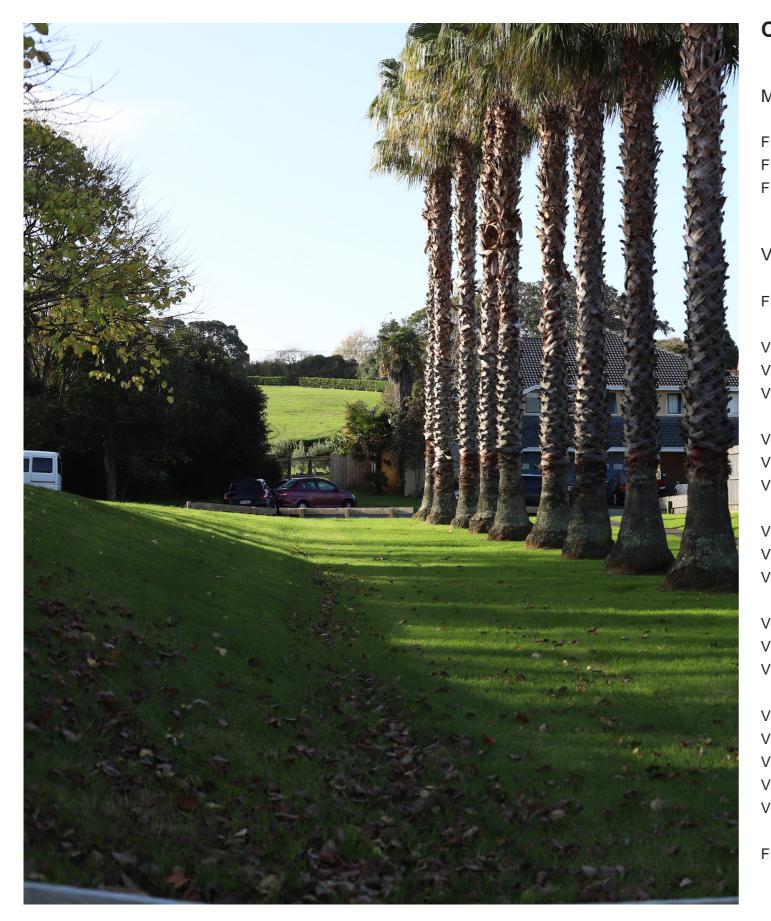
Graphic Supplement to Remuera Precinct - Plan Change. Landscape Effects Assessment

Visual Simulations from 2022 Fast Track Application





The Hill, Ellerslie



Contents

MAPS

١.

١.

FIGURE 1:	Wider Site Context
FIGURE 2:	Site Context
FIGURE 3:	Auckland Unitary Plan

VISUAL SIMULATIONS

FIGURE 4:	Viewpoint Locations
VS 1A:	View from Ladies Mile looking South - Panorama
/S 1B:	View from Ladies Mile looking South - Single 50m
VS 1C:	View from Ladies Mile looking South - Single 50m
VS 2A:	View from Abbots Way looking South-West - Par
VS 2B:	View from Abbots Way looking South-West - Sing
VS 2C:	View from Abbots Way looking South-West - Sing
VS 3A:	View from Umere Crescent looking North-West -
/S 3B:	View from Umere Crescent looking North-West -
VS 3C:	View from Umere Crescent looking North-West -
VS 4A:	View from Derby Downs Place looking North-Wes
VS 4B:	View from Derby Downs Place looking North-Wes
VS 4C:	View from Derby Downs Place looking North-Wes
VP 5:	View from Liston Park looking South-West - Singl
VP 6:	View from Derby Downs looking North-East - Par
VP 7:	View from Lonsdale Street looking North-East - S
VP 8:	View from Somerfield Street looking North-East
VP 9:	View from Ladies Mile looking North-East - Singl

Methodology - Visual Simulations FIGURE 5:

as (Existing & Proposed View) mm Frame (Existing View) Imm Frame (Proposed View)

anoramas (Existing & Proposed View) ngle 50mm Frame (Existing View) ngle 50mm Frame (Proposed View)

- Panorama (Existing & Proposed View)

