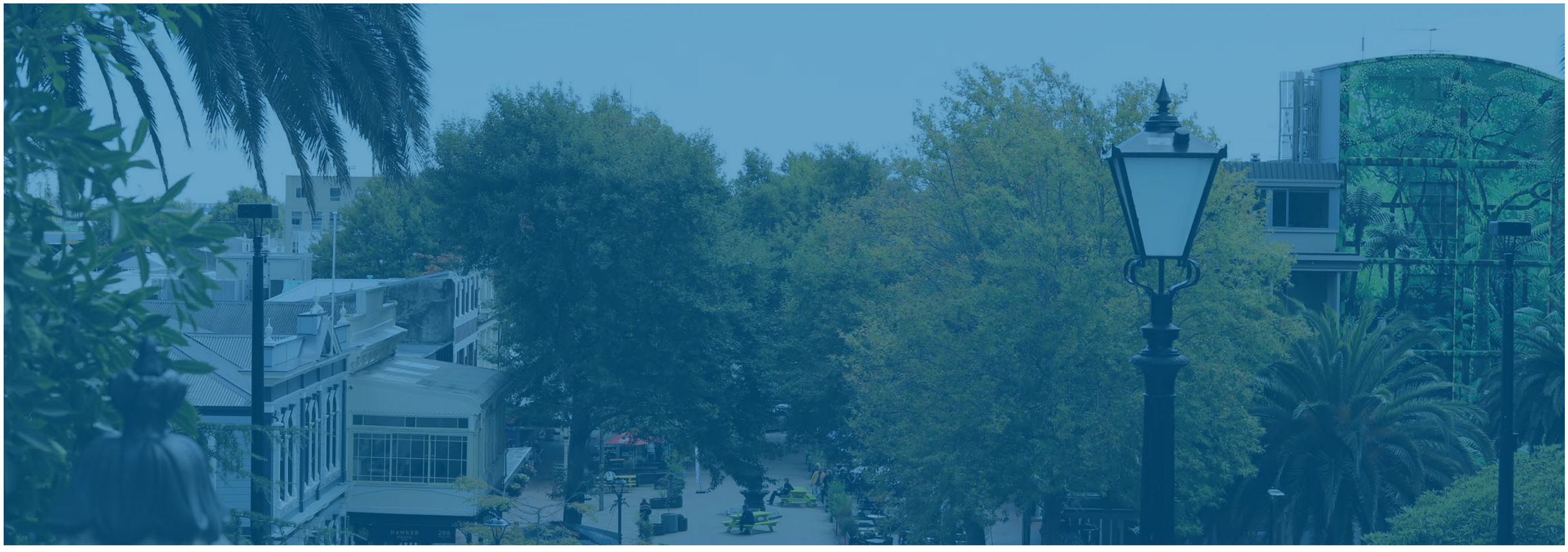
NELSON PLAN CHANGE 29

GRAPHIC SUPPLEMENT

17 MAY 2024



NELSON PLAN CHANGE 29



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METHODOLOGY

FIGURE 4: Visual Simulation Methodology



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0 320 m

1:10,000 @ A3

DRAFT

Data Sources: Eagle Technology, Land Information New Zealand, GEBCO, Community maps contributors

