



LANDSCAPE APPEAL STATEMENT

Proposed Solar Farm to the west of Berrington, Shrewsbury, SY5 6HA

On behalf of To Eenergy International Ltd

Date: October 2023

ADAS ref: 1120025-L-RP-01 (03)

LPA ref: 22/04355/FUL



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Version History

Version	Date	Amendments
1	19/06/2023	-
2	10/10/2023	Minor text amendments
3	13/10/2023	Minor text amendments

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1. Introduction

1.1. Author

- 1.1.1. My name is Daniel Haigh and I hold a Bachelor of Science degree in Forestry and Forest Products (BSc Hons) and a Postgraduate Diploma in Landscape Architecture (PGDip). I am a Chartered Member of the Landscape Institute (CMLI).
- 1.1.2. I am Associate Director at RSK ADAS Ltd (ADAS) and I lead the ADAS landscape team. I have over 15 years of experience in landscape and I specialise in landscape and visual assessment (LVIA). I have experience of LVIA, landscape design and biodiversity enhancement across a wide variety of projects including renewable energy, housing, commercial, energy and transport infrastructure, flood alleviation schemes, and public realm design. Many of these projects have been in Green Belt as well as statutory protected landscapes including National Parks (NP), Areas of Outstanding Natural Beauty (AONB) as well as non-statutory landscape designations such as Areas of Great Landscape Value (AGLV), as 'valued landscapes'. I have prepared evidence at planning appeal to address various landscape and visual issues at inquiry.
- 1.1.3. ADAS is a Landscape Institute registered practice. The ADAS landscape team undertake their work in compliance with the Landscape Institute's Code of Standards of Conduct and Practice for Landscape Professionals.
- 1.1.4. This landscape appeal statement is based on my own professional judgement and is prepared in accordance with the guidance of the Landscape Institute. The content is to the best of my knowledge is true and is presented irrespective of by whom I am instructed.

1.2. Context

- 1.2.1. I am instructed on behalf of Econergy International Ltd (Appellant), to present evidence relating to landscape and visual matters in respect of the appeal concerning the construction of a solar farm with associated infrastructure on land west of Berrington, Shrewsbury, SY5 6HA. This evidence should be read in conjunction with the planning proof prepared by Anthony Heslehurst.
- 1.2.2. The appellant has lodged an appeal against the decision in regard to the following application:

Erection of an up to 30 MW Solar PV Array, comprising ground mounted solar PV panels, vehicular access, internal access tracks, landscaping and associated infrastructure, including security fencing, CCTV, client storage containers and grid connection infrastructure, including substation buildings and off-appeal site cabling.

1.3. Scope

1.3.1. In my appeal statement I explain the visual effects of the appeal scheme on the visual amenity, recognising that the overall planning balance is for Anthony Heslehurst to discuss.

1.3.2. The planning application was submitted to Shropshire Council who subsequently identified three reasons for refusal on 16 May 2023. The second reason for refusal relates to visual matters which is:

"Adverse visual impact

2. The proposed solar farm site would potentially have a visually oppressive effect for users of the publicly maintained highway leading to Cantlop Mill which bisects the site. This is due to the height difference of up to 6m locally between the highway and the top of the proposed arrays. The proposals would also have an adverse effect on existing expansive and high-quality views in the vicinity of the public footpath at Cantlop which is in an elevated position overlooking the site. Other publicly accessible views of a generally pristine rural environment exist from the Berrington Road to the north and the Eaton Mascot Road to the east. Additional field margin planting has been proposed and solar arrays have been pulled back in some margins with the objective of seeking to reduce such views. However, full screening is not physically possible due to the local topography, and it is not certain how effective planting would be as a visual mitigation measure. The proposals therefore have the potential to adversely affect the local landscape and visual amenities from a number of public viewpoints surrounding the site due to the replacement of the current arable fields with solar arrays and associated built infrastructure. This conflicts with Core Strategy Policies CS6, CS17 and SAMDev policy MD12."

1.3.3. It is noted in the committee report the case officer stated that:

"The Council's landscape adviser has supported the LVIA methodology and conclusions that the proposals can be accepted in terms of visual and landscape effects." (para. 6.5.8).

1.3.4. As such the following matters are considered within my Landscape Appeal Statement with regard to points raised relating to harm set out in the second reasons for refusal, summarised as follows:

- Visual effects on users of the road leading to Cantlop Mill.
- Visual effects on users of the public footpath at Cantlop (0407/5R/2).
- Visual effects on users of road that runs along the northern boundary (known locally as the Berrington Road).
- Visual effects on users of the road that runs along the eastern boundary (known locally as the Eaton Mascot Road).

1.3.5. My landscape appeal statement will addresses how the proposal would affect the visual amenity of those visual receptors listed above during the operational phase of the proposals.

- 1.3.6. Although effects on landscape character were not an explicit reason for refusal. My landscape appeal statement will also addresses how the proposal will affect landscape features, landscape character of the appeal site and The Estate Farmlands LCT during the operational phase of the proposals.
- 1.3.7. In preparing my appeal statement, I have also reviewed the following documents that were part of the original planning application (22/04355/FUL) to inform my decision making.
- Planning, Design and Access statement (ADAS);
 - Landscape and Visual Impact Appraisal (LVA) (ADAS);
 - Tree Survey (ADAS);
 - Shropshire Landscape Typology, 2006 (Shropshire County Council);
 - Shropshire Local Development Framework: Adopted Core Strategy, 2011 (Shropshire County Council);
 - Shropshire Council Site Allocations and Management of Development (SAMDev) Plan, 2015 (Shropshire County Council);;
 - Development Management Report, Agenda item 5, 09/05/2023 (Shropshire County Council); and
 - Decision Notice, 13/09/2023 (Shropshire County Council).
- 1.3.8. I have reviewed the scheme with reference to the application LVIA viewpoints surrounding the appeal site. I have set out my own analysis with regard to the appeal scheme in this appeal statement. Whilst I note that a Landscape and Visual Appraisal was prepared for the application, in preparing for this Inquiry I have undertaken my own analysis of the slightly revised proposal using a updated methodology to the one used in the LVA which described in Appendix 2.

1.4. Professional Judgement

- 1.4.1. My appeal site visits and desktop review have been used to determine the landscape and visual effects and to make informed professional judgements that are supported by reasoned argument, as detailed in GLVIA 3 para 2.24. As well as establishing the level and nature of change from a landscape and visual perspective. My assessment is based on autumn/winter views, I have been mindful of summer views which the inspector may experience in the appeal site visit.
- 1.4.2. The degree of landscape or visual effect is identified by means of a descriptive scale as per the Guidelines for Landscape and Visual Impact Assessment 3rd Edition (GLVIA3) (Ref. 1). As part of that process consideration should be given to the nature of the landscape and visual effects. GLVIA3 notes the following in regards the landscape effects:

“One of the more challenging issues is deciding whether the landscape effects should be categorised as positive or negative. It is also possible for effects to be neutral in their consequences for the landscape. An informed professional judgement should be made about this and the criteria used in reaching the judgement should be clearly stated. They might include, but should not be restricted to:

- *The degree to which the proposal fits with existing character*
- *The contribution to the landscape that the development may make its own right, usually by virtue of good design, even if it is in contrast to existing character*
- *The importance of perceptions of landscape is emphasised by the European Landscape Convention, and others may of course hold different opinions on whether the effects are positive or negative, but this is not a reason to avoid making this judgement, which will ultimately be weighed against the opinions of others in the decision-making process.”*

(page 88, para. 5.37)

1.4.3. In regard to visual effects GLVIA3 states that:

“As with landscape effects and informed professional judgement should be made as to whether the visual effects can be described as positive or negative (or in some cases neutral) in their consequences for views and visual amenity. This will need to be based on a judgement about whether the changes will affect the quality of the visual experience for those groups of people who will see the changes, given the nature of the existing views.”

(page 113, para. 6.29)

1.4.4. Within my landscape appeal statement, visual effects are also discussed and relate to the changes that arise in the composition of available views as a result of the proposed development, and also consider people’s responses to the changes and to the overall effect on visual amenity. Generally, change in the landscape, especially that which people are used to can be seen as adverse. As such as part of this appeal statement I have assumed that, however there would be some beneficial changes in the landscape features.

1.5. The appeal site

- 1.5.1. The appeal site is located to the south-west of Berrington. The appeal site is made up of two agricultural fields. There are a few ponds located just outside of the appeal site. There is a publicly maintained highway leading to Cantlop Mill that runs north to south through the centre of the appeal site. The boundaries of the appeal site are lined with hedgerows and occasional hedgerow trees or linear tree belts. There are occasional gaps in these hedgerows to accommodate field entrances. There are a few isolated trees within the western field of the appeal site. There is a seasonally wet pond in the western field.
- 1.5.2. In the western field, the appeal site falls from a high point of 89m AOD in the north-eastern part of the field to 74m AOD in the west and south. In the eastern field, the appeal site falls from a high point of 88m AOD in the northern boundary to 72m AOD in the south and south-east.
- 1.5.3. Cliff Hollow (known locally as the Berrington Road) runs along much of the northern boundary of the appeal site. Shrewsbury Road runs along the western boundary of the appeal site. An unnamed road (known locally as the Eaton Mascot Road) runs along much

of the eastern boundary. Vehicular access to the appeal site is currently from the publicly maintained highway leading to Cantlop Mill that runs in between the two fields that make up the appeal site.

2. The proposed development

2.1. Description

- 2.1.1. The proposal is for the erection of a solar photovoltaic (PV) array, with a total export capacity of up to 30 MW. Other features included as part of the proposed layout include:
- Boundary Fencing;
 - Customer Sub-Stations;
 - MV Power Stations;
 - Fencing and CCTV Cameras;
 - Landscaping Works;
 - Internal Access Tracks;
 - Welfare Units;
 - Compound Area/Track Type 1;
 - Waterless Toilet; and
 - Britcabs x 3.
- 2.1.2. Access to the appeal site, during both the construction and operational phase, will be gained via the creation of a new access point off the unnamed highway (locally referred to as 'Shrewsbury Road') running along the western flank of the appeal site.
- 2.1.3. Shrewsbury Road runs in a north-south orientation, providing access onto the A458 towards Shrewsbury, as well as the A5. This access will remain in place throughout the operational lifetime of the project and will be fitted with a gate and a turning area for the benefit of larger vehicles visiting the appeal site.
- 2.1.4. In regard to the design of the arrays, a tracker system will be utilised, to orient the panels towards the sun throughout the day. The panels are covered by high transparency solar glass with an anti-reflective coating which minimises reflection, whilst also allowing the maximum absorption of the available sunlight. The panels are dark grey/blue in colour.
- 2.1.5. A Storage Container and Customer Sub-Station are also proposed along the western section of the western field parcel. Off-Appeal site cabling works are proposed, running north along the highway connecting to the Grid Substation.
- 2.1.6. The solar PV panels will be erected on posts within the existing pattern of the landscape ensuring that the soil beneath them will still be available for the infiltration of rainwater. In addition, the inverter station, customer switch gear and spare containers will all be elevated above ground level.
- 2.1.7. During the construction phase of the project, temporary welfare units will be set up along the western side of the appeal site. During the operational phase, a waterless toilet will also be located on appeal site, to serve staff on appeal site.
- 2.1.8. The final layout for this development has been refined to ensure that any potential impacts are minimised, whilst also incorporating enhancement measures into the scheme.

