



Name PML01  
 Status Existing  
 Reference: From De la Salle Rugby Carpark  
 looking South

**Dun Laoghaire Rathdown  
 County Council**

**Camera location**  
 720184, 723237, 117.7  
**Target Direction**  
 720094, 722745, 118.7

Camera Canon 6D Mk 2  
 Lens Canon EF 50mm  
 HView Angle Nominal 40 degrees  
 Date/Time: 28/08/2018 14:04



**Glenamuck Districk Road Scheme**

Rev:  
 0

Recommended viewing distance with both eyes is 500mm.





Name PML01  
 Status Proposed  
 Reference: From De la Salle Rugby Carpark  
 looking South

**Dun Laoghaire Rathdown  
 County Council**

**Camera location**  
 720184, 723237, 117.7  
**Target Direction**  
 720094, 722745, 118.7

Camera Canon 6D Mk 2  
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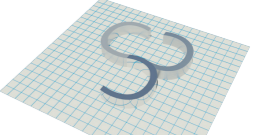
**Glenamuck Districk Road Scheme**

Rev:  
 0

Recommended viewing distance with both eyes is 500mm.

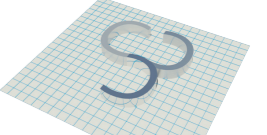




Name PML02 Status Existing Reference: From Enniskerry Road new entrance looking W	<b>Dun Laoghaire Rathdown County Council</b>	<b>Camera location</b> 720184, 723140, 122.2  <b>Target Direction</b> 720157, 723155, 122.2	Camera Canon 6D Mk 2 Lens Canon EF 50mm HView Angle Nominal 40 degrees  Date/Time: 24/09/2018 16:06  Recommended viewing distance with both eyes is 500mm.	<small>www.shackleton.ie</small>  <small>Chris Shackleton Consulting</small>
<b>Glenamuck Districk Road Scheme</b>		Rev: 0		





<p>Name PML02          Status Proposed          Reference: From Enniskerry Road new entrance looking W</p>	<p><b>Dun Laoghaire Rathdown          County Council</b></p>	<p><b>Camera location</b>          720184, 723140, 122.2</p> <p><b>Target Direction</b>          720157, 723155, 122.2</p>	<p>Camera Canon 6D Mk 2          Lens Canon EF 50mm          HView Angle Nominal 40 degrees</p> <p>Date/Time: 24/09/2018 16:06</p> <p>Recommended viewing distance with both eyes is 500mm.</p>	<p>www.shackleton.ie</p>  <p>Chris Shackleton Consulting</p>
<p><b>Glenamuck Districk Road Scheme</b></p>				



## Photomontage Methodology / Method Statement

Work has been completed in accordance with best practice guidelines a summary of which are provided below.

### Preparation

Prior to site visit camera locations were identified and located on digital map to enable GPS routing to the correct locations. The site was “scouted” for access using Google Streetview (c) Google.

### Photography

- Photographs were taken on site at locations specified using a high-resolution professional digital camera. The Camera a Canon 6D is a full frame format (which corresponds to a traditional 35mm film format) as recommended by best practice guidelines.
- Images will be taken in RAW format which provides the maximum flexibility in adjustment along with the best quality available, and with bracketed exposure. The images were stored with embedded camera/photo exif data.
- The camera was tripod mounted, spirit leveled and set at a nominal 1.6m above ground level
- The lens used as a Canon prime (fixed) 50mm or normal lens. The 50mm lens provides a similar magnification to the human eye and will provide an image which is accepted.

### Control

A series of survey points were captured on site for each photograph using Trimble R8 survey grade RTK-GPS. The following were measured:

- The camera position, plan and height
- Measured points of detail visible when the photograph was taken. On streetscape scenes points of detail (corners of buildings, poles, sign, white lines, structures, etc) are surveyed to provide an accurate orientation base where insufficient existing detail is available we supplement with either with red/white ranging rods or smaller orange cones placed in the camera’s field of view while taking the photograph.
- Regardless of the type of control the configuration shall be non-collinear with a good photogrammetric geometry. This ensures that computational analysis is convergent.

### Setting up AVR Images

- Survey and OS mapping is imported into 3D software
- A calibrated virtual 50mm camera is created to match the physical one used to capture the image. These are snapped to the surveyed locations. The individual photograph frames are loaded into the viewport.
- Using in-built software algorithms the virtual camera is adjusted so the points of detail on the photograph and the surveyed points in real-life coalesce in the camera viewport. Once complete the virtual camera will be orientated so that it is identical to the physical camera that took the base photograph.
- Checks are made using the surveyed information and project mapping and cross referenced with the photographs to ensure they align.
- A Daylight system is then accurately introduced into the scene at it correct geo-referenced coordinates. Once the time/date and time zone is set the digital sky will match the position of the sun and shadows created by the same in the base photograph.

## Verifiable Photomontage & Proposed development modelling

- The proposed development, structure, road works and earthworks is modeled up in 3D from the drawings provided by the Client / Design Team.
- The building is located in accordance with surveyed location and at the correct FFL.
- True life digital materials are designed and assigned to the 3D model elements using reference imagery provided by the client. Sophisticated real world rendering shaders are used in conjunction with the daylight system to produce final renders which will react in a verifiable manner to match the reference photographic base images.
- Finally, the new development image and the existing original photograph are merged with due care for any demolitions/removals, foreground / background existing objects, landscaping, lighting, shadows, etc. to produce a single believable and verifiable composite image.

### Viewing instructions

These images are designed to be printed at A3 and taken to site to evaluate the impact of the development.

Images should be viewed with both eyes open from the locations indicated and held 500mm from the viewers eyes. (Arms length). When held at arms length the viewer should be able to effectively focus not only on the photomontage in hand but also on the surrounding landscape which will give them a much wider field of view.

When used in this fashion the existing landscape will line-up and the photomontage will provide similar perspective and thus enable the viewer to visually evaluate the proposal.



