



BEACON FEN ENERGY PARK

Planning Inspectorate Reference: EN010151

Appendix 6.5 – Residential Visual Amenity Assessment

Document Reference: 6.3 ES Volume 2, 6.2.17

~~April~~ December 2025



Quality information

Prepared by	Checked by	Verified by	Approved by
DS	LG	SR	SR

Revision History-

Revision	Revision date	Details	Authorized	Name	Position
<u>2</u>	<u>15/12/25</u>	<u>Updates to reflect consultee comments.</u>	<u>SR</u>	<u>SR</u>	<u>Technical Director</u>
-	-	-	-	-	-
-	-	-	-	-	-

Disclaimer

This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known. No part of this document may be reproduced without the prior written approval of Wardell Armstrong LLP.

Table of Contents

Appendix 6.5 Residential Visual Amenity Assessment	1
1.1 Introduction	1
1.2 Methodology	2
Step 1.....	2
Scope of the Assessment.....	2
Step 2.....	3
Visual Baseline.....	3
Step 3.....	3
Visual Effects	3
Step 4.....	3
Residential Visual Amenity Threshold	3
1.3 RVVA Assessment	4
Step 1 - Study area	4
Limitations.....	4
Step 2 - Baseline Visual Amenity Evaluation.....	5
R1 Group Receptor – (1a) Ewerby Thorpe Farm and (1b) Ewerby Lodge	5
R2 Group Receptor – (2a) Howell Fen Farmhouse, (2b) Asgarby Barns, (2c) Westmorelands Farm	5
R3 Group Receptor –Copperhill Kennels Cattery (3a), Waithe Farmhouse (3b), The Grange (3c), Ferry Farm & Mere House (3d)	5
R4 Gashes Barn.....	5
R5 Group Receptor – Star Fen Farm (5a), The Bungalow (5b), Star Fen Cottage (5c), Windward (5d)	6
R6 Group Receptor – Decoy Farm (6a), Berrick Cottage (6b), April Cottage (6c), Courtrow Farm (6d), The Paddocks (6e), Winkhill (6f)	6
R7 Hall Farm.....	6
R9 Group Receptor – Crow Lane Farm (9a), White House(9b), White House Farm(9c), Broadhurst Farm(9d)	6
R10 – White House Farm.....	6
R11 – Poplar Tree Farm.....	6
R12 – Villa Farm	7
Group Receptor 15 – Meadow View (15a), Dovecote Farm (15b), Cozee Cottage (15c), Highland House (15d), Gauntlet Bridge Farm (15e), Fen Lodge (15f), Crow Hall (15g)	7
R18 Group Receptor – Garwick Farm (18a), Strawberry Cottage (18b), Bramble Cottage (18c), white House (18d), Fen House (18e).....	7
R19 Group Receptor – Smallholding (19a), Blackberry Cottage (19b), Holmes House (19c), Old Vine House (19d), White House Farm (19e), Fen Farm (19f).....	7
R20. Group Receptor - Crowne Cottage (20a), Keepers Cottage (20b).....	7
Step 3 - Assessment of visual effects.....	7
Step 4 - Residential Visual Amenity Threshold.....	11
1.4 Summary	17

Tables

Table 1.1 - Identified Visual Effects for Residential Visual Amenity Receptors	8
Table 1.2 - RVAA for R1 Group Receptor – (1a) Ewerby Thorpe Farm and (b) Ewerby Lodge	11
Table 1.3 - RVAA for R2 Group Receptor – (2a) Howell Fen Farmhouse, (2b) Asgarby Barns, (2c) Westmoreland Farm.....	12
Table 1.4 - RVAA for R4 – Gashes Barn.....	14
Table 1.5 - RVAA for R20 Group Receptor – (20a) Crown Cottage, (20b) Keepers Cottage.....	16

Figures

Figure 1a,b,c - Howell Fen Farmhouse	19
Figure 2a,b,c - Keepers Cottage	20
Figure 3a,b,c - Crown Cottage.	21

1. Appendix 6.5 Residential Visual Amenity Assessment

1.1 Introduction

1.1.1 This Appendix provides a Residential Visual Amenity Assessment (RVAA)¹, with regard to individual properties and property groups in proximity to the Beacon Fen Energy Park.

1.1.2 The term ‘residential amenity’ refers to the living conditions at a residential property, including garden area and domestic curtilage. This is a balance judgement made by planning professionals that goes beyond visual aspects into traffic, air quality and the like. Residential visual amenity is one component of residential amenity and this assessment focusses on this visual aspect.