2.2. Operational Lifespan

- 2.2.1. The development will have a lifespan of about 40 years. At the end of the useful life of the facility, it will be decommissioned, and all the associated equipment will be removed. It is considered that the land can then be quickly reverted to agricultural use. The strengthened boundary hedgerows and planting will remain, however, leaving an enhanced landscape that is characteristic of the Estate Farmlands LCT, albeit with improved functionality of landscape features within the appeal site and a richer biodiversity.

2.3. Landscape strategy

- 2.3.1. The landscape strategy for the proposed development will ensure the delivery of biodiversity benefits through the landscape proposals and management of the appeal site during its operational phase. The proposed landscape, biodiversity enhancements and mitigation have not been developed in detail, but indicative proposals can be found on the landscape masterplan Figure 6. These mitigation measures form part of the landscape design and overall proposed development and have been considered in the assessment of effects.
- 2.3.2. The development will retain as many of the important landscape features as possible with the landscape strategy appeal site with the following broad aims:
- To assimilate built elements into the surrounding landscape.
 - To minimise adverse effects on visual amenity.
 - To enhance and reinforce the existing landscape framework and to improve the quality and character of the local landscape.
- 2.3.3. The landscape mitigation and enhancement proposals that have responded to the findings of the LVA and strategies and recommendation in relevant landscape character studies are shown on Figure 6 and are as follows:
- Retention of existing hedgerows and trees (mitigation).
 - Retention of existing waterbodies (mitigation).
 - Proposed hedgerow planting to mitigate for any losses and enhance connectivity (mitigation).
 - Landscape management adaptations to increase overall height of hedgerows (mitigation).
 - Proposed species rich grassland (enhancement).
 - Beehives have also been included (enhancement).
- 2.3.4. The landscape proposals have been guided by landscape character guidance, where appropriate.

3. Visual Effects

3.1. Introduction

- 3.1.1. In this section I explore the effect of the proposed development on the general visual amenity of the landscape and the perception of those visual receptors (people) using the landscape from a number of visual receptors listed in the reason for refusal.
- 3.1.2. Visual amenity is defined in the glossary of GLVIA 3 as:
- “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.”* (page 158)
- 3.1.3. The appreciation of views of the landscape within the appeal site and study area is predominantly gained from publicly accessible areas, primary roads and Public Rights of Way (PRoW).
- 3.1.4. My evidence is not a technical glint and glare assessment and should not be used as such.
- 3.1.5. However, my evidence takes into account the seasonal and daily changes in colour and reflective qualities of the proposed solar panels.

3.2. Visual sensitivity

- 3.2.1. Sensitivity of visual receptors will be dependent on their activity and whether their attention is focused on their surroundings. An explanation of the sensitivity of the visual receptors appraised in this report are discussed below.

Users of PRoW.

- 3.2.2. For most of the PRoW within the study area the value attached to the views will be low as the routes are not within designated landscapes with no notable cultural associations. Given the rural nature of the study area visual receptors using PRoW will have a very high susceptibility to change as the landscape will be the main focus of attention. This will also be the case for walkers using the rural lanes within the study area. It is considered that the sensitivity is users of the normal PRoW is high.

Users of roads.

- 3.2.3. For the local single-track roads being discussed as part of this appeal statement the value attached to the views will be low as the routes are not within designated landscapes with no notable cultural associations. Given the rural nature of the study area visual receptors using would include walkers, cyclists and horse riders as well as cars. They will have a very high susceptibility to change as the landscape will be the main focus of attention. It is considered that the sensitivity is users of the roads is high.

3.3. Visual effects on users of the road leading to Cantlop Mill.

- 3.3.1. This road runs between the two parcels of the appeal site and links the residents of Cantlop Mill to the wider countryside and provides a permissive right of way. The road is predominantly lined with vegetation. Views from this road are represented by viewpoints 2, 3, 4, 5 and 6. There are short framed open views of the appeal site where the short gaps in the vegetation for field access occur, with views of the wider landscape visible beyond the appeal site. Partial views of the northern part of the eastern field are possible along the northern section of the road where the northern part of the eastern field of the appeal site rises up above the verge vegetation. Glimpsed views through the vegetation are possible along the remaining sections of the road that runs adjacent to the appeal site.
- 3.3.2. At completion and after 15 years there will be short framed open views of the proposed development from the sections of road where gaps in the vegetation occur for field access, and partial views from the northern sections of road, with glimpses possible through vegetation for the remaining length of road. The proposed panels would be set back from the road and would not be oppressive or seen over the top of the vegetation running along immediately adjacent to the road by receptors passing adjacent to the appeal site. As shown by the illustrative sections and photomontages from viewpoints 2 and 4. The extent of these changes will be modest, and the duration will be medium. The sensitivity of PRoW is high, and the magnitude of change of the northern section of this road (worst case) will be small adverse, therefore the level of effect is considered to be moderate.

3.4. Visual effects on users of the public footpath at Cantlop (PRoW 0407/5R/2)

- 3.4.1. This PRoW is located to the south of the appeal site on the other side of the valley facing the appeal site and runs in an east to west direction, linking the settlement of Cantlop to the wider countryside. Views from this PRoW are represented by viewpoint 15. There are open views of the appeal site to the north from most of the PRoW in the middle distance. The views reduce to partial as the receptor leads further west, away from the appeal site. Most of the southern, lower ground of the site is screened from views by the existing boundary vegetation.
- 3.4.2. At completion there would be open views of the proposed development. PRoW. The extent of these changes will be ample, and the duration will be medium. The sensitivity of visual receptor using the PRoW is high, and the magnitude of change will be medium adverse, therefore the level of effect is considered to be moderate.
- 3.4.3. Although the proposed tree planting would slightly decrease the visibility of the proposed development the magnitude of change and level of effect would remain the same at year 15.
- 3.4.4. Visual effects on users of road that runs along the northern boundary (known locally as the Berrington Road).
- 3.4.5. This road runs along the northern boundary of the site in an east to west direction, linking the settlement of Berrington to the wider countryside. The road is narrow, predominantly

lined with vegetation and sunken in places. Most views are focused to the direction of travel along the road corridor channelled by vegetation on the road. Views from this road are represented by viewpoints 1, 7 and 8. There are framed open views of the appeal site where gaps in the vegetation for field access occur, with views of the wider landscape visible beyond the appeal site. Glimpsed views through vegetation are possible along the remaining sections of the road that runs adjacent to the appeal site.

- 3.4.6. At completion there would be short framed open views of the proposed development from the sections of road where gaps in the vegetation occur for field access, from the majority of the roads length views would be blocked by the hedgerow that runs adjacent to the road. The extent of these changes will be limited for the road as a whole, and the duration will be medium. The sensitivity of visual receptor using the road is high, and the magnitude of change will be very small adverse, therefore the level of effect is considered to be minor.
- 3.4.7. After 15 years, the planting in the gaps along the northern boundary and around the appeal site would have matured, further limiting any oblique views into the appeal site (as shown in photomontage viewpoint 1). The extent of these changes will remain limited for the road as a whole, and the duration will be medium. As along the majority of the length views of the appeal site would be blocked by the hedgerow that runs adjacent to the road. The sensitivity of visual receptor using the road is high, and the magnitude of change will be very small adverse, therefore the level of effect is considered to be minor.

3.5. Visual effects on users of the road that runs along the eastern boundary (known locally as the Eaton Mascot Road).

- 3.5.1. This road runs along the eastern boundary of the appeal site in a north to south-east direction, linking the settlement of Berrington to Eaton Mascott. The road is predominantly lined with vegetation and is sunken below hedgerows on banks for most parts. Most views are focused to the direction of travel along the road corridor. Views from this road are represented by viewpoint 9. There are framed open views of the appeal site where gaps in the vegetation for field access occur adjacent to the appeal site and partial views across the eastern field parcel from a 20m section of the road to the south-east corner of the appeal site. Oblique glimpsed views towards the appeal site are possible along some sections of the road that runs adjacent to the appeal site where the vegetation thins out.
- 3.5.2. At completion there will be framed open views of the proposed development from the sections of road where the short gaps in the vegetation occur for field access, a partial view from the section of road to the south-east corner of the appeal site and glimpsed views where surrounding vegetation thins out. The extent of these changes will be limited for the road as a whole, and the duration will be medium. The sensitivity of visual receptor using the road is high, and the magnitude of change will be very small adverse, therefore the level of effect is considered to be minor.
- 3.5.3. After 15 years the infill planting of the gaps will have matured and proposed landscape management will allow the boundary hedgerows to grow to a height of 4m, which will reduce the views of the proposed development from this road after 15 years. The extent of

these changes will remain limited for the road as a whole, and the duration will be medium. The sensitivity of visual receptor using the PRow is high, and the magnitude of change will be very small adverse, therefore the level of effect is considered to be minor.

3.6. Summary of visual effects

- 3.6.1. The results of the LVIA show that the proposed solar farm will be visually well contained due to surrounding landform, existing vegetation and the low visual profile of the scheme with the panels. Visibility will be localised and limited to close range views from immediately adjacent to the appeal site, with the exception to the rising ground to the south of the appeal site on the other side of the valley where the proposed development will be seen below the skyline as part of the longer and wider ranging views across the valley. The proposal will be set within existing field pattern landscape where field boundaries are demarcated by mature hedges and tree cover. There are no views of the appeal site from any landmarks or gateways.
- 3.6.2. The summary table below lists the visual receptors considered within the LVA and level of effects assessed on each one.

Table 3.1: Visual effects summary

Visual receptor	Level of effect (year 0)	Level of effect (year 15)
Road leading to Cantlop Mill	Moderate	Moderate
PRow 0407/5R/2	Moderate	Moderate
Road that runs along the northern boundary (known locally as the Berrington Road).	Minor	Minor
Road that runs along the eastern boundary (known locally as the Eaton Mascot Road).	Minor	Minor

4. Effects on landscape elements and character

4.1. Introduction

- 4.1.1. This section of my Landscape appeal statement describes how the proposed development will affect the character of the landscape resource within the appeal site and the wider study area. Landscape character is defined within the GLVIA3 glossary as:

“A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different to another...”

