# Photomontage Methodology Report of

# Proposed Extension to St. Tiernan's School

# Photomontage Methodology

## Photography

The photos were taken with a Canon Eos T5i camera on the 4th of August 2018.

**View 1**. Latitude 53° 16' 60.0" N, Longitude 6° 14' 33.2" W. Focal length of camera 18mm.

**View 2**. Latitude 53° 17' 00.0" N, Longitude 6° 14' 28.0" W. Focal length of camera 18mm.

**View 3**. Latitude 53° 16' 58.7" N, Longitude 6° 14' 28.9" W. Focal length of camera 18 mm.

**View 4**. Latitude 53° 16' 59.5" N, Longitude 6° 14' 24.3" W. Focal length of camera 18 mm.

**View 5**. Latitude 53° 16' 58.7" N, Longitude 6° 14' 19.9" W. Focal length of camera 18 mm.

**View 6**. Latitude 53° 16' 57.0" N, Longitude 6° 14' 18.5" W. Focal length of camera 18 mm.

**View 7**. Latitude 53° 16' 53.1" N, Longitude 6° 14' 33.1" W. Focal length of camera 18 mm.

**View 8**. Latitude 53° 16' 51.5" N, Longitude 6° 14' 28.5" W. Focal length of camera 18 mm.

**View 9**. Latitude 53° 16' 51.6" N, Longitude 6° 14' 13.5" W. Focal length of camera 18 mm.
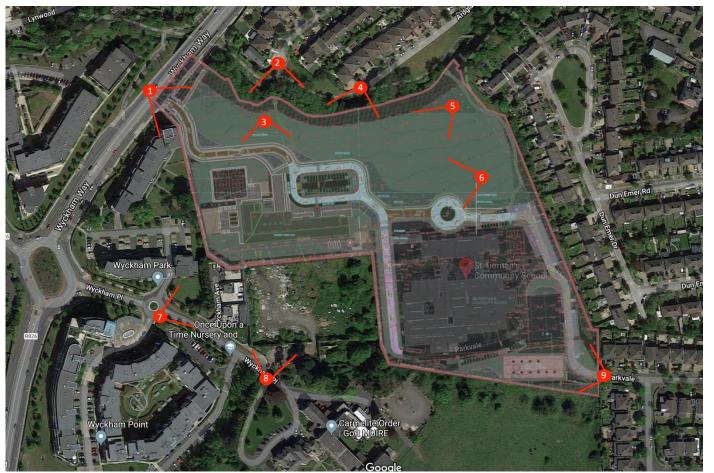
## Modelling

Preparation of an accurate 3D model of the proposed school extension buildings and site plan including landscaping, road layouts and parking.

## Setup

The following information is used to accurately position the 3D model 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 have 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.



Viewpoint positions.

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 rendered model of the proposed new school buildings into the photograph to achieve the final result.

NET3D

View 1. Before

View 1. After

View 1. Before & After





NET3D

View 2. Before



NET3D

View 2. After

View 2. Before & After

View 3. After

NET3D

NET3D

View 4. Before

NET3D

View 4. After



NET3D

View 4. Before & After

View 5. Before



NET3D

View 5. Before & After

View 6. Before



NET3D

View 6. After

NET3D

NET3D

View 8. Before



NET3D

View 8. Before & After

View 9. Before

View 9. After

NET3D