

Attachment 1

Photomontage Methodology Statement.

03 April 2020

Project: Proposed Development of Hauhungaroa No. 6 Trust Land, Whareroa North.

Photo viewpoints x3:

VPT 1 - Viewed From Whareroa Road Looking North

VPT 2 - Viewed From No. 30 Turangitukua Terrace Looking North-East

VPT 3 - Viewed From Lake Taupo Looking North-West

Photomontages issued: 31 March 2020

Photomontages prepared by: U6 Photomontages Limited

Client: Cheal Consultants Limited

Landscape Architect: Mary Monzingo

Photography and viewpoint data recording.

Images VPT1 & VPT2 were photographed in landscape fashion using a fixed 50mm lens, fitted to a full frame sensor DSLR camera mounted on a tripod. Image VPT3 is a single hand-held landscape photograph taken from a boat within the Whareroa bay.

After each series of land-based photographs were taken, the ground was marked with survey paint so that the surveyor could then conduct their survey to record the easting and northing co-ordinates and elevations of each camera location. Selected control point items/reference points in each scene (such as street furniture items, and structural features on distant houses) were also identified and surveyed for their coordinates. The location coordinates for the VPT3 photograph were recorded using a hand-held GPS unit.

Software setup.

VPT1 & VPT2 images have been stitched together using several separate photographs to achieve the horizontal field of views stated within the photomontage pdf document. Each frame was manually overlapped by approximately 75% to achieve precise joining and to eliminate any 'barrel effect' (edge distortion).

A 3D model of the project was built by using electronic design drawings supplied by Cheal Consultants and a list of plant species with recommended 10 year growth rates supplied by Mary Monzingo.

Locating the digital model within the photographs.

The processed survey data and the 3D model were loaded into 3D design software where a computer camera was created at each viewpoint location within the artificial 3D environment. The correct camera specifications, time of day and date were entered into the program to simulate the precise conditions experienced at the time the photographs were taken on site.

An exact snapshot/render of the development was then captured replicating the same camera height, location and direction as the photographer.

Accurate placement of the proposal in each image was achieved by overlaying and matching up combined renders of the development and control point items, to the selected control point items that existed in each view.

Leaving only the proposed project visible in its correct location, the control point items were then swapped over to a second layer and switched off for later reference.

Additional photo editing was required to erase lower parts of the proposal where it appeared to be behind foreground topography and vegetation etc.

Photomontage presentation.

For each viewpoint location we have presented one panoramic image showing the existing landscape scene, and a second showing the landscape scene containing the proposed development. This means that a comparison can be made between the existing and the proposed situation. Each photomontage document states the recommended optimal viewing distance when printed out 1:1 (100%) on full size A3 paper.