



BEACON FEN ENERGY PARK

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Quality information

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Table of Contents

6.	Landscape and Visual	6
6.1	Introduction	6
	Appendices	6
	Figures	6
6.2	Legislation and Policy	8
	Legislative Framework	8
	Planning Policy.....	8
6.3	Consultation & Engagement	9
	Consultation Undertaken to Date	9
	Scope of the Assessment.....	25
	Effects not considered within the scope	25
	Development Description	25
	Solar Array Area	26
	Cable Route	27
	Bespoke Access Road	28
	Embedded Mitigation	28
	Landscape Design Plan	29
	Limitations & Exclusions	30
	Limitations.....	30
	Assumptions.....	31
	Construction.....	31
	Operation	32
6.4	Assessment Methodology & Significance Criteria.....	33
	Extent of the Study Area	33
	Assessment Methodology	34
	Landscape Effects.....	34
	Visual Effects	34
	Cumulative Effects	34
	Cumulative Landscape Effects.....	35
	Cumulative Visual Effects.....	35
	Significance Criteria	35
6.5	Baseline Conditions	36
	Current Baseline Conditions	36
	Hierarchy of Landscape Character.....	36
	National Landscape Character.....	36
	Local Landscape Character	37
	North Kesteven Landscape Character Assessment.....	38
	Fenland Sub Area	38
	Central Clays and Gravels Sub Area.....	38
	Landscape Character Assessment of Boston Borough	39
	Holland Reclaimed Fen LCA.....	39
	Landscape of the Site and Surroundings	40
	Landform and Drainage	40
	Land Use and Land Cover	41
	Settlements and individual properties	41
	Transport Network.....	42
	Recreational Routes.....	42
	Designated Landscapes.....	42
	Visual Baseline.....	43

ZTV Analysis	43
Views from Residential Receptors and Settlements.....	44
Views from PRoW	45
Views from People at Work	45
Views from Roads	46
Selection of Viewpoints for Assessment.....	46
Sensitive Receptors	47
Future Baseline Conditions	48
6.6 Assessment of Effects	48
Embedded Mitigation	48
Assessment of Landscape Effects	50
Proposed Development and Landscape Receptors	50
Landscape Sensitivity – Site level	51
Landscape Sensitivity – Local Landscape Character	51
Fenland Sub Area	52
Central Clays and Gravels Sub Area.....	52
Holland Reclaimed Fen LCA.....	52
Bicker to Wyberton Settled Fen LCA.....	53
South Holland Fen LCA	53
Landscape Effects.....	53
Construction Phase.....	53
National Landscape Character.....	54
Landscape character – Site level	54
Existing landscape elements.....	54
Landscape character.....	54
Significance of effects	55
Effects on Landscape character – Local landscape character	55
Fenland Sub Area	55
Landscape elements	55
Significance of effects	55
Central Clays and Gravels Sub Area.....	55
Landscape elements	55
Landscape character.....	55
Significance of effects	56
Holland Reclaimed Fen LCA.....	56
Landscape elements	56
Landscape character.....	56
Significance of effects	56
Bicker to Wyberton Settled Fen LCA.....	56
Landscape elements	56
Landscape character.....	56
Significance of effects	56
South Holland Fen LCA	56
Landscape elements	56
Landscape character.....	57
Significance of effects	57
Operational Phase	57
Landscape character – Site level	57
Significance of effects	58
Effects on Landscape character – Local landscape character	58
Fenland Sub Area	58
Significance of effects	58

Central Clays and Gravels Sub Area.....	58
Significance of effects	59
Holland Reclaimed Fen LCA.....	59
Significance of effects	59
Bicker to Wyberton Settled Fen LCA.....	59
Significance of effects	60
South Holland Fen LCA	60
Significance of effects	60
Decommissioning Phase.....	60
Effects on Landscape character – Site level	60
Landscape elements	61
Landscape Character – LCA's.....	61
Assessment of Visual Effects	61
Construction Phase.....	62
Solar Array Area	62
Visual Context and overview	62
Residential Receptors	62
Recreational Facilities and Routes	63
Transport Network.....	63
Cable Route Corridor	63
Visual Context and overview	63
Residential Receptors	64
Recreational Facilities and Routes	65
Transport Network.....	65
Bespoke Access Road	65
Visual Context and overview	65
Residential Receptors	66
Recreational Routes and Community Facilities.....	66
Transport Network.....	66
Operational Phase	67
Solar Array Area	67
Visual Context and overview	67
Year 0.....	67
Residential Receptors	67
Recreational Facilities and Routes	68
Transport Network.....	68
Year 15.....	69
Residential Receptors	69
Recreational Facilities and Routes	69
Transport Network.....	69
Cable Route Corridor	70
Visual Context and overview	70
Year 0.....	70
Residential Receptors	70
Recreational Facilities and Routes	70
Transport Network.....	71
Year 15.....	71
Residential Receptors	71
Recreational Facilities and Routes	71
Transport Network.....	72
Bespoke Access Road	72
Visual Context and overview	72

Year 0.....	72
Residential Receptors	72
Recreational Routes and Community Facilities.....	72
Transport Network.....	73
Year 15.....	73
Residential Receptors	73
Transport Network.....	73
Decommissioning Phase.....	74
Solar Array Area	74
Cable Route Corridor	74
Bespoke Access Road	74
6.7 Mitigation	75
6.8 Residual Effects	75
Monitoring	75
Construction.....	75
Operation	76
6.9 Assessment of Cumulative Effects.....	76
Intra-Cumulative Effects	76
Ecology	76
Glint and Glare	77
Inter-Cumulative Effects	77
Heckington Fen Solar Park	82
Cumulative Landscape Effects.....	82
Cumulative Visual effects	83
Vicarage Drove Solar Farm.....	84
Cumulative Landscape effects	84
Cumulative Visual effects	85
Bicker Fen Solar Farm	85
Cumulative Landscape effects	85
Cumulative Visual effects	85
Little Hale Fen Solar Farm	86
Cumulative Landscape effects	86
Cumulative Visual effects	86
6.10 Summary	87
Landscape Effects.....	87
Landscape Designations.....	87
Landscape Character.....	87
Construction Phase - Visual	88
Operational Phase – Landscape	89
Operational Phase – Visual.....	89
Summary of Mitigation	90
Summary of Residual Effects	90
Summary Cumulative Effects.....	90
Cumulative Landscape Effects.....	90
Cumulative –Visual Effects.....	91

Figures

Figure 6.1 Bareground Zone of Theoretical Visibility

Figure 6.2 Screened Zone of Theoretical Visibility

Figure 6.3 Topography

Figure 6.4 Landscape Designations

- Figure 6.5 Landscape Character
Figure 6.6 Recreational Routes, Facilities and Visitor destinations
Figure 6.7 Residential Properties
Figure 6.8 Baseline Panorama Viewpoint 1: View from View from Wood Lane near Ruskington Fen
Figure 6.9 Baseline Panorama Viewpoint 2: View from Ferry Lane
Figure 6.10 Baseline Panorama Viewpoint 3: View from Cow Drove
Figure 6.11 Baseline Panorama Viewpoint 4: View from Halfpenny Toll Lane near Ewerby Thorpe (Farm)
Figure 6.12 Baseline Panorama Viewpoint 5: View from PRoW (Public Right of Way) Ewer 1/5 near Evedon Road
Figure 6.13 Baseline Panorama Viewpoint 6: View from Asgarby Road near Asgarby
Figure 6.14 Baseline Panorama Viewpoint 7: View from Footpath Heck 2/4 near Hall Farm
Figure 6.15 Baseline Panorama Viewpoint 8: View from the A17, between Poplars Farm and Garwick Cottage
Figure 6.16 Baseline Panorama Viewpoint 9: View from A17 Swineshead Bypass near East Heckington
Figure 6.17 Baseline Panorama Viewpoint 10: View from Fen Road west of Little Hale
Figure 6.18 Baseline Panorama Viewpoint 11: View from A17/ Swineshead Bypass near Hammond Beck
Figure 6.19 Baseline Panorama Viewpoint 12: View from 42 George Street at Helpringham
Figure 6.20 Baseline Panorama Viewpoint 13: View from South Drove/Footpath Help 2/7
Figure 6.21 Baseline Panorama Viewpoint 14: View from PRoW Doni/8/1 near Bullbank Holt
Figure 6.22 Baseline Panorama Viewpoint 15: View from Howell Fen Drove
Figure 6.23 Baseline Panorama Viewpoint 16: View from B1395 Clay Bank
Figure 6.24 Baseline Panorama Viewpoint 17: View from B1395 Clay Bank (Sycamore Farm)
Figure 6.25 Baseline Panorama Viewpoint 18: View from Public Footpath Ewer 12/1
Figure 6.26 Baseline Panorama Viewpoint 19: View from A17 near poplars Farm
Figure 6.27 Photomontage 1: View from View from Ferry Lane
Figure 6.28 Photomontage 2: View from Cow Drove
Figure 6.29 Photomontage 3: View from Halfpenny Toll Lane near Ewerby Thorpe (Farm)
Figure 6.30 Photomontage 4: View from A17 near Poplars Farm
Figure 6.31 Landscape Strategy Plan
Figure 6.32 Vegetation Removal Plan

Tables

Table 6.1 - Summary of Consultation Undertaken to Date	10
Table 6.2 - Matrix for Evaluating Significance	36
Table 6.3 - Key characteristics of LCAs within the Study Area	39
Table 6.4 - Key sensitive landscape receptors and potential impacts	47
Table 6.5 - Key sensitive visual receptors and potential impacts.....	48
Table 6.6 - Mitigation Measures and Securing Mechanism	48
Table 6.7 - Summary of Inter-Cumulative Schemes Considered within the Landscape and Visual Assessment ..	78
Table 6.8 - Landscape and Visual Summary Assessment Matrix	92

Appendices

- Appendix 6.1 Landscape and Visual Legislation and Policy
Appendix 6.2 Landscape and Visual Methodology
Appendix 6.3 Landscape Character Baseline and Sensitivity
Appendix 6.4 Visual Assessment
Appendix 6.5 Residential Visual Amenity Assessment
Appendix 6.6 Arboricultural Impact Assessment
Appendix 6.7 Outline Landscape and Ecological Management Plan

6. Landscape and Visual

6.1 Introduction

- 6.1.1 This Chapter reports the assessment of the likely significant effects of the Proposed Development on Landscape and Visual receptors. It comprises a Landscape and Visual Impact Assessment (LVIA) which considers the potential for likely significant effects during construction, operation and decommissioning of the Proposed Development on landscape character and visual amenity.
- 6.1.2 This Chapter (and its associated figures and appendices) is not intended to be read as a standalone assessment and reference should be made to the front end of this Environmental Statement (ES) (Chapters 1 – 5) and particularly to the description of the Proposed Development in **Chapter 2: Proposed Development (Document Ref: 6.2 ES Vol. 1, 6.2.2)** which includes details about the Site, the design parameters and construction methodology, as well as **Chapter 18: Cumulative Effects (Document Ref: 6.2 ES Vol. 1, 6.2.18)** and **Chapter 19: Summary of Significant Environmental Effects (Document Ref: 6.2 ES Vol. 1, 6.2.19)**.
- 6.1.3 This chapter is accompanied by the following Appendices and Figures:

Appendices

- **Appendix 6.1: Landscape and Visual Legislation and Policy (Document Ref: 6.3 ES Vol. 2, 6.3.13);**
- **Appendix 6.2: Landscape and Visual Methodology (Document Ref: 6.3 ES Vol. 2, 6.3.14);**
- **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15);**
- **Appendix 6.4: Visual Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.16);**
- **Appendix 6.5: Residential Visual Amenity Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.17);**
- **Appendix 6.6: Arboricultural Impact Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.18); and**
- **Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19).**

Figures

- **Figure 6.1 Bareground Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.12);**
- **Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13);**
- **Figure 6.3 Topography (Document Ref: 6.4 ES Vol.3, 6.4.14);**
- **Figure 6.4 Landscape Designations (Document Ref: 6.4 ES Vol.3, 6.4.15);**
- **Figure 6.5 Landscape Character (Document Ref: 6.4 ES Vol.3, 6.4.16);**
- **Figure 6.6 Recreational Routes, Facilities and Visitor destinations (Document Ref: 6.4 ES Vol.3, 6.4.17);**

- **Figure 6.7 Residential Properties (Document Ref: 6.4 ES Vol.3, 6.4.18);**
- **Figure 6.8 Baseline Panorama Viewpoint 1: View from View from Wood Lane near Ruskington Fen (Document Ref: 6.4 ES Vol.3, 6.4.19);**
- **Figure 6.9 Baseline Panorama Viewpoint 2: View from Ferry Lane (Document Ref: 6.4 ES Vol.3, 6.4.20);**
- **Figure 6.10 Baseline Panorama Viewpoint 3: View from Cow Drove (Document Ref: 6.4 ES Vol.3, 6.4.21);**
- **Figure 6.11 Baseline Panorama Viewpoint 4: View from Halfpenny Toll Lane near Ewerby Thorpe (Farm) (Document Ref: 6.4 ES Vol.3, 6.4.22);**
- **Figure 6.12 Baseline Panorama Viewpoint 5: View from PRow (Public Right of Way) Ewer 1/5 near Evedon Road (Document Ref: 6.4 ES Vol.3, 6.4.23);**
- **Figure 6.13 Baseline Panorama Viewpoint 6: View from Asgarby Road near Asgarby (Document Ref: 6.4 ES Vol.3, 6.4.24);**
- **Figure 6.14 Baseline Panorama Viewpoint 7: View from Footpath Heck 2/4 near Hall Farm (Document Ref: 6.4 ES Vol.3, 6.4.25);**
- **Figure 6.15 Baseline Panorama Viewpoint 8: View from the A17, between Poplars Farm and Garwick Cottage (Document Ref: 6.4 ES Vol.3, 6.4.26);**
- **Figure 6.16 Baseline Panorama Viewpoint 9: View from A17 Swineshead Bypass near East Heckington (Document Ref: 6.4 ES Vol.3, 6.4.27);**
- **Figure 6.17 Baseline Panorama Viewpoint 10: View from Fen Road west of Little Hale (Document Ref: 6.4 ES Vol.3, 6.4.28);**
- **Figure 6.18 Baseline Panorama Viewpoint 11: View from A17/ Swineshead Bypass near Hammond Beck (Document Ref: 6.4 ES Vol.3, 6.4.29);**
- **Figure 6.19 Baseline Panorama Viewpoint 12: View from 42 George Street at Helpringham (Document Ref: 6.4 ES Vol.3, 6.4.30);**
- **Figure 6.20 Baseline Panorama Viewpoint 13: View from South Drove/Footpath Help 2/7 (Document Ref: 6.4 ES Vol.3, 6.4.31);**
- **Figure 6.21 Baseline Panorama Viewpoint 14: View from PRow Doni/8/1 near Bullbank Holt; (Document Ref: 6.4 ES Vol.3, 6.4.32);**
- **Figure 6.22 Baseline Panorama Viewpoint 15: View from Howell Fen Drove (Document Ref: 6.4 ES Vol.3, 6.4.33);**
- **Figure 6.23 Baseline Panorama Viewpoint 16: View from B1395 Clay Bank (Document Ref: 6.4 ES Vol.3, 6.4.34);**
- **Figure 6.24 Baseline Panorama Viewpoint 17: View from B1395 Clay Bank (Sycamore Farm) (Document Ref: 6.4 ES Vol.3, 6.4.35);**
- **Figure 6.25 Baseline Panorama Viewpoint 18: View from Public Footpath Ewer 12/1 (Document Ref: 6.4 ES Vol.3, 6.4.36).;**
- **Figure 6.26 Baseline Panorama Viewpoint 19: View from A17 near Poplars Farm (Document Ref: 6.4 ES Vol.3, 6.4.37);**
- **Figure 6.27 Photomontage 1: View from View from Ferry Lane (Document Ref: 6.4 ES Vol.3, 6.4.38);**
- **Figure 6.28 Photomontage 2: View from Cow Drove (Document Ref: 6.4 ES Vol.3, 6.4.39);**

- **Figure 6.29 Photomontage 3: View from Halfpenny Toll Lane near Ewerby Thorpe (Farm) (Document Ref: 6.4 ES Vol.3, 6.4.40); and**
- **Figure 6.30 Photomontage 4: View from A17 near Poplars Farm (Document Ref: 6.4 ES Vol.3, 6.4.41);**
- **Figure 6.31 Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42); and**
- **Figure 6.32 Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43).**

6.2 Legislation and Policy

- 6.2.1 The legislation and policy considered relevant to the assessment of Landscape and Visual effects are listed below, with details provided in **Appendix 6.1: Landscape and Visual Legislation and Policy (Document Ref: 6.3 ES Vol. 2, 6.3.13).**

Legislative Framework

- 6.2.2 The applicable legislation includes:

- Planning Act (2008).

Planning Policy

- 6.2.3 The applicable planning policy includes:

- Overarching National Policy Statement for Energy (EN-1) (November 2023);
 - National Policy Statement for Renewable Energy Infrastructure (EN-3) (November 2023).
 - National Policy Statement for Electricity Networks Infrastructure (EN-5) (November 2023).
- National Planning Policy;
 - National Planning Policy Framework (NPPF) (updated 12 December 2024).
- Planning Practice Guidance;
 - Design: process and tools (1 October 2019).
 - Natural environment (19 February 2025).
 - Renewable and low carbon energy (14 August 2023).
- Local Planning Policy;
 - Central Lincolnshire Local Plan 2018 – 2040 (Adopted April 2023).
 - South East Lincolnshire Local Plan 2011 – 2036 (March 2019).
 - South Kesteven District Council Local Plan 2011 – 2036 (Adopted January 2020).

6.3 Consultation & Engagement

Consultation Undertaken to Date

6.3.1 Consultation undertaken during the preparation of the DCO application includes the following key stages:

- EIA Scoping;
- Early Non-Statutory Consultation;
- Statutory Consultation; and
- Direct Topic-Specific Consultation.

6.3.2 **Chapter 5: Consultation (Document Ref: 6.2 ES Vol. 1, 6.2.5)** provides a description of the consultation activities undertaken in support of the preparation of this Chapter, as well as the Environmental Statement as a whole. A summary of the consultation and engagement relevant to this Chapter is provided in Table 6.1.

Table Error! No text of specified style in document..1 - Summary of Consultation Undertaken to Date

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
EIA SCOPING				
PINS	26 May 2023	Scoping Opinion	<p>Aswarby Park Registered Park and Garden (RPG).</p> <p>The Applicant proposes to scope out effects on the Grade II listed Aswarby Park RPG based on lack of intervisibility due to a separation distance of approximately 5km from the site and the presence of intervening vegetation. The Screened Zone of Theoretical Visibility (ZTV) provided within Figure 4.3 of the Scoping Report shows that there is potential for visibility of the south solar array site and both solar array sites within parts of the RPG. On the basis of this potential visibility, and in the absence of further detailed information including agreement from relevant statutory consultees, the Inspectorate does not agree to scope this matter out at this stage. The ES should include an assessment of effects on this RPG, or the information referred to demonstrating agreement with the relevant consultation bodies and the absence of a likely significant effect.</p>	<p>The Screened ZTV has been updated to reflect the update parameters for the Proposed Development, Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13). The ZTV illustrates theoretical visibility within the extent of the 5km LVIA study Area. Aswarby Park RPG is located beyond the extent of the study area at approximately 6.6km from the Bespoke Access Road, 9.2km from the Solar Array Area and 12.4km from the Cable Route Corridor (Bicker Fen Substation extension. As a result of this considerable separation distance in relation to the scale of development, the maximum height is 15m at Bicker Fen Substation Extension, it is unlikely significant effects will be perceived by receptors at the RPG.</p>

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
PINS	26 May 2023	Scoping Opinion	<p>Zones of Theoretical Visibility (ZTVs)</p> <p>Bareground and Screened ZTVs are provided within the Scoping Report at Figures 4.1 and 4.3 respectively. It is noted (in paragraph 4.5.2) that these ZTVs are based on maximum panel heights of 4.5m. However, there are other components of the Proposed Development which have a height greater than 4.5m, such as substation(s) of 11m height and CCTV poles of 5m. Paragraph 4.6.5 also states that it is assumed that the cable would be buried; however, it is noted in paragraph 2.5.4 that the option of using overhead line(s) instead of a buried cable cannot be ruled out. The final ZTVs, and subsequently the Landscape and Visual Impact Assessment (LVIA), should ensure that a worst-case scenario is assessed based on the maximum parameters of the Proposed Development, including any auxiliary infrastructure such as security camera poles, fences, or construction compounds (although the Inspectorate notes the Applicant's intention to</p>	<p>Updated ZTV's are provided as part of the Environmental Statement. The ZTV's are based on the maximum height parameters of the Proposed Development including 13m for the Onsite Substation within the Solar Array Area and 15m for the proposed Bicker Fen Substation Extension to the southern extent of the Cable Route Corridor. Two ZTV's are included as follows; Figure 6.1 Bareground Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.12) which illustrates the worst case scenario and Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13) which includes the screening effects of intervening vegetation and built form.</p>

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			assess a worst-case scenario, as stated in paragraph 2.9.2 of the Scoping Report). The Applicant should consider the use of multiple ZTVs if appropriate.	
PINS	26 May 2023	Scoping Opinion	<p>Photomontages.</p> <p>The Scoping Report states that it is currently anticipated that photomontages will be provided for four of the sixteen viewpoints (specifically, Viewpoints 5, 6, 9, and 10). Limited justification is provided for the selection of these photomontages; paragraph 4.5.15 of the Scoping Report states that these photomontages will show the Proposed Development “in its landscape context from key locations in the surrounding locality”.</p> <p>The Applicant should fully justify the location and number of photomontages, ensuring these are fully representative of the maximum visual envelope of the Proposed Development. The Applicant should seek agreement from relevant consultees regarding the appropriateness of selected photomontages and evidence of this</p>	<p>Photomontage locations have been informed by email correspondence (26/03/24) with AAH consultants acting on behalf of North Kesteven District Council and Lincolnshire County Council. Photomontages from viewpoints 2,3,4 and 19 at year 0 and year 15 scenarios for viewpoints 2,3,4 and 19 are provided in the Environmental Statement as follows:</p> <p>Figure 6.27 Photomontage 1: View from Ferry Lane (Viewpoint 2) (Document Ref: 6.4 ES Vol.3, 6.4.38);</p> <p>Figure 6.28 Photomontage 2: View from Cow Drove (Viewpoint 3) (Document Ref: 6.4 ES Vol.3, 6.4.39);</p> <p>Figure 6.29 Photomontage 3: View from Halfpenny Toll Lane near Ewerby Thorpe (Farm) (Viewpoint 4) (Document Ref: 6.4 ES Vol.3, 6.4.40);</p> <p>and</p> <p>Figure 6.30 Photomontage 4: View from A17 near Poplars Farm (Viewpoint 19) (Document Ref: 6.4 ES Vol.3, 6.4.41).</p>

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			<p>agreement should be provided within the DCO application.</p> <p>The photomontages should show all components of the Proposed Development, including security fencing, CCTV poles, battery storage system, substations etc., and demonstrate the Proposed Development before and after mitigation in order to enable a worst-case scenario to be fully understood.</p>	
PINS	26 May 2023	Scoping Opinion	<p>Viewpoints</p> <p>The Scoping Report does not provide any evidence that viewpoints selected at this stage have been agreed by the LPAs and other relevant stakeholders, although it is noted in paragraph 4.5.13 that viewpoints are subject to change following stakeholder comments. The Applicant should seek agreement from relevant consultees regarding the appropriateness of selected viewpoints and provide evidence of this agreement within the DCO application.</p> <p>Furthermore, the numbering of the viewpoints shown in Figures 4.1</p>	<p>Additional viewpoints have been included following consultation with North Kesteven District Council and Lincolnshire County Council. The viewpoints used to inform the Environmental Statement, LVIA are illustrated in Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13).</p> <p>A consistency check has been carried out in relation to the referencing of viewpoints on figures and within the Environmental Statement LVIA.</p>

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			and 4.3 is different across the two figures. Figure 4.3 includes a Viewpoint 0, but no such viewpoint is listed within Table 4.2. The Applicant should ensure consistency of labels between figures and/or across documents	
PINS	26 May 2023	Scoping Opinion	Landscape Environmental Management Plan / Landscape and Ecological Management Plan (LEMP) Embedded mitigation measures, namely retention and management of new and existing planting, are proposed to be detailed within an “accompanying Landscape Environmental management Plan (LEMP)”. Appendix 14.1 (Healthy Planning Checklist) also states that a “Landscape and Ecological Management Plan (LEMP) will form part of the DCO submission”. Assuming these refer to the same document, the Inspectorate would expect to see an outline LEMP submitted as part of the DCO application, detailing the specific mitigation measures proposed and the means by which these would be secured. The LEMP should also detail	An OLEMP has been provided in Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19) . The OLEMP sets out the measures used to secure compliance with the implementation, establishment and management of proposed mitigation measures as well as the protection and management of vegetation assumed to be retained.

