Title:	Planning Application Photomontages
Client:	Limerick City and County Council
Project:	Opera Site, Limerick
Project Manager:	AECOM Ireland Ltd.

Prepared By:	Pedersen Focus Ltd.
Date:	15 / 3 /2019

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Architectural Visualisation

V.A.T. No. IE9581693J

Project: **Opera Site, Limerick.**
Client: **Limerick City and County Council**

15th of March, 2019.

To whom it may concern,

The computer generated images of the proposed development were prepared by Pedersen Focus Ltd. Currently, there are no official rules that define a methodology to produce verified views. Pedersen Focus bases its methodology on the Guidelines for Landscape and Visual Impact Assessment, 3rd Edition by The Landscape Institute.

Data Collection.
3d CAD models of the proposed development were provided by AECOM and Coady Architects. 2D Landscaping masterplan was provided by AECOM. The site survey was provided by Murphy Surveys. Model materials were applied to the provided model by Pedersen Focus. 3D site model was prepared by Pedersen Focus.
Camera locations, survey data and the 3d digital model were integrated by Pedersen Focus Ltd. Site photography and surveying of camera locations was carried out by Pedersen Focus. We use fixed lenses (24mmTS, 28mm and 50mm) and generally guidance as set out in the Landscape Institute's advice note “Photography and photomontage in landscape and visual assessment”.

3d Model.
The 3d model of the proposed development was rendered using lighting conditions corresponding to the respective site photograph.

Control point verification.
Each photomontage was verified with survey control points matching consistently.
Appendix A to this booklet of Planning Application Photomontages shows the photomontage control points for each of the photomontage views.

Photomontage.
The photomontages were prepared using industry standard image handling software. The rendered 3d model was inserted between foreground and background elements. Site photographs by Pedersen Focus were cross-referenced to help estimate the amount of mitigation provided by existing trees. Proposed mitigation planting with growth after 10 years is shown in the photomontages. In general, Pedersen Focus have attempted to reflect all planting shown in the photomontages realistically, however, mitigation should be considered indicative only.
The photomontages for viewpoints 9, 17, 18, 19, 20 & 21 were taken with the camera positioned in portrait format to allow the view to include the upper elements of proposed and existing buildings.
Views 17, 18, 21 & 22 were photographed using a 24mm TiltShift lens. Shift was used to adjust the position of the subject in the image area without moving the camera back; this is often helpful in avoiding the convergence of parallel lines. TiltShift lenses are commonly used in Architectural photography when photographing tall buildings. Views 10 & 22 have been extended upwards to allow the composition (i.e. sky has been added) to include the proposed tower.

The photomontages are presented with their existing views for comparison. All views are presented with the “proposed” version showing the proposed development in the site photograp. Pedersen Focus have been established since May, 2000. During this time we have strived to build a reputation for producing reliable, accurate and verifiable views, through the use of in-house procedures and quality checks at various stages of all projects and in accordance with the guidelines set out by the Landscape Institute's “Guidelines for Landscape & Visual Impact Assesment”.

Any questions relating to the preparation of the computer generated images may be referred to:

