Nicholson Place, St Leonards, NSW

Visual Impact and View Loss Assessment Images and Methodology Report

29th August 2025

VIRTUAL IDEAS

1. INTRODUCTION

This document, created by Virtual Ideas, aims to showcase the visual impact of the proposed developments for Nicholson Place, St Leonards, NSW, in comparison to the existing built form and site conditions.

2. VIRTUAL IDEAS EXPERTISE

Virtual Ideas is a reputable architectural visualisation company with over 15 years of expertise in crafting visual impact assessment content and reports for projects of significant magnitude, aligning with the standards set by local and state planning authorities.

Our reports have served as evidence in proceedings before both the Land and Environment Court and the Supreme Court of NSW. Our director, Grant Kolln, has provided expert testimony in visual impact assessment in the Supreme Court of NSW.

Virtual Ideas' methodologies and outcomes have undergone thorough scrutiny by court-appointed experts in relation to previous visual impact assessment submissions, consistently garnering recognition for their precision and reliability.

3. RENDERINGS METHODOLOGY

The following outlines the meticulous process employed by Virtual Ideas to produce the renderings that underpin this report.

3.1 DIGITAL 3D SCENE CREATION

Our initial stage involves crafting a precise, true-to-life digital 3D environment using Autodesk 3ds Max software, accurately scaled to real-world dimensions, and aligned to a standardised reference point utilising the MGA 56 GDA 2020 coordinate system.

To construct this environment, we combine various data sources, encompassing existing, approved and proposed building 3D models, along with site survey data. Further information regarding the origins of these data sources is provided in Appendices A, B, C, D, E, F and G.

In cases where data sources lack alignment with the MGA-56 GDA 2020 coordinates, we employ identifiable features common across datasets, such as site boundaries and building outlines, which can be aligned with those already situated in the MGA-56 GDA 2020 framework.

Detailed accounts of the alignment processes for each data source are elaborated upon in Section 3.3.

3.2 SITE PHOTOGRAPHY

The site photography was captured by Virtual Ideas, with the respective viewpoint locations delineated on the viewpoint map in Section 4 of this document.

The choice of camera lenses for photography was made by Ethos Urban after careful consideration of multiple factors. Paramount among these were the distance of the camera position from the site and the scale of the proposed development in relation to the surrounding built environment and landscape.

For these public domain photomontages, a 24mm lens was chosen. This lens choice ensures adequate visibility of both the proposed development and the immediate surrounding context, facilitating a thorough assessment of the proposed development's visual impact.

For certain scenarios, employing a 50mm lens may produce the most effective photomontage for assessing visual impact. The 50mm lens is often favoured for its close approximation to the human eye perception of distance. However, in instances where a 50mm lens fails to encompass an adequate surrounding context for comprehensive visual impact assessment, opting for a wider lens becomes imperative. All photographs are lens profile corrected in Camera RAW, which removes the distortion associated with the curvature of the lens.

Comprehensive metadata, including date, time, and lens information, is recorded during site photography. This critical data enables precise analysis and documentation of each photograph's attributes.

3.3 ALIGNMENT OF 3D SCENE

To accurately position the 3D scene within its geographical context, we employed the following data:

1. Site Survey Alignment: Utilising a provided site survey, we aligned the boundaries of the proposed buildings with geo-referenced data, ensuring precise positioning within the digital environment.

2. Camera Alignment: Cameras were aligned to surveyed positions supplied by CMS Surveyors, adhering to the MGA-56 GDA 2020 coordinate system. This meticulous alignment ensured that viewpoints captured within the 3D scene accurately reflected real-world perspectives.

3.4 RENDERING CREATION

Following the completion of the camera alignment, we proceeded to integrate lighting into the 3D scene.

To replicate natural lighting conditions accurately, a digital sunlight system was incorporated into the 3D environment. This system emulates the directional lighting of the sun leveraging location data, as well as time and date information. Implemented through specialised software, the sunlight system ensures precise alignment with the sun's angle, enhancing realism within the scene.

For rendering, we applied a basic chalk whaite material for easy identification.

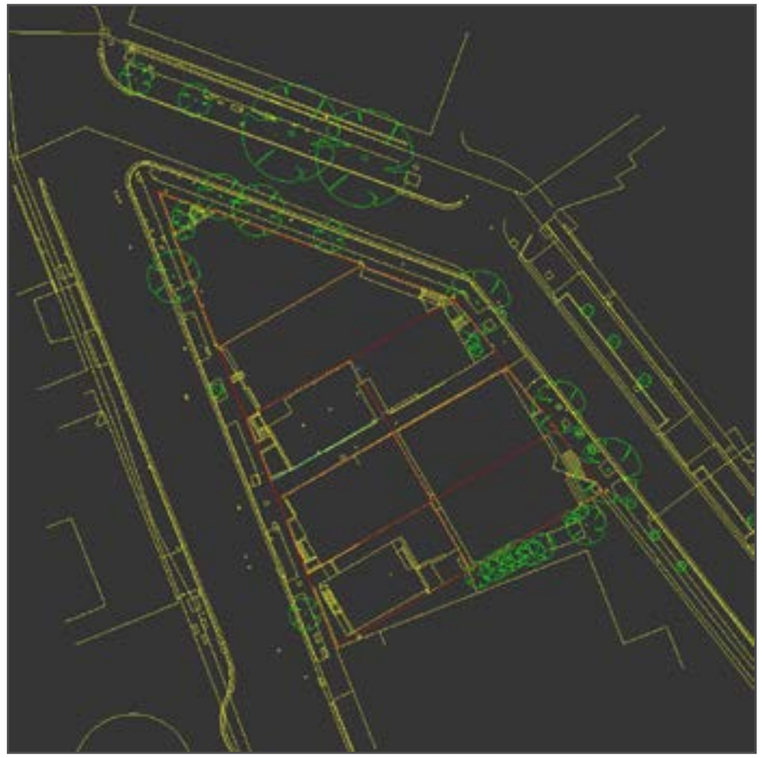
3.5 FULL 3D RENDERINGS

The viewpoints chosen for this study were selected by the planner, Ethos Urban, to provide sufficient coverage from surrounding private domain residences of potential view impacts from various vantage points. All viewpoints are captured with a virtual full-frame camera with a 24mm lens.

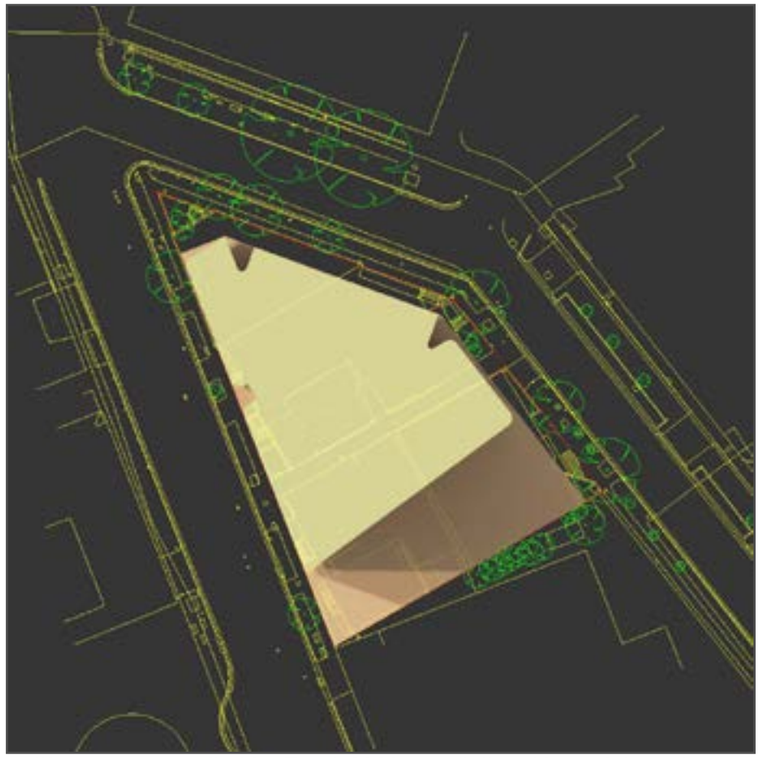
The next task in the 3D render creation process is to light the scene. In order to seamlessly integrate the 3D model of the proposed building model into the existing photogrammetric city model, ensuring that the lighting conditions of both models match for visual consistency and realism, we began by evaluating the lighting conditions under which the photogrammetric city model was captured.

This involved examining the shadows and highlights present in the city model. Closely examining the angle and length of the shadows in the photogrammetric model provided insight into the position and intensity of the sun and the approximate time of day in which the textures in the photogrammetric model were captured.

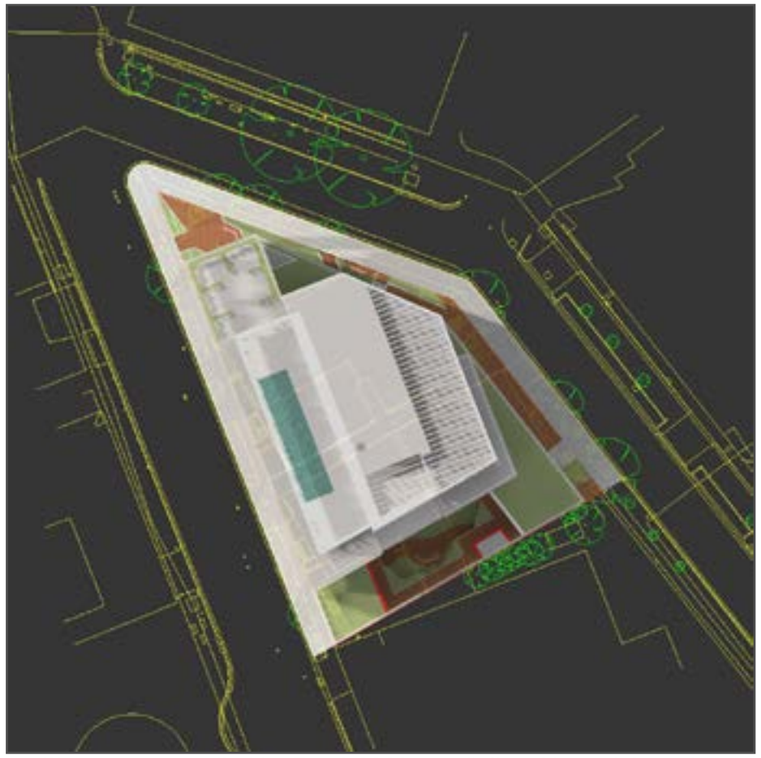
We then recreated those lighting conditions by adjusting the sun's position in the 3D rendering software accordingly. This step is crucial for ensuring that the proposed building integrates seamlessly into the existing scene, is visually coherent and appears naturally within the cityscape.



Site survey supplied by Frank M Mason & Co



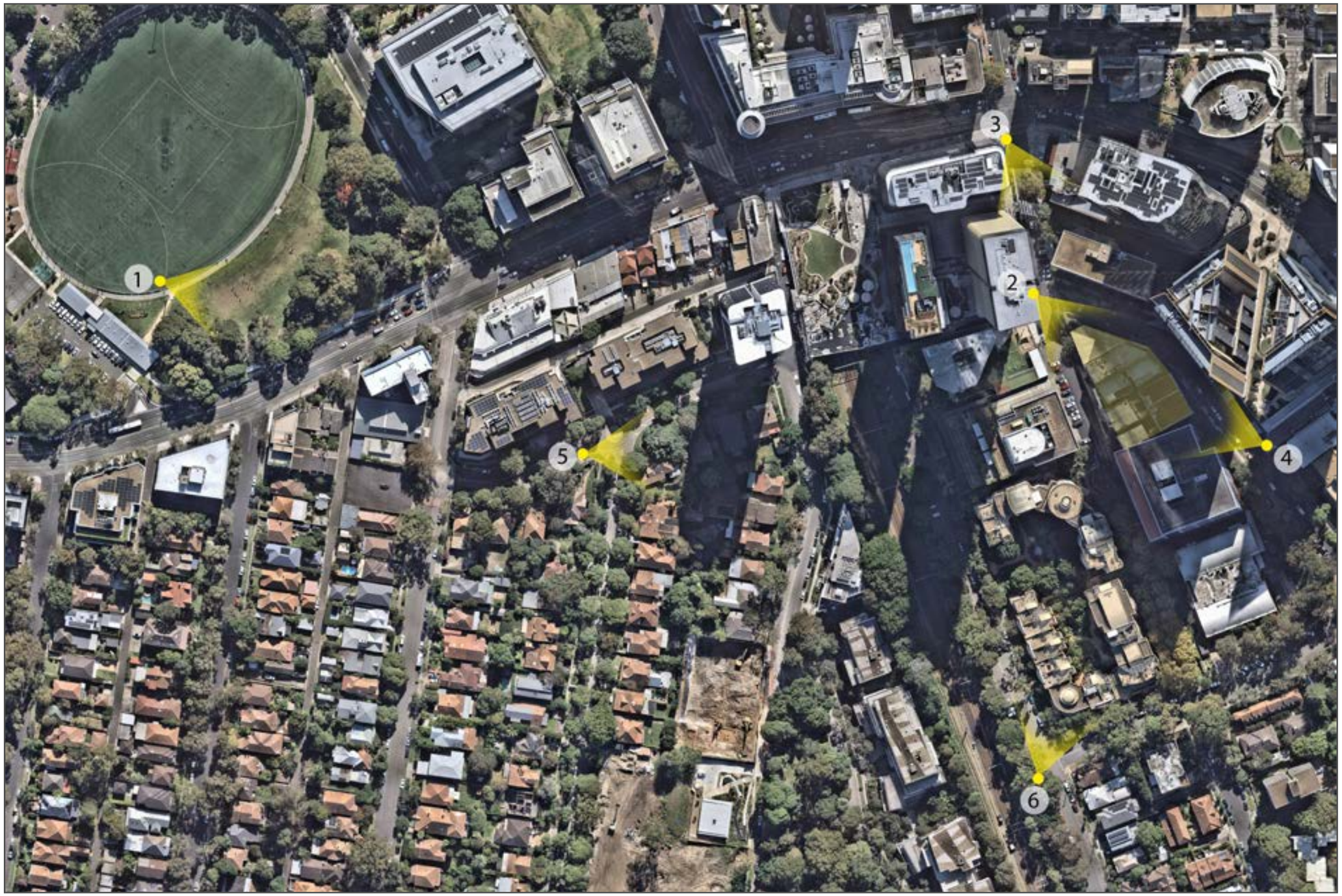
Site survey supplied by Frank M Mason & Co with model overlay of previous SSDA scheme



