

Appendix 4: Part B, Visual Simulations

Auckland Regional Landfill Proposed Facility

Part B
Appendix 4: Visual Simulations
May 2019



Boffa Miskell

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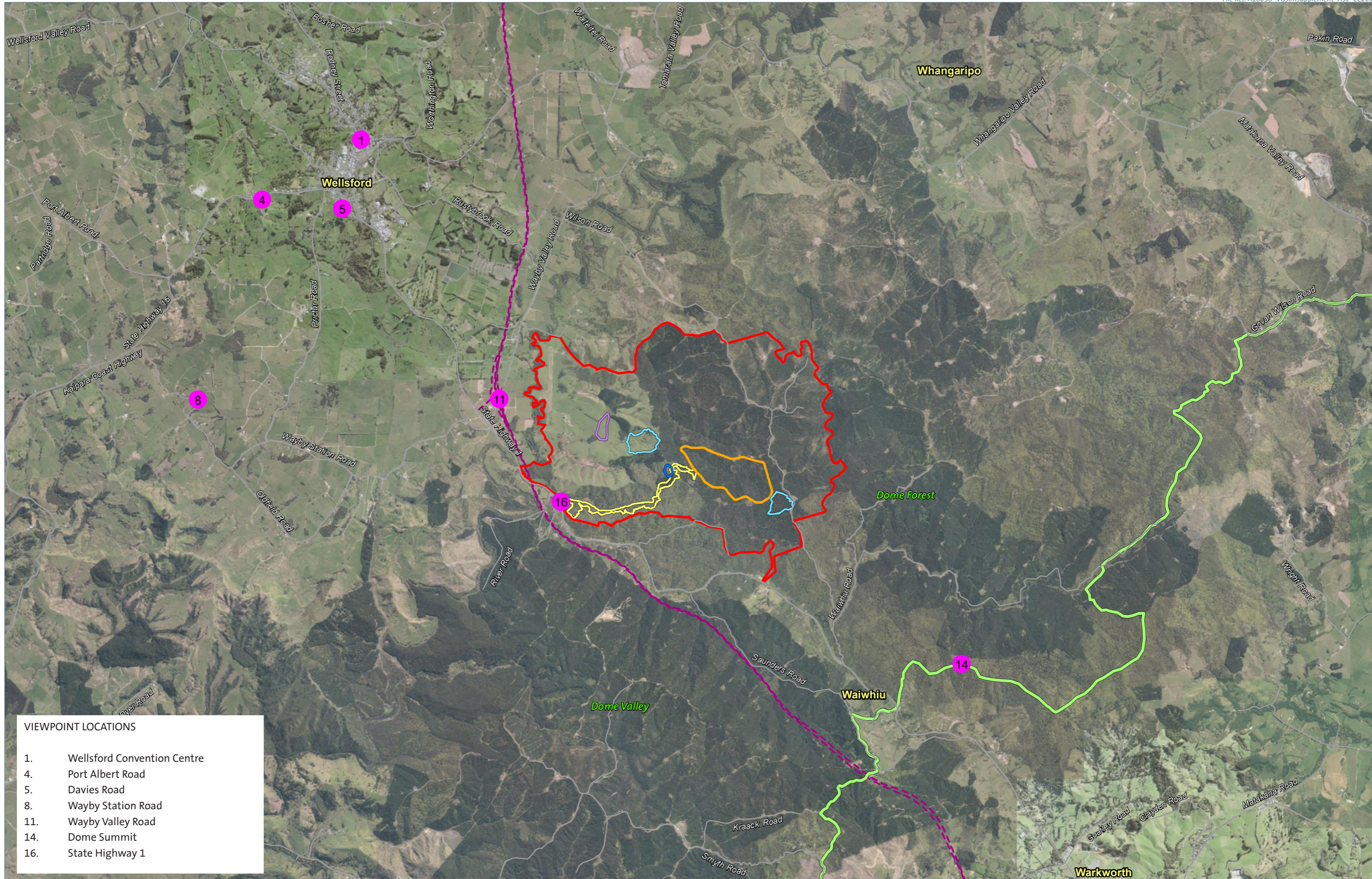
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VISUAL SIMULATIONS - METHODOLOGY

SITE VISIT & PHOTOGRAPHY

Site photographs were taken with a Canon digital SLR camera fitted with a 50mm focal length lens, mounted on a tripod and panoramic head. A series of photos were taken at predetermined viewpoints, situated on public land. The locations of each viewpoint were fixed by either hand held GPS or GPS units built in to the cameras.