1.1.3 The Landscape Institute (Technical Guidance Note (TGN) 2/19 ‘Residential Visual Amenity Assessment’) defines residential visual amenity as follows:

“the overall quality, experience and nature of views and outlook available to occupants of residential properties, including views from gardens and domestic curtilage”

1.1.4 As such it is a holistic approach that considers the experience of the occupant in the course of living at the property and all of the visual effects and changed views experienced, rather than a single or a small proportion of views

1.1.5 The Landscape and Visual Impact Assessment (LVIA), **Chapter 6: Landscape and Visual (Document Ref: 6.2 ES Vol. 1, 6.2.6)** has identified and assessed effects on relevant receptors including residential properties within the Study Area. The purpose of the RVAA is to supplement the LVIA and to provide the further level of detail required to understand if the Proposed Development would result in the extent of visual change required to reach or exceed the ‘Residential Visual Amenity Threshold’. In this respect, TGN 2/19 makes the following statement:

“It is not uncommon for significant adverse effects on views and visual amenity to be experienced by people at their place of residence as a result of introducing a new development into the landscape. In itself this does not necessarily cause particular planning concern. However, there are situations where the effect on a residential property’s outlook / visual amenity is so great that it is not generally considered in the public interest to permit such conditions to occur where they did not exist before.”

1.1.6 This RVAA is further informed by photomontages at year 0 and at year 15, illustrated in Figures 1 to 3, for the following properties:

- Figure 1a,b,c - Howell Fen Farmhouse;
- Figure 2a,b,c - Keepers Cottage; and
- Figure 3a,b,c - Crown Cottage.

¹ Residential Visual Amenity Assessment (RVAA) Technical Guidance Note 2/19 by the Landscape Institute (March 2019).

1.2 Methodology

- 1.2.1 The approach followed in this report is set out in (TGN) 2/19 ‘Residential Visual Amenity Assessment’ which sets out the ‘steps’ to be followed when undertaking an RVAA, informed by the guidelines included in the GLVIA. Paragraph 4.1 of this guidance identifies the following steps:

- “1. Definition of study area and scope of the assessment – informed by the description of the proposed development, defining the study area extent and scope of the assessment with respect to the properties to be included.*
- 2. Evaluation of baseline visual amenity at properties to be included having regard to the landscape and visual context and the development proposed.*
- 3. Assessment of likely change to visual amenity of included properties in accordance with GLVIA3 principles and processes.*
- 4. Further assessment of predicted change to visual amenity of properties to be included forming a judgement with respect to the Residential Visual Amenity Threshold.”*

Step 1

Scope of the Assessment

- 1.2.2 This RVAA report has been prepared in accordance with the Landscape Institute guidance, TGN 2/19 and Guidelines for Landscape and Visual Amenity (GLVIA3) and is to be read in conjunction with the Landscape and Visual Assessment and accompanying Appendices. TGN 2/19 describes the purpose of a RVAA as follows:

“The purpose of RVAA is to provide an informed, well-reasoned answer to the question: ‘is the effect of the development on Residential Visual Amenity of such nature and/or magnitude that it potentially affects ‘living conditions’ or Residential Amenity’? In this guidance, this is referred to as the Residential Visual Amenity Threshold.”

- 1.2.3 Therefore, the RVAA focuses primarily on identifying residential properties which have the potential to reach or exceed the ‘Residential Visual Amenity Threshold’ as a consequence of the Proposed Development. Indicators that the threshold has been reached may be that the visual presence of the Proposed Development is considered to be ‘overwhelming’ or ‘overbearing’.
- 1.2.4 In accordance with guidance the RVAA, therefore, considers properties assessed within **Chapter 6: Landscape and Visual (Document Ref: 6.2 ES Vol. 1, 6.2.6)** including **Appendix 6.4: Visual Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.16)** with the potential to reach or exceed the Residential Visual Amenity Threshold.
- 1.2.5 TGN 2/19 advises that when considering RVAA and size of the study area in relation to the development type and scale

“potentially very large but lower profile structures and developments such as road schemes and housing are unlikely to require RVAA, except potentially of properties in very close proximity (50-250m) to the development.”

Step 2

Visual Baseline

- 1.2.6 Step 2 of the assessment requires the preparation of visual baseline descriptions with reference to the residential properties identified for the evaluation. The baseline descriptions highlight key qualities of the available views, their nature and extent, alongside the presence of the features in the vicinity of the residential property that influence the visibility. The descriptions also include the domestic curtilage of residential properties, such as garden vegetation and outbuildings, the relationship of the houses with landforms, and key aspects of the views, including the visual experience of arriving or leaving the residential property.

Step 3

Visual Effects

- 1.2.7 The potential visual effects are assessed in accordance with GLVIA3, and consider the sensitivity of visual receptors, which combines judgments on 'value' and 'susceptibility' to determine the sensitivity of visual receptors. This step also includes the assessment of the magnitude of change as a factor of scale and size, geographical extent, and reversibility. The potential effects are determined by combining the sensitivity with the magnitude of change. The detailed methodology is set out in **Appendix 6.2: Landscape and Visual Methodology (Document Ref: 6.3 ES Vol. 2, 6.3.14)**.
- 1.2.8 The aim of Step 3 is to identify those properties requiring further assessment in relation to the Residential Visual Amenity Threshold judgement. Typically, the residential receptors where the largest potential effects were identified in step 3 are carried forward into the assessment in section 3. The largest potential visual effects are moderate and major adverse, as defined in Appendix 8.1 Landscape and Visual Methodology. Many receptors will be subject to moderate or major adverse and significant impact only at one development stage. For the purpose of the RVAA Assessment, only the identified RVAA receptors that will experience moderate or major (significant) medium to long term adverse effects are carried forward to step 4.

