FENWICK SOLAR FARM

Fenwick Solar Farm

EN010152

Environmental Statement

Volume I Chapter 10: Landscape and Visual Amenity

Document Reference: EN010152/APP/6.1

Regulation 5(2)(a)

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

October 2024

Revision Number: 00

BOOM POWER

BOOM-POWER.CO.UK

Revision History

Revision Number	Date	Details
00	October 2024	DCO application

Prepared for:
Fenwick Solar Project Limited

Prepared by:
AECOM Limited

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10. Landscape and Visual Amenity

10.1 Introduction

10.1.1 This chapter of the Environmental Statement (ES) presents an assessment of the likely significant effects of Fenwick Solar Farm (hereafter referred to as the 'Scheme') with respect to landscape and visual amenity. The assessment follows the methodology provided in **ES Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology [EN010152/APP/6.3]**.

10.1.2 This chapter should be read in conjunction with the Scheme description provided in **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]**. Additionally, landscape and visual amenity interfaces with a number of other topics and as such, should be considered alongside **ES Volume I Chapter 7: Cultural Heritage [EN010152/APP/6.1]** and **ES Volume I Chapter 8: Ecology [EN010152/APP/6.1]**.

10.1.3 This chapter is supported by the following figures (**ES Volume II [EN010152/APP/6.2]**):

a. **Figure 1-1: Scheme Location;**
b. **Figure 1-3: Elements of the Site;**
c. **Figure 2-2: Public Rights of Way;**
d. **Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations;**
e. **Figure 10-2: National and Regional Character Areas;**
f. **Figure 10-3 Local Landscape Character Areas;**
g. **Figure 10-4: Topography;**
h. **Figure 10-5: Hydrology and Woodland;**
i. **Figure 10-6: Screened Zone of Theoretical Visibility (ZTV) – Solar PV Panels;**
j. **Figure 10-7: Screened ZTV – On-Site Substation and BESS;**
k. **Figure 10-8: Screened ZTV – All Features;**
l. **Figure 10-9: Representative Viewpoint Locations;**
m. **Figure 10-10: Viewpoint Photography;**
n. **Figure 10-11: Tree Preservation Order and Important Hedgerows for the Solar PV Site**; and
o. **Figure 10-12: CPRE Light Pollution and Dark Skies.**

10.1.4 This chapter is supported by the following technical appendices (**ES Volume III [EN010152/APP/6.3]**):

a. **Appendix 10-1: Legislation, Policy and Guidance (Landscape and Visual Amenity)**;

b. **Appendix 10-2: Landscape and Visual Impact Assessment Methodology**;

c. **Appendix 10-3: Landscape Character Baseline**;

d. **Appendix 10-4: Visual Baseline**;

e. **Appendix 10-5: Landscape Assessment**

f. **Appendix 10-6: Visual Assessment**; and

g. **Appendix 10-7: Arboricultural Impact Assessment**.

10.2 Legislation, Policy and Guidance

10.2.1 The following provides an overview of the legislation and planning policy relevant to landscape and visual matters. A full record is set out in **ES Volume III Appendix 10-1: Legislation, Policy and Guidance (Landscape and Visual Amenity) [EN010152/APP/6.3]**.

Legislation

Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

10.2.2 The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (Ref. 10-1) transposes the EU EIA Directive into UK law. Regulation 14 sets out the information that should be included within an Environmental Statement that accompanies a Development Consent Order (DCO).

Planning (Listed Building and Conservation Areas) Act 1990

10.2.3 The Planning (Listed Buildings and Conservation Areas) Act 1990 (Ref. 10-1) (as amended) provides specific protection for buildings and areas of special architectural or historic interest. These features contribute to the heritage of an area and an understanding of historic landscape.

The Town and Country Planning (Tree Preservation) (England) Regulations 2012

10.2.4 The Town and Country Planning (Tree Preservation) (England) Regulations 2012 (Ref. 10-3) provide powers to local planning authorities to make and administer Tree Preservation Orders, the purpose of which is to protect selected trees and woodlands by prohibiting their cutting down, uprooting, topping, lopping, wilful destruction or wilful damage without prior consent.

The Hedgerow Regulations 1997

10.2.5 The Hedgerow Regulations 1997 (Ref. 10-4) provide protection for Important Hedgerows, these being hedgerows that meet certain criteria in respect of their length, location, and importance.

National Policy

Overarching National Policy Statement for Energy (EN-1) (November 2023)

10.2.6 NPS EN-1 (November 2023) (Ref. 10-5) establishes criteria for good design for energy infrastructure and how it should guide the design of a Scheme from the outset. NPS EN-1 (November 2023) also sets out how virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape but that there may be beneficial landscape character effects arising from mitigation. NPS EN-1 (November 2023) also explains that projects need to be designed carefully, having regard to siting, operational and other constraints, aiming to minimise harm to the landscape.

National Policy Statement (NPS) for Renewable Energy Infrastructure (EN-3) (November 2023)

10.2.7 NPS EN-3 (November 2023) (Ref. 10-6) is concerned with Renewable Energy. Taken together with NPS EN-1 (November 2023), it provides the primary policy for decisions by the Secretary of State on applications they receive for nationally significant renewable energy infrastructure.

10.2.8 NPS EN-3 (November 2023) sets out the main likely landscape and visual impacts of large-scale solar farms and provides guidance on how these impacts might be minimised.

Overarching National Policy Statement (NPS) for Electricity Networks Infrastructure (EN-5) (November 2023)

10.2.9 This National Policy Statement (NPS) (Ref. 10-7), taken together with the Overarching NPS for Energy (EN-1) (November 2023), provides the primary policy for decisions taken by the Secretary of State on applications it receives for electricity networks infrastructure.

10.2.10 NPS EN-5 (November 2023) sets out consideration relevant to the siting of infrastructure including substations, including reference to the Horlock Rules (guidelines for the design and siting of substations).

National Planning Policy Framework (December 2023)

10.2.11 The National Planning Policy Framework (NPPF) (December 2023) (Ref. 10-8) sets out the Government's planning policies for England and how these should be applied. Paragraph 5 of the NPPF (December 2023) explains that the Framework does not contain specific policies for nationally significant infrastructure projects. However, the NPPF (December 2023) does include sections relevant to landscape and visual matters, including Paragraph 135 which states that developments should be "*visually attractive…."* and "*sympathetic to local character".*

Local Policy

10.2.12 The Doncaster Local Plan (Ref. 10-9) was adopted in 2021 and sets out how the Borough will develop from 2015 to 2035. The following policies (recorded in **ES Volume III Appendix 10-1: Legislation, Policy and Guidance (Landscape and Visual Amenity) [EN010152/APP/6.3]**) are relevant to landscape and visual matters:

a. Policy 18: Development Affecting Public Rights of Way;
b. Policy 19: Access, Design and Layout of Public Rights of Way;
c. Policy 25: Development in the Countryside Policy Area;
d. Policy 26: Green Infrastructure (Strategic Policy);
e. Policy 29: Ecological Networks (Strategic Policy);
f. Policy 32: Woodlands, Trees and Hedgerows;
g. Policy 33: Landscape (Strategic Policy);
h. Policy 48: Landscaping of New Developments; and
i. Policy 58: Low Carbon and Renewable Energy (Strategic Policy).

Guidance

10.2.13 The NPPF (December 2023) is supported by Planning Practice Guidance which provides more detail on certain policy areas, including the following relevant to this assessment:

a. National Planning Practice Guidance, the Natural Environment (Landscape) 2019 (Ref. 10-10);
b. National Planning Practice Guidance, Light Pollution, 2019 (Ref. 10-11); and
c. National Planning Practice Guidance, Renewable and Low Carbon Energy, 2023 (Ref. 10-12).

10.3 Scoping Opinion and Additional Consultation

10.3.1 A scoping exercise was undertaken in June 2023 to establish the content of the assessment and the approach and methods to be followed. The scoping exercise outcomes were presented in the Scoping Report (**ES Volume III Appendix 1-1: EIA Scoping Report [EN010152/APP/6.3]**) which was submitted to the Planning Inspectorate on 1 June 2023. The Scoping Report records the findings of the scoping exercise and details the technical guidance, standards, good practice and criteria to be applied in the assessment to identify and evaluate the likely significant effects of the Scheme on landscape and visual amenity.

10.3.2 A Scoping Opinion was received from the Planning Inspectorate on 11 July 2023 (**ES Volume III Appendix 1-2: EIA Scoping Opinion [EN010152/APP/6.3]**). A full review of all comments raised in the Scoping Opinion, including paragraph references, is provided in **ES Volume III Appendix 1-3: EIA Scoping Opinion Responses [EN010152/APP/6.3]**.

Additional Consultation

10.3.3 City of Doncaster Council are the host authority of the Scheme with the entirety of the Solar PV Site and Grid Connection Corridor falling within Doncaster. The administrative area of North Yorkshire Council adjoin the northern boundary of the Solar PV Site, whereas the administrative area of East Riding of Yorkshire Council is located within the northeast of the Solar PV Site Study Area.

10.3.4 City of Doncaster Council were contacted in July 2023 regarding the scope and approach to the LVIA. The Council confirmed that they did not have a landscape officer but that they were intending to appoint an independent consultant to advise on landscape and visual matters. In the absence of a Landscape Planner, comments were not provided on the scope and approach to LVIA at this point. However, confirmation that the proposed viewpoints looked comprehensive and provided good coverage was received in October 2023.

10.3.5 City of Doncaster Council responded by email to the Scheme's statutory consultation on 29 May 2024. The response noted that the Council were actively exploring options to procure independent advice on landscape and visual matters. Following correspondence with City of Doncaster Council over the Summer of 2024, an introduction meeting was held on 25 September 2024 with LUC, who have been appointed to advise the council. The meeting introduced LUC to the project and provided an overview of the LVIA methodology. It was agreed in the meeting that at this late stage in the project, there would be little time for any feedback by LUC to be incorporated into the application. However, that there would be time to work together prior to examination and to resolve any matters leading up to the preparation of a Statement of Common Ground.

10.3.6 City of Doncaster Council's statutory consultation response also commented on security and fencing, which is summarised in Table 10-1 below.

10.3.7 A meeting was held with North Yorkshire Council's Principal Landscape Architect on 15 September 2023. Comments received during the meeting and via email (dated 23 October 2023) following the meeting are summarised in Table 10-1 below.

10.3.8 East Riding of Yorkshire Council were contacted by email in September 2023. A response was received confirming that the land in the area is low lying and therefore there would be few visual receptors from the administrative area. It was noted that effects associated with the Trans-Pennine Trail and other local receptors would likely adequately cover, and assess, any wider effects. Therefore, no further consultation would be required.

Table 10-1: Additional Consultation Comments

Consultee	Comment Received	How and Where Addressed
North Yorkshire Council	Noted the importance of identifying the geographical extent of effects, instead of describing a pinpoint location which is commonly seen when assessing only representative viewpoints	The visual assessment has been structured to focus on all visual receptors who could experience an effect as a result of the Scheme, rather than representative viewpoints.
North Yorkshire Council	Generally…in agreement of typical locations on the plan and receptors	Locations west of VP5 (now Viewpoint 9) and VP8 (now Viewpoint 12) were considered

Consultee	Comment Received	How and Where Addressed
	illustrated and set out in your table but would recommend the following additional consideration: VP5 (now Viewpoint 9) and VP8 (now Viewpoint 12) – dependent on exact location in the field. More open views of the development may be more likely with slight adjustment towards the west for each location. VP23 (now Viewpoint 30) – dependent on exact location in the field. More open views of the development may be more likely with adjustment towards the east of the suggested position. VPN1, VPN2, VPN3 – additional suggested viewpoints where open views of the development seem likely.	but were not accessible on the ground during both Summer and Winter fieldwork due to overgrown vegetation obstructing the PRoW, lack of a ditch crossing point and flooded conditions. Viewpoint 31 has been added to capture more open views to the east of Viewpoint 23 (now Viewpoint 30). All three viewpoint suggestions have been incorporated into the visual baseline and assessment. VPN1 is included as Viewpoint 27. VPN2 is included as Viewpoint 24. VPN3 is included as Viewpoint 26, although with a slightly adjusted position to take account of the worst-case scenario where there is no screening from the Christmas tree plantation.
North Yorkshire Council	For all viewpoints I would recommend Visualisation Type 1 annotated baseline photograph.	All photographs presented in **ES Volume II Figure 10-10: Viewpoint Photography [EN010152/APP/6.2]** have been produced as Type 1s.
North Yorkshire Council	For at least two of the North Yorkshire viewpoints (suggest VP5 [now Viewpoint 9], and VPN3, [now Viewpoint 26]) I would wish to see an additional Visualisation Type 3 Photowire showing potential solar panel layout at Year 1. (Where specific planting mitigation is proposed, please provide an additional image at Year 15).	Noted – Type 3 photomontages have been produced at ten viewpoints, including three in North Yorkshire. This includes: • Viewpoint 9 (formerly VP5), as suggested. • Viewpoint 19 which is located close to Viewpoint 26 (formerly VPN3) along the Trans Pennine Trail. This location was chosen over Viewpoint 26 due to it being closer to the Order limits and therefore demonstrating the worst-case scenario.

Consultee	Comment Received	How and Where Addressed
		• Viewpoint 25 – along Lowgate to demonstrate views for residents along Lowgate. These all show Year 1 and Year 15.
East Riding of Yorkshire Council	The land in the area is low lying and visual receptors are few from the East Riding. Impacts associated with the Trans-Pennine Trail and other local receptors is likely to adequately cover, and assess, any wider impacts.	Noted – Trans Pennine Trail included as a visual receptor. LCA 8C: M62 Corridor Hook to Pollington included as a landscape receptor.
City of Doncaster Council	Large-scale solar farms can be a target of crime which can lead operators to install high security fencing which is intrusive in the landscape. The proposed stock proof mesh-type fencing with wooden posts, which has a maximum height of 2.2m, would be appropriate. Every effort should be made to minimise the scale of any galvanised palisade security fencing needed around the On-Site Substation and to incorporate screening where pracitcable.	Noted – a more detailed description of the Scheme's design can be found in **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]**. The Solar PV Site Perimeter Fencing would be a stock proof mesh-type fencing with wooden posts at a maximum height of 2.2 m. Galvanised palisade security fencing, likely green in colour and up to 2.5 m in height, would secure the On-Site Substation and BESS Area. Additional vegetation is proposed around the On-Site Substation to help screen it from PRoW. Existing vegetation around the BESS would help to screen it from PRoW.

10.4 Assessment Methodology

10.4.1 This section sets out the scope and methodology for the assessment of the likely significant effects of the Scheme on landscape and visual amenity.

Study Area

10.4.2 The extent of the Study Area is determined by the potential visibility of the Scheme in the surrounding landscape. It is also proportionate to the size and scale of the Scheme and nature of the surrounding landscape. The Guidelines for Landscape and Visual Amenity (GLVIA3) (Ref. 10-13) state that the Study Area should include *"the full extent of the wider landscape around it which the proposed development may influence in a significant manner".*

10.4.3 For the purposes of this Landscape and Visual Impact Assessment (LVIA) the Study Area has been divided into two parts. The first relates to the Solar PV Site. The second part relates to the Grid Connection Corridor.

10.4.4 The Solar PV Site Study Area has been defined by a combination of Zones of Theoretical Visibility (ZTV) analysis and professional judgement (refer to **ES Volume II Figure 10-6: Screened Zone of Theoretical Visibility (ZTV) – Solar PV Panels [EN010152/APP/6.2]**, **ES Volume II Figure 10-7: Screened ZTV – On-Site Substation and BESS [EN010152/APP/6.2]** and **ES Volume II Figure 10-8: Screened ZTV – All Features [EN010152/APP/6.2]** and verified in the field.

10.4.5 The initial area of search extended 5 km from the Solar PV Site. The review found that there was no potential for significant landscape or visual effects beyond 2 km, other than from Askern Hill, located approximately 4.8 km southwest of the Solar PV Site, which is elevated above the surrounding landscape, as shown on **ES Volume II Figure 10-4: Topography [EN010152/APP/6.2]**. The Solar PV Site therefore extends up to 2 km from the boundary of the Solar PV Site. People visiting Askern Hill have been included within the visual assessment as a single receptor beyond the Solar PV Site Study Area.

10.4.6 The extent of the Solar PV Site Study Area is shown on **ES Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations [EN010152/APP/6.2]**, covering land between Balne and Pollington in the north, Stubs Common and Sykehouse in the centre, and Moss to the south.

10.4.7 The Grid Connection Corridor Study Area covers land up to 500 m either side of the Grid Connection Corridor. It is unlikely that significant landscape or visual effects would occur beyond this distance, given the type and scale of equipment that would be required to install the underground cable and the short duration for which any one landscape or visual receptor beyond the Grid Connection Corridor would experience any change.

10.4.8 If the Scheme utilises a Grid Connection Line Drop, this would comprise below ground cables connecting the On-Site Substation to a new cable sealing end compound at the base of an existing on-site 400 kV overhead line tower located within Field SE2. These works have also been considered as part of this assessment.

10.4.9 The Order limits also include a section of highway at the junction of the A19 and Station Road in the town of Askern to allow for abnormal indivisible load (AIL) vehicle access and escort. An initial Study Area was applied to cover the land up to 500 m from this section of highway. As the works would be limited to temporary traffic signal and banksman control for the period of AIL delivery, no impacts on Landscape and Visual Amenity are anticipated, and therefore this area is not assessed further.

Sources of Information

10.4.10 The following sources have been consulted in order to establish baseline landscape and visual conditions:

a. Relevant national energy policies, planning policy, and planning practice guidance;

b. Landscape and visual amenity related policies contained in adopted and City of Doncaster Council planning policy;

c. Mapping data from Historic England including listed buildings, registered parks and gardens;

d. Natural England, City of Doncaster Council, East Riding of Yorkshire Council and Nork Yorkshire Council published landscape character assessments; and

e. ZTVs, aerial photography and Ordnance Survey (OS) maps.

Assessment Methodology

10.4.11 The LVIA methodology is set out in full in **ES Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology [EN010152/APP/6.3]**.

10.4.12 The following guidance has been used to inform the scope and content of the LVIA, and to assist in the identification and mitigation of likely significant effects. This builds upon the overarching methodology and guidance presented in **ES Volume I Chapter 5: Environmental Impact Assessment Methodology [EN010152/APP/6.1].** Guidance used comprises:

a. Guidelines for Landscape and Visual Impact Assessment, 3rd Edition (GLVIA3) (Landscape Institute and Institute of Environmental Assessment and Management, 2013) (Ref. 10-13);

b. The Landscape Institute's Technical Guidance Note 06/19: Visual Representation of Development Proposals, 2019 (Ref. 10-14);

c. An Approach to Landscape Character Assessment (Natural England, 2014) (Ref. 10-15);

d. The Landscape Institute's Infrastructure Technical Guidance Note 04/2020 (Ref. 10-16);

e. The Landscape Institute's Tranquillity Technical Guidance Note 2017 (Ref. 10-17);

f. Landscape Institute's Technical Guidance Note 2/19: 'Residential Visual Amenity Assessment' (2019) (Ref. 10-18); and

g. The Landscape Institute's Assessing Landscape Value Outside National Designations Technical Guidance Note 02/21 (Ref. 10-19).

Establishment of the Baseline

10.4.13 Establishment of the baseline has involved consultation with stakeholders, reference to existing data sources through desk study, and fieldwork surveys.

10.4.14 Reference was made to the prevailing policy framework, published strategies and guidance, Ordnance Survey mapping, 3-dimensional topographical data, and site photographs and aerial photography.

10.4.15 Fieldwork surveys were undertaken by qualified and experienced landscape architects to inform the scoping process and to record the Winter and Summer season conditions. The purpose of this fieldwork was to review the boundaries and key characteristics defined in the published landscape

character assessments and to identify, record and map features and characteristics of the landscape, including perceptual qualities.

10.4.16 Information from these surveys has been used to inform the identification of baseline landscape conditions.

10.4.17 Comments from statutory consultees made in response to the scoping process, non-statutory consultation and statutory consultation (including informal discussions and consultation) and through meetings with officers of relevant planning authorities have informed the scope and methodology of the LVIA and development of the landscape strategy.

Landscape Baseline

10.4.18 Establishment of the landscape baseline involved identifying the physical features of the landscape (with reference to **ES Volume II Figure 10-4: Topography [EN010152/APP/6.2]**, **ES Volume II Figure 10-5: Hydrology and Woodland [EN010152/APP/6.2]**, **ES Volume II Figure 2-2: Public Rights of Way [EN010152/APP/6.2]**, and **ES Volume II Figure 10-11: Tree Preservation Order and Important Hedgerows for the Solar PV Site [EN010152/APP/6.2]**), as well as aesthetic and perceptual qualities (with reference to **ES Volume II Figure 10-12: CPRE Light Pollution and Dark Skies [EN010152/APP/6.2]**) to determine the overall character of the landscape.

10.4.19 Published landscape character assessments were reviewed to identify existing Landscape Character Areas (LCAs) at the national and district scales. The extent of published LCA boundaries is presented on **ES Volume II Figure 10-2: National and Regional Character Areas [EN010152/APP/6.2]**.

10.4.20 In addition, 11 Local Landscape Character Areas (LLCAs), as shown on **ES Volume II Figure 10-3: Local Landscape Character Areas [EN010152/APP/6.2]**, were identified to provide a finer level of detail than the published studies.

10.4.21 The LCAs and LLCAs identified through the process above comprises the landscape receptors recorded in the baseline set out in **ES Volume III Appendix 10-3: Landscape Character Baseline [EN010152/APP/6.3]**.

Visual Baseline

10.4.22 With reference to GLVIA3 (Ref. 10-13) the visual assessment relates to the potential changes to existing views of visual receptors e.g. residents, users of public rights of way (PRoW) or motorists, as a result of the addition or loss of features in existing views.

10.4.23 ZTVs were used to assist in the identification of visual receptors and representative viewpoints. These ZTVs are presented in **ES Volume II Figure 10-6: Screened Zone of Theoretical Visibility (ZTV) – Solar PV Panels [EN010152/APP/6.2]**, **ES Volume II Figure 10-7: Screened ZTV – On-Site Substation and BESS [EN010152/APP/6.2]** and **ES Volume II Figure 10-8: Screened ZTV – All Features [EN010152/APP/6.2]**. The methodology for the preparation of the ZTVs is presented in **ES Volume III Appendix 10-2: Landscape and Visual Amenity Methodology [EN010152/APP/6.3]**.

10.4.24 The final list of viewpoints and visual receptors evaluated in the visual assessment, which is presented in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**. The distribution of representative viewpoints is shown on **ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2]**.

10.4.25 Photographs, presented in **ES Volume II Figure 10-13: Photomontages [EN010152/APP/6.2]**, have been included to assist in describing baseline views and visual effects. They have been prepared in accordance with best practice guidance published by the Landscape Institute (Ref. 10-14) and are presented as Type 1 (annotated viewpoint photographs).

10.4.26 Photomontages, which are presented at Type 3 and prepared in accordance with best practice guidance published by the Landscape Institute (Ref. 10-14), have been produced for ten representative viewpoints across the Solar PV Site Study Area. These are shown in **ES Volume II Figure 10-10: Viewpoint Photography [EN010152/APP/6.2]**. A range of representative viewpoints have been selected for photomontages to demonstrate a variety of views and receptors, including short, middle and longer views, as well as residential, road and recreational receptors. Where applicable, photomontages have been chosen to demonstrate the worst-case scenario for visual receptors. Type 3 photomontages have been produced at both Year 1 and Year 15 to demonstrate the effects of mitigation planting.

