



Visual Simulation for

G & S Stillwell

98C Ohiwa Harbour Road,
Opotiki, Bay of Plenty

Drawing Number:	Drawing Description:	Drawing Issue Date:	Drawing Number:	Drawing Description:	Drawing Issue Date:
J001233/01	- Methodology	28/07/22	J001233/11	- Viewpoint 06 - 5 Years	28/07/22
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J001233/03	- Building Locations	28/07/22	J001233/13	- Viewpoint 06 - 5 Years Close Up	28/07/22
J001233/04	- Viewpoint 04 - Existing	28/07/22	J001233/14	- Viewpoint 10 - Existing	28/07/22
J001233/05	- Viewpoint 04 - Proposed Buildings	28/07/22	J001233/15	- Viewpoint 10 - Proposed Buildings	28/07/22
J001233/06	- Viewpoint 04 - 5 Years	28/07/22	J001233/16	- Viewpoint 10 - 5 Years	28/07/22
J001233/07	- Viewpoint 04 - Proposed Buildings Close Up	28/07/22	J001233/17	- Viewpoint 10 - Proposed Buildings Close Up	28/07/22
J001233/08	- Viewpoint 04 - 5 Years Close Up	28/07/22	J001233/18	- Viewpoint 10 - 5 Years Close Up	28/07/22
J001233/09	- Viewpoint 06 - Existing	28/07/22	J001233/19	- Viewpoint 04 - Building Overlay	28/07/22
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Methodology for Photo Simulations

The photomontage images have been produced by Greenwood Associates Landscape Architects and are based on the following factors:

- The camera field of view with a 55mm lens for Viewpoints 04/06 and 35mm lens for Viewpoint 10.
- The camera position in a 3D space located at the following positions (X,Y WKID 2193) for the respective viewpoints:
 - Viewpoint 4: 1967234.68922, 5785539.6539
 - Viewpoint 6: 1963815.76759, 5785911.30597
 - Viewpoint 10: 1965867.72670, 5787147.10156

All coordinates were obtained on site and inputed as datum reference points within Archicad to determine each camera location. (Viewpoints 4 & 6 match those in the corresponding LVA document)

The camera used to obtain the images utilised for these simulations was a Nikon D5100 with a fixed lens focal length of 55mm and a Sony M7 MK 2 with a fixed focal length of 35mm.

The images were then input into 3D modelling software (ArchiCAD) to determine the correct camera settings for the model renders.

The camera positions are set as per the obtained coordinates listed above (refer drawing J001233/2 'viewpoint locations' for a viewpoint location map). These positions and approximate camera angles were then translated into a 3D scene in the modelling software. The chosen positions highlight the key areas that will have visual access to the proposed development.

The scene was cross-referenced by using ArchiCad and contours to export an accurate scaled 3D model. To place the model in context, a map of site is placed within the 3D software to allow an accurate positioning of the terrain and building models.

Individual renders of the 3D model were then created from all relevant camera positions and angles, The camera was positioned 1.80m above sea level for Viewpoint 4, 2.80m above sea level for Viewpoint 6 and 101.80m above sea level for Viewpoint 10, this includes the eye level height of the photographer. The 3D renders were then overlaid onto the original images using Photoshop with any part of the render not required then deleted.

Note: All visualisations are to be viewed at 550mm from the eye when printed on A3 standard paper.

All coordinates given in this document are WKID 2193.

All buildings modelled are 10x10m, lots 10-12 are single storey at 5m high and lots 1-7 are two-storeys at 8m high. They are positioned near the northwestern corner of each building platform.

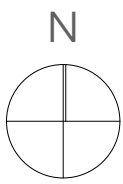
All specimen trees shown are 2-3m tall at time of planting, reaching up to 5m high over a 5 year period as indicated in the landscape plans.

