LANDSCAPE AND VISUAL APPRAISAL

LAND TO THE NORTH OF ROMAN BANK AND TO THE EAST OF MIDDLE MARSH ROAD AT RED HOUSE FARM, HOLBEACH BANK, HOLBEACH, SPALDING, PE12 8BY

GRID REFERENCE: X536995, Y328849

PROPOSED 48 MW SOLAR FARM

September 2022

Quality Assurance – Approval Status

Version	Date	Prepared by	Checked by	Approved by	Version Details
1	14/01/2022	Oliver Brown	Tom Ferraby	Oliver Brown	Initial Draft
2	17/01/2022	Oliver Brown	Tom Ferraby	Oliver Brown	Draft Issued for Comment
3	12/09/2022	Oliver Brown	Paul Booth	Oliver Brown	Proofing review
4	14/09/2022	Oliver Brown	Tom Ferraby	Oliver Brown	Report updated and AVRS added

Landscape and Visual Appraisal

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1.0 Introduction and Methodology

Purpose of the LVA

1.1 AAH Consultants has been commissioned to prepare a Landscape and Visual Appraisal (**LVA**) for a full planning application (the '**Application**') for a proposed 48 MW Solar Farm (the '**Development**') on land to the east of Middle Marsh Road, north of Red House Farm, Holbeach Bank, Holbeach, Spalding, PE12 8BY, grid reference X536995, Y328849 (the '**Site**').

1.2 This report presents the findings of a desktop study and field assessment. The aim of the LVA is to assess the potential landscape and visual implications of the Development.

1.3 The LVA process is therefore based on the proposed Site Layouts and Landscape Masterplans provided in support of the Application. With regard to the consideration of the proposals, the LVA has helped inform the development of the scheme layout and the assessment was commenced at the very first opportunity to mark the beginning of an iterative process and primarily to identify particular issues before the Application was submitted.

About AAH Planning Consultants and The Author

1.4 AAH Consultants comprises professional and accredited individuals. Our consultants are chartered members of the Landscape Institute (LI), the Royal Town Planning Institute (RTPI) and the Institute of Environmental Management and Assessment (IEMA).

1.5 This LVA has been prepared by Oliver Brown BA (Hons) Dip LA CMLI, who is a Landscape Architect within AAH with over 20 years' experience in landscape design and assessment. Oliver is a Chartered Member of the Landscape Institute (CMLI) and holds an Honours Degree and Post Graduate Diploma in Landscape Architecture from Leeds Metropolitan University.

Methodology

1.6 The Methodology for the LVA is attached as **Appendix A,** and is based on guidance presented in the *Guidelines for Landscape and Visual Impact Assessment, Third Edition 2013* (GLVIA3) and current best practice.

1.7 The LVA also references the following Lincolnshire County Council (LCC) and South Holland District Council (SHDC) documents:

- *South East Lincolnshire Local Plan (2019);*

- *South East Lincolnshire Local Plan Design Guide SPD;*
- *Lincolnshire Green Masterplan;*
- *Strategic Landscape Capacity Study for South Holland District Council (July 2003);*
- *The Historic Landscape Characterisation Project for Lincolnshire:*
    - *The Historic Character of The County of Lincolnshire (September 2011)*
    - *The Historic Character of The County of Lincolnshire: The Historic Landscape Character Zones (September 2011)*

The Site and its Context

1.8 The Site is centred on Ordnance Survey Grid Reference X536995, Y328849, and is located approximately 4km north of the market town of Holbeach between the villages of Holbeach Bank (to the south-west) and Holbeach St Marks (to the north). It is situated in South-East Lincolnshire, within the administrative boundary of South Holland District Council (SHDC).

1.9 The total Site area consists of approximately 80 hectares of agricultural land under arable cultivation. The location of the Site is shown in **Figure 1.**

1.10 The Site forms part of the wider landscape, which is characterised by open and flat land, with large-scale industrial-scale agriculture occupying drained fens, experiencing "big skies" and wide-open views. Middle Marsh Road, which runs along the western Site boundary, is bordered by farmsteads and residential properties with views to the east towards the Site. To the south of the Site lie 1 and 2 Bass Cottages (semi-detached dwellings) and the farmstead of Red House Farm, which are located along a farm track/lane which connects to Roman Bank. Overhead power lines and associated pylons run through the centre of the Site in a north-west - south-east orientation, and an underground pipeline with an associated 25m exclusion zone, runs south of the Site in an east to west direction. The context of the Site, including landscape and heritage features, is shown in **Figures 2A and 2B.**

The Development

1.11 The Development can be summarised as follows:

- Solar farm of up to 48 MW capacity. The dimensions of the solar panels are approximately 1.65m (length) x 1.0m (width). These panels will be installed on mounting structures. The structures will be constructed from galvanised steel, and the overall finished height of the installed panels will be a maximum of 3m.

- Approximately three grid inverter-transformer buildings, constructed from prefabricated concrete to maximum dimensions of 8 metres (length) x 3.2m (width) x 3m (height). In addition, there would be a cabinet of approximately 3m x 3m x 2.5m for the switchgear. This would then be connected by an 11kV cable to a separate cabinet of the same dimensions. An underground cable would then lead to the grid off-site;

- Site access, access roads, paths, perimeter security fencing and associated infrastructure; and

- Landscaping, to include native hedgerows to perimeters, native woodland copses and scrub areas, and wildflower meadow/meadow grass, which may be used for seasonal grazing by sheep or poultry throughout the Development, including under the solar panels.

Desktop Study

1.12 A desktop study was undertaken of published information to establish the landscape resource and landscape context of the Site, to identify potential visual receptors which may be affected by the Development.

Field work

1.13 The landscape character and value, along with potential visual receptors and viewpoints, were subsequently assessed through field work on Site and the surrounding area on the 9th September 2021. The weather conditions were clear, leading to good visibility. It is acknowledged that different effects are possible due to seasonality and the conditions that other seasons provide.

Scope of Study Area

1.14 The appraisal has allowed for a 2km study area to assess the impact of the Development upon both the landscape resource and visual amenity. A Zone of Theoretical Visibility (ZTV) was prepared to assist in identifying the visual envelope that is likely to be affected by the Development. The ZTV is based solely on OS topographic information and does not take into account intervening built form and vegetation structure, which would undoubtedly reduce the zone of visual influence. Nevertheless, it is usually considered that the ZTV is a useful tool for assessing the visual influence of any site and in helping identify potential visual receptors and locations for viewpoint photographs, which was subsequently further refined on-site through field work. Through fieldwork, views of the Site beyond 2km were not identified, and therefore the study area has been set at 2km.

Viewpoints

1.15 Field work informed and refined the selection of views which best represent the visibility of the Development from the various identified visual receptors. The appraisal provides a total of ten viewpoints taking into account a series of representative locations that represent views from the identified visual receptors, and the supporting illustrative Site photographs are shown in **Appendix B1**. The viewpoint locations are shown on **Figure 4**.

Accurate Visual Representations

1.16 Accurate Visual Representations (AVR's) of the Development, along with associated methodology, are included within **Appendix B2** to provide a useful understanding of the potential effects of the Development on the existing baseline. The appraisal provides visual representations of all ten viewpoints, which have been developed in line with current best practice guidance: *Landscape Institute Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals*, published 17th September 2019.

Mitigation

1.17 This appraisal takes into account mitigation measures, developed through an iterative design process, which have become integrated or embedded into the project design, and these are shown in **Figure 5** and described in paragraphs 5.16 to 5.21.

Findings

1.18 The findings of the desktop study and field assessment can be found in the following tables:

- Table 1: Landscape Receptors
- Table 2A: Community Visual Receptors Viewpoints
- Table 2B: Public Visual Receptors and Viewpoints
- Table 2C: Transport Visual Receptors and Viewpoints
- Table 2D: Workplace Visual Receptors and Viewpoints
- Table 3: Landscape Effects
- Table 4: Visual Effects

Consultation

1.19 For reference, consultation correspondence (emails and letters) is contained within **Appendix E**. This appraisal has taken into consideration the Pre-Application information provided by the SHDC dated 6th December 2021, following the submission of a Landscape and Visual Baseline Appraisal by AAH. Within the pre-application feedback, the following is pertinent to landscape and visual matters:

"South Holland lies within the Fens National Character Area, which is notable for its largescale, flat, open landscape with big skies and extensive vistas to level horizons. The site is highly visible from Middle Marsh Road to the west and Roman Bank to the south (which immediately adjoin the site) due to a lack of screening. By contrast, hedging along Eastern Road (approx. 350m east) provides some screening from an easterly direction, as well trees lining the access road to Poplars Farm House and Poplar Farm Cottage (Cowfield Gould). Save for the road users of Middle Marsh Road and Roman Bank, the greatest visual impact will be experienced by those properties to the west of the site on Middle Marsh Road (as some of these have almost uninterrupted views across the site), as well as Red House Farm itself and no's 1 and 2 Bass Cottages."

The pre-application advice goes on to provide the following guidance for the site layout and mitigation:

"Although the development of a solar farm of this scale gives scope to incorporate mitigation in the form of landscaping where views are currently possible, visual screening of the development through the introduction of hedging and/or tall vegetation along Middle Marsh Road and in close proximity to other dwellings mentioned would foreshorten views and create a sense of enclosure which would have a significant adverse effect on the open landscape character by virtue of the extent of mitigation required. Whilst residents do not have a distinct right to a view over land not within their ownership, the proximity and scale of the proposed development is such that there would be a material adverse impact on the outlook of occupants of the closest properties. This is a material planning consideration. A smaller scale development may be more appropriate."

1.20 Following receipt of the Pre-Application feedback from SHDC, AAH issued the following information via email to the Case Officer, on 21st December 2021 for review, comment and agreement:

- Proposed Methodology;
- Draft Viewpoint Photographs;

- Visual Assessment Viewpoints; and

- Figure 4: Draft Viewpoint Locations and ZTV.

1.21 On 27th January 2022, responses on the AAH information issued on 21st December 2021 were received via email from the SHDC Case Officer. The comments confirmed that *"proposed methodology and scope of the study area looks reasonable",* and in regards to the proposed viewpoints:

"I would be inclined to suggest including a further viewpoint between VP2 and VP3 to get an idea of the perspective from the properties there. Agree with the Type 4 AVRs for: VP1, VP2, VP3, VP4, VP6, VP7. Type 4 also if the new one is included. AVR Level 3 would appear to be ok for the remainder …"

2.0 Planning Policy Context

2.1 The following section provides a summary of the relevant Landscape Planning Policy Context relevant to the Study Area, the Site and the Development.

National Planning Policy Framework 2021

2.2 The revised National Planning Policy Framework (NPPF)[1] was published in July 2021, following revisions in 2019 and 2018, setting out the Government's planning policies for England and how these are expected to be applied. The NPPF advises that the planning system should protect and enhance valued landscapes in a manner commensurate with their statutory status or identified quality in the development plan and that plans should distinguish between the hierarchy of international, national and local designations. NPPF does not provide a definition of valued landscape, however one indicator of value can be designation, either at a national or local level.

2.3 The NPPF also advises that strategic policies should make sufficient provision for the conservation and enhancement of the natural, built and historic environment, including landscapes and that policies should ensure that developments are sympathetic to local character, as noted at *paragraph 153*.

2.4 The NPPF notes the importance of landscape and visual impact assessment in the process of planning for climate change, stipulating at *paragraph 155* that planning policies and decisions should help increase the use and supply of renewable energy whilst ensuring that adverse impacts are satisfactorily addressed.

South East Lincolnshire Local Plan (2019)

2.5 The South East Lincolnshire Local Plan was adopted in 2019 and was produced jointly with South Holland District Council, Boston Borough Council and Lincolnshire County Council to plan the future of South Holland District and Boston Borough. The South-East Lincolnshire Local Plan (2019) Proposals Map identifies that the Site is located in *'Countryside'*, and a *'Cycle Route'* runs along Middle Marsh Road (classified as National Cycle Network Route 1), which lies to the western boundary of the Site. The evolving layout for the Development should consider and incorporate local planning policy guidance and policies relevant to the Site and Study Area, which are summarised as follows:

[1] Ministry of Housing. Communities and Local Government, February 2019, National Planning Policy Framework

2.6 **Policy 2: Development Management.** This policy requires that sustainable development considerations are met.

2.7 **Policy 3: Design of New Development**. This policy promotes good quality design and that development respect and enhance the landscape and landscape character in which it is located.

2.8 **Policy 28: The Natural Environment.** This policy promotes the protection, enhancement and management of natural assets and designated sites in the area to create high-quality interconnected greenspace for wildlife.

South East Lincolnshire Local Plan Design Guide SPD

2.9 Lincolnshire County Council have developed a Supplementary Planning Document (SPD) *South East Lincolnshire Local Plan Design Guide SPD,* which when adopted, will supplement *The South East Lincolnshire Local Plan* policies, promoting: *"… well designed, sustainable development and will ensure that a consistent approach is applied to the assessment of design proposals in South East Lincolnshire.".* The SPD acts as a guide for development in the area providing fifteen criteria of design policy, and while it appears more focused on residential and urban development, it does provide good practice guidance for design and should be considered in the evolving layout of the Development. While the document holds limited weight until formally adopted, in regard to the Site and landscape and visual matters, the following is relevant:

2.10 **Criteria 3: The Landscape Character of The Location.** This relates to development respecting, responding and enhancing the landscape character in which it is located, with reference to relevant landscape character assessments. Paragraph 3.34 of the SPD notes, in regard to landscape character:

"South East Lincolnshire lies within The Fens National Character Area. The area is notable for its large-scale, flat, open landscape with extensive vistas to level horizons. The level, open topography shapes the impression of huge skies which convey a strong sense of place, tranquillity and inspiration.".

Criteria 3 goes on to outline that development should utilise landscape character assessments and landscape and visual assessments to:

- ***Understand*** *the character of the site and its broader setting.*
- ***Promote*** *the character in townscape and landscape.*
- ***Respond*** *positively to the character of the area.*

- ***Consider*** *the context of the area and the key features of the locality.*
- ***Use*** *LVIA to identify the impact of the proposal on views and the landscape.*

2.11 **Criteria 14: The Incorporation of Existing Hedgerows and Trees and the Provision of Appropriate New Landscaping to Enhance Biodiversity, Green Infrastructure, Flood Risk Mitigation.** This relates to the conservation and enhancement of the natural environment, which focuses on the retention and enhancement of existing natural features such as trees, hedgerows and vegetation and the enhancement of biodiversity. Criteria 14 references the *Nature Strategy for Greater Lincolnshire* (revised 2015) and *Greater Lincolnshire Partnership Website Action Plan* (BAP - 3rd edition) and goes on to outline that development should:

- *Incorporate existing natural features.*
- *Protect good quality trees and take opportunities for new prominent tree planting.*
- *Plan for replacement trees if necessary.*
- *Ensure trees have space to reach maturity.*
- *Design in appropriate root protection zones.*
- *Obtain specialist arboricultural advice.*
- *Demonstrate how biodiversity has been incorporated at an early stage.*
- *Undertake ecological surveys.*
- *Design in enhancement, restoration and creation of wildlife features or habitats.*

Lincolnshire Green Masterplan

2.12 Lincolnshire County Council have developed a Green Masterplan that sets out guiding principles of how to achieve *"net zero carbon"* by 2050, aligned with the central government target. The Green Masterplan is backed up by an Initial Action Plan and Green Masterplan Actions, and while the majority of this document is not relevant to the Development, it does highlight: *"looking at our county farms for more opportunities for tree planting*" as a priority and this should be considered and incorporated where possible.

3.0 Landscape Character Appraisal

Establishing the Landscape Baseline

National Character Area

3.1 The *National Character Area* (NCA)[2] profiles produced by Natural England divides England into 159 National Character Areas. The Site is located within **NCA Profile: 46. The Fens**.

3.2 The wider landscape surrounding the Site typically shows some of the characteristics of NCA 46. The characteristics of NCA 46 aligned with the wider landscape surrounding the Site include the openness and sense of rural remoteness and tranquillity, with extensive vistas to level horizons resulting in "*huge skies*", from limited vegetation cover, extensive agriculture and flat topography. The large open arable fields are typically bounded by a network of drains, being predominantly devoid of notable or substantial vegetation, and settlement includes dispersed ribbon villages and hamlets and isolated farmsteads.

3.3 NCA 46 also provides Statements of Environmental Opportunities (SEO) for the Character Area, which should be considered and incorporated, where applicable and possible, in any evolving Development layout.

Strategic Landscape Capacity Study for South Holland District Council (July 2003)

3.4 The *Strategic Landscape Capacity Study for South Holland District Council* (July 2003 by John Campion Associates Ltd.) sub-divides the South Holland District into discrete landscape areas of similar character, providing a finer grain assessment to the NCA profiles. While the Capacity Study has been produced to assess the suitability of each landscape area to accommodate wind turbines, it does provide relevant information on the existing landscape character, and also the capacity to accommodate development, which should be considered in any proposals and subsequent appraisal.

3.5 At a **District Scale**, the Site and Study Area sits within the **Settled Fens Landscape Character Type**, which is described as follows:

- *"Predominantly flat topography, dissected by main roads, rivers, drainage channels and drainage ditches often on raised banks (1-3m). Primarily nucleated settlements and associated mature trees. Church spires and towers often rise above the mature vegetation to provide prominent landmark features. Medium to large fields with intensive market*

[2] Natural England. (2014) *National Character Area Profile 46: The Fens.* Natural England, p. 7. Available at http://publications.naturalengland.org.uk/file/5742315148673024 (Accessed 19/09/21).

gardening crops. Locally strong hedgerow elements. Views are restricted or foreshortened by shelterbelts and woodland or mature hedgerows.

- *This contributes to a sense of enclosure with a more open feel between settlements. The main visual detractors are the 440Kv and 132Kv overhead cables on towers, electricity sub-stations and power stations and urban fringe visual clutter (dominated by light industry and glasshouse horticulture).*
- *Note that within the larger settlements, there are no views of adjacent fenland, and this introspective quality reduces the awareness of place within the wider fenland landscape.*
- *Key Characteristics: flat landform, nucleated settlements with mature vegetation and church spires; organic lines dominate, e.g. winding roads.*
- *Condition: average, but ranges from good (farmland) to poor (urban fringe clutter).”*

The Historic Landscape Characterisation Project for Lincolnshire:

The Historic Character of The County of Lincolnshire (September 2011)

3.6 The *Lincolnshire Historic Landscape Characterisation Project (September 2011)* (HLC) categorises and characterises the landscape of Lincolnshire with specific reference to its development over time so as to examine the development of the modern landscape. The HLC identifies two levels of characterisation: Regional Character Areas; and Character Zones.

3.7 Ten Regional Character Areas have been identified, and at a **Regional Scale** the Site falls within **Regional Character Area 10: The Wash** (ARS sub-province: EWASH). This is a large area covering approximately 660km2 of low lying agricultural and coastal land to the south and west of The Wash estuarine complex. A description of the present landscape is provided, with the following being of relevance to the Site and Study Area:

“… The rural landscape is one of broad, open views with occasional vertical intrusions from buildings or features, such as the tower of St Botolph’s Church in Boston, wind power facilities or relict sea banks.”.

The report identifies that this is a landscape dominated by industrial scale agriculture, which is explained as:

“… the most striking element of the modern landscape is the occurrence of very large modern fields, sometimes referred to as ‘prairies’. These large flat arable fields are almost industrial in character, with parallel lines of uniform crops, such as lettuces or brassicas stretching away into the distance. The enormous quantities of produce grown require a large

infrastructure for processing, and the rural landscape is punctuated by industrial complexes such as canneries and freezing plants..”

3.8 The report provides commentary on the modern landscape of the area, and how the modern landscape has transpired is summarised as follows:

“Over the last century, much of the farmland of the area has been turned to arable cultivation. The fertility of the land has been augmented by the adoption of modern farming techniques, but the same techniques require increasing use of machinery, such as tractors and combine harvesters. In order to accommodate the machinery, farmers here, as elsewhere in the county, have consolidated their fields by removing some of the historic boundaries. This has resulted in the creation of large ‘prairie’ style fields across the character area.”