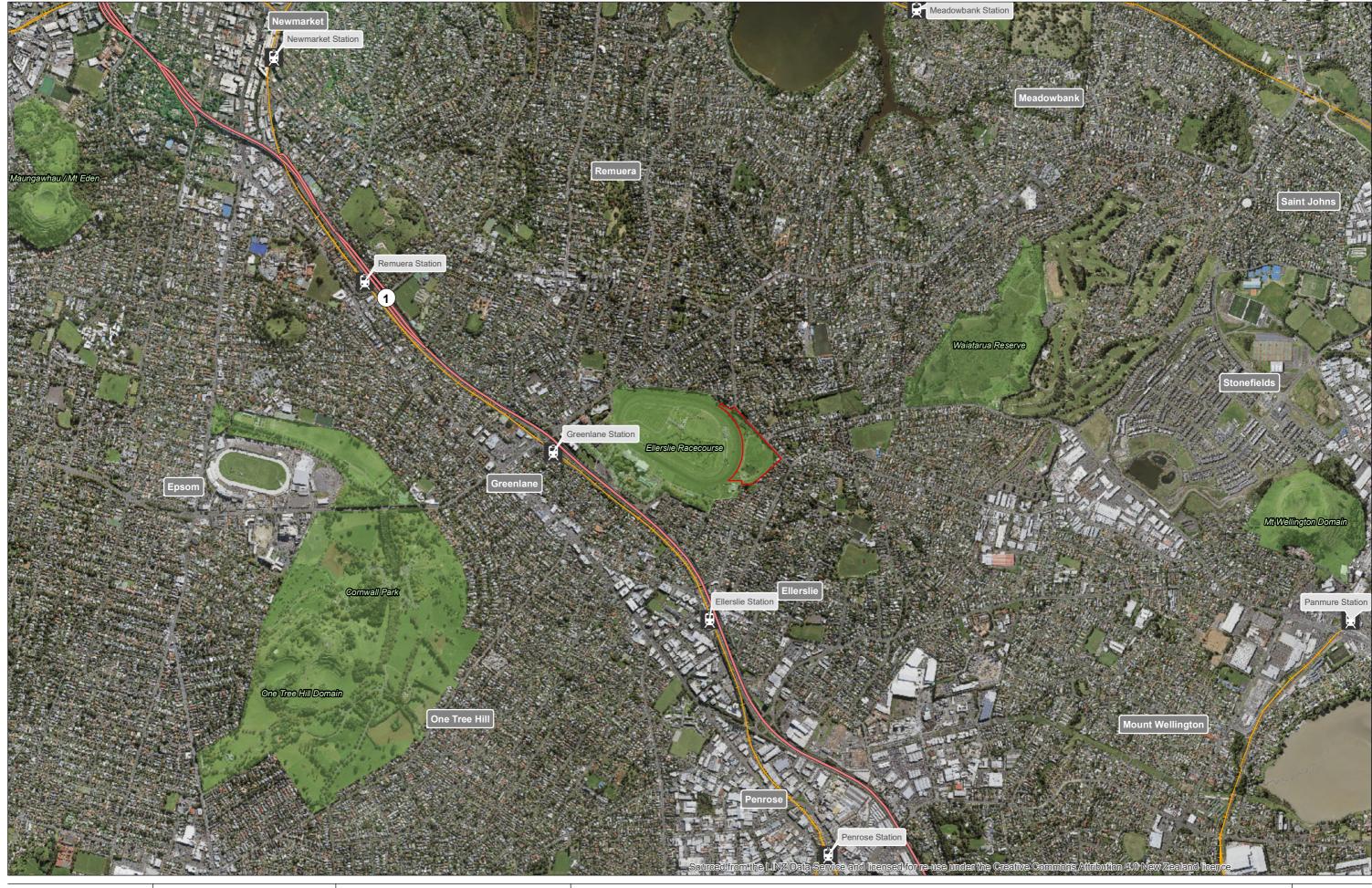
- Single 50mm Frame (Existing View)
- Single 50mm Frame (Proposed View)

est - Panorama (Existing & Proposed View)

est - Single 50mm Frame (Existing View)

est - Single 50mm Frame (Proposed View)

gle 50mm Frame (Existing View) anorama (Existing View) - Single 50mm Frame (Existing View) - Single 50mm Frame (Existing View) gle 50mm Frame (Existing View)