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			monitoring requirements and consider the potential for vegetation planting as a form of mitigation to be affected by climate change. To allow for documents to be certified within the DCO, as a mechanism to secure the mitigation, the application documents should ensure that the naming convention is consistent between the documents and the appropriate Schedule of the DCO.	
North Kesteven District Council and Lincolnshire County Council	18 May 2023	Scoping Opinion Response (Joint response from North Kesteven District Council and Lincolnshire County Council informed by Appendix 1. Landscape Scoping Report Review by AHH Consultants (May 2023))	Viewpoints. Figures 4.1 and 4.3 of the scoping report identifies 16 proposed viewpoints across the two PV sites and the area identified for the cable connection to the sub-station. AAH have undertaken a site visit in early May 2023, and the site characteristics suggest that these viewpoints need to be supplemented by additional ones from further distances in all directions. The selected 16 appear to be appropriate for closer scrutiny of sensitivity, however the final locations and number of viewpoints are to be agreed with LCC and other relevant stakeholders.	Following further consultation further viewpoints have been added including further long distance views to the south east the locations of which are shown in Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13).

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
North Kesteven District Council and Lincolnshire County Council	18 May 2023	Scoping Opinion Response (Joint response from North Kesteven District Council and Lincolnshire County Council informed by Appendix 1. Landscape Scoping Report Review by AHH Consultants (May 2023))	<p>Photomontages</p> <p>To gain an understanding of the visibility of the development and how the panels and infrastructure would appear in the surrounding landscape, Photomontages/Accurate Visual Representations (AVRs) should be produced. It is currently proposed to develop 4 of the 16 viewpoints as photomontages, however it is not clear the justification for the selection of these as photomontages. Viewpoints 9 and 10 have close proximity, whilst the others are spread with a bias to the northwest of the sites, there are currently no proposed photomontages to the southeast of the sites. The number and location of viewpoints to be developed as Photomontages/AVRs should be agreed with LCC and other relevant stakeholders and produced in accordance with LI guidance: TGN 06/19 Visual Representation of Development Proposals. At this stage, it is deemed appropriate that these should be produced to illustrate the proposals at different</p>	<p>Photomontage locations have been informed by email correspondence (26/03/24) with AAH consultants acting on behalf of North Kesteven District Council and Lincolnshire County Council. Photomontages from viewpoints 2,3,4 and 19 at year 0 and year 15 scenarios for viewpoints 2,3,4 and 19 are provided in the Environmental Statement as follows:</p> <p>Figure 6.27 Photomontage 1: View from Ferry Lane (Viewpoint 2) (Document Ref: 6.4 ES Vol.3, 6.4.38);</p> <p>Figure 6.28 Photomontage 2: View from Cow Drove (Viewpoint 3) (Document Ref: 6.4 ES Vol.3, 6.4.39);</p> <p>Figure 6.29 Photomontage 3: View from Halfpenny Toll Lane near Ewerby Thorpe (Farm) (Viewpoint 4) (Document Ref: 6.4 ES Vol.3, 6.4.40);</p> <p>and</p> <p>Figure 6.30 Photomontage 4: View from A17 near Poplars Farm (Viewpoint 19) (Document Ref: 6.4 ES Vol.3, 6.4.41).</p>

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			phases: Existing Situation (baseline), Operational (year 1) and Residual with planting established (10 to 15 years). The Photomontage/AVR Level and Type is to be discussed and agreed.	
North Kesteven District Council and Lincolnshire County Council	18 May 2023	Scoping Opinion Response (Joint response from North Kesteven District Council and Lincolnshire County Council informed by Appendix 1. Landscape Scoping Report Review by AHH Consultants (May 2023))	The Council therefore considers that the ES should contain a Residential Visual Amenity Assessment (RVAA) compiled with reference to Technical Guidance Note 02/19 'Residential Visual Amenity Assessment'. The RVAA should not focus solely on individual or groups of properties however should consider the magnitude of change to residential amenity on a 'settlement scale' basis taking account not only of fixed address points but also the experiences of residents of those settlements when travelling into and around those areas. This should include (for Beacon Fen North) the settlements of Howell and Ewerby Thorpe, Westmorelands, Asgarby Barns and Howell Fen Farmhouse on Howell Fen Drove (which appear to be	A RVAA which has considered the specified properties has been included in the Environmental Statement, Appendix 6.5: Residential Visual Amenity Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.17).

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			outside the DCO boundary) and the properties on Waithe Lane/Ewerby Fen to the north west of the site, along with Gashes Barn which is located within the broader site boundary but appears to be in separate/private ownership.	
North Kesteven District Council and Lincolnshire County Council	May 2023	North Kesteven District Council and Lincolnshire County Council informed by Appendix 1. Landscape Scoping Report Review by AHH Consultants (May 2023))	Visual The visual assessment should take account of the 'worst case scenario' in terms of winter views, and effects associated with landscape mitigation at the Operational Phase (year 1), Residual Phase with planting having established (10 to 15 years), and at the Decommissioning Phase. Landscape Scoping Report Review May 2023 Lincolnshire County Council, Beacon Fen Solar Project The LVIA should ensure all elements associated with the development are considered and assessed, such as battery storage and boundary fencing, which may be more visible than panels due to height and mass.	Chapter 6 of the Environmental Statement has assessed winter views which represent a worst case scenario. Winter views are illustrated in Figures 6.8 to 6.26 Baseline Panoramas (Document Ref: 6.4 ES Vol.3, 6.4.19) to (Document Ref: 6.4 ES Vol.3, 6.4.37).

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			The visual assessment should include for visual receptors, and not just an assessment of any agreed viewpoints. It should also clearly cross reference viewpoints to associated receptors	
North Kesteven District Council and Lincolnshire County Council	May 2023	North Kesteven District Council and Lincolnshire County Council informed by Appendix 1. Landscape Scoping Report Review by AHH Consultants (May 2023))	Cumulative impacts Cumulative Landscape and Visual Impacts should be assessed, particularly in regard to the Heckington Solar Project.	Cumulative impacts, including those in relation to Heckington Fen Solar Park, are considered in the Environmental Statement, Chapter 6. Section 6.9.
Statutory Consultation				
Natural England	01 March 2024	PEIR response	Natural England confirmed that the Proposed Development is not located within, or within the setting of, any nationally designated landscapes. Natural England advised that the development should avoid impact to and, where possible, enhance local distinctiveness.	Approach to landscape strategy includes measures to relate to prevailing character of the landscape context. Including the retention of field boundary vegetation and drainage channels as illustrated in Figure 6.31 Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42)
Forestry Commission	01 March 2024	PEIR response	The Forestry Commission advised that there is the opportunity to provide	The landscape strategy plan has been developed to enhance connectivity through the introduction of hedgerows

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			enhanced connectivity between individual areas of woodland.	and native shrub belts as illustrated in Figure 6.31 Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42).
Lincolnshire County Council	08 March 2024	PEIR response	Request for a Residential Visual Amenity Assessment (RVAA) to be carried out to inform the LVIA and evolving layouts.	A RVAA has been included within Appendix 6.5: Residential Visual Amenity Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.17).
Lincolnshire Wildlife Trust	01 March 2024	PEIR response	Request for enhanced habitat connectivity.	The landscape strategy plan has been developed to enhance connectivity through the introduction of hedgerows and native shrub belts Figure 6.31 Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42).
Direct Topic-Specific Consultation				
North Kesteven District Council Lincolnshire County Council AAH Consultants	17 July 2023	Viewpoint, Photomontage and RVAA receptor consultation	North Kesteven District Council requested that updated plans are issued following removal of the Beacon Fen South site the Proposed Development.	The updated plans were sent by email on 29 th September 2023.
North Kesteven District Council Lincolnshire County Council AAH Consultants	31 July 2023	Viewpoint, Photomontage and RVAA receptor consultation	North Kesteven District Council provided initial comments on proposed viewpoint locations, requesting the inclusion of viewpoints that will capture the cumulative effects of Heckington Fen Solar Park following the amendment of the scheme design.	Further viewpoints have been added. The viewpoint locations are illustrated in Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13).

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
			Request for additional viewpoints from the Amber Hill area, junction of the A17 and the B1395 Sidebar Lane and potentially a viewpoint from south of North Kyme on the A153/B1395 junction to capture possible panoramic views looking SE and SW. North Kesteven District Council advised that joint advice will be provided from the North Kesteven District Council on behalf of other LPA's.	
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Viewpoint, Photomontage locations	AAH Consultants recommended that the following viewpoints 2,3,4 and 8 should be adopted as photomontages:	These viewpoints have been used as the basis for photomontages with the exception of Viewpoint 8 where it has been agreed that Viewpoint 19 (in close proximity to Viewpoint 8) can be used.
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence relating to Cumulative scope.	Heckington Fen DCO should include information submitted in the Examination process by Ecotricity in relation to cumulative LVIA impacts with Beacon Fen.	This has been considered when preparing Environmental Statement Chapter 6 Landscape and Visual and included within the assessment as appropriate. Reference should be made to Section 6.9 Assessment of Cumulative Effects of the chapter.
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence relating to viewpoints.	Winter viewpoint photography is required to illustrate the worst case scenario, of deciduous vegetation devoid of leaf cover.	Environmental Statement Chapter 6 Landscape & Visual, Figures 6.8 to 6.25 , Baseline Panoramas (Document Ref: 6.4 ES Vol.3, 6.4.19) to (Document Ref: 6.4 ES Vol.3, 6.4.37) include winter viewpoint photography.

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence relating to landscape character effects.	Paragraph 6.5.6 The LVIA should be amended to reference the presence of the Access Route within the Central Clays and Gravels sub-area.	This has been considered within Environmental Statement Chapter 6 Landscape & Visual, specifically 6.5 Baseline Conditions, Section 6.6 Assessment of Effects, Section 6.7 Mitigation and Section 6.8 Residual Effects. Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15) and Appendix 6.4: Visual Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.16) have also been updated.
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence relating to viewpoints.	Disagreement regarding paragraph 6.5.23 in relation to the perception of level changes and how this influences the availability of elevated views.	This has been addressed within the Environmental Statement, Chapter 6 Landscape & Visual Specifically section 6.5 Baseline Conditions, has been updated to accurately reflect existing levels.
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence relating to viewpoints.	Further viewpoints have been requested in addition to VPs 5 and 6 to inform the assessment relating to the access road.	Additional viewpoints have been added generally following consultation. It is considered that viewpoints 5 and 6 are appropriate to inform the assessment of effects in relation to the Bespoke Access Road.
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence relating to views from residential properties.	The Council agrees with the residential properties identified for inclusion in the assessment which should be supplemented by the baseline panoramas.	Baseline panorama figures have been submitted as part Chapter 6 Landscape & Visual of the Environmental Statement and used to inform the assessment. Please refer to

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
				the Baseline Panoramas and Photomontages for residential properties are provided within Appendix 6.5: Residential Visual Amenity Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.17).
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence	Query regarding the Bespoke Access Route and whether it will be retained post-construction for operational maintenance purposes.	Chapter 2: Proposed Development (Document Ref: 6.2 ES Vol. 1, 6.2.2) , specifically Section 2.1, Paragraph 2.1.9 'Bespoke Access Road'. Confirms that the access road will be in place for the life of the Proposed Development and this provides the basis for the assessment within the Environmental Statement, Chapter 6 Landscape & Visual.
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence	Comments relating to visual effects experienced at Gashes Barn.	Visual effects in relation to receptors at Gashes Barn are assessed and reported in in the Environmental Statement, Chapter 6 Landscape & Visual of the Environmental Statement, Appendix 6.4: Visual Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.16) and Appendix 6.5: Residential Visual Amenity Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.17).

ORGANISATION	DATE	FORM OF CONSULTATION	REQUEST	SUMMARY OF RESPONSE
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence	Request to review the LVIA relating to planning application 23/1419/FUL (Mareham Lane Screddington Solar Farm) with regard to potential cumulative effects.	The Environmental Statement, Chapter 6 Landscape and Visual, section 6.9 provides the rationale for inclusion or exclusion of cumulative schemes for assessment. In relation to Mareham Lane is considered that there is very limited potential for significant adverse landscape and visual cumulative effects because of the separation distance and intervening layers of vegetation cover.
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence	Request to consider cumulative effects in association with the Heckington Fen NSIP project.	Cumulative effects in relation to Heckington Fen are considered in the Environmental Statement, Chapter 6 Landscape & Visual, section 6.9.
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence	Request to undertake a full RVAA.	A RVAA is included in Appendix 6.5: Residential Visual Amenity Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.17).
North Kesteven District Council Lincolnshire County Council AAH Consultants	26 March 2024	Email correspondence	Request for a plan to illustrate the locations of the baseline panorama viewpoints.	The locations of the baseline viewpoint panoramas are illustrated in Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13).

Scope of the Assessment

- 6.3.3 This LVIA assesses the effects of the Proposed Development on the landscape resource and the effects on views and visual amenity. This Chapter reports the likely significant effects of the Proposed Development in relation to landscape and visual impacts.
- 6.3.4 The approach to the assessment has been informed by comments received within the Scoping Opinion and subsequent stakeholder consultation and engagement. Feedback from North Kesteven District Council regarding LVIA scope, viewpoint and photomontage locations, as well as the cumulative assessment has also been taken into account.
- 6.3.5 The LVIA considers the potential effects on the landscape fabric and character of the Site and wider 5km LVIA study area, hereafter, referenced as the 'Study Area'. This includes consideration of effects on landscape character at the Site level and in relation to published local and national landscape character studies within the Study Area.
- 6.3.6 Effects on the visual amenity of relevant visual receptors identified within the Study Area have also been assessed. Effects on residential receptors within settlements, the users of nationally designated recreational routes and major roads within the Study Area will be considered. In accordance with GLVIA3¹ which recommends the adoption of a proportionate approach the visual assessment has assessed visual effects for residents in individual properties and property groups, users of the PRoW network and minor road network within 2km of the Proposed Development.
- 6.3.7 The temporal scope of the LVIA includes the following stages:
- Construction;
 - Operation, at year 0 and at year 15; and
 - Decommissioning.

Effects not considered within the scope

- 6.3.8 Landscape and visual receptors beyond the coverage of the ZTV, **Figure 6.1 Bareground Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.12)**, which has been verified by Site survey, are excluded from the assessment on the basis that receptors with no, or very limited visibility are unlikely to experience significant landscape and visual effects.

Development Description

- 6.3.9 A full development description is provided in **Chapter 2: Proposed Development (Document Ref: 6.2 ES Vol. 1, 6.2.2)**. A summary of development parameters which have informed the assessment of landscape and visual effects for the Proposed Development, which is comprised of the following components; Solar Array Area, Cable Route and Bespoke Access Road.

¹ Guidelines for Landscape and Visual Impact Assessment, Third Edition, by the Landscape Institute and Institute of Environmental Management and Assessment (2013)

Solar Array Area

6.3.10 The Solar Array Area would comprise the following:

- The height of the arrays has been informed through iterative design considering flood modelling data resulting in a height of up to 3.9m above ground level in fields to the east and up to 3.5m above ground level in fields towards the west, south and an isolated field to the north as shown on **Figure 2.4 Panel Heights (Document Ref: 6.4 ES Vol.3, 6.4.4)**.
- Supporting infrastructure, including; inverters, transformers and switchgear as follows:
 - A Power Conversion Unit (PCU) comprises the inverter, transformer, and switchgear. If grouped together, this would comprise an area of up to 16m x 3.5m with a height of 3.5m.
 - It is anticipated that either a string inverter or central inverters would be used onsite. Central inverters would be the largest option, representing the worst case scenario, with a height of up to 3.5m.
 - Two transformer options are being considered, 'indoor' and 'outdoor' both with a height of up to 3.5m.
 - Switchgear with a typical footprint of 3m x 3.5m and is up to 3.5m in height.;
- An associated 600MW battery energy storage system (BESS). The BESS area is located adjacent to the proposed Onsite Substation as shown on **Document Ref. 2.6 Illustrative Layout Plan of Battery Energy Storage System and On-Site Substation**.
- The dimensions of the BESS containers (and switch rooms) are anticipated to be approximately up to 8m x 3m, with a height of up to 4.5m.
- The shape of the Onsite Substation will be defined as part of detailed design and will not exceed an area of **40,000m²**. The footprint of the single onsite substation compound is likely to take the form of either a rectangle or a square with the following dimensions:
 - **Rectangle:** up to 250m x 160m and a height of up to 13m; or
 - **Square:** up to 200m x 200m and a height of up to 13m.
- The perimeter fence would likely comprise a standard post and wire deer fencing up to 3m tall around the Solar Array Area. Security fencing up to 3.4m will be installed around the Onsite Substation compound and, possibly, other infrastructure / compounds. Acoustic fencing, up to 4m tall, may be required around the BESS, subject to the detailed design and layout.
- The following fencing and security types are proposed:
 - **Perimeter fence:** up to 3m high consisting of post and wire deer fencing. Pole mounted internal-facing closed circuit television (CCTV) systems to be deployed around perimeter of the operational Solar Array Area of the Site; anticipated to be 5m high.
 - **Acoustic fence:** If required around the BESS infrastructure this would be up to 4m high.

- **Security fence:** This would be installed around substation compounds and other electrical infrastructure / compounds and will include a security fence to be up to 3.4m high and a 0.35m concrete beam below ground.
- Motion detection security lighting will be used along with infrared lighting provided by the CCTV security system deployed around perimeter of the operational Solar Array Area of the Site; anticipated to be 5m high. Lighting at the BESS and Onsite Substation will be passive infrared (PIR) operated, calibrated to detect vehicles and personnel. All visible lighting will be 50W, installed at a maximum height of 4m with downward light fittings to prevent light spillage.
- Temporary construction compounds will be required, as well as temporary roadways, to enable access to all the land within the Solar Array Area boundary;
- Localised earthworks to form a suitable development platform for the substation and BESS;
- Water supply and drainage infrastructure including up to four firewater storage tanks;
- One primary access on the western edge of the site and a secondary access to the south. Further operational access is provided to the north west and north;
- Landscape and biodiversity enhancement areas around the Solar Array Area perimeter and within the Solar Array Area to provide visual amenity, reduce landscape impacts, and provide a net gain for biodiversity (further details are provided in section 6. Embedded Mitigation and **Figure 6.31 Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42)**;
- PRow Ewer/12/1 is being enhanced as a permissive path and will be in place for the operational duration of the project, with a small footbridge to be created over the watercourse.

Cable Route

6.3.11 Introduction of the Cable Route will involve the following works:

- Cable route connection between the Solar Array Area and the existing Bicker Fen 400kV Substation (approximately 13km),
- Underground cabling is the adopted standard and proposed option.
- Standard trenching will be primarily utilised for crossings including methods such as open-cut, cofferdam and silk curtains.
- Trenchless techniques, such as boring, horizontal directional drilling (HDD), micro-tunnelling or moling methods will be undertaken where environmental assessment determines that mitigation for an environmental impact is required or design constraints concludes the need for an alternative to open trenching.
- During construction, temporary construction compounds will be required every 1-3 km approximately, as well as temporary roadways, to enable access to all land.
- Removal of small sections of hedgerow as shown in **Figure 6.32 Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43)**.
- Reinstatement planting within the Cable Route Corridor perimeter to provide reestablish landscape structure.

Bespoke Access Road

6.3.12 Introduction of the Bespoke Access Road will involve the following works:

- A Bespoke Access Road from the A17 to the Solar Array Area, comprising a 6m wide carriageway, will be provided to facilitate the construction, operation/maintenance and decommissioning phases of the Proposed Development. The carriageway will be widened on some bends to a width of 8m, to allow for the passage of abnormal loads, and for two way Heavy Goods Vehicle (HGV) traffic. Additionally, overrun areas will be provided where necessary for abnormal loads. The road will be approximately 3.2km (from A17 to the Site) and the working width during construction will be 50m.
- The soil associated with the reprofiling required to construct the road will be stored as required in accordance with good practice guidance alongside the Bespoke Access Road.
- Fencing will be required along the boundary of the working area during construction and gates will be installed at the entry points to prevent unauthorised access. However, this is subject to detailed design. Gates will also be present where the road crosses Asgarby Road and Heckington Road.

Bicker Fen Substation Extension

6.3.13 The connection works at the National Grid Bicker Fen substation will require an extension to the existing substation. This extension will be to the south-west of the existing substation site. The choice of the location for the extension has been determined in liaison with National Grid and considers the requirements for other customers connecting into the National Grid.

6.3.14 National Grid have requested that there be optionality within the design of the extension to Bicker Fen substation. The extent of the two design options can be seen in **Document Ref: 2.26 Land Take Design Options (Bicker Fen Substation)**. The two design options that are under consideration are: Air Insulated Switchgear (AIS) and Gas Insulated Switchgear (GIS).

Embedded Mitigation

6.3.15 Environmental considerations have influenced the Proposed Development throughout the design development process of the Solar Array Area and the site selection process for the Cable Route Corridor and the Bespoke Access Corridor.

6.3.16 The iterative design process has been informed by the Landscape and Visual Assessment, developing design principles as set out within **Chapter 3: Alternatives & Design Evolution Scope and Methodology (Document Ref: 6.2 ES Vol. 1, 6.2.3)** which respond to the policy requirements, published landscape character assessments and field work.

6.3.17 The design and layout of the Solar Array Area, the Cable Route Corridor, and Bespoke Access Road has been refined following feedback received during statutory consultation and further environmental surveys. This has also informed the development of mitigation measures which include the following:

- Reduction in the extent of the proposed solar PV panels to provide buffers from nearby residential receptors and Public Rights of Way (PRoW) /

introduction of a new permissive path, existing hedgerows and trees and existing drains;

- Minimising vegetation loss within the Solar Array by the retention of the existing field pattern with associated boundary hedgerows and tree cover;
- Introducing native shrub with trees within the Solar Array Area to provide visual mitigation in relation to specific residential properties and introduce shrub and hedgerow planting within the Site to provide landscape and biodiversity enhancements;
- Within the Cable Route Corridor and Bespoke Access Corridor trees, hedgerows and scrub will be replaced on a like for like basis with reinstatement / replacement planting (subject to easement restrictions) and re-seeding; and
- Strengthening the structural landscape within the Solar Array Area will ensure greater integration of the Proposed Development during its operational life.

6.3.18 An Outline Landscape and Ecological Management Plan (OLEMP) (**Document Ref: 6.3 ES Vol. 2, 6.3.19**) has been prepared which outlines the principles of the proposed landscape and ecological management. It will form the basis of a detailed Landscape and Ecology Management Plan(s) (LEMP) prepared pursuant to a requirement in Schedule 2 to the **Draft DCO (Document Ref: 3.1)**.

Landscape Design Strategy

6.3.19 The Landscape Design Strategy, **Figure 6.31 Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42)**, for the Proposed Development has taken into consideration the following guidance and consultation feedback:

- Recommendations contained within relevant landscape guidelines including Natural England Statements of Environmental Opportunity (SEO) outlined in the profiles for NCA Profile: 46 The Fens² and NCA Profile: 47 Southern Lincolnshire Edge³;
- Guidance contained within the Landscape Institute's Infrastructure Technical Guidance Note 04/204;
- Suggested land management guidelines set out in the North Kesteven Landscape Character Assessment (September 2007)⁵;
- Relevant policies in the Local Plan as set out in **Appendix 6.1: Landscape and Visual Legislation and Policy (Document Ref: 6.3 ES Vol. 2, 6.3.13)**;
- The Landscape Strategy Plan has considered the Biodiversity Opportunity Mapping Study for Central Lincolnshire⁶ (BOMS) and associated mapping and has been developed in association with the project ecologist to meet relevant requirements of the document; and
- Comments received during pre-application consultation.

6.3.20 A summary of the landscape mitigation measures illustrated in the Landscape Strategy Plan are set out below:

² [REDACTED]
³ [REDACTED]
⁵ <https://www.n-kesteven.gov.uk/sites/default/files/2023-03/NE004B%20E036%20North%20Kesteven%20Landscape%20Character%20Assessment%20Report.pdf>
⁶ <https://www.n-kesteven.gov.uk/sites/default/files/2023-03/E049%20Biodiversity%20Opportunity%20Mapping%20Study%20for%20Central%20Lincolnshire%201.pdf>

- Landscape and biodiversity enhancement areas around the Solar Array Area perimeter and within the Solar Array Area to provide visual amenity, reduce landscape impacts, and provide a net gain for biodiversity. There will be a 10m offset from areas of woodland to the solar PV arrays;
- Native shrub planting with trees (typically belts 8-12m in width) will be introduced within the Solar Array Area to screen views where specific adverse visual effects have been identified and also to provide landscape assimilation through enhanced connections with existing woodland and shrubs;
- Hedgerow planting to enhance biodiversity and provide visual assimilation and screening;
- Neutral grassland will be introduced to the Solar Array Area as general surface vegetation cover;
- Wildflower meadow and floodplain grazing marsh areas to provide biodiversity and landscape enhancements;
- Existing vegetation cover including, trees, woodland and hedgerows will be retained where possible and protected during construction and operation; and
- Existing ponds and waterbodies will be retained and integrated into the wider landscape scheme.