The Historic Character of The County of Lincolnshire: The Historic Landscape Character Zones (September 2011)

3.9 This section of the HLC provides a finer-grained assessment, breaking down the ten Regional Character Areas into separate zones. The Historic Character of The County of Lincolnshire: The Historic Landscape Character Zones (HLCZ) identifies that at a **Local Scale** the Study Area includes two Character Zones within the wider **The Wash Character Area**:

- Character Zone WSH4 Reclaimed Wash Farmlands
- Character Zone WSH6 Townlands within The Wash Character Area

3.10 The Site is found within **Character Zone WSH4 Reclaimed Wash Farmlands,** and the HLCZ provides a description of the area that identifies it as being dominated by industrial scale agriculture, stating the following, which is relevant to the Site and Study Area:

“Land use throughout the entire zone is primarily agricultural, and there are a number of large scale farmsteads of industrial size in the zone.”

The HLCZ goes on to describe:

“Field boundaries predominantly comprise narrow and shallow wet dykes, although embanked natural watercourses form continuous linear boundaries across the zone. A small number of fields around Holbeach St Matthew and Dawesmere are bounded by hedgerows.”

In regards to vegetation, the HLA states*:*

"Woodland in the zone is sparsely distributed throughout, and mainly consists of thin rectilinear plantations and holts located along field boundaries or adjacent to buildings. The southwest of the zone has a limited number of orchards.."

Establishing the Landscape Baseline at Different Scales

3.11 To follow best practice set out within GLVIA3, the starting point of establishing the landscape baseline includes a desk-based document review of the hierarchy of published landscape character assessments at different scales to see where they offer a suitable level of detail for appropriate judgements on *value*, *susceptibility* and *sensitivity* and subsequently for judgements to be made on the level of effect of the Development on these landscapes.

3.12 The published character assessments identified and summarised within this appraisal provide detailed, relevant information that relates directly to the Site and Study Area and generally aligns with the findings of the AAH fieldwork carried out. Subsequently, the following section provides a detailed baseline and evaluation of the landscape characteristics of the Site and immediate (adjacent) context and how these reflect the published character traits of the wider area.

Landscape Characteristics of the Site

3.13 The key landscape features/elements of the Site, extracted from published landscape character assessments and AAH desktop and fieldwork, can therefore be summarised as follows:

- The Site forms part of the wider landscape, which is characterised by open, flat industrial-scale agriculture land occupying drained fens with the perception of big skies with wide, panoramic, open views;
- Limited trees and hedgerows are evident within the Site, with the large fields having limited field boundary vegetation. Trees, woodland, hedgerows and vegetation cover is also limited within the Study Area, adding to the open character;
- National Cycle Network Route 1 runs along Middle Marsh Road, adjacent to the greater part of the western boundary of the Site, however the Site does not contain any PROW, and the nearest are over 1km away, illustrating that this is a landscape with limited public access or opportunities for recreation;
- Ditches run along the northern and eastern Site boundaries, as well as along Roman Bank, south of the Site, and a section of Middle Marsh Road along the north-western boundary. Ditches are also located within the centre of the Site, and form the majority of the internal (and nearby) field boundaries;

- Overhead power lines and associated pylons run through the central section of the Site, in a north-west to south-east orientation, and an underground pipeline with an associated 25m exclusion zone, runs east to west just to the south of the Site; and
- Two semi-detached dwellings of 1 and 2 Bass Cottages and the farmstead of Red House Farm lie to the south of the Site, and there are also several residential properties and farmsteads along the western side of Middle Marsh Road adjacent to the western boundary of the Site, and these properties have views east across the road and open fields of the Site. The isolated Poplars Farm lies to the east of the Site, and there would be some views looking west towards the eastern boundary of the Site.

These key characteristics and features of the Site are further detailed in the sections below.

Topography and Drainage

3.14 The analysis of the terrain of the Site and Study Area shows how the broader landscape surrounding the Site is flat and relatively featureless. The Site is also flat, with levels varying between approximately 3 and 4m AOD.

3.15 The River Welland lies approximately 4.5km to the north-west of the Site. Drainage ditches are evident across the Study area, being an inherent characteristic of this drained fenland.

Land Use, Land Cover

3.16 The predominant land use within the Study Area comprises arable agriculture on an industrial scale, resulting in large, open and predominantly featureless fields. The Site contains large, irregular shaped open arable fields bound and defined by drainage ditches.

Trees, Woodlands, Hedgerows & Vegetation

3.17 Trees, Woodlands, Hedgerows and Vegetation cover are limited within the Site and Study Area, resulting in an open character, devoid of many vertical elements beyond pylons associated with overhead power lines, wind turbines and buildings, which include some large storage structures associated with the arable farms. There is little tree cover, and where present, it is generally small copses or focussed around the settlements, farmsteads and residential properties. There are shelterbelts evident in the wider landscape, however these tend to be relatively short and isolated. Some hedgerows are present within the Study Area; however, these tend to be isolated lengths or gappy and in poor condition and form a poorly connected network. Other vegetation, particularly that forming semi-natural wildlife habitat, appears to be very limited in the area, with areas outside of settlements being intensively managed through modern agricultural practices leaving little room for areas of

biodiversity. However, a well-established hedgerow does run along the western carriageway of the southern length of Eastern Road, and the access track to Polar Farm contains a well-established tree avenue, both of which, along with mature planting around farmsteads, provide some structure to the landscape, particularly to the eastern parts of the Study Area. The Site and immediate context does contain some limited areas of trees and planting, including a shelter belt to the south, along the access to Red House Farm, a small group of trees central to the Site along the drain, sporadic individual trees and established planting around Red House Farm and 1 and 2 Bass Cottages, however these appear small and out of scale in this expansive landscape. Within the wider landscape small blocks of plantation woodland are present, and although views across this landscape are extremely open, to some extent, they soften the horizon. However, the flatness of the landscape does result in the limited vegetation layering over each other in views, providing screening to views in places.

Settlements

3.18 The Site is located between the villages of Holbeach Bank (to its southwest) and Holbeach St Marks (to its north). The predominant settlement in the wider area is the market town of Holbeach, approximately 2km to the south of the Site. Settlement in the area predominantly comprises dispersed ribbon villages and hamlets. There are isolated farmsteads and residential properties within the local area, reflecting the wider rural context and agricultural land use.

3.19 1 and 2 Bass Cottages (which are semi-detached dwellings) and the farmstead of Red House Farm, are located along a farm track/lane to the south of the Site, connecting to Roman Bank and Middle Marsh Road. There are also several residential properties and farmsteads along the western side of Middle Marsh Road which runs adjacent to Site's western boundary, and these properties have clear views east across the Site. Views southward from Holbeach St Marks (to the north) and north-eastward from Holbeach Bank (to the southwest) are limited by distance as well as by intervening buildings and vegetation cover.

Communications

3.20 The Study Area is served by local roads, lanes and farm tracks, which are typically characterised as winding country roads. The A17, 2km to the south of the Site, is the main road in the area, connecting Holbeach to Kings Lynn to the east. Middle Marsh Road runs along much of the Site's western boundary, and Roman Bank runs to the south of the Site. Close to the northern extremity of the Site, Lincoln Lane leaves Middle Marsh Road, while to the east, Eastern Road connects Roman Bank to Holbeach St Matthews.

3.21 Overhead power lines and associated pylons run through the northern section of the Site, in a northwest to southeast orientation, and an underground pipeline with an associated 25m exclusion zone runs in an east to west direction just to the south of the Site.

Designations and Landscape Features

3.22 The Southeast Lincolnshire Local Plan (2019) Proposals Map identifies that the Site is located in 'Countryside', and it also highlights the route of National Cycle Route 1. Therefore, the Site is not covered by any landscape, ecological or heritage designations at a local, regional or national level.

Registered Parks & Gardens

3.23 The Site is not part of or does it support any Registered Parks and Gardens within its boundaries. The Study area also does not contain any Registered Parks and Gardens

Public Right of Way (PROW), Cycle Routes and Walking Routes

3.24 There are no Public Rights of Way (PROW) on the Site. The Study Area is predominantly devoid of PROW, with only five identified within the Study Area, which are isolated and poorly connected to the wider network, indicating that recreational walkers are likely limited within the Study Area (with other recreational facilities being also absent, beyond National Cycle Network Route 1). Two PROW are located approximately 1km (at the nearest point) north of the Site at Holbeach St Marks: a footpath connecting to St Marks Road to the east of the village (Footpath Holb/3/1) which is the only PROW with potential views towards the Site; and a bridleway which meets Lapwater Lane further to the north (Bridleway Holb/2/1). Another three PROW are located approximately 1.9km to the south of the Site: a footpath to the south of the village of Holbeach Clough, connecting Roman Bank to Washway Road (Footpath Holb/5/1); and two footpaths located north of Holbeach linking the A17 to Washway Road (Footpath Holb/11/1 and Footpath Holb/12/1) , none of which would have views of the Site due to their distance from it as well as intervening buildings or trees.

3.25 National Cycle Network Route 1 runs along Middle Marsh Road, adjacent to the western boundary of the Site, and a section of "On-road route not on the National Cycle Network", as identified by Sustrans, which The Southeast Lincolnshire Local Plan (2019) Proposals Map identifies as "Cycle Route" runs along Roman Bank, which passes the southern boundary of the Site.

Tree Preservation Orders

3.26 While the Site is predominantly devoid of vegetation, it does contain some small isolated trees (predominantly as shelterbelts or associated with residential properties), but at this stage, it is not known whether these are covered by any Tree Preservation Orders. If required, a Tree Survey will be undertaken to include details of the boundary trees, hedgerows and other vegetation found within the Site. This will clarify whether these trees and hedgerows are covered by any Tree Preservation Orders.

Heritage Assets and evolution of the landscape

3.27 In terms of heritage assets, it is not the purpose of the LVA to assess the impact on the significance of a particular heritage asset; that would be for a Heritage Assessment to address. Nevertheless, the appraisal process does provide the opportunity to improve the understanding of the visual relationship between these protected assets and the Development.

3.28 The Site is not covered by any conservation area designations, does not support any listed buildings and does not contain any Scheduled Monuments (SM) within its boundary. Subsequently, this appraisal has also taken into account some of the more sensitive heritage assets, however these are limited in the Study Area. The closest conservation areas are within Holbeach and Fleet Hargate, which are outside the Study Area. The nearest listed buildings are within Holbeach St Marks, just under 1km north of the Site ('Church of St Mark' and 'War Memorial at Holbeach St Marks') and at Penny Hill, approximately 1km south of the Site.

3.29 The National Library of Scotland have digitised and published a series of Georeferenced maps overlaid onto aerial photography of Great Britain. This provides a valuable reference resource to review how a landscape has likely developed over the last 150 years. Ordnance Survey Maps – Six-inch England and Wales, 1842-1952 has been referred to as being one of the *"most comprehensive, topographic mapping covering all of England and Wales from the 1840s to the 1950s".* While an excerpt has not been provided within this assessment due to copyright permission limitations, the georeferenced maps may be viewed via the following website link: https://maps.nls.uk/geo/explore

3.30 Ordnance Survey Maps - Six-inch England and Wales, 1842-1952, Surveyed: 1888 to 1913, Published: 1904, illustrates the Site and local context from over 110 years ago, and when compared to modern mapping and aerial photography, illustrates changes in the landscape. The Site and local area appear relatively unchanged in over 100 years, with the main

apparent difference being the removal of field boundaries (likely hedgerows or drainage ditches) over the last century, with fields being smaller at the turn of the 20th Century than today due to the industrialisation of the agricultural process in the area. The houses and Red House Farm to the south are evident on the historic mapping, however Desert Farm has subsequently been demolished. Similarly, housing along Marsh Road, including Middle Marsh House, is evident, appearing in the same locations as today. Marsh Road, Roman Bank and Eastern Road appear unchanged from the 1904 mapping, and are labelled on the historic mapping. The absence of woodland or substantial areas of vegetation is evident to a similar extent today, indicating little has changed in this landscape over more than 100 years beyond increasing in field size and loss of field boundaries. While in the local area, pockets of settlement have developed and extended small settlements such as Holbeach Bank and Holbeach Clough, the overall setting of the Site is still within the open countryside with isolated farmsteads and houses.

Nature Conservation

3.31 There are no nature conservation designations within the Site or Study Area, the nearest is the Wash SSSI, approximately 5km to the north of the Site. Refer to the Ecology Survey associated with the Application for further details.

National and Regional Protection

3.32 The Site does not lie within a National or Regional Park and does not support any other national or regional landscape designation.

Landscape Receptors

3.33 Following the desk-based document review of published character assessments, as well as additional desktop and field survey work undertaken by AAH, a series of landscape receptors have subsequently been identified within the baseline, which provide baseline receptors at varying scales. **Figure 3** identifies Local Scale landscape character areas, and **Table 1** below lists the Landscape Receptors identified. **Table 3** provides a brief summary of the baseline of these landscape receptors as part of the appraisal process.

Table 1: Key Landscape Characteristics and Attributes (Landscape Receptors)

Landscape Characteristics and Attributes
Local Scale Landscape Character Areas: *from The Historic Character of The County of Lincolnshire: The Historic Landscape Character Zones (September 2011) and fieldwork*
LCA 1: Character Zone WSH4 Reclaimed Wash Farmlands • Land use throughout the entire zone is primarily **agricultural at an industrial scale**, and there are a number of **large-scale farms** in the zone. • Field boundaries predominantly comprise **narrow and shallow wet dykes**, although embanked natural watercourses form continuous linear boundaries across the zone. A small number of fields around Holbeach St Matthew and Dawesmere are bounded by hedgerows. • **Woodland in the zone is sparsely distributed** throughout, and **mainly consists of thin rectilinear plantations and holts located along field boundaries or adjacent to buildings**. The southwest of the zone has a limited number of orchards.
LCA 2: The Site and its immediate context • **Unbroken arable "prairie" comprising industrial scale, flat arable fields.** • **Limited vegetation** allows **open views** across the Site and local area. • **Horizons feature tree cover** (particularly around settlements) within the wider study area. • **Electricity pylons and overhead cables, wind turbines and telegraph poles** are **prominent features.** • **Drainage ditches** define the field boundaries.
Site Scale Landscape Features: *extracted from published character assessments and AAH desktop and fieldwork*
LF 1: Landform and Topography • An inherently **flat landscape** with a **network of man-made drainage ditches**. • Mainly **silt loam or medium silt clay loam topsoils** over silt loam or medium silty clay loam subsoils. • It is a landscape typical of much of eastern England, and has **few natural features**.
LF 2: Vegetation • Large intensively-worked industrial scale arable fields with **few field margins**. • There are **very few trees, but does** include shelter belt to the south, along the access to Red House Farm, a small group of trees along the drain, sporadic individual trees and established planting around Red House Farm and 1 and 2 Bass Cottages and the houses which border the settlement along Middle Marsh Road and some hedgerows • Some small areas of **scrub** is present on the site. • **Ditches** forming field boundaries are **not likely to have very great ecological value** as they carry runoff from arable production and appear devoid of complex vegetation beyond improved grass. • **No hedgerows** on or around the Site but there are some in the Study Area (notably bordering Eastern Road).
LF 3: Land-use • An area of **intensive food production**, of **industrial-scale agriculture** following the widespread amalgamation of enclosed drained former salt marsh into **very large fields** with drainage ditches dividing them. • Land within the Site currently comprises **arable monoculture cultivation**. • **Dispersed settlement** along roads • **Settlements within the study area are generally bordered and enclosed by tree cover, while the areas between are more open.** however the key settlement characteristic of the area is: "***nucleated settlements with mature vegetation and church spires***". • Site forms part of the **landscape setting to houses bordering Middle Marsh Road**, which appear to date from the 20th century. In discussion with the local council, it has been noted that the views from these residential areas adjacent to the Site should be sensitively designed to ensure that the sense of openness and space from which they benefit is retained since views from the road and many of the houses across the fields to the east are open and uninterrupted.

• There are no existing buildings on the Site, but there is a **farm and some isolated houses within the southern parcel of land leased by the same landowner** (defined by the blue line on the plans).
LF 4: Heritage • The landscape contains few historic features of importance; • The site lies on the **seaward side of the former sea bank** (Roman Bank), which was previously salt marsh); • The **Church of St Mark** is located just under 0.5km to the north of the Site within the village of Holbeach St Marks.
LF 5: Perceptual Landscape • **Strong sense of openness with big skies and open panoramic views**. • The unnatural exposure of the landscape can feel in places **uncomfortable and bleak**. • Where there is some tree cover, the perceptual experience is improved, but this is a **monotonous landscape with few natural features or discernible landmarks**. • **Pylons, wind turbines and large agricultural buildings** form part of the long-range views across the **prairie-like fields**. • **Small blocks of plantation woodland** and other tree cover around and near settlements and farms combines to **soften the horizon in views, but are somewhat incongruous** with a high percentage of coniferous species which are not native to the region.

4.0 Visual Amenity Appraisal

4.1 Generally, the Site is situated within a relatively featureless, flat, open landscape, which is exposed to views from the surrounding landscape. However, while limited, tree and vegetation cover and small blocks of woodland provide some interruption to these views through layering over each other. The open nature of this landscape allows clear views to farmsteads and isolated residential properties that punctuate the predominantly monotonous view. The ribbon settlements in the Study Area provide containment and screening from views through built form and concentration of built form, hedgerows and trees, breaking up long vistas in places.

4.2 Overall, while an open and exposed landscape, the likely potential visual receptors with views of the Site are limited in number and sensitivity. The flatness of the landscape also reduces potential visibility of the Site or Development, being no opportunity to look up to, or down upon, the Site, which appears more as a horizontal band of land in views due to the views being at the same elevation, and usually from some distance away, and so are at an acute angle.

