

VIEW AND VISUAL IMPACT ASSESSMENT

S4.55(2) MODIFICATION TO CONCEPT APPROVAL

16 MAY 2019
SYDNEY METRO VICTORIA CROSS STATION OVER STATION DEVELOPMENT
FINAL
PREPARED FOR LEND LEASE

URBIS

URBIS STAFF RESPONSIBLE FOR THIS REPORT WERE:

Director	Stephen White
Associate Director	Ashleigh Ryan
Senior Consultant	Rob Battersby
Project Code	P7580
Report Number	Final

TABLE OF CONTENTS

1.	Introduction	1
1.1.	Overview	1
1.2.	Scope of VVIA.....	1
1.3.	Accompanying Documentation	2
2.	Site and Surrounding Context.....	3
2.1.	Site Description	3
2.2.	Sydney Metro	3
3.	Modified Concept Proposal.....	5
3.1.	Concept Approval	5
3.2.	Modification to Concept Approval	5
4.	View and Visual Impact Assessment.....	7
4.1.	Methodology	7
4.2.	Image Production.....	7
4.3.	Public View Analysis from Key Vantage Points and Locations	7
4.3.1.	Long-Distance and Scenic View Impacts	8
4.3.2.	Short- to Medium-Distance Views	10
4.3.3.	Assessment of Visual Impact from Key Vantage Points and Surrounding Locations	14
4.4.	Private View Analysis from Adjoining Residential Building.....	14
5.	Statutory Planning Considerations	20
5.1.	North District Plan	20
5.2.	Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005	20
5.3.	North Sydney Local Environmental Plan 2013	21
6.	Conclusion	22
	Disclaimer	24

Appendix A Public View Study

Appendix B Private View Study

FIGURES:

Figure 1 – Site Aerial	4
Figure 2 – Sydney Metro Alignment Map	4
Figure 3 – Modified Concept Proposal – North West Axonometric	6
Figure 4 – Modified Concept Proposal – South West Axonometric.....	6
Figure 5 – Key Vantage Points and Public Domain Locations	8
Figure 6 – Comparative Views from Mrs Macquarie’s Chair (Location #04)	9
Figure 7 – Comparative Views from Sydney Opera House (Location #05).....	9
Figure 8 – Comparative Views from Barangaroo Headland Park (Location #06).....	9
Figure 9 – Comparative Views from the Gladesville Bridge (Location #07)	10
Figure 10 – Comparative Views from corner of Falcon Street and Miller Street, North Sydney (Location #01)	10
Figure 11 – Comparative Views from corner of Falcon Street and Bent Street, Neutral Bay (Location #02).....	11
Figure 12 – Comparative Views from Yeo Street and Freshwater Lane, Neutral Bay (Location #03)....	11
Figure 13 – Comparative Views from corner of West Street and Pacific Highway, North Sydney (Location #08)	11
Figure 14 – Comparative Views from corner of Walker Street and Ridge Street, North Sydney	

(Location #09)	12
Figure 15 – Comparative Views from corner of Blues Point Road and Union Street, Blues Point (Location #10)	12
Figure 16 – Comparative Views from corner of Alfred Street and Lavender Street, Lavender Bay (Location #11)	12
Figure 17 – Comparative Views from corner of Miller Street and McLaren Street, North Sydney (Location #12)	13
Figure 18 – Comparative Views from corner of Pacific Highway and Miller Street (Location #13).....	13
Figure 19 – Comparative Views from corner of Alfred Street and Mount Street, North Sydney (Location #14)	13
Figure 20 – Comparative Views from Apartment 1501 (Looking South West)	16
Figure 21 – Comparative Views from Apartment 2001 (Looking South West)	16
Figure 22 – Comparative Views from Apartment 2701 (Looking South West)	16
Figure 23 – Comparative Views from Rooftop Level 37 (Looking South West)	17
Figure 24 – Comparative Views from Rooftop Level 37 (Looking West)	17
Figure 25 – Comparative Views from Apartment 2105 (Looking South West)	17
Figure 26 – Comparative Views from Apartment 2501 (Looking West)	18

1. INTRODUCTION

1.1. OVERVIEW

This View and Visual Impact Assessment (**VVIA**) has been prepared to accompany a section 4.55(2) application which seeks modifications to a State Significant Development (**SSD**) Concept Approval (reference SSD 17_8874) (**Concept Approval**) granted for a commercial mixed-use Over Station Development (**OSD**) above the new Sydney Metro Victoria Cross Station (**the site**). This report has been prepared having regard to the Secretary's Environmental Assessment Requirements (**SEARs**) dated 30 November 2017.

The Minister for Planning granted development consent to the Concept SSD Development Application (DA) on 18 December 2018. Concept approval was granted for:

- A maximum building envelope, including street-wall and setbacks for the OSD
- A maximum building height of RL 230 or 168 metres, providing:
 - Approximately 40 commercial storeys and 2 additional storeys for rooftop plant for the high-rise portion of the building envelope
 - Approximately 13 storeys for the lower eastern portion of the building envelope at RL 118 or 55 metres
 - A maximum gross floor area (GFA) of 60,000sqm, excluding station floorspace
 - Basement car parking for a maximum 150 parking spaces.

Following Sydney Metro's appointment of Lendlease (Victoria Cross) Pty Limited as the preferred development partner to deliver the Victoria Cross OSD, and ongoing design development, minor modifications to the approved building envelope are now required.

The section 4.55(2) modification application proposes the following changes to the approved building envelope:

- Reduction in the massing and overall dimensions of the building cantilever above the Miller Street special area setback;
- Relocation of building massing from the low-rise levels the tower, north of the through-site link, to the high-rise levels of the tower;
- Reduction of the Berry Street setback from 5 metres to 4.5 metres, extending the building envelope marginally to the north; and
- Increasing the approved maximum GFA for the over station development from 60,000sqm to 61,500sqm.

It is noted that the Concept SSD DA instrument of approval does not consent to any physical works commencing on site until a Detailed SSD DA is granted for the site. A Detailed SSD DA seeking consent for the detailed construction of the proposed development is lodged under a different cover concurrently with this Concept SSD DA modification application.

1.2. SCOPE OF VVIA

The purpose of this VVIA is to provide an assessment of the view and visual impacts of the modified concept proposal in comparison to the Concept Approval. The detailed design of the OSD will be subject to a separate view and visual impact assessment to be submitted with a subsequent Detailed SSD application.

This VVIA has been prepared having regard to the SEARs issued by the Department of Planning and Environment (**DP&E**) on 30 November 2017 and the relevant conditions of consent included in the Concept Approval. The SEARs require the Environmental Impact Statement (**EIS**) to include a visual and view impact analysis and photomontages.

Relevantly to the visual and view assessment, the SEARs include the following requirements:

"The EIS shall:

- *include view analysis to and from the site from key vantage points and streetscape locations including photomontages or perspectives of the proposed development;*
- *include a view impact analysis from adjoining developments, including from Beau Monde Apartments in Berry Street; and*
- *demonstrate how the proposal impacts and any proposed measures to mitigate potential impacts, the amenity of surrounding properties, including residential development, with regard to solar access, privacy and view impacts.”*

This VVIA addresses the above SEARs requirements.

The scope of this VVIA is:

- to provide a visual analysis of the modified concept proposal from key vantage points within North Sydney and public domain locations (including iconic views from south of Sydney Harbour);
- to provide a comparative analysis between the visual impacts of the approved building envelope and the visual impacts of the modified building envelope; and
- to assess view impacts from the adjacent residential Alexander Apartments building.

This VVIA is based on view sharing and visual assessment planning principles established by NSW, national, and international policy and practices.

1.3. ACCOMPANYING DOCUMENTATION

This VVIA is informed by the following studies prepared by Virtual Ideas:

- Visual Impact Photomontages and Methodology Report (Public View Study) (at **Appendix 1**); and
- Visual Impact Photomontages and Methodology Report (Private View Study) (at **Appendix 2**).

Urbis has undertaken a visual and view impact analysis based on the above studies.

2. SITE AND SURROUNDING CONTEXT

2.1. SITE DESCRIPTION

The site is generally described as 155-167 Miller Street, 181 Miller Street, 187-189 Miller Street, and part of 65 Berry Street, North Sydney (**the site**). The site occupies various addresses/allotments and is legally described as follows:

- 155-167 Miller Street (SP 35644) (which incorporates Lots 40 and 41 of Strata Plan 81092 and Lots 37, 38 and 39 of Strata Plan 79612)
- 181 Miller Street (Lot 15/DP 69345, Lot 1 & 2/DP 123056, Lot 10/DP 70667)
- 187 Miller Street (Lot A/DP 160018)
- 189 Miller Street (Lot 1/DP 633088)
- Formerly part 65 Berry Street (Lot 1/DP 1230458)

2.2. SYDNEY METRO

Sydney Metro is Australia's biggest public transport project. Services started in May 2019 in the city's North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new metro railway stations underground at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new metro platforms under Central.

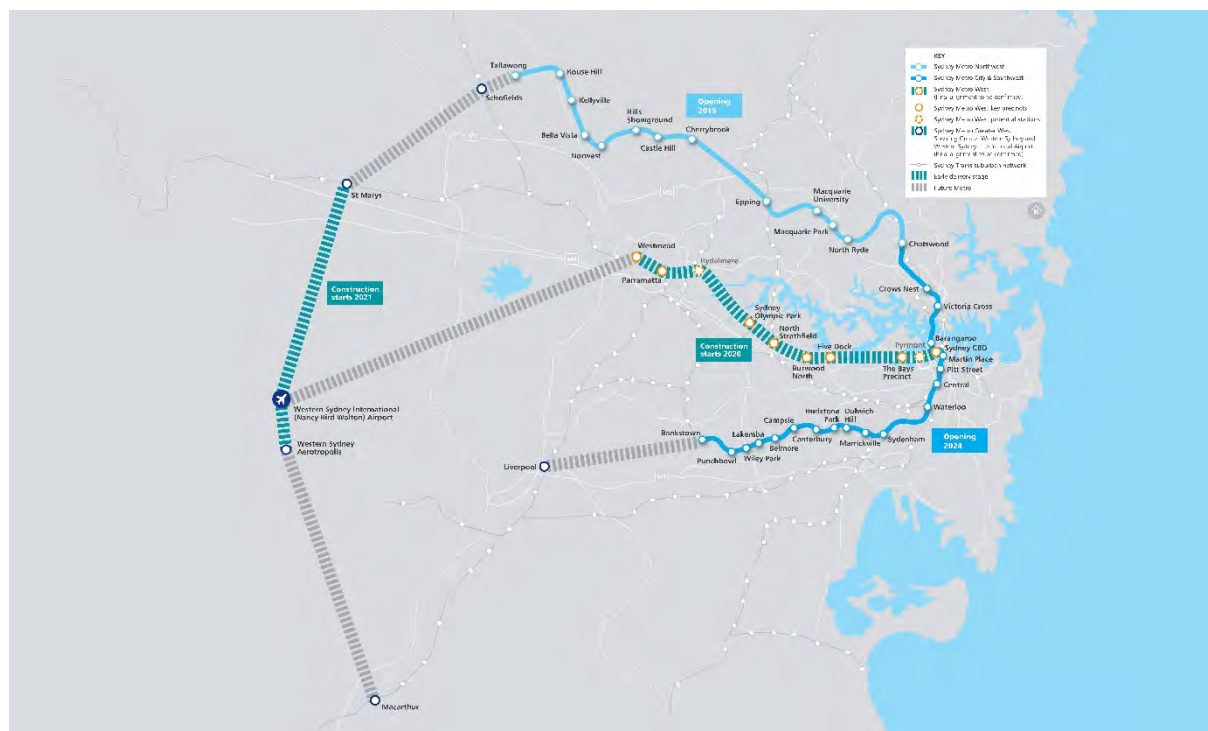
In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre. The Sydney Metro project is illustrated in the Figure below.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (**CSSI Approval**). The terms of the CSSI Approval includes all works required to construct the Sydney Metro Victoria Cross Station, including the demolition of existing buildings and structures on both sites. The CSSI Approval also includes construction of below and above ground improvements with the metro station structure for appropriate integration with the OSD.

With regards to CSSI related works, any changes to the "metro box envelope" and public domain will be pursued in satisfaction of the CSSI conditions of approval and do not form part of the scope of the Concept SSD DA for the OSD.

[illegible]

Figure 2 – Sydney Metro Alignment Map



3. MODIFIED CONCEPT PROPOSAL

3.1. CONCEPT APPROVAL

The Minister for Planning granted development consent to SSD Concept Approval (reference SSD 17_8874) for a commercial mixed-use OSD above the new Sydney Metro Victoria Cross Station on 18 December 2018. Concept Approval was granted for:

- A maximum building envelope, including street-wall and setbacks for the OSD
- A maximum building height of RL 230 or 168 metres, providing:
 - Approximately 40 commercial storeys and 2 additional storeys for rooftop plant for the high-rise portion of the building envelope;
 - Approximately 13 storeys for the lower eastern portion of the building envelope at RL 118 or 55 metres;
 - A maximum gross floor area (GFA) of 60,000sqm, excluding station floorspace; and
 - Basement car parking for a maximum 150 parking spaces.

The Concept SSD DA instrument of approval does not consent to any physical works commencing on site until a Detailed SSD DA is granted for the site. A detailed SSD DA seeking consent for the detailed design and construction of the proposed development is lodged under a different cover concurrently with this Concept SSD DA modification application.

3.2. MODIFICATION TO CONCEPT APPROVAL

Following Sydney Metro's appointment of Lendlease (Victoria Cross) Pty Limited as the preferred development partner to deliver the Victoria Cross OSD, and ongoing design development, minor modifications to the approved building envelope are now required. Accordingly, the section 4.55(2) modification application proposes the following changes to the approved building envelope:

- Reduction in the massing and overall dimensions of the building cantilever above the Miller Street special area setback;
- Relocation of building massing from the low-rise levels the tower, north of the through-site link, to the high-rise levels of the tower; and
- Reduction of the Berry Street setback from 5 metres to 4.5 metres, extending the building envelope marginally to the north.

The proposed modifications to the concept proposal are detailed in the Environmental Impact Statement.

The modified building envelope is shown in **Figure 3** and **Figure 4** below. These represent the maximum built envelope within which the future OSD development can be delivered.

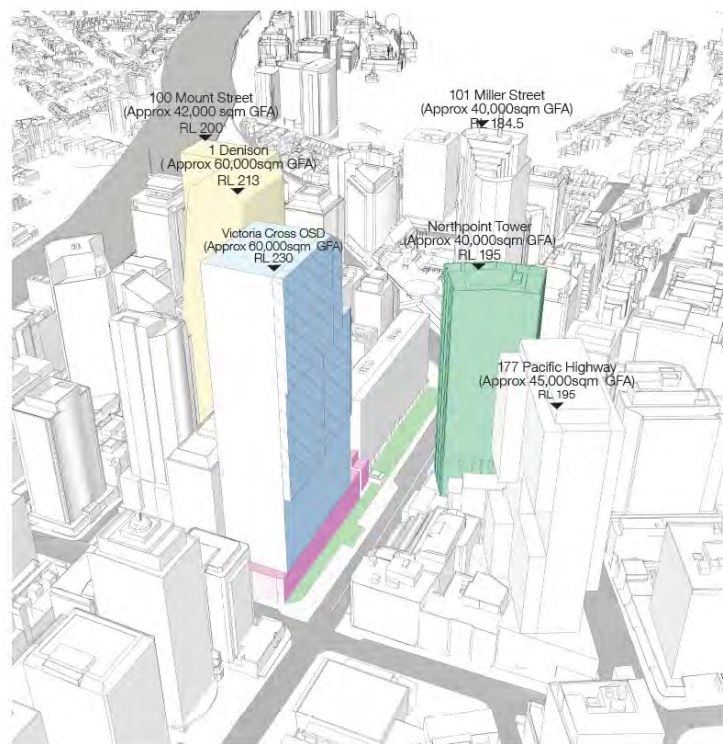
Figure 3 – Modified Concept Proposal – North West Axonometric

ISOMETRIC VIEWS

The adjacent isometric diagrams demonstrate the extent of the modified OSD building envelope. The envelope has a rectangular shaped floorplate on the lower levels with a frontage to Miller and Berry Streets. The middle and upper levels of the building are setback from the western boundary between 1.5m - 6m. The upper floors are also setback on the southern boundary above RL182.3. The building envelope has a maximum height of RL 230. The through-site link is flanked by low level and retail and podium office space.

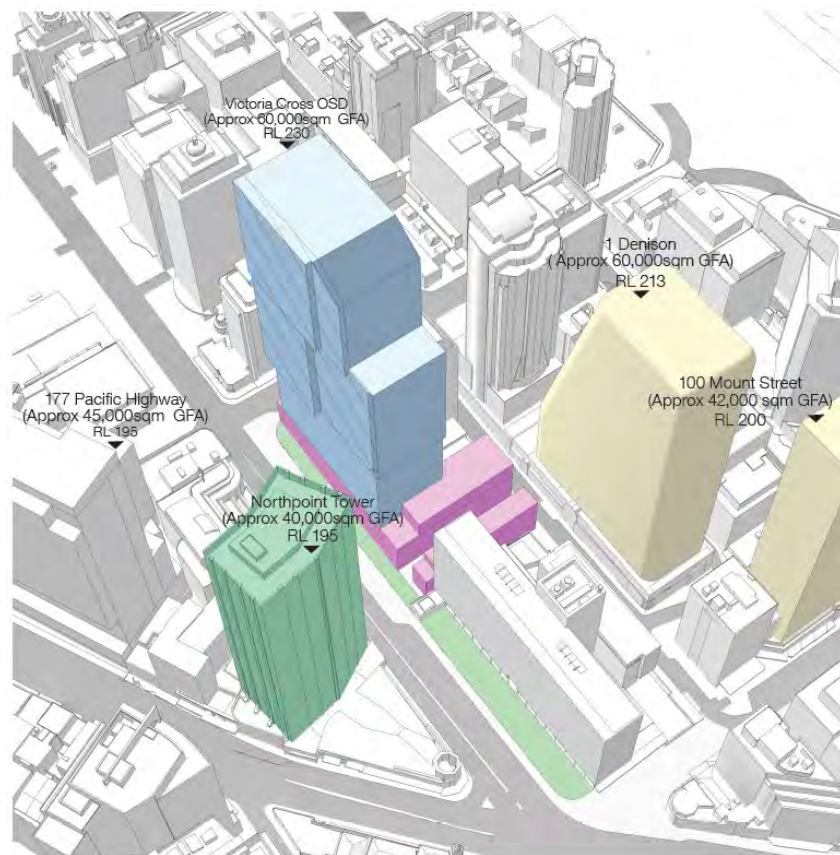
KEY:

- VICTORIA CROSS STATION CSSI APPROVAL- INCLUDES STRUCTURE AND BUILDING INFRASTRUCTURE AND SPACE FOR LIFT CORES, ACCESS, PARKING, RETAIL AND BUILDING SERVICES FOR THE FUTURE OSD
- OSD CONCEPT SSD BUILDING ENVELOPE - INCLUDES OSD USES
- ARTICULATION ZONE
- UNDER CONSTRUCTION
- UNDER REFURBISHMENT



Source: Bates Smart Built Form and Urban Design Report (June 2019)

Figure 4 – Modified Concept Proposal – South West Axonometric



Source: Bates Smart Built Form and Urban Design Report (June 2019)

4. VIEW AND VISUAL IMPACT ASSESSMENT

4.1. METHODOLOGY

This VVIA provides the following:

- a visual analysis of the modified concept proposal from key vantage points within North Sydney and other public domain locations (including iconic views from south of Sydney Harbour);
- a comparative visual impact assessment between the approved building envelope and the modified building envelope; and
- an assessment of view impacts from the adjacent residential Alexander Apartments building.

The methodology for this VVIA is based on view sharing and visual assessment principles established by NSW, national, and international policy and practices. The methodology and approach for the visual analysis and view impact assessment is undertaken in accordance with the SEARs requirements.

4.2. IMAGE PRODUCTION

This VVIA is informed by photomontage renderings obtained from public and private viewpoints provided in the following view impact studies prepared by Virtual Ideas:

- Visual Impact Photomontages and Methodology Report (Public View Study); and
- Visual Impact Photomontages and Methodology Report (Private View Study).

The methodology for preparing the photomontages is described in the two view impact studies as follows:

“The general process in creating accurate photomontage renderings involves the creation of an accurate, real world scale digital 3D model. We then take site photographs and place cameras in the 3D model that match the real world position that the photographs were taken on site.

The camera positions are then surveyed to identify the Map Grid of Australia (MGA) coordinates at each position.

By matching the real world camera lens properties to the camera properties in our software and rotating the camera so that surveyed points in 3D space align with the corresponding points on the photograph, we can create a rendering that is correct in terms of position, scale, rotation, and perspective.

The rendering can then be superimposed into the real photo to generate an image that represents accurate form and visual impact.”

This view impact studies prepared by Virtual Ideas therefore accurately portray the form and visual impact of the proposed modified building envelope as a comparative analysis to the approved building envelope.

It is noted that the photomontages contained in the view impact studies include the indicative building massing of two approved developments at locations within close proximity of the site, being:

- 100 Mount Street, North Sydney; and
- 1 Denison Street, North Sydney.

The inclusion of these two approved developments in the view impact studies provides a more accurate visual depiction of the emerging North Sydney cityscape and skyline.

The building at 100 Mount Street has recently been completed and the building at 1 Denison Street is currently under construction. The two buildings are identified in white block massing in the photomontages.

4.3. PUBLIC VIEW ANALYSIS FROM KEY VANTAGE POINTS AND LOCATIONS

The following provides a view analysis of the modified concept proposal from 14 key vantage points within North Sydney and public domain locations (including vantage points from south of Sydney Harbour). These

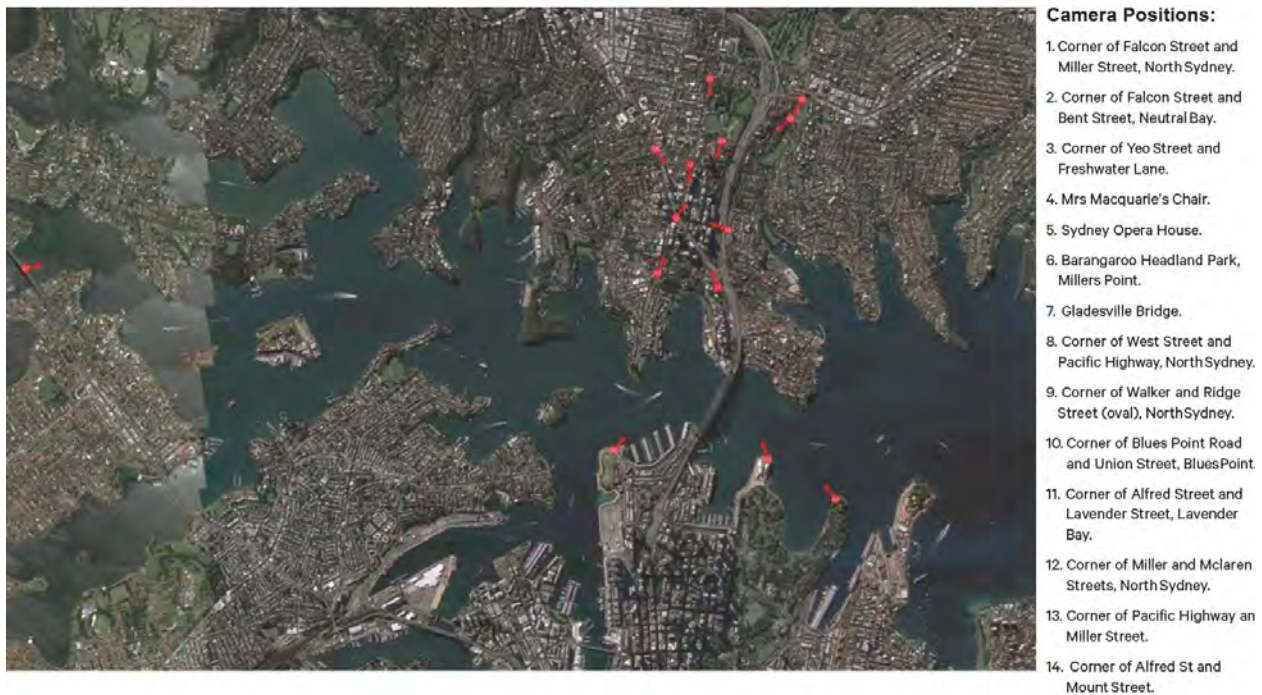
vantage points were selected in consultation with North Sydney Council during the original concept SSD Application.

The view photomontages are taken from the Visual Impact Photomontages and Methodology Report (Public View Study) prepared by Virtual Ideas (at **Appendix 1**) and demonstrate the impact of the modified concept proposal from the perspective of the public domain.