Boffa Miskell 🖱
O
www.boffamiskell.co.nz



Site Boundary Public Open Sp Public Open Space — Highways

Train Stations Railway Tracks

THE HILL ELLERSLIE Wider Site Context

Date: 27 October 2021 | Revision: 0 Plan prepared for Fletcher Residential Ltd by Boffa Miskell Limited Project Manager: Rachel.deLambert@boffamiskell.co.nz | Drawn: HWi | Checked: JWi



Site Boundary Public Open Sp

- Highways

Public Open Space

R Train Stations

Railway Tracks

Boffa Miskell 🦱
\mathcal{O}
www.boffamiskell.co.nz

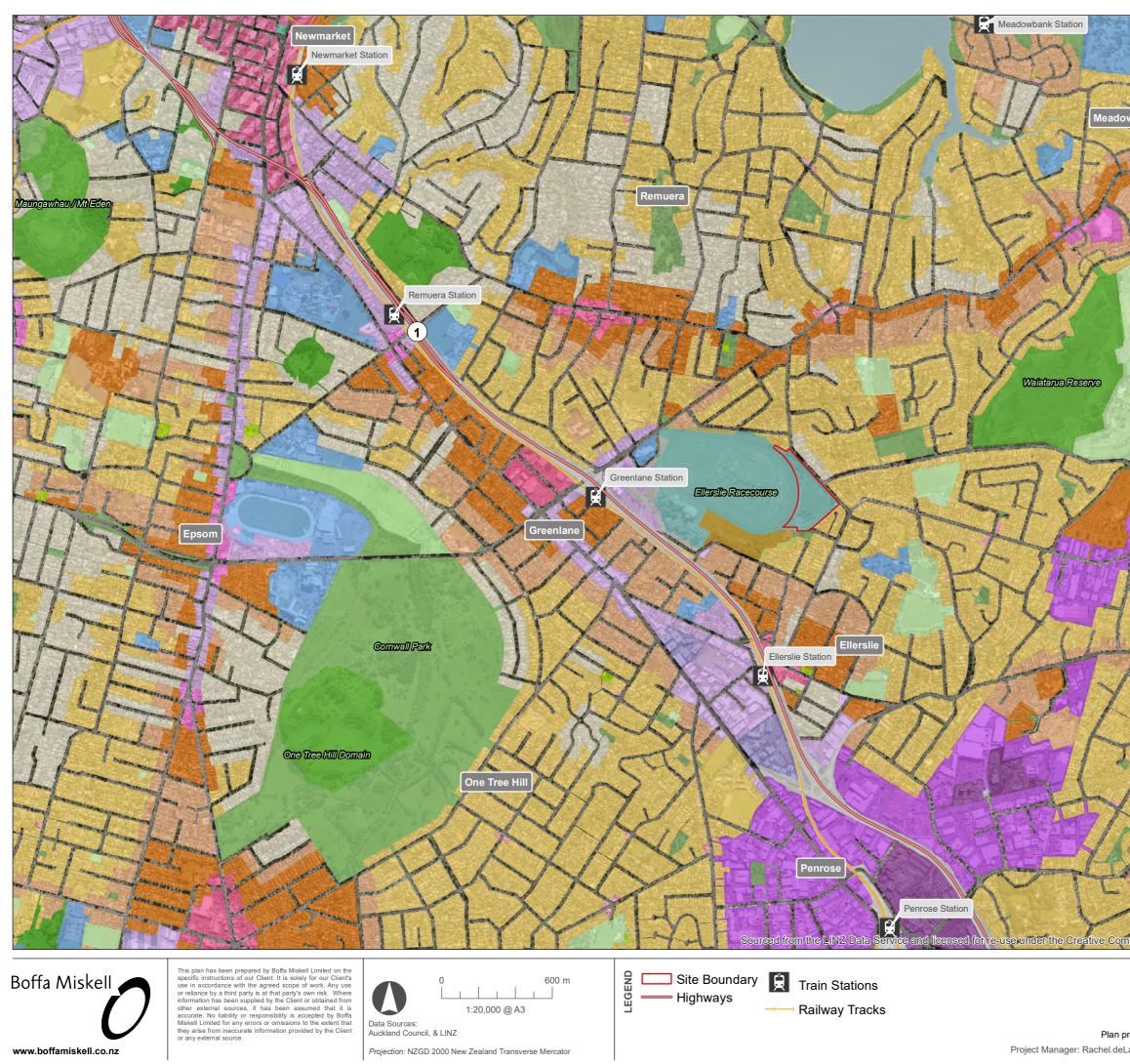
This plan has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.