Step 4

Residential Visual Amenity Threshold

- 1.2.9 In step 4, only residential receptors for which major or moderate adverse effects were identified in step 3 are being assessed further to establish whether the Residential Visual Amenity Threshold has been reached. The consideration of the criteria listed above leads to the identification of two types of judgment in respect of the assessed residential properties:
- Residential properties where the Residential Visual Amenity Threshold has been reached; and
 - Residential properties where the Residential Visual Amenity Threshold has not been reached.
- 1.2.10 Factors considered as part of this judgement require consideration as to whether development is '*overwhelming in views in all directions*', '*inescapably dominant*' or '*unpleasantly encroaching*'. If the threshold is reached, it

becomes a matter of relevance to the 'Residential Amenity' of the property and, therefore, a matter for consideration in the planning process.

1.3 RVVA Assessment

Step 1 - Study area

- 1.3.1 The study area for the RVAA has been defined following consideration of the scale and height of the Proposed Development, advice provided in (TGN) 2/19 and consideration of the relatively open nature of the host landscape.
- 1.3.2 The Proposed Development is described in **Chapter 2: Proposed Development (Document Ref: 6.2 ES Vol. 1, 6.2.2)** of the Environmental Statement. The key parameters of the Proposed Development are the height and geographical extent of the energy and associated infrastructure, together with appearance and contrast within the host landscape. The assessment is based on the assumption that solar panels within the Solar Array Area will be 3.5 or 3.9m in height, the associated infrastructure (proposed Onsite Substation) will be up to 13m in height and the Bicker Fen Substation extension will be up to 15m in height.
- 1.3.3 Selected RVAA receptors were subject to consultation (via e-mail 30.06.2023) with the stakeholders, including Lincolnshire County Council, North Kesteven District Council and AAH Planning. No comments were received following the consultation.
- 1.3.4 This original selection has been refined, following the rationale set out above, to include individual properties and property groups within an area which includes a 250m offset from the order limits of the Proposed Development, hereafter referenced as the 'Study Area'. The extent of the Study Area is in accordance with Landscape Institute guidance (TGN 2/19) which recommends the inclusion of residential properties up to a distance of 250m for inclusion in RVAA for projects which are;
- "potentially very large but lower profile structures and developments such as road schemes and housing are unlikely to require RVAA, except potentially of properties in very close proximity (50-250m) to the development."*
- 1.3.5 The extent of the Study Area also allows the inclusion of all residential properties which have been predicted to experience significant operation phase visual effects resulting from the Proposed Development.

Limitations

- 1.3.6 The following limitations were identified:
- The RVAA assessment has been based on desktop study including OS mapping, Aerial Photography, ZTV analysis and field survey primarily from publicly accessible locations adjacent to relevant properties but also including visits to some individual properties where access has been agreed. These properties include Crown Cottage and Keepers Cottage in Howell hamlet and Howell Fen Cottage; and
 - The RVAA assessment only considers residential visual amenity. Other aspects of residential amenity considerations including factors such as

privacy, natural light and outlook are beyond the scope of this assessment and have not been considered.

Step 2 - Baseline Visual Amenity Evaluation

- 1.3.7 This section provides an overview baseline description of the visual amenity for properties included in the RVAA. The included properties are those located within the 250m buffer from the Order Limits as illustrated on **Figure 6.7 Residential Properties (Document Ref: 6.4 ES Vol.3, 6.4.18)**.

R1 Group Receptor – (1a) Ewerby Thorpe Farm and (1b) Ewerby Lodge

- 1.3.8 Relatively open views of the Site are available from the easterly elevations from ground floor and upper floor windows which are orientated towards the Solar Array Area. Views are also available from the external and garden areas to the east of the properties with limited screening vegetation to the property boundary although views of the Site are partially filtered by intervening field boundary hedgerows. The properties are situated on a slightly elevated area of land (approximately 2-3m above the level of the Solar Array Area at the western extent of the Site) which facilitates visibility towards the Proposed Development.

R2 Group Receptor – (2a) Howell Fen Farmhouse, (2b) Asgarby Barns, (2c) Westmorelands Farm

- 1.3.9 Views from Asgarby Barns are partially filtered by garden vegetation although restricted views to the west towards the Solar Array Area and the northern part of the Cable Route Corridor are available. Views of the Solar array Area from Howell Fen Farmhouse are partially restricted by a mix of mature garden vegetation and several ancillary buildings to the north of the property and wholly screened towards the Cable Route Corridor. Although views of the Solar Array Area are available in views to the west particularly from upper floor windows. The views from the access driveway are heavily restricted by agricultural buildings and field boundary vegetation.

