9 LANDSCAPE AND VISUAL IMPACT ASSESSMENT

9.1 Introduction

9.1.1 Overview

This report, prepared by HEPLA Limited, presents an assessment of the likely significant landscape and visual effects of the Proposed Development upon the landscape resources and visual amenity of the site and surrounding study area. The Landscape and Visual Impact Assessment (LVIA) is based on the project description and site context as set out Chapter 2: Project Description and concentrates on the key landscape and visual issues in relation to:

- landscape effects – both physical changes to constituent elements of the landscape fabric, and how changes in the character and qualities of the landscape and designated areas are perceived by people, as a result of the Proposed Development; and
- visual effects – changes to views or visual amenity, as experienced by people, from key viewpoints, the surrounding landscape, settlements, roads, footpaths and cycle routes, as a result of the Proposed Development.

Landscape character and resources are considered to be of importance in their own right and are valued for their intrinsic qualities regardless of whether they are visible / seen by people or not. Effects on visual amenity as perceived by people are clearly distinguished from, although closely linked to, effects on landscape character and resources. Landscape and visual assessments are therefore separate, but linked processes.

This report provides a summary of relevant planning policy and a description of the methods used in the assessment. This is followed by a description of the relevant baseline conditions of the site and surrounding area and an assessment of the likely significant effects during the operation of the Proposed Development. Mitigation measures are identified, where appropriate to avoid, reduce or offset any adverse effects identified, together with the nature and significance of likely residual effects.

The LVIA includes an Assessment of Cumulative Landscape and Visual Effects arising from the operation of the Proposed Development in conjunction with built/consented developments within the study area, and those at planning application stage. Note that this is incorporated into the main assessment under consideration of each receptor rather than being presented separately. This is because the built and consented sites are considered as part of the baseline.

The LVIA is supported by a comprehensive set of Figures illustrating the Proposed Development's context, the predicted visibility of the Proposed Development and the appearance of the Proposed Development. The site location, Landscape Designations, Landscape Character Areas and viewpoint locations are identified on Figures 1.1.1 – 1.1.4.

The assessment of visual effects is supported by viewpoint photographs and predicted wireframe visualisations in Figures 1.2.1 – 1.2.11.

9.1.2 Competence

The LVIA chapter has been prepared by a Chartered Landscape Architect at Hermitage Environmental Planning and Landscape Architecture Limited (HEPLA), and has been peer reviewed by another Chartered Landscape Architect. Both have over 20 years of professional experience in undertaking LVIA.

9.2 Scope and Methodology

9.2.1 General Approach

In preparing this Chapter, a wide range of national legislation and policy guidance documents relevant to the assessment have been considered as listed in Table 6.1.

The LVIA has been based on guidelines provided in the following publications:

- Landscape Character Assessment: Guidance for England and Scotland (The Countryside Agency and SNH, 2002); and
- Guidelines for Landscape and Visual Impact Assessment (GLVIA3) (Landscape Institute and Institute of Environmental Assessment, 3rd Edition 2013).

The general approach to the LVIA includes the following tasks:

- Scoping
- Baseline Assessment (comprising desk study and field survey) and
- Analysis and Reporting

These tasks are described in detail below.

9.2.2 Scoping

The scope of the LVIA was set out through written communication with South Holland District Council in October 2022. In summary, given the localised nature of the effects, it was considered that the assessment would focus on a core study area of c.2 km beyond the site boundary to assess landscape and visual effects in detail. The following viewpoint locations to be included in the assessment were confirmed to South Holland District Council during November 2022:

1. View east from Eastern Road close to Woodstock House.

2. Views from Marsh Road.

3. Views west and north along the public footpath crossing the site.

4. View west from public footpath to the west of No.4 Sot's Hole Bank.

5. View south west from beside The Old Forge, Sot's Hole Bank.

6. View south from Eastern Road at the edge of Holbeach St Matthew

7. View south east from Newland's Cottage

8. View east from Grange Cottages on Lincoln Lane to the east of Holbeach St Marks

9. View south from the Sea Bank.

Subsequent to the scoping exercise with South Holland District Council it is noted that an application has been submitted for a nearby 48MW solar farm, proposed at Land North of Roman Bank and East of Middle Marsh Road at Red House Farm, Holbeach Bank, Spalding, located 1.5 km to the south west of the Proposed Development. As such the scope of this assessment has been extended to consider cumulative landscape and visual effects with this site.

The following further solar farm proposals within South Holland District have not been considered further in the cumulative assessment due to their long separation distance from the proposed development:

- Decoy Farm, planning reference: H02-0991-18, which lies c.22 km to the south east of the site.
- Gunthorpe Road Solar Farm, appeal reference: APP/A2525/W/22/3295140, which lies 14 km to the south east of the site.
- Bicker Fen Solar Farm, planning reference H04-0849-22, which lies 19 km to the west of the site.

There will be no significant cumulative effects on landscape and visual receptors arising with these three sites.

9.2.3 Baseline Assessment

The first stage of the assessment reviews the existing landscape and visual resource of the study area in terms of its character, quality (i.e., the baseline condition) and establishes sensitivity of the resources/receptors. The baseline assessment forms the basis against which to assess the magnitude and significance of the predicted landscape and visual effects arising from the Proposed Development.

The baseline assessment has three elements:

- Description – the process of collecting and presenting information about landscape and visual resources in a systematic manner;

- Classification – the more analytical activity whereby landscape and visual resources are refined into units of distinct and recognisable character; and
- Evaluation – the process of attributing a sensitivity rating to a given landscape or visual resource, by reference to specified criteria.

In determining these elements, the baseline assessment process comprises three stages: desk study, field survey and analysis. These are described below.

9.2.4 Desk Study

As part of the desk study, existing map and written data regarding the Proposed Development site and its environs were reviewed, including:

- Natural England – National Landscape Character Assessment, online;
- Ordnance Survey (OS) Explorer Map, Sheet 249, Spalding & Holbeach;
- South East Lincolnshire Local Plan, adopted 2017;
- Historic England's Register of Parks and Gardens.

The desk study enabled the definition of the baseline landscape and visual resource within the study area and the main users of the area, key viewpoints and key features were identified (these were subsequently confirmed as part of the field studies).

The aim of the baseline visual assessment was to ensure that a representative range of viewpoints were included in the visual assessment in order to represent the identified receptors. The potential extent of visibility of the Proposed Development was identified by reference to Ordnance Survey map data, the draft zone of theoretical visibility mapping, and observations made in the field. Following this, potential visual receptors likely to be affected by the Proposed Development were identified.

The viewpoints were selected to ensure that the visual assessment included a representative range in relation to the following criteria:

- Type of receptor - including different Landscape Character Areas;
- Distance of receptor from Proposed Development - to a maximum distance of 3km from the Proposed Development; and
- Direction of receptor from Proposed Development, with the aim of achieving an even distribution from different compass points around the site.

The desk study provides the basis for subsequent field survey work. It informs the description of the Landscape Character Areas for the study area, the definition of the potential extent of visibility and the identification of the principal viewpoints and receptors, which were subsequently confirmed during the field survey.

9.2.5 Field Survey

A field survey was undertaken to verify the Landscape Character Area identified within the study area and gain a full appreciation of the relationship between the Proposed Development and the existing landscape.

Field survey work also verified the appropriateness of the proposed viewpoints. This involved checking the initial viewpoint selection on the ground, to ensure that there will be views of the Proposed Development from these locations. In some instances, this can be remedied by slight adjustments of the location, although this has to remain relevant to the particular receptor(s) for which the viewpoint was selected. It is also important to ensure that the selected viewpoints are a representative view, and demonstrate potential visibility of the Proposed Development for the selected location. The fieldwork was supported by analysis of Ordnance Survey maps, and observations were recorded with photographs.

9.2.6 Analysis and Reporting

Analysis and reporting of the baseline assessment took place after completion of the desk and field surveys. The baseline landscape assessment provided a description, classification and evaluation of the landscape of the study area from which to assess the potential landscape effects of the Proposed Development. The baseline visual assessment provided an initial list of viewpoints for the viewpoint assessment, with brief commentary on viewpoint location, distance from the Proposed Development, receptors and rationale for selection, from which to assess the potential visual effects. The baseline assessment is supported by Figures

1.1.1 – 1.1.4, which show: the study area, Landscape Designations, Landscape Character Areas and Viewpoint Locations. Zone of theoretical visibility mapping was also used to inform the assessment.

The baseline assessment provided a description of the landscape and visual resource. From this information an assessment of the landscape and visual effects of the Proposed Development can be undertaken to determine the development's acceptability in principle and the appropriate mitigation measures.

Assessment of Residual Landscape and Visual Effects

The assessment describes the changes in the character and quality of the landscape and visual resources that are expected to result from the Proposed Development. It covers both landscape impacts, i.e. changes in the fabric, character and key defining characteristics of the landscape; and visual impacts, i.e. changes in available views of the landscape and the significance of those effects on people.

In assessing landscape impacts, the potential direct effects on the fabric of the landscape are considered, together with the potential effects on the perception of landscape character. The latter depends on a number of factors:

- The nature of the Landscape Character Area, including factors such as the nature of views and sense of enclosure;
- The extent of the potential visibility of the Proposed Development (e.g. the number of potential viewpoints and extent of the development seen);
- The proportion of the Landscape Character Area with potential visibility; and
- The distance to the Proposed Development.

The baseline landscape character assessment together with an assessment of the potential effects on each character area is included in the assessment, along with consideration of the extent of potential significant effects.

A viewpoint analysis has been carried out to identify and evaluate the potential effects on visual amenity arising from the Proposed Development at specific representative locations. The viewpoints selected are considered to be representative of the spectrum of receptors in the study area, located at different distances, directions and elevations relative to the Proposed Development.

The assessment involved the preparation of viewpoints to illustrate views of the existing site, to predict the extent of views of the Proposed Development and to assist in the assessment of effects. These are shown in Figures 1.2.1 – 1.2.11.

9.3 Assessment Criteria

The aim of the LVIA is to identify, predict and evaluate potential key effects arising from a development. Wherever possible, identified effects are quantified, however, the nature of LVIA requires an element of interpretation using professional judgement. In order to provide a level of consistency to the assessment, the prediction of magnitude of change and assessment of significance of the residual landscape and visual effects have been based on pre-defined criteria.

9.3.1 Sensitivity of the Landscape and Magnitude of Change

The capacity of the landscape to accommodate change of the type and scale involved in the formation of the Proposed Development is assessed. The assessment process makes judgements on landscape sensitivity and susceptibility to change, in the context of the specific effects arising from the proposal.

The sensitivity of the landscape is not absolute and varies according to the existing landscape, the nature of the Proposed Development and the type of change being considered. The determination of the sensitivity of the landscape resource to changes associated with the Proposed Development is defined as high, medium, low or negligible - or intermediate bands between these. It is developed from guidance within GLVIA3, and based on professional interpretation of a combination of parameters as follows:

- Key landscape characteristics - a professional evaluation informed by the key characteristics of the landscape and existing character assessments, describing the elements that make up the landscape including:
    - Landscape value, as reflected by local, regional or national landscape designation;

- Landscape scale – which is the relative size of the main landscape elements and components;
- Physical influences such as landform;
- Land cover, including different types of vegetation and patterns and types of tree cover; and
- The nature of views - whether open, closed, long or short distance, simple or diverse.

GLVIA3 advises that the two components of 'value' and 'susceptibility' to change are taken into account in assigning sensitivity to change from the Proposed Development to landscape and visual receptors. The two factors are described and explained in greater detail below.