Viewpoint Selection

4.3 This section covering the Visual Baseline has been prepared, taking into account a number of identified visual receptors in the Study Area with potential views from publicly accessible areas. Views that are considered to be representative of these receptors, and as agreed with SHDC, are contained within **Appendix B1** which seeks to illustrate the full extent of the Development and visibility of the Site within the local landscape that would be experienced at each viewpoint**.** These are accompanied by Viewpoint Visualisations at **Appendix B2** showing the visibility of the Development as currently proposed. The viewpoint locations are illustrated in **Figure 4** and they are described in **Table 4**. The viewpoints are listed below:

- **VP 1** View from Roman Bank*
- **VP1A** View from Middle Marsh Road (south of Site)*
- **VP 2** View from Middle Marsh Road (south)*
- **VP 2A** View from Middle Marsh Road (at residential properties)*
- **VP 3** View from Middle Marsh Road (north)*
- **VP 4** View from Lincoln Lane*

- **VP 5** View from footpath 3/1 at St Mark's Road*
- **VP 6** View from New Road*
- **VP 7** View from Eastern Road*
- **VP 8** View from Eastern Road at Cowfield Gould*

*Denotes Viewpoints that have been developed as AVRs as contained within **Appendix B2***

4.4 **Tables 2A, 2B**, **2C** and **2D,** below, provide a summary of Visual Receptors (people with potential views of the Site and/or Development) and associated representative viewpoint(s). A description of the baseline of these potential views is provided within **Table 4.** The visual receptors have been identified as follows, and locations, are illustrated on **Figure 4**:

Table 2A: Community Visual Receptors and Viewpoints

Community visual receptors and viewpoints: While this LVA does not include an assessment of views from individual residents in private properties, views from communities in the Study Area have been considered that account for numerous visual receptors as part of a group of dwellings resulting in a larger number of visual receptors with potential views of the Site and Development. Individual properties have not been identified.	
Community Visual Receptors	**Representative Viewpoint(s)**
C1: Community of Holbeach Bank	VP1
C2: Community of Properties along Middle Marsh Road	VP2A
C5: Community of Holbeach St Marks	VP5

Table 2B: Public Visual Receptors and Viewpoints

Public visual receptors and viewpoints: This includes areas of land and buildings providing public access and would comprise recreational receptors on a range of public footpaths, cycleways, parks and public gardens where views of the countryside can form important features of the enjoyment associated with these receptors.	
Public Visual Receptors	**Representative Viewpoint(s)**
P1A: Users of PROW Footpath Holb/5/1	VP1
P1B: Users of PROW Footpaths Holb/11/1 and Holb/12/1	VP1
P2: Users of National Cycle Network Route 1	VP1, VP2, VP3, VP5
P5A: Users of PROW Bridleway Holb/2/1	VP5
P5B: Users of PROW Footpath Holb/3/1	VP5

Table 2C: Transport Visual Receptors and Viewpoints

Transport visual receptors and viewpoints: There may be views from private vehicles (such as cars, vans, delivery/service vehicles), public transport, cyclists, horse riders and pedestrians on the surrounding road network. During passage through the landscape, people generally have differing responses to changes in visual amenity depending on the context.	
Transport Receptors	**Representative Viewpoint(s)**
T0: Users of tracks and access roads within the Site	-
T1A: Users of Roman Bank	VP1
T1B: Users of Local Roads and Lanes south of Site (around Holbeach Bank, Holbeach Clough and Penny Hill)	VP1
T2A: Users of Marsh Road and Middle Marsh Road	VP2, VP3
T2B: Users of Flint House Road	VP2
T2C: Users of Sluice Road	VP2, VP3
T4: Users of Lapwater Lane	VP4
T5: Users of Roads and Lanes north of the Site (Around Holbeach St Marks)	VP5
T6: Users of Users of Roads and Lanes north of the Site (Around Christie Cottage and Christie House)	VP6
T7: Users of Eastern Road	VP7
T8: Users of Hurn Bank/Sea Bank	VP8

Table 2D: Workplace Visual Receptors and Viewpoints

Workplace visual receptors and viewpoints: This may include people who work in the area or have a purpose for being in a particular place for employment. Where no firm data is available, this may simply need to be a relative judgement, for example noting comparatively more people working in one place compared with few in another. The majority will be agricultural workers in fields and farmsteads surrounding the Site.	
Workplace Receptors	**Viewpoint**
W1: Workers at Taylor O A & Sons Ltd nursery and farms to the south, e.g. clays Farm	VP1
W2: Workers at Farms to the west of the Site, e.g. Flint House Farm	VP2, VP3
W4: Workers at Farms and agricultural land to the north of the Site, e.g. Caultons Farm	VP4, VP5, VP6
W7: Workers at farms to the east e.g. Poplars Farm	VP6, VP7, VP8

5.0 Evaluation

Landscape Character Effects

Value of Landscape Receptors

5.1 Table 1 within **Appendix A** provides the appropriate criteria for determining *landscape value*. **Appendix C** also provides an assessment of the landscape value of the published landscape character areas and of the Site and immediate setting, identified in Section 3.0. The Value of the landscape receptors is subsequently included in **Table 3** (Landscape Effects). Overall, the Site and Study Area comprise a landscape of low value, with no landscape, ecological or heritage designations of large, open, flat, industrial-scale agricultural land, devoid of notable features. Through the industrialisation of the landscape over the last century, field boundaries have been lost, and subsequently, vegetation is relatively sparse and, on the whole, poorly managed resulting in a landscape in poor condition. Subsequently, the ecological value is limited, as are Heritage features. A limited and fragmented PROW network, along with limited opportunities for recreation, reduces recreational value beyond the National Cycle Network Route 1 running along the western Site boundary. While the landscape has a notable character of tranquillity, openness and "big skies", this does lead to a perception of monotony and in places uncomfortable exposure.

Susceptibility of Landscape Receptors

5.2 *Landscape susceptibility* is the degree to which a particular landscape type, area or resource can accommodate different amounts of change or development of a specific type and the scope for mitigation, which would be in character with the existing landscape. Table 2 within **Appendix A** provides the appropriate criteria for determining the *susceptibility* of the landscape resource to change. This subsequently feeds into the appraisal within **Table 3** (Landscape Effects), in order to assess the potential effects of the Development on the *landscape resource.* The open, flat landscape of the Site and Study Area is a monotonous and degraded landscape with little variety in landscape pattern, and subsequently has been assessed as having a low susceptibility to change, and therefore able to accommodate the Development within the existing landscape grain while retaining any existing features or elements.

Sensitivity of Landscape Receptors

5.3 The ***sensitivity*** of a landscape resource is judged by the ***value*** of the landscape combined with the ***susceptibility*** of that landscape to change. Table 3 within **Appendix A** provides a guide for determining the *sensitivity* of the landscape resource. **Table 3** (Landscape Effects) provides the findings on *landscape sensitivity* for each level and scale of Landscape Receptor in order to assess the potential effects of the Development on the *landscape resource.*

5.4 **Table 3** below assesses the potential effects of the Development on the landscape resource (landscape receptors) at a variety of scales to provide an overall understanding of the impacts on the landscape. The landscape that the Site sits within, at a *Regional*, *District* and *Local* level, is generally considered to be of a ***Low Sensitivity***.

5.5 The Site itself contains few features which contribute to the overall coherence and quality of the landscape. The Site consists of large agricultural fields, and although they provide part of the wider setting of the landscape, it forms part of a degraded landscape with poor overall coherence and in poor condition. An important part of its value lies in its size and its potential prominence in views from the west, although visibility from the wider landscape is not considered to be a significant issue due to the flat topography and the effects of distance.

Assessment of Landscape Effects

5.6 The potential effects on landscape character at the three key stages of Construction, operation, and residual phases are set out in **Table 3** below. At the **construction phase** of the Development, the key changes on Site would likely be:

- Stripping of grassland/arable land topsoil (if required): due to the flat nature of the Site, re-grading works are unlikely;
- The presence and movement of plants;
- The installation of foundations for the panels;
- As construction activities progress, the panels and structures will become evident;
- Potential use of roads within the landscape character area by construction traffic and deliveries, including temporary road closures and signage;
- Highway upgrading works, as required;
- Temporary lighting; and Installation of fencing.

5.7 At the **operational phase** (0 to 1 years), the Development will be complete and operational, however any landscaping works associated with the Development will not yet be established and so will have limited benefit to the landscape or ecological enhancement.

5.8 At the **residual phase** (15 years), the establishment of new areas of mixed native species tree planting, hedgerow and wildflower/meadow grass and other appropriate landscape treatments would have established, integrating and screening built elements into the local landscape, providing benefits to biodiversity within and around the solar panels and associated structures, and although the openness of the Site would be reduced in places, it would still be a well-functioning landscape with more diverse habitat areas for wildlife and the potential to offer seasonal grazing if considered appropriate.

Table 3: Landscape Character Effects

Value Refer to Table 1 Appendix A	**Susceptibility** Refer to Table 2 Appendix A	**Sensitivity** Value x Susceptibility (Refer to Table 3 Appendix A	**Predicted Landscape Effects** (Refer to Table 4 Appendix A)	**Significance of Effect** Sensitivity x Magnitude (Refer to Table 6 Appendix A)
Local Scale Landscape Character Areas: *from The Historic Character of The County of Lincolnshire: The Historic Landscape Character Zones (September 2011)*				
LCA 1: Character Zone WSH4 Reclaimed Wash Farmlands				
Low Value The majority of this area is a flat agricultural landscape that is devoid of landscape features of value. The area is not covered by any designations and has been shaped by industrial-scale agricultural practices. However, this landscape contains some heritage assets, such as the Sea Bank.	**Low Susceptibility** This open industrial-scale agricultural landscape has the capacity to accommodate solar development within the existing landscape grain, without effecting the identified landscape attributes and maintaining openness.	**Low Sensitivity**	**Construction Phase Effects** Construction activity would be evident on Site, however key landscape features identified in the baseline, while limited, would be retained. The presence of taller elements associated with construction, such as site hoarding or cranes, may be visible in this flat landscape, reducing the perception of openness. **Low Magnitude of Effect**	**Minor Adverse**
			Operational Phase Effects The notable change to this character area would be the presence of solar panels and associated infrastructure within the formerly arable land. The existing key landscape features identified in the baseline, while limited, would be retained. While the area covered by panels would be of a large scale and change arable land use to a solar farm, the panels would sit easily within the existing field pattern and grain of this landscape, and the flatness of the landscape, with the layering of boundary planting and woodland blocks would result in minimal visual intrusion across the character area. **Low Magnitude of Effect**	**Minor Adverse**
			Residual Phase Effects **Residual Impacts** would be reduced by the introduction of established planting, which would add valuable landscape elements and features, along with the creation of habitats that are currently missing within this degraded landscape. **Negligible Magnitude of Effect**	**Negligible**

Site Scale Landscape Characteristics and Attributes: *extracted from published character assessments and AAH desktop and field work:*				
LCA 2: The Site (and immediate context)				
Low Value At this closer scale, the landscape has been assessed as holding a value which is aligned with the wider local and regional landscape that the Site sits within since the features and character at both scales is closely aligned. The Site is predominantly devoid of landscape features of value, being made up of a series of large, flat, open agricultural fields. However, this adds to the perception of openness, which is a key characteristic of the Site and wider landscape.	**Low Susceptibility** This open industrial-scale agricultural landscape has the capacity to accommodate solar development within the existing landscape grain without affecting the identified landscape attributes and maintaining openness.	**Low Sensitivity**	**Construction Phase Effects** Construction activity would be evident on Site for the duration of this phase, however all key landscape features identified in the baseline, while limited, would be retained. The presence of taller elements associated with construction, such as site hoarding or cranes, may be visible in this flat landscape, and although incongruous, they would not be the only man-made features in this landscape. **Low Magnitude of Effect**	**Minor Adverse**
			Operational Phase Effects The character of the Site would be changed with the installation of solar panels across most of the existing arable farmland, and there would be security fencing around its perimeters and along the access tracks/lanes which cross the Site, meaning that they would be more enclosed than currently. The existing key landscape features identified in the baseline, while limited, would be retained. While the area covered by panels would be of a large scale and change arable land use to a solar farm, the panels would sit easily within the existing field pattern and grain of this flat open landscape. **Low Magnitude of Effect**	**Minor Adverse**
			Residual Phase Effects **Residual Impacts** would be reduced by the establishment of new areas of mixed native-species tree planting, hedgerows and wildflowers, and other appropriate treatments would seek to provide benefits to biodiversity wherever possible within and around the solar panels and associated structures, and although the perception of openness would be reduced in places it would still be a well-functioning landscape with different habitat areas for wildlife and the potential to offer seasonal grazing if considered appropriate. Structure planting around the Site's perimeters, along the access tracks/lanes would break the Site up into smaller parcels and link into wider green infrastructure. **Low Magnitude of Effect**	**Minor Beneficial**

LF 1: Landform and Topography				
Low Value A landscape typical of much of eastern England, with few natural features. The landform is consistently flat, and the landscape bares little resemblance to the former salt marsh of the area.	**Low Susceptibility** The large scale of the arable landscape combined with the flatness of both the site and the nearby receptors means that the landscape would be little affected by the proposal.	**Low Sensitivity**	**Construction Phase Effects** Construction activity would be present within the site but would have no impact on landform. Drainage ditches are proposed to be retained in place and protected at all phases, with any development offset from these features, therefore there would be no effects. **Negligible Magnitude of Effect**	**Negligible**
			Operational Phase Effects The now functioning solar farm would have no effects on this landscape feature. **Negligible Magnitude of Effect**	**Negligible**
			Residual Phase Effects Planting will have established; but would not have any significant effect on this landscape feature. **Negligible Magnitude of Effect**	**Negligible**
LF 2: Vegetation				
Low Value Very few isolated trees, few field margins and no hedgerows. Land under intensive arable cultivation, so habitat is only seasonal / short-term.	**Low Susceptibility** The industrial farmland of the Site and the surrounding area is contiguous and contains few vegetative features which would be affected by the development.	**Low Sensitivity**	**Construction Phase Effects** Field boundary vegetation would be protected and retained in place during construction. No tree or hedgerow removal is proposed, and construction activities would be well offset from these features. **Negligible Magnitude of Effect**	**Negligible**
			Operational Phase Effects All existing vegetation would be retained, and new landscaping would be newly planted and so would have little effect. **Negligible to Low Magnitude of Effect**	**Negligible**
			Residual Phase Effects Field boundary vegetation would be enhanced by planting that would now have established. In order to respect the prevailing character, the density of tree planting would be kept low, with the exception of woodland copses in key locations, which would screen the development, and their size is based on the existing blocks of woodland nearby. **Moderate to High Magnitude of Effect**	**Moderate Beneficial**

LF 3: Land-use				
Low to medium value Industrial-scale arable landscape consisting of very large fields divided by drainage ditches. Linear settlement along the roads and isolated farms and dwellings within the open farmland generally dating from the 20th century. The long-distance cycle route is however of regional importance and is also used by the local community for recreation.	**Low Susceptibility** The large scale of the arable landscape combined with the flatness of both the site and the nearby receptors means that the landscape would be little affected by the proposal.	**Low to Medium Sensitivity**	**Construction Phase Effects** Construction activities, while changing arable land to construction activities, would be well offset from Middle Marsh Road and Roman Bank, along which NCR1 passes and houses with more open views towards the site are situated, and would have little effect on the surrounding arable landscape. Drainage ditches would be unaffected by the proposal.. **Medium Magnitude of Effect**	**Moderate Adverse**
			Operational Phase Effects The arable land would now be a working solar farm, which would be well set-back from the adjacent roads and NCR1, except at the northwest corner of the Site. However, while any seeding would likely still be establishing, the land would still have the potential for agricultural use (grazing), limiting the change from existing. Drainage ditches would be unaffected by the proposal. Houses nearby would have medium-range views of the Site, which would appear as a linear element in the landscape. **Low Magnitude of Effect**	**Minor Adverse**
			Residual Phase Effects Hedgerows and trees, along with wildflower/meadow grass, would have established by this phase and would soften the development and return this to a useable area of land that would have value either as grazing land or for biodiversity. In some locations there would be a change to the perception of space from NCR 1 and nearby houses, but this would be reduced due to the effects of distance and both the selection of species and management of the planting so that the landscape retains its open character from the majority of locations. Planting would also be seasonal in its effects unlike built structures, allowing more open views in winter months. **Low Magnitude of Effect**	**Minor Adverse to Negligible**
LF 4: Heritage				
Low value The landscape contains few historic features of importance close to the Site	**Low Susceptibility** The large scale of the arable landscape combined with the flatness of both the site and the nearby receptors means that the nearest historic features (i.e. Church	**Low Sensitivity**	**Construction Phase Effects** Construction activities would be separated from the nearest historic features by approximately 1km as well as by intervening vegetation and buildings. **Negligible Magnitude of Effect**	**Negligible**
			Operational Phase Effects The Development would be separated from the nearest historic features by approximately 1km as well as by intervening vegetation and buildings. **Negligible Magnitude of Effect**	**Negligible**

	of St Mark to the north, and Roman Bank to the south) would be little affected by the proposal.		**Residual Phase Effects** The establishment of hedgerows, trees and scrub areas would further soften the development and create a defined edge to the Development, reducing perception from the wider area as well as potential intervisibility and diminishing any effects further. **Negligible Magnitude of Effect**	**Negligible**
LF 5: Perceptual Landscape				
Low to Medium Value The Site and wider landscape is characterised by its sense of openness and big skies, which creates a feeling of tranquillity in places. While not necessarily "attractive" this perceptual attribute is valuable in giving this region one of its main identifying features.	**Low to Medium Susceptibility** Any change in openness would be out of character, however, this is a degraded landscape devoid of notable landscape features, which results in perceptions of monotony, exposure and potentially unease.	**Low to Medium Sensitivity**	**Construction Phase Effects** Construction activity would be evident on Site, and presence of taller elements associated with construction, such as site hoarding or cranes, may be visible in this flat landscape, reducing the perception of openness and tranquillity in some locations. **Low to Medium Magnitude of Effect**	**Minor to Moderate Adverse**
			Operational Phase Effects The character of the Site would be changed with the installation of solar panels across most of the existing arable farmland, and there would be security fencing around its perimeters and along the access tracks/lanes which cross the Site. These built elements would result in a slightly more enclosed sense of space than that which currently exists, but fencing would be of a steel mesh type, solar panels would be a maximum of 3m high and buildings a maximum of 5m high. The development would be set well away from nearby receptors to minimise effects on openness, and building would be set centrally and well away from the boundaries. **Low Magnitude of Effect**	**Minor Adverse to Negligible**
			Residual Phase Effects Planting will have established; selected so as to maintain the open character of this landscape ensuring trees are in blocks and hedgerows are maintained at appropriate heights, and the establishment of the planting at this stage would add value to the wider landscape. The presence of blocks of trees and hedgerows is also typical in some parts of the study area and so as well as being limited to key locations, would not be out of character within the surrounding landscape. **Low to Medium Magnitude of Effect**	**Minor Adverse to Negligible**

Summary of Landscape Character Effects

5.9 As can be seen from **Table 3**, the Development is assessed as having limited adverse effects on the Landscape resource within the *Study Area*, with opportunities to bring about beneficial effects to the Site and vegetation in the Study Area. The Development would be located in large, open, industrial-scale arable fields with limited landscape features. Mitigation measures would reduce the initial adverse impacts resulting from the appearance of the built infrastructure in the open landscape and contribute to the regeneration of what is effectively a degraded and intensively farmed landscape with little overall coherence, although soft organic features would reduce the sense of openness in some locations.

Visual Amenity Effects

Value of Views

5.10 GLVIA3 notes that judgements should be made about the *value* attached to views experienced. Table 7 within **Appendix A** provides the appropriate criteria for understanding the definitions to assess the *value* of, or attached to, views, and **Table 4** sets out the findings on the value ranking of each identified viewpoint potentially experienced by the identified visual receptors. Generally, the value of views across this landscape is low, being across an open, flat industrial-scale agricultural landscape with little interest or features of note and unlikely to attract visitors.

Susceptibility of Visual Receptors

5.11 *Visual susceptibility* will vary with each receptor, meaning the particular person, or group, experiencing the view. This will be defined by the occupation or activity of the receptor in particular locations, and the extent of attention that would be focused on the view(s). The susceptibility of each identified visual receptor is identified within **Table 4,** and Table 8 within **Appendix A** provides a full description of the criteria used to assess the *visual susceptibility*. The identified receptors within the Study Area have a variety of visual susceptibility.

Sensitivity of Visual Receptors

5.12 The visual ***sensitivity*** is judged at the assessment stage as a combination of ***value*** of the view and the ***susceptibility*** of the receptor. **Table 4** sets out the findings of *visual sensitivity* of each of the visual receptors, and subsequently the sensitivity of each viewpoint in order to

assess the potential effects of the Development on the *visual resource*. Viewpoints to represent views from the identified visual receptors are shown within **Appendix B1.** To assist in verifying and illustrating the potential effects on visual amenity AVRs have been produced and shown within **Appendix B2**.

5.13 The potential effects on visual receptors are set out in **Table 4** below, and consider the three phases of the Development (construction, operation, and residual). During the **construction phase**, the key changes on views of the Site would likely be:

- Change from open arable fields to construction site: visibility of plant, particularly tall or large plant, to assist in the construction of the panels and ancillary buildings/structures;
- On-site compound, accommodation and temporary parking; construction vehicles, plant and equipment; and lighting;
- Removal of short sections of hedgerow to accommodate Site Access;
- Due to the flat nature of the Site, ground re-profiling is unlikely to be required to accommodate new Development;
- Furthermore, as the panels are installed, and ancillary buildings/structures are constructed, the Development will start to become evident.