Site survey supplied by Frank M Mason & Co with model overlay of current SSDA scheme

4. PUBLIC VIEWPOINTS

MAP ILLUSTRATING VIEWPOINT LOCATIONS



VIEWPOINT POSITION 01 - Gore Hill Oval

VIEWPOINT POSITION 02 - Nicholson and Christie Street

VIEWPOINT POSITION 03 - Pacific Highway and Christie Street

VIEWPOINT POSITION 04 - Nicholson Street

VIEWPOINT POSITION 05 - Marshall Street

VIEWPOINT POSITION 06 - Lithgow and Oxley Street

5.1 VIEWPOINT POSITION 01 - GORE HILL OVAL

VIEWPOINT LOCATION

ALIGNMENT OF SURVEYED POINTS

PHOTOGRAPH DETAILS

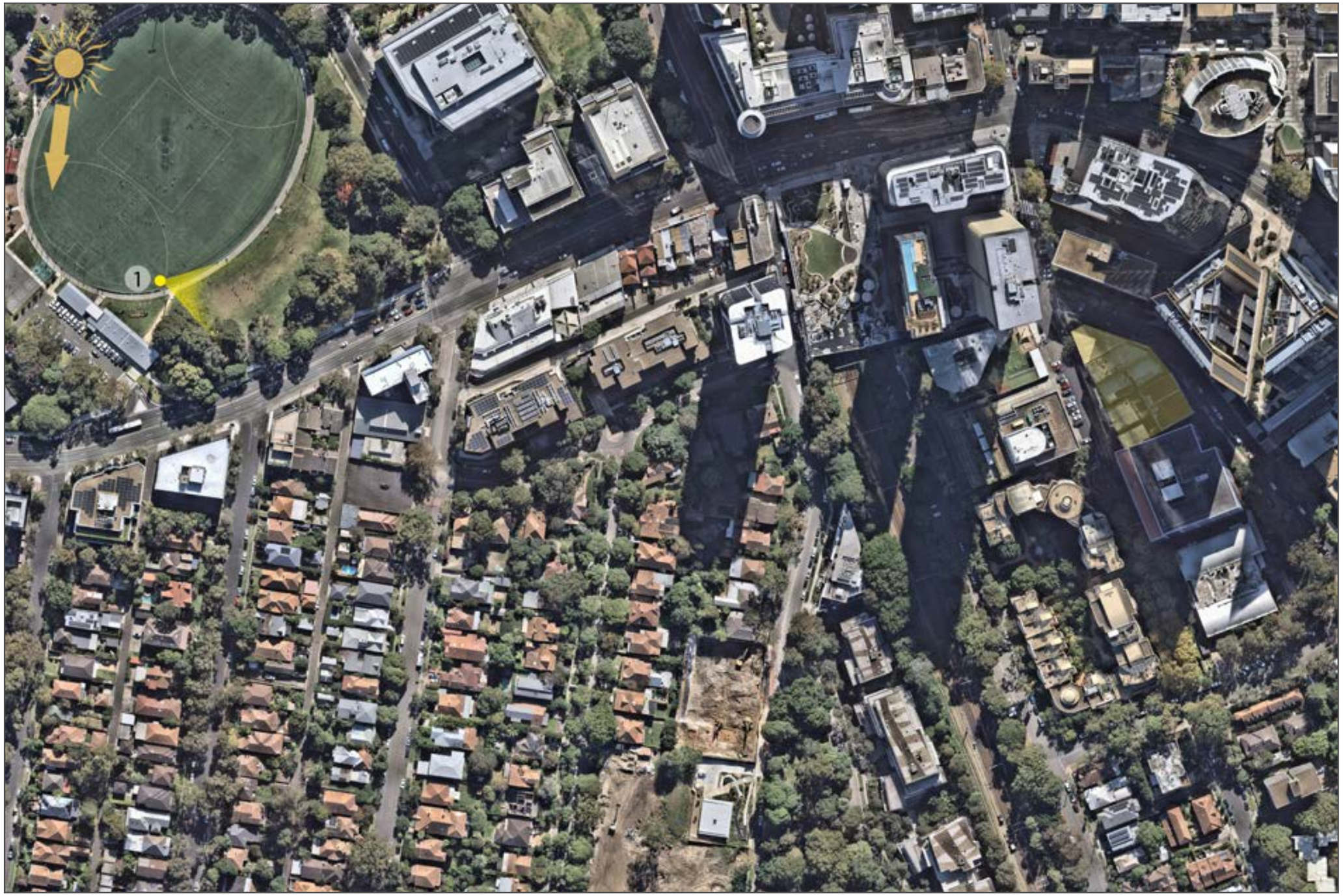
File Name:	View 01_Pos 01_01
Author:	Virtual Ideas
Format:	ARW
Date:	12 May 2023
Time:	11:25
Lens:	FE 24-70mm F2.8 GM
Model:	Sony ILCE-7C
Sensor:	Full frame
Focal length:	24mm

ORIGINAL PHOTOGRAPH

CURRENT SSDA COMPARED TO PREVIOUS SSDA

5.2 VIEWPOINT POSITION 01 - GORE HILL OVAL

VIEWPOINT LOCATION



5.3 VIEWPOINT POSITION 01 - GORE HILL OVAL

ALIGNMENT OF SURVEYED POINTS

5.4 VIEWPOINT POSITION 01 - GORE HILL OVAL

PHOTOGRAPH OF CURRENT CONDITION

5.5 VIEWPOINT POSITION 01 - GORE HILL OVAL

CURRENT SSDA COMPARED TO PREVIOUS SSDA

6.1 VIEWPOINT POSITION 02 - NICHOLSON AND CHRISTIE STREET

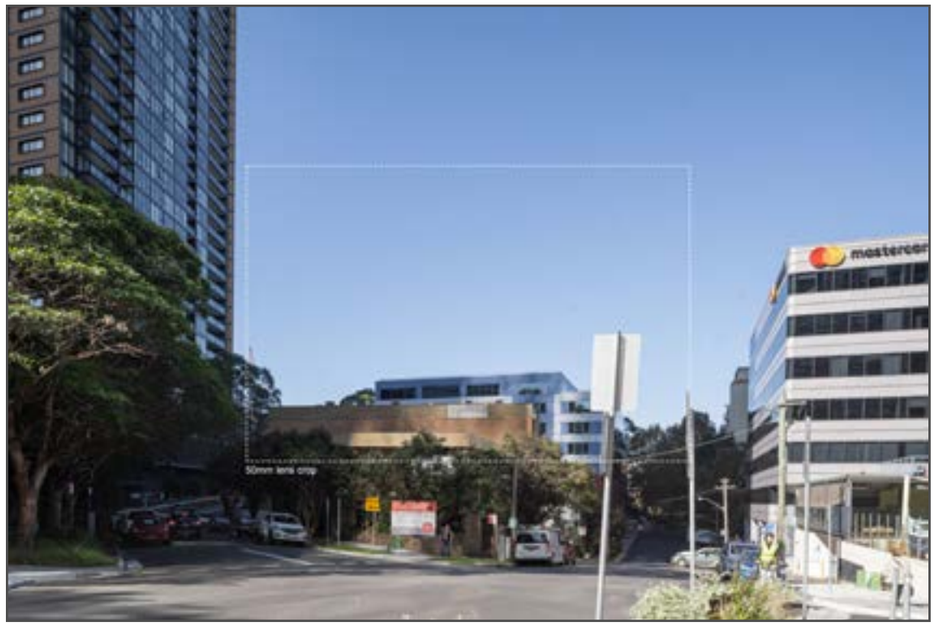
VIEWPOINT LOCATION

ALIGNMENT OF SURVEYED POINTS

PHOTOGRAPH DETAILS

File Name:	View 02_Pos 01_01
Author:	Virtual Ideas
Format:	ARW
Date:	12 May 2023
Time:	10:46
Lens:	FE 24-70mm F2.8 GM
Model:	Sony ILCE-7C
Sensor:	Full frame
Focal length:	24mm