Projection: NZGD 2000 New Zealand Transverse Mercator

THE HILL ELLERSLIE Site Context

Date: 27 October 2021 | Revision: 0 Plan prepared for Fletcher Residential Ltd by Boffa Miskell Limited Project Manager: Rachel.deLambert@boffamiskell.co.nz | Drawn: HWi | Checked: JWi



File Ref: BM210194_003_A3L_Auckland Unitary Plan .mxd

Auckland Unitary Plan Zoning

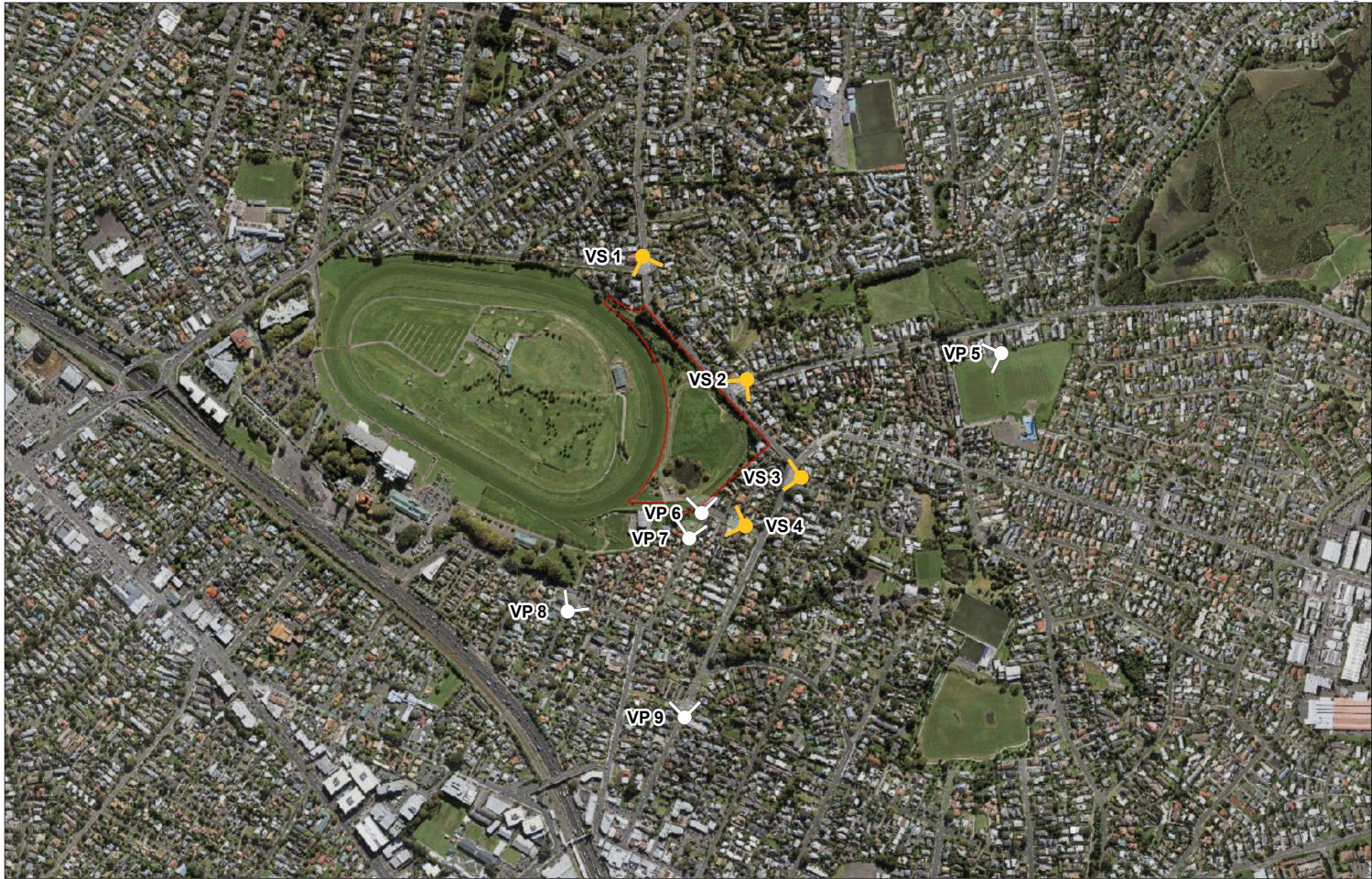
Stonefields

Single House Residential Mixed Housing Suburban Mixed Housing Urban Terrace Housing & Apartments Conservation Informal Recreation Sport & Active Recreation Open Space - Civic Spaces Zone **Open Space - Community** Metropolitan Centre Zone Business - Town Centre Zone Local Centre Zone Neighbourhood Centre Mixed Use Zone General Business Zone Business Park Zone Heavy Industry Zone Light Industry Zone Strategic Transport Corridor Special Purpose School Zone (16m) General Coastal Marine **Coastal Transition Zone** Water

w zealano

THE HILL ELLERSLIE Auckland Unitary Plan

Date: 27 October 2021 | Revision: 0 Plan prepared for Fletcher Residential Ltd by Boffa Miskell Limited Project Manager: Rachel.deLambert@boffamiskell.co.nz | Drawn: HWi | Checked: JWi



Boffa Miskell 🥒 www.boffamiskell.co.nz

This plan has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.



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

Projection: NZGD 2000 New Zealand Transverse Mercator

Viewpoint Visual Simulation Site Boundary

LEGEND

THE HILL ELLERSLIE **Viewpoint Locations** Date: 04 November 2021 | Revision: 1 Plan prepared by Boffa Miskell Limited Project Manager: Rachel.deLambert@boffamiskell.co.nz | Drawn: HCo | Checked: JMa