Landscape Value

Establishing landscape value requires an understanding of how society values different Landscapes. This is used to inform judgements on the significance of effects. Value is most often expressed through designation; however, undesignated landscapes and components of individual landscapes also need to be examined. As part of the baseline the following factors are considered when developing an understanding of landscape value:

- Landscape quality/condition - the physical state of the landscape;
- Scenic quality - aspects of the landscape that appeal to the senses;
- Rarity - presence of unusual or rare features;
- Representativeness - the landscape may be representative of a typical landscape;
- Recreation values - particularly where landscape experience is important;
- Perceptual aspects - value for particular experience such as tranquillity; and
- Cultural associations - with people such as writers or artists, events, etc.

Information on landscape value is included in the baseline descriptions of landscape character, in information included from the citations of designated landscapes. This information has been reviewed and refined through survey and analysis.

Susceptibility to Change

GLVIA3 defines susceptibility to change as "the ability of the landscape to accommodate the proposed development without undue consequences for the maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies."

The degree to which a particular landscape type or area can accommodate change will vary with:

- existing land use;
- the pattern and scale of the landscape;
- visual enclosure/openness of views, and distribution of visual receptors; and
- the scope for mitigation, which will be in character with the existing landscape.

Key characteristics likely to be affected by the Proposed Development are evaluated, taking into account 'quality, value, contribution to landscape character, and the degree to which the particular element or characteristic can be replaced or substituted'.

Landscape Sensitivity

In order to evaluate the sensitivity of the landscape receptor the criteria outlined in Table 9.1 below have been used, combining an understanding of the landscape value and susceptibility to change, based on GLVIA3.

Table 9.1: Landscape Sensitivity

Description	Sensitivity
Landscape with important components, usually of particularly distinctive character and high quality, susceptible to relatively small changes and for which mitigation will be difficult or not possible. Some less distinctive or lower quality landscapes may also fall into this category where characteristics are such that mitigation of negative changes will be difficult. Landscape is often recognised through designation.	

Landscape with characteristics reasonably tolerant of changes or for which mitigation is likely to be possible. These landscapes may be of high quality or of distinctive character but will usually be relatively ordinary and moderately valued.	High Sensitivity
A less distinctive or relatively poor landscape with few features of quality or interest, potentially tolerant of substantial change and with scope for mitigation of any negative changes.	
Considerably modified or degraded landscape, with few/no features of quality or interest e.g. heavily industrialised landscapes.	Medium Sensitivity
	Low Sensitivity

In some instances, a landscape with important components and high quality may be of a lower sensitivity as a result of its potential tolerance to change and opportunities for mitigation. Conversely a landscape with few features of interest may be of a higher sensitivity because it is vulnerable to change with little opportunity to mitigate change.

Having described the landscape resource and the key components that contribute to the character of the landscape, and categorised the sensitivity of each landscape type to change, the probable magnitude of change sustained as a result of the Proposed Development is assessed. This change could be adverse, neutral or beneficial. The assessment of the magnitude of change is described below.

Magnitude of Change on Landscape Receptors

Each effect on landscape needs to be assessed in terms of its size or scale, the geographical extent of the area influenced, and its duration and reversibility.

Size or Scale (including nature of influence on landscape character)

- Judgements are made about the size or scale of the change in the landscape that are likely to be experienced as a result of the Proposed Development. The judgements take account of:
- The extent to which landscape elements will be lost, the proportion of the total extent that this represents and the contribution of that element to the character of the landscape;
- The degree to which aesthetic or perceptual aspects of the landscape are altered either by removal of existing components of the landscape or by addition of new ones; and
- Whether the effect changes the key characteristics of the landscape which are critical to its distinctive character.

Geographic Extent

The geographic extent over which landscape effects are considered to be distinct from size or scale, the extent of effects will vary according to the nature of the proposal. The effect of a development may have an influence at the following scales:

- At site level, within the development site itself;
- At the level of the immediate setting of the site;
- At the scale of the Landscape Character Area within which the development is proposed; or
- At a larger scale influencing several Landscape Character Areas.

Duration and Reversibility of Landscape Effects

In the context of the Proposed Development the effects on the landscape will be present for the duration of the planning permission.

Judgement on Magnitude of Change

Magnitude of change on landscape is categorised as substantial, moderate, slight, negligible, or none – as set out in Table 9.2 below. There may also be no magnitude of change, where further analysis of potential effects upon landscape receptors reveals that there will be no alteration as a result of the Proposed Development.

Table 9.2: Definition of Magnitude

Level of Magnitude	Definition of Magnitude
Substantial	Total loss or major alteration to key elements/features/characteristics of the baseline (pre-development) conditions such that post development character/composition of baseline will be fundamentally changed.
Moderate	Partial loss or alteration to one or more key elements/features/characteristics of the baseline (pre-development) conditions such that post development character/ composition/ attributes of baseline will be partially changed.
Slight	Minor loss of or alteration to one or more key elements/features/characteristics of the baseline (pre-development) conditions. Change arising from the loss/alteration will be discernible but underlying character/composition of the baseline condition will be similar to pre-development circumstances/patterns.
Negligible	Very minor loss or alteration to one or more key elements/features/characteristics of the baseline (pre-development) conditions. Change barely distinguishable, approximating to the "no change" situation.
None	No change.

Visual Receptor Sensitivity and Magnitude of Change

The sensitivity of visual receptors depends upon:

- The location of the viewpoint;
- The context of the view;
- The activity of the receptor; and
- Frequency and duration of the view.

Value attached to Views

Judgements are also made about the value attached to views experienced taking account of:

- Recognition of the value attached to particular views, for example in relation to heritage assets, or through planning designations.
- Indication of value attached to particular locations as a distinctive view through appearance in guide books, provision of formal facilities such as a car park and sign board, or references in art and literature.

Susceptibility of Visual Receptors to Change

- The susceptibility of different visual receptors to changes in views is a function of:
- The occupation or activity of people experiencing the view at particular locations; and
- The extent to which their attention or interest may therefore be focused on the views and visual amenity they experience at particular locations.

Visual receptor susceptibility is defined as high, medium, or low, or a gradation of these, as set out in Table 9.3.

Table 9.3: Definition of Visual Receptor Sensitivity

Level of Sensitivity	Definition of Visual Receptor Sensitivity
High	Users of outdoor recreational facilities including strategic recreational footpaths, cycle routes or rights of way, whose attention may be focused on the landscape; important landscape features with physical, cultural or historic attributes; views from principal settlements; visitors to beauty spots and picnic areas.
Medium	Other footpaths; people travelling through or past the landscape on roads, train lines or other transport routes, views from minor settlements.
	People engaged in outdoor sports or recreation (other than appreciation of the landscape), those whose attention may be focused on their work or activity rather than the wider landscape.
Low	Views from heavily industrialised or densely built up areas.

Magnitude of Change on Visual Receptors

The magnitude of visual change arising from the Proposed Development is described as substantial, moderate, slight, negligible, or none based on the overall extent of visibility. For individual viewpoints it will depend upon:

- distance of the viewpoint from the development;
- duration of effect;
- angle of view in relation to main receptor activity;
- proportion of the field of view occupied by the development;
- background to the development; and
- the extent of other built development visible, particularly vertical, elements.

Size or Scale

Judging magnitude of visual effects identified needs to take account of:

- The scale of change in the view with respect to the loss or addition of features in the view and changes in its composition, including the proportion of the view occupied by the Proposed Development;
- The degree of contrast or integration of any new features or changes in the landscape with the existing or remaining landscape elements and characteristics in terms of form, scale and mass, line, height, colour and texture; and
- The nature of the Proposed Development, in terms of the relative amount of time over which it will be experienced and whether views will be full, partial or glimpses.

Geographical Extent

The geographical extent of a visual effect will vary with different viewpoints and is likely to reflect:

- The angle of the view in relation to the main activity of the receptor;
- The distance of the viewpoint from the Proposed Development; and
- The extent of the area over which the changes would be visible.

Duration and Reversibility of Visual Effects

In the context of the Proposed Development the effects on views will be present for the duration of the planning permission.

Level and Significance of Effects

The significance of any identified landscape or visual effect has been assessed as major, moderate, minor or no effect. These categories have been determined by consideration of viewpoint sensitivity (combining susceptibility and value) and predicted magnitude of change (size, scale, geographical extent, duration) as

described above, with the following matrix in Table 9.4 used as a guide to correlating sensitivity and magnitude to determine significance of effects.

Table 9.4: Significance of Effects on Landscape and Visual Receptors

Level of Sensitivity	Definition of Visual Receptor Sensitivity			
	Substantial	Moderate	Slight	Negligible
High	Major	Major/Moderate	Moderate	Moderate/Minor
Medium	Major/Moderate	Moderate	Moderate/Minor	Minor
Low	Moderate	Moderate/Minor	Minor	Minor/None

Where the landscape or visual effect has been classified as major or major/moderate, this is considered to be a significant effect in terms of the EIA Regulations (if applicable). It should be noted that significant effects need not be adverse and may be either negative or positive. The assumption is that effects are negative unless stated.

The table is not used as a prescriptive tool, and the methodology and analysis of potential effects at any particular location must make allowance for the exercise of professional judgement. Thus, in some instances, a particular parameter may be considered as having a determining effect on the analysis.

Supporting Graphics

Approach

The LVIA is supported by a range of figures including viewpoint photography. These have been prepared in adherence to the principles presented in the Guidelines for Landscape and Visual Impact Assessment (Landscape Institute and Institute of Environmental Assessment, 3rd Edition 2013), and The Landscape Institute's Advice Note TGN 06/19 Visual Representation of Development Proposals, September 2019.

Photography

All photography was undertaken through the use of a full frame digital Single Lens Reflex (dSLR) camera. The camera was mounted on a tripod with a panoramic head in order to obtain a stable platform for the single frame and panoramic views. The position of the tripod was recorded with a handheld GPS device. In addition to recording the location of the viewpoint, observations with regard to time of day, weather, cloud cover, and visibility were recorded.

Following completion of the fieldwork, the photography was reviewed and the clearest images selected for the production of panoramic images. In some cases, small adjustments are made to the images through the use of Adobe Photoshop/CS3 software in order to improve clarity.

The panoramas were then prepared through the joining of two or more images (typically three) in Photoshop.

Visualisations

The visualisations are presented in order to provide a view of the proposed development within its landscape context and assist the assessor in determining the change and resultant effect on the viewpoint location.

A photomontage is a visualisation based on the superimposition of an image of the proposed development on to a photograph for the purpose of creating a realistic representation of proposed or potential changes to a view, generated using computer software.

The presentation of graphics material requires careful consideration in order to prepare a visualisation that provides an accurately scaled depiction of the proposed development for use at the viewpoint location.

The visualisations were used by the assessor in the field in order to help inform an understanding of the effect resulting from the proposed development at the viewpoint location.

9.4 Planning Policy and Guidance

In the preparation of this Landscape and Visual Impact Assessment, full consideration has been given to the policies, guidance and advice contained in National Planning Policy Framework (NPPF), 2021, the South East Lincolnshire Local Plan, which was adopted in 2017, and subject specific planning policies, which set the context to the development plan.

Key policies relevant to the LVIA are set out below:

9.4.1 National Planning Policy Framework

The NPPF sets out the Government's Planning policies for achieving and delivering sustainable development. Key planning principles relevant to the LVIA are set out below:

- Section 11: Making Effective Use of Land – *"Planning policies and decisions should promote an effective use of land in meeting the need for homes and other uses, while safeguarding and improving the environment and ensuring safe and healthy living conditions."*
- Section 15: Conserving and enhancing the natural environment - states that planning policies and decisions should contribute to and enhance the natural and local environment; and
- Section 16: Conserving and enhancing the historic environment - states that new development should make a positive contribution to local character and distinctiveness.

Development of the land will aim to retain and enhance the positive aspects of the site's features, including the existing structure of trees, whilst addressing potential impacts on both the environment of the adjoining landscape and the wider setting by promoting a proactive mitigation strategy. The associated landscape proposals are indicated on the Landscape Masterplan and described and illustrated in the accompanying Design and Access Statement.

