STEPHENSON HALLIDAY

Planning, Landscape & Environment
an RSK company

HOB LANE SOLAR FARM

Landscape and Visual Appraisal

Hob Lane Solar Farm Ltd.

March 2025

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	Name	Date
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1 INTRODUCTION

1.1 Background

1.1.1 Stephenson Halliday was commissioned in February 2025 to prepare a landscape and visual appraisal (LVA) of the proposed solar farm development on land north and south of Rake Lane, Dunham-on-the-Hill, to the immediate south of J14 of the M56 (the Proposed Development), by Belltown Power on behalf of Hob Lane Solar Farm Ltd. This assessment forms part of a suite of documents supporting the application for this development proposal.

1.1.2 This LVA defines the existing landscape and visual baseline environments; assesses their sensitivity to change; describes the key landscape and visual related aspects of the Proposed Development; describes the nature of the anticipated changes, and assesses the effects arising during construction, operation and decommissioning.

1.1.3 The LVA considers the potential effects upon:

- landscape fabric;
- landscape character;
- the special qualities of any landscape designations; and
- visual receptors including residential, transport and recreational receptors.

1.1.4 The LVA has been undertaken in accordance with published best practice; namely the Guidelines for Landscape and Visual Impact Assessment (Third Edition), Landscape Institute and IEMA 2013 (GLVIA3) and associated technical guidance notes published by the Landscape Institute (referenced as appropriate in Appendix 1).

1.1.5 Although linked, landscape and visual effects are considered separately. Landscape effects derive from changes in the landscape fabric, which may result in changes to the character, whereas visual effects are the effect of these changes as experienced by people (visual receptors). Effects on the setting of any heritage assets are dealt with as part of a separate heritage report.

1.2 The Site and Proposals

1.2.1 Figure 1 - Site Context places the Proposed Development within its local context. The development proposals are presented on drawing 1008/05/03/1000 Rev 01 – Landscape Mitigation Plan. The site occupies 77 hectares of mixed arable and pastoral fields bound by mature trees and hedgerows to the immediate south of J14 of the M56 which is currently used for a mix of both arable and pastoral farming. Much of the site sits within an area that contains the remains of part of a Second World War ammunition storage facility (ROF Dunham-on-the-Hill), which comprises various buildings widely dispersed across the site. This is a non-designated heritage asset.

1.2.2 The Site is flat in nature with minimal changes in level. It forms part of a wider flat area of farmland located between the M56 in the west and southwest, Hob Lane and the B5132 to the south, the Mid-Cheshire railway line to the east and the A5117 to the north.

1.2.3 The proposal involves the construction and operation of a 30MWac solar photovoltaic (PV) farm and associated infrastructure and landscape and ecological enhancements, for a proposed operational period of 40 years. It is spread across 10 field parcels and would be accessed along Common Lane off the A5117 to the northeast of the Site. The main elements of the proposed works within the Site are:

- Panels with a maximum height of 3.2m sitting at a 20-degree angle
- Substation compound (40m x 25m)
- Substation (30m length, 8m width and 5m height)
- Inverter / transformer stations (14m length, 5m width and 4m height)
- CCTV spaced along fencing
- 2.5m high deer fencing
- Internal crushed aggregate access routes to access the 10 field parcels

1.3 Competence

1.3.1 This report along with the design and mitigation of the Proposed Development has been prepared by Chartered Landscape Architects at Stephenson Halliday. The Practice has over 24 years of experience working on renewable energy proposals throughout the UK. Key individuals working on this project have over 20 years of experience as chartered landscape architects.

1.3.2 The Practice is a Landscape Institute and IEMA registered practice and all work is prepared and reviewed internally by senior highly experienced landscape planners with Public Inquiry experience.

1.3.3 To inform the assessment, a site visit was made to various locations within the study area including, but not restricted to, representative viewpoints by Stephenson Halliday's assessment team during February 2024.

1.4 Study Area

1.4.1 It is accepted practice within landscape and visual appraisal work that the extent of the study area for a development proposal is broadly defined by the visual envelope of the Proposed Development. In this case a study area of 3km has been used (as shown on Figures 2-6). This study area is adequate to identify all non-negligible effects on landscape and views given the height, scale and mass of the Proposed Development, local topography, built form and woodland belts within the study area.

1.5 Report Structure and Terminology

1.5.1 This report is structured as set out in the table of contents.

1.5.2 Supporting appendices have been prepared that supplement the sections regarding methodology, planning policy and baseline. The appendices are important to the assessment and should be read alongside this report.

1.5.3 Key terms used within the assessment are described in Appendix 1.

2 METHODOLOGY

2.1.1 This section provides a summary of the methodology adopted for the LVA. Full details of the assessment methodology, including assessment criteria, are provided in Appendix 1.

2.1.2 In accordance with GLVIA3, the level of landscape and visual effects is determined by considering, in tandem, the sensitivity of landscape and visual receptors (landscape elements, landscape character areas, landscape designations and groups of people who may be affected by changes in visual amenity) and the magnitude of effect arising from the Proposed Development.

2.2 Sensitivity

2.2.1 Sensitivity (described as High, Medium or Low) is judged by combining component judgements about the value and susceptibility of the receptor, as illustrated in Table 1.. An explanation of how susceptibility and value has been determined is provided in Appendix 1. Detailed susceptibility and value criteria for landscape receptors are established in Appendix 2 whilst detailed visual susceptibility and value criteria are set out in Appendix 1. It should be noted that intermediate assessments of value or susceptibility may be applied (e.g. High/Medium, Medium/Low or National/Regional, Regional/Community). Likewise, when combining susceptibility and value to determine sensitivity, an intermediate assessment is adopted where overall sensitivity is judged to lie between levels. In all instances, professional judgement is employed, and the tables below should not be interpreted rigidly to give a specific answer. A slightly greater weight is given to susceptibility in judging the sensitivity of visual receptors.

Table 1 Landscape Sensitivity

LANDSCAPE RECEPTORS		Susceptibility		
		High	**Medium**	**Low**
Value	**National**	High	High/Medium	Medium
	Regional	High/Medium	Medium	Medium/Low
	Community	Medium	Medium/Low	Low

Table 2 Visual Sensitivity

VISUAL RECEPTORS		Susceptibility		
		High	**Medium**	**Low**
Value	**National**	High	High/Medium	Medium
	Regional	High/Medium	High/Medium	Medium/Low
	Community	High/Medium	Medium	Low

2.3 Magnitude

2.3.1 The magnitude of effect arising from the Proposed Development (described as Substantial, Moderate, Slight or Negligible) is assessed in terms of its scale, geographic extent of the area or receptor that is influenced, and its duration.

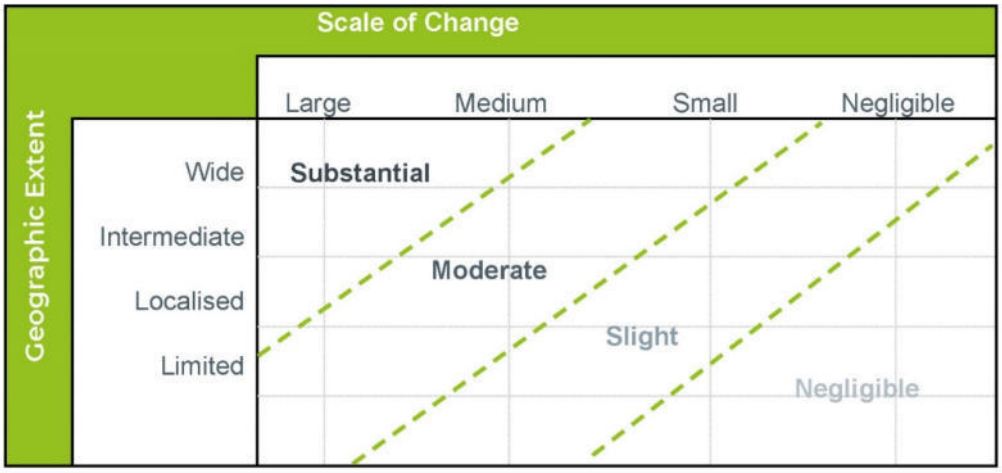
2.3.2 Scale of change (expressed as Large, Medium, Small, Negligible) is the first and primary factor in determining magnitude. Geographical extent and duration of the effect are modifying factors to the overall magnitude judgement which may be higher if the effect is particularly widespread and/or long lasting, or lower if it is constrained in geographic extent and/or timescale.

2.3.3 The diagrams presented in Plate 1 below illustrate in outline how these two modifying factors are considered in a two-stage process and further explanation is provided in Appendix 1. Plate 1 is not intended to be interpreted rigidly as a chart to provide definitive answers; professional judgement is employed as appropriate to arrive at an overall judgement on the magnitude of effect. A definition of the terms used in the diagrams in Plate 1 is provided in Appendix 1.

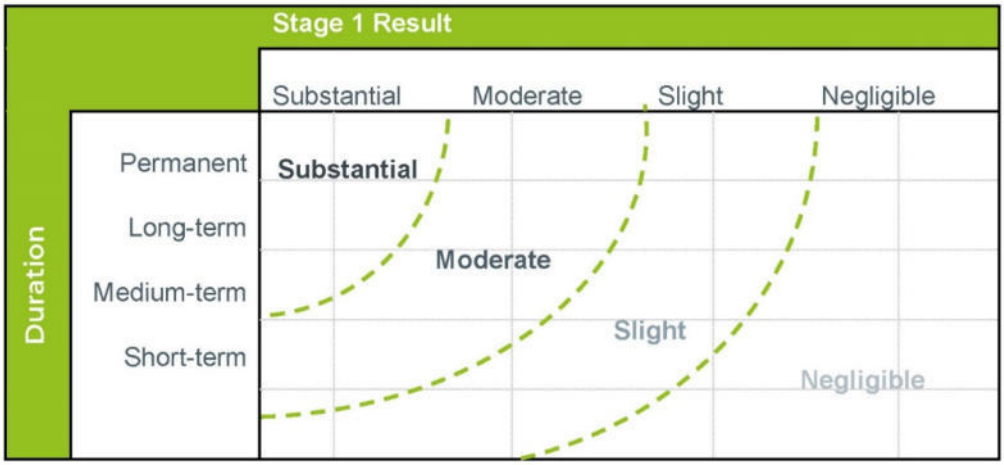
2.3.4 Where magnitude of effect (or other judgements) is judged to lie between levels, an intermediate assessment is adopted and is expressed as e.g. Moderate/slight.

Plate 1 - Illustration of how Magnitude of Effect is Established

Stage 1 - Modifying Influence of Geographic Extent on Magnitude of Effect



Stage 2 - Modifying Influence of Duration on Magnitude of Effect



2.4 Level of Effects

2.4.1 The significance of a landscape or visual effect (described as Major, Moderate, Minor or Negligible) is assessed using professional judgement, combining the sensitivity of the receptor with the predicted magnitude of effect, as summarised in Table 3. Table 3 is not used as a prescriptive tool and illustrates the typical outcomes, allowing for the exercise of professional judgement. In some instances, a particular parameter may be considered as having a determining effect on the analysis. Where significance is judged to lie between levels, an intermediate assessment will be adopted for example 'Moderate/Minor'. Such a judgement indicates that the significance of effect is less than Moderate but more than Minor.

Table 3 Significance

		Magnitude of Change			
		Substantial	**Moderate**	**Slight**	**Negligible**
Receptor Sensitivity	**High**	Major	Major/Moderate	Moderate	Minor
	Medium	Major/Moderate	Moderate	Moderate/Minor	Minor/Negligible
	Low	Moderate	Moderate/ Minor	Minor	Negligible

Beneficial/Adverse

2.4.2 Landscape and visual effects can be beneficial or adverse and in some instances may be considered neutral. Neutral effects are those which overall are neither adverse nor positive but may incorporate a combination of both. Whether an effect is beneficial, neutral or adverse is identified based on professional judgement.

2.4.3 However, for the avoidance of doubt, in this assessment it has been assumed that where new infrastructure is introduced into the landscape or views, this will generally constitute an adverse effect. Any variation from this stance will be clearly justified.