5.14 The **Operational Phase** (at Year 0/1) refers to the completion of the Development. The condition of the site will be fully operational, and all landscape works will have been implemented and plant stock will be at an early stage, so would provide limited screening in views. This would be assessed with consideration in the winter months, during which there would be little or no foliage on most trees and shrubs, and would be therefore seen as "worst case" in visual terms.

5.15 At the **residual phase** (15 years), the assessment takes account of the provision of a suitable landscape scheme incorporated within the development. This assessment takes place fifteen years from completion, which assumes the proposed planting associated with the landscape scheme will have established and matured. This would be assessed with consideration given to seasonal variation.

Table 4: Visual Amenity Effects

Viewpoint 1: View from Roman Bank	**Location:** 1.48km south of Site	**Grid Reference:** X536538 Y327713

Existing View: The baseline view extends to capture the southern edge of the Site looking north from Roman Bank at the junction of Middle Marsh Road. In this view, the Site is visible in the middle distance, beyond the foreground fields, due to the absence of any intervening field boundary vegetation. Number 1 and 2 Bass cottage and Red House Farm, along with associated shelterbelt and garden planting, are visible to the centre of the view, with the well-established hedgerow along Eastern Road visible beyond the shelter belt. To the left of the view, properties along Middle Marsh Road are visible. This is an open and expansive view, and illustrates the flatness and openness of this relatively featureless agricultural landscape. The horizon is formed to the right of the view by woodland and trees associated with Coney Garth, Garthside and Grove Farm and to the centre by Trees and vegetation associated with Holbeach St. Marks.

Representative Viewpoint for the following receptors:	**Summary of Receptor View**	**Value of view:** (Refer: Table 7 Appendix A)	**Susceptibility** Table 8 Appendix A	**Sensitivity** Table 9 Appendix A
C1: Community of Holbeach Bank	Variable, long-distance views of the Site from north-eastern areas due to the absence of boundary vegetation, with boundaries defined by drainage ditches and road verges.	**Low**	**Medium**	**Low to Medium**
P1A: Users of PROW Footpath Holb/5/1	Views of the Site are unlikely due to built form within Holbeach Clough and Holbeach Bank and intermittent vegetation screening views.		**Medium**	**Low to Medium**
P1B: Users of PROW Footpaths Holb/11/1 and Holb/12/1	Views of the Site are unlikely due to built form such as the Taylor O A & Sons Ltd nursery and small developments and intermittent vegetation screening views.		**Medium**	**Low to Medium**
P2: Users of National Cycle Network Route 1	There would be clear sequential views of the Site from the south and adjacent to the Site. There may be views for a short section north of the Site when travelling south.		**Medium to High**	**Medium**
T1A: Users of Roman Bank	Open medium-distance views of the Site due to the absence of boundary vegetation, with boundaries defined by drainage ditches and the edge of the carriageway.		**Medium to Low**	**Low**
T1B: Users of Local Roads and Lanes south of Site	Oblique, sequential variable views across fields to the Site due to lack of boundary and intermittent vegetation. However, views do not encompass the entirety of the Site and would be medium distance.		**Medium to Low**	**Low**
W1: Workers at nurseries and farms to the south, e.g. Clays Farm	In the majority of views of the Site, these would be views north across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	**Overall Viewpoint Sensitivity**	**Magnitude of Effect**	**Significance of Effect**
Construction Phase: The majority of the construction phase of the Development would not be visible from this viewpoint, however construction traffic, noise and movement in the southern areas of the Site would make activity more noticeable to receptors. Taller elements such as cranes or other large plant machinery would potentially break the horizon/treeline, making activity more conspicuous.	**Low to Medium**	**Low**	**Minor Adverse**
Operational Phase: The southern edge of the Development would be visible in the middle distance across the open foreground fields. However, due to the distance, the majority of the development would appear as a strip of panels that would not break the skyline and would sit against the tree cover on the horizon and would not appear conspicuous in the view sitting comfortably within the current of the landscape grain.		**Low**	**Minor Adverse**
Residual Phase: The established planting would screen and integrate panels and ancillary buildings and structures. Also, due to the distance between receptors and the planting, the openness of this landscape and view would be maintained.		**Negligible**	**Negligible**

Viewpoint 1A: View from Middle Marsh Road (south of Site)*	**Location:** 688m south of Site	**Grid Reference:** X 536757 Y 328575

Existing View: The baseline view extends to capture the southern edge of the Site looking northeast from Middle Marsh Road, just north of Marshland Lodge. In this view, the southern boundary of the Site is visible in the middle distance, beyond the foreground field, due to the absence of intervening field boundary vegetation. Number 1 and 2 Bass cottage and Red House Farm, along with associated shelterbelt and garden planting, are visible to the right of the view, with the well-established hedgerow and tree line along Eastern Road is visible beyond the shelter belt. To the left of the view, properties along Middle Marsh Road, opposite the western site boundary, are visible. This is an open and expansive view, and illustrates the flatness and openness of this relatively featureless agricultural landscape.

Representative Viewpoint for the following receptors:	**Summary of Receptor View**	**Value of view:** (Refer: Table 7 Appendix A)	**Susceptibility** Table 8 Appendix A	**Sensitivity** Table 9 Appendix A
P2: Users of National Cycle Network Route 1	There would be clear views of the Site when south and adjacent to the Site. There may be views for a short section north of the Site when travelling south.	**Low**	**Medium to High**	**Medium**
T2A: Users of Marsh Road and Middle Marsh Road	There would be clear sequential views of the Site when south and adjacent to the Site. There would also be some views for a short section north of the Site when travelling south.		**Medium to Low**	**Low**
T2B: Users of Flint House Road	Some views to the southern areas of the Site, however built form along Flint Road, does screen and channel views.		**Medium to Low**	**Low**
T2C: Users of Sluice Road	Some long-distance views to the Site would be limited to the western extents, however housing and roadside vegetation, such as hedgerows, provide screening.		**Medium to Low**	**Low**
W2: Workers at Farms to the west of the Site e.g. Flint House Farm	In the majority of views of the Site, these would be views east across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	**Viewpoint Sensitivity**	**Magnitude of Effect**	**Significance of Effect**
Construction Phase: The majority of the construction phase of the Development, which, while visible across open fields, would not be conspicuous from this viewpoint, however construction traffic, noise and movement in the southern and western areas of the Site would make activity more noticeable to receptors. Taller elements such as cranes or other large plant machinery would potentially break the horizon/treeline making activity more conspicuous.	**Low to Medium**	**Low to Medium**	**Minor to Moderate Adverse**
Operational Phase: The southern and south-western edge of the Development would be visible in the middle distance across the open fields in the foreground. Due to the distance, the majority of the development would appear as a strip of panels that would not break the skyline and would not appear conspicuous in the view, sitting comfortably within the current of the landscape grain.		**Low**	**Minor Adverse**
Residual Phase: The established planting would screen and integrate panels and ancillary buildings and structures. Due to the distance between receptors and the planting, the openness of this landscape and view would be maintained.		**Negligible**	**Negligible**

Viewpoint 2: View from Middle Marsh Road (south)*	Location: 360m from western boundary of Site	Grid Reference: X536574 Y329145

Existing View: The baseline view extends to capture the southern area of the Site looking east across the arable field to the south of Middle Marsh Farm (outside of Site boundary). In this view, the southern extent of the Site is visible due to the close proximity of the view and the absence of any substantial boundary vegetation beyond isolated trees (to the right of the view), which is defined by a drainage ditch, post and rail and tape fencing, and the edge of the carriageway. Views to the central and northern extents of the Site are screened by mature tree and scrub vegetation associated with Middle Marsh Farm beyond this vegetation, which along with the isolated trees along the carriageway and field boundary, frame views of this open, flat and relatively featureless agricultural landscape. The horizon is formed to the right of the view by woodland and trees associated with Coney Garth, Garthside and Grove Farm. Beyond, wind turbines at the wind farm at Fleet Haven are visible above the treeline, as are the pylons and OH wires crossing the Site.

Representative Viewpoint for the following receptors:	Summary of Receptor View	Value of view: (Refer: Table 7 Appendix A)	Susceptibility Table 8 Appendix A	Sensitivity Table 9 Appendix A
P2: Users of National Cycle Network Route 1	There would be clear views of the Site when south and adjacent to the Site. There may be views for a short section north of the Site when travelling south.	**Low to Medium**	**Medium to High**	**Medium to High**
T2A: Users of Marsh Road and Middle Marsh Road	There would be clear sequential views of the Site when south and adjacent to the Site. There would also be some views for a short section north of the Site when travelling south.		**Medium to Low**	**Low**
T2B: Users of Flint House Road	Some views to the southern areas of the Site, however built form along Flint Road does screen and channel views.		**Medium to Low**	**Low**
T2C: Users of Sluice Road	Some long-distance views to the Site would be limited to the western extents, however housing and roadside vegetation, such as hedgerows, provide screening.		**Medium to Low**	**Low**
W2: Workers at Farms to the west of the Site e.g. Flint House Farm	In the majority of views of the Site, would be views east across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	Viewpoint Sensitivity	Magnitude of Effect	Significance of Effect
Construction Phase: The majority of the construction phase of the Development, which while visible across open fields, would not be conspicuous from this viewpoint, however construction traffic, noise and movement in the southern and western areas of the Site would make activity more noticeable to receptors. Taller elements such as cranes or other large plant machinery would potentially break the horizon/treeline, making activity more conspicuous.	**Medium**	**Medium**	**Moderate Adverse**
Operational Phase: The southwestern edge of the Development would be visible in the close (approximately 300m) distance across the open foreground fields. However, existing vegetation screens the majority of the Site (central and northern areas), and while relatively close in the view, the flat landscape would result in the development appearing as a strip of panels that would not break the skyline and would not appear conspicuous in the view sitting comfortably within the current of the landscape grain.		**Low**	**Minor Adverse**
Residual Phase: The established planting would screen and integrate panels and ancillary buildings and structures. Due to the distance between receptors and the planting, the openness of this landscape and view would be maintained.		**Negligible**	**Negligible**

Viewpoint 2A: View from Middle Marsh Road (at residential properties)	**Location:** 260m from western boundary of Site	**Grid Reference:** X536574 Y329145

Existing View: The baseline view extends to capture the entire central and southern area of the Site looking east across the open arable fields. In this view, the Site is clearly visible due to the absence of any boundary vegetation along Middle Marsh Road, which is defined by a drainage ditch and the edge of the carriageway. This is an open and expansive view, and illustrates the flatness and openness of this relatively featureless agricultural landscape and a clear example of the "big skies" that typify the landscape character, with the foreground devoid of any features beyond flat arable land. The horizon is formed to the right of the view by woodland and trees associated with Coney Garth, Garthside and Grove Farm. Beyond, wind turbines at the wind farm at Fleet Haven are visible, as are the pylons and OH wires crossing the Site.

Representative Viewpoint for the following receptors:	**Summary of Receptor View**	**Value of view:** (Refer: Table 7 Appendix A)	**Susceptibility** Table 8 Appendix A	**Sensitivity** Table 9 Appendix A
C2: Community of Properties along Middle Marsh Road	Clear views of the Site across Middle Marsh Road and across the open rural landscape to the east	**Low**	**High**	**Medium**
P2: Users of National Cycle Network Route 1	There would be clear views of the Site when south and adjacent to the Site. There may be views for a short section north of the Site when traveling south.		**Medium to High**	**Medium**
T2A: Users of Marsh Road and Middle Marsh Road	There would be clear sequential views of the Site when south and adjacent to the Site. There would also be some views for a shorth section north of the Site when traveling south.		**Medium to Low**	**Low**
W2: Workers at Farms to west of the Site e.g. Flint House Farm	In the majority of views of the Site, these would be views east across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	**Viewpoint Sensitivity**	**Magnitude of Effect**	**Significance of Effect**
Construction Phase: The construction phase of the Development would be conspicuous and visible from this view, with open flat fields to the foreground offering no screening. Construction traffic, noise and movement would make activity more noticeable to receptors, however the development would be offset at least 200m from the edge of the carriageway of Middle Marsh Road. Taller elements such as cranes or other large plant machinery would potentially break the horizon/treeline, making activity more conspicuous, however the view still maintains a level of openness with the retention of the existing open foreground fields and views of the tree-lined horizon.	**Medium**	**High**	**Moderate to Major Adverse**
Operational Phase The Development would visible as a linear band of panels across a wide panorama with long-distance views to the ancillary structures behind panels. However since the development is offset at least 200m from the edge of the carriageway of Middle Marsh Road the view would retain a level of openness with the retention of the existing open foreground fields and views of the tree-lined horizon.		**Medium**	**Moderate Adverse**
Residual Phase The established planting would screen and integrate panels and ancillary buildings and structures. While the existing open view is altered to a degree by this planting, by being set well back from receptors, the open character of the view is maintained in keeping with the local landscape character. The taller ancillary buildings and structures would likely still be visible above planting but are over 1km in distance from receptors and would appear as small elements within the view, and would be in keeping with similar vertical features such as pylons or turbines.		**Negligible to Low**	**Negligible to Minor Adverse**

Viewpoint 3: View from Middle Marsh Road (north)	**Location:** 100m west of Site	**Grid Reference:** X536921 Y329987

Existing View: The baseline view extends to capture the entirety of the western section of the Site looking east from Middle Marsh Road. In this view, the Site is clearly visible due to the close proximity of the view and the absence of any boundary vegetation along this section of the boundary, which is defined by a drainage ditch and edge of the carriageway. This is an open and expansive view and illustrates the flatness and openness of this relatively featureless agricultural landscape. The horizon is formed to the right of the view by woodland and trees associated with Coney Garth, Garthside and Grove Farm. Beyond, wind turbines at the wind farm at Fleet Haven and pylons and overhead wires crossing the Site are visible, as are the agricultural buildings at New Building. Vegetation at Poplars Farm is visible to the centre of the view, screening the built elements of this farm.

Representative Viewpoint for the following receptors:	**Summary of Receptor View**	**Value of view:** (Refer: Table 7 Appendix A)	**Susceptibility** Table 8 Appendix A	**Sensitivity** Table 9 Appendix A
P2: Users of National Cycle Network Route 1	There would be clear views of the Site when south and adjacent to the Site. There may be views for a short section north of the Site when travelling south.	**Low**	**Medium to High**	**Medium**
T2A: Users of Marsh Road and Middle Marsh Road	There would be clear sequential views of the Site when south and adjacent to the Site. There would also be some views for a short section north of the Site when travelling south.		**Medium to Low**	**Low**
W2: Workers at Farms to the west of the Site, e.g. Flint House Farm	In the majority of views of the Site, these would be views east across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	**Viewpoint Sensitivity**	**Magnitude of Effect**	**Significance of Effect**
Construction Phase: The western extents of the development would be visible across the open field in the foreground, where to the left and centre of the view the construction would be particularly apparent. Although it would introduce built elements into the view along with vehicles and machinery, it would be set-back from the road and not altogether incongruous with the immediate landscape, which features electricity pylons and wind turbines within an open arable prairie.	**Medium**	**Medium to High**	**Moderate to Major Adverse**
Operational Phase The Development would be visible as a linear band of panels across a wide panorama with long-distance views to the ancillary structures behind panels. However, since the development is offset at least 65m from the edge of the carriageway of Middle Marsh Road (panels appear closest to the left of the view), the view would retain a level of openness with the retention of part of the existing open foreground field and views of the tree-lined horizon.		**Medium**	**Moderate Adverse**
Residual Phase The established planting would screen and integrate panels and ancillary buildings and structures. While the existing open view is altered to a degree by this planting, by being set well back from receptors, the open character of the view is maintained in keeping with the local landscape character. The planting would also be in keeping with the wider rural character consisting of hedgerow field boundaries and small woodland copses. The taller ancillary buildings and structures would be at least partially visible through, or above, the woodland copse but would be in keeping with similar vertical features in the view, such as pylons or turbines.		**Low**	**Minor adverse**

Viewpoint 4: View from Lapwater Lane	**Location:** 190m north of Site	**Grid Reference:** X537316 Y330587

Existing View: The baseline view extends to capture the northern area of the Site looking south from Lincoln Lane at the junction of Middle Marsh Road. In this view, the Site is clearly visible over adjacent flat open fields and Middle Marsh Road due to the lack of any boundary vegetation, beyond isolated trees, with the Site defined by a drainage ditch and edge of carriageway. This is an open and expansive view, and illustrates the flatness and openness of this relatively featureless agricultural landscape. The horizon is formed by distant woodland and trees. Pylons OH wires crossing the Site are visible, as are residential properties along Middle Marsh Road that front onto the western Site boundary (to the right of the view), and Poplars farm, along with associated shelterbelt and garden planting, visible to the left with hedgerow and tree lines associated with the access road to Poplars farm visible to the centre. Garden vegetation associated with number 1 and 3 Lincoln Lane screen views to the left of the view.

Representative Viewpoint for the following receptors:	**Summary of Receptor View**	**Value of view:** (Refer: Table 7 Appendix A)	**Susceptibility** Table 8 Appendix A	**Sensitivity** Table 9 Appendix A
T4: Users of Lincoln Lane and Lapwater Lane	The Site is clearly visible over adjacent flat open fields and Middle Marsh Road due to the boundary vegetation along this section of the northern Site boundary.	**Low**	**Medium to Low**	**Low**
W4: Workers at Farms and agricultural land to the north of the Site, e.g. Caultons Farm	In the majority of views of the Site, these would be views south across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	**Viewpoint Sensitivity**	**Magnitude of Effect**	**Significance of Effect**
Construction Phase: The northern extents of the development would be visible in the centre of the view, where the construction would be apparent directly in front of receptors looking to the south. Although it would introduce built elements into the view along with vehicles and machinery, it would be set-back from the road and not altogether incongruous with the immediate landscape.	**Low**	**Medium to High**	**Moderate Adverse**
Operational Phase The Development would be visible as a linear band of panels across a wide panorama with long-distance views to the ancillary structures behind panels. However, since the development is offset at least 65m from the edge of the carriageway of Middle Marsh Road the view would retain a level of openness with the retention of part of the existing open foreground field and views of the tree-lined horizon.		**Medium**	**Minor Adverse**
Residual Phase The established planting would screen and integrate panels and ancillary buildings and structures. While the existing open view is altered by this established planting, the planting proposed is set back from receptors along the northern boundary and is in keeping with that found in the local area comprising hedgerows, hedgerow trees and small woodland copses. The taller ancillary buildings and structures would be at least partially visible through the woodland copse but would be in keeping with similar vertical features such as pylons or turbines.		**Low**	**Minor Adverse**

Viewpoint 5: View from footpath 3/1 at St Mark's Road	**Location:** 1.04km north of Site	**Grid Reference:** X537524 Y331424

Existing View: The baseline view extends to capture a medium-distance view towards the northern area of the Site looking south from St Marks Road in Holbeach St. Marks. In this view, the northern section of the Site is just visible, however due to the flat nature of the topography in this area, the view is limited as the view does not benefit from looking up to or down on the Site, therefore the majority of the Site is not visible. This is an open and expansive view, and illustrates the flatness and openness of this relatively featureless agricultural landscape. The horizon is formed by arable land and by woodland blocks and trees beyond. Chapel House to the southern extent of Holbeach St. Marks is visible to the right of the view.