6.3.21 The OLEMP, **Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19)** has been provided as part of the application which sets out the proposed long-term management of the landscape and ecological elements of the Proposed Development. The OLEMP also includes the recommendations of the Arboricultural Impact Assessment (AIA), **Appendix 6.6: Arboricultural Impact Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.18)** as a means of securing these measures.

6.3.22 The design and the proposed mitigation measures will be further refined at the detailed design stage. The principles within the OLEMP will form the basis of the detailed LEMP(s) which will be prepared prior to construction should the DCO be granted for the Proposed Development.

6.3.23 The obligation to prepare a detailed LEMP(s) and have this/these approved by the relevant planning authority, is secured through a requirement in Schedule 2 to the **Draft DCO (Document Ref: 3.1)**. The detailed LEMP(s) will be developed from the principles set out in the OLEMP as it/they must be substantially in accordance with the OLEMP. The LEMP(s) will include information on establishment and long-term operational management of the landscape and ecological resource. The LEMP(s) will also describe the long-term management of ecological habitats required to achieve biodiversity net gain units.

Limitations & Exclusions

Limitations

6.3.24 General assumptions used throughout the ES are set out in **Chapter 5: Scope and Methodology (Document Ref: 6.2 ES Vol. 1, 6.2.4)**. The assumptions and limitations relevant to the Landscape and Visual Assessment are described below.

- 6.3.25 The assessment of visual effects has principally been undertaken through Site appraisal and further informed by using the range of agreed representative viewpoints. These viewpoints are not intended to show every possible view towards the Proposed Development but represent the views that will be experienced by a range of different receptor types from a range of different locations within the local landscape and have been informed through consultation with NKDC and other consultees, as requested in line 3.1.4 of the Scoping Opinion.
- 6.3.26 Fieldwork has predominantly been undertaken from publicly accessible locations. Professional judgement has been used to assess residents' views, aided by aerial photography and fieldwork observations from the surrounding area.
- 6.3.27 Summer viewpoint photography was undertaken in the summer/autumn of 2023, showing trees with leaf cover. As such, the photographs represent the scenario where existing vegetation provides maximum screenings. The winter photography was undertaken in January 2024 to illustrate the worst case scenario in which deciduous vegetation is devoid of leaf cover.

Assumptions

Construction

- 6.3.28 Assumptions relevant to the construction stage assessment are set out below:
- The precise alignment of the Cable Route and the Bespoke Access Road are not yet known, construction of the Cable Route has been assumed to be anywhere within the Cable Route Corridor boundary to represent a worst-case scenario;
 - The ZTV for the Proposed Development has been modelled on a worst-case scenario with PV Array heights at 3.5m and 3.9m and the tallest elements of the Solar Array Area, the HV transformers at up to 13m. The extension to the Bicker Fen substation with a maximum height of 15m is also assessed;
 - The construction phase is assumed to require daily HGV movements. Access during construction will be provided via a Bespoke Access Road from the A17;
 - The contractor will primarily utilise the construction compounds within the Solar Array Area. However, there will also likely be a need for temporary construction laydown areas within the Cable Route Corridor and the Bespoke Road Corridor;
 - Construction compounds will consist of offices, welfare facilities, canteens, storage and waste skips, parking areas and enough space to allow the storage, offloading and turning areas of vehicles. Mobile cranes (a vehicle with a tall lifting arm) may be required temporarily to construct the compounds, including the lifting and placing of office containers and other ancillary structures. Compounds will store materials as required, with frequent deliveries, to limit stock piling and will include lighting for operational and security purposes;
 - Existing trees will be protected in accordance with the recommendations of BS5837 (2012) Trees in Relation to Design, Demolition and Construction;

- Ground preparation for areas of solar PV and associated infrastructure will consist of topsoil stripping and storage, localised ground levelling, laying of foundations for structures and trenching for wiring. This will be undertaken by standard construction equipment, including; diggers, excavators and trucks;
- Installation of the solar module support structures will follow with the solar panels being fixed onto these structures;
- There will be construction activity for the installation of associated infrastructure, including; solar inverters, transformers and switchgear. This activity will require tall lifting equipment including cranes;
- The Onsite Substation and BESS have been located to minimise visual impact on nearby visual receptors;
- Construction may require removal of crops if present during the works;
- Linear excavation will be required to accommodate the cable which will result in the formation of temporary stock piles;
- Parameters of Onsite Substation and other structures have been designed to be of the smallest dimensions required for functionality of these elements;
- Topsoil will be spread back across the area with a new native grass seed mix applied along with the planting of the hedgerows and woodland, and;
- It has been assumed for the purpose of the assessment that agricultural land use across the majority of the Site including the solar PV arrays, Cable Route and Bespoke Access Road will recommence at the end of the decommissioning phase.

Operation

6.3.29 The following assumptions are relevant to year 0 of the operational phase:

- The visual assessment considers effects in winter year 0, thereby assessing the worst-case scenario, when the mitigation planting for the Proposed Development will not be established;
- It is assumed that the height of the transformer will be up to 10.5m in height. The height of inverters and switchgear will be up to 3.5m and the height of the substation will be up to 13m;
- Proposed native hedge plants will be between 0.6m and 0.8m in height with tree planting between 1m and 3.5m in height on completion (year 0); and
- All proposed planting will form part of the proposed green infrastructure and will be implemented and managed in accordance with the OLEMP, **Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19).**

6.3.30 The following assumptions are relevant to year 15 of the operational phase:

- The visual assessment at year 15 considers the influence of seasonal variation including winter time as a worst case scenario when deciduous vegetation is assumed to be devoid of leaf cover and summer to take account of the screening effect of maturing vegetation in full leaf; and
- The tree planting will have grown by an assumed 3m in height (equating to 20 centimetres per year) and will, therefore, range between 4m and 6.5m in height. New and existing hedgerows will be managed and maintained at a height of up to 3.5m.

6.3.31 The following assumptions are relevant to the decommissioning phase:

- It is assumed that all infrastructure within the Solar Array Area, including the solar PV panels, Onsite Substation and BESS, associated structures and equipment are removed in a manner requiring a similar level of activity to the construction phase, requiring machinery movements and localised excavation;
- Cabling within the Cable Route Corridor will be left in situ and not removed at the decommissioning phase. Reinstatement planting will have matured and providing a comparable level of vegetation cover to the baseline scenario, The Bicker Fen substation extension will remain in situ and will not be affected by decommissioning activity;
- Whilst it is assumed that the Bespoke Access Road will be removed following decommissioning, it is possible that engagement with the landowners at that time will establish a preference for it to be retained. Optionality has been deliberately retained in the Application to facilitate such a scenario. It is acknowledged that retention of the Bespoke Access Road would change operational impacts on receptors within its vicinity to permanent, however as these impacts are already being assessed as long term (for a duration of 45 years) it is not considered that this would result in materially different effects. The activities associated with its removal would likely have a greater effect than operation (albeit for different durations). As such, this Chapter has assumed that the Bespoke Access Road will be removed in order to ensure that the potential effects of its removal have been fully considered within this ES; and
- The assessment will consider a winter time worst-case scenario with the duration of the decommissioning phase being between 12 and 24 months.

6.4 Assessment Methodology & Significance Criteria

Extent of the Study Area

- 6.4.1 Guidelines for Landscape and Visual Impact Assessment (GLVIA 3)⁷ recommend that the study area should cover the geographical area from which the Proposed Development will be potentially visible. The guidance also emphasises the need to take a proportionate approach to ensure the assessment is focussed on receptors with the potential to experience significant effects.
- 6.4.2 In the case of the Proposed Development, the LVIA study area of the assessment hereafter referenced as the 'Study Area' has been defined by a combination of ZTV analysis, and professional judgement further verified by field surveys. Preliminary viewpoint analysis has also been undertaken to inform a likely significance threshold i.e. the maximum approximate distance from the Site boundary where significant visual effects may be experienced. The combination of these factors has resulted in a study area that covers an area of 5km from the Site boundary. It is considered that beyond this distance the Proposed Development is unlikely to give rise to significant landscape or visual effects.

⁷ Guidelines for Landscape and Visual Assessment 3rd edition (2013).

Assessment Methodology

- 6.4.3 The method of baseline data collection and assessment has been carried out in accordance with current best practice and industry guidance. Full details are provided in **Appendix 6.2: Landscape and Visual Methodology (Document Ref: 6.3 ES Vol. 2, 6.3.14)**.

Landscape Effects

- 6.4.4 Landscape effects are associated with the Proposed Development and relate to changes to the fabric and character of the landscape as a receptor and how it is experienced. This requires consideration of landscape elements, features and characteristics, including perceptual qualities and their interrelationships.
- 6.4.5 The landscape assessment relates to:
- Direct effects upon landscape elements as a result of the built form of the Proposed Development;
 - Change in character, which is the distinct, recognisable and consistent pattern of elements that creates distinctiveness and a sense of place. This includes consideration of effects that contribute towards the experience of intangible characteristics such as tranquillity, wildness and cultural associations; and
 - Effects on designated landscapes, and other recognised areas of special interest.

Visual Effects

- 6.4.6 Visual effects relate closely to landscape effects, but they concern changes in views and visual amenity. Visual assessment concerns people's perception and response to visual change.
- 6.4.7 The landscape and visual effects are related to other environmental disciplines such as heritage and biodiversity and therefore are to be read in conjunction with **Chapter 7: Ecology (Document Ref: 6.2 ES Vol. 1, 6.2.7)** **Chapter 8: Cultural Heritage (Document Ref: 6.2 Vol. 1, 6.2.8)**.
- 6.4.8 The LVIA has been informed by field surveys undertaken between March 2023 and February 2024.
- 6.4.9 Judgements about landscape and visual sensitivity result from combining judgments regarding value and susceptibility to the proposed changes. The sensitivity levels are recorded on the scale of very high, high, medium, low and very low, and are accompanied by narrative justification.
- 6.4.10 Judgements about the magnitude of change for landscape effects are recorded on a scale of high, medium, low and negligible, based on the principles set out in paragraphs 5.48-5.52 of GLVIA3, which recommends consideration of scale, geographical extent and the duration and reversibility of effects.

Cumulative Effects

- 6.4.11 The assessment of cumulative effects is essentially the same as for the assessment of the primary landscape and visual effects, in that the level of landscape and visual effect is determined by assessing the sensitivity of the landscape or visual receptor and the magnitude of change. Cumulative

assessment, however, considers the magnitude of change posed by multiple developments.

Cumulative Landscape Effects

- 6.4.12 The assessment considers the extent to which the Proposed Development, in combination with other existing identified schemes, those that are consented, and those for which planning applications have been submitted may introduce landscape change. This change can be brought about through either an 'additional' or 'in combination' effect on landscape character.
- 6.4.13 As a general observation, high levels of adverse cumulative landscape impacts are more likely to occur where similar developments will be close to the proposed development and where the ZTVs for different developments overlap, resulting in energy developments becoming a greater characteristic of the landscape, and potentially changing the landscape character.

Cumulative Visual Effects

- 6.4.14 Cumulative visual effects may arise from the effects on views and visual amenity of the Proposed Development in association with views of other developments resulting in a combined effect which is greater than that solely introduced by the Proposed Development.

Significance Criteria

- 6.4.15 Judgements about the overall level of landscape and visual effects, are recorded on a scale of Major, Moderate, Minor and Negligible, based on the principles set out in paragraphs 5.53-5.57 of GLVIA3. The underlying principles are summarised in GLVIA3, Figure 5.10 (Page 92). The criteria which relate to the Proposed Development have been set out in Table 6.2.
- 6.4.16 GLVIA3 references the requirement for a final judgment on whether the effects are considered significant or not in Paragraph.3.32 "... *There are no hard and fast rules about what effects should be deemed 'significant'...but LVIA's should always distinguish clearly between what is considered to be the significant and not significant effects*".
- 6.4.17 Paragraphs 3.35 and 3.36 of GLVIA requires the need to use narrative text to justify the identification of significant effects.
- 6.4.18 The overall level of landscape and visual effects is derived by considering the combination of the sensitivity of the receptors and the magnitude of impact resulting from the Proposed Development. The matrix presented in Table 6.2 is used as a guide to show how sensitivity and magnitude are combined to determine the level of effects. However, it is important to note that professional judgement is also required and used to determine the actual level of effects in each case. Where the level of effect is considered to differ from this guide, a reasoned justification has been provided within section 6.6.
- 6.4.19 The matrix presented in Table Error! No text of specified style in document..2 should, therefore, be considered as a guide, and deviation from this guide has been explained in the assessment.

Table Error! No text of specified style in document..2 - Matrix for Evaluating Significance

		SENSITIVITY				
		Very high	High	Medium	Low	Very low
MAGNITUDE	High	Major	Major	Major or Moderate	Moderate or Minor	Minor
	Medium	Major	Major or moderate	Moderate or Minor	Minor	Minor or Negligible
	Low	Major or Moderate	Minor or Moderate	Minor	Minor or Negligible	Negligible
	Very low	Minor or Moderate	Minor	Minor or Negligible	Negligible	Negligible

6.4.20 Effects that are deemed to be significant for the purposes of this assessment are those that are described as being of a Major or Moderate adverse/beneficial level. Effects assessed as Minor or Negligible are considered to be ‘non-significant’.

6.5 Baseline Conditions

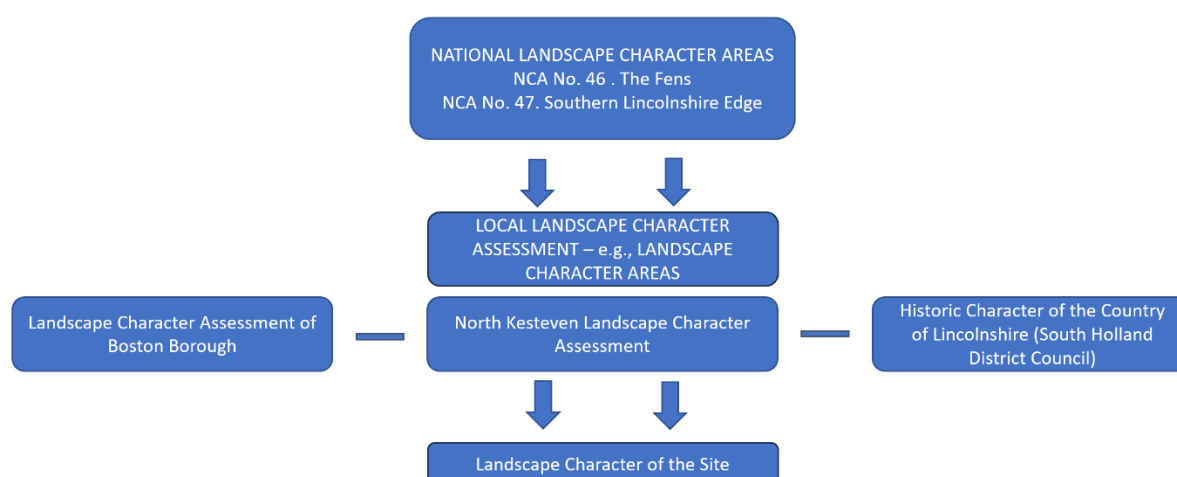
Current Baseline Conditions

6.5.1 This section describes the landscape and visual characteristics of the Site and the Study Area.

Hierarchy of Landscape Character

6.5.2 The hierarchy of landscape character within the study area illustrated in Diagram No. 1 below and in **Figure 6.5 Landscape Character (Document Ref: 6.4 ES Vol.3, 6.4.16)**.

Diagram No. 1 Landscape Character Hierarchy



National Landscape Character

6.5.3 Natural England has produced mapping and written descriptions of the landscape character of England within defined National Character Areas (NCA). The aim is to assist those who make decisions regarding local plans to consider how best to enhance and respect local distinctiveness.

- 6.5.4 At a national scale, the 5km LVIA study area includes two NCA: NCA 47 Southern Lincolnshire Edge, and NCA 46 The Fens.
- 6.5.5 A detailed analysis of these NCAs is included in Appendix 6.3 Landscape Character Baseline and Sensitivity. The landscape context of the study area exhibits some of the key characteristics described in the published NCA descriptions and they are taken as an appropriate description of the wider landscape context.

Local Landscape Character

- 6.5.6 The assessment has considered effects on the landscape types identified at the local and regional level within the following relevant Landscape Character Assessments:
- North Kesteven Landscape Character Assessment;
 - South Kesteven Landscape Character Assessment⁸;
 - Landscape Character Assessment of Boston Borough Council⁹; and
 - Historic Character of the County of Lincolnshire¹⁰ (used to inform landscape character areas within South Holland District Council in the absence of a Landscape Character Assessment).
- 6.5.7 The majority of the Site is located within North Kesteven Council's administrative area. The south-eastern part of the Cable Route Corridor is located within the administrative boundary of Boston Borough Council. This Landscape Character Assessment identifies Landscape Character Types (LCT) and Landscape Character Sub-Areas that provide a more detailed description of landscape characteristics.
- 6.5.8 The south eastern part of the study area falls within the administrative boundary of South Kesteven District Council, and the landscape of this area is described within the South Kesteven Landscape Character Assessment. This Assessment identified seven District Landscape Character Areas (LCAs) with distinct characteristics. The Fen Margin and the Fens LCAs fall within the most northern part of the study area.
- 6.5.9 The Solar Array Area and the majority of the Cable Route Corridor falls within the Fenland Sub Area; however, the south eastern part is located within the Holland Reclaimed Fen LCA within Boston Borough Council. The Bespoke Access Road lies predominantly within the Central Clays and Gravels LCA Sub Area.
- 6.5.10 The south eastern part of the study area falls within the administrative boundary of Boston Borough Council, and the character of the landscape is described within the Landscape Character Assessment of Boston Borough Council. This Landscape Character Assessment identifies LCT, which represent distinct types of landscape that are relatively homogenous in character. These LCTs have been subdivided into nine LCAs, which are "single unique areas and are the discrete geographical areas of a particular landscape type". The Holland Reclaimed Fen LCA falls within the north eastern part of the study area.

⁸<https://www.southkesteven.gov.uk/sites/default/files/2023-11/Landscape%20Character%20Assessment%202007.pdf>

⁹

¹⁰ https://www.n-kesteven.gov.uk/sites/default/files/2023-03/HEV002%20LincsHLC_Report-1.pdf

- 6.5.11 In the absence of a Landscape Character Assessment published by the South Holland District Council, the boundaries of the Historic Character of the County of Lincolnshire covering the Lincolnshire area have been used to identify LCA of distinct characteristics within the study area. Based on the review of the available information informed by field surveys, two LCA were identified, comprising the Wash LCA and the South Holland Fens LCA.
- 6.5.12 Key characteristics of the landscape within the study area have been described below. More detailed landscape character description and sensitivity assessment is included in **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)**.

North Kesteven Landscape Character Assessment

Fenland Sub Area

- 6.5.13 The Landscape of Fenland Sub Area is a low-lying relatively, flat landscape with large field units predominantly divided by drainage channels. Drains and ditches provide a strong linear pattern often reflected in road pattern. The Fens are described in the North Kesteven Landscape Character Assessment as follows;

“The fens have a very strong and distinctive character and despite its absence of variation might be considered to present a sense of drama and melancholy.”

- 6.5.14 The land has been reclaimed and drained from the natural marshes and wet woodlands from which the ‘reclaimed’ fens of today are derived and represent an almost totally man-made landscape. The Fens typically have peaty and very dark brown soils, frequently used for growing wheat or root vegetables.
- 6.5.15 Tree and woodland cover is relatively scarce, with minimal significant woodland cover. There are occasional individual trees and some tree belts which are typically associated with isolated farmsteads. These often consist of poplar trees which are visible for considerable distances over the flat and otherwise uninterrupted landscape.
- 6.5.16 The settlement pattern is largely comprised of individual properties and small villages connected with a network of minor roads and lanes. Overhead high-voltage electricity cables and pylons feature prominently within the open landscape.

Central Clays and Gravels Sub Area

- 6.5.17 The landscape character of the Central Clays and Gravels Sub Area is characterised by gently undulating lowland, with scattered woodland. South of Sleaford, the land falls gradually down from the Upland Plateau Fringe at approximately 40m Above Ordnance Datum (AOD) in the west before merging with the adjacent fenland in the east at approximately 5m AOD. Agricultural use dominates with cereal and root vegetables with occasional grazed areas. Some small woodland copses, mostly broadleaved are scattered throughout the Sub Area. High voltage power lines and pylons cross through the area but, whilst large in scale, are generally less prominent in the landscape than in the more open landscapes of the Fens or the Limestone Heath.
- 6.5.18 Although drainage channels, dykes and other watercourses are present, their presence is generally restricted to low lying areas. The settlements comprise

typically isolated farmsteads, small villages and occasional small towns such as Sleaford that include some industrial land use. There are some landmarks such as the Heckington 8-sailed windmill which is a Grade I Listed Building and presents a strong historical reference point in the landscape.

Landscape Character Assessment of Boston Borough

Holland Reclaimed Fen LCA

- 6.5.19 The key characteristics of Holland Reclaimed Fen are described within the Landscape Character Assessment of Boston Borough Council. In summary, the landform of Holland Reclaimed Fen LCA is flat and low-lying, with semi-remote views of agricultural landscapes. The long-distance panoramas are available across cereal crops with frequently open skylines. These views are sometimes interrupted by small-scale telegraph poles or wind turbines, such as near Bicker in the southwest corner. A hierarchical grid layout of straight, open, deep drains is crossed by frequent bridges which allow access to the adjacent dwellings and farmsteads. Drain and dyke banks are well maintained in most parts with limited riparian vegetation.
- 6.5.20 Wheat and brassica crops dominate within medium to large-scale fields within the strong geometric pattern of drains, dykes and ditches. Tree cover is sparse and confined to mature trees and shelterbelts around settlements, farmsteads and dwellings. A section of the Boston to Sleaford rail link runs along the top of the South Forty Foot Drain embankment.
- 6.5.21 Overall, the landscape is intact, large-scale, semi-remote and intensively farmed. Table 6.3 below outlines the key characteristics of other LCAs considered within the Study Area.

Table Error! No text of specified style in document..3 - Key characteristics of LCAs within the Study Area

LANDSCAPE CHARACTER AREAS	CHARACTERISTICS
South Kesteven Landscape Character Assessment	
The Fens	<ul style="list-style-type: none"> • Low flat terrain, level horizons and large skies. • Large-scale open rectangular fields, divided by drainage ditches and embanked rivers. • Sparse trees and woodland cover. • Little settlement apart from individual farmsteads, often with large-scale agricultural buildings.
Fen Margin	<ul style="list-style-type: none"> • A transitional area between the wooded Kesteven Uplands and the flat open fens. • Broad east-facing slope, with local variations in topography. • Medium-scale rectilinear fields with some hedgerow trees and a variety of farming uses. • High proportion of settlement along the A15 and B1177 roads provides activity in the landscape.
South Holland District Council	
The Wash Farmlands LCA	<ul style="list-style-type: none"> • A sparsely settled LCA characterised by its agricultural use under arable cultivation. Settlement character entirely dispersed with no nucleation.

LANDSCAPE CHARACTER AREAS	CHARACTERISTICS
	<ul style="list-style-type: none"> • Field boundaries are discontinuous and in the form of shallow wet dykes, with a wider, irregular geometric field pattern present. • Woodland is extremely sparse, consisting of small-scale twentieth-century plantations around domestic or farm buildings. • There are no civic buildings or amenities in the character zone.
South Holland Fens LCA	<ul style="list-style-type: none"> • This LCA presents a large portion of the southern half of the county, with the area well defined to the north and west, where in these areas a clear defined edge is present on higher ground. • Predominantly flat topography, dissected by local roads, rivers, drainage channels and drainage ditches, often on raised banks. • Least settled character area due to the lack of nucleated settlements. • The few trees to be found tend to be near farmsteads, and there is no evidence of hedgerows as field boundaries. • Views are unrestricted across the landscape, with limited detracting features enhancing the impact of big skies. • The flat landscape is occasionally relieved by small woodland blocks and raised roads and tracks around isolated farmsteads.
Landscape Character Assessment of Boston Borough Council	
Bicker to Wyberton Settled Fen LCA	<ul style="list-style-type: none"> • Expansion and modernisation of the infrastructure associated with intensive agriculture. • New sustainable housing on the edge of Bicker village. • Countryside and Environmental Stewardship Schemes are affecting the appearance of buffer strips around arable fields edges and dyke vegetation, through changed farming and management practices. • Views to Bicker Fen wind farm outside the character area. • Urban expansion on the outskirts of Boston town including leisure, residential, industrial and commercial developments which could in future merge with outlying settlements. • Housing development over the last decade including expansion of villages such as Swineshead.

Landscape of the Site and Surroundings

Landform and Drainage

6.5.22 The landform of the Solar Array Area is low lying and relatively flat, typical of fenland landscape and varies from 2m AOD at Middfoder Dike in the east to 14m AOD on land immediately to the east of Ewerby Thorpe. The landform of

the Cable Route Corridor is also relatively flat and below 5m AOD to the east of Little Hale.