Sensitivity Criteria

10.4.27 The sensitivity of landscape receptors and visual receptors is determined by a combination of their susceptibility to change by the specific type of development being assessed, and their respective value. Susceptibility and value are each classified as high, medium, or low, with evidence provided as to the basis of their evaluation within **ES Volume III Appendix 10-3: Landscape Character Baseline [EN010152/APP/6.3]** and **ES Volume III Appendix 10-4: Visual Baseline [EN010152/APP/6.3]**. Generally, value and susceptibility are given equal weighting and therefore the sensitivity of a landscape or visual receptor may be classified as high, medium-high, medium, low-medium, or low.

Magnitude of Effect Criteria

10.4.28 GLVIA3 (Ref. 10-13) notes that magnitude, for both landscape and visual effects, is informed by combining consideration of the scale, extent and duration of an effect. This LVIA considers the duration of effects as:

a. Short term: 0–2 years;

b. Medium term: 2–5 years; and

c. Long term: over 5 years.

10.4.29 The magnitude of landscape and visual effects is classified on a five-point scale of high, medium, low, very low and neutral.

Level of Effect

10.4.30 The level of landscape and visual effects has been determined by considering the relationship between the sensitivity of the receptor and the

magnitude of effect. Table 10-2 provides a guide showing how these two elements are combined. However, this determination is principally made on professional judgement. Where this differs from the guide provided, a reasoned explanation is provided within the assessment.

Table 10-2: Level of Effect Guide

Sensitivity	Magnitude of effect				
	High	**Medium**	**Low**	**Very Low**	**None**
High	Major	Major or Moderate	Moderate or Minor	Moderate or Minor	Neutral
Medium-High	Major or Moderate	Major or Moderate	Moderate or Minor	Minor or Negligible	Neutral
Medium	Major or Moderate	Moderate	Moderate or Minor	Minor or Negligible	Neutral
Low-Medium	Moderate or Minor	Moderate or Minor	Minor	Negligible	Neutral
Low	Moderate or Minor	Moderate or Minor	Minor or Negligible	Negligible	Neutral

Significance Criteria

10.4.31 Following identification of the level of effect, an assessment of significance is provided. Major and moderate effects (adverse or beneficial) are typically considered to be significant. Minor, negligible, and neutral effects are considered not significant.

Rochdale Envelope

10.4.32 In order to ensure a robust assessment of the likely significance of the environmental effects of the Scheme, the assessment is being undertaken adopting the principles of the ‘Rochdale Envelope’ approach where appropriate in line with Planning Inspectorate guidance (Ref. 10-20). This involves assessing the maximum (or where relevant, minimum) worst-case parameters for the elements where flexibility needs to be retained (facility dimensions or operational modes for example).

10.4.33 In line with Planning Inspectorate guidance, the following assumptions have been made with regard to the Scheme, as applicable to this landscape and visual amenity assessment:

a. The Solar PV Panels:

   i. Would occupy the entire extent of the area shown on the indicative site layout plan (**ES Volume II Figure 2-3: Indicative Site Layout Plan [EN010152/APP/6.2]**);

   ii. Would measure the maximum height of 3.5 m tall;

   iii. Would be fixed south facing panels;

   iv. Would be dark blue, grey, or black in colour; and

v. In areas of archaeological mitigation, where required, would be mounted on pre-cast concrete blocks.

b. Perimeter fencing around the Solar PV Site would be stock proof mesh-type fencing with wooden posts and would be a maximum height of 2.2m.

c. Field Stations:

i. Would comprise up to four Field Station Units enclosed within containerised units measuring up to 3.5 m in height.

d. The Battery Energy Storage System (BESS):

i. Would occupy the entire extent of the BESS Area shown on the indicative site layout plan (**ES Volume II Figure 2-3: Indicative Site Layout Plan [EN010152/APP/6.2]**);

ii. Would comprise shipping-type containers measuring up to 3.5 m in height; and

iii. Would be enclosed by galvanised palisade security fencing, likely green in colour, measuring 2.5 m in height.

e. The On-Site Substation compound:

i. Would be up to 100 m by 200 m;

ii. The maximum structure height will measure 13 m (although the majority of infrastructure within the substation would be shorter); and

iii. Would be enclosed by galvanised palisade security fencing, likely green in colour, measuring 2.5 m in height.

f. The Grid Connection Cables installation (noting that this would not be required if the Grid Connection Line Drop option is selected upon final design)

i. Would require a cable trench of approximately 0.75 m wide.

ii. Would have a working area for installation of the Grid Connection Cables which is anticipated to be a 30 m wide corridor. This would be widened in places to accommodate required operations and narrowed in others, for example to minimise removal of hedgerows or at open cut watercourse crossings. The minimum width is anticipated to be 5 m.

iii. Would have the working width demarcated by temporary (Heras style) fencing, where required.

10.5 Assumptions, Limitations and Uncertainties

10.5.1 The information presented in this LVIA reflects that obtained and evaluated at the time of reporting and is based on the maximum likely extents of land and structures required for the construction phase, and the operation and maintenance phase. It represents a realistic worst-case scenario based on the Rochdale Envelope Approach, as set out in **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]**.

10.5.2 This LVIA draws upon landscape and visual surveys undertaken between April 2023 and February 2024 which included surveys during both winter and summer conditions.

10.5.3 All fieldwork has been undertaken from publicly accessible locations within the Solar PV Site Study Area and Grid Connection Corridor Study Area. Professional judgement has been used to assess residents' views, aided by aerial photography and field work from the surrounding area.

10.5.4 The Order limits (refer to **ES Volume II Figure 1-1: Scheme Location [EN010152/APP/6.2]**) illustrates the maximum extent of land (including the Grid Connection Corridor) that is expected to be included within the application.

Assumptions at Construction Phase of Development

10.5.5 With reference to **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]** and **ES Volume I Chapter 5: Environmental Impact Assessment Methodology [EN010152/APP/6.1],** the construction phase assessment is based on peak activity in 2029 and has considered the peak activities, for example the use of taller plant and equipment such as cranes.

10.5.6 Reasonable worst-case scenario assumptions for the construction phase are:

a. Construction would last for 24 months.

b. Construction would be undertaken during Winter, such that deciduous vegetation is not in leaf, thereby representing a worst-case assessment scenario.

c. The perimeter fence around the Solar PV Site would be implemented early in the construction phase, where practicable, to secure the construction areas. It would consist of up to 2.2 m high stock proof mesh-type fencing with wooden posts. This would also prevent construction activity in proximity to retained vegetation.

d. One main construction compound would be located south of Haggs Lane, west of the BESS Area. Two temporary construction compounds would be located in the northwest and southeast of the Solar PV Site in fields NW7 and SE2.

e. Two temporary construction compounds would also be located within the Grid Connection Corridor, one in a field east of the junction between Trumfleet Lane and Brick Kiln Lane and the other in the field southwest of Marsh Road adjacent to Trumfleet Pit.

f. Construction would require daily HGV movements to the Solar PV Site of up to 18 deliveries per day, as a worst-case. Solar PV Panels would be offloaded at the main temporary construction compound and distributed across the Solar PV Site via tractor and trailer. There would be a maximum of five AIL deliveries.

g. All HGV would enter the Solar PV Site via the main site access off Moss Road.

h. Construction would require the use of plant including excavators, standard post drivers, ground levellers, ground compressors, forklift

trucks and cranes. Cranes would extend to approximately 20 m in height during periods of lifting and approximately 4 m when on standby.

i. Mounting of Solar PV Panels would be undertaken by hand. Cranes would be used to lift equipment into position, such as at Field Stations, where required.

j. Temporary access tracks would be established across the Solar PV Site.

k. Ground preparation would consist of localised ground levelling, post driving, and trenching.

l. Temporary and permanent diversions to PRoW may be required, but for the purposes of this LVIA, it has been assumed that all PRoW would remain open in order to assess the worst-case effects on people's views.

m. Construction works would generally be restricted to daylight hours only with focussed task specific lighting provided where this is not practicable. Lights would be installed to be of the minimum brightness required to perform the desired function and complete with directional fittings to minimise light spill and glare. 'General' lighting may be required in construction compounds in winter periods, i.e. early morning and early evening. CCTV would use infrared (IR) lighting. Lighting would be used by the security team on their regular checks and 'emergency' visits.

n. Quiet non-intrusive works using electric hand tools only, such as the installation of Solar PV Panels, may take place over longer periods during the Summer. Other quiet non-intrusive works, such as electrical testing, commissioning and inspection, may take place over longer periods throughout the year.

Assumptions at Operation and Maintenance Phase of Development

10.5.7 The operation and maintenance phase would occur following completion of the construction phase, which is anticipated to be 2030. With reference to **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]**, assumptions for the Year 1 operation and maintenance assessment are:

a. The Scheme would be operational across the extent of the Solar PV Site, during Winter, when deciduous vegetation is not in leaf, thereby representing the worst-case scenario.

b. The Solar PV Panels would be on a Solar PV Mounting Structure and angled such that the highest edge is up to 3.5 m above ground level. Panels would be fixed and south facing. In areas of archaeological mitigation, where required, Solar PV Panels would be mounted on pre-case concrete blocks.

c. The landscape design would be implemented in line with the Indicative Landscape Masterplan shown in Appendix 1 of the **Framework Landscape and Ecological Management Plan (LEMP) [EN010152/APP/7.14]**. The ground across the Solar PV Site and Grid Connection Corridor would be seeded, but the grassland would not yet be established. The ground underneath the Solar PV Panels would reflect the appearance of an agricultural field in Winter. New tree and scrub planting would also not yet be established.

d. Proposed hedgerows would be 0.6–0.8 m tall. Proposed trees would be 1.0–3.5 m tall, dependent on available plants and natural variation in heights. Planting is assumed to grow at a rate of 33 cm per year.

e. Task specific lighting would be introduced during temporary periods of maintenance and repair. Task specific and fixed 'general' lighting would be used at the On-Site Substation, BESS Area and the Operations and Maintenance Hub during the winter months (in early mornings and early evenings only) to maintain safe working conditions.

10.5.8 The assumptions for the Year 15 assessment are:

a. The Scheme would be operational across the extent of the Solar PV Site.

b. An assessment of effects is provided for both Summer and Winter conditions to demonstrate the impact of seasonality on landscape and visual effects.

c. All new planting would have established such that there would be a neutral/modified grassland sward across the Solar PV Site and, where reflective of the baseline conditions, across the Grid Connection Corridor. Tree planting would have grown such that they are between 6 m and 7.5 m tall. Hedgerows across the Solar PV Site would be maintained at a minimum height of 3.5 m.

Assumptions at Construction Phase of Development

10.5.9 The design life of the Scheme is 40 years, with decommissioning commencing 40 years after final commissioning, which is currently anticipated to be 2070. The assumptions for the decommissioning phase are:

a. The Solar PV Site would no longer be operational. All Solar PV Panels and associated structures and equipment would be removed in a manner similar to the construction phase, requiring machinery and localised excavation.

b. Planting proposed as part of the Scheme would remain in-situ. Hedgerows would be a minimum height of 3.5 m tall. Trees would have reached full maturity.

c. The assessment is undertaken for Winter conditions, thereby representing the worst-case scenario.

d. Decommissioning would last between 12 and 24 months.

e. The underground Grid Connection Cables and the On-Site Substation would be left in-situ. All above ground infrastructure within the Solar PV Site would be removed.

f. Lighting would be as described for construction.

10.6 Baseline Conditions

10.6.1 This section describes the existing and anticipated future baseline conditions for the landscape and visual assessment.

Existing Landscape Baseline

10.6.2 The landscape baseline is set out in full in **ES Volume III Appendix 10-3: Landscape Character Baseline [EN010152/APP/6.3]**. The following provides an overview of the Solar PV Site Study Area, the Grid Connection Corridor Study Area and the landscape receptors identified.

Summary of the Landscape Character of the Solar PV Site

10.6.3 Land within the Solar PV Site comprises small to large scale fields which are primarily used for arable farming.The Solar PV Site is situated across low lying and generally flat landform between 5 m and 6 m above Ordnance Datum (AOD). The Solar PV Site is bound by the River Went along its northern boundary. Fenwick Common Drain marks the southwestern boundary of the Solar PV Site, whereas Ell Wood and Fenwick Grange Drain forms the southern boundary. Fleet Drain extends through the northeast corner of the Solar PV Site.

10.6.4 The fields are mainly geometric in form and divided by a combination of drainage ditches, hedgerows, and trees. Hedgerows are low, managed and often gappy. The extent of this vegetation is notably less across the southeast part of the Solar PV Site, such that there is a more open character in relation to a higher degree of enclosure across the remainder of the Solar PV Site.

10.6.5 There is a more notable infrastructure character to the southeast part of the Solar PV Site due to the existing pylons. An existing wind turbine at Riddings Farm is notable within the north of the Solar PV Site.

10.6.6 The Solar PV Site is not covered by any landscape designations, nor does it contain any rare landscape features. There is a high recreational value to the southwest part of the Solar PV Site, due to several PRoW which follow field boundaries, whilst there are no PRoW across the northwest and northeast parts of the Solar PV Site.

10.6.7 The Solar PV Site is not lit and therefore reflects an area of generally darker night skies, although, with reference to **ES Volume II Figure 10-12: CPRE Light Pollution and Dark Skies [EN010152/APP/6.2]**, some light spillage from Fenwick, Moss and West End influence parts of the Solar PV Site.

10.6.8 Most of the Solar PV Site is considered to exhibit higher levels of tranquillity due to the land use. The exceptions to this are in proximity to the settlements, overhead power lines, and roads.

Summary of the Landscape Character of the Grid Connection Corridor

10.6.9 With reference to **ES Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations [EN010152/APP/6.2]**, the Grid Connection Corridor extends southwards from the Solar PV Site for approximately 6.3 km to the Existing National Grid Thorpe Marsh Substation.

10.6.10 The Grid Connection Corridor is approximately 100 m in width between these two locations and situated across low lying and very gently undulating landform between 5 m and 6 m AOD, as demonstrated by **ES Volume II Figure 10-4: Topography [EN010152/APP/6.2]**. Areas of more notable but localised level change occur along the southern part of the Grid Connection

Corridor, adjacent to the River Don, due to the presence of engineered embankments. There are also numerous watercourses and drains dividing the fields.

10.6.11 Agriculture is the main land use across the Grid Connection Corridor, characterised by a range of field sizes and forms but with a consistent pattern of low hedgerows and trees dividing the fields. Other land uses across the Grid Connection Corridor include overhead pylons between Trumfleet Grange and Thorpe in Balne. With reference to **ES Volume II Figure 2-2: Public Rights of Way [EN010152/APP/6.2]**, the Grid Connection Corridor is crossed by several PRoW which mainly link to the surrounding settlements or are aligned with watercourses. The routes include the Trans Pennine Trail and National Cycle Network Route 62 to the north of Trumfleet.

10.6.12 With reference to **ES Volume II Figure 10-12: CPRE Light Pollution and Dark Skies [EN010152/APP/6.2]**, the Grid Connection Corridor is an area of predominantly 'darker skies', reflecting the agricultural land use and limited sources of lighting. In proximity to Moss and Thorpe in Balne, the character of the night sky is slightly brighter due to localised light spillage from residential areas.

10.6.13 Most of the Grid Connection Corridor is considered to exhibit higher levels of tranquillity due to the land use. The exceptions to this are in proximity to the settlements, overhead power lines, and roads. Similarly, there is no sense of tranquillity at the Existing National Grid Thorpe Marsh Substation.

Summary of the Landscape Character of the Solar PV Site Study Area and Grid Connection Corridor Study Area

10.6.14 The Study Area for the LVIA includes all land within the Solar PV Site Study Area and Grid Connection Study Area as shown on **ES Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations [EN010152/APP/6.2]**.

Landform and Watercourses

10.6.15 With reference to **ES Volume II Figure 10-4: Topography [EN010152/APP/6.2]**, the landform within the north of the Solar PV Site Study Area remains low lying to the north of the River Went, at around 5 m AOD, before rising gradually towards Pollington at the northern edge of the Solar PV Site Study Area, situated around 10 m AOD. With reference to **ES Volume II Figure 10-5: Hydrology and Woodland [EN010152/APP/6.2]**, the two main hydrological features are the River Went, to the immediate north of the Solar PV Site, and the Aire and Calder Navigation which crosses the northern part of the Solar PV Site Study Area. The intervening fields between these two watercourses are crossed by numerous drainage ditches.

10.6.16 To the east of the Solar PV Site, the landform is low lying and generally flat at around 5 m AOD. There are several drainage ditches, small watercourses (Smallhedge Rein), and ponds (mainly between Topham and West Lane) situated across this low-lying land. The New Junction Canal is the main hydrological feature in the eastern part of the Solar PV Site Study Area with its straight (engineered) alignment formed by very low embankments above the surrounding fields.

10.6.17 To the south of the Solar PV Site, the landform is similarly low lying and generally flat, situated at around 5 m AOD, before rising very gradually towards Moss and Brick Kiln Lane which are situated between 6 and 7 m AOD. Several drainage ditches cross the southern part of the Solar PV Site Study Area, including the Ell Wood and Fenwick Grange Drain between the Solar PV Site and Moss, the Flashley Carr Drain in the southeast part of the Solar PV Site Study Area, and the Mill Dike at the southern edge of the Solar PV Site Study Area.

10.6.18 To the west of the Solar PV Site Study Area, the landform is generally flat and low lying at around 5 m AOD and rises very gradually towards Fenwick which is situated at 6 m AOD. There is very localised level change along the alignment of the East Coast Main Line, to the west of Fenwick, with the railway line situated on a very low embankment. The landform falls very gradually to the west of the railway line, towards the conflux of the River Went (old course) and River Went at 5 m AOD.

10.6.19 In summary, the Solar PV Site Study Area is characterised by a consistent pattern of low-lying landform, generally at around 5 m AOD. The main areas of level change relate to agricultural management with drainage ditches or infrastructure which cross the fields via low embankments. Settlements, such as Fenwick, are also located across very slightly elevated land. The Solar PV Site therefore reflects this wider pattern of low-lying landform, and the more localised very gradual rise in landform between the River Went and Fenwick.

10.6.20 The landform of the eastern side of the Grid Connection Corridor Study Area remains low lying and very gently undulating, at around 5 m AOD. The main areas of level change are related to the dismantled railway line, due to either being in cutting or embankment. To the south of the Grid Connection Corridor, the landform similarly remains low lying, reflecting the numerous watercourses, including the River Don, flowing between Kirk Sandall and Almholme. To the west of the Grid Connection Corridor, the landform remains low lying across agricultural fields, with localised level changes in relation to the numerous ditches and watercourses which divide the fields. There is a notable rise in the landform between the Existing National Grid Thorpe Marsh Substation and the Thorpe Marsh Nature Reserve in the southern part of the Grid Connection Corridor Study Area due to the former spoil tip.

10.6.21 With reference to **ES Volume II Figure 2-2: Public Rights of Way [EN010152/APP/6.2]**, the western side of the Grid Connection Corridor Study Area is mainly in Flood Zone 2, whilst the eastern part is mainly in Flood Zone 3.

10.6.22 In summary, the Grid Connection Corridor Study Area consists of an area of low lying and very gently undulating landform at around 5 m AOD, due to being within the plains of the River Don and numerous drains which cross the landscape. There is localised level change along the dismantled railway line and engineered watercourses.

Vegetation

10.6.23 With reference to **ES Volume II Figure 10-5: Hydrology and Woodland [EN010152/APP/6.2]** and **ES Volume II Figure 10-11: Tree Preservation Order and Important Hedgerow Plan [EN010152/APP/6.2]**, the vegetation

patterns to the north of the Solar PV Site consist mainly of field boundary hedgerows with trees. Woodland is limited and small in scale with the main concentration located 1.2 km northwest of the Solar PV Site at Chapel Hill. There is also a small woodland located 500 m northeast of the Solar PV Site on the northern side of the River Went to the north of Topham, along with established tree belts adjacent to the dismantled railway line. Small woodlands and mature tree groups border many of the farms and residential properties between the Solar PV Site and Pollington, as well as along the banks of the New Fleet Drain.

10.6.24 There is woodland adjacent to the eastern part of the Solar PV Site, extending from West Lane and across Bungalow Farm. Established trees border the dismantled railway which also extends across the eastern part of the Solar PV Site Study Area. Beyond these main areas of vegetation, the remainder of the eastern part of the Solar PV Site Study Area is characterised by mature hedgerows and trees which divide the fields and are adjacent to many of the local roads, including at Sykehouse.

10.6.25 To the south of the Solar PV Site, the agricultural land use results in the main vegetation patterns being hedgerows and tress dividing the fields or bordering local roads. The density of this field boundary vegetation increases to the south of Moss in the southern part of the Solar PV Site Study Area.

10.6.26 The pattern of field boundary vegetation continues to the west of the Solar PV Site, along with established trees bordering residential properties and agricultural land uses in Fenwick. To the west of Fenwick, the larger scale field pattern and sparser field boundaries results in a more open character to the landscape. The extent of vegetation increases at the western edge of the Solar PV Site Study Area adjacent to the A19 corridor and Askern.

10.6.27 In summary, the vegetation patterns across the Solar PV Site Study Area strongly reflect the agricultural land use with mature hedgerows and trees dividing fields or bordering the local road network. The extent of woodland and tree belt cover is localised but mainly concentrated across the eastern part of the Solar PV Site Study Area, including adjacent to the dismantled railway line and the eastern edge of the Solar PV Site. The hedgerows and trees across the Solar PV Site therefore reflect the field boundary patterns across the Solar PV Site Study Area.

10.6.28 The main vegetation pattern across the Grid Connection Corridor Study Area are field boundary hedgerows with trees. The main concentration of woodland is along the disused railway and around Thorpe Marsh Nature Reserve.

Settlement Pattern and Land Use

10.6.29 With reference to **ES Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations [EN010152/APP/6.2]**, the settlement pattern is sparse across the northern part of the Solar PV Site Study Area, consisting of a low number of individual farms and residential properties. Balne is located 1.9 km northwest of the Solar PV Site and consists of a small cluster of bungalows and two storey residential properties adjacent to a crossroad. The density of the settlement pattern increases at the northern edge of the Solar PV Site Study Area at Pollington.

10.6.30 To the east of the Solar PV Site, residential land uses are concentrated adjacent to West Lane which extends to Sykehouse, located approximately 400 m east of the Solar PV Site, where the road becomes Broad Lane. Properties in Sykehouse are mainly bungalows with small clusters of contemporary two storey properties located centrally in the village. Topham, located 250 m northeast of the Solar PV Site, is a very small cluster of large, detached properties set within well vegetated grounds with the Topham Ferry Bridge providing a crossing point across the River Went. Overhead pylons cross the eastern part of the Solar PV Site Study Area between Topham and West Lane.

10.6.31 To the south of the Solar PV Site, agricultural fields extend for 600 m to Moss which consists of mainly two storey residential properties concentrated between Moss Road and Pinfold Lane. Moss Road is also the main road across the southern part of the Solar PV Site Study Area.

10.6.32 Fenwick, which borders the western edge of the Solar PV Site, consists of a linear arrangement with mainly two storey residential properties and farm buildings adjacent to Fenwick Lane, Fenwick Common Lane and Shaw Lane. Residential properties extend to border the East Coast Main Line which crosses Fenwick Lane via a level road crossing. The overhead electrical lines and supporting gantries border the railway tracks for the entire length of the railway across the Solar PV Site Study Area. Fenwick Lane is also bordered by telegraph poles. To the west of the East Coast Main Line, the settlement pattern is very sparse due to the agricultural land use with only several detached residential properties and farms adjacent to Fenwick Lane.

The Solar PV Site borders Riddings Farm and Fenwick Hall, both of which are accessed via Lawn Lane. Riddings Farm consists of a bungalow in proximity to Lawn Lane, bordered by mature hedgerows. Taller, two storey barns are to the north of the bungalow, along with a single wind turbine, measuring 24.6 m tall. Fenwick Hall consists of a residential property bordered by tall hedgerows and mature trees, along with a range of farm buildings.