Representative Viewpoint for the following receptors:	**Summary of Receptor View**	**Value of view:** (Refer: Table 7 Appendix A)	**Susceptibility** Table 8 Appendix A	**Sensitivity** Table 9 Appendix A
C3: Community of Holbeach St Marks	Variable views across fields to the northern sections of the Site from southern areas of this community due to lack of boundary and intermittent vegetation. However, due to the flat nature of this landscape, intermittent vegetation layers provide screening, and therefore limit views to the Site.	**Low**	**High**	**Medium**
P2: Users of National Cycle Network Route 1	Along this route, there would be clear sequential views of the Site when travelling north and south while adjacent to the Site. There would also be some views for a short section north of the Site when travelling south.		**Medium to High**	**Medium**
P5A: Users of PROW Bridleway Holb/2/1	Views of the Site are unlikely due to built form within Holbeach St Marks and intermittent vegetation screening views.		**Medium to High**	**Medium**
P5B: Users of PROW Footpath Holb/3/1	Medium distance view towards the northern area of the Site looking south from St Marks Road. In this view, the northern section of the Site is just visible, however due to the flat nature of the topography in this area and layering effect of intermittent vegetation, the view is limited		**Medium to High**	**Medium**
T5: Users of Roads and Lanes north of the Site (Around Holbeach St Marks)	Oblique, sequential and direct variable views across fields to the Site due to lack of boundary and intermittent vegetation. However, due to the flat nature of this landscape, views do not encompass the entirety of the Site.		**Medium**	**Low**

Description of Effects	**Overall Viewpoint Sensitivity**	**Magnitude of Effect**	**Significance of Effect**
Construction Phase: The majority of the construction phase of the Development would not be visible from this viewpoint, however construction traffic, noise and movement in the northern areas of the Site would make activity more noticeable to receptors. Taller elements such as cranes or other large plant machinery would potentially break the horizon/treeline, making activity more conspicuous. Existing features would be retained.	**Low**	**Medium**	**Moderate Adverse**
Operational Phase: The northern edge of the Development would be visible in the middle distance (over 1km) across the open foreground fields. However, due to the distance, the majority of the development would appear as a thin strip of panels (in the context of the wider view) that would not break the skyline, sitting against the tree cover on the horizon and would not appear conspicuous in the view, sitting comfortably within the current of the landscape grain with the retention of existing landscape features.		**Low**	**Minor Adverse**
Residual Phase: The established planting would screen and integrate panels and ancillary buildings and structures. Also, due to the distance between receptors and the planting, the openness of this landscape and view would be maintained and existing features retained.		**Negligible**	**Negligible**

Viewpoint 6: View from New Road	**Location:** 1.81m north-east of Site	**Grid Reference:** X539134 Y331454

Existing View: The baseline view extends to capture a medium to long-distance view towards the northern area of the Site looking southwest from New Road near Christie House. In this view, the northern section of the Site is just visible, however due to the flat nature of the topography in this area, the view is very limited as the view does not benefit from looking up to or down on the Site, therefore the majority of the Site is not visible and appearing more as a small slither of land nearly 2km away. This is an open and expansive view, and illustrates the flatness and openness of this relatively featureless agricultural landscape. The horizon is formed by arable land and by woodland and trees beyond.

Representative Viewpoint for the following receptors:	**Summary of Receptor View**	**Value of view:** (Refer: Table 7 Appendix A)	**Susceptibility** Table 8 Appendix A	**Sensitivity** Table 9 Appendix A
T6: Users of Users of Roads and Lanes north of the Site (Around Christie Cottage and Christie House)	Oblique, sequential and variable views where the northern section of the Site is just visible, however due to the flat nature of the topography in this area, the view of the Site is very limited and likely to be barely perceptible to road users.	**Low**	**Medium**	**Low to Medium**
W4: Workers at Farms and agricultural land to the north of the Site, e.g. Caultons Farm	In the majority of views of the Site, these would be views south across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	**Overall Viewpoint Sensitivity**	**Magnitude of Effect**	**Significance of Effect**
Construction Phase: The majority of the construction phase of the Development would not be visible from this viewpoint, however construction traffic, noise and movement in the northern areas of the Site would make activity more noticeable to receptors, however this would be at almost 2km at the nearest point and would be a small part of the existing view. Taller elements such as cranes or other large plant machinery would potentially break the horizon/treeline making activity more conspicuous. Existing features would be retained.	**Low to Medium**	**Low to Medium**	**Minor to Moderate Adverse**
Operational Phase: The northern edge of the Development would be just visible in the middle to long distance (almost 2km) across the open foreground fields. However, due to the distance, the development would appear as a thin strip of panels (in the context of the wider view) that would not break the skyline, sitting against the tree cover on the horizon and would not appear conspicuous in the view, sitting comfortably within the current of the landscape grain with the retention of existing landscape features. Taller ancillary elements may appear more conspicuous in the view, however these would be viewed in context with other vertical elements, such as pylons, and be at such a distance so as to occupy a very small part of the view. The development would likely be hardly perceptible to receptors.		**Negligible**	**Negligible**
Residual Phase: The established planting would screen and integrate panels and ancillary buildings and structures. Also, due to the distance between receptors and the planting, the openness of this landscape and view would be maintained and existing features retained.		**Negligible**	**Negligible**

Viewpoint 7: View from Eastern Road	Location: 761m east of Site	Grid Reference: X538240 Y329103

Existing View: The baseline view extends to capture a medium-distance view towards the central and eastern area of the Site looking west from Eastern Road near New Buildings Cottage. In this view, the Site is just visible across the adjacent large arable field, however due to the flat nature of the topography in this area, the view is limited as the view does not benefit from looking up to or down on the Site, therefore the majority of the Site appears as a slither of land. This is an open and expansive view, and illustrates the flatness and openness of this relatively featureless agricultural landscape. The horizon is formed by arable land and by woodland and trees beyond. Pylons and OH wires crossing the Site are visible, as are the agricultural buildings at New Building. Vegetation at Poplars Farm is visible to the centre of the view, screening the majority of built elements of this farm. Properties along Middle Marsh Road are also visible along the horizon, fronting onto the western Site boundary.

Representative Viewpoint for the following receptors:	Summary of Receptor View	Value of view: (Refer: Table 7 Appendix A)	Susceptibility Table 8 Appendix A	Sensitivity Table 9 Appendix A
T7: Users of Eastern Road	Oblique and sequential variable views across fields towards the Site. However, a well-established hedgerow does provide screening along large sections and due to the flat nature of this landscape, views do not encompass the entirety of the Site.	**Low**	**Medium**	**Low**
W7: Workers at farms to the east e.g. Poplars Farm	In the majority of views of the Site, these would be views west across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	Overall Viewpoint Sensitivity	Magnitude of Effect	Significance of Effect
Construction Phase: The majority of the construction phase of the Development would not be visible from this viewpoint, however construction traffic, noise and movement in the eastern areas of the Site would make activity more noticeable to receptors. Taller elements such as cranes or other large plant machinery would potentially break the horizon/treeline making activity more conspicuous. Existing features would be retained and there are limited receptors associated with this viewpoint.	**Low**	**Medium**	**Moderate Adverse**
Operational Phase: The eastern edge of the Development would be visible in the middle distance (over 700km) across the open foreground fields. However, due to the distance, the majority of the development would appear as a thin strip of panels (in the context of the wider view) that would not break the skyline, sitting against the tree cover on the horizon and would not appear conspicuous in the view, sitting comfortably within the current of the landscape grain with the retention of existing landscape features.		**Low**	**Minor Adverse**
Residual Phase: Any established planting would screen and integrate panels and ancillary buildings and structures. Also, due to the distance between receptors and the development, the openness of this landscape and view would be maintained and existing features retained and there are limited receptors associated with this viewpoint.		**Low**	**Minor Adverse**

Viewpoint 8: View from Eastern Road at Cowfield Gould	**Location:** 760m south east of Site	**Grid Reference:** X537238 Y328048

Existing View: The baseline view extends to capture a medium-distance view across open agricultural fields towards the southern and eastern area of the Site looking west from Eastern Road. However, the Site is screened from view due to the flat topography and intermittent vegetation and built elements layering over each other, creating a physical screen.

Representative Viewpoint for the following receptors:	**Summary of Receptor View**	**Value of view:** (Refer: Table 7 Appendix A)	**Susceptibility** Table 8 Appendix A	**Sensitivity** Table 9 Appendix A
T7: Users of Eastern Road	Oblique and sequential variable views across fields to the Site. However, a well-established hedgerow does provide screening along large sections, and due to the flat nature of this landscape, views do not encompass the entirety of the Site.	**Low**	**Medium**	**Low**
T8: Users of Hurn Bank/Sea Bank	Oblique and sequential variable views across fields to the Site. However, due to the flat nature of this landscape, views are predominantly screened.		**Medium**	**Low**
W7: Workers at farms to the east e.g. Poplars Farm	In the majority of views of the Site, these would be views west across flat open fields devoid of any substantial vegetation.		**Low**	**Low**

Description of Effects	**Overall Viewpoint Sensitivity**	**Magnitude of Effect**	**Significance of Effect**
Construction Phase: The majority of the construction phase of the Development would not be visible from these PROW, however construction traffic, noise and movement may make activity more noticeable to receptors. Taller elements such as cranes or other large plant machinery would potentially be visible, making activity more conspicuous. Existing features would be retained and there are limited receptors associated with this viewpoint.	**Low**	**Low**	**Minor Adverse**
Operational Phase The Development would likely not be visible in this view.		**Negligible**	**Negligible**
Residual Phase The Development would likely not be visible in this view.		**Negligible**	**Negligible**

Mitigation Measures

5.16 Mitigation measures to prevent/avoid, reduce and, where possible, offset or remedy any landscape and visual effects are described in this chapter. Such measures can fall into three categories as defined by the GLVIA guidelines at paragraph 4.21:

"1. Primary measures, developed through the iterative design process, which have become integrated or embedded into the project design;

2. Standard construction and operational management practices for avoiding and reducing environmental effects; and

3. Secondary measures, designed to address any residual adverse effects remaining after primary measures and standard construction practices have been incorporated into the scheme."

5.17 Published landscape character assessments for the character areas that the Site is located have been utilised to influence and guide the Indicative Site Layout, and subsequently primary and secondary mitigation. While the character assessments do not provide specific guidelines or actions for the Site and immediate context, they provide valuable information to ensure the Development is implemented in a way that respects and reflects the local landscape character of the area.

5.18 Primary mitigation measures have been considered (as part of the iterative process) during the design evolution of the Development. Therefore, landscape mitigation measures for the completed phase of the Development are inherent to the design proposals and include careful design and siting of the Development. Such designed-in mitigation measures have been considered in the assessment of the potential effects.

5.19 Due to the nature of the construction activities with the Development it is inevitable that some adverse effects would occur to the landscape resource and visual amenity of the Site and its immediate environs. These effects can be minimised by implementing the following standard construction and operational management practices:

- Adoption of a Construction and Environmental Management Plan (CEMP) to ensure good Site management and housekeeping;

- Careful siting of construction machinery, materials and welfare facilities to avoid unnecessary intrusion, minimise soil compaction and avoid damage to existing vegetation and trees including their root systems; and

- Erection of temporary hoarding around the construction area to clearly delineate working areas.

5.20 Furthermore, through careful analysis and evaluation during the initial Site selection stages, consideration has been given to means of enhancing the landscape resource and visual amenity of the Development. Therefore the layout and mitigation of the Development has incorporated the initial findings of the landscape and visual appraisal, as well as incorporated SHDC comments, as outlined in paragraph 1.19. This identified potential sensitive receptors to the west of the Site (Middle Marsh Road, properties to the west of the Site on Middle Marsh Road and National Cycle Network Route 1), but also that the openness of views from these receptors may be compromised by locating mitigation planting in close proximity, foreshortening currently open views and altering the open character of this landscape. Therefore, in response to this, the following Primary Mitigation is incorporated into the Site Layout:

- The Site is located on flat agricultural land in the open countryside and would be well set-back from the adjacent Middle Marsh Road and National Cycle Network Route 1 by a minimum of 60m.

- Where the Development (and subsequently mitigation planting) is adjacent to properties to the west of the Site on Middle Marsh Road, it would be set-back by a minimum of 185-210m, in order to maintain the open character and view, and would appear as a limited horizontal component of the wider views, seen in context with the surrounding open agricultural landscape which has limited vegetation or positive landscape features;

- Since the Site is flat, it is accepted that the panels should be laid out with no re-grading to existing levels required beyond requirements to positively manage drainage and effective water infiltration on Site. This can then facilitate the most effective structure planting layout, in which relatively narrow strips of tree and shrub planting can have the most beneficial effects and provide the greatest screening and integration of the Development in views from identified receptors.

Secondary Measures

5.21 Through careful planning, siting and design during the assessment process as outlined above, the following additional measures have been considered for the purpose of this assessment, and they aim to integrate the Development within the regional, district, local, and Site scale landscape. These measures would be guided by relevant NPPF and Local Plan guidance and policy, recommendations within any ecological and arboricultural reports (once available), and the information provided within the *Strategic Landscape Capacity Study for South Holland District Council* (July 2003) and the *Lincolnshire Historic Landscape Characterisation Project (September 2011). The landscape layout* is illustrated in **Figure 5**, and these secondary mitigation measures seek to:

- Connect existing trees and hedgerows for visual and ecological cohesion;
- Introduce (or re-introduce) more than 3km of native hedgerows to the Site's perimeter, defining existing field boundaries while ensuring field patterns are maintained so the land may be returned to arable use once the Development is decommissioned. Hedgerows would be set back from any existing drainage ditches in order to maintain appropriate offsets for management;
- Habitat creation associated with open grassland under and around panels, using a mix or mixes for grazing (if appropriate) to benefit soil health, fertility and biodiversity. The seed mixes would be selected based on existing soil types to ensure the land may return to arable production once the Development is decommissioned;
- Plant up areas to create small woodland blocks for landscape, visual and ecological enhancement. These will reflect small copses and blocks found within the wider landscape character area so as to be in keeping with the local landscape, comprise native species, and add structure and interest to this landscape;
- Addition of scrub planting to screen and integrate the Development as well as compliment those scrub areas already existing on site and provide a more diverse pattern of habitat;
- Ecological features, such as bird and bat boxes, or habitat piles, will be incorporated into the Development to improve biodiversity and ecological enhancement. These elements, along with the final plant species and mixes, would be developed in detail post submission alongside the project and SHDC ecologists, relevant SHDC landscape architect (or similar) and other relevant stakeholders, and likely secured by Condition.

6.0 Conclusion

6.1 This report has been undertaken by a Chartered Landscape Architect and is based on guidance presented in the *Guidelines for Landscape and Visual Impact Assessment, Third Edition 2013* (GLVIA3) and other relevant best practice. The predicted landscape and visual effects of the development of a 48 MW Solar Farm on arable land to the north of Roman Bank and to the east of Middle Marsh Road at Red House Farm, Holbeach Bank, Holbeach, Spalding, PE12 8BY are identified and presented at Construction, Year 0/1 and Year 15.

Landscape Effects

6.2 The landscape character of the Study Area is defined primarily by large, open, industrial-scale arable fields across a flat and expansive area of agriculture on drained land, which was formerly fenland (fresh or salt-water wetland or marsh). The industrial scale of agricultural practices over the last century have resulted in the majority of existing field boundaries being lost and very large open fields predominantly devoid of vegetation or other landscape features beyond drainage ditches (which are not very apparent in the landscape). This has resulted in a landscape of "big skies" that feels exposed, monotonous and degraded. Subsequently, Site and Study Area has been judged as having a **low value**, **low susceptibility** to change, and subsequently **low sensitivity**.

6.3 It is acknowledged that the **baseline landscape character** of the Site would be altered as a result of the Development bringing about some adverse effects on landscape character, particularly at the construction and operation phases, since the Development would have introduce built elements over a relatively large are which would be evident in its landscape setting. However, it would form part of the degraded, monotonous, open landscape described above, and due to the flat nature of the landform the effects it would have on the baseline landscape would be very limited. Existing landscape features, though few, would be protected and the Development would be offset from them. During the **residual phase** and with **landscape mitigation**, effects on the landscape receptors would be reduced since the planting associated with the Development would have established and would create a valuable greenspace within the Site (when considering the intensive cultivation of the surrounding area, with few and generally small woodland blocks and little meadow or scrub) which would integrate the built elements with the landscape and provide links to wider landscape features, restoring and reconnecting wildlife habitat. At a Site level it is assessed that this would bring about beneficial effects, as a result of raising biodiversity and providing additional and valuable hedgerows, trees and wildflowers in a landscape that is predominantly devoid of these elements.

6.4 The **key landscape matters** therefore can be summarised as follows:

- While very limited, **existing landscape features would not be impacted by the Development**;

- While the open arable fields of the Site are being replaced by the Development, **effects on the identified landscape character areas and features would be very limited**; and

- **The Development provides the opportunity to establish extensive areas of new planting, including almost 0.7 hectares of woodland copse, 0.3 hectares of scrub, over 3km of native hedgerow, and 79 hectares of meadow grass, improving the value of this landscape, boosting its function as habitat for a wide variety of species and re-introducing lost features such as field boundaries.** This would meet Policies 2 and 3 and 28 of *the South East Lincolnshire Local Plan*, being a sustainable development that respects and enhances the landscape and landscape character, retains natural assets and creates interconnectivity for wildlife. This also meets Criteria 3 and Criteria 14 of the *South East Lincolnshire Local Plan Design Guide SPD* by *"respecting, responding and enhancing the landscape character in which it is located*" and *"Incorporation of Existing Hedgerows and Trees and the Provision of Appropriate New Landscaping to Enhance Biodiversity, Green Infrastructure, Flood Risk Mitigation".* New tree planting on Site is aligned with the *Lincolnshire County Council have developed a Green Masterplan* Action priority: *"looking at our county farms for more opportunities for tree planting*".

Visual Effects

6.5 Visually, the Site is situated within a relatively featureless, flat, open landscape, which is exposed to potential views from the surrounding landscape. However, while limited, tree and vegetation cover and small blocks of woodland form solid features in the landscape and tree groups layer over each other to soften the horizon. The open nature of this landscape allows clear views to farms and isolated residential properties that punctuate the predominantly monotonous view. The ribbon settlements in the Study Area provide containment and screening from views through the concentration of built form, hedgerows and trees, breaking up long vistas in places.

6.6 Overall, while an open and exposed landscape, the likely potential visual receptors with views of the Site are limited in number and sensitivity. The most sensitive receptors identified are to the west of the Site (Middle Marsh Road, properties to the west of the Site on Middle Marsh Road and National Cycle Network Route 1), with open, close-range views to the east towards the Development. There are also some medium-distance views from

some locations on the surrounding local road network, although the availability of these views would largely be limited to moving vehicles, although could be more apparent to people on foot (utilising lanes for dog walking etc.) and cyclists. Views from the PROW network are extremely limited to medium-distance views across a flat landscape towards the Site, screened by intermittent vegetation or built elements associated with settlements, and difficult to perceive due to the effects of distance. Subsequently, Site and Study Area has been judged as generally having a **low value**, **low susceptibility** to change, and subsequently **low sensitivity, with some medium sensitivity associated with National Cycle Route 1 and other nearby PROW**.

6.7 The **baseline visual conditions** of the Site would be altered as a result of the Development, which would be evident in its landscape setting, however where visible it would be seen as part of a degraded open landscape with industrial qualities and features such as pylons, wind turbines and large agricultural buildings, and extensive views would be limited due to the flat nature of the topography. Visual effects would be highest at the construction phase, within which activity would be introduced into the currently static, open landscape, and would be the most apparent from visual receptors with close-range views to the west of the Site, (from Middle Marsh Road and National Cycle Network Route 1, and houses bordering Middle Marsh Road) as represented by Viewpoints: 2, 2A and 3. However these effects would fall at the operation phase and would diminish considerably during the **residual phase** with **landscape mitigation**. At this phase the planting works associated with the Development would have established and would create a valuable greenspace within the Site that would screen and integrate the built elements in views from the wider landscape and reinforce the existing vegetation within the Site's wider setting.

6.8 The **key visual matters,** therefore can be summarised as follows:

- **Visual receptors are relatively limited** in this open, exposed landscape;
- It is assessed that the **set-back of the development from the local roads, particularly Middle Marsh Road and the houses along it** (where there would be a minimum of 185m from the carriageway to the perimeter fence of the Development) **would respect the sense of openness and space** from the most sensitive visual receptors;
- **The openness of this industrial-scale agricultural landscape.** Landscape mitigation associated with the Development would **screen and integrate the proposals from visual receptors with planting and** through the use of native species and a low density of tree

planting (apart from the denser woodland copses at key locations) **would be in keeping with the local character and not appear out of place or context.**

Overall Conclusion

6.9 Through an iterative process (which is a fundamental part of the LVA), the assessment work has shown there are opportunities for mitigation as part of the design process, integrated into the layout of the Development, but also scope to deliver a landscape strategy as mitigation in support of the planning application so that effects at all phases are minimised so as to be acceptable.