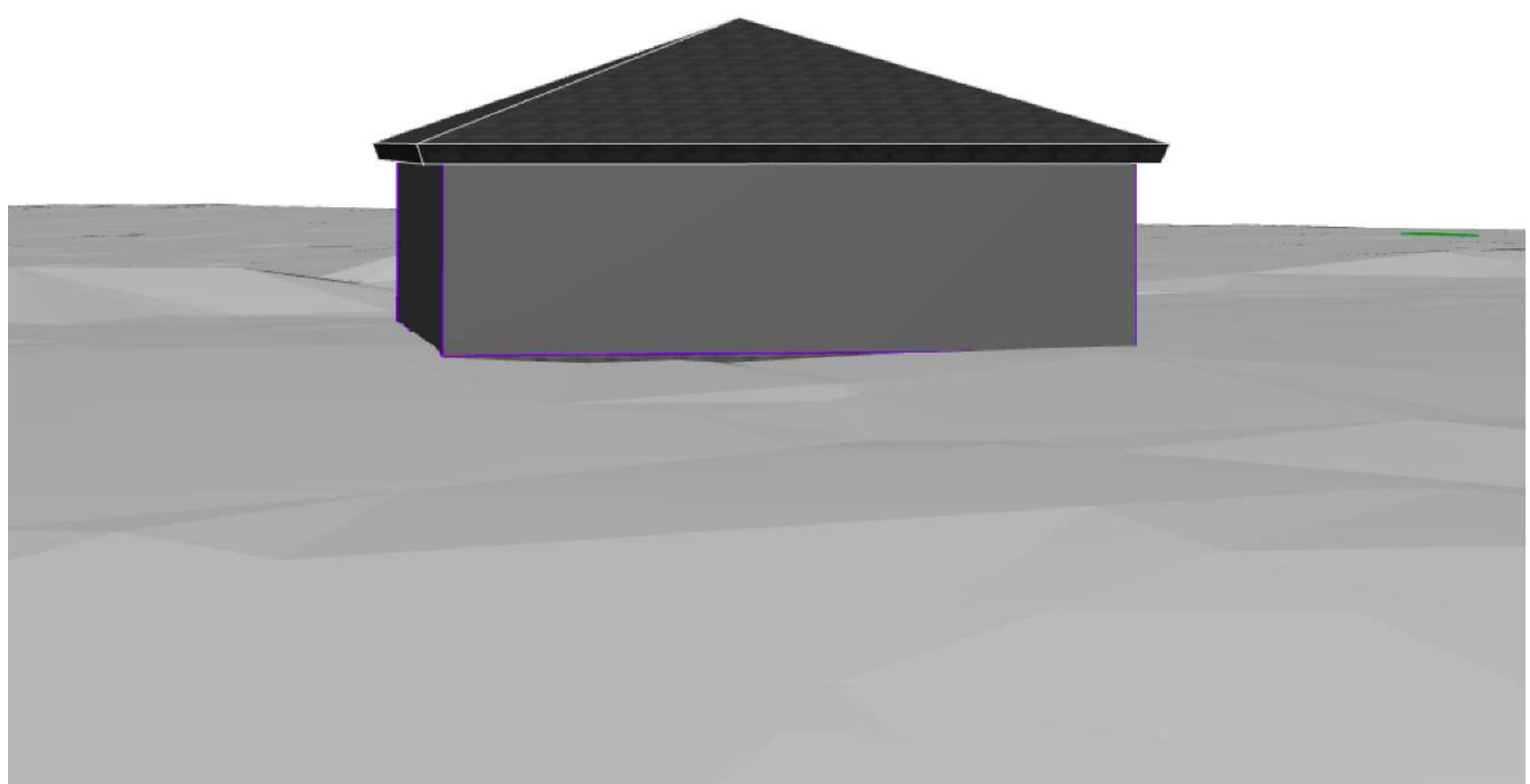


Viewpoint 10
X: 1965867.72670
Y: 5787147.10156
Elevation: +101.80m

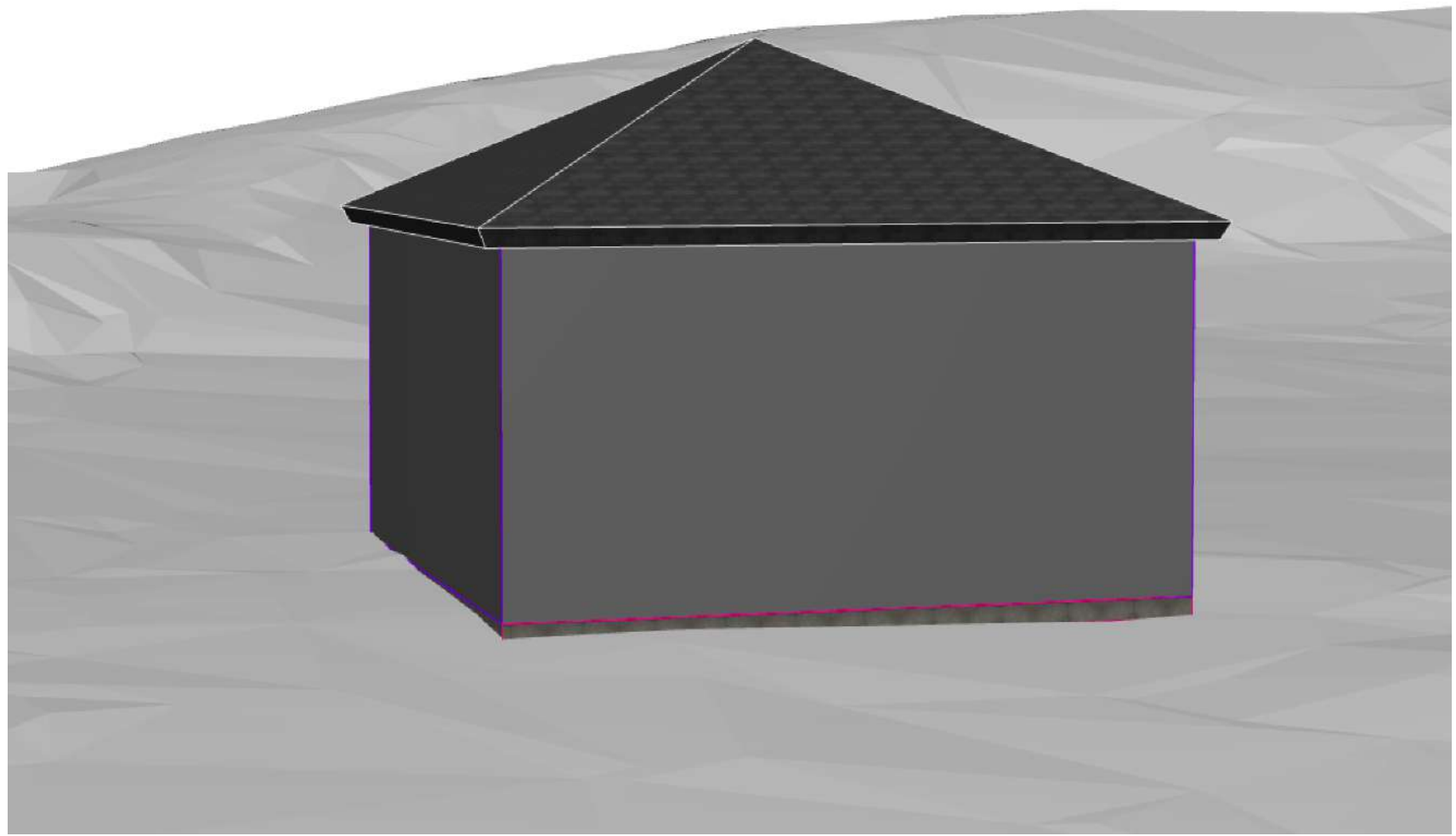
Viewpoint 6
X: 1963815.76759
Y: 5785911.30597
Elevation: +1.80m

Viewpoint 4
X: 1967234.68922
Y: 5785539.6539
Elevation: +2.80m





BUILDING MODEL: 1 STOREY HOUSE - LOTS 10/11/12



BUILDING MODEL: 2 STOREY HOUSE - LOTS 1/2/3/4/6/7

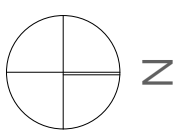




Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 800m
- Co-ordinates WKID 2193: X:1967234.68922 Y:5785539.6539
- Elevation: +2.80m
- Image date: 17 February 2022

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/04 Viewpoint 04 - Existing

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 800m
- Co-ordinates WKID 2193: X:1967234.68922 Y:5785539.6539
- Elevation: +2.80m
- Image date: 17 February 2022

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/05 Viewpoint 04 – Proposed Buildings

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 800m
- Co-ordinates WKID 2193: X:1967234.68922 Y:5785539.6539
- Elevation: +2.80m
- Image date: 17 February 2022

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/06 Viewpoint 04 – 5 Years

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 800m
- Co-ordinates WKID 2193: X:1967234.68922 Y:5785539.6539
- Elevation: +2.80m
- Image date: 17 February 2022

- Photo has been zoomed x2 to adequately show building models



Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3

- Distance to site: Approx. 800m

- Co-ordinates WKID 2193: X:1967234.68922 Y:5785539.6539

- Elevation: +2.80m

- Image date: 17 February 2022

- Photo has been zoomed x2 to adequately show building models

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/08 Viewpoint 04 – 5 Year Close Up

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 2430m
- Co-ordinates WKID 2193: X:1963815.76759 Y:5785911.30597
- Elevation: +1.80m
- Image date: 17 February 2022

Client

G & S Stillwell

Project

98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing

J001233/09 Viewpoint 06 – Existing

Issue Date

28/07/22

Drawn

GR

Checked

CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 2430m
- Co-ordinates WKID 2193: X:1963815.76759 Y:5785911.30597
- Elevation: +1.80m
- Image date: 17 February 2022

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/10 Viewpoint 06 – Proposed Buildings

