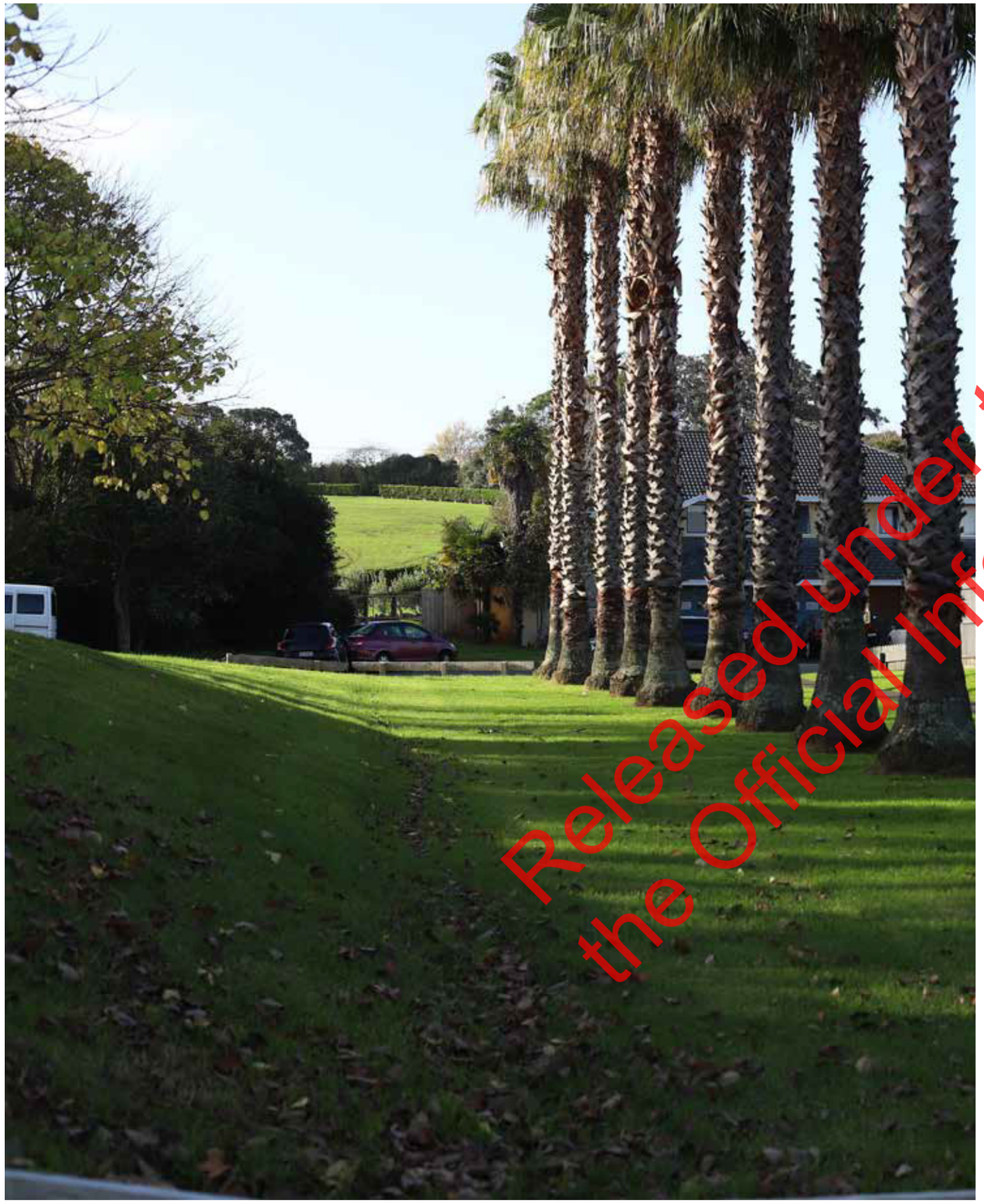
Boffa Miskell

THE HILL, ELLERSLIE

GRAPHIC SUPPLEMENT

NOVEMBER 2021

The Hill, Ellerslie



Contents

File Ref: BM210194_001_A3L_Wider_Site_Context.mxd

Boffa Miskell

www.boffamiskell.co.nz

0 600 m

1:20,000 @ A3

Data Sources:
Auckland Council, & LINZ

Projection: NZGD 2000 New Zealand Transverse Mercator

LEGEND

- Site Boundary
- 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

Figure 1

File Ref: BM210194_002_A3L_Site_Context.mxd

Boffa Miskell

www.boffamiskell.co.nz

0 200 m

1:7,500 @ A3

Data Sources:
Auckland Council, & LINZ

Projection: NZGD 2000 New Zealand Transverse Mercator

LEGEND

- Site Boundary
- Public Open Space
- Highways
- Train Stations
- Railway Tracks

THE HILL ELLERSLIE

Site Context

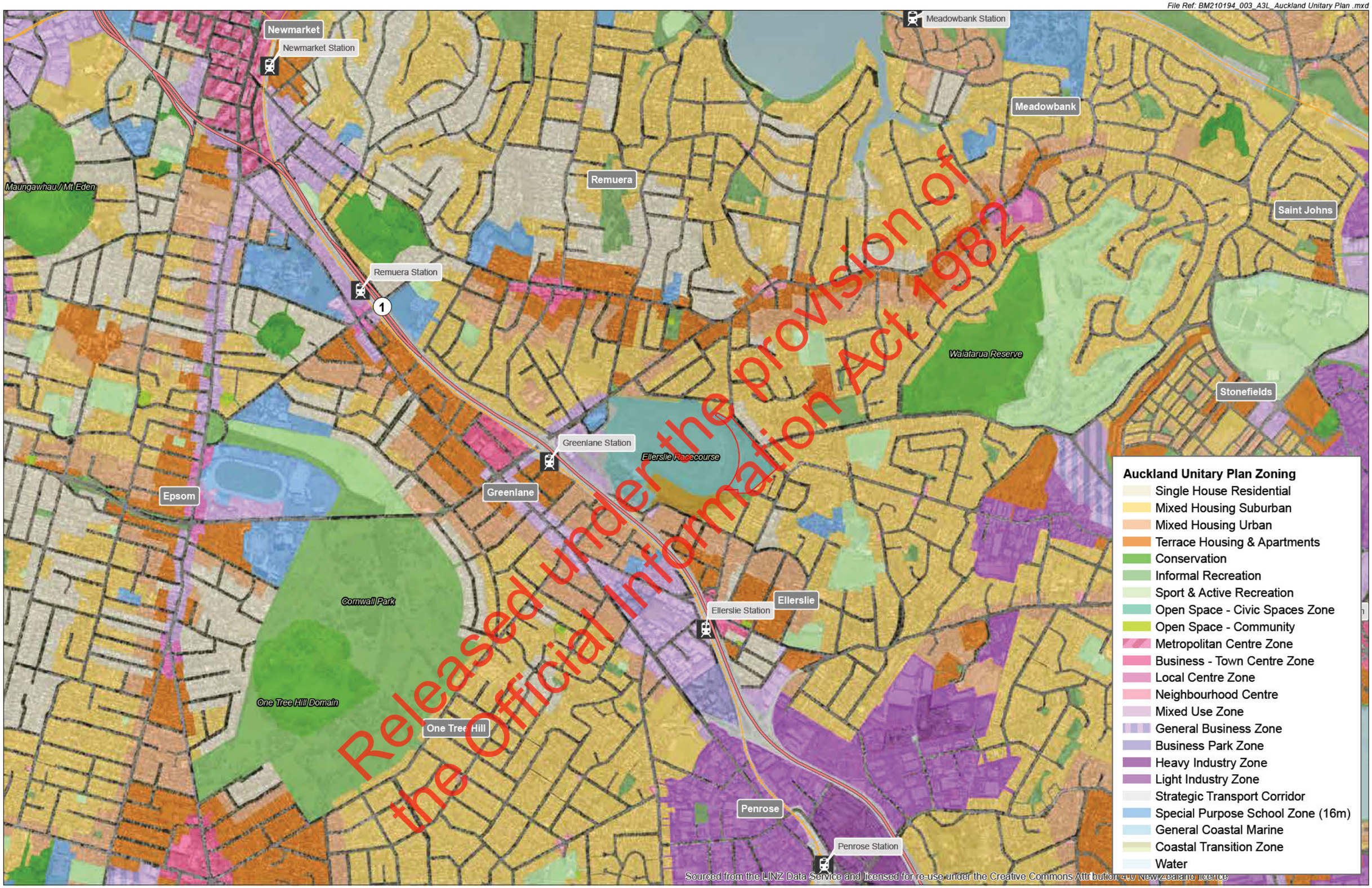
Date: 27 October 2021 | Revision: 0

Plan prepared for Fletcher Residential Ltd by Boffa Miskell Limited

Project Manager: Rachel.deLambert@boffamiskell.co.nz | Drawn: HWi | Checked: JWi

Figure 2

File Ref: BM210194_003_A3L_Auckland Unitary Plan .mxd



Boffa Miskell

www.boffamiskell.co.nz

0 600 m

1:20,000 @ A3

Data Sources:
Auckland Council, & L NZ

Projection: NZGD 2000 New Zealand Transverse Mercator

LEGEND

Site Boundary
Highways
Train Stations
Railway Tracks

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

Figure 3

Boffa Miskell

www.boffamiskell.co.nz

0 200 m
1:7,500 @ A3

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

Projection: NZGD 2000 New Zealand Transverse Mercator

LEGEND

- Viewpoint
- Visual Simulation
- Site Boundary