- 4.1.2. Landscape effects are appraised at several scales. Firstly, at a site level including landscape elements. Secondly, the landscape character of the site itself. Thirdly, at a Landscape Character Types (LCT) level appraising the effects on the key characteristics of the LCT that the site sits within.

- 4.1.3. Shropshire Landscape Typology, 2006 (Shropshire County Council) defines LCTs that cover the county. LCTs, are defined in GLVIA3:

“These are distinct types of landscape that are relatively homogeneous 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 lands use and settlement pattern, and perceptual and aesthetic attributes.” (page 157).

4.2. Landscape sensitivity

- 4.2.1. The sensitivity of landscape receptors is evaluated based on combining judgements of their susceptibility to the type of change or development proposed and the value attached to the landscape.

Landscape value

- 4.2.2. The value of the landscape receptors will to some degree reflect landscape designations and the level of importance which they signify, although there should not be over-reliance on designations as the sole indicator of value. Other considerations include the condition of the Natural heritage, Cultural heritage, Landscape condition, Associations, Distinctiveness, Recreational, Perceptual (scenic, wilderness and tranquillity) and Functionality.

- 4.2.3. Part of the assessment of local landscape value has been based on the designations shown on Figure 4 and landscape character assessments. The appeal site is not located within any landscape designations. There are several Listed Buildings, Conservation Areas and Historic Park and Garden located within the study area.

- 4.2.4. Within the document ‘Assessing landscape value outside national designations’ (2021). Table 1 (page 7) provides guidelines for assessing landscape value by a consideration of the following factors:

- 4.2.5. Natural heritage. There is some potential for protected species to be present with limited semi-natural habitat on site itself and with some blocks of woodland and ponds within 500m. The appeal site and The Estate Farmlands LCT is considered to have a medium natural habitat landscape value. Landscape of the appeal site and the LCT area contains common components and characteristics that makes a recognisable positive contribution to landscape character.
- 4.2.6. Cultural heritage. There is some intervisibility between the appeal site and several the cultural heritage designations in the local area (within 500 m). The elements on the appeal site itself, are considered to have a low cultural heritage landscape value. The Estate Farmlands LCT is considered to have a medium cultural heritage landscape value. Landscape of the LCT area contain common cultural heritage elements that makes a recognisable positive contribution to landscape character.
- 4.2.7. Landscape condition. The landscape features within and surrounding the appeal site appear to be in fair condition as they are neither declining nor particularly well managed. The landscape condition is considered to be fair for the appeal site, and the Estate Farmlands LCT. Landscape of the appeal site and the LCT area contain common components in a fair condition that make a recognisable positive contribution to landscape character.
- 4.2.8. Associations. The document 'The Shropshire Landscape Typology' (Ref.8) does not list the appeal site as having any particular cultural associations and the cultural landscape value is considered to be low for the appeal site. The Estate Farmlands LCT has a medium value as the LCT area contains common components and characteristics that makes a recognisable positive contribution to landscape character.
- 4.2.9. Distinctiveness. The document 'The Shropshire Landscape Typology' (Ref.8) does not list any rare landscape elements within the landscape character areas within the study area. The landscape characteristics of the appeal site and local landscape are typical of the LCT; however, they are not considered to be particularly important or rare examples of the key characteristics of the LCT. The elements on the appeal site, appeal site itself, and The Estate Farmlands LCT are not considered to be rare or particularly important examples and the distinctiveness landscape value is assessed as low.
- 4.2.10. Recreational. There is a road running through the appeal site between the two fields that has public access, The appeal site is considered to have a high recreational landscape value. The Estate Farmlands LCT is considered to have a medium recreation landscape value as it has a network of PRoW running through it.
- 4.2.11. Perceptual (scenic). No formal assessment of scenic quality of the Estate Farmlands LCT has been undertaken, however, the document 'The Shropshire Landscape Typology' (Ref.8) notes that The Estate Farmlands LCT has "...*Medium to large scale landscapes with framed views ...*". The elements on the appeal site, and the Estate Farmlands LCT are considered to have a medium scenic quality as they are rural areas with views that make a recognisable positive contribution to landscape character.

- 4.2.12. Perceptual (wilderness and tranquillity). A formal assessment of tranquillity of the Estate Farmlands LCT has not been undertaken. The document ‘The Shropshire Landscape Typology’ (Ref.8) notes that the LCT has “...Mixed farming landuse...”. The elements on the appeal site, and the Estate Farmlands LCT are considered to have a medium perceptual landscape value as they are rural areas with a sense of tranquillity that make a recognisable positive contribution to landscape character.
- 4.2.13. Functional. The individual trees, hedgerows and lines of trees and hedgerows that run around its boundaries play a part in the Green Infrastructure network of the locality and the LCT as a whole. The elements on the appeal site, and the Estate Farmlands LCT are considered to have a medium natural functional landscape value.
- 4.2.14. Combining the value of the surrounding designations, landscape character studies and other criteria it is assessed that the value of the appeal site and the Estate Farmlands LCT is medium.
- 4.2.15. The landscape of the appeal site is not valued in terms of the NPPF, paragraph 174, as it is not covered by any statutory designations or identified as having high quality in any of the development plan documents or published landscape character study documents. Also as part of my appraisal the landscape of the appeal site has not identified the appeal site as having sufficient landscape qualities to elevate it above other more everyday landscapes.

Landscape susceptibility

- 4.2.16. GLVIA3 states that susceptibility means:
- “the ability of the landscape to accommodate the proposed Development without undue consequences for maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies”.*
- 4.2.17. Judgements on landscape susceptibility (high, medium, low) include references to both the physical and aesthetic characteristics and the potential scope for mitigation.
- 4.2.18. The landscape of the appeal site has a medium scale and sense of enclosure and is not particularly complex. It does have a rising landform and sits in a relatively rural context.
- 4.2.19. Although there will be a clearly perceived change to land use on the appeal site, the proposed development will exist within the existing pattern of the landscape and have negligible direct effects on landscape features. Furthermore, the appeal site will be fully restored on decommissioning, albeit that improvements made to the function and structure of landscape features through implementation of the landscape strategy will remain.
- 4.2.20. The appeal site’s susceptibility to the type of development proposed, namely a solar PV array, is assessed as medium along with the Estate Farmlands LCT.

Overall sensitivity

- 4.2.21. Combining landscape value and susceptibility to change provides a guide as to how sensitive a landscape is. The sensitivity of the elements on the appeal site, and the estate farmlands is assessed as medium.

4.3. Effects on landscape elements

Effects on trees / scrub / hedgerows

- 4.3.1. The existing vegetation on the appeal site will be actively managed and incorporated into the proposed landscape areas as part of the proposed development. There will be additional tree planting (70 no.) and some additional hedgerow creation to fill in gaps along the boundary. The sensitivity of the trees and hedgerows is medium. The extent of these changes will be modest, and the duration will be medium. The magnitude of change will be small beneficial, and the level of effect therefore is assessed to be minor at completion. At year 15 as the proposed planting matures this will increase to medium beneficial magnitude of change and moderate level of effect. As the extent of these changes will be modest, and the duration will be long.

Effects on land use

- 4.3.2. The proposal is temporary and reversible in nature and will allow for continued agricultural use of the appeal site. During the temporary life of the development, it is proposed this land will continue as pasture. The sensitivity of the land use is medium, the magnitude of change during operation will be inconsequential and the level of effect is assessed as nil at completion and at year 15.

4.4. Effects on landscape character

- 4.4.1. This section examines the potential impacts of the development proposals on the intrinsic character and quality of the landscape, as described in the baseline section. The scale of these impacts is likely to be greatest at the point at which direct changes in the landscape fabric occur, i.e., at the appeal site level, with the effects diminishing with increasing distance from the appeal site.
- 4.4.2. This section therefore examines the potential impacts on landscape character and resources from the appeal site level outwards. The effects on landscape character are described below.

Effects on landscape character of the appeal site

- 4.4.3. The development proposals will change the appeal site from agricultural fields to a dual-use solar farm and pastoral grazing area. There will be a change in the character to the appeal site for the duration of the solar farm's lifetime due to the construction of the solar arrays, fencing and ancillary structures and equipment. However, the pattern of the landscape and all of the field boundaries will remain intact and enhanced. Although the solar panels are constructed over the field, all landscape features are retained so that effects are reversible. The extent of these changes will be extensive across the appeal site

itself and the duration will be medium. The change in character as a result of the appeal site being developed and the effect on the appeal site will inevitably be large adverse. The level of effect is assessed to be major at completion and at year 15.

Effects on landscape character of The Estate Farmlands LCT.

- 4.4.4. The following key characteristics identified for the LCT are listed below with an assessment of how they will be affected by the proposed development.

Mixed farming landuse

- 4.4.5. The land use of the LCT will not be affected in landscape terms as part of the proposed development. The appeal site will remain in productive agricultural use. Albeit changing from arable to pastoral.

Clustered settlement pattern.

- 4.4.6. The settlement pattern of the LCT will not be affected in landscape terms as part of the proposed development.

Large country houses with associated parklands

- 4.4.7. The large country houses with associated parklands of the LCT will not be affected in landscape and visual terms as part of the proposed development as there will be no intervisibility between them.

Planned wooded character.

- 4.4.8. There will be no loss of woodland as part of the proposed development and there will be an increase in trees as a result of the proposals.

Medium to large scale landscape with framed views

- 4.4.9. The proposed development will be visible in several views of the appeal site from the surrounding landscape particularly those from the south on the other side of the valley. However, its low height and the location of the site mean that where visible, it will not terminate any longer views or form a feature on the skyline.

- 4.4.10. The proposed development will positively affect one of the relevant key characteristics of the LCA and adversely one. The sensitivity of this LCT is medium. The extent of these changes will be compact, and the duration will be medium. The proposed development will result in a very small adverse magnitude of change in the LCT as a whole, of localised geographic extent, with a level of effect assessed to be negligible at completion and year 15.

4.5. Summary

- 4.5.1. It is accepted that there would be a major effect with regard to the character of the appeal site itself. Except for some small areas of associated infrastructure which would require the loss of some agricultural land. All other land would remain in agricultural use. With

the proposed development fully constructed, the character of the fields within the appeal site would change as they would now accommodate solar arrays. However, the underlying character of the field would still be there and would fully return with decommissioning of the proposed development.