R3 Group Receptor –Copperhill Kennels Cattery (3a), Waithe Farmhouse (3b), The Grange (3c), Ferry Farm & Mere House (3d)

- 1.3.10 The views from Copperhill Kennels Cattery and Waithe Farmhouse are largely screened by garden vegetation whilst more open views are available from the Grange. The views from the ground floor rooms at Ferry Farm & Mere House are predominantly screened by two mature garden trees that flank the views. The views from access track or drives to the properties will be largely screened by the existing vegetation. The Solar Array Area is located approximately 150 – 200m to the south and east of the properties.

R4 Gashes Barn

- 1.3.11 Gashes Barn is located within a relatively open location approximately 150 – 200m in all directions from the Solar Array Area. There are open views from the property and garden areas across the relatively open, agricultural landscape comprising relatively small field units. The principal views from the property are orientated to the north west, towards Black Drove, where views are largely open and uninterrupted. South easterly views from the property are only partially interrupted by outbuildings and a short section of vegetation cover to the south eastern plot boundary. Open views are also available across

the agricultural landscape from Black Drove, the route which provides access to the property.

R5 Group Receptor – Star Fen Farm (5a), The Bungalow (5b), Star Fen Cottage (5c), Windward (5d)

- 1.3.12 The views from Windward are open towards part of the Cable Corridor. The main aspect of the views from Star Fen Farm is orientated to the south and north. The views from the Bungalow and Star Fen Cottage allow for partial views toward the Cable Route Corridor. Partial views will be also available from garden and vehicles parked at the drive, but the views will be heavily restricted by vegetation around perimeter of the building.

R6 Group Receptor – Decoy Farm (6a), Berrick Cottage (6b), April Cottage (6c), Courtrow Farm (6d), The Paddocks (6e), Winkhill (6f)

- 1.3.13 The visibility from these residential properties varies. The main aspect of the views from Berrick Cottage is orientated to the north and south, with views largely screened by garden vegetation and along Littleworth Drove. The views from Decoy Farm are screened by mature trees around the garden perimeter. Views from April Cottage and Courtrow Farm are largely screened although some partial views are available from April Cottage towards the Cable Route Corridor to the east, but the main aspect of the views from this property is orientated to the north and south. Although there is a degree of openness around the Paddocks and Winkhill. Views towards the Cable Route Corridor will be available from the access drive at April Cottage.

R7 Hall Farm

- 1.3.14 An individual residential receptor with an associated cluster of farm buildings within a relatively open situation which facilitated visibility of the cable route corridor in close distance views.

R9 Group Receptor – Crow Lane Farm (9a), White House(9b), White House Farm(9c), Broadhurst Farm(9d)

- 1.3.15 There is a degree of openness to the views from Crow Lane Farm as existing trees and vegetation around the property provides limited screening to the views. The views from White House are largely screened by mature vegetation around the perimeter of the property and ancillary buildings, however partial views from the upper storey will be available towards the Cable Route Corridor. The views from Broadhurst Farm are comprehensively screened by existing vegetation and ancillary buildings although partial views may be available from the access drive.

R10 – White House Farm

- 1.3.16 This property is located to the west of the Cable Route Corridor and is enclosed by a comprehensive belt of largely evergreen, mature vegetation. The access to the property on North drove is more open and allows widespread visibility towards the Cable Route Corridor.

R11 – Poplar Tree Farm

- 1.3.17 The views from Poplar Farm are largely screened by vegetation around the property; however, both construction and decommissioning will be visible to the east but largely screened in other directions.

R12 – Villa Farm

- 1.3.18 The views from Villa Farm are screened to the east and west by agricultural buildings. There is some visibility to the north and south along the drive leading to the residential property.

Group Receptor 15 – Meadow View (15a), Dovecote Farm (15b), Cozee Cottage (15c), Highland House (15d), Gauntlet Bridge Farm (15e), Fen Lodge (15f), Crow Hall (15g)

- 1.3.19 The views from Crow Hall are almost entirely screened from the upper storey to the east. The main aspect of the views is orientated, however, to the north and south. There are open views towards the Cable Route Corridor from Fen Lodge, but the vegetation in the middle ground restricts the views. There are open views from Highland House. Open views are also available from the upper storeys of Meadow View, whilst the ground floor views from Dovecote Farm are largely screened by existing hedgerows around the Site. The views into the Cable Route Corridor are generally screened by trees along Black Drove.

R18 Group Receptor – Garwick Farm (18a), Strawberry Cottage (18b), Bramble Cottage (18c), white House (18d), Fen House (18e)

- 1.3.20 The views from Garwick Farm are screened by adjacent outbuildings, similar to views from Strawberry Cottage, where the views are screened by dense trees around the building. Partial views into the west are available from Bramble Cottage and Poplar Farm adjacent to the Cable Corridor Route.

R19 Group Receptor – Smallholding (19a), Blackberry Cottage (19b), Holmes House (19c), Old Vine House (19d), White House Farm (19e), Fen Farm (19f)

- 1.3.21 The views from Smallholding are largely screened by adjacent outbuildings and vegetation. The views from Blackberry Cottage are partially screened by existing field boundary vegetation but open towards the construction access route along Littleworth Drove. The views from the Holmes House are screened by garden vegetation with trees. The views from other properties are screened mainly by a combination of garden vegetation, trees and intermittent field boundary vegetation.