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

Figure 4

Existing View

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761229 mE	Horizontal Field of View	: 90°
NZTM Northing	: 5916211 mN	Vertical Field of View	: 30°
Elevation/Eye Height	: 59.8m / 1.6m	Projection	: Rectilinear
Date of Photography	: 1 54pm 10 June 2021 NZST	Image Reading Distance @ A3 is 20 cm	

Data Sources: BML - photography / RTK GNSS, AC, Brewer_Davidson: 2021-10-20_The Hill v5_3D Model.skp

THE HILL ELLERSLIE

View from Ladies Mile looking South

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

VS 1A

Existing View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

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

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Ladies Mile looking South

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

VS 1B

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761229 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5916211 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 59.8m / 1.6m	Projection	: NA
Date of Photography	: 1 54pm 10 June 2021 NZST	Image Reading Distance @ A3 is 50 cm	

Data Sources: BML - photography / RTK GNSS, AC, Brewer_Davidson: 2021-10-20_The Hill v5_3D Model.skp

THE HILL ELLERSLIE

View from Ladies Mile looking South

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

VS 1C

Existing View

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761454 mE	Horizontal Field of View	: 90°
NZTM Northing	: 5915944 mN	Vertical Field of View	: 30°
Elevation/Eye Height	: 53.5m / 1.6m	Projection	: Rectilinear