2.5 Residential Amenity

2.5.1 As set out within LI Technical Guidance Note 02//19 'Residential Visual Amenity Assessment (RVAA)':

"Changes in views and visual amenity are considered in the planning process. In respect of private views and visual amenity, it is widely known that no one has 'a right to a view.' …

It is not uncommon for significant adverse effects on views and visual amenity to be experienced by people at their place of residence as a result of introducing a new development into the landscape. In itself this does not necessarily cause particular planning concern. However, there are situations where the effect on the outlook / visual amenity of a residential

property is so great that it is not generally considered to be in the public interest to permit such conditions to occur where they did not exist before."

2.5.2 This report does not include an assessment of residential visual amenity as it is judged that the proposed development would not give rise to effects meeting the threshold described above.

2.6 Distances

2.6.1 Where distances are given in the assessment, these are approximate distances between the nearest part of the site and the nearest part of the receptor in question, unless explicitly stated otherwise.

2.7 Visual Aids

2.7.1 Annotate Viewpoint Photographs (Type 1 Visualisations) have been provided for each of the assessment viewpoints used in this LVA and have been included as appendix 3 which accompanies the LVA. These accord with guidance for 'Type 1' visualisations as defined in Landscape Institute Technical Guidance Note 06/19 (TGN 06/19).

2.7.2 Table 1 of TGN 06/19 confirms that Type 1 visualisations are appropriate for planning applications for most non-EIA developments accompanied by LVA, where there are concerns about landscape and visual effects and effective mitigation is required.

2.7.3 The visualisations are considered adequate to enable Council officers / members and members of the public who wish to comment on the application to understand the context of the Proposed Development in key views.

3 LEGISLATIVE, PLANNING POLICY AND GUIDANCE

3.1.1 This assessment has been undertaken in accordance with the following legislation, and with regard to the following planning policy and guidance.

3.1.2 It should be noted that this report does not assess the compliance of the Proposed Development against relevant planning policy. Such an assessment is presented in the accompanying Planning, Design and Access Statement.

Legislation

- European Landscape Convention[1];

[1] European Landscape Convention. Available online: https://www.coe.int/en/web/conventions/full-list?module=treaty-detail&treatynum=176

- The Town and Country Planning (Tree Preservation) (England) Regulations[2]; and
- The Hedgerows Regulations 1997[3].

National Planning Policy

- National Policy Statement for Renewable Energy Infrastructure (NPS EN-3) (2023) (designated in January 2024)[4]. Section 2.5 provides a consideration of good design for energy infrastructure, Section 2.10 relates to solar photovoltaic generation and paragraphs 2.10.93 to 2.10.101 specifically relate to the landscape and visual impacts of solar generation;
- National Planning Policy Framework (NPPF) (2024)[5]. Sections 12 and 15 are of relevance to this assessment.

Local Planning Policy

- Chester West and Chester Local Plan (Part 1) Strategic Policies (29th Jan 2015)[6]. Within it the following policies are considered relevant to this report:
  - Policy ENV 2 – Landscape – seeks to wherever possible enhance landscape character and local distinctiveness with development taking full account of the characteristics of the development site, its relationship with its surroundings and where appropriate views into, over and out of the site. In addition, features of landscape quality should be incorporated into any design
  - Policy ENV 3 – Green Infrastructure (GI)– Supports the creation, enhancement and management of a network of high quality multi-functional GI through development creating new or enhancing existing GI, along with increased planting of trees and woodlands.
  - Policy ENV 5 – Historic Environment – States that development should safeguard or enhance both designated and non-designated heritage assets
  - Policy ENV 7 – Alternative Energy Supplies – Supports renewable proposals where there are no unacceptable impacts on landscape, visual or residential amenity.

[2] The Town and Country Planning (Tree Preservation) (England) Regulations. Available online: https://www.legislation.gov.uk/uksi/2012/605/contents

[3] The Hedgerows Regulations 1997. Available online: https://www.legislation.gov.uk/uksi/1997/1160/contents/made

[4] Department for Energy Security and Net Zero (2023) (designated in January 2024). National Policy Statement for Renewable Energy Infrastructure (EN-3). Available online: https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3

[5] Ministry of Housing, Communities and Local Government (2024) National Planning Policy Framework. Available online: https://assets.publishing.service.gov.uk/media/675abd214cbda57cacd3476e/NPPF-December-2024.pdf

[6] Chester West and Chester Local Plan (Part One) Strategic Policies (2015). Available online: https://consult.cheshirewestandchester.gov.uk/kse/event/24907/section/ID-3252242-60254#ID-3252242-60254

- Chester West and Chester Local Plan (Part Two) Land Allocations and Detailed Policies[7]. Within this the following policies are considered relevant to this report:
    - Policy GBC 2 – Protection of Landscape – where development requires a countryside location it must protect and wherever possible enhance landscape character and distinctiveness, integrate into the landscape character of the area and be designed to take account of guidance in the Landscape Strategy through appropriate siting, scale layout, design, and landscape treatment.
    - Policy DM2 – Impact on Residential Amenity – All new development should safeguard quality of life for residents with development only supported where it does not result in significant adverse impact on residential amenity.
    - Policy DM3 – Design, Character and Visual Amenity – development will be expected to achieve a high standard of design that respects the character and protects visual amenity of the local area.

Guidance

- Planning Practice Guidance: Natural Environment (2016, updated 2024)[8]. 008, 036 and 037 are relevant.
- Planning Practice Guidance: Design – Process and Tools (2014, updated 2019)[9]. Paragraph 001 is relevant.
- Planning Practice Guidance: Renewable and Low Carbon Energy (2015, updated 2023)[10]. Paragraphs 005, 007 and 013 are relevant.
- Landscape Institute and Institute of Environmental Management and Assessment. Guidelines for Landscape and Visual Impact Assessment (Third Edition) (2013)[11].
- Landscape Institute Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment (Third Edition) (2024) (GLVIA3)[12].

[7] Chester West and Chester Local Plan (Part Two) Land Allocations and Detailed Policies (2019). Available online: https://consult.cheshirewestandchester.gov.uk/kse/event/34617/section/s1561545628369#s1561545628369

[8] Planning Practice Guidance: Natural Environment (2016, updated 2024). Available online: https://www.gov.uk/guidance/natural-environment

[9] Planning Practice Guidance: Design – Process and Tools (2014, updated 2019). Available online: https://www.gov.uk/guidance/design

[10] Planning Practice Guidance: Renewable and Low Carbon (2015, updated 2023). Available online: https://www.gov.uk/guidance/renewable-and-low-carbon-energy

[11] Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) (2013). Landscape Institute and Institute of Environmental Management and Assessment

[12] Landscape Institute Notes and Clarifications on Aspects of Guidelines for Landscape and Visual Impact Assessment Third edition (GLVIA3). Landscape Institute (2024). Available online: https://www.landscapeinstitute.org/technical-resource/notes-and-clarifications-on-aspects-of-the-3rd-edition-guidelines-on-landscape-and-visual-impact-assessment-glvia3-litgn-2024-01/

- Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals (2019)[13].
- Landscape Institute Technical Guidance Note 02/21: Assessing landscape value outside national designations (2021)[14].
- Landscape Institute Technical Guidance Note 02/19: Residential Visual Amenity Assessment (2019)[15].
- Landscape Institute Technical Guidance Note 04/20: Infrastructure (2020)[16].
- Natural England. An Approach to Landscape Character Assessment (2014)[17].
- Natural England. An Approach to Landscape Sensitivity Assessment (2019)[18].

4 BASELINE

4.1 Introduction

4.1.1 The landscape baseline forms the basis for the identification and description of the landscape changes that may result from the Proposed Development. It establishes the character of the area, based on reference to published characterisation studies, designated landscapes, and other sensitive landscape receptors identified via GIS datasets and other desk-based research. The landscape baseline also references the physical landscape elements within the Site.

4.1.2 The visual baseline is informed by the landscape baseline. The visual baseline (existing views and visual amenity) forms the basis for the identification and description of the visual changes that may result from the Proposed Development. It establishes the areas from where the Proposed Development may be visible, the different groups of people who may experience views of the Proposed Development, the locations or viewpoints where they would be affected and the nature of the views at those locations. It also establishes the

[13] Technical Guidance Note 06/19: Visual Representation of Development Proposals. Landscape Institute (2019). Available online: https://www.landscapeinstitute.org/visualisation/

[14] Technical Guidance Note 02/21: Assessing landscape value outside national designations. Landscape Institute (2021). Available online: https://www.landscapeinstitute.org/publication/tgn-02-21-assessing-landscape-value-outside-national-designations/

[15] Technical Guidance Note 02/19: Residential Visual Amenity Assessment. Landscape Institute (2019). Available online: https://www.landscapeinstitute.org/technical-resource/rvaa/

[16] Technical Guidance Note 04/20: Infrastructure. Landscape Institute (2020). Available online: https://www.landscapeinstitute.org/technical-resource/infrastructure-guidance/

[17] An Approach to Landscape Character Assessment. Natural England (2014). Available online: https://www.gov.uk/government/publications/landscape-character-assessments-identify-and-describe-landscape-types

[18] An Approach to Landscape Sensitivity Assessment. Natural England (2019). Available online: https://www.gov.uk/government/publications/landscape-sensitivity-assessment

relative number of receptors within each group of people who are likely to be affected by changes in their views or visual amenity.

4.1.3 Field surveys have been undertaken to confirm and ground truth the desk-based findings and to verify the extent of potential visibility.

4.1.4 An overview of the baseline study results is provided in this section with the full baseline description of the individual landscape and visual receptors being provided alongside the assessment in Section 6 for ease of reference.

4.2 Landscape Character

4.2.1 The landscape character of England was assessed and classified as part of the Character of England project published by the then Countryside Agency in 1999 and updated between 2011 and 2014 by Natural England. The studies identified a number of National Character Areas (NCA). The NCA profiles are now available online and are updated on an ongoing basis as new information becomes available. Local authorities throughout England have also assessed and classified local Landscape Character Areas or Types (LCA/ LCT) within their authority boundaries.

4.2.2 The assessment of landscape effects uses this work as the starting point for identifying the landscape baseline and for the basis of the assessment of effects on landscape character.

4.2.3 Published landscape character documents which are relevant to the study area have been reviewed and these documents have helped to inform the description of the existing baseline. The following documents have been referenced within the landscape character assessment:

- National Character Area (NCA) 61: Shropshire, Cheshire and Staffordshire Plain[19];
- A Landscape Strategy for Cheshire West and Chester Borough (2016).[20]
- Landscape Sensitivity Study and Guidance on Wind and Solar Photovoltaic Developments (March 2016)[21]

National Landscape Character

4.2.4 Nationally the Site and the study area are in NCA 61 Shropshire, Cheshire and Staffordshire Plain with some identified key elements of the wider NCA, as described by Natural England:

[19] National Character Area Profile 61: Shropshire, Cheshire and Staffordshire Plain, Natural England. Available online: https://nationalcharacterareas.co.uk/shropshire-cheshire-and-staffordshire-plain/

[20] A Landscape Strategy for Cheshire West and Chester Borough, Bayou Bluenvironment / The Planning and Environment Studio Ltd. (2016)

[21] Landscape Sensitivity Study and Guidance on Wind and Solar Photovoltaic Developments (March 2016) - Cheshire West and Chester Council

'This is an expanse of flat or gently undulating, lush, pastoral farmland…. A series of small sandstone ridges cut across the plain and are very prominent features within this open landscape….They are characterised by steep sides and woodland is often ancient and semi-natural woodland which is notably absent from the plains.

The NCA is important for food production. Throughout the plain, the water retention and fertility of the clay soils support lush pastures for grazing dairy cattle…. The lighter soils in Staffordshire and parts of Shropshire support more mixed farms.

The presence of large conurbations and dense network of roads mean that development pressures are likely to continue. Road improvements risk the urbanisation of rural villages.