R20. Group Receptor - Crowne Cottage (20a), Keepers Cottage (20b)

- 1.3.22 These properties are located to the northern extent of Howell hamlet immediately to the south west of the Solar Array Area. Views of the Solar Array Area are available from the northern elevation of Keepers Cottage and the eastern elevation of Crown Cottage. Visibility is partially screened at ground level by boundary hedgerows, but more open visibility is available from first floor windows.

Step 3 - Assessment of visual effects

- 1.3.23 The assessment of visual effects is set out in **Appendix 6.4: Visual Assessment (Document Ref: 6.3 ES Vol. 2, 6.3.16)** which includes the assessment of effects on residents in settlements, single properties and property groups. These groups correspond to the RVAA receptors identified on **Figure 6.7 Residential Properties (Document Ref: 6.4 ES Vol.3, 6.4.18)**. The visual effects have been assessed with reference to GLVIA3, guidance,

including consideration of the sensitivity of visual receptors which combines judgments on 'value' and 'susceptibility'. The magnitude of change is determined by considering several factors, including size and scale, geographical extent, duration, and reversibility. The level of effect is in accordance with LVIA methodology is determined by combining sensitivity and magnitude. Table 1.1 below, lists the identified RVAA receptors alongside the visual effects brought forward from Appendix 6.4.

Table 1.1 - Identified Visual Effects for Residential Visual Amenity Receptors

IDENTIFIED VISUAL EFFECTS ON RESIDENTIAL VISUAL AMENITY RECEPTORS			
RVAA RECEPTORS	SENSITIVITY	MAGNITUDE	SIGNIFICANCE
R1 Group Receptor a. Ewerby Thorpe Farm b. Ewerby Lodge	High	C: High	C: Major adverse (significant)
		Y0: High	Y0: Major adverse (significant)
		Y15: Low	Y15: Minor adverse (not significant)
		D: Low	D: Minor adverse (not significant)
R2 Group Receptor a. Howell Fen Farmhouse, b. Asgarby Barns c. Westmorelands Farm, (Potential views of Solar Array Area and Cable Route Corridor)	High	C: High	C: Major adverse (significant)
		Y0: Medium	Y0: Moderate adverse (significant)
		Y15: Low	Y15: Minor adverse (not significant)
		D: Low	D: Minor adverse (not significant)
R3 Group Receptor 3a Copperhill Kennels Cattery 3b Waithe Farmhouse 3c The Grange 3d Ferry Farm & Mere House	High	C: Medium	C: Moderate adverse (significant)
		Y0: Low	Y0: Minor adverse (not significant)
		Y15: Very Low	Y15: Negligible adverse (not significant)
		D: Very Low	D: Negligible adverse (not significant)
R4 Gashes Barn	High	C: High	C: Major adverse (significant)
		Y0: High	Y0: Major adverse (significant)
		Y15: Medium	Y15: Moderate adverse (significant)
		D: Medium	D: Moderate adverse (significant)
R5 Group Receptor 5a Star Fen Farm 5b The Bungalow 5c Star Fen Cottage 5d Windward	High	C: High	C: Major adverse (significant)
		Y0: Low	Y0: Minor adverse (not significant)
		Y15: Very	Y15: Negligible

IDENTIFIED VISUAL EFFECTS ON RESIDENTIAL VISUAL AMENITY RECEPTORS

RVAA RECEPTORS	SENSITIVITY	MAGNITUDE	SIGNIFICANCE
(Potential views of Cable Route Corridor)		Low	adverse (not significant)
		D: Very Low	D: Negligible adverse (not significant)
R6. Group Receptor 6a Decoy Farm 6b Berrick Cottage 6c April Cottage 6d Courtrow Farm 6e The Paddocks, 6f Winkhill. (Potential views of Cable Route Corridor)	High	C: Medium	C: Moderate adverse (significant)
		Y0: Low	Y0: Minor adverse (not significant)
		Y15: Very Low	Y15: Negligible adverse (not significant)
		D: Very Low	D: Negligible adverse (not significant)
R7 Hall Farm	High	C: Medium	C: Moderate adverse (significant)
		Y0: Very low	Y0: Negligible adverse (not significant)
		Y15: Very Low	Y15: Negligible adverse (not significant)
		D: Very Low	D: Negligible adverse (not significant)
R9 Group Receptor 9a Crow Lane Farm 9b White House 9c White house Farm 9d Broadhurst Farm	High	C: High	C: Major adverse (significant)
		Y0: Low	Y0: Minor adverse (not significant)
		Y15: Very Low	Y15: Negligible adverse (not significant)
		D: Very Low	D: Negligible adverse
R10 White House Farm	High	C: High	C: Major adverse (significant)
		Y0: Low	Y0: Minor adverse (significant)
		Y15: Very Low	Y15: Negligible adverse (not significant)
		D: Very Low	D: Negligible adverse
R11 Poplar Tree Farm	High	C: High	C: Major adverse (significant)
		Y0: Low	Y0: Minor adverse (not significant)
		Y15: Very Low	Y15: <u>Minor adverse (not significant)</u> Negligible adverse (not significant)