10.6.33 In summary, the main land use across the Solar PV Site Study Area is agriculture. The settlement pattern is generally sparse, consisting of small-scale linear villages adjacent to the local road network, with Fenwick being the closest of these to the Solar PV Site. The main concentration of residential and employment land uses is at the northern edge of the Solar PV Site Study Area at Pollington. Infrastructure is notable as a result of the height of the overhead pylons across the eastern part of the Solar PV Site Study Area and the electrical wires adjacent to the East Coast Main Line, across the western part of the Solar PV Site Study Area. The Solar PV Site is therefore part of the common place agricultural land use within the Solar PV Site Study Area.

10.6.34 Agriculture is the main land use across the Grid Connection Corridor Study Area, with a range of field sizes and a constant pattern of field boundary vegetation.

10.6.35 Moss is a small village, situated approximately 1.6 km to the south of Fenwick, clustered between the junction of Moss Road and Brick Kiln Lane. Residential properties range between bungalows and two storey buildings,

with contemporary detached properties located in the western part of the village.

10.6.36 To the south of Moss, the settlement pattern is intermittent, with individual farms and small hamlets adjacent to the lanes. This includes Trumfleet and Thorpe in Balne, which are characterised by ribbon residential development.

10.6.37 The Thorpe Marsh Nature Reserve is in the southwest part of the Grid Connection Corridor Study Area, between the former spoil tip and the East Coast Main Line.

10.6.38 Infrastructure includes overhead pylons extending from the east of Moss to the south of the Existing National Grid Thorpe Marsh Substation.

Public Rights of Way and Other Public Access

10.6.39 With reference to **ES Volume II Figure 2-2: Public Rights of Way [EN010152/APP/6.2]**, there are a relatively high number of PRoW extending to the north of the River Went. These routes connect with the local road network and include part of National Cycle Route 62 to the north of Topham.

10.6.40 To the east of the Solar PV Site, there are a low number of PRoW extending between West Lane and the New Junction Canal. To the south of the Solar PV Site, there are several PRoW extending towards Moss. To the west of the Solar PV Site, there are several PRoW within Fenwick and extending adjacent to the East Coast Main Line. There are no PRoW across the western part of the Solar PV Site Study Area, between Fenwick Lane and the River Went (old course).

10.6.41 The northern part of the Solar PV Site therefore reflects no public access to most of the land to the south of the River Went. The southern part of the Solar PV Site reflects the higher degree of public access between Fenwick and Moss with the PRoW within the Solar PV Site forming part of these routes.

10.6.42 There are a relatively high number of PRoW across the eastern part of the Grid Connection Corridor Study Area, extending between the villages and adjacent to field drains. These routes include parts of the Trans Pennine Trail between Braithwaite and Kirkhouse Green and the Thorne Round Walk to the south of Kirk Bramwith.

10.6.43 In contrast, there are a low number of PRoW across the southern part of the Grid Connection Corridor Study Area. PRoW mainly extend between Fordstead Lane, Almholme and the East Coast Main Line.

10.6.44 There are a relatively high number of PRoW across the western part of the Grid Connection Corridor Study Area, extending across between Trumfleet, Thorpe in Balne and the East Coast Main Line.

Designations

10.6.45 With reference to **ES Volume II Figure 10-1: Landscape and Visual Amenity Study Area and Relevant Designations [EN010152/APP/6.2]**, the Solar PV Site, Solar PV Site Study Area, Grid Connection Corridor, and the Grid Connection Corridor Study Area are not covered by any statutory or local landscape designations.

10.6.46 No part of the Order Limits or the Study Areas of the Order Limits is within, or in proximity to, a Conservation Area. There are several listed buildings and scheduled monuments in proximity to the Solar PV Site, which, with reference to the **ES Volume I Chapter 7: Cultural Heritage [EN010152/APP/6.1]** and **ES Volume II Figure 7-1: Designated Heritage Assets [EN010152/APP/6.2]**, include:

a. The Dovecote and outbuildings (Grade II), Barn and Granary (Grade II) and Lily Hall (Grade II) within Riddings Farm, located approximately 160 m from the Solar PV Site;

b. Lowgate Farmhouse (Grade II), located approximately 1.5 km to the northwest of the Solar PV Site, between the River Went and Pollington;

c. Fenwick Hall moated site scheduled monument, Barn and outbuildings (Grade II) and Fenwick Hall (Grade II) within Fenwick Hall, located approximately 110 m from the Solar PV Site;

d. Topham Ferry Bridge (Grade II), located approximately 250 m to the northeast of the Solar PV Site at the River Went;

e. Dovecote and outbuildings (Grade II), located approximately 170 m to the southeast of the Solar PV Site at West End; and

f. Ponderosa Farmhouse Barn (Grade II), located approximately 1.2 km to the south of the Solar PV Site at Moss.

10.6.47 Within the Grid Connection Corridor Study Area, listed buildings are concentrated adjacent to Wrancarr Lane and around Thorpe in Balne. There is also a scheduled monument at Thorpe in Balne, which is omitted from the Grid Connection Corridor.

10.6.48 The Solar PV Site, Solar PV Site Study Area, Grid Connection Corridor, and Grid Connection Corridor Study Area are not within, nor in proximity to, any statutory ecological designations. However, there are a number of Local Wildlife Sites (LWS) within, or within proximity to, the Solar PV Site and Grid Connection Corridor. With reference to **ES Volume I Chapter 8: Ecology [EN010152/APP/6.1]** and **ES Volume 6 Figure 8-2: Sites Non-Statutorily Designated for their Biodiversity Value [EN010152/APP/6.2]**, these include the Went Valley LWS, located within the northern part of the Solar PV Site and Bunfold Shaw LWS located just outside the Solar PV Site, as well as a number of LWS adjacent to the Grid Connection Corridor associated with the River Don and Thorpe Marsh Nature Reserve.

10.6.49 In summary, the Solar PV Site extends around listed buildings within Riddings Farm and Fenwick Hall, which also includes the Fenwick Hall moated site scheduled monument. The overall number of listed buildings within the Solar PV Site Study Area is low and relate to farm buildings or crossings of the River Went. This low number of buildings reflects the lack of Conservation Areas in proximity to the Solar PV Site. A number of LWS exist within the Solar PV Site Study Area, including the Went Valley LWS which partly falls within the northern corner of the Solar PV Site.

10.6.50 Within the Grid Connection Corridor Study Area, a handful of listed buildings exist around Thorpe in Balne. A number of LWS associated with the River Don exist around Braithwaite, as well as around Thorpe Marsh.

Character of the Night Sky

10.6.51 CPRE have mapped the level of radiance (night lights) shining up into the night sky via differing colour bands (Ref. 10-21).

10.6.52 With reference to **ES Volume II Figure 10-12: CPRE Light Pollution and Dark Skies [EN010152/APP/6.2]**, the 'darker' night skies extend across the northern part of the Solar PV Site Study Area, which reflects the agricultural land use adjacent to the River Went. The level of night lights increases towards the northern edge of the Solar PV Site Study Area, reflecting the greater density of residential land uses at Pollington, which is identified as a mid-tier brightness area (via the orange and pink hatching).

10.6.53 To the east of the Solar PV Site, the level of night lights is low which results in daker night skies (via the light blue hatching) and reflects the agricultural land uses. There is increased brightness adjacent to West Lane and across Sykehouse (via the light green hatching) due to the residential land uses.

10.6.54 To the south and west of the Solar PV Site, the level of night lights is relatively low due to the agricultural land uses (via the light green hatching). There is an increase in the level of night lights across Moss with the centre of Moss identified as a brighter area (via the orange and yellow hatching) and at Fenwick (via the light green hatching).

10.6.55 The level of night lights is relatively low across the Grid Connection Corridor Study Area, reflecting the agricultural land use (via the light green hatching). There are localised brighter night skies across the residential areas, including Moss and between Thorpe in Balne and the Existing National Grid Thorpe Marsh Substation (via the yellow and orange hatching).

Tranquillity

10.6.56 With reference to CPRE's online tranquillity mapping (Ref. 10-22)**,** infrastructure corridors and settlements within the Solar PV Site Study Area and Grid Connection Corridor Study Area typically reduce the level of tranquillity locally. Areas not crossed by main roads or rail corridors are shown to be the most tranquil.

Published Landscape Character Assessments

National Character Areas

10.6.57 With reference to **ES Volume II Figure 10-2: National and Regional Character Areas [EN010152/APP/6.2]**, at the national scale, the Solar PV Site, Solar PV Site Study Area, Grid Connection Corridor and Grid Connection Corridor Study Area are covered by Natural England's NCA 39: Humberhead Levels (Ref. 10-23).

10.6.58 NCA 39 covers and is described by the published study as a "*flat, low-lying and large-scale agricultural landscape*."

10.6.59 The likelihood of significant adverse landscape effects on NCA 39 is considered negligible due to the scale of the NCA and the limited intervisibility between the Solar PV Site and the wider NCA. Potential landscape effects on NCA 39 are therefore not assessed, but the NCA profile has informed the baseline understanding of and approach to embedded mitigation.

County Level Landscape Character Assessment: Doncaster Landscape Character and Capacity Study

10.6.60 The Doncaster Landscape Character and Capacity Study (Ref. 10-24) sets out eight Landscape Character Types (LCTs) and smaller Landscape Character Areas (LCAs) across Doncaster.

10.6.61 With reference to **ES Volume II Figure 10-2: National and Regional Character Areas [EN010152/APP/6.2]**, the Solar PV Site, the southern part of the Solar PV Site Study Area, most of the Grid Connection Corridor and a large portion of the Grid Connection Corridor Study Area are covered by LCT F: Settled Clay Farmlands (LCT F), most of which is made up of LCA F2: Owston to Sykehouse Settled Clay Farmlands (LCA F2). A small part of the Grid Connection Corridor Study Area is covered by LCA F1: Tollbar Settled Clay Farmlands.

10.6.62 The southern part of the Grid Connection Corridor and most of the southern part of the Grid Connection Corridor Study Area is covered by LCT E: River Carrlands (LCT E) and LCA E2: West Don and Dun River Carrlands (LCA E2).

10.6.63 A small part of the Grid Connection Corridor Study Area is covered by LCT H: Sandlands, Heaths and Farmlands and LCA H2: Blaxton to Stainforth Sandland Heaths and Farmland (LCA H2).

10.6.64 LCTs extend across a wider area than LCAs and record generic features that are repeated across the wider landscape. As such, where a published assessment provides information relating to both LCTs and LCAs, the LCTs provide context only and are not considered as a receptor within this LVIA.

Landscape Character Type E: River Carrlands (LCT E)

10.6.65 The Solar PV Site is not located within LCT E; however, the southern part of the Grid Connection Corridor and the Grid Connection Corridor Study Area is.

10.6.66 LCT E is characterised as a medium scale agricultural landscape situated across the flat alluvial floodplains of the Rivers Don, Dun and Torne.

Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)

10.6.67 LCA E2 covers the southern portion of the Grid Connection Corridor.

10.6.68 The published study notes that LCA E2 comprises a flat floodplain with medium scale, mainly arable geometric fields in an irregular pattern. Fragmented field boundary hedges, interspersed with mature trees, cross the LCA. A network of drains forms field boundaries and there are infrequent small deciduous woodlands across the area. Major transport corridors, including motorways, extend through the LCA.

Landscape Character Type F: Settled Clay Farmlands (LCT F)

10.6.69 LCT F covers the entirety of the Solar PV Site and the southern part of the Solar PV Site Study Area, alongside the northern portion of the Grid Connection Corridor and the Grid Connection Corridor Study Area.

10.6.70 LCT F is described as a flat wide floodplain, characterised by historic small scale pastoral agricultural land uses as well as intensive farming, including

modern drainage schemes. The compact settlements, scattered farmsteads, minor roads, and green lanes are stated as creating a distinctive, intimate, and rural landscape. The published study (Ref. 10-24) notes that in all parts of LCT F, the historic pattern is overlain by straight railways and canals which are raised and enclosed by earthworks and that woodland cover is sparse.

10.6.71 The published study notes that the LCT consists of only a very few settlements but is interrupted by urban development around Doncaster. Additionally, major transport corridors cross the LCT and are commonly slightly elevated above surrounding land.

Landscape Character Area F1: Tollbar Settled Clay Farmlands (LCA F1)

10.6.72 Neither the Solar PV Site nor the Grid Connection Corridor are located within LCA F1, however, it does fall within the southwestern corner of the Grid Connection Corridor Study Area.

10.6.73 The published study notes that LCA F1 comprises mainly flat landform with large to medium scale arable fields with missing or fragmented hedgerows. A network of ditches and drains sometimes form field boundaries. The LCA is crossed by a network of busy roads and rail corridors and includes several larger settlements which have merged with Doncaster's urban area.

Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)

10.6.74 LCA F2 covers Solar PV Site, the southern and central parts of the Solar PV Site Study Area, and the northern part of the Grid Connection Corridor and its Study Area.

10.6.75 LCA F2 is described by the published study as a flat, simple landscape with views of large skies and a feeling of openness, although ground level views are often curtailed by hedgerows and trees. The land cover consists of a small-scale pastoral agricultural landscape with some hay fields and frequent mature hedges. In places, this pattern has been lost by field amalgamation, creating larger arable fields. There are many compact historic settlements across LCA F2, including Sykehouse. The published study states that there is an extensive PRoW network across LCA F2, a remote and tranquil nature to the landscape, and some intrusive elements including noise from the railway.

Landscape Character Type H: Sandlands, Heaths and Farmland

10.6.76 The Solar PV Site and Grid Connection Corridor are not located within LCT H; however, LCT H does fall within the Grid Connection Corridor Study Area.

10.6.77 LCT H is characterised as a medium to large-scale arable landscape across a flat and drained floodplain area.

Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland (LCA H2)

10.6.78 Neither the Solar PV Site nor the Grid Connection Corridor are located within LCA H2, however, LCA H2 does fall within the southeast of the Grid Connection Corridor Study Area.

10.6.79 LCA H2 is described by the published study as a flat, low-lying floodplain with medium to large-scale arable fields with fragmented and missing hedgerow boundaries. Fields are crossed by a network of larger drains and smaller wet ditches. The land is intensively farmed and there are numerous sand and gravel extraction sites. The settlement pattern is made up of scattered farms with small rural settlements in the east and larger former mining settlements in the west. Occasional woodlands and heathland can be found across the area. Major transport routes, including motorways and railways, cross the landscape.

County Level Landscape Character Assessment: Doncaster Landscape Character Assessment Update – Sensitivity to Wind Energy Development 2020

10.6.80 The 2020 update (Ref. 10-25), whilst focused on wind energy, reviewed and updated the landscape baseline of all LCA's identified in the 2007 study (set out above).

10.6.81 This update included changes to the description of LCA F2 which notes the removal of the cooling towers at Thorpe Marsh Power Station (located within LCA E2), such that they are no longer visible from LCA F2. In addition, there have been residential and solar farm (Campsall Road) developments which are considered by the published study as not changing the overall key characteristics of LCA F2.

10.6.82 Further updates, compared to the 2007 study, are recorded in **ES Volume III Appendix 10-3: Landscape Character Baseline [EN010152/APP/6.3]**.

North Yorkshire and York Landscape Characterisation Project, 2011

10.6.83 On 1 April 2023, the North Yorkshire unitary council was launched to replace Selby District Council. The North Yorkshire and York Landscape Characterisation Project (Ref. 10-26) sets out the respective LCTs and LCAs.

Landscape Character Area 23 – Levels Farmland

10.6.84 With reference to **ES Volume II Figure 10-2: National and Regional Character Areas [EN010152/APP/6.2]**, the north and northwest parts of the Solar PV Site Study Area, within the council boundary, is covered by LCT 23: Levels Farmland (LCT 23). The Solar PV Site is not located in this LCT.

10.6.85 LCT 23 is described by the published study as a predominantly flat agricultural landscape, characterised by large land in large fields, forming a large-scale farmland landscape.

East Riding of Yorkshire Landscape Character Assessment, 2018

10.6.86 The East Riding of Yorkshire Landscape Character Assessment (Ref. 10-27) identifies 23 LCTs and 81 LCAs across the local authority area.

Landscape Character Type 8: M62 Corridor (LCT 8)

10.6.87 The northeastern part of the Solar PV Site Study Area, within the council boundary, is covered by LCT 8: M62 Corridor (LCT 8).

10.6.88 LCT 8 is described by the published study as a low-lying agricultural landscape which extends along the linear M62 transportation corridor. The study notes the landscape as being *"ordinary with areas of poor quality",* largely due to the high number of detractors and fragmentation.

Landscape Character Area 8C: M62 Corridor Hook to Pollington (LCA 8C)

10.6.89 Neither the Solar PV Site nor the Grid Connection Corridor are located within LCA 8C, however, it does fall within the northeastern portion of the Solar PV Site Study Area.

10.6.90 LCA 8C is described as an intensively farmed landscape which lies adjacent to industrial development on the edge of Goole and the M62. Farmland is characterised by large to medium-scale fields with very few trees. The skyline of the area is characteristic of industrial development, including turbines, pylons, and silos.

Local Landscape Character Areas

10.6.91 Given the large geographic scale of LCAs defined within published landscape character assessments, 11 Local Landscape Character Areas (LLCA) have been identified to provide a finer grain of detail and to help better inform a more proportionate assessment of landscape effects across the Solar PV Site Study Area. Given the lack of above ground change during operation, it is unlikely that the Grid Connection Cables would result in significant operational effects. LLCAs have therefore not been defined for the Grid Connection Corridor and the Grid Connection Corridor Study Area.

10.6.92 All published character assessments at all scales have been used to inform the identification and definition of the LLCAs. The extent of the LLCAs can be seen on **ES Volume II Figure 10-3: Local Landscape Character Areas [EN010152/APP/6.2]**. The sensitivity of each LLCA has been assessed in accordance with the LVIA methodology set out within **ES Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology [EN010152/APP/6.3]** and is set out in full in **ES Volume III Appendix 10-5: Landscape Assessment [EN010152/APP/6.3]**.

10.6.93 The following provides an overview of each LLCA.

LLCA 01: Fenwick Village (LLCA 01)

10.6.94 LLCA 01 is located within the centre of the Solar PV Site Study Area. A small proportion of the LLCA 01 falls within the Solar PV Site.

10.6.95 This LLCA comprises the small, nucleated village of Fenwick and the immediately adjoining small to medium-scale fields which form its setting. Fenwick, which does not exhibit a distinctive architectural style, includes traditional farms and dwellings with 21st century infill. Existing pylons, a wind turbine, and infrastructure associated with the East Coast Main Line disturb the rural character of the village and reduce its tranquillity.

LLCA 02: Fenwick Farmlands (LLCA 02)

10.6.96 LLCA 02 is located within the centre of the Solar PV Site Study Area and comprises much of the southern half of the Solar PV Site.

10.6.97 A relatively open landscape comprising medium to large-scale arable fields which are regularly bound by fragmented hedgerows, belts of trees, and open ditches. The agricultural land use and lack of settlement contributes towards a rural character, however, the 'planned' system of fields and their often-poor vegetation structure erodes this in places. Visual and audible intrusion from existing infrastructure within the LLCA, including the East Coast Main Line and pylons, as well as views of the chimney at Drax Power Station and a wind turbine at Riddings Farm, mean there is a limited sense of tranquillity across the area.

LLCA 03: River Went Farmlands (South) (LLCA 03)

10.6.98 LLCA 03 is located within the centre and the west of the Solar PV Site Study Area. It comprises much of the northern half of the Solar PV Site.

10.6.99 A relatively open landscape comprising medium to large-scale arable fields which are generally elongated and rectilinear in shape, creating long views across the River Went and into adjoining farmland (LLCA 06). The agricultural land use and limited settlement contributes towards a rural character; however, this is often eroded by the poor vegetation structure and amalgamation of fields. Visual and audible intrusion from existing infrastructure within the LLCA, including the East Coast Main Line and pylons, as well as views of the chimney at Drax Power Station and a wind turbine at Riddings Farm, mean there is a limited sense of tranquillity across the area.

LLCA 04: Flashley Carr Farmlands (LLCA 04)

10.6.100 LLCA 04 is located within the southeast of the Solar PV Site Study Area. A very small portion of LLCA 04 falls within the eastern edge of the Solar PV Site.

10.6.101 An agricultural landscape of irregularly shaped, small to medium-scale fields used for both arable and pastoral land practices. Fields are commonly bound by dense hedgerows and thick tree belts which create the sense of a wooded horizon, meaning views are often shortened within this area. A minor road network characterised by sharp bends and lined by rows of trees, ditches and hedgerows serves the area, whilst PRoW access is low. Pylons and a dismantled railway within the west and northwest erode the rural character and sense of tranquillity compared to that experienced within the east of the area.

LLCA 05: River Went Corridor (LLCA 05)

10.6.102 LLCA 05 forms a narrow linear corridor from east to west through the Solar PV Site Study Area. The LLCA forms much of the northern boundary of the Solar PV Site with small parts of the LLCA extending into the Order limits.

10.6.103 A narrow river valley with gently sloping sides which hosts a mosaic of riparian habitats, trees, and vegetation. PRoW cross the River Went and follow its northern bank, with the Trans Pennine Trail and National Cycle Network Route 62 crossing at the Topham Ferry Bridge in the east. Away from visual and audible intrusions, such as the East Coast Main Line and

pylons around Topham, the area experiences a higher sense of tranquillity and wildness compared to other areas across the Solar PV Site Study Area.

LLCA 06: River Went Farmlands (North) (LLCA 06)

10.6.104 LLCA 06 is located in the north of the Solar PV Site Study Area. The LLCA is located to the north of the Solar PV Site, outside the Order limits.

10.6.105 A relatively open landscape comprising medium to large-scale, rectilinear fields which are predominantly used for arable purposes. Occasional smaller-scale fields can be found immediately adjacent to farmsteads. Settlement is limited to individual farmsteads and detached properties mainly focussed along Lowgate. The Trans Pennine Trail and National Cycle Network Route 62 pass through the east of the area. Visual and audible intrusion from existing infrastructure within the LLCA, including the East Coast Main Line, pylons, wind turbines and the chimney at Drax Power Station, mean there is a limited sense of tranquillity.

LLCA 07: Topham and Eskholme Farmlands (LLCA 07)

10.6.106 LLCA 07 is located within the northeast of the Solar PV Site Study Area. A very small portion of the LLCA is located within the northeast corner of the Solar PV Site.

10.6.107 A wooded and enclosed agricultural landscape comprised of small to medium-scale arable and pastoral fields. Fields are bound by dense hedgerows, shelterbelts and ditches which create the sense of a wooded landscape. Settlement is limited to the small, wooded hamlet of Topham and scattered farmsteads. A higher sense of tranquillity exists across this LLCA compared to the rest of the Solar PV Site Study Area due to the enclosed and intimate landscape coupled with the general lack of human presence. However, visual intrusion by existing infrastructure, namely existing pylons to the west of Topham, occurs in some parts of the LLCA.

LLCA 08: Moss Village (LLCA 08)

10.6.108 LLCA 08 is located within the south of the Solar PV Site Study Area. It is located outside of the Solar PV Site, however, a very small portion falls within the Grid Connection Corridor.

10.6.109 This LLCA comprises the village of Moss and the immediately adjoining small-scale fields and paddocks which form its setting. The village has seen considerable 20th and 21st century infill growth, largely comprising red and mixed brick detached properties. Outward views from Moss are largely shortened by intervening vegetation, however, occasional views of existing pylons can be achieved from the east of the village. This intrusion of infrastructure, coupled with the audible disturbance of the East Coast Main Line and relatively busy Moss Road means there is a lack of tranquillity in the village.

LLCA 09: Moss Farmlands (LLCA 09)

10.6.110 LLCA 09 is located within the south of the Solar PV Site Study Area and the northern part of the Grid Connection Corridor. A small portion of the LLCA falls within the southwest corner of the Solar PV Site, including part of

Fenwick Common Lane. The LLCA also covers the northern part of the Grid Connection Corridor.