4.2.5 The key characteristics NCA 61: Shropshire, Cheshire and Staffordshire Plain considered relevant to the study area include:

- Prominent discontinuous sandstone ridges of Triassic age, characterised by steep sides and freely draining, generally infertile soil that supports broadleaved and mixed woodland.
- Few woodlands, confined to the area around Northwich and to estates, cloughs and deciduous and mixed woods on the steeper slopes of the wind-swept sandstone ridges. Locally extensive tracts of coniferous woodland and locally distinctive orchards scattered throughout.
- Strong field patterns with generally well-maintained boundaries, predominantly hedgerows, with dense, mature hedgerow trees. Sandstone walls occur on the ridges and estate walls and Cheshire-style (curved topped) metal railing fences occur locally on estates in Cheshire.
- Dairy farming dominates on the plain, with patches of mixed farming and arable in the north and large areas in the southeast.
- Diversity of wetland habitats includes internationally important meres and mosses comprising lowland raised bog, fen, wet woodland, reedbed and standing water, supporting populations of a host of rare wildlife, including some species of national and international importance.
- Extensive peat flood plains where flood plain grazing marsh habitats support regionally important populations of breeding waders in areas such as Baggy Moor, Weald Moor and Doxey Marshes.
- Many main rivers and their flood plains lie in this area, including the Dee, Dane, Severn, Penk and Sow. Significant areas of grazing marsh, alluvial flood meadows and hay meadows associated with the rivers Dee, Sow, Gowy and Severn. The area has the highest density of field ponds in western Europe.
- Rich archaeological evidence of iron-age hill forts concentrated on the sandstone ridges and the Weald Moors. Remnant ridge and furrow and moated houses are features of the plain. The Roman road, Watling Street, crosses the plain linking London to Wales via Wroxeter. Chester was an important Roman settlement.

- Regularly spaced, large farmsteads, dispersed hamlets, market towns and many other settlements including Macclesfield and Telford. Timber-frame buildings are a distinctive feature of the plain, often highly decorated in Cheshire, for example, the moated Little Moreton Hall. The historic towns including Stafford, Shrewsbury and the city of Chester have a wealth of 17th- and 18th-century half-timber, brick and red sandstone buildings.

4.2.6 Although the Site and study area include elements of the characteristics listed above, the scale of the proposed development in comparison to the size of the NCA, and the lack of perceptibility of the Site from the wider NCA, means there would never be greater than a negligible overall effect on the landscape character of NCA 61:Shropshire, Cheshire and Staffordshire Plain and as such it is not considered further within this appraisal.

Local Landscape Character

A Landscape Strategy for Cheshire West and Chester Borough

4.2.7 The Site and study area fall wholly within the area covered by the Cheshire West and Chester Landscape Strategy (2016)[22]. The entirety of the site and the majority of the study area falls within Landscape Character Area (LCA) 9a Cheshire Plain West: Dunham to Tarvin Plain.

4.2.8 In addition to the host character area the study area also contains the following character areas:

- Landscape within the west of the study area is in LCA 15i River Valleys: Gowy Valley;
- LCA 2b Sandstone Ridge: Helsby Hill is located to the northeast of the study area;
- A small section in the northeast of the study area is in LCA 4a Drained Marsh: Frodsham, Helsby and Lordship Marshes.
- A small section in the east is in LCA 3a Sandstone Fringe: Helsby to Tarporley.

LCA 9a Cheshire Plain West: Dunham to Tarvin Plain

4.2.9 The site is located in the north of the Dunham to Tarvin Plain LCA, which falls between the Gowy Valley and Sandstone Fringe.

4.2.10 This landscape type is defined by its flat or very gentle topography enclosed by hedgerows and standard trees in small-medium enclosures that follow an irregular and semi-regular field pattern. It is differentiated from the Cheshire Plain East by the physical barrier of the Sandstone Ridge. Woodland cover is very low, with small blocks scattered intermittently across the area. The field patterns comprise a mix of ancient enclosure and post medieval improvement. Settlement is predominantly dispersed and has a low density.

[22] Cheshire West and Chester Landscape Strategy (2016). Available online: https://www.cheshirewestandchester.gov.uk/residents/planning-and-building-control/total-environment/local-landscape-character-assessment-landscape-strategy-2016

4.2.11 Visually the number of potential viewpoints around the LCA are low due to the absence of high vantage points and the nearest tall hedgerow tends to form the visual horizon. The petro-chemical and industrial hub at Ellesmere Port is outside the LCA but is a prominent visual feature from the study area. The Sandstone Ridge is an area of high ground to the immediate east of the study area and is prominent in views in that direction.

4.2.12 Significant communication corridors, including the M56, cross the LCA impacting tranquillity and the rural landscape.

4.2.13 The stated overall Landscape Management Strategy for LCA 9a Cheshire Plain West: Dunham to Tarvin Plain is that '*the landscape should conserve and restore the historic field pattern of hawthorn hedgerows and hedgerow oak trees and enhance the grassland and small woodland network, and to limit the influence of urban and industrial development to the north on the rural character of the plain*.'

4.2.14 Stated Built Development Guidelines, include:

- *Ensure any industrial character or large-scale commercial development in M56 corridor and beyond is appropriately sited, designed and orientated so as to limit its influence on the rural and tranquil plain to the south, with extensive mitigating planting as necessary.*
- *Ensure that the siting of Solar PV farms is not visually prominent from higher ground.*

4.2.15 In addition to the host landscape character area, the Site has the potential to be visible from LCA 2B Sandstone Ridge: Helsby Hill and LCA 3A Sandstone Fringe: Helsby to Tarporley. For both of these character areas the potential for views out across the host character area and the wider estuarine landscape is considered a key characteristic and as such the extent of change to this view will need to be considered within the assessment section of this report.

4.2.16 The other LCAs within the 3km study area do not offer levels of intervisibility with the Site with the Proposed Development that are likely to influence their characteristics. These areas are as follows and as such will not be considered further within this report.

- LCA 4a - Drained Marsh: Frodsham, Helsby and Lordship Marshes
- LCA 5f – Undulating Enclosed Farmland: Helsby to Frodsham
- LCA 15i – River Valleys: Gowy Valley
- LCA16a – Mudflats and Saltmarsh: Stanlow & Ince Banks

Landscape Sensitivity Study and Guidance on Wind and Solar Photovoltaic Developments

4.2.17 This document reviews the various character types / areas to define their sensitivity towards both wind and solar photovoltaic developments. While its content has been reviewed and considered within the report, the sensitivity of the character areas included within the LVA has been determined in accordance with the Landscape Institutes advice note TGN 02-21: Assessing landscape value outside national designations rather than using the sensitivity as defined within this sensitivity study which predates the advice.

Green Belt

4.2.18 The Site is located in within the Liverpool, Manchester and West Yorkshire Greenbelt. A map of the Green Belt within the study area is presented on Figure 5. A brief analysis of the likely effects on the Green Belt is provided in Section 6.5.

4.3 Landscape Baseline

4.3.1 **Figures 1-6** illustrate the landscape character, designations and constraints within the study area referenced in this LVA.

The Site

4.3.2 The location of the site is presented on Figure 1 Site Context.

4.3.3 The Site comprises a number of agricultural fields across relatively flat countryside within the Cheshire West and Cheshire Council (CWCC) local authority. The site boundary extends 1km in a south westerly direction along the M56, sitting within a parcel of land that lies between Hob Lane in the south, Common Lane to the east and the A5117 to the north.

4.3.4 The site boundary extends from Junction 14 of the M56 in the north, to 350m north of Hob Lane in the south; and from the M56 in the west, to Common Lane to the east. The agricultural fields are a variety of shapes and sizes and usually separated by mature hedgerow boundaries. The fields are host to a series of small woodland belts/copses, drainage ditches and ponds of various sizes. The host fields are generally flat and the whole site is between 9m and 12m above ordnance datum (AOD).

4.3.5 There are a number of derelict red brick structures across the site associated with the lands former use as part of a Ministry of Defence (MoD) ammunitions store. Some of the structures are enclosed by earthworks and many are now covered in vegetation. In addition to the buildings there are also existing hard standing access tracks within the north of the site linked to the previous MoD land use.

4.3.6 The northwest boundary of the site is adjacent to the M56 for 950m, separated from the M56 by a wooded embankment, and is 630m south of Elton at its closest point. The northern boundary of the site is adjacent to the A5117 for a short section immediately adjacent to the motorway junction. The Site access road runs along Common Lane for 510m and then enters the Site at the northeastern edge with the boundary of the Site continuing south as a series of field boundaries for a further 860m directly adjacent to further agricultural fields east of the site, whilst Dunham-on-the-Hill is 490m east of the site at its closest point. The southern site boundary is offset northwards from Hob Lane at a minimum distance of 350m from the nearest Site boundary with the boundary running westwards towards the M56.

4.3.7 There is vehicular access to the site via Common Lane at the northeast corner of the site, which extends into the northern and central fields, with hardstanding offshoots from Common Lane towards the former munition stores. There is also vehicular access from Rake Lane, off Hob Lane, at the south of the site; Rake Lane quickly becomes a dead end for vehicles but there are farm vehicle access points to the north and south. The eastern section of Rake Lane runs west to east through the centre of the site towards Chester Road and the north of Dunham-on-the-Hill (from the site boundary eastwards Rake Lane is a Public Right of Way (PRoW)).

4.3.8 As a whole the site is a flat agricultural landscape, with hedgerow boundaries, woodland belts, individual trees, ponds and remnants of ammunition stores. Within the northern half of the site the hedgerows appear to be well maintained and in a better condition than those in the south, some of which are gappy and of varying quality. A section of the site boundary to the south and southeast comprises solely of a post and wire fence, with no hedgerows.

4.3.9 The agricultural land within the site is provisionally classified as Grade 3b (good to moderate), with detailed Agricultural Land Classification results to follow this planning application.

4.3.10 The site is located within land allocated as Green Belt by CWCC.

4.3.11 A detailed description of the Site is provided in the 'Landscape Assessment' below in Section 6.

Study Area Topography, Landform and Land Use

4.3.12 Figure 4 presents the topography and landcover (woodland blocks and surface water) of the study area and it is apparent that the site and its immediate area are generally level at around 12m AOD, excluding small, localised undulations. The generally flat landscape slightly rises within the north of the study area to around 20m AOD; to the east the landform quickly rises 600m east of the site to around 40m AOD at Dunham-on-the-Hill; and within the very northeast of the study area the landform noticeable rises towards the summit of Helsby Hill (139m AOD) at 2.35km from the nearest Site boundary.

4.3.13 The landscape of the majority of the study area is an agricultural landscape similar to that as described for the site within Section 2.1 and extends in all directions from the site, with the exception of the major Stanlow industrial complex which extends into the northwest corner of the study area and is approximately 1km northwest of the site at its closest point

4.3.14 The entire study area, except for the areas within the Stanlow industrial complex and Helsby, are within land allocated as Green Belt.

Study Area Settlements and Residential Receptors

4.3.15 The settlement of Elton occupies an area within the north of the study area extending to 630m north of the site; and the southern (semi-industrial) end of Helsby occupies the northeast corner of the study area extending to 1km east of the site.

4.3.16 In addition to the settlements of Elton and Helsby, there are smaller settlements at Hapsford, to the immediate northeast of the site, Dunham-on-the-Hill, a linear village on the higher ground around 650m southeast of the site, Wimbolds Trafford, 1.7km southwest of the site, and Thornton-le-Moors, 1.3km west of the site.

4.3.17 There are also numerous scattered properties around the study area, those closest to the site include Maryburgh Caravan Park 100m northeast of the site, properties on Hapsford Lane 630m east of the site, properties on Hob Lane from 380m south of the Site and The Bungalow on Rake Lane 350m from the southwest boundary of the site (albeit the property owner is also the landowner for the area of site closest to the property).

Study Area Transport and Access Routes

4.3.18 The major transport route within the study area is the M56 running northeast to southwest through the centre of the study area directly passing the western boundary of the site. The other key roads in the study area are the A5117, connecting Helsby to Ellesmere Port, a section of which is directly adjacent to the northern boundary of the site, the B5132 running north to south within the west of the study area and the A56 Chester Road running northeast to southwest through the study area, often on higher ground (affording views across the landscape to the west) passing 490m east of the site at its closest point.

4.3.19 The Chester to Warrington Rail Line runs northeast to south through the study area, passing 270m east of the site boundary at its closest point; and its offshoot to Ellesmere Port runs east to west passing 1.2km north of the site at its closest point.

4.3.20 Figure 1 presents the routes of National Cycle Network (NCN) Route 5 within the north of the study area and a number of PRoW within the local landscape around the site; the closest of which are PRoW 114/FP4/1 running along Rake Lane and ceasing at the sites eastern boundary; PRoW 143/FP2/1 within the village of Hapsford to the northeast of the site; PRoW 123/FP3/1 on the opposite side of the M56 90m from the sites northern boundary; and PRoW 318/FP3/1, the eastern end of which is on Hob Lane approximately 320m south of the site. Within the wider study area both the Longster Trail and North Cheshire Way run along the sandstone ridge to the east of the Site.

