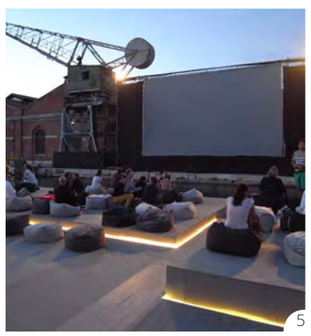


1_ Viewing pods to the Harbour
2_ Local retail within seating in planting
3_ Green link from pyrmont into Darling Harbour
4_ Lawn with seating edges
5_ Local pop-up events
6_ Green roof

Image 130 Extract from Aspect Studio's Public Domain Design Report showing reference images for key elements

Image 131 Public Domain reference images

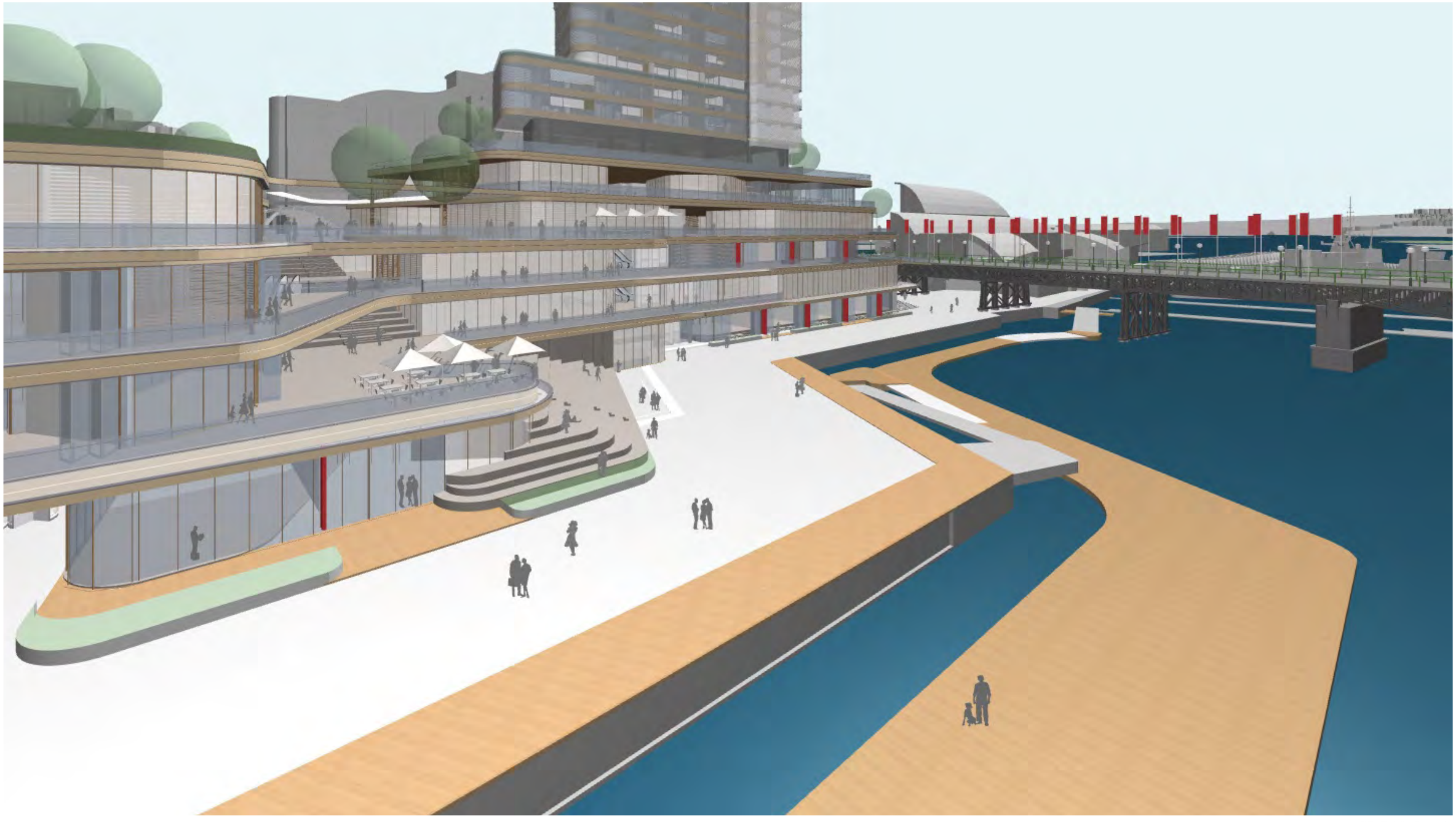


Image 132 Public Domain

Articulation and Materiality

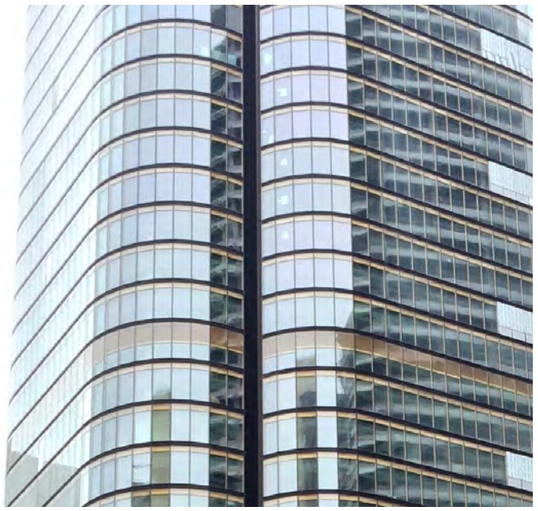
Uniquely Sydney

Pyrmont is a special place with a strong and unique character drawn from its rich history and distinctive topography and landscape. The facade systems and materiality should seek to ground the building in Pyrmont and the immediate waters edge landscape whilst the tower should adopt a higher degree of glazing and lightness.

The main façade (north, east and south elevations) of the residential tower is proposed to be high quality glazing with high VLT and low levels of reflectivity.