Date of Photography	: 12:40pm 10 June 2021 NZST	Image Reading Distance @ A3 is 20 cm	

Data Sources: BML - photography / RTK GNSS, AC, Brewer_Davidson: 2021-10-20_The Hill v5_3D Model.skp

THE HILL ELLERSLIE

View from Abbots Way looking South-West

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

VS 2A

Existing View

Boffa Miskell
www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761454 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5915944 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 53.5m / 1.6m	Projection	: NA
Date of Photography	: 12:40pm 10 June 2021 NZST	Image Reading Distance @ A3 is	50 cm

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Abbots Way looking South-West

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

VS 2B

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761454 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5915944 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 53.5m / 1.6m	Projection	: NA
Date of Photography	: 12:40pm 10 June 2021 NZST	Image Reading Distance @ A3 is 50 cm	

Data Sources: BML - photography / RTK GNSS, AC, Brewer_Davidson: 2021-10-20_The Hill v5_3D Model.skp

THE HILL ELLERSLIE

View from Abbots Way looking South-West

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

VS 2C

Existing View

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761572 mE	Horizontal Field of View	: 90°
NZTM Northing	: 5915732 mN	Vertical Field of View	: 30°
Elevation/Eye Height	: 49.1m / 1.6m	Projection	: Rectilinear
Date of Photography	: 10:56am 10 June 2021 NZST	Image Reading Distance @ A3 is 20 cm	