IDENTIFIED VISUAL EFFECTS ON RESIDENTIAL VISUAL AMENITY RECEPTORS

RVAA RECEPTORS	SENSITIVITY	MAGNITUDE	SIGNIFICANCE
		D: Very low	D: Negligible adverse
R12 Villa Farm	High	C: High	C: Major adverse (significant)
		Y0: Medium	Y0: Minor adverse (not significant)
		Y15: Low	Y15: Negligible adverse (not significant)
		D: High	D: Negligible adverse
R15. Group Receptor 15a Meadow View 15b Dovecote Farm 15c Cozee Cottage 15d Highland House 15e Gauntlet Bridge Farm 15f Fen Lodge 15g Crow Hall	High	C: High	C: Major adverse (significant)
		Y0: Low	Y0: Minor adverse (not significant)
		Y15: Very low	Y15: Negligible adverse (not significant)
		D: Very low	D: Negligible adverse (not significant)
R18. Group Receptor 18a Garwick Farm 18b Strawberry Cottage 18c Bramble Cottage 18d Poplar Farm	High	C: High	C: Moderate adverse (significant)
		Y0: Low	Y0: Minor adverse (not significant)
		Y15: Very low	Y15: Negligible adverse (not significant)
		D: Very low	D: Negligible adverse (not significant)
R19 Group Receptor 19a Smallholding 19b Blackberry Cottage 19c. Holmes House 19d Old Vine House 19e White House Farm 19f Fen Farm	High	C: High	C: Major adverse (significant)
		Y0: Low	Y0: Minor adverse (not significant)
		Y15: Very low	Y15: Negligible adverse (not significant)
		D: Very low	D: Negligible adverse (not significant)
R20 Group Receptor Residential receptors in Howell including; 20a Crowne Cottage 20b Keepers Cottage	High	C: Medium	C: Major adverse (significant)
		Y0: Medium	Y0: Moderate adverse (significant)
		Y15: Low	Y15: Minor adverse (not significant)
		D: Medium	Y15: Minor adverse (not significant)

Key

Assessment Stages: C - Construction, Y0 – Year 0, Y15 – Year 15, D –

IDENTIFIED VISUAL EFFECTS ON RESIDENTIAL VISUAL AMENITY RECEPTORS

RVAA RECEPTORS	SENSITIVITY	MAGNITUDE	SIGNIFICANCE
----------------	-------------	-----------	--------------

Decommissioning

Step 4 - Residential Visual Amenity Threshold

1.3.24 Step four of the RVAA typically identifies the residential properties for which significant adverse effects have been identified in step three of the assessment. In accordance with the approach set out in paragraph 1.1.7 properties where operation phase significant effects have been predicted are carried forward to step four of the RVAA. These properties include:

1. R1 Group Receptor.

- Eweby Thorpe Farm; and
- Ewerby lodge.

2. R2 Group Receptor.

- Howell Fen Farmhouse;
- Asgarby Barns; and
- Westmorelands Farm.

3. R4 Gashes Barn.

4. R20 Group Receptor.

- Crown Cottage; and
- Keepers Cottage.

Table 1.2 - RVAA for R1 Group Receptor – (1a) Ewerby Thorpe Farm and (b) Ewerby Lodge

R1 Group Receptor a. Ewerby Thorpe Farm b. Ewerby Lodge	
Location	These properties are located to the east of the settlement of Ewerby to the north west of the Proposed Development. These properties are located on and accessed via Heckington Road and Thorpe Road/Halfpenny Toll Road.
Distance to nearest proposed infrastructure	The Solar Array Area is approximately 170m to the east of properties at the closest point. The Substation and BESS is approximately 875m to the south east at the closest point.
Existing Views	The properties are situated on an area of slightly elevated land rising to the west in a relatively open situation. Relatively open views will be available from the easterly property elevations and rear garden areas of both properties across the agricultural landscape to the east.

R1 Group Receptor

- a. Ewerby Thorpe Farm
- b. Ewerby Lodge

	<p>Access to the Ewerby Lodge is via the rear of the property off Halfpenny Toll Lane where some views are available to the east. Access to Ewerby Thorpe Farm properties is gained from Heckington Lane where views are more enclosed by adjacent built development and garden vegetation.</p>
Proposed Views from property curtilage	<p>On completion, there will be relatively open and close distance views of infrastructure, principally solar photovoltaic PV panels within the Solar Array area to the east and south east of the eastern property elevations. These views will be available across a flat arable field and will be partially filtered by a hedgerow which defines the eastern extent of the field unit.</p> <p>Views of the Substation will also be available although these will be available in middle distance oblique views to the south east. Views from the westerly orientated elevations and associated external spaces will be largely restricted by dwellings and associated structures. Views of infrastructure will be available at the access point to Ewerby Thorpe Lodge. This will result in notable change to the characteristics of views from the eastern property elevations.</p> <p>Native shrub planting with trees is proposed to the eastern and southern boundaries of the field unit which lies between the properties and the Proposed Development. Following establishment and maturation of this planting views of solar PV panels will not be a prominent component of the view although the open nature of the view will be partially diminished.</p>
RVAA Threshold	<p>In relation to views from these properties the presence of energy infrastructure in this characteristically rural landscape will be perceived by residents. Although the solar PV panels at 3.5m height and partially screened by intervening vegetation will not be perceived by residents as being overbearing or overwhelming.</p> <p>Overall, the RVAA threshold would not be reached.</p>