- 6.5.23 Drains and dykes are typical landscape features of the fenland landscape, which are characteristic of both the Solar Array Area, the Cable Route Corridor and the Bespoke Access Road. The low-lying fen landscape east of Great Hale, Little Hale and Helpringham comprises large and medium-scale fields subdivided by drainage channels. A hierarchy of drains and ditches provides a strong linear pattern, with these features demarcating field boundaries rather than hedgerows. Key drains within or along boundaries of the Solar Array Area and eastern part of the Cable Route Corridor include Twelve Drain, Midfodder Dike, Hodge Dike, The Beck, Car Dyke, Helpringham Eau, Great Hale Eau, South Forty Foot Drain. The fen landscape was initially created in 17th century and is still an ongoing process, which transformed wild wetlands and meandering streams into long straight channels at regular angles that enabled the use of the peat-rich soils for growing a variety of crops.
- 6.5.24 Both the landform and the drainage pattern of the Site are representative of the wider study area. The western part of the study area includes fewer ditches and drainage channels as the limestone plateau edge transitions into the more porous soils of the fens. The landform at the western extent of the study area rises to approximately 50m in proximity to Green Hill (between Aswarby and Aunsby) and approximately 2m AOD at the eastern extents of the study area. The River Witham is located in the north eastern part of the study area. Ponds are also frequently present throughout the study area.

Land Use and Land Cover

- 6.5.25 Arable land use dominates within the Solar Array Area. Small to medium-scale fields are separated by drainage channels or hedgerows. There are a few small woodland blocks within the Solar Array Area, such as Fox Covert.
- 6.5.26 Land use and land cover within the Cable Route Corridor, Solar Array Area and Bespoke Access Road is predominantly comprised of arable field units within a mosaic of small, medium, and large fields separated by hedgerows or, more frequently by drainage channels. Existing energy infrastructure is present in the form of high-voltage power lines and pylons, the Bicker Fen Substation and the adjacent Bicker Fen wind farm. Woodland cover is sparse and comprises small to medium size woodlands.
- 6.5.27 Land cover and land use across the study area is similarly characterised by arable agriculture fields demarcated by drainage channels. The woodlands are larger, and hedgerows are typically more frequent as field enclosures to the western part of the study area. Roadside hedgerows are usually complete, dense and in good condition, with a few sparsely spaced hedgerow trees. In contrast, the landscape in the eastern part of the study area is more open, with fewer woodlands and hedgerows and the frequent presence of drainage channels. Arable land use dominates with cereal and root crops. Shelterbelts are occasionally present and often consist of poplars. Overall, the agricultural landscape within the study area is well-managed and in good condition.

Settlements and individual properties

- 6.5.28 The settlement pattern in the Study Area generally comprises small villages, such as Heckington, Helpringham and Great Hale, or hamlets, such as Little

Hale. The villages are frequently aligned along local roads and therefore have a linear character, such as Heckington and Great Hale or hamlets, such as Little Hale and Helpringham orientated along the B1394. Heckington is the largest village within the study area, which originated at the intersection of minor roads, but has grown northwards towards the A17 bypass. Newer mixed development has been built on the outskirts of the villages, although much of this has been in-keeping with the local vernacular.

- 6.5.29 Red brick buildings with tiled roofs dominate. Some older houses were built of yellow brick, and although the core of the villages is of historical interest. The Heckington Village and Heckington Station Conservation Area Appraisal¹¹ refers to *“Heckington Windmill as a prominent landmark..which presents strong historical reference points within the landscape which should be protected from visual interruption.”*
- 6.5.30 Sleaford is the largest market town and is located at the western edges of the study area. The fenland landscape to the east is less settled and includes villages such as South and North Kyme with some isolated houses, and hamlets. The villages of Donnington and Billingborough are located at the south eastern edges of the study area, slightly elevated above the adjacent fen landscape to the east.

Transport Network

- 6.5.31 Main roads in the western part of the study area are orientated north to south (Lincoln to Sleaford) with minor connector routes roads running west to east. The road pattern in the eastern part of the study area consists largely of narrow, straight roads running in an east west direction which relate to the prevailing drainage pattern. The A17 bisects across the centre of the study area and takes an uncharacteristic sweeping line.
- 6.5.32 The A52 skirts the southeastern peripheries of the study area to link with the A17 just north of Bicker. The B1395 links East Heckington with North Kyme, and the B1394 links Heckington with Swaton in the north-south direction. The roads within the Fenland are raised above the land level on earth embankments along the drainage channels. The movement of vehicles along the roads is a rare dynamic element within a relatively static and tranquil landscape.
- 6.5.33 The Peterborough to Lincoln railway line runs south of Helpringham, with associated rail infrastructure such as bridges, level crossings and signal boxes.

Recreational Routes

- 6.5.34 There are numerous footpaths and PRow present within the study area. The Cross Britain Way is a walking route that traverses the study area in the south eastern part and is aligned with the drainage network such as Bridge End Causeway for much of its length. This long-distance recreational route is regionally promoted in tourist guides and published online information.

Designated Landscapes

¹¹ https://www.n-kesteven.gov.uk/sites/default/files/2023-01/heckington_village_and_heckington_station_conservation_areas_appraisal_adopted.pdf

- 6.5.35 There are no landscape designations within the Site or Study Area, however, there are some sensitive landscape receptors present as illustrated in **Figure 6.4 Landscape Designations (Document Ref: 6.4 ES Vol.3, 6.4.15)** and as described below.
- 6.5.36 Listed Buildings and Scheduled Monuments are grouped primarily within the core of villages or hamlets such as Heckington, Great Hale, Little Hale, Helpringham, Howell, Ewerby Thrope or South Kyme. Although some such as Roman Saltern in Helpringham Fen SAM is located near South Forty Foot Drain in the south eastern part of the study area.
- 6.5.37 Aswarby Park, Grade II Registered Park and Garden is located on the western peripheries of the study area. Areas of Ancient Woodland including Evedon Wood to the north west and Old Wood to the north east are located over 1km away from the Solar Array Area. Aswarby Thorns Ancient and Semi Natural Woodland is located approximately 1.2km to the north east of Aswarby Park (Grade II Registered Park and Garden). Evedon Wood is located approximately 1.2km to the west from the Solar Array Area. The Old Wood Ancient and Semi Natural Woodland is located approximately 1km to the north east of the Solar Array Area.
- 6.5.38 The Horbling Fen Site of Special Scientific Interest (SSSI) is located approximately 850m to the south of the A52 and Mareham Pastures Local Nature Reserve is located at the southern edge of Sleaford.

Visual Baseline

- 6.5.39 This section identifies the key visual receptors within the LVIA study area that may experience a change in views as a consequence of the Proposed Development.

ZTV Analysis

- 6.5.40 The limited topographical variation within the study area combined with the presence of sparse vegetation in the form of woodlands and hedgerows results in comprehensive ZTV coverage as illustrated in **Figure 6.1 Bareground Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.12)** and **Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13)**.
- 6.5.41 **Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13)** has been produced using Digital Terrain Model (DTM) data combined with associated building locations based on OS Master Map data and their heights and tree canopy extents data from National Tree Map data and their maximum heights. Although this ZTV includes buildings and trees over 3m in height, it does not include hedgerows, which, although present to a limited extent within the study area, have a considerable impact on visibility within a relatively flat landscape. Further field surveys have established that the visibility of the Solar Array Area and Bespoke Access Road will be restricted predominantly to areas within 2km buffer from the Site. This is primarily due to screening provided by hedgerows that have not been captured in ZTV data analysis, but also other vegetation cover including corpses and woodlands not captured by National Tree Map data.
- 6.5.42 The visibility of the Cable Route Corridor will depend on the final alignment of the Cable Route, however, ZTV analysis indicates that close distance

receptors are likely to be most notably affected because of the presence of field boundary vegetation, woodlands and garden vegetation that provides a reasonable level of screening within the relatively flat landscape. The ZTV indicates that there will be some additional visibility associated with the substation extension at the southern end of the Cable Route Corridor.

Views from Residential Receptors and Settlements

- 6.5.43 A relatively limited number of residential receptors currently experience views towards the Solar Array Area. **Figure 6.7 Residential Properties (Document Ref: 6.4 ES Vol.3, 6.4.18)** illustrates the location of residential properties and settlements and **Appendix 6.4: Visual Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.16)** provides a detailed assessment. A summary of key findings relating to the visual assessment is set out below.
- 6.5.44 Residents of Gashes Barn within the north east of the have views across extensive parts of the Solar Array Area, although adjacent agricultural buildings, trees and existing hedgerow within the main site provides limited screening. Ewerby Waithe is a single-storey house (approximately 600m to the north of the Site), from where partially filtered middle distance views towards the Solar Array Area are available.
- 6.5.45 The views from the residential property at Ferry Farm are largely screened by the adjacent woodland belt, garden vegetation and hedgerow along Kyme Eau drainage channel. Views from Anwick village located approximately 2.55km to the north west of the Site are screened by Haversholme Wood. The views from residential properties along the A153 are almost entirely screened by hedgerows, however some long distance views are expected from the upper storey of some of these properties into parts of the Site. The views from South Kyme village are screened by woodland belt around the village and a hedgerow along the Middfoder Dyke, which forms the eastern boundary of the Solar Array Area.
- 6.5.46 Open views of the Solar Array Area are available from Ewerby Thorpe Farm, adjacent to the west of the Site. The visibility from residential properties located further away within Ewerby is more restricted by intervening vegetation, consisting of hedgerows and shelter belts or through screening provided by poultry units or scattered trees. The existing woodland and tree groups around residential properties largely screen the views from Howell hamlet. The views from Westmorelands Farm are largely screened by adjacent ancillary buildings with partial views available of the Solar Array Area. There are views from Howell Fen Farmhouse partially screened by trees and hedgerows around the perimeter of the residential property. The views from residential properties located further away to the south, accessed off Littleworth Drove and Star Fen Road are considerably more restricted due to the greater distance from the Site, screening of field boundary vegetation and presence of trees and shelterbelts around residential properties. The views from Heckington are screened by vegetation along the A17.
- 6.5.47 Views of construction works within the Cable Route Corridor are expected to be predominantly visible by residential receptors in the vicinity of the Proposed Development, such as Car Dyke Farm and Crow Lane Farm. Although views from many of these residential receptors are partially restricted by vegetation to the property boundaries. Residents of some properties have views which

are primarily available from the upper storeys, this includes many of the dwellings around Great Hale.

- 6.5.48 Views from settlements and residential properties towards the Bespoke Access Corridor are limited. Asgarby is located immediately to the east of the access point off the A17 but views from residential properties will be restricted by mature tree cover and boundary hedgerows. Views will be, similarly, limited from residential properties in Boughton located immediately to the south of the Bespoke Access Corridor.

Views from PRow

- 6.5.49 The location of PRow within the study area is illustrated in **Figure 6.6 Recreational Routes, Facilities and Visitor destinations (Document Ref: 6.4 ES Vol.3, 6.4.17)**.
- 6.5.50 There is a single PRow, Ewer/12/1 within the Solar Array Area which links into PRow Ewer/9/1 and SKm/8/1 immediately to the north east of the Solar Array Area. There are several PRow that link with the Solar Array Area, such as Public Bridleway Ewer/1103/1, which links Ewerby Thorpe with Asgarby Road. Partial views towards the Solar Array Area are available from Public Footpath Anwi/2/2 and Restricted Byway Ewer/8/1, which are routed along the River Slea. The views from Public Footpath SKym/8/1 the SKym/1/1 located to the west of the Solar Array Area, are largely screened by a hedgerow along Middfoder Dyke, but some filtered views into the Site are available. The views from Public Footpaths such as AsHo/4/1 near Howell and Public Footpath Heck/12/1 stretching along Heckington Eau to the south are largely screened by intervening vegetation.
- 6.5.51 There are a range of PRow within the Cable Route Corridor. Some of them follow the existing drainage channels such as Public Footpath Help/14/2 and Help/2/6. Some sections of PRow are short such as Public Footpath LHal/5/1, but they are linked to the farm access tracks allowing for connectivity. Public footpath Bick/1/1 runs in the north southerly direction along the South Forty Foot Drain. This public footpath aligns with the section of Cross Britain Way, which is a promoted hiking route in tourist information guides and online sources. This 280 mile route links Boston in England with Barmouth in Wales.
- 6.5.52 Several PRow traverse the Bespoke Access Corridor or are routed through the adjoining landscape. PRow to the west of Asgarby Lane, include; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1 are routed through the Cable Route Corridor. There are also some PRow to the east of Asgarby Lane, including; ASHo/3/1 and Ewer/1103/1 KkLT/4/2 and KkLT/5/1.

Views from People at Work

- 6.5.53 The key visual receptors that will experience a change in views at work are farmers working within the Study Area.
- 6.5.54 Business units of notable size are present at the eastern edges of Heckington. However, the views towards the Site are screened by adjacent buildings and vegetation. Although these business units are industrial in character, located typically within large unsightly buildings, they are often focussed on processing food. Other businesses include those which utilise existing farm buildings such as the Farm Kitchen producing food for schools.

Views from Roads

- 6.5.55 The key transport receptors that have views towards the Site are local roads adjacent to the Site such as Asgarby Road, from where partial views of the Solar Array Area are available above the existing hedgerow that stretches along the perimeter of the Site. Similar views are available to transport receptors along Halfpenny Toll Lane that follows the northern perimeter of the Site, although some short sections of hedgerow are gappy allowing for more open views towards the Site. The views from Ferry Lane to the north of the Site are also restricted by hedgerow with occasional gaps. The views from roads located further to the north such as the A153 to the north are screened by field boundary vegetation and raised banks along the River Slea.
- 6.5.56 The views from transport receptors to the east such as Wood Lane and Clay Bank are screened by intervening field boundary vegetation, occasional small woodland blocks, but foremost the hedgerow with trees along the Middfoder Dyke. Some glimpsed and partial views are available from Cow Drove, linking the nearby local farms with South Kyme, from where some partial views towards the Site are available.
- 6.5.57 Transport receptors will experience views into the Cable Route Corridor the A17, Main Road/B1394, Fen Road and Little Hale Drove Road and the minor road network in close proximity to the Bicker Fen substation.
- 6.5.58 Short lived, transient views will be available of the entrance to the Bespoke Access Road from the A17 and from Asgarby Lane adjacent to the Bespoke Access Road crossing.

Selection of Viewpoints for Assessment

- 6.5.59 Viewpoints have been selected to inform the potential visual effects of the Proposed Development. The viewpoints are representative of the range of views and viewer types likely to experience views of the Proposed Development (paragraphs 6.19 and 6.20 of GLVIA3).
- 6.5.60 The selection of viewpoints was informed by the ZTV analysis, fieldwork, and by desk based research relating to access and recreation, including footpaths, bridleways and public access land, tourism including popular vantage points, and distribution of population. A range of viewpoints were selected representing views at a range of elevations, orientations, distances, and aspects. The viewpoints were also selected to capture the views from recreational routes, panoramic views and views from promoted recreational routes. The detailed location of each viewpoint was considered as typical or representative of the view likely to be experienced.
- 6.5.61 The initial selection of viewpoints was submitted with the Scoping Report. The comments received with the Scoping Opinion informed the addition of a further six viewpoints alongside the identification of three photomontage locations.
- 6.5.62 A series of photographs were taken from the agreed representative viewpoints using a Nikon D750, with a 50mm fixed lens, mounted on a tripod with a professional panoramic head which positions the focal point of the camera lens above the pivot of the tripod and allows the photographs to be stitched together accurately. Panoramic photographs are presented as Type 1

visualisations and prepared in accordance with the requirements of the Technical Guidance Note 06/19 published by the Landscape Institute¹².

6.5.63 The viewpoint locations used to inform the visual assessment are shown in **Figure 6.1 Bareground Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.12)** and **Figure 6.2 Screened Zone of Theoretical Visibility (Document Ref: 6.4 ES Vol.3, 6.4.13)**. The baseline viewpoint panoramas are illustrated in **Figures 6.8 to 6.26 Baseline Panoramas (Document Ref: 6.4 ES Vol.3, 6.4.19) to (Document Ref: 6.4 ES Vol.3, 6.4.37)**. Photomontages are illustrated in **Figures 6.27 to 6.30 Baseline Panoramas (Document Ref: 6.4 ES Vol.3, 6.4.38) to (Document Ref: 6.4 ES Vol.3, 6.4.41)**.

Sensitive Receptors

6.5.64 Landscape receptors likely to be affected by the Proposed Development and anticipated impacts are included in Table Error! No text of specified style in document..4 below.

Table Error! No text of specified style in document..4 - Key sensitive landscape receptors and potential impacts

SENSITIVE LANDSCAPE RECEPTORS	POTENTIAL IMPACTS
Existing vegetation, such as hedgerows and trees	Loss of vegetation.
Land use	Long term change from arable land use to energy infrastructure.
Landscape pattern	Long term disruption to landscape pattern through introduction of infrastructure.
Change to landscape character of the Site	Introduction of uncharacteristic features associated with the Proposed Development such as solar arrays, inverter cabins and substation and other elements of the development.
Perceptual aspects of landscape character	Construction activity and the presence of energy infrastructure. Introduction of elements of the Proposed Development that may locally alter perceptions of tranquillity and remoteness.
Field enclosure	Removal of vegetation will reduce field enclosure.
Drainage channels	Section of drainage channels being altered to allow for temporary access.
Landscape character	Change to landscape character on the Site level, local and regional scale.
Cumulative change to landscape character	Effects of the Proposed Development in association with other identified cumulative schemes in the Study Area.

6.5.65 Visual receptors likely to be affected by the Proposed Development and anticipated impacts are included in Table Error! No text of specified style in document..5 below.

¹² Visual Representation of Development Proposals, Technical Guidance Note 06/19, The Landscape Institute (2019)

Table Error! No text of specified style in document..5 - Key sensitive visual receptors and potential impacts

SENSITIVE VISUAL RECEPTORS	POTENTIAL IMPACTS
Residents of properties with views of the Proposed Development	Introduction of energy infrastructure in the views available to residents resulting in effects on visual amenity.
Recreational receptors along the PRoWs with views of the Proposed Development	Introduction of energy infrastructure in the views available to residents resulting in effects on visual amenity.
People at work with views of the Proposed Development	Introduction of energy infrastructure in the views available to residents resulting in effects on visual amenity.
People travelling along major transport corridors and local roads	Introduction of energy infrastructure in the views available to residents resulting in effects on visual amenity.

Future Baseline Conditions

- 6.5.66 It is anticipated that the future landscape and visual baseline within the Site will remain as indicated in the baseline section. The land will, therefore, remain in agricultural use.
- 6.5.67 In relation to the study area, the land uses, and vegetation patterns are also considered to remain similar, although the potential cumulative effects with other renewable schemes have been considered and assessed.
- 6.5.68 The effects of change in temperature or precipitation levels as a result of climate change may result in changes to species composition, habitats and land use change within the Site and study area. The implications of climate change are considered and assessed within **Chapter 12: Climate Change (Document Ref: 6.2 ES Vol. 1, 6.2.12)**.

6.6 Assessment of Effects

Embedded Mitigation

- 6.6.1 The assessment is based on the assumptions included in the Limitation and Exclusions section 6.3.21 to 6.3.29. The section below sets out the mitigation measures that are embedded into the design and delivery of the Proposed Development (referred to as "embedded mitigation").
- 6.6.2 Construction phase embedded mitigation of relevance to this landscape and visual chapter is as follows:

Table Error! No text of specified style in document..6 - Mitigation Measures and Securing Mechanism

MITIGATION	SECURING MECHANISM
Construction	
Temporary fencing will be used to demarcate important and protected habitats and vegetation in accordance with industry standard guidance during the construction stage;	OLEMP/OCEMP

MITIGATION	SECURING MECHANISM
The use of hoarding will be considered where visual screening is required for residential properties, the PRoW network and recreational areas.	OCEMP
Work compounds, access tracks, haulage routes and material storage areas, will be located away from sensitive landscape and visual receptors where practicable; and Lighting associated with construction works will be designed, positioned and directed to prevent or minimise light spill and pollution both in relation to nearby residential receptors and more widely across the Study Area.	OCEMP
Land temporarily impacted by works to divert utilities will be reinstated to its former condition and composition upon completion, as far as reasonably practicable;	OLEMP
Operation	
The extent of the Cable Corridor Route has been refined to minimise its size and therefore reduce the extent of land use change and direct landscape effects.	Work Plans
The Onsite Substation and BESS is located centrally within the Solar Array Area and was informed by landscape considerations, including to minimise its visual presence in the landscape;	Work Plans
Loss of existing vegetation including mature trees and hedgerows has been limited through siting and design refinements as part of the iterative design process;	Work Plans
Land utilised during construction will be reinstated to its original use as far as technically practicable and through consultation with the landowners as required;	OLEMP
Existing vegetation will be retained as far as reasonably practicable in order to preserve its function as a natural screen to the elements of the Proposed Development;	OLEMP
Species selection has been developed through consideration of the local landscape context and plants/seed of local provenance will be specified where appropriate. A diverse range of plant species have been selected having regard to climate change resilience and the requirement to survive and thrive in conditions which are likely to be warmer and drier during the summer months and wetter during the winter months;	OLEMP
In order to minimise the visual impact of the Proposed Development, the landscape design around the Solar Array Area includes enhancement to the existing perimeter vegetation planting, aimed at comprehensive screening of the Proposed Development by year 15 of operation;	OLEMP
A belt of native shrub planting will be introduced to the west of the proposed Onsite Substation and BESS in the Solar Array Area to minimise visual impact as perceived from visual receptors to the west and help provide assimilation into the landscape context.	OLEMP

MITIGATION	SECURING MECHANISM
Planting within the Cable Route Corridor will be limited to the reinstatement of hedgerows removed during the construction phase subject to easement restrictions.	OLEMP
To protect the historic character of the fenland landscape where field boundaries are typically demarcated by drainage channels with few field boundary hedgerows, the inclusion of additional hedgerows within Solar Array Area has been carefully considered. Hedgerows have only been introduced where necessary for landscape integration, visual mitigation or to provide enhanced connections between existing areas of vegetation.	OLEMP
Woodland planting typically comprising typically of native species (with some climate change-adapting species) planted as multipurpose features will provide visual screening, will aid landscape integration and support nature conservation and biodiversity enhancements;	OLEMP
Lighting will only be required to facilitate periodic maintenance visits and will not be continuously operational to minimise light spill/pollution; and Lighting will be designed, positioned and directed to prevent or minimise light disturbance, excluding floodlighting to nearby receptors.	Work Plans
The existing and proposed hedgerows around the perimeter of the Solar Array Area will be managed to a height of up to 3.5m to provide visual mitigation.	OLEMP
Decommissioning	
Retention of existing planting including areas of landscape and habitat creation to provide landscape and visual assimilation and biodiversity enhancements during decommissioning works.	ODEMP/OLEMP
Return of land to arable use.	ODEMP/OLEMP

Assessment of Landscape Effects

Proposed Development and Landscape Receptors

- 6.6.3 Interactions between the Proposed Development and landscape receptors are anticipated to occur in two ways: through direct change to landscape fabric resulting from the loss or addition of landscape elements as a result of the introduction of the Proposed Development; and changes to the Site which may be perceived from the surrounding area resulting in wider landscape character change.
- 6.6.4 The Proposed Development at the Solar Array Area will utilise arable fields set within the agricultural landscape of the Fenland Sub-Area Solar PV arrays and associated infrastructure will be introduced into the agricultural landscape, however, the existing field pattern and associated perimeter vegetation consisting of hedgerows with trees alongside hedgerows forming the field boundaries will largely be retained. Short sections of hedgerow up to 15m in length will be removed to facilitate Site access, further detail is provided in **Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19).**

- 6.6.5 The change in landscape character will be largely a result of modification to land use and the introduction of solar PV panels and associated infrastructure that will have a characterising influence within the Site and Study Area.
- 6.6.6 During the construction phase, activity within the Cable Route Corridor will introduce uncharacteristic elements, such as the temporary movement of vehicles along access routes, excavation, and temporary material stockpiles alongside the temporary presence of compounds. On completion the area will be restored to allow agricultural land use to recommence. Following reinstatement of land within the Cable Route Corridor and establishment of replacement planting permanent change to the landscape of the Cable Route Corridor will be minimal although the extension to the Bicker Fen Substation will be perceptible.
- 6.6.7 Landscape effects resulting from the Proposed Development have been assessed at a Site, local and national landscape character level. The landscape assessment is based on the determination of relevant landscape sensitivity set out in **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)** and summarised in the following section.

Landscape Sensitivity – Site level

- 6.6.8 Landscape value at the Site level has been defined as Medium as set out in **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)**.
- 6.6.9 The large-scale landscape of the areas of the Solar Array Area that will house solar PV panels and ancillary electrical infrastructure are generally of lower susceptibility to the Proposed Development, because the large-scale fields have the potential to accommodate the Proposed Development without extensive disruption to the existing field pattern. The landform of the Solar Array Area is generally flat or gently undulating, reducing the requirement for extensive landform change to construct the Proposed Development. The landscape is therefore less susceptible to change as a result of large scale solar development. The arable land use could be readily reinstated following decommissioning which is also indicative of lower susceptibility.
- 6.6.10 The landscape of the Site has some perceptions of tranquillity and some scenic quality resulting from views across the agricultural landscape of landmarks such as the church spire at Ewerby Thorpe. The resulting susceptibility has been defined as Medium.
- 6.6.11 Overall, medium value combined with medium susceptibility results in medium sensitivity for the landscape of the Site.