10.6.111 A relatively enclosed landscape characterised by a mixture of small and medium-scale fields. These are regularly bound by thick hedgerows with hedgerow trees or tree belts. Occasional large-scale fields can be found where the historic field pattern has been amalgamated, often leading to fragmented or more open field boundaries. Small pockets of higher tranquillity are possible where fields are enclosed by vegetation. Otherwise, visual and audible intrusion from the East Coast Main Line, as well as views of pylons which cross through the east of the area, erode the sense of tranquillity across the LLCA.

LLCA 10: Sykehouse Medieval Farmlands (LLCA 10)

10.6.112 LLCA 10 is located within the east of the Solar PV Site Study Area and falls outside of the Solar PV Site.

10.6.113 This LLCA comprises the linear village of Sykehouse, a historic village which has seen subsequent modern infill leading to a near continuous character. Agricultural land provides the setting to Sykehouse, with large-scale arable fields commonly found to the north and small-scale, medieval strip fields used for hay and pasture found to the south. The area is bound by the linear courses of the New Junction Canal to the east and the dismantled railway to the west, eroding the area's rural character and instead leaving legacies of previous industrial and mining activity in the wider area. Visual intrusion from pylons to the south of the area also reduces the sense of tranquillity. However, the small-scale of fields to the south of Sykehouse and their densely vegetated boundaries creates pockets of enclosed and intimate landscapes, with associated higher tranquillity.

LLCA 11: Balne Farmlands (LLCA 11)

10.6.114 LLCA 11 is located within the north of the Solar PV Site Study Area and falls outside of the Solar PV Site.

10.6.115 An open, agricultural landscape comprising medium to large-scale, irregularly shaped fields predominantly used for arable purposes. Settlement is limited to farmsteads and small residential clusters focussed along Highgate and Balne Moor Road, and the small crossroads village of Balne. Locally open views across adjoining fields are possible due to the semi-open field boundaries. Visual and audible intrusion from the East Coast Main Line, as well as inter-visibility with pylons and industry at Great Heck and Pollington erodes the rural character and means there is a limited sense of tranquillity across the area.

Sensitivity of Landscape Receptors

10.6.116 From the above landscape baseline review, Table 10-3 sets out the landscape receptors within the Solar PV Site Study Area and Grid Connection Corridor Study Area which are taken forward for the assessment of likely significant effects. These landscape receptors include published LCAs (or LCTs where LCAs are not available) from district and borough landscape character assessments that fall within the Solar PV Site Study

Area and Grid Connection Corridor Study Area, as well as the 11 LLCAs across the Solar PV Site Study Area identified above.

10.6.117 In line with GLVIA 3 (Ref. 10-14) and the methodology in **ES Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology [EN010152/APP/6.3]**, the landscape receptor sensitivity is derived from an assessment of landscape value and landscape susceptibility, which is set out in full for each landscape receptor in **ES Volume III Appendix 10-5: Landscape Assessment [EN010152/APP/6.3]**.

Table 10-3: Landscape Receptor Sensitivity Summary

Landscape Receptor	Landscape Value	Landscape Susceptibility	Landscape Sensitivity
LCA F2: Owsten to Sykehouse Settled Clay Farmlands	High	Medium	Medium-High
LCA E2: West Don and Dun River Carrlands	High	Low	Medium
LCA F1: Tollbar Settled Clay Farmlands	High	Medium	Medium-High
LCA H2: Blaxton to Stainforth Sandland Heaths and Farmland	Medium	Medium	Medium
LCT 23: Levels Farmlands	Medium	Medium	Medium
LCA 8C: M62 Corridor Hook to Pollington	Low	Low	Low
LLCA 1: Fenwick Village	Medium	Medium	Medium
LLCA 2: Fenwick Farmlands	Medium	Low	Low-Medium
LLCA 3: River Went Farmlands (South)	Low	Low	Low
LLCA 4: Flashley Carr Farmlands	High	Medium	Medium-High
LLCA 5: River Went Corridor	High	High	High
LLCA 6: River Went Farmlands (North)	Low	Low	Low
LLCA 7: Topham and Eskholme Farmlands	High	Medium	Medium-High
LLCA 8: Moss Village	Medium	Medium	Medium
LLCA 9: Moss Farmlands	Medium	Medium	Medium
LLCA 10: Sykehouse Medieval Farmlands	High	Medium	Medium-High
LLCA 11: Balne Farmlands	Low	Low	Low

Existing Visual Baseline

10.6.118 This section describes the visual baseline with reference to the visual receptors and representative viewpoints (see **ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2]**) identified across the Solar PV Site Study Area and Grid Connection Corridor Study Area through desk-based review, including analysis of ZTVs and field surveys.

Zone of Theoretical Visibility Analysis

10.6.119 The ZTVs prepared have been used to help identify sensitive visual receptor groups and locate representative viewpoints across the Solar PV Site Study Area. Fieldwork surveys were undertaken to verify the findings of the ZTV.

10.6.120 The methodology used for the preparation of the ZTVs is set out in **ES Volume III Appendix 10-2: Landscape and Visual Impact Assessment Methodology [EN010152/APP/6.3]**.

10.6.121 The ZTV indicates potential for wide ranging theoretical visibility of the Solar PV Site from across the Solar PV Site Study Area.

10.6.122 **ES Volume II Figure 10-8: Screened ZTV – All Features [EN010152/APP/6.2]** demonstrates that the mostly flat landform and lack of vegetation affords almost complete visibility across the northern part of the Solar PV Site Study Area. Existing planting in the northeastern corner of the Solar PV Site is shown to provide a degree of screening in the northeast of the Solar PV Site Study Area, reducing the proportion of the Solar PV Site visible to typically less than 10%.

10.6.123 East of the Solar PV Site, the vegetation lining the dismantled railway is shown to provide almost complete screening to land further east (including from Topham and Sykehouse). Occasional gaps are shown to afford some visibility of small parts of the Solar PV Site (<10%).

10.6.124 The existing network of field boundary vegetation present across the southern part of the Solar PV Site Study Area limits the visibility of the Solar PV Site from land to the south, such that land around the western part of Moss, and land further south is shown not to have intervisibility with the Solar PV Site. Occasional areas of visibility are shown on the outskirts of the Solar PV Site Study Area.

10.6.125 A lack of vegetation and built features west of the Solar PV Site is shown to result in almost complete visibility to the west of the Solar PV Site.

Visual receptors and representative viewpoints

10.6.126 Visual receptors likely to experience views of the construction or operation and maintenance of the Solar PV Site or Grid Connection Corridor were identified through interrogation of the ZTVs and fieldwork, and were subsequently categorised into the following types:

a. Residents;

b. Recreational users of the PRoW network, promoted walking routes and cycle routes;

c. Users of the road network; and

d. Users of the rail network.

10.6.127 With reference to **ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2]**, 37 representative viewpoints have been selected across the Solar PV Site Study Area and Grid Connection Corridor Study Area to help illustrate the visual effects of the Scheme. Viewpoint 32 at Askern Hill is beyond the 2 km Solar PV Site Study Area but is included due to its locally elevated position and also following feedback from the Scoping Opinion. The list of representative viewpoints is not an exhaustive list of all locations where the Scheme will be visible, but instead provides a representative and proportionate variety of views from different visual receptor groups, listed above.

10.6.128 Representative viewpoints are located on public land, in accordance with industry practice. In some cases, representative viewpoints from nearby public land are referred to in the case of private views, for example, views from residential properties.

10.6.129 Table 10-4 lists the visual receptors identified, the viewpoints captured to represent their visual amenity, and the receptor's sensitivity. A description of the representative viewpoints is provided in **ES Volume III Appendix 10-4: Visual Baseline [EN010152/APP/6.3]** and an assessment of sensitivity is provided in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**.

Table 10-4: Visual Receptors, Sensitivity and Representative Viewpoints

Visual Receptor	Sensitivity	Representative Viewpoints (see ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2])
Residents (within 2 km)		
Residents of Fenwick (for baseline description and assessment see Table 1 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 5 - View north from Lawn Lane Viewpoint 15 – View southeast from the junction of Shaw Lane and Fenwick Common Lane Viewpoint 17 – View east from PRoW Fenwick 8 Viewpoint 18 – View north from PRoW Fenwick 7
Residents of Moss (for baseline description and assessment see Table 2 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 6 – View north from PRoW Moss 6/Fenwick 14 Viewpoint 14 – View northwest from London Lane Viewpoint 33 – View north from Moss Road Viewpoint 34 – View southeast from PRoW Moss 20

Visual Receptor	Sensitivity	Representative Viewpoints (see ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2])
Residents of Topham (for baseline description and assessment see Table 3 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium-high	Viewpoint 13 – View west from the Topham Ferry Bridge
Residents of Sykehouse (for baseline description and assessment see Table 4 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium-high	Viewpoint 28 – View southwest from Bridleway Sykehouse 11
Residents of Balne (for baseline description and assessment see Table 5 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 30 – View southeast from Park Lane, Balne Viewpoint 31 – View southeast from Highgate, Balne
Residents of Askern (for baseline description and assessment see Table 6 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 32 – View northeast from Askern Hill
Residents of Fenwick Grange (for baseline description and assessment see Table 7 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	No representative viewpoint. The nearest viewpoint is Viewpoint 22.
Residents of West End (for baseline description and assessment see Table 8 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 7 – View northwest from PRoW Sykehouse 29 Viewpoint 8 – View north from West Lane
Residents of Riddings Farm and Fenwick Hall (for baseline description and assessment see Table 9 in **ES Volume III Appendix 10-6: Visual**	Medium	No representative viewpoint. The nearest viewpoint is Viewpoint 1.

Visual Receptor	Sensitivity	Representative Viewpoints (see ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2])
Assessment [EN010152/APP/6.3])		
Residents along Lowgate (for baseline description and assessment see Table 10 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 23 – View south from Lowgate Viewpoint 24 – View south from Lowgate at Linton House Farm Viewpoint 25 – View south from PRoW 35.3/8/1
Residents around Highgate (for baseline description and assessment see Table 11 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 29 – View south from Highgate Viewpoint 31 – View southeast from Highgate, Balne
Residents of Thorpe in Balne, Trumfleet and Hawkhouse Green (for baseline description and assessment see Table 12 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 35 – View northwest from PRoW Moss 20 Viewpoint 36 – View northeast from PRoW Thorpe in Balne 7 Viewpoint 37 – View northeast from PRoW Thorpe in Balne 6
Recreational Users of PRoW, Promoted Walking Routes and Cycle Routes (within 2 km)		
Users of the PRoW network within the Solar PV Site (for baseline description and assessment see Table 13 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Low-Medium	Viewpoint 2 – View west from PRoW Fenwick 12 Viewpoint 3 – View north from PRoW Fenwick 15 Viewpoint 4 – View north from PRoW Fenwick 16 Viewpoint 6 – View north from PRoW Moss 6/Fenwick 14 Viewpoint 7 – View northwest from PRoW Sykehouse 29
Users of the PRoW network to the north of the Solar PV Site (for baseline description and assessment see Table 14 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Low-Medium	Viewpoint 9 – View south from PRoW 35.3/15/1 Viewpoint 11 – View south from 35.3/15/2 (west) Viewpoint 12 – View south from PRoW 35.3/15/2 (east)

Visual Receptor	Sensitivity	Representative Viewpoints (see ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2])
		Viewpoint 19 – View southwest from Trans Pennine Trail Viewpoint 25 – View south from PRoW 35.3/8/1 Viewpoint 26 – View southwest from Trans Pennine Trail at Crowcroft Lane
Users of the PRoW network to the south of the Solar PV Site (for baseline description and assessment see Table 15 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Low-Medium	Viewpoint 6 – View north from PRoW Moss 6/Fenwick 14 Viewpoint 14 – View northwest from London Lane Viewpoint 22 – View northwest from PRoW Moss 8 Viewpoint 33 – View north from Moss Road Viewpoint 34 – View southeast from PRoW Moss 20 Viewpoint 35 – View northwest from PRoW Moss 20 Viewpoint 36 – View northeast from PRoW Thorpe in Balne 7 Viewpoint 37 – View northeast from PRoW Thorpe in Balne 6
Users of the PRoW network to the east of the Solar PV Site (for baseline description and assessment see Table 16 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium	Viewpoint 13 – View west from the Topham Ferry Bridge Viewpoint 22 – View northwest from PRoW Moss 8 Viewpoint 28 – View southwest from Bridleway Sykehouse 11
Users of the PRoW network to the west of the Solar PV Site (for baseline description and assessment see Table 17 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Low-Medium	Viewpoint 16 – View east from PRoW Fenwick 11 Viewpoint 17 – View east from PRoW Fenwick 8 Viewpoint 18 – View north from PRoW Fenwick 7 Viewpoint 20 – View northeast from PRoW Fenwick 7 at the East Coast Main Line Viewpoint 21 – View east from PRoW Fenwick 6/35.3/14/1

Visual Receptor	Sensitivity	Representative Viewpoints (see ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2])
		Viewpoint 27 – View southeast from PRoW 35.3/14/1
Users of Trans Pennine Trail and NCN Route 62 (for baseline description and assessment see Table 18 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Medium-High	Viewpoint 13 – View west from the Topham Ferry Bridge Viewpoint 19 – View southwest from Trans Pennine Trail Viewpoint 26 – View southwest from Trans Pennine Trail at Crowcroft Lane
Users of the Road Network (within 2 km)		
Users of the minor road network in and around Fenwick (for baseline description and assessment see Table 19 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Low-Medium	Viewpoint 1 – View west from Lawn Lane Viewpoint 5 – View north from Lawn Lane Viewpoint 15 – View southeast from the junction of Shaw Lane and Fenwick Common Lane
Users of the minor road network to the south and east of the Solar PV Site (including Moss Road, Flashley Carr Lane and West Lane) (for baseline description and assessment see Table 20 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Low-Medium	Viewpoint 8 – View north from West Lane Viewpoint 10 – View northwest from West Lane Railway Bridge Viewpoint 33 – View north from Moss Road Viewpoint 35 – View northwest from PRoW Moss 20
Users of the minor road network to the north of the Solar PV Site (including Lowgate and Highgate) (for baseline description and assessment see Table 21 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Low-Medium	Viewpoint 23 – View south from Lowgate Viewpoint 24 – View south from Lowgate at Linton House Farm Viewpoint 25 – View south from PRoW 35.3/8/1 Viewpoint 29 – View south from Highgate Viewpoint 31 – View southeast from Highgate, Balne
Users of the Rail Network (within 2 km)		

Visual Receptor	Sensitivity	Representative Viewpoints (see ES Volume II Figure 10-9: Representative Viewpoint Locations [EN010152/APP/6.2])
Rail users travelling on the East Coast Main Line (for baseline description and assessment see Table 22 in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**)	Low-Medium	Viewpoint 20 – View northeast from PRoW Fenwick 7 at the East Coast Main Line

Future Baseline

10.6.130 This LVIA considers landscape and visual effects in the future during construction (2028 to 2030), operation and maintenance at Year 1 (2031) and Year 15 (2045), and decommissioning (2070). In the absence of any known alternative plans for the Order Limits and its surroundings, the baseline is assumed to be the same as the present day. Similarly, it is likely that the Solar PV Site and its surroundings would remain in their current condition and use in the absence of the Scheme.

10.7 Embedded Mitigation

10.7.1 The Scheme has been designed, as far as practicable, to avoid and reduce impacts and effects on landscape and visual amenity through the process of design development, and by embedding measures into the Scheme design. In addition, how the Scheme is constructed, operated and maintained, and decommissioned would be appropriately controlled in order to manage and minimise potential environmental effects (required as a result of legislative requirements and/or standard sectoral practices).

10.7.2 The delivery of these embedded mitigation measures are secured through the **Framework Construction Environmental Management Plan (CEMP) [EN010152/APP/7.7]**, **Framework Operational Environmental Management Plan (OEMP) [EN010152/APP/7.8]** and **Framework Decommissioning Environmental Management Plan (DEMP) [EN010152/APP/7.9]**. These management plans would be developed into detailed (or construction issues) management plans by the appointed Contractor prior to the start of Scheme construction, operation and maintenance, or decommissioning.

10.7.3 Embedded measures are taken into account prior to the assessment of effects in order to avoid considering assessment scenarios that are unrealistic in practice i.e. effects do not take account of measures even though they will be standard practice and/or form part of the Scheme design. These have been followed through into the assessment to ensure that realistic likely environmental effects have been identified.

Measures Embedded into the Scheme Design

Design Principles

10.7.4 Good design has been a key consideration from the outset. The LVIA has informed the iterative design process which has been guided by design principles and in response to policy requirements. The Scheme design principles cover a broad range of considerations. The principles most relevant to landscape and visual matters are as follows:

a. Seek to establish spaces that can serve for energy generation, biodiversity improvement, water and flood control, and green infrastructure.

b. Site the Scheme sensitively in the landscape, respecting the distinctive and unique character of settlements adjacent to the Scheme and the surrounding countryside and exploring reasonable opportunities to mitigate visual impacts.

Published Guidance

10.7.5 The iterative design process has also incorporated changes based on guidance provided in published landscape character assessments, including the following statements of environmental opportunity identified for NCA 37: Humberhead Levels (Ref. 10-23), in which the Scheme is located:

a. "Safeguard, manage and expand the wetland habitats, including the internationally important lowland raised bogs, the floodplain grazing marsh, reedbeds, wet pastures and watercourses, to protect and enhance biodiversity, contribute to landscape character, address climate change and reduce flood risks (SEO 1);

b. Manage the agricultural landscape to retain its distinctive character and its productivity, while improving its contribution to biodiversity, the protection of vulnerable soils and palaeo-environmental evidence, and the water resource (SEO 2);

c. Manage the landscape features such as semi-natural habitats and historic field patterns that reveal local variations in landscape character, often arising from underlying soils and history of drainage, to enhance people's understanding and enjoyment of the landscape (SEO 3); and

d. Protect the open and expansive character of the landscape, its cultural features and sense of remoteness, by ensuring that new development is sensitively located, accommodates green infrastructure, retains long views and makes a positive contribution to biodiversity. (SEO 4)"

10.7.6 Guidance is also provided for county level landscape character areas. This guidance is recorded in full in **ES Volume III Appendix 10-3: Landscape Character Baseline [EN010152/APP/6.3]**.

Landscape Strategy

10.7.7 The Scheme design has also embedded guidance contained within the Landscape Institute's Infrastructure Technical Guidance Note including:

a. Paying attention to how the Scheme will integrate with and, wherever possible, enhance existing nature networks and green infrastructure;

b. Consideration of how the Scheme will respond to, and reinforce or enhance, landscape character; and

c. Responding to existing landform.

Embedded Mitigation

10.7.8 With reference to the design principles and guidance referenced above, the overall objective of the landscape design is to sensitively integrate the Scheme into the landscape, avoiding or minimising adverse landscape and visual impacts as far as practicable. As such, the following mitigation has been embedded:

a. Careful siting in the landscape;

i. All Solar PV Panels have been sited within the existing field pattern, protecting existing vegetation, and maximising the natural screening provided by field boundary vegetation.

ii. Larger infrastructure, such as the On-Site Substation and BESS Area, have been located away from residential receptors, which are identified as being amongst the most sensitive receptors, in order to minimise potential visual effects.

iii. The Solar PV Site mostly avoids land abutting settlement boundaries, such as fields immediately adjacent to Fenwick. Where this has not been possible, offsets (measuring a minimum of 50 m) and new planting has been incorporated to retain a sense of openness whilst screening the Solar PV Panels.

iv. The Solar PV Site mostly avoids land adjacent to the local road network to minimise the visual impact on people travelling. Where this has not been possible, bespoke offsets and mitigation planting to provide screening has been incorporated.

v. The siting of Solar PV Panels and associated infrastructure seeks to minimise instances of development on both sides of PRoW. Where development is proposed on one side of a PRoW, an offset of 15 m from the centre line has been incorporated. Where development is proposed on both sides of a PRoW, a minimum offset of 20 m either side of the centre line has been integrated (creating a 40m wide corridor between the fencelines), as well as areas of wider offsets to vary the extent of views experienced across the Solar PV Site where practicable. There would be a further 5 m from the perimeter fence to the Solar PV Panels. Where practicable new planting or the gapping up of existing planting is proposed to reduce instances where Solar PV Panels would be on both sides of PRoW.

b. Conserving existing vegetation patterns;

i. Offsets from trees and woodlands have been incorporated to ensure the health and longevity of vegetation, retaining the existing structure of the landscape. This includes minimum offsets of:

i. 15 m from individual trees (or greater if required by the root protection area);

ii. 15 m from woodland;

iii. 5 m from hedgerows; and

iv. 10 m from watercourses.

ii. The design uses existing tracks, lanes and access points across the Solar PV Site, wherever practicable, in order to minimise the disturbance of existing vegetation.

iii. Important hedgerows, as identified under Schedule 1 of the Hedgerow Regulations 1997, will be retained, with the exception of where short stretches will need to be removed to accommodate access or the laying of cables. Where practicable, any hedgerow removal will be re-planted following construction.

c. Creating new green infrastructure;

i. A substantial offset has been integrated along the eastern side of Fleet Drain, forming a green corridor to retain and enhance the green infrastructure network across the Solar PV Site.

ii. The introduction of neutral and modified grassland beneath the Solar PV Panels, and across the extent of the wider Solar PV Site, will enhance biodiversity compared to the current agricultural landscape.

iii. A substantial offset has been integrated along the southern side of the River Went, protecting the character of the river corridor through retaining a sense of openness. Mitigation planting would be located along the northern boundary of the Solar PV Panels, allowing for an open mosaic of habitats to be retained along the river corridor, in keeping with local character and enhancing the green infrastructure network.

iv. Hedgerows would generally be improved through ‘gapping up’ where they are currently fragmented, improving landscape structure and ecological connectivity.

d. Sensitive design in relation to form and materials;

i. Fencing around the Solar PV Site would be timber posts with stock proof mesh-type fencing, measuring up to 2.2 m high, allowing visual permeability and thereby minimising its visual impact.

e. Sensitive design of lighting;

i. The lighting strategy is discussed in detail in **ES Volume I Chapter 2: The Scheme [EN010152/APP/6.1]** and construction phase measures are further outlined in the Framework CEMP presented in **Framework Construction Environmental Management Plan [EN010152/APP/7.7]**. The proposed lighting has been designed to avoid and minimise the potential for adverse landscape and visual effects. The following mitigation has been embedded in the Design Principles:

i. Lighting would be directional with care to minimise potential for light spillage beyond the Solar PV Site particularly towards neighbouring properties, habitats, highways or waterways;

ii. Lights installed would be of the minimum brightness and/or power rating capable of performing the desired function;

iii. Light fittings would be used that reduce the amount of light emitted above the horizontal (reduce upward lighting);

iv. Light fittings would be positioned correctly, inward facing and directed downwards;

v. Lights would be directed into the Solar PV Site;

vi. Use of Passive Infra-Red (PIR) controlled lights (motion sensors) except where temporary focussed task specific lighting is required;

vii. No visible lighting would be utilised at the Solar PV Site perimeter fence. Infrared (IR) lighting will be provided by the CCTV/security system to provide night vision functionality for CCTV;

viii. As far as is practicable, construction works would be limited to daylight hours only, with focussed task specific lighting provided where this is not practicable, for example at the Horizontal Directional Drilling (HDD) drill entry/drill exit pit when installing cables. Within construction compounds and at welfare areas, etc, motion activated security lighting will be employed outside of core hours. Task specific and fixed 'general' lighting may be required in Winter periods (early mornings and up to 7 pm) to meet safety requirements;

ix. During operation and maintenance, areas of the Solar PV Site would not require artificial lighting other than during temporary periods of maintenance/repair. Focussed task specific lighting should only be required in the event of emergency works/equipment failure requiring night-time working (which will be avoided as far as practicable) or panel cleaning operations;

x. As they are containerised units, the Field Station Units and BESS Containers may contain internal artificial lighting (to be manually activated when needed), but light spillage would be minimal (through doorway when open);

xi. Lighting at the On-Site Substation would be inward facing PIR operated which is calibrated to detect vehicles and personnel. Outside task specific and fixed 'general' lighting may be required in Winter periods (early mornings and evenings) to meet safety requirements. The buildings within the On-Site Substation would be fitted with internal lighting but light spillage would be minimal (through open doorway only).

