

Verified Photomontages of Proposed upgrade to Leixlip Water Treatment Plant

Date: 17/09/21

Project:
Leixlip Water Treatment Plant

Prepared for:
Ryan Hanley Consulting Engineers

Prepared by:
G-Net 3D
NSC Campus
Mahon, Cork
Tel: 021-2307043
info@gnet3d.com



Photomontage Methodology

Photography

The photos for views 1-3 were taken on the 31st of May, 2021. The approach views 2a-2h were taken on the 2nd of September, 2021. A Canon Eos T5i camera was used for all the photography. Leica GS008 was used to gather the coordinates for the viewpoints.

Modelling

Preparation of an accurate 3D model of the plant upgrade including the model of existing plant, road, wall and landscape details that assists with the accurate model positioning.

Setup

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

- Site survey,
- Photographs,
- The camera location of each photograph is 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. 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 ie. buildings, roads, lamps, etc which are visible on the photographs. These items are modelled based on the survey information. After all 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.



Viewpoint positions.

Information on the viewpoints:

| View No | Easting | Northing | Height level (m) | Distance to the outline of proposal (m) |
|---------|------------|------------|------------------|---|
| View 1 | 700893.041 | 735715.148 | 36.102 | 95.27 |
| View 2 | 700787.502 | 735768.825 | 31.018 | 112.9 |
| View 3 | 700751.298 | 735829.471 | 31.452 | 71.45 |
| View 2a | 700757.632 | 735880.980 | 29.064 | 149.1 |
| View 2b | 700755.906 | 735866.816 | 29.803 | 135.15 |
| View 2c | 700754.053 | 735849.226 | 30.828 | 117.7 |
| View 2d | 700751.871 | 735829.123 | 31.393 | 97.75 |
| View 2e | 700750.691 | 735816.126 | 31.539 | 85.1 |
| View 2f | 700749.694 | 735809.012 | 31.652 | 78.1 |
| View 2g | 700748.958 | 735801.658 | 31.879 | 71.15 |
| View 2h | 700748.010 | 735794.302 | 31.916 | 64.1 |



Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 31/05/2021 1:51PM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 1

Existing View





Horizontal Angle of View 75° (28mm Lens)



Horizontal Angle of View 40° (50mm Lens)



Project

Leixlip Water Treatment Plant

Issue Date

17/09/2021

Photography

Date & Time: 31/05/2021 1:51PM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 1

Proposed View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Issue Date

17/09/2021

Photography

Date & Time: 31/05/2021 1:58PM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2

Existing View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Issue Date

17/09/2021

Photography

Date & Time: 31/05/2021 1:58PM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2

Proposed View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Issue Date

17/09/2021

Photography

Date & Time: 31/05/2021 2:05PM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 3

Existing View





Horizontal Angle of View 40° (50mm Lens)



Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 31/05/2021 2:05PM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 3

Proposed View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 9:43AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2a

Existing View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 9:43AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2a

Proposed View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 9:45AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2b

Existing View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 9:45AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2b

Proposed View



NET^{3D}



Horizontal Angle of View 75° (28mm Lens)



Horizontal Angle of View 40° (50mm Lens)