NZTM Easting : 1761229 mE NZTM Northing : 5916211 mN Elevation/Eye Height : 59.8m / 1.6m Date of Photography :1:54pm 10 June 2021 NZST

≧

Horizontal Field of View : 90° Vertical Field of View : 30° Projection Image Reading Distance @ A3 is 20 cm

: Rectilinear

Data Sources: BML - photography / RTK GNSS; AC; WAM - 9723 The Hill - Model_01.max; 961_ PBA_The Hill Apartments - For Boffa Miskell_220429.rvt; BDA -The Hill_3D Site.fbx

Existing View

Proposed View

THE HILL ELLERSLIE

View from Ladies Mile looking South

Date: 8 July 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi VS 1A





NZTM Easting : 1761229 mE NZTM Northing : 5916211 mN പ് Elevation/Eye Height : 59.8m / 1.6m Date of Photography :1:54pm 10 June 2021 NZST

Data Sources: BML - photography

Vie

Horizontal Field of View : 40° Vertical Field of View : 25° Projection : Rectilinear Image Reading Distance @ A3 is 50 cm

Existing View

THE HILL ELLERSLIE View from Ladies Mile looking South

Date: 8 July 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi VS 1B





NZTM Easting : 1761229 mE NZTM Northing : 5916211 mN Elevation/Eye Height : 59.8m / 1.6m Date of Photography :1:54pm 10 June 2021 NZST

ď

≧

Horizontal Field of View : 40° Vertical Field of View : 25° Projection : Rectilinear Image Reading Distance @ A3 is 50 cm

Data Sources: BML - photography / RTK GNSS; AC; WAM - 9723 The Hill - Model_01.max; 961_ PBA_The Hill Apartments - For Boffa Miskell_220429.rvt; BDA -The Hill_3D Site.fbx

Proposed View

THE HILL ELLERSLIE View from Ladies Mile looking South

Date: 8 July 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi VS 1C







NZTM Easting : 1761454 mE NZTM Northing : 5915944 mN Elevation/Eye Height :53.5m / 1.6m Date of Photography : 12:40pm 10 June 2021 NZST