Management Measures

10.7.9 The grassland and new planting that has been embedded into the Scheme to provide landscape and visual mitigation will require management and maintenance in order to provide the intended effect. A **Framework LEMP [EN010152/APP/7.14]** has been prepared to demonstrate how successful establishment will be achieved.

10.8 Assessment of Likely Significant Effects

10.8.1 This section sets out the likely significant effects of the Scheme on landscape and visual amenity, taking account of the embedded mitigation measures as detailed in Section 10.7.

Construction Effects

10.8.2 Table 10-5 records the potential landscape and visual effects arising from construction of the Scheme during Winter conditions. A full assessment of landscape effects can be found in **ES Volume III Appendix 10-5: Landscape Assessment [EN010152/APP/6.3]**. A full assessment of Visual Effects can be found in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**.

10.8.3 The assessment of effects takes into account the embedded mitigation measures which are set out in Section 10.7.

Table 10-5: Summary of Assessment of Effects – Landscape and Visual Amenity (Construction, During Winter)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Landscape effects			
Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)	Construction activity would physically alter the landscape of the Solar PV Site and the Grid Connection Corridor, increasing activity and causing localised alterations to the condition of the landscape. These changes would only alter a small geographic part of the LCA which covers the Solar PV Site and Grid Connection Corridor.	Short term and reversible	**Moderate Adverse (Significant)**
Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)	The southern section of the Grid Connection Corridor passes through LCA E2 and connects with the Existing National Grid Thorpe Marsh Substation. Localised construction activity would occur along the corridor to excavate the trench and lay the Grid Connection Cables.	Short term and reversible	Minor Adverse (Not Significant)
Landscape Character Area F1: Tollbar Settled Clay Farmlands	There would be no construction activity within the LCA, and the effects would not be perceptible due to the mature vegetation between the substation and Thorpe Marsh Drain.	N/A	Neutral
Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland	There would be no construction activity within the LCA, however, construction activity would be perceptible from a very small part of LCA H2 to the immediate east of the Grid Connection Corridor due to the open banks of the River Don.	Short term and reversible	Negligible Adverse (Not Significant)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Landscape Character Type 23: Levels Farmland (LCT 23)	The Solar PV Site and Grid Connection Corridor would not be located in LCT 23. Therefore, there would be no physical change to the landscape features and stated key characteristics within the LCT. Construction activity within the north of the Solar PV Site would be perceptible from the southern edge of LCT 23. However, it would be imperceptible from the vast majority of the LCT.	Short term and reversible	Minor Adverse (Not Significant)
Landscape Character Area 8C: M62 Corridor Hook to Pollington	The Solar PV Site and Grid Connection Corridor would not be located in LCA 8C. Construction activity would not be perceivable from LCA 8C due to the distance and intervening features of vegetation and undulating landform.	N/A	Neutral
LLCA 01 – Fenwick Village	Construction activity within the Solar PV Site, including the construction of Solar PV Mounting Structures, digging of trenches to accommodate cabling, and the installation of the Solar PV Panels, would occur within three fields, namely NW3, NW4 and NW8, within this LLCA. Construction activity across the remainder of the Solar PV Site would also be perceived to varying degrees from the LLCA.	Short term and reversible	**Moderate Adverse (Significant)**
LLCA 02 – Fenwick Farmland	The majority of the southwestern and southeastern extents of the Solar PV Site are located within LLCA 02, covering	Short term and reversible	**Major Adverse (Significant)** this is due to the particularly disruptive nature of the construction phase in

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	approximately two thirds of the LLCA. Therefore, construction activity would introduce direct landscape effects across a large part of the LLCA.		this part of the Solar PV Site and the proportion of the LLCA hosting construction activity.
LLCA 03 – River Went Farmlands (South)	The vast majority of the northern extents of the Solar PV Site are located within LLCA 03, although covering less than half of the LLCA. Construction activity would introduce physical change to the landscape across the eastern half of the LLCA that falls within the Solar PV Site but would be imperceptible from the western half of the LLCA.	Short term and reversible	**Moderate Adverse (Significant)**
LLCA 04 – Flashley Carr Farmlands	A very small portion of LLCA 04 is covered by the Solar PV Site, namely the eastern arm which comprises Fields SE6 and SE7. Both Fields SE6 and SE7 would host Solar PV Panels and therefore construction activity, including the construction of Solar PV Mounting Structures and the installation of panels, would take place. Wider construction activity would also be perceptible from a very small portion of the LLCA.	Short term and reversible	Minor Adverse (Not Significant)
LLCA 05 – River Went Corridor	The northern edge of the Solar PV Site falls within LLCA 05, however, no development apart from ecological enhancements and landscape mitigation is proposed within the River Went corridor. Therefore, there would be no heavy construction activity within LLCA 05. There would be a perception of construction	Short term and reversible	**Moderate Adverse (Significant)**

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	activity occurring in the neighbouring LLCA 03 which would erode the relatively high tranquillity experienced along the river corridor.		
LLCA 06 – River Went Farmlands (North)	The Solar PV Site is not included within LLCA 06, however, construction activity within the north of the Solar PV Site would be perceptible from the LLCA, particularly from its southern edge and in more open views from Lowgate. From areas in the north and to the west of the East Coast Main Line, construction activity would not be perceptible.	Short term and reversible	Minor Adverse (Not Significant)
LLCA 07 – Topham and Eskholme Farmlands	A very small portion of the LLCA is located within the northeast of the Solar PV Site along Fleet Drain. No infrastructure is proposed within the LLCA and therefore there would be no heavy construction. There is no new vegetation planting proposed along Fleet Drain, however, to improve the diversity of the existing grassland, some seeding would take place during the construction phase.	Short term and reversible	Minor Adverse (Not Significant)
LLCA 08 – Moss Village	The northern section of the Grid Connection Corridor passes along the eastern edge of the LLCA. Localised construction activity would occur along the Grid Connection Corridor to excavate the trench and lay the Grid Connection Cables. Perception of construction activity occurring within the Solar PV Site	Short term and reversible	**Moderate Adverse (Significant)**

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	would also be possible from a small portion of the LLCA.		
LLCA 09 – Moss Farmlands	A very small portion of LLCA 09 is located within the southwest of the Solar PV Site, comprising fields SW11 and SW12. Construction activity would be introduced into these fields. Construction activity within fields SW7, SW8 and SW10 would be perceptible from the eastern edge of the LLCA. Construction within the northern part of the Grid Connection Corridor would also physically alter this LLCA.	Short term and reversible	**Moderate Adverse (Significant)**
LLCA 10 – Sykehouse Medieval Farmlands	The Solar PV Site and Grid Connection Corridor would not be located in LLCA 10. Therefore, there would be no physical change to the LLCA. The construction activity would not be perceived due to the intervening distance and features between the LLCA and the Scheme.	N/A	Neutral
LLCA 11 – Balne Farmlands	The Solar PV Site and Grid Connection Corridor would not be located in LLCA 11. Therefore, no physical change to the landscape. The construction activity would not be perceived due to the distance and features between the LLCA and the Scheme.	N/A	Neutral

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Visual effects			
Residents of Fenwick	Partially filtered views of construction activity would be possible in Fields NW3 and NW4 of the Solar PV Site from north facing windows of properties on the northern side of Lawn Lane. Partially filtered views of construction activity in Field SW9 of the Solar PV Site would be possible at an oblique angle from south facing first floor windows of properties along the southeastern extent of Shaw Lane. For all other residents, including along Fenwick Lane and Fenwick Common Lane, views of construction activity would be screened by intervening vegetation or built form.	Short term and reversible	**Moderate Adverse (Significant)** for residents to the north of Lawn Lane. Minor Adverse (Not Significant) for residents on southeastern extent of Shaw Lane. Neutral for all other residents in Fenwick.
Residents of Moss	Filtered views would be experienced by residents including those of Lilac Cottage and Jet Hall Farm along London Lane, Sunrise Cottage and the Old School along Fenwick Common Lane, and properties on the eastern edge of Moss overlooking the Grid Connection Corridor. Taller plant would be visible from north facing velux windows of Harland House along Moss Road, as well as from first floor windows of Cherryton House on London Lane and properties around Moseley House Farm.	Short term and reversible	**Moderate Adverse (Significant)** for properties in the east of Moss, Lilac Cottage, Jet Hall Farm, Sunrise Cottage and the Old School. Negligible Adverse (Not Significant) for Cherryton House, Harland House, and properties around Moseley House Farm. Neutral for all other residents in Moss.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	For all other residents within Moss, views of construction activity within the Solar PV Site would be screened by intervening vegetation or built form.		
Residents of Topham	Construction activity within the Solar PV Site and Grid Connection Corridor would not be visible for residents in Topham due to dense intervening vegetation and the orientation of buildings. There would be no change to the existing views experienced by residents.	N/A	Neutral
Residents of Sykehouse	Taller plant associated with the construction of Solar PV Panels within Fields SE6 and SE7 would be seen extending above intervening vegetation from west-facing, first floor windows of properties along the junction of West Lane, Bate Lane and Broad Lane. Views of activity at ground level would be screened by intervening tree-lined field boundaries and vegetation along the disused railway.	Short term and reversible	Negligible Adverse (Not Significant) for properties along the junction of West Lane, Bate Lane and Broad Lane. Neutral for all other residents in Sykehouse.
Residents of Balne	Construction activity within the Solar PV Site and Grid Connection Corridor would not be visible for residents in Balne due to the intervening distance, vegetation, and raised embankment of the East Coast Main Line.	N/A	Neutral
Residents of Askern	For residents along Park Avenue and Swan Court, views of construction activity within the Solar PV Site and Grid Connection Corridor would be limited to taller plant equipment	Short term and reversible	Negligible Adverse (Not Significant) for properties along Park Avenue and Swan Court.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	extending above the tree line in the background of views east.		Neutral for all other residents in Askern.
Residents of Fenwick Grange	Due to the orientation of the farmhouse at Fenwick Grange, direct or oblique views are not possible towards the Solar PV Site and therefore construction activity within the Solar PV Site would not be visible from habitable windows. Oblique views across surrounding pastoral fields to the south and towards Flashley Carr Lane would remain unchanged. There would also be no views towards the Grid Connection Corridor.	N/A	Neutral
Residents of West End	Direct, semi-open views towards construction activity within Field SE3 of the Solar PV Site would be possible from north facing windows of West End Cottage. Direct views north are also afforded from the neighbouring bungalow, Richmond. However, views from Richmond are more heavily filtered due to the mature hedgerow along the property's northern curtilage. Close, yet filtered views of construction activity occurring in Field SE2 would be possible from South Fork. Views of construction activity would not be possible from West End Farm, Bungalow Farm and Meadow View due to intervening vegetation and built form.	Short term and reversible	**Moderate Adverse (Significant)** for residents of West End Cottage and South Fork. Minor Adverse (Not Significant) for residents of Richmond. Neutral for residents of West End Farm, Bungalow Farm and Meadow View.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of Riddings Farm and Fenwick Hall	Views of construction activity within the Solar PV Site would largely be screened from the occupied property at Riddings Farms due to intervening outbuildings and vegetation bordering the farmyard. However, filtered views of construction activity within Field SW2 of the Solar PV Site would be possible from the south facing, first floor dormer window. Construction activity within the Solar PV Site would not be visible from Fenwick Hall, due to screening from intervening buildings and vegetation.	Short term and reversible	Minor Adverse (Not Significant) for residents of Riddings Farm. Neutral for residents of Fenwick Hall.
Residents along Lowgate	Construction activity across the Solar PV Site and Grid Connection Corridor would not be visible for most residents along Lowgate. Longer and partially filtered views of construction activity within the north of the Solar PV Site would be experienced by residents of Desiderata, Lowgate Bungalow, Linton House Farm and Fir Tree Farm due to south-facing windows with limited intervening vegetation.	Short term and reversible	Minor Adverse (Not Significant) for residents of Desiderata and Lowgate Bungalow. Negligible Adverse (Not Significant) for residents of Linton House Farm and Fir Tree Farm. Neutral for all other residents along Lowgate.
Residents around Highgate	Views of construction activity within the Solar PV Site would be barely perceptible and confined to taller plant involved within the north of the Solar PV Site.	Short term and reversible	Negligible Adverse (Not Significant) for residents of 1-8 Highgate, Highgate House, Beechtree Farm and Highgate Farm. Neutral for all other residents along Highgate.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of Thorpe in Balne, Trumfleet and Hawkhouse Green	Views of construction activity occurring along the Grid Connection Corridor, including horizontal directional drilling, would be possible from north-facing first floor windows of Glebe House in Trumfleet. Middle distance and partially filtered views of construction activity would also be available form some windows of Moss Villa, White House Farm and Wilsick House Farm.	Short term and reversible	**Moderate Adverse (Significant)** for residents of Glebe House. Minor Adverse (not significant) for residents of Moss Villa, White House Farm and Wilsick House Farm. Neutral for all other residents within Thorpe in Balne, Trumfleet and Hawkhouse Green.
Users of the PRoW network within the Solar PV Site	During construction, there would be close and open views of construction activity occurring within the southwest and southeast of the Solar PV Site from the existing PRoW network within the Solar PV Site.	Short term and reversible	**Major Adverse (Significant)** for users of PRoW Fenwick 10, 11, 12, 13, 14, 15, 16, Moss 5, and Sykehouse 29 due to this representing a particularly high magnitude of effect on the visual amenity of PRoW users.
Users of the PRoW network to the north of the Solar PV Site	Direct and open views towards construction activity occurring in the north of the Solar PV Site, including construction of Solar PV Mounting Structures, installation of Solar PV Panels, and general vehicle movement would be possible from PRoW which follow the northern bank of the River Went, including PRoW 35.3/15/1 and PRoW 35.3/15/2. Views north across surrounding agricultural fields would remain unchanged. Longer and more filtered views towards construction activity would be available from a handful of PRoW to the north of Lowgate.	Short term and reversible	**Moderate Adverse (Significant)** for users of PRoW 35.3/15/1, 35.3/15/2 and 35.3/8/1. Minor Adverse (Not Significant) for users of PRoW 35.3/7/1. Negligible Adverse (Not Significant) for users of PRoW 35.3/10/2 and 35.3/9/1, and Pollington 4 and 5. Neutral for users of all other PRoW to the north of the Solar PV Site.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Users of the PRoW network to the south of the Solar PV Site	Direct views of construction activity within the Solar PV Site would be afforded from the northern extents of Moss 6 and 7. Close views of construction activity along the Grid Connection Corridor would be available from Moss 20 and 21, and Thorpe in Balne 5, 6, 7, 11, and 13. Views from the PRoW network further south would remain unchanged.	Short term and reversible	**Moderate Adverse (Significant)** for users of PRoW Moss 6, 7, 20 and 21, and Thorpe in Balne 5, 6, 7, 11 and 13. Neutral for users of all other PRoW to the south of the Solar PV Site.
Users of the PRoW network to the east of the Solar PV Site	Construction activity within the Solar PV Site would be screened from PRoW to the east of the Solar PV Site due to intervening distance, vegetation, and built form. There would be no change to the existing views experienced by users of the PRoW network.	N/A	Neutral
Users of the PRoW network to the west of the Solar PV Site	Heavily filtered views of construction activity occurring in Field SW9 of the Solar PV Site would be available from Fenwick 3 and 4, including when Fenwick 3 crosses the East Coast Main Line. Views of taller plant extending above intervening hedgerows would be available from Fenwick 3, 4 and 7.	Short term and reversible	Minor Adverse (Not Significant) for users of PRoW Fenwick 3 and 4. Negligible Adverse (Not Significant) for users of PRoW Fenwick 7. Neutral for users of all other PRoW to the west of the Solar PV Site.
Users of the Trans Pennine Trail and National Cycle Network Route 62	Construction would not be visible for the majority of the Trans Pennine Trail and NCN Route 62. Longer distance and partially filtered views of construction activity within Fields NE9 and NE11 would be available for people walking the short stretch between Balne Hall	Short term and reversible	Minor Adverse (Not Significant)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	Wood and Topham, and at Crowcroft Lane, near Balne Lodge. Fleeting views of construction activity along the Grid Connection Corridor would be possible from sections of the Trans Pennine Trail as it follows the lane between Thorpe in Balne and Trumfleet.		
Users of the minor road network in and around Fenwick	Construction activity would not be visible from most of the minor road network. Brief glimpses and partially screened views of construction activity within Fields SW1, SW2, SW9, SW10, NW4 and NW8 would be afforded from Fenwick Common Lane, Shaw Lane and the eastern extent of Lawn Lane, where gaps in the adjoining vegetation permit.	Short term and reversible	Minor Adverse (Not Significant) for people travelling on Fenwick Common Lane, Shaw Lane and Lawn Lane. Neutral for people travelling elsewhere across the road network in and around Fenwick.
Users of the minor road network to the south and east of the Solar PV Site (including Moss Road, Flashley Carr Lane and West Lane)	Construction activity within the Solar PV Site would not be visible from most of the minor road network to the south of the Solar PV Site. Brief glimpses and partially screened views would be afforded from Moss Road and West Lane. Close but fleeting views of construction activity along the Grid Connection Corridor would be available from Trumfleet Lane, Moss Lane and Marsh Road.	Short term and reversible	Minor Adverse (Not Significant) for people travelling on Moss Road, West Lane, Trumfleet Lane, Moss Lane and Marsh Road. Neutral people travelling on all other roads to the south of the Solar PV Site.
Users of the minor road network to the north of the Solar PV Site (including Lowgate and Highgate)	Construction activity within the Solar PV Site and Grid Connection Corridor would not be visible from most of the minor road network to the north of the Solar PV Site. Fleeting views	Short term and reversible	Minor Adverse (Not Significant) for people travelling on Lowgate.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	towards construction activity occurring within the north of the Solar PV Site would be afforded from Lowgate and the southern section of Cat Lane. Longer distance, barely perceptible views would be available from some sections of Highgate.		Negligible Adverse (Not Significant) for people travelling on Highgate and Cat Lane. Neutral for people travelling on all other roads to the north of the Solar PV Site.
Rail users travelling on the East Coast Main Line	Momentary views of construction activity occurring in the northwest and southwest of the Solar PV Site would be available in views east for passengers travelling along the East Coast Main Line between the Moss Level Crossing and the Lowgate Level Crossing. These views would be very short-lived due to the speed at which trains travel along the Main Line. Furthermore, the view would occupy an extremely short section of the overall journey through the landscape experienced by passengers.	Short term and reversible	Negligible (Not Significant)

Operation and Maintenance Effects – Year 1

10.8.4 Table 10-6 records the potential landscape and visual effects arising from the Scheme in Year 1 of operation and maintenance during Winter conditions. A full assessment of landscape effects can be found in **ES Volume III Appendix 10-5: Landscape Assessment [EN010152/APP/6.3]**. A full assessment of Visual Effects can be found in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**.

10.8.5 The assessment of effect takes into account the embedded mitigation measures which are set out in Section 10.7.

Table 10-6: Summary of Assessment of Effects – Landscape and Visual Amenity (Operation and Maintenance – Year 1, During Winter)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Landscape effects			
Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)	The Scheme would result in a change in land use across all fields occupied by Solar PV Panels or other associated equipment within the Solar PV Site. These changes would only alter a small geographic part of the LCA which covers the Solar PV Site. Furthermore, it would be perceived from only the immediate surroundings of the Solar PV Site.	Long term and reversible	**Moderate Adverse (Significant)**
Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)	The Grid Connection Corridor would be completed and cables below ground. The topsoil finish would be in keeping with agricultural fields in Winter. Replacement planting for vegetation removed to accommodate the cable would not yet have established. However, the localised reduction in vegetation cover and continuity of hedgerows would represent a very small scale of change in character.	Long term and reversible	Negligible Adverse (Not Significant)
Landscape Character Area F1: Tollbar Settled Clay Farmlands	The Grid Connection Corridor would be complete and cables below ground. The underground cable would not be perceived from LCA F1 due to intervening vegetation. The Solar PV Site would not be perceptible from LCA F1 due to the intervening distance and	N/A	Neutral

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	vegetation between the Solar PV Site and the receptor.		
Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland	The Grid Connection Cables would be complete and below ground. The topsoil finish would be in keeping with agricultural fields in Winter and therefore would not be perceived from LCA H2. The Solar PV Site would not be perceptible from LCA H2 due to the intervening distance and vegetation between the Solar PV Site and the receptor.	Long term and reversible	Neutral
Landscape Character Type 23: Levels Farmland (LCT 23)	The north of the Solar PV Site would be perceptible from the southern edge of LCT 23. However, the Solar PV Site would cause no discernible change to the perceptual qualities of the wider LCT due to the intervening undulating landform and vegetation. There would also be no physical change to LCT 23.	Long term and reversible	Minor Adverse (Not Significant)
Landscape Character Area 8C: M62 Corridor Hook to Pollington	There would be no effect on LCA 8C as the Solar PV Site would not be located in the LCA and there would be no perception of it due to the intervening vegetation and undulating landform.	N/A	Neutral
LLCA 01 – Fenwick Village	The Solar PV Site would be located within three fields within the LLCA (Fields NW3, NW4 and NW8). The remainder of the Solar PV Site would be perceived to varying degrees. This would cause an alteration to the perception of character of LLCA 01.	Long term and reversible	**Moderate Adverse (Significant)**

Receptor	Potential Impacts	Duration	Likely Significance of Effect
LLCA 02 – Fenwick Farmland	The southwest and southeast of the Solar PV Site would occupy approximately two thirds of LLCA02. This would introduce an evident change in land use, reducing the agricultural character and degree of openness due to the introduction of solar infrastructure. Landscape mitigation and hedgerow gapping up would be yet to establish.	Long term and reversible	**Moderate Adverse (Significant)**
LLCA 03 – River Went Farmlands (South)	The north of the Solar PV Site would occupy under half of LLCA03. This would introduce energy infrastructure into the landscape, causing an evident change in land use in comparison to the existing agricultural character. The Scheme would be largely imperceptible from parts of the LLCA not located within the Solar PV Site.	Long term and reversible	**Moderate Adverse (Significant)**
LLCA 04 – Flashley Carr Farmlands	Solar PV Panels and associated infrastructure would occupy Fields SE6 and SE7 of the Solar PV Site which occupy a very small portion of LLCA 04. Solar PV Panels within Field SE3 would also be perceptible from a very small portion of LLCA 04 due to proposed vegetation still establishing.	Long term and reversible	Minor Adverse (Not Significant)
LLCA 05 – River Went Corridor	Perception of the Solar PV Site would affect part of LLCA 05 between Topham and the East Coast Main Line. Proposed vegetation along the northern boundary of the Solar PV Site would be yet to establish. There would be no	Long term and reversible	**Moderate Adverse (Significant)**