The podium levels will be organic forms or shapes with facated facades and high levels of articulation. Between these strata levels will be predominately high quality glass facades, with potential for integrated digital displays and living green walls giving the form texture and depth.

Image 133 Public Domain reference images



TF1 Main Tower Facade

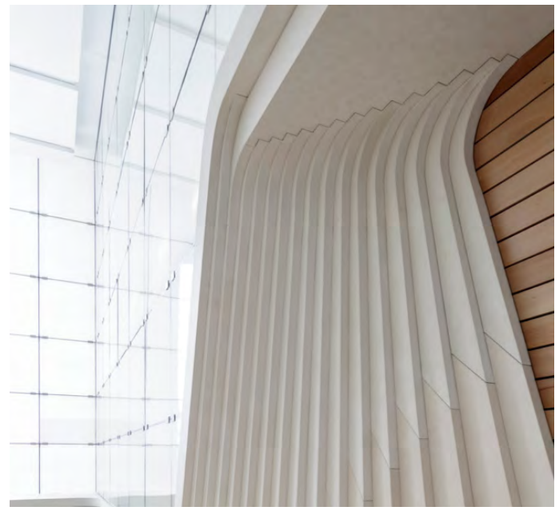
High performance glazing, high VLT, low reflectivity.

PF2 Podium Glazing

Clear glass via a floor-by-floor system incorporating large louvers delivering external connectivity to the retail spaces behind.

Timber

Potential timber elements to incorporated into the podium facades to provide warmth and softness.



Stone

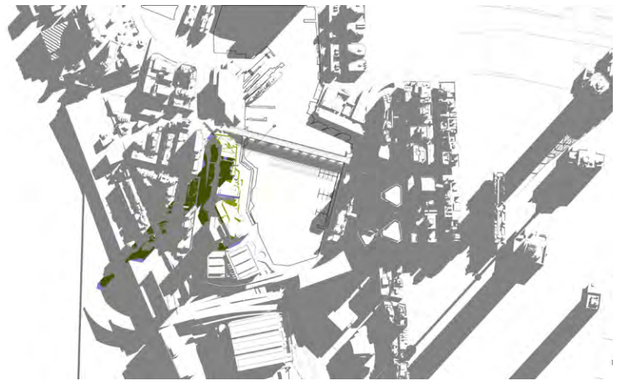
Potential use of stone as a feature carried through the retail podium elements such that the facades and publicly accessible spaces are united through materiality and organic architectural expression.