≧

Horizontal Field of View : 90° Vertical Field of View : 30° Projection : Rectilinear Image Reading Distance @ A3 is 20 cm

View from Abbots Way looking South-West

Data Sources: BML - photography / RTK GNSS; AC; WAM - 9723 The Hill - Model_01.max; 961_ PBA_The Hill Apartments - For Boffa Miskell_220429.rvt; BDA -The Hill_3D Site.fbx

Existing View

Proposed View

THE HILL ELLERSLIE

Date: 8 July 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi VS 2A





NZTM Easting : 1761454 mE NZTM Northing : 5915944 mN Elevation/Eye Height :53.5m / 1.6m Date of Photography :12:40pm 10 June 2021 NZST

Data Sources: BML - photography

Vie

 Horizontal Field of View
 : 40°

 Vertical Field of View
 : 25°

 Projection
 : Rectilinear

 Image Reading Distance @ A3 is 50 cm

View from Abbots Way looking South-West

 Date: 8 July 2022 Revision: 1

 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited

 Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

Existing View

THE HILL ELLERSLIE

VS 2B



Boffa Miskell

This plan has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.

NZTM Easting : 1761454 mE NZTM Northing : 5915944 mN Elevation/Eye Height :53.5m / 1.6m Date of Photography :12:40pm 10 June 2021 NZST

≧

Horizontal Field of View: 40°Vertical Field of View: 25°Projection: RectilinearImage Reading Distance @ A3 is 50 cm

View from Abbots Way looking South-West

 Date: 8 July 2022 Revision: 1

 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited

 Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

Data Sources: BML - photography / RTK GNSS; AC; WAM - 9723 The Hill - Model_01.max; 961_ PBA_The Hill Apartments - For Boffa Miskell_220429.rvt; BDA -The Hill_3D Site.fbx

Proposed View

THE HILL ELLERSLIE

VS 2C







NZTM Easting : 1761572 mE NZTM Northing : 5915732 mN Elevation/Eye Height :49.1m / 1.6m Date of Photography :10:56am 10 June 2021 NZST

≧

Horizontal Field of View : 90° Vertical Field of View : 30° Projection : Rectilinear Image Reading Distance @ A3 is 20 cm

Date: 8 July 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

Data Sources: BML - photography / RTK GNSS; AC; WAM - 9723 The Hill - Model_01.max; 961_ PBA_The Hill Apartments - For Boffa Miskell_220429.rvt; BDA -The Hill_3D Site.fbx

Existing View

Proposed View

THE HILL ELLERSLIE

View from Umere Crescent looking North-West







NZTM Easting : 1761572 mE NZTM Northing : 5915732 mN Elevation/Eye Height :49.1m / 1.6m Date of Photography :10:56am 10 June 2021 NZST

Data Sources: BML - photography

<u>Vie</u>

 Horizontal Field of View
 : 40°

 Vertical Field of View
 : 25°

 Projection
 : Rectilinear

 Image Reading Distance @ A3 is 50 cm

THE HILL ELLERSLIE View from Umere Crescent looking North-West

 Date: 8 July 2022 Revision: 1

 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited

 Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

Existing View

VS 3B



Boffa Miskell www.boffamiskell.co.nz

This plan has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source. information provided by the Client or any external source.

NZTM Easting : 1761572 mE NZTM Northing : 5915732 mN മ് Elevation/Eye Height :49.1m / 1.6m Date of Photography :10:56am 10 June 2021 NZST

≤ïe

Horizontal Field of View : 40° Vertical Field of View : 25° Projection : Rectilinear Image Reading Distance @ A3 is 50 cm

Data Sources: BML - photography / RTK GNSS; AC; WAM - 9723 The Hill - Model_01.max; 961_ PBA_The Hill Apartments - For Boffa Miskell_220429.rvt; BDA -The Hill_3D Site.fbx

Proposed View

THE HILL ELLERSLIE View from Umere Crescent looking North-West

Date: 8 July 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi VS 3C







NZTM Easting : 1761455 mE NZTM Northing : 5915620 mN Elevation/Eye Height :41.6m / 1.6m Date of Photography :1:45pm 2 November 2021 NZDT