4.4 Landscape Designations

4.4.1 The site and study area are not host to any nationally recognised landscape designations.

4.4.2 Within the 3km study area, and at least partially within the ZTV, is the following local landscape designation:

- The eastern portion of the study area, around Helsby Hill, falls within an Area of Special County Value (ASCV)

4.4.3 It is described as being *'visually and perceptually some of the most important landscape within the district due to the relatively pronounced change in elevation in relation to the lower-lying pastoral landscapes of the Cheshire Plain to the east and west……. The landscape comprises a mosaic of pastural and arable farming with pockets of woodland cover, particularly to the western slopes of the ridge….. The ASCV is crossed by a dense and connected network of recreational trails bridleways and footpaths.'*

4.4.4 Locally recognised landscapes do not have the same statutory protections as national designations but ACSVs are offered some protection in the Local Plan. Policy GBC2 states that '*Where development requires a countryside location, it must satisfy Local Plan (Part One) policy ENV 2 and:*

- *protect and, wherever possible, enhance landscape character and distinctiveness;*
- *integrate into the landscape character of the area; and*
- *be designed to take account of guidance in the Landscape Strategy.'*

4.4.5 In addition, development in or affecting the setting of an ASCV must also

- *'preserve their special landscape character and scenic value;*
- *enhance landscape quality, character and appearance wherever possible; and*
- *make suitable provision for improving public access to, and enjoyment of the landscape, where appropriate'.*

4.5 Visual Baseline

4.5.1 The visual baseline and visual envelope for the Proposed Development is based on the landscape baseline, as detailed in the paragraphs above.

ZTV study

4.5.2 A Zone of Theoretical Visibility (ZTV) study was generated based on the proposed design. This is shown on Figure 2 and indicates areas of potential visibility. The analysis was carried out using a topographic model and including buildings and trees (with heights derived from LiDAR surface mapping data) as visual barriers in order to provide a more realistic indication of potential visibility. To aid with the assessment the areas for proposed panels were modelled along with the proposed substation area. These elements were mapped separately with the visibility of both overlaid to indicate where both were visible or where one or other element was visible. The ZTV presents a 'worst case' view in terms of visibility and does not distinguish the amount of development visible through gradation or any other means. Visibility within the ZTV presented could mean anything from visibility of the whole site down to a glimpsed view of one small part of the development.

4.5.3 The ZTV study was used to aid the identification of those receptors that are likely to be most affected by the Proposed Development and those that do not require detailed consideration.

4.5.4 The ZTV for the Proposed Development illustrates that the potential visibility of the development would split into two key areas. The first area sits within the immediate 1km context of the Site. This area sits within the plain and as such is flat in nature and is contained by existing visual barriers within the landscape. To the north, built form to the north of the A5117 provides a barrier which along with the filtered views through road side and field edge vegetation prevents longer views. To the east, Warrington Road and topography around Dunham-on-the-Hill prevent longer views. To the south the view is largely contained by Hob Lane and to the west by Thornton Green Lane. Outside of this zone there are further pockets of suggested visibility around Hapsford and Barrow Lane Farm as well as some potential visibility to the south of Hob Lane.

4.5.5 The second area of suggested visibility runs along the ridge line running southwards from Helsby Hill. This includes visibility from the summit of the hill, along the southern edge of Helsby, and running southwards to the west of Alvanley and around Manor Farm and Sugar Lane.

4.5.6 Effects on landscape or visual receptors outside the areas of visibility shown on the ZTV study would be Negligible and are not assessed in detail.

Existing Visual Baseline

4.5.7 The Site sits within the Cheshire Plain and as such the surrounding landscape is largely flat in nature. The landscape around the Site is also characterised by mature field edge vegetation which filters and restricts forward visibility within the plain landscape. The wider context of the Site includes the Mersey Estuary with the area to the north of the Site characterised by large industrial infrastructure such as the Stanlow refinery, large commercial (big shed) development, and wind turbines. The refinery in particular forms a backdrop to views from much of the Site and surrounding landscape.

4.5.8 The sandstone ridge running southwards from Helsby Hill also forms a prominent landmark in wider views from the Site and surrounding area. The rocky nature of the northern edge of Helsby Hill is particularly striking in views. Surrounding energy infrastructure also manifests itself through the pylons that run across the plain providing another vertical element in the wider landscape. Transport infrastructure passes along the southern side of the estuary providing visual barriers within the landscape.

4.5.9 These large regional scale elements within the landscape contrast with the more traditional structure of some of the villages and smaller minor road that reflect the areas more rural context over which much of this larger scale more modern infrastructure has been placed.

Specific viewpoints

4.5.10 There are no promoted viewpoints within the study area.

4.6 Visual Receptors

4.6.1 Visual receptors are "*the different groups of people who may experience views of the development"* (GLVIA, 3rd edition, para 6.3). In order to identify those groups who may be significantly affected the ZTV study, baseline desk study and site visits have been used.

4.6.2 The different types of groups assessed within this chapter encompass local residents; people using key routes such as roads; cycle ways, people within accessible or recreational landscapes; people using Public Rights of Way; or people visiting key viewpoints. In dealing with areas of settlement, Public Rights of Way and local roads, receptors are grouped into areas where effects might be expected to be broadly similar, or areas which share particular factors in common.

4.6.3 Representative viewpoints have been selected to aid the assessment of effects on visual receptors.

Visual Receptor Groups

4.6.4 The following visual receptor groups are located within the study area and are likely to have visibility of at least parts of the Proposed Development, as presented on the ZTV study on Figure 2, and are considered further in Section 6:

- **Hapsford** – small village between 580 and 870m northeast of the Site boundary with the ZTV suggesting visibility from properties along the southern and western edges of the village.

- **Maryburgh Caravan Park** which is located on the western side of the A5117 along Common Lane and is within 90m of the Site at its closest point. The access route runs along the lane adjacent to the caravan park.

- **Hapsford Lane** – The lane runs in a southerly direction from Hapsford to Dunham-on-the-Hill with several individual properties and farmsteads along its length.

- **Dunham-on-the-Hill** – The village sits on a small hill between 480m and 1km east of the nearest Site boundary. The ZTV suggests visibility from roads and properties on the western slope of the hill.

- **Hob Lane** – Runs from Dunham-on-the-Hill eastwards towards Wimbolds Trafford. The ZTV suggests that there would be some possibility of glimpsed views along its length. At its closest point it is located 350m south of the nearest Site boundary.

- **Helsby Hill** – Includes numerous PRoW that cross the hillside. The summit is located 2.35km to the northeast of the nearest Site boundary.

- **Alvanley** – Includes properties at the western edge of the village as well as the approaches along Primrose Lane and Helsby Road. Located 2.6kmkm to the east of the nearest Site boundary.

- **Helsby** – Includes properties and roads between Alvanley Road and the Rock at the southern edge of the town between 2.1km and 2.6km from the nearest Site boundary.

- **Cob Hall Lane / Sugar Lane** – Located around 3km from the Site boundary to the south, the ZTV suggests some degree of visibility from properties along both lanes and from adjacent PRoW.

4.6.5 There are also several receptor groups which are excluded from the detailed assessment, on the basis that visual effects are likely to be Negligible, for the reasons indicated below:

- **Chester – Warrington Trainline** – At its nearest point the line runs 450m to the east of the Site. However, for the section where the ZTV suggests the potential for visibility, the railway sits in cutting and is border on both sides by robust mature vegetation; any potential visual effects would be negligible and are not considered further.

- **Elton** – The ZTV suggests the potential for limited visibility along roads and from properties along the southern edge of Elton. However, site work determined that from publicly accessible areas there would be limited potential for any visibility due to the existing screening vegetation that sits between the settlement and the A5117; any potential visual effects would be negligible as demonstrated in Viewpoint 12 and are not considered further.

- **Land to the west of Cryers Lane –** This includes views from the edge of Thornton-le-Moors and PRoW Elton FP5. While the ZTV suggests some limited visibility from this location, site investigation determined that in reality the extent of field edge and roadside vegetation, along with the distance from the Site, would result in any potential visual effects being negligible and are not considered further.

4.6.6 It is acknowledged that there may be occasional other properties within the study area that would have heavily filtered and/ or glimpsed views of the completed development, in particular from upper floor windows, but effects would never be greater than Minor/negligible adverse on properties outside the identified visual receptor groups.

Key routes

4.6.7 The following key routes lie within the study area:

Roads and Rail

- **M56** – The M56 falls within the ZTV running in a northeast to southwest direction, with the ZTV suggesting the potential for visibility along a 1.6km stretch running in a southwesterly direction from Junction 14.

- **A5117** – The A5117 runs west to east across the study area, bordering the Site briefly adjacent to the motorway junction. The ZTV suggests the possibility of pockets of visibility between Thornton-le Moors, 1.3km to the west, and Hapsford, 580m to the east.

- **A56** – Runs in a north / south direction from Helsby to Chester. At its closest point the road is 680m east of the nearest Site boundary. Effects on road users along the A56 are considered in the visual receptor group 'Dunham-on-the-Hill'

4.6.8 Other roads in the study area are more likely to be used for local journeys and are considered within the receptor group areas they lie within.

Recreational Routes

- **North Cheshire Way** – Crosses the study area in an east / west direction with the ZTV suggesting occasional glimpses of the Proposed Development including from Barrow Lane through Dunham-on-the-Hill and then again as it ascends Towers Lane up towards Alvanley.

- **Longster Trail** – Runs from the summit of Helsby Hill in a generally southerly direction with the ZTV suggesting potential visibility from the hillside and from around Manor Farm in the south.

- **PRoW 123/FP3/1** – Runs from the A5117 at Junction 14 in a westerly direction to Elton Green and with the ZTV suggesting the potential for views towards the Proposed Development along its length. At its closest point it is located 75m to the north.

- **PRoW 114/FP4/1** – Runs westwards from Dunham-on-the-Hill to the boundary of the Site where it links into Rake Lane

4.6.9 All other PRoW within the study area and ZTV are located further from the site, and as such are considered in the receptor group areas they lie within.

5 THE PROPOSED DEVELOPMENT

5.1 The Proposal

5.1.1 The Proposed Development comprises a 30MWac solar photovoltaic (PV) farm with associated infrastructure and ecological enhancements which is to be installed for a temporary period of 40 years.

5.1.2 The Site area is 77 hectares in total and would be accessed from A5117 via Common Lane. The Proposed Development is split over 10 individually fenced parcels of varying sizes running southwards from the M56 motorway. The proposed fencing is 2.5m high deer fencing with CCTV spaced along fencing at various points. Crushed aggregate internal access routes would link the various field parcels with the routes generally seeking to follow existing field entrances to minimise any vegetation removal to facilitate.

5.1.3 The panel heights would be up to 3.2m in height with a lower tip of 0.8m and a 3.5m spacing between panels. The substation would be located in one of the most westerly fields approximately 190m from the motorway at it nearest point. It sits within a 40m x 25m compound with a maximum height of 5m. In addition to this there are a number of invertor/transformer units located in field parcels across the Site. These are 6m x 2.9m and 2.4m in height.

5.2 Design Approach and Mitigation

5.2.1 The design approach is described in full within other documents accompanying the application. This section of the appraisal considers the fit with guidance provided in respect of visual impact and landscape character. The design of the Proposed Development has followed an iterative process that has considered the site location and site constraints and looked to minimise any adverse effects wherever feasible.

5.2.2 In terms of site location, careful consideration has been given to the selection of a site that can accommodate solar infrastructure. Initial site analysis fed into the design process, resulting in the loss of two fields adjacent to the A5117 from the scheme due to the potential for more significant adverse visual effects.

5.2.3 The proposal works with the existing field structure, ensuring the retention of the vast majority of existing vegetation on Site. This would allow the retention of the existing field structure and ensure that the Site can be successfully assimilated back to farmland at the end of the 40 year period. The proposals also ensure that a 10m offset is maintained from any existing vegetation to the nearest Site infrastructure and ensures that any ground disturbance would not occur within tree protection areas.