Jesper Pedersen, B. Eng.
Managing Director

Viewpoint	Camera / Lens	Horizontal field of view	Date	Time	Camera location (ITM Easting, Northing, Ellipsoid height (WGS84))	Tripod/camera height	Distance to nearest proposed building
View 1	Canon 5D II / 28mm	65.1deg	3/5/2016	09.55am	158257.975, 157408.208, 6.77m	1.58m	345m
View 2	Canon 5D II / 28mm	65.1deg	3/5/2016	09.28am	158260.435, 157720.572, 8.89m	1.59m	503m
View 3	Canon 5D II / 50mm	38.7deg	3/5/2016	10.17am	158538.050, 157236.297, 8.59m	1.58m	632m
View 4	Canon 5D II / 28mm	65.1deg	3/5/2016	10.52am	157954.736, 157116.498, 7.87m	1.60m	126m
View 5	Canon 5D II / 50mm	38.7deg	3/5/2016	11.19am	157749.984, 156548.621, 15.32m	1.55m	639m
View 6	Canon 5D II / 50mm	38.7deg	3/5/2016	12.13pm	157309.108, 156597.222, 15.02m	1.63m	791m
View 7	Canon 5D II / 50mm	38.7deg	3/5/2016	12.34pm	157650.298, 157124.071, 5.75m	1.59m	168m
View 8	Canon 5D II / 28mm	65.1deg	3/5/2016	17.39pm	157686.093, 157335.875, 5.93m	1.57m	117m
View 9	Canon 5D II / 16mm	95.6deg*	3/5/2016	19.11pm	157825.742, 157407.686, 5.00m	1.53m	34m
View 10	Canon 5D II / 19mm	87.2deg	3/5/2016	12.57pm	157953.851, 157445.574, 5.84m	1.56m	100m
View 11	Canon 5D II / 28mm	65.1deg	3/5/2016	17.53pm	157808.754, 157541.011, 4.09m	1.58m	165m
View 12	Canon 5D II / 28mm	65.1deg	3/5/2016	12.47pm	157600.876, 157794.250, 8.07m	1.58m	481m
View 13	Canon 5D II / 28mm	65.1deg	3/5/2016	15.22pm	157532.399, 157454.305, 5.43m	1.59m	311m
View 14	Canon 5D II / 28mm	65.1deg	3/5/2016	15.02pm	157362.123, 157343.171, 9.07m	1.60m	414m
View 15	Canon 5D II / 50mm	38.7deg	3/5/2016	13.36pm	157194.777, 157102.867, 5.12m	1.60m	588m
View 16	Canon 5D II / 50mm	38.7deg	3/5/2016	16.43pm	155480.533, 161113.637, 32.02m	1.55m	4420m
View 17	Canon 5D II / 24mm	73.1deg*	25/05/2018	12.18pm	157933.190, 157379.091, 6.25m	1.62m	31m
View 18	Canon 5D II / 24mm	73.1deg*	25/05/2018	12.44pm	157899.188, 157219.454, 6.54m	1.60m	18m
View 19	Canon 5D II / 28mm	65.1deg*	01/09/2017	10.16am	157866.754, 157151.093, 6.58m	1.63m	37m
View 20	Canon 5D II / 28mm	65.1deg	01/09/2017	11.25am	157733.557, 157231.475, 6.56m	1.65m	34m
View 21	Canon 5D II / 24mm	73.1deg*	25/05/2018	14.35pm	157815.576, 157373.378, 7.94m	1.59m	31m
View 22	Canon 5D II / 24mm	73.1deg	25/05/2018	16.06pm	157865.842, 157456.332, 7.53m	1.57m	84m
View 23	Canon 5D II / 50mm	38.7deg	25/05/2018	15.42pm	157720.831, 157792.186, 26.91m	1.56m	445m

* View was photographed with the camera rotated 90 degrees to “portrait” to allow the upper elements of proposed and existing buildings to be included in the photograph, while keeping the camera axis level to avoid vertical distortion of the perspective.

Project:	Project Opera, Limerick		
Client:	Limerick City and County Council		
Drawing title:	Photo data sheet (1 of 1)		
Date: Jan. 2019	Scale: NTS	Drawn by: JP	
Prepared by:	Pedersen Focus Ltd.		

Drawing title: Viewpoint location map 1 of 2			
Date: Jan. 2019	Scale: NTS	Drawn by: JP	
Prepared by: Pedersen Focus Ltd.			

Drawing title: Viewpoint location map 2 of 2		
Date: Jan. 2019	Scale: NTS	Drawn by: JP
Prepared by: Pedersen Focus Ltd.		

View 1 - Existing

View 1 - Proposed

View 2 - Existing

View 2 - Proposed

View 3 - Existing

View 3 - Proposed