9.4.2 Local Planning Policy

The Adopted South East Lincolnshire Local Plan 2011-2036 provides policy guidance on development and landscape matters. Key policies relevant to the LVIA are set out below:

Adopted South East Lincolnshire Local Plan 2011-2036

Primary Policy 28: The Natural Environment: states that:

"A high quality, comprehensive ecological network of interconnected designated sites, sites of nature conservation importance and wildlife-friendly greenspace will be achieved by protecting, enhancing and managing natural assets:

3. Addressing gaps in the ecological network:

a. by ensuring that all development proposals shall provide an overall net gain in biodiversity, by:

i. protecting the biodiversity value of land, buildings and trees (including veteran trees) minimising the fragmentation of habitats;

ii. maximising the opportunities for restoration, enhancement and connection of natural habitats and species of principal importance;

iii. incorporating beneficial biodiversity conservation features on buildings, where appropriate; and maximising opportunities to enhance green infrastructure and ecological corridors, including water space; and

iv. conserving or enhancing biodiversity or geodiversity conservation features that will provide new habitat and help wildlife to adapt to climate change, and if the development is within a Nature Improvement Area (NIA), contributing to the aims and objectives of the NIA."

The comprehensive structure planting proposals associated with the proposed development will enhance the existing ecological network.

Policy 31: Climate Change and Renewable and Low Carbon Energy Landscapes states that:

"B. Renewable Energy

With the exception of Wind Energy the development of renewable energy facilities, associated infrastructure and the integration of decentralised technologies on existing or proposed structures will be permitted provided, individually, or cumulatively, there would be no significant harm to:

1. visual amenity, landscape character or quality, or skyscape considerations;

2. residential amenity in respect of: noise, fumes, odour, vibration, shadow flicker, sunlight reflection, broadcast interference, traffic;

3. highway safety (including public rights of way);

4. agricultural land take;

5. aviation and radar safety;

6. heritage assets including their setting; and

7. the natural environment."

These matters have been carefully considered in the development of the site layout and the associated embedded mitigation measures which include a comprehensive structure planting strategy.

9.5 Baseline Assessment

9.5.1 Introduction

This section provides a general description of the existing landscape and visual context of the Proposed Development and the wider study area.

9.5.2 Landscape Resources

Site setting

The Proposed Development site comprises six adjacent fields of arable land, subdivided by drainage ditches, an access track, and closely maintained hedgerows along some of the field boundaries. The site extends to c.113.5 hectares. The site comprises the central portion of the Hartley Farm, which lies within the drained farmland of Holbeach Marsh between Holbeach St Matthew to the north east and Holbeach St Marks to the west. The public road, Marsh Road, acts as the south western edge of the site. The site is bordered by surrounding farmland on all sides. Eastern Road beyond the site boundary to the north and Sot's Hole Bank beyond the site boundary to the west bound the northern edges of the farmland. The meandering course of the Fleet Haven drain defines the south eastern edge of the site.

The site is flat, between 3 m – 4 m Above Ordnance Datum (AOD), set within a flat agricultural landscape, and forming part of the polder landscape of the Fens. The angular fields form an interlocking jigsaw subdivided by rectilinear drains. The site measures c. 2 km from east to west and c.700 m from north to south.

The large fields comprising the site and the surrounding fields are defined with occasional well-defined hedgerows, closely maintained hedgerows, with drainage ditches along some field boundaries. Occasional small belts of deciduous woodland, provide strong visual containment in this flat landscape. The scattered farmsteads are marked by clusters of trees which stand out in this open landscape.

The site is not subject to any heritage or landscape designations. The location of the site in the context of the wider study area is shown on Figure 1.1.1.

The Study Area

The wider study area comprises a 1.5 km radius from the boundary of the Proposed Development site, as shown in Figure 1.1.1. This study area boundary extends to encompass the key wider areas of influence of the Proposed Development on the surrounding landscape.

Topographic Features

The wider context is dominated by the flat, open agricultural landscape of The Fens Landscape Character Area. The low Sea Bank to the north forms the only feature of elevation in this otherwise flat landscape. The

earthwork separates the drained polder of the Fens from the coastal marshes and the coastline of The Wash to the north east.

Settlements

The flat agricultural landscape is relatively sparsely settled with occasional farms and cottages, accessed from minor road network and via private tracks. Typically, the buildings of the farms are surrounded by larger modern barns and sheds. Hedgerows and some woodland contain some views in this open landscape. Holbeach St Matthew and Holbeach St Marks form the main villages in the area with the clusters of houses in the villages, softened by well treed settings.

A transmission line, supported by pylons crosses Holbeach Marsh to the south of the study area.

Roads

There are no main roads in the study area but there is a well-defined network of minor roads winding between the arable farmland. Farm tracks are frequent. A footpath crosses the southern extent of the site between Marsh Road and Sot's Hole but otherwise the footpath network is limited.

Views from the network of roads varies between open expansive views across fields, contrasting with views contained by the well-defined hedgerows around the fields and occasional tree belts. Farm buildings and sheds also interrupt views in places. Views are oblique to the direction of travel.

Recreation Routes

National cycle Route 1 passes along the country lanes from Holbeach in the south, via Holbeach St Marks, to Boston in the north. The route is marked on Figure 1.1.3.

Landscape Designations

The site and study area of the Proposed Development is not covered by any form of landscape designation.

Tourism and Recreation

Opportunities for formal recreation in the wider study area are limited however, The Wash includes salt marsh and mudflats that support large, internationally important populations of seals, waders and wildfowl and as such is a focus for bird watching. The Sea Bank provides an elevated vantage point and is popular for local recreation. Elsewhere water-based recreation on the waterways is popular alongside angling. There are no formal tourism and recreation opportunities within the immediate 1.5 km study area.

9.5.3 Landscape Classification

Landscape classification is a means of sub-dividing the landscape into different areas with distinctive landscape character. Landscape types differ in their range of landscape features and the patterns these create, and consequently their ability to accommodate different types of development. Some areas may be particularly sensitive, others more resilient.

To assist in the understanding and interpretation of the study area and its wider setting, the assessment has drawn on the findings of the online National Character Areas Map, made available by Natural England. This classifies the immediate site and its context as falling within the "The Fens" Character Area.

The following information from the online description provides a baseline against which the potential impact of the Proposed Development on the landscape and visual amenity of the area can be judged:

Table 9.5: National Character Area profile 46: The Fens: Key Characteristics:

The Fens: Key Characteristics:

- *"Expansive, flat, open, low-lying wetland landscape influenced by the Wash estuary, and offering extensive vistas to level horizons and huge skies throughout, provides a sense of rural remoteness and tranquillity.*
- *Jurassic clays are overlain by rich, fertile calcareous and silty soils over the coastal and central fens and by dark, friable fen peat further inland. The soils are important for agriculture, which is hugely significant for the rural economy in the Fens. There are over 4,000 farms in the Fens; enough wheat is grown here annually to produce a quarter of a million loaves of bread and one million tons of potatoes are grown here. In addition to traditional vegetables, exotics such as pak choi are now cultivated. Some 40 per cent of England's bulbs and flowers are also produced in the Fens.*
- *The Wash is the largest estuarine system in Britain, supporting internationally important intertidal and coastal habitats influenced by constant processes of accretion and deposition, forming salt marsh and mudflats and providing habitats for wildfowl, wading birds and other wildlife, including grey seals and approximately 90 per cent of the UK's common seals. It also provides important natural sea defences and plays a key role in climate change regulation. Flood storage areas on the Nene, Cam, Lark and Ouse washes also provide significant biodiversity interest. True fen mainly occurs at remnant conservation sites, such as Baston or Wicken Fen.*
- Overall, woodland cover is sparse, notably a few small woodland blocks, occasional avenues alongside roads, isolated field trees and shelterbelts of poplar, willow and occasionally leylandii *hedges around farmsteads, and numerous orchards around Wisbech. Various alders, notably grey alder, are also used in shelterbelts and roadside avenues.*
- *The predominant land use is arable – wheat, root crops, bulbs, vegetables and market gardening made possible by actively draining reclaimed land areas. Associated horticultural glasshouses are a significant feature. Beef cattle graze narrow enclosures along the banks of rivers and dykes and on parts of the salt marsh and sea banks.*
- *Open fields, bounded by a network of drains and the distinctive hierarchy of rivers (some embanked), have a strong influence on the geometric/rectilinear landscape pattern. The structures create local enclosure and a slightly raised landform, which is mirrored in the road network that largely follows the edges of the system of large fields. The drains and ditches are also an important ecological network.*
- *Large, built structures exhibit a strong vertical visual influence, such as wind farms and other modern large-scale industrial and agricultural buildings, while drainage and flood storage structures and embanked rail and road routes interrupt the horizontal fen plain.*
- *Settlements and isolated farmsteads are mostly located on the modestly elevated 'geological islands' and the low, sinuous roddon banks (infilled ancient watercourses within fens). Elsewhere, villages tend to be dispersed ribbon settlements along the main arterial routes through the settled fens, and scattered farms remain as relics of earlier agricultural settlements. Domestic architecture mostly dates from after 1750 and comprises a mix of late Georgian-style brick houses and 20thcentury bungalows."*

Overall Landscape Quality – Medium

Overall Landscape Sensitivity to development – Medium

Not designated for landscape reasons

9.5.4 Baseline Visual Resources

A key component of the assessment is the assessment of effects from key locations within the study area. This assessment is undertaken through field work, establishing the extent of visibility to the Proposed Development in the field.

Viewpoint Selection

Viewpoints for the visual assessment were identified following a detailed analysis of the visibility of the Proposed Development and a preliminary list of viewpoints selected. The type of receptors considered included the following:

- The local settlement pattern;
- Local vantage points; and
- Roads (main and minor).

In order to confirm the appropriateness of the viewpoint selection, field survey verification was carried out. This involved checking the viewpoint grid references on the ground, to ensure that there would be views of the Proposed Development from these locations.

The final list of agreed viewpoints is shown in Table 9.6 and their locations are illustrated in Figure 1.1.4. Photographs of the existing views from these viewpoints are shown in Figures1.2.1 to 1.2.11. The existing and predicted views of the Proposed Development are described in the assessment below.

Table 9.6: Viewpoint locations

Viewpoint (VP) Number	Location	Receptor and Sensitivity	Distance from the Proposed Development	Grid Reference
VP1	View east from Eastern Road close to Woodstock House.	Residents (High) Road Users (Medium)	300 m	539208, 330129
VP2	Views from Marsh Road.	Walkers (High) Road Users (Medium)	0 m	540347, 330165
VP3	Views west and north along the public footpath crossing the site.	Recreational walkers (High)	0 m	541058, 330130
VP4	View west from public footpath to the west of No.4 Sot's Hole Bank.	Residents/ Walkers (High) Road Users (Medium)	550 m	542069, 330953
VP5	View south west from beside The Old Forge, Sot's Hole Bank.	Residents (High) Road Users (Medium)	400 m	541424, 331426
VP6	View south from Eastern Road at the edge of Holbeach St Matthew	Road Users (Medium)	450 m	541079, 331569
VP7	View south east from Newland's Cottage	Residents (High) Road Users (Medium)	400 m	539920, 330707

VP8	View east from Grange Cottages on Lincoln Lane to the east of Holbeach St Marks	Residents (High) Road Users (Medium)	2.05 km	537741, 331091
VP9	View south from the Sea Bank.	Walkers (High)	2.85 km	542189, 333760
VP10	Grid access Viewpoint 1, New Buildings Cottage, Eastern Road	Residents (High) Road Users (Medium)	1.35 km	538299, 329212
VP11	Grid access Viewpoint 2, Marsh Road	Road Users (Medium)	1.8 km	539732, 328147

9.6 Assessment of Construction Stages Effects

The construction period for the Development is anticipated to take 6 months, commencing in 2023; assuming all necessary permissions are obtained. During this phase temporary activities and elements have the potential to cause an effect on the landscape and visual amenity of the Study area as follows:

- Construction of new built form;
- Formation of temporary construction compound and fencing;
- Machinery and material storage;
- Plant and vehicle movements;
- HGV and abnormal load deliveries to site and vehicle movements on site;
- Construction site lighting in winter months; and
- Reinstatement work, including removal of temporary accommodation.