Shadow Analysis

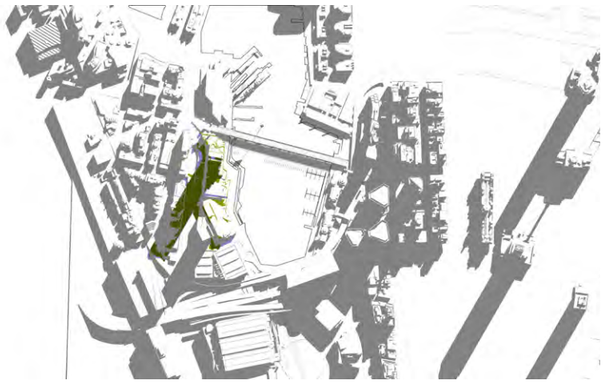
Provided is both plan and perspective shadow analysis of the envelope and Illustrative Concept scheme from 9am - 3pm for 21st June (Winter), 21st Dec (Summer) and the Equinox 21st Sept.

Complete drawing package is located at Appendix A - (iii)

Winter Shadow Analysis



9am

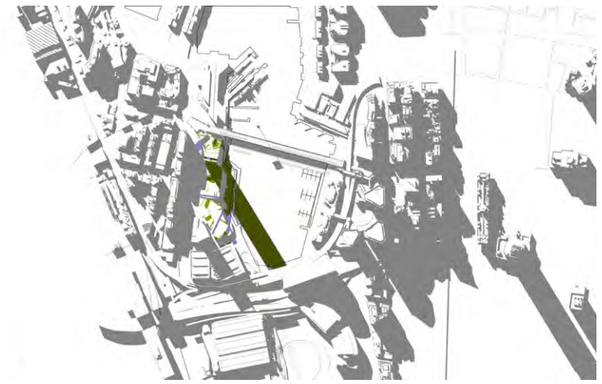


10am

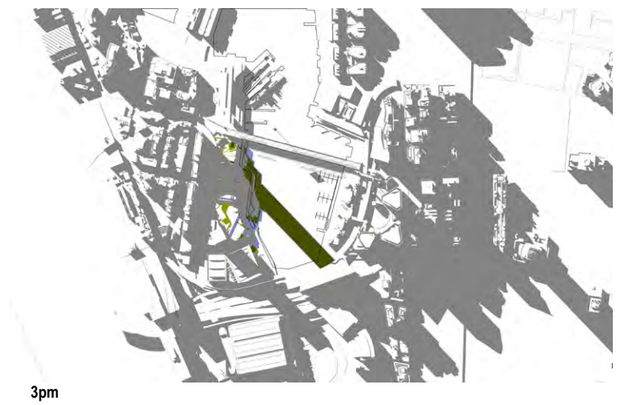
11am

12pm

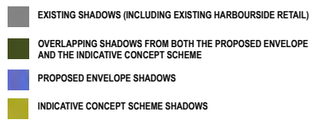
1pm