- 4.5.2. There would be no changes to the physical characteristics of the landscape character of The Estate Farmlands LCT beyond the appeal site.
- 4.5.3. The summary table below lists the landscape receptors considered within this appeal statement and level of effects assessed on each one.

Table 4.1: Landscape effects summary

Landscape receptor	Level of effect (year 0)	Level of effect (year 15)
Landscape elements - Trees / scrub / hedgerows	Minor	Moderate
Landscape elements - Land use	Nil	Nil
Landscape character of the appeal site	Major	Major
Landscape character of The Estate Farmlands LCT	Negligible	Negligible

5. Summary and Conclusions

5.1. Summary

- 5.1.1. Econergy International Ltd (Appellant), to present evidence relating to landscape and visual matters in respect of the appeal concerning the construction of a solar farm with associated infrastructure on land west of Berrington, Shrewsbury, SY5 6HA. This evidence should be read in conjunction with the Statement of Case prepared by Anthony Heslehurst.
- 5.1.2. The application to which this appeal relates was a full application to the Council reference 22/04355/FUL. I have reviewed the scheme with reference to the application LVIA viewpoints surrounding the appeal site. I have set out my own analysis with regard to the appeal scheme in this appeal statement. Whilst I note that a Landscape and Visual Impact Appraisal was prepared for the application, in preparing this landscape appeal statement, I have undertaken my own analysis of the slightly revised proposal.
- 5.1.3. The proposed development is for the erection of a solar photovoltaic (PV) array, with a total export capacity of up to 30 MW peak generation power on two arable fields. This generation would be a meaningful contribution of renewable energy contributing to energy targets.
- 5.1.4. In regard to visual amenity, of particular note is that although the proposed development covers two arable fields, the gently undulating nature of the landform, combined with the existing vegetation, the actual visual envelope and the degree to which this scheme would be seen from the surrounding area would be very limited. With the exception to the rising ground to the south of the appeal site, on the other side of the valley.
- 5.1.5. The proposed development will result in some beneficial effects with regard to landscape elements. The elements that currently contribute to defining the character of the appeal site, namely trees, hedgerows and pasture will be retained and enhanced such that their condition, function and habitat value are improved as a result of the proposed development and associated landscape strategy.
- 5.1.6. It is accepted that there will be a major effect with regard to the character of the appeal site itself. Except for some small areas of associated infrastructure which would require the loss of some agricultural land, all other land would remain in agricultural use. With the proposed development fully constructed, the character of the fields within the appeal site would change as they would now accommodate solar arrays. However, the underlying character of the field and the pattern of the landscape will remain, and furthermore, removal of the proposed development at decommissioning will leave the landscape improvements delivered through the landscape strategy.
- 5.1.7. There will be no changes to the key physical characteristics of the landscape character of the Estate Farmlands LCT beyond the appeal site.

5.2. Conclusions

- 5.2.1. The proposed development is a renewable energy scheme which will generate renewable electricity on a commercial scale. The proposed development will be carefully integrated with the existing fabric of the landscape, retaining the field pattern and existing vegetation whilst enabling farming practice to continue and delivering a comprehensive landscape strategy that includes Retention of existing hedgerows, trees and waterbodies, proposed hedgerow and tree planting, proposed species rich grassland and beehives.
- 5.2.2. Whilst the proposed development will retain much of the appeal site's existing character, it also in a number of enhancements. These include; The existing gappy hedgerows along its boundaries would be infilled with hedge planting, new tree planting and new and extensive areas of pasture will be created.
- 5.2.3. The proposed development is temporary in nature with the intention that it will be fully decommissioned, and the appeal site fully restored to its former condition. The proposed landscape scheme will remain and having established and matured, leaving a positive legacy of landscape and biodiversity enhancement post-decommissioning which strengthens the key characteristics of the wider Estate Farmlands LCT.
- 5.2.4. The carefully designed proposal, conserves the majority of the landscape features on the appeal site; topography, hedgerows, trees and field pattern. The principal change will be the arable land utilised as pasture, with a key characteristic of the Estate Farmlands being the '*mixed farming landuse*'. Introducing the solar farm will inevitably introduce built infrastructure, albeit retaining productive agricultural land in the same field pattern where it would also read as being set within the existing landscape framework. As such, much of the character associated with the appeal site and its setting within the wider Estate Farmlands LCT will remain.
- 5.2.5. The second reason for refusal is due to the adverse visual impacts on four visual receptors close to the appeal site. However, the proposed development will not cause any significant changes to views as it will only be partially visible in glimpsed oblique views where it is seen through gaps in the boundary vegetation from users of the road leading to Cantlop Mill, the road that runs along the northern boundary (known locally as the Berrington Road) and the road that runs along the eastern boundary (known locally as the Eaton Mascot Road). The proposed development will not be seen over the top of the vegetation and will appear as part of the wider landscape for visual receptors passing along these roads. However, some longer views towards the proposed development will be from PRoW 0407/5R/2 to the south of the appeal site, where it will form part of the large and wide ranging view available and will be seen below the skyline due to the low nature of the proposed development.
- 5.2.6. The roads around the appeal site and running between the two field parcels are narrow, sucken in paces and lined with hedgerows and trees. This restricts views of the landscape to fleeting glimpses through gaps. Most views are focused to the direction of travel along the road corridor. Once gaps in the hedgerow have been filled in with additional planting and it allowed to grow up there would be only from field entrances where the proposed

development will be partially visible in framed views as the transient receptors pass at speed.

- 5.2.7. For the reasons discussed above, it is my professional judgement that whilst there would be some limited adverse effects on landscape character and visual amenity when considered with the delivery of the landscape strategy which will provide benefits in terms of restoring existing characteristic landscape features, and visual screening for the proposed development, adverse landscape and visual effects of the proposed development will be limited and highly localised. I have read and understand the relevant plan policies in relation to landscape and visual matters. Interpretation of policy is a matter for Mr. Heslehurst, but I have a detailed understanding of the policies in relation to my work.
- 5.2.8. Any landscape and visual effects which I have identified in this appeal statement will be considered as part of the planning balance and dealt with by the planning witnesses and ultimately the decision maker.

Appendix 1 – Illustrative material

Figures

Figure 1: Topography

Figure 2: Shropshire Character Types

Figure 3: Designations

Figure 4: Context

Figure 5: Visibility and viewpoints

Figure 6: Landscape masterplan

Viewpoint photographs

Photomontages

Illustrative sections

Appendix 2 – Methodology

Introduction

A3.1. The following section outlines the methodology and approach to the appraisal of landscape and visual effects. The methodology sets out the criteria and definitions used for the appraisal of sensitivity, magnitude of change and level of effects.

Relevant guidance

A3.2. The landscape and visual effect appraisal has been based on guidelines provided in the following publications:

- Landscape Institute and Institute of Environmental Assessment (2013), Guidelines for Landscape and Visual Effect Assessment, 3rd edition. (GLIVIA3).
- Natural England (2014), An Approach to Landscape Character Assessment.
- Landscape Institute (2016), Townscape Character Assessment, 2018.
- Landscape Institute, Technical Guidance Note | 02/21 Assessing landscape value outside national designations, 2021.

A3.3. The methodology on the production of photography that accompanies this report can be found in Appendix 5 and is based up on Landscape Institute (2019), Technical Guidance Note 06/19 Visual Representation of Development Proposals (Ref.4).

Scope of appraisal

A3.4. To provide an appropriate context, the appraisal includes a comprehensive description of the baseline position for landscape and visual amenity, including reference to landscape and townscape character assessments from national to local scale and a range of visual receptors.

A3.5. The appraisal encompasses desk studies, collection of baseline data and site surveys on the context, character and quality of the Study Area, an evaluation of the landscape and an appraisal of properties and local views potentially affected by the proposed development. The appraisal also recommends mitigation measures to reduce potential adverse effects.

A3.6. Consideration has been given to the construction stage of the scheme, however, the appraisal focuses on the operational period of the proposed development.

A3.7. Heritage assets such as Scheduled Monuments, Listed Buildings, Conservation Areas and Registered Parks and Gardens all contribute to the overall landscape character, context and setting of the area. Visual and Landscape effects on the setting of Listed Buildings and Scheduled Monuments are not included in the scope of this appraisal.

Impact assessment or appraisal

A3.8. GLVIA3 and the Statement of Clarification 1/13 (Ref.2), states that:

"In carrying out appraisals, the same principles and process as LVIA may be applied but, in so doing, it is not required to establish whether the effects arising are or are not significant given that the exercise is not being undertaken for EIA purposes."

A3.9. This LVA is not part of an Environmental Impact Assessment. As such, discussions on whether effects are significant or not in is not covered in this assessment. Only a Landscape and Visual Impact Assessment (LVIA) as part of an Environmental Impact Assessment (EIA) would do this.

Residential visual amenity

A3.10. GLVIA3 (Ref.1) states that:

In some instances it may also be appropriate to consider private viewpoints from residential properties. ... Effect of development on development on private property are frequently dealt with mainly through 'residential amenity assessments'. (Ref.1, page 107, para. 6.17)

A3.11. GLVIA3 and the Statement of Clarification 1/13 (Ref.2), states that:

"The assessor should be clear as to the purpose of such assessment/appraisal. On the one hand, assessment of the effect of a proposed development from private residential property can be used to inform the overall landscape and visual impact assessment/appraisal"

A3.12. Although this LVA considers residential visual receptors as part of the process to understand overall landscape and visual effects. It is not a Residential Amenity Assessments (RAA) and as such should not be used as one.

Landscape appraisal methodology

Landscape baseline

A3.13. The purpose of baseline studies is to record the existing landscape features, characteristics, the way the landscape is experienced. The following are typically undertaken as part of the landscape baseline studies:

- Identification of the extents of the study area. This is based on professional judgement, the existing visibility and character influences, desk based and site appraisals;
- Identification of patterns and scale of landform, land use and built development, relevant current planning policy (including landscape designations) and published character assessments (further localised character assessments may also be undertaken to supplement published assessments see below);

- Where such additional assessments are undertaken, these are based on consideration of 'natural', 'cultural and social' and 'perceptual and aesthetic' factors. These may include:
- Landform and hydrology, Land use and settlement, Pattern/texture/line, Scale, Historical development/time depth, Activity/cultural association, Spatial structure and built form, Infrastructure, Movement, connectivity and accessibility, Green Infrastructure, Enclosure/views, and Tranquillity and remoteness.

A3.14. Landscape character assessments at a variety of strategic scales provide an understanding of the landscape at a wider level and allows the identification of elements that may be present at a number of different scales (national, regional, local and site specific). This hierarchical assessment will establish the baseline conditions and enable an assessment of the sensitivity of the landscape resource to potential changes as a result of a proposed development. Landscape receptors would be identified at the baseline stage and should include:

- Landscape elements or features (e.g. existing tree cover, hedgerows, etc).
- Landscape character areas (site, local or national).
- Designated landscape resources (e.g. Registered Parks and Gardens).