The views in this analysis have been selected to indicate the scale and massing the modified concept proposal from key vantage points (long-, medium-, and short-distance views) and streetscape locations.

The key vantage points and public domain locations are identified and described in **Figure 5** below.

Figure 5 – Key Vantage Points and Public Domain Locations



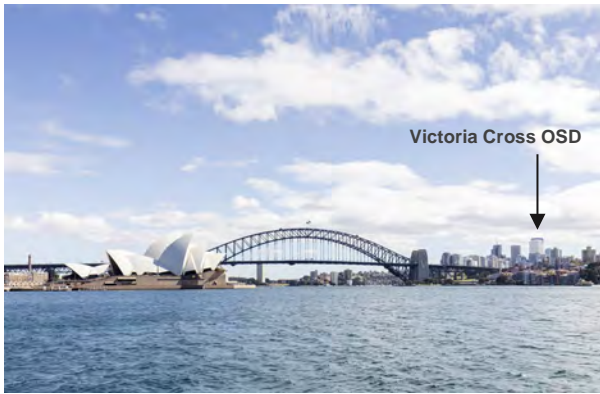
Source: Visual Impact Photomontage Report prepared by Virtual Ideas

4.3.1. Long-Distance and Scenic View Impacts

The long-distance and scenic views to the site are obtained from iconic locations, generally across Sydney Harbour. These long-distance and scenic views are obtained from Mrs Macquarie's Chair (Location #04), Sydney Opera House (#05), Barangaroo Headland Park (#06), and Gladesville Bridge (#07).

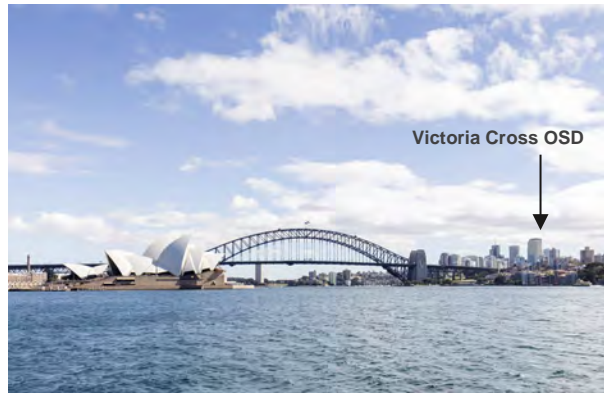
The following provides a comparative analysis between the approved building envelope and the proposed modified building envelope from the perspective of the selected long-distance and scenic views.

Figure 6 – Comparative Views from Mrs Macquarie’s Chair (Location #04)



Picture 1 – Approved OSD Building Envelope

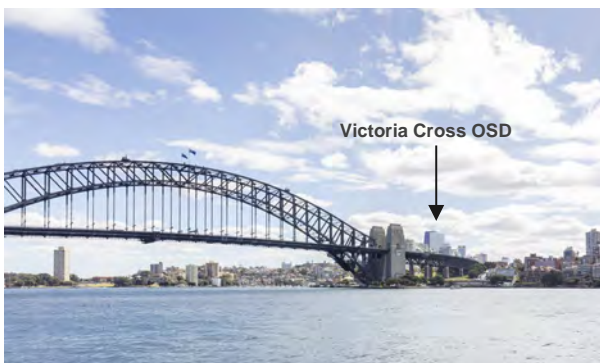
Source: Visual Impact Photomontage Report



Picture 2 – Proposed OSD Building Envelope

Source: Visual Impact Photomontage Report

Figure 7 – Comparative Views from Sydney Opera House (Location #05)



Picture 3 – Approved OSD Building Envelope

Source: Visual Impact Photomontage Report



Picture 4 – Proposed OSD Building Envelope

Source: Visual Impact Photomontage Report

Figure 8 – Comparative Views from Barangaroo Headland Park (Location #06)



Picture 5 – Approved OSD Building Envelope

Source: Visual Impact Photomontage Report



Picture 6 – Proposed OSD Building Envelope

Source: Visual Impact Photomontage Report

Figure 9 – Comparative Views from the Gladesville Bridge (Location #07)



Picture 7 – Approved OSD Building Envelope

Source: Visual Impact Photomontage Report



Picture 8 – Proposed OSD Building Envelope

Source: Visual Impact Photomontage Report

4.3.2. Short- to Medium-Distance Views

The short-distance views to the site are those obtained from within the surrounding streetscape and immediate North Sydney context, including Walker Street, Miller Street, and the Pacific Highway. The medium-distance views are those obtained from key locations in Neutral Bay, Blues Point and Lavender Bay.

The following provides a comparative analysis between the modified concept proposal and the approved concept proposal from the perspective of the selected short- and medium-distance views.

Figure 10 – Comparative Views from corner of Falcon Street and Miller Street, North Sydney (Location #01)



Picture 9 – Approved OSD Building Envelope

Source: Visual Impact Photomontage Report



Picture 10 – Proposed OSD Building Envelope

Source: Visual Impact Photomontage Report

Figure 11 – Comparative Views from corner of Falcon Street and Bent Street, Neutral Bay (Location #02)



Picture 11 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report

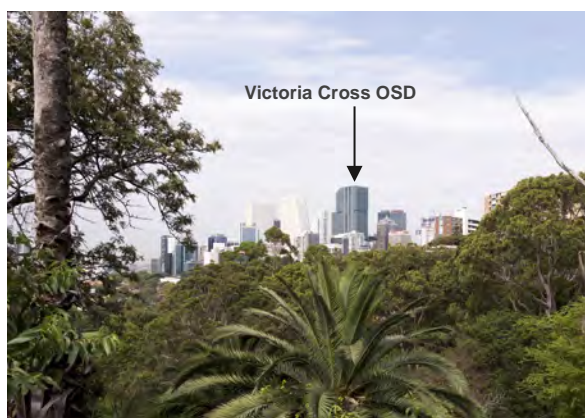


Picture 12 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

Figure 12 – Comparative Views from Yeo Street and Freshwater Lane, Neutral Bay (Location #03)



Picture 13 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report



Picture 14 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

Figure 13 – Comparative Views from corner of West Street and Pacific Highway, North Sydney (Location #08)



Picture 15 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report



Picture 16 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

Figure 14 – Comparative Views from corner of Walker Street and Ridge Street, North Sydney (Location #09)



Picture 17 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report



Picture 18 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

Figure 15 – Comparative Views from corner of Blues Point Road and Union Street, Blues Point (Location #10)



Picture 19 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report



Picture 20 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

Figure 16 – Comparative Views from corner of Alfred Street and Lavender Street, Lavender Bay (Location #11)



Picture 21 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report



Picture 22 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

Figure 17 – Comparative Views from corner of Miller Street and McLaren Street, North Sydney (Location #12)



Picture 23 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report



Picture 24 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

Figure 18 – Comparative Views from corner of Pacific Highway and Miller Street (Location #13)



Picture 25 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report



Picture 26 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

Figure 19 – Comparative Views from corner of Alfred Street and Mount Street, North Sydney (Location #14)



Picture 27 – Approved OSD Building Envelope
Source: Visual Impact Photomontage Report



Picture 28 – Proposed OSD Building Envelope
Source: Visual Impact Photomontage Report

4.3.3. Assessment of Visual Impact from Key Vantage Points and Surrounding Locations

NSW Land and Environment Court's planning principle for public domain views is established in *Rose Bay Marina Pty Limited v Woollahra Municipal Council & Anr [2013] NSWLEC 1046 (Rose Bay Marina)* the Land and Environment Court established a 'planning principle' for public domain views. The planning principle for public domain views adopted in Rose Bay Marina involves a two-step process:

- 1) *Step 1 – Investigation to identify the nature and scope of existing views from the public domain; and*
- 2) *Step 2 – Analysis of the development's public domain view impacts.*

The following provides a public domain view assessment based on principle established in Rose Bay Marina.

Step 1 – Investigation to identify the nature and scope of existing views from the public domain

Sections 4.3.1 and 4.3.2 of this VVIA identify the nature and scope of public domain views from key vantage points within North Sydney and south of Sydney Harbour. These views have been selected to indicate the scale and massing the modified concept proposal from long-, medium-, and short-distance views.

Step 2 – Analysis of the development's public domain view impacts

The second step in the planning principle established in Rose Bay Marina is to provide a qualitative and quantitative analysis of the development's public domain view impacts.

From the perspective of long-distance and scenic views obtained to the site from iconic and public domain locations across Sydney Harbour, the subtle changes to the massing and dimension of the building envelope are almost unperceivable and the visual impacts compared to the approved concept proposal are negligible.

From the perspective of the medium-distance views obtained from streetscape locations around North Sydney and neighbouring suburbs, the proposed changes to the massing and dimension of the building envelope range from minor to negligible. Whilst the modified concept proposal is visible from certain medium-distance locations (such as the corner of West Street and Pacific Highway and the corner of Blues Point Road and Union Street), the extent to which the modified building massing can be perceived is minor. From the perspective of other medium-distance locations, such as those obtained from Neutral Bay, Lavender Bay, and elsewhere around North Sydney, the modified building envelope is almost imperceivable.

From the perspective of the short-distance views obtained to the site from within the immediate surrounding streetscape (including views from the corner of Miller Street and McLaren Street and the corner of the Pacific Highway and Miller Street), the proposed changes to the massing and dimension of the building envelope can be observed. However, the resultant visual impact of from these short-distance views are considered minor in the context of the height, massing, and scale of the approved building envelope.

As assessed in the approved concept proposal, the visual impacts of the modified concept proposal are acceptable in the context of the existing and emerging surrounding context and are consistent with applicable environmental planning controls and the desired future character of North Sydney.

4.4. PRIVATE VIEW ANALYSIS FROM ADJOINING RESIDENTIAL BUILDING

The SEARs require an assessment of potential private view impacts from adjoining developments, including views from the Beau Monde apartments (now known as the 'Alexander Apartments building').

NSW Land and Environment Court's planning principles for view sharing are established in *Tenacity Consulting Pty Ltd v Warringah Council [2004] NSWLEC 140 (Tenacity)*. The judgment in *Tenacity* establishes a four-step process for the assessment of view sharing. This four-step process is as follows:

- 3) *Step 1 - Assess the views that the proposed development will affect.*
- 4) *Step 2 - Consider from what part of the property the views are obtained.*
- 5) *Step 3 - Assess the extent of the impact.*
- 6) *Step 4 - Assess the reasonableness of the proposal that is causing the impact.*

The following section provides a comparative assessment of view sharing impacts between the approved concept proposal and modified concept proposal based on view sharing principles established in *Tenacity*.

Step 1: What are the affected views?

The following section demonstrates the views affected by the modified concept proposal as compared to the views affected by the approved concept proposal. The photomontages are taken from the Visual Impact Photomontages and Methodology Report (Private View Study) (at **Appendix 2**) and have been obtained from selected apartments on Levels 15, 20, 21, 27, and 37 of the Alexander Apartments building.

The photomontage renderings below include the indicative building massing of approved developments at 100 Mount Street and 1 Denison Street. The inclusion of these approved developments provides a more accurate visual depiction of the emerging North Sydney cityscape and skyline. The approved buildings are under currently construction and identified in white block massing in the photomontage renderings.

It is noted that the view impacts from the Alexander Apartments building have been only partially assessed due to limitations in gaining access to and obtaining photography from some of the apartments.

Figure 20 – Comparative Views from Apartment 1501 (Looking South West)



Picture 29 – Approved OSD Building Envelope
Source: *Visual Impact Photomontage Report*



Picture 30 – Proposed OSD Building Envelope
Source: *Visual Impact Photomontage Report*

Figure 21 – Comparative Views from Apartment 2001 (Looking South West)



Picture 31 – Approved OSD Building Envelope
Source: *Visual Impact Photomontage Report*



Picture 32 – Proposed OSD Building Envelope
Source: *Visual Impact Photomontage Report*

Figure 22 – Comparative Views from Apartment 2701 (Looking South West)



Picture 33 – Approved OSD Building Envelope
Source: *Visual Impact Photomontage Report*



Picture 34 – Proposed OSD Building Envelope
Source: *Visual Impact Photomontage Report*

Figure 23 – Comparative Views from Rooftop Level 37 (Looking South West)

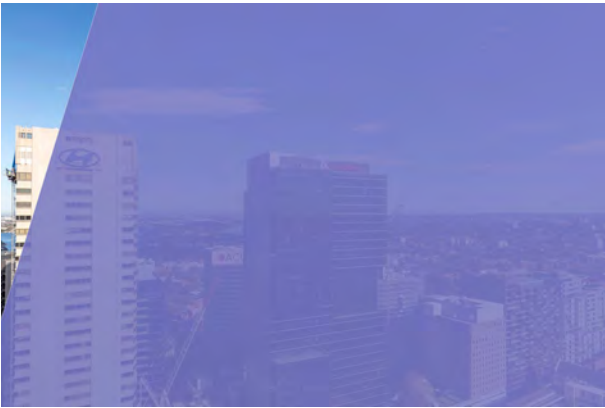


Picture 35 – Approved OSD Building Envelope
Source: *Visual Impact Photomontage Report*

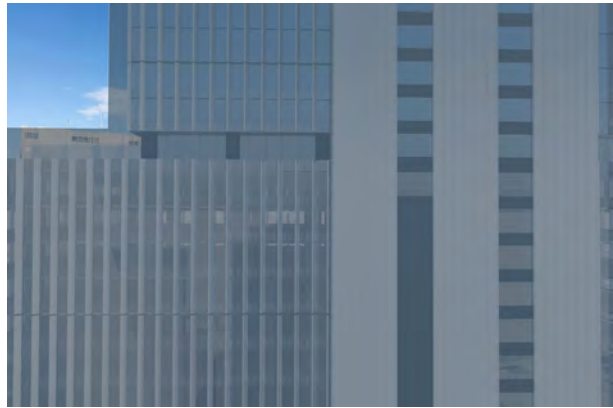


Picture 36 – Proposed OSD Building Envelope
Source: *Visual Impact Photomontage Report*

Figure 24 – Comparative Views from Rooftop Level 37 (Looking West)



Picture 37 – Approved OSD Building Envelope
Source: *Visual Impact Photomontage Report*



Picture 38 – Proposed OSD Building Envelope
Source: *Visual Impact Photomontage Report*

Figure 25 – Comparative Views from Apartment 2105 (Looking South West)

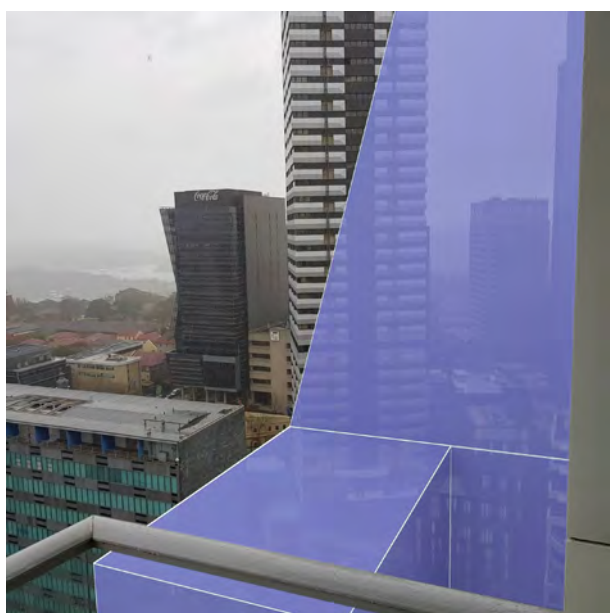


Picture 39 – Approved OSD Building Envelope
Source: *Visual Impact Photomontage Report*



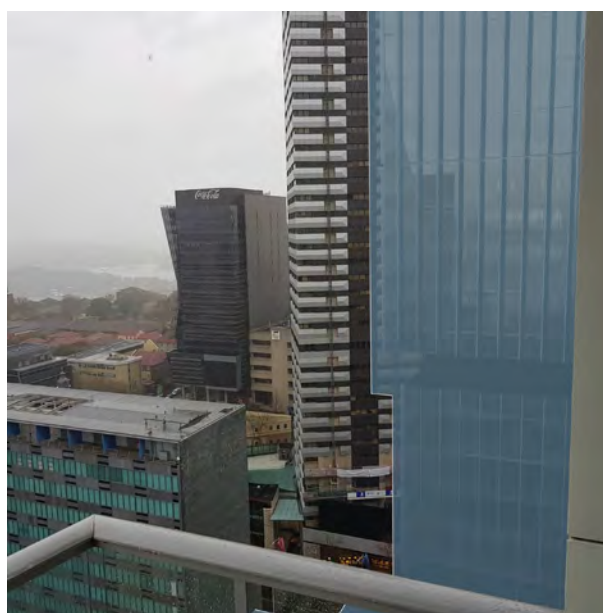
Picture 40 – Proposed OSD Building Envelope
Source: *Visual Impact Photomontage Report*

Figure 26 – Comparative Views from Apartment 2501 (Looking West)



Picture 41 – Approved OSD Building Envelope

Source: *Visual Impact Photomontage Report*



Picture 42 – Proposed OSD Building Envelope

Source: *Visual Impact Photomontage Report*

Step 2: From which part of the property are the views obtained?

Due to its location and configuration, the parts of the Alexander Apartments building from which views are generally obtained to the south west and west. Views to the south west and south are obtained from all levels facing these directions. The most significant views are obtained from the edge of balconies.

Step 3: What is the extent of the impact?

The following observations are made regarding the extent of view impacts of the modified concept proposal:

- The visual impact of the modified concept proposal from the majority of apartments, such as Apartments 1501 (looking south west), 2001 (looking south west), and 2701 (looking south west) is marginal. The modifications to the massing and dimension of the building envelope is evident; however they do not obstruct longer-distance views to the Harbour and beyond compared to the approved building envelope.
- View impacts of the modified building envelope from certain apartments, particularly Apartment 1501 (looking west and south west) are improved by the modified building massing and dimensions.
- View impacts from Rooftop Level 37 of the harbour to the west are considered acceptable insofar as this is the rooftop level which does not provide useable or habitable space for residents and provides for retention of extensive views of the harbour to the south west with no loss of iconic views. Furthermore, view impacts from Rooftop Level 37 are not any more extensive than the approved building envelope.
- Long-distance views of the Harbour from the surveyed apartments remain relatively unaffected.

The modified building envelope would cause minor to significant loss of land-to-sky interface view impacts to the south west and the west of the Alexander Apartments building. Notwithstanding, the visual impacts from the building are marginal and acceptable comparative visual impacts of the approved concept proposal. Furthermore, the affected views from the Alexander Apartments building are not considered iconic.

Step 4: How reasonable is the development?

As assessed in the approved concept proposal, the visual and view sharing impacts of the modified proposal on the Alexander Apartments building are acceptable in the context of the existing and emerging surrounding context. Impacts to views are generally at the edge of a view corridor and therefore significant views towards Barangaroo and Sydney Harbour tributaries are maintained notwithstanding the proposed modified building envelope. The massing and dimension of the modified building envelope is generally compliant with

statutory planning controls relating to building height and setbacks, and is appropriate in the context of the emerging and desired future character of North Sydney.

As detailed in the Section 4.55(2) Modification Planning Report, the proposed tower setback and cantilever arrangement to Miller Street presents a technical non-compliance with clause 6.4 of the *North Sydney Local Environmental Plan 2013 (NSLEP)* which was approved under the Concept Approval. However, notwithstanding this technical non-compliance, the modified envelope is setback in accordance with the required Miller Street Setback up to a height of RL 124 and the proposed modification seeks to increase the setback to 2.5 metres at the mid-rise levels from 1.5 metres under the Concept Approval. The proposed modification also provides a greater setback to the south of 26 to 28 metres than that approved under the Concept Approval (18 metres) which further assists in reducing the impact of the proposed envelope. The non-compliant elements of the modified building envelope with respect to the building height development standard will have marginal view sharing impacts on residents of the Alexander Apartments building.

5. STATUTORY PLANNING CONSIDERATIONS

The following section provides an overview of strategic planning policies and statutory planning considerations relevant to the assessment of view and visual impacts of the modified concept proposal.

5.1. NORTH DISTRICT PLAN

The North District forms a large part of the Eastern Harbour City with its economy leaning to the Harbour CBD as the metropolitan centre. The Harbour CBD includes North Sydney and is considered the largest office market in the region. The District covers the local government areas of Hornsby, Hunter's Hill, Ku-ring-gai, Lane Cove, Mosman, **North Sydney**, Northern Beaches, Ryde and Willoughby.

The District Plan responds to major transport, health and education investments either committed or planned across the District, such as the Northern Beaches Hospital, Sydney Metro Northwest, Sydney Metro City & Southwest and NorthConnex, which aligns with Future Transport 2056.

Planning priorities that relate to visual impacts are discussed below.

- ***Planning Priority N17 (Protecting and enhancing scenic and cultural landscapes)***

Objective 28 seeks to ensure scenic and cultural landscapes are protected. The view and visual impacts of the modified concept proposal as comparative to the approved concept proposal are acceptable in the context of the existing and emerging character of the surrounding area. Notwithstanding, future design will incorporate refined building articulation and façade detailing to mitigate view and visual impacts.

5.2. SYDNEY REGIONAL ENVIRONMENTAL PLAN (SYDNEY HARBOUR CATCHMENT) 2005

The *Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005* (SREP) is a regional planning instrument that aims to ensure the catchment, foreshores, waterways and islands of Sydney Harbour are recognised, protected, enhanced and maintained as a natural and public asset of national significance.

The site is located within the Sydney Harbour Catchment area but not within the Foreshores and Waterways area. Clause 26 of the SREP is relevant to consideration of the proposal with regards to the maintenance, protection and enhancement of views. Matters to be taken into consideration in relation to clause 26 include:

- (a) *development should maintain, protect and enhance views (including night views) to and from Sydney Harbour,*
- (b) *development should minimise any adverse impacts on views and vistas to and from public places, landmarks and heritage items,*
- (c) *the cumulative impact of development on views should be minimised.*

In relation to clause 26(a), views of the modified building envelope to and from Sydney Harbour are minimal as compared to the approved building envelope. It is acknowledged that the concept proposal will be visible from certain perspectives from Sydney Harbour. However, as demonstrated in the view analysis in **Section 4.3**, from the perspective of long-distance views and scenic obtained to the site from iconic and streetscape locations across Sydney Harbour, the subtle changes to the massing and dimension of the building envelope are almost unperceivable. Views to the Sydney Harbour obtained from the adjoining Alexander Apartments building are generally maintained and are not compromised by the modified concept proposal.

In relation to clause 26(b), the modified concept proposal does not result in unacceptable impacts compared to the approved concept proposal in relation to views or vistas to and from key public places and landmarks. From the perspective of short- and medium-distance views obtained to the site from immediate surrounding streetscape locations, the proposed changes to the massing and dimension of the building envelope are generally from minor to inconsequential. Whilst the modified concept proposal is visible from certain key public places and landmarks, the extent to which the modifications to the envelope are perceived is minor.

In relation clause 26(c), the modified concept proposal does not result in any unacceptable cumulative impacts on views insofar as the modifications to the original concept proposal are subtle and minor.

5.3. NORTH SYDNEY LOCAL ENVIRONMENTAL PLAN 2013

North Sydney Local Environmental Plan 2013 (NSLEP) is the principal environmental planning instrument applying to the site, establishing permissible land uses, development standards, and heritage requirements.

The NSLEP establishes the following objectives with regards to visual impact and view sharing:

- new development does not adversely affect residential amenity in terms of visual and acoustic privacy, solar access and view sharing; and
- new development on foreshore land does not adversely affect the visual qualities of that foreshore land when viewed from Sydney Harbour and its tributaries.

The modified concept proposal is consistent with these objectives in that the modified building envelope is not considered to adversely affect the residential amenity of the adjoining Alexander Apartments building in terms of visual privacy or view sharing. Furthermore, as detailed in Section 5.2, the views of the modified building envelope to and from Sydney Harbour are minimal as compared to the approved building envelope.

6. CONCLUSION

This VVIA concludes that the modified concept proposal will have low visual impacts on the existing visual catchment as a comparison to the approved concept proposal. The modified concept proposal is acceptable in terms of its assessment against the SEARs requirements and relevant statutory planning considerations.

As assessed in the approved concept proposal, the visual impacts of the modified concept proposal are acceptable in the context of the existing surrounding context and desired future character of North Sydney.

It is concluded that the views impacts of the modified concept proposal on the Alexander apartment building are consistent with view sharing planning principles established in the case of *Tenacity*. The modified proposal does not adversely affect the residential amenity of this residential building to an unreasonable extent.

This view impact analysis assesses the modified concept proposal, being the maximum built envelope within which future OSD development can be delivered. For the reason that future detailed design, modulation and articulation of the Victoria Cross OSD would be refined within the maximum envelope parameters of the modified building envelope, it is likely that the resultant visual impacts of the development would be reduced.