Projection: NZGD 2000 New Zealand Transverse Mercator

LEGEND

Viewpoint Location

Viewshaft Plane

View shaft origin

NELSON PLAN CHANGE 29

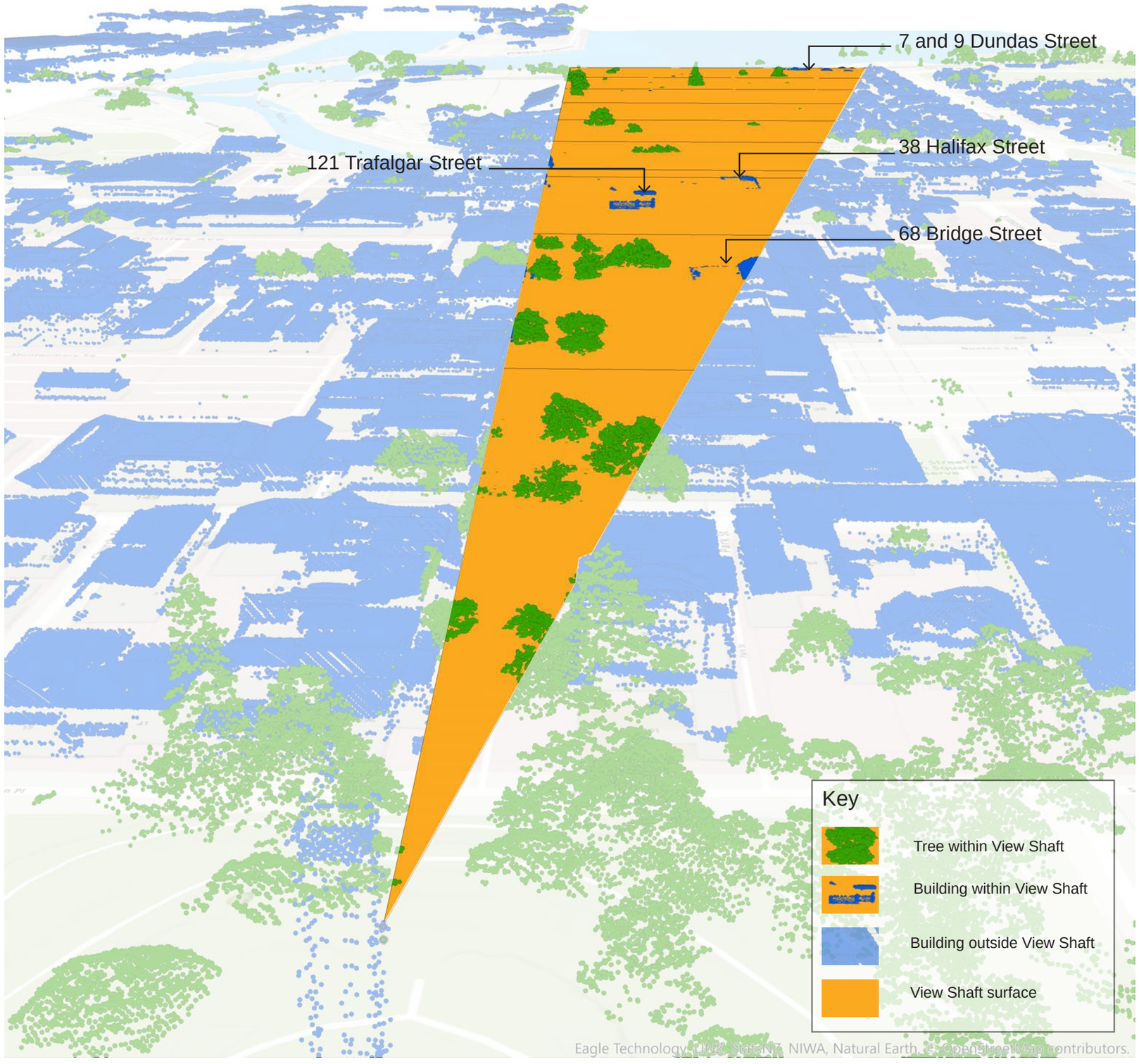
Viewpoint Location

Date: 15 May 2024 | Revision: 2

Plan prepared for Nelson City Council by Boffa Miskell Limited

Project Manager: Rhys.Girvan@boffamiskell.co.nz | Drawn: CMu | Checked: RGi

Map 1



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Data Sources : View shaft data sourced from NCC. LiDAR dataset NZ22_ToS sourced from OpenTopography. National and regional datasets sourced from LINZ