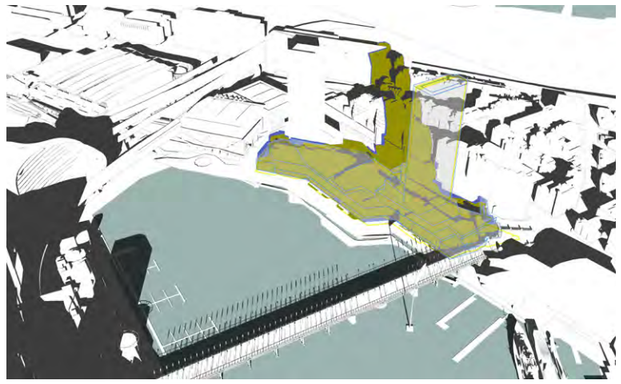
2pm



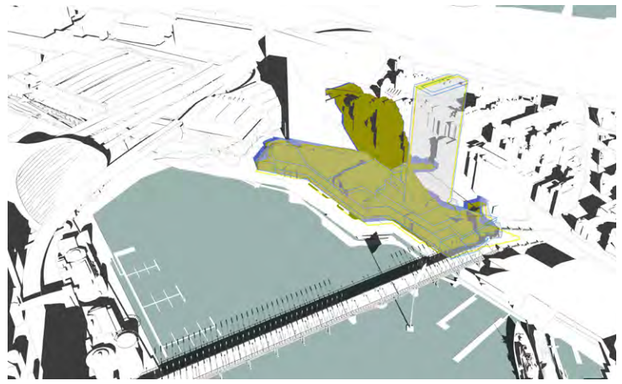
3pm



Winter Shadow Analysis



9am



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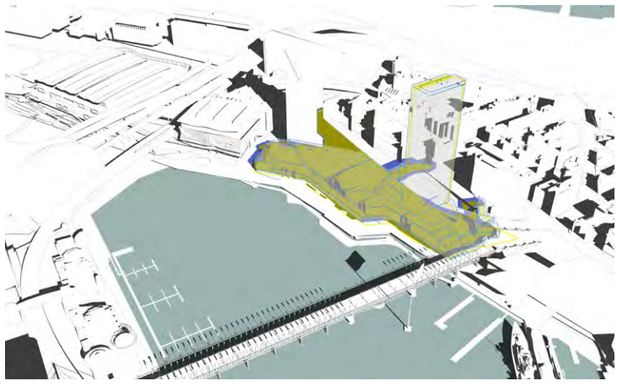

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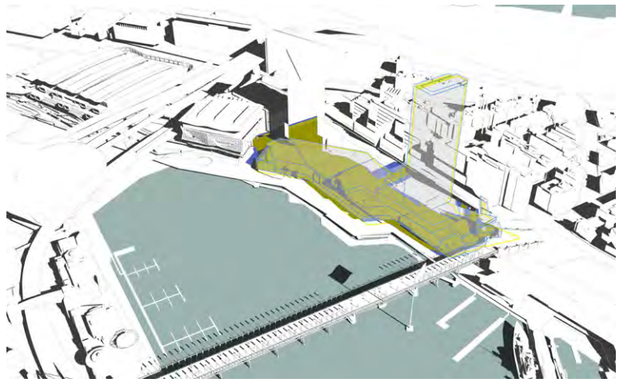

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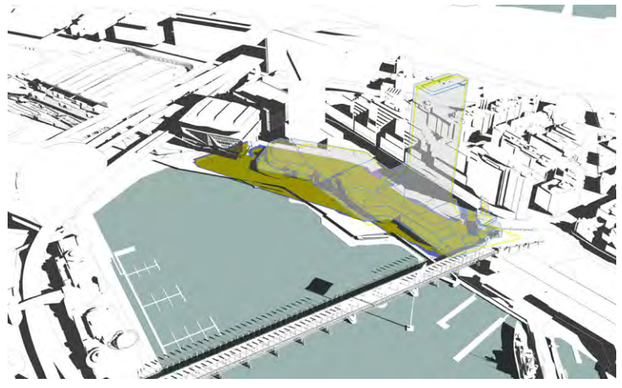
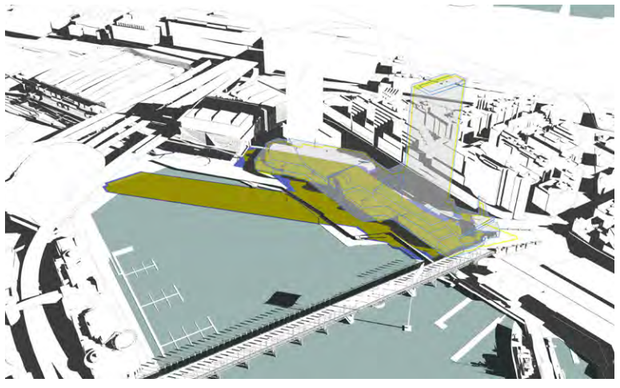
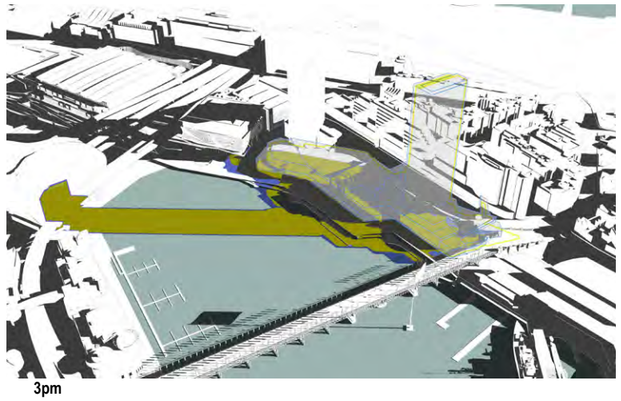