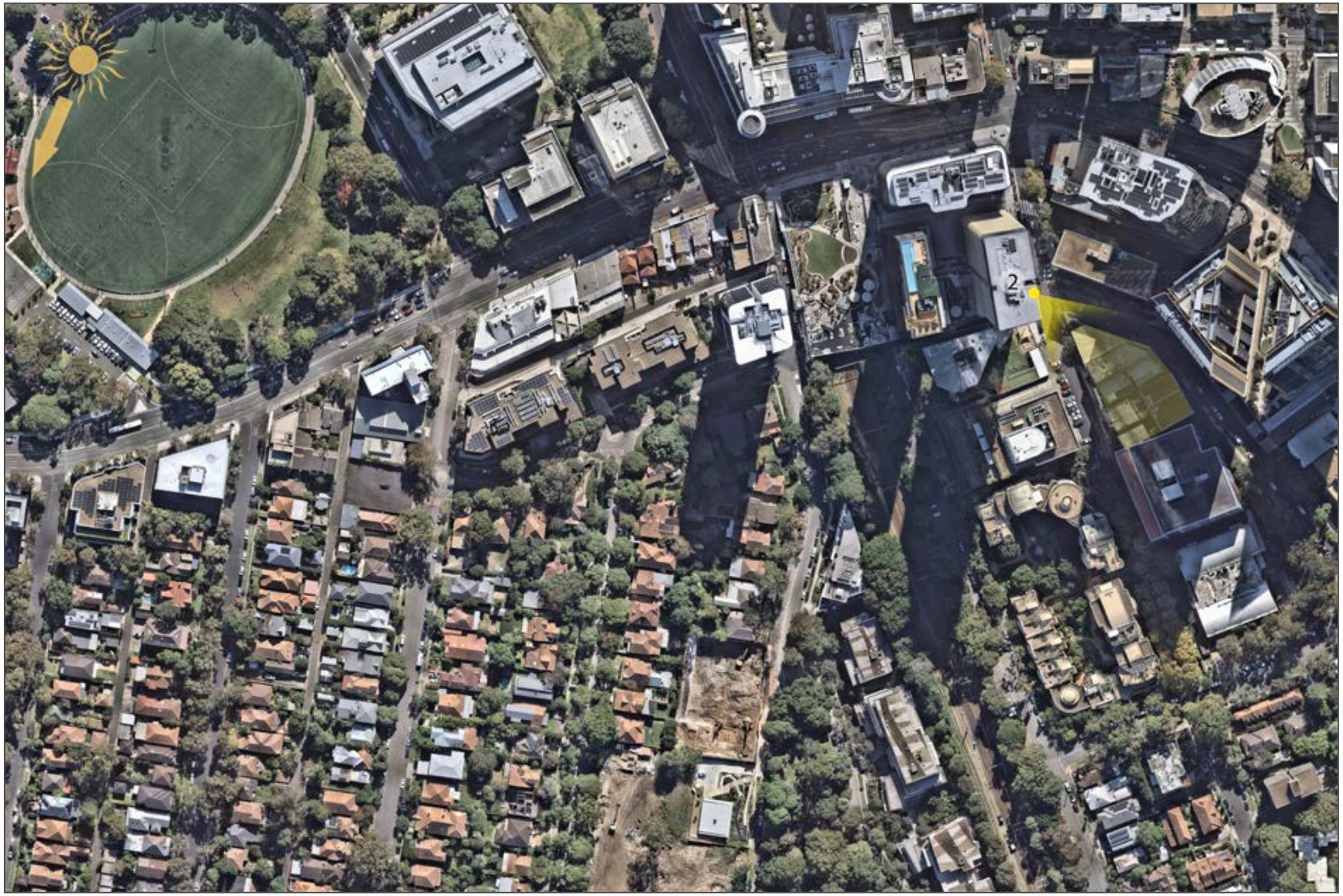
ORIGINAL PHOTOGRAPH



CURRENT SSDA COMPARED TO PREVIOUS SSDA

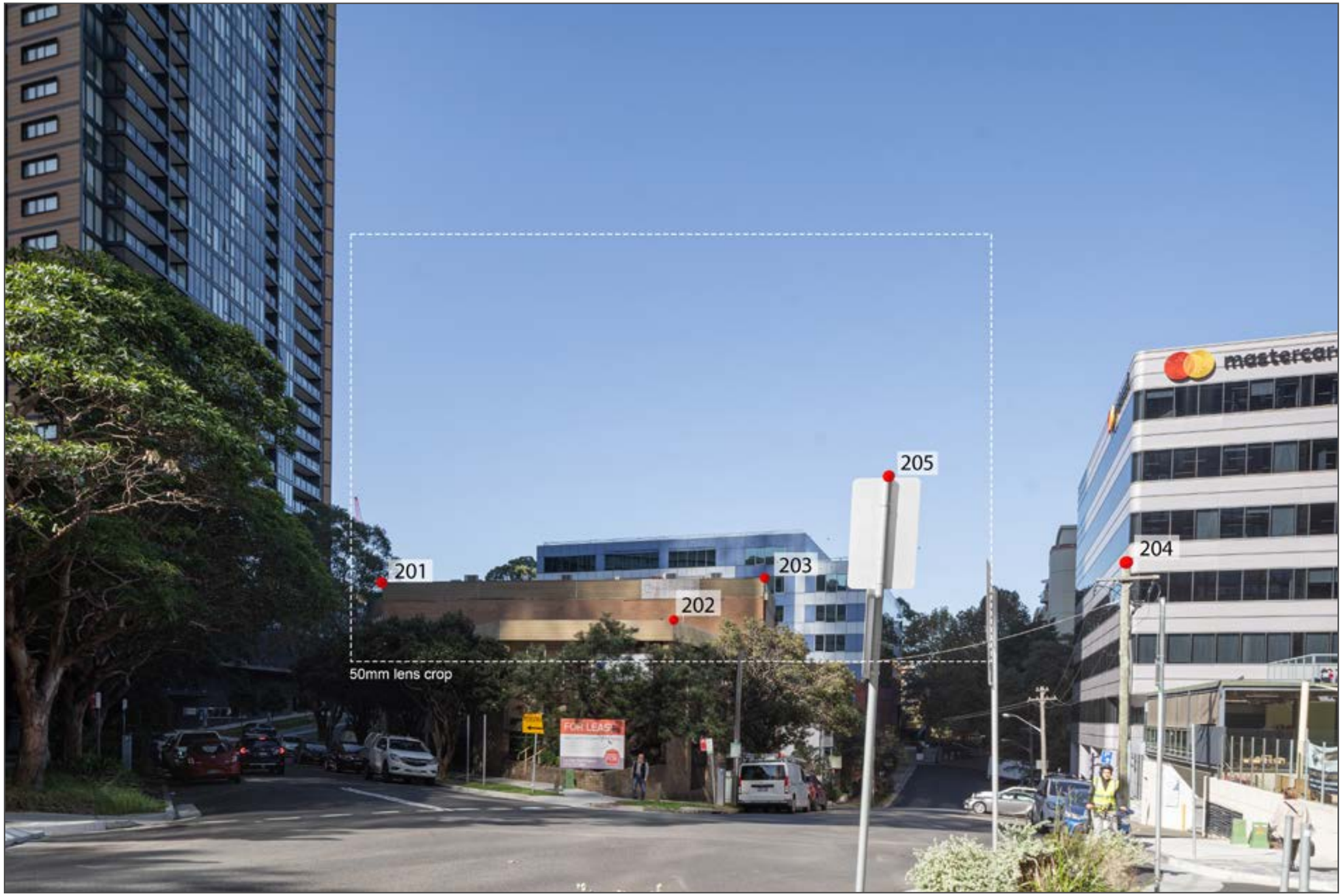
6.2 VIEWPOINT POSITION 02 - NICHOLSON AND CHRISTIE STREET

VIEWPOINT LOCATION



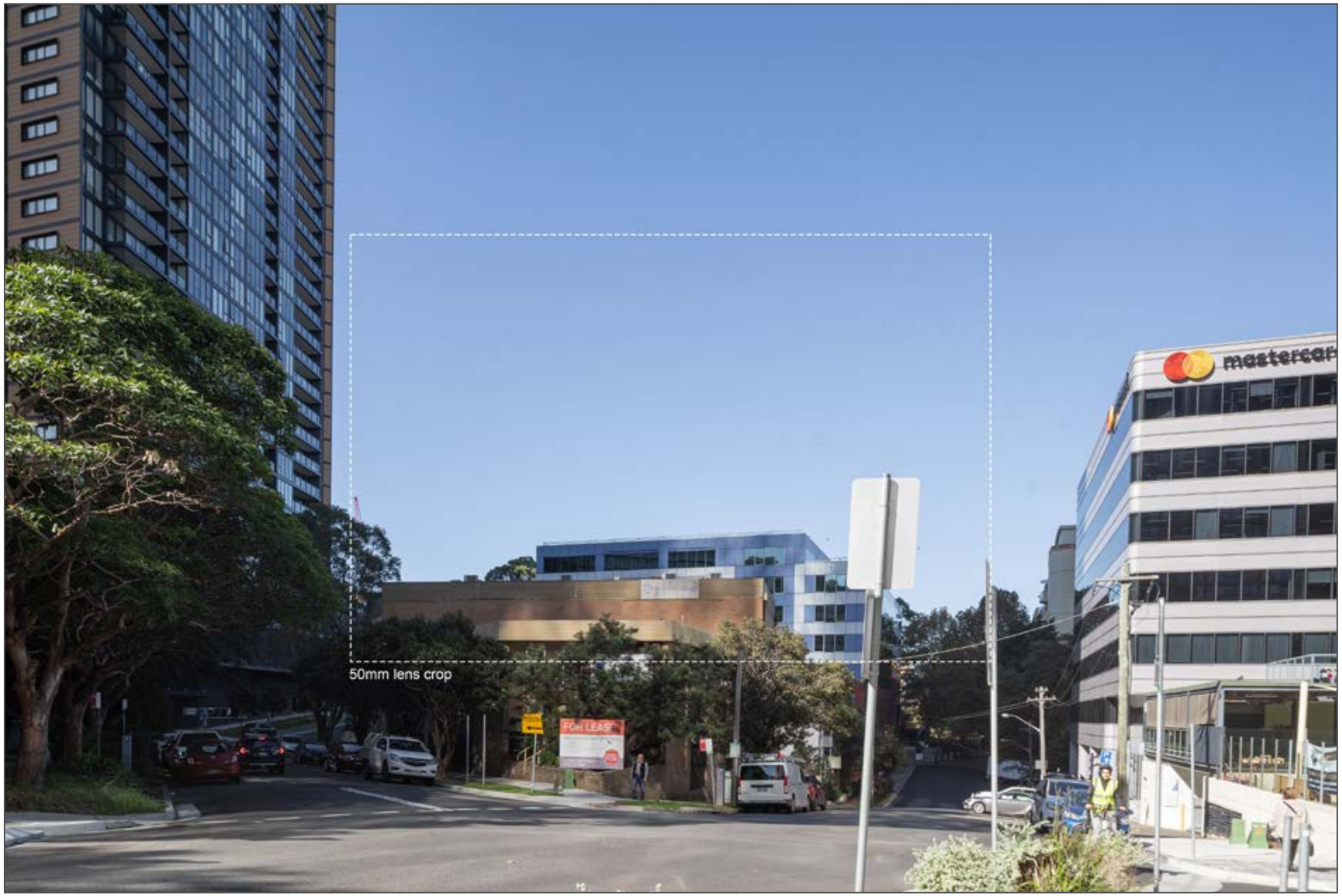
6.3 VIEWPOINT POSITION 02 - NICHOLSON AND CHRISTIE STREET

ALIGNMENT OF SURVEYED POINTS



6.4 VIEWPOINT POSITION 02 - NICHOLSON AND CHRISTIE STREET

PHOTOGRAPH OF CURRENT CONDITION



6.5 VIEWPOINT POSITION 02 - NICHOLSON AND CHRISTIE STREET

CURRENT SSDA COMPARED TO PREVIOUS SSDA

7.1 VIEWPOINT POSITION 03 - PACIFIC HIGHWAY AND CHRISTIE STREET

VIEWPOINT LOCATION

ALIGNMENT OF SURVEYED POINTS

PHOTOGRAPH DETAILS

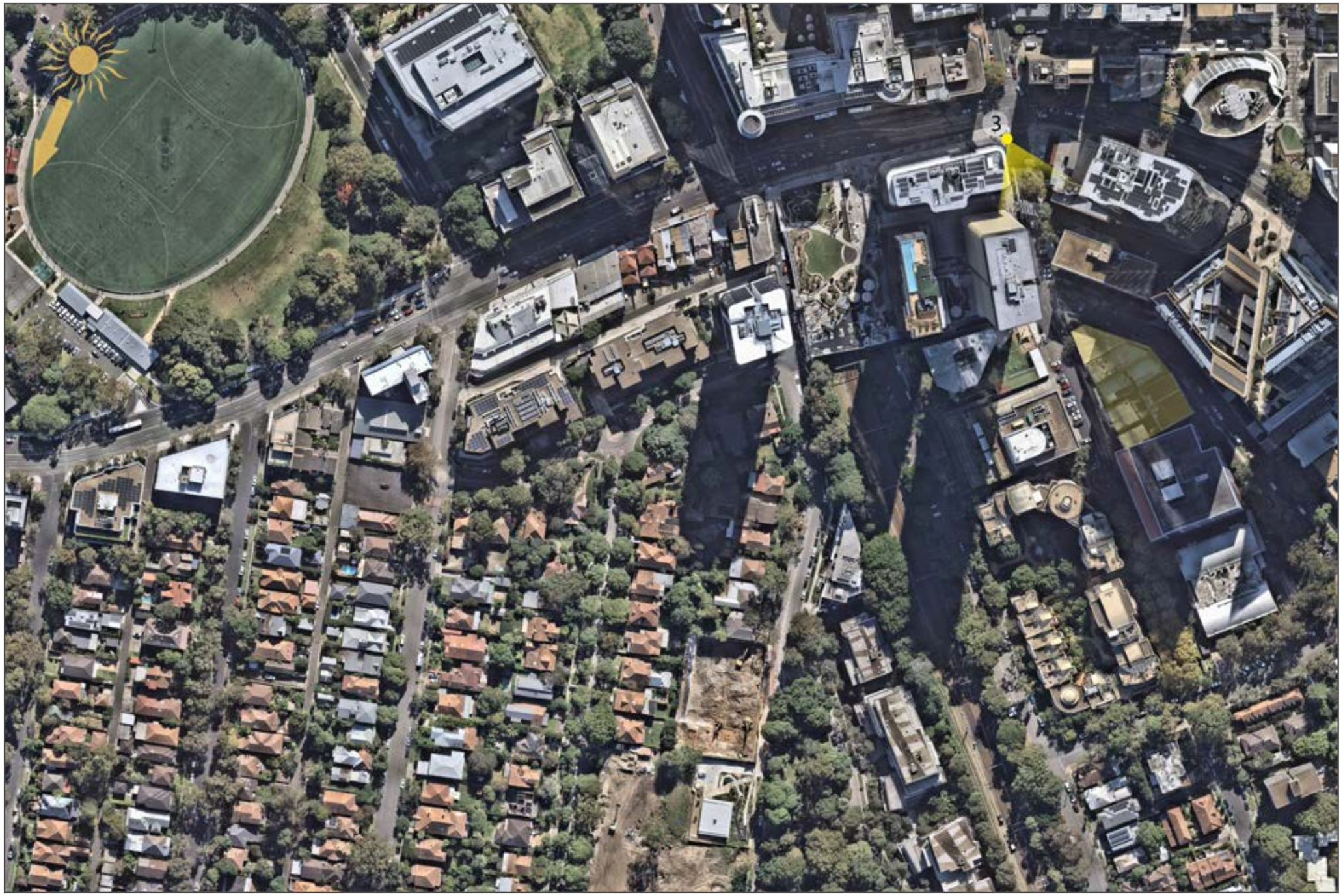
File Name:	View 03_Pos 01_01
Author:	Virtual Ideas
Format:	ARW
Date:	12 May 2023
Time:	10:54
Lens:	FE 24-70mm F2.8 GM
Model:	Sony ILCE-7C
Sensor:	Full frame
Focal length:	24mm