A3.15. Where relevant, the future baseline of the site and its context is also considered, in order to account for ongoing change in the landscape, for example developments that are under construction and which will have altered the landscape context to the site by the time the proposed development would be likely to be initiated.

Landscape sensitivity

A3.16. Landscape sensitivity is based on the combination of value (including condition) and the susceptibility of the landscape to the type of development proposed. This is determined by professional judgement.

Landscape value

A3.17. Landscape value relates to the importance attached to a landscape, often as a basis for designation or recognition which expresses national or regional consensus, because of its distinctive landscape pattern, cultural associations, scenic or aesthetic qualities. It should be noted that, in virtually all circumstances, landscapes are valued (frequently highly valued) in the local context by various if not all sectors of the community. The value of the landscape also takes account of factors listed in Table 1 of Assessing landscape value outside National Designations (Ref.3 page 7) which include Natural Heritage, Cultural Heritage, Landscape condition, Associations, Distinctiveness, Recreational, Perceptual (Scenic), Perceptual (Wilderness and tranquillity), and Functional.

A3.18. As a matter of principle, all landscapes are considered to be of value, as enshrined within the European Landscape Convention (ELC) 2004. The overall value of each landscape receptor is categorised as Very Low, Low, Medium, High or Very High as set out in Table A4.1.

Table A4.1. Landscape value criteria

Value	Criteria
Very High	Landscape area of rare or distinctive components and characteristics that may also be internationally acknowledged. A landscape feature that makes a unique positive contribution to landscape character.
High	Landscape area of rare or distinctive components and characteristics that may also be nationally designated for scenic beauty. A landscape feature that makes a strong and multifaceted positive contribution to landscape character.
Medium	Landscape area of common components and characteristics that may be designated at local or borough level for its landscape and visual qualities. A landscape feature that makes a recognisable positive contribution to landscape character.
Low	Landscape area or feature of inconsequential components and characteristics, undesignated and with little or no wider recognition of value, although potentially of importance to the local community.
Very Low	Landscape area or feature that is undesignated and in a poor condition and state of disrepair that detracts from the landscape quality.

Landscape susceptibility

A3.19. GLVIA3 (Ref.1) states that susceptibility means:

“the ability of the landscape to accommodate the proposed Development without undue consequences for maintenance of the baseline situation and/or the achievement of landscape planning policies and strategies” (Ref.1, page 88, para. 5.40)

A3.20. The following criteria are taken into consideration in the appraisal of landscape susceptibility, although not all criteria are equally applicable or important for each landscape receptor:

- Scale
- Enclose
- Landform;
- Pattern/Complexity;
- Composition;
- Landcover;
- Built form / Engineered influences
- Relationship of a given landscape area or feature to the surrounding context; and
- Potential for appropriate mitigation within the context of existing character and guidelines.

A3.21. With regard to landscape features, susceptibility relates to the potential for loss/retention of the relevant features in relation to the type of development proposed (for example trees within a site are potentially highly susceptible to construction of an industrial shed, where they might not be to construction of residential units, as the latter provides more scope to mitigate by design); and the facility with which such elements may be replaced, where appropriate.

A3.22. The overall susceptibility for each landscape receptor is categorised as Very Low, Low, Medium, High or Very High as set out in Table A4.2.

Table A4.2. Landscape susceptibility criteria

Susceptibility	Criteria
Very High	The receptor may exhibit a clearly defined structure with a symbiotic relationship to the surrounding context and key characteristics of the area, with the type of development proposed very likely to alter the overall integrity of the receptor.
High	The receptor may exhibit an established structure with a direct relationship to the surrounding context and key characteristics of the area, with the type of development proposed likely to alter the overall integrity of the receptor.
Medium	The receptor may exhibit a varied structure with a tangible relationship to the surrounding context and key characteristics of the area, while the type of development proposed may potentially alter the overall integrity of the receptor.
Low	The receptor may exhibit an incoherent structure with minimal relationship to the surrounding context and key characteristics of the area, with the type of development proposed unlikely to alter the overall integrity of the receptor.
Very Low	The receptor may exhibit no overriding structure with no relationship to the surrounding context and key characteristics of the area, with the type of development proposed very unlikely to alter the overall integrity of the receptor.

Overall landscape sensitivity

A3.23. The matrix set out in Table A4.3 is applied, utilising professional judgement, to assess the sensitivity of a receptor, which is defined as Very Low, Low, Medium, High or Very High. Detailed criteria on how value and susceptibility are determined in relation to landscape receptors is set out in each relevant section of this methodology.

Table A4.3: Landscape sensitivity matrix

		LANDSCAPE SUSCEPTIBILITY				
		Very High	High	Medium	Low	Very Low
LANDSCAPE VALUE	Very High	Very High	Very High	High	High	Medium
	High	Very High	High	High	Medium	Medium
	Medium	High	High	Medium	Medium	Low
	Low	High	Medium	Medium	Low	Low
	Very Low	Medium	Medium	Low	Low	Low

Magnitude of change

A3.24. GLVIA3 (Ref.1) states that when appraising landscape effect you should:

“Each effect on landscape receptors needs to be assessed in terms of its size or scale, the geographical extent of the area influenced, and its duration and reversibility” (Ref.1, page 90, para. 5.48)

Size and scale

A3.25. The size and scale of the development taking into consideration; the extent of existing landscape elements that would be lost, the proportion of the total extent that this represents and the contribution of that element to the character of the landscape; the degree to which aesthetic or perceptual aspects of the landscape are altered either by the removal of existing components of the landscape, or, the addition of new features; whether the effect changes key characteristics of the landscape which are critical to its distinctive character.

Geographical extent

A3.26. Consideration of the extent of landscape effect can either relate to the quantification of an effect on existing landscape elements (e.g. an area of tree cover to be removed) or to the extent of the geographical area over which a change in landscape character might be experienced.

A3.27. The extent of landscape change likely to arise as a result of the proposed development upon either landscape elements or within different landscape areas is categorised as extensive, limited or localised. It is not possible to provide consistent criteria for these descriptive terms that apply in every instance (i.e. to different types of landscape receptors).

A3.28. Judgements on size, scale and geographical extent contributing to landscape change are defined Table A4.4 below:

Table A4.4. Landscape size, scale and geographical criteria

Size, scale and geographical extent	Criteria
Extensive	There will likely be a wholesale change to the landscape receptor, which will likely result in a fundamental change to the integrity of the landscape or key characteristics of a very wide geographic area.
Ample	There will likely be change to a high proportion of the landscape receptor, which will likely result in a noticeable change in the integrity of the landscape or the key characteristics of an extended geographic area.
Modest	There will likely be change to a moderate proportion of the landscape receptor, which will likely result in a perceptible change in the integrity of the landscape or the key characteristics of a discrete geographic area.

Size, scale and geographical extent	Criteria
Compact	There will likely be change to a limited proportion of the landscape receptor, which will likely not be discernible or have no effect on the integrity of the landscape or the key characteristics of a very localised geographic area.
Limited	No or barely discernible change to the landscape receptor.

Duration

A3.29. The duration of the landscape effect likely to arise as a result of the proposed development on landscape elements or within different landscape character areas or types, long term, medium term or short term. This is used to qualify and contextualise the appraisal of degree of landscape change.

Reversibility

A3.30. Whatever the expected duration of a landscape effect, consideration of reversibility relates to whether a landscape effect could be reversed rather than will be reversed. This enables a distinction to be made between a new element which is expected to be permanent but could nevertheless be removed without residual effect should it become unexpectedly obsolete, and a landscape or visual change that is practicably irreversible. The following criteria have been adopted within this appraisal:

A3.31. Judgements on duration and reversibility contributing to landscape change are defined Table A4.5 below:

Table A4.5. Landscape duration and reversibility criteria

Duration and reversibility	Criteria
Long	Likely to be of permanence with limited prospect of being reinstated / reversed.
Medium	Likely to be of permanence or for an extended temporary period over a generation (i.e. up to 30 years), and/or less readily reinstated / reversible.
Short	Likely to be temporary but for a longer term (up to 10 years), which can be reinstated / reversible.
Very Short	Likely to be temporary (up to 5 years) and readily reinstated / reversible.
Brief	Likely to be temporary (up to 1 years) and readily reinstated / reversible.

Overall landscape magnitude of change

A3.32. The matrix set out in Table A4.6 is applied to assess the magnitude of change, which is defined as None, Very Small, Small, Medium or Large. Detailed criteria on how scale and duration are determined in relation to landscape receptors is set out in each relevant

section of this methodology. Where it is considered that there is potential for both adverse and beneficial changes to occur, there are described comprehensively.

Table A4.6: Landscape magnitude of change matrix

		DURATION AND REVERSIBILITY				
		Long	Medium	Short	Very short	Brief
SIZE, SCALE AND GEOGRAPHICAL EXTENT	Extensive	Large	Large	Medium	Small	Very small
	Ample	Large	Medium	Small	Very small	Very small
	Modest	Medium	Small	Small	Very small	Very small
	Compact	Small	Very small	Very small	Very small	Inconsequential
	Limited	Very small	Very small	Very small	Inconsequential	Inconsequential

Balance of change

A3.33. Change are defined as beneficial, adverse, or neutral, as defined in Table A4.7. This consideration is termed the 'balance of change', factoring in both the potentially beneficial and adverse aspects associated with a given change and its resultant effect.

Table A4.7. Landscape balance of change

Balance of change	Criteria
Beneficial	An effect that will on balance result in an improvement to the condition, integrity or key characteristics/composition of the landscape receptor.
Neutral	An effect that will on balance maintain the condition, integrity or key characteristics/ composition of the landscape receptor and may incorporate a combination of positive and negative aspects.
Adverse	An effect that will on balance result in damage to the condition, integrity or key characteristics/composition of the landscape receptor.

Level of effect

A3.34. To draw conclusions on the level of landscape effects, the sensitivity of the receptor and the magnitude of effect experienced is considered alongside one another in line with the matrix set out in Table A4.8. Depending on the nature of the proposed development, the significance of effects may be considered at different stages of the project lifecycle (e.g. during construction; at Year 1 of operation; at Year 15 of operation; and/or on decommission).