6.10 Through careful analysis and evaluation during the initial site selection stages, consideration has been given to means of integrating the Development into the local landscape and where possible enhancing the landscape character and visual amenity of the Development. The layout and additional (secondary) mitigation measures have been considered to ensure the Development will be sympathetic to local character, including the surrounding open agricultural landscape as well as its immediate landscape setting, as well as potential visual receptors. Most importantly, the Development notes the importance of good design and includes measures that will add to the overall quality and value of the area, providing an appropriate layout and effective landscape design to screen and integrate the Development into the landscape context. Overall, the Development will seek to include important green space and linkages to the wider green infrastructure network of the South Holland District, providing beneficial effects at the residual phase of the Development.

AAH landscape

Legend

Site Boundary

Land lease boundary

Rev 1: Site boundary amended

Drawing Nr: 21-18-LVA-GR-01
Rev Nr: 1
Drawn by: TF
Checked by: OB
Scale @ A3: 1:5,000

Land East of Marsh Road, Holbeach Marsh, SE Lincolnshire

Figure 1:
Site Location Plan

AAH landscape

Legend

- Site Boundary
- Land lease boundary
- 2km Study Area
- Listed Buildings

Rev 2: Site boundary amended

Drawing Nr: 21-18-LVA-GR-02A
Rev Nr: 0
Drawn by: TF
Checked by: OB

Scale @ A3: 1:25,000

Land East of Marsh Road, Holbeach Marsh, SE Lincolnshire

Figure 2A: Heritage Designations

AAH landscape

Legend

- Site Boundary
- Land lease boundary
- 2km Study Area
- Public Right of Way (Footpath)
- Public Right of Way (Bridleway)
- Sustrans National Cycle Route 1

Rev 1: Site boundary amended

Drawing Nr: 21-18-LVA-GR-02B
Rev Nr: 0
Drawn by: TF
Checked by: OB

Scale @ A3: 1:25,000

Land East of Marsh Road,
Holbeach Marsh,
SE Lincolnshire

Figure 2B:
Landscape Features

AAH landscape

Legend

- Site Boundary
- Land lease boundary
- 2km Study Area

Character Areas shown are taken from the The Historic Landscape Characterisation Project for Lincolnshire 2011

WSH 4: Reclaimed Wash Famlands

WSH 6: Townlands

Rev 1: Site boundary amended

Drawing Nr: 21-18-LVA-GR-03
Rev Nr: 0
Drawn by: TF
Checked by: OB

Scale @ A3: 1:25,000

Land East of Marsh Road,
Holbeach Marsh,
SE Lincolnshire

Figure 3:
Landscape Character Areas

Visual Receptors

Public Receptors using:

- P1A PROW Footpath Holb/5/1
- P1B PROW Footpaths Holb/11/1 and Holb/12/1
- P2 National Cycle Network Route 1
- P3 *Not Used*
- P4 *Not Used*
- P5A PROW Bridleway Holb/2/1
- P5B PROW Footpath Holb/3/1
- P6 *Not Used*
- P7 *Not Used*
- P8 *Not Used*

Transport Receptors using:

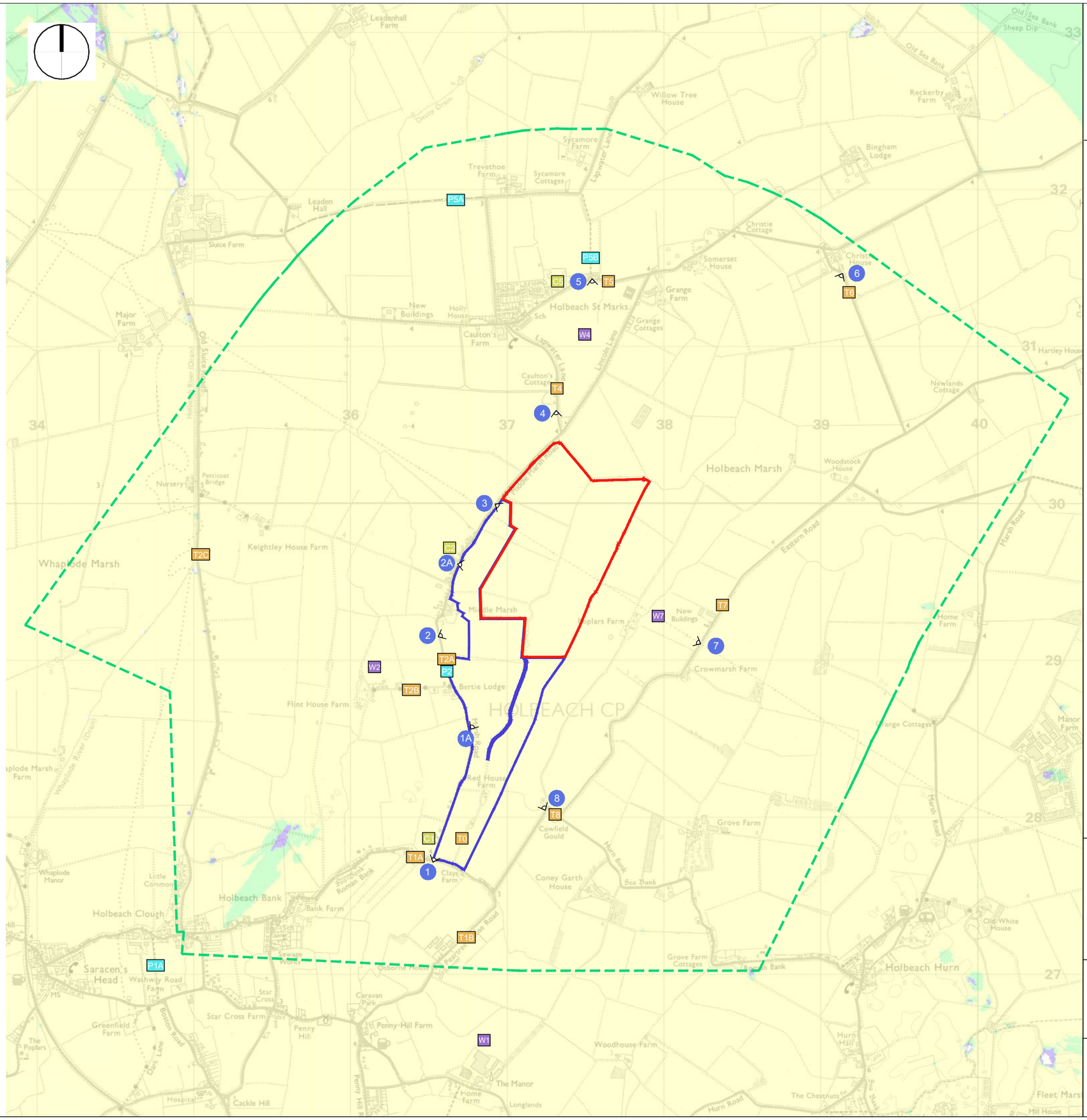
- T0 Tracks and access roads within the Site
- T1A Roman Bank
- T1B Local Roads and Lanes south of Site (around Holbeach Bank, Holbeach Clough and Penny Hill)
- T2A Marsh Road and Middle Marsh Road
- T2B Flint House Road
- T2C Sluice Road
- T3 *Not Used*
- T4 Lapwater Lane
- T5 Roads and Lanes north of the Site (Around Holbeach St Marks)
- T6 Roads and Lanes north of the Site (Around Christie Cottage and Christie House)
- T7 Eastern Road
- T8 Hurn Bank/Sea Bank

Workplace Receptors at:

- W1 Taylor O A & Sons Ltd nursery and farms to the south, eg. clays Farm
- W2 Farms to the west of the Site, eg. Flint House Farm
- W3 *Not Used*
- W4 Farms and agricultural land to the north of the Site, eg. Caultons Farm
- W5 *Not Used*
- W6 *Not Used*
- W7 Farms to the east eg. Poplars Farm
- W8 *Not Used*

Community Receptors at:

- C1 Community of Holbeach Bank
- C2 Community of Properties along Middle Marsh Road
- C5 Community of Holbeach St Marks



AAH landscape

Legend

- Site Boundary
- 2km Study Area
- Viewpoint Locations (1)
- Zone of Theoretical Visibility: High
- Zone of Theoretical Visibility: Low

Rev 1: Site boundary amended

Drawing Nr: 21-18-LVA-GR-04
Rev Nr: 1
Drawn by: TF
Checked by: OB
Scale @ A3: 1:25,000

Land East of Marsh Road,
Holbeach Marsh,
SE Lincolnshire

Figure 4:
Viewpoint Locations & ZTV

AAH consultants

N

NOTE

This drawing is for planning purposes and is not to be used for construction

KEY

Existing:

- To remain in arable cultivation
- Existing drainage ditch
- Overhead cables
- Trees
- Ecological constraint

Proposed:

- Site boundary
- Land lease boundary
- Native hedgerow with trees

  Hedgerow: hawthorn, blackthorn, hazel, elder, holly, dogwood, dogrose

  Hedgerow trees: Pedunculate oak, ash, horse chestnut, small-leaved lime, field maple, silver birch, goat willow, white willow, common osier, wild cherry
- Wildflower Mixes

  Cotswolds Grass Seeds - Solar Park Long Term Grazing Mixture, or similar and approved seed mix for open areas

  Buffer Strip Grass Margin Mix for perimeters along hedgerows and within woodland copses
- Woodland copse

  Peduncular oak, ash, field maple, silver birch, alder, goat willow, white willow, common osier, wild cherry, holly
- Scrub

  Hawthorn / blackthorn with Cotswolds Grass Seeds Pollen & Nectar Mix Grass & Legume Margin mix

Rev 1 - Revised to latest Site layout, 16.9.22

Drawing Nr: 21-18-LM
Rev Nr: 1
Drawn by: TF
Checked by: OB

Scale @ A1: 1:2,500

Land east of Middle Marsh Rd, Holbeach, Lincolnshire

Figure 5:
Landscape Masterplan

APPENDIX A

Methodology

For

Landscape and Visual Appraisal

(LVA)

Landscape and Visual Appraisal Methodology (AAH Consultants)

Introduction

"Landscape and Visual Impact Assessment (LVIA) is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and visual amenity."

"LVIA may be carried out either formally, as part of an Environmental Impact Assessment (EIA) or a Strategic Environmental Impact Assessment (SEA), or informally as a contribution to the 'appraisal' of development proposals and planning applications. Both are important and the broad principles and the core of the approach are similar in each case."

The third edition of Guidelines for Landscape and Visual Impact Assessment Landscape Institute, 2013 (GLVIA3) para. 1.1. and para.1.3

In terms of effects, there are two separate but interlinked issues and that the LVA must assess and clearly distinguish between:

- *"**assessment of landscape effects**: assessing effects on the landscape as a resource in its own right;*
- ***assessment of visual effects**: assessing effects on specific views and on the general visual amenity experienced by people."*

The following methodology for the LVA is based on best practice guidance presented in the *Guidelines for Landscape and Visual Impact Assessment*, Third Edition 2013 (GLVIA3) and current best practice including from the following sources:

- *An Approach to Landscape Character Assessment,* Natural England 2014;
- *Visual Representation of Development Proposals*, Landscape Institute 17 September 2019 (TGN 06/19);
- *Assessing Landscape Value Outside National Designations*, Landscape Institute 2021 (TGN 02/21); and
- *GLVIA Webinar Q&As*, Landscape Institute (TIN 01/21).

Scenarios for Assessment

Likely effects are assessed at the following stages of the project:

- **Construction:** This is when construction is on-going and where some parts of the site may be complete while construction continues elsewhere.

- **Operational Phase (at Year 0/1):** This refers to the completion of the development. The condition of the site will be fully operational and all landscape works will have been implemented and plant stock will be at a young stage so would provide limited screening in views or benefit to the landscape; and
- **Residual Phase (+15 Years):** This takes account of the provision of a suitable landscape scheme incorporated within the development. This assessment takes place fifteen years from completion, which assumes proposed planting associated with the landscape scheme will have established and matured. This would be assessed with consideration both to the summer months with trees and vegetation in leaf, and in winter months during which there would be little or no foliage on most trees and shrubs).

Effects are classified as either **permanent** or **temporary**, where appropriate. Permanent changes are those which are either irreversible, will last for the foreseeable future, or will have environmental effects for the foreseeable future. Temporary effects describe changes that are in place for a period of time. The different durations of effect are therefore as follows:

- **Permanent:** the change is expected to be permanent (40 years+) and there is no intention for it to be reversed.
- **Long-term:** the change is expected to be in place for 15-40 years and will be reversed, fully mitigated or no longer occurring beyond that timeframe.
- **Medium-term:** the change is expected to be in place for 2-15 years and will be reversed, fully mitigated or will no longer occur beyond that timeframe.
- **Short-term:** the change is expected to be in place for 0-2 years and will be reversed, fully mitigated or will no longer occur beyond that timeframe.

Landscape Assessment Methodology

GLVIA3 notes that Landscape Character Area (LCA) Assessments are prepared at different scales, from the National or European level to the District or Parish level and that they should fit together as a nested series, or a hierarchy, of landscape character types and/or areas, such that each level of assessment adds more detail to the LVA. To reflect GLVIA3, the starting point of the LVA will therefore include a review of the hierarchy of the published landscape character assessments at different scales. This will include field work to establish whether the site and its wider landscape setting reflects the published assessments and whether they offer a suitable level of detail for appropriate judgements on *value*, *susceptibility* and *sensitivity* to be made.

Published LCAs are subsequently refined by further desk research, site visits and field survey work to provide the context and understanding at a smaller (closer) scale that can include the use of field

survey sheets. These field survey sheets can provide a transparent approach to more accurately reflect the landscape resource and individual elements that may be directly or indirectly affected by the development. The finer-grained local and site level review is carried out by AAH to compliment the published LCAs, and sets out the key features and elements, and overall character (or characters) of the site and immediate setting.

LCAs at the following range of scales are therefore summarised or defined in the baseline section of the report:

- National (Natural England)
- Regional / District (Local Authority and National Parks)
- Local (Local Authority and/or AAH Planning)
- Site and its immediate context (AAH Planning)

Sensitivity of Landscape Receptor

The ***sensitivity*** of a landscape resource is judged at the assessment stage by the ***value*** of the landscape combined with the ***susceptibility*** of that landscape to change.

Landscape Value

GLVIA3 recommends that the *value* of a landscape is identified at the baseline stage and GLVIA3 draws observations (para 5.28) on landscape value in the context that a review of existing landscape designations is usually the starting point in understanding landscape value, but that the value of undesignated landscapes also needs to be considered:

"In cases where there is no existing evidence to indicate landscape value, and where scoping documents suggest that it is appropriate, value should be determined as part of the baseline study through new survey and analysis. This requires the definition of the criteria and factors that are considered to confer value on a landscape or on its components."

While GLVIA3 (Box 5.1, page 84) identifies a range of factors as a starting point for considering the value of individual features or elements in an undesignated landscape, *TGN 02/21* by the Landscape Institute provides further, more recent, clarification and guidance on assessing and making judgements on the value of a landscape, and provides at Table 1, para. 2.4.4, the following suggested range of factors and indicators to be considered:

- **Natural heritage** *"Landscape with clear evidence of ecological, geological, geomorphological or physiographic interest which contribute positively to the landscape"*

- **Cultural heritage** *"Landscape with clear evidence of archaeological, historical or cultural interest which contribute positively to the landscape"*
- **Landscape condition** *"Landscape which is in a good physical state both with regard to individual elements and overall landscape structure"*
- **Associations** *"Landscape which is connected with notable people, events and the arts"*
- **Distinctiveness** *"Landscape that has a strong sense of identity"*
- **Recreational** "Landscape offering recreational opportunities where experience of landscape is important"
- **Perceptual (Scenic)** *"Landscape that appeals to the senses, primarily the visual sense"*
- **Perceptual (Wildness and tranquillity)** *"Landscape with a strong perceptual value notably wildness, tranquillity and/or dark skies"*
- **Functional** *"Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape"*

An assessment of the suggested range of factors and indicators to be considered above provides the appropriate criteria for determining the *value* of the landscape based on published character assessments and field work. Judgements about landscape value are recorded on a scale of high, medium or low. However, **Table 1** below provides a range of factors associated with determining the *value* of the landscape resource in the assessment process.

Table 1: Landscape Value

Criteria Level	Landscape Characteristics
High	• Important components of the landscape distinctive character and a strong sense of place. • Areas of landscape character that are highly valued for their scenic quality (including Internationally or Nationally designated landscapes); or landscapes that are of interest to national or international tourism; and/or elements/features that could be described as unique; or are nationally scarce; or mature vegetation with provenance such as ancient woodland or mature parkland trees; • Mature landscape features which are characteristic of and contribute to a sense of place and illustrates time-depth in a landscape and if replaceable, could not be replaced other than in the long term. • May indicate value attached to the identity of particular areas, for example 'Constable Country'. • A relatively unspoilt, pristine landscape with high levels of wildness and/or tranquillity, where changes or modifications would be able to be restored or replaced other than in the long term.
Medium	• A landscape of relatively common characteristics. • An undesignated or locally designated landscape. • A public or semi-public open space that is of value to the local community, which supports features in good condition; • Areas that have a positive landscape character but include some areas of alteration/degradation/or erosion of features; and/or • Features/elements that are locally commonplace; or unusual locally but in moderate/poor condition; or mature vegetation that is in moderate/poor condition and/or readily replicated. • Landscape in reasonable condition and that is widespread
Low	• An undesignated landscape with few distinctive characteristics. • Areas that are relatively bland or neutral in character with few/no notable features; and/or a landscape that includes areas of alteration/degradation or erosion of features; and or landscape elements/features that are common place of make little contribution to local distinctiveness. • Landscape affords local value, but is low quality and supports features or elements many of which may be in poor condition.

Landscape Susceptibility

GLVIA3 notes in para. 5.40 that the consideration of landscape *susceptibility* is defined as: *"The ability of the landscape (whether it be the overall character or quality/condition of a particular landscape type or area, or an individual element and/or feature, or a particular aesthetic and perceptual aspect) 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".*

Judgements about the *susceptibility* of landscape receptors to change are recorded on a scale of high, medium or low. *Landscape susceptibility* forms part of the effects assessment and so should for clarity be presented separate to the baseline. **Table 2** below provides the appropriate criteria for determining the *susceptibility* of the landscape resource to change in the assessment process.