Table 1.3 - RVAA for R2 Group Receptor – (2a) Howell Fen Farmhouse, (2b) Asgarby Barns, (2c) Westmoreland Farm

R2 Group Receptor

- a. Howell Fen Farmhouse
- b. Asgarby Barns
- c. Westmoreland Farm

Location	<p>These properties are located immediately to the south of the Proposed Development accessed via Howell Fen</p>
-----------------	--

R2 Group Receptor

- a. Howell Fen Farmhouse
- b. Asgarby Barns
- c. Westmoreland Farm

	Drove which is adjacent to the southern boundary of the Solar Array Area.
Distance to nearest proposed infrastructure	a. The Solar Array Area is approximately 60m to the east of properties at the closest point. The Substation and BESS are approximately 900m to the north west at the closest point.
	b. The Solar Array Area is approximately 100m to the east of properties at the closest point. The Substation and BESS are approximately 920m to the north west at the closest point.
	c. The Solar Array Area is approximately 155m to the east of properties at the closest point. The Substation and BESS are approximately 1055m to the north west at the closest point.
Property layout, orientation and access arrangements	These properties are located on and accessed via Howell Fen Drove.
Existing Views	Views from Asgarby Barns are partially filtered by garden vegetation although there are restricted views to the west towards the Solar Array Area and the northern part of the Cable Route Corridor are available. Views of the Solar array Area from Howell Fen Farmhouse (Figure 1a,b,c - Howell Fen Farmhouse) are partially restricted by a mix of mature garden vegetation and several ancillary buildings to the north of the property and wholly screened towards the Cable Route Corridor. Although views towards the proposed Solar Array Area are available in views to the west. The views from the access driveway are heavily restricted by agricultural buildings and field boundary vegetation.
Proposed Views from property curtilage	On completion, open views from all properties will be limited by a combination of intervening agricultural buildings and vegetation. The most open views would be experienced by residents from windows in the western elevation of Howell Fen Farmhouse to the west and from Westmorelands to the north east.
	In these views will partial but relatively close distance views of infrastructure, principally solar photovoltaic panels PV within the Solar Array area to the west and north east. Generally, these views will be available through gaps between buildings and mature vegetation cover. Views of the Substation will also be available from Howell Fen Farmhouse and Asgarby Barns at an

R2 Group Receptor

- a. Howell Fen Farmhouse
- b. Asgarby Barns
- c. Westmoreland Farm

	<p>oblique angle and not comprising a strong element in the visual experience of this receptor group although these will be available in middle distance oblique views to the south east.</p> <p>Native shrub planting belts with trees are proposed to the western, northern and north eastern boundaries of intervening land parcels which would provide a buffer between the properties and Solar Array Area. When established this planting will progressively screen views and reduce the characterising presence of infrastructure for residents.</p> <p>Residents accessing properties by Howell Fen Drove will experience close distance but short lived, transient views of solar PV through gaps in field boundary vegetation.</p>
RVAA Threshold	<p>Although energy infrastructure will not generally feature prominently in views from this property group the incremental sequential experience of partial views as residents access and move around the curtilage of properties will be changed. Infrastructure will be intermittently perceptible and will adversely affect residential visual amenity.</p> <p>However, the presence of energy infrastructure will not comprise a dominant component within these views and because of the relatively low height of infrastructure visible in close distance views will not be as a whole overbearing or overwhelming.</p> <p>Overall, the RVAA threshold would not be reached.</p>

Table 1.4 - RVAA for R4 – Gashes Barn

R4 Gashes Barn

Location	<p>Gashes Barn is an isolated property located within an agricultural landscape context within the north eastern part of the proposed Solar Array Area. The property is set within an area of open grassland with perimeter drains and a linear remnant hedgerow to the south eastern boundary.</p> <p>Gashes Barn is accessed via Black Drove which is located immediately to the north eastern extent of the proposed Solar Array Area. Black Drove is orientated from the northern Solar Array Boundary towards Gashes Barn. Black Drove is routed through a corridor</p>
-----------------	--