Table A4.8: Landscape level of effects matrix

		MAGNITUDE OF CHANGE				
		Large	Medium	Small	Very small	Inconsequential
LANDSCAPE SENSITIVITY	Very high	Major	Major	Moderate	Minor	Minor
	High	Major	Moderate	Moderate	Minor	Minor
	Medium	Moderate	Moderate	Minor	Negligible	Negligible
	Low	Moderate	Minor	Negligible	Negligible	Negligible
	Very low	Minor	Minor	Negligible	Negligible	Nil

A3.35. The appraisal of level is subject to professional judgement and is rated on a scale of Nil through to Major, as defined in Table A4.9. Intermediate ratings may be identified, where the effect is considered to vary across the range, using professional judgement. In essence, the reported significance indicates how important the effect is likely to be from a landscape and visual perspective.

Table A4.9. Level of landscape effect criteria

Level of effect	Criteria
Major	An effect that is very likely to be important from a landscape perspective.
Moderate	An effect that is potentially important from a landscape perspective.
Minor	An effect that is unlikely to be important from a landscape perspective.
Negligible	An effect that is has minimal importance from a landscape perspective.
Nil	No effect and therefore of no importance from a landscape perspective.

Visual appraisal methodology

Visual baseline

A3.36. The visibility of a proposed development is influenced by landform, vegetation, built development and existing infrastructure. It is important to determine the extent to which the project would influence the existing views and identify the likely receptors. This is normally established using a ZTV or by field study and the method used in this LVA is described in the body of the report. Potential receptors would include:

- Residents, in individual residential properties and settlements.

- Users of Public Rights of Way.
- Road users.
- People located in other key recreational or visitor locations.

A3.37. The extent of visibility of the site or proposed development from each visual receptor is described below:

- Open view – A clear view of a large proportion of the site within the wider landscape.
- Partial view – A view of part of the site or a distant view in which the site forms a proportion of the wider view.
- Glimpsed view - a very brief, passing view of the site or a distant view in which the site forms a small proportion of the view in the wider view.
- No view – Views towards the site are blocked by visual barriers or a view of the site is difficult to discern.

A3.38. The type of view is typically described as transient/sequential (i.e. experienced when moving) or fixed (i.e. from a static location and the angle of view (e.g. frontal or oblique).

A3.39. For the purposes of this appraisal, close range views are less than 500m from the site. Medium range views are between 500m and 2km from the site. Long range views are more than 2km.

A3.40. It has not been possible to enter the curtilage of private dwellings to check views as part of this appraisal. In such cases, a reasonable worst-case assumption has been made in dealing with potential views from a publicly accessible point.

A3.41. The site and its context are captured through representative viewpoints from publicly accessible locations using the methodology stated in Appendix 5.

A3.42. Where relevant, the future baseline of the site and its context is also considered, in order to account for ongoing change in the landscape, for example developments that are under construction and which will have altered the landscape context to the site by the time the proposed development would be likely to be initiated

Visual sensitivity

Value

A3.43. The appraisal of visual value is based on a combination of any cultural/historical associations the view may have, along with any designation or policy protection. Consideration is also given to views by visitors to particular sites of interest.

A3.44. The overall value for each visual receptor is categorised as Very Low, Low, Medium, High or Very High as set out in Table A4.10.

Table A4.10. Visual value criteria

Value	Criteria
Very High	View from a celebrated location that is likely to be of international importance, either designated or with exceptional international cultural associations.
High	View from a location that is within a designated and with notable cultural associations attached to the view, or a view from an expressly recognised viewpoint location (i.e. identified within tourism guides or the Local Plan).
Medium	View from a location that is within a designated landscape or with notable cultural associations attached to the view.
Low	View from a location that is not designated and with limited cultural associations attached to the view.
Very Low	View from a location that is not designated and with no notable cultural associations attached to the view.

Susceptibility

A3.45. The susceptibility of each visual receptor is a measure of their vulnerability to the type of development proposed, without undue consequences for the maintenance of the baseline situation. The following criteria are taken into consideration in the appraisal of visual susceptibility:

- The extent to which the viewers' attention is focussed on the landscape;
- The extent to which the view contributes to the viewers' amenity experience; and
- The nature of the activity the viewer is involved in (or otherwise).

A3.46. The overall susceptibility for each visual receptor is categorised as Very Low, Low, Medium, High or Very High as set out in Table A4.11.

Table A4.11. Visual susceptibility criteria

Susceptibility	Criteria
Very High	People engaged in an activity and/or at a location where their visual setting is of utmost importance and the landscape is the main focus of their attention.
High	People engaged in an activity and/or at a location where their visual setting is important and the landscape is likely an important focus of their attention.
Medium	People engaged in an activity and/or at a location where their visual setting is incidental to their enjoyment and attention is partly focussed on the landscape.
Low	People engaged in an activity and/or at a location where their visual setting is unlikely to be important and limited attention is focussed on the landscape.
Very Low	People engaged in an activity and/or at a location where their visual setting is of minimal importance and little or no attention is focussed on the landscape.

Overall visual sensitivity

A3.47. The matrix set out in Table A4.12 is applied, utilising professional judgement, to assess the sensitivity of a receptor, which is defined as Very Low, Low, Medium, High or Very High. Detailed criteria on how value and susceptibility are determined in relation to visual receptors is set out in each relevant section of this methodology.

Table A4.12: Visual sensitivity matrix

		VISUAL SUSCEPTIBILITY				
		Very High	High	Medium	Low	Very Low
VISUAL VALUE	Very High	Very High	Very High	High	High	Medium
	High	Very High	High	High	Medium	Medium
	Medium	High	High	Medium	Medium	Low
	Low	High	Medium	Medium	Low	Low
	Very Low	Medium	Medium	Low	Low	Low

Magnitude of change

A3.48. GLVIA3 (Ref.1) states that when appraising visual effect you should:

“Each of the visual effects identified needs to be evaluated in terms of its size or scale, the geographical extent of the area influenced, and its duration and reversibility” (Ref.1, page 90, para. 5.48)

Size and scale

A3.49. The size and scale of visual change that takes place taking account of; the scale of change of the view, the degree of contrast or composition of any new features and the nature of the view of the proposed development.

Geographical extent

A3.50. Parameters included in the appraisal would include; angle of view in relation to main receptor activity; the distance of the visual receptor from the proposed development and the extent of the area over which the changes would be visible.

A3.51. Judgements on size, scale and geographical extent contributing to landscape change are defined Table A4.13 below:

Table A4.13. Visual size, scale and geographical extent criteria

Size, scale and geographical extent	Criteria
Extensive	There will likely be a pronounced change in the composition of the view, close to the viewer and occupying a wide extent of the view.
Ample	There will likely be noticeable change in the composition of the view, which may be close to the viewer and/or occupying a sizeable extent of the view.
Modest	There will likely be a perceptible change in the composition of the view, which may be at some distance from the viewer, or nearby but only glimpsed and/or occupying a discrete extent of the view.
Compact	There will likely be a barely perceptible change in the composition of the view, which is likely to be at considerable distance from the viewer and only glimpsed and/or occupying a limited extent of the view.
Limited	No or barely discernible change in the composition of the view.

Duration

A3.52. The duration of the visual effect likely to arise as a result of the proposed development in the long term, medium term or short term. This is used to qualify and contextualise the appraisal of degree of landscape change. Also whether or not the view is experienced in fixed or transient views and, in the latter, whether it is intermittent/glimpsed or continuous.

Reversibility

A3.53. Whatever the expected duration of a visual effect, consideration of reversibility relates to whether a visual effect could be reversed rather than will be reversed. This enables a distinction to be made between a new element which is expected to be permanent but could nevertheless be removed without residual effect should it become unexpectedly obsolete, and a visual change that is practicably irreversible.

A3.54. Judgements on duration and reversibility contributing to landscape change are defined in Table A4.14 below:

Table A4.14. Visual duration and reversibility criteria

Duration and reversibility	Criteria
Long	Likely to be of permanence and/or visible for a continuous period.
Medium	Likely to be of permanence or for an extended temporary period, and/or likely to be only intermittently visible.
Short	Likely to be temporary but visible for a continuous period.
Very Short	Likely to be temporary and only intermittently visible.
Brief	Likely to be temporary and only briefly visible.

Overall visual magnitude of change

A3.55. The matrix set out in Table A4.15 is applied to assess the magnitude of change, which is defined as None, Very Small, Small, Medium or Large. Detailed criteria on how scale and duration are determined in relation to landscape receptors is set out in each relevant section of this methodology. Where it is considered that there is potential for both adverse and beneficial changes to occur, there are described comprehensively.

Table A4.15: Visual magnitude of change matrix

		DURATION AND REVERSIBILITY				
		Long	Medium	Short	Very short	Brief
SIZE, SCALE AND GEOGRAPHICAL EXTENT	Extensive	Large	Large	Medium	Small	Very small
	Ample	Large	Medium	Small	Very small	Very small
	Modest	Medium	Small	Small	Very small	Very small
	Compact	Small	Very small	Very small	Very small	Inconsequential
	Limited	Very small	Very small	Very small	Inconsequential	Inconsequential

Balance of change

A3.56. Change is defined as beneficial, adverse, or neutral, as defined in Table A4.16. This consideration is termed the 'balance of change', factoring in both the potentially beneficial and adverse aspects associated with a given change and its resultant effect.

Table A4.16. Visual balance of change

Balance of change	Criteria
Beneficial	An effect that will on balance result in an improvement to the viewing experience.
Neutral	An effect that will on balance maintain the condition, integrity of the viewing experience and may incorporate a combination of positive and negative aspects.
Adverse	An effect that will on balance result in damage to the condition, integrity of the viewing experience.

Level of effect

A3.57. To draw conclusions on the level of visual effects, the sensitivity of the receptor and the magnitude of effect experienced is considered alongside one another in line with the matrix set out in Table A4.17. Depending on the nature of the proposed development, the significance of effects may be considered at different stages of the project lifecycle

(e.g. during construction; at Year 1 of operation; at Year 15 of operation; and/or on decommission).

Table A4.17: Level of visual effects matrix

		MAGNITUDE OF CHANGE				
		Large	Medium	Small	Very small	Inconsequential
LANDSCAPE SENSITIVITY	Very high	Major	Major	Moderate	Minor	Minor
	High	Major	Moderate	Moderate	Minor	Minor
	Medium	Moderate	Moderate	Minor	Negligible	Negligible
	Low	Moderate	Minor	Negligible	Negligible	Negligible
	Very low	Minor	Minor	Negligible	Negligible	Nil

A3.58. The appraisal of level is subject to professional judgement and is rated on a scale of Nil through to Major, as defined in Table A4.18. Intermediate ratings may be identified, where the effect is considered to vary across the range, using professional judgement. In essence, the reported significance indicates how important the effect is likely to be from a landscape and visual perspective.