In conclusion, the modified concept proposal has acceptable visual and view impacts.

DISCLAIMER

This report is dated 26 August 2019 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Lend Lease (**Instructing Party**) for the purpose of Lend Lease (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose other than the Purpose, and to any other person which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

In preparing this report, Urbis was required to make judgements which may be affected by unforeseen future events, the likelihood and effects of which are not capable of precise assessment.

All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

In preparing this report, Urbis may rely on or refer to documents in a language other than English, which Urbis may arrange to be translated. Urbis is not responsible for the accuracy or completeness of such translations and disclaims any liability for any statement or opinion made in this report being inaccurate or incomplete arising from such translations.

Whilst Urbis has made all reasonable inquiries it believes necessary in preparing this report, it is not responsible for determining the completeness or accuracy of information provided to it. Urbis (including its officers and personnel) is not liable for any errors or omissions, including in information provided by the Instructing Party or another person or upon which Urbis relies, provided that such errors or omissions are not made by Urbis recklessly or in bad faith.

This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above.

Appendix A PUBLIC VIEW STUDY

Visual Impact Photomontages and Methodology Report

Victoria Cross Overstation Development Concept Plan Modification - Public View Study

Introduction

This report has been prepared to accompany a section 4.55(2) modification application to the State Significant Development (SSD) Concept Approval (reference SSD 17_8874) granted for a commercial mixed-use Over Station Development (OSD) above the new Sydney Metro Victoria Cross Station. This report has been prepared having regard to the Secretary's Environmental Assessment Requirements dated 30 November 2017.

The Minister for Planning granted development consent to the Concept SSD Development Application (DA) on 18 December 2018. Concept Approval was granted for:

- A maximum building envelope, including street-wall and setbacks for the OSD
- A maximum building height of RL 230 or 168 metres, providing:
 - Approximately 40 commercial storeys and 2 additional storeys for rooftop plant for the high-rise portion of the building envelope
 - Approximately 13 storeys for the lower eastern portion of the building envelope at RL 118 or 55 metres
 - A maximum gross floor area (GFA) of 60,000sqm, excluding station floorspace
 - Basement car parking for a maximum 150 parking spaces.

Following Sydney Metro's appointment of Lendlease (Victoria Cross) Pty Limited as the preferred development partner to deliver the Victoria Cross OSD, and ongoing design development, minor modifications to the approved building envelope are now required.

The section 4.55(2) modification application proposes the following changes to the approved building envelope:

- Reduction in the massing and overall dimensions of the building cantilever above the Miller Street special area setback;
- Relocation of building massing from the low-rise levels the tower, north of the through-site link, to the high-rise levels of the tower;
- Reduction of the Berry Street setback from 5 metres to 4.5 metres, extending the building envelope marginally to the north; and
- Increasing the approved maximum GFA for the over station development from 60,000sqm to 61,500sqm.

It is noted that the Concept SSD DA instrument of approval does not consent to any physical works commencing on site until a Detailed SSD DA is granted for the site. A Detailed SSD DA seeking consent for the detailed construction of the proposed development is lodged under a different cover concurrently with this Concept SSD DA modification application.

The Site

The site is generally described as 155-167 Miller Street, 181 Miller Street, 187-189 Miller Street, and part of 65 Berry Street, North Sydney (the site). The site occupies various addresses/allotments and is legally described as follows:

- 155-167 Miller Street (SP 35644) (which incorporates lots 40 and 41 of Strata Plan 81092 and lots 37, 38 and 39 of Strata Plan 79612)
- 181 Miller Street (Lot 15/DP 69345, Lot 1 & 2/DP 123056, Lot 10/DP 70667)
- 187 Miller Street (Lot A/DP 160018)
- 189 Miller Street (Lot 1/DP 633088)
- Formerly part 65 Berry Street (Lot 1/DP 1230458)

Figure 01 – Site Aerial



Sydney Metro Description

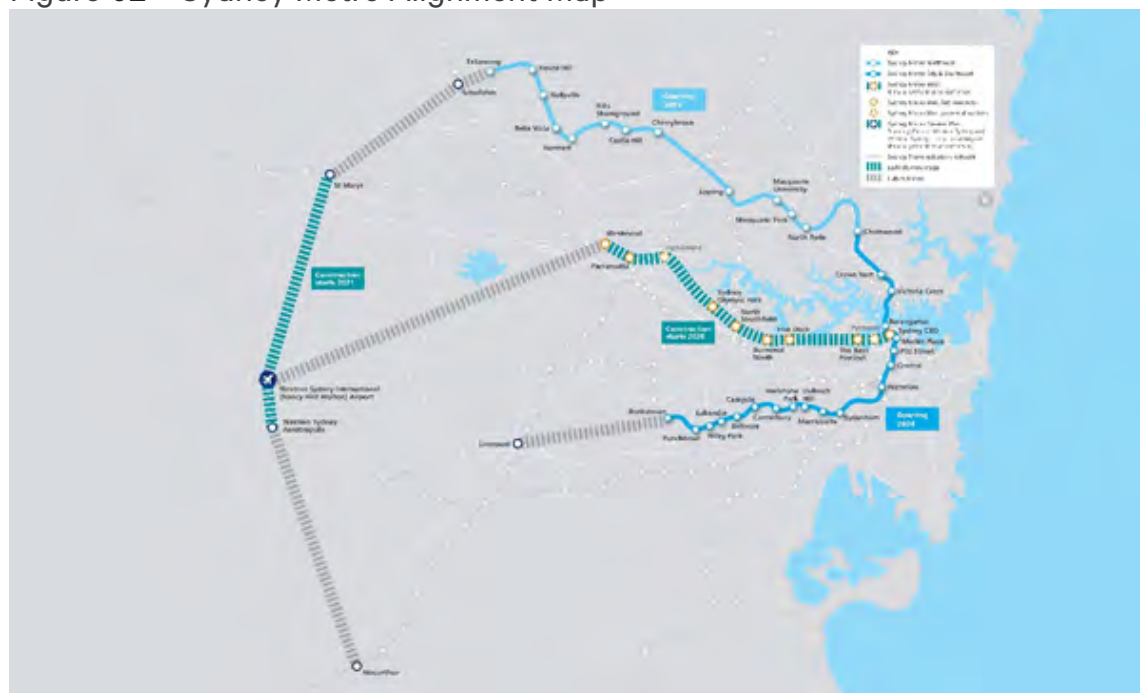
Sydney Metro is Australia’s biggest public transport project. Services started in May 2019 in the city’s North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new metro railway stations underground at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre. The Sydney Metro project is illustrated in the Figure below.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (CSSI Approval). The terms of the CSSI Approval includes all works required to construct the Sydney Metro Victoria Cross Station, including the demolition of existing buildings and structures on both sites. The CSSI Approval also includes construction of below and above ground improvements with the metro station structure for appropriate integration with the OSD.

With regards to CSSI related works, any changes to the “metro box envelope” and public domain will be pursued in satisfaction of the CSSI conditions of approval and do not form part of the scope of the Concept SSD DA for the OSD.

Figure 02 – Sydney Metro Alignment Map



Source: Sydney Metro

Overview

The general process in creating accurate photomontage renderings involves the creation of an accurate, real world scale digital 3D model. We then take site photographs and place cameras in the 3D model that match the real world position that the photographs were taken on site.

The camera positions are then surveyed to identify the Map Grid of Australia (MGA) coordinates at each position.

By matching the real world camera lens properties to the camera properties in our software and rotating the camera so that surveyed points in 3D space align with the corresponding points on the photograph, we can create a rendering that is correct in terms of position, scale, rotation, and perspective.

The rendering can then be superimposed into the real photo to generate an image that represents accurate form and visual impact.

Description of collected data

To create the 3D model and establish accurate reference points for alignment to the photography, a variety of information was collected. This includes the following:

- 1) Architectural design of Approved building envelope
Created by: Bates Smart
Format: Sketchup model
- 2) Architectural design of Proposed building envelope
Created by: Bates Smart
Format: Sketchup model
- 3) Surveyed data
Created by: CMS Surveyors
Format: DWG file
- 4) Site photography
Created by: Virtual Ideas (VI Photos) Format: JPEG file
- 5) Surveyed 2015 3D North Sydney context model
Created by: AAM
Format: 3DS Studio Max file
- 6) Approved DA building envelopes
Supplied by: Batesmart
Format: Sketchup model

Notes on images

The photomontages are also showing the indicative building massing of the following developments in the vicinity of the site for the purpose of visual assessment of the future surrounding city scape.

Both buildings are currently under construction and are shown in 'white' in the photomontages:

- 100 Mount St, North Sydney
- 1 Denison St, North Sydney

Methodology

Site Photography

Site photography was taken from predetermined positions as instructed by Bates Smart. These locations were selected in consultation with North Sydney Council.

Photographs were taken using a Nikon D810 digital camera, using a 14-24mm f/2.8 lens.

The positions of the photographs were surveyed and documented into a DWG drawing supplied by the surveyor.

3D Model

Using the imported surveyed data into our 3D software (3DS Max), we then imported the supplied 3D model of the proposed building envelope and relevant DA approved building massings.

Alignment

The positions of the real world photography were located in the 3D scene. Cameras were then created in the 3D model to match the locations and height of the position from which the photographs were taken from. They were then aligned in rotation so that the points of the 3D model aligned with their corresponding objects that are visible in the photograph.

Renderings of the building envelope massing were then created from the aligned 3D cameras and montaged into the existing photography at the same location. This produces an accurate representation of the scale and position of the new building envelope with respect to the existing surroundings.

The new building envelope is shown in 'blue' in the following photomontages, with the indicative building forms for 100 Mount Street and 1 Denison Street developments shown in 'white'.

In conclusion, it is my opinion as an experienced, professional 3D architectural and landscape renderer that the images provided accurately portray the level of visibility and impact of the built form.

Yours sincerely, Grant Kolln





CV of Grant Kolln, Director of Virtual Ideas

Personal Details

Name: Grant Kolln
DOB: 07/09/1974
Company Address: Suite 71, 61 Marlborough St, Surry Hills, NSW, 2010
Phone Number: 02 8399 0222

Relevant Experience

2003 - Present

Director of 3D visualisation studio Virtual Ideas. During this time I have worked on many visual impact studies for legal proceedings in various different types of industries including architectural, industrial, mining, landscaping, and several large public works projects. This experience has enabled us to create highly accurate methodologies for the creation of our visual impact media and report creation.

1999 - 2001

Project Manager for global SAP infrastructure implementation - Ericsson, Sweden

1999 - 1999

IT Consultant - Sci-Fi Channel, London

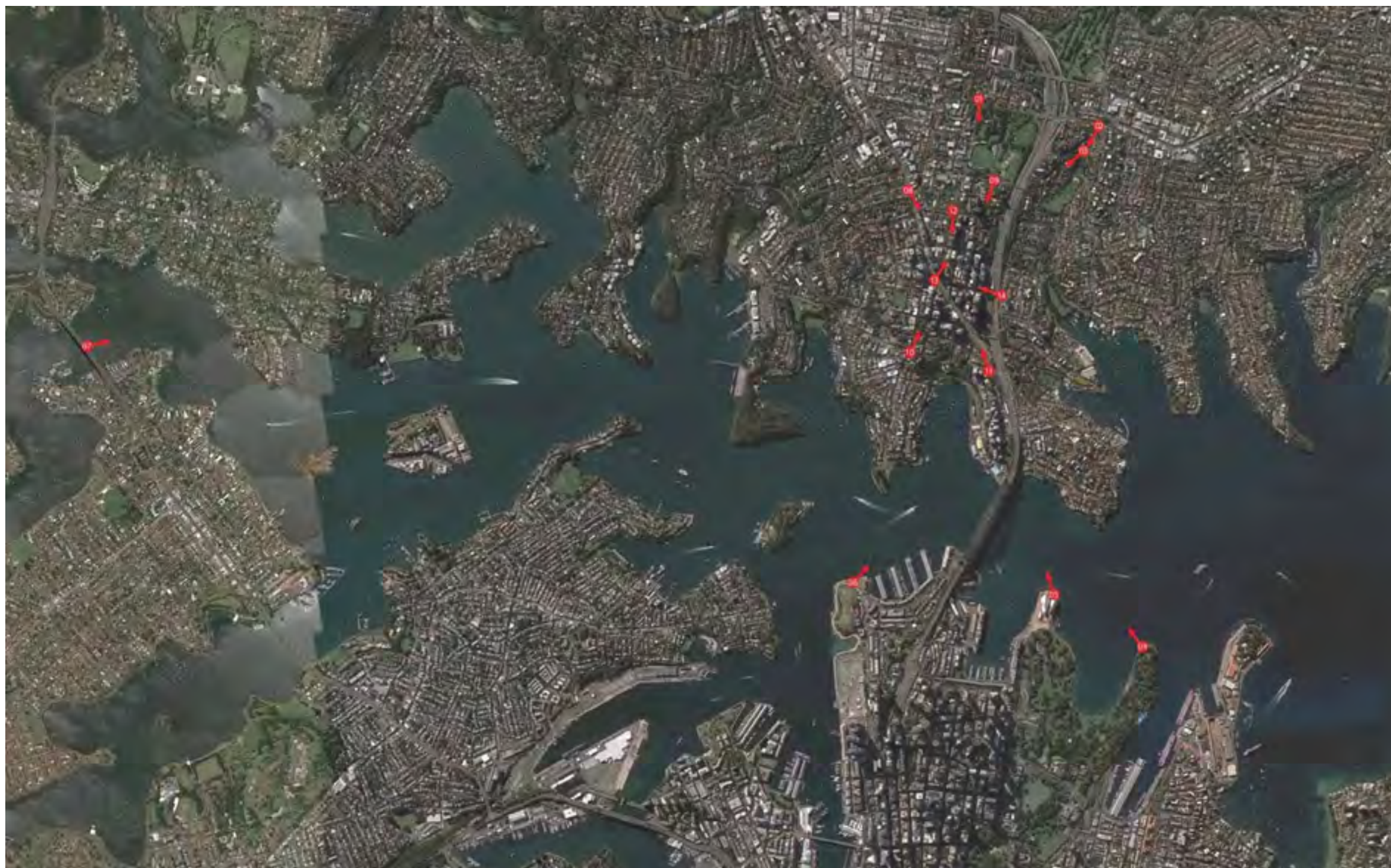
1994 - 1999

Architectural Technician, Thomson Adsett Architect, Brisbane QLD.

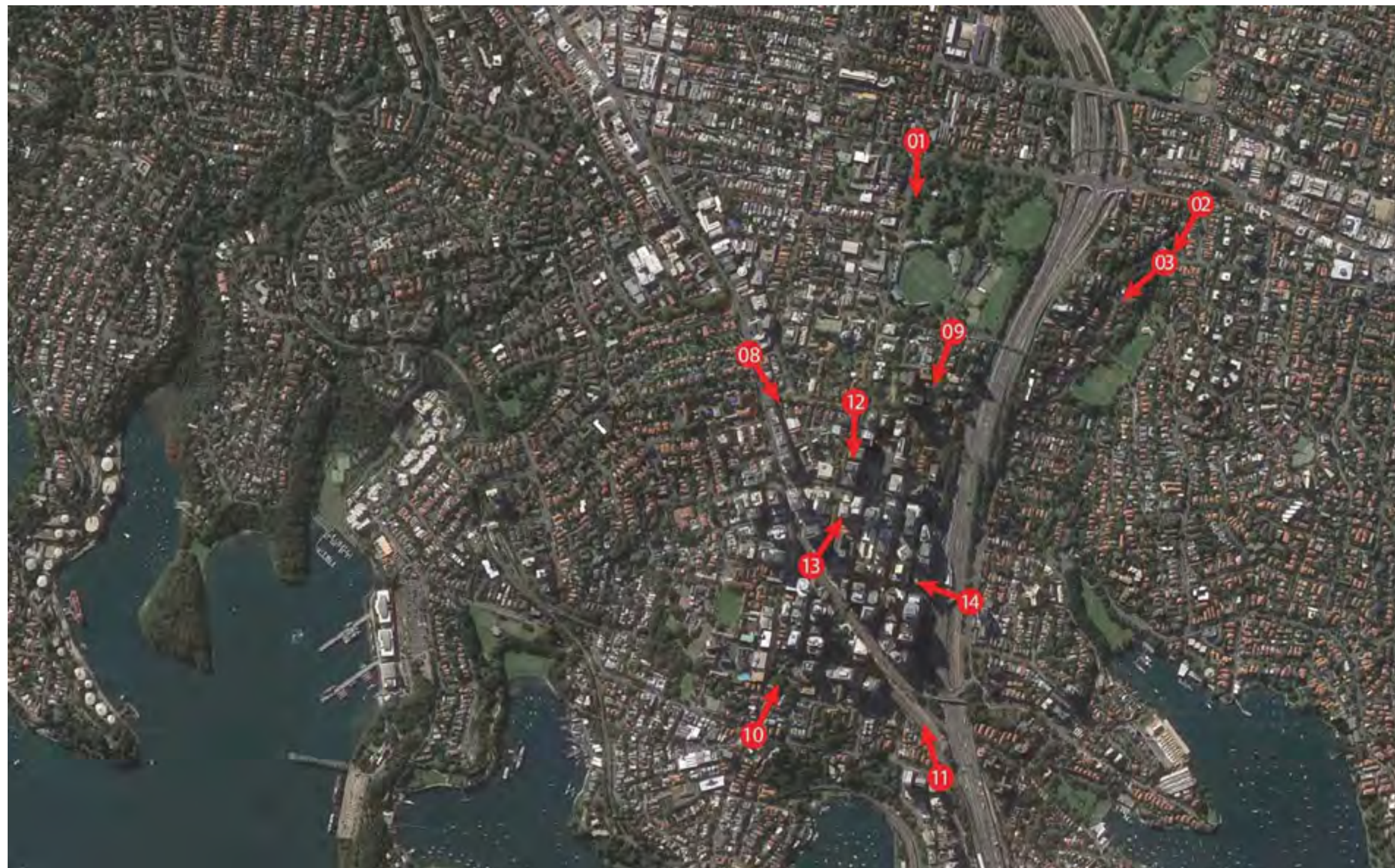
Relevant Education / Qualifications

1997

Advanced Diploma in Architectural Technology, Southbank TAFE, Brisbane, QLD

**Camera Positions:**

1. Corner of Falcon Street and Miller Street, North Sydney.
2. Corner of Falcon Street and Bent Street, Neutral Bay.
3. Corner of Yeo Street and Freshwater Lane.
4. Mrs Macquarie's Chair.
5. Sydney Opera House.
6. Barangaroo Headland Park, Millers Point.
7. Gladesville Bridge.
8. Corner of West Street and Pacific Highway, North Sydney.
9. Corner of Walker and Ridge Street (oval), North Sydney.
10. Corner of Blues Point Road and Union Street, Blues Point.
11. Corner of Alfred Street and Lavender Street, Lavender Bay.
12. Corner of Miller and McLaren Streets, North Sydney.
13. Corner of Pacific Highway and Miller Street.
14. Corner of Alfred St and Mount Street.



Camera Positions:

1. Corner of Falcon Street and Miller Street, North Sydney.
2. Corner of Falcon Street and Bent Street, Neutral Bay.
3. Corner of Yeo Street and Freshwater Lane.
4. Mrs Macquarie's Chair.
5. Sydney Opera House.
6. Barangaroo Headland Park, Millers Point.
7. Gladesville Bridge.
8. Corner of West Street and Pacific Highway, North Sydney.
9. Corner of Walker and Ridge Street (oval), North Sydney.
10. Corner of Blues Point Road and Union Street, Blues Point.
11. Corner of Alfred Street and Lavender Street, Lavender Bay.
12. Corner of Miller and McLaren Streets, North Sydney.
13. Corner of Pacific Highway and Miller Street.
14. Corner of Alfred St and Mount Street.

Camera Position 1

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 30th August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 1

Original photograph

Photo Date: 30th August 2017

Photo Lens: 24mm




Camera Position 1

Original photograph showing North Sydney alignment

Photo Date: 30th August 2017

Photo Lens: 24mm



 2015 North Sydney surveyed model from AAM Group

Camera Position 1

Photomontage of approved envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 1

Photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 2

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 30th August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 2

Original photograph



Photo Date: 30th August 2017

Photo Lens: 24mm

Camera Position 2

Original photograph showing North Sydney alignment

Photo Date: 30th August 2017

Photo Lens: 24mm



 2015 North Sydney surveyed model from AAM Group

Camera Position 2

Photomontage of approved envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 2

Photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 3

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 30th August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



Victoria Cross OSD Proposed Envelope
Indicative building Massing of 100 Mount St and 1 Denison St

Victoria Cross OSD Approved Envelope
2015 North Sydney surveyed model from AAM Group

Camera Position 3

Original photograph



Photo Date: 30th August 2017

Photo Lens: 24mm


Camera Position 3

Original photograph showing North Sydney alignment

Photo Date: 30th August 2017

Photo Lens: 24mm



 2015 North Sydney surveyed model from AAM Group

Camera Position 3

Photomontage of approved envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 3

Photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



Victoria Cross OSD Proposed Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 4

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 31st August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 4

Original photograph



Photo Date: 31st August 2017

Photo Lens: 24mm

Camera Position 4

Original photograph showing North Sydney alignment



Photo Date: 31st August 2017

Photo Lens: 24mm



2015 North Sydney surveyed model from AAM Group

Camera Position 4

Photomontage of approved envelope

Photo Date: 31st August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 4

Photomontage of proposed envelope

Photo Date: 31st August 2017

Photo Lens: 24mm



Victoria Cross OSD Proposed Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 5

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 31st August 2017



Photo Lens: 24mm



Photomontage of approved envelope



Photomontage of proposed envelope



 Victoria Cross OSD Proposed Envelope
 Indicative building Massing of 100 Mount St and 1 Denison St

 Victoria Cross OSD Approved Envelope
 2015 North Sydney surveyed model from AAM Group

Camera Position 5

Original photograph

Photo Date: 31st August 2017

Photo Lens: 24mm




Camera Position 5

Original photograph showing North Sydney alignment

Photo Date: 31st August 2017

Photo Lens: 24mm



 2015 North Sydney surveyed model from AAM Group

Camera Position 5

Photomontage of approved envelope

Photo Date: 31st August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 5

Photomontage of proposed envelope

Photo Date: 31st August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 6

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 31st August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 6

Original photograph

Photo Date: 31st August 2017

Photo Lens: 24mm



Camera Position 6

Original photograph showing North Sydney alignment

Photo Date: 31st August 2017

Photo Lens: 24mm



2015 North Sydney surveyed model from AAM Group

Camera Position 6

Photomontage of approved envelope

Photo Date: 31st August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 6

Photomontage of proposed envelope

Photo Date: 31st August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 7

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 30th August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 7

Original photograph

Photo Date: 30th August 2017

Photo Lens: 24mm




Camera Position 7

Original photograph showing North Sydney alignment

Photo Date: 30th August 2017

Photo Lens: 24mm



 2015 North Sydney surveyed model from AAM Group

Camera Position 7

Photomontage of approved envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 7

Photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 7

Closer-in crop of photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 8

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 30th August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 8

