Figure 21. Viewpoint F.

View from Ponsonby Road at the intersection with Williamson Avenue, looking southeast.

Original Photo MJ | 50mm | DSLR Canon D810 | 3 August 2023 12:06pm | 1755918E 5919472N NZTM 60m elevation
Reading distance for correct scale: 400mm
Field of View Approximately 110˚ horizontal (across 2 x A3 pages) & 34˚ vertical

Figure 22. Viewpoint G.

View from the northern / eastern reaches of the Western Park public open space looking south.

Original Photo MJ | 50mm | DSLR Canon D810 | 3 August 2023 11:54am | 1756300E 5919811N NZTM 31m elevation
Reading distance for correct scale: 400mm
Field of View Approximately 110˚ horizontal (across 2 x A3 pages) & 34˚ vertical

Figure 23. Viewpoint H.

View from adjacent to 373 Karangahape Road, east of the motorway overbridge, looking southwest.

Original Photo MJ | 50mm | DSLR Canon D810 | 3 August 2023 11:39am | 1756599E 5919435N NZTM 72m elevation
Reading distance for correct scale: 400mm
Field of View Approximately 110˚ horizontal (across 2 x A3 pages) & 34˚ vertical

Photosimulation Methodology Statement

- Photos were taken with either a 50mm or 28mm fixed lens on DSLR camera. Locations were fixed using a handheld GPS unit with accuracy of 5m. These points were cross referenced using the Auckland Council GIS information. Reference points in the landscape, such as trees and existing structures were also located to assist referencing of photo to digital model.
- A sequence of photos was taken from each viewpoint and stitched to form panoramas. Photos were overlapped by approximately 30% and edges cropped prior to stitching to eliminate edge distortion.
- A digital model was created. Computer images were generated within the digital scene from the same locations as the photos. The image was overlaid and aligned with the photo using key reference points and visual matching. (Photos were imported in RAW format to avoid degradation of the image, requiring resizing to match the computer image).
- The wire-frame was then switched off leaving the proposed activity in its correct location and scale relative to the photo. Lower parts of the proposed activity were erased using Photoshop software where they would be behind foreground items.
- The time and weather when the photo was taken was entered to the program in order to replicate lighting conditions.
- The completed photomontage is presented over two pages:
  - The photos are produced to replicate correct scale at the nominated reading distance (in this case 400mm).
  - Each photomontage is printed across two facing pages to illustrate a field of view of approximately 110° at a reading distance of 400mm. This approximates the field of human binocular vision. (But not peripheral vision which extends to approximately 200°)

Notes on use of Photosimulations:

- The Photosimulations are a useful tool but they cannot not precisely reproduce real life for the following reasons:
  - 2D Photography flattens an image compared to binocular vision.
  - Photography is static, whereas the human vision can scan and remember information.
  - Photographs are passive, whereas the eye seeks out detail.
  - The human eye can see more contrast than can be reproduced through photography.

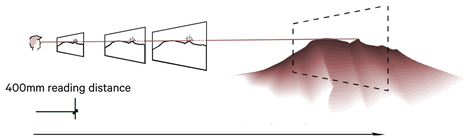

Figure 24: The relationship between reading distance and real life scale.

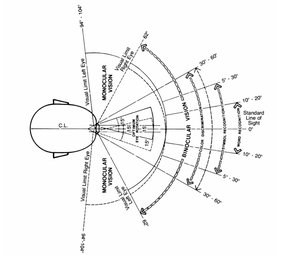

Figure 25: Binocular vision is approximately 124°. Field of view is approximately 110° across 2 x A3 pages at correct scale image for 400mm reading distance (vertical field of view is approximately 33°)

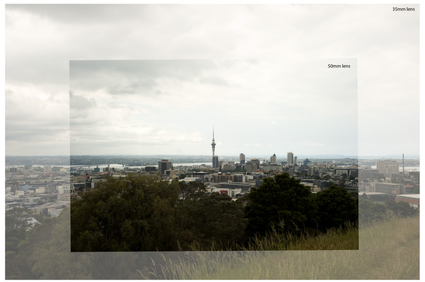

Figure 26: Comparison of 35mm lens and 50mm lens

Two images from the same location. With 35mm and 50mm lenses perspective is influenced by field of view, not by lens focal length. The overlaid portion is identical.

Methodology.

Land.
People.
Culture.
Isthmus.

Tāmaki Makaurau Auckland
246 Queen St
Central City
PO Box 90 366
Victoria Street West

+64 9 309 9442

Pōneke Wellington
Level 5
56 Victoria Street
PO Box 24116
Wellington

+64 4 499 9832

Ōtautahi Christchurch
10A Mollett Street
Central City
PO Box 1153
Christchurch 8011

+64 3 983 7360