

**PURSER**

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Volume 3:

# Appendix 18.1

Verified Photomontages and CGIs



**Verified View Photomontages and  
Computer Generated Images of  
Proposed Bioenergy Plant at  
Lisheen, Co. Tipperary**

**October 2024**

Document at A3 prepared by

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Photomontage Methodology

The methodology used to develop the photomontages is based on the “Visual Representation of Development Proposals” Guidance note by the Landscape Institute, 2019.

Photography

The photography was carried out on the October 1<sup>st</sup>, 2024, using Sony α7RIII full frame camera. A 24mm lens was used for the photography. This wide lens was selected for the photography to provide more information on the context around the proposed development. The horizontal field of view of these photographs is 74°. The above-mentioned guidance suggests that 40° angle is the closest to human eye vision and is recommended for the verified photomontages. In the cases where the wide lens is used, there should be an indication of 40° field of view, which is shown as a frame on all the views. A recommended viewing distance of the photomontages taken using 24mm lens is approximately 300mm from eyes when printed on A3 paper.

Geomax Zenith 60 GPS Antennae was used to accurately record the viewpoint and reference markers’ coordinates and height levels. Viewpoint locations are indicated in the viewpoint map to the right, viewpoint coordinates and information on photography is under each photo.

Modelling

Preparation of an accurate 3D model of the proposed Lisheen Bioenergy Plant development, including landscape and infrastructure. For cumulative views low detail 3D models were prepared for following permitted developments:

- Acorn Recycling (TCC Reg. Ref. 2360281)
- National Bioeconomy R&D Unit (TCC Reg. Ref. 211171)
- Glanbia Biorefinery (TCC Reg. Ref. 18601296)
- Revive Environmental (TCC Reg. Ref. 21709)

Setup

The following information is used to accurately position the model of the proposed development into the photographs:

- Site survey,
- Photographs,
- Verified viewpoint coordinates and height levels are accurately marked on the location OSi map.

To match the 3D camera view with the photograph we take the following steps:  
The camera height is taken from information gathered on the levels from where the photos are taken (table below).  
The height levels of the proposed development are outlined on the site. Focal length is based on the photograph EXIF info.

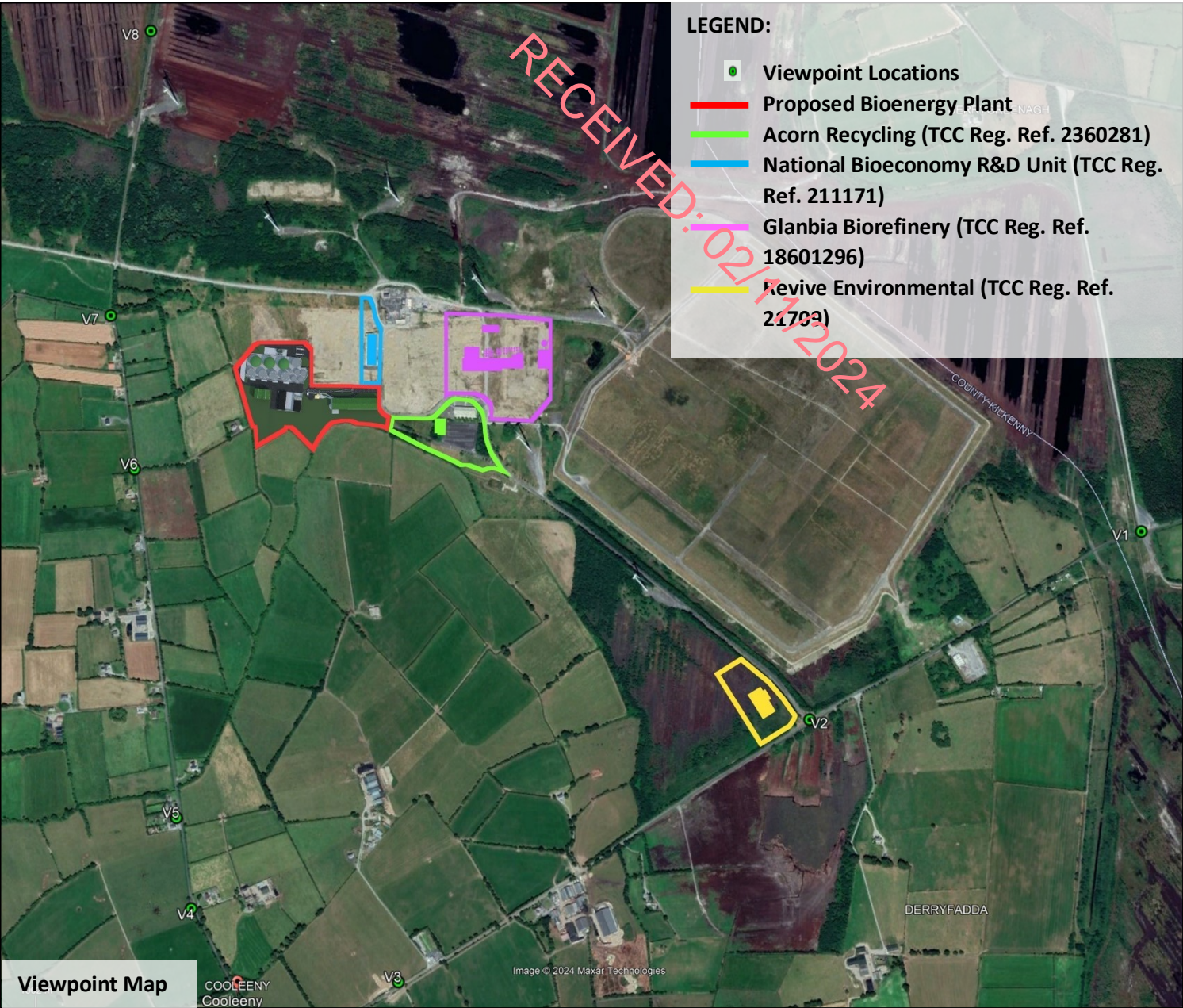
This data is imported into our 3D software and the 3D camera is matched with the selected photographs. To match the 3D camera accurately we use all the above data and the reference 3D models. The reference 3D models are existing structures i.e. buildings, roads, lamps, etc which are visible on the photographs. These items are modelled based on the survey information. After all the above conditions are fulfilled and we are satisfied that the camera matches correctly, we proceed to the next step.

Rendering

We apply the materials and textures prior to rendering the photomontage images. Light settings are adjusted to match the brightness of the photographs and sun is positioned according to the date and time the photo was taken.

Post processing

This process means incorporating a 3D image of the proposed development into the photograph to achieve the final result.





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< 24mm 73.7°      <<50 mm 39.6°      39.6° 50mm>>      73.7° 24mm >



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< 24mm 73.7°      <<50 mm 39.6°      39.6° 50mm>>      73.7° 24mm >



View 1. Cumulative View

- Proposed Bioenergy Plant
- Acorn Recycling (TCC Reg. Ref. 2360281)
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- Glanbia Biorefinery (TCC Reg. Ref. 18601296)

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< 24mm 73.7° | <<50 mm 39.6° | 39.6° 50mm>> | 73.7° 24mm >



View 2. Baseline View









## View 2. Cumulative View

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