NZILA GUIDELINES & PANORAMA PREPARATION

The visualisations have been produced in accordance with the NZILA Best Practice Guidelines for Visual Simulations (BPG 10.2) and also adhere to Boffa Miskell’s internal Visualisation Guidelines.

As can be seen below (derived from Figure 9 of the NZILA BPG), a photo taken with a 28mm lens will provide a horizontal field of view of 65°. Using a 50mm lens will provide a “cropped” (40°) version of the same view. The same effect can also be achieved by taking multiple 50mm photos in portrait mode, and using digital stitching software to merge and crop to 90°, 65° or 40°.

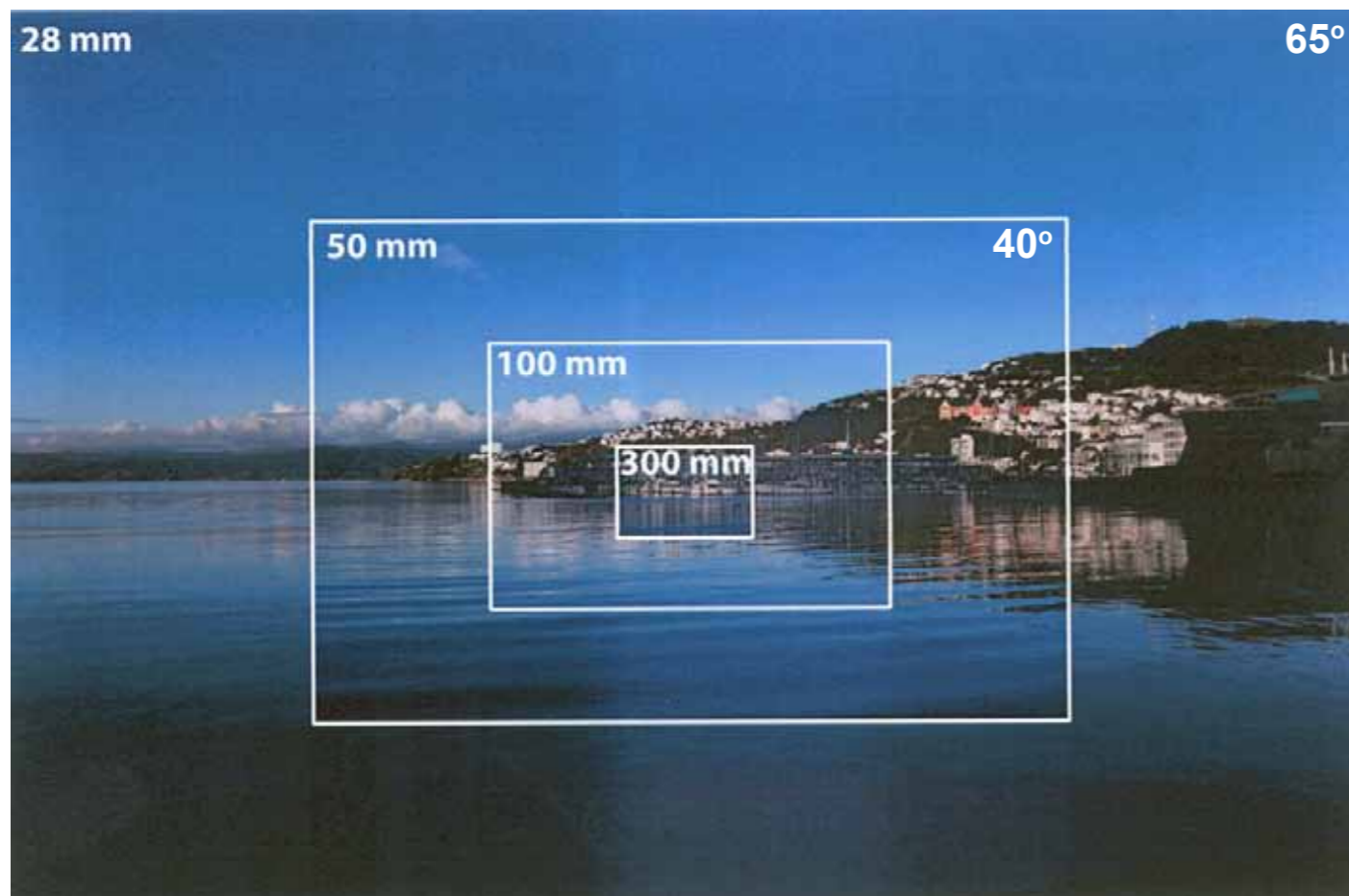
COMPOSITING

Virtual camera views were then created in 3D modelling software, and a combination of 3D contour data and 3D engineering drawings turned on in each of these views. These were then matched to the corresponding photographic panorama, using identifiable features in the landscape and the characteristics of the camera to match the two together. The visualisations were then assembled using graphic design software.

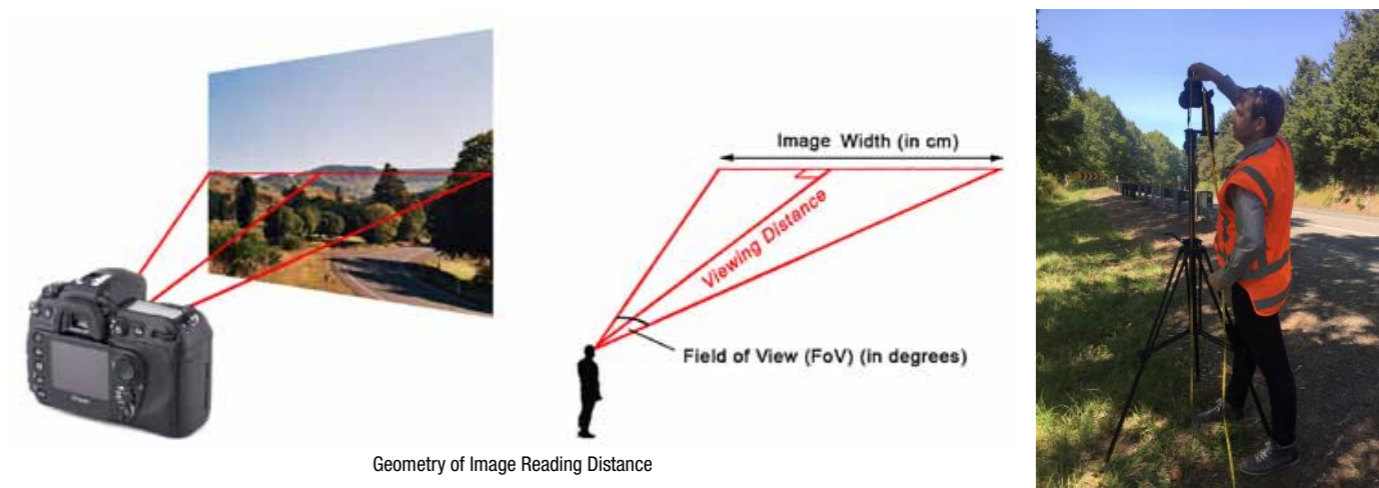
VIEWING

Views which have a field of view of 40° should be viewed from a distance of 55 cm when printed at A3. Views which have a field of view of 65° should be viewed from a distance of 31.5cm when printed at A3. Views which have a field of view of 90° should be viewed from a distance of 20 cm when printed at A3.

This will ensure that each simulation is viewed as if standing on-site at the actual camera location, and is in accordance with Section 7.11 of the NZILA BPG (reproduced below). Users are encouraged to print these pages on A3 transparency, go to the viewpoint and hold at the specified reading distance, in order to verify the methodology.



LENS	HORIZ FoV ¹	PAPER SIZE	ACTUAL IMAGE SIZE ²	READING DISTANCE ³
		A4	277mm W x 185mm H	215mm
28mm	65°	A3	400mm W x 267mm H	315mm
		A2	574mm W x 383mm H	450mm
		A4	277mm W x 185mm H	380mm
50mm	40°	A3	400mm W x 267mm H	550mm
		A2	574mm W x 383mm H	790mm



FIGURE



Existing View



Post Closure



Existing View (Single Frame)



Visible extent of proposal (approx)

Post Closure (Single Frame)



Existing View



Post Closure



Existing View (Single Frame)



Visible extent of proposal (approx)

Post Closure (Single Frame)