Landscape Sensitivity – Local Landscape Character

- 6.6.12 This section focuses on the landscape character areas which will be subject to direct or indirect effects as a consequence of the Proposed Development. A description of landscape character for landscape units within the Study Area including; LCAs, LCTs and landscape sub units is provided in **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)**.

Fenland Sub Area

- 6.6.13 Landscape value at the Site level has been defined as Medium as set out in **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)**.
- 6.6.14 Some aspects of the Fenland Sub Area are indicative of lower susceptibility. The large scale field pattern would potentially be able to accommodate large scale energy infrastructure of the type proposed without fragmenting landscape structure. Although the relatively open nature of the Site would tend towards higher susceptibility, the majority of the Proposed Development is relatively low to the ground. The flat landform of the Fens would require minimal modification which indicates low susceptibility to the nature of the Proposed Development. Land cover consisting mainly of arable crops can be readily replaced and is generally of low susceptibility to the introduction of Proposed Development.
- 6.6.15 There is a general absence of large-scale built form, indicating higher susceptibility. The Fenland Sub Area does have some perceptions of remoteness and tranquillity, although the presence of features such as high voltage power lines and towers alongside the A153 and Nottingham to Skegness Line Railway Line does detract from these qualities. The landscape includes several historic landmarks, including church spires, which are one of the key qualities of vistas. The skylines are important features of the fenland landscape which indicate higher susceptibility.
- 6.6.16 Overall, medium value combined with medium susceptibility results in medium sensitivity for the landscape of the Site.

Central Clays and Gravels Sub Area

- 6.6.17 Landscape value at the Site level has been defined as Medium.
- 6.6.18 The large-scale field pattern with occasional remnants of estate landscape associated with small rural settlements combined with a medium level of enclosure generally indicate a lower susceptibility to the accommodation of the Bespoke Access Road. Small changes in the landform of the Sub Area are of medium susceptibility to the Bespoke Access Road, as little alteration to the existing landform is required. There are some detracting elements within the Sub Area including large scale transport corridors such as Sleaford North Railway Junction, 'A' Roads such as the A15 and A17, and Whitecross Lane Solar Park. Overall, the susceptibility of Central Clays and Gravels Sub Area is low to the introduction of the Bespoke Access Road.
- 6.6.19 Overall, medium value combined with medium susceptibility results in medium sensitivity for the landscape of the Site.

Holland Reclaimed Fen LCA

- 6.6.20 Landscape value of the Holland Reclaimed Fen LCA has been defined as Medium.
- 6.6.21 The medium to large-scale fields arranged in geometric pattern are generally of low susceptibility to the accommodation of the Cable Route. The limited enclosure of the Fenland landscape is of low susceptibility to the Cable Route as, the cable will remain in situ and following completion and reinstatement of

the land will not have a notable characterising influence on the Fenland Sub Area.

6.6.22 There is a general absence of detracting, large-scale built form within this LCA resulting in some perceptions of remoteness and tranquillity. Although drainage infrastructure such as the North Forty Foot Drain and South Forty Foot Drain are influential characterising features. Overall, the susceptibility of Holland Reclaimed Fen LCA is medium.

6.6.23 Overall, medium value combined with medium susceptibility results in medium sensitivity for the landscape of the Site.

Bicker to Wyberton Settled Fen LCA

6.6.24 Landscape value of the Bicker to Wyberton Settled Fen LCA has been defined as Medium.

6.6.25 The relatively flat landform of this LCA and medium scale field units with relatively sparse vegetation and a medium level of enclosure indicate low to medium susceptibility to the Proposed Development. The presence of large-scale built form is limited; however, the road network and occasional small-scale solar farms are a characterising presence within the LCA. There is a range of landmark features within this LCA, and skyline views are characteristic of this landscape, resulting in higher susceptibility. Overall, the Bicker to Wyberton Settled Fen LCA is considered to be of medium susceptibility to the introduction of the Proposed Development.

6.6.26 Overall, medium value combined with medium susceptibility results in medium sensitivity for the landscape of the Site.

South Holland Fen LCA

6.6.27 Landscape value of the South Holland Fen LCA has been defined as Medium as set out in **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)**.

6.6.28 The medium-scale fields and moderate level of enclosure are generally indicative of medium susceptibility. However, the relatively flat landform and sparse vegetation cover are of lower susceptibility. The presence of local landmarks is limited within this LCA, and views are more restricted compared to other parts of the Fenland and, therefore, indicate lower susceptibility. The skylines are frequently restricted by field boundary vegetation and, therefore, of lower susceptibility to the Proposed Development. Overall, there is a medium level of tranquillity and remoteness and, therefore, a medium level of susceptibility.

6.6.29 Overall, medium value combined with medium susceptibility results in medium sensitivity for the landscape of the Site.

Landscape Effects

Construction Phase

6.6.30 The section below sets out the assessment of landscape effects during the construction phase.

National Landscape Character

- 6.6.31 Two NCAs are present within the LVIA study area: NCA Profile: 47 Southern Lincolnshire Edge and NCA Profile: 46 The Fens. The detailed assessment of effects on both NCA's is set out in **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)**. In summary, no significant effects have been identified due to the limited geographical and characterising influence in relation to the scale of the respective NCA.

Landscape character – Site level

Existing landscape elements

- 6.6.32 The removal of vegetation will be of a relatively small scale and limited to hedgerow sections to allow for access. Small blocks of woodland within the Site will be retained and protected. Whilst some loss of vegetation will occur, this will be compensated by hedgerow and tree replacement planting alongside enhancement planting. The arable land use will be altered by introducing temporary construction activity and the gradual installation of panels. The existing field pattern will be maintained and enhanced, although rationalised in places to help accommodate the Proposed Development. The existing field enclosure will be maintained. The network of drainage ditches within the Site will be maintained, with temporary crossings installed in locations required for access. Protective fencing will be installed to protect trees, woodland and hedgerows during construction.

Landscape character

- 6.6.33 During construction, the solar PV arrays will be progressively installed across the Solar Array Area, with construction vehicles accessing the Site via the Bespoke Access Road. The Bespoke Access Road linking the A17 with the Solar Array Area will be constructed in the landscape to the west of the Solar Array Area. Activity associated with constructing the route will be perceived in the landscape to the north and west of Asgarby and north of Boughton.
- 6.6.34 Construction activity associated with the solar PV arrays, inverter cabins and associated development such as lay down areas and compounds will be relatively low level. Works associated with the Onsite Substation, including compounds and material storage areas will result in a localised characterising influence. There will also be notable effects on tranquillity experienced within the area due to the movement generated by construction activity and the introduction of uncharacteristic features associated with construction.
- 6.6.35 The Cable Route Corridor has been located to minimise removal of vegetation. The arable land use and landscape pattern will be altered temporarily but will be restored to the baseline use at the end of construction. The change within the Cable Route Corridor will be temporary; excavations, earthworks, material stockpiles and compounds alongside access routes will be removed, and the land will be restored to its current use.
- 6.6.36 Construction activity associated with the Bespoke Access Road will require the removal of some boundary vegetation, and the works will be a locally disruptive element in the landscape.

- 6.6.37 There will be a large scale change as agricultural land use will be replaced by construction activity that will be uncharacteristic within the agricultural landscape.

Significance of effects

- 6.6.38 Overall, at construction there will be a high magnitude of change at a Site level resulting in a Major adverse (significant) effect which will be temporary, short term and reversible.

Effects on Landscape character – Local landscape character

Fenland Sub Area

Landscape elements

- 6.6.39 There will be some hedgerow removal to facilitate construction activity within the extent of the Fenland Sub Area although the woodland blocks and trees will be retained. Surface vegetation will also be removed and progressively replaced with construction activity and the installation of solar panels. The existing field pattern and network of drainage channels will be largely retained with some local alteration to accommodate some elements of the Proposed Development.

Landscape character

- 6.6.40 Construction activity will occupy a moderate extent of the LCA introducing a new dynamic pattern of uncharacteristic activities within the rural landscape. Although construction will be located mainly at lower levels, the introduction of the compound and material lay-down areas, as well as the construction of other elements, such as the Onsite Substation and BESS, will introduce uncharacteristic features.

Significance of effects

- 6.6.41 Overall, at construction there will be a medium magnitude of change resulting in a Moderate adverse (significant) effect which will be temporary, short term and reversible.

Central Clays and Gravels Sub Area

Landscape elements

- 6.6.42 Vegetation removal will be of relatively small scale and limited to short sections of hedgerows to facilitate access principally in relation to the Bespoke Access Road. There will be a short-term loss of the agricultural land use within the Cable Route Corridor, which overall will result in a very small scale of loss and alteration to existing landscape elements.

Landscape character

- 6.6.43 Construction associated with the Bespoke Access Road will be short term and will result in a relatively small scale of change, affecting a small proportion of the Sub Area. Locally the change to landscape character will be more notable, through the introduction of uncharacteristic features and construction vehicle movement. However, the Bespoke Access Corridor has been located away from local settlements to utilise the enclosure provided by nearby woodlands, and hedgerows. The western boundary of the Solar Array Area adjoins this

Sub Area, however the change to perceptual and aesthetic qualities will be very localised. Construction works within the Cable Route Corridor will be sufficiently distant and separated to not notably affect this Sub Area.

Significance of effects

- 6.6.44 Overall, at construction there will be a low magnitude of change resulting in a Minor adverse (not significant) effect which will be temporary, short term and reversible.

Holland Reclaimed Fen LCA

Landscape elements

- 6.6.45 Vegetation removal will be of a small scale within the extent of the Holland Reclaimed Fen LCA. In this area, drainage channels, rather than hedgerows, tend to define field structure. Existing field pattern will be retained, and agricultural land use will be reinstated at the end of the construction stage.

Landscape character

- 6.6.46 Construction activity will occupy a relatively small extent of the LCA, and the change to the land use, landscape pattern and enclosure will be of small scale. The construction works will introduce increased vehicular movements, including HGVs and the presence of dumper trucks and excavators which will be visible in this relatively open landscape with sparse field boundary vegetation. Activity associated with earthworks and temporary access tracks will be perceived, affecting tranquillity within a small part of the LCA.

Significance of effects

- 6.6.47 Overall, during construction there will be a medium magnitude of change resulting in a Moderate adverse (significant) effect which will be temporary, short term and reversible.

Bicker to Wyberton Settled Fen LCA

Landscape elements

- 6.6.48 There will be no hedgerow or surface vegetation removal within the Bicker to Wyberton Settled Fen LCA and the landscape of this LCA will not be directly affected.

Landscape character

- 6.6.49 Construction works will occur within an area of the Bicker to Wyberton Settled Fen LCA. This will temporarily introduce a new dynamic pattern of uncharacteristic activity, affecting perceptions of tranquillity, which will predominantly affect a small area within the western part of the LCA.

Significance of effects

- 6.6.50 Overall, at construction there will be a very low magnitude of change resulting in a Negligible adverse (not significant) effect which will be temporary, short term and reversible.

South Holland Fen LCA

Landscape elements

- 6.6.51 There will be no vegetation removal within the South Holland Fen LCA, and the landscape of this LCA will not be directly affected.

Landscape character

- 6.6.52 Construction activity will occupy an area adjacent to South Holland Fen LCA. This activity will introduce a new dynamic pattern of uncharacteristic activity although this change will not be widely perceptible across the LCA as a whole.

Significance of effects

- 6.6.53 Overall, at construction there will be a very low magnitude of change resulting in a Negligible adverse (not significant) effect which will be temporary, short term and reversible.

Operational Phase

- 6.6.54 This section presents the assessment effects at year 0 and year 15. At year 0 the Proposed Development will have been constructed but the associated mitigation planting will not be of sufficient stature to provide any meaningful mitigation. The year 15 assessment considers the Proposed Development with established, but not fully mature, mitigation planting which is assumed to be of sufficient stature to provide partial landscape and visual assimilation.

Landscape character – Site level

- 6.6.55 At year 0, the Proposed Development will result in large scale land use change from agricultural use to housing solar PV arrays and associated infrastructure. Although the Proposed Development will occur within the existing field network, the change in land use will be notable, altering the perceptual qualities of the Site. Although the landscape structure within the Solar Array Area will be maintained, the rural qualities of the area will be diminished, and the introduction of energy infrastructure will affect key characteristics of the open agricultural landscape. However, the Proposed Development will be introduced within the existing field pattern largely allowing retention of the existing landscape framework. The mitigation planting will not provide meaningful additional landscape integration at year 0.
- 6.6.56 The changes within the landscape caused by the introduction of the Cable Route will be barely perceptible following the restoration of land to the former use. However, where vegetation has been removed, the proposed mitigation planting will not yet be established and the Bicker Fen Substation Extension will have a localised characterising presence in year 0. Overall, the change will be medium-term and reversible but occupying the entire Site and resulting in a high magnitude of change.
- 6.6.57 Introduction of the Bespoke Access Road will result in some fragmentation of landscape pattern and the requirement for minor landform change including the introduction of a shallow linear mound adjacent and parallel to the road will also be locally perceptible.
- 6.6.58 At Year 15, the mitigation planting will help to integrate the Proposed Development within the existing landscape. The increased height of the boundary hedgerows and additional tree planting will provide a landscape framework that will partially assimilate the Proposed Development reducing

the impact of the land use change. However, a change to openness will be reduced and land use change will be noticeable.

Significance of effects

- 6.6.59 At year 0, there will be a high magnitude of change resulting in a Major adverse (significant) effect which will be medium term and reversible.
- 6.6.60 At year 15, the magnitude of change will reduce to medium resulting in a Moderate adverse (significant) effect which will be long term and reversible (Effects in relation to Bicker Fen substation will be permanent).

Effects on Landscape character – Local landscape character

Fenland Sub Area

- 6.6.61 The Proposed Development will alter the existing land use and landscape pattern with the Fenland Sub Area by introducing solar arrays and increasing perceptions of built development. The Proposed Development will be partially contained by perimeter vegetation and with field boundary vegetation, reducing the perception of local impact and the extent of visible development. Effects on remoteness and tranquillity will be localised. Mitigation planting will not provide effective screening at year 0.
- 6.6.62 At year 0, a change to the landscape character associated with the introduction of the Cable Route will be of small scale and perceptible in places, where the arable crops have not been fully restored alongside mitigation planting.
- 6.6.63 At Year 15, the introduced mitigation planting and change in hedgerow management height will help to integrate the Solar Array Area and Cable Route within the existing landscape. The openness of the fenland landscape will be altered with some modifications to the field pattern and greater presence of planting introduced to accommodate the Proposed Development. The mitigation planting will help to break up the massing of the Proposed Development and integrate the Proposed Development, resulting in a low scale of change and extent. The change will be long term and reversible. At year 15, the proposed mitigation planting will restore key qualities associated with baseline landscape character.

Significance of effects

- 6.6.64 At year 0, there will be a medium magnitude of change resulting in a Moderate adverse (significant) effect which will be medium term and reversible.
- 6.6.65 At year 15, the magnitude of change will reduce to low resulting in a Minor adverse (not significant) effect which will be long term and reversible.

Central Clays and Gravels Sub Area

- 6.6.66 The Solar Array Area located within the adjoining Fenland Sub Area will be operational and will be partially visually contained by the existing retained hedgerows. Although there will be some limited intervisibility particularly in relation to views of the Onsite Substation and BESS.
- 6.6.67 The Bespoke Access Corridor is located almost entirely within the Central Clays and Gravels Sub Area. Within the corridor the Bespoke Access Road will be designed and routed to minimise disruption to field pattern and

vegetation loss although the linear nature of the route will result in the fragmentation of some field units and will result in the removal of sections of field boundaries and hedgerows. Minor landform change including the introduction of a shallow linear mound adjacent and parallel to the Bespoke Access Road will also have a relatively minor characterising presence. The presence of the Bespoke Access Road and associated vehicular movements will have a localised characterising influence but will not be widely perceptible across the Sub Area as a whole. The change to the perceptual and aesthetic qualities will be very localised. The introduction of the Cable Route Corridor will have no effect on the landscape of Central Clays and Gravels Sub Area due to a distance from the Sub Area, degree of separation and largely restored landscape at the end of the year 0. The change will be long-term and reversible, resulting overall in a low magnitude of change.

- 6.6.68 At year 15, the proposed vegetation around the perimeter of the Solar Array Area will be established and will provide comprehensive screening reducing the characterising presence of the proposed Development. The Cable Route Corridor will be fully restored at year 15.

Significance of effects

- 6.6.69 At year 0, there will be a low magnitude of change resulting in a Minor adverse and (not significant) effect which will be medium term and reversible.
- 6.6.70 At year 15, the magnitude of change will remain low resulting in a Minor adverse and (not significant) effect which will be long term and reversible.

Holland Reclaimed Fen LCA

- 6.6.71 The changes at year 0 associated with the Cable Route Corridor will be very limited, as although the loss of vegetation will not be fully compensated, the cable will not be visible and the arable land use will be restored. The extension of the Bicker Fen Substation will have a localised characterising influence, but this will be perceived in relation to the existing infrastructure and partially assimilated by the retention of boundary vegetation. The Solar Array Area and Bespoke Access Road will have a limited characterising presence within this LCA because of the considerable separation distance and limited intervisibility.
- 6.6.72 At Year 15, the introduced mitigation planting will be established and providing a comparable presence within the Cable Route Corridor to the baseline scenario resulting in very small direct landscape effects. Planting associated with the Solar Array Area will provide further assimilation further reducing indirect effects.

Significance of effects

- 6.6.73 At year 0, there will be a low magnitude of change resulting in a Minor adverse (not significant) effect which will be medium term and reversible.
- 6.6.74 At year 15, the magnitude of change will reduce to very low resulting in a Negligible adverse (not significant) effect which will be long term and reversible.

Bicker to Wyberton Settled Fen LCA

- 6.6.75 At year 0, following reinstatement works the scale of perceptible change resulting from implementation works in the Cable Route Corridor will be

minimal and there will be limited visibility with permanent above ground structures in the Solar Array Area and Bespoke Access Road. At Year 15, the introduced mitigation planting will be established and will have largely restored vegetation removed during construction whilst maintaining key qualities of the existing landscape. The geographical extent and the scale of the change will be small.

Significance of effects

- 6.6.76 At year 0, there will be a very low magnitude of change resulting in a Negligible adverse (not significant) effect which will be medium term and reversible.
- 6.6.77 At year 15, the magnitude of change will remain very low resulting in a Negligible adverse (not significant) effect which will be long term and reversible.

South Holland Fen LCA

- 6.6.78 At year 0, the scale of perceived change within South Holland Fen LCA in the Cable Route Corridor will be minimal following reinstatement works, although the extension to the Bicker Fen substation will have a characterising influence on the northern most extent of the LCA. There will be very limited intervisibility with the Solar Array Area and Bespoke Access Road aspects of the Proposed Development. At Year 15, the reinstatement planting within the Cable Route Corridor will be established and of a stature to provide a reasonable level of assimilation.

Significance of effects

- 6.6.79 At year 0, there will be a very low magnitude of change resulting in a Negligible adverse (not significant) effect which will be medium term and reversible.
- 6.6.80 At year 15, the magnitude of change will remain very low resulting in a Negligible adverse (not significant) effect which will be long term and reversible.

Decommissioning Phase

Effects on Landscape character – Site level

- 6.6.81 Within the Solar Array Area and Bespoke Access Corridor effects at decommissioning will be comparable to those experienced during the construction phase, introducing a similar scale and pattern of activity and movement into the Site for a similar time period. Solar arrays, inverters, transformers and the Onsite Substation will be removed from site and recycled where possible, foundations will be broken up and removed below the surface to enable future ploughing. Underground cables connecting the different elements of the electrical infrastructure may remain in situ but will potentially be removed alongside the security fence and posts. The internal access roads are also anticipated to be removed although some may remain in situ, subject to the preference of, and agreement with, the landowner at that time.
- 6.6.82 Within the Cable Corridor Route the cable will be left in situ therefore, decommissioning activity is not anticipated and residual effects will only result from the minimal perceived changes in vegetation cover and the localised characterising influence of the Bicker Fen substation extension.

- 6.6.83 Within the Bespoke Access Corridor effects at decommissioning will be comparable to those experienced during the construction phase. Excavation and associated machinery movements will have a strong characterising influence on the Site area.

Landscape elements

- 6.6.84 Works associated with the decommissioning phase will not require the removal of trees and hedgerows (subject to landowner agreement) within the Solar Array Area. However, the neutral grassland typically proposed under and around the solar PV panels are likely to be replaced by arable use. If the land does not revert to arable use the Proposed Development will introduce a range of habitats and planting that will be retained during decommissioning, such as perimeter planting and this green infrastructure will continue to contribute towards landscape structure after the lifetime of the Proposed Development. Similarly, within the Bespoke Access Corridor it is anticipated that decommissioning works can take place without the need for tree and hedgerow removal although there will be some short term, temporary disruption to surface vegetation cover.

Landscape Character – LCA's

- 6.6.85 Similarly to the construction phase, there will be a large scale of change within the Fenland Sub Area resulting from decommissioning activity although change within the Cable Corridor Route will be minimal. This will result in a medium magnitude of change and Moderate (Adverse) effects. In relation to the Bespoke Access Corridor direct effects will be experienced within the Central Clays and Gravels Sub Area resulting in minor adverse effects.
- 6.6.86 There will be no other significant effects for LCA's within the Study Area at decommissioning.

Assessment of Visual Effects

- 6.6.87 This section provides an overview of the key findings of the Visual assessment which is provided in **Appendix 6.4: Visual Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.16)**. It includes the visual assessment for receptors within the Study Area (paragraph 6.3.6), including; residents, users of the recreational path and transport network and focusses on the identification of significant effects.
- 6.6.88 The visual assessment considers the visual change introduced within the Study Area as a result of the introduction of the Proposed Development at the following stages:
- Construction;
 - Operation - Year 0;
 - Operation - Year 15; and
 - Decommissioning.
- 6.6.89 The visual assessment has been informed by a viewpoint assessment using a selection of viewpoints agreed with stakeholders.
- 6.6.90 The Baseline Panoramas for the representative viewpoints (prepared in accordance with Technical Guidance Note (TGN) 06/19 Visual Representation of development proposals published by the Landscape Institute) are shown in

the baseline panoramas, **Figures 6.8 to 6.26 (Document Ref: 6.4 ES Vol.3, 6.4.19) to (Document Ref: 6.4 ES Vol.3, 6.4.37).** Figures 6.8 to 6.26. Photomontages have been prepared for viewpoints 2,3,4 and 19 which are illustrated in **Figures 6.27 to 6.30 (Document Ref: 6.4 ES Vol.3, 6.4.19) to (Document Ref: 6.4 ES Vol.3, 6.4.37).**

- 6.6.91 Where a visual receptor location corresponds with multiple types of receptors that may experience a change in the views, the most sensitive receptor has been assessed so that the visual assessment represents a worst case scenario.

Construction Phase

Solar Array Area

Visual Context and overview

- 6.6.92 Activity will be apparent within different field parcels, as construction works progress across the Site area resulting in a gradually evolving change in views. The relatively flat landform of the site and the presence of retained existing field boundary vegetation and screening provided by vegetation close to the Site and in the wider landscape will limit the general extent of visibility. The presence of the temporary construction compounds and material lay-down areas and the construction of the Onsite Substation and BESS will be locally more visible and prominent in the views, but the perceived changes resulting from this will be localised, affecting a low number of visual receptors.

Residential Receptors

- 6.6.93 Some residential receptors will experience significant visual effects during the construction phase. Residential receptors are identified on **Figure 6.7 Residential Properties (Document Ref: 6.4 ES Vol.3, 6.4.18).**
- 6.6.94 Receptors experiencing significant effects associated with construction of the Solar Array Area as set out below:
- Major adverse and significant effects will be experienced by residents of Ewerby Thorpe Farm (R1a) and Ewerby Thorpe Lodge (R1b), as there will be relatively open views from the properties towards the Solar Array Area from its slightly elevated location;
 - Major adverse (significant) effects will be experienced by residential receptors at Property Group R2, including; Howell Fen Farmhouse (R2a), Asgarby Barns (R2b) and Westmorelands Farm (R2c);
 - Major adverse (significant) effects will be experienced by residential receptors at Gashes Barn (R4) due to the proximity to the works within the Solar Array Area; and
 - Major adverse (significant) effects will be experienced by residential receptors at Property Group R20, including; Crown Cottage (R20a) and Keepers Cottage (R20b) due to the proximity to the works within the Solar Array Area.
- 6.6.95 More widely, no significant effects have been identified for residential receptors within settlements.
- 6.6.96 Construction phase effects for residential receptors will be temporary, short term and reversible.