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	perception of the Scheme beyond the stretch of the River Went that directly adjoins the Solar PV Site due to screening by mature vegetation around Topham and the raised embankment of the East Coast Main Line.		
LLCA 06 – River Went Farmlands (North)	There would be no development within LLCA 06 and no physical change to its key characteristics, however, part the northern edge of the Solar PV Site would be perceptible from the south of the LLCA.	Long term and reversible	Minor Adverse (Not Significant)
LLCA 07 – Topham and Eskholme Farmlands	A very small portion of the LLCA falls within the Solar PV Site, however, this forms part of the ecological mitigation area and therefore no infrastructure would be introduced into the LLCA. Solar PV Panels and associated infrastructure within the adjoining fields would be largely enclosed by existing vegetation, making them barely perceptible from the very small part of the LLCA within the Solar PV Site. Elsewhere from the LLCA, the Scheme would be imperceptible due to intervening mature vegetation around Topham.	Long term and reversible	Negligible Adverse (Not Significant)
LLCA 08 – Moss Village	The Grid Connection Cables east of Moss would be complete and below ground. The topsoil finish would be in keeping with agricultural fields in Winter. The perception of Solar PV Panels within Field SW12 would result in a slight increase in the	Long term and reversible	Minor Adverse (Not Significant)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	infrastructure character of the LLCA alongside the existing roads and overhead pylons.		
LLCA 09 – Moss Farmlands	Solar PV Panels and associated infrastructure within the Solar PV Site would occupy a small part of LLCA 09, within fields SW11 and SW12. This would introduce infrastructure into the landscape and detract from its agricultural character somewhat. However, this would be within a very small portion of LLCA 09 and would be perceived alongside existing roads, pylons and the East Coast Main Line.	Long term and reversible	Minor Adverse (Not Significant)
LLCA 10 – Sykehouse Medieval Farmlands	The Scheme would not be perceptible from LLCA 10 due to intervening mature vegetation and therefore there would be no effect.	N/A	Neutral
LLCA 11 – Balne Farmlands	The Scheme would not be perceptible from LLCA 10 due to intervening distance, vegetation, built form and the raised embankment of the East Coast Main Line, and therefore there would be no effect.	N/A	Neutral
Visual effects			
Residents of Fenwick	Filtered views of Solar PV panels in fields NW3 and NW4 would be possible from north-facing windows for residents on the northern side of Lawn Lane, due to proposed vegetation being yet to establish. Filtered views of Solar PV Panels within field SW9 would be visible at an oblique angle from	Long term and reversible	**Moderate Adverse (Significant)** for properties to the north of Lawn Lane. Minor Adverse (Not Significant) for properties on the southeastern extent of Shaw Lane. Neutral for all other residents in Fenwick.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	first floor, south facing windows of properties along the eastern end of Shaw Lane. For all other residents within Fenwick, including along Fenwick Lane and Fenwick Common Lane, the Scheme would not be visible and therefore there would be no change to the composition of views.		
Residents of Moss	Views of Solar PV Panels within Field SW12 would be possible from some windows of Jet Hall Farm, Lilac Cottage, Sunrise Cottage and the Old School due to landscape mitigation being yet to establish. With reference to **ES Volume I Chapter 14: Other Environmental Topics – Glint and Glare Assessment [EN010152/APP/6.1]** Jet Hall Farm, Sunrise Cottage and the Old School are all identified as experiencing a low glint and glare impact prior to mitigation planting establishing. Longer and filtered views towards the southern edge of the Solar PV Site would be available from top floor, north-facing windows of Harland House and properties around Moseley Hall Farm. For properties on the eastern edge of Moss, the Grid Connection Cables would be underground and ground cover matching that of arable fields in winter. Sections of hedgerow replanting	Long term and reversible	**Moderate Adverse (Significant)** for residents of Lilac Cottage, Jet Hall Farm, Sunrise Cottage and the Old School. Negligible Adverse (Not Significant) for residents of Harland House, properties around Moseley Hall farm and properties on the eastern edge of Moss. Neutral for all other residents in Moss.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	would be yet to establish, as such, it would represent a barely perceptible change. For all other residents within Moss, the Scheme would be screened by intervening vegetation and built form.		
Residents of Topham	The Scheme would not be visible for residents in Topham due to intervening mature vegetation and the orientation of buildings.	N/A	Neutral
Residents of Sykehouse	The Scheme would not be visible for residents in Sykehouse due to intervening mature vegetation, particularly that along the disused railway.	N/A	Neutral
Residents of Balne	The Scheme would not be visible for residents in Balne due to intervening distance, vegetation, built form and the raised embankment of the East Coast Main Line.	N/A	Neutral
Residents of Askern	The Scheme would not be visible for residents in Askern due to intervening vegetation and distance between the Solar PV Site and the receptor.	N/A	Neutral
Residents of Fenwick Grange	There would be no views of the Scheme from the farmhouse at Fenwick Grange due to intervening farm buildings and vegetation.	N/A	Neutral
Residents of West End	Direct views towards Solar PV Panels in Field SE3 of the Solar PV Site would be available from West End Cottage through gappy	Long term and reversible	**Moderate Adverse (Significant)** for residents of West End Cottage and South Fork.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	boundary vegetation along West Lane. Filtered views through the existing mature hedgerow of Solar PV Panels within Field SE2 would be available from South Fork. With reference to **ES Volume I Chapter 14: Other Environmental Topics – Glint and Glare Assessment [EN010152/APP/6.1]** South Fork is identified as experiencing a low glint and glare impact prior to mitigation planting being established. Direct views towards Solar PV Panels within Field SE3 of the Solar PV Site would be possible from the singular north facing velux window of Richmond. There would be no views of the Scheme from West End Farm, Bungalow Farm and Meadow View.		Minor Adverse (Not Significant) for residents of Richmond Neutral for West End Farm, Bungalow Farm and Meadow View.
Residents of Riddings Farm and Fenwick Hall	Filtered views towards Solar PV Panels within Field SW2 of the Solar PV Site would be available from the south-facing first floor dormer window of the occupied property Riddings Farm. Views of the Scheme from Fenwick Hall would be screened by intervening vegetation and built form.	Long term and reversible	Minor Adverse (Not Significant) for residents of Riddings Farm. Neutral for residents of Fenwick Hall.
Residents along Lowgate	The backs of Solar PV Panels within the north of the Solar PV Site would be visible at a distance from south-facing windows of Desiderata and Lowgate Bungalow, and over	Long term and reversible	Minor Adverse (Not Significant) for residents of Desiderata and Lowgate Bungalow.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	the top of existing vegetation and agricultural buildings from south-facing first floor windows of Linton House Farm and Fir Tree Farm. For all other properties along Lowgate, views would remain unchanged.		Negligible Adverse (Not Significant) for residents of Linton House Farm and Fir Tree Farm. Neutral for all other residents along Lowgate.
Residents around Highgate	Distant views of the backs of Solar PV Panels within the north of the Solar PV Site would be possible from south-facing windows of some properties along Highgate, including 1-8 Highgate, Highgate House, Beechtree Farm and Highgate Farm. However, these views would be largely truncated by intervening vegetation and seen at a distance of at least 1.5 km.	Long term and reversible	Negligible Adverse (Not Significant) for residents of 1-8 Highgate, Highgate House, Beechtree Farm and Highgate Farm. Neutral for all other residents along Highgate.
Residents of Thorpe in Balne, Trumfleet and Hawkhouse Green	Grid Connection Cables would be underground and covering topsoil would match the appearance of arable fields in the winter. Replanting of hedgerows that were removed to accommodate the Grid Connection Cables would be yet to establish, as such, it would create a barely perceptible change to the existing views for Glebe House, Moss Villa, White House Farm and Wilsick House Farm.	Long term and reversible	Negligible Adverse (Not Significant) for residents of Glebe House, Moss Villa, White House Farm and Wilsick House Farm. Neutral for all other residents in Thorpe in Balne, Trumfleet and Hawkhouse Green.
Users of the PRoW network within the Solar PV Site	Solar PV Panels within the southwest of the Solar PV Site would be visible at close range from PRoW, causing a pronounced change to views.	Long term and reversible	**Major Adverse (Significant)** for users of PRoW Fenwick 10, 11, 12, 13, 14, 15, 16, Moss 5, and Sykehouse 29 due to this representing a particularly high

Receptor	Potential Impacts	Duration	Likely Significance of Effect
			magnitude of effect on the visual amenity of PRoW users.
Users of the PRoW network to the north of the Solar PV Site	Direct and open views would be afforded of the rear of Solar PV Panels within fields NW1, NW5, NW9, NW11, NE1, NE2, NE5, NE6, NE7 and NE9 of the Solar PV Site would be possible from PRoW 35.3/15/1, 35.3/15/2 and 35.3/8/1. Filtered views of Solar PV Panels within NE11 of the Solar PV Site would also be possible from PRoW 35.3/15/2. As the distance between the viewer and the Solar PV Site increases, the backs of panels would become less pronounced in views.	Long term and reversible	**Moderate Adverse (Significant)** for users of PRoW 35.3/15/1, 35.3/15/2 and 35.3/8/1. Minor Adverse (Not Significant) for users of PRoW 35.3/7/1. Negligible Adverse (Not Significant) for users of PRoW 35.3/10/2 and 35.3/9/1, and Pollington 4 and 5. Neutral for users of all other PRoW to the north of the Solar PV Site.
Users of the PRoW network to the south of the Solar PV Site	Direct and close views of the Solar PV Site would be afforded from the northern extents of Moss 6 and 7. For Moss 20 and 21, and Thorpe in Balne 5, 6, 7, 11 and 13, the Grid Connection Cables would be underground and covering topsoil would match that of arable fields in winter. Gaps where hedgerows were removed would be replanted, although this would be yet to establish.	Long term and reversible	**Moderate Adverse (Significant)** for users of PRoW Moss 6, 7. Negligible Adverse (Not Significant) for users of PRoW Moss 20 and 21, Thorpe in Balne 5, 6, 7, 11 and 13. Neutral for users of all other PRoW to the south of the Solar PV Site.
Users of the PRoW network to the east of the Solar PV Site	The Scheme would not be visible from PRoW to the east of the Solar PV Site.	N/A	Neutral
Users of the PRoW network to the west of the Solar PV Site	For most of PRoW to the west of Fenwick, views of the Scheme would be screened by intervening vegetation and built form. There	Long term and reversible	Negligible Adverse (Not Significant) for users of PRoW Fenwick 3, 4 and 7.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	would be limited change experienced from PRoW Fenwick 3, 4 and 7.		Neutral for users of all other PRoW to the west of the Solar PV Site.
Users of the Trans Pennine Trail and National Cycle Network Route 62	Views of the backs of Solar PV Panels within Fields NE9 and NE11 of the Solar PV Site would be visible in the distance for users travelling south on the Trans Pennine Trail between east of Balne Hall Wood and Topham, and momentarily at Crowcroft Lane, near Balne Lodge. Views from the wider route would remain largely unchanged and therefore the change to people's visual amenity would only be experienced for a short duration, reducing its visual impact.	Long term and reversible	Minor Adverse (Not Significant)
Users of the minor road network in and around Fenwick	The Scheme would not be visible from most of the minor road network around Fenwick. Brief glimpses and partially screened visibility would be afforded from parts of Fenwick Common Lane though gaps in hedgerows, the eastern extent of Shaw Lane and parts of Lawn Lane.	Long term and reversible	Minor Adverse (Not Significant) for people travelling on Fenwick Common Lane, Shaw Lane and Lawn Lane. Neutral for people travelling elsewhere across the road network in and around Fenwick.
Users of the minor road network to the south and east of the Solar PV Site (including Moss Road, Flashley Carr Lane and West Lane)	The Scheme would not be visible from most of the minor road network to the south of the Solar PV Site. Brief glimpses and partially screened visibility would be afforded from Moss Road and West Lane where intervening proposed vegetation would be establishing. For people travelling on Trumfleet Lane, Moss Lane and Marsh Road, the Grid Connection Cables would	Long term and reversible	Minor Adverse (Not Significant) for people travelling on West Lane. Negligible Adverse (Not Significant) for people travelling on Moss Road. Neutral for people travelling on all other roads to the south of the Solar PV Site.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	be underground and covering topsoil matching conditions of arable fields in winter, such that there would be no perceptible change for road users.		
Users of the minor road network to the north of the Solar PV Site (including Lowgate and Highgate)	The Scheme would not be visible from most of the minor road network to the north of the Solar PV Site. Brief glimpses and partially screened visibility would be afforded from Lowgate and the southern section of Cat Lane. Due to the distance between Highgate and the Solar PV Site, the Scheme would be barely perceptible in transitory views.	Long term and reversible	Minor Adverse (Not Significant) for people travelling on Lowgate. Negligible Adverse (Not Significant) for people travelling on Highgate and Cat Lane. Neutral for people travelling on all other roads to the north of the Solar PV Site.
Rail users travelling on the East Coast Main Line	Momentary views of Solar PV Panels within the northwest and southwest of the Solar PV Site, alongside views of the BESS Area within Field SW10 of the Solar PV Site, would be available in views east for passengers travelling between the Moss Level Crossing and the Lowgate Level Crossing. These views would be very short-lived and would occupy an extremely short section of the overall journey through the landscape experienced by passengers.	Long term and reversible	Negligible (Not Significant)

Operation and Maintenance Effects – Year 15

10.8.6 Table 10-7 records the potential landscape and visual effects of the Scheme in Year 15 of operation and maintenance. An assessment has been undertaken during Summer and Winter conditions to demonstrate the seasonality of effects. A full assessment of landscape effects can be found in **ES Volume III Appendix 10-5: Landscape Assessment [EN010152/APP/6.3]**. A full assessment of Visual Effects can be found in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**.

10.8.7 The assessment of effect takes into account the embedded mitigation measures which are set out in Section 10.7.

Table 10-7: Summary of Assessment of Effects – Landscape and Visual Amenity (Operation and Maintenance – Year 15, During Winter and Summer)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Landscape effects			
Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)	Planting proposed as part of the Scheme would have established, including structural vegetation and grassland beneath the Solar PV Panels. This would help to enclose the Scheme including Solar PV Panels, BESS Area, On-Site Substation and access tracks, from the immediate surrounding landscape, reducing perception of the Scheme across the LCA.	Long term and reversible	Minor Adverse (Not Significant) in Winter and Summer.
Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)	Replacement planting along the Grid Connection Corridor would have established. Ground cover would be returned to its previous use and therefore the Grid Connection Corridor would reflect the existing baseline, such that there would be no change in the landscape character.	Long term and reversible	Neutral in Winter and Summer.
Landscape Character Area F1: Tollbar Settled Clay Farmlands	The Grid Connection Cables would be complete and underground, therefore, the change would not be perceived from LCA F1.	N/A	Neutral in Winter and Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland	The Grid Connection Cables would be complete and underground, therefore, the change would not be perceived from LCA H2.	N/A	Neutral in Winter and Summer.
Landscape Character Type 23: Levels Farmland (LCT 23)	The perception of the Scheme would be greatly reduced from locations across the southern edge of LCT 23 in comparison to that at Year 1 due to the establishment of the proposed planting along the northern edge of the Solar PV Site.	Long term and reversible	Negligible Adverse (Not Significant) in Winter, reducing to Neutral in Summer.
Landscape Character Area 8C: M62 Corridor Hook to Pollington	The Scheme would not be perceptible from LCA 8C and therefore there would be no change.	N/A	Neutral in Summer and Winter.
LLCA 01 – Fenwick Village	At Year 15, planting proposed between the Solar PV Panels and the northeastern edge of the LLCA would have established, reducing perception of the Scheme across LLCA 01.	Long term and reversible	Minor Adverse (Not Significant) in Winter, reducing to Negligible Adverse (Not Significant) in Summer.
LLCA 02 – Fenwick Farmland	By Year 15, structural planting proposed as part of the Scheme, including hedgerow gapping up and new vegetation belts would have established. Grassland beneath the panels and across the ecological enhancement areas would also be established. This would enhance the landscape structure, whilst also improving ecological connections through the area. This would also further reduce the area	Long term and reversible	**Moderate Adverse (Significant)** in Winter and Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	from which the Scheme is perceptible, however, approximately two thirds of the LLCA would be occupied by the Solar PV Site, continuing to introduce an evident change in land use and character.		
LLCA 03 – River Went Farmlands (South)	Perception of the Scheme from areas outside of the Solar PV Site would reduce in comparison to the Year 1 assessment due to proposed hedgerow gapping up. This would make the Scheme barely perceptible from the landscape to the west of the Solar PV Site, and imperceptible from the landscape to the west of the East Coast Main Line.	Long term and reversible	Minor Adverse (Not Significant) in Winter and Summer.
LLCA 04 – Flashley Carr Farmlands	Planting proposed as part of the Scheme along the southern edge of Field SE3 and SE7 would have established. This would reduce the perception of the Scheme from parts of the LLCA not included within the Order limits. The Solar PV Site would continue to be imperceptible from most of LLCA 04.	Long term and reversible	Negligible Adverse (Not Significant) in Winter and Summer.
LLCA 05 – River Went Corridor	Structural planting proposed along the northern boundary of the Solar PV Site would have established and would enclose the river corridor on one side. This would reduce the perception of the adjacent Solar PV Panels and completely screen them in Summer. However, this	Long term and reversible	Minor Adverse (Not Significant) in Winter, reducing to Negligible (Not Significant) in Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	would reduce the visual openness of the river corridor on one side. Improvements to riparian habitats along the River Went would have established and would enhance the watercourse as an ecological corridor.		
LLCA 06 – River Went Farmlands (North)	Vegetation proposed along the northern boundary of the Solar PV Site would have established. This would enclose the Solar PV Site and reduce the perception of the Scheme from LLCA 06. Although this would shorten views south, it would reinforce the perception of a vegetated river corridor along the River Went.	Long term and reversible	Negligible Adverse (Not Significant) in Winter, reducing to Negligible Beneficial (Not Significant) in Summer due to the reinforcement of a vegetated river corridor offsetting the shortening of views south.
LLCA 07 – Topham and Eskholme Farmlands	Grassland seeded along the Fleet Drain would have matured and would provide greater ecological connections. The wider Scheme would be barely perceptible from the LLCA within the Solar PV Site and imperceptible from the wider LLCA during the Winter. It would be imperceptible from the LLCA during the Summer. There would be no alteration to the LLCA's key characteristics.	Long term and reversible	Negligible Adverse (Not Significant) in Winter, reducing to Negligible Beneficial (Not Significant) in Summer due to the ecological enhancements and lack of perception of the Scheme.
LLCA 08 – Moss Village	Replacement planting along the Grid Connection Corridor would have established and ground cover returned to its previous use. This would make the Grid Connection Corridor imperceptible	Long term and reversible	Negligible Adverse (Not Significant) in Winter, reducing to Neutral in Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	and reflect the existing baseline character. Landscape mitigation, including hedgerow thickening within the southwest of the Solar PV Site would have also established, therefore reducing the perception of infrastructure within the setting of the LLCA.		
LLCA 09 – Moss Farmlands	Planting proposed as part of the Scheme would have established, reducing the perception of change from across the LLCA.	Long term and reversible	Negligible Adverse (Not Significant) in Winter and Summer.
LLCA 10 – Sykehouse Medieval Farmlands	There would be no perception of the Scheme during the Winter or Summer from LLA 10.	N/A	Neutral in Winter and Summer.
LLCA 11 – Balne Farmlands	There would be no perception of the Scheme during Winter or Summer from LLCA 11.	N/A	Neutral in Winter and Summer.
Visual effects			
Residents of Fenwick	Planting proposed along the southern edge of Fields NW3 and NW4 would have established. This would permit heavily filtered views of the Solar PV Site from north-facing windows of properties along the northern side of Lawn Lane during the Winter. These views would be screened during Summer, therefore shortening existing views north.	Long term and reversible	Minor Adverse (Not Significant) for properties to the north of Lawn Lane in Winter, reducing to Negligible Adverse (Not Significant) in Summer. Negligible Adverse (Not Significant) for properties on the southeastern extent of Shaw Lane in Winter and Summer. Neutral for all other residents in Fenwick in Winter and Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	Planting proposed on the western edge of Field SW9, along Fenwick Common Drain and PRoW Fenwick 11, would have established. This would permit glimpses of Solar PV Panels through bare branches during Winter, however, would screen views of the Solar PV Site during Summer.		
Residents of Moss	Hedgerow gapping up around Fields SW11 and SW12 would screen and filter the Solar PV Site from most nearby properties. However, visibility of these elements would remain at an oblique angle from upper storey windows of Jet Hall Farm. With reference to **ES Volume I Chapter 14: Other Environmental Topics – Glint and Glare Assessment [EN010152/APP/6.1]** Jet Hall Farm, Sunrise Cottage and the Old School are all identified as experiencing no glint and glare impact once mitigation planting has established. New vegetation proposed along the southern edge of the Solar PV Site would have established and would largely screen views from properties around Moseley House Farm.	Long term and reversible	**Moderate Adverse (Significant)** for residents of Jet Hall Farm in Winter, reducing to Minor Adverse (Not Significant) in Summer. Negligible Adverse (Not Significant) for Harland House in Winter and Summer. Negligible Adverse (Not Significant) for residents of Lilac Cottage and properties around Moseley House Farm in Winter, reducing to Neutral in Summer. Neutral for all other residents in Moss in Winter and Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of Topham	The Scheme would not be visible for residents of Topham due to intervening mature vegetation and the orientation of buildings.	N/A	Neutral in Winter and Summer.
Residents of Sykehouse	The Scheme would not be visible for residents of Sykehouse due to intervening mature vegetation, particularly that along the disused railway.	N/A	Neutral in Winter and Summer.
Residents of Balne	The Scheme would not be visible for residents of Balne due to intervening distance, vegetation, built form and the raised embankment of the East Coast Main Line.	N/A	Neutral in Winter and Summer.
Residents of Askern	The Scheme would not be visible for residents in Askern due to intervening vegetation and distance.	N/A	Neutral in Winter and Summer.
Residents of Fenwick Grange	The Scheme would not be visible for residents of Fenwick Grange due to screening by farmyard buildings and surrounding vegetation.	N/A	Neutral in Winter and Summer.
Residents of West End	Proposed planting along the southern edge of Field SE3 and SE7 would filter and partially screen views of Solar PV Panels in residential views. With reference to **ES Volume I Chapter 14: Other Environmental Topics – Glint and Glare Assessment**	Long term and reversible	Minor Adverse (Not Significant) for residents of West End Cottage in Winter, reducing to Negligible Adverse (Not Significant) in Summer. Negligible Adverse (Not Significant) for residents of Richmond in Winter and Summer

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	[EN010152/APP/6.1], South Fork is identified as experiencing no glint and glare impact once mitigation planting has established.		Neutral for residents of West End Farm, Bungalow Farm and Meadow View in Winter and Summer.
Residents of Riddings Farm and Fenwick Hall	Hedgerow thickening proposed along Lawn Lane would have established. This double layer of vegetation would screen views of Solar PV Panels in Field SW2 from the south-facing first floor dormer window of Riddings Farm. Views from Fenwick Hall would remain unchanged.	Long term and reversible	Neutral for residents of Riddings Farm and Fenwick Hall in Winter and Summer.
Residents along Lowgate	By Year 15, planting proposed along the northern edge of the Solar PV Site would have established. During the Winter months, this would still permit some heavily filtered views of the backs of Solar PV Panels at a distance of approximately 750 m, making the Solar PV Site barely perceptible These would become screened in Summer. For all other properties along Lowgate, views would remain unchanged.	Long term and reversible	Negligible Adverse (Not Significant) for residents of Desiderata, Lowgate Bungalow, Linton House Farm and Fir Tree Farm in Winter and Summer. Neutral for all other residents along Lowgate in Winter and Summer.
Residents around Highgate	By Year 15, planting proposed along the northern edge of the Solar PV Site would have established. This would heavily filter distant views of Solar PV Panels from	N/A	Neutral in Winter and Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	properties along Highgate, making them unperceivable in views.		
Residents of Thorpe in Balne, Trumfleet and Hawkhouse Green	The Grid Connection Cables would be underground and ground cover matching that of the previous use. Replacement planting would be established, therefore creating an unperceivable change in views.	N/A	Neutral in Winter and Summer.
Users of the PRoW network within the Solar PV Site	Close and open views of Solar PV Panels within Fields SW1, SW3, SW4, SW5, SW6, SW7, SW8 and SW9 of the Solar PV Site would be remain from PRoW Fenwick 10, 12, 13, 14, 15 and 16, causing a pronounced change to views. Close views of the On-Site Substation would be possible through the bare branches of the proposed mitigation planting from PRoW Fenwick 14. During Summer, vegetation will reduced the extent to which solar infrastructure is visible, including the On-Site Substation. For users of Fenwick 11, proposed planting along Fenwick Common Drain would filter views of Solar PV Panels in Winter, screening them in Summer.	Long term and reversible	**Major Adverse (Significant)** for users of PRoW Fenwick 10, 12, 13, 14, 15, 16, Moss 5, and Sykehouse 29 in Winter, reducing to **Moderate Adverse (Significant)** in Summer. **Moderate Adverse (Significant)** for users of PRoW Fenwick 11 during Winter, reducing to Minor Adverse (Not Significant) in Summer.
Users of the PRoW network to the north of the Solar PV Site	Planting proposed along the northern boundary of the Solar PV Site would screen views of Solar PV Panels within	Long term and reversible	Minor Adverse (Not Significant) for users of PRoW 35.3/15/1, 35.3/15/2 and 35.3/8/1 in