9.6.1 Mitigation of Construction Effects

The location and management of the construction operations identified above will be carefully considered to minimise effects on the landscape resource and visual receptors. The following measures will be required to minimise temporary effects:

- Visual impact is minimized through careful site selection, design, and consideration of existing vegetation for screening purposes. A proposed planting plan will retain existing well-maintained hedgerows and trees and supplement this with new and infill hedgerow planting, alongside hedgerow trees, using native species, to strengthen existing species-poor hedgerows and fill gaps, providing valuable wildlife habitats and effective screening.
- During the construction phase good standards of housekeeping will be employed to ensure that the site is kept tidy;
- Protection of valued features within the application boundary;
- Maintenance of tidy and contained construction compound and laydown area;
- External lighting will be kept to a minimum; where lighting is required for health and safety reasons, directional lighting or shields shall be used to minimise the potential for light spillage and glare;
- The work site will be fenced at the outset, and all trees, shrubs and other vegetation which can be retained will be fenced and protected to the limit of their root zones (the canopy spread), in accordance with BS 5837:2012 Trees in relation to design, demolition and construction. No vehicular access, spoil, soil or equipment storage will be permitted within the fenced areas;
- No unnecessary tree or shrub removal will be undertaken, and vegetation which is to be removed will be marked and agreed on site prior to any felling. No tree removal will be undertaken out with the approved Site. If any removal which has not been anticipated (e.g. trees that may fall on the site and need to be removed for safety reasons), additional new planting, over and above that in the detailed landscape design, will be undertaken to offset the loss;

- Where services trenching crosses an existing hedge or tree belt which are to retained existing gaps will be used where possible so that vegetation removal is minimised. Where removal is required, vegetation will be cleared to a width of around 5 m, or the minimum possible to achieve access;
- Contractor compounds will be located in a place of lowest sensitivity (i.e. away from residential properties and areas of valued trees and shrubs);
- Materials and machinery will be stored tidily during the works;
- Lighting of compounds and works sites will be restricted to agreed working hours and that which is necessary for safety and security. Construction lighting will be designed so that it does not impinge into sensitive views, such as close views from bedroom windows of residential properties. Low level lighting will be used where possible, rather than lighting on tall columns;
- Roads providing access to site compounds and works areas will be maintained free of dust and mud; and
- On completion of construction, all remaining construction materials will be removed from the site and work compounds, hard standing and temporary access roads will be reinstated.

Once the Development is in operation there may be occasional infrequent requirements to repair and maintain the solar array. This may result in vehicles and machinery being present on site for a few days and could result in landscape and visual effects for short periods of time.

9.6.2 Assessment of Residual Construction Effects

The overall effect of the construction phase on landscape and visual amenity is not anticipated to be any greater than the effects during the operational phase and therefore a separate construction phase assessment is not required. In addition, it should be noted that the construction phase will be relatively short-term and temporary.

Effects on medium to long distance views and the perception of the landscape character will be as discussed in detail below in the assessment of residual effects with respect to landscape resource and visual amenity. Locally to the site, there will be not significant short-term effects due to the construction phase on landscape and visual amenity. These effects will be short term in nature and will be typical of normal construction activity seen elsewhere.

Embedded Mitigation

Design iteration of the proposed solar array was undertaken as part of the LVIA to reduce the visual effects. The subsequent assessment has, therefore, been completed taking into account the following embedded mitigation measures which will be adopted within the design.

Visual impact is minimized through careful site selection, design, and consideration of existing vegetation for screening purposes. A proposed planting plan will retain existing well-maintained hedgerows and trees and supplement this with new and infill hedgerow and hedgerow tree planting, using native species, to strengthen existing species-poor hedgerows and fill gaps, providing valuable wildlife habitats and effective screening.

The visualisations prepared for the assessment are based on the array positions and heights, as shown on the site layout plan, as prepared by Green Energy International Limited. The wireframe visualisations include features such as the accommodation and storage buildings, pole mounted CCTV camera towers, and site boundary fencing the proposed solar arrays.

Topography and Landform

The arrays will be sited without the need for any ground modelling. The local topography has been carefully used to limit the extent of direct views to the site.

Fencing

The Proposed Development will be surrounded with a security fence. The fencing will be sensitively coloured in a dark green, or a similarly recessive colour, to ensure that it recedes in wider views across the landscape.

Lighting

Whilst there will be only a negligible requirement for lighting during rare night time service visits. A number of measures will be introduced to minimise the unwanted effects associated with light sources. These will include:

- Cowls/shielding of lights to prevent glare;
- Minimisation of light spread through the use of directional lighting.

These measures are proposed to minimise light pollution and reduce night time glare.

Services

All services associated with the new development will be routed underground and therefore, any visual effects, once construction is completed, will be limited.

It is envisaged that the site drainage strategy will utilise the existing drainage ditches without the need for any additional infrastructure.

Applied Mitigation

Landscape mitigation works including native hedgerow and hedgerow tree planting, and hedgerow reinforcement, are proposed as part of the development. As part of a phased programme of construction the hedgerow reinforcement and tree planting strategy will be implemented at the earliest opportunity. Development in the more visually sensitive sectors of the site will benefit from the early establishment of this planting which will mature to provide an attractive setting to the new development.

The landscape proposals will be used to help integrate the scheme into the surrounding landscape, to anchor it and make it part of the landscape.

A detailed landscape design will be implemented and inspected by a Chartered Landscape Architect at intervals as required, and not less than 4 weeks apart. This will be first approved by the Council as part of the planning application process.

Native tree and hedgerow species, of local provenance will be planted as transplant nursery stock for the hedgerow reinforcement planting and feathered whips for the trees, which will establish quickly to provide screening/filtering of views into the site during operation. The stock size is selected to ensure successful establishment. Species for the hedgerow will include hazel, holly, hawthorn and blackthorn, and tree belt species will include birch, hazel and cherry. An area of riparian planting is proposed beside the Fleet Haven watercourse, including species such as willow, alder and black poplar. The land beneath the solar tables will be planted with a herb rich ley for sheep grazing. The detailed planting proposals will be agreed with officers from south Holland District Council. The planting proposals include:

- A permanent grass mixture will be sown beneath the solar tables;
- Reinforcement of hedgerows and hedgerow tree planting;
- Lengths of new hedgerow planting;
- A length of tree belts around the temporary construction compound/battery storage compound;
- Areas of riparian woodland planting beside the Fleet Haven watercourse.

Maintenance

Measures, to be adopted as part of a landscape management plan for the scheme, are described below:

- Any shrubs planted within the site will be maintained and replanted if there is any damage/death or loss of plants during each planting season within a three-year maintenance period.
- Tree ties and guards etc, will be adjusted annually, and will be removed at the end of the maintenance period.

9.7 Assessment of Residual Operational Effects of the Landscape Resource

9.7.1 Introduction

This section comprises the assessment of the residual effects on the landscape resources arising from the Proposed Development during the operational period. The effects are residual because they take into account the embedded mitigation measures described above.

The landscape resource is the distinctive physical pattern of components and features that combine to form and characterise the landscape. The effects of the Proposed Development on this resource are those that will directly alter this physical pattern and will thus have an effect on the character of the landscape. These effects will only occur within the Landscape Character Area in which the development is located. Beyond this, changes to the landscape character would be confined to indirect changes to the landscape resource. The assessment of the effects on the landscape resource is subdivided into direct effects on the landscape resource and indirect effects on landscape character.

The following assessment of landscape effects addresses:

- Effects on the application site;
- Effects on landscape character; and
- Effects on designated landscapes.

Identification of the potential for significant residual effects has been undertaken following a review of draft visibility mapping and a review of the visualisations provided in Figures 1.2.1 to 1.2.11. This is in addition to the fieldwork undertaken in October 2022 and the use of computer-generated visualisations in order to inform the judgements made by the landscape professional undertaking the assessment.

9.7.2 Duration and Reversibility of the Effects

The magnitude of changes that would be experienced by receptors as a result of the Proposed Development relates in part to the duration of effects and their permanence/ reversibility. The effects will last for the duration of the planning permission for Proposed Development.

9.7.3 Assessment of Direct Effects on the Landscape Resource

Location

The baseline assessment identified a series of adjacent, level, fields of arable land, some with hedgerows, tree belts and field drains, as the context for the Proposed Development. The Application Site comprises landscape features commonly found within the local study area.

Landscape Sensitivity

It is considered that the sensitivity of the Landscape to the proposed change is Medium. The factors which have contributed to this judgement are as follows:

Value

Medium: The site area is not covered by any landscape designations but is an active and productive arable landscape.

Susceptibility to Change

Medium: Across the site it is considered that, in the context of the surrounding flat open agricultural landscape, such agricultural land is not a particularly scarce landscape resource. Taking into account adjacent land uses, it is considered that the sensitivity of the landscape to change is medium.

Magnitude of Change

The overall magnitude of change to the existing landscape fabric across the site is Substantial. The factors which have contributed to this judgement are set out below.

Size or Scale

As a result of construction on the site, there will be a loss or reduction in landscape resources in the area. The solar array infrastructure will be erected in the fields and there will be reduction in the available productive farmland.

The development will incorporate 45,444 solar modules arranged as 1623 solar 'tables' with each table comprising 28 modules. Two types of solar module are proposed:

- Tracking arrays (on the western half of the site) max height (when at full tilt – 3.84m) 2m when flat, orientated in rows running from north to south.
- The south Facing Arrays (on the eastern side of the site) max height 2.89, orientated in rows running from east to west.

There will be a rectilinear network of tracks serving the solar array with Smart Transformer Stations arranged evenly around the site (c.2 per each of the 14 separate arrays), each comprising a small building.

There will also be a DNO Substation comprising a c.3m high 9 m x 5 m concrete panel building and a Customer HV Room comprising a 3 m high, 30m x 5 m concrete panel building. These buildings will be arranged to the far eastern corner of the development, at the site entrance and will include two welfare portacabins.

The compound at the far eastern corner of the site will also incorporate 48 Battery Energy Storage Units with 8 further smart transformer units.

The site will be bounded by a 3 m high security fence, with pole mounted CCTV surveillance cameras a c.15m intervals.

There are no significant existing trees on the site and the Proposed Development will be set back from existing lengths of existing hedgerow, so there will be little or no direct loss of vegetation cover.

On completion of the Proposed Development and the implementation of a pro-active mitigation strategy, hedgerows comprising native species will be planted in the gaps in the existing hedges, with significant lengths of new hedgerows proposed and tree belts around the site compound. Riparian woodland planting is proposed beside the meandering course of the Fleet Haven watercourse. A herb rich grass ley for sheep grazing will be sown beneath the solar tables. The new planting will assist in integrating the Proposed Development into the wider landscape setting.

Geographical Extent

The site area extends to c.113.5 hectares. The site measures c. 2 km from east to west and c.700 m from north to south.

Significance of Effect

The combination of the individual judgements of Medium sensitivity and Substantial magnitude of change on the landscape fabric of the site at the operational stage of the Proposed Development, are considered to result in a locally Major/Moderate effect, which in the context of this assessment is considered to be Significant. Whilst the Proposed Development represents a significant effect upon the landscape resources of the site area, the change is fully reversible in the long term.