Recreational Facilities and Routes

- 6.6.97 Construction works at the Solar Array Area will be most visible to recreational receptors located close to the Site. This includes users of the PRow network, where the views are not screened or restricted by hedgerows or the raised embankments associated with the larger drainage channels.
- 6.6.98 Significant adverse effects have been identified for users of some sections of the PRow network as follows:
- Users of sections of PRow Ewer/8/2, Ewer/8/1, Ewer/9/1, Ewer/12/1, Skym/8/1 along and adjacent to the River Slea/Kyme Eau will experience Major adverse (significant) effects due to the close proximity of construction activity associated with the Proposed Development; and
 - Users of Bridleway Ewer/1103/1, located immediately to the west of Solar Array Area, will experience Major adverse (significant) effects due to the close distance of construction activity associated with the Proposed Development.
- 6.6.99 Minor adverse (not significant) effects have been identified for recreational users along PRow Anwi 2/2 to the north of the Solar Array Area.
- 6.6.100 No changes to the views have been identified for recreational receptors using PRow Ewer/1/5 due to the screening provided by intervening vegetation. No change to the views would be experienced by recreational receptors using PRow Anwi/6/1 and the PRow network east of Ewerby including, Ewer/5/1, Ewer/974/1 and Ewer/1/6 as views are screened by a combination of the existing vegetation and built form within Ewerby village.
- 6.6.101 Construction phase effects for recreational facilities and routes will be temporary, short term and reversible.

Transport Network

- 6.6.102 Major adverse (significant) effects will be experienced by users of Black Drove/Ferry Lane/Halfpenny Toll Lane (**Figure 6.9 Baseline Panorama Viewpoint 2: View from Cow Drove (Document Ref: 6.4 ES Vol.3, 6.4.20)** and **Figure 6.27 Photomontage 1: View from Cow Drove (Viewpoint 2) (Document Ref: 6.4 ES Vol.3, 6.4.38)**). This will result because of close distance views of construction activity within the Solar Array Area to the south available intermittently through gaps in the roadside hedgerow.
- 6.6.103 Major adverse (significant) effects will be experienced by users of Howell Fen Drove **Figure 6.22 Baseline Panorama Viewpoint 15: View from Howell Fen Drove (Document Ref: 6.4 ES Vol.3, 6.4.33)**. This will result because of close distance views of construction activity within the Solar Array Area to the north available intermittently through gaps in the roadside hedgerow.
- 6.6.104 Construction phase effects for transport receptors will be temporary, short term and reversible.

Cable Route Corridor

Visual Context and overview

- 6.6.105 Construction works to install the Cable Route will include extensive excavation within the Cable Route Corridor. Excavated soil will be stored on-site within

temporary soil stockpiles. The construction will require the presence of compounds and the construction of temporary access tracks that will be dismantled at the end of construction. Vehicle movement within the Cable Route Corridor will be a characteristic of the construction phase. The land will be temporarily excluded from agricultural production but restored at the end of the construction phase. Vegetation removal will be minimal although some short sections of vegetation will be removed to install the Cable Route. This activity, associated machinery movements, stockpiles and land use change will introduce largely temporary effects, although the extension to the Bicker Fen Substation will result in longer term visual effects.

Residential Receptors

6.6.106 Some residential receptors in individual properties and property groups within the agricultural landscape adjoining the Cable Route Corridor will experience significant visual effects during the construction phase associated with the Cable Route Corridor as set out below.

6.6.107 Major adverse (significant) effects have been identified for residents in properties to the west of the Cable Route Corridor due to the proximity of construction works that will be prominent in the views. This includes residents at:

- Property Group R9 including, Crow Lane Farm, White House, Broadhurst Farm;
- Property R10. White House Farm;
- Property R11. Poplar Tree Farm; and
- Property R12. Villa Farm.

6.6.108 Moderate adverse (significant) effects have been identified for residents in properties to the west of the Cable Route Corridor due to the proximity of construction works that will be prominent in the views. This includes residents at:

- Property Group R6. Courtrow Farm, The Paddocks, Winkhill.

6.6.109 Major adverse (significant) effects have been identified for residents in properties to the east of the Cable Route Corridor due to the proximity of construction works that will be prominent in the views. This includes residents at:

- Property Group R5. Star Fen Farm, The Bungalow, Star Fen Cottage, Windward, Berrick Cottage, Decoy Farm; and
- Property Group R15. Meadow View, Dovecote Farm, Cozee Cottage, Highland House, Gauntlet Bridge Farm, Fen Lodge, Crow Hall.

6.6.110 Moderate adverse (significant) effects have been identified for residents in properties to the east of the Cable Route Corridor due to the proximity of construction works that will be prominent in the views. This includes residents at:

- Property Group R13. Kingtree Lodge, Cowbridge Farm;
- Property Group R14. Butlers, Acorn Lodge, Milldrain Lodge; and
- Property Group R18. Garwick Farm, Strawberry Cottage, Bramble Cottage, White House, Fen House.
- Property group R7. Hall Farm, The Farm House, Poplar Farm.

6.6.111 These effects will only occur during periods when activity in the Cable Route Corridor is taking place within relatively close proximity to properties and up to a distance of approximately 1km. Effects will be temporary, short term and reversible.

Recreational Facilities and Routes

6.6.112 Due to the extent of construction works within the Cable Route Corridor, the views from a range of PRoWs located close to the Cable Route Corridor will be significantly affected. The flat landscape with relatively sparse field boundary vegetation and woodland cover provides limited screening to the views.

6.6.113 Major adverse (significant) have been identified during the construction phase for recreational receptors for users of some sections of the PRoW network as follows:

- PRoW network to the east of Great and Little Hale PRoW Nos. GtHa/2/1, LHa/4/1 and GtHa/2/1;
- PRoW network to north west of Heckington, West of Solar Array Area, including: Heck/12/1, Heck/14/1, Heck/2/4; and
- PRoW Bick/2/1.

6.6.114 Construction phase effects for users of recreational facilities and routes will be temporary, short term and reversible.

Transport Network

6.6.115 Moderate adverse (significant) effects have been identified for users of sections of the transport network as follows:

- Transport receptors from some sections of the A17 due to the proximity of the Cable Route Corridor and the extent of visible works. The views will also include the views of temporary access tracks.
- Transport receptors using the of local road network adjacent to and crossing the southern extent of the Cable Route Corridor including Tileban Lane and Bicker Drove.

6.6.116 Negligible adverse and not significant effects are reported from transport receptors along Clay Bank/B1395, **Figure 6.10 Baseline Panorama Viewpoint 3: View from Clay Bank/B1395 near Sycamore House (Document Ref: 6.4 ES Vol.3, 6.4.21)**. Some of the transport receptors will not experience change in the views due to the screening provided by intervening vegetation including hedgerows and trees alongside raised embankments of drains as illustrated on **Figure 6.8 Baseline Panorama Viewpoint 1: View from Wood Lane near Ruskington Fen (Document Ref: 6.4 ES Vol.3, 6.4.19)**.

6.6.117 Construction phase effects for transport receptors will be temporary, short term and reversible.

Bespoke Access Road

Visual Context and overview

6.6.118 Construction activity will be apparent within the agricultural landscape as works progress across the Bespoke Access Corridor resulting in a gradually

evolving change in views. Generally, the most visible aspects will be at the interface with the A153, to the west of Anwick, where views of the entrance to the Bespoke Access Road, and associated activity in the landscape beyond, will be available.

6.6.119 The relatively flat landform of the Site and the presence of retained existing field boundary vegetation and screening provided by vegetation close to the Site and in the wider landscape will limit the general extent of visibility. The presence of compounds and material stockpiles will be locally more visible and prominent in views, although this effect will be within a localised area and affecting a limited number of visual receptors.

Residential Receptors

6.6.120 Visibility of construction activity associated with the Bespoke Access Road will be limited from surrounding settlements, including Ewerby and Kirkby La Thorpe because of the intervening layers of field boundary vegetation and the relatively flat topography. Residential receptors in Asgarby and Broughton may experience relatively close distance views of construction works through gaps in vegetation and particularly from upper floor windows although these views will be experienced intermittently and for short periods. The level of effect will be Minor adverse (not significant) because of the partial nature of the visibility.

6.6.121 Construction phase effects for residential receptors will be temporary, short term and reversible.

Recreational Routes and Community Facilities

6.6.122 Some users of the recreational path network will experience notable change as a result of close distance views of construction activity. Visitors to St. Andrews Church are also likely to experience some views of construction activity in the agricultural landscape to the north beyond although the boundary hedgerows will largely preclude visibility and the level of effect will be Minor adverse (not significant).

6.6.123 Significant effects will be experienced by the following PRoW users:

- PRoW to the west of Asgarby Lane, including; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1 are routed through the Cable Route Corridor and users will experience close distance but transient views resulting in Major adverse (significant) effects; and
- PRoW to the east of Asgarby Lane, including; ASHo/3/1 and Ewer/1103/1 KkLT/4/2 and KkLT/5/1 where users will experience close to middle distance but transient views resulting in Moderate adverse effects.

6.6.124 Construction phase effects for users of recreational facilities and routes will be temporary, short term and reversible.

Transport Network

6.6.125 Views of construction activity associated with the Bespoke Access Road from the transport network will generally be limited to transient views from short sections of the transport network. Significant effects have been identified as set out below.

- Users of the A153 will experience short lived transient views of vehicular movements and activity associated with introducing the junction

infrastructure at the interface with the A153 layby from a short section of the route resulting in Moderate adverse (significant) effects;

- Users of Asgarby Lane will experience views of construction activity including vegetation removal which will result in Moderate adverse (significant) effects although dense roadside hedgerows will largely preclude wider visibility; and
- Users of Heckington Lane/Halfpenny Toll Lane will experience short lived transient views of construction activity including vegetation removal resulting in Moderate adverse (significant) effects.

6.6.126 Construction phase effects for transport receptors will be temporary, short term and reversible.

Operational Phase

Solar Array Area

Visual Context and overview

6.6.127 Anticipated impacts on visual receptors during the operation of the Proposed Development will include a change in visual character across the rural landscape. The proposed mitigation planting will progressively provide comprehensive screening to much of the Proposed Development, however, the loss of openness affecting visual characteristics will remain.

6.6.128 Some visual receptors will have partial views of solar arrays and other elements of the Proposed Development, such as inverter cabins, Onsite Substation and BESS, CCTV cameras and fencing. At year 0, the proposed mitigation planting will not provide substantive screening, but views will change over time as the proposed mitigation planting progressively matures to provide effective screening at year 15.

Year 0

Residential Receptors

6.6.129 The presence of residential receptors is generally limited around the Solar Array Area; however, some residential properties will experience considerable change in the views due to the proximity to the Site and availability of relatively open or partially screened views across the fenland landscape. Significant adverse visual effects are anticipated to be experienced by residents at the following properties:

- Views from Ewerby Thorpe Farm (R1a) and Ewerby Thorpe Lodge (R1b) **Figure 6.11 Baseline Panorama Viewpoint 4: View from Halfpenny Toll Lane near Ewerby Thorpe (Farm) (Document Ref: 6.4 ES Vol.3, 6.4.22)** will be considerably altered in year 0 as solar arrays will feature prominently in views from a slightly elevated location **Figure 6.29 Photomontage 3: View from Halfpenny Toll Lane near Ewerby Thorpe (Farm) (Document Ref: 6.4 ES Vol.3, 6.4.40)**, resulting in Major adverse (significant) effects for residents of these properties at year 0;
- Moderate adverse (significant) effects will be experienced by residents of Howell Fen Farmhouse (R2a), Asgarby Barns (R2b) and Westmorelands Farm (R2c) resulting from views of solar PV arrays and associated infrastructure in relatively close distance views;

- There will be relatively open and close distance views available from Gashes Barn (R4) and from the access road to the property of the solar PV arrays with associated infrastructure, resulting in Major adverse (significant) effects; and
- Moderate adverse, significant effects will be experienced by residential receptors at Crown Cottage (R20a) and Keepers Cottage (R20b) due to close distance views of solar PV arrays and associated infrastructure within the Solar Array Area.

6.6.130 At year 0, there will be no significant adverse effects experienced by residents within settlements. Minor adverse (not significant) effects were identified for residents of Ewerby Thorpe hamlet, views will largely be screened by existing intervening vegetation and adjoining built development. Negligible adverse and not significant effects have been identified for residents of Ewerby village with views being restricted by the screening effects of existing vegetation. Views from Asgarby village of the Solar Array Area will be largely screened by a combination of garden vegetation, nearby trees and woodlands, **Figure 6.13 Baseline Panorama Viewpoint 6: View from Asgarby Road near Asgarby (Document Ref: 6.4 ES Vol.3, 6.4.24).**

6.6.131 Year 0 effects for residential receptors would be medium term and reversible.

Recreational Facilities and Routes

6.6.132 Significant adverse effects are anticipated to be experienced by receptors using the following PRoWs:

- PRoW network near the River Slea, including; PRoW Ewer/8/2, Ewer/8/1 and Anwi/2/2. There will be relatively open views of infrastructure within the Solar Array Area from sections of these paths resulting in Moderate (significant) effects at Year 0; and
- Bridleway Ewer/1103/1 will experience views of the Solar Array Area resulting in Moderate (significant) effects at year 0.

6.6.133 Year 0 effects for users of recreational facilities and routes would be medium term and reversible.

Transport Network

6.6.134 At year 0, Moderate adverse (significant) effects will be experienced by users of Black Drove/Ferry Lane/Halfpenny Toll Lane (**Figure 6.9 Baseline Panorama Viewpoint 2: View from Cow Drove (Document Ref: 6.4 ES Vol.3, 6.4.20)** and **Figure 6.27 Photomontage 1: View from Cow Drove (Viewpoint 2) (Document Ref: 6.4 ES Vol.3, 6.4.38).** This will be as a result of close distance views of infrastructure within the Solar Array Area available intermittently through gaps in the roadside hedgerow.

6.6.135 Moderate adverse (significant) effects will be experienced by users of Howell Fen Drove **Figure 6.22 Baseline Panorama Viewpoint 15: View from Howell Fen Drove (Document Ref: 6.4 ES Vol.3, 6.4.33).** This will result because of close distance views of infrastructure within the Solar Array Area to the north available intermittently through gaps in the roadside hedgerow.

6.6.136 More widely Negligible adverse (significant) effects have been identified for users of Clay Bank/B1395 **Figure 6.23 Baseline Panorama Viewpoint 16: View from B1395 Clay Bank (Document Ref: 6.4 ES Vol.3, 6.4.34).** In these

views the Solar Array Area will be largely screened by layers of vegetation in the middle distance.

6.6.137 Year 0 effects for users of transport receptors would be medium term and reversible.

Year 15

6.6.138 At year 15, the proposed mitigation will be established and will screen the majority of the Proposed Development, in combination with the continued presence and growth of existing vegetation. The management of existing hedgerows to allow growth to a height of 3.5m and will provide further visual assimilation. The level of effects for users of Black Drove/Ferry Lane/Halfpenny Toll Lane will reduce to Minor adverse (not significant).

Residential Receptors

6.6.139 In relation to residential properties where significant effects have been identified at year 0, the establishment of mitigation planting will result in the following assessment at year 15:

- For residents at Ewerby Thorpe Farm (R1a) and Ewerby Thorpe Lodge (R1b), visual effects would reduce to Minor adverse (not significant) as a result of the establishment of mitigation planting;
- For residents of Howell Fen Farmhouse (R2a), Asgarby Barns (R2b) and Westmorelands Farm (R2c) visual effects would reduce to Minor adverse (not significant) following establishment of mitigation planting;
- For residents at Gashes Barn (R4), establishment of mitigation planting will provide considerable screening of views of energy infrastructure, but the nature of the view will remain fundamentally changed and open views will remain available from the access road. Visual effects will reduce to Moderate adverse (significant);
- For residents at Crown Cottage (R20a) and Keepers Cottage (R20b) establishment of mitigation planting will provide considerable screening of views reducing the level of effect to Minor adverse (not significant).

6.6.140 Year 15 effects for residential receptors would be long term and reversible.

Recreational Facilities and Routes

- In relation to recreational facilities and routes where significant effects have been identified at year 0, the establishment of mitigation planting will result in the following assessment at year 15:
- For users of the PRow network near the River Sleas, including; PRow Ewer/8/2, Ewer/8/1, Ewer/9/1, Ewer/12/1 and Anwi/2/2 effects will reduce to Moderate adverse (significant) resulting from the establishment of mitigation planting and hedgerow management to the north of the Site. Although it is anticipated that partial visibility of the upper elements of the Onsite Substation and BESS will remain available; and
- For users of Bridleway Ewer/1103/1 effects will reduce to Minor adverse (not significant) as a result of the establishment of mitigation planting and hedgerow management measures.

6.6.141 Year 15 effects for users of recreational facilities and routes would be long term and reversible.

Transport Network

6.6.142 In relation to transport receptors where significant effects have been identified at year 0, the establishment of mitigation planting will result in the following assessment at year 15:

- For users of Black Drove/Ferry Lane/Halfpenny Toll Lane (**Figure 6.9 Baseline Panorama Viewpoint 2: View from Cow Drove (Document Ref: 6.4 ES Vol.3, 6.4.20)** and **Figure 6.27 Photomontage 1: View from Cow Drove (Viewpoint 2) (Document Ref: 6.4 ES Vol.3, 6.4.38)**. effects will reduce to Minor adverse (not significant). This will result from the establishment of mitigation planting and hedgerow management measures to the northern boundary of the Solar Array Area.

6.6.143 Year 15 effects for transport receptors would be long term and reversible.

Cable Route Corridor

Visual Context and overview

6.6.144 Following completion of the Cable Route installation and restoration of the Site area, the above ground presence of the Cable Route will be minimal. Visual effects in the operational phase will be limited to change resulting from vegetation removal and the extension to the Bicker Fen Substation. The land will be restored to its former agricultural use in a relatively short time period and field boundary vegetation removed to facilitate implementation will be replaced. Whilst a loss to the field boundary vegetation may be perceptible locally, it is anticipated that reinstatement planting will restore the field boundary vegetation in the medium term.

6.6.145 The underground cable within the Cable Route Corridor will be retained in situ be retained limiting the visual presence of the Proposed Development at decommissioning.,

6.6.146 The anticipated effects on different categories of visual receptors have been presented below through the operational stages of Year 0, Year 15, and decommissioning stage.

Year 0

Residential Receptors

6.6.147 At year 0, no significant visual effects are anticipated for residential receptors in defined settlements within the Study Area as a result of the visible presence of the Proposed Development within the Cable Route Corridor. Limited visual change will be experienced by residents in individual properties who resulting from vegetation loss within the Cable Route Corridor and views of the Bicker Fen Substation extension at year 0. However, there would be no significant effects for residential receptors in individual properties and property groups.

6.6.148 Year 0 effects for residential receptors would be permanent.

Recreational Facilities and Routes

6.6.149 At operation following cessation of construction activity the Proposed Development will have a limited visual presence in the Cable Route Corridor. Therefore, at year 0, no significant visual effects are anticipated for Recreational Facilities and Routes.

- 6.6.150 For the majority of recreational receptors in the vicinity of Cable Route Corridor Minor or Negligible adverse (not significant) effects are identified at year 0, due to the perception of small scale of change to vegetation pattern and localised partial views of the Bicker Fen substation extension. This change will be experienced by some users of PRowS to the east of Helpringham including; Help/14/2, Swhd/13/1 and Swhd/14/1.
- 6.6.151 Minor adverse (not significant) effects are anticipated for recreational users of PRow No. Heck/2/4 close to the Cable Corridor Route resulting from the perception of vegetation loss.
- 6.6.152 Views from PRow Ewer1/5 at Evedon Road will be comprehensively screened by intervening vegetation, therefore no change has been identified from this location.
- 6.6.153 Year 0 effects for users of recreational facilities and routes would be permanent.

Transport Network

- 6.6.154 On cessation of construction activity and reinstatement of hedgerows and agricultural land use the visual presence of the Proposed Development within the Cable route Corridor would be limited. There would be no significant visual effects resulting from views of the cable corridor experienced by users of the transport network at year 0.
- 6.6.155 At year 0, Negligible adverse (not significant) effects have been identified for users of local roads near the Cable Route Corridor including, Tilebarn Lane, Bicker Drove, and the A17 where the loss of boundary hedgerows and surface vegetation will be intermittently perceptible.
- 6.6.156 Year 0 effects for transport receptors would be medium term and permanent.

Year 15

Residential Receptors

- 6.6.157 By year 15, the agricultural crops and the lost field boundary vegetation will be fully restored within the Cable Route area Corridor providing assimilation into the adjoining agricultural landscape. The views will be very similar to the baseline views following establishment of reinstatement planting.
- 6.6.158 Effects will reduce to negligible adverse (not significant for the majority of residential receptors within the Cable Route Corridor and there will be no residual significant effects.
- 6.6.159 Year 15 effects for residential receptors would be permanent.

Recreational Facilities and Routes

- 6.6.160 By Year 15, the views of recreational receptors will not be significantly affected as the Cable Route will be underground and reinstatement planting will restore the lost vegetation and agricultural land use. This will result in minor adverse (not significant) effects for users of recreational routes including PRow. Bick/2/1.
- 6.6.161 Year 15 effects for users of recreational facilities and routes would be permanent.

Transport Network

6.6.162 At year 15, following establishment of reinstatement planting effects in relation to all users of the transport network would reduce to Negligible adverse (Not significant).

6.6.163 Year 15 effects for transport receptors would be permanent.

Bespoke Access Road

Visual Context and overview

6.6.164 On completion of construction works and the removal of machinery, stockpiles and restoration of land, the landscape associated with this aspect of the Proposed Development will return to a more settled state. Close distance views of the road will be available for some PRow users. However, beyond the immediate Site context, views will be limited to the occasional presence of vehicles accessing the Solar Array Area for operational and maintenance purposes. This will include transportation of replacement items of key infrastructure which will intermittently introduce higher levels of visibility. Middle to long distance views will be limited because of the relatively flat landform of the Site and the presence of retained layers existing field boundary vegetation which will provide screening.

Year 0

Residential Receptors

6.6.165 At year 0, visibility of the Bespoke Access Road would be limited from settlements and individual properties. The road itself will be at grade and will not feature prominently in views because of the intervening layers of field boundary vegetation and the relatively flat topography. The most visible aspect of the Bespoke Access Road will be the occasional presence of moving vehicles and as a result no significant effects are predicted for residents.

6.6.166 Residents within the nearby Settlements of Asgarby and Boughton may experience occasional transient views of vehicular movements on the Bespoke Access Road but views of the infrastructure are not anticipated to be available. Effects for these residential receptors will be Minor adverse (not significant).

6.6.167 Year 0 effects for residential receptors would be medium term and reversible.

Recreational Routes and Community Facilities

6.6.168 Following cessation of construction activity. Views of the Proposed Development for visitors to St. Andrews Church will mainly be restricted to occasional and transient glimpsed views of moving vehicles in the middle distance resulting in Minor adverse (not significant) effects.

6.6.169 Adverse effects will continue to be experienced by users of the PRow network. Significant effects will be experienced by some users of the PRow network as follows:

- PRow network to the west of Asgarby Lane, including KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1 which are routed through the Bespoke Access Corridor. Users are anticipated to experience close distance but transient

views of the road infrastructure and associated vehicular movements resulting in Moderate adverse (significant) effects.

6.6.170 In relation to effects on the PRoW network to the east of Asgarby Lane, including ASHo/3/1, Ewer/1103/1 KkLT/4/2 and KkLT/5/1, users are anticipated to experience some visibility of infrastructure. However, the road will not feature prominently in these views and the visual effect would reduce to Minor adverse (not significant).

6.6.171 Year 0 effects for Recreational Routes and Community Facilities would be medium term and reversible.

Transport Network

6.6.172 At operation year 0, views of the Bespoke Access Road from users of transport network will be limited to transient views through openings in field boundary vegetation of the route and the interface with existing roads. No significant operation phase effects have been identified.

6.6.173 Year 0 effects for transport receptors would be medium term and reversible.

Year 15

Residential Receptors

6.6.174 At year 15, establishment of reinstatement planting and management measures to allow hedgerows to be maintained to an increased height of 3.5m in the intervening landscape will provide further screening and reduce visibility of the Bespoke Access Road for residential receptors. No significant operation phase effects have been identified for residential receptors at year 15.

6.6.175 Year 15 effects for residential receptors would be long term and reversible.
Recreational Routes and Community Facilities

6.6.176 At year 15, establishment of reinstatement planting and management measures to allow hedgerows to be maintained to an increased height of 3.5m in the intervening landscape will provide further screening and reduce visibility of the Bespoke Access Road for visitors to St. Andrews Church. However, occasional, partial and glimpsed views of moving vehicles in the middle distance may remain available.

6.6.177 Establishment of reinstatement planting will progressively screen views from the wider path network users of the PRoW network to the west of Asgarby Lane. This network includes PRoWs; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1, which are orientated through the Bespoke Access Corridor and users will continue to experience close distance views resulting in Moderate adverse (significant) effects.