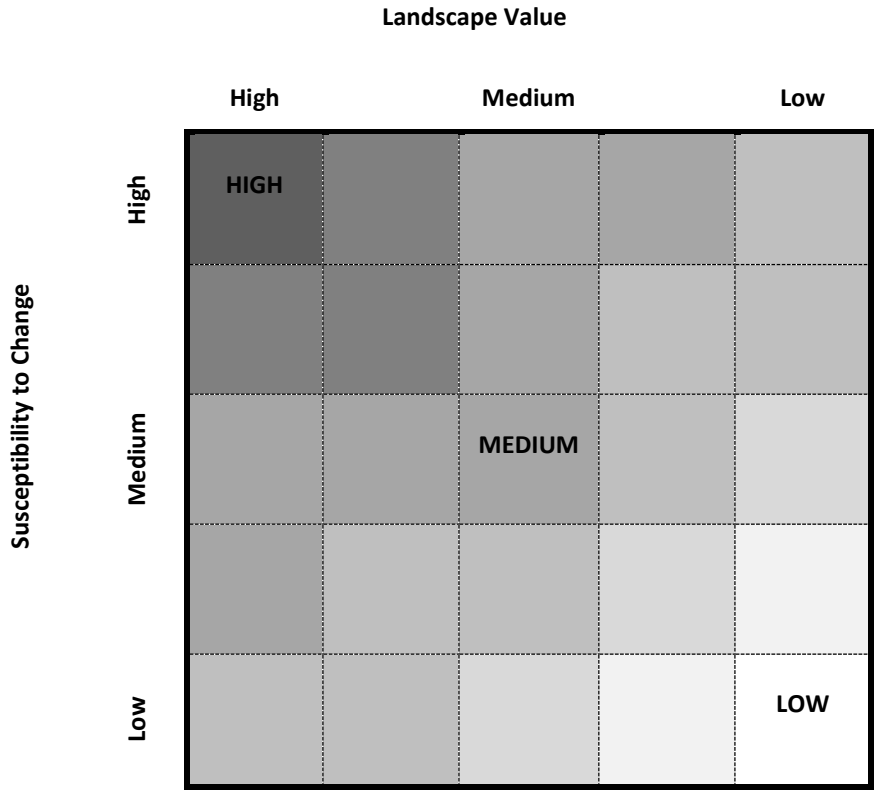
Table 2: Landscape Susceptibility Criteria

Criteria Level	Landscape Susceptibility to Change
High	• The receptor has a low capacity to accommodate the development without effects upon its overall integrity. The landscape is likely to have a strong pattern/texture or is a simple but distinctive landscape and/or with high value features and essentially intact. • Visually open or exposed with widespread intervisibility, which may include intervisibility between landmarks/features and/or designated landscapes. • A landscape with very few night time light sources: provides dark skies.
Medium	• The receptor has some capacity to accommodate the development without effects upon its overall integrity. • The pattern of the landscape is mostly intact and/or with a degree of complexity and with features mostly in reasonable condition. • A landscape of some visual containment and limited intervisibility to landmarks/features and/or designated landscapes.
Low	• The receptor is robust; it can accommodate the development without effects upon its overall integrity. • The landscape is likely to be monotonous and/or degraded with common/indistinct features and minimal variation in landscape pattern.

Evaluating Landscape Sensitivity

The *sensitivity* of the landscape resource will therefore be determined using professional judgement using **Table 3** as a guide to correlate *landscape value* and *susceptibility to change* providing a high, medium or low ranking.

Table 3: Landscape Sensitivity



Magnitude of Landscape Effects

Each effect on a receptor from the construction and/or operation of a development needs to be assessed in terms of its size or scale, the geographical extent of the area influenced, and its duration and reversibility. *Magnitude of effects* forms part of the effects assessment and should, for clarity, be presented separate to the baseline, categorised as high, medium, low or negligible. **Table 4** below provides a description of the criteria used to assess the *magnitude of effects* in the assessment process:

Table 4: Magnitude Criteria

Criteria Level	Description
High	• Introduction of development which would result in a large, noticeable change over an extensive area; or intensive noticeable change within an intimate landscape • Affecting many key characteristics and/or valuable elements and the experience of the landscape. • Long term change and/or largely not reversable.
Medium	• Introduction of uncharacteristic development which would result in noticeable change over a moderate area, or more intensive change over a limited area. • Affecting some key characteristics and the experience of the landscape. • Medium to long term change and/or some mitigation is possible eand/or largely not reversable.
Low	• Introduction of development that is not uncharacteristic which would result in a small change over a limited area. • Affecting few characteristics and/or valuable elements and the experience of the landscape. • Medium term change and/or mitigation is possible and/or fully/partially reversable.
Negligible	• Little or no perceptible change to the landscape characteristics. • Short term change and/or full mitigation is possible.

Determining the Significance of Landscape Effects

The potential *significance of effect* on the landscape resource is determined by a combination of the *magnitude* of the potential effects and the *sensitivity* of the landscape to change.

The potential *significance of effect* forms part of the effects assessment and should for clarity be presented separate to the baseline. **Table 5** below provides the appropriate criteria for assessing the *significance* of landscape effects in the assessment process.

Table 5: Significance of landscape effects

Magnitude of Effect					
Sensitivity of Receptor (Susceptibility and Value)		**High**	**Medium**	**Low**	**Negligible**
	High	Major	Moderate/Major	Moderate	Negligible
	Medium	Moderate/Major	Moderate	Minor/Moderate	Negligible
	Low	Moderate	Minor/Moderate	Minor	Negligible

While the above consideration of the *sensitivity* of the landscape resource with the *magnitude* of the potential effect provides an overall assessment of the potential *significance of effect*, this is not a quantitative process; there is not an absolute scoring system, and although considerations are made according to recognised features and methods of working as outlined in this report, the correlation of the two factors is, in the end, a matter of professional judgement and therefore can be judged as indicative.

Landscape effects may be beneficial or adverse and are assigned a *significance of effect* ranking. The definitions of *significance of effect* forms part of the effects assessment and should for clarity be presented separate to the baseline. **Table 6** below provides the appropriate criteria for understanding the definitions of the varying levels of *landscape effect* in the assessment process.

Table 6: Landscape Effects Categories

Levels of Effect	Description of Landscape Effect
Moderate Beneficial	• The development proposal would be in keeping with the existing landscape character and cause a positive noticeable change or improvement to the existing landscape resource. • The development may also remove uncharacteristic features.
Minor Beneficial	• The development proposal would cause a small, positive improvement to existing landscape resource. • The development may also remove uncharacteristic features.
Negligible	• The development proposal is appropriate in its context and may be difficult to differentiate from the surrounding landscape resource. • Very minor loss or alteration to one or more key elements/features/characteristics of the baseline landscape, i.e., pre-development condition and/or introduction of elements that are not uncharacteristic within the surrounding landscape – approximating the 'no change' situation.
Minor Adverse	• The development proposal would cause a barely perceptible effect within the receiving landscape's characteristics. • Minor loss or alteration to one or more key elements/features/characteristics of the baseline landscape, i.e., pre-development condition and/or introduction of elements that may not be uncharacteristic when set within the attributes of the receiving landscape.
Moderate Adverse	• The development proposal would cause a noticeable difference to the landscape resource. • Partial loss or alteration to one or more key elements/features/characteristics of the baseline landscape, i.e., pre-development condition and/or introduction of elements that may be predominant, but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving landscape.
Major Adverse	• The development proposal would completely change the landscape resource for a long period of time or permanently • Total loss of or major alteration to key elements/features/characteristics of the baseline landscape, i.e., pre-development condition and/or introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving landscape.

Visual Assessment Methodology

GLVIA3 (para 6.1) sets out that ***"An assessment of visual effects deals with the effects of change and development on the views available to people and their visual amenity."***

GLVIA3 recommends that this should include a description of the baseline visual conditions of the site and its wider setting that may be affected, identifying constituent elements and how they contribute to the overall visual amenity. The baseline data will draw from a digital mapping visibility exercise to illustrate those areas of the landscape from which the development proposal may or may not be experienced using a Zone of Theoretical Visibility (ZTV) map.

Zone of Theoretical Visibility (ZTV)

The ZTV map is produced to illustrate the areas of land visible from a number of points within the site. The ZTV illustrates the areas of land visible when viewed from a height of 1.6m above ground level (to approximate eye level). The analysis is produced to assist in identifying potential visual receptors, viewpoint selection and to provide an appreciation of the theoretical visibility of the development proposal in the wider landscape.

The ZTV is produced using Garrad Hassan Windfarmer (version 5.0.8.1) software and the OS Landform 'Terrain 50' data set, in which heights are provided on a 50m grid for the UK. Visibility is calculated at 10m centres, of an indicative development based on a development height of 3.0 metres with an even coverage of the whole site area appropriate to the permission being sought. For any one grid location, this is expressed as the number of points of a height representative of the proposals that would be visible, taking account of existing landform. The result for each grid square is shaded with a colour according to the value. Therefore, the same colours in plan represent areas with relatively similar magnitudes of theoretical visibility.

The use of the ZTV map is considered good practice and is useful as a tool to assist in assessing the visibility of the development proposal within the site and the wider landscape setting. However, it should not be considered as an absolute measure of visibility. Whilst a ZTV map indicates the potential area from which it might be possible to secure views to part(s) of the site, the use of the map needs to be qualified on the following basis:

- there will be a number of areas within the ZTV where it might be possible to view parts of the development proposal, but that may not be accessible to the general public or well frequented;
- a ZTV map does not account for the complete effects of screening and filtering of views as a result of intervening features, such as buildings, trees, hedgerows, weather conditions; and

- a ZTV map does not account for the viewing direction, for example when travelling in a vehicle.

The combined effect of these limitations means that ZTV mapping tends to over-estimate the extent of visibility; both in terms of the land area from which the site is visible, and the extent of visibility of the site from a particular receptor or viewpoint, and so do not truly represent the 'visual impact' of the site.

In predicting the effects of the development on the viewpoints being assessed GLVIA3 states that it is helpful to consider the following issues (as well as others which may be identified):

- accessibility to the public;
- potential number and sensitivity of viewers who may be affected;
- viewing direction and elevation;
- distance (short-range < 0.5km, medium-range 0.5 to 2km and long-range > 2km views);
- nature of the view (static views, views from settlements and views from sequential points along routes);
- type of view type (panoramas, vistas and glimpses); and
- the potential for cumulative views of the development proposal in conjunction with other known development in or beyond the planning system.

Visual Sensitivity

The visual ***sensitivity*** is judged at the assessment stage as a combination of ***value*** of the view and the ***susceptibility*** of the receptor.

GLVIA3 (para 6.31) notes that ***"It is important to remember at the outset that visual receptors are all people. Each visual receptor, meaning the particular person or group of people likely to be affected at a specific viewpoint, should be assessed in terms of both their susceptibility to change in views and visual amenity and also the value attached to particular views."***

Value of a View

In making judgements about the value of each view, GLVIA3 notes that the assessment should take into account the following:

- recognition of the value attached to particular views, for example in relation to heritage assets or through planning designations;
- indicators of the value attached to views by visitors, for example in guide books, tourist maps, literary references, painting, the provision of facilities for their enjoyment etc.

Table 7 below provides the appropriate criteria for understanding the definitions to assess the *value of a view* in the assessment process.

Table 7: Criteria for Visual Value

Criteria Level	Description of View
High	• A recognised high quality view, well-frequented and/or promoted as a beauty spot/visitor destination; and/or • A view with cultural associations (recognised in art, literature or other media); and/or • A view which relates to the experience of other features, for example intervisibility between heritage assets; and/or • A view that is well balanced, containing attractive features and notable for its high scenic quality; and/or • A view which is an important part of being there; and/or • A view which is experienced by large numbers of people and/or is recognised at a regional or national level (such as within, to or across a designated landscape) for its qualities.
Medium	• A locally recognised and/or valued view, however is not widely recognised for its quality or has low visitor numbers; and/or • The view has no strong cultural associations; and/or • An otherwise attractive view that includes some unattractive or discordant features, or visual detractors; and/or • A view which plays a small part in the receptors being there.
Low	• A view with limited local value and/or no recognised quality and/or is unlikely to be visited specifically to experience the views available; and/or • A view that is unattractive, discordant and/or contains many visual detractors; and/or • A view which is unlikely to be part of the receptor experience.

Visual Susceptibility

Visual susceptibility will vary with each receptor, meaning the particular person, or group, experiencing the view. This will be defined by the occupation or activity of the receptor in particular locations, and the extent of attention that would be focussed on the view(s). The *susceptibility* of visual receptors to change is typically assessed by ascribing a high, medium or low ranking. See **Table 8** below for a full description of the criteria used to assess the *visual susceptibility* of the visual receptors and viewpoints in the assessment process.

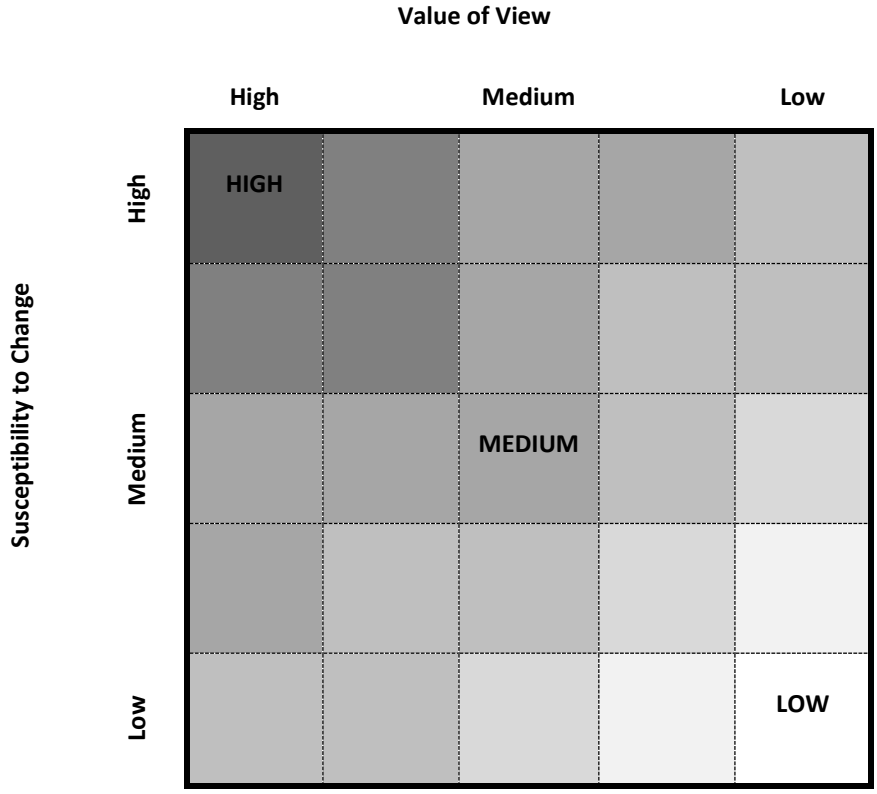
Table 8: Visual Susceptibility Criteria

Criteria Level	Visual Susceptibility of Receptors
High	• Visitors to heritage assets or other attractions, where views of the surroundings are an important contributor to the experience; • Principal views from public buildings, beauty spots, picnic areas or important landscape features with physical, cultural or historic attributes; • Travellers on scenic routes; • Receptors with a key interest and expectation of enjoying the view and are engaged in outdoor recreation, including the use of public rights of way, cycle routes or designated scenic drives, whose attention or interest is likely to be focussed on the landscape; • Communities or Residents in homes who have open, uninterrupted views; and • Visitors within a nationally or internationally designated landscape.
Medium	• Users of local, urban/urban fringe and less used Public Rights of Way, where views are not the primary focus, or includes a number of detractors or negatively influenced by adjacent uses; • Schools and other institutional buildings and their outdoor areas, play areas; • Visitors to locations where the view is valued, but not an intrinsic part of the activity for example people engaged in outdoor sport or recreation which does not involve or depend upon appreciation of views of the landscape; • Travellers on local roads, attractive rural lanes and 'B' roads or on public transport where viewing periods are intermittent; • Residents in homes who have views in the direction of the development where the quality, condition and extent of the existing view is not important to the quality of their environment, such as some high-density suburban areas; and
Low	• People at their place of work whose attention may be focussed on their work or activity and not their surroundings, where the setting of the view is not important to the quality of life or working life. Views from heavily industrialised areas, derelict land or commercial buildings or commercially engaged pedestrians; • People travelling through or past the landscape on 'A' roads, train lines or other main transport routes. Motorists travelling not for the specific enjoyment of the scenery; and • People engaged in outdoor sport or recreation where the focus is more on the activity rather than the view.

Evaluating Visual Sensitivity

The *sensitivity* of the visual resource will therefore be determined using professional judgement using **Table 9** as a guide to correlate *landscape value* and *susceptibility to change* providing a high, medium or low ranking.

Table 9: Visual Sensitivity



Magnitude of Visual Effects

Magnitude of visual effects are categorised as high, medium, low, negligible or none, and is determined by:

- The extent (size/scale) of change in the view, such as loss of features, changes in composition and proportion of view;
- The distance from the viewer (short range < 0.5km; medium range 0.5 to 2km; and long-range > 2km views);
- The proportion or number of views affected and the duration of each from each receptor, including a sequence of views that may have transient views (e.g. along a road); and
- Duration and Reversibility of the change, both temporary or long term, and intermittent or continuous

Due to access restrictions, the *magnitude* of effect on view for all receptors is on the basis of ground-level views (e.g., from the ground floor level) from publicly accessible areas. **Table 10** provides a description of the criteria used to assess the *magnitude* of effects on visual receptors.

Table 10: Magnitude of Visual Effect

Criteria Level	Description
High	• The development, or part of it, would become the dominant and contrasting feature or focal point in the view. • Little or no scope for adequate mitigation. • Long term change and/or largely not reversable
Medium	• The development, or part of it, would form a prominent feature or element of the view which is readily apparent to the receptor in the view; and/or • Partial mitigation is possible; and/or • Medium to Long term change and/or largely not reversable
Low	• The development, or part of it, would be noticeable but not alter the overall balance of features and elements that comprise the existing view. • Partial or full mitigation is possible. • Medium term change and/or fully/partially reversable
Negligible	• Only a very small part of the development would be discernible, or it is at such a distance that it would form a barely perceptible noticeable feature or element of the view and/or occupy a negligible/small proportion of the view. • Short term change and or full mitigation is possible.
None	• No Change in views or visual amenity.

Determining the Significance of Visual Effects

The potential *significance of effect* is determined by a combination of the *magnitude* of the potential effects and the *sensitivity* of the visual receptor.

The potential *significance of effect* forms part of the effects assessment and should, for clarity, be presented separate to the baseline. **Table 11** below provides the appropriate criteria for assessing the *significance* of visual effects.

Table 11: Significance of Visual Effects (Indicative)

		Magnitude of Effect			
Sensitivity of Receptor (Susceptibility and Value)		**High**	**Medium**	**Low**	**Negligible**
	High	Major	Moderate/Major	Moderate	Negligible
	Medium	Moderate/Major	Moderate	Minor/Moderate	Negligible
	Low	Moderate	Minor/Moderate	Minor	Negligible

While the above consideration of the *sensitivity* of the visual receptors with the *magnitude* of the potential effect provides an overall assessment of the potential *significance of effect*, this is not a quantitative process; there is not an absolute scoring system, and although considerations are made according to recognised features and methods of working, as outlined in this report, the correlation of the two factors is, in the end, a guide which is still subject to professional judgement based on the specific site conditions.

Visual effects may be beneficial or adverse and are assigned a *significance of effect* ranking. The definitions of *significance of effect* forms part of the effects assessment and should for clarity be presented separate to the baseline. **Table 12** below provides the appropriate criteria for understanding the definitions of the varying levels of *visual effect* in the assessment process.

Table 12: Categories of Visual Effect

Levels of Effect	Description of Visual Effect
Moderate Beneficial	• The development would cause a noticeable improvement and contribution to the existing view/visual amenity of the area. • Any existing detracting features would be fully or mostly removed from the view.
Minor Beneficial	• The development proposal would cause a barely perceptible change and/or small improvement to the existing key views/visual amenity of the area. • Any existing detracting features would be partially or mostly removed from the view.
Negligible	• The development is appropriate in its view. It may be difficult to differentiate from its surroundings within the view and would affect very few or no receptors. • Very minor loss or alteration to one or more key elements/features/ characteristics of the baseline view and/or introduction of elements that are not uncharacteristic within the view – approximating the 'no change' situation.
Minor Adverse	• The development would result in a perceptible but limited negative visual effect and would affect few receptors. Minor loss or alteration to one or more key elements/features/ characteristics of the baseline view and/or introduction of elements that may not be uncharacteristic when set within the attributes of the receiving view.
Moderate Adverse	• The development would cause a noticeable negative difference in the view and would affect several receptors. • Partial loss or alteration to one or more key elements/features/ characteristics of the view and/or introduction of elements that may be predominant, but may not necessarily be considered to be substantially uncharacteristic when set within the attributes of the receiving view.
Major Adverse	• The development would negatively change the appearance of the majority of the view for a long period of time or permanently. • It would affect many receptors. • Total loss of, or major alteration to, key elements/features/characteristics of the baseline view and/or introduction of elements considered to be totally uncharacteristic when set within the attributes of the receiving view.