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	the Summer. However, during the Winter months, filtered views of panels within the north of the Solar PV Site would be possible from PRoW 35.3/15/1, 35.3/15/2 and 35.3/8/1. Solar PV Panels would become increasingly less perceptible with distance from the Solar PV Site.		Winter, reducing to Negligible Adverse (Not Significant) in Summer. Negligible Adverse (Not Significant) for users of PRoW 35.3/7/1, 35.3/10/2 and 35.3/9/1 and Pollington 4 and 5 in Winter, reducing to Neutral in Summer. Neutral for users of all other PRoW to the north of the Solar PV Site in Winter and Summer.
Users of the PRoW network to the south of the Solar PV Site	Views of the Solar PV Site would be possible from the northern extents of Moss 6 and 7 due to gaps in the vegetation where the PRoW enter the Solar PV Site. During the Summer, vegetation along the southern boundary of the Solar PV Site would mostly screen these views, however, they would be partially filtered during the Winter months. Along the Grid Connection Corridor, the change would be imperceivable due to established replacement vegetation and ground cover being returned to its previous use.	Long term and reversible	Minor Adverse (Not Significant) for users of PRoW Moss 6 and 7 in Winter and Summer. Neutral for users of all other PRoW to the south of the Solar PV Site in Winter and Summer.
Users of the PRoW network to the east of the Solar PV Site	The Scheme would not be visible from PRoW to the east of the Solar PV Site due to intervening mature vegetation.	N/A	Neutral in Winter and Summer.
Users of the PRoW network to the west of the Solar PV Site	Planting proposed along Fenwick Common Drain would have established and would screen and filter views of the	Long term and reversible	Negligible Adverse (Not Significant) for users of PRoW Fenwick 3 and 7 in Winter, reducing to Neutral in Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	Solar PV Site such that it becomes barely perceptible during Winter from the momentarily elevated views as the PRoW cross the East Coast Main Line. The Scheme would become screened during Summer. For users of all other PRoW to the west of the Solar PV Site, views of the Scheme would be screened by intervening vegetation and built form.		Neutral for users of all other PRoW to the west of the Solar PV Site during Winter and Summer.
Users of the Trans Pennine Trail and National Cycle Network Route 62	By Year 15, planting proposed along the northern boundary of the Solar PV Site would have established, filtering views of Solar PV Panels in Fields NE9 and NE11 of the Solar PV Site during the Winter and screening views in Summer.	Long term and reversible	Negligible Adverse (Not Significant) in Winter, reducing to Neutral in Summer.
Users of the minor road network in and around Fenwick	Planting proposed along Fenwick Common Drain would filter any glimpsed views of Solar PV Panels within Field SW9 of the Solar PV Site from Fenwick Common Lane and Shaw Lane. Hedgerow thickening along Lawn Lane would also partially filter glimpsed views of the backs of panels within Field SW1 and SW2 of the Solar PV Site, although momentary glimpses through field entrances would remain.	Long term and reversible	Negligible Adverse (Not Significant) for people travelling on Lawn Lane in Winter and Summer. Negligible Adverse (Not Significant) for people travelling on Fenwick Common Lane and Shaw Lane in Winter, reducing to Neutral in Summer. Neutral for people travelling elsewhere across the road network in and around Fenwick in Winter and Summer.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Users of the minor road network to the south and east of the Solar PV Site (including Moss Road, Flashley Carr Lane and West Lane)	Planting proposed along the southern edge of Fields SE3 and SE7 would have established and would filter and screen views of the Solar PV Site in fleeting views from Moss Road and West Lane. Views from roads that adjoin the Grid Connection Corridor would remain unchanged from the existing baseline.	Long term and reversible	Negligible Adverse (Not Significant) for people travelling on West Lane and Moss Road in Winter, reducing to Neutral in Summer. Neutral for people travelling on all other roads to the south of the Solar PV Site in Winter and Summer.
Users of the minor road network to the north of the Solar PV Site (including Lowgate and Highgate)	Although bare during the Winter, new planting proposed along the northern boundary of the Solar PV Site would heavily filter longer distance views of Solar PV Panels from Lowgate and the southern extent of Cat Lane. It would make the scheme unperceivable in longer views from Highgate.	Long term and reversible	Negligible Adverse (Not Significant) from Lowgate and Cat Lane in Winter, reducing to Neutral in the Summer. Neutral for people travelling on all other roads to the north of the Solar PV Site in Winter and Summer.
Rail users travelling on the East Coast Main Line	Proposed planting along the eastern edge of the Solar PV Site would further filter views of Solar PV Panels and the BESS Area in momentary and very short-lived views for users travelling at speed along the East Coast Main Line.	Long term and reversible	Negligible Adverse (Not Significant) in Winter, reducing to Neutral in Summer.

Decommissioning Effects

10.8.8 Table 10-8 records the potential landscape and visual effects arising from decommissioning of the Scheme during Winter conditions. A full assessment of landscape effects can be found in **ES Volume III Appendix 10-5: Landscape Assessment [EN010152/APP/6.3]**. A full assessment of Visual Effects can be found in **ES Volume III Appendix 10-6: Visual Assessment [EN010152/APP/6.3]**.

Table 10-8: Summary of Assessment of Effects – Landscape and Visual Amenity (Decommissioning, During Winter)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Landscape effects			
Landscape Character Area F2: Owsten to Sykehouse Settled Clay Farmlands (LCA F2)	The activity of decommissioning would be similar to that of construction; however, the On-Site Substation and Grid Connection Cables would remain in situ, meaning the extent of land affected and the extent of construction activity across LCA F2 would be reduced. Furthermore, the perception of decommissioning from the wider LCA would be reduced as a result of mature mitigation planting, which would be retained during decommissioning.	Short term and reversible	Minor Adverse (Not Significant)
Landscape Character Area E2: West Don and Dun River Carrlands (LCA E2)	The Grid Connection Cables would not be removed during the decommissioning process and therefore there would be no perceptible change to the landscape character.	N/A	Neutral
Landscape Character Area F1: Tollbar Settled Clay Farmlands	The Grid Connection Cables would not be removed during the decommissioning process and therefore there would be no perceptible change to the landscape character.	N/A	Neutral
Landscape Character Area H2: Blaxton to Stainforth Sandland Heaths and Farmland	The Grid Connection Cables would not be removed during the decommissioning process and therefore there would be no perceptible change to the landscape character.	N/A	Neutral
Landscape Character Type 23: Levels Farmland (LCT 23)	Decommissioning activity within the Solar PV Site would be perceptible from the southern edge of LCT 23, however, at a reduced level than construction due	Short term and reversible	Negligible Adverse (Not Significant)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	to the mature planting along the northern boundary of the Solar PV Site. It would be imperceptible from the vast majority of LCT 23 due to intervening undulating landform and vegetation. There would be no discernible change to the character of LCT 23 during decommissioning.		
Landscape Character Area 8C: M62 Corridor Hook to Pollington	Decommissioning activity would not be perceptible from LCA 8C and therefore there would be no change.	N/A	Neutral
LLCA 01 – Fenwick Village	Decommissioning effects would be similar in scale and activity to the construction effects, however, the now established vegetation between the Solar PV Site and the edge of Fenwick would reduce the perception of activity from the wider LLCA.	Short term and reversible	Minor Adverse (Not Significant)
LLCA 02 – Fenwick Farmland	The effects of decommissioning would be similar to those of construction; however, the On-Site Substation would remain in place, meaning the extent of land affected would be slightly less than during construction. The perception of decommissioning would also be slightly less due to the more established vegetation structure which would be retained.	Short term and reversible	**Major Adverse (Significant)** due to the particularly disruptive nature of decommissioning activity in this part of the Solar PV Site and the proportion of the LLCA hosting decommissioning activity.
LLCA 03 – River Went Farmlands (South)	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would be retained once the Solar PV Panels are removed. Decommissioning activity would be imperceptible	Short term and reversible	**Moderate Adverse (Significant)**

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	from parts of the LLCA to the west of the East Coast Main Line.		
LLCA 04 – Flashley Carr Farmlands	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the proposed vegetation along the southern edge of Fields SE3 and SE7 which would have matured. This would be retained once the Solar PV Panels are removed.	Short term and reversible	Minor Adverse (Not Significant)
LLCA 05 – River Went Corridor	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the proposed vegetation along the northern edge of the Solar PV Site which would have matured. This would be retained once the Solar PV Panels are removed.	Short term and reversible	Minor Adverse (Not Significant)
LLCA 06 – River Went Farmlands (North)	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the proposed vegetation along the northern edge of the Solar PV Site which would have matured. This would be retained once the Solar PV Panels are removed.	Short term and reversible	Negligible Adverse (Not Significant)
LLCA 07 – Topham and Eskholme Farmlands	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would be retained once the Solar PV Panels are removed.	Short term and reversible	Negligible Adverse (Not Significant)

Receptor	Potential Impacts	Duration	Likely Significance of Effect
LLCA 08 – Moss Village	The effects of decommissioning would be similar to those of construction; however, the perception of decommissioning would be reduced due to the more established vegetation structure which would be retained once the Solar PV Panels are removed. The Grid Connection Cables would not be removed during the decommissioning process.	Short term and reversible	Minor Adverse (Not Significant)
LLCA 09 – Moss Farmlands	The effects of decommissioning within the southwest of the Solar PV Site would be similar to those of construction in that there would be a general increase in activity in a small part of the LLCA, as well as an increase in HGV movement. However, the change would be reduced from construction given the more established vegetation. The perception of decommissioning would be also be reduced from parts of the LLCA outside the Solar PV Site due to the established vegetation along Ell Wood and Fenwick Grange Drain. The Grid Connection Cables would not be removed during the decommissioning process and therefore there would be no change along the Grid Connection Corridor.	Short term and reversible	Minor Adverse (Not Significant)
LLCA 10 – Sykehouse Medieval Farmlands	Decommissioning activity would not be perceptible from LLCA 10 and therefore there would be no change.	N/A	Neutral
LLCA 11 – Balne Farmlands	Decommissioning activity would not be perceptible from LLCA 11 and therefore there would be no change.	N/A	Neutral

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Visual effects			
Residents of Fenwick	Planting proposed as part of the Scheme along the southern edge of Fields NW3 and NW4 would filter views of decommissioning activity for properties on the northern side of Lawn Lane. Proposed planting along Fenwick Common Drain would also filter oblique views for properties along the southeastern end of Shaw Lane.	Short term and reversible	Minor Adverse (Not Significant) for residents of properties to the north of Lawn Lane. Negligible Adverse (Not Significant) for residents of properties on the southeastern extent of Shaw Lane. Neutral for all other residents in Fenwick.
Residents of Moss	Filtered views of decommissioning would be afforded at an oblique angle from first floor, west-facing windows of Jet Hall Farm. Heavily filtered views of decommissioning activity would also be possible from some windows of Harland House, Lilac Cottage, properties around Moseley House Farm, Sunrise Cottage and the Old School. For all other residents within Moss, views of decommissioning activity would be screened by intervening vegetation or built form.	Short term and reversible	**Moderate Adverse (Significant)** for residents of Jet Hall Farm. Neutral for all other residents in Moss.
Residents of Topham	Decommissioning activity would not be visible for residents of Topham due to intervening mature vegetation.	N/A	Neutral
Residents of Sykehouse	Taller plant associated with the decommissioning process in Fields SE6 and SE7 of the Solar PV Site would be seen extending above the treeline in views west from first floor windows of properties along the junction of West Lane, Bate Lane and Broad Lane.	Short term and reversible	Negligible Adverse (Not Significant) for residents of properties along the junction of West Lane, Bate Lane and Broad Lane.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	This would represent a barely perceptible change to existing views across adjacent agricultural fields.		Neutral for all other residents in Sykehouse.
Residents of Balne	Decommissioning activity within the Solar PV Site would not be visible for residents in Balne due to the intervening distance, vegetation, and the raised embankment of the East Coast Main Line	N/A	Neutral
Residents of Askern	For residents along Park Avenue and Swan Court, views of decommissioning activity within the Solar PV Site would be limited to taller plant equipment extending above the treeline in the background of views east. This would create a barely perceptible change in the composition of the view.	Short term and reversible	Negligible Adverse (Not Significant) for properties along Park Avenue and Swan Court. Neutral for all other residents in Askern.
Residents of Fenwick Grange	There would be no views of decommissioning activity within the Solar PV Site from Fenwick Grange due to intervening buildings within the farmyard and vegetation.	N/A	Neutral
Residents of West End	Direct, heavily filtered views of decommissioning activity within Field SE3 within the Solar PV Site would be possible from north facing windows of West End Cottage. This would include taller plant extending above the treeline of the intervening mature vegetation. Similar views would also be afforded from the singular north facing velux window of Richmond bungalow.	Short term and reversible	Minor Adverse (Not significant) for residents of West End Cottage Negligible Adverse (Not Significant) for residents of Richmond Neutral for residents of West End Farm, Bungalow Farm and Meadow View.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
Residents of Riddings Farm and Fenwick Hall	Hedgerow gapping up proposed along Lawn Lane would have established. This double layer of mature vegetation would screen views of decommissioning activity within Field SW2 from the south-facing first floor dormer window of Riddings Farm. Views from Fenwick Hall would remain unchanged.	Short term and reversible	Neutral for residents of Riddings Farm and Fenwick Hall.
Residents along Lowgate	Views of decommissioning activity would be heavily filtered and viewed at a distance for residents of Desiderata, Lowgate Bungalow, Linton House Farm and Fir Tree Farm. Decommissioning activities within the Solar PV Site would not be visible for all other residents along Lowgate.	Short term and reversible	Negligible Adverse (Not Significant) for residents of Desiderata, Lowgate Bungalow, Linton House Farm and Fir Tree Farm. Neutral for all other residents along Lowgate.
Residents around Highgate	Planting proposed as part of the Scheme along the northern edge of the Solar PV Site would filter distant views of Solar PV Panels from properties along Highgate, making them unperceivable in the landscape.	N/A	Neutral
Residents of Thorpe in Balne, Trumfleet and Hawkhouse Green	The Grid Connection Cables would not be removed at decommissioning and therefore there would be no change from baseline conditions.	N/A	Neutral
Users of the PRoW network within the Solar PV Site	Close views of decommissioning activity, including vehicle movement and the removal of Solar PV Panels and Solar PV Mounting Structures, would be available from PRoW Fenwick 10, 12, 13, 14, 15 and 16, as well as from Sykehouse 29 and Moss 5.	Short term and reversible	**Major Adverse (Significant)** for users of PRoW Fenwick 10, 12, 13, 14, 15, 16, Moss 5, and Sykehouse 29 due to this representing a particularly high magnitude of effect on the visual amenity of PRoW users.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	Partially filtered views of decommissioning activity through intervening vegetation would also be available from PRoW Fenwick 11.		**Moderate Adverse (Significant)** for users of PRoW Fenwick 11.
Users of the PRoW network to the north of the Solar PV Site	Proposed vegetation along the northern edge of the Solar PV Site would have matured and would provide partial screening to decommissioning activity. This would become increasingly less perceivable from PRoW further north.	Short term and reversible	Minor Adverse (Not Significant) for users of PRoW 35.3/15/1, 35.3/15/2 and 35.3/8/1. Negligible Adverse (Not Significant) for users of PRoW 35.3/7/1, 35.3/10/2, 35.3/9/1, and Pollington 4 and 5. Neutral for users of all other PRoW to the north of the Solar PV Site.
Users of the PRoW network to the south of the Solar PV Site	Filtered views of decommissioning activity within the Solar PV Site would be possible from the northern end of Moss 6 and 7. The Grid Connection Cables would not be removed at decommissioning. Elsewhere from the PRoW network to the south of the Solar PV Site, views would remain unchanged.	Short term and reversible	**Moderate Adverse (Significant)** for users of PRoW Moss 6 and 7. Neutral for users of all other PRoW to the south of the Solar PV Site.
Users of the PRoW network to the east of the Solar PV Site	Decommissioning activity would not be visible from PRoW to the east of the Solar PV Site due to intervening mature vegetation.	N/A	Neutral
Users of the PRoW network to the west of the Solar PV Site	Heavily filtered views of decommissioning activity within the Solar PV Site would be possible as Fenwick 3 and 7 cross the locally elevated East Coast Main Line. Occasional glimpses of larger plant extending above intervening vegetation would also be possible for short periods of time. Views from the	Short term and reversible	Negligible Adverse (Not Significant) for users of PRoW Fenwick 3 and 7. Neutral for users of all other PRoW to the west of the Solar PV Site.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	rest of the PRoW network to the west of the Solar PV Site would be screened by intervening vegetation and built form.		
Users of the Trans Pennine Trail and National Cycle Network Route 62	Brief and barely perceptible views of decommissioning activity within the Solar PV Site would be possible from a short stretch of the Trans Pennine Trail for users travelling south between Balne Hall Wood and Topham. This would be limited to heavily filtered glimpses of activity through bare branches of vegetation along the northern edge of the Solar PV Site.	Short term and reversible	Negligible Adverse (Not Significant)
Users of the minor road network in and around Fenwick	Brief, oblique glimpses of decommissioning activity would be possible through bare vegetation along Fenwick Common Drain where there are field entrances along Fenwick Common Lane and at the eastern extent of Shaw Lane. These would form a brief part of transient views. Partially filtered glimpses of activity in Field SW1, SW2 and NW4 of the Solar PV Site would also be possible from the eastern extent of Lawn Lane.	Short term and reversible	Negligible Adverse (Not Significant) for people travelling on Fenwick Common Lane, Shaw Lane and Lawn Lane. Neutral for people travelling elsewhere across the road network in and around Fenwick.
Users of the minor road network to the south and east of the Solar PV Site (including Moss Road, Flashley Carr Lane and West Lane)	Brief and filtered views of decommissioning activity would be possible through bare vegetation along the southern boundary of Field SE3 of the Solar PV Site and through the existing field entrance to Field SE7. Glimpses of taller plant associated with decommissioning activity within the Solar PV Site would also be possible from Moss Road, including between Moss Level Crossing and the western edge	Short term and reversible	Negligible Adverse (Not Significant) for people travelling on West Lane and Moss Road. Neutral for people travelling on all other roads to the south of the Solar PV Site.

Receptor	Potential Impacts	Duration	Likely Significance of Effect
	of Moss, as well as between the eastern edge of Moss and Moss Farm.		
Users of the minor road network to the north of the Solar PV Site (including Lowgate and Highgate)	Branches of the proposed planting along the northern boundary of the Solar PV Site would heavily filter any views of decommissioning activity from Lowgate and the southern section of Cat Lane. From Highgate, views would be filtered at a distance making decommissioning activity unperceivable in the background of views.	Short term and reversible	Negligible Adverse (Not Significant) for people travelling on Lowgate and Cat Lane. Neutral for people travelling on all other roads to the north of the Solar PV Site.
Rail users travelling on the East Coast Main Line	Planting proposed as part of the Scheme would help to filter views of decommissioning activity from the East Coast Main Line. However, the locally elevated position of the railway means some activity within the Solar PV Site, including taller plant, would still be barely perceptible in very short-lived views from the train between the Moss Level Crossing and the Lowgate Level Crossing.	Short term and reversible	Negligible Adverse (Not Significant)

10.9 Additional Mitigation and Enhancement Measures

10.9.1 The Scheme has undergone a series of design iterations to embed mitigation measures into the design.

10.9.2 The assessment provided in this ES chapter has shown that significant landscape and visual effects may occur as a result of the change in land use and the presence of the Solar PV Panels and associated structures. In the long term, these significant effects would reduce as mitigation planting matures; however, some significant effects would remain. In such instances, it is typical to introduce additional mitigation measures to reduce the level of effect.

Additional Mitigation

10.9.3 Throughout the EIA process, design iterations have been undertaken and incorporated into the embedded design to reduce identified significant effects as far as practicable.

10.9.4 Additional mitigation to reduce identified significant effects on residential receptors has been considered and includes:

a. Specimen tree and shrub planting, or the planting of ‘ready hedges’ at an approximate height of 1.5m at time of planting in sensitive locations. This would reduce the time between planting during the construction phase and establishment when the planting would provide an effective screen, usually Year 15. These locations include, as set out within the **Framework LEMP [EN010152/APP/7.14]**:

    i. Along the southern edge of Fields NW3 and NW4 to help provide early screening for properties along the northern side of Lawn Lane in Fenwick;

    ii. Along the southern edge of Field SE3 to help provide early screening for properties at West End; and

    iii. Along the southern and western edge of Field SW12 to provide early screening for properties along London Lane and Fenwick Common Lane.

10.10 Residual Effects

10.10.1 The additional mitigation and enhancement measures identified above, namely the focussed planting of ‘ready hedges’ nearby to sensitive receptors, would not reduce the residual effect experienced by residential receptors to the north of Lawn Lane, at West End, along London Lane and along Fenwick Common Lane during construction or Year 1 operation and maintenance. However, it would allow for the screening effects of Year 15 to be delivered sooner.