9.7.4 Assessment of Landscape Effects

People's perceptions of the effects of a development on landscape character and designated or other relevant landscape areas are closely related to the potential extent and nature of visibility of the development and ancillary infrastructure.

Assessment of Effects on Landscape Character

Introduction

The following section provides an assessment of the predicted effects on Landscape Character Areas within the 1.5 km study area which has been identified as having the potential to experience significant effects. Beyond 1.5 km, due to the low-lying nature of the proposals, the effect of distance, local topography and the filtering effects of vegetation, the Proposed Development will be a less visible element in the landscape. As

such, the effect on landscape character resulting from the Proposed Development will only give rise to a negligible magnitude of change beyond 1.5 km, and therefore no further assessment beyond this distance is required.

The assessment of effects on The Fens Landscape Character Area has been undertaken through field survey and the analysis of ZTV mapping and visualisations in order to confirm the likely nature of visibility and associated implications for effects on the key characteristics and defining features of the character unit.

The location of Landscape Character Areas (LCT) is presented on Figure 1.1.2.

The Fens LCA

Location

The Proposed Development lies within this distinctively flat agricultural landscape, which forms the wider Fens landscape and locally the landscape of Holbeach Marsh.

Landscape Sensitivity

The sensitivity is considered to be Medium. The factors which have contributed to this judgement are set out below.

Value

Within the study area the Fens landscape is not designated. The value of the landscape is considered to be Medium because:

- The flat landscape is well structured with hedgerows and occasional tree belts;
- It forms the wider context to the local settlements at Holbeach St Marks and Holbeach St Matthew.

Susceptibility to Change

Medium:

- Relatively large scale; and
- Managed farming landscape with a limited palette of land uses.

Overall, the Landscape Character Area has a Medium capacity to accommodate change associated with the Proposed Development without undue consequence to baseline qualities. This assumes that the solar array can be accommodated within existing field boundaries, ensuring existing hedges and tree belts are retained, that the development will be low in height and the comprehensive landscape structure planting proposals will assist in integrating the Proposed Development into the setting.

Magnitude of Change

The magnitude of change will be Moderate across the local area (c.500 m radius) of the Holbeach Marsh around the site, although Slight in the wider context (beyond c. 500 m), due to the well-defined hedgerows and occasional tree belts, and the low-lying nature of the proposed solar array. The factors which have contributed to this judgement are as follows:

Size and Scale

- No direct effects on existing landscape elements beyond open agricultural fields.
- Visibility will be limited because the landscape is very flat and because the development will be low lying. Those views which are possible will be oblique to the direction of views and filtered by vegetation cover.
- The large-scale nature of the landscape is capable of accommodating the low-lying nature of development proposed.

Geographical Extent

The Proposed Development will be visible as a relatively minor new element in the landscape, seen within the large-scale farming landscape, with limited influence on the character of the wider The Fens landscape:

- A small portion of the LCT will be directly displaced by the solar array, and limited visibility will affect the areas around it, where trees and hedgerows are less effective in screening views from open areas.

The extent of the effect will quickly diminish with distance, as low-lying elements will be screened or filtered by hedgerows and trees.

Significance of Effect

The combination of the individual judgements of Medium sensitivity and locally Moderate magnitude of change, are considered to result in a locally Moderate effect within around 500 m of the site from where it will have most influence, reducing to Minor when considered as part of the wider LCT. In the context of this assessment, the effect is considered to be Not Significant.

Potential for Future Cumulative Effects

The addition of the proposed development to the in-planning Roman Bank Solar Farm proposal which is located 1.5 km to the south west will result in a Minor and Not Significant combined and sequential cumulative effect locally from the network of minor roads crossing Holbeach Marsh. Effects are limited due to the flat terrain and effective containment provided by the well-defined network of hedgerows. Locally solar farm development within the agricultural plain will become locally noticeable element and characteristic of the landscape. These effects will not influence the key characteristics of the wider LCT.

9.8 Assessment of Residual Effects on Visual Receptors

9.8.1 General

The following sections provide an assessment of the residual visual effects that would be likely to arise from the Proposed Development during the operational period. The effects are residual because they take into account the design and mitigation measures discussed above.

The following assessment addresses effects on the visual amenity of people, through assessing:

- Effects on settlements;
- Effects on key transport routes; and
- Effects at viewpoints.

The assessment has been undertaken through field survey and the analysis of preliminary ZTV mapping and verified visualisations, in order to confirm the likely nature of visibility. An overview of the nature of the visibility of the Proposed Development (the components most likely to be visible) within the study area is provided below.

9.8.2 General Appraisal of Visibility of the Proposed Development

An overview of the nature of the visibility of the Proposed Development (the components most likely to be visible) within the study area is therefore provided below.

General Visibility within 1.5 km

The potential visual influence of the Proposed Development is closely related to a range of parameters, the most important of which are distance and the proposed low height of the solar arrays. Within around 500 m, elements of the Proposed Development are likely to be more visible. Beyond this distance visibility will be less distinct, with the lower parts of the development being screened or filtered by hedgerows and trees and views assimilating with existing landscape elements, forming part of wider views. Given the low-lying nature of the site, and the low height of the development which is proposed, even the low-cut hedges, and the general clutter at ground level will help to screen the solar array. The short tree belts will filter views in winter and screen them in summer.

It is considered that between c.500 m - 1 km of the site, the solar arrays, which form largest component of the development, constructed to a maximum height of 3.84 m, will be seen as a locally noticeable element in the landscape. Within this radius, the Proposed Development will not necessarily be intrusive or dominant, but the solar panels will have the potential to be visible, seen as new elements in the landscape. Between 1 – 1.5 km the Proposed Development will be less visible, with the oblique nature of views across the broadly level

landscape reducing the extent of the visual influence of the development. Beyond 1.5 km, the relative size of the development, as it is seen in wider views, will be much reduced, becoming less distinct and less visible with distance, and appearing as a negligible element in the wider views of the landscape. The slightly elevated views from the Sea Bank to the north illustrate the effective cover provided by the intervening woodland and trees. The low-lying development will assimilate well into the flat low-lying landscape as seen in these slightly elevated views.

Field work indicated in general terms a considerably reduced visibility toward the site with increasing distance, as discussed below.

General Visibility

Theoretical visibility extends around the Proposed Development however, due to the hedgerows, woodland copses, scattered trees and farms across the farmland, the extent of direct views toward the site are limited. Where views are possible, the low-lying nature of the Proposed Development and the flat terrain will restrict the extent of visibility. The Proposed Development will have a relatively tight visual envelope across these flat landscapes. The slightly elevated land at Sea Bank to the north is too far away to enable an elevated view in which the proposed solar array would be anything more than barely perceptible.

9.8.3 Assessment of Effects on the Visual Amenity of Settlements

The following section provides an assessment of the predicted effects on the visual amenity that would be experienced by residents of principal settlements within the study area.

In accordance with the criteria outlined in the detailed methodology above, residential receptors, within settlements in the study area, have a high susceptibility to change as views are experienced regularly for prolonged periods and are generally considered to have a high sensitivity overall to the Proposed Development.

Holbeach St Matthew

Holbeach St Matthew is located c.500 m to the north of the Proposed Development. The settlement is separated from the site by farmland, hedgerows and trees. It is represented by Viewpoint 6, described below.

Visual Sensitivity

Overall Sensitivity

Receptors within Holbeach St Matthew are considered to be of High sensitivity to changes resulting from the proposed solar array. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Residents are considered to be susceptible to change in views.

Value attached to Settlement and Views

Medium: Residents attach value to their local views.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Geographical Influence of Predicted Visibility

Analysis indicates that there will be direct visibility of the Proposed Development from the settlement, over c.500 m away. The oblique nature of views over the flat terrain will limit the extent of actual visibility to a narrow line of solar tables. Locally solar farm development within the farmland to the south of the settlement will become locally noticeable element and characteristic of the landscape.

Scale and Nature of Change to Views from Settlement

The existing views from the southern edge of the settlement enable filtered views across the flat farmland. The proposed solar array will be visible in the short term where there are open views from the settlement towards the site, such as at Viewpoint 6. It will be seen as a new low-lying element forming a narrow strip of development, set within the context of existing farmland. The Proposed Development will visually soften over the short to medium term as the proposed native hedgerow planting establishes around the perimeter of the site and as the planting measures begin to mature.

Overall Magnitude

The change in visual amenity as a result of the Proposed Development will be Slight in magnitude.

Significance of Effect

The combination of the individual judgements of High sensitivity to change and Slight magnitude of change is considered to result in a Moderate and Not Significant level of effect. This will reduce over the short to medium term, as the structure planting establishes, to Negligible magnitude of change with a Moderate/Minor and Not Significant level of effect.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal which is located 3.9 km to the south west of the settlement will not result in cumulative effects on Holbeach St Matthew.

Holbeach St Marks

Holbeach St Marks is located c.2.51 km to the north west of the Proposed Development. The settlement is separated from the site by farmland, hedgerows and trees. It is represented by Viewpoint 8, described below.

Visual Sensitivity

Overall Sensitivity

Receptors within Holbeach St Marks are considered to be of High sensitivity to changes resulting from the proposed solar array. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Residents are considered to be susceptible to change in views.

Value attached to Settlement and Views

Medium: Residents attach value to their local views.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Geographical Influence of Predicted Visibility

Analysis indicates that there will be direct visibility of the Proposed Development from the settlement, over c.2.5 km away. The oblique nature of views over the flat terrain will limit the extent of actual visibility to a narrow line of the upper section of the solar tables.

Scale and Nature of Change to Views from Settlement

The existing views from the south eastern edge of the settlement enable filtered views across the flat farmland. The proposed solar array will be visible in the short term as very narrow line of development, where there are open views from the settlement towards the site, such as at Viewpoint 8. It will be seen as a new low-lying element forming a narrow strip of development, set within the context of existing farmland. The Proposed Development will visually soften over the short to medium term as the proposed native hedgerow planting and tree belt establishes around the perimeter of the site and as the planting measures begin to mature.

Overall Magnitude

The change in visual amenity as a result of the Proposed Development will be Negligible in magnitude.

Significance of Effect

The combination of the individual judgements of High sensitivity to change and Negligible magnitude of change is considered to result in a Moderate/Minor and Not Significant level of effect. This will reduce over the short to medium term, as the structure planting establishes, to further reduce the magnitude of change.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal which is located 3.9 km to the south west of the settlement will result in Minor, Not Significant cumulative effects on Holbeach St Marks.

9.8.4 Assessment of Effects on the Visual Amenity of Route Corridors

This section of the LVIA provides an assessment of the Proposed Development from the main route corridor within the study area. Fieldwork and analysis indicate that there will be some limited visibility from the minor road network to the north, east and west of the site. Some sections of the minor roads will experience views of the Proposed Development where it will constitute a locally visible new element, these effects are covered in detail in the assessment of effects at specific viewpoints below.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal which is located 1.5 km to the south west will result in a Minor and Not Significant sequential cumulative effects locally from the network of minor roads crossing Holbeach Marsh. Effects are limited due to the flat terrain and effective containment provided by the well-defined network of hedgerows.

9.8.5 Assessment of Effects at Viewpoints

The viewpoint assessment has been carried out to identify and evaluate the potential effects on visual amenity arising from the Proposed Development at specific representative locations in the study area. The selection of viewpoints is discussed above.

The predicted views from the seven viewpoint locations are illustrated using the visualisations in Figures 1.2.1 to 1.2.11 which are indicative of the likely positioning, spatial distribution and size of the Proposed Development.

For the purposes of assessing the effects on visual amenity, the sensitivity of the receptors is as defined Table 3, 'Definition of Visual Receptor Sensitivity' in the methodology.