≧

Horizontal Field of View: 90°Vertical Field of View: 30°Projection: RectilinearImage Reading Distance @ A3 is 20 cm

View from Derby Downs Place looking North-West

Data Sources: BML - photography / RTK GNSS; AC; WAM - 9723 The Hill - Model_01.max; 961_ PBA_The Hill Apartments - For Boffa Miskell_220429.rvt; BDA -The Hill_3D Site.fbx
 Date: 8 July 2022 Revision: 1

 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited

 Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

Existing View

Proposed View

THE HILL ELLERSLIE





NZTM Easting : 1761455 mE NZTM Northing : 5915620 mN ď Elevation/Eye Height :41.6m / 1.6m Date of Photography : 1:45pm 2 November 2021 NZDT

<u>Vie</u>

Data Sources: BML - photography

Horizontal Field of View : 40° Vertical Field of View : 25° Projection : Rectilinear Image Reading Distance @ A3 is 50 cm

View from Derby Downs Place looking North-West

THE HILL ELLERSLIE

Date: 8 July 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi VS 4B



Boffa Miskell www.boffamiskell.co.nz

This plan has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.

NZTM Easting : 1761455 mE NZTM Northing : 5915620 mN ď Elevation/Eye Height :41.6m / 1.6m Date of Photography :1:45pm 2 November 2021 NZDT

≤ïe

Horizontal Field of View : 40° Vertical Field of View : 25° Projection : Rectilinear Image Reading Distance @ A3 is 50 cm

View from Derby Downs Place looking North-West

Data Sources: BML - photography / RTK GNSS; AC; WAM - 9723 The Hill - Model_01.max; 961_ PBA_The Hill Apartments - For Boffa Miskell_220429.rvt; BDA -The Hill_3D Site.fbx

THE HILL ELLERSLIE

Date: 8 July 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi VS 4C



Boffa Miskell 🥒 www.boffamiskell.co.nz

Date of Photography : 2:38pm 10 June 2021 NZST

Horizontal Field of View : 40° Vertical Field of View : 25° Projection : Rectilinear Image Reading Distance @ A3 is 50 cm

Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

Data Sources: BML - photography

<u>s</u>

De

<u>Vie</u>

Existing View

THE HILL ELLERSLIE

View from Liston Park looking South-West Date: 27 May 2022 Revision: 1



Boffa Miskell www.boffamiskell.co.nz

Date of Photography : 3:43pm 10 June 2021 NZST <u>s</u>

Horizontal Field of View : 90° Vertical Field of View : 30° Projection : Rectilinear Image Reading Distance @ A3 is 20 cm

View from Derby Downs looking North-East

Data Sources: BML - photography

å

Vie

Existing View

THE HILL ELLERSLIE

Date: 04 November 2021 Revision: 0 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi





Date of Photography : 3:16pm 10 June 2021 NZST

Horizontal Field of View: 40°Vertical Field of View: 25°Projection: RectilinearImage Reading Distance: A3 is 50 cm

THE HILL ELLERSLIE View from Lonsdale Street looking North-East

Date: 27 May 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

Data Sources: BML - photography

<u>s</u>

ő

Ś

Existing View



Boffa Miskell

This plan has been prepared by Boffa Miskell Limited on the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work. Any use or reliance by a third party is at that party's own risk. Where information has been supplied by the Client or obtained from other external sources, it has been assumed that it is accurate. No liability or responsibility is accepted by Boffa Miskell Limited for any errors or omissions to the extent that they arise from inaccurate information provided by the Client or any external source.