Original photograph

Photo Date: 30th August 2017

Photo Lens: 24mm

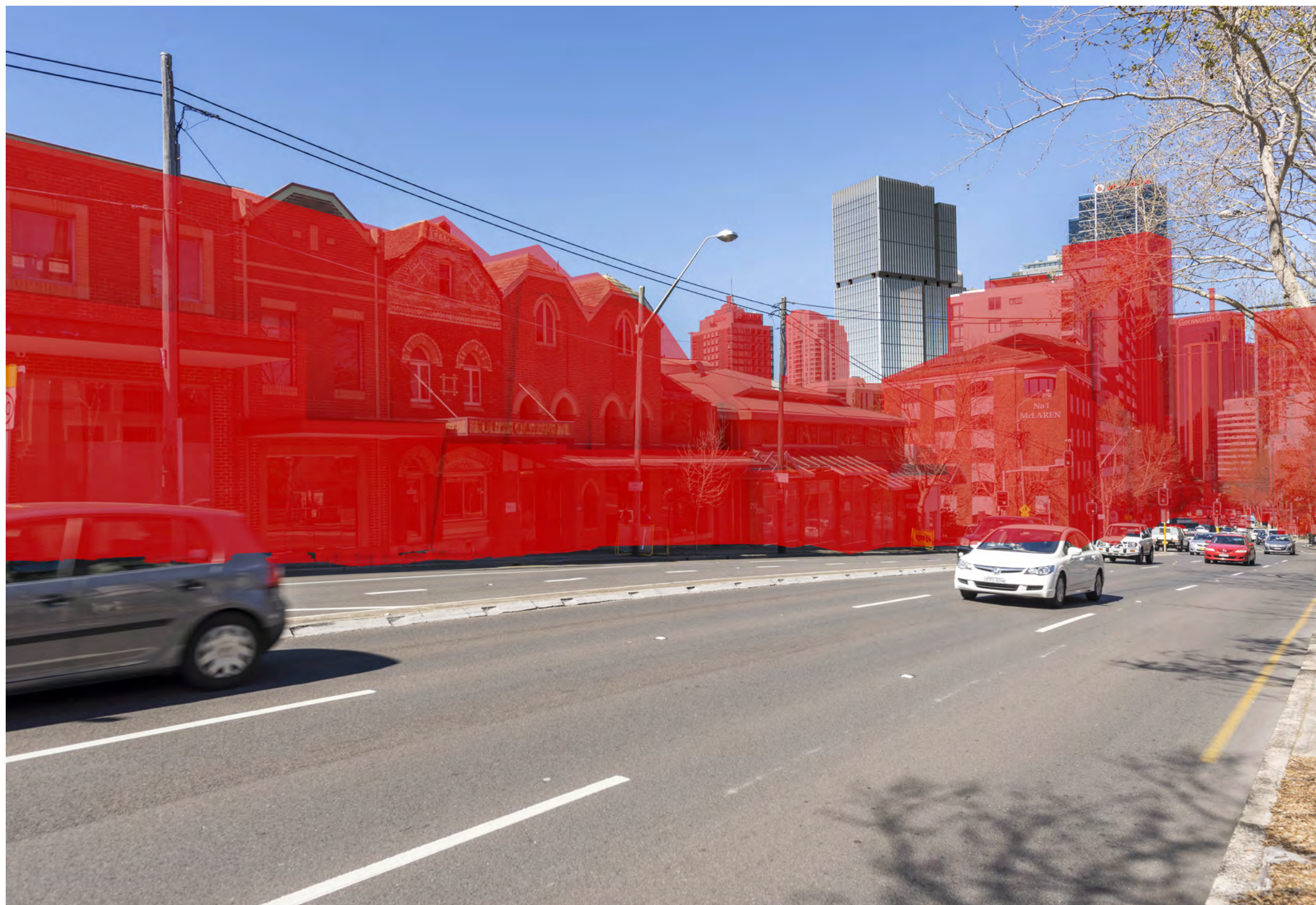


Camera Position 8

Original photograph showing North Sydney alignment

Photo Date: 30th August 2017

Photo Lens: 24mm



2015 North Sydney surveyed model from AAM Group


Camera Position 8


Photomontage of approved envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



 Victoria Cross OSD Approved Envelope

 Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 8

Photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 9

Original photograph



Original photograph showing North Sydney alignment



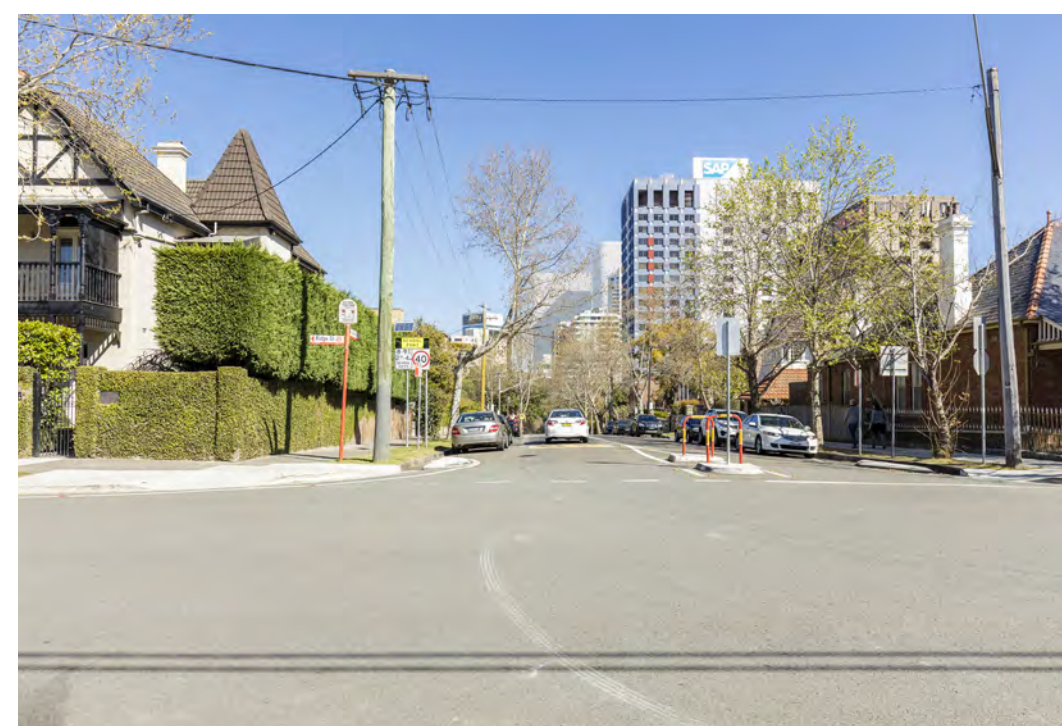
Photo Date: 30th August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 9

Original photograph

Photo Date: 30th August 2017

Photo Lens: 24mm

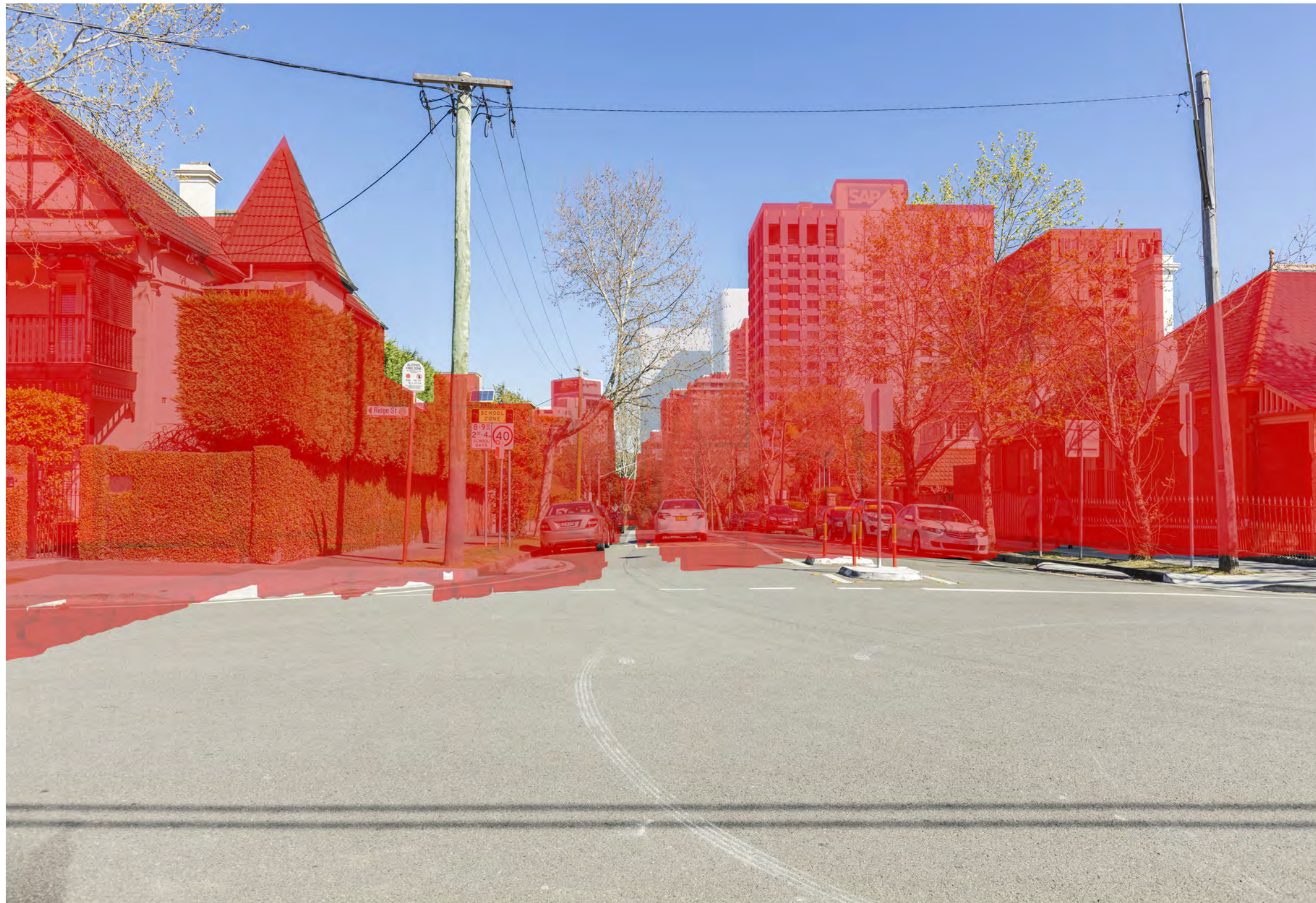


Camera Position 9

Original photograph showing North Sydney alignment

Photo Date: 30th August 2017

Photo Lens: 24mm



2015 North Sydney surveyed model from AAM Group

Camera Position 9

Photomontage of approved envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 9

Photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 10

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 30th August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 10

Original photograph

Photo Date: 30th August 2017

Photo Lens: 24mm



Camera Position 10

Original photograph showing North Sydney alignment

Photo Date: 30th August 2017

Photo Lens: 24mm



2015 North Sydney surveyed model from AAM Group

Camera Position 10

Photomontage of approved envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 10

Photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 11

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 4th September 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 11

Original photograph

Photo Date: 4th September 2017

Photo Lens: 24mm



Camera Position 11

Original photograph showing North Sydney alignment

Photo Date: 4th September 2017

Photo Lens: 24mm



2015 North Sydney surveyed model from AAM Group

Camera Position 11

Photomontage of approved envelope

Photo Date: 4th September 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 11

Photomontage of proposed envelope

Photo Date: 4th September 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 12

Original photograph



Original photograph showing North Sydney alignment



Photo Date: 30th August 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 12

Original photograph

Photo Date: 30th August 2017

Photo Lens: 24mm



Camera Position 12

Original photograph showing North Sydney alignment

Photo Date: 30th August 2017

Photo Lens: 24mm



2015 North Sydney surveyed model from AAM Group


Camera Position 12

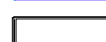
Photomontage of approved envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



 Victoria Cross OSD Approved Envelope

 Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 12


Photomontage of proposed envelope

Photo Date: 30th August 2017

Photo Lens: 24mm



 Victoria Cross OSD Proposed Envelope

 Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 13

Original photograph



Original photograph showing North Sydney alignment

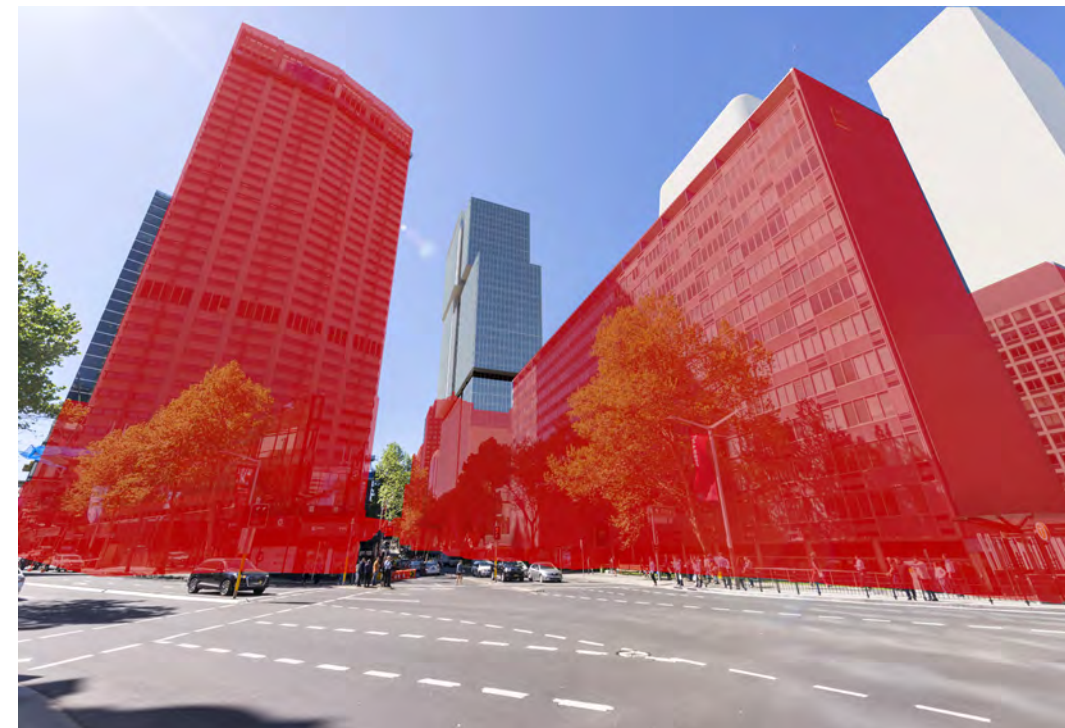


Photo Date: 26th September 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 13

Original photograph



Photo Date: 26th September 2017

Photo Lens: 24mm


Camera Position 13

Original photograph showing North Sydney alignment

Photo Date: 26th September 2017

Photo Lens: 24mm



 2015 North Sydney surveyed model from AAM Group

Camera Position 13

Photomontage of approved envelope

Photo Date: 26th September 2017

Photo Lens: 24mm



Victoria Cross OSD Approved Envelope



Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 13

Photomontage of proposed envelope

Photo Date: 26th September 2017

Photo Lens: 24mm



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

Camera Position 14

Original photograph



Original photograph showing North Sydney alignment

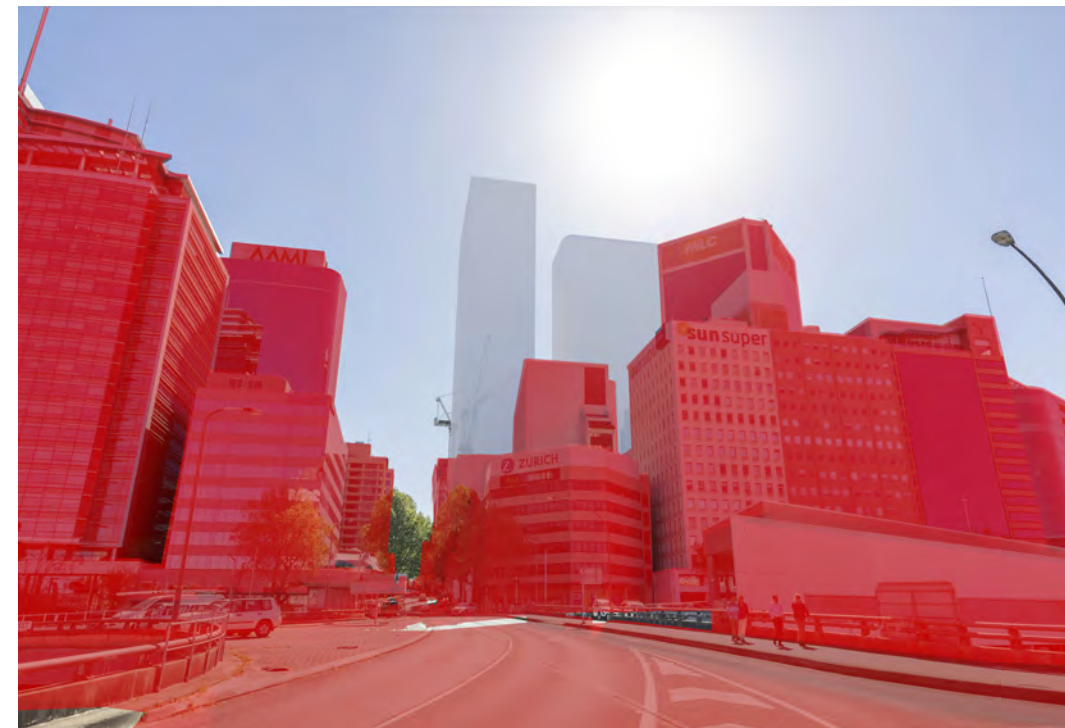


Photo Date: 26th September 2017

Photo Lens: 24mm

Photomontage of approved envelope



Photomontage of proposed envelope



- Victoria Cross OSD Proposed Envelope
- Indicative building Massing of 100 Mount St and 1 Denison St

- Victoria Cross OSD Approved Envelope
- 2015 North Sydney surveyed model from AAM Group

Camera Position 14

Original photograph

Photo Date: 26th September 2017

Photo Lens: 24mm

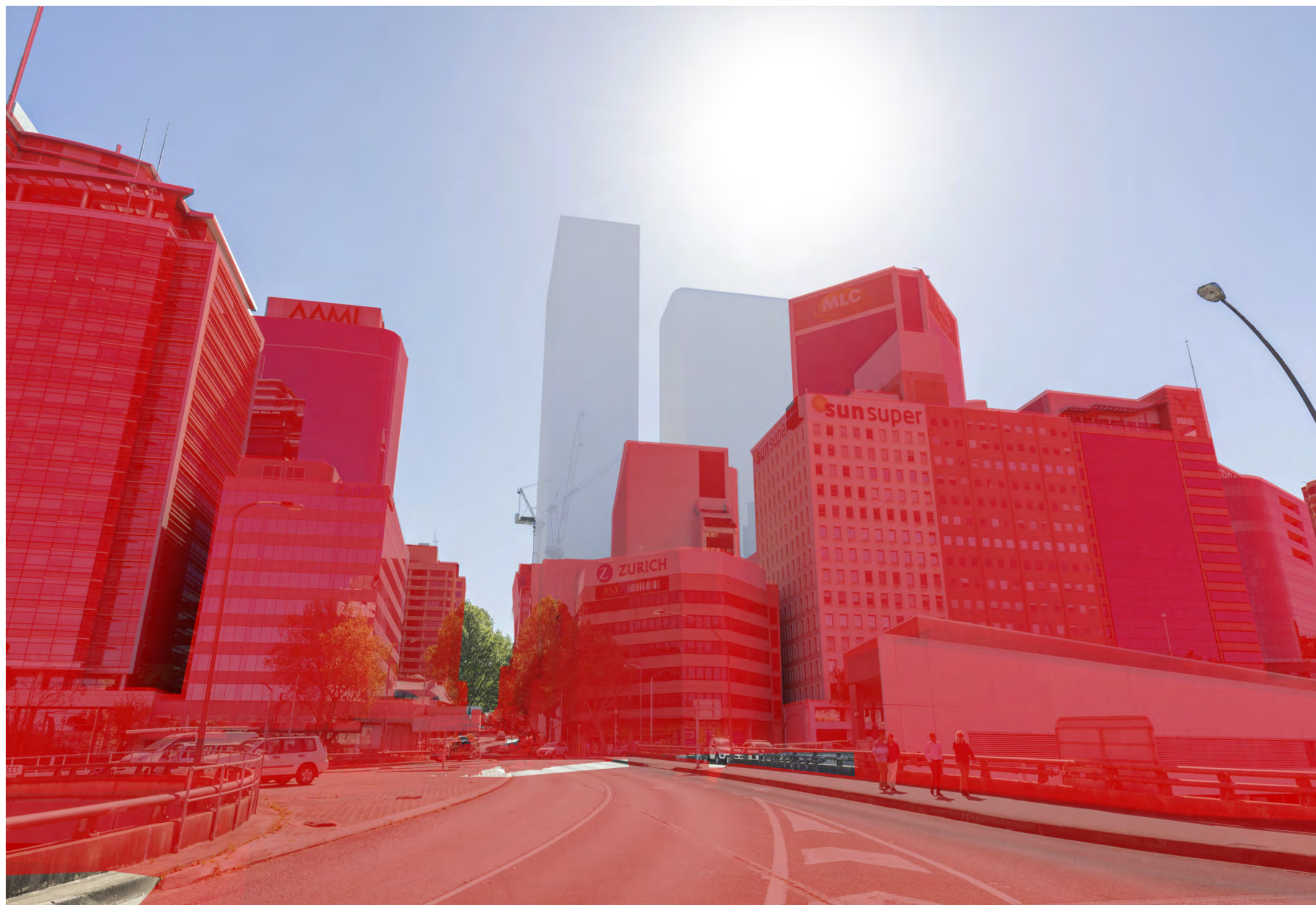



Camera Position 14

Original photograph showing North Sydney alignment

Photo Date: 26th September 2017

Photo Lens: 24mm



 2015 North Sydney surveyed model from AAM Group

Camera Position 14


Photomontage of approved envelope

Photo Date: 26th September 2017

Photo Lens: 24mm



 Victoria Cross OSD Approved Envelope

 Indicative building Massing of 100 Mount St and 1 Denison St


Camera Position 14


Photomontage of proposed envelope

Photo Date: 26th September 2017

Photo Lens: 24mm



 Victoria Cross OSD Proposed Envelope

 Indicative building Massing of 100 Mount St and 1 Denison St

01 POS 2

Appendix A - Camera Position Survey - 05.09.17



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



CMS
SURVEYORS

DATE: 05th September 2017
Our Ref: 17210Alpha locations

Studio 71101, Momborough Street
Sunny Hill
NSW 2010

Date: Mr Rick Mansfield

As requested we have attended site and measured the Co-ordinates and Elevation of the ground level at the below sites. Co-ordinates are MGA 55 and elevation to Australian Height datum (AHD).
Measurements were taken by GNSS observations Smartnet.
DWG of locations has also been supplied.

RE: SYDNEY PHOTO LOCATIONS

Easting	Northing	Ground Elevation	Photo point
335043.936	6254890.072	68.414	CAM 3A
334993.889	6255243.412	87.397	CAM 2A
334986.682	6255211.051	83.793	CAM 2B
334988.536	6255218.429	84.819	CAM 2C
334907.770	6252361.974	3.515	CAM 05 POS 1
335509.284	6252034.355	1.156	CAM 04 POS 1
335488.256	6252009.111	1.308	CAM 04 POS 2
333618.819	6252406.357	3.231	CAM 06 POS 1
334431.908	6253728.384	35.193	CAM 11
333926.003	6253845.383	44.416	CAM 10A
333934.634	6253830.389	43.555	CAM 10B
334144.035	6254701.056	80.915	CAM 12A
334145.908	6254722.002	83.063	CAM 12C
334370.185	6254907.237	85.740	CAM 9A
334252.980	6255379.997	77.832	CAM 1B
333871.792	6254823.874	91.305	CAM 8A

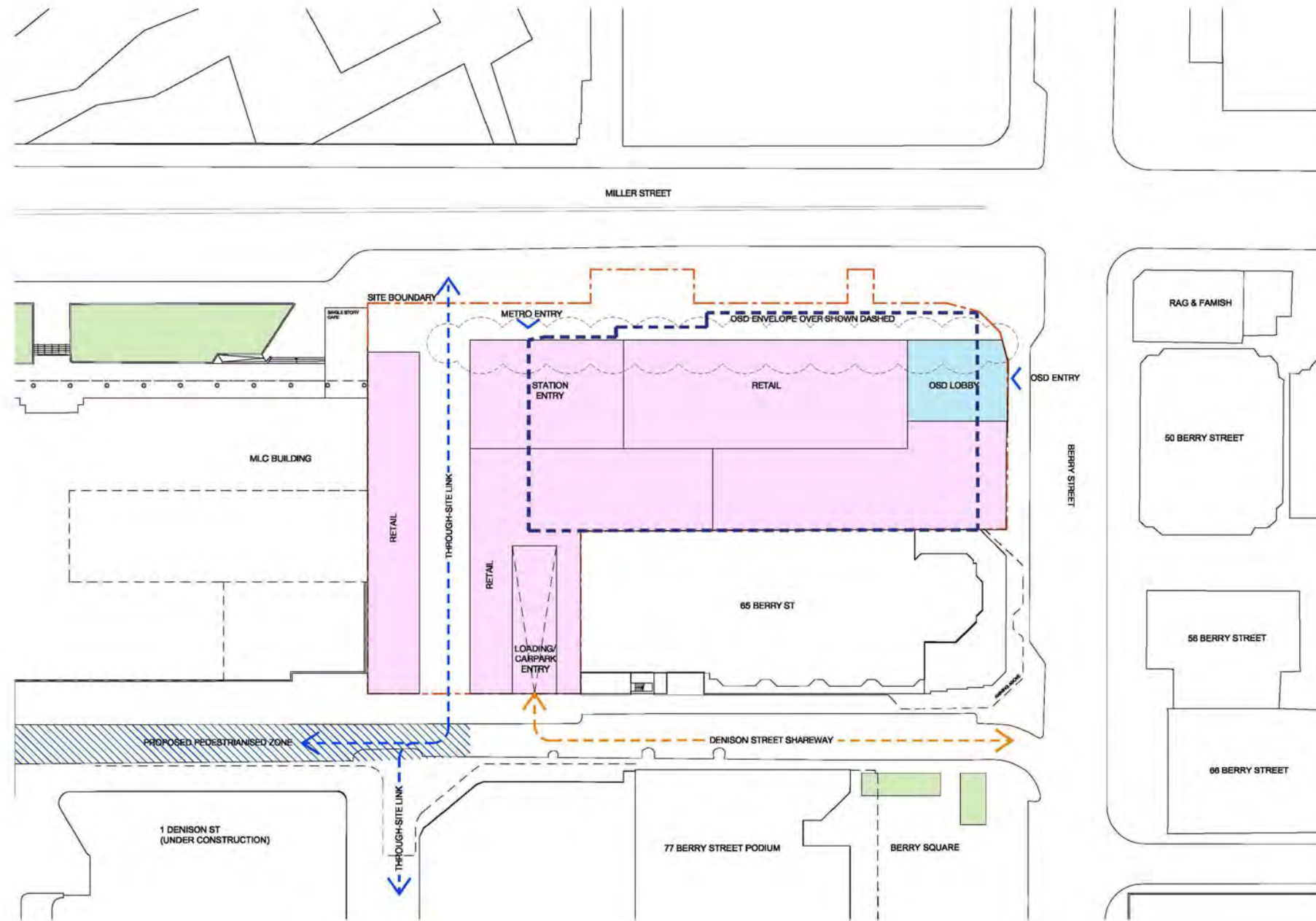


HEAD OFFICE
1/71 Camelsfoot Avenue, Dee Why NSW
1580
PO BOX 463, Dee Why NSW 1580
Ph: 02 9371 4632 Fax: 02 9371 4633
Email: info@cmsurveyors.com.au
Web: www.cmsurveyors.com.au

PROCESSED BY:
A/C/CLARK & Co.
Surveyors
100 GARRATT & ASSOCIATES
Sydney NSW

COORDINATION:
Kempster & PHILLIPS & Co.
PO Box 444444, 44 COO WARRIMARR NSW 2380
Ph: 02 6440 3391 Fax: 02 6440 3646
Email: kempster@kempster.com.au

Appendix A – Documentation of Proposed Building Envelope



- CSSI Areas (not for approval)
- SSDA Areas

Note:

Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

All drawings may not be reproduced or distributed without prior permission from the architect.