The following detailed analysis of the eleven viewpoints includes a description of the existing and predicted view, an assignment of receptor sensitivity (including confirmation of receptor susceptibility and the value applied to the viewpoint), an analysis of the magnitude of change and an assessment of the level of predicted effects on visual amenity and a determination of their significance. A summary of the effects is provided in Table 7.

Duration and Reversibility of the Visual Effects

The magnitude of changes that would be experienced by visual receptors as a result of the Proposed Development relates in part to the duration of effects and their permanence/ reversibility. The effects of the development will last for the duration of the planning permission.

As the duration of the effects of the Proposed Development will be common to all visual receptors, they have been implicitly considered with regard to the likely magnitude of change in all views, but are not repeated with regard to each viewpoint.

Viewpoint 1: View east from Eastern Road, close to Woodstock House

Location and Rationale for Selection

Viewpoint 1 is located adjacent to Eastern Road, near the junction with Marsh Road and adjacent to the access drive to Woodstock House, due west of the Proposed Development. The viewpoint lies c.300 m to the west of the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by road users and also local residential receptors. Figure 1.2.1 shows 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections. Figure 1.2.1b shows 90° panoramas of the existing view and a predicted visualisation of the Proposed Development at Year 15, following the establishment of the proposed structure planting.

Description of Existing View

The existing view looks west across the open arable fields with small blocks of woodland breaking up the view beyond. The site area is seen beyond the clipped hedgerows beyond the foreground field. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. Four turbines of Red House Wind Farm are seen to the right of the image.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for nearby residents and Medium for road users. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by the residents of Woodstock House, who will experience views in the direction of the Proposed Development.

Medium: Road users will be focussed on views looking along the road and across the surrounding landscape.

Value attached to View

Medium: The viewpoint looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed solar array will be visible as a narrow band of development, seen in oblique views from the road, beyond the immediate roadside views, and partly screened and filtered by the existing lengths of hedgerows and tree belts around the fields which make up the site.
- The Proposed Development will introduce low level structures into the view.
- The sub station buildings and the adjacent battery energy storage units are proposed in the western extent of the site and these structures will be visible in the short to medium term until the proposed structure planting establishes.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.
- Over the short to medium term the proposed sections new hedgerow planting and woodland belt planting along the north western edge of the site will establish to soften the profile of the Proposed Development, forming a well-defined edge to the development and an attractive new feature in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 90° to the viewpoint.
- The Proposed Development lies over a separation distance of c.300 m from the viewpoint.

- Views of this nature will be seen intermittently along Eastern Road, with a limited influence on the focus of the view for road users.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Moderate in the short term in respect of the Proposed Development. Reducing to Slight as the proposed structure planting matures over the short to medium term.

Level and Significance of Effect

The High sensitivity of residents and Medium sensitivity of the road users and Moderate magnitude of change are considered to result in Major/Moderate and Moderate levels of effect respectively, which in the context of this assessment are considered to be Significant for residents. As the proposed structure planting matures over the short to medium term effects will reduce to Moderate for residents with the establishment of beneficial new landscape elements.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal, which is located 1.3 km to the southwest of the viewpoint, will not result in cumulative effects on this receptor due to the flat terrain and the prevailing well defined structure of hedgerows.

Viewpoint 2: Views from Marsh Road

Location and Rationale for Selection

Viewpoint 2 is located at the tight bend in Marsh Road at the southern edge of the Proposed Development. The viewpoint lies adjacent to the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by road users and also walkers. Figure 1.2.2a-b show 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections, looking east and west respectively. Figure 1.2.2c shows 90° panoramas of the existing view and a predicted visualisation of the Proposed Development at Year 15 for the view west, following the establishment of the proposed structure planting.

Description of Existing View

The existing view in Figure 1.2.2a looks east across the open arable fields with small blocks of woodland and hedgerows breaking up the view beyond. The site area is in the immediate foreground comprising the visible extent of the tilled field. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. Six turbines of Red House Wind Farm are seen in the landscape beyond to the centre of the image.

The existing view in Figure 1.2.2b looks west across the adjacent open arable field, with small blocks of woodland and hedgerows breaking up the view beyond. The site area is in the immediate foreground comprising the visible extent of the tilled field. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. The buildings of Hartley Farm are seen to the right of the image.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for walkers and Medium for road users. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by recreational walkers who will experience direct views to the Proposed Development.

Medium: Road users will be focussed on views looking along the road and across the surrounding landscape.

Value attached to View

Medium: The view looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The southern extent of the Proposed Development will be directly visible as a prominent new element close to the viewpoint, seen as staggered rows of solar tables extending north and east across the fields beyond.
- The Proposed Development will introduce new a visible development form into the view.
- The character and pattern of elements in the views will be locally altered as the solar tables curtail views to the existing elements in the landscape.
- Over the short to medium term the proposed hedgerow planting along the south western edge of the site will establish to soften the profile of the Proposed Development, as illustrated in Figure 1.2.2 c, forming a well-defined edge to the development and an attractive new feature in the landscape, curtailing direct views from Marsh Road.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies from north west to south east from this viewpoint.
- The Proposed Development lies adjacent to the viewpoint.
- Views of this nature will be seen intermittently along Marsh Road, with a limited influence on the focus of the view for road users.
- The Proposed Development will have a direct influence on walkers crossing from Marsh Road to Sot's Hole Road.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Substantial in the short term in respect of the Proposed Development. The effect on views from Marsh Road will reduce to Slight as the proposed structure planting, which includes a section of new hedgerow beside Marsh Road, matures over the short to medium term.

Level and Significance of Effect

The High sensitivity of walkers and Medium sensitivity of the road users and Substantial magnitude of change are considered to result in Major and Major/Moderate levels of effect respectively, which in the context of this assessment are considered to be Significant. As the proposed structure planting matures over the short to medium term, and the fields are converted to grazing land, effects will reduce to Moderate/Minor for road users with the establishment of beneficial new landscape elements.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal, which is located 2 km to the west of the viewpoint, will not result in cumulative effects on this receptor due to the flat terrain and the prevailing well-defined structure of hedgerows.

Viewpoint 3: Views east and north along the public footpath crossing the site.

Location and Rationale for Selection

Viewpoint 3 is located on the footpath which traverses the site, midway between Marsh Road and Sot's Hole Road. The viewpoint lies within the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by walkers crossing the site on the public footpath. Figures 1.2.3 a-c show 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections, looking from north though the south east. Figure 1.2.3 d-e shows 90° panoramas of the existing view and a predicted visualisation of the

Proposed Development at Year 15 for the views east and south east, following the establishment of the proposed riparian woodland planting along the south eastern site boundary.

Description of Existing View

The existing view in Figure 1.2.3 a looks north across the open arable field seen against the back drop of small blocks of woodland and hedgerows beyond. The footpath follows the curving line of the farm access track. The site area is in the immediate foreground comprising the visible extent of the tilled field. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape.

The existing view in Figure 1.2.3 b looks east across the adjacent open arable fields, with small blocks of woodland and hedgerows breaking up the view beyond. The property at No.4 Sot's Hole bank is seen on the minor road at Sot's Hole in the distance. The site area is in the immediate foreground comprising the visible extent of the tilled field. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. The course of the Fleet Haven Drain, which can be discerned as a faint grass strip beyond the field, marks the south eastern boundary of the site.

The existing view in Figure 1.2.3 c looks south across the adjacent open arable field, with small blocks of woodland and hedgerows breaking up the view beyond. The site area is in the immediate foreground comprising the visible extent of the tilled field. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. The course of the Fleet Haven Drain, which can be discerned as a faint grass strip beyond the field, marks the south eastern boundary of the site. Five turbines of Red House Wind Farm are seen in the landscape beyond to the centre of the image.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for walkers. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by recreational walkers who will experience direct views to the Proposed Development.

Value attached to View

Medium: The view looking across Holbeach Marsh is to a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The Proposed Development will be directly visible as a prominent new element close to the footpath, seen as staggered rows of solar tables extending north, east and south across the adjoining fields.
- The Proposed Development will introduce new a visible development form into the view.
- The character and pattern of elements in the views will be locally altered as the solar tables curtail views to the existing elements in the wider landscape.
- Over the short to medium term the proposed riparian woodland planting along the south eastern edge of the site will establish to form a backdrop to the Proposed Development, as illustrated in Figures 1.2.3 d-e, forming a well-defined edge to the development and an attractive new feature in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development extends from north through the south from this viewpoint.
- The Proposed Development lies adjacent to the viewpoint.
- The Proposed Development will have a direct influence on walkers crossing from Marsh Road to Sot's Hole Road.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Substantial in respect of the Proposed Development.

Level and Significance of Effect

The High sensitivity of walkers and Substantial magnitude of change are considered to result in a Major level of effect, which in the context of this assessment is considered to be Significant. As the proposed riparian woodland planting matures along the course of the Fleet Haven over the short to medium term, and the fields are converted to grazing land, effects will be moderated by the establishment of beneficial new landscape elements.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal, which is located 2.79 km to the west of the viewpoint, will not result in cumulative effects on this receptor due to the flat terrain and the prevailing well-defined structure of hedgerows.

Viewpoint 4: View west from public footpath to the west of No.4 Sot's Hole Bank

Location and Rationale for Selection

Viewpoint 4 is located on the public footpath just to the west of Sot's hole Road, close to No.4 Sot's Hole Bank, due east of the Proposed Development. The viewpoint lies c.550 m to the east of the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by walkers and also local residential receptors. Figure 1.2.4 shows 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections. Figure 1.2.4 b shows 90° panoramas of the existing view and a predicted visualisation of the Proposed Development at Year 15, following the establishment of the proposed structure planting.

Description of Existing View

The existing view looks west, along the farm track/public footpath, across the open arable fields with small blocks of woodland breaking up the view beyond. The site area is seen as a narrow line of tilled fields beyond the foreground field of winter wheat. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. The buildings of Hartley Farm are seen to the right of the image.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for walkers and nearby residents. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by the residents of No.4 Sot's Hole Bank and by recreational walkers who will experience views in the direction of the Proposed Development.

Value attached to View

Medium: The viewpoint looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed solar array will be visible as a narrow band of development beyond the foreground arable field. The solar tables will be visible in the short to medium term until the proposed structure planting establishes.

- The Proposed Development will introduce low level structures into the view.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.
- Over the short to medium term the proposed riparian woodland planting beside the course of the Fleet Haven and the proposed new section of hedgerow to the north east, will establish to soften the profile of the Proposed Development, forming a well-defined edge to the development and attractive new features in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 255° to the viewpoint.
- The Proposed Development lies over a separation distance of c.550 m from the viewpoint.
- Views of this nature will be seen from the eastern section of the public footpath beside Sot's Hole Road.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Slight in the short term in respect of the Proposed Development. Reducing to Negligible as the proposed structure planting matures over the short to medium term.

Level and Significance of Effect

The High sensitivity of walkers and residents and Slight magnitude of change are considered to result in a Moderate level of effect, which in the context of this assessment are considered to be Not Significant. As the proposed structure planting matures over the short to medium term effects will reduce to Moderate/Minor with the establishment of beneficial new landscape elements.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal, which is located 3.69 km to the west of the viewpoint will not result in cumulative effects on this receptor due to the flat terrain and the prevailing well-defined structure of hedgerows.

Viewpoint 5: View south west from beside The Old Forge Sot's Hole Bank

Location and Rationale for Selection

Viewpoint 5 is located beside Sot's Hole Road, close to the Old Forge, Sot's Hole Bank, due north east of the Proposed Development. The viewpoint lies c.400 m to the north east of the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by local residential receptors and road users. Figure 1.2.5 shows 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections. Figure 1.2.5 b shows 90° panoramas of the existing view and a predicted visualisation of the Proposed Development at Year 15, following the establishment of the proposed structure planting.