Table A4.18. Visual level of effect criteria

Level of effect	Criteria
Major	An effect that is very likely to be important from a visual perspective.
Moderate	An effect that is potentially important from a visual perspective.
Minor	An effect that is unlikely to be important from a visual perspective.
Negligible	An effect that has minimal importance from a visual perspective.
Nil	No effect and therefore of no importance from a visual perspective.

Iterative design

A3.59. LVAs are undertaken by professionals who are also likely to be involved in the design of the landscape, site design, and the preparation of subsequent management proposals. The design and appraisal stages are iterative, with stages overlapping in part.

Mitigation

A3.60. Mitigation measures are embedded within the design of the proposed development (for an outline application this comprises the development parameters) as a result of the desk-based study and LVA field work. These measures, such as the building layout, massing and height; and arrangement of open spaces and new structural planting, are termed 'Primary Mitigation'. Effective Primary Mitigation strategies avoid or reduce adverse effects by ensuring the key principles of the design of the development, as noted above, are sympathetic with the existing baseline.

A3.61. Where the design process does not enable mitigation to be embedded within the proposed development, additional recommended measures to reduce adverse effects are termed 'Secondary Mitigation.' These may be illustrated in material accompanying the proposal, including the Design and Access Statement. These secondary measures contribute to the appraisal of residual effects.

Enhancement

A3.62. Whilst not specifically related to mitigation, enhancement may be achieved through delivery of the proposed development (e.g. the creation of a new landscape or public amenity/access; enhancement in character or view; or improved management of existing landscape features secured through the proposed development). The beneficial changes resulting from these measures are incorporated into appraisal of landscape and visual effects.

References for glossary

- Ref.1 Landscape Institute and Institute of Environmental Assessment, Guidelines for Landscape and Visual Effect Assessment, 3rd edition, 2013.
- Ref.2 Landscape Institute, GLVIA3 Statement of Clarification 1/13, issued 10/06/2013
- Ref.3 Landscape Institute, Technical Guidance Note | 02/21 Assessing landscape value outside national designations, 2021
- Ref.4 Landscape Institute (2019), Technical Guidance Note 06/19 Visual Representation of Development Proposals.

Photograph methodology

Introduction

A4.1. The following section outlines the methodology and approach to the site photography for this LVA.

Relevant guidance

A4.2. The photographs provided as part of this LVA have been based on guidelines provided in the following publications:

- Landscape Institute and Institute of Environmental Assessment (2013), Guidelines for Landscape and Visual Effect Assessment, 3rd edition. (Ref.1)
- Landscape Institute (2019), Technical Guidance Note 06/19 Visual Representation of Development Proposals. (Ref.2)

Scope of photography and photomontages

A4.3. The type of photographs used as part of this report are proportionate to the level of appraisal and have been guided by Visual Representation of Development Proposals (Ref.2) which states:

To maintain a proportionate approach, different types of visualisation may be required, depending on:

- *the type and scale of project;*
- *the aim (Purpose) and likely audience (Users) of the visualisation in the decision-making process; and*
- *the Sensitivity of the receptors and Magnitude of potential landscape and visual change.*
- *The time, effort, technical expertise and cost involved in producing visualisations should be proportionate to these factors. (Ref.2 page 3 para. 1.3.1 and 1.3.2)*

A4.4. The types of visualisations produced for this report have been guided by the contents of Table A5.1 below extracted from Visual Representation of Development Proposals (Ref.2).

Table A5.1: Relationships between Purpose, User and Visualisation Types

Category	Purpose and Users	Appropriate Visualisation Types
A	Evidence submitted to Public Inquiry, most planning applications accompanied by LVIA (as part of formal EIA), some non-EIA (LVA) development which is contrary to policy or likely to be contentious. Visualisations in public domain.	2 - 4
B	Planning applications for most non-EIA development accompanied by LVA, where there are concerns about landscape and visual effects and effective mitigation is required. Some LVIAs for EIA development. Visualisations in public domain.	1 - 4

Category	Purpose and Users	Appropriate Visualisation Types
C	Planning applications where the character and appearance of the development is a material consideration. LVIA / LVA is not required but supporting statements (such as Planning Statements and Design and Access Statements) describe how the proposal responds to landscape context and policies. Visualisations in public domain	1 - 3
D	To inform the iterative process of assessment and design with client, and / or pre-application consultations with the competent authority. Visualisations mainly confidential.	1 - 2

Based on Visual Representation of Development Proposals, Table 1 (Ref.2 page 9)

Types of visualisation

A4.5. The types of visualisation are listed in the table below:

Table A5.2: Visualisation Types

Type of visualisation	Description
Type 1	<p>Annotated Viewpoint Photograph: Reproduced at a size which aids clear understanding of the view and context, these simply show the extent of the site within the view, and annotate any key features within the view. Type 1 is the most basic form of visual representation with a focus on the baseline information</p>
Type 2	<p>3D Wireline / Model: This covers a range of computer-generated visualisation, generally without a photographic context. Wirelines and other 3D models are particularly suited to graphically describing the development itself. Type 2 visualisations use basic graphic information to assist in describing a proposed development and its context.</p>
Type 3	<p>Photomontage / Photowire: This Type encompasses photomontages and photowires which will commonly be produced to accompany planning applications, LVAs and LVIAs. They provide a reasonable level of locational and photographic accuracy, but are not suitable for the most demanding and sensitive of contexts. Type 3 visualisations do not need to be accompanied by verification data, nor is a precise survey of features and camera locations required. Although minimum standards are set for image presentation, the visualisations do not need to be reproduced with scale representation. Type 3 visualisations offer an appropriate level of detail and accuracy for a range of EIA and non-EIA projects.</p>

Type of visualisation	Description
Type 4	<p>Photomontage / Photowire (survey / scale verifiable):</p> <p>Type 4 photomontages and / or photowires require the use of equipment and processes which provide quantifiable verification data, such that they may be checked for accuracy (as per industry-standard 'AVRs' or 'Verified Views'). Precise survey of features and viewpoint / camera locations may be included where warranted. Type 4 visualisations are generally reproduced with scale representation.</p> <p>Type 4 visualisations represent the highest level of accuracy and verifiability for use in the most demanding of situations.</p>

Based on Visual Representation of Development Proposals (Ref.2 page 16)

A4.6. A summary table below extracted from Visual Representation of Development Proposals (Ref.2) describes the information required for each visualisation type:

Table A5.3: Visualisation Type Specifications

	Type 1	Type 2	Type 3	Type 4
Table 2 Visualisation Types 1-4	Type 1	Type 2	Type 3	Type 4
Aim of the Visualisation	Annotated Viewpoint Photograph To represent context and outline or extent of development and of key features	3D Wireline / Model (non-photographic) To represent 3D form of development / context	Photomontage / Photowire To represent appearance, context, form and extent of development	Photomontage / Photowire Survey / Scale Verifiable To represent scale, appearance, context, form, and extent of development
Photographic Equipment	Tripod Recommended but discretionary	Not relevant	Recommended	Necessary
Location	Panoramic head Not relevant	Not relevant	Recommended for panoramas	Necessary for panoramas
Accuracy	Minimum Camera / Lens Cropped frame or FFS + 50mm	Not relevant	Cropped frame or FFS + 50mm	Full Frame Sensor (FFS) + 50mm FL lens ¹
Data & Presentation	Source of camera/viewpoint location data GPS, OS Maps, geo-referenced aerial photography	Varies according to technology	Use good quality data: GPS, OS Maps, geo-referenced aerial photography, LIDAR	Use best available data: High resolution commercial data, LIDAR, GNSS, or measured / topographic surveys
	Survey-verified ²	Not relevant	When appropriate	When appropriate
	Verifiable (SNH) ³	Not relevant	Required	Required
	3D model	Not relevant	Required	Required
	Image Enlargement ⁴	Typically 100%	Typically 100%	100% - 150%
	Form of Visualisation	sketch / outline / arrows	wireline / massing / rendered / textured	wireline / massing / rendered / textured to agreed AVR level ⁵
	Viewpoint mapping	Dedicated viewpoint location plan	Dedicated viewpoint location plan	Dedicated viewpoint location plan, + individual inset maps recommended
	Reporting of methodology and data sources	Outline description of sources and methodology recommended	Data, sources and methodology recommended	Verifiable data, sources and methodology required

Source: Visual Representation of Development Proposals (Ref.2, Table 2, page 11)

Type 1 - Annotated viewpoint photograph

Field survey and photography

A4.7. The camera used for the photography in this LVA was a Canon 6D DSLR (full frame sensor) which can be used to produce photographs equivalent to those from a standard 35mm SLR camera. All photographs were taken with a fixed 50mm focal length lens (Canon EF 50 mm f/1.8 II). As standard all photographs were taken using a Manfrotto tripod with panoramic head and leveller except where stated. The camera location was recorded using a Trimble Catalyst GPS unit set to 1cm accuracy.

Presentation of images

A4.8. All photographs are presented as follows:

- Single image - A3 paper size. Images are presented at a size of 390 x 260mm. Enlargement at 100% and a horizontal field of view of 39.6°; or
- Panoramic image - A1 paper size. Images are presented at a size of 820 x 250mm. Enlargement at 96% and a horizontal field of view of 90°.

A4.9. The following information is presented with each photograph.

- Grid reference (easting and northing);
- Altitude of ground level (using OS open terrain data);
- Camera height above ground level;
- Distance from site boundary (to nearest boundary edge);
- Weather conditions when the photograph was taken (based on Met Office descriptions);
- Date and time the photograph was taken;
- Camera, lens and equipment used to capture the photograph;
- Horizontal field of view;
- Paper and image size;
- Projection;
- Enlargement factor; and
- Map illustrating the site and viewpoint location.

Viewing procedure

A4.10. When viewing the represented views, the viewer must keep their head motionless and fix their eyes on the centre of the view. When comparing the view in the field, the viewer must also keep the head motionless. This ensures that the represented view falls within the human field of view.

A4.11. It must be borne in mind that photographs and photomontages are not intended to replace the real-time visual experience and that a consensus can only be made by comparing the printed images in the field from the viewpoint whilst observing the correct viewing procedure.

Type 3 - Photomontage / Photowire

Field survey and photography

A4.12. The camera used for the photography was a Canon 6D DSLR (full frame sensor) which can be used to produce photographs equivalent to those from a standard 35mm SLR camera. All photographs were taken with a fixed 50mm focal length lens (Canon EF 50 mm). As standard all photographs were taken using a tripod, panoramic head and leveller except where stated. The camera location was recorded using a GPS unit set to 1cm accuracy.