Rev	Date	Description	Issue	Checked
1	20.07.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
2	02.04.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
3	01.03.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
4	01.03.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
5	01.03.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
6	01.03.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
7	01.03.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
8	01.03.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
9	01.03.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG
10	01.03.19	ISSUE FOR 04.05 MODIFICATION	JWC	MLG

TFNSW
Victoria Cross OSD
Building Envelope
Indicative Ground Floor
Plan

Scale	1:100 scale	© AD
Drawn	Author	Checked
Project no.	012041	
Status	Project Status	
Plot Date	2/05/2019 12:55:04 PM	
Plot File		
Drawing no.	A01.001	
Revision	6	

FOR INFORMATION

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email: mel@batesmart.com.au
http://www.batesmart.com.au

Sydney 43 Dinkbone Street
Sydney Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email: syd@batesmart.com.au
http://www.batesmart.com.au

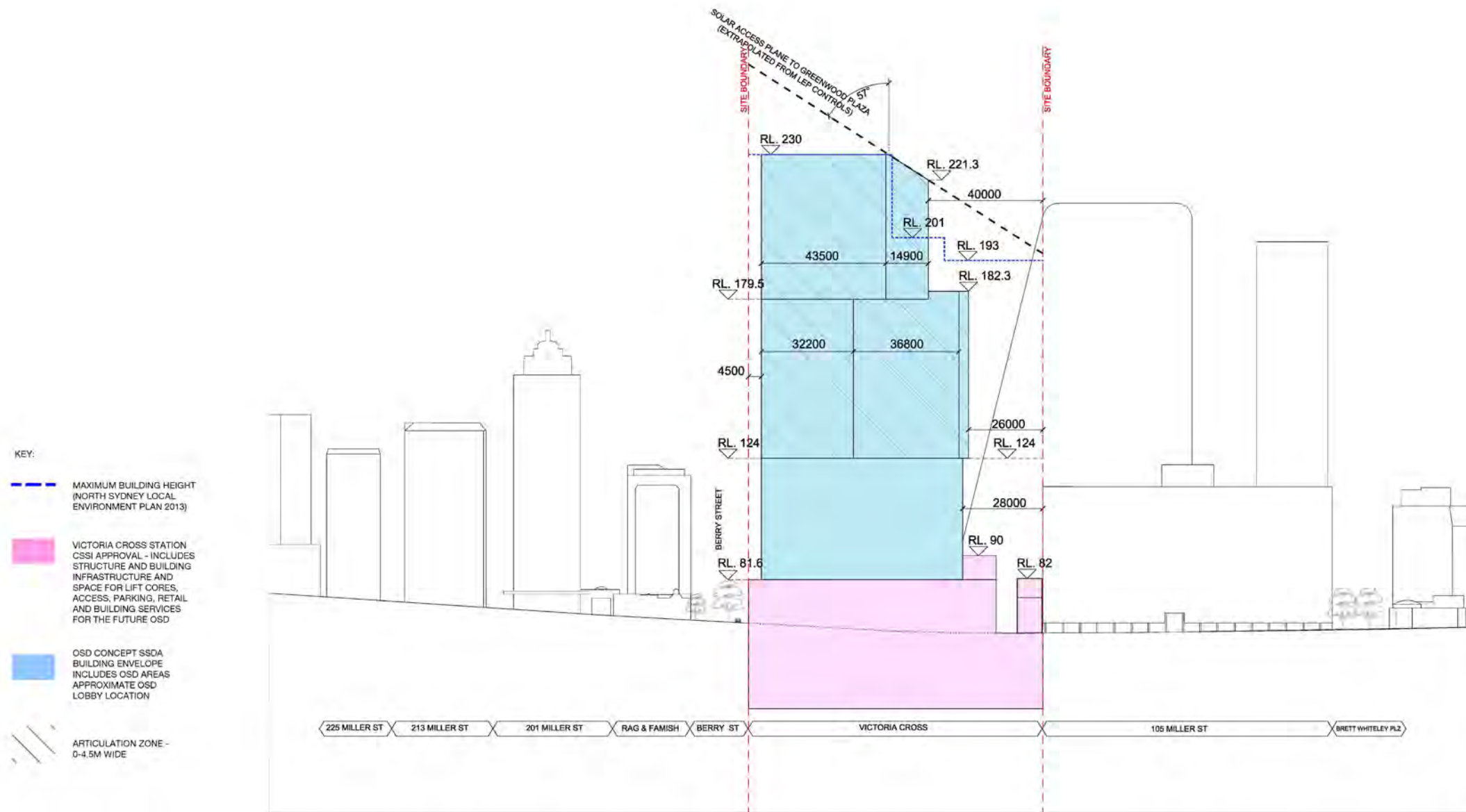
Bates Smart Pty Ltd ABN 70 004 999 400

BATESSMART

- CSSI Areas (not for approval)
- SSDA Areas

Note:

Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.



- KEY:
- MAXIMUM BUILDING HEIGHT (NORTH SYDNEY LOCAL ENVIRONMENT PLAN 2013)
 - VICTORIA CROSS STATION CSSI APPROVAL - INCLUDES STRUCTURE AND BUILDING INFRASTRUCTURE AND SPACE FOR LIFT CORES, ACCESS, PARKING, RETAIL AND BUILDING SERVICES FOR THE FUTURE OSD
 - OSD CONCEPT SSDA BUILDING ENVELOPE INCLUDES OSD AREAS APPROXIMATE OSD LOBBY LOCATION
 - ARTICULATION ZONE - 0-4.5M WIDE

Note: A 500mm flexible zone is presumed on the Northern and Southern (above RL 114) elevations of the building envelope, to allow for non-habitable architectural detailing and expression such as sunshades.

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and/or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

All drawings may not be reproduced or distributed without prior permission from the architect.

Revision	Date	Description	Initial	Checked
1	11/07/19	ISSUE FOR I&E		
2	12/04/19	ISSUE FOR I&E		
3	12/04/19	ISSUE FOR I&E		
4	12/04/19	ISSUE FOR I&E		
5	12/04/19	ISSUE FOR I&E		
6	12/04/19	ISSUE FOR I&E		
7	12/04/19	ISSUE FOR I&E		
8	12/04/19	ISSUE FOR I&E		
9	12/04/19	ISSUE FOR I&E		
10	12/04/19	ISSUE FOR I&E		

TFNSW
Victoria Cross OSD
Building Envelope
Miller Street Elevation

Scale: Not to scale
Drawn: Author: Checked: Checker:
Project no: 312041
Status: Project Status
Plot Date: 20/05/2018 12:54:02 PM
Plot File:
Drawing no: A01.002
Revision: 6

FOR INFORMATION

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 0200 F 03 8664 6300
email: mel@batesmart.com.au
http://www.batesmart.com.au

Sydney 43 Brisbane Street
Sydney Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email: syd@batesmart.com.au
http://www.batesmart.com.au

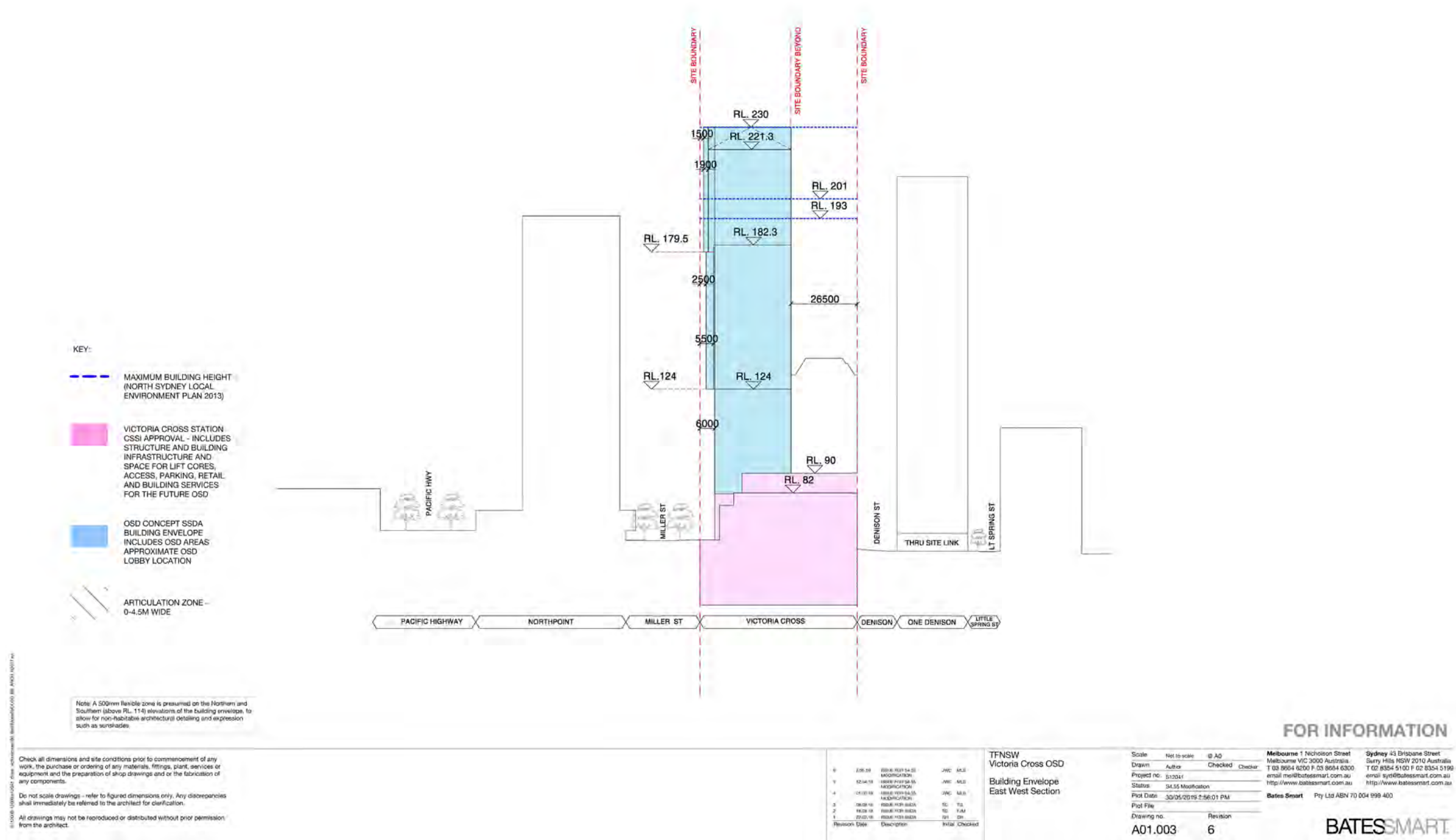
Bates Smart Pty Ltd ABN 70 004 999 400

BATESSMART

- CSSI Areas (not for approval)
- SSDA Areas

Note:

Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.



- CSSI Areas (not for approval)
- SSDA Areas

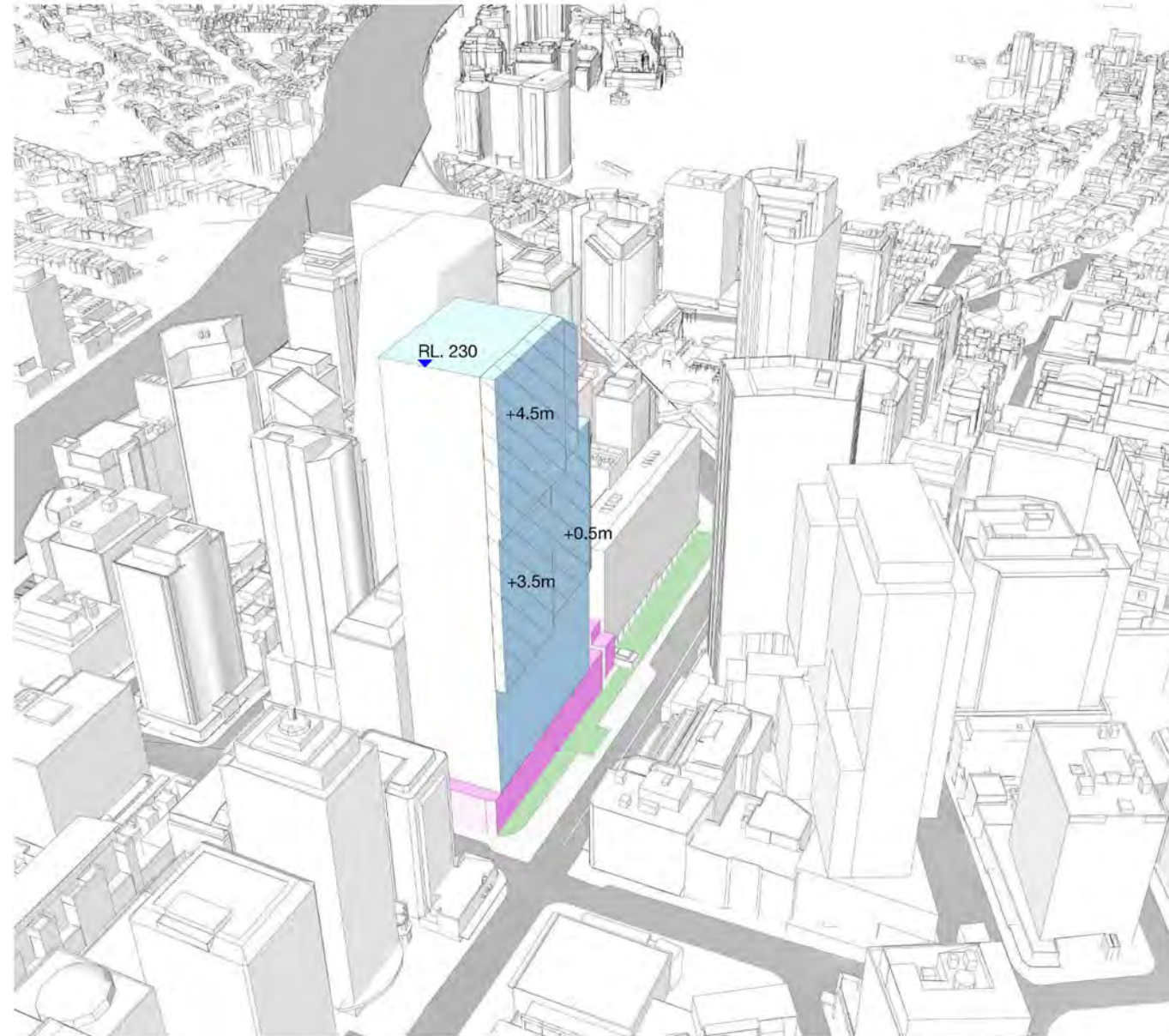
Note:

Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.

KEY:

- VICTORIA CROSS STATION CSSI APPROVAL - INCLUDES STRUCTURE AND BUILDING INFRASTRUCTURE AND SPACE FOR LIFT CORES, ACCESS, PARKING, RETAIL AND BUILDING SERVICES FOR THE FUTURE OSD
- OSD CONCEPT SSDA BUILDING ENVELOPE INCLUDES OSD AREAS, APPROXIMATE OSD LOBBY.
- ARTICULATION ZONE - 0-4.5M WIDE

Note: A 500mm flexible zone is presumed on the Northern and Southern (above RL 114) elevations of the building envelope, to allow for non-habitable architectural detailing and expression such as sunshades.



Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and/or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

All drawings may not be reproduced or distributed without prior permission from the architect.

Revision	Date	Description	Drawn	Checked
1	12.05.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
2	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
3	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
4	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
5	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
6	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
7	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
8	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
9	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB
10	12.06.19	ISSUE FOR 54.56 MODIFICATION	JWC	MLB

TFNSW
Victoria Cross OSD
Building Envelope
North West Axonometric

Scale	Not to scale	© A0
Drawn	Author	Checked
Project No.	810041	
Status	Project Status	
Plot Date	2/05/2019 12:55:05 PM	
Plot File		
Drawing no.	Revision	
A01.004	6	

FOR INFORMATION

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8964 6200 F 03 8964 8300
email: mel@batesmart.com.au
http://www.batesmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email: syo@batesmart.com.au
http://www.batesmart.com.au

Bates Smart Pty Ltd ABN 70 004 999 400

BATESSMART

- CSSI Areas (not for approval)
- SSDA Areas

Note:

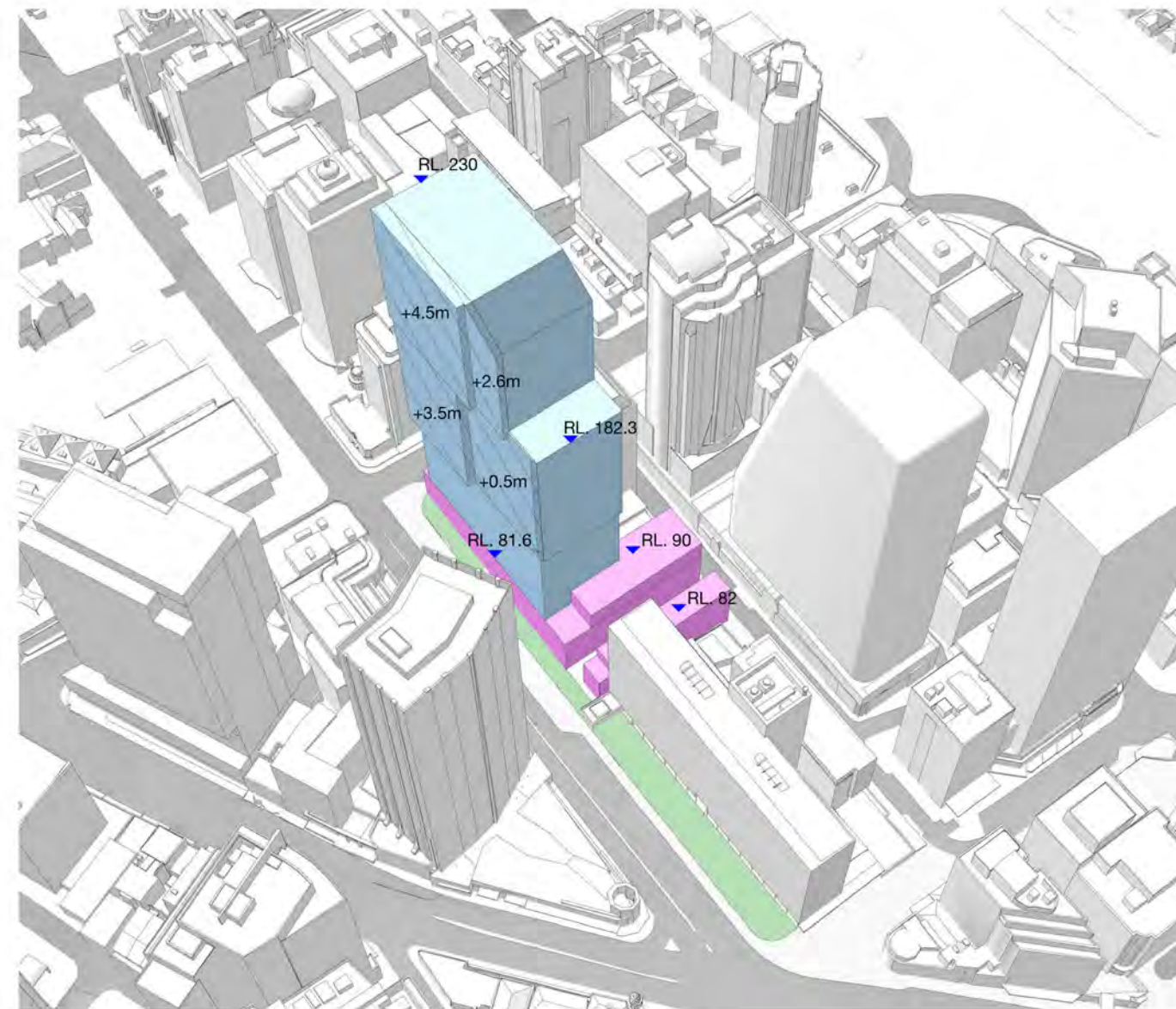
Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.

KEY:

VICTORIA CROSS STATION CSSI APPROVAL - INCLUDES STRUCTURE AND BUILDING INFRASTRUCTURE AND SPACE FOR LIFT CORES, ACCESS, PARKING, RETAIL AND BUILDING SERVICES FOR THE FUTURE OSD

OSD CONCEPT SSDA BUILDING ENVELOPE INCLUDES OSD AREAS, APPROXIMATE OSD LOBBY.

ARTICULATION ZONE - 0-4.5M WIDE



Note: A 500mm flexible zone is presumed on the Northern and Southern (above RL 114) elevations of the building envelope, to allow for non-habitable architectural detailing and expression such as sunshades.

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

All drawings may not be reproduced or distributed without prior permission from the architect.

Revision	Date	Description	Initials	Checked
6	21.05.19	ISSUE FOR S4.55 MODIFICATION	JWC	MJS
5	12.04.19	ISSUE FOR S4.55 MODIFICATION	JWC	MJS
4	01.03.19	ISSUE FOR S4.55 MODIFICATION	JWC	MJS
3	08.08.18	ISSUE FOR S4.55 MODIFICATION	TG	YIS
2	18.04.18	ISSUE FOR S4.55 MODIFICATION	TG	FJM
1	22.02.18	ISSUE FOR S4.55 MODIFICATION	GH	CH

TFNSW
Victoria Cross OSD
Building Envelope
South West
Axonometric

Scale: Not to scale
Drawn: Author
Project no: 915941
Status: S4.55 Modification
Plot Date: 30/05/2019 2:57:40 PM
Plot File:
Drawing no: A01.005
Revision: 6

FOR INFORMATION

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email: mel@batesmart.com.au
http://www.batesmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email: syd@batesmart.com.au
http://www.batesmart.com.au

Bates Smart Pty Ltd ABN 70 004 999 400

BATESSMART

Appendix B – Camera Lenses for Photomontages

Digital Camera Lenses for Photomontages and Visual Impact Assessments

The intention of a photomontage rendering is to visually communicate how proposed built form sits in respect to its surroundings. To achieve this, a digitally rendered image from a digital 3D model is accurately superimposed into a digital photograph to provide an accurate representation in terms of light, material, scale, and form.

Camera lens selection also plays an important part in creating a photomontage that communicates visual impact. There are several things to consider with respect to lens selection.

Field of View of the Human Eye

The field of view of the human eye is a topic that varies depending on the source of information. In many cases, the field of view of the eye is stated to be 17mm. Other opinions claim a smaller field of view of around 22-24mm.

Whichever the case, it is accepted that the human eye has a wide field of view. When a person stands close to a subject - for instance a building - their field of vision can potentially read all of the top, sides and bottom of the building simultaneously in a single glance.