Description of Existing View

The existing view looks south west, across the open arable fields with small blocks of woodland breaking up the view beyond. The site area is seen as a narrow line of tilled fields beyond the foreground field of winter wheat. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. The buildings of Hartley Farm are seen to the right of the image, six turbines of Red House Wind Farm are seen in the landscape beyond to the left of the view.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for residents and Medium for road users. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by the residents of the Old Forge, Sot's Hole Bank who will experience views in the direction of the Proposed Development.

Medium: Road users will be focussed on views looking along the road and across the surrounding landscape.

Value attached to View

Medium: The viewpoint looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed solar array will be visible as a narrow band of development beyond the foreground arable field. The solar tables will be visible in the short to medium term until the proposed structure planting establishes.
- The Proposed Development will introduce low level structures into the view.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.
- Over the short to medium term the proposed riparian woodland planting beside the course of the Fleet Haven and the proposed new section of hedgerow to the north east, will establish to soften the profile of the Proposed Development, forming a well-defined edge to the development and attractive new features in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 195° to the viewpoint.
- The Proposed Development lies over a separation distance of c.400 m from the viewpoint.
- Views of this nature will be seen intermittently from Sot's Hole Road.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Slight in the short term in respect of the Proposed Development. Reducing to Negligible as the proposed structure planting matures over the short to medium term.

Level and Significance of Effect

The High sensitivity of residents and Medium sensitivity of road users, and Slight magnitude of change are considered to result in a Moderate level of effect on residents and a Moderate/Minor level of effect on Road Users, which in the context of this assessment are considered to be Not Significant. As the proposed structure planting matures over the short to medium term effects will reduce to Moderate/Minor and Minor respectively with the establishment of beneficial new landscape elements.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal, which is located 3.42 km to the southwest of the viewpoint, will not result in cumulative effects on this receptor due to the flat terrain and the prevailing well-defined structure of hedgerows.

Viewpoint 6: View south from Eastern Road at the edge of Holbeach St Matthew

Location and Rationale for Selection

Viewpoint 6 is located beside Eastern Road, close to the settlement at Holbeach St Matthew, due north of the Proposed Development. The viewpoint lies c.450 m to the north of the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by local residential receptors and road users. Figure 1.2.6 shows 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections. Figure

1.2.6 b shows 90° panoramas of the existing view and a predicted visualisation of the Proposed Development at Year 15, following the establishment of the proposed structure planting.

Description of Existing View

The existing view looks south, across the open arable fields with small blocks of woodland breaking up the view beyond. The site area is seen beyond the foreground tilled field, beyond the grassed edge of the field drain. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. The buildings of Hartley Farm are seen to the right of the image, six turbines of Red House Wind Farm are seen in the landscape beyond the centre of the view.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for residents and Medium for road users. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by the residents of Holbeach St Matthew who will experience views in the direction of the Proposed Development.

Medium: Road users will be focussed on views looking along the road and across the surrounding landscape.

Value attached to View

Medium: The viewpoint looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed solar array will be visible as a narrow band of development beyond the foreground arable field. The solar tables will be visible in the short to medium term until the proposed structure planting establishes.
- The Proposed Development will introduce low level structures into the view.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.
- Over the short to medium term the proposed riparian woodland planting beside the course of the Fleet Haven and the proposed new section of hedgerow to the north east, will establish to soften the profile of the Proposed Development, forming a well-defined edge to the development and attractive new features in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 190° to the viewpoint.
- The Proposed Development lies over a separation distance of c.450 m from the viewpoint.
- Views of this nature will be seen intermittently from Eastern Road.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Slight in the short term in respect of the Proposed Development. Reducing to Negligible as the proposed structure planting matures over the short to medium term.

Level and Significance of Effect

The High sensitivity of residents and Medium sensitivity of road users, and Slight magnitude of change are considered to result in a Moderate level of effect on residents and a Moderate/Minor level of effect on Road Users, which in the context of this assessment are considered to be Not Significant. As the proposed structure

planting matures over the short to medium term effects will reduce to Moderate/Minor and Minor respectively with the establishment of beneficial new landscape elements.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal, which is located 3.48 km to the southwest of the viewpoint, will not result in cumulative effects on this receptor due to the flat terrain and the prevailing well-defined structure of hedgerows.

Viewpoint 7: View south east from Newlands Cottage

Location and Rationale for Selection

Viewpoint 7 is located beside Eastern Road, close to Newlands Cottage, due north west of the Proposed Development. The viewpoint lies c.400 m to the north of the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by local residential receptors and road users. Figure 1.2.7 shows 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections. Figure 1.2.7 b shows 90° panoramas of the existing view and a predicted visualisation of the Proposed Development at Year 15, following the establishment of the proposed structure planting.

Description of Existing View

The existing view looks south, across the open arable fields with small blocks of woodland breaking up the view beyond. The site area is seen beyond the foreground field of brassicas, beyond the low hedgerow at the northern edge of the site. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. Two turbines of Red House Wind Farm are seen in the landscape beyond to the left of the view.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for residents and Medium for road users. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by residents of who will experience views in the direction of the Proposed Development.

Medium: Road users will be focussed on views looking along the road and across the surrounding landscape.

Value attached to View

Medium: The view looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed solar array will be visible as a narrow band of development beyond the foreground arable field and the low boundary hedgerow. The solar tables will be visible in the short to medium term until the proposed hedgerow reinforcement/raise and sections of new hedgerow establish.
- The Proposed Development will introduce low level structures into the view.
- The sub-station and the battery energy storage units will be visible in the short term to right hand extent of the image. The proposed woodland belt will mature over the short to medium term to soften direct views to these new elements.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.

- Over the short to medium term the proposed new sections of hedgerow to the north, and the woodland belt to the west, will establish to soften the profile of the Proposed Development, forming a well-defined edge to the development and attractive new features in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 170° to the viewpoint.
- The Proposed Development lies over a separation distance of c.400 m from the viewpoint.
- Views of this nature will be seen intermittently from Eastern Road.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Slight in the short term in respect of the Proposed Development. Reducing to Negligible as the proposed structure planting matures over the short to medium term.

Level and Significance of Effect

The High sensitivity of residents and Medium sensitivity of road users, and Slight magnitude of change are considered to result in a Moderate level of effect on residents and a Moderate/Minor level of effect on Road Users, which in the context of this assessment are considered to be Not Significant. As the proposed structure planting matures over the short to medium term effects will reduce to Moderate/Minor and Minor respectively with the establishment of beneficial new landscape elements.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal, which is located 1.77 km to the west of the viewpoint, will not result in cumulative effects on this receptor due to the flat terrain and the prevailing well-defined structure of hedgerows.

Viewpoint 8: View east from Grange Cottages on Lincoln Lane to the east of Holbeach St Marks

Location and Rationale for Selection

Viewpoint 8 is located beside Lincoln Lane, close to the Grange Cottages, north west of the Proposed Development. The viewpoint lies c.2.05 km to the north west of the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by local residential receptors and road users. Figure 1.2.8 shows 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections. Figure 1.2.8 b shows 90° panoramas of the existing view and an overlay wireframe visualisation of the Proposed Development.

Description of Existing View

The existing view looks south east past the mature hedgerow beside the Grange Cottages, across the open arable fields with small blocks of woodland breaking up the view beyond. The site area is contained from view by the intervening hedgerows and blocks of woodland to the north of the site. Six turbines of Red House Wind Farm are seen in the landscape beyond to the left of the view. A transmission line and pylons are seen in the distance to the right of the view.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for residents and Medium for road users. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by residents of who will experience views in the direction of the Proposed Development.

Medium: Road users will be focussed on views looking along the road and across the surrounding landscape.

Value attached to View

Medium: The view looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed solar array will be screened from view by the intervening hedgerows and woodland blocks.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 115° to the viewpoint.
- The Proposed Development lies over a separation distance of c.2.05 km from the viewpoint.
- Views of this nature will be seen intermittently from Lincoln Road.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Negligible in respect of the Proposed Development.

Level and Significance of Effect

The High sensitivity of residents and Medium sensitivity of road users, and Negligible magnitude of change are considered to result in Minor levels of effect on residents and on road users, which in the context of this assessment are considered to be Not Significant.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal which is located 900 m to the south of this viewpoint, will result in a Moderate and Not Significant combined cumulative effects in local views across Holbeach Marsh. Effects are limited due to the flat terrain and effective containment provided by the well-defined network of hedgerows.

Viewpoint 9: View south from the Sea Bank

Location and Rationale for Selection

Viewpoint 9 is located on the Sea Bank north of the Proposed Development. The viewpoint lies c.2.85 km to the north of the Proposed Development, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by walkers. Figure 1.2.9 shows 90° panoramas of the existing view and a wireframe overlay visualisation of the Proposed Development at Year 1, presented as cylindrical projections.

Description of Existing View

The existing view from this elevated viewpoint looks south across the open arable fields with small blocks of woodland breaking up the view beyond. The site area is contained from view by the intervening hedgerows and blocks of woodland to the north of the site. Six turbines of Red House Wind Farm are seen in the landscape beyond to the left of the view.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for walkers. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by walkers of who will experience views across the surrounding landscape.

Value attached to View

Medium: The view looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed solar array will be screened from view by the intervening hedgerows and woodland blocks.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 196° to the viewpoint.
- The Proposed Development lies over a separation distance of c.2.85 km from the viewpoint.
- Views of this nature will be experienced from the length of the Sea Bank to the north of the site.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Negligible in respect of the Proposed Development.

Level and Significance of Effect

The High sensitivity of walkers, and Negligible magnitude of change are considered to result in Minor levels of effect on walkers, which in the context of this assessment is considered to be Not Significant.

Potential for Future Cumulative Effects

The addition of the Proposed Development to the in-planning Roman Bank Solar Farm proposal which is located 5.62 km to the south west of this viewpoint, will not result in cumulative effects. Visibility is screened by the well-defined network of hedgerows and tree cover on the flat terrain of Holbeach Marsh.

Viewpoint 10: Grid access Viewpoint 1, New Buildings Cottage, Eastern Road

Location and Rationale for Selection

Viewpoint 10 is located adjacent to Eastern Road, adjacent to New Buildings Cottage, due west of the grid access point of the Proposed Development. The viewpoint lies c.270 m to the west of the grid access point, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views experienced by road users and also local residential receptors. Figure 1.2.10 shows 90° panoramas of the existing view and a visualisation of the Proposed Development at Year 1, presented as cylindrical projections. Figure 1.2.10b shows 90° panoramas of the existing view and a predicted visualisation of the Proposed Development at Year 15, following the establishment of the proposed structure planting.

Description of Existing View

The existing expansive view looks west across the open arable and pasture fields. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. Am electricity transmission line traverses the landscape supported on pylon towers at regular intervals.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be High for nearby residents and Medium for road users. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

High: Awareness of views by the residents of New Buildings Cottage, who will experience views in the direction of the Proposed Development.

Medium: Road users will be focussed on views looking along the road and across the surrounding landscape.

Value attached to View

Medium: The viewpoint looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed grid connection point will be visible in the foreground of the pylon tower to the right of the view, with a perimeter security fence and a tower and cables connecting into the transmission line.
- The Proposed Development will introduce new noticeable structures into the view.
- The substation building and the security fence will be visible in the short to medium term until the proposed structure planting establishes.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.
- Over the short to medium term the proposed sections of new hedgerow planting will establish to soften the profile of the grid connection equipment associated with the Proposed Development.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 120° to the viewpoint.
- The Proposed Development lies over a separation distance of c.270 m from the viewpoint.
- Views of this nature will be seen intermittently along Eastern Road, with a limited influence on the focus of the view for road users.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Moderate in the short term in respect of the Proposed Development. Reducing to Slight as the proposed structure planting matures over the short to medium term.