ORIGINAL PHOTOGRAPH

CURRENT SSDA COMPARED TO PREVIOUS SSDA

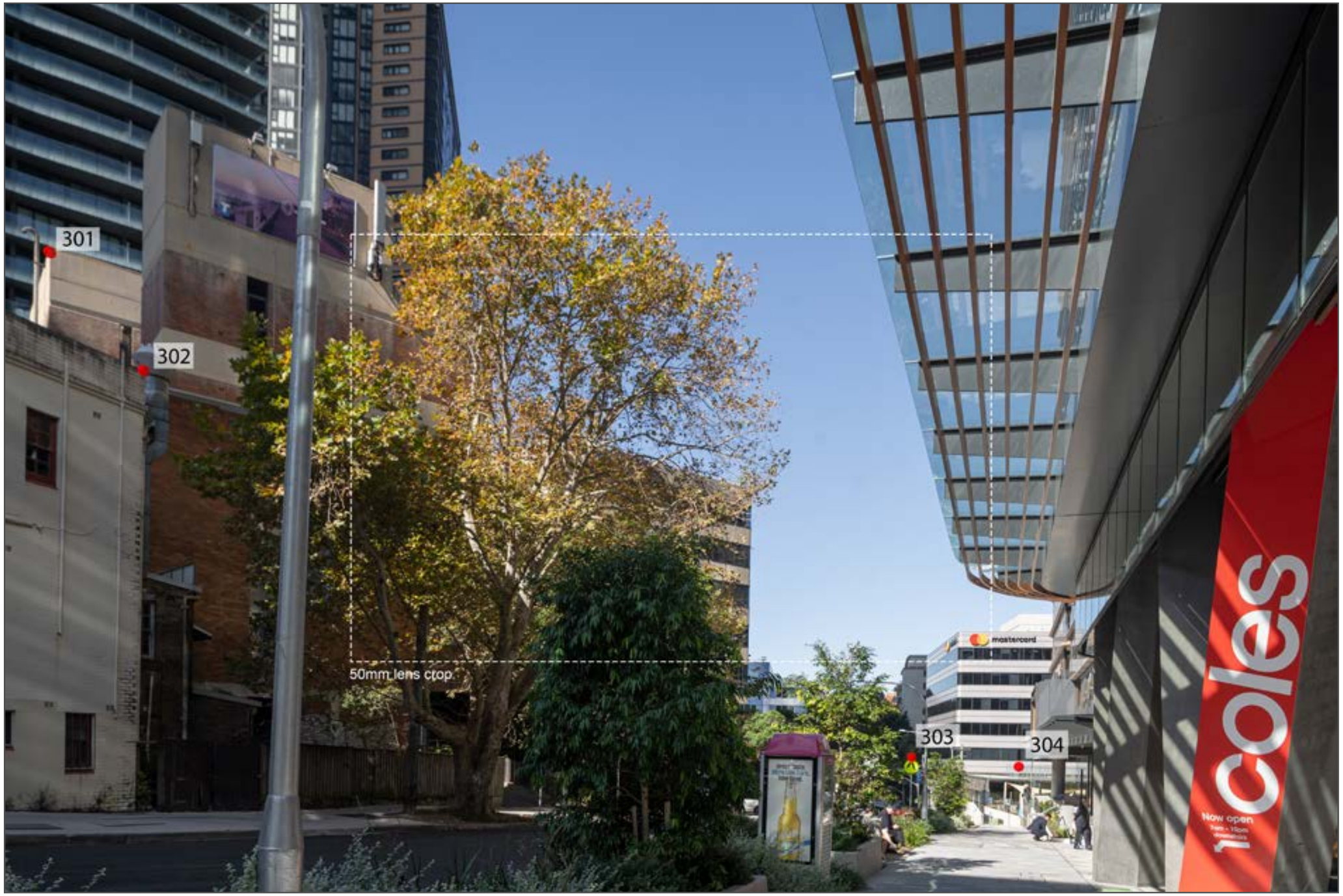
7.2 VIEWPOINT POSITION 03 - PACIFIC HIGHWAY AND CHRISTIE STREET

VIEWPOINT LOCATION



7.3 VIEWPOINT POSITION 03 - PACIFIC HIGHWAY AND CHRISTIE STREET

ALIGNMENT OF SURVEYED POINTS

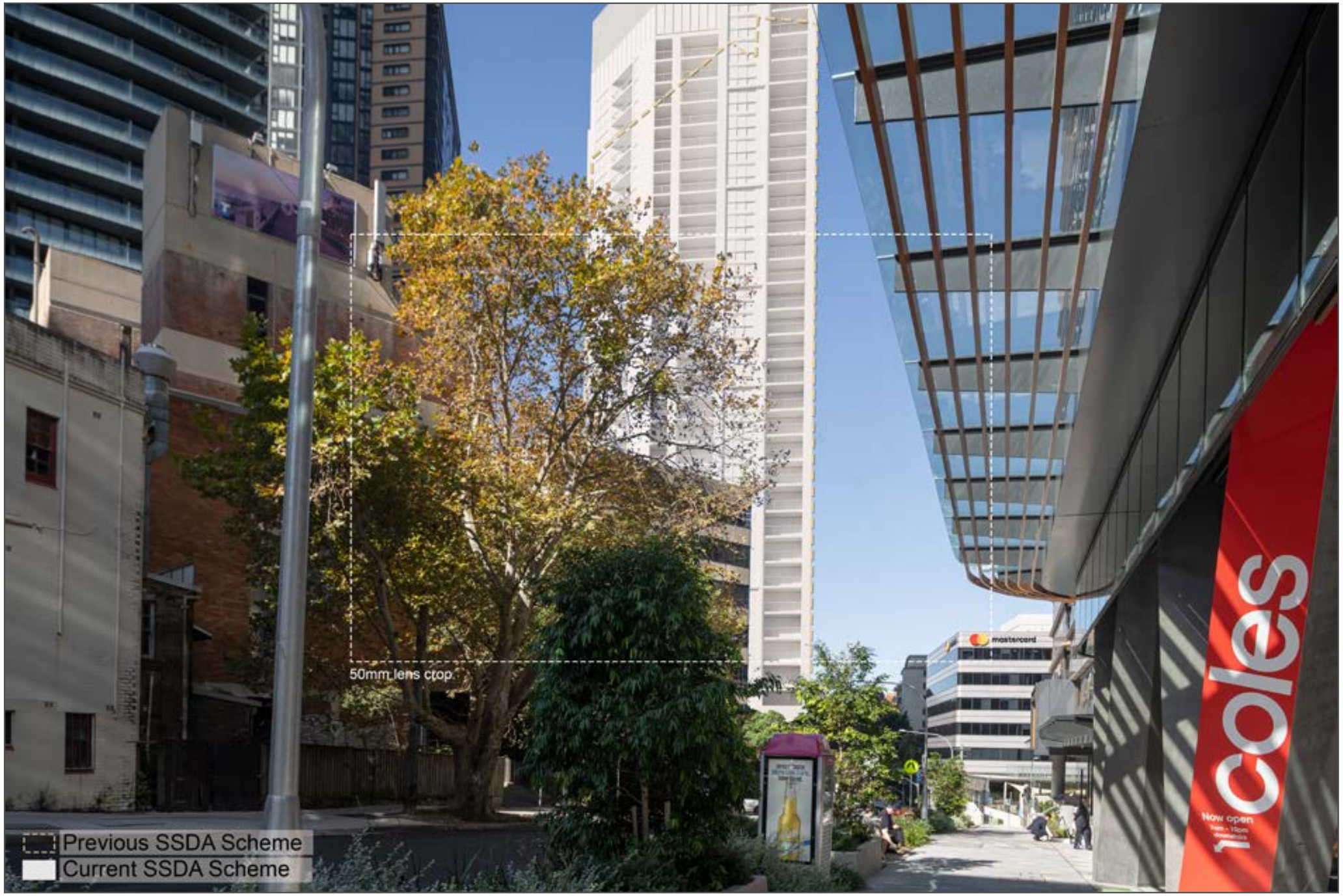


7.4 VIEWPOINT POSITION 03 - PACIFIC HIGHWAY AND CHRISTIE STREET

PHOTOGRAPH OF CURRENT CONDITION

7.5 VIEWPOINT POSITION 03 - PACIFIC HIGHWAY AND CHRISTIE STREET

CURRENT SSDA COMPARED TO PREVIOUS SSDA



8.1 VIEWPOINT POSITION 04 - NICHOLSON STREET

VIEWPOINT LOCATION

ALIGNMENT OF SURVEYED POINTS

PHOTOGRAPH DETAILS

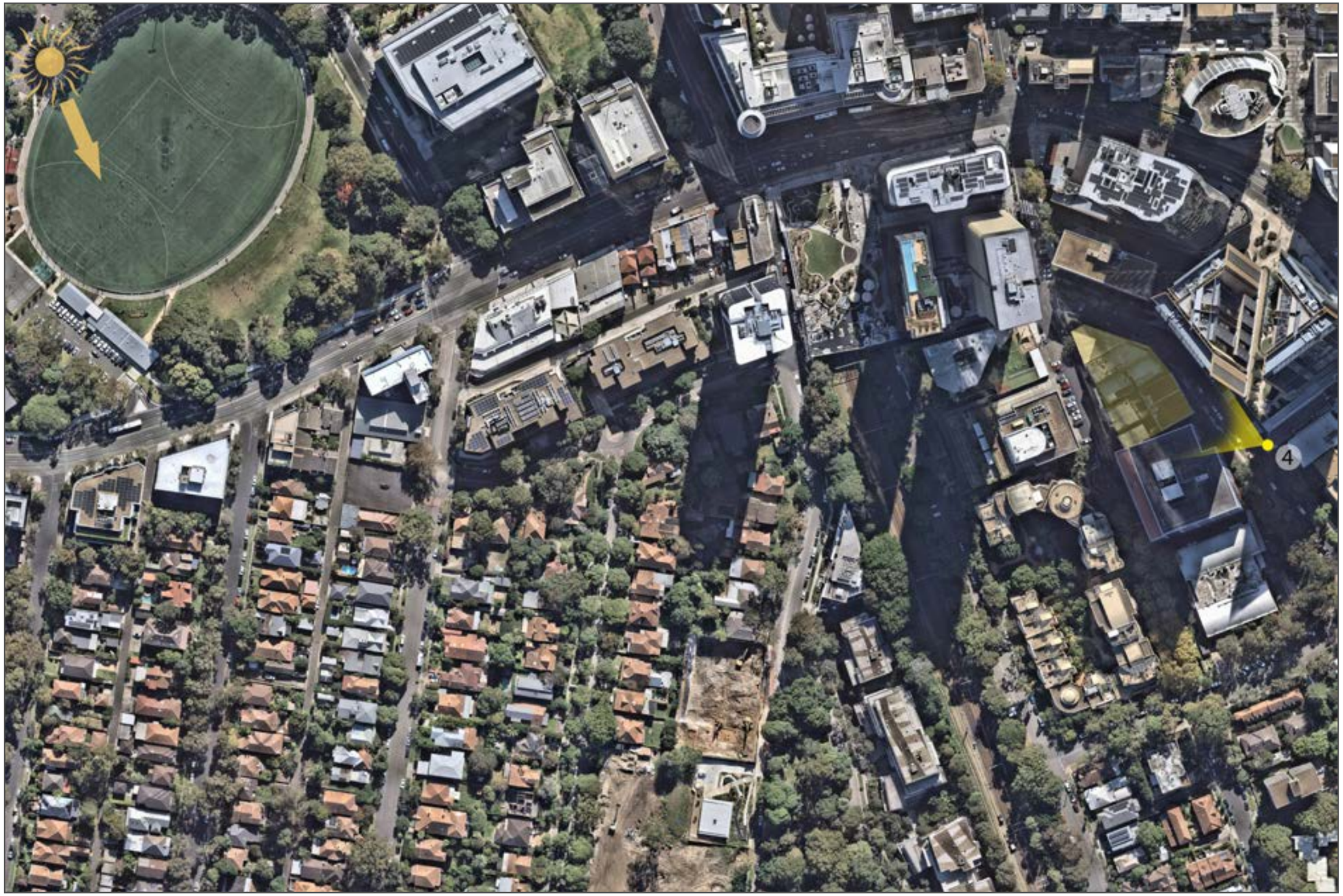
File Name:	View 04_Pos 01_01
Author:	Virtual Ideas
Format:	ARW
Date:	12 May 2023
Time:	12:14
Lens:	FE 24-70mm F2.8 GM
Model:	Sony ILCE-7C
Sensor:	Full frame
Focal length:	24mm