5.2.4 Access to the Site is proposed along Common Lane, an existing access road that leads down from the A5117. Access tracks to the various field parcels use existing field gates and vegetation gaps with the exception of one point where the track would involve the removal of a small section of hedgerow. The Site substation has been located at the western edge of the Site, close to the M56 motorway and away from any sensitive receptors. Invertor/transformer units have been positioned with care within the scheme, away from development edges to minimise their potential visibility.

5.2.5 The existing vegetation both within and surrounding the Site provides a good level of existing screening from the surrounding receptors with proposed mitigation measures in this respect focusing on gapping up existing field edge vegetation. The visibility of the Site from the sandstone ridge to the east would not be feasible to fully mitigate, so the strategy instead focuses on further breaking up the parcels of land. This would be achieved through additional tree planting between the top four and middle four field parcels and between the middle four and bottom two parcels. The proposed landscape mitigation can be seen on Stephenson Halliday drawing no.1000 Rev 01 – Landscape Mitigation Plan.

5.2.6 Planting would be installed as whip planting (600-800mm) with some feathered tree planting where an increase in woodland or tree cover is sought. Species selection would reflect the existing make up of hedgerows and woodland on site and would be native in nature. The existing field edge ponds on the Site would be retained within the design and the grassland and scrub outside of the fenced areas managed to maximise their ecological potential. Within the fenced areas grassland would be managed as modified grassland.

5.2.7 The existing vegetation heights provide a good level of screening within the wider landscape. Hedgerows within the Site would be maintained as 'high hedges' between the heights of 3.5 and 4m to further enhance this screening and aid with breaking up views of the Proposed Development from more elevated locations.

6 LANDSCAPE AND VISUAL EFFECTS

6.1 Introduction

6.1.1 This section sets out the effects that the Proposed Development would have on landscape and visual receptors.

6.2 Viewpoint Analysis

6.2.1 Viewpoint analysis has been undertaken from a total of 13no. viewpoints with the viewpoints selected broadly reflecting those that are referenced in the pre-application submission and confirmed in the LPA response. The exception to this was the view from the PRoW to the rear of properties in Thornton-le-Moors where access from Yew Tree Close was no longer possible; and the addition of views at Alvanley and a view from the North Cheshire Way adjacent to Barrow Lane Farm. The viewpoint locations are illustrated on Figure 2: ZTV and Viewpoint Locations. The visualisations (comprising of LI Type 1 annotated photographs of the existing view) are presented in Appendix 3: Viewpoint Photosheets.

6.2.2 The full viewpoint analysis is contained within Appendix 4 Viewpoint Analysis. The findings are summarised below in Table 4: Viewpoint Analysis Summary.

6.2.3 Please note that Appendix 4: Viewpoint Analysis considers the nature and the scale of changes to character and views at each viewpoint location only. The sensitivity of receptors and wider extent of the effect (beyond the individual viewpoint location) and its duration are considered in the main body of the assessment text below as part of the consideration of the magnitude and significance of effects.

Table 4 Viewpoint analysis summary

Viewpoint No.	Viewpoint	Distance / direction to view	Scale of Landscape Effect	Scale of Visual Effect
1	Helsby Hill	2.85km / northeast	Small	Small
2	Helsby Road adjacent to Cheshire Lookout Camp Site	2.75km east	Negligible	Small
3	Edge of Hapsford adjacent to A5117	620m east	Negligible	Negligible
4	Hapsford Lane	670m east	Negligible	Negligible
5	Footpath 114/FP5/1 adjacent to Dunham-on-the-Hill	480m southeast	Negligible	Small
6	A56 at edge of Dunham-on-the-Hill	680m southeast	Negligible	Small
7	Bridleway 197/BR3/1 close to Lowerhall Farm	3.1km southeast	Negligible	Negligible
8	North Cheshire Way on Barrow Lane	1.27km southeast	Negligible	Negligible
9	Hob Lane close to Moss House Farm	350m south	Negligible	Negligible
10	B5132 close to M56 bridge	700m west	Negligible	Negligible
11	B5132 close to Elton Green	625m northwest	Negligible	Small
12	Junction of Old Hall Lane and Parkland Drive	720m northwest	Negligible	Negligible
13	Footpath 123/FP3/1 close to Junction 14 of M56	160m northwest	Small	Small

6.2.4 Each of the viewpoints is a 'sample' of the potential effects, representing a wide range of receptors including not only those actually at the viewpoint, but also those nearby, at a similar distance and/or direction. From these viewpoints it can be seen that the distribution of effects would be as follows:

6.2.5 Effects on character:

- Large scale change in landscape character would occur across all fields in which components of the Proposed Development are being constructed. These effects would be contained within the Site boundary and the immediate area bordering it. Within the Site there would be change in land use from mixed arable and pastoral farmland into a solar farm.

- Beyond the Site boundary and its immediate vicinity there would only be small scale changes in landscape character, due to the screening effects of existing vegetation and, to the north, the separation of the Site from the landscape by the M56.

6.2.6 Effects on views:

- Vegetation would prevent or heavily filter views from the surrounding flat plain. Where there are glimpsed views it is unlikely that the wider scale of the solar farm would be apparent with the change in view being no greater than Small.

- When visible in longer views from more elevated points within the study area, the Proposed Development would sit within the existing field edge vegetation which would break up the scale of the development. While the full extent of the Proposed Development is more likely to be visible from these more elevated locations, the Site would only form a small part of a much wider panoramic view.

6.3 Construction Effects

6.3.1 The construction of the project would take place over a 6-to-12-month period. The likely landscape and visual effects arising from construction are identified as temporary effects:

6.3.2 Typical activities would include:

- The installation of a temporary construction compound to include welfare facilities and office accommodation.

- Access to the site for the delivery of equipment and materials from Common Lane off the A5117.

- Erection of deer fencing and CCTV around the perimeter of the various field parcels.

- Installation of mounting frames and PV panels, invertor/ transformer stations and the site substation compound.

- Excavations for cable runs (outside of existing root protection areas).

- Installation of mitigation planting including infill planting and additional screen planting along with measures to achieve the desired onsite biodiversity net gain.

- Reinstatement works including the removal of the temporary construction compound.

- Removal of vegetation and soil movement

Effects on landscape fabric during construction

6.3.3 The Proposed Development has been designed to ensure suitable offsets from blocks of woodland, hedgerows and waterbodies are maintained and as such these features of the landscape fabric would remain unchanged during the construction period with development taking place within the existing arable and pastoral fields that make up the Site.

6.3.4 Construction of the Proposed Development seeks to minimise vegetation removal; however, there would be small amount required to facilitate the scheme. The Arboricultural Assessment which accompanies this application identifies the following vegetation for removal to facilitate the Proposed Development: G37, G46 and G47 which are all category C would require removal, along with T24 and T28 which are also category C; and T27 and T29 which are category B trees. All other vegetation would be retained and protected in accordance with BS 5837: Trees in relation to design, demolition and construction. Existing hedgerows would be 'gapped up' where necessary with the extent of new planting and hedgerow improvements far exceeding the quantity removed.

6.3.5 There would be a medium scale of change to the Site fabric as a whole, with the transition of the 10 field parcels into a solar farm and the erection of the various elements of the Proposed Development.

Effects on landscape character during construction

6.3.6 Effects during the construction phase on landscape character would arise from:

- Short-term change of farmland to a construction site including the formation of temporary construction compounds and access tracks;
- Increased vehicular movement and personnel in the landscape delivering and erecting the component parts of the Proposed Development;
- Changes to landscape fabric resulting from vegetation removal; and
- The incremental increase in the infrastructure comprising the Proposed Development.

6.3.7 The following observations can be made on the scale of landscape change across the study area during construction:

- Large scale change in landscape character would occur across all fields in which components of the Proposed Development are being constructed. This is an unavoidable consequence of construction as fields temporarily become a construction site.
- Large, medium and small-scale change in landscape character would also be experienced in various directions surrounding the fields in which the construction takes place. The flat nature of the surrounding plain would result in these effects being increasingly filtered and contained by the surrounding field edge vegetation and woodland blocks.
- Small scale changes in landscape character would occur from more elevated points on the adjacent sandstone ridge with views out across the wider landscape.
- Large and Medium scale change are limited to the Site and directly adjacent.
- Small scale change would occur within 1km of the nearest Site boundary or from longer views out across the plain from the adjacent ridgeline.

Effects on visual amenity during construction

6.3.8 Effects during construction on visual receptors would typically arise from views of:

- Temporary construction compounds;
- Highway work and management;
- The movement of plant and personnel within the Site installing the Proposed Development; and
- The incremental increase in the infrastructure comprising the Proposed Development.

6.3.9 Views from the surrounding flat plain quickly become filtered by field edge vegetation limiting views towards the Site to within 500m. Outside of this distance, views are limited to more elevated points such as parts of Dunham-on-the-Hill and from the sandstone ridge line to the northeast. Where visible, both from publicly accessible points and from residences, the scale of change would be no greater than Small. The exception to this would be from the Maryburgh residential caravan site on Common Lane. From here the scale of change during the construction period would be Medium to Large, resulting from the use of the lane for access to the Site for construction traffic.

6.4 Operation (including maintenance)

Effects on landscape fabric during operation

6.4.1 Once operational, there would be no additional effects on the landscape fabric over and above those described in relation to the construction phase. These effects, primarily related to vegetation loss, would remain during the early operational phase of the project. By year 10, new mitigation planting would have established which far exceeds the initial loss and would make a positive contribution to the landscape fabric.

6.4.2 The installed fencing for the Proposed Development would encircle each of the individual field parcels rather than run around the periphery of the Site. This would ensure permeability through the Site for wildlife along field edge boundaries. Within these fenced areas, the grassland underneath would be managed as modified grassland with the areas outside managed for ecological benefit to improve species diversity and increase areas of scrub to provide enhancements to connectivity for wildlife.

6.4.3 By year 10 there would be a small-scale change over the site fabric as a whole

Effects on Landscape Character

6.4.4 Effects during operation on landscape character would typically arise from:

- Introduction of new energy infrastructure into existing agricultural fields including the ground-mounted solar PV, substation, inverters, transformers, access tracks, fencing and security measures;

- Incremental growth of newly established mitigation planting (gapping up hedgerows and new tree planting);
- Establishment of new species rich grassland in open fields and field margins; and
- Regular maintenance visits and operations including habitat management.

6.4.5 Descriptions for each of the assessed character areas and types are briefly summarised below, along with further observations from site-based work. The locations of the character areas are presented on Figure 4 and Appendix 2 should be referenced in terms of the assessment of sensitivity.

Character area LCA 9a Cheshire Plain West: Dunham to Tarvin Plain

6.4.6 Key characteristics of the character area relevant to the Site and surroundings include:

- A broad, gently shelving and mostly flat plain landscape characterised by hedges and hedgerow trees providing limited vistas;
- Wide areas of improved grassland for dairy farming and fodder crops;
- Limited woodland, confined to isolated coverts and copses, although hedgerow oaks are important elements of the landscape;
- Historic medieval field patterns and increases in tree cover are still found around smaller settlements;
- Extensive network of small field ponds which are generally inconspicuous in the landscape;
- Larger settlements punctuate the plain where historic form has often been lost within areas of 20th century and later housing development, e.g. at Tarvin;
- Elsewhere, settlement is scattered across the plain in small linear hamlets and freestanding farmsteads;
- Petro-chemical and Industrial development outside the character area is prominent across the north of the LCA;
- The Sandstone Ridge presents a more elevated skyline to the east of the LCA;
- Where hedgerows and tree networks remain, the area can present some degree of limited enclosure due to an absence of elevation and viewpoints;
- Some loss of field boundaries diminishes this enclosure where some arable farming has been established;
- Significant transport infrastructure dissects the area and diminishes tranquillity and rurality, particularly across the north of the LCA.

6.4.7 The Site and surrounding landscape are characteristic of the wider character area with all of the above characteristics present within the study area. The Site and surrounding flat nature of the landscape results in the Proposed Development being largely screened from most of the character area. The oil refinery, energy infrastructure and larger industrial development are often prominent in the backdrop of views, as is the adjacent sandstone ridge. The Proposed Development would sit within the existing field structure so would not result in the further loss of field boundaries, furthermore, the gapping up of existing hedgerows would aid within reinforcing the existing enclosure created by the surrounding field edge vegetation.