Data Sources: BML - photography / RTK GNSS, AC, Brewer_Davidson: 2021-10-20_The Hill v5_3D Model.skp

THE HILL ELLERSLIE

View from Umere Crescent looking North-West

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

VS 3A

Existing View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761572 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5915732 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 49.1m / 1.6m	Projection	: NA
Date of Photography	: 10:56am 10 June 2021 NZST	Image Reading Distance @ A3 is 50 cm	

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Umere Crescent looking North-West

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

VS 3B

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761572 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5915732 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 49.1m / 1.6m	Projection	: NA
Date of Photography	: 10:56am 10 June 2021 NZST	Image Reading Distance @ A3 is 50 cm	

Data Sources: BML - photography / RTK GNSS, AC, Brewer_Davidson: 2021-10-20_The Hill v5_3D Model.skp

THE HILL ELLERSLIE

View from Umere Crescent looking North-West

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

VS 3C

Existing View

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761455 mE	Horizontal Field of View	: 90°
NZTM Northing	: 5915620 mN	Vertical Field of View	: 30°
Elevation/Eye Height	: 41.6m / 1.6m	Projection	: Rectilinear
Date of Photography	: 1:45pm 2 November 2021 NZDT	Image Reading Distance @ A3 is 20 cm	

Data Sources: BML - photography / RTK GNSS, AC, Brewer_Davidson: 2021-10-20_The Hill v5_3D Model.skp

THE HILL ELLERSLIE

View from Derby Downs Place looking North-West

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

VS 4A

Existing View

Boffa Miskell
www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761455 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5915620 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 41.6m / 1.6m	Projection	: NA
Date of Photography	: 1:45pm 2 November 2021 NZDT	Image Reading Distance @ A3 is 50 cm	

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Derby Downs Place looking North-West

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

VS 4B

Proposed View

Boffa Miskell
www.boffamiskell.co.nz

Viewpoint Details

NZTM Easting	: 1761455 mE	Horizontal Field of View	: 40°
NZTM Northing	: 5915620 mN	Vertical Field of View	: 25°
Elevation/Eye Height	: 41.6m / 1.6m	Projection	: NA
Date of Photography	: 1:45pm 2 November 2021 NZDT	Image Reading Distance @ A3 is 50 cm	

Data Sources: BML - photography / RTK GNSS, AC, Brewer_Davidson: 2021-10-20_The Hill v5_3D Model.skp

THE HILL ELLERSLIE

View from Derby Downs Place looking North-West

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

VS 4C

Existing View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

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

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

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Liston Park looking South-West

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

VP 5

Existing View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

Date of Photography : 3:43pm 10 June 2021 NZST

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

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Derby Downs looking North-East

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

VP 6

Existing View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

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

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

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Lonsdale Street looking North-East

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

VP 7

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

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

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

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Somerfield Street looking North-East