6.6.178 Year 15 effects for users of recreational routes and community facilities would be long term and reversible.

Transport Network

6.6.179 At operation year 15, views of the Bespoke Access Road from the transport network will remain available in short-lived transient views. No significant operation phase effects have been identified.

6.6.180 Year 15 effects for users of recreational routes and community facilities would be long term and reversible.

Decommissioning Phase

Solar Array Area

6.6.181 Generally, within the Solar Array Area effects at the decommissioning phase will be of a similar level to those at the construction phase because of the comparable nature of the activities taking place. However, the extent of the visual influence will be less extensive because at this stage mitigation and enhancement planting combined with hedgerow management measures will provide more visual containment of the Solar Array Area.

6.6.182 Landscape effects will include Major adverse (significant) effects at the Site level. However, effects on the Fenland Sub Area will be Minor adverse (not significant) as a result of the visual containment provided by establishment of mitigation planting.

6.6.183 In relation to visual effects the establishment and maturation of mitigation planting related to specific properties in close proximity to the Solar Array Area will limit the extent to which significant effects will be experienced by residential receptors. Residents at Gashes Barn (R4) will experience Moderate adverse (significant) effects during decommissioning resulting in a loss of openness from the presence of the mature mitigation planting.

6.6.184 Effects on residents at Ewerby Thorpe Farm (R1a) and Ewerby Thorpe Lodge (R1b) and Crown Cottage (R20a) and Keepers Cottage (R20b) would be Minor adverse (not significant) as a result of the establishment of mitigation planting.

6.6.185 Establishment of mitigation planting will result in very limited significant visual effects for users of the PRow network. Users of PRow network near the River Sleas, including; PRow Ewer/8/2, Ewer/8/1, Ewer/9/1, Ewer/12/1 and Anwi/2/2 will experience Moderate adverse (significant) effects. No other significant effects will be experienced by users of the recreational path network.

6.6.186 Transient, glimpsed views of construction activity will be intermittently perceptible for some transport receptors in close proximity to the Site. However, no significant effects will be experienced as a result of the establishment of mitigation planting and hedgerow management measures.

Cable Route Corridor

6.6.187 At decommissioning, within the Cable Route Corridor the cable will be left in situ, reinstatement planting will be mature and will be assimilated into the wider landscape context. The continued presence of the Bicker Fen substation extension will remain perceptible to the southern extent of the Cable Route Corridor. No significant landscape or visual effects have been identified at the decommissioning phase.

Bespoke Access Road

6.6.188 The scale of decommissioning activity within the Bespoke Access Corridor will be similar to that experienced at the construction phase.

6.6.189 Landscape effects will be of a similar level to those reported at the construction phase. This will include Major adverse (significant) effects at the Site level and Minor adverse (not significant) effects for the Central Clays and Gravels Sub Area.

6.6.190 In summary there will be no significant visual effects experienced by residential receptors. However, significant decommissioning phase effects will be experienced by users of the recreational path and transport networks as follows:

- PRow to the west of Asgarby Lane, including; KkLT/6/1ASHo/2/1, KkLT/4/2 and KkLT/5/1 are routed through the Bespoke Access Corridor and users will experience close distance but transient views of decommissioning activity resulting in Major adverse (significant) effects;
- PRow to the east of Asgarby Lane, including; ASHo/3/1 and Ewer/1103/1 KkLT/4/2 and KkLT/5/1 where users will experience close to middle distance but transient views resulting in Moderate adverse (significant) effects;
- Users of the A153 will experience short lived transient views of vehicular movements and activity associated with decommissioning the junction infrastructure at the interface with the A153 layby from a short section of the route resulting in Moderate adverse (significant) effects;
- Users of Asgarby Lane will experience views of decommissioning activity which will result in Moderate adverse (significant) effects although dense roadside hedgerows will largely preclude wider visibility; and
- Users of Heckington Lane/Halfpenny Toll Lane will experience short lived transient views of decommissioning activity resulting in Moderate adverse (significant effects) effects.

6.6.191 Decommissioning phase effects will be temporary, short term and reversible.

6.7 Mitigation

6.7.1 Embedded mitigation measures have been identified in section 6.3, no further measures have been identified during the course of undertaking the assessment of landscape and visual effects.

6.8 Residual Effects

6.8.1 No further mitigation measures have been identified which would modify the landscape and visual assessment, therefore, the residual effects have been as set out in section 6.6 of this chapter.

Monitoring

Construction

6.8.2 During the construction phase, an Environmental Clerk of Works will be appointed to ensure that the Proposed Development's construction is delivered in accordance with the measures set out within the OLEMP, **Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19)** and LEMP(s) which will be developed at the detailed design stage. The LEMP will be secured in accordance with the details set out in paragraph 6.3.20.

- 6.8.3 In addition, establishment of appropriate vegetation protection measures and areas for removal will be inspected by an Environmental Clerk of Works to ensure compliance with the **Appendix 6.6: Arboricultural Impact Assessment (Document Ref: 6.6 ES Vol.2, 6.3.18)** and **Figure 6.32: Vegetation Removal Plan (Document Ref: 6.4 ES Vol.3, 6.4.43)**. This requirement has been detailed within [section 1.4] of the OLEMP, **Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19)**.
- 6.8.4 The Environmental Clerk of Works will monitor the implementation of the landscape mitigation proposals to ensure that the landscape scheme is implemented in accordance with the approved landscape details.

Operation

- 6.8.5 During the establishment aftercare, proposed mitigation planting will be routinely inspected in accordance with the requirements stipulated in the detailed LEMP(s). Inspection will ensure management and maintenance of landscape elements, as identified in the detailed LEMP(s), are undertaken and that the proposed planting achieve their intended environmental function and objective. Monitoring of the establishment, growth and maintenance of landscape planting will be undertaken during the establishment aftercare period to ensure its successful establishment. The duration of monitoring during establishment period and long-term management is outlined in [section 1.6] of the OLEMP and will be clarified in the detailed LEMP(s) prepared post consent.

6.9 Assessment of Cumulative Effects

Intra-Cumulative Effects

- 6.9.1 The Institute of Environmental Management and Assessment (IEMA) guidelines refer to "intra-project effects" when a single receptor is affected by more than one source of effect arising from different aspects of the Proposed Development.
- 6.9.2 The findings reported in the specialist chapters have been considered to identify potential interactions between Landscape and Visual Assessment effects upon single receptors identified within Landscape and Visual Assessment.
- 6.9.3 The initial review identified the following other types of environmental effects, which interact with single identified landscape and visual receptors:

Ecology

- 6.9.4 The intra-cumulative assessment in relation to ecology is informed by the findings of **Chapter 7: Ecology (Document Ref: 6.2 ES Vol. 1, 6.2.7)** Specific receptors which may be jointly affected in terms of landscape and visual and ecology include the Site comprising the Solar Array Area, Cable Route Corridor and Bespoke Access Corridor. Direct, residual landscape effects will be experienced within the Site as a result of land use change and the presence of energy infrastructure resulting in Moderate adverse (significant) effects as set out in section 6.6.60. Residual impacts on the Site in relation to ecological issues range from Low beneficial (not significant) to Medium beneficial

(significant) as a result of the reduced application of agricultural chemicals and improvements to habitats through Biodiversity Net Gain (Table 7.12). Accordingly, the combined discipline specific effects would not result in additional significant adverse effects.

Glint and Glare

- 6.9.5 The intra-cumulative assessment in relation to glint and glare is informed by the findings of **Chapter 13: Glint and Glare (Document Ref: 6.2 ES Vol. 1, 6.2.13)** Specific receptors which may be jointly affected in terms of landscape and visual and glint and glare include the transport network and dwellings/residential receptors. The visual assessment has found that there will be residual visual effects for residential receptors at Gashes Barn (R4) (paragraph 6.6.138). However, views of the solar PV arrays will be comprehensively screened at year 15 reducing the potential for intra-cumulative effects in relation to glint and glare. Accordingly, it has been determined that the combined discipline specific effects would not result in additional significant adverse effects.

Inter-Cumulative Effects

- 6.9.6 This section of the LVIA assesses the anticipated inter- cumulative landscape and visual effects of the Proposed Development when considered in the context of other solar developments, and other schemes, in the planning process, those consented, and those in construction and operation.
- 6.9.7 The assessment of inter-cumulative effects is being undertaken with regard to the NSIP guidance on Cumulative Effects Assessment (2024) which recommends a four staged approach as follows:
- Stage 1: Establishing the long list;
 - Stage 2: Establishing the short list;
 - Stage 3: Information gathering, and; and
 - Stage 4: Assessment.
- 6.9.8 An initial short list of cumulative developments has been compiled using emerging information being partially available for Stage 3.
- 6.9.9 With respect to cumulative effects on landscape resources, paragraph 7.19 of GLVIA3 states the following:
- “Cumulative landscape effects may result from adding new types of change or from increasing or extending the effects of the main project when it is considered in isolation. For example, the landscape effects of the main project may be judged of relatively. low significance when taken on their own, but when taken. together with the effects of other schemes, usually of the same type, the cumulative landscape effects may become more significant.”*
- 6.9.10 The assessment of cumulative visual effects has involved reference to the cumulative visibility of the cumulative developments identified, with the reference to the identified viewpoints.
- 6.9.11 In Table 7.1, GLVIA3 refers to two types of the cumulative visual effects:

“Combined – Occurs where the observer is able to see two or more developments from one viewpoint;

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

- 6.9.12 The combined effects can be differentiated into “in combination” and “in succession” visual effects, whilst sequential effects can be either “frequently sequential” or “occasionally sequential”. Further details of methodology for this inter-cumulative assessment are set out in **Chapter 4: Scope and Methodology (Document Ref: 6.2 ES Vol. 1, 6.2.4)** and **Appendix 6.2: Landscape and Visual Methodology (Document Ref: 6.3 ES Vol. 2, 6.3.14).**
- 6.9.13 The first step in the cumulative assessment is an initial assessment to ascertain which of the landscape character receptors, representative viewpoints have the potential to undergo cumulative effects as a result of the consideration of other developments in combination with the Proposed Development.
- 6.9.14 As with the assessment of effects of the Proposed Development, the significance of cumulative effects is determined through a combination of considering the sensitivity of the landscape receptor or view and considering the magnitude of change. The sensitivity assessment for landscape and visual receptors used in the inter-cumulative assessment follows the same approach as that used in the assessment of the Proposed Development **Appendix 6.2: Landscape and Visual Methodology (Document Ref: 6.3 ES Vol. 2, 6.3.14).**
- 6.9.15 Inter-cumulative developments considered for inclusion within the cumulative landscape and visual assessment are listed in Table Error! No text of specified style in document..7 below, and illustrated in **Figure 4.1.: Cumulative Development: Nationally Significant Infrastructure (Document Ref: 6.4 ES Vol.3, 6.4.10)** and **Figure 4.2.: Cumulative Development: Local (Document Ref: 6.4 ES Vol.3, 6.4.11)** along with the rationale for inclusion or exclusion. Further details of the cumulative developments and their assessment across the full scope of the ES assessment are set out in **Chapter 18: Cumulative Effects (Document Ref: 6.2 ES Vol. 1, 6.2.13).**

Table Error! No text of specified style in document..7 - Summary of Inter-Cumulative Schemes Considered within the Landscape and Visual Assessment

CONSIDERED SCHEMES		SCOPED IN/OUT FOR CUMULATIVE ASSESSMENT
REFERENCE	SCHEME	JUSTIFICATION
B/17/0340 (BBC) Approximate distance (400m)	Viking Link – works to facilitate electricity link between the Bicker Fen substation in Lincolnshire and Revsing substation in southern Jutland, Denmark	The underground cable connection with works around Bicker Fen Substation will overlap with the Cable Corridor Area of the Proposed Development.
H04-0823-17 (SHDC) Approximate distance (100m)	Key scheme elements include: Construction of associated Temporary Construction Compounds (TCC), Temporary	There is a potential for cumulative landscape and visual effects as a result of introduction of these two

CONSIDERED SCHEMES		SCOPED IN/OUT FOR CUMULATIVE ASSESSMENT
REFERENCE	SCHEME	JUSTIFICATION
17/1200/FUL (NKDC) Adjacent	Works Areas (TWA) and temporary vehicle access arrangements; construction of a permanent access road from the A52 to the converter station site, including a bridge crossing over Hammond Beck; Installation of up to six onshore high voltage alternating current (AC) cables between the converter station at North Ing Drove and the existing Bicker Fen 400 kV Substation; installation of two substation bays at Bicker Fen 400 kV Substation to allow Viking Link to be connected to the National Electricity Transmission System.	developments primarily due to an overlap between the cable routes associated with both schemes.
Heckington Fen Solar Park (PINS REF: EN010123) Approximate distance (Cable routes will be partially contiguous)	Heckington Fen Solar Park is an approved DCO application. The project status is at the post-decision stage. The Solar Array Area will consist of PV infrastructure and an Energy Storage System (ESS) with associated infrastructure. Electricity will be transferred by an underground 400kV cable. The offsite cable route will extend 8.5km to the south and connecting with the Bicker Fen Substation. The underground cable connection will overlap with the Cable Route Corridor of the Proposed Development.	There is a potential for cumulative landscape and visual effects due to the overlap between the cable routes associated with both schemes.
Vicarage Drove (B/21/0443) (B/22/0198) (BBC) Approximate distance (250m to Cable Route Corridor)	Vicarage Drove is an approved planning application for a solar farm consisting of PV panels and associated infrastructure.	There is a potential for cumulative landscape and visual effects due to the proximity of the scheme to the Bicker Fen Substation and partial overlap with the Cable Route Corridor.
Handley Chase Sleaford South Quadrant	Handley Chase Development It is an urban extension to the south of Sleaford including retail units with offices,	The Handley Chase Development is located beyond the Study Area and is therefore separated from

CONSIDERED SCHEMES		SCOPED IN/OUT FOR CUMULATIVE ASSESSMENT
REFERENCE	SCHEME	JUSTIFICATION
13/0498/OUT 18/0652/RESM 22/0856/RESM 20/0363/RESM 21/0669/RESM 21/1068/RESM 22/0188/RESM 23/0649/RESM	convenience store, car park spaces, new link road, 410 residential dwellings and associated infrastructure, including access, internal roads, Public Open Space and attenuation basins, south of Sleaford.	the Proposed Development predominantly, by the existing intervening vegetation. Therefore, there will be no intervisibility between two schemes. Both schemes have the potential to affect Central Clays and Gravels Sub Area, however as Hadley Chase Development will be seen as natural extension to the existing urban use around Sleaford the potential effects on this Sub Area are not considered to be significant. Therefore, this scheme has not been carried forward for the inter-cumulative assessment.
Bicker Fen Solar Farm B/22/0356 B/21/0412 (BBC) Approximate distance (100m to Cable Route Corridor)	Bicker Fen Solar Farm (Land to the west of Cowbridge Road) is a solar farm that consist of photovoltaic solar arrays, grid connection, access improvement and associated infrastructure.	There is a potential for cumulative landscape and visual effects due to the proximity of the scheme to the Bicker Fen Substation and overlap with the Cable Route Corridor.
Land at Heckington 15/0383/EIASCR (NKDC) Approximate distance (2500m)	Land at Heckington is at EIA screening stage and includes for a proposed expansion of residential area (up to 600 dwellings) to the north of Heckington with associated road network and residential infrastructure.	There will be no intervisibility between the residential properties at Land at Heckington and the Proposed Development as there is an existing woodland belt along the northern boundary of the residential development that will be retained. Other intervening vegetation such as along the A17 also contributes to the screening and separation effect. Therefore, the cumulative visual effects will not be significant. The Land at Heckington is located within Fenland Sub Area, however as the residential development is adjacent to Heckington it will be

CONSIDERED SCHEMES		SCOPED IN/OUT FOR CUMULATIVE ASSESSMENT
REFERENCE	SCHEME	JUSTIFICATION
		seen as an extension to the existing settlement pattern. Therefore, the cumulative landscape effects are not anticipated to be significant. Therefore, this scheme has not been carried forward for the inter-cumulative assessment.
Gorse Lane Solar Farm 19/0060/FUL (NKDC) Approximate distance (4500m)	Gorse Lane Solar Farm is an approved 20MW Solar Farm with associated infrastructure.	This solar farm is located at approximately 10km from the Proposed Development and therefore the views are completely screened by intervening vegetation. Due to the separation distance the cumulative landscape effects will not be significant. Therefore, this scheme has not been carried forward for the inter-cumulative assessment.
Overhead Lines National Grid 22/1596/OHL 22/1597/OHL 22/1598/OHL 22/1599/OHL (NKDC) Approximate distance (2500m)	Proposals include for removal of the existing overhead power lines and erection of new power lines.	The proposed replacement of overhead power lines is associated with the existing electricity network and although they are likely to result in a change to the views and will cause localised change to the landscape character primarily in construction, the replacement will essentially maintain the existing baseline scenario once completed. Therefore, this scheme has not been carried forward for the inter-cumulative assessment.
Little Hale Solar Farm Little Hale Fen Solar Farm 21/1337/EIASCR (NKDC) Land South of Little Hale 23/1021/FUL B/23/0300 (BBC)	A proposed solar farm (up to 49.995MW) with associated infrastructure and underground cabling linking with the Bicker Fen Substation.	The Little Hale Solar Farm is located just to the east of South Forty Foot Drain with underground round cable connection linking to the Bicker Fen Substation, and therefore the cumulative effects of these two developments have been considered in the inter-cumulative assessment.

CONSIDERED SCHEMES		SCOPED IN/OUT FOR CUMULATIVE ASSESSMENT
REFERENCE	SCHEME	JUSTIFICATION
Mareham Lane Scredington Solar Farm (3/1419/FUL) Approximate distance (5000m)	A proposed solar farm (up to 49.995MW) with associated infrastructure. Mareham Lane Scredington Solar Farm has been refused at planning	Very limited potential for intervisibility with the Proposed Development because of the considerable separation distance (over 6km to the Solar Array Area), intervening infrastructure including the Peterborough to Lincoln Railway Line and mature vegetation cover. Therefore, this scheme has not been carried forward for the inter-cumulative assessment.

6.9.16 Following further analysis, and consultation with relevant stakeholders, the following schemes have been identified for inclusion for assessment of cumulative landscape and visual effects:

- Heckington Fen Solar Park;
- Vicarage Drove;
- Bicker Fen Solar Farm; and
- Little Hale Solar Farm.

Heckington Fen Solar Park

6.9.17 The proposed Heckington Fen Solar Park is located approximately 3.5km to the south east of the Solar Array Area at the closest point introducing the potential for cumulative landscape and visual effects

6.9.18 The underground cabling area associated with the Heckington Fen Solar Park is partially contiguous with the Cable Route Corridor. The Cable Route Corridor is routed from the Bicker Fen substation towards the Solar Array Area to the north west and the Heckington Fen cable route is orientated from the Bicker Fen Substation to its solar park area to the north east. However, the respective routes cross at a point immediately to the north the Bicker Fen substation adjacent to the South Forty Foot Drain, introducing the potential for direct cumulative landscape and visual effects.

Cumulative Landscape Effects

6.9.19 At this stage, the detailed programme for the construction of the respective developments are not finalised but for the purposes of the assessment it is assumed that construction activity will be at least partially concurrent. The landscape effects of the Proposed Development in isolation at the Site level during construction has been assessed as Major adverse (significant) as a result of vegetation removal and soil stripping activities. The LVIA for Heckington Fen Solar Park (EN010123, Document Reference: (REP5-033) 6.1.6 Rev 3) has not identified any significant effects on landscape elements at the construction phase. In combination with the Heckington Fen scheme there would be an increased extent of vegetation removal over a relatively localised area associated with the cable route corridors of the respective

schemes. However, there would not be an increased level of effect and therefore significant cumulative landscape effects at a Site level are not predicted.

- 6.9.20 The Proposed Development and Heckington Fen Solar Park fall within NCA 46 The Fens. This would result in an incremental addition of energy infrastructure within the NCA. However, apart from short lived construction activity associated with the implementation of cable connections intervisibility between the two schemes is limited. Therefore, in relation to the scale of the NCA as a whole it is considered that the combined effects of the Proposed Development and Heckington Fen Solar Park do not have the potential to result in significant cumulative effects.
- 6.9.21 In terms of local landscape character, the Proposed Development and the Heckington Fen Solar Park are located within the Fenland Sub Area. The effect of the Proposed Development in isolation for landscape character has been assessed as Moderate adverse (significant). The effects for the Heckington Fen Solar Park at construction have been assessed as Moderate (not significant). The concurrent construction works associated with the two schemes in combination would introduce the presence of further activity within a predominantly rural landscape, intervisibility of this activity across the LCA as a whole would be partial and not comprehensive. Overall, the in combination characterising influence of both schemes across the Fenland Sub Area would result in Moderate adverse (significant) effects. This is the same level as that assessed for the Proposed Development in isolation, therefore, no significant cumulative effects are predicted.
- 6.9.22 The cable route for Heckington Fen is located within the Holland Reclaimed Fen LCA and will introduce direct landscape effects into a localised part of the character area. Within a localised area where the respective cable routes are in close proximity there may be a marginal increase in the characterising influence of construction activity and potentially an increased presence of construction vehicles on the local road network. Construction activity particularly associated with the Cable Route will be perceptible but will not feature prominently and will not have a characterising influence across the character area as a whole. In combination effects on the Holland Fen LCA will be Minor adverse (not significant).

Cumulative Visual effects

- 6.9.23 Significant adverse visual effects have been identified during construction for the Heckington Fen Solar Park particularly in relation to the Solar Park aspect of the scheme. Viewpoints 1, 2 and 4 in the Heckington Fen LVIA representing close distance views from the landscape immediately to the west of the scheme including views from Clay Bank (B1395), **Figure 6.23 Baseline Panorama Viewpoint 16: View from B1395 Clay Bank (Document Ref: 6.4 ES Vol.3, 6.4.34)** and the adjacent PRow network. Views of the Proposed Development will also be available from this area although the orientation of views will be to the west and northwest meaning simultaneous views of the respective developments will generally not be available. Cumulative visibility will generally be experienced in successive views or sequentially as people move through the landscape on the PRow network or by vehicular receptors travelling on the B1395. In these views the Heckington Fen Solar Park is anticipated to be the most prominent aspect and there will be limited intervisibility

with the Proposed Development and Cumulative visual effects will be Minor adverse (not significant) and temporary.

- 6.9.24 Localised significant adverse visual effects will also be experienced by visual receptors in close proximity to the southern extent of the respective cable routes and grid connection. Significant effects are identified in relation to the Proposed Development because of construction activity in the Cable Route Corridor (section 6.6). Simultaneous introduction of the cable works associated with Heckington Fen may temporarily increase the perceived level of activity in this area resulting in Minor adverse (not significant) effects.
- 6.9.25 At operation year 0, following cessation of construction works the landscape will return to a more settled state although reinstatement planting will not be established or contributing to visual assimilation. In relation to the Heckington Fen LVIA, viewpoints 1,2,4 and 6 are assessed as continuing to experience Major to Moderate significant adverse effects because of relatively close distance views of infrastructure within the solar park. Views of the Proposed Development for receptors in a similar area **Figure 6.23 Baseline Panorama Viewpoint 16: View from B1395 Clay Bank (Document Ref: 6.4 ES Vol.3, 6.4.34)** would result in Minor adverse (not significant) effects. Cumulative visual effects at operation would generally be experienced sequentially as people travel through the landscape. In this respect the most notable visual change is likely to be experienced for receptors moving between the respective developments, including; users of the B1395 and the PRow and minor road network in this area. Overall, at operation phase there will be limited intervisibility between the proposed Development and Heckington Fen Solar Park. The combined visual effects would be Minor adverse (not significant).
- 6.9.26 Although the loss of some vegetation and change to surface textures will be perceptible in the respective cable routes the removal of construction activity in views will reduce the perception of visual change reducing visual effects to not significant. As mitigation matures within the landscape of the cable route corridors will progressively re-integrate the Cable Route corridor site into the landscape context.

Vicarage Drove Solar Farm

- 6.9.27 The Vicarage Drove Solar Farm is located immediately to the west of the Bicker Fen Substation and adjacent to the Bicker Fen Wind Farm. The western site boundary is defined by the South Forty Foot Drain the embankments of which preclude wider visibility of the scheme across the landscape to the west as illustrated in the ZTV for the scheme (Drawing ref. D68.20/03 Rev. B, Landscape Science Consultancy Ltd., 16/06/21).
- 6.9.28 Although the scheme partially overlaps with some parcels of the Cable Route Corridor there will be very limited intervisibility with the Solar Array Area of the Beacon Fen Energy Park. This is because of the screening provided by the embankments associated with the Forty Foot Drain, the relatively flat landform and intervening layers of mature vegetation cover.

Cumulative Landscape effects

- 6.9.29 The implementation of underground cabling and associated activity as part of the Cable Route works and the construction of solar arrays with associated

infrastructure at Vicarage Drove Solar Farm is likely to result in significant effects over a localised part of the Holland Reclaimed Fen LCA during construction. This will be as a result of vegetation removal and the presence and movement associated with construction activity which will be perceptible across a small part of the LCA. Overall, the effects of the respective schemes during construction would be Moderate adverse (significant) as identified for the Proposed Development in isolation, therefore, no significant cumulative effects are predicted.