6.4.8 The approach of fencing each individual field parcel would ensure that permeability for wildlife remains with the areas outside managed for ecological gain and to maximise on site BNG. In terms of the landscape management guidelines set out within the character assessment, the Proposed Development would align with the following recommendations:

- Maintain an intact hedgerow network through management of hedges and ensuring a young stock of hedgerow trees – The Proposed Development would retain and enhance the existing hedgerow network within the Site

- Avoid over-intensive flail mowing or ploughing too close to hedgerow boundaries – protect saplings and encourage trees to grow up at intervals along the hedgerows – The Proposed Development would manage areas outside of the fenced field parcels for ecological benefit.

- Consider opportunities to replace hedgerows where they have been lost utilising appropriate species of hawthorn and oak standards – The Proposed Development would seek to gap up existing hedgerows to strengthen structure within the landscape

- Conserve the remaining hedgerow trees and seek opportunities to encourage a new generation of hedgerow trees to increase their presence in the landscape – The Proposed Development would ensure that the landscape within the Site is actively managed through the lifecycle of the scheme

- Consider opportunities to plant simple, small pockets of trees and small blocks of woodland in field corners to ensure the continuation of these declining characteristic features – Opportunities for new pockets of tree planting have been taken within the proposed mitigation planting

- Conserve the small to medium scale pattern of fields, particularly early field systems which provide historic continuity in the landscape, particularly around settlements – The existing field pattern has been retained within the proposals.

- Maintain the pastoral character of the landscape and reduce soil erosion by minimising exposure of bare soil (for example as a result of increased crop growing) - The pastoral character of the land within the Proposed Development would be lost over the lifetime of the development. However, the proposal responds to the landscape in a way that ensures that the existing character can be restored following decommissioning. Temporarily taking the soil out of arable use would provide an opportunity for the soils to recover.

- Increase the biodiversity of intensively managed grassland and arable land – create and link buffer strips along linear features such as hedgerows to create a continuous network of wildlife corridors – The proposal would provide a significant net gain in biodiversity.

- Conserve the remnant fragments of unimproved grassland that is of nature conservation value and consider opportunities to extend / recreate this habitat – The Proposed Development seeks to manage and enhance field edge grassland and vegetation to provide improved Green Infrastructure running through the scheme.

- Encourage the retention and management of field ponds and brooks that are of wildlife importance as well as contributing to the diversity of the landscape – These have been retained and appropriate offsets to development provided.

- Conserve the sense of peace and quiet away from the main roads and conserve the rural character of the lanes. Avoid features that 'suburbanise' the landscape such as kerbs and large-scale signage – The Proposed Development is largely screened from any surrounding lanes, even during winter months. However, where visible the Proposed Development would have a 'suburbanising' effect on the landscape.

- Conserve distant views to the Welsh hills and take account of views from the Sandstone Fringe and Sandstone Ridge when planning for change – These views have been retained within the scheme.

6.4.9 The built development guidelines ask to ensure that '*the siting of Solar PV farms is not visually prominent from higher ground'.* While there would initially be some visibility from higher ground, the proposed mitigation strategy of gapping up existing hedgerows along with the introduction of further tree planting would further strengthen the existing screen provided by existing vegetation and break up visibility of the Proposed Development. Furthermore, the location of the Proposed Development at the northern edge of the character area adjacent to the M56 results in the proposals sitting within the context of the larger scale and more prominent developments along the Mersey Estuary.

6.4.10 Overall, the Proposed Development would have limited effect on the landscape character, with the retention and enhancement of many of the key characteristics found on the Site being of benefit. However, the introduction of a solar farm into the rural context of the Site would have a negative effect on the landscape character both within the Site and its immediate context (within 500m of nearest Site boundary), and within the context of the role the Site plays in forming part of the setting to long views out from the adjacent sandstone ridge.

6.4.11 The landscape sensitivity of the character area was assessed as Medium / Low; the scale of the landscape change is medium over a localised extent of the character area and would be over the long term and reversible resulting in a **Moderate / Minor adverse** effect on the character area at year 1. By year 10, once the proposed mitigation planting has established this would reduce to a **Minor adverse** effect.

Character area LCA 2b Sandstone Ridge: Helsby Hill

6.4.12 Helsby Hill forms a distinctive land form within the wider estuarine environment and while not physically affected by the Proposed Development, the intervisibility between the host LCA 9a

and Helsby Hill LCA forms an element of the LCA as demonstrated in Viewpoint 1. The following key characteristics listed within the assessment are considered relevant:

- Long distance footpaths run along the length of the ridge where there are some spectacular panoramic views as far as Wales to the west and the Peak District to the east.

- Locally designated as an Area of Special County Value (ASCV) recognising its landscape and scenic quality and its historic, archaeological and ecological value.

6.4.13 The lower parts of the hill side are often well wooded with the peak more open and providing panoramic views across a wide area. While the area is well visited and used extensively for recreational purposes in which enjoyment of the view is a key element, there is a sense of tranquillity within much of the area and a feeling of separation from the surrounding partially urban context.

6.4.14 LCA 9a forms a part of a wider view with the largely rural nature of the character area contrasting with the large industry that is present around Ellesmere Port in particular, it also contrasts with the open nature of the wider Mersey Estuary and mud flats. LCA 9a appears predominantly as farmland in the wider view with much of the area having strong field edge vegetation including large mature oaks which gives the landscape a well wooded feel when viewed from the hillside. From locations where there are wider views across the landscape it is likely that the Proposed Development would be visible as part of the wider panoramic view.

6.4.15 When looking at the Site, the field parcels within which the Proposed Development is located are partially screened by this field edge vegetation, but with the gappy nature of some of the hedgerows and the varied extent of larger tree cover in the Site providing filtered views in towards some of the larger field parcels. The Site as a whole forms a small part of a much wider panoramic view, with the Proposed Development looking to retain and enhance the existing field edge structure. The proposed mitigation strategy would fill in gaps within the hedgerows and plant additional hedgerow trees to reinforce the existing strong field edge vegetation and reinstate where this has in part been lost.

6.4.16 The landscape sensitivity of the character area was assessed as medium / low, the scale of the landscape change would be small over a limited extent of the character area resulting in a slight / negligible magnitude of effect which would be over the long term and reversible resulting in a **Minor Adverse** effect on the character area at year 1. By year 10, once the proposed mitigation planting has established, the extent of visibility would reduce. However, there would still be some views of panels although to a lesser extent, The scale of change would remain at Small / Negligible resulting in a **Minor / Negligible Adverse** effect.

Character area LCA 3a Sandstone Fringe: Helsby to Tarporley

6.4.17 LCA 3a is described as a transitionary zone between the host character area and the sandstone ridge. As such, while it does still offer views across the plain as demonstrated in Viewpoints 2 and 7, these views do not tend to be as extensive, with the lower heights providing a more acute angle of view which results in the landscape appearing more vegetated and with less visibility of fields in and around the Site. The following key characteristics are considered relevant when considering the potential effects to the LCA.

- A generally low-level of woodland cover but containing a number of small, scattered woodland blocks;

- Some areas are designated as an Area of Special County Value (ASCV) recognising their landscape and scenic quality and their historic, archaeological and ecological importance;

- Although this area does not provide as many recreational opportunities as the adjacent Sandstone Ridge it contains a number of public footpaths, including the Longster Trail long distance recreational footpath and part of the Sandstone Trail as it descends off the ridge.

- The adjacent Sandstone Ridge forms a backdrop to views across the Sandstone Fringe.

6.4.18 For much of the LCA the focus of the view is westwards as opposed to the panoramic views available on Helsby Hill. While the estuary is still visible, along with the large industrial context of much of it, these elements tend to be more on the periphery of wider views across the landscape. The more acute angle of views towards the Site result in there being less potential for visibility of the Proposed Development when viewed from vantage points within the LCA. The existing field edge vegetation within and around the Site would largely screen any potential views of panels and other Site infrastructure although there would still be some visibility towards more open parts of the Site. The Proposed Development would be significantly less prominent than other larger scale infrastructure that already make up a key element of the wider view.

6.4.19 The landscape sensitivity of the character area was assessed as low; the scale of the landscape change would be Small/Negligible over a localised extent of the character area and would be over the long term and reversible resulting in a **Negligible Adverse** effect on the character area.

6.5 Visual Effects

Visual Receptor Groups

6.5.1 This assessment focuses on effects on groups of visual receptors, incorporating effects on views from public spaces and streets within neighbourhoods. The assessment of effects focuses on the visual amenity of public spaces, though views from groups of dwellings will also be noted in the descriptions. Effects on private residential amenity are a separate matter, and as set out at Section 2.5 above do not merit detailed assessment in respect of this development.

6.5.2 Information and detail on how visual sensitivity, magnitude of change and level of effects are assessed is provided in Appendix 1 - LVA Methodology and Criteria.

6.5.3 Views towards the Site from all the visual receptor groups within the study area are of Community value with the exception of Helsby Hill which is of Regional value. Every visual receptor group includes residential receptors and / or PRoW, and would therefore have a High susceptibility to the change arising from the Proposed Development, therefore the visual receptors groups would be of high/medium sensitivity unless specifically stated below.

6.5.4 **Hapsford** – A small village between 580 and 870m northeast of the Site boundary with the ZTV suggesting visibility from properties along the southern and western edges of the village. The group comprises local roads and footpaths within the village, along with residences. Potential visibility of the Site would be restricted to properties with an outlook towards the

A5117 and those with and outlook westwards. Viewpoint 3 is taken from the edge of the village on the A5117.

6.5.5 Views from ground level would be restricted by landform, built form and vegetation with no visibility of the proposed development predicted. From properties, views towards the Proposed development would be restricted to glimpsed views of infrastructure along the eastern edge of the Site, primarily from first floor windows. Views towards the proposed development would be heavily filtered by existing vegetation between the receptor and Site boundary, with the likelihood that only small parts of the Site would be visible at any one location. Strengthening of the field edge vegetation along this boundary with new tree planting and the gapping of hedgerows, along with maintaining the hedgerows within and bordering the Site at a greater height than presently (3-4m) would reduce or fully screen views from this location by year 10.

6.5.6 The scale of visual change would be small / negligible at year 1, over a limited extent of the view and long-term in nature, resulting in a slight / negligible magnitude of effect. This would result in a **Minor adverse** effect. By year 10, once the proposed mitigation planting has established, the extent of visibility would further reduce resulting in a negligible scale of change and a **Minor / Negligible adverse** effect.

6.5.7 **Hapsford Lane** – The lane runs in a southerly direction from Hapsford to Dunham-on-the-Hill with several individual properties and farmsteads along its length. Viewpoint 4 is taken midway along the lane; at its closest point the lane is 630m from the nearest Site boundary. Views from the lane itself are limited by roadside vegetation with field edge vegetation increasingly filtering views westwards towards the Site which is set back a minimum of three to five fields from the lane. The flat nature of the Site and surrounding landscape would result in field edge vegetation screening infrastructure associated with the Proposed Development from view at ground level with the exception of a small chance of glimpsed views from some locations during winter months.

6.5.8 From properties along the lane, particularly ones with an outlook westward, there is an increased chance of glimpsed views towards parts of the Proposed Development due to the more elevated position. However, these views would still be heavily filtered by existing vegetation which would be further reinforced by new planting as part of the mitigation strategy.

6.5.9 The scale of visual change would be negligible at year 1 over a limited extent of the view and long-term in nature, resulting in a Negligible magnitude of effect. This would result in a **Minor / Negligible adverse** effect. By year 10, once the proposed mitigation planting has established, the extent of visibility would further reduce resulting in a **Negligible adverse** effect.

6.5.10 **Maryburgh Caravan Park** is a private Traveller site with 25 pitches and permanent planning permission. It is located on the western side of the A5117 along Common Lane and is within 90m from the nearest Site boundary. The primary access route into the Site runs along the Common Lane immediately adjacent to the caravan park.

6.5.11 While in close proximity to the Site, there is a strong band of vegetation that surrounds the caravan park enclosing it from the surrounding landscape. This band of vegetation is particularly strong in the direction of the Site with two small woodland copses largely screening any potential views towards the Proposed Development. This band of vegetation

is likely to screen all but occasional glimpsed views of the Proposed Development, even during winter months, with the extent of visibility reducing further when the trees are in leaf.

