



Botley West Solar Farm

Environmental Statement

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1 Photomontage Methodology

1.1 Introduction

1.1.1 This Appendix sets out the methods used to photograph and prepare annotated photographs for the Landscape and Visual Impact Assessment (LVIA) of the Botley West Solar Farm project. The photography, photomontage, photowireline and annotated photography methodology set out below is considered to be suitable to accurately illustrate the proposed development within a selection of photographic views and has taken into account of the *Guidelines for Landscape and Visual Impact Assessment: Third Edition* (Landscape Institute and Institute of Environmental Management and Assessment, 2013) as well as Landscape Institute *Technical Guidance Note 06/19: Visual Representation of Development Proposals*, September 2019. The same methodology is followed for annotated photographs, photomontages or photowireline.

1.2 Procedure for taking Photographs from Representative Viewpoints

1.2.1 Photograph locations are shown on Figure 5 and have been selected in order to:

- Meet consultee expectations;
- Provide a fair representation of the solar park from various distances and orientations to inform the Landscape and Visual Impact Assessment (LVIA); and

1.2.2 Contain at least 16 visible reference points of existing features that can be used to verify the proposal location later in the photomontage process.

1.2.3 The photographs were taken in favourable weather conditions and clear visibility. This photography has been used as the baseline for the annotated photographs.

1.2.4 A fixed 50 mm lens on a digital SLR camera was used for the photography in a format equivalent to 35 mm. A full frame sensor was used (as recommended in the Landscape Institute Technical Guidance Note 06/19: Visual Representation of Development Proposals, September 2019). The same exposure setting was used for all the frames. Viewpoint locations were recorded using a hand-held GPS.

1.2.5 Where possible, the site was placed in the middle of the view with frames taken either side to give the landscape context. The panoramas were photographed with the horizon in the centre using a level tripod that was rotated on the same grid co-ordinate to ensure individual frames were aligned.

1.3 Method for Production of Photomontages and Photowirelines

- 1.3.1 The Landscape Institute Technical Guidance breaks visualisations into four main types according to the level of detail required:
- Type 1 Annotated viewpoint photographs To represent context and outline or extent of development and of key features;
 - Type 2 3D wireline / model. To represent 3D form of development / context;
 - Type 3 Photomontage / photowire. To represent appearance, context, form and extent of development;
 - Type 4 Photomontage / photowire (survey / scale verifiable). To represent scale, appearance, context, form, and extent of development.
- 1.3.2 Botley West Solar Farm photomontages should be considered as very close to Type 4 visualisations. The viewpoint photography locations used to produce the photomontages were not individually surveyed. However, 5cm drone survey data was used to very accurately align the photography.
- 1.3.3 5cm drone survey (pointcloud) data was used to generate hundreds of reference points to assist in constructing the photomontage or photowireline. Landform, landmarks, buildings and other structures are used to align the photography as they are very visible within the drone survey data.
- 1.3.4 The horizontal field of view for photomontage and photowireline purposes is 90° and 39.6°. 90° panoramas were used to provide broad coverage and capture, as much as possible, the extent of the development and the landscape to be assessed. The panoramas are produced by splicing the photos together with specialist software. A 50% overlap was taken between frames to allow the sides of each photo to be removed when splicing, to minimise distortion.
- 1.3.5 The panoramas are generated using Adobe Photoshop imaging software. The digital photographs are put directly into the computer program and each frame combined cylindrically to form a panoramic view. Photographs are corrected for colour, brightness and / or contrast to ensure that the image quality was optimised. Where possible the representation of the proposed development is at the centre of the image and should be viewed at a comfortable reading distance. The 90° panoramas should be printed at A1 and viewed at arms length. The single frame views should be printed on A3 paper and viewed at arms length.
- 1.3.6 The proposed development has been modelled to GB National Grid co-ordinates in Autodesk software using detailed topographical survey data.
- 1.3.7 Perspective viewpoints are determined using GB National Grid co-ordinates established when taking the photographs. The camera location is determined using GPS co-ordinates and the lens type is matched within the software.
- 1.3.8 The photomontage and photowireline computer images are placed onto the photographs and scaled/positioned so that the reference features in the image match those in the photographs. The panoramic views are aligned as a

cylindrical projection. Light settings are adjusted to match the time of day and weather conditions of the photograph.

1.3.9 The computer model is rendered as a 'solid model' perspective and saved as an image file thus creating a photomontage or photowireline.

1.3.10 Each viewpoint location is illustrated through a series of figures as follows:

- The existing and proposed photomontage view as a 90° panorama on an A1 sheet with viewpoint data;
- A single frame photomontage to illustrate the project in a 50 mm format, printed to a vertical height of 240 mm; and
- Where the weather conditions for the photographs were hazy, the buildings would be adjusted, to achieve enough contrast to enable the elements to be seen.

1.3.11 The methodology provided above and that which is used to prepare photomontages and photowireline is fully compliant with the relevant guidance and provides images of a high level of accuracy that are fit for purpose and proportionate to the type of proposed development and the context in which it would be seen.

1.4 References

Landscape Institute Technical Guidance Note 06/19 Visual Representation of Development Proposals (September 2019).

Landscape Institute and Institute of Environmental Management and Assessment (2013) Guidelines for Landscape and Visual Impact Assessment: Third Edition.

Scottish Natural Heritage (2014) Visual Representation of Wind Farms, Version 2.1.