



Ørsted Energy Balancing Infrastructure (EBI)

Environmental Statement:
Volume 4, Appendix 6.1 – Visual Aids

Ørsted

1 Visual aids

1.1 Guidance and standards used

- 1.1.1.1 All photography, visualisations (wirelines and photomontages) and their graphical presentation has been undertaken in line with the Landscape Institute's Technical Guidance Note 06/19, Visual Representation of Development Proposals (2019).

1.2 Guidance and standards used

- 1.2.1.1 To generate wireline visualisations and photomontages, computer models of the proposed site and study area are produced. Autodesk 3DS Max is used to create a 3D computer model of the proposed development representing the specified geometry and position of the proposed development, and the existing landform (terrain). The landform information is derived from 50m resolution terrain data incorporating 5m resolution terrain data around the site and each viewpoint and viewpoints where required (either by local guidance, or where we judge it is needed for accurate modelling).
- 1.2.1.2 The computer models include the entire study area and all calculations take account of the effects caused by atmospheric refraction and the Earth's curvature. The computer models do not take account of the screening effects of any intervening objects and forestry, so does not show any vegetation, buildings, woodland or other non-terrain features, unless expressly stated.
- 1.2.1.3 The computer models combine the existing landform with the model of the proposed development and detailed data collected in the field to enable the output of accurate visual and graphical information and associated data for presentation as finished figures.

1.3 Visualisations: Photomontage Type 3

- 1.3.1.1 Baseline photography has been undertaken at each agreed representative viewpoint location using a high-quality digital SLR camera with full frame sensor and a 50mm fixed focal length lens, in combination with a panoramic head equipped tripod at 1.5m height Above Ground Level (AGL) unless stated otherwise – in accordance with the relevant guidance identified above. The resulting photos are combined into panoramas using Adobe Photoshop photo stitching software and saved as cylindrical and planar projection versions for use in visualisation production. 'Single frame' 50mm and 75mm planar images are produced by cropping and re-projecting stitched cylindrical images to match the extent of the original 50mm photographs.
- 1.3.1.2 The computer model is used to generate a perspective view from each viewpoint of the proposed development, using landform in the computer model and the specified geometry and position of the proposed development.
- 1.3.1.3 Using the computer model, a wireline diagram showing the proposed development (and any cumulative sites as required) is generated for each viewpoint to meet the relevant requirements of guidance.
- 1.3.1.4 To produce a photomontage, the above wireline is combined with the photographic panorama using Adobe Photoshop. Detailed viewpoint information as recorded on site (e.g. GPS grid co-ordinates; ground level information; compass bearings; and any other known references; etc.) is used to enable the accurate alignment of the photographs with the computer model. A perspective match is achieved between the computer generated wireline and the photographs by iteratively adjusting the parameters until all the major features in the image are aligned satisfactorily. The proposed development is then rendered using 3DS Max taking into account the time and conditions occurring on the day of the photography to provide a realistic image.
- 1.3.1.5 A minimal amount of image processing is undertaken. Where necessary, the contrast between the background photograph and the proposed development is increased to ensure that the development is apparent in the photomontage, as far as possible. It should be noted that there is an element of professional judgement inherent in the illustration of the changes represented by any photomontage.
- 1.3.1.6 The information shown on the visualisations and within the LVIA is generated via the computer model or from mathematical calculations.
- 1.3.1.7 The completed base photography, wirelines, photomontages and accompanying data are then presented as figures using desktop publishing/graphic design software to meet the relevant guidance requirements.