

Visual Impact Assessment

Harbourside, Darling Harbour

BACKGROUND

This document was prepared by Virtual Ideas to describe the processes used to create the visual impact photomontages and illustrate the accuracy of the results.

Virtual Ideas is a highly experienced architectural visualisation company, that regularly prepares 3D visualisation media for use in visual impact assessments and planning and development applications. Our approach to creating view and visual impact media follows the prescribed methodology as established by relevant government planning authorities and is focused on most accurately communicating the proposed design and visual impact of a development. Our methodologies and results have been inspected by various court appointed experts in a variety of cases and have always been found to be accurate and acceptable.

OVERVIEW

The general process of creating accurate photomontage renderings begins with the creation of an accurate, real-world scale digital 3D model. Site photographs of the relevant view locations are then captured and these camera positions are then surveyed by a surveyor to determine the MGA coordinates. These coordinates are then matched in our 3D model and a virtual camera is set up to align with the real-world camera positions.

By matching the real-world camera lens properties to the camera properties in 3D software and rotating the camera so that surveyed points in the 3D space align with the corresponding points on the photograph, we can create a rendering that is correct in terms of position, scale, rotation, and perspective. The rendering can then be superimposed into the real photo to generate an image that represents accurate form and visual impact.

The following photomontages have been prepared in respect of Land and Environment Court proceeding no. 10884/14 in accordance with the Land and Environment Court’s practice directions.

METHODOLOGY

Site Photography

Site photography was taken from predetermined positions and heights as instructed by Mirvac and JBA Urban. All photographs were taken using a NIKON D810 digital camera, using a 24mm lens and taken at an approximate eye height of 1.6m above ground level. The positions of the photographs were surveyed and then added into the existing site survey.

3D model

Using the imported surveyed data into our 3D software (3DS Max), we then imported a supplied 3D model of the proposed building.

Alignment

The positions of the real world photography were located in the 3D scene. Cameras were then created in the 3D model to match the locations and height of where the photographs were taken from. These are then aligned in rotation so that the points of the 3D model align with their corresponding objects that are visible in the photograph.

Renderings of the building with realistic textures and lighting were then created from the aligned 3D cameras and montaged into the existing photography at the same location. This produces an accurate representation of the scale and position of the new design relative to the existing built form.

In conclusion, it is my opinion as an experienced, professional 3D architectural and landscape renderer that the images provided accurately portray the level of visibility and impact of the built form.

Opinions expressed in this verification report are made with regard to Division 2 of Part 31 of the Uniform Civil Procedure Rules and the Expert Witness Codes of Conduct in Schedule 7 of the Uniform Civil Procedure Rules, which I have read and agree to be bound by.

Yours sincerely
Grant Kolln



CV OF GRANT KOLLN, DIRECTOR OF VIRTUAL IDEAS

Personal Details

Name: Grant Kolln
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Company Address: Suite 71, 61 Marlborough St, Surry Hills, NSW, 2010
Phone Number: 02 8399 0222

Relevant Experience

- 2003 - 2015

Director of 3D visualisation studio Virtual Ideas. During this time I have worked on many visual impact studies for legal proceedings in various different types of industries including architectural, industrial, mining, landscaping, and several large public works projects. This experience has enables us to create highly accurate methodologies for the creation of our visual impact media and report creation.
- 1999 - 2001

Project manager for global SAP infrastructure implementation - Ericsson, Sweden
- 1999 - 1999

IT consultant - Sci-Fi Channel, London
- 1994 - 1999

Architectural Technician, Thomson Adsett Architect, Brisbane QLD.

Relevant Education / Qualifications

- 1997

Advanced Diploma in Architectural Technology. Southbank TAFE, Brisbane, QLD

DESCRIPTION OF COLLECTED DATA

To create the 3D model and establish accurate reference points for alignment to the photography, a variety of information was collected. This includes the following:

- 1) Architectural 3D model of indicative base building design, proposed envelope and some surrounding context buildings
 - Created by: Francis-Jones Morehen Thorp (FJMT)
Level 5/70 King St, Sydney NSW 2000
 - Format: Din3D model
- 2) 3D models of Barangaroo and Darling Harbour context buildings
 - Created by: Lendlease
Level 14, Tower Three, International Towers Exchange Place, 300, Barangaroo Avenue, Sydney NSW 2000
 - Format: 3DS Max files
- 3) Surveyed data
 - Created by: Tom McDonald, Rygate & Company Pty. Ltd. Registered Land Surveyors
Level 9, 89 York St, Sydney, NSW 2000
 - Format: DWG and PDF files
- 3) Site photography
 - Created by: Virtual Ideas Pty Ltd
Studio 71, 61 Marlborough St, Surry Hills, NSW 2010
 - Format: JPEG file