NELSON PLAN CHANGE 29

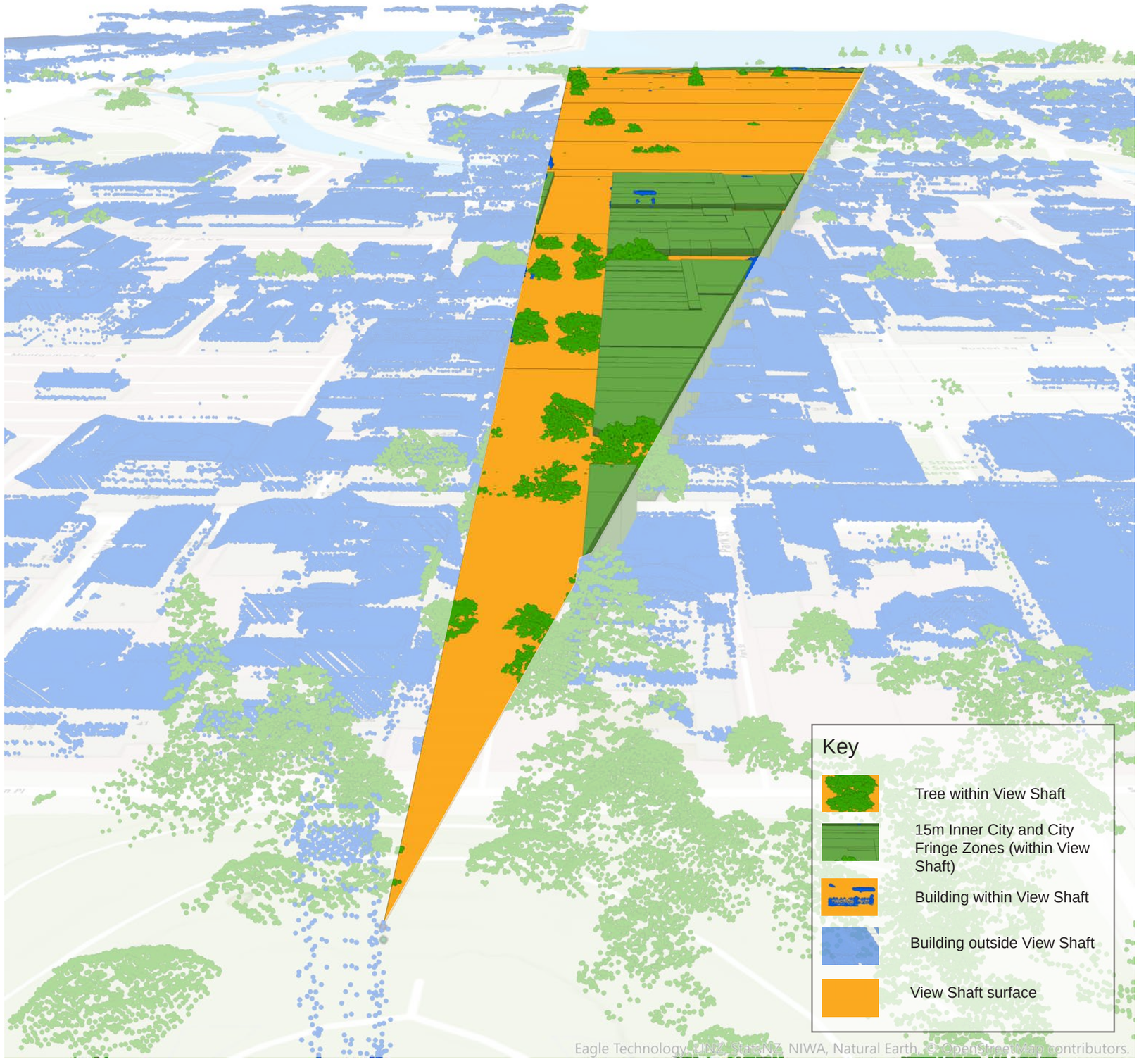
Oblique view : View shaft and LiDAR

Date: 17 May 2024 | Revision:3

Prepared for Nelson City Council by Boffa Miskell Limited

Project Manager: Rhys.Girvan@boffamiskell.co.nz | Drawn: CMu | Checked: RGi

Figure 1



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NELSON PLAN CHANGE 29

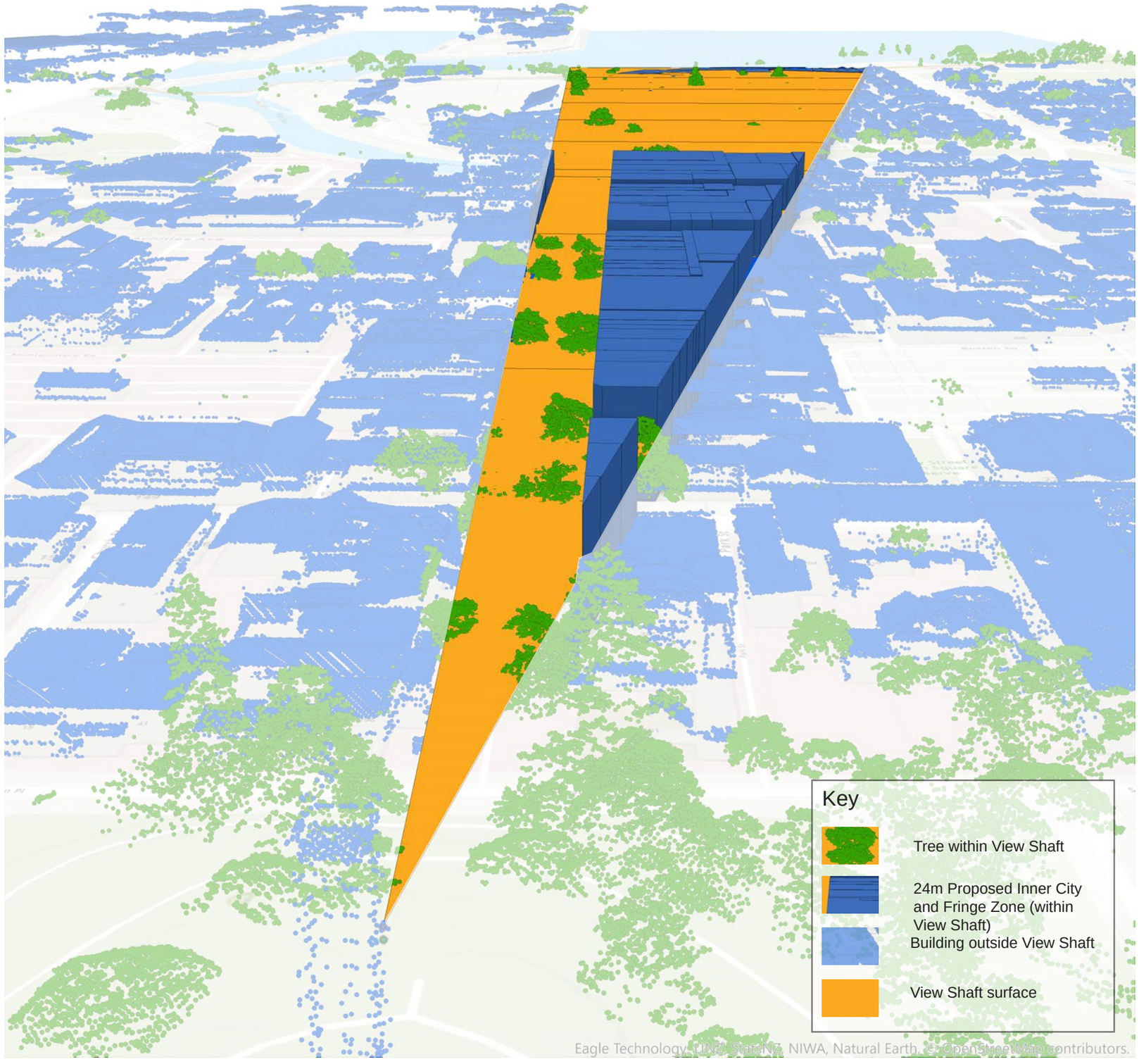
Oblique view : View shaft, LiDAR and 15m height limit within View Shaft

Date: 17 May 2024 | Revision:3

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Figure 2



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NELSON PLAN CHANGE 29

Oblique view : View shaft, LiDAR and Proposed 24m height limit within View Shaft

Date: 17 May 2024 | Revision:3

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Figure 3



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Viewpoint Details

NZTM Easting	: 1623768.37 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5430601.04 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 17.29m NZVD2016/1.5m AGL	Projection	: NA
Date of Photography	: 11:42am March 2024 NZDT	Image Reading Distance @ A3 is 50 cm	