6.5.12 The scale of visual change would be small / negligible at year 1 over a limited extent of the view and long-term in nature, resulting in a minor / negligible magnitude of effect. This would result in a **Minor / Negligible adverse** effect which would remain at year 10.

6.5.13 **Dunham-on-the-Hill** – The village sits on a small hill between 480m and 1km east of the nearest Site boundary. The ZTV suggests visibility from roads and properties on the western slope of the hill. Viewpoints 5 and 6 are taken from the western edge of the village while viewpoint 8 is taken from the approach to the village from the south.

6.5.14 The village sits on a small hill that rises to around 40m above the surrounding plain resulting in properties within the village often being visible in views from the surrounding landscape. From the direction of the Site, the properties along the western edge of the village have views out in the direction of the Site. When viewed from ground level, from footpaths and public roads within the village, there is very limited potential for view towards the Site. This is primarily due to the surrounding built form but also due to vegetation within the village which prevents views out across the wider landscape. From within residences with outlooks in the direction of the Site, there is a greater chance of visibility of the Proposed Development due to the more elevated nature of views.

6.5.15 From locations within the village with views out in the direction of the Site, the landscape would appear well vegetated with field edge vegetation, including large mature tree planting, heavily filtering views in the direction of the Site. During winter months there is some possibility of views through this vegetation towards infrastructure at the periphery of the Site with this potential visibility reducing when trees are in leaf. The extent of visibility would increase as elevation increases although would still be heavily filtered from all locations within the village.

6.5.16 The scale of visual change would be small / negligible at year 1 over a limited extent of the view and long-term in nature, resulting in a slight / negligible magnitude of effect. This would result in a **Minor Adverse** effect. By year 10, once the proposed mitigation planting has established, the extent of visibility would further reduce resulting in a **Minor / Negligible Adverse** effect.

6.5.17 **Hob Lane** – Runs from Dunham-on-the-Hill eastwards towards Wimbolds Trafford. The ZTV suggests that there would be some possibility of glimpsed views along its length. Viewpoint 9 is taken from midway along the lane. At its closest point, the lane is located 350m south of the nearest Site boundary. The lane contains numerous properties at various points along its length with varying degrees of visibility in the direction of the Site. At its closest point, the Site is set back a minimum of 4 fields from the lane and with vegetation providing an increasingly filtered view in the direction of the Site.

6.5.18 Opportunities for views towards infrastructure within the Proposed Development are limited at all points along the lane with the possibility of occasional glimpses of small parts through gaps in field edge vegetation. This limited visibility of the scheme would reduce still further during summer months when vegetation is in leaf.

6.5.19 The scale of visual change would be negligible at year 1 over a limited extent of the view and long-term in nature, resulting in a negligible magnitude of effect. This would result in a **Minor / Negligible Adverse** effect. By year 10, once the proposed mitigation planting has

established, the extent of visibility would further reduce resulting in a **Negligible Adverse** effect.

6.5.20 **Helsby Hill** – Including numerous PRoW that cross the hillside, the summit is located 2.35km to the northeast of the nearest Site boundary and is represented by viewpoint 1. The Site sits within a wider panoramic view of the Cheshire Plain and Mersey Estuary. This panoramic view is restricted across much of the hillside by extensive woodland planting with wider views mostly limited to the area around the summit.

6.5.21 From this location the Site sits in the middle distance of the view. The area immediately around the Site is rural in nature but set within a wider view which contains large industrial and energy infrastructure such as the oil refinery, large commercial warehousing, wind turbines and pylons. To the southwest, Chester can be seen in the distance, looking along the estuary to the northwest, the settlements of Ellesmere Port and beyond this Birkenhead and Liverpool can also be seen.

6.5.22 When looking at the area comprising the Site, the extent of visibility of the existing field parcels is partially restricted by existing field edge vegetation and in particular larger stature trees. Areas where the field edge vegetation is sparser, or which lack larger trees, provide clearer views in towards the individual field parcels that make up the development. Visibility of the northern part of the Proposed Development would be more notable from this location although there is likely to be some visibility of proposed infrastructure within most of the field parcels. The proposed mitigation strategy of letting hedgerows within the site increase in height to be maintained between 3.5 and 4m, along with new tree planting and the gapping up of existing hedgerows, would begin to reduce the extent of visibility of the development as it establishes and matures.

6.5.23 As stated above, views from the hillside would be classed as regional value and of high susceptibility resulting in a high / medium sensitivity. The scale of visual change would be small / negligible at year 1 over a limited extent of the view and long-term in nature, resulting in a negligible magnitude of effect. This would result in a **Minor Adverse** effect. By year 10, once the proposed mitigation planting has established, the extent of visibility would further reduce resulting in a **Minor / Negligible Adverse** effect.

6.5.24 **Alvanley** – Includes properties at the western edge of the village as well as the approaches along Primrose Lane and Helsby Road and is represented by viewpoint 2. The village sits at an elevated point along the sandstone ridge to the east of the study area. Views from the core of the village are screened by existing vegetation, built form and land form. Views out across the plain in the direction of the Site are restricted to occasional views out from gaps in roadside vegetation along Helsby Road and Primrose Lane and also from private residences with a southern outlook, primarily along the southern side of Helsby Road. The receptor group also includes views from the Cheshire Lookout Campsite, the White Lion Pub and Alvanley and Manley Village School.

6.5.25 Views from these locations are more contained than the panoramic views on Helsby Hill with most views out across the plain broken up by vegetation or glimpsed in nature. The more acute angle of view reduces the extent to which the individual field parcels within the Site can be distinguished within the landscape, with existing field edge vegetation providing a screen to much of the Proposed Development. Despite this there is still the potential for views out towards the Proposed Development which would form a small part of the wider view across the plain which includes existing large-scale infrastructure with a far greater visual presence.

Proposed mitigation planting would aid in further breaking up views towards the Proposed Development as it establishes and matures.

6.5.26 The scale of visual change would be small/negligible at year 1, over a limited extent of the view and long-term in nature, resulting in a negligible magnitude of effect. This would result in a **Minor Adverse** effect. By year 10, once the proposed mitigation planting has established, the extent of visibility would further reduce resulting in a **Minor / Negligible Adverse** effect.

6.5.27 **Helsby** – Includes properties and roads off The Rock, including Sandy Lane, Swireford Road, Rockfield Drive, Nemos Close, Alvanley Drive, The Paddock and Alvanley Road. This area is residential in nature and bound by woodland to the west, the area itself is well wooded with a large amount of mature vegetation located between properties. From publicly accessible points within this receptor group, built form and existing vegetation would screen all but occasional glimpsed views between properties and vegetation in the direction of the Site. From within private residences, only those with an outlook in the direction of the Site would have the potential of visibility towards the Site. These views would sometimes be framed by vegetation and glimpsed in nature but also sometimes more open with wider views out across the plain landscape.

6.5.28 Where there are views in the direction of the Site, they would be seen across existing development lower down the slope along either side of the Chester Road. Further in the distance Ellesmere Port would also be in view along with associated large-scale infrastructure along the Mersey Estuary. The immediate context of the Site is largely rural in nature when viewed from here, with the exception of the M56 which passes by the Site to the north.

6.5.29 The more acute angle of views towards the Site would result in much of the Site being screened by existing field edge vegetation, however there is potential for partial views towards the Proposed Development. As proposed mitigation planting begins to mature and existing field edge vegetation is maintained at a greater height of between 3.5 and 4m, the extent to which the Proposed Development would be visible would diminish.

6.5.30 The scale of visual change would be small at year 1 over a limited extent of the view and long-term in nature resulting in a slight / negligible magnitude of effect. This would result in a **Minor Adverse** effect. By year 10, once the proposed mitigation planting has established, the extent of visibility would further reduce, resulting in a **Minor / Negligible Adverse** effect.

6.5.31 **Cob Hall Lane / Sugar Lane** – Located around 3km from the Site boundary, the ZTV suggests some degree of visibility from properties along both lanes and from adjacent PRoW. Viewpoint 7 is taken from the North Cheshire Way, from within this area of potential visibility. In addition to the PRoW that run through this area of potential visibility, there are also properties on Cob Hall Lane and Sugar Lane with panoramic views out across the landscape and the potential for glimpsed views in the direction of the Site from the roadside.

6.5.32 The extent of visibility would vary with some views limited by vegetation. Where there are clear views out across the plain, the Site tends to sit more to the periphery of the view to the north with the focus of the view more in the direction of Chester. The acute angle of view results in the Site appearing largely screened from this location with layered field edge vegetation preventing clear views into the Site.

6.5.33 The scale of visual change would be negligible at year 1 over a limited extent of the view and long-term in nature resulting in a negligible magnitude of effect. This would result in a **Minor / Negligible Adverse** effect. By year 10, once the proposed mitigation planting has established, the extent of visibility would further reduce resulting in a **Negligible Adverse** effect.

Key routes

6.5.34 The following key routes lie within the study area:

Roads and Rail

6.5.35 **M56** – The M56 runs in a northeast to southwest direction to the west of the Site, with the ZTV suggesting the potential for visibility along a 1.6km stretch running in a southwesterly direction from Junction 14. The road sits within a cutting along most of this length with a robust line of roadside vegetation running along most of the length where the Site boundary borders the motorway, with the exception of several small gaps which would provide the opportunity for passing glimpsed views in towards the Proposed Development. While the vegetation would offer a screen when in leaf there is also a chance of filtered views through parts of the screen during winter months when the vegetation is not in leaf.

6.5.36 Views from the motorway would be classed as of community value with a low susceptibility resulting in a low sensitivity. The scale of visual change would be negligible at year 1 over a limited extent of the view and long-term in nature, resulting in a negligible magnitude of effect. This would result in a **Negligible Adverse** effect which would remain at year 10.

6.5.37 **A5117** – The A5117 runs west to east across the study area, bordering the Site briefly adjacent to the motorway junction. The ZTV suggests the possibility of pockets of visibility between Thornton-le Moors, 1.3km to the west, and Hapsford, 580m to the east. Viewpoint 3 is taken from the road adjacent to Hapsford.

6.5.38 To the north of the M56, potential visibility is limited by road side hedgerows and other vegetation which prevents views along most of the length on the approach to the motorway junction. Within the last 500m of the approach, the view across to the other side of the motorway begins to open up a little with views over to the roadside vegetation on the southern side of the motorway. This gives potential for glimpsed views in towards small parts of the northern edge of the Proposed Development, although these would be very much dependant on hedgerow height adjacent to the road and the vehicle height from which the landscape is viewed.

6.5.39 Crossing to the south of the motorway, there is a chance of a glimpsed view in towards the corner of the Site which borders the motorway junction, beyond this, moving in an easterly direction there is no further scope for views towards the Proposed Development.

6.5.40 Views from the A5117 would be classed as of community value with a medium susceptibility resulting in a medium sensitivity. The scale of visual change would be small / negligible at year 1 over a limited extent of the view and long-term in nature resulting in a negligible magnitude of effect. This would result in a **Minor / Negligible Adverse** effect reducing to **Negligible Adverse** at year 10 when mitigation planting had established and begun to mature.

Recreational Routes

6.5.41 **North Cheshire Way** – Crosses the study area in an east / west direction with the ZTV suggesting occasional glimpses of the Proposed Development including from Barrow Lane, through Dunham-on-the-Hill and then again as it ascends Towers Lane up towards Alvanley. At its closest point it is 890m from the nearest Site boundary. The first pocket of suggested visibility is from Barrow Lane. While the ZTV suggests visibility from this point, site analysis suggests that the Proposed Development would not be visible from this location (see viewpoint 8). Equally, from within Dunham-on-the-Hill there is unlikely to be any visibility of the Proposed Development from the North Cheshire Way.

6.5.42 The next pocket of suggested visibility is along Towers Lane. This route is well screened by roadside vegetation with opportunities to view the Site limited to occasional glimpsed views through gaps in vegetation. From here the site is then screened from view until the route reaches the summit of Helsby Hill (viewpoint 1) where the site would be visible as part of a wide panoramic view.

6.5.43 Overall, the extent of visibility along the route is very limited with views towards the Site mostly screened. The only clear view of the Site is from the summit of Helsby Hill where it sits within a much wider view with significant amounts of existing larger scale infrastructure already visible in the wider view (see 6.5.20-23).