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

VP 8

Proposed View

Boffa Miskell

www.boffamiskell.co.nz

Viewpoint Details

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

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

Data Sources: BML - photography

THE HILL ELLERSLIE

View from Ladies Mile looking North-East

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

VP 9

VISUAL SIMULATIONS - METHODOLOGY

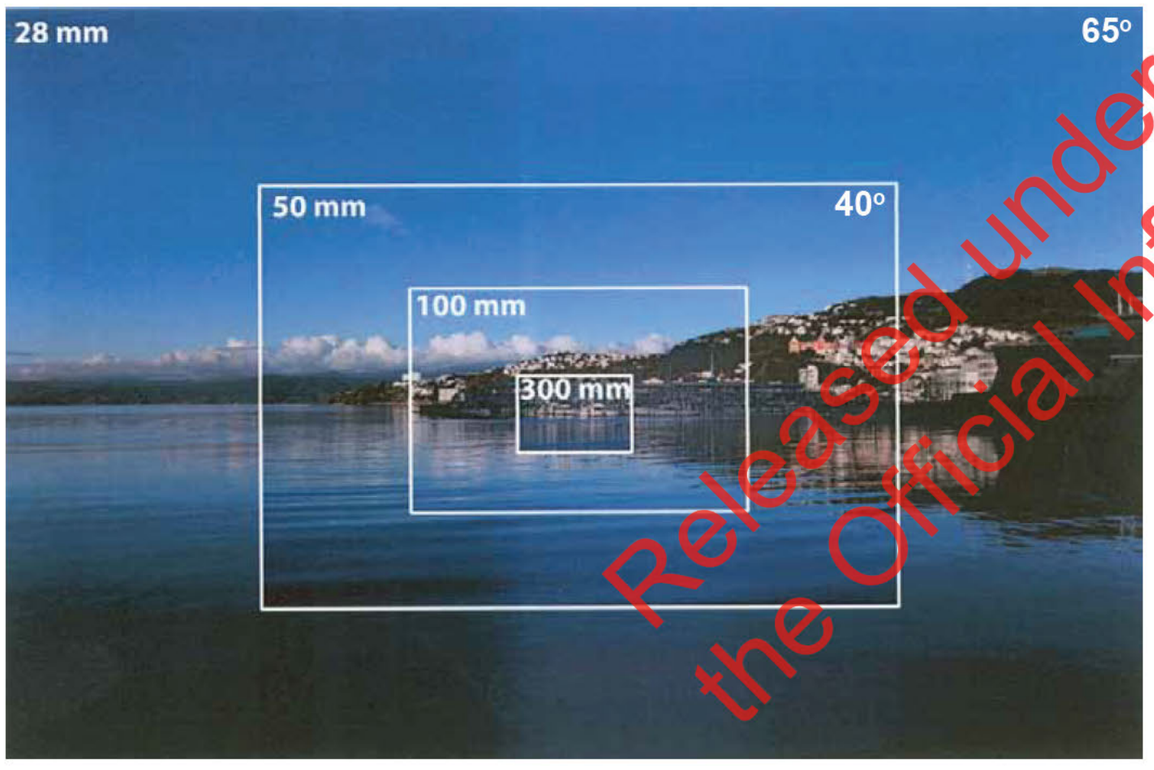
SITE VISIT & PHOTOGRAPHY

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 65º - using a 50mm lens will provide a "cropped" (40º) 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 65º or 40º.



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.

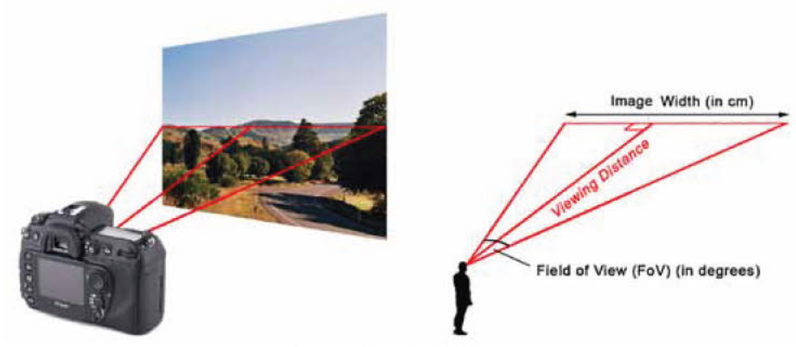
RECOMMENDED IMAGE READING DISTANCE

Views which have a field of view of 90º should be viewed from a distance of 20 cm when printed at A3
Views which have a field of view of 65º should be viewed from a distance of 31.5cm when printed at A3
Views which have a field of view of 40º 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]
28mm	65°	A4	277mm W x 185mm H	215mm
		A3	400mm W x 267mm H	315mm
		A2	574mm W x 383mm H	450mm
50mm	40°	A4	277mm W x 185mm H	380mm
		A3	400mm W x 267mm H	550mm
		A2	574mm W x 383mm H	790mm



Geometry of Image Reading Distance

About Boffa Miskell

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.

---

www.boffamiskell.co.nz

Auckland	Hamilton	Tauranga	Wellington	Christchurch	Queenstown	Dunedin
09 358 2526	07 960 0006	07 571 5511	04 385 9315	03 366 8891	03 441 1670	03 470 0460