ORIGINAL PHOTOGRAPH

CURRENT SSDA COMPARED TO PREVIOUS SSDA

8.2 VIEWPOINT POSITION 04 - NICHOLSON STREET

VIEWPOINT LOCATION



8.3 VIEWPOINT POSITION 04 - NICHOLSON STREET

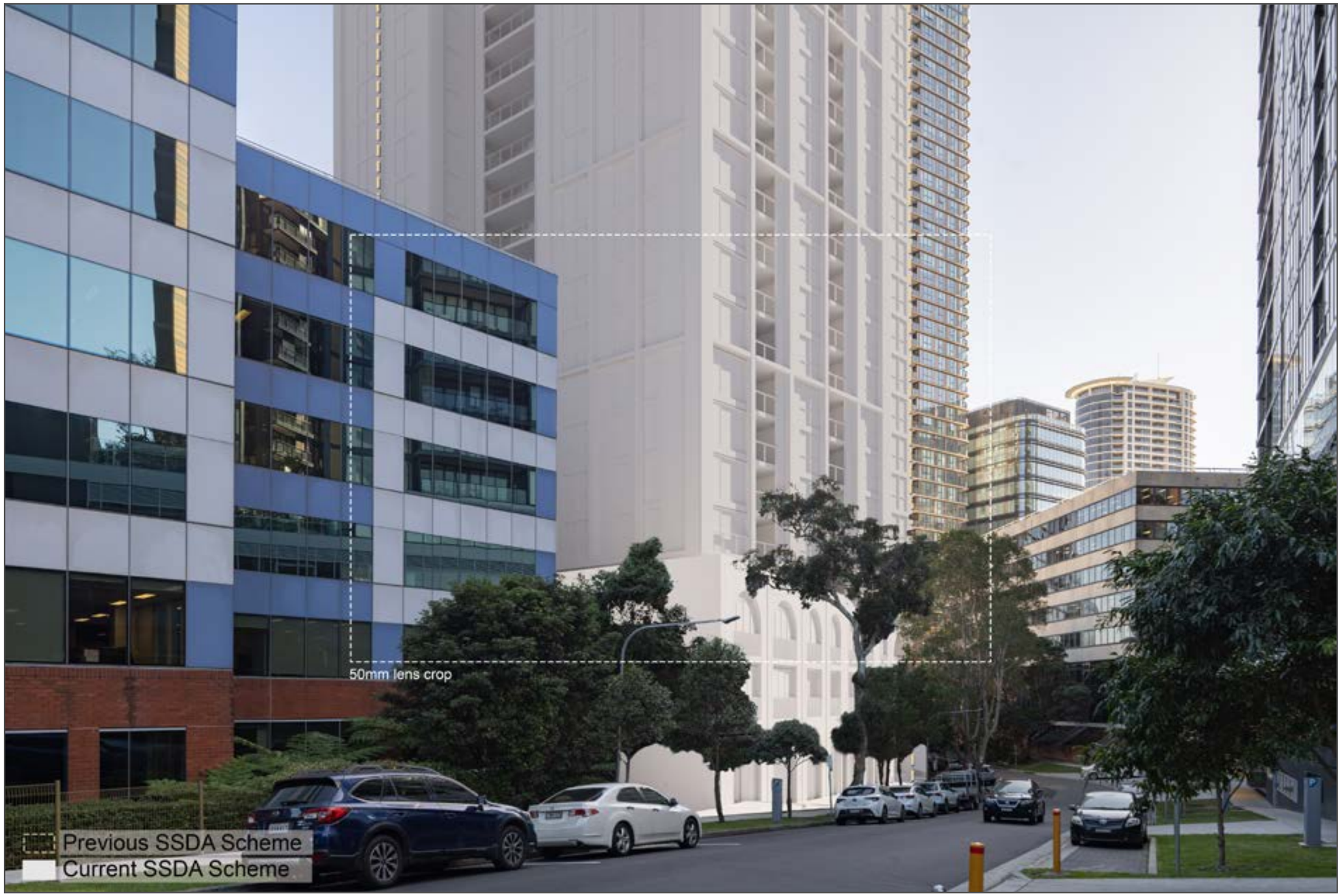
ALIGNMENT OF SURVEYED POINTS

8.4 VIEWPOINT POSITION 04 - NICHOLSON STREET

PHOTOGRAPH OF CURRENT CONDITION

8.5 VIEWPOINT POSITION 04 - NICHOLSON STREET

CURRENT SSDA COMPARED TO PREVIOUS SSDA



9.1 VIEWPOINT POSITION 05 - MARSHALL AVENUE

VIEWPOINT LOCATION

ALIGNMENT OF SURVEYED POINTS

PHOTOGRAPH DETAILS

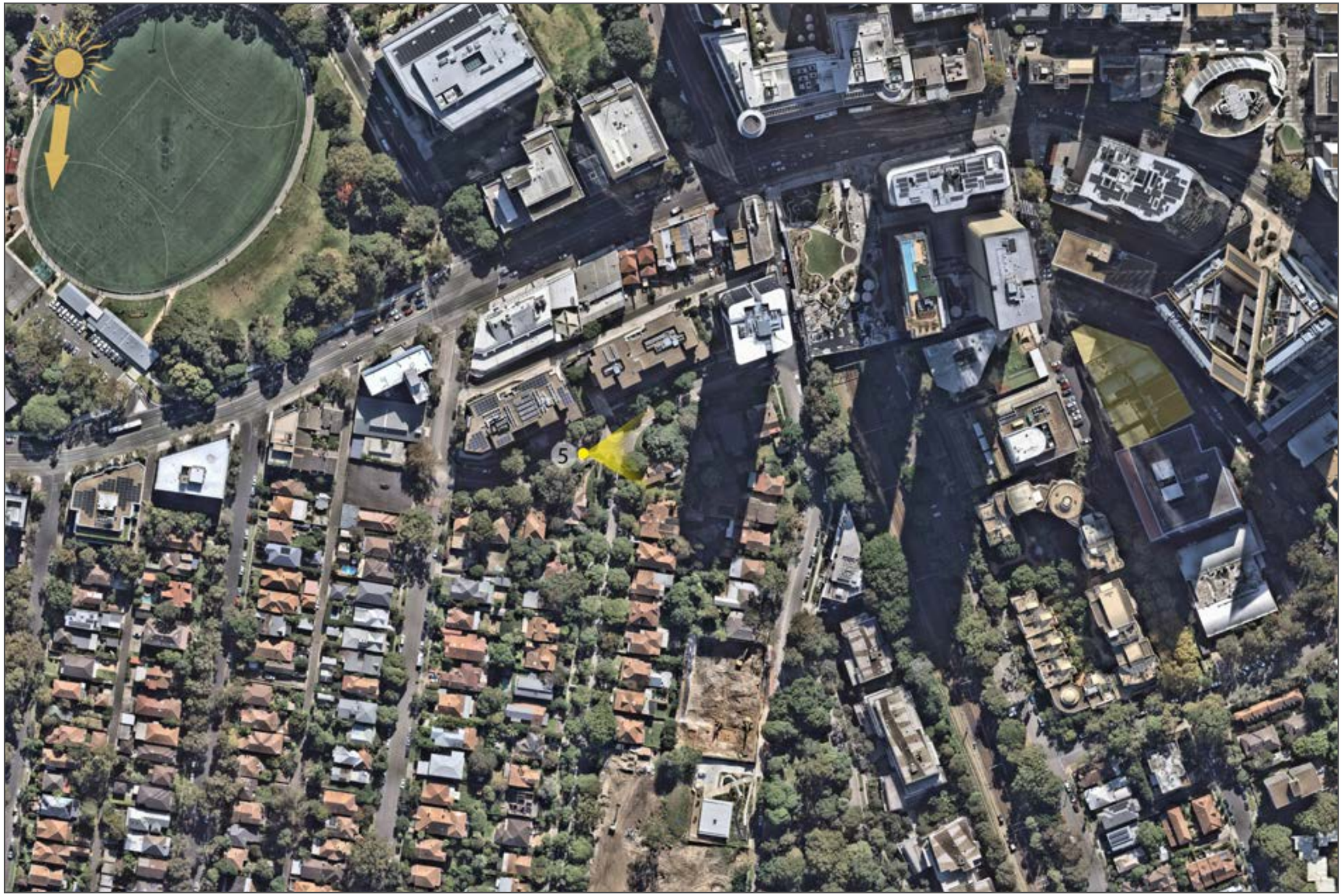
File Name:	View 05_Pos 01_01
Author:	Virtual Ideas
Format:	ARW
Date:	12 May 2023
Time:	11:38
Lens:	FE 24-70mm F2.8 GM
Model:	Sony ILCE-7C
Sensor:	Full frame
Focal length:	24mm

ORIGINAL PHOTOGRAPH

CURRENT SSDA COMPARED TO PREVIOUS SSDA

9.2 VIEWPOINT POSITION 05 - MARSHALL AVENUE

VIEWPOINT LOCATION



9.3 VIEWPOINT POSITION 05 - MARSHALL AVENUE

ALIGNMENT OF SURVEYED POINTS

9.4 VIEWPOINT POSITION 05 - MARSHALL AVENUE

PHOTOGRAPH OF CURRENT CONDITION

9.5 VIEWPOINT POSITION 05 - MARSHALL AVENUE

CURRENT SSDA COMPARED TO PREVIOUS SSDA

10.1 VIEWPOINT POSITION 06 - LITHGOW AND OXLEY STREET

VIEWPOINT LOCATION

ALIGNMENT OF SURVEYED POINTS

PHOTOGRAPH DETAILS

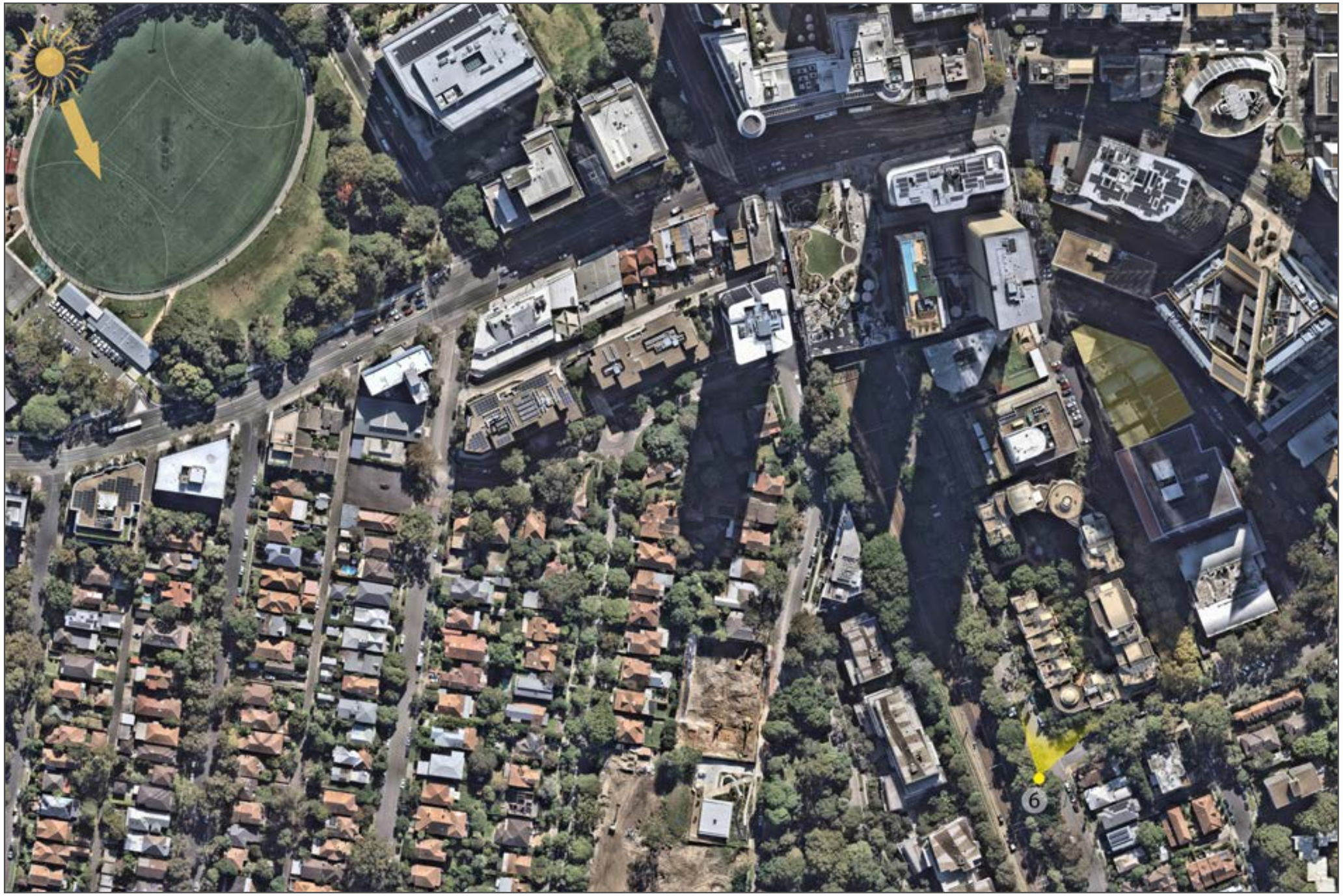
File Name:	View 06_Pos 01_01
Author:	Virtual Ideas
Format:	ARW
Date:	12 May 2023
Time:	12:25
Lens:	FE 24-70mm F2.8 GM
Model:	Sony ILCE-7C
Sensor:	Full frame
Focal length:	24mm

ORIGINAL PHOTOGRAPH

CURRENT SSDA COMPARED TO PREVIOUS SSDA

10.2 VIEWPOINT POSITION 06 - LITHGOW AND OXLEY STREET

VIEWPOINT LOCATION



10.3 VIEWPOINT POSITION 06 - LITHGOW AND OXLEY STREET

ALIGNMENT OF SURVEYED POINTS

10.4 VIEWPOINT POSITION 06 - LITHGOW AND OXLEY STREET

PHOTOGRAPH OF CURRENT CONDITION

10.5 VIEWPOINT POSITION 06 - LITHGOW AND OXLEY STREET

CURRENT SSDA COMPARED TO PREVIOUS SSDA

11.1 PRIVATE VIEWPOINTS

MAP ILLUSTRATING VIEWPOINT LOCATIONS

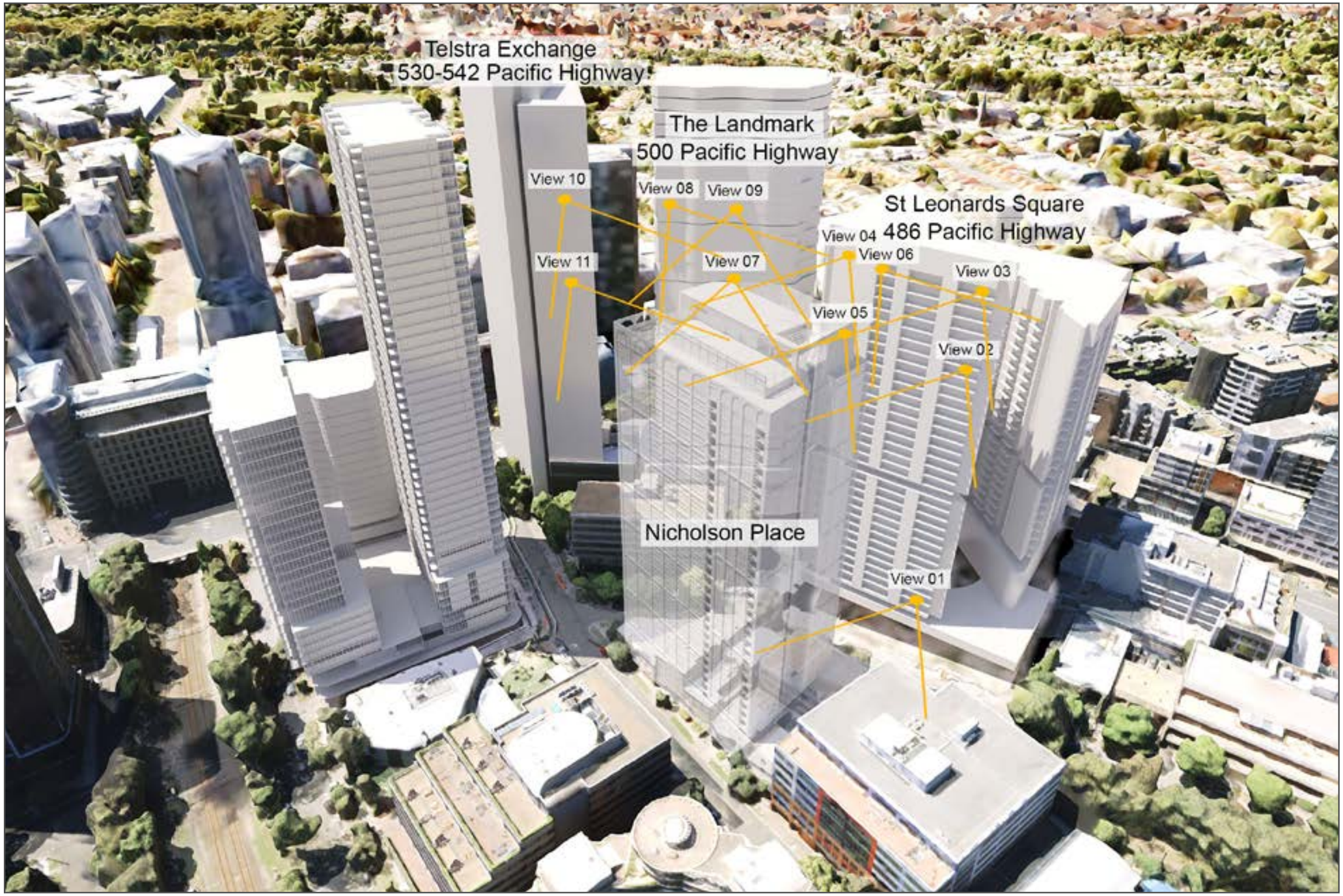
VIEWPOINT POSITION 01-06
St Leonards Square,
486 Pacific Highway