Digital production of photomontages

Digital image preparation

A4.13. The original Canon image files were processed in Adobe Photoshop to adjust White Balance, colour accuracy and sharpness. The images underwent further correction procedure to ensure the horizon is precisely horizontal and any barrel distortion is compensated for. The panoramic views were stitched using Adobe Photoshop. The corrected baseline image, which is known as the background plate, is then ready for the visualisation work to begin. All final images are output as uncompressed JPEG or TIFF files. The photographs are all equally sized according to the preferred reproduction size or desired viewing distance.

Model position and height check

A4.14. AutoCAD is predominantly used for the first stage of the model construction process prior to constructing an existing base model using 3D Studio Max Design. The base model is used to generate a model of all the existing elements required to map the photographic viewpoints to the verified view. The building finished floor levels and ridge heights were provided by the client.

A4.15. All elements of the scheme are combined with the site survey and mapping data, so that they correspond with each other. Any additional data can then be applied to the 3D model at this stage to create a basic skeleton for the final solid rendered model. The co-ordinate system is used when doing this, so that information regarding viewpoints can be accurately located such as the viewpoint markers.

A4.16. The heights and levels of the key features of the proposed scheme are then cross checked against the design drawings and sections to check they correspond.

Camera matching process

A4.17. Irrespective of whether the final photomontage is output as a single or composite panoramic image, each photomontage is based upon a single photograph.

A4.18. The viewpoint markers are used to tie the photograph to the CAD Camera view. These are usually surveyed items such as lamp posts, walls, field boundaries and buildings; in

essence, anything that has a known location. At least four points are required to enable a high degree of accuracy with some at least at a height above ground level i.e. tops of lampposts and buildings.

- A4.19. The background plate photograph is imported into 3D Studio Max, to verify the accuracy of the match.
- A4.20. The location and angle of view can also be checked by triangulating the position. This is a reliable method successfully used for location finding in the field.
- A4.21. The rendered views were based on single photographs to match the corresponding section of the panorama.
- A4.22. A wireframe model of the existing and proposed model is then rendered, overlaid onto the photograph and issued for approval.
- A4.23. At this stage the model may be sent to the client and design team can confirm that they are satisfied with the camera matching and mass and scale of the scheme before proceeding to the next stage.

Texturing and rendering

- A4.24. 3D Studio Max Design is then used for applying the photorealistic surfaces and materials to the 3D model. Once this is complete, the lighting can be added to create a realistic scene. The exact reactions to sunlight can be calculated by using the software's ability to place it in the direction according to the time of day/month etc. Additional transparent lighting effects are also added to add the final touches.
- A4.25. Rendering is the term used to describe the process of generating a two-dimensional rendered bitmap image from the 3D model.
- A4.26. Texturing is the application of photorealistic surfaces to the 3D model to reflect what the proposed scheme would look like once constructed. Using information provided by the designers and manufacturers plus samples (e.g. types of glass metal, brickworks etc) we produce the qualities and appearance which most closely represents the real-world materials.
- A4.27. Lighting and sun direction is an important factor in representing the scheme proposals as they would appear in the photograph. From the photograph META data and observations in the field; the sunlight and daylight system in 3D Studio Max is used to accurately simulate the real-world lighting as it was when the photograph was taken. The Sunlight and Daylight System calculates the movement of the sun over the earth at a given location. In addition, the software reproduces the ambient lighting, shadows and reflections.
- A4.28. The exact resolution of the photograph is noted and used as the size for the final rendered output of the 3D Model view so that the two overlay each other precisely

Post production

- A4.29. Adobe Photoshop is used to blend the modelled information with the existing base line / base plate photograph. Various masks are created to position the development behind any existing details. Colour correction is then applied if necessary to give it that “lived in look”.
- A4.30. Finally, proposed vegetation can be introduced along with the removal of any existing details on site that would be removed during the development process.
- A4.31. The blending of any additional imagery and rendered models to provide context and realism is undertaken before the final image is completed, to allow an accurate “before & after” comparison.

Presentation of images

- A4.32. All photographs are presented as follows:
- Single image - A3 paper size. Images are presented at a size of 390 x 260mm. enlargement at 100% and a horizontal field of view of 39.6° ; or
 - Panoramic image - A1 paper size. Images are presented at a size of 820 x 250mm. enlargement at 96% a horizontal field of view of 90°.
- A4.33. The following information is presented which each photograph.
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 - Paper and image size
 - Projection
 - Enlargement factor
 - Map illustrating the site and viewpoint location

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- A4.34. When viewing the represented views and Photomontages, the viewer must keep their head motionless and fix their eyes on the centre of the view. When comparing the view in the field, the viewer must also keep the head motionless. This ensures that the represented view falls within the human field of view.
- A4.35. It must be borne in mind that photographs and photomontages are not intended to replace the real-time visual experience and that a consensus can only be made by

comparing the printed images in the field from the viewpoint whilst observing the correct viewing procedure.

Type 4 - Photomontage / Photowire

Field Survey and Photography

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Digital production of photomontages

Digital Image Preparation

A4.37. The original Canon image files were processed in Adobe Photoshop to adjust White Balance, colour accuracy and sharpness. The images underwent further correction procedure to ensure the horizon is precisely horizontal and any barrel distortion is compensated for. The panoramic views were stitched using Adobe Photoshop. The corrected baseline image, which is known as the background plate, is then ready for the visualisation work to begin. All final images are output as uncompressed JPEG or TIFF files. The photographs are all equally sized according to the preferred reproduction size or desired viewing distance.

Model Position and Height Check

A4.38. AutoCAD is predominantly used for the first stage of the model construction process prior to constructing an existing base model using 3D Studio Max Design. The base model is used to generate a model of all the existing elements required to map the photographic viewpoints to the verified view. The building finished floor levels and ridge heights were provided by the client.

A4.39. All elements of the scheme are combined with the site survey and mapping data, so that they correspond with each other. Any additional data can then be applied to the 3D model at this stage to create a basic skeleton for the final solid rendered model. The co-ordinate system is used when doing this, so that information regarding viewpoints can be accurately located such as the viewpoint markers.

A4.40. The heights and levels of the key features of the proposed scheme are then cross checked against the design drawings and sections to check they correspond.

Camera Matching Process

A4.41. Irrespective of whether the final photomontage is output as a single or composite panoramic image, each photomontage is based upon a single photograph.

- A4.42. A minimum of the 3d visually verifiable locations (markers) are used from the model to tie the photograph to the CAD Camera view. These are usually surveyed items such as lamp posts, walls, field boundaries and buildings; in essence, anything that has a known location. At least four points are required to enable a high degree of accuracy with some at least at a height above ground level i.e. tops of lampposts and buildings.
- A4.43. The background plate photograph is imported into 3D Studio Max, to verify the accuracy of the match.
- A4.44. The location and angle of view can also be checked by triangulating the position. This is a reliable method successfully used for location finding in the field.
- A4.45. The rendered views were based on single photographs to match the corresponding section of the panorama.
- A4.46. A wireframe model of the existing and proposed model is then rendered, overlaid onto the photograph and issued for approval.
- A4.47. At this stage the model may be sent to the client and design team can confirm that they are satisfied with the camera matching and mass and scale of the scheme before proceeding to the next stage.

Texturing and Rendering

- A4.48. 3D Studio Max Design is then used for applying the photorealistic surfaces and materials to the 3D model. Once this is complete, the lighting can be added to create a realistic scene. The exact reactions to sunlight can be calculated by using the software's ability to place it in the direction according to the time of day/month etc. Additional transparent lighting effects are also added to add the final touches.
- A4.49. Rendering is the term used to describe the process of generating a two-dimensional rendered bitmap image from the 3D model.
- A4.50. Texturing is the application of photorealistic surfaces to the 3D model to reflect what the proposed scheme would look like once constructed. Using information provided by the designers and manufacturers plus samples (e.g. types of glass metal, brickworks etc) we produce the qualities and appearance which most closely represents the real-world materials.
- A4.51. Lighting and sun direction is an important factor in representing the scheme proposals as they would appear in the photograph. From the photograph META data and observations in the field; the sunlight and daylight system in 3D Studio Max is used to accurately simulate the real-world lighting as it was when the photograph was taken. The Sunlight and Daylight System calculates the movement of the sun over the earth at a given location. In addition, the software reproduces the ambient lighting, shadows and reflections.

A4.52. The exact resolution of the photograph is noted and used as the size for the final rendered output of the 3D Model view so that the two overlay each other precisely

Post Production

A4.53. Adobe Photoshop is used to blend the modelled information with the existing base line / base plate photograph. Various masks are created to position the development behind any existing details. Colour correction is then applied if necessary to give it that "lived in look".

A4.54. Finally, proposed vegetation can be introduced along with the removal of any existing details on site that would be removed during the development process.

A4.55. The blending of any additional imagery and rendered models to provide context and realism is undertaken before the final image is completed, to allow an accurate "before & after" comparison.

Presentation of images

A4.56. All photographs are presented as follows:

- Single image - A3 paper size. Images are presented at a size of 390 x 260mm. enlargement at 100% and a horizontal field of view of 39.6° ; or
- Panoramic image - A1 paper size. Images are presented at a size of 820 x 250mm. enlargement at 96% a horizontal field of view of 90°.

A4.57. The following information is presented which each photograph.

- Grid reference (easting and northing)
- Attitude of ground level (using OS open terrain data)
- Camera height above ground level
- Distance from site boundary (to nearest boundary edge)
- Weather conditions when the photograph was taken (based on Met Office descriptions)
- Date and time the photograph was taken
- Camera, lens and equipment used to capture the photograph.
- Horizontal field of view
- Paper and image size
- Projection
- Enlargement factor
- Map illustrating the site and viewpoint location

Viewing procedure

A4.58. When viewing the represented views and Photomontages, the viewer must keep their head motionless and fix their eyes on the centre of the view. When comparing the view in the field, the viewer must also keep the head motionless. This ensures that the represented view falls within the human field of view.

A4.59. It must be borne in mind that photographs and photomontages are not intended to replace the real-time visual experience and that a consensus can only be made by comparing the printed images in the field from the viewpoint whilst observing the correct viewing procedure.

References for photograph methodology

- Ref.1 Landscape Institute and Institute of Environmental Assessment (2013), Guidelines for Landscape and Visual Effect Assessment, 3rd edition.
- Ref.2 Landscape Institute (2019), Technical Guidance Note 06/19 Visual Representation of Development Proposals.
- Ref.3 Mayor of London (2012), The London View Management Framework



LANDSCAPE APPEAL STATEMENT

Proposed Solar Farm to the west of Berrington, Shrewsbury, SY5 6HA

On behalf of To Eenergy International Ltd

Date: October 2023

ADAS ref: 1120025-L-RP-01 (03)

LPA ref: 22/04355/FUL

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