10.10.2 A summary of residual significant landscape and visual effects is provided in Table 10-9 below.

Table 10-9: Summary of Residual Significant Effects – Landscape and Visual Amenity

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
Construction – Significant Landscape Effects					
Construction	Change to character of LLCA 02.	Major Adverse (Significant)	See Section 10.9	Major Adverse (Significant)	St, T, D
Construction	Change to character of LCA F2. Change to character of LLCA 01. Change to character of LLCA 03. Change to character of LLCA 05. Change to character of LLCA 08. Change to character of LLCA 09.	Moderate Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	St, T, D
Construction – Significant Visual Effects					
Construction	Change to visual amenity experienced by people walking on PRoW within the Solar PV Site.	Major Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	St, T, D

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
Construction	Change to visual amenity experienced by residents to the north of Lawn Lane.	Moderate Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	St, T, D
	Change to visual amenity experienced by residents of the east of Moss, Lilac Cottage, Jet Hall Farm, Sunrise Cottage and the Old School.				
	Change to visual amenity experienced by residents of West End Cottage and South Fork.				
	Change to visual amenity experienced by residents of Glebe House.				
	Change to visual amenity experienced by people walking on PRoW along the River Went to the north of the Solar PV Site.				
	Change to visual amenity experienced by people walking on PRoW to the				

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
	immediate south of the Solar PV Site and along the Grid Connection Corridor.				
Operation and Maintenance Year 1 – Significant Landscape effects					
Operation and Maintenance – Year 1	Change to character of LCA F2 Change to character of LLCA 01 Change to character of LLCA 02 Change to character of LLCA 03 Change to character of LLCA 05	Moderate Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	Lt, T, D
Operation and Maintenance Year 1 – Significant Visual effects					
Operation and Maintenance – Year 1	Change to visual amenity experienced by people walking on PRoW within the Solar PV Site.	Major Adverse (Significant)	See Section 10.9	Major Adverse (Significant)	Lt, T, D
Operation and Maintenance – Year 1	Change to visual amenity experienced by residents	Moderate Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	Lt, T, D

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
	to the north of Lawn Lane. Change to visual amenity experienced by residents of Lilac Cottage, Jet Hall Farm, Sunrise Cottage and the Old School. Change to visual amenity experienced by residents of West End Cottage and South Fork Change to visual amenity experienced by people walking on PRoW along the River Went to the north of the Solar PV Site. Change to visual amenity experienced by people walking on PRoW to the immediate south of the Solar PV Site.				
Operation and Maintenance Year 15 – Significant Landscape effects					

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
Operation and Maintenance – Year 15	Change to character of LLCA 02 during Summer and Winter.	Moderate Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	Lt, T, D
Operation and Maintenance Year 15 – Significant Visual effects					
Operation and Maintenance – Year 15	Change to visual amenity experienced by people walking on PRoW within the Solar PV Site during Winter only.	Major Adverse (Significant)	See Section 10.9	Major Adverse (Significant)	Lt, T, D
Operation and Maintenance – Year 15	Change to visual amenity experienced by residents of Jet Hall Farm in Winter only. Change to visual amenity experienced by people walking on PRoW within the Solar PV Site during Summer only.	Moderate Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	Lt, T, D
Decommissioning – Significant Landscape Effects					
Decommissioning	Change to character of LLCA 02.	Major Adverse (Significant)	See Section 10.9	Major Adverse (Significant)	St, T, D

Development Stage	Environmental Effect (taking account of embedded mitigation)	Classification of Effect	Additional Mitigation Requirements (if required)	Significance of Residual Effect	Nature of Effect (Lt/Mt/St and P/T and D/In)
Decommissioning	Change to character of LLCA 03.	Moderate Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	St, T, D
Decommissioning – Significant Visual Effects					
Decommissioning	Change to visual amenity experienced by people walking on PRoW within the Solar PV Site.	Major Adverse (Significant)	See Section 10.9	Major Adverse (Significant)	St, T, D
Decommissioning	Change to visual amenity experienced by residents of Jet Hall Farm. Change to visual amenity experienced by people walking on PRoW to the immediate south of the Solar PV Site.	Moderate Adverse (Significant)	See Section 10.9	Moderate Adverse (Significant)	St, T, D

Note: Lt = long term, Mt = medium term, St = short term, P = permanent, T = temporary, D = direct and In = indirect

10.11 Cumulative Effects

10.11.1 This section assesses the potential effects of the Scheme in combination with the potential effects of other proposed and committed development (referred to as 'cumulative developments') within the surrounding area.

10.11.2 A list of the cumulative developments to be considered in combination with the Scheme was prepared and shared with City of Doncaster Council, North Yorkshire Council and East Riding of Yorkshire Council and is produced in **ES Volume I Chapter 15: Cumulative Effects and Interactions [EN010152/APP/6.1]** and presented in **ES Volume II Figure 15-3: Location of Short List Schemes [EN010152/APP/6.2]**. The assessment has been made with reference to the methodology and guidance set out in **ES Volume I Chapter 5: Environmental Impact Assessment Methodology [EN010152/APP/6.1]**.

10.11.3 The cumulative assessment identified, for each receptor, the areas where the predicted effects of the Scheme could interact with effects arising from other cumulative developments on the same landscape or visual receptor on a spatial and/or temporal basis.

10.11.4 Cumulative landscape effects may result where effects arising from several developments, typically of the same typology, combine, increasing the prevalence of such developments within a landscape to an extent where the new form of development may become a defining characteristic. The likely significance of these effects relates to the number of similar developments affecting the landscape, their scale, their inter-relationship and the sensitivity and ability of the particular landscape receptor to accommodate this type of development.

10.11.5 Cumulative visual effects may result where effects arising from several development, typically of the same typology, combine to increase the appearance and dominance of the developments within the visual amenity experienced by a receptor. The likely significance of these effects relates to the number of developments visible and their scale, location, and inter-relationship to each other within the view.

10.11.6 Where the Scheme has been found to result in a negligible effect on landscape character or visual amenity, the associated receptor is not considered further as part of the cumulative assessment.

10.11.7 This cumulative assessment considers effects that may arise from other solar, battery and energy developments. With reference to **ES Volume II Figure 15-3: Location of Short List Schemes [EN010152/APP/6.2]**, these include:

a. City of Doncaster Ref. 23/00537/FULM: Energy Hub including BESS, substation and associated infrastructure. Located approximately 0 km from the Scheme (ID1).

b. City of Doncaster Ref. 23/012441/FULM: Installation of underground cable. Located approximately 0 km from the Scheme (ID 2).

c. City of Doncaster Ref. 21/02567/FULM: 49.9MW solar farm and battery storage. Located approximately 4.4 km from the Scheme (ID 3).

d. City of Doncaster Ref. 23/01746/FULM: 180MW battery energy facility. Located approximately 0.5 km from the Scheme (ID 6).

e. City of Doncaster Ref. 20/01774/TIPA: Energy recovery facility including 95m stack. Located approximately 1.7 km from the Scheme (ID 9).

f. City of Doncaster Ref.23/01082/SCRE: 61.7ha solar farm and energy storage development. Located approximately 1.7 km from the Scheme (ID 11).

g. City of Doncaster Ref. 22/02088/FULM: 2.5MW Solar PV Panels and 0.9MW green hydrogen plant. Located approximately 3.9 km from the Scheme (ID 36).

10.11.8 Given the uncertainty associated with the programme of cumulative developments, it has been assumed, for the assessment of potential cumulative effects on landscape character and visual amenity, that construction of cumulative developments would be concurrent with construction of the Scheme. This would represent an unlikely worst-case scenario and if construction were to not occur simultaneously, then the reported cumulative effect would be reduced.

Cumulative Landscape Effects

10.11.9 Potential cumulative landscape effects which may arise during the construction, operation and maintenance, and decommissioning phases of the Scheme are outlined in Table 10-10.

10.11.10 LCA F2 – Owston to Sykehouse Settled Clay Farmlands and LCA E2 – West Don and Dun River Carrlands have been scoped into the cumulative landscape assessment as they host, or are in proximity to, one or more of the cumulative developments listed above. Other LCAs that host or are in proximity to a cumulative development have been scoped out of the cumulative assessment as they have been assessed has having a negligible adverse effect or less from the Scheme, as set out above. This is because it is unlikely that the addition of a negligible adverse effect from the Scheme to the cumulative landscape effect of other developments would lead to a significant cumulative landscape effect.

10.11.11 The Scheme would result in minor adverse, or greater, effects on LLCAs 01, 02, 03, 04, 05, 06, 07, 08, and 09. None of the cumulative developments are located within or close to these LLCAs and therefore there would be no cumulative landscape effects on these LLCAs. As such, the LLCAs are not taken forward to assessment in Table 10-10.

Cumulative Visual Effects

10.11.12 Potential cumulative visual effects which may arise during the construction, operation and maintenance, and decommissioning phases of the Scheme are outlined in Table 10-10.

10.11.13 Visual receptors that were identified as having the potential for intervisibility between the Scheme and the cumulative developments listed above include residents of Thorpe in Balne, users of the PRoW network to the south of the Solar PV Site, users of the Trans Pennine Trail, and users of the minor road network to the south and east of the Solar PV Site.

10.11.14 Two grid connection options exist for the Scheme, the underground Grid Connection Cables along the Grid Connection Corridor which connects at the Existing National Grid Thorpe Marsh Substation, or a line drop off one of the existing pylons within the Solar PV Site.

10.11.15 The potential line drop would be located at an existing pylon in Field SE2 of the Solar PV Site. The overhead wires connecting the pylon down to the cable sealing end compound, fences and buzz bars would form part of a separate application to the Scheme.

10.11.16 This cumulative assessment is based on the worst-case scenario of the Grid Connection Corridor option. The exception to this is for users of PRoW Sykehouse 29 who would experience a very minor increase in infrastructure associated with the line drop option in views north. Most of the above ground changes associated with the line drop option would be screened by Solar PV Panels within Field SE2, as such, it is unlikely that the level of visual effect would be greater than that already experienced as a result of the Scheme.

Table 10-10: Cumulative Effects Assessment

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
Landscape Receptors					
LCA F2: Owsten to Sykehouse Settled Clay Farmlands	Medium-High	Construction **Moderate Adverse (Significant)**	36 - 22/02088/FULM	Cumulative development 22/02088/FULM (2.5MW Solar PV Panels and 0.9MW green hydrogen plant) would be located on the edge of LCA F2. Given the small scale of the cumulative development relative to the Scheme, and the intervening distance of at least 5 km between the Grid Connection Corridor and Solar PV Site, the construction of both developments at the same time would result in **no significant additional cumulative effect** on LCA F2 over and above those identified for the Scheme in isolation. No other cumulative developments would be located within, or in close proximity to, LCA F2.	Construction **Moderate Adverse (Significant)**
		Year 1 **Moderate Adverse (Significant)**		The Grid Connection Cables would be underground during operation. Therefore, potential for cumulative landscape effects would only arise from the Solar PV Site. Given the distance between the Solar PV Site and cumulative development 22/02088/FULM (a minimum of approximately 6 km), and the small scale of	Year 1 **Moderate Adverse (Significant)**

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
				the cumulative development relative to the Scheme, there would be **no additional cumulative landscape effects** over and above those identified for the Scheme in isolation.	
		Year 15 Minor Adverse (Not Significant)		For the reasons provided for the Year 1 assessment, there would be **no additional cumulative landscape effects** at Year 15 during Winter and Summer over and above those identified for the Scheme in isolation.	Year 15 Minor Adverse (Not Significant)
		Decommissioning Neutral		For the reasons provided for the construction assessment, there would be **no significant additional cumulative landscape effects** during decommissioning over and above those identified for the Scheme in isolation.	Decommissioning Neutral
LCA E2: West Don and Dun River Carrlands	Medium	Construction Minor Adverse (Not Significant)	1 – 23/00537/FULM 2 - 23/012441/FULM 11 - 23/01082/SCRE 6 - 23/01746/FULM	Parts of three cumulative developments are located within LCA E2, primarily relating to cable connections with the Existing National Grid Thorpe Marsh Substation, including 23/01082/SCRE (solar farm and energy storage), 23/00537/FULM (energy hub), and 23/012441/FULM (underground cable) Cumulative development 23/01746/FULM is located outside of LCA E2 in the adjacent LCA F1, adjacent to cumulative development 23/01082/SCRE. Given the short duration	Construction Minor Adverse (Not Significant)

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
				required to install the Grid Connection Cables for the Scheme, the duration of any cumulative effects occurring at the same time as the construction of 23/01082/SCRE, 23/00537/FULM, 23/012441/FULM and 23/01746/FULM would also be very short in duration, such that it is unlikely that the level of effect would be greater than that reported for each of the developments in isolation. Therefore, there would be **no significant additional cumulative landscape effects** over and above those identified for the Scheme in isolation.	
		Year 1 Negligible Adverse (Not Significant)		The Grid Connection Cables would be underground during operation. Therefore, potential for cumulative landscape effects would only arise from the Solar PV Site. Given the distance between the Solar PV Site and cumulative developments 23/01082/SCRE and 23/01746/FULM (a minimum of approximately 6.2 km), there would be **no additional cumulative landscape effects** over and above those identified for the Scheme isolation.	Year 1 Negligible Adverse (Not Significant)
		Year 15 Neutral		For the reasons provided for the Year 1 assessment, there would be **no cumulative**	Year 15 Neutral

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
				landscape effects at Year 15 during Winter and Summer.	
		Decommissioning Minor Adverse (Not Significant)		The Grid Connection Cables would not be removed during decommissioning, therefore, for the reasons provided for the Year 1 and Year 15 assessment, there would be **no additional cumulative landscape effects** during decommissioning over and above those identified for the Scheme in isolation.	Decommissioning Minor Adverse (Not Significant)
Visual Receptors					
Residents of Thorpe in Balne, Trumfleet and Hawhouse Green	Medium	Construction **Moderate Adverse (Significant)**	1 – 23/00537/FULM 2 - 23/012441/FULM 3 - 21/02567/FULM 6 - 23/01746/FULM 9 - 20/01774/TIPA	Construction associated with the Grid Connection Corridor would result in a Moderate Adverse (Significant) visual effect for Glebe House, Trumfleet Lane. There would be no views of construction activity associated with the cumulative developments from Glebe House due to intervening distance and vegetation. Therefore, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation**.**	Construction **Moderate Adverse (Significant)** Minor Adverse (Not Significant)

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
		Minor Adverse (Not Significant)	11 - 23/01082/SCRE 36 - 22/02088/FULM	Construction associated with the Grid Connection Corridor would result in a Minor Adverse (Not Significant) visual effect for Moss Villa, White House Farm and Wilsick House Farm. There would be no views of construction activity associated with the cumulative developments from Glebe House due to intervening distance and vegetation. Therefore, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation**.**	Minor Adverse (Not Significant)
		Year 1 Negligible Adverse (Not Significant)		The Grid Connection Cables would be underground during operation. Therefore, potential for cumulative visual effects would only arise from the Solar PV Site. As there is no views of the Solar PV Site for properties in Thrope in Balne, Trumfleet and Hawhouse Green, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation.	Year 1 Negligible Adverse (Not Significant)
		Year 15 Neutral		For the reasons provided for the Year 1 assessment, there would be **no cumulative visual effects** at Year 15 during Winter and Summer.	Year 15 Neutral

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
		Decommissioning Neutral		The Grid Connection Cables would not be removed during decommissioning, therefore, for the reasons provided for the Year 1 and Year 15 assessment, there would be **no cumulative visual effects** during decommissioning.	Decommissioning Neutral
Users of the PRoW network to the south of the Solar PV Site	Low-Medium	Construction **Moderate Adverse (Significant)**	1 – 23/00537/FULM 2 - 23/012441/FULM 3 - 21/02567/FULM 6 - 23/01746/FULM 9 - 20/01774/TIPA 11 - 23/01082/SCRE 36 - 22/02088/FULM	Construction activity associated with the Solar PV Site and the Grid Connection Corridor would create a Moderate Adverse (Significant) visual effect for users of Moss 6, 7, 20 and 21, and Thorpe in Balne 5, 6, 7, 11 and 13. There would be the potential for views of construction activity associated with the Grid Connection Corridor alongside distant views towards the construction of the 95m stack in 20/01774/TIPA and the energy hub of 23/00537/FULM from Thorpe in Balne 11 and 13. However, this would be experienced at an approximate distance of 3.5 km. There may also be brief glimpses of taller plant associated with the construction of 23/01746/FULM and 23/01082/SCRE. However, these would be barely perceptible in views. Given the short duration required to install the Grid Connection Cables for the Scheme, the duration of any cumulative effects	Construction **Moderate Adverse (Significant)**

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
				occurring at the same time as the construction of 0/01774/TIPA would also be very short in duration, such that it is unlikely that the level of effect would be greater than that reported for each of the developments in isolation. Overall, there would be **no significant additional cumulative visual effects** over and above those identified for the Scheme in isolation. There would be no views of construction activity associated with other cumulative developments from other PRoW which experience visibility with the construction of the Scheme.	
		Year 1 **Moderate Adverse (Significant)**		The Scheme would give rise to Moderate Adverse (Significant) visual effects for users of Moss 6 and 7. There would be no visibility of the cumulative developments from these PRoW due to intervening distance and vegetation. Therefore, there would be **no additional visual cumulative effects** over and above those identified for the Scheme in isolation.	Year 1 **Moderate Adverse (Not Significant)**
		Negligible Adverse (Not Significant)		The Grid Connection Cables would be underground and therefore representing a negligible adverse effect for users of Moss 20	Negligible Adverse (Not Significant)

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
				and 21, and Thorpe in Balne 5, 6, 7, 11 and 13 whilst replacement planting establishes. There would be no views of the Solar PV Site from these PRoW, such that there would be **no additional visual cumulative effects** over and above those identified for the Scheme in isolation.	
		Year 15 Minor Adverse (Not Significant)		For the reasons provided for the Year 1 assessment, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation at Year 15 during Winter and Summer.	Year 15 Minor Adverse (Not Significant)
		Decommissioning **Moderate Adverse (Significant)**		The Grid Connection Cables would not be removed during decommissioning, therefore, for the reasons provided for the Year 1 and Year 15 assessment, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation during decommissioning.	Decommissioning
Users of the Trans Pennine Trail and National Cycle Route 62	Medium-High	Construction Minor Adverse (Not Significant)	1 – 23/00537/FULM 2 - 23/012441/FULM 3 - 21/02567/FULM	There would be the potential for barely perceptible glimpses of taller plant associated with the construction of 23/01746/FULM, 23/01082/SCRE, 23/00537/FULM and the 95m stack of 20/01774/TIPA from sections of the Trans Pennine Trail between Tilts and Thorpe in Balne. Although these views would	Construction Minor Adverse (Not Significant)

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
			6 - 23/01746/FULM 9 - 20/01774/TIPA 11 - 23/01082/SCRE 36 - 22/02088/FULM	not be combined with views of construction activity along the Grid Connection Corridor, they would form part of a sequence of views as users pass through the landscape. Given the short duration required to install the Grid Connection Cables for the Scheme, the duration of any cumulative effects occurring at the same time as the construction of the cumulative developments would also be very short in duration, such that it is unlikely that the level of effect would be greater than that reported for each of the developments in isolation. Overall, there would be **no significant additional cumulative visual effects** over and above those identified for the Scheme in isolation.	
		Year 1 Minor Adverse (Not Significant)		There would be the potential for momentary glimpsed views towards the 95m stack as part of 20/01774/TIPA from the Trans Pennine Trail around Thorpe in Balne. During operation, the Grid Connection Cables would be underground and therefore would cause no visual change around Thorpe in Balne. From this point, it would be at least 12.5 km along the Trans Pennine Trail before the Scheme would be visible and therefore it is not considered a sequential visual effect.	Year 1 Minor Adverse (Not Significant)

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
				Overall, there would be **no additional cumulative visual effect** over and above those identified for the Scheme in isolation.	
		Year 15 Negligible Adverse (Not Significant) Neutral in Summer		For the reasons provided for the Year 1 assessment, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation at Year 15 during Winter or Summer.	Year 15 Negligible Adverse (Not Significant) in Winter Neutral in Summer
		Decommissioning Negligible Adverse (Not Significant)		The Grid Connection Cables would not be removed during decommissioning, therefore, for the reasons provided for the Year 1 and Year 15 assessment, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation during decommissioning.	Decommissioning Negligible Adverse (Not Significant)
Users of the minor road network to the south and east of the Solar PV Site	Low-Medium	Construction Minor Adverse (Not Significant)	1 – 23/00537/FULM 2 - 23/012441/FULM 3 - 21/02567/FULM 6 - 23/01746/FULM	Construction activity associated with the Solar PV Site and the Grid Connection Corridor would create a Minor Adverse (Not Significant) visual effect for people travelling on Moss Road, West Lane, Trumfleet Lane, Moss Lane and Marsh Road. There would be no views of the construction of the cumulative developments from Moss Road or West Lane and therefore there would be **no additional**	Construction Minor Adverse (Not Significant)

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
			9 - 20/01774/TIPA 11 - 23/01082/SCRE 36 - 22/02088/FULM	**cumulative visual effects** over and above those identified for the Scheme in isolation. There would be the potential for views of construction activity associated with the Grid Connection Corridor alongside distant views towards the construction of the 95m stack as part of 20/01774/TIPA from Marsh Road. There may also be brief glimpses of taller plant associated with the construction of 23/01746/FULM, 23/00537/FULM, and 23/01082/SCRE, however, these would be barely perceptible in views, alongside construction activity associated with the grid connection for 23/01082/SCRE. Given the short duration required to install the Grid Connection Cables for the Scheme, the duration of any cumulative effects occurring at the same time as the construction of the cumulative developments would also be very short in duration, such that it is unlikely that the level of effect would be greater than that reported for each of the developments in isolation. Overall, there would be **no significant additional cumulative visual effects** over and above those identified for the Scheme in isolation.	

Receptor	Receptor Sensitivity	Residual Effect	Cumulative Developments Included in Assessment	Description of Cumulative Effect	Residual Cumulative Effect
		Year 1 Minor Adverse (Not Significant) and Negligible Adverse (Not Significant)		There would be no views of the cumulative developments during operation and maintenance from Moss Road or West Lane. The Grid Connection Cables would be underground during operation. Therefore, the potential for cumulative visual effects would only arise from the Solar PV Site. As there are no views of the Solar PV Site for users of Marsh Road, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation.	Year 1 Minor Adverse (Not Significant) and Negligible Adverse (Not Significant)
		Year 15 Negligible Adverse (Not Significant) in Winter Neutral in Summer		For the reasons provided for the Year 1 assessment, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation at Year 15 during Winter and Summer.	Year 15 Negligible Adverse (Not Significant) in Winter Neutral in Summer
		Decommissioning Negligible Adverse (Not Significant)		The Grid Connection Cables would not be removed during decommissioning, therefore, for the reasons provided for the Year 1 and Year 15 assessment, there would be **no additional cumulative visual effects** over and above those identified for the Scheme in isolation during decommissioning.	Decommissioning Negligible Adverse (Not Significant)

10.12 Summary and Conclusions

10.12.1 The assessment of likely significant effects (with embedded mitigation in place) has determined that the Scheme is likely to result in significant adverse, short-term landscape effects on LCA F2, LLCA 01, LLCA 02, LLCA 03, LLCA 05, LLCA 08, and LLCA 09 during construction. These reduce to not significant for LLCA 08 and LLCA 09 at Year 1 of operation and maintenance, and at Year 15 for LCA F2, LLCA 01, LLCA 03, and LLCA 05. Likely significant landscape effects occur for LLCA 02 and LLCA 03 during decommissioning.

10.12.2 Significant landscape effects would remain at Year 15 operation and maintenance for LLCA 02 due to the Solar PV Site occupying a large portion of the LLCA, creating an inevitable change in land use and character.

10.12.3 The assessment of likely significant effects (with embedded mitigation in place) has determined that the Scheme is likely to result in significant adverse, short-term visual effects during construction for users of the PRoW network within the Solar PV Site, as well as for users of the PRoW network to the immediate south of the Solar PV Site and along the River Went to the north of the Solar PV Site. These reduce to not significant for users of the PRoW network to the immediate south of the Solar PV Site and along the River Went to the north of the Solar PV Site at Year 15 of operation and maintenance. During decommissioning, PRoW to the immediate south of the Solar PV Site would likely experience significant visual effects.

10.12.4 Significant visual effects for residential receptors during construction are likely to occur for properties along the northern side of Lawn Lane in Fenwick, residents on the eastern edge of Moss, Jet Hall Farm, Lilac Cottage, Sunrise Cottage, Old School, West End Cottage, South Fork, and Glebe House. These effects reduce to not significant at Year 1 of operation and maintenance for Glebe House and residents on the eastern edge of Moss, and Year 15 for properties along the northern side of Lawn Lane in Fenwick, Lilac Cottage, Sunrise Cottage, Old School, West End Cottage, and South Fork. This is due to the establishment of proposed mitigation, enhancement and replacement planting, as well as the management of existing hedgerows. It is worth nothing that the use of ‘ready hedges’ as additional mitigation would see these visual effects reduce sooner than Year 15 for residents on the northern side of Lawn Lane, Lilac Cottage, Sunrise Cottage, Old School and West End Cottage.

10.12.5 Significant visual effects would remain at year 15 of operation and maintenance for users of the PRoW network within the Solar PV Site due to the proximity of solar infrastructure in views, as well as for residents of Jet Hall Farm due to its proximity to the Solar PV Site and availability of elevated views from first floor windows.

10.12.6 Overall, cumulative effects for all identified landscape and visual receptors do not increase as a result of the introduction of the Scheme alongside the identified short list of cumulative developments. This is due to the intervening vegetation and distance between the Solar PV Site and the cumulative developments. Cumulative developments tend to be in proximity to the Grid Connection Corridor. However, as construction activity would be very short-lived and Grid Connection Cables underground during operation, there

would be no significant cumulative landscape or visual effects associated with the Grid Connection Corridor.

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