Data Sources : View shaft data sourced from NCC. LiDAR dataset NZ22_ToS sourced from OpenTopography. National and regional datasets sourced from LINZ

NELSON PLAN CHANGE 29

Viewpoint 1: Change under plan provisions

Date: 17 May 2024 | Revision:3

Prepared for Nelson City Council by Boffa Miskell Limited

Project Manager: Rhys.Girvan@boffamiskell.co.nz | Drawn: CMu | Checked: RGi

Church Hill Steps



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Viewpoint Details

NZTM Easting	: 1623797.18 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5431265.83 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 4.1m NZVD2016/1.5m AGL	Projection	: NA
Date of Photography	: 10:05am March 2024 NZDT	Image Reading Distance @ A3 is 50 cm	

Data Sources : View shaft data sourced from NCC. LiDAR dataset NZ22_ToS sourced from OpenTopography. National and regional datasets sourced from LINZ

NELSON PLAN CHANGE 29

Viewpoint 2: Change under plan provisions

Date: 17 May 2024 | Revision:3

Prepared for Nelson City Council by Boffa Miskell Limited

Project Manager: Rhys.Girvan@boffamiskell.co.nz | Drawn: CMu | Checked: RGi

Trafalgar Street Bridge



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Viewpoint Details

NZTM Easting	: 1623807.06 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5431823.81 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 3.4m NZVD2016/1.5m AGL	Projection	: NA
Date of Photography	: 9:43am March 2024 NZDT	Image Reading Distance @ A3 is 50 cm	

Data Sources : View shaft data sourced from NCC. LiDAR dataset NZ22_ToS sourced from OpenTopography. National and regional datasets sourced from LINZ

NELSON PLAN CHANGE 29

Viewpoint 3: Change under plan provisions

Date: 17 May 2024 | Revision:3

Prepared for Nelson City Council by Boffa Miskell Limited

Project Manager: Rhys.Girvan@boffamiskell.co.nz | Drawn: CMu | Checked: RGi

VP3



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Viewpoint Details

NZTM Easting	: 1623818.07 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5432965.10 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 2.7m NZVD2016/1.5m AGL	Projection	: NA
Date of Photography	: 9:53am March 2024 NZDT	Image Reading Distance @ A3 is 50 cm	

Data Sources : View shaft data sourced from NCC. LiDAR dataset NZ22_ToS sourced from OpenTopography. National and regional datasets sourced from LINZ

NELSON PLAN CHANGE 29

Viewpoint 4: Change under plan provisions

Date: 17 May 2024 | Revision:3

Prepared for Nelson City Council by Boffa Miskell Limited

Project Manager: Rhys.Girvan@boffamiskell.co.nz | Drawn: CMu | Checked: RGi

VP4

VISUALISATIONS - METHODOLOGY

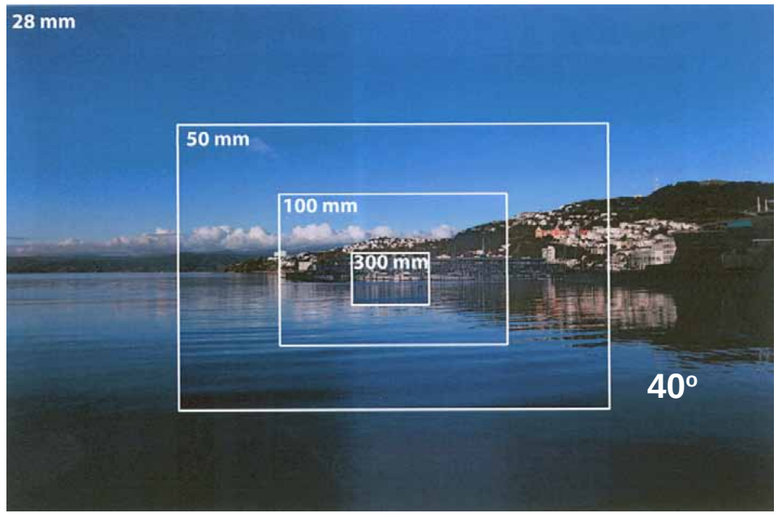
SITE VISIT & PHOTOGRAPHY

Site photographs were taken with a Canon digital SLR camera fitted with a 50mm focal length lens, mounted on a tripod. The locations of each viewpoint were recorded using an EMLID Reach 2 GPS Rover Unit.