Level and Significance of Effect

The High sensitivity of residents and Medium sensitivity of the road users and Moderate magnitude of change are considered to result in Major/Moderate and Moderate levels of effect respectively, which in the context of this assessment are considered to be Significant for residents. As the proposed structure planting matures over the short to medium term effects will reduce to Moderate for residents with the establishment of beneficial new landscape elements.

Potential for Future Cumulative Effects

The addition of the grid connection and the Proposed Development to the in-planning Roman Bank Solar Farm proposal which is located c.700 m to the west of this viewpoint, will result in a Moderate/Minor and Not Significant combined cumulative effects in local views across Holbeach Marsh. Effects are limited due to the flat terrain and effective containment provided by the well-defined network of hedgerows.

Viewpoint 11: Grid access Viewpoint 2, Marsh Road

Location and Rationale for Selection

Viewpoint 11 is located adjacent to Marsh Road, due east of the grid access point of the Proposed Development. The viewpoint lies c.1.5 km to the south east of the grid access point, as indicated on the Viewpoint Location Plan, Figure 1.1.4. The viewpoint was selected as being representative of views

experienced by road users. Figure 1.2.11 shows 90° panoramas of the existing view and a predicted wireframe overlay visualisation of the Proposed Development at Year 1, presented as cylindrical projections. Figure 1.2.11b shows 90° panoramas of the existing view and a screening photomontage visualisation of the Proposed Development at Year 15, following the establishment of the proposed structure planting.

Description of Existing View

The existing expansive view looks west across the open arable fields. The wider view is curtailed by hedgerows and woodland blocks, seen in oblique views across this flat landscape. An electricity transmission line traverses the landscape supported on pylon towers at regular intervals.

Visual Sensitivity

The overall sensitivity of receptors at this location is considered to be Medium for road users. The factors that have contributed to this judgement are as follows:

Susceptibility to Change

Medium: Road users will be focussed on views looking along the road and across the surrounding landscape.

Value attached to View

Medium: The viewpoint looking across Holbeach Marsh is of a productive agricultural landscape.

Magnitude of Change

The effects on visual receptors have been evaluated according to the nature of the change to the view in terms of size, scale and character; the geographical extent of the predicted visibility and its duration, as part of the overall visual experience of the receptor, as follows:

Size or Scale (including nature of influence on the character of the view)

- The proposed grid connection point will be substantially screened from view by the intervening woodland block with just the upper section of the connection tower visible above the tree line.
- The Proposed Development will introduce a new distant structure into the view.
- The character of wider views will be maintained, with the development fitting into the pattern and scale of landscape features seen in the landscape.

Geographical Extent (including influence on focus of the view)

- The view to the Proposed Development lies to the west at c. 355° to the viewpoint.
- The Proposed Development lies over a separation distance of c.1.5 km from the viewpoint.
- Views of this nature will be seen intermittently along Marsh Road, with a limited influence on the focus of the view for road users.

Judgement on Magnitude of Change

Based on factors considered above, the overall magnitude of change to this viewpoint is considered to be Negligible in respect of the Proposed Development.

Level and Significance of Effect

The Medium sensitivity of the road users and Negligible magnitude of change are considered to result in a Minor level of effect, which in the context of this assessment is considered to be Not Significant for residents.

Potential for Future Cumulative Effects

The addition of the grid connection and the Proposed Development to the in-planning Roman Bank Solar Farm proposal which is located c.2.52 m to the west of this viewpoint, will result in a Moderate/Minor and Not Significant combined cumulative effects in local views across Holbeach Marsh. Effects are limited due to the flat terrain and effective containment provided by the well-defined network of hedgerows.

Table 9.7: Summary of Effects on Viewpoints

No.	Location	Receptors and Sensitivity	Magnitude of Change	Effect	Significance
1	View east from Eastern Road close to Woodstock House.	Residents (High) Road Users (Medium)	Moderate	**Major/ Moderate** **Moderate**	**Significant** for residents Reducing to Moderate **Not Significant** in the short to medium term.
2	Views from Marsh Road.	Walkers (High) Road Users (Medium)	Substantial	**Major** **Major/ Moderate**	**Significant** for Walkers Reducing to Moderate/ Minor **Not Significant** for road users in the short to medium term.
3	Views west and north along the public footpath crossing the site.	Recreational walkers (High)	Substantial	**Major**	**Significant for walkers**
4	View west from public footpath to the west of No.4 Sot's Hole Bank.	Residents/ Walkers (High)	Slight	**Moderate**	Not Significant Reducing to Moderate/ Minor Not **Significant** in the short to medium term
5	View south west from beside The Old Forge, Sot's Hole Bank.	Residents (High) Road Users (Medium)	Slight	**Moderate** **Moderate/Minor**	Not Significant Reducing to Moderate/ Minor Not **Significant** in the short to medium term
6	View south from Eastern Road at the edge of Holbeach St Matthew	Road Users (Medium)	Slight	**Moderate** **Moderate/Minor**	Not Significant Reducing to Moderate/ Minor Not **Significant** in the short to medium term
7	View south east from Newland's Cottage	Residents (High) Road Users (Medium)	Slight	**Moderate** **Moderate/Minor**	Not Significant Reducing to Moderate/ Minor Not **Significant** in the short to medium term

8	View east from Grange Cottages on Lincoln Lane to the east of Holbeach St Marks	Residents (High) Road Users (Medium)	Negligible	**Minor**	Not Significant
9	View south from the Sea Bank.	Walkers (High)	Negligible	**Minor**	Not Significant
10	Grid access Viewpoint 1, New Buildings Cottage, Eastern Road	Residents (High) Road Users (Medium)	Moderate	**Major/ Moderate** **Moderate**	**Significant** for residents Reducing to Moderate **Not Significant** in the short to medium term.
11	Grid access Viewpoint 2, Marsh Road	Road Users (Medium)	Negligible	**Minor**	Not Significant

9.9 Summary

In summary, a Landscape and Visual Impact Assessment has been undertaken for the Proposed Development in order to identify significant effects on landscape and visual receptors, the receptors being identified through desk study and field work.

The Proposed Development site is not covered by any form of landscape designation. There are no local or national designations within the 1.5 km study area.

This assessment reviewed potential effects of the Proposed Development on landscape fabric, landscape character and effects on visual amenity.

Assessment of Residual Effects on the Landscape Resource

As a result of construction on the site, there will be a loss or reduction in landscape resources in the area. The existing fields will be built upon, and for the duration of the planning permission there will be a reduction in the extent of available productive farmland.

Two types of solar tables will be erected:

Tracking arrays (on the western half of the site) max height (when at full tilt – 3.84m) 2m when flat, orientated in rows running from north to south.

The south Facing Arrays (on the eastern side of the site) max height 2.89, orientated in rows running from east to west.

There will be a rectilinear network of tracks serving the solar array with Inverter Stations arranged evenly around the site, and a Substation, a Customer HV Room, and Battery Storage Units arranged to the west the site.

Gaps in the existing hedges around the perimeter of the development will be repaired and reinforced with new planting and lengths of new hedgerow and new tree belts will be established to form a well-defined landscape structure to the site. This will assist in softening and filtering views towards the Proposed Development.

The proposed solar array will have a Substantial magnitude of change on this existing landscape resource. Taking account of adjacent land uses, it is considered that the sensitivity to change of this landscape resource is Medium. The direct effects on the Proposed Development site itself will be Major/Moderate which constitutes a Significant effect in the context of this assessment. However, these effects will be localised to the site area

and will be fully reversible. As the proposed structure planting establishes, there will be beneficial new, long term, features in the landscape including reinforced hedgerows, sections of new hedgerow and hedgerow trees.

Assessment of Residual Effects on Landscape Character

Due to the prevailing flat terrain, the oblique nature of views and the filtering of views by vegetation cover, the influence of the solar array will be significantly reduced beyond 1.5 km and the resulting effects on landscape character will give rise to no more than negligible magnitudes of change. The assessment of effects on landscape character is therefore focussed on The Fens Landscape Character Area within a 1.5 km radius study area.

The assessment has concluded that there will be locally moderate and Not Significant effects on The Fens LCA, within the immediate vicinity of the Proposed Development. The effects of the Proposed Development on the wider landscape unit will be moderated by the existing hedgerows and trees which enclose part of the site, the way that the low lying solar array will fit into the flat landscape, and distance, which taken together will reduce the wider influence on landscape character.

No further significant effects on Landscape Character have been identified.

Assessment of Residual Visual Effects

The study included an assessment of the effects of the Proposed Development upon settlements, transport corridors and viewpoints representative of a range of receptors within the study area.

The effects on visual amenity from the settlement of Holbeach St Matthew and Holbeach St Marks within the 1.5 km study area were assessed. The solar array will be visible in oblique views, partly behind the existing vegetation structure. No significant effects are predicted to arise.

Effects on visual amenity from minor roads within the 1.5 km study area were also assessed. No significant long-term effects were considered to arise in respect of the Proposed Development.

The nature of the visibility of the Proposed Development was also assessed from eleven viewpoints which were set out in correspondence with the Council. The viewpoints included adjoining residential properties, route corridors, and the local road network. The assessment of the viewpoints concluded that there would be significant effects on visual amenity in the short term from Woodstock House located to the west of the proposed solar array at, which is close to the Proposed Development. A further short-term significant effect was recorded on residents at New Buildings Cottage to the west of the proposed Grid Access Point. Significant visual effects were also reported at Viewpoints 2 and 3 taken from the public footpath which traverses through the centre of the Proposed Development.

The comprehensive structure planting proposals will mature over the short term to filter and contain direct views, and will assist in integrating the Proposed Development into the landscape. The existing hedgerows will be maintained at a higher height in order to assist with screening of the low-level infrastructure.

Importantly, from more distant locations, the Proposed Development would appear in the context of a low-lying flat landscape, contained within the existing field boundaries, which can accommodate the level of change associated with the development scale proposed.

Cumulative Landscape and Visual Effects

The assessment of cumulative effects with the proposed Roman Bank Solar Farm is incorporated into the main LVIA, with separate judgements for the cumulative effects. This section summarises the key issues, informed by the analysis and assessment which has already been presented.

The Proposed Development and the Roman Bank Solar Sites would be seen in very limited areas in combined and or sequential views from some limited parts of the landscape within Holbeach Marsh, extending the influence of solar farm development as a characteristic of the landscape locally. These changes give rise to no greater than Moderate and Not Significant local effects which will not influence the key characteristics of the wider landscape.

9.10 Conclusion

The Landscape and Visual Impact Assessment (LVIA) has established that the Proposed Development will change the existing landscape and visual baseline conditions.

Any significant effects on the landscape resource and visual amenity will be localised and will be seen in the context of the diverse and changing landscape of southeast Lincolnshire.

The Proposed Development will incorporate embedded mitigation measures in relation to the design of the solar array equipment and built form. The development of the land at Caudwell Farm will cause local change to the immediate setting and give rise to locally significant effects. These effects will quickly reduce over a short distance, as the intervening distance, terrain and enhanced vegetation structure assist in containing views.

The development strategy will incorporate the sections of new hedgerow and tree belts alongside gapping up of lengths of the existing hedgerows and tree belts which surround the proposed site, incorporating a native species-based planting mix. A section of new riparian woodland planting beside the Fleet Haven watercourse is proposed along the south eastern site boundary. This will establish over the short term to soften and filter direct views to the development. In addition, the existing hedgerows will be maintained at a higher height.

Whilst significant effects will arise due to local change, the sensitive siting of the development and introduction of new mitigation planting will assist in accommodating the Proposed Development within the existing flat agricultural setting. The Proposed Development will fit with the large scale and pattern of the prevailing landscape features and will be seen as an appropriate scale of new development in the wider landscape.