Glossary of Terms

Access land	Land where the public have access either by legal right or by informal agreement.
Baseline Studies	Work done to determine and describe the environmental conditions against which against which any future changes can be measured or predicted and assessed.
Characterisation	The process of identifying areas of similar landscape character, classifying and mapping them and describing their character.
Characteristics	Elements, or combinations of elements, which make a contribution to distinctive landscape character.
Compensation	Measures devised to offset or compensate for residual adverse effects which cannot be prevented /avoided or further reduced.
Competent authority	The authority which determines the application for consent, permission, licence or other authorisation to proceed with a proposal. It is the authority that must consider the environmental information before granting any kind of authorisation.
Consultation bodies	Any body specified in the relevant EIA Regulations which the competent authority must consult in respect of an EIA, and which also has a duty to provide a scoping opinion and information.
Designated landscape	Areas of landscape identified as being of importance at international, national or local levels, either defined by statute or identified in development plans or other documents.
Development	Any proposal that results in a change to the landscape and/or visual environment.
Direct effect	An effect that is directly attributable to the proposed development.
'Do nothing' situation	Continued change or evolution in the landscape in the absence of the proposed development.
Ecosystem services	The benefits provided by ecosystems that contribute to making human life both possible and worth living. The Millennium Ecosystem Assessment

(www.unep.org/maweb/en/index/aspx) grouped ecosystem services into four broad categories:

1. supporting services, such as nutrient cycling, oxygen production and soil formation – these underpin the provision of the other 'service' categories;
2. provisioning services, such as food, fibre, fuel and water;
3. regulating services, such as climate regulation, water purification and flood protection;
4. cultural services, such as education, recreation, and aesthetic value.

Elements Individual parts which make up the landscape, such as, for example, trees, hedges and buildings.

Enhancement Proposals that seek to improve the landscape resource and the visual amenity of the proposed development site and its wider setting, over and above its baseline condition.

Environmental Impact Assessment (EIA) The process of gathering environmental information describing a development proposal; identifying and describing the likely significant environmental effects of the project; defining ways of preventing/avoiding, reducing, or offsetting or compensating for any adverse effects; consulting the general public and specific bodies with responsibilities for the environment; and presenting the results to competent authority to inform the decision on whether the project should proceed.

Environmental Statement A statement that includes the information that is reasonably required to assess the environmental effects of the development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile, but that includes at least the information referred to in the EIA regulations.

Feature Particularly prominent or eye-catching elements in the landscape, such as tree clumps, church towers or wooded skylines OR a particular aspect of the project proposal.

Geographical Information System (GIS) A system that captures, stores, analyses, manages and presents data linked to location. It links spatial information to a digital database.

Green Infrastructure (GI) Networks of green spaces and watercourses and water bodies that connect rural areas, villages, towns and cities.

Heritage The historic environment and especially valued assets and qualities such as historic buildings and cultural traditions.

Historic Landscape Characterisation (HLC) and Historic Land-use Assessment (HLA) Historic characterisation is the identification and interpretation of the historic dimension of the present-day landscape or townscape within a given area. HLC is the term used in England and Wales, HLA is the term used in Scotland.

Indirect Effects Effects that result indirectly from the proposed project as a consequence of the direct effects, often occurring away from the site, or as a result of a sequence of interrelationships or a complex pathway. They may be separated by distance or in time from the source of the effects.

Iterative design process The process by which project design is amended and improved by successive stages of refinement which respond to growing understanding of environmental issues.

Key characteristics Those combinations of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.

Land cover The surface cover of the land, usually expressed in terms of vegetation cover or lack of it. Related to but not the same as land use.

Land use What land is used for, based on broad categories of functional land cover, such as urban and industrial use and the different types of agriculture and forestry.

Landform The shape and form of the land surface which has resulted from combinations of geology, geomorphology, slope, elevation and physical processes.

Landscape An area, as perceived by people, the character of which is the result of the action or interaction of natural and/or human factors.

Landscape and Visual Impact Assessment (LVIA) A tool used to identify and assess the likely significance of the effects of change resulting from development both on the landscape as an environmental resource in its own right and on people's views and visual amenity.

Landscape character A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

Landscape Character Areas (LCAs) These are single unique areas which are the discrete geographical areas of a particular landscape type.

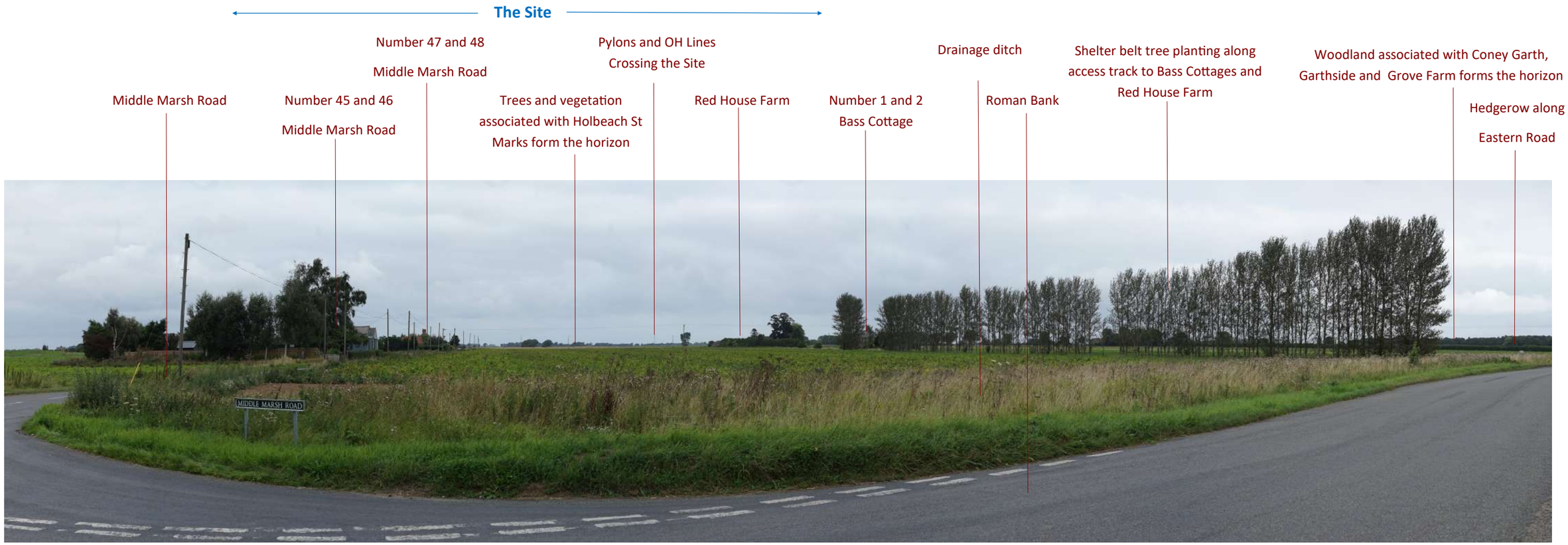
Landscape Character Assessment (LCA)	The process of identifying and describing variation in the character of the landscape, and using this information to assist in managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make landscapes distinctive. The process results in the production of a Landscape Character Assessment.
Landscape Character Types (LCTs)	These are distinct types of landscape that are relatively homogenous in character. They are generic in nature in that they may occur in different areas in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.
Landscape classification	A process of sorting the landscape into different types using selected criteria but without attaching relative values to different sorts of landscape.
Landscape effects	Effects on the landscape as a resource in its own right.
Landscape quality (condition)	A measure of the physical state of the landscape. It may include the extent to which typical character is represented in individual areas, the intactness of the landscape and the condition of individual elements.
Landscape receptors	Defined aspects of the landscape resource that have the potential to be affected by a proposal.
Landscape strategy	The overall vision and objectives for what the landscape should be like in the future, and what is thought to be desirable for a particular landscape type or area as a whole, usually expressed in formally adopted plans and programmes or related documents.
Landscape value	The relative value that is attached to different landscapes by society. A landscape may be valued by different stakeholders for a whole variety of reasons.
Magnitude (of effect)	A term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is for short or long term in duration.
Parameters	A limit or boundary which defines the scope of a particular process or activity.
Perception	Combines the sensory (that we receive through our senses) with the cognitive (our knowledge and understanding gained from many sources and experiences).

Photomontage	A visualisation which superimposes an image of a development proposal upon a photograph or series of photographs.
Receptors	See Landscape receptors and Visual receptors.
Scoping	The process of identifying the issues to be addressed by an EIA. It is a method of ensuring that an EIA focuses on the important issues and avoids those that are considered to be less significant.
Seascape	Landscapes with views of the coast or seas, and coasts and adjacent marine environments with cultural, historical and archaeological links with each other.
Sensitivity	A term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposal and the value related to that receptor.
Significance	A measure of the importance or gravity of the environmental effect, defined by significance criteria specific to the environmental topic.
Stakeholders	The whole constituency of individuals and groups who have an interest in a subject or place.
Strategic Environmental Assessment (SEA)	The process of considering the environmental effects of certain public plans, programmes or strategies at a strategic level.
Susceptibility	The ability of a defined landscape or visual receptor to accommodate the specific development proposal without undue negative consequences.
Time depth	Historical layering – the idea of landscape as a 'palimpsest', a much written-over manuscript.
Townscape	The character and composition of the built environment including the buildings and the relationships between them, the different types of urban open space, including green spaces, and the relationship between buildings and open spaces.
Tranquillity	A state of calm and quietude associated with peace, considered to be a significant asset of landscape.
Visual amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides an attractive visual setting or backdrop for the enjoyment of activities of the people living, working, recreating, visiting or travelling through an area.

Visual effects	Effects on specific views and on the general visual amenity experienced by people.
Visual envelope*	Extent of potential visibility to or from a specific area or feature.
Visual effects*	Effects on specific views and on the general visual amenity experienced by people.
Visual receptors	Individuals and/or defined groups of people who have the potential to be affected by a proposal.
Visualisation	A computer simulation, photomontage or other technique illustrating the predicted appearance of a development proposal.
Zone of Theoretical Visibility or **ZTV;** sometimes also referred to as a Zone of Visual Influence or ZVI)	A map, usually digitally produced, showing areas of land within which, a development proposal is theoretically visible.

Appendix B1

VIEWPOINT PHOTOGRAPHS



Viewpoint Photograph 1: View from Roman Bank

Location: 1.43km south of Site

Grid Reference: X536538 Y327713

The Site

Arable field to the south of Middle Marsh Farm (outside of Site boundary)

Pylons and OH Lines Crossing the Site

Gappy vegetation along field boundary west of Site

Drainage ditch

Small group of trees on western boundary

Vegetation at Poplars Farm

Wind turbines at Wind farm at Fleet Haven

Trees along access track to Poplars Farm

Woodland associated with Coney Garth, Garthside and Grove Farm forms the horizon

Middle Marsh Road



Viewpoint Photograph 2: View from Middle Marsh Road (south)

Location: 525m from western boundary of Site

Grid Reference: X536574 Y329145

The Site

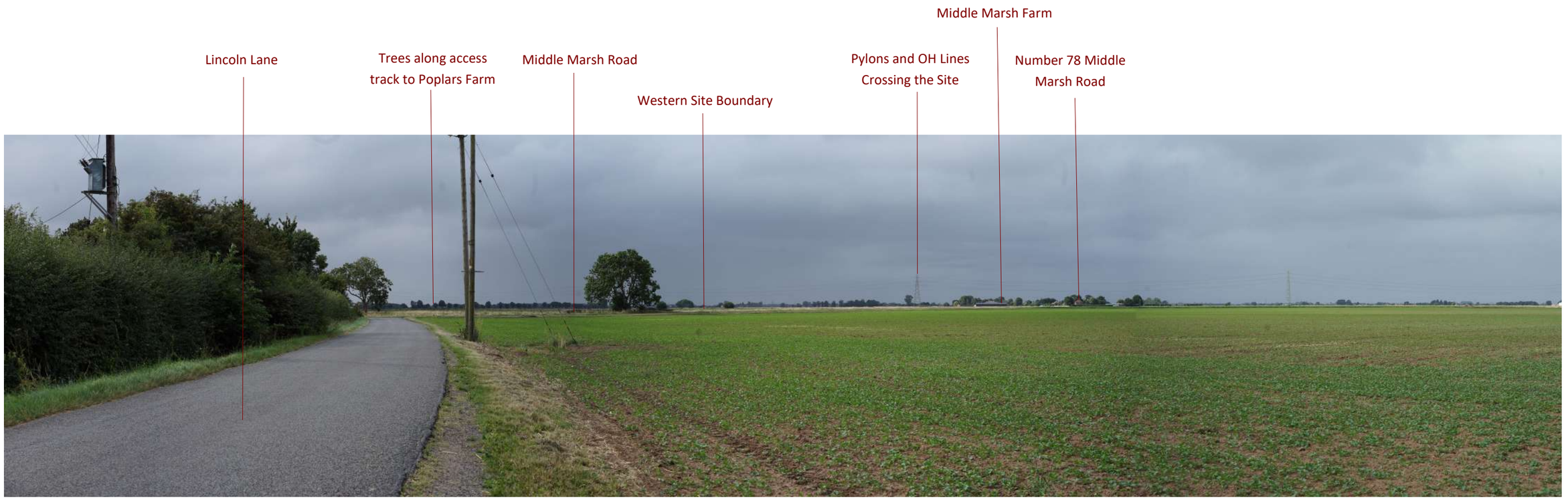


Viewpoint Photograph 3: View from Middle Marsh Road (north)

Location: 60m south of Site / 100m west of Site

Grid Reference: X536921 Y329987

The Site



Viewpoint Photograph 4: View from Lincoln Lane

Location: 190m north of Site

Grid Reference: X537316 Y330587

The Site

Vegetation associated with The Grange and Grange Cottages

Pylons and OH Lines Crossing the Site

Caulton's Cottage along Lincoln Lane

Trees and hedgerow along Lincoln Lane

St Marks Road



Viewpoint Photograph 5: View from footpath 3/1 at St Mark's Road

Location: 1.04km north of Site

Grid Reference: X537524 Y331424

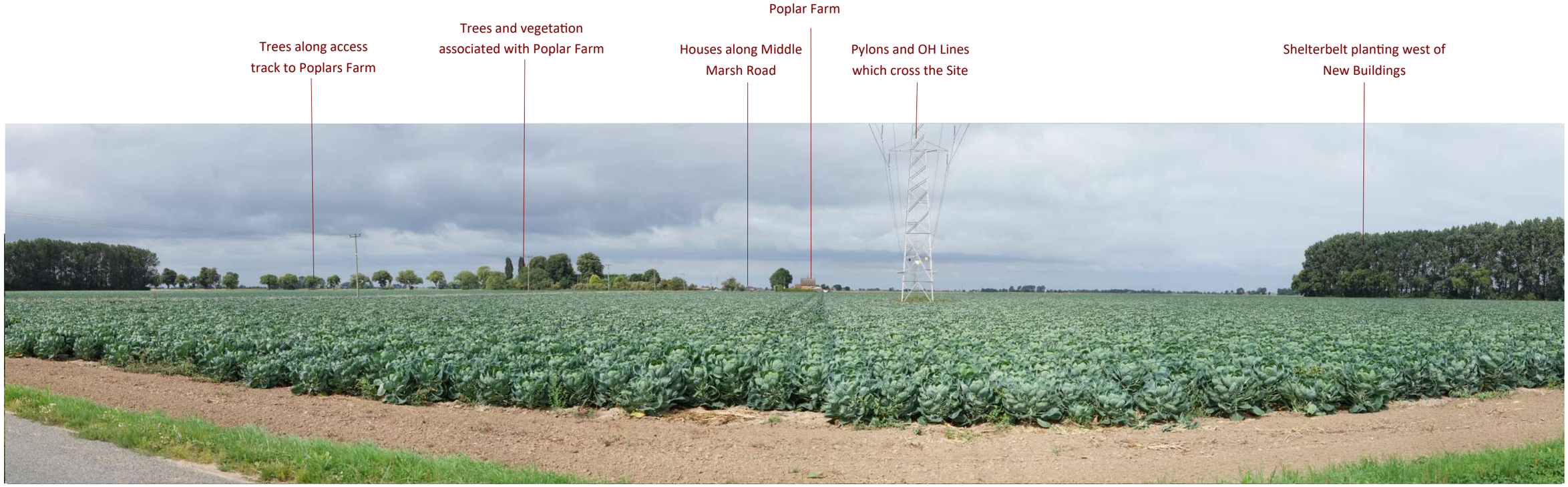


Viewpoint Photograph 6: View from New Road

Location: 1.79m north-east of Site

Grid Reference: X539134 Y331454

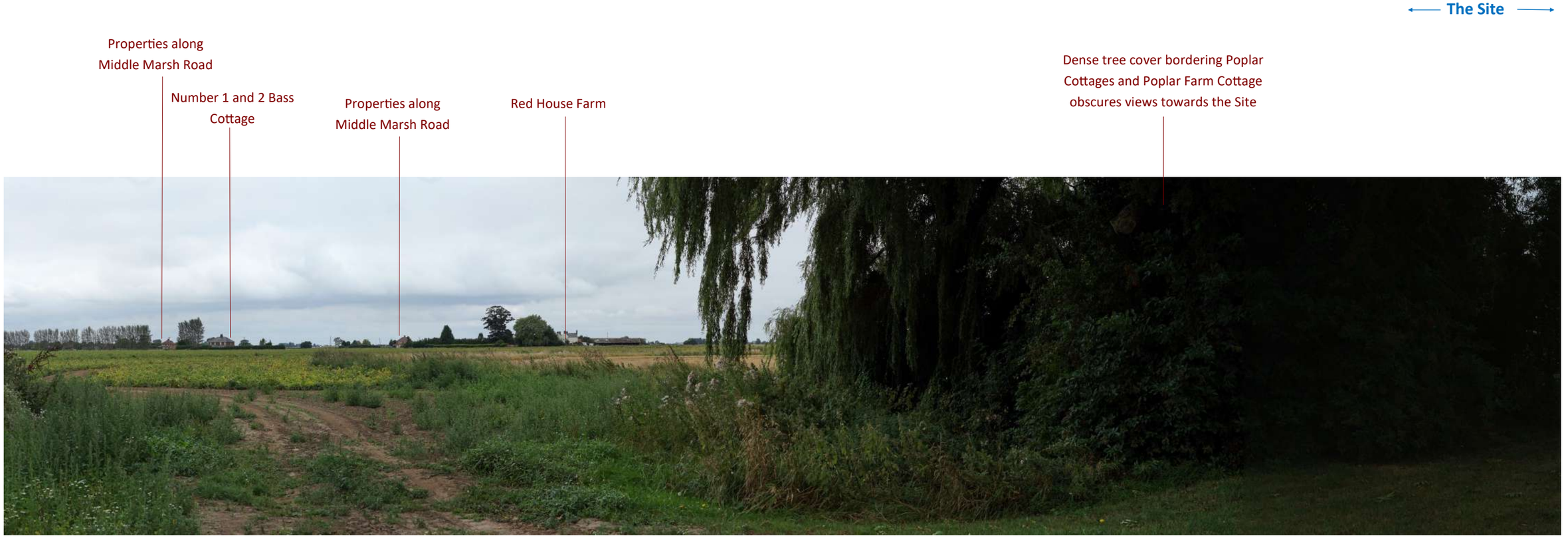
The Site



Viewpoint Photograph 7: View from Eastern Road

Location: 757m east of Site

Grid Reference: X538240 Y329103



Viewpoint Photograph 8: View from Eastern Road by Cowfield Gould

Location: 940m south of Site

Grid Reference: X537238 Y328048