6.5.44 Views from the PRoW would be classed as of regional value with a high susceptibility resulting in a high / medium sensitivity. The scale of visual change would be negligible at year 1, over a limited extent of the view and long-term in nature, resulting in a negligible magnitude of effect. This would result in a **Minor / Negligible Adverse** effect which would remain at year 10.

6.5.45 **Longster Trail** – Runs from the summit of Helsby Hill in a generally southerly direction, at its nearest point the route is 2.7km from the Site. The ZTV suggests that there is the possibility of views towards the Proposed Development from a small section of the route around Lowerhall Farm (viewpoint 7) and then again along a small ridge running between Moor's Brook and Tower Lane. From both of these locations the Site would be visible in the context of a wider panoramic view and only visible for a short section of the route at both locations. The Site then remains screened from view until the summit of Helsby Hill where it briefly follows the same route as the North Cheshire Way**.**

6.5.46 Views from the PRoW would be classed as of regional value with a high susceptibility resulting in a high / medium sensitivity. The scale of visual change would be negligible at year 1, over a limited extent of the view, and long-term in nature, resulting in a negligible magnitude of effect. This would result in a **Minor / Negligible Adverse** effect which would remain at year 10.

6.5.47 **PRoW 123/FP3** – Runs from the A5117 at Junction 14 in a westerly direction to Elton Green and with the ZTV suggesting the potential for views towards the Proposed Development along its length, at its closest point it is located 75m to the north. The PRoW is not well used and is isolated from surrounding settlements by the M56 and A5117. Views along the length of the PRoW are dominated by the pylons that run between the two roads.

6.5.48 Field edge vegetation is relatively sparse with gaps in much of the vegetation with the landscape notably more open than that to the south of the motorway. As a result, there are views back in the direction of the Proposed Development along most of the length of the

footpath although these do become increasingly filtered moving westwards. While roadside vegetation to the north of the M56 is relatively sparse, there is a stronger band of vegetation running along much of the southern side of the motorway, further limiting views. The resulting visibility of the Proposed Development is relatively limited in nature with glimpsed views through occasional gaps in vegetation all year round, and the possibility of filtered views through vegetation during winter months.

6.5.49 Views from the PRoW would be classed as of community value with a high susceptibility resulting in a high / medium sensitivity. The scale of visual change would be negligible at year 1, over a limited extent of the view, and long-term in nature, resulting in a negligible magnitude of effect. This would result in a **Minor / Negligible Adverse** effect which would remain at year 10.

6.5.50 **PRoW 114/FP5** – Runs westwards from the Dunham-on-the-Hill to the boundary of the Site. From the railway crossing to the nearest Site boundary is 480m with the approach to the Site from the village lined with vegetation either side of the PRoW. This filters views towards the Site with this screening becoming less effective approaching the Site boundary. The PRoW ends at the Site boundary.

6.5.51 The proposed mitigation strategy would seek to reinforce the existing vegetation the eastern edge of the Site, gapping up hedgerow and introducing additional tree planting. In addition, existing vegetation within the Site would be maintained at a height of 3.5-4m. This would provide an enhanced level of screening as it establishes and begins to mature.

6.5.52 Views from the PRoW / lane would be classed as of community value with a high susceptibility resulting in a high / medium sensitivity. The scale of visual change would be medium at year 1, over a limited extent of the view and long-term in nature, resulting in a moderate / slight magnitude of effect. This would result in a **Moderate Adverse** effect. By year 10 the proposed mitigation planting would have reduced the potential visibility of the scheme resulting in a reduction in effect to **Moderate / Minor Adverse**.

6.6 Designated Areas

6.6.1 The Site does not sit within any landscape designations; however, it does sit within the wider setting of the Helsby and Frodsham Hills Area of Special County Value (ASCV), which is a locally recognised landscape. The ASCV broadly reflects the extent of *LCAs 2a: Frodsham* and *2b: Helsby Hill* but also includes parts of *LCA3a: Helsby to Tarpoley* and *LCA5f: Helsby to Frodsham Undulating Enclosed Farmland.*

6.6.2 The statement of importance states that the ASCV is *'Visually and perceptually some of the most important landscape within CWaC due to the relatively pronounced change in elevation in relation to the lower-lying pastoral landscapes of the Cheshire Plain to the east and west. This gives rise to a prominent but rounded skyline visible from a wide area and presents extensive views from a variety of points upon it. Such views are particularly important to the north where expansive vistas of the industrialised Mersey Estuary and Ellesmere Port are dramatic, as well as towards the uplands of the Peak District in the east and to the west towards the Clwydian Hills and, in clear conditions, beyond to the mountains of north Wales.*

6.6.3 *The landscape comprises a mosaic of pasture and arable farmland with pockets of woodland cover, particularly to the western slopes of the ridge. More incised cloughs complicate the ridge's generally linear form to its eastern and western flanks. The ASCV is crossed by a*

dense and connected network of recreational trails, bridleways and footpaths, including the Sandstone Trail and Delamere Way.'

6.6.4 Special landscape qualities of the ASCV that have the potential to be impacted by Proposed Development and are considered relevant to the Site are:

- Long distance footpaths run along the length of the ridge from where there are some spectacular panoramic views from the ridge as far as Wales to the west and the Peak District to the east.

6.6.5 The expansive panoramic views from more open elevated points form a key element of the ASCV and as such any change to this setting should be considered. The Proposed Development sits within a broadly rural part of the wider view but close to large infrastructure associated with the estuarine landscape such as the oil refinery, large commercial development, the M56 and energy infrastructure including wind turbines and pylons.

6.6.6 The Proposed Development would be visible as a small part of this wider view, with the built form of the solar farm sat within the existing field structure. Existing field edge vegetation, including large mature oak trees, would break up the scale of the development and provide a partial screen. However, despite this, there would be views towards parts of the Proposed Development. The proposed mitigation planting would reinforce this existing landscape structure by gapping up existing hedgerows and planting new hedgerow trees. Once established, this would aid in further screening the Proposed Development from these longer views.

6.6.7 Effects on the purposes of this designation would only be in relation to the views from it and the change to the wider setting. While visible the Proposed Development would only form a small part of a much wider panoramic view and would be secondary in terms of influence in the view when compared to larger scale infrastructure along the Mersey Estuary. The effect on this characteristic of the ASCV would be Small to Negligible and localised in extent. The effects would be of a Slight / Negligible magnitude of effect and **Minor Adverse** in year 1, reducing to **Minor / Negligible Adverse** by year 10 once mitigation planting had established and began to mature.

6.7 Green Belt Analysis

6.7.1 Effects on the Green Belt do not fall within the guidelines for LVIA/LVA and the case for 'Very Special Circumstances (VSC)' is contained within the accompanying Planning, Design and Access Statement for the Proposed Development. The Green Belt Analysis in this LVA has been used to feed into the VSC.

6.7.2 The Cheshire West and Chester Local Plan policy STRAT 9: Green Belt and Countryside states:

'The intrinsic character and beauty of the Cheshire countryside will be protected by restricting development to that which requires a countryside location and cannot be accommodated within identified settlements. Within the countryside the following types of development will be permitted;

- *Development that has an operational need for a countryside location such as for agricultural or forestry operations.*

- *Replacement buildings.*
- *Small scale and low impact rural / farm diversification schemes appropriate to the site, location and setting of the area.*
- *The reuse of existing rural buildings, particularly for economic purposes, where buildings are of permanent construction and can be reused without major reconstruction.*
- *The expansion of existing buildings to facilitate the growth of established businesses proportionate to the nature and scale of the site and its setting.*

Development must be of an appropriate scale and design to not harm the character of the countryside.

6.7.3 Specifically in relation to Green Belt, the National Planning Policy Framework (NPPF) (December 2024), states that the essential characteristics of Green Belts are their openness and their permanence (NPPF paragraph 142).

6.7.4 The NPPF sets out the five purposes of Green Belt. Table below 5 provides an assessment of the Proposed Development against these five purposes:

Table 5 Green Belt Assessment

Purpose	Assessment
To check the unrestricted sprawl of large built-up areas	Urban sprawl would occur when new development is proposed on the urban fringe of settlement. The Site is located in countryside with the nearest significant urban settlements being Elton (550m north), and Helsby (1.4km east). Smaller village settlements surround the Site include Hapsford (500m northeast), Dunham-on-the-Hill (480m east) and Thornton-le-Moors (1.2km northwest). The filtering of views by existing vegetation results in the Proposed Development having limited intervisibility with surrounding settlements. The Site is bound by the M56 to the north and any further expansion of the development would encroach into the buffers that prevent significant interaction with surrounding receptors. As such it is reasonable to assume that the proposals would remain within the proposed footprint and not be extended in the future.
To prevent neighbouring towns merging into one another	The Proposed Development is visually distinct from surrounding settlements with the vegetation and surrounding farmland preventing intervisibility from most locations. The M56 separates the Proposed Development from the more urban context of the Ellesmere Port area to the north. Furthermore, solar development is not permanent in nature with the application seeking approval for a 40 year operational period. After this point the Site would be returned to farmland which would benefit from the ecological enhancements and improvements to biodiversity that the Proposed Development achieved.

To assist in safeguarding the countryside from encroachment	The Site is currently undeveloped but is well screened from the surrounding landscape due to the flat nature of the plain and strong field edge vegetation. The proposed mitigation planting would further strengthen this separation from surrounding settlements, PRoWs and local roads, providing a strong level of containment for the Site. The scheme is also relatively unobtrusive within a landscape where other large-scale infrastructure such as wind turbines, pylons and an oil refinery provide existing man-made intervention in the wider context.
To preserve the setting and special character of historic towns	The Site does not contribute to the special character of any historic towns and the proposed development would not impact the setting or character of them either. Further information on potential effects on heritage assets can be found within the Heritage report that accompanies this application.
To assist in urban regeneration, by encouraging the recycling of derelict and other urban land.	The development of the Site would not detract from any strategy to assist in urban regeneration. Further information on site selection can be found within the Planning, Design and Access Statement that accompanies this application.

7 SUMMARY OF LANDSCAPE AND VISUAL EFFECTS

7.1.1 The proposal involves the installation of a 30MWac Solar PV Farm and associated infrastructure and landscape and ecological enhancements, for a temporary operational period of 40 years. It is spread across 10 field parcels and would be accessed off Common Lane off the A5117 to the north of the Site.

7.1.2 The Proposed Development would include green infrastructure proposals, with fencing positioned to maintain the connectivity of existing field edge vegetation. This would be retained and enhanced as part of the proposals through the gapping up of any hedgerows as required and through the planting of additional hedgerow trees and the management of areas outside of the fence lines for ecological enhancement and to maximise biodiversity net gain.

7.1.3 The Proposed Development sits within the Cheshire Plain. The site and surrounding landscape are flat in nature with the exception of a small hillside around Dunham-on-the-Hill and a sandstone ridge to the east of the Site that runs up to a summit on Helsby Hill. From within the plain, the Site is well screened by existing field edge vegetation which heavily filters views, even through wintertime. From more elevated points such as Helsby Hill there are wide panoramic views across the landscape where the Site forms a small part of a much wider view. The Site is located within an area of Green Belt.

7.1.4 The Proposed Development would involve the loss of 3no. small groups of category C vegetation and 4no. trees (2no. category B and 2no. category C). Other than this, impacts on landscape elements would be limited to the pastoral and arable farmland within the host fields.

7.1.5 Potential effects on the host landscape character area (9a Cheshire Plain West: Dunham to Tarvin Plain) are over a localised extent and Moderate / Minor adverse. Once mitigation planting has matured this would reduce to a Minor Adverse effect. Effects on adjacent landscape character areas are no greater than Minor adverse.

7.1.6 Effects on visual amenity are localised to the Site and its immediate vicinity, although there would be longer-distance views of the Proposed Development possible from areas of high ground at Helsby Hill and the sandstone ridge running from it.

7.1.7 The largest effect on visual amenity would occur on the PRoW and lane that run from the edge of Dunham-on-the-Hill down to the Site boundary; this has a Moderate adverse effect reducing to Moderate / Minor adverse at year 10. Other than this, visual effects would be no greater than Minor Adverse at year 1 and Minor / Negligible Adverse at year 10 from elsewhere in the study area where there are views of the Site. All anticipated effects are considered reversible at the end of the solar farm's 40 year lifespan, when the landscape can be returned to farmland with enhanced field edge vegetation and green infrastructure created as a legacy.