NZILA GUIDELINES & PANORAMA PREPARATION

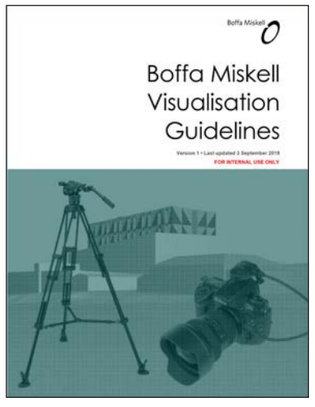
The visualisations have been produced in accordance with the Tuia Pito Ora New Zealand Institute of Landscape Architects (NZILA) Best Practice Guidelines for Visual Simulations (BPG 10.2) and also adhere to Boffa Miskell's internal Visualisation Guidelines.

Camera lenses with different focal lengths capture images with differing fields of view. As can be seen below (derived from Fig 9 of the NZILA BPG), a photo taken with a 28mm lens provides a horizontal field of view of 65º. A 50mm lens will provide a cropped (40º) version of the same view.



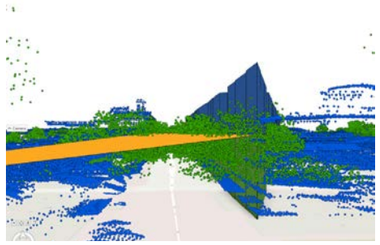






3D MODELLING

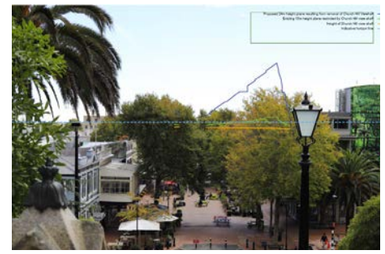
Virtual camera views were then created in 3D modelling software, and 3D terrain data and massing models were imported. These views were then registered over the corresponding photograph, using LiDAR data, identifiable features in the landscape and the characteristics of the camera to match the two together. The visualisations were then assembled using graphic design software.



Prepare 3d model of View Shaft



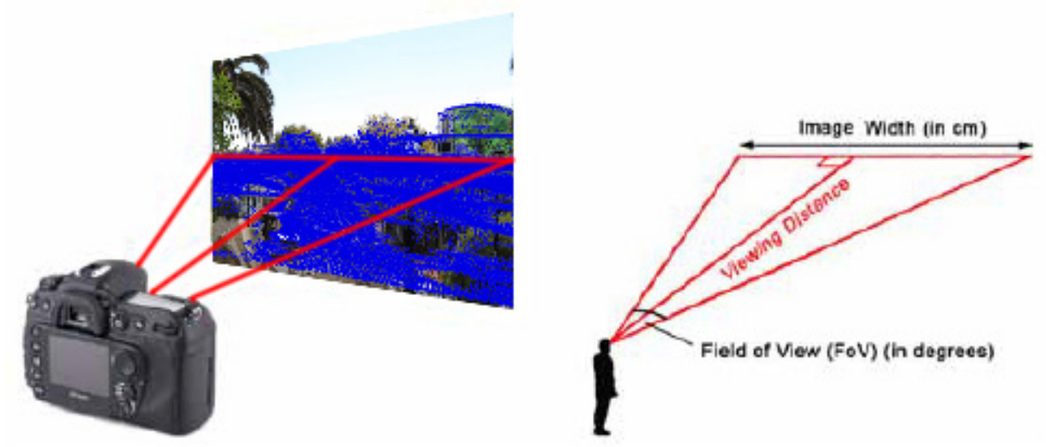
Align model with photograph



Create wireline overlay

IMAGE READING DISTANCES

These visualisations have a field of view of 40º and so should be viewed from a distance of 50 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. 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.



Geometry of Image Reading Distance

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