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Nikon D5100

- Sensor: CMOS 23.6x15.6mm

- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length

- Printed Image Size: 400x267mm @ A3

- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3

- Distance to site: Approx. 2430m

- Co-ordinates WKID 2193: X:1963815.76759 Y:5785911.30597

- Elevation: +1.80m

- Image date: 17 February 2022

Client

G & S Stillwell

Project

98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing

J001233/11 Viewpoint 06 – 5 Years

Issue Date

28/07/22

Drawn

GR

Checked

CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 2430m
- Co-ordinates WKID 2193: X:1963815.76759 Y:5785911.30597
- Elevation: +1.80m
- Image date: 17 February 2022

- Photo has been zoomed x2 to adequately show building models

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/12 Viewpoint 06 – Proposed Buildings Close Up

Issue Date
28/07/22
Issue
RC-R02

Drawn
GR
Checked
CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 2430m
- Co-ordinates WKID 2193: X:1963815.76759 Y:5785911.30597
- Elevation: +1.80m
- Image date: 17 February 2022

- Photo has been zoomed x2 to adequately show building models

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/13 Viewpoint 06 – 5 Year Close Up

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Sony A7 MK 2

- Lens: Locked at 35mm Length

- Printed Image Size: 400x267mm @ A3

- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 330mm from eye at A3

- Distance to site: Approx. 1400m

- Co-ordinates WKID 2193: X:1965867.72670 Y:5787147.10156

- Elevation: +101.80m

- Image date: 18 July 2022

Client

G & S Stillwell

Project

98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing

J001233/14 Viewpoint 10 – Existing

Issue Date

28/07/22

Drawn

GR

Checked

CC





Image Specifications

- Camera: Sony A7 MK 2
- Lens: Locked at 35mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 330mm from eye at A3
- Distance to site: Approx. 1400m
- Co-ordinates WKID 2193: X:1965867.72670 Y:5787147.10156
- Elevation: +101.80m
- Image date: 18 July 2022

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/15 Viewpoint 10 – Proposed Buildings

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Sony A7 MK 2
- Lens: Locked at 35mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 330mm from eye at A3
- Distance to site: Approx. 1400m
- Co-ordinates WKID 2193: X:1965867.72670 Y:5787147.10156
- Elevation: +101.80m
- Image date: 18 July 2022

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/16 Viewpoint 10 – 5 Years

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Sony A7 MK 2
- Lens: Locked at 35mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 330mm from eye at A3

- Distance to site: Approx. 1400m

- Co-ordinates WKID 2193: X:1965867.72670 Y:5787147.10156

- Elevation: +101.80m

- Image date: 18 July 2022

- Photo has been zoomed x2 to adequately show building models

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/17 Viewpoint 10 – Proposed Buildings Close Up

Issue Date
28/07/22
Issue
RC-R02

Drawn
GR
Checked
CC





Image Specifications

- Camera: Sony A7 MK 2
- Lens: Locked at 35mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 330mm from eye at A3

- Distance to site: Approx. 1400m

- Co-ordinates WKID 2193: X:1965867.72670 Y:5787147.10156

- Elevation: +101.80m

- Image date: 18 July 2022

- Photo has been zoomed x2 to adequately show building models

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/18 Viewpoint 10 – 5 Year Close Up

Issue Date
28/07/22
Issue
RC-R02

Drawn
GR
Checked
CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
- Simulation Technique: Photomontage produced in Photoshop using scale model rendered in ArchiCad

- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 800m
- Co-ordinates WKID 2193: X:1967234.68922 Y:5785539.6539
- Elevation: +2.80m
- Image date: 17 February 2022

- Terrain model was developed from contours taken from LINZ.

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/19 Viewpoint 04 – Building Overlay

Issue Date
28/07/22

Drawn
GR
Checked
CC





Image Specifications

- Camera: Nikon D5100
- Sensor: CMOS 23.6x15.6mm
- Lens: AF-S NIKKON 18-55mm 1:3.5-5.6G Locked at 55mm Length
- Printed Image Size: 400x267mm @ A3
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- Image Viewing Distance 550mm from eye at A3
- Distance to site: Approx. 2430m
- Co-ordinates WKID 2193: X:1963815.76759 Y:5785911.30597
- Elevation: +1.80m
- Image date: 17 February 2022

- Terrain model was developed from contours taken from LINZ

Client
G & S Stillwell

Project
98C Ohiwa Harbour Road, Opotiki, Bay of Plenty

Drawing
J001233/20 Viewpoint 06 – Building Overlay

Issue Date
28/07/22

Drawn
GR
Checked
CC