R4 Gashes Barn

	defined by the limits of the proposed Solar array Area. This corridor is approximately 605m long. The visual experience of residents travelling through this corridor has been considered within the RVAA because the route is used principally to access the residential property.
Distance to nearest proposed infrastructure	Solar PV arrays would be approximately 150m to the north of the property at the closest point, 165m to the east, 205m to the south and 185m to the west. There would be a distance of approximately 20m to solar PV arrays from Black drove at the closest point The Substation and BESS are approximately 1030m to the south west at the closest point.
Existing Views	The open nature of the external areas allows widespread visibility across the adjoining agricultural landscape which is comprised of a flat landscape structured by rectilinear field units defined by a combination of drainage ditches and partially intact hedgerows. The raised landform associated with the Car Dyke is visible to the east.
Proposed Views from property curtilage	On completion, there will be open, close distance views of solar arrays to all aspects of the property and from the Black Drove access road for a distance of approximately 605m. This will fundamentally change the visual experience for residents at the property and whilst accessing the property during the early years of the operation period of the Proposed Development prior to the establishment of mitigation planting. Native shrub planting belts with trees are proposed to the north eastern, south eastern and south western boundaries of the property. A native species hedgerow is proposed to the north western boundary and to either side of Black Drove within the Solar Array Area. It is considered that after 5 years this planting will be established and have some stature but will not substantially mitigate adverse effects. After 10 years the planting would have a greater presence and substantially screen/filter views of energy infrastructure although its presence will still be a notable part of the visual experience.
RVAA Threshold	The property would be located in relatively close proximity to the Solar Arrays and there would be views of energy infrastructure from all aspects of the property and access road. This is likely to be perceived as 'overwhelming' but not 'overbearing' in the medium term. This scenario would persist until the proposed mitigation planting became established and sufficiently mature to provide effective screening of energy infrastructure from the property and

R4 Gashes Barn

associated access road. It is anticipated that this level of visual assimilation would be reached after approximately 10 years following implementation of the landscape scheme after which the Residential Amenity Threshold would no longer be reached.

Overall, the RVAA threshold would be reached until approximately 10 years following implementation of mitigation planting.

Table 1.5 - RVAA for R20 Group Receptor – (20a) Crown Cottage, (20b) Keepers Cottage

R20 Group Receptor a. Crown Cottage b. Keepers Cottage	
Location	These properties are located within Howell Village immediately to the south west of the Proposed Development. Crown Cottage (Figure 3a,b,c – Crown Cottage) is accessed via Heckington Road and Keepers Cottage (Figure 2a,b,c – Keepers Cottage) via Howell Fen Drove.
Distance to nearest proposed infrastructure	a. The Solar Array Area is approximately 90m to the north east of the property at the closest point. The Substation and BESS are approximately 1500m to the north east at the closest point. b. The Solar Array Area is approximately 185m to the north of the property at the closest point. The Substation and BESS are approximately 1545m to the north east at the closest point.
Existing Views	Dense roadside hedges to both sides of Heckington Road limit ground level visibility from Crown Cottage although more open views are available towards the proposed Solar array Area from first floor windows of the eastern elevation. The flat arable landscape is apparent beyond the roadside hedge with linear strips of mature vegetation defining field boundaries and interspersed with some woodland blocks and tree cover. A similar scenario is apparent for Keepers Cottage where views are available from first floor windows of the proposed Solar Array Area to the north. Although views are more restricted by mature trees within the property curtilage.
Proposed Views from property curtilage	On completion, relatively close distance views will be available of solar arrays to the north east from first floor windows of Crown Cottage and to the north from Keepers Cottage. In relation to Crown Cottage there will be views of an expansive area of solar arrays. Residents in Keepers cottage will experience more restricted views. The introduction of energy infrastructure in both scenarios result in notable change but only from the upper storey. The perception of

R20 Group Receptor

- a. Crown Cottage
- b. Keepers Cottage

	<p>change at Ground level will be less apparent.</p> <p>Native shrub planting belts with trees are proposed to the northern and eastern boundaries of intervening land parcels which would provide a buffer between the properties and the Solar Array Area. When established this planting will progressively screen views and reduce the characterising presence of infrastructure for residents of both properties.</p>
RVAA Threshold	<p>Notable visual change will primarily be experienced through windows at first floor level. At ground level the Proposed Development will be perceptible in views filtered by dense vegetation where the proposed energy infrastructure will not be strongly perceived and will not be overbearing or overwhelming.</p> <p>Overall, the RVAA threshold would not be reached.</p>

1.4 Summary

- 1.4.1 The RVAA provides an assessment of residents living in individual residential properties and property groups within a 250m offset from the Proposed Development order limits. The assessment initially identifies properties where significant medium to long term visual effects have been identified. These properties have been carried forward for more detailed analysis to determine if the Residential Visual Amenity Threshold has been reached.
- 1.4.2 Four properties/property groups were analysed and of these it was determined that a single property, R4 Gashes Barn, would reach the Residential Amenity Threshold. This is because of the manner in which there would be relatively close distance views of energy infrastructure from all aspects of the property and from Black Drove. This would likely to be perceived as 'overwhelming' but not 'overbearing' in the medium term. This scenario would persist until the proposed mitigation planting became established and sufficiently mature to provide effective screening of energy infrastructure from the property and associated access road. It is anticipated that this level of visual assimilation would be reached after approximately 10 years after which following implementation of the landscape scheme after which the Residential Amenity Threshold would no longer be reached.

1.5 Figures

Figure 1a,b,c - Howell Fen Farmhouse







Figure 2a,b,c – Keepers Cottage







Figure 3a,b,c – Crown Cottage