- 6.9.30 At operation following cessation of construction activity and implementation of reinstatement measures the respective schemes would have a limited characterising presence and there would be no significant cumulative landscape effects.

Cumulative Visual effects

- 6.9.31 A limited number of visual receptors in a localised area including residents at Eau End Farm, Villa Farm and Poplar Tree Farm and users of PRowWs, Help/14/3 and Bick/1/1, are likely to experience views of construction works of the combined schemes. Wider visibility will be restricted by embankments and vegetation associated with the South Forty Foot Drain and in the wider landscape. This localised area is likely to experience significant cumulative visual effects assuming the construction phases of the respective developments occur concurrently.
- 6.9.32 During the operational phase, there will be very limited intervisibility of above ground infrastructure associated with the respective schemes. As a consequence, there will be no significant cumulative visual effects at operation.

Bicker Fen Solar Farm

- 6.9.33 Bicker Fen Solar Farm is located to the east of the Bicker Fen Substation and west of Bicker Bar and Northorpe villages. There would be limited intervisibility between this with the Solar Array Area views being filtered by intervening vegetation and scattered farmsteads.

Cumulative Landscape effects

- 6.9.34 As the Proposed Development is located outside of the Bicker to Wyberton Settled Fen LCA, the effects of the Cable Route Corridor will be restricted primarily to the construction phase. Effects in relation to perceptual and aesthetic qualities will not be greater than those identified for the Proposed Development in isolation on the Bicker to Wyberton Settled Fen. Similarly, the cumulative landscape effects will not be greater for Holland Reclaimed Fen LCA than those identified for the Proposed Development due to the separation distance between the schemes and limited intervisibility.
- 6.9.35 At operation the cumulative landscape effects on Wyberton Settled Fen LCA and Holland Reclaimed Fen LCA will not exceed those identified in isolation for the Proposed Development and Bicker Fen Substation.
- 6.9.36 The cumulative landscape effects at the regional scale will not be significant due to the limited extent of the schemes within the landscape of the NCA.

Cumulative Visual effects

- 6.9.37 Potentially significant cumulative visual effects during construction are likely to be experienced by some residents along Cowbridge Road/Bicker Drove and recreational receptors such as Cross Britain Way Long Distance Path, Public Footpath No. Bick/2/1 and Bridleway No. Bick/1/1 (South Forty Foot Drain). This is based on the assumption that both schemes will be constructed at the same time.
- 6.9.38 During the operational phase, cumulative visual effects will not be greater than those identified for visual receptors when considering both schemes in isolation as the landscape of the Cable Route Corridor will be largely restored at the end of construction.

Little Hale Fen Solar Farm

- 6.9.39 The Little Hale Fen Solar Farm is located within a low lying Fenland landscape to the east of the South Forty Foot Drain and the Bicker Fen Substation, and to the north west of the village of Northorpe. Generally, the Little Hale Fen Solar site is located to the south of the Cable Route Corridor resulting in the potential for cumulative effects. However, intervisibility with the Proposed Development will be limited because of the separation distance, the presence of the South Forty Foot Drain and mature vegetation in the intervening landscape.

Cumulative Landscape effects

- 6.9.40 The cumulative landscape effects at the regional scale will not be significant due to the limited extent of the respective schemes in relation to the host NCA 46, The Fens.
- 6.9.41 The Little Hale Fen Solar Farm is of relatively small scale and extent and will, therefore not notably increase the presence of energy infrastructure within the Fenland Sub Area individually or in combination with the Proposed Development. Following cessation of construction activity, the landscape associated with the Cable Route Corridor will be restored although the Little Fen Solar Site will continue to have a localised characterising presence increasing the presence of energy infrastructure in association with the Bicker Fen Wind Farm and substation.

Cumulative Visual effects

- 6.9.42 Relatively open views will be available for users of a localised section of the PRoW network including; Public Bridleway No. Bick1/1, that is routed along the South Forty Foot Drain. Successive, cumulative visual effects are likely to be experienced in the short term assuming the construction phases of the respective schemes occur concurrently. Glimpsed views of construction works associated with the Cable Route Corridor and Little Hale Fen Solar Farm are also likely to be available from PRoW No. Help/14/3 and LHal/5/1.
- 6.9.43 Combined visibility for residential receptors will be restricted. A limited number of residential receptors such as those at Eau End Farm may experience visibility of both schemes during construction. However, the scale of perceived change would be minor due to the presence of South Forty Foot Drain, outbuildings and vegetation to the curtilage of dwellings.

- 6.9.44 During the operational phase cumulative visual effects would not be widely perceived due to the reinstatement of hedgerows and a return to agricultural land use for land within the Cable Route Corridor.

6.10 Summary

Landscape Effects

Landscape Designations

- 6.10.1 The Proposed Development is not located within and will not affect any national statutory landscape designations or regional or local non-statutory landscape designations.

Landscape Character

- 6.10.2 At a national level the Proposed Development is located within NCA Profile: 46 The Fens and NCA Profile: 47 Southern Lincolnshire Edge. The LVIA has determined that there would be no significant landscape effects in relation to these NCA's because of the relatively small scale of the NCA's which would be affected or influenced by the Proposed Development.
- 6.10.3 At a local level, the Proposed Development is located within the Fenland Character Sub Area, the Holland Reclaimed Fen LCA and the Central Clays and Gravels Sub Area.
- 6.10.4 The LVIA has assessed landscape effects at the Site level in terms of direct effects on Site fabric and character and at a local and national level in terms of effects on landscape character more widely as detailed in **Appendix 6.3: Landscape Character Baseline and Sensitivity (Document Ref: 6.3 ES Vol. 2, 6.3.15)**.
- 6.10.5 During the construction phase the key effects are associated with the introduction of, solar PV arrays, Onsite Substation and associated infrastructure at the Solar Array Area. Construction within the Cable Route Corridor will result in some vegetation removal, soil stripping, excavation, the introduction of temporary material stockpiles, access tracks and associated movement and activity. Movements associated with construction vehicles will be intermittently apparent along some access roads and temporary access tracks. Arable land use within the Solar Array Area will be transformed through the introduction of large scale construction works.
- 6.10.6 Major adverse (significant) effects have been identified at the Site level during construction. Moderate adverse (significant) effects have been identified at the construction phase for the Fenland Sub Area and Holland Reclaimed Fen LCA. The introduction of the Bespoke Access Road will result in Minor adverse and not significant effect on the landscape of the Central Gravels and Clays Sub Area. The effects during construction will be short term and reversible and will include implementation of reinstatement measures and the landscape mitigation scheme, **Figure 6.31 Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42)** and secured through the OLEMP, **Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19)**.

Construction Phase - Visual

6.10.7 Construction phase visual effects will result from the perception of visual change resulting from the introduction of activity and associated infrastructure within the predominantly agricultural landscape.

6.10.8 Major adverse (significant) effects have been identified for the following visual receptors:

- Residents of Property Group R1; Ewerby Thorpe Farm and Ewerby Thorpe Lodge;
- Residents of Property Group R2; Howell Fen Farmhouse, Asgarby Barns and Westmorelands Farm;
- Residents of Property R4; Gashes Barn;
- Residents of Property Group R5; Star Fen Farm, The Bungalow, Star Fen Cottage, Windward, Berrick Cottage, Decoy Farm;
- Residents of Property Group R9; including, Crow Lane Farm, White House, Broadhurst Farm;
- Residents of Property R10; White House Farm;
- Residents of Property R11; Poplar Tree Farm;
- Residents of Property R12; Villa Farm;
- Residents of Property Group R15; Meadow View, Dovecote Farm, Cozee Cottage, Highland House, Gauntlet Bridge Farm, Fen Lodge, Crow Hall;
- Residents of Property Group R20; Crown Cottage and Keepers Cottage;
- Recreational receptors using the PRow Network adjacent to the River Slea;
- Recreational receptors using the Bridleway Ewer/1103/1;
- Recreational receptors using the PRow network to the east of Great and Little Hale;
- Recreational receptors using the PRow network to the north west of Heckington;
- Recreational receptors using Public Footpath Bick/2/1;
- Recreational receptors using the PRow network to the west of Asgarby Lane;
- Transport receptors using Black Drove/Ferry Lane/Halfpenny Toll Lane; and
- Transport receptors using Howell Fen Drove.

6.10.9 Moderate adverse and significant effects have been identified for the following visual receptors:

- Residents of Property Group R6. Courtrow Farm, The Paddocks, Winkhill;
- Residents of R7 Hall Farm
- Residents of Property Group R13. Kingtree Lodge, Cowbridge Farm;
- Residents of Property Group R14. Butlers, Acorn Lodge, Milldrain Lodge
- Residents of Property Group R18. Garwick Farm, Strawberry Cottage, Bramble Cottage, White House, Fen House;
- Recreational receptors using the PRow network to the east of Asgarby Lane;
- Transport receptors using the A17;
- Transport receptors using the minor road network adjacent to and crossing the southern extent of the Cable Route Corridor including Tileban Lane and Bicker Drove;

- Transport receptors using A153;
- Transport receptors using Asgarby Lane; and
- Transport receptors using Heckington Lane/Halfpenny Toll Lane.

6.10.10 These construction phase effects will be short term and reversible.

Operational Phase – Landscape

6.10.11 On completion of the construction phase, the Site will return to a more settled state and will be characterised by the presence of energy infrastructure within the Solar Array Area and infrastructure within the Bespoke Access Corridor. The landscape mitigation measures will initially have a limited presence but will progressively provide assimilation with the landscape context as the vegetation becomes established. Agricultural land use within the Cable Route Corridor will be reinstated although some change in the vegetation pattern will be perceptible. Over time this change will become less marked as the vegetation becomes established and over time the existing pattern of land use will be comprehensively restored.

6.10.12 Significant operational phase landscape effects include the following:

- Major adverse (significant) effects have been identified on the landscape character of the Site at year 0, reducing to Moderate adverse (significant) at year 15; and
- Moderate adverse and significant effects have been identified on the Fenland Sub Area in year 0. At year 15, the proposed mitigation planting will help to integrate the Proposed Development within the existing landscape, resulting in a reduction of effects to Minor adverse (not significant).

6.10.13 The effects on the Holland Reclaimed LCA will reduce to minor adverse and not significant in year 0 following cessation of construction activity and restoration of agricultural land use.

Operational Phase – Visual

6.10.14 On completion, significant adverse effects have been identified for some visual receptors as a result of the change in views introduced by the Solar Array Area and the Bespoke Access Road. No significant visual effects have been identified in relation to views of the Cable Route Corridor.

6.10.15 Upon completion, at year 0, Major adverse (significant) effects have been identified for the following receptors:

- Residents of Property Group R1. Ewerby Thorpe Farm and Ewerby Thorpe Lodge;
- Residents of Property Group R2. Howell Fen Farmhouse, Asgarby Barns and Westmorelands Farm; and
- Residents of Property R4. Gashes Barn.

6.10.16 Moderate adverse (significant) effects have been identified for the following visual receptors at year 0:

- Residents of Property Group R20. Crown Cottage and Keepers Cottage;
- Recreational receptors using the PRow network near the River Sleas;
- Recreational receptors using Bridleway Ewer/1103/1;
- Recreational receptors using the PRow network to the west of Asgarby;

- Transport receptors using Black Drove/Ferry Lane/Halfpenny Toll Lane;
- Transport receptors using Howell Fen Drove.
- Recreational receptors using PRoWs near the River Sleas; and
- Recreational receptors using the PRoW network to the west of Asgarby Lane.

6.10.17 At year 15, establishment and partial maturation of mitigation planting will reduce the number of visual receptors which will experience significant adverse effects. However, Moderate adverse (significant) effects will continue to be experienced by the receptors identified below:

- Residents of Property R4. Gashes Barn;
- Recreational users of the PRoW network near the River Sleas; and
- Recreational receptors using the PRoW network to the west of Asgarby Lane.

Summary of Mitigation

6.10.18 The proposed mitigation measures include a comprehensive landscape restoration and enhancement scheme illustrated in the indicative landscape Proposals **Figure 6.31 Landscape Strategy Plan (Document Ref: 6.4 ES Vol.3, 6.4.42)**. The landscape strategy plan comprises proposals for replacement planting where vegetation has been lost to facilitate implementation, enhanced planting to mitigate adverse visual effects for sensitive visual receptors and measures to enhance biodiversity value developed in association with the project ecologists. The measures within the landscape strategy plan will be secured through the OLEMP, **Appendix 6.7 Outline Landscape and Ecological Management Plan (Document Ref: 6.3 ES Vol. 2, 6.3.19)**.

Summary of Residual Effects

6.10.19 No further mitigation measures have been identified which would modify the landscape and visual assessment, therefore, the residual effects will be as set out in section 6.6 of this chapter.

Summary Cumulative Effects

Cumulative Landscape Effects

6.10.20 In relation to effects on landscape character there would be no significant adverse cumulative effects. Works associated with the Solar Array Area are sufficiently distant from other considered energy schemes to the south that there is limited intervisibility reducing the potential for cumulative effects to occur. Therefore, cumulative effects are predicted to be focussed on the area adjacent to and to the north of the Bicker Fen substation, in an area where there is the possibility for the simultaneous introduction of cable routes.

6.10.21 At a national level the introduction of further development within NCA 46 – The Fens focussed on the area between Swineshead and Heckington will result in the increased characterising presence of energy infrastructure. Overall, this is predicted to have a notable but not significant effect on NCA 46. At all phases of development the contribution of the Proposed Development to this overall cumulative scenario would be Negligible adverse (Not significant).

6.10.22 At the local level there would be Minor adverse (not significant) cumulative effects on the Fenland Sub Area associated with the in combination effects of

the Proposed Development and Heckington Fen Solar Park at all development phases assuming construction and decommissioning activity will be at least partially concurrent.

- 6.10.23 In relation to the Holland Fen LCA there would be Minor adverse (Not significant) effects at construction and decommissioning phases assuming simultaneous construction activity associated with the cable routes for the Proposed Development, Heckington Fen Solar Park and works associated with Vicarage Drove Solar Farm.

Cumulative –Visual Effects

- 6.10.24 Cumulative visual effects at construction will primarily be limited to those resulting from the in combination presence of construction activity associated with the cable routes connecting into Bicker Fen Substation. Major to Moderate (Significant) visual effects have been identified for residential, recreational and transport receptors in the Cable Route Corridor for the Proposed Development in isolation and it is not anticipated that the temporary introduction of further construction activity associated with other identified cumulative schemes will increase the level of effect for these receptors. Therefore, no significant cumulative visual effects are predicted.
- 6.10.25 On completion of the Proposed Development and cessation of construction activity within the Cable Corridor Route there will be limited intervisibility between the Proposed Development and other considered cumulative schemes. There will be no significant adverse cumulative visual effects at operation phase.

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ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
Landscape & Visual												
Construction Phase - Landscape												
Landscape Character of the Site	Temporary change to the landscape character of the site resulting from the presence of construction works and associated activity.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
Fenland Sub Area	Temporary change to the landscape character of the site resulting from the presence of construction works within the Solar Array Area and the Cable Route Corridor.					X			Moderate Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
Holland Reclaimed Fen LCA	Temporary change to the landscape character of the LCA resulting from the presence of construction works and associated with the Cable Route Corridor within the south western					X			Moderate Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
	extent of the character area.											
Construction Phase - Visual												
Property Group R1. Ewerby Thorpe Farm and Ewerby Thorpe Lodge	Views of construction activity within the Solar Array Area.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
Property Group R2. Howell Fen Farmhouse, Asgarby Barns and Westmorelands Farm	Views of construction activity within the Solar Array Area.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
Property R4. Gashes Barn	Views of construction activity within the Solar Array Area.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
Property Group R5. Star Fen Farm, The Bungalow, Star Fen Cottage, Windward, Berrick Cottage, Decoy Farm	Views of construction activity with the Cable Corridor Area.							X	Major Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
Property Group R6. Courtrow Farm, The Paddocks, Winkhill	Views of construction activity within the Cable Route Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
R7 Hall Farm	Views of construction activity with the Cable Corridor Area.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
Property Group R9. including, Crow Lane Farm, White House, Broadhurst Farm	Views of construction activity within the Cable Route Corridor.							X	Major Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
Property R10. White House Farm	Views of construction activity with the Cable Corridor Area.							X	Major Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
												existing mature vegetation.
Property R11. Poplar Tree Farm	Views of construction activity with the Cable Corridor Area.							X	Major Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
Property R12. Villa Farm	Views of construction activity with the Cable Corridor Area.							X	Major Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
Property Group R13. Kingtree Lodge, Cowbridge Farm;	Views of construction activity with the Cable Corridor Area.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
Property Group R14. Butlers, Acorn Lodge, Milldrain Lodge	Views of construction activity with the Cable Corridor Area.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
Property Group R15. Meadow View, Dovecote Farm,	Views of construction activity with the Cable Corridor Area.							X	Major Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
Cozee Cottage, Highland House, Gauntlet Bridge Farm, Fen Lodge, Crow Hall												and protection of existing mature vegetation.
Property Group R18. Garwick Farm, Strawberry Cottage, Bramble Cottage, White House, Fen House	Views of construction activity with the Cable Corridor Area.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP. Retention and protection of existing mature vegetation.
Property Group R20. Crown Cottage and Keepers Cottage	Views of construction activity within the Solar Array Area.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
PRoW Network adjacent to the River Slea	Views of construction activity within the Solar Array Area.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
Bridleway Ewer/1103/1	Views of construction activity within the Solar Array Area.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
PRoW network east of Great and Little Hale	Views of construction activity within the Cable Route Corridor.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
PRoW network to north west of Heckington	Views of construction activity within the Cable Route Corridor.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
PRoW Bick/2/1	Views of construction activity within the Cable Route Corridor.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
												existing trees, areas of woodland and hedgerows.
PRoW network to the west of Asgarby Lane	Views of construction activity within the Bespoke Access Corridor.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
PRoW to the east of Asgarby Lane	Views of construction activity within the Bespoke Access Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
Black Drove/Ferry Lane/Halfpenny Toll Lane	Views of construction activity within the Cable Corridor Area Solar Array Area.							X	Major Adverse	St, R	Significant	Implementation of OCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
Howell Fen Drove	Views of construction activity within the Cable Route Corridor.							X	Major Adverse	St, R	Significant	Implementation of measures in the OCEMP and OLEMP. Retention and protection of existing mature vegetation.
A17	Views of construction activity within the Cable Route Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP and OLEMP. Retention and protection of existing mature vegetation.
Minor road network adjacent to and crossing the southern extent of the Cable Route Corridor including Tileban Lane and Bicker Drove	Views of construction activity within the Cable Route Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP and OLEMP. Retention and protection of existing mature vegetation.
A153	Views of construction activity within the Bespoke Access Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP and OLEMP. Retention and protection of existing mature vegetation.
Asgarby Lane	Views of construction activity within the							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP and OLEMP.

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
	Bespoke Access Corridor.											Retention and protection of existing mature vegetation.
Heckington Lane/Halfpenny Toll Lane	Views of construction activity within the Bespoke Access Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of measures in the OCEMP and OLEMP. Retention and protection of existing mature vegetation.
Operation Year 0 - Landscape												
Landscape Character of the Site	Change to the landscape character of the site through introduction of solar PV arrays and associated infrastructure. (Solar Array Area)							X	Major Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Mitigation planting within the Solar Array Area providing connectivity with existing vegetation and replacement planting within the Cable Route Corridor and Bespoke Access Corridor.
Fenland Sub Area	Change to the landscape character of the landscape sub area through introduction of solar PV arrays,					X			Moderate Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Mitigation planting within the Solar Array Area

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
	associated infrastructure and											providing connectivity with existing vegetation and replacement planting within the Cable Route Corridor and Bespoke Access Corridor.
Operation Year 0 - Visual												
Property Group R1. Ewerby Thorpe Farm and Ewerby Thorpe Lodge	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Major Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Native shrub and tree planting to the perimeter of the Solar Array Area adjacent to the property.
Property Group R2. Howell Fen Farmhouse, Asgarby Barns and Westmorelands Farm	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Major Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Native shrub and tree planting to the perimeter of the Solar Array Area adjacent to the property.

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
Property R4. Gashes Barn	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Major Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Native shrub planting and tree planting to the perimeter of the Property boundary and the introduction of hedgerows to the access road.
Property Group R20. Crown Cottage and Keepers Cottage	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Moderate Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Native shrub and tree planting to the perimeter of the Solar Array Area adjacent to the property.
PRoWs near the River Slea	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Moderate Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Hedgerow management measures and new hedgerow planting.
Bridleway Ewer/1103/1	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Moderate Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. New hedgerows to the western perimeter of

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
												the Solar array Area and management measures for existing hedgerows.
PRoW network to the west of Asgarby	Views of infrastructure associated with the Bespoke Access Road.							X	Moderate Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Retention and protection of existing vegetation and replacement planting within the Bespoke Access Corridor.
Black Drove/Ferry Lane/Halfpenny Toll Lane	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Moderate Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Retention and protection of existing vegetation and replacement planting within the Bespoke Access Corridor.
Howell Fen Drove	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Moderate Adverse	Mt, R	Significant	Implementation of measures within the OLEMP. Retention and protection of existing vegetation and hedgerow

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
												planting and management.
Operation Year 15 (Residual Effects) – Landscape												
Landscape Character of the Site	Change to the landscape character of the site through introduction of solar PV arrays and associated infrastructure							X	Moderate Adverse	Lt, R	Significant	Mitigation planting within the Solar Array Area providing connectivity with existing vegetation and replacement planting within the Cable Route Corridor and Bespoke Access Corridor.
Operation Year 15 (Residual Effects) - Visual												
Property R4. Gashes Barn Gashes Barn	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Moderate Adverse	Lt, R	Significant	Implementation of measures within the OLEMP. Native shrub planting to the perimeter of the Property boundary and the introduction of hedgerows to the access road.
PRoWs near the River Sleas	Views of solar PV arrays and associated energy infrastructure within the Solar Array Area.							X	Moderate Adverse	Lt, R	Significant	Implementation of measures within the OLEMP. Hedgerow management

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
												measures and new hedgerow planting.
PRoW network to the west of Asgarby	Views of infrastructure associated with the Bespoke Access Road.							X	Moderate Adverse	Lt, R	Significant	Implementation of measures within the OLEMP. Retention and protection of existing vegetation and replacement planting within the Bespoke Access Corridor.
Decommissioning Phase - Landscape												
Landscape Character of the Site	Temporary change to the landscape character of the site resulting from the presence of construction works and associated activity.							X	Major Adverse	St, R	Significant	Implementation of DCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
Decommissioning Phase - Visual												
Property R4. Gashes Barn	Views of decommissioning activity within the Solar Array Area.							X	Moderate Adverse	St, R	Significant	Implementation of DCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
PRoW Network adjacent to the River Slea	Views of decommissioning activity within the Solar Array Area.							X	Moderate Adverse	St, R	Significant	Implementation of DCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
PRoW to the west of Asgarby Lane	Views of decommissioning activity within the Bespoke Access Corridor.							X	Major Adverse	St, R	Significant	Implementation of DCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
PRoW to the east of Asgarby Lane	Views of decommissioning activity within the Bespoke Access Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of DCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
A153	Views of decommissioning activity within the Bespoke Access Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of DCEMP and measures in the OLEMP including measures to protect

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
												existing trees, areas of woodland and hedgerows.
Asgarby Lane	Views of decommissioning activity within the Bespoke Access Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of DCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.
Heckington Lane/Halfpenny Toll Lane	Views of decommissioning activity within the Bespoke Access Corridor.							X	Moderate Adverse	St, R	Significant	Implementation of DCEMP and measures in the OLEMP including measures to protect existing trees, areas of woodland and hedgerows.

Cumulative: Construction Phase - Landscape

At Construction Phase (Year 0)- There would be no significant adverse cumulative landscape effects.

Cumulative: Construction Phase - Visual

At Construction Phase (Year 0)- There would be no significant adverse cumulative visual effects.

Cumulative: Operation Phase (Year 0)- Landscape

At Operation Phase (Year 0)- There would be no significant adverse cumulative landscape effects.

Cumulative: Operation Phase (Year 0)- Visual

At Operation Phase (Year 0)- There would be no significant adverse cumulative visual effects.

ISSUE	DESCRIPTION OF IMPACT	GEOGRAPHICAL SIGNIFICANCE							IMPACT	NATURE	SIGNIFICANCE	MITIGATION MEASURES
		I	N	R	C	D	P	L				
Cumulative: Operation Phase (Year 15)- Landscape												
At Operation Phase (Year 15)- There would be no residual significant adverse cumulative landscape effects.												
Cumulative: Operation Phase (Year 15)- Landscape												
At Operation Phase (Year 15)- There would be no significant adverse cumulative visual effects.												
Key: Geographical Significance: I = International N = National R = Regional C = County D = District P = Parish L = Low to Local Nature: St = Short Term Mt = Medium Term Lt = Long Term R = Reversible Ir = Irreversible												

BFEP Appendices