1pm



2pm



3pm

EXISTING SHADOWS (INCLUDING EXISTING HARBOURSIDE RETAIL)

PROPOSED ENVELOPE SHADOWS

INDICATIVE CONCEPT SCHEME SHADOWS

Equinox Shadow Analysis

9am

10am

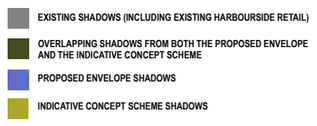
11am

12pm

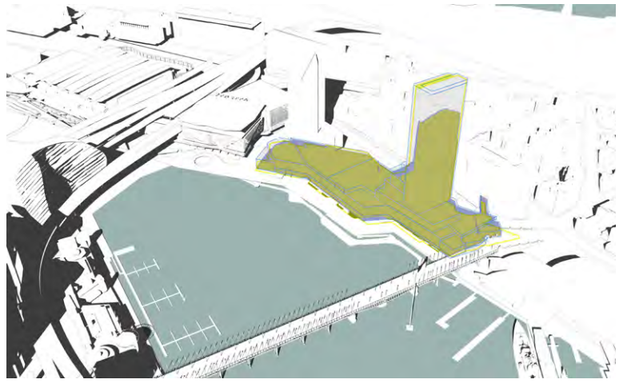
1pm

2pm

3pm



Equinox Shadow Analysis



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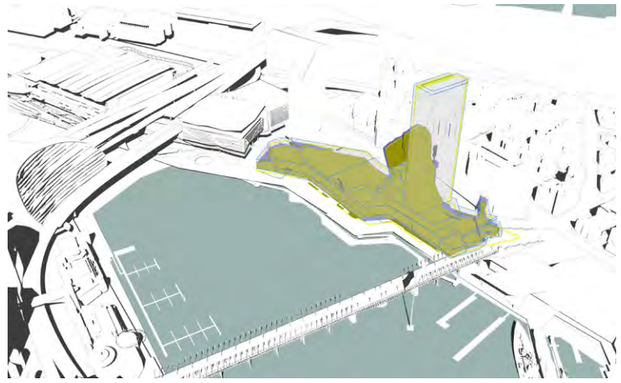

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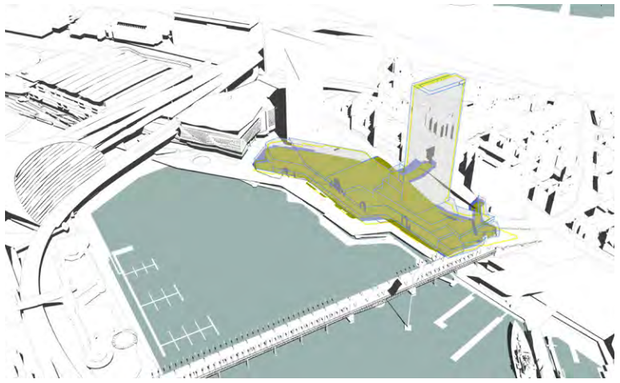

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