Project
Leixlip Water Treatment Plant

Issue Date
17/09/2021

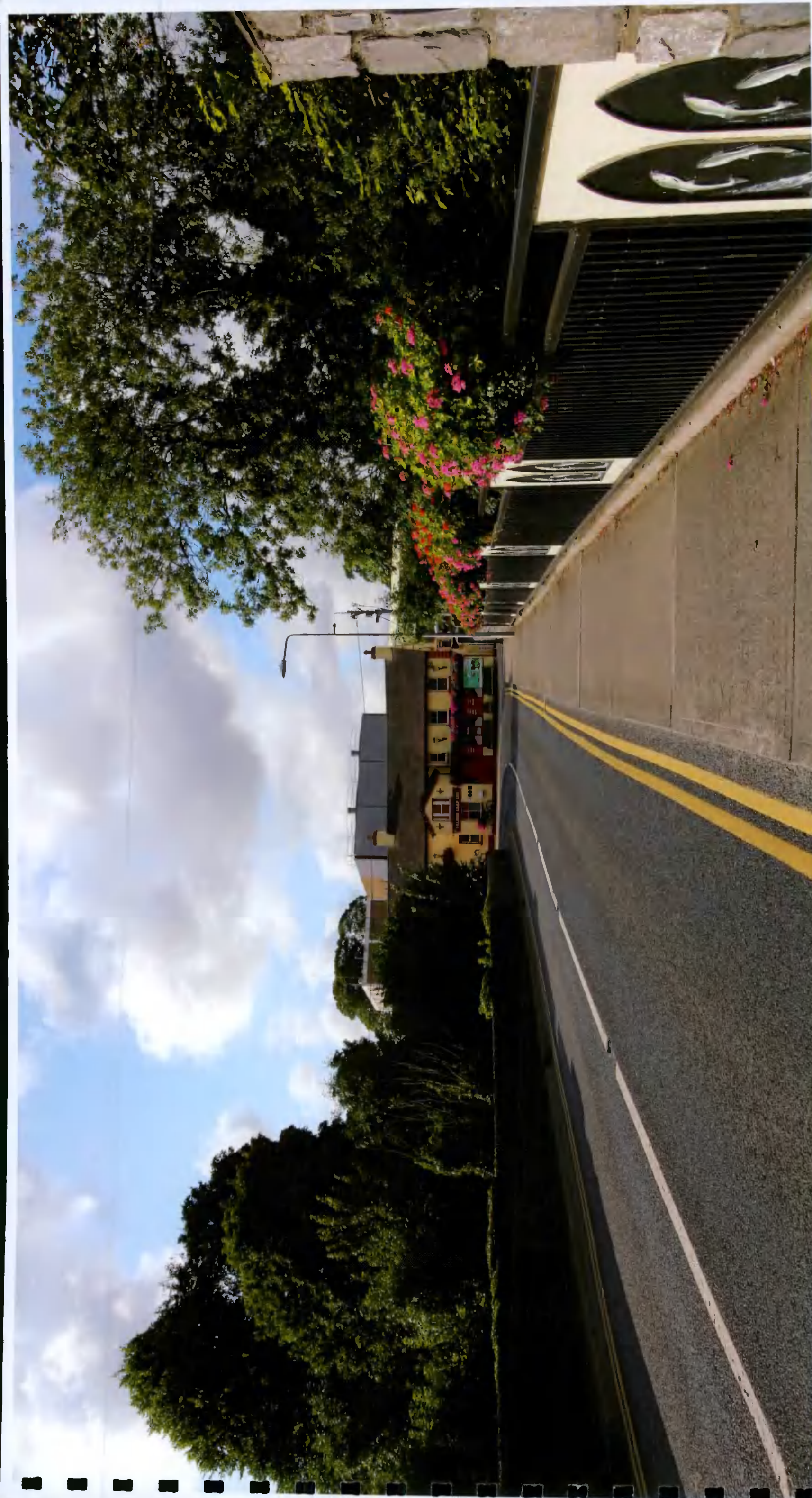
Photography

Date & Time: 02/09/2021 9:48AM
Camera: Canon EOS REBEL T5i
Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2c

Existing View





Horizontal Angle of View 40° (50mm Lens)



Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Issue Date

17/09/2021

Photography

Date & Time: 02/09/2021 9:48AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Proposed View

Viewpoint No 2c





Horizontal Angle of View 75° (28mm Lens)



Horizontal Angle of View 40° (50mm Lens)



Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 9:51AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Existing View

Viewpoint No 2d





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 9:51AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2d

Proposed View





Horizontal Angle of View 40° (50mm Lens)



Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 9:58AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2e

Existing View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 9:58AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2e

Proposed View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 10:01AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2f

Existing View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 10:01AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2f

Proposed View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 10:05AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2g

Existing View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Photography

Date & Time: 02/09/2021 10:05AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2g

Proposed View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Issue Date

17/09/2021

Photography

Date & Time: 02/09/2021 10:08AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2h

Existing View





Horizontal Angle of View 40° (50mm Lens)

Horizontal Angle of View 75° (28mm Lens)

Project

Leixlip Water Treatment Plant

Issue Date

17/09/2021

Photography

Date & Time: 02/09/2021 10:08AM

Camera: Canon EOS REBEL T5i

Lens: 18 mm. Camera crop factor x1.6

Viewpoint No 2h

Proposed View