In addition to this, the human eye can change focus and target direction extremely rapidly, allowing a person to view a large structure in a very short period of time, effectively making the perceived field of view even larger.

The Perspective of the Human Eye

It is difficult to accurately reproduce what the human eye sees by the means of a printed image. The eye's image sensor - the retina - is curved along the back surface of the eyeball, whereas the sensor on a camera is flat. Consequently, the perspective of a photograph can look quite different to how a person views a scene in the real world, especially when comparing to a photo captured with a wide camera lens.

In digital photography circles, it is widely accepted that using a longer lens (approximately 50mm) reduces the amount of perspective in an image and therefore more closely replicates what the human eye would see in reality. This, however, only addresses how the eye perceives perspective and does not consider the field of view of the eye.

The intention of a photomontage rendering is to visually communicate how proposed built form sits in respect to its surroundings. To achieve this, a digitally rendered image from a digital 3D model is accurately superimposed into a digital photograph to provide an accurate representation in terms of light, material, scale, and form.

Camera lens selection also plays an important part in creating a photomontage that communicates visual impact. There are several things to consider with respect to lens selection.

Appendix B PRIVATE VIEW STUDY

Visual Impact Photomontages and Methodology Report

Victoria Cross Overstation Development Concept Plan Modification - Private View Study

Introduction

This report has been prepared to accompany a section 4.55(2) modification application to the State Significant Development (SSD) Concept Approval (reference SSD 17_8874) granted for a commercial mixed-use Over Station Development (OSD) above the new Sydney Metro Victoria Cross Station. This report has been prepared having regard to the Secretary's Environmental Assessment Requirements dated 30 November 2017.

The Minister for Planning granted development consent to the Concept SSD Development Application (DA) on 18 December 2018. Concept Approval was granted for:

- A maximum building envelope, including street-wall and setbacks for the OSD
- A maximum building height of RL 230 or 168 metres, providing:
 - Approximately 40 commercial storeys and 2 additional storeys for rooftop plant for the high-rise portion of the building envelope
 - Approximately 13 storeys for the lower eastern portion of the building envelope at RL 118 or 55 metres
 - A maximum gross floor area (GFA) of 60,000sqm, excluding station floorspace
 - Basement car parking for a maximum 150 parking spaces.

Following Sydney Metro's appointment of Lendlease (Victoria Cross) Pty Limited as the preferred development partner to deliver the Victoria Cross OSD, and ongoing design development, minor modifications to the approved building envelope are now required.

The section 4.55(2) modification application proposes the following changes to the approved building envelope:

- Reduction in the massing and overall dimensions of the building cantilever above the Miller Street special area setback;
- Relocation of building massing from the low-rise levels the tower, north of the through-site link, to the high-rise levels of the tower;
- Reduction of the Berry Street setback from 5 metres to 4.5 metres, extending the building envelope marginally to the north; and
- Increasing the approved maximum GFA for the over station development from 60,000sqm to 61,500sqm.

It is noted that the Concept SSD DA instrument of approval does not consent to any physical works commencing on site until a Detailed SSD DA is granted for the site. A Detailed SSD DA seeking consent for the detailed construction of the proposed development is lodged under a different cover concurrently with this Concept SSD DA modification application.

The Site

The site is generally described as 155-167 Miller Street, 181 Miller Street, 187-189 Miller Street, and part of 65 Berry Street, North Sydney (the site). The site occupies various addresses/allotments and is legally described as follows:

- 155-167 Miller Street (SP 35644) (which incorporates lots 40 and 41 of Strata Plan 81092 and lots 37, 38 and 39 of Strata Plan 79612)
- 181 Miller Street (Lot 15/DP 69345, Lot 1 & 2/DP 123056, Lot 10/DP 70667)
- 187 Miller Street (Lot A/DP 160018)
- 189 Miller Street (Lot 1/DP 633088)
- Formerly part 65 Berry Street (Lot 1/DP 1230458)

Figure 01 – Site Aerial



Sydney Metro Description

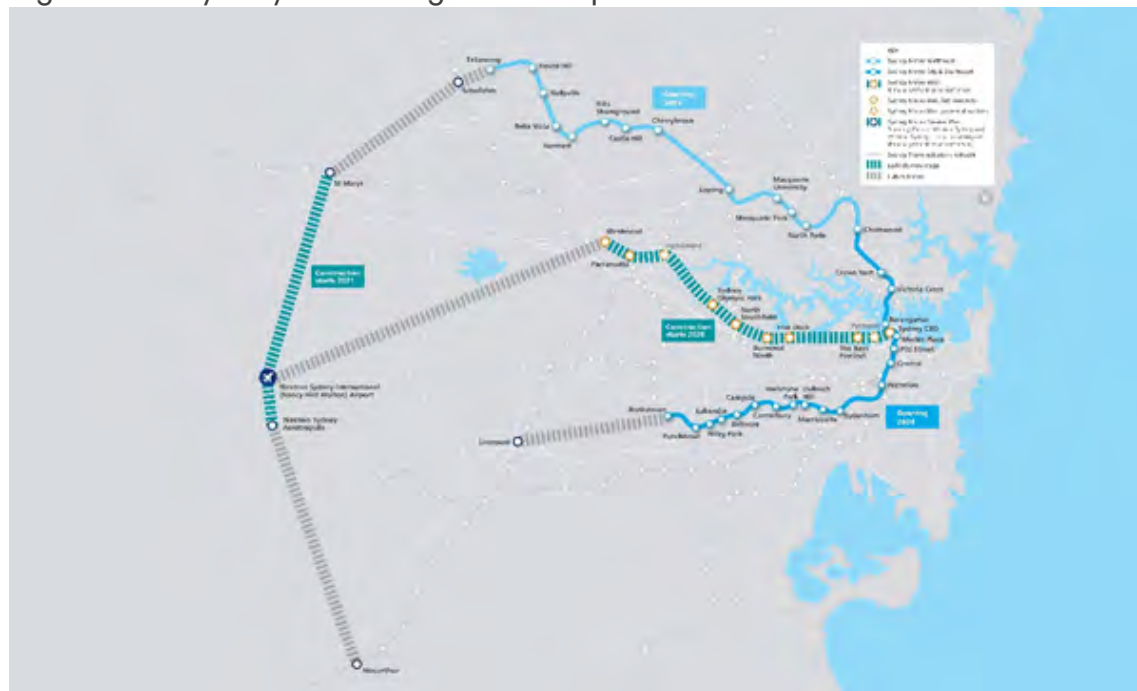
Sydney Metro is Australia’s biggest public transport project. Services started in May 2019 in the city’s North West with a train every four minutes in the peak. Metro rail will be extended into the CBD and beyond to Bankstown in 2024. There will be new metro railway stations underground at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new metro platforms under Central.

In 2024, Sydney will have 31 metro railway stations and a 66 km standalone metro railway system – the biggest urban rail project in Australian history. There will be ultimate capacity for a metro train every two minutes in each direction under the Sydney city centre. The Sydney Metro project is illustrated in the Figure below.

On 9 January 2017, the Minister for Planning approved the Sydney Metro City & Southwest - Chatswood to Sydenham project as a Critical State Significant Infrastructure project (reference SSI 15_7400) (CSSI Approval). The terms of the CSSI Approval includes all works required to construct the Sydney Metro Victoria Cross Station, including the demolition of existing buildings and structures on both sites. The CSSI Approval also includes construction of below and above ground improvements with the metro station structure for appropriate integration with the OSD.

With regards to CSSI related works, any changes to the “metro box envelope” and public domain will be pursued in satisfaction of the CSSI conditions of approval and do not form part of the scope of the Concept SSD DA for the OSD.

Figure 02 – Sydney Metro Alignment Map



Source: Sydney Metro

Overview

The general process in creating accurate photomontage renderings involves the creation of an accurate, real world scale digital 3D model. We then take site photographs and place cameras in the 3D model that match the real world position that the photographs were taken on site.

The camera positions are then surveyed to identify the Map Grid of Australia (MGA) coordinates at each position.

By matching the real world camera lens properties to the camera properties in our software and rotating the camera so that surveyed points in 3D space align with the corresponding points on the photograph, we can create a rendering that is correct in terms of position, scale, rotation, and perspective.

The rendering can then be superimposed into the real photo to generate an image that represents accurate form and visual impact.

Description of collected data

To create the 3D model and establish accurate reference points for alignment to the photography, a variety of information was collected. This includes the following:

- 1) Architectural design of Approved building envelope
Created by: Bates Smart
Format: Sketchup model
- 2) Architectural design of Proposed building envelope
Created by: Bates Smart
Format: Sketchup model
- 3) Surveyed data
Created by: CMS Surveyors
Format: DWG file
- 4) Site photography
Created by: Virtual Ideas (VI Photos) Format: JPEG file
- 5) Surveyed 2015 3D North Sydney context model
Created by: AAM
Format: 3DS Studio Max file
- 6) Approved DA building envelopes
Supplied by: Batesmart
Format: Sketchup model

Notes on images

The photomontages are also showing the indicative building massing of the following developments in the vicinity of the site for the purpose of visual assessment of the future surrounding city scape.

Both buildings are currently under construction and are shown in 'white' in the photomontages:

- 100 Mount St, North Sydney
- 1 Denison St, North Sydney

Methodology

Site Photography

Site photography was taken from predetermined positions as instructed by Bates Smart. These locations were selected in consultation with North Sydney Council.

Photographs were taken using a Nikon D810 digital camera, using a 14-24mm f/2.8 lens.

The positions of the photographs were surveyed and documented into a DWG drawing supplied by the surveyor.

3D Model

Using the imported surveyed data into our 3D software (3DS Max), we then imported the supplied 3D model of the proposed building envelope and relevant DA approved building massings.

Alignment

The positions of the real world photography were located in the 3D scene. Cameras were then created in the 3D model to match the locations and height of the position from which the photographs were taken from. They were then aligned in rotation so that the points of the 3D model aligned with their corresponding objects that are visible in the photograph.

Renderings of the building envelope massing were then created from the aligned 3D cameras and montaged into the existing photography at the same location. This produces an accurate representation of the scale and position of the new building envelope with respect to the existing surroundings.

The new building envelope is shown in 'blue' in the following photomontages, with the indicative building forms for 100 Mount Street and 1 Denison

Street developments shown in 'white'.

In conclusion, it is my opinion as an experienced, professional 3D architectural and landscape renderer that the images provided accurately portray the level of visibility and impact of the built form.

Yours sincerely, Grant Kolln





CV of Grant Kolln, Director of Virtual Ideas

Personal Details

Name: Grant Kolln
DOB: 07/09/1974
Company Address: Suite 71, 61 Marlborough St, Surry Hills, NSW, 2010
Phone Number: 02 8399 0222

Relevant Experience

2003 - Present

Director of 3D visualisation studio Virtual Ideas. During this time I have worked on many visual impact studies for legal proceedings in various different types of industries including architectural, industrial, mining, landscaping, and several large public works projects. This experience has enabled us to create highly accurate methodologies for the creation of our visual impact media and report creation.

1999 - 2001

Project Manager for global SAP infrastructure implementation - Ericsson, Sweden

1999 - 1999

IT Consultant - Sci-Fi Channel, London

1994 - 1999

Architectural Technician, Thomson Adsett Architect, Brisbane QLD.

Relevant Education / Qualifications

1997

Advanced Diploma in Architectural Technology, Southbank TAFE, Brisbane, QLD

Apartment 1501 - Overview

Original Photograph - Camera Lens 24mm
South East



South



South West



Approved Victoria Cross Over Station Development Building Envelope - Camera Lens 24mm

South East



South



South West

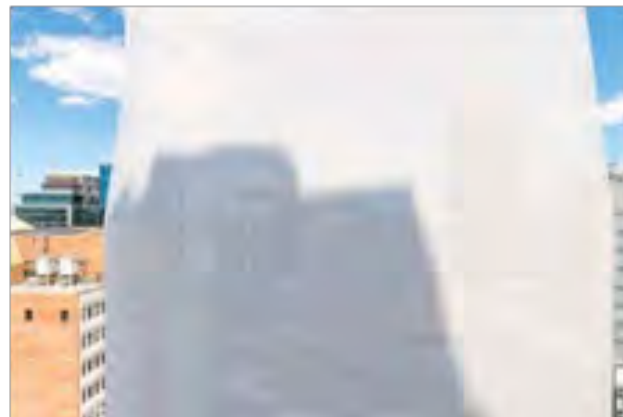


Proposed Victoria Cross Over Station Development Building Envelope - Camera Lens 24mm

South East



South



South West



100 Mount St and 1 Denison Street Building Massing

Approved Victoria Cross OSD Building Envelope



Proposed Victoria Cross OSD Building Envelope

Apartment 1501 - South East

Original Photograph



Photo Date: 29th March 2018

Photo Lens: 24mm

Camera Height: RL 112.65

Apartment 1501 - South East


Approved Victoria Cross Over Station Development Building Envelope



Photo Date: 29th March 2018

Photo Lens: 24mm

Camera Height: RL 112.65

 100 Mount St and 1 Denison Street Building Massing

Apartment 1501 - South

Original Photograph



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 112.65

Apartment 1501 - South

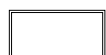
Approved Victoria Cross Over Station Development Building Envelope



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 112.65



100 Mount St and 1 Denison Street Building Massing

Apartment 1501 - South West

Original Photograph



Photo Date: 12th March 2018

Photo Lens: 24mm

Camera Height: RL 112.65

Apartment 1501 - South West

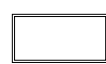

Approved Victoria Cross Over Station Development Building Envelope

Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 112.65



-  100 Mount St and 1 Denison Street Building Massing
-  Approved Victoria Cross OSD Building Envelope

Apartment 1501 - South West

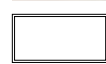

Proposed Victoria Cross Over Station Development Building Envelope

Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 112.65



-  100 Mount St and 1 Denison Street Building Massing
-  Proposed Victoria Cross OSD Building Envelope

Apartment 2001 - Overview

Original Photograph - Camera Lens 24mm
South East



South



South West

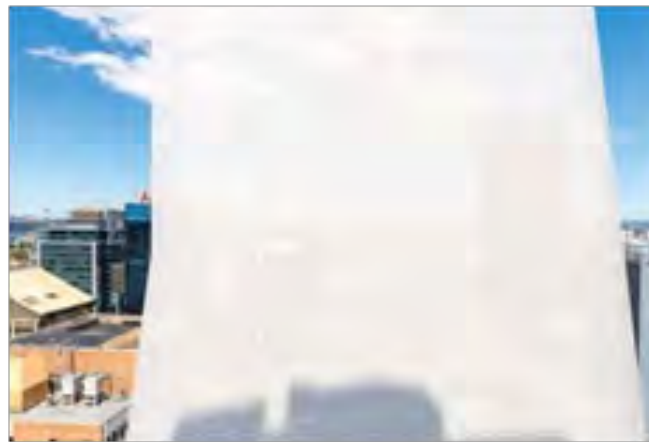


Approved Victoria Cross Over Station Development Building Envelope - Camera Lens 24mm

South East



South



South West



Proposed Victoria Cross Over Station Development Building Envelope - Camera Lens 24mm

South East



South



South West



100 Mount St and 1 Denison Street Building Massing



Approved Victoria Cross OSD Building Envelope



Proposed Victoria Cross OSD Building Envelope

Apartment 2001 - South East

Original Photograph



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 116

Apartment 2001 - South East


Approved Victoria Cross Over Station Development Building Envelope



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 116

 100 Mount St and 1 Denison Street Building Massing

Apartment 2001 - South

Original Photograph



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 116

Apartment 2001 - South


Approved Victoria Cross Over Station Development Building Envelope



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 116

 100 Mount St and 1 Denison Street Building Massing

Apartment 2001 - South West

Original Photography



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 112.65

Apartment 2001 - South West

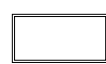

Approved Victoria Cross Over Station Development Building Envelope

Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 112.65



-  100 Mount St and 1 Denison Street Building Massing
-  Approved Victoria Cross OSD Building Envelope

Apartment 2001 - South West

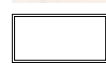

Proposed Victoria Cross Over Station Development Building Envelope

Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 112.65



-  100 Mount St and 1 Denison Street Building Massing
-  Proposed Victoria Cross OSD Building Envelope

Apartment 2701 - Overview

Original Photograph - Camera Lens 24mm
South East



South



South West

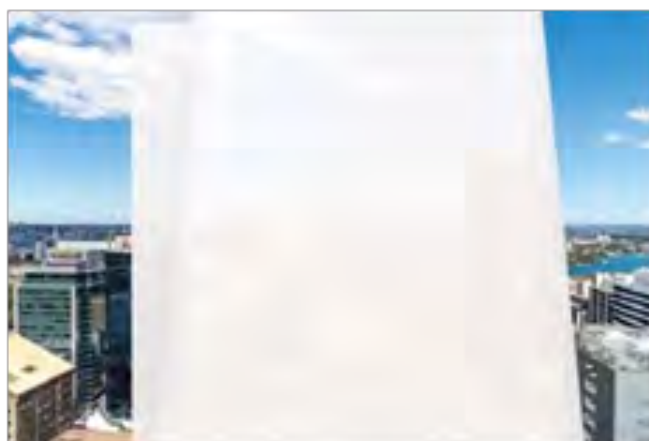


Approved Victoria Cross Over Station Development Building Envelope - Camera Lens 24mm

South East



South



South West

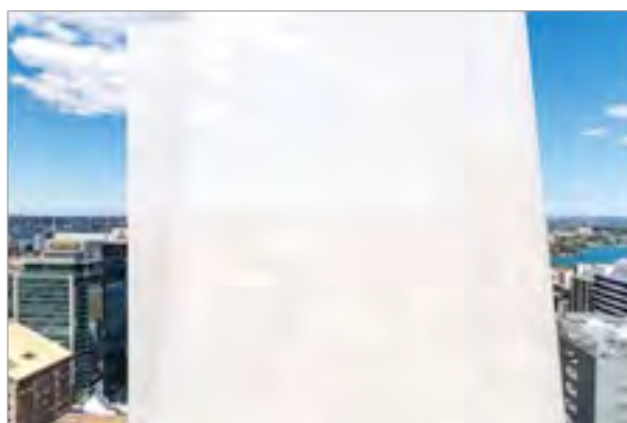


Proposed Victoria Cross Over Station Development Building Envelope - Camera Lens 24mm

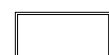
South East



South



South West



100 Mount St and 1 Denison Street Building Massing



Approved Victoria Cross OSD Building Envelope



Proposed Victoria Cross OSD Building Envelope

Apartment 2701 - South East

Original Photograph



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 145.25

Apartment 2701 - South East

Approved Victoria Cross Over Station Development Building Envelope

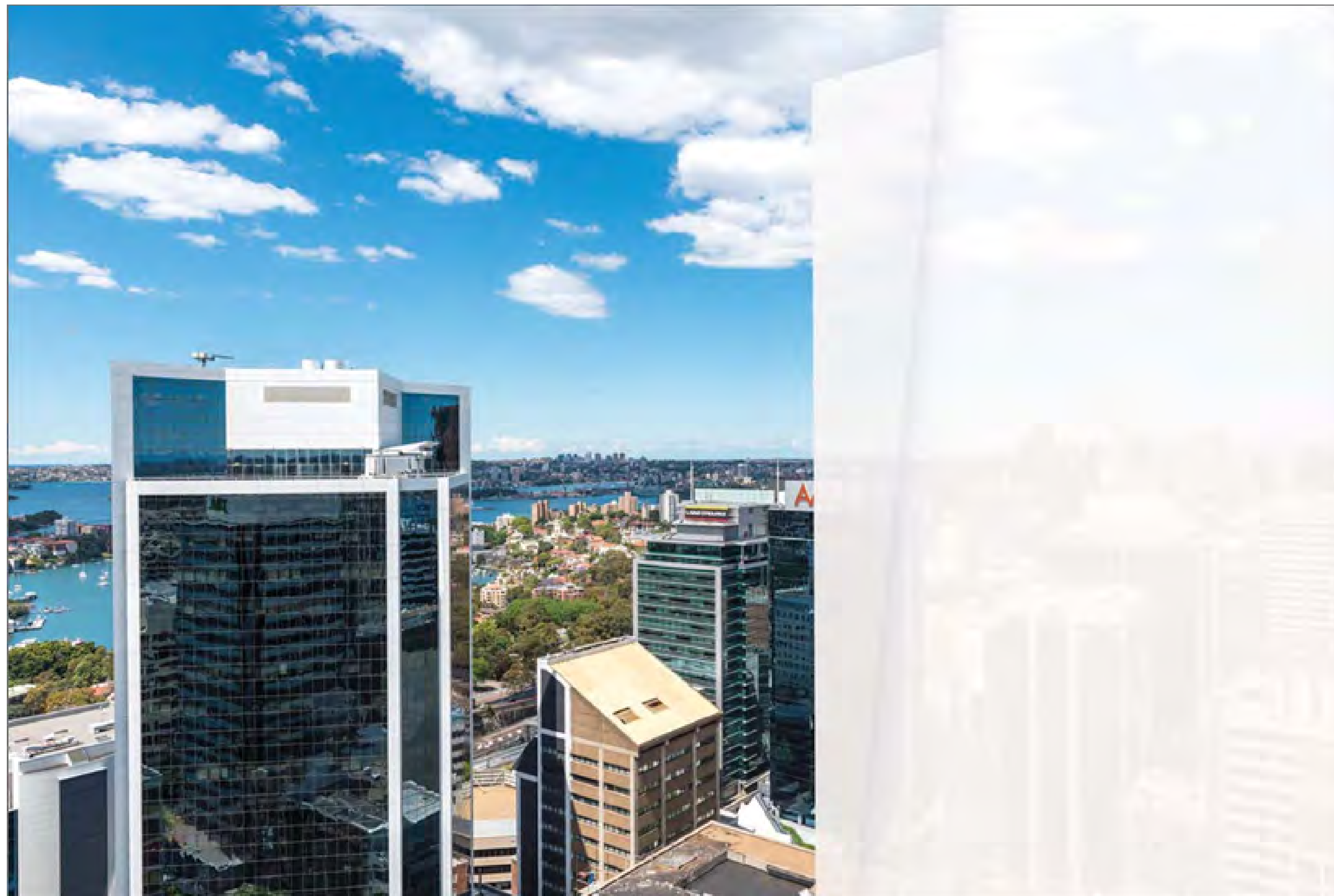
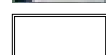


Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 145.25

 100 Mount St and 1 Denison Street Building Massing

Apartment 2701 - South

Original Photography



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 145.25

Apartment 2701 - South

Approved Victoria Cross Over Station Development Building Envelope

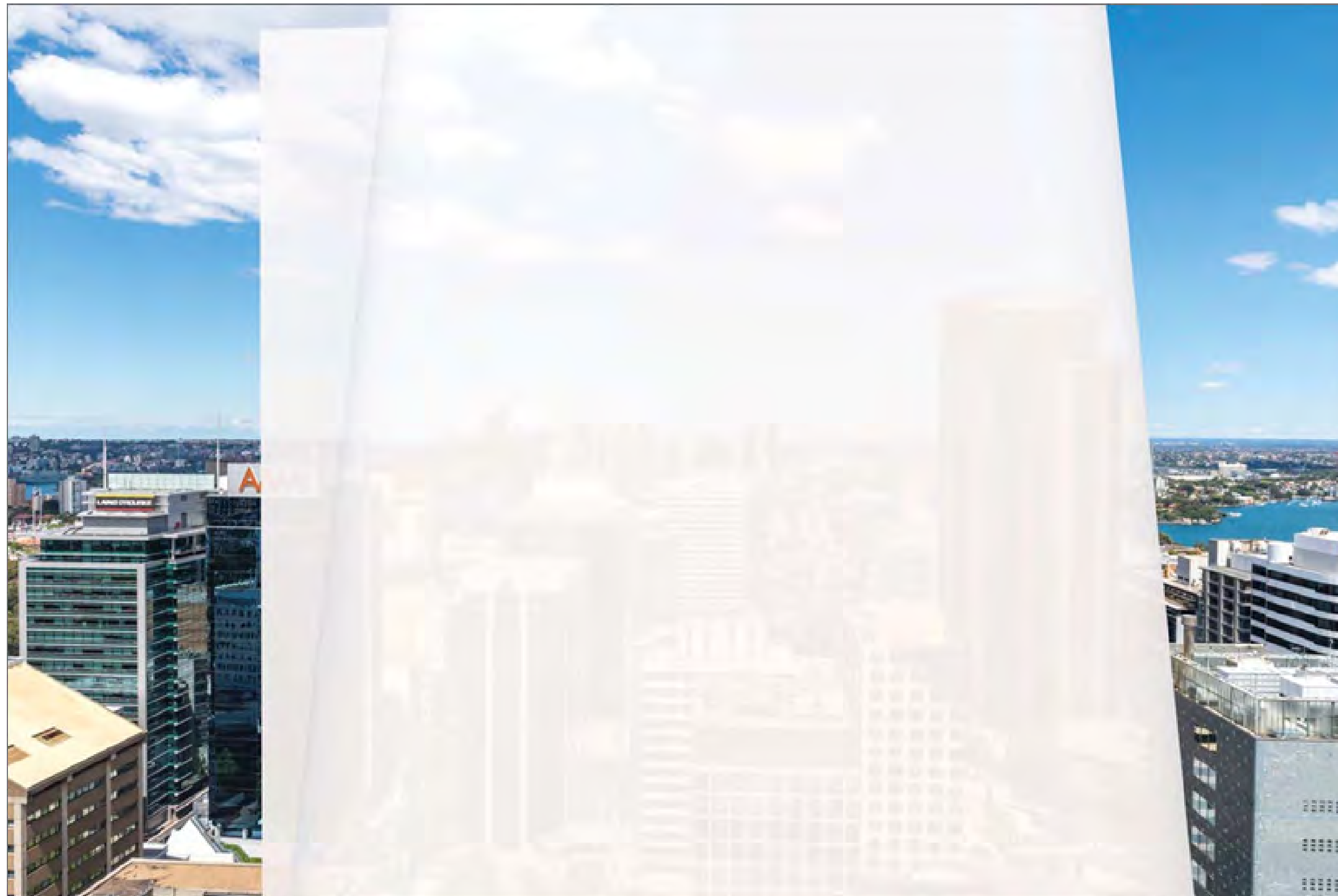
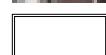


Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 145.25

 100 Mount St and 1 Denison Street Building Massing

Apartment 2701 - South West

Original Photography



Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 145.25

Apartment 2701 - South West

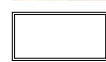

Approved Victoria Cross Over Station Development Building Envelope

Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 145.25



-  100 Mount St and 1 Denison Street Building Massing
-  Approved Victoria Cross OSD Building Envelope

Apartment 2701 - South West

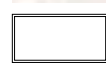

Proposed Victoria Cross Over Station Development Building Envelope

Photo Date: 19th October 2016

Photo Lens: 24mm

Camera Height: RL 145.25



-  100 Mount St and 1 Denison Street Building Massing
-  Proposed Victoria Cross OSD Building Envelope

Rooftop Level 37 - Overview

Original Photograph - Camera Lens 24mm
South West



West



North West



Approved Victoria Cross Over Station Development Building Envelope - Camera Lens 24mm

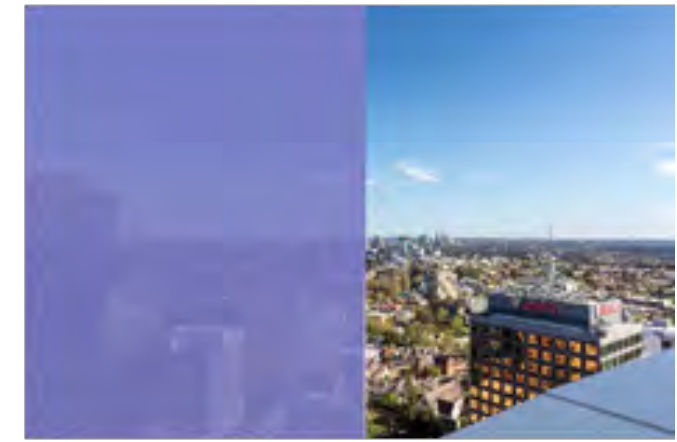
South East



West



North West



Proposed Victoria Cross Over Station Development Building Envelope - Camera Lens 24mm

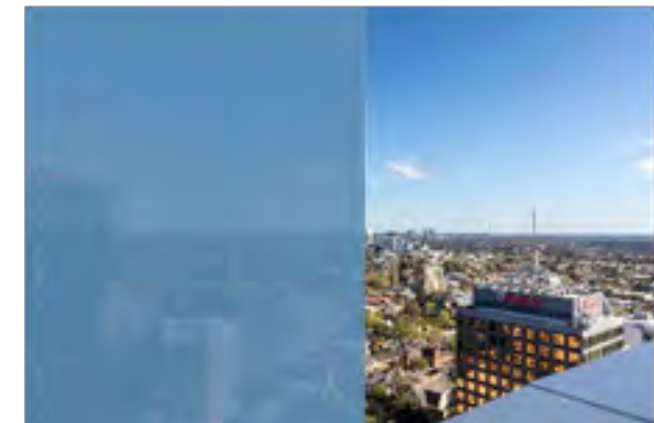
South West



West



North West



100 Mount St and 1 Denison Street Building Massing



Approved Victoria Cross OSD Building Envelope



Proposed Victoria Cross OSD Building Envelope

Rooftop Level 37 - South West

Original Photograph



Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05

Rooftop Level 37 - South West

Approved Victoria Cross Over Station Development Building Envelope



Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05

Approved Victoria Cross OSD Building Envelope

Rooftop Level 37 - South West

Proposed Victoria Cross Over Station Development Building Envelope

Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05



Proposed Victoria Cross OSD Building Envelope

Rooftop Level 37 - West

Original Photography



Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05

Rooftop Level 37 - West

Approved Victoria Cross Over Station Development Building Envelope

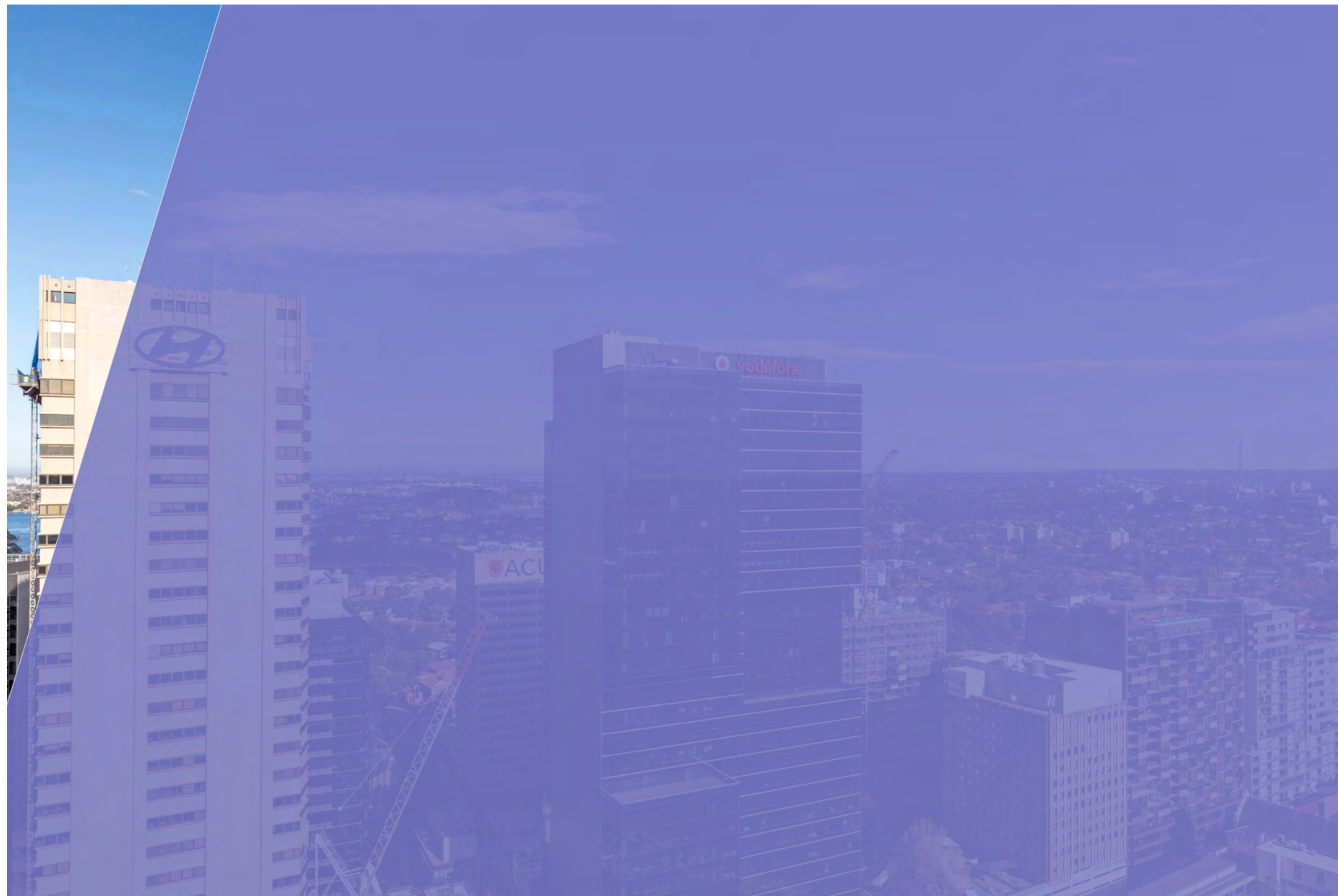


Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05

Approved Victoria Cross OSD Building Envelope

Rooftop Level 37 - Overview

Proposed Victoria Cross Over Station Development Building Envelope

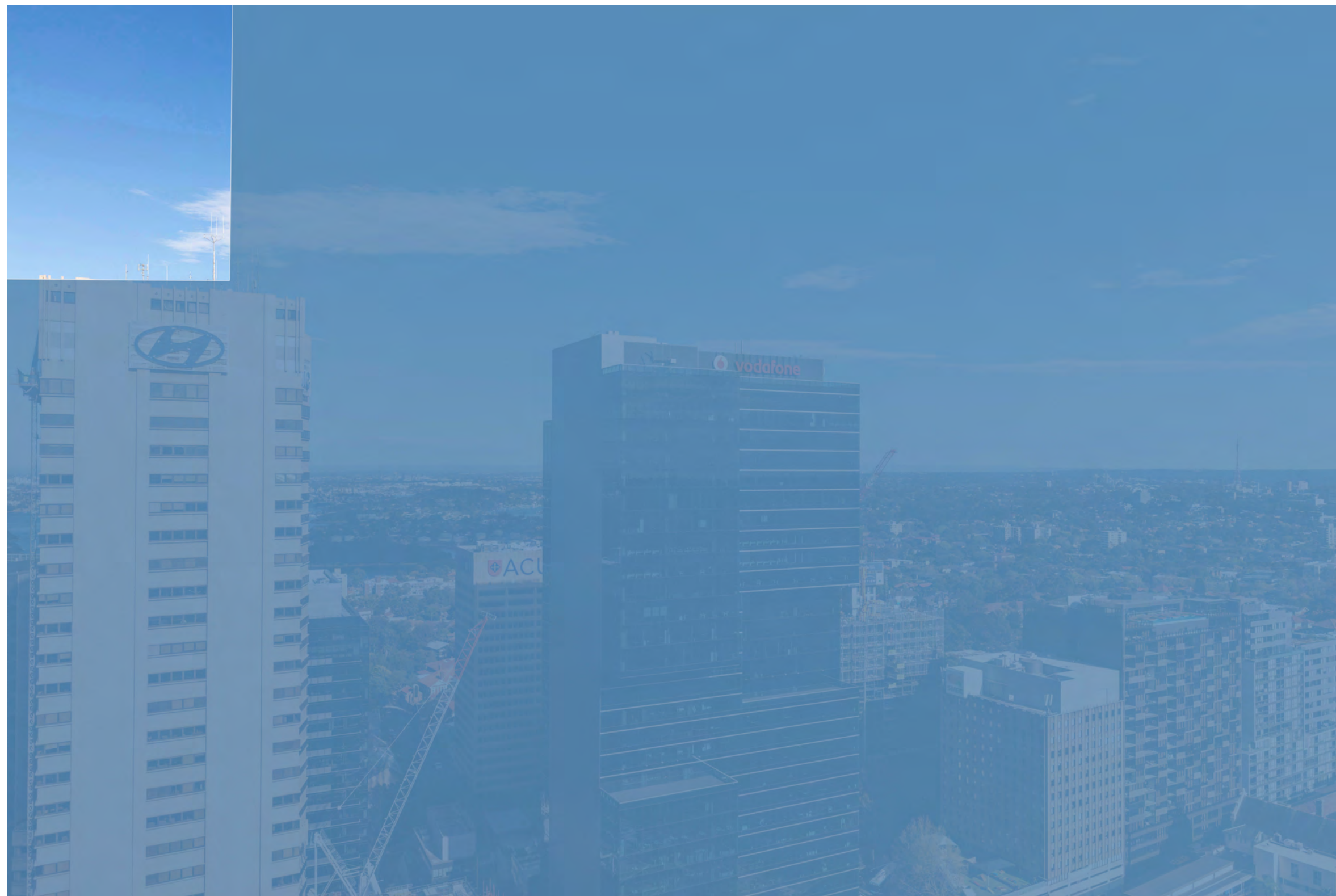


Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05

 Proposed Victoria Cross OSD Building Envelope

Rooftop Level 37 - North West

Original Photograph



Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05

Rooftop Level 37 - North West

Approved Victoria Cross Over Station Development Building Envelope

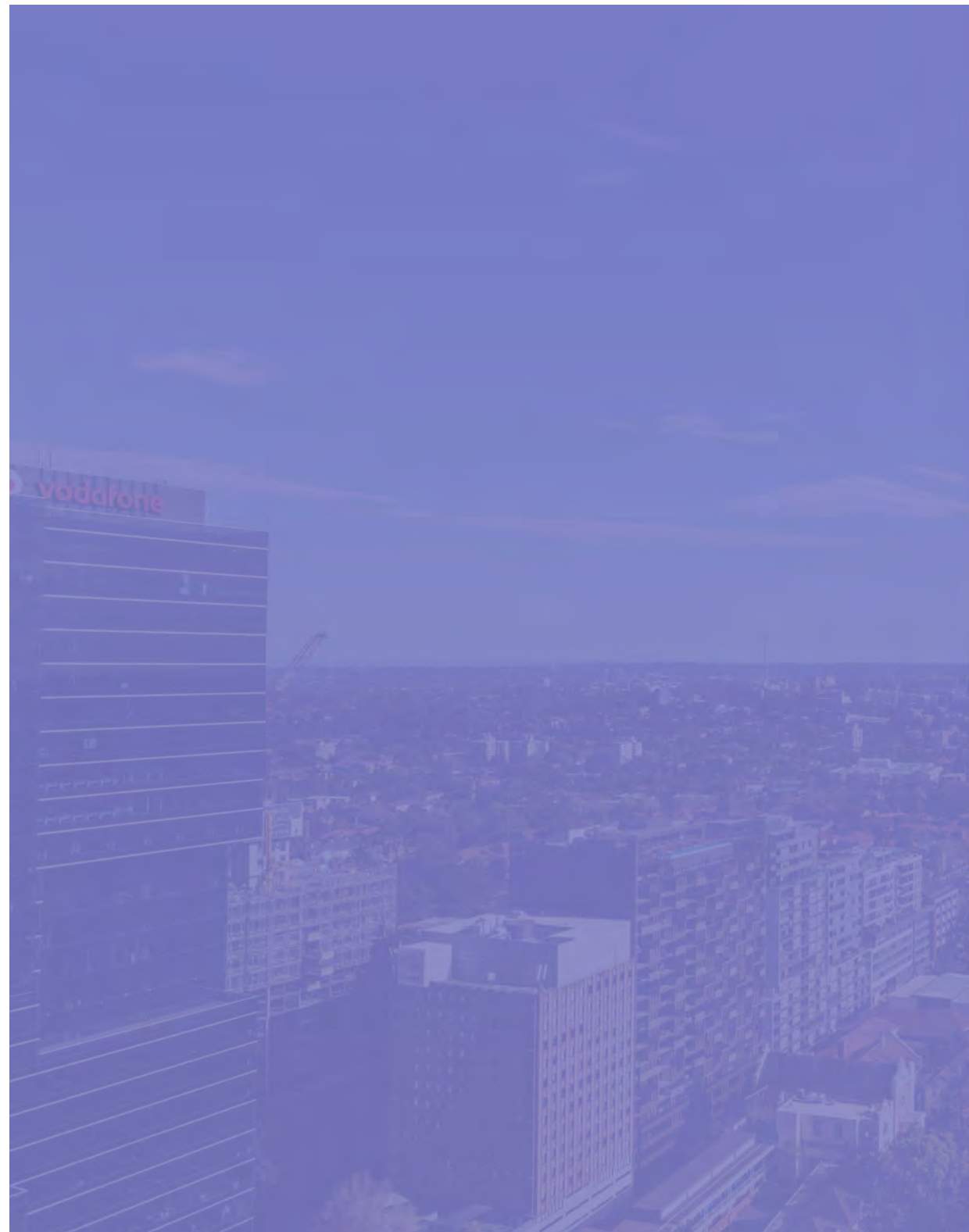


Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05

 Approved Victoria Cross OSD Building Envelope

Rooftop Level 37 - North West

Proposed Victoria Cross Over Station Development Building Envelope



Photo Date: 13th September 2016

Photo Lens: 24mm

Camera Height: RL 174.05

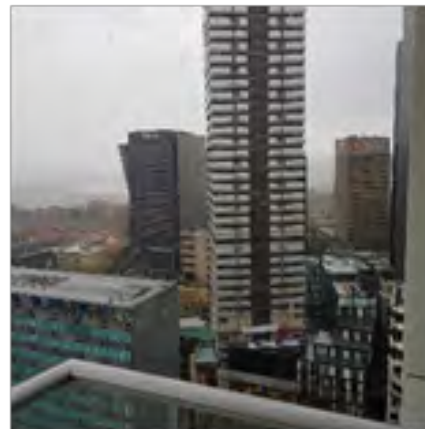
Proposed Victoria Cross OSD Building Envelope

Additional Views - Overview

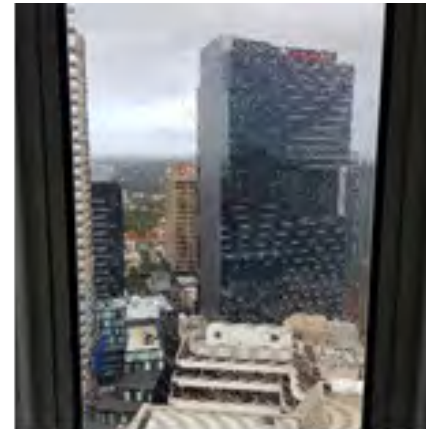
Original Photograph - Camera Lens 37mm
Level 21 South West



Level 25 West



Level 31 West



Level 33 South West



Level 33 West

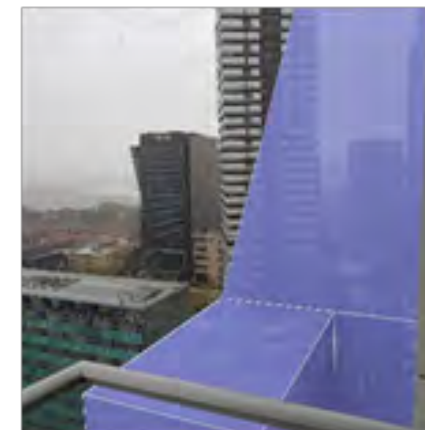


Approved Victoria Cross Over Station Development Building Envelope - Camera Lens 37mm

Level 21 South West



Level 25 West



Level 31 West



Level 33 South West



Level 33 West

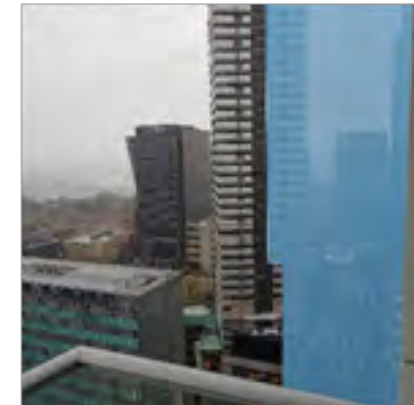


Proposed Victoria Cross Over Station Development Building Envelope - Camera Lens 37mm

Level 21 South West



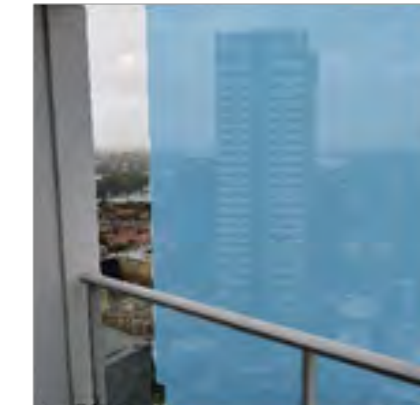
Level 25 West



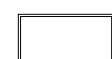
Level 31 West



Level 33 South West



Level 33 West



100 Mount St and 1 Denison Street Building Massing



Approved Victoria Cross OSD Building Envelope



Proposed Victoria Cross OSD Building Envelope

Apartment 2105 - South West

Original Photograph



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 128.8

Apartment 2105 - South West

Approved Victoria Cross Over Station Development Building Envelope



Approved Victoria Cross OSD Building Envelope

Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 128.8

Apartment 2105 - South West

Proposed Victoria Cross Over Station Development Building Envelope

Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 128.8



Proposed Victoria Cross OSD Building Envelope

Apartment 2501 - West

Original Photograph



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 139.5

Apartment 2501 - West

Approved Victoria Cross Over Station Development Building Envelope



 Approved Victoria Cross OSD Building Envelope

Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 139.5

Apartment 2105 - West

Proposed Victoria Cross Over Station Development Building Envelope



Proposed Victoria Cross OSD Building Envelope

Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 139.5

Apartment 3102 - West

Original Photograph



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 155.4

Apartment 3102 - West

Approved Victoria Cross Over Station Development Building Envelope



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 155.4

 Approved Victoria Cross OSD Building Envelope

Apartment 3102 - West

Proposed Victoria Cross Over Station Development Building Envelope

Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 155.4



Proposed Victoria Cross OSD Building Envelope

Apartment 3302 - South West

Original Photograph



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 160.6

Apartment 3302 - South West

Approved Victoria Cross Over Station Development Building Envelope



 Approved Victoria Cross OSD Building Envelope

Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 160.6

Apartment 3302 - South West

Proposed Victoria Cross Over Station Development Building Envelope



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 160.6

Proposed Victoria Cross OSD Building Envelope

Apartment 3302 - West

Original Photograph



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 160.6

Apartment 3302 - West

Approved Victoria Cross Over Station Development Building Envelope



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 160.6

 Approved Victoria Cross OSD Building Envelope

Apartment 3302 - West


Proposed Victoria Cross Over Station Development Building Envelope



Photo Date: 10th August 2018

Photo Lens: 37mm

Camera Height: RL 160.6

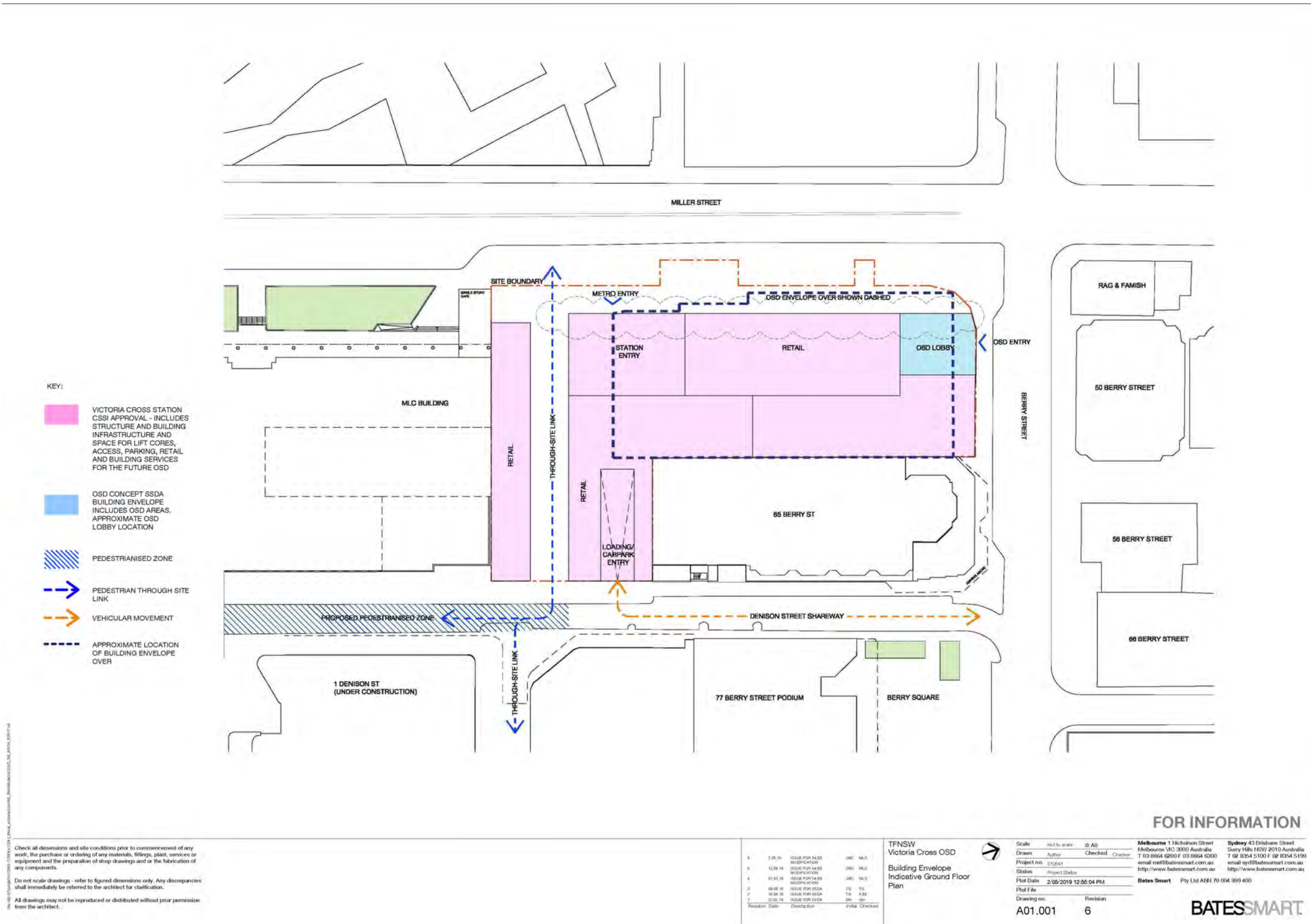
 Proposed Victoria Cross OSD Building Envelope