VIEWPOINT POSITION 07-09
The Landmark,
500 Pacific Highway

VIEWPOINT POSITION 10-11
Telstra Exchange,
530-542 Pacific Highway

11.2 PRIVATE VIEWPOINTS

MAP ILLUSTRATING VIEWPOINT LOCATIONS



VIEWPOINT POSITION 01-06
St Leonards Square,
486 Pacific Highway

VIEWPOINT POSITION 07-09
The Landmark,
500 Pacific Highway

VIEWPOINT POSITION 10-11
Telstra Exchange,
530-542 Pacific Highway

12.1 VIEWPOINT POSITION 01 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	99.2m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

12.2 VIEWPOINT POSITION 01 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA

12.3 VIEWPOINT POSITION 01 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA

13.1 VIEWPOINT POSITION 02 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	174.9m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

13.2 VIEWPOINT POSITION 02 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA

13.3 VIEWPOINT POSITION 02 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA

14.1 VIEWPOINT POSITION 03 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	196.3m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

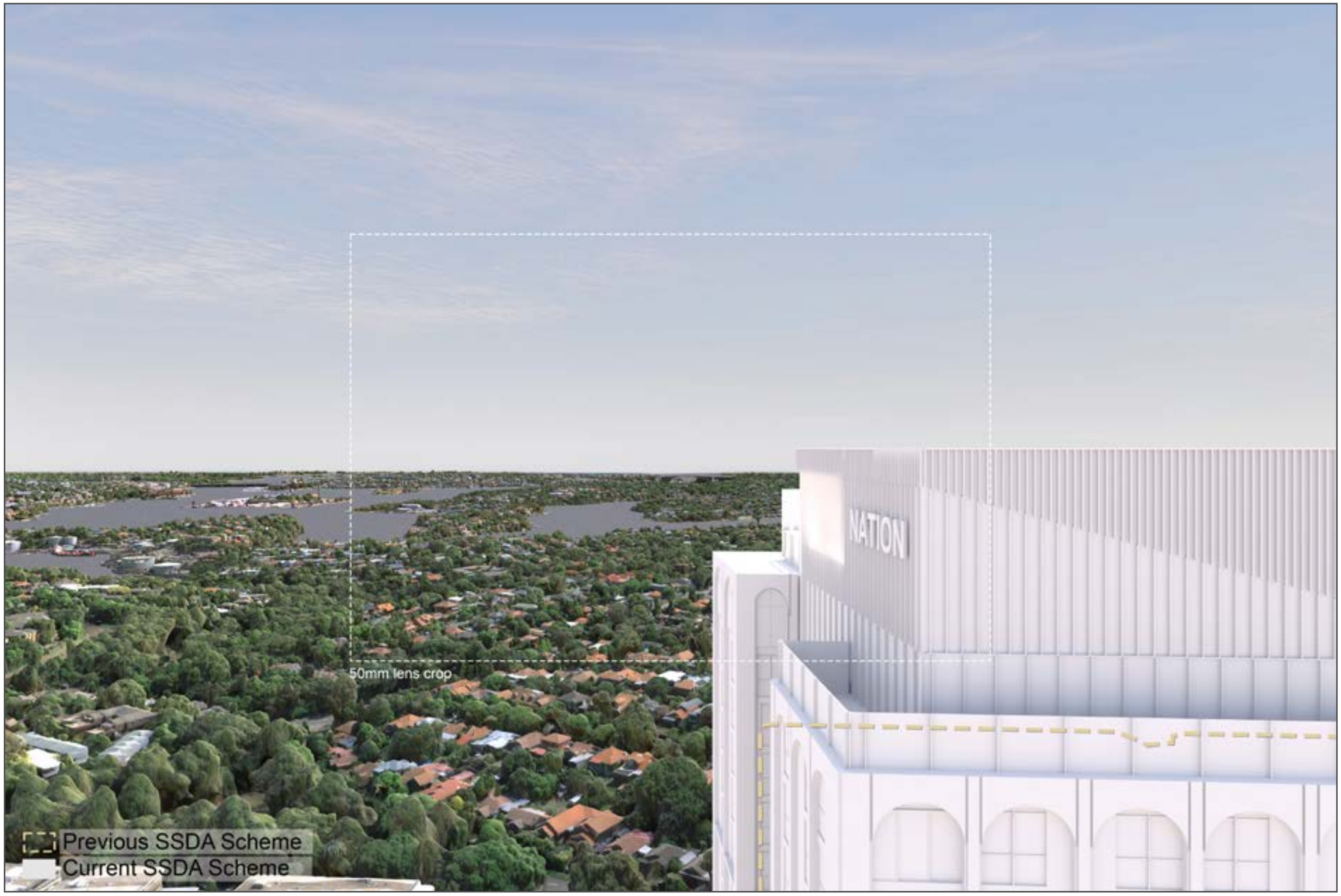
CURRENT SSDA COMPARED TO PREVIOUS SSDA

14.2 VIEWPOINT POSITION 03 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA

14.3 VIEWPOINT POSITION 03 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA



15.1 VIEWPOINT POSITION 04 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	196.3m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

15.2 VIEWPOINT POSITION 04 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA

15.3 VIEWPOINT POSITION 04 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA

16.1 VIEWPOINT POSITION 05 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	174.9m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

16.2 VIEWPOINT POSITION 05 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA

16.3 VIEWPOINT POSITION 05 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA

17.1 VIEWPOINT POSITION 06 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

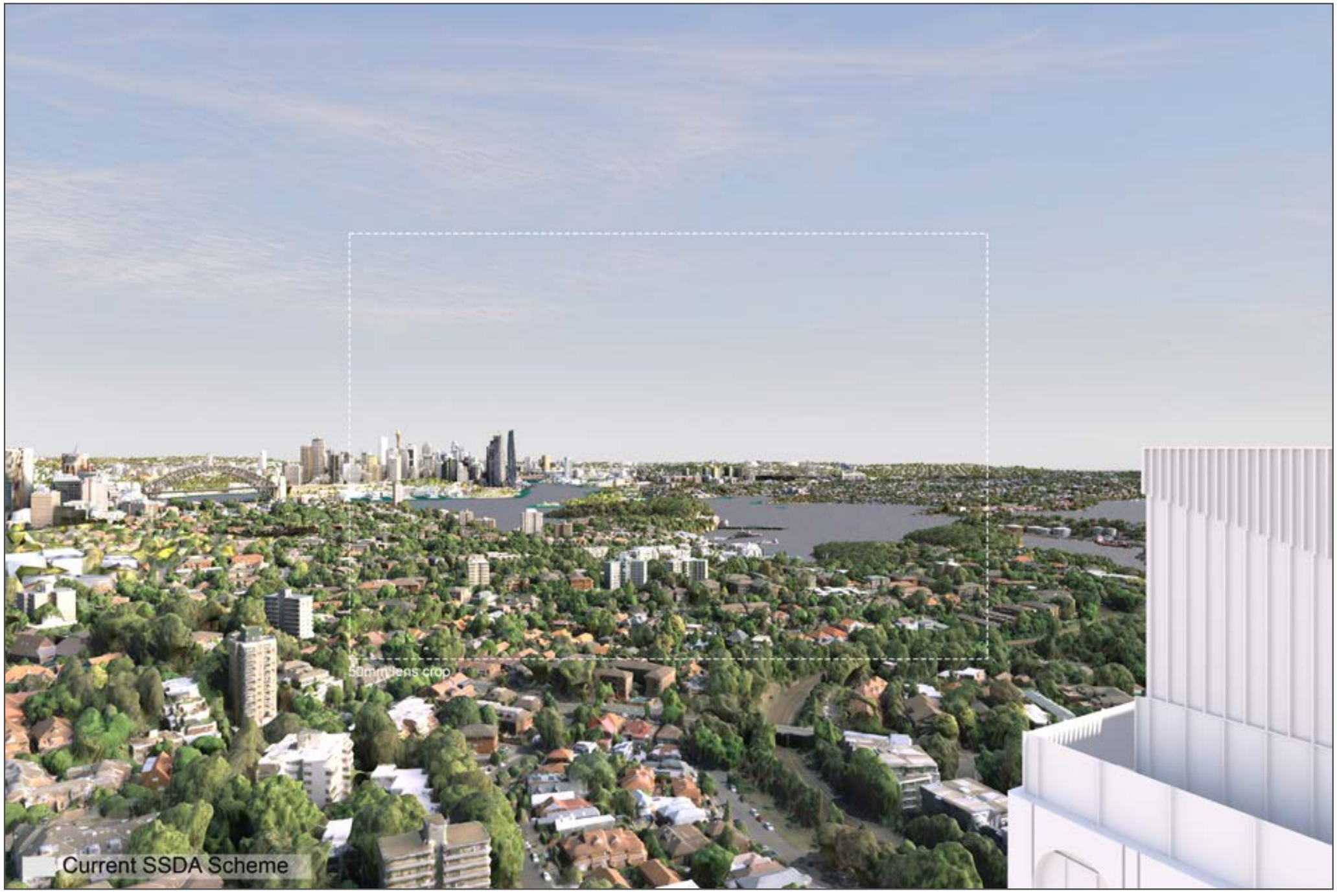
RL:	196.3m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

17.2 VIEWPOINT POSITION 06 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA



17.3 VIEWPOINT POSITION 06 - ST LEONARDS SQUARE, 486 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA

18.1 VIEWPOINT POSITION 07 - The Landmark, 500 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	174.9m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

18.2 VIEWPOINT POSITION 07 - The Landmark, 500 PACIFIC HIGHWAY

CURRENT SSDA

18.3 VIEWPOINT POSITION 07 - The Landmark, 500 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA

19.1 VIEWPOINT POSITION 08 - The Landmark, 500 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

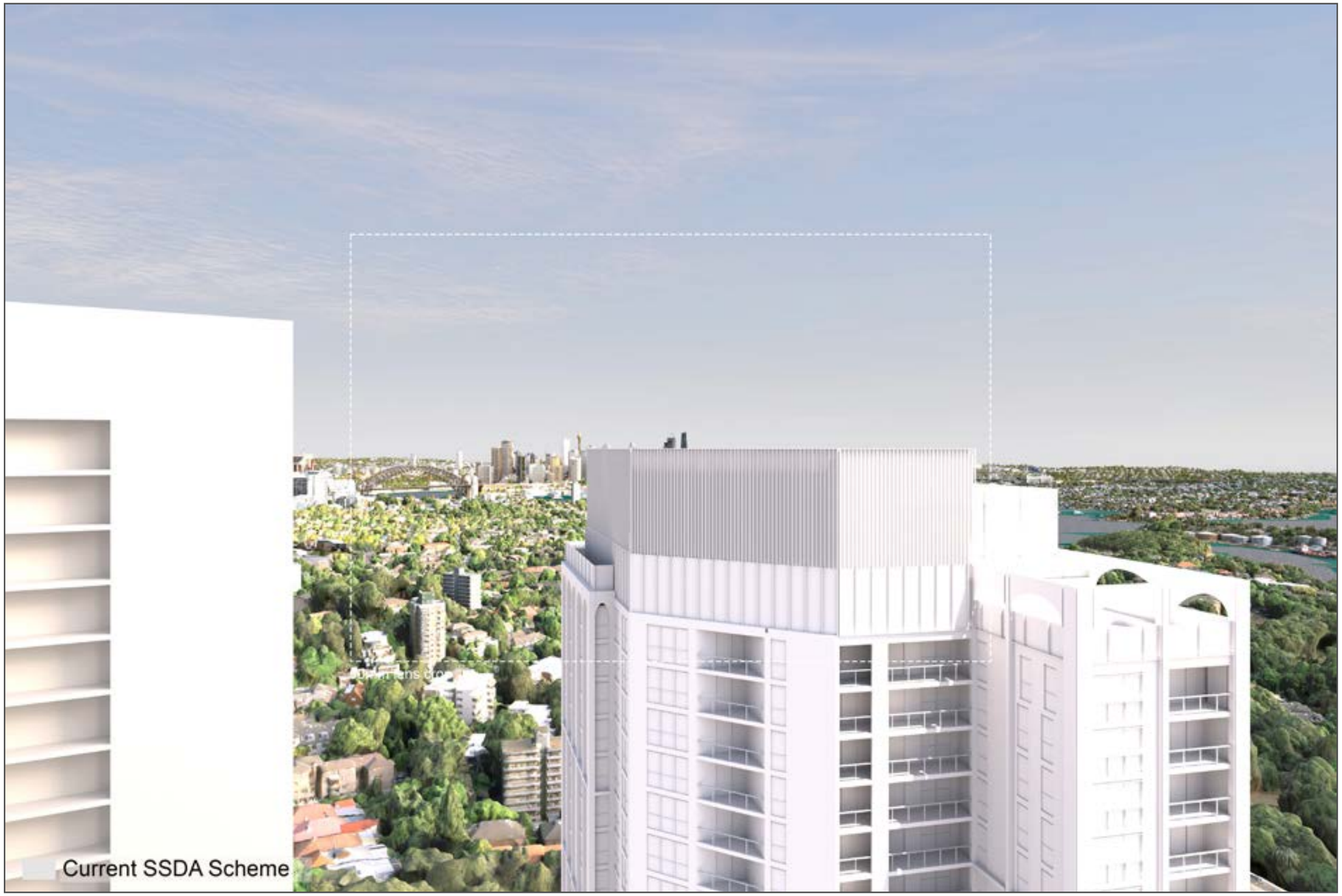
RL:	99.2m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

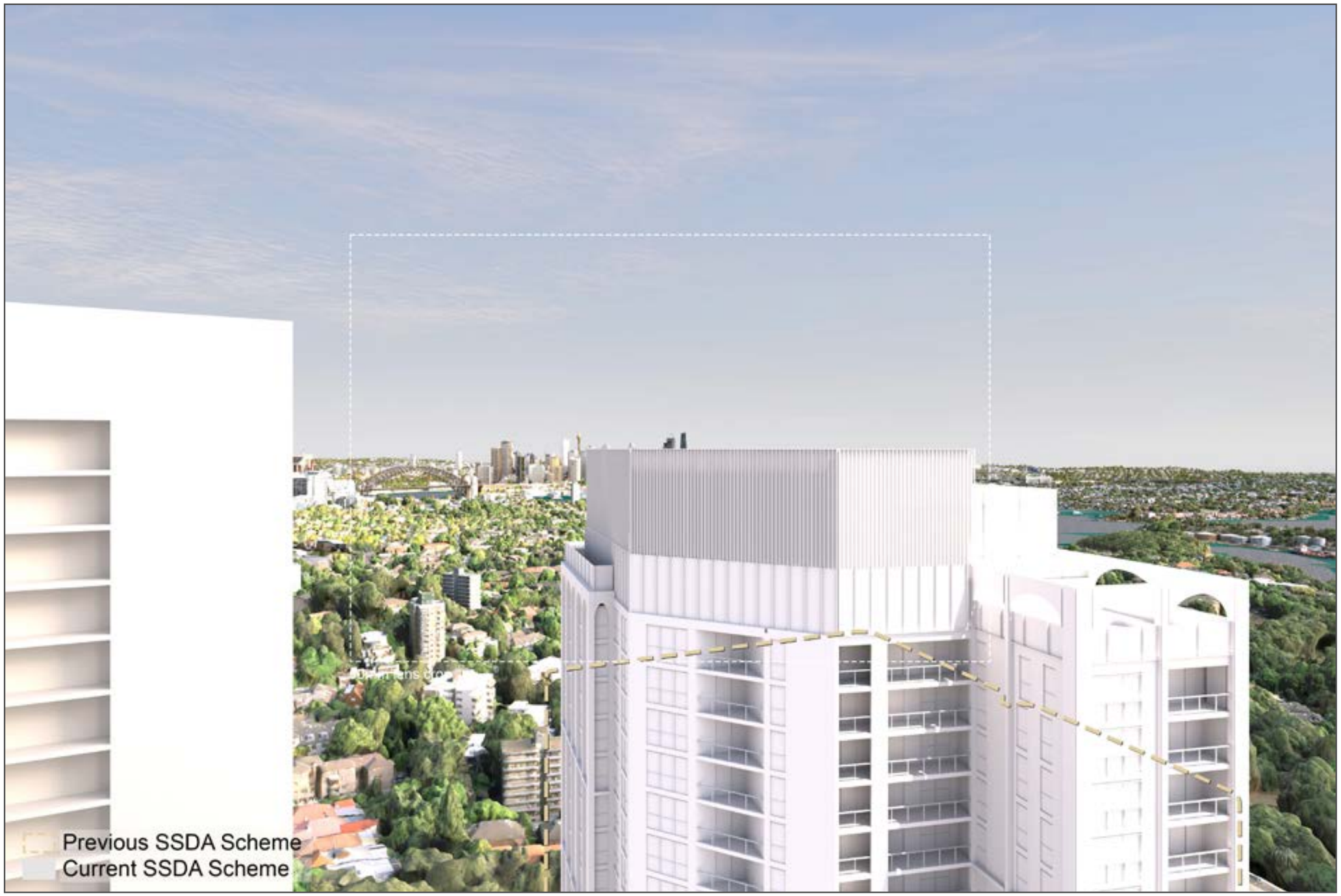
19.2 VIEWPOINT POSITION 08 - The Landmark, 500 PACIFIC HIGHWAY

CURRENT SSDA



19.3 VIEWPOINT POSITION 08 - The Landmark, 500 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA



20.1 VIEWPOINT POSITION 09 - The Landmark, 500 PACIFIC HIGHWAY

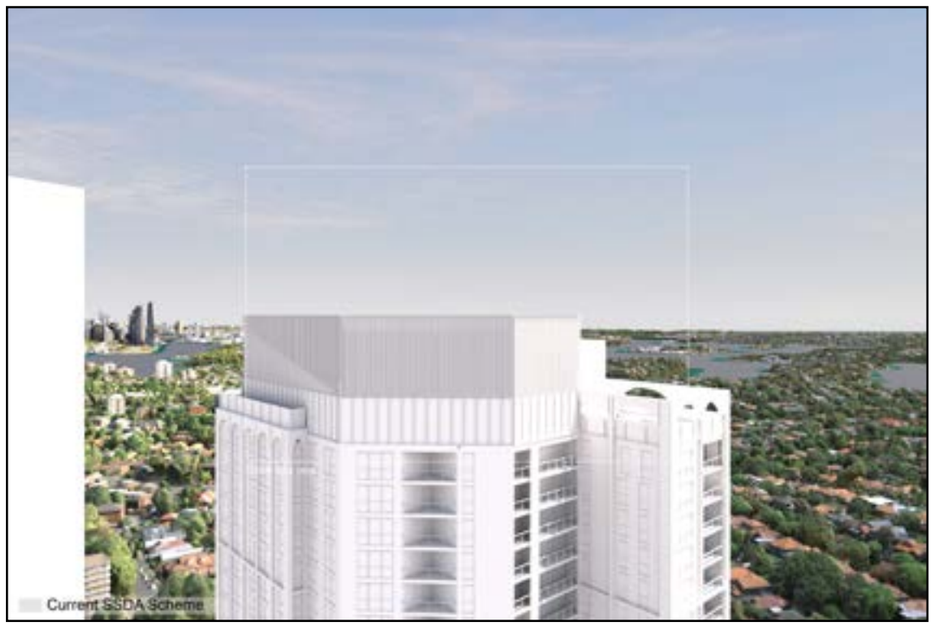
VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	99.2m
Sensor:	Full frame
Focal length:	24mm

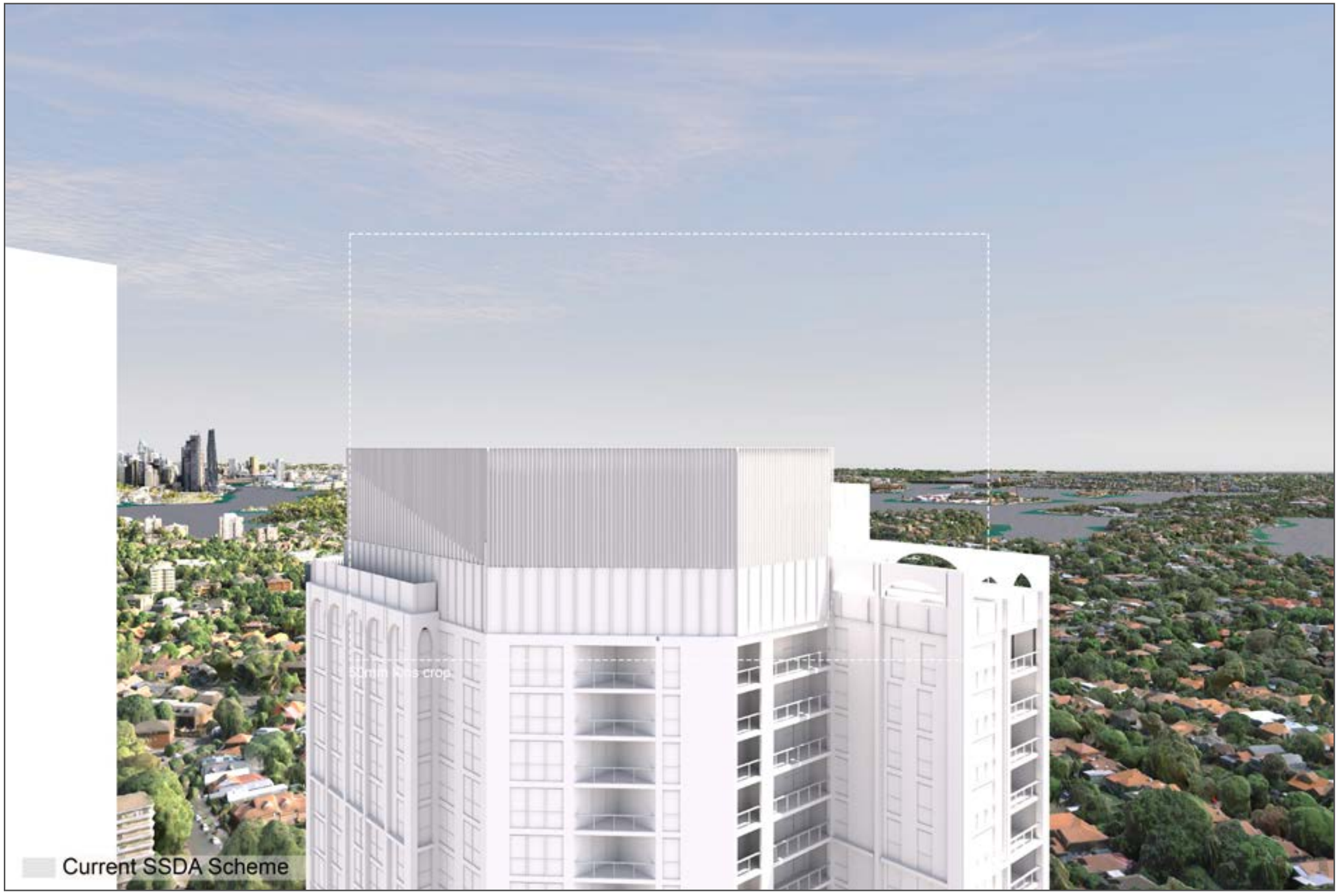
CURRENT SSDA



CURRENT SSDA COMPARED TO PREVIOUS SSDA

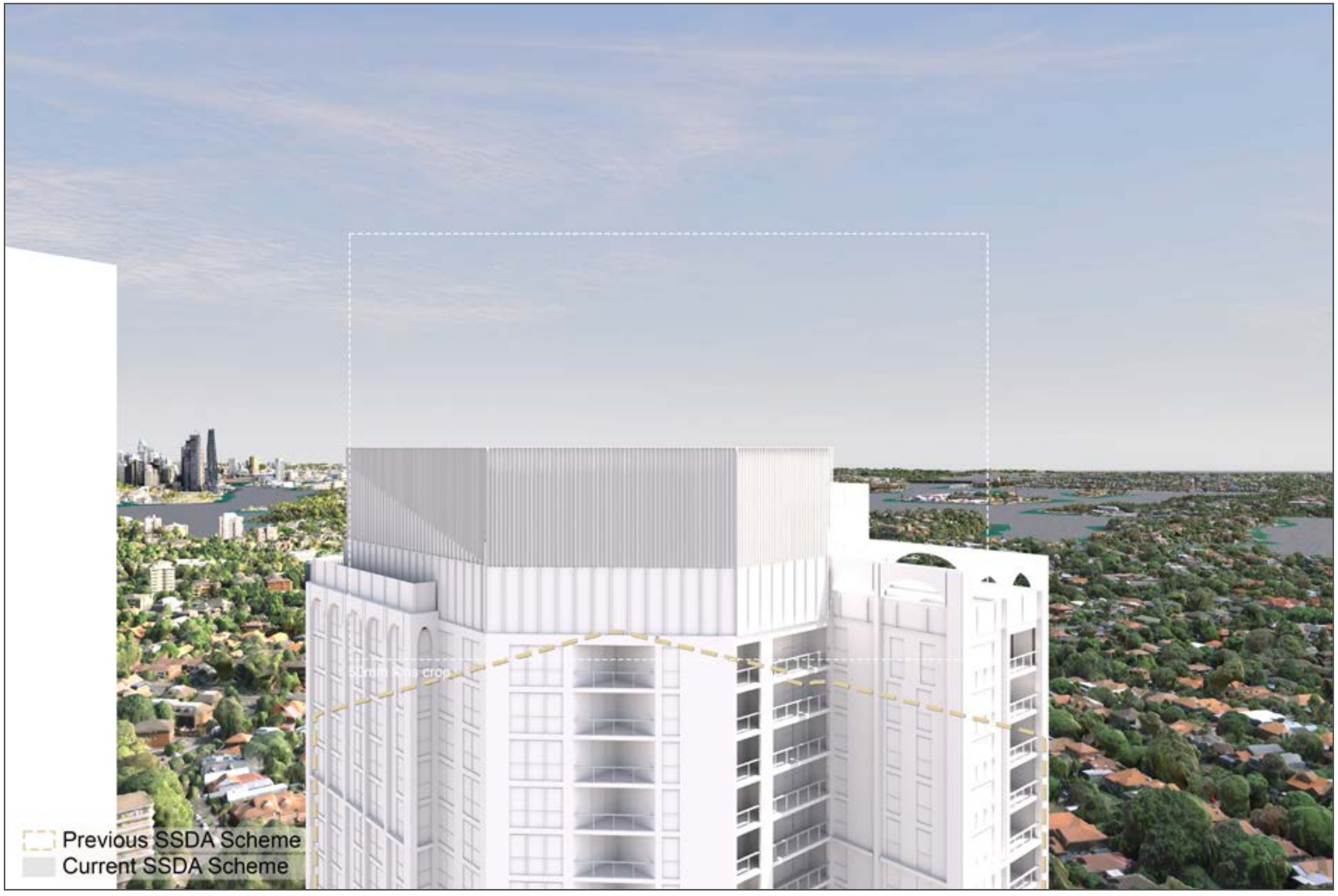
20.2 VIEWPOINT POSITION 09 - The Landmark, 500 PACIFIC HIGHWAY

CURRENT SSDA



20.3 VIEWPOINT POSITION 09 - The Landmark, 500 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA



21.1 VIEWPOINT POSITION 10 - Telstra Exchange, 530-542 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	99.2m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

21.2 VIEWPOINT POSITION 10 - Telstra Exchange, 530-542 PACIFIC HIGHWAY

CURRENT SSDA

21.3 VIEWPOINT POSITION 10 - Telstra Exchange, 530-542 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA

22.1 VIEWPOINT POSITION 11 - Telstra Exchange, 530-542 PACIFIC HIGHWAY

VIEW LOCATION PLAN

VIEW LOCATION ELEVATION

CAMERA DETAILS

RL:	174.9m
Sensor:	Full frame
Focal length:	24mm

CURRENT SSDA

CURRENT SSDA COMPARED TO PREVIOUS SSDA

22.2 VIEWPOINT POSITION 11 - Telstra Exchange, 530-542 PACIFIC HIGHWAY

CURRENT SSDA

22.3 VIEWPOINT POSITION 11 - Telstra Exchange, 530-542 PACIFIC HIGHWAY

CURRENT SSDA COMPARED TO PREVIOUS SSDA

23.1 3D SCENE DATA SOURCES

Appendix A - 3D Model of current SSDA scheme

File Name: 20250815_Model
Author: Cox Architecture
Format: fbx
Alignment: Aligned to MGA 56 GDA2020 via appendix E

Appendix B - 3D Model of previous SSDA scheme

File Name: Nicholson Place_View Analysis Massings_No Height Breach
Author: Cox Architecture
Format: AutoCAD
Alignment: Aligned to MGA 56 GDA2020 via appendix E

Appendix C - Elevation of 472 & 486 Pacific Hwy

File Name: FFL
Author: Sissons Architects
Format: pdf

Appendix D - 3D Model of proposed neighbouring buildings

File Name: Proposal at 29-57 Christie Street St Leonards - DA171 2020_1517864
Author: Virtual Ideas/Fitzpatrick + Partners
Format: 3DS Max/pdf
Alignment: MGA 56 GDA2020

Appendix E - Site survey

File Name: 33489-01.dwg
Author: Frank M Mason & Co
Format: AutoCAD
Alignment: MGA 56 GDA2020

Appendix F - Site photography survey

File Name: 22468photo locations.dwg
Author: CMS
Format: AutoCAD
Alignment: MGA 56 GDA2020

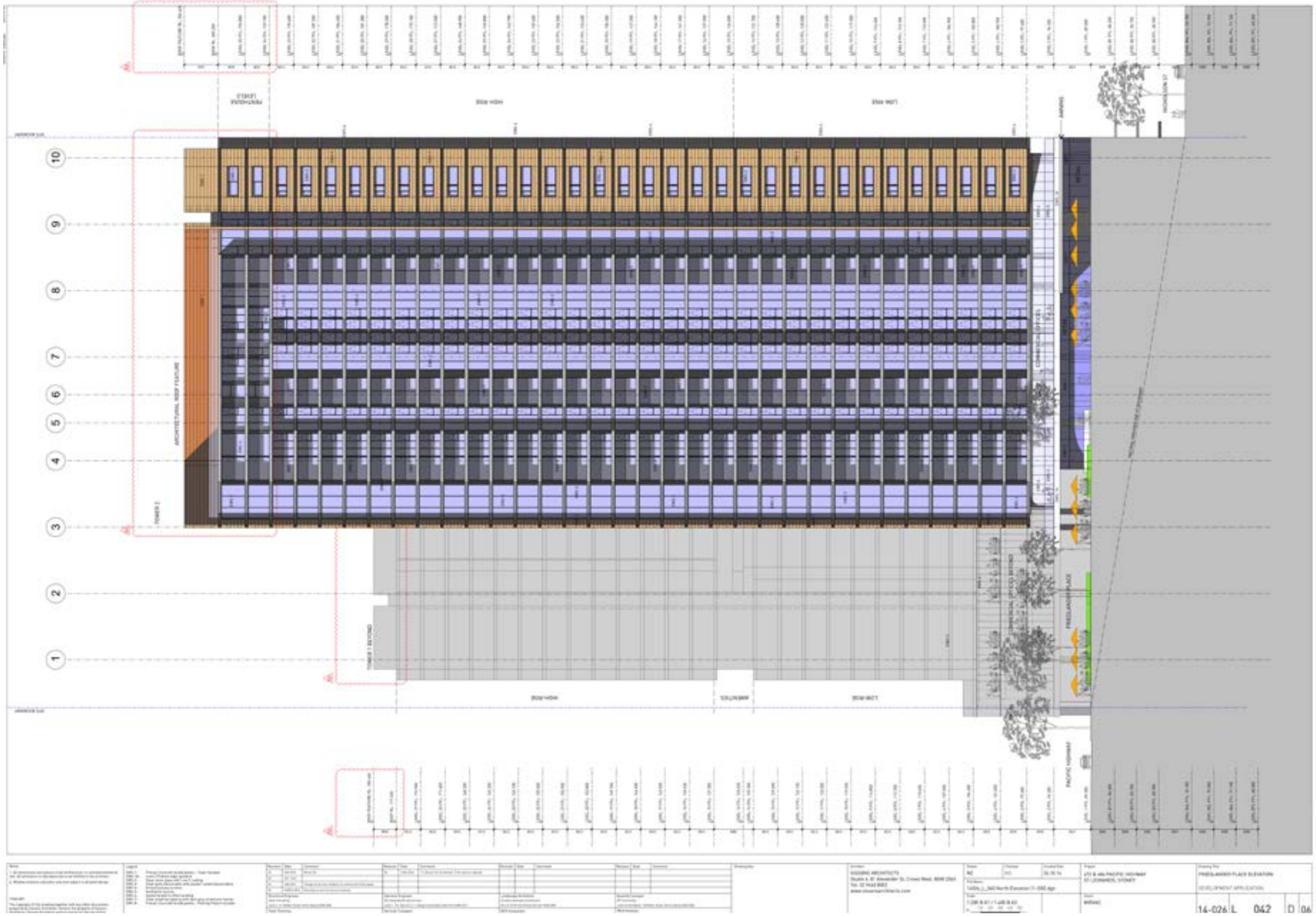
Appendix G - Photgrammetric city model

File Name: Aerometrex Sydney model
Author: Aerometrex
Format: obj/3DS Max
Alignment: MGA 56 GDA2020

23.2 APPENDIX A/D: 3D MODEL OF THE CURRENT SSDA SCHEME SUPPLIED BY COX

23.3 APPENDIX B/D: 3D MODEL OF THE PREVIOUS SSDA SCHEME SUPPLIED BY COX

23.4 APPENDIX C: ELEVATION SUPPLIED BY MIRVAC



23.5 APPENDIX E: SITE SURVEY

23.6 APPENDIX F: SITE PHOTOGRAPHY SURVEY

CMS Surveyors Pty Limited
A.B.N. 79 096 240 201
LAND SURVEYING, PLANNING & DEVELOPMENT CONSULTANTS

CMS SURVEYORS

Date: 17-05-2023
Our Ref: 22468 Photo Locations

Studio 71/61 Marlborough Street
Surry Hills
NSW 2010

Dear Rick Mansfield,

RE: PHOTO LOCATIONS – ST LEONARDS

As requested, we have attended site and measured the Co-ordinates and Elevation of the photo locations for Concord West.

Co-ordinates are MGA 56 **(GDA 2020)** and elevation to Australian Height datum (AHD).

Measurements were taken using Leica Total Station TS15 and GNSS measurements.

DWG of locations has also been supplied.

Point Number	Easting	Northing	Reduced Level (RL)	Photo Point
100	332561.383	6255888.946	83.352	CAMERA LOCATION 1
200	333012.278	6255891.719	78.359	CAMERA LOCATION 2
300	332998.290	6255963.528	82.250	CAMERA LOCATION 3
400	333137.765	6255802.777	81.637	CAMERA LOCATION 4
500	332784.095	6255800.682	73.572	CAMERA LOCATION 5
600	333022.865	6255627.155	72.310	CAMERA LOCATION 6
101	332568.521	6255886.688	84.441	Fence Poles
102	332573.380	6255888.590	84.424	Fence Poles
103	332752.434	6255930.073	109.984	Wall
104	332740.315	6255945.760	112.559	Wall
106	332599.580	6255898.974	89.015	Light Pole
201	333065.992	6255857.931	88.364	Wall
202	333036.710	6255862.703	83.828	Wall
203	333044.183	6255845.262	88.364	Wall
204	333020.199	6255859.597	85.038	Pole
205	333015.200	6255885.935	81.561	Pole
301	333053.373	6255937.243	111.046	Wall
302	333019.292	6255951.466	92.307	Wall
303	333008.663	6255924.398	83.670	Pole
304	333016.411	6255845.783	82.853	Fence

Surveyors NSW
ISNSW THE INSTITUTION OF SURVEYORS NSW INC

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INCORPORATING
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(Roseville)
MBS GREEN & ASSOCIATES
(Mona Vale)

COOTAMUNDRA
Incorporating PENGELLY & GRAY
90 Wallendoon St, COOTAMUNDRA NSW 2590
Ph: 02 6942 3395 Fax: 02 6942 4046
Email: coota@cmssurveyors.com.au

Point Number	Easting	Northing	Reduced Level (RL)	Photo Point
401	333131.872	6255808.049	82.075	Bollard
402	333126.204	6255815.019	81.422	Bollard
403	333076.682	6255878.165	105.313	Wall
404	333100.002	6255820.719	89.811	Wall
405	333107.412	6255823.133	81.150	Pole
501	332794.755	6255797.625	79.905	Light Pole
502	332803.022	6255793.350	72.776	Post
503	332810.105	6255803.569	74.144	Pole
504	332815.038	6255812.600	80.181	Light Pole
505	332814.042	6255805.797	74.306	Sign
601	333035.038	6255638.701	75.956	Pole
602	333056.447	6255705.230	99.731	Wall
603	333053.006	6255708.150	99.723	Wall
604	333034.400	6255669.704	90.068	Pole
605	333028.450	6255651.785	76.051	Sign

Note: R.L. shown on the report for photo locations are ground levels. Camera height should be added to the supplied RL of each corresponding photo location.

Yours faithfully,

Jon Tutte
Cadastral Surveyor
CMS Surveyors Pty Limited

Surveyors NSW
ISNSW THE INSTITUTION OF SURVEYORS NSW INC

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23.7 APPENDIX F: SITE PHOTOGRAPHY SURVEY

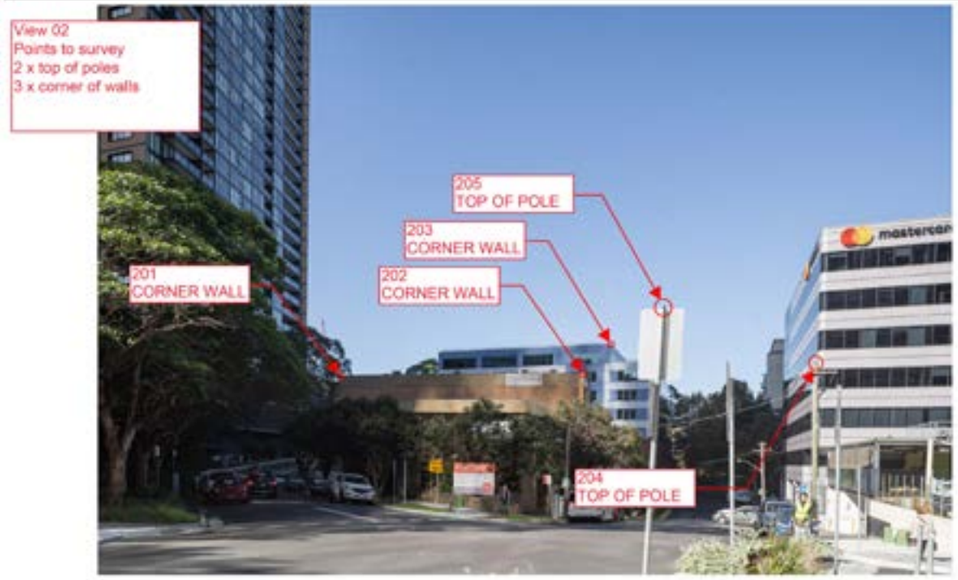
VIRTUAL IDEAS

Nicholson Place VIA_Survey Brief

View 01_Pos 01_01

VIRTUAL IDEAS

Nicholson Place VIA_Survey Brief



View 02_Pos 01_01

VIRTUAL IDEAS

Nicholson Place VIA_Survey Brief

View 03_Pos 01_01

VIRTUAL IDEAS

Nicholson Place VIA_Survey Brief

View 04_Pos 01_01

23.8 APPENDIX F: SITE PHOTOGRAPHY SURVEY

VIRTUAL IDEAS

Nicholson Place VIA_Survey Brief

View 05_Pos 01_01

VIRTUAL IDEAS

Nicholson Place VIA_Survey Brief

View 06_Pos 01_01

23.9 APPENDIX G: PHOTOGRAMMETRIC CITY MODEL SUPPLIED BY AEROMETREX

aerometrex
Digital Mapping Specialists

Sydney 75mm - 3D MODEL

Aerometrex Project Number:	A5673
Aerial Survey Acquisition Dates:	4th, 10th, 11th and 12th February 2019
Number of frames captured:	127,250
Capture Pixel Size:	7.5 cm GSD
Horizontal Datum:	Geocentric Datum of Australia 1994 (GDA94)
Vertical Datum:	Australian Height Datum (AHD)
Map Projection:	MGA Zone 56 (MGA56) FBX Offsets: X= 313,000 Y= 5,236,000
Spatial Accuracy – XYZ:	Derived controls from 10cm Photogrammetric surveying – 25cm absolute accuracy

Data Summary:

- **FBX Tiles** – 3D mesh tiles in FBX format split into their Level of Details. Please refer to the associated *metadata.xml* and Tile_Index.kml folder for global offsets and tile extents respectively.

  Please note there are different directories for different Level of details meaning L19 is typically the highest level of resolution and geometry and every Level down the geometry gets simplified as well as the texture resolution.

aerometrex
Digital Mapping Specialists

Figure 1: Sydney 2019 3D Model example

Figure 2: Sydney 2019 3D Model example

Any queries/feedback please contact Aerometrex - Adelaide
ph +61 8 8362 9911

aerometrex