Date of Photography :4:12pm 10 June 2021 NZST

Horizontal Field of View: 40°Vertical Field of View: 25°Projection: RectilinearImage Reading Distance@ A3 is 50 cm

THE HILL ELLERSLIE View from Somerfield Street looking North-East

Date: 27 May 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

Data Sources: BML - photography

<u>s</u>

പ്

Ś

Proposed View



Boffa Miskell www.boffamiskell.co.nz

Date of Photography :4:41pm 10 June 2021 NZST

Horizontal Field of View : 40° Vertical Field of View : 25° Projection : Rectilinear Image Reading Distance @ A3 is 50 cm

THE HILL ELLERSLIE View from Ladies Mile looking North-East

Data Sources: BML - photography

<u>s</u>

å

Vie

Proposed View

Date: 27 May 2022 Revision: 1 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: RGo | Checked: JWi

VISUAL SIMULATIONS - METHODOLOGY

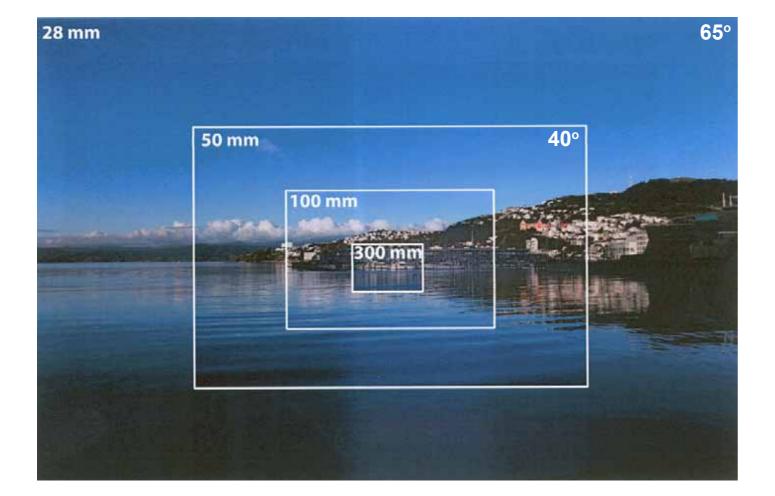
SITE VISIT & PHOTOGRAPHY

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 using an EMLID Reach2 GPS Rover unit.

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.

Camera lenses of different focal lengths capture images with differing fields of view. To understand how illusions are created by different lens sizes, one must understand depth of field and how "depth of field" and "field of view" are related. As can be seen below (derived from Fig 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 image size can also be achieved by taking multiple 50mm photos in "portrait" mode, and using digital stitching software to merge and crop to 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.

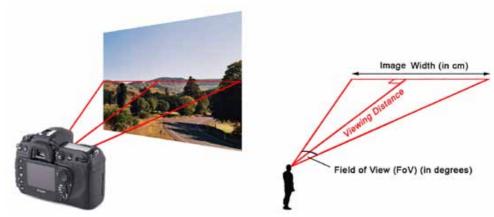
RECOMMENDED IMAGE READING DISTANCE

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

For convenience, Boffa Miskell has adopted image reading distances of 20cm, 30cm and 50cm.

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



Geometry of Image Reading Distance



This plan has been prepared by Boffa Miskell Limited o the specific instructions of our Client. It is solely for our Client's use in accordance with the agreed scope of work Any use or reliance by a third party is at that party's ow risk. Where information has been supplied by the Client ned from other external sources, it has beer assumed that it is accurate. No liability or responsibility accepted by Boffa Miskell Limited for any errors of missions to the extent that they arise from inaccurate information provided by the Client or any external source



THE HILL ELLERSLIE

Methodology

Date: 21 October 2021 Revision: 0 Plan prepared for Fletcher Residential Limited by Boffa Miskell Limited Project Manager: rachel.delambert@boffamiskell.co.nz | Drawn: JMy | Checked: JWi

Boffa Miskell is a leading New Zealand professional services consultancy with offices in Auckland, Hamilton, Tauranga, Wellington, Christchurch, Dunedin and Queenstown. We work with a wide range of local and international private and public sector clients in the areas of planning, urban design, landscape architecture, landscape planning, ecology, biosecurity, cultural heritage, graphics and mapping. Over the past four decades we have built a reputation for professionalism, innovation and excellence. During this time we have been associated with a significant number of projects that have shaped New Zealand's environment.

Auckland	Hamilton	Tauranga	Wellin
09 358 2526	07 960 0006	07 571 5511	04 38

About Boffa Miskell

www.boffamiskell.co.nz

ington

Christchurch 85 9315 03 366 8891

Queenstown 03 441 1670

Dunedin 03 470 0460