Appendix A – Documentation of Proposed Building Envelope

- CSSI Areas (not for approval)
- SSDA Areas

Note:

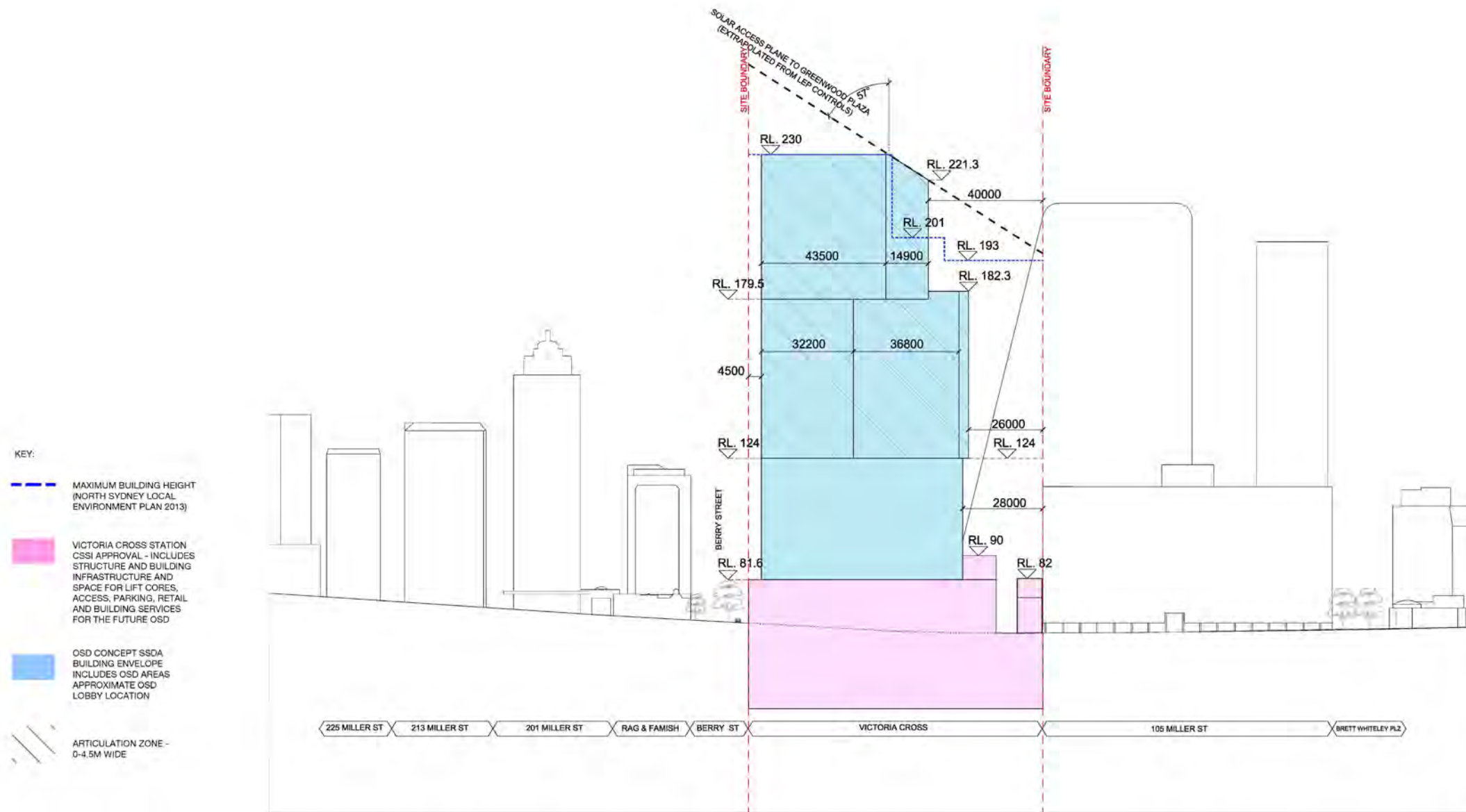
Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.



- CSSI Areas (not for approval)
- SSDA Areas

Note:

Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.



Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and/or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

All drawings may not be reproduced or distributed without prior permission from the architect.

Revision	Date	Description	Initial	Checked
1	11/07/19	ISSUE FOR I&E		
2	12/04/19	ISSUE FOR I&E		
3	12/04/19	ISSUE FOR I&E		
4	12/04/19	ISSUE FOR I&E		
5	12/04/19	ISSUE FOR I&E		
6	12/04/19	ISSUE FOR I&E		
7	12/04/19	ISSUE FOR I&E		
8	12/04/19	ISSUE FOR I&E		
9	12/04/19	ISSUE FOR I&E		
10	12/04/19	ISSUE FOR I&E		

TFNSW
Victoria Cross OSD
Building Envelope
Miller Street Elevation

Scale: Not to scale
Drawn: Author
Project no: 312041
Status: Project Status
Plot Date: 20/05/2018 12:54:02 PM
Plot File:
Drawing no: A01.002
Revision: 6

FOR INFORMATION

Bates Smart
Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 0200 F 03 8664 6300
email: mel@batesmart.com.au
http://www.batesmart.com.au

Bates Smart
Sydney 43 Brisbane Street
Sydney Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email: syd@batesmart.com.au
http://www.batesmart.com.au

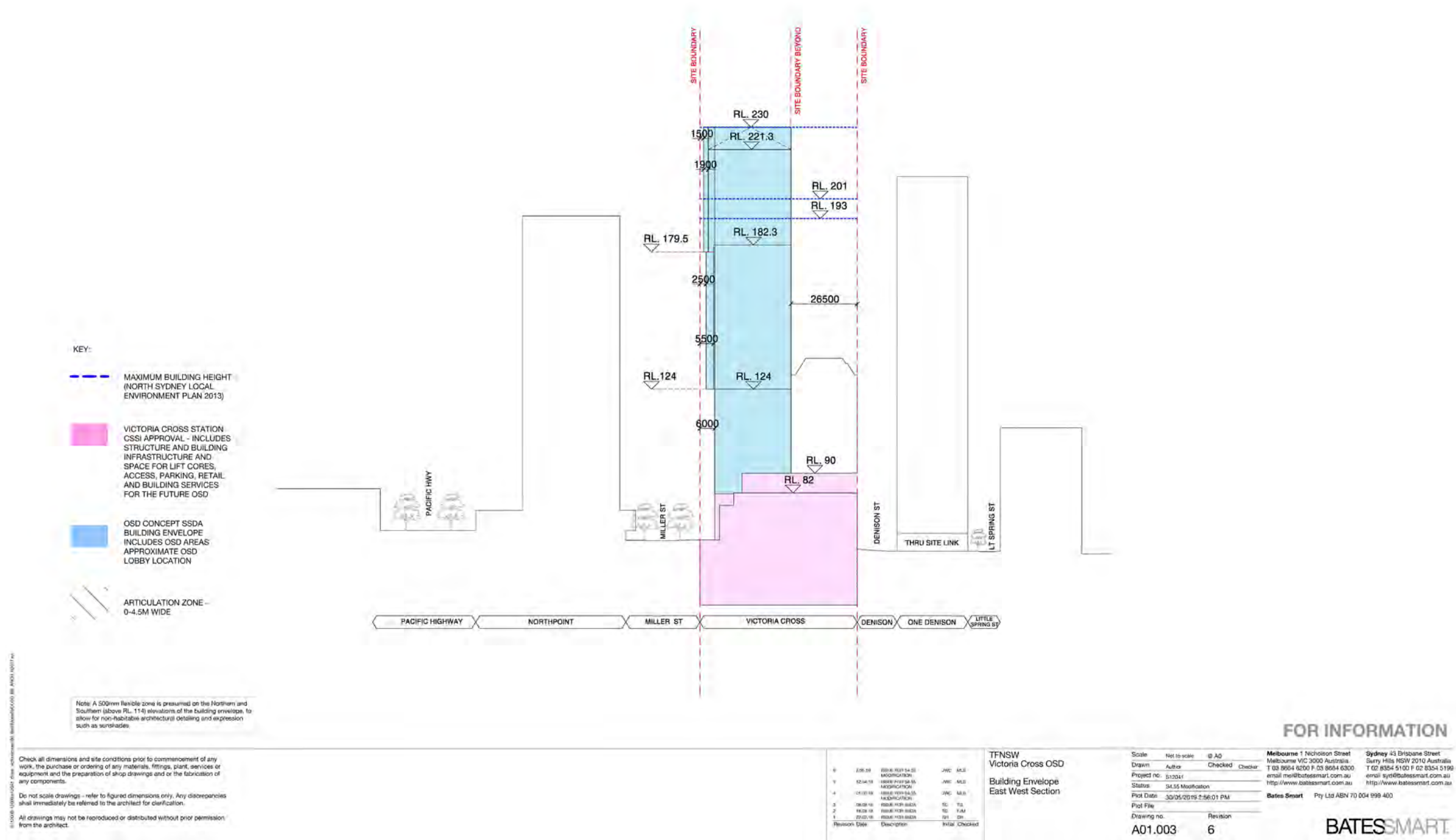
Bates Smart
Pty Ltd ABN 70 004 999 400

BATESSMART

- CSSI Areas (not for approval)
- SSDA Areas

Note:

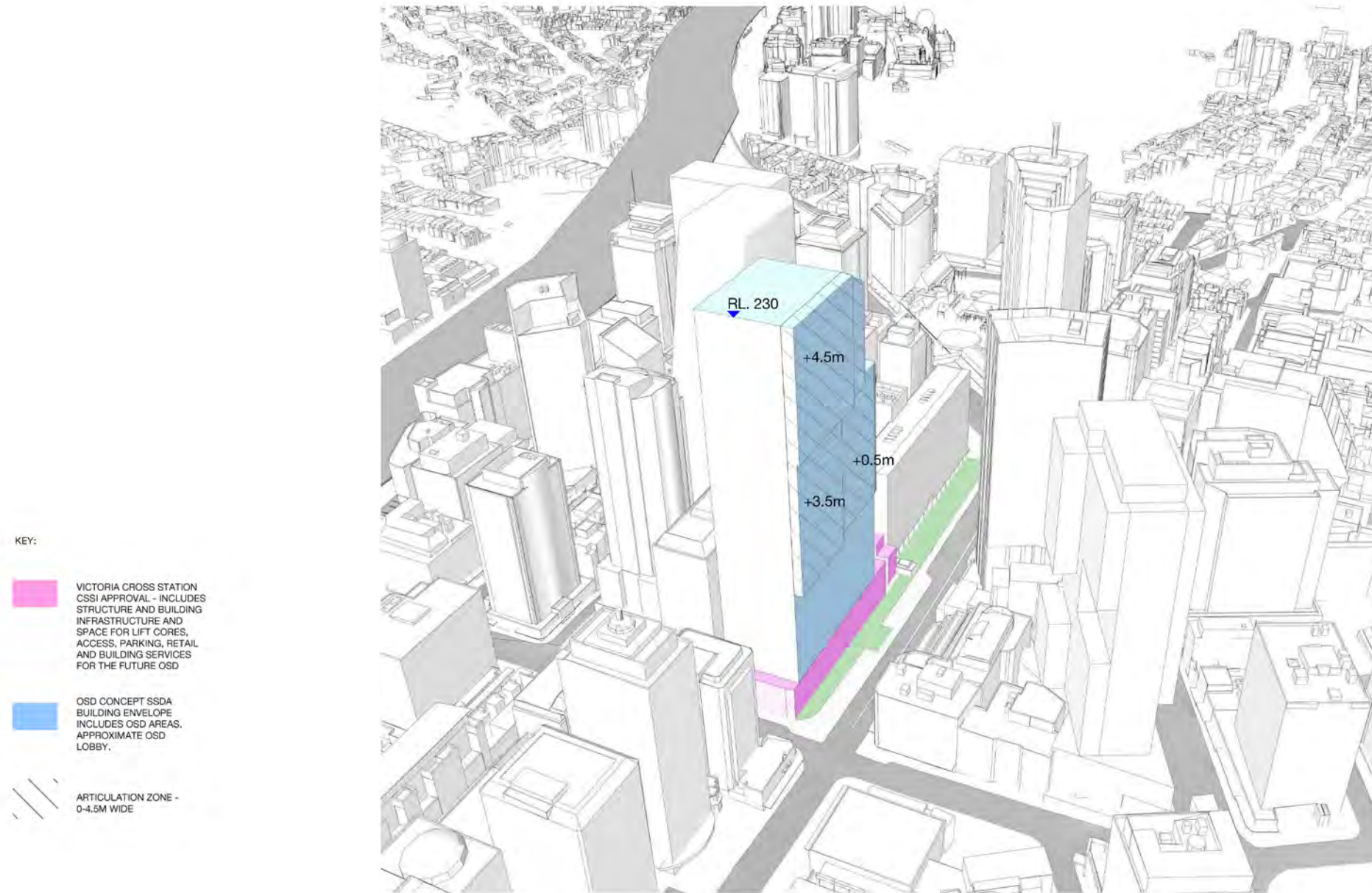
Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.



- CSSI Areas (not for approval)
- SSDA Areas

Note:

Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.



KEY:

**VICTORIA CROSS STATION
CSSI APPROVAL - INCLUDES
STRUCTURE AND BUILDING
INFRASTRUCTURE AND
SPACE FOR LIFT CORES,
ACCESS, PARKING, RETAIL
AND BUILDING SERVICES
FOR THE FUTURE OSD**

**OSD CONCEPT SSDA
BUILDING ENVELOPE
INCLUDES OSD AREAS,
APPROXIMATE OSD
LOBBY.**

**ARTICULATION ZONE -
0-4.5M WIDE**

Note: A 500mm flexible zone is presumed on the Northern and Southern (above RL. 114) elevations of the building envelope, to allow for non-habitable architectural detailing and expression such as sunshades.

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and/or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

All drawings may not be reproduced or distributed without prior permission from the architect.

Revision	Date	Description	Drawn	Checked
1	02.05.19	ISSUE FOR S436 MODIFICATION	JWC	MLB
2	12.06.19	ISSUE FOR S436 MODIFICATION	JWC	MLB
3	01.08.19	ISSUE FOR S436 MODIFICATION	JWC	MLB
4	18.08.19	ISSUE FOR S436 MODIFICATION	TG	TG
5	18.08.19	ISSUE FOR S436 MODIFICATION	TG	TG
6	22.02.19	ISSUE FOR S436 MODIFICATION	QAI	QAI

TFNSW
Victoria Cross OSD
Building Envelope
North West Axonometric

Scale	Not to scale	© A0
Drawn	Author	Checked
Project No.	810041	
Status	Project Status	
Plot Date	2/05/2019 12:55:05 PM	
Plot File		
Drawing no.	Revision	
A01.004	6	

FOR INFORMATION

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8964 6200 F 03 8964 8300
email: mel@batesmart.com.au
http://www.batesmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email: syo@batesmart.com.au
http://www.batesmart.com.au

Bates Smart Pty Ltd ABN 70 004 999 400

BATESSMART

- CSSI Areas (not for approval)
- SSDA Areas

Note:

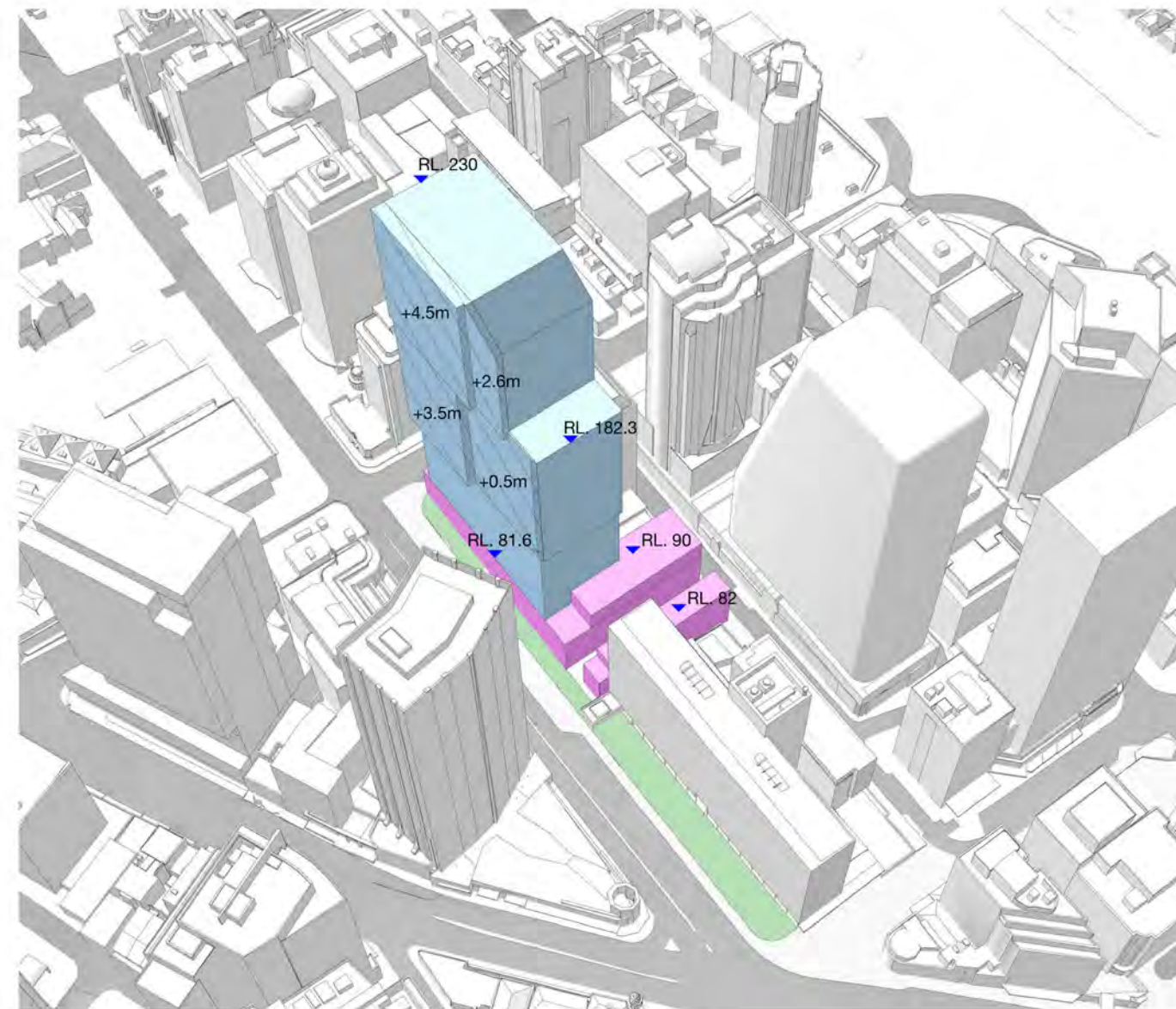
Final OSD on CSSI areas is subject to issue of the relevant construction certificate and approved Station Design and Precinct Plan CSSI details is indicative and subject to separate approval.

KEY:

VICTORIA CROSS STATION CSSI APPROVAL - INCLUDES STRUCTURE AND BUILDING INFRASTRUCTURE AND SPACE FOR LIFT CORES, ACCESS, PARKING, RETAIL AND BUILDING SERVICES FOR THE FUTURE OSD

OSD CONCEPT SSDA BUILDING ENVELOPE INCLUDES OSD AREAS, APPROXIMATE OSD LOBBY.

ARTICULATION ZONE - 0-4.5M WIDE



Note: A 500mm flexible zone is presumed on the Northern and Southern (above RL 114) elevations of the building envelope, to allow for non-habitable architectural detailing and expression such as sunshades.

Check all dimensions and site conditions prior to commencement of any work, the purchase or ordering of any materials, fittings, plant, services or equipment and the preparation of shop drawings and or the fabrication of any components.

Do not scale drawings - refer to figured dimensions only. Any discrepancies shall immediately be referred to the architect for clarification.

All drawings may not be reproduced or distributed without prior permission from the architect.

6	21.05.19	ISSUE FOR S4.55 MODIFICATION	JWC: MJS
5	12.04.19	ISSUE FOR S4.55 MODIFICATION	JWC: MJS
4	01.03.19	ISSUE FOR S4.55 MODIFICATION	JWC: MJS
3	08.08.18	ISSUE FOR S4.55 MODIFICATION	TG: TG
2	18.04.18	ISSUE FOR S4.55 MODIFICATION	TG: FJM
1	22.02.18	ISSUE FOR S4.55 MODIFICATION	GH: GH
Revision Date		Description	Initials Checked

TFNSW
Victoria Cross OSD
Building Envelope
South West
Axonometric

Scale: Not to scale
Drawn: Author
Project no: 915941
Status: S4.55 Modification
Plot Date: 30/05/2019 2:57:40 PM
Plot File:
Drawing no: A01.005
Revision: 6

FOR INFORMATION

Melbourne 1 Nicholson Street
Melbourne VIC 3000 Australia
T 03 8664 6200 F 03 8664 6300
email: mel@batesmart.com.au
http://www.batesmart.com.au

Sydney 43 Brisbane Street
Surry Hills NSW 2010 Australia
T 02 8354 5100 F 02 8354 5199
email: syd@batesmart.com.au
http://www.batesmart.com.au

Bates Smart Pty Ltd ABN 70 004 999 400

BATESSMART.

Appendix B – Camera Lenses for Photomontages

Digital Camera Lenses for Photomontages and Visual Impact Assessments

The intention of a photomontage rendering is to visually communicate how proposed built form sits in respect to its surroundings. To achieve this, a digitally rendered image from a digital 3D model is accurately superimposed into a digital photograph to provide an accurate representation in terms of light, material, scale, and form.

Camera lens selection also plays an important part in creating a photomontage that communicates visual impact. There are several things to consider with respect to lens selection.

Field of View of the Human Eye

The field of view of the human eye is a topic that varies depending on the source of information. In many cases, the field of view of the eye is stated to be 17mm. Other opinions claim a smaller field of view of around 22-24mm.

Whichever the case, it is accepted that the human eye has a wide field of view. When a person stands close to a subject - for instance a building - their field of vision can potentially read all of the top, sides and bottom of the building simultaneously in a single glance.

In addition to this, the human eye can change focus and target direction extremely rapidly, allowing a person to view a large structure in a very short period of time, effectively making the perceived field of view even larger.

The Perspective of the Human Eye

It is difficult to accurately reproduce what the human eye sees by the means of a printed image. The eye's image sensor - the retina - is curved along the back surface of the eyeball, whereas the sensor on a camera is flat. Consequently, the perspective of a photograph can look quite different to how a person views a scene in the real world, especially when comparing to a photo captured with a wide camera lens.

In digital photography circles, it is widely accepted that using a longer lens (approximately 50mm) reduces the amount of perspective in an image and therefore more closely replicates what the human eye would see in reality. This, however, only addresses how the eye perceives perspective and does not consider the field of view of the eye.

The intention of a photomontage rendering is to visually communicate how proposed built form sits in respect to its surroundings. To achieve this, a digitally rendered image from a digital 3D model is accurately superimposed into a digital photograph to provide an accurate representation in terms of light, material, scale, and form.

Camera lens selection also plays an important part in creating a photomontage that communicates visual impact. There are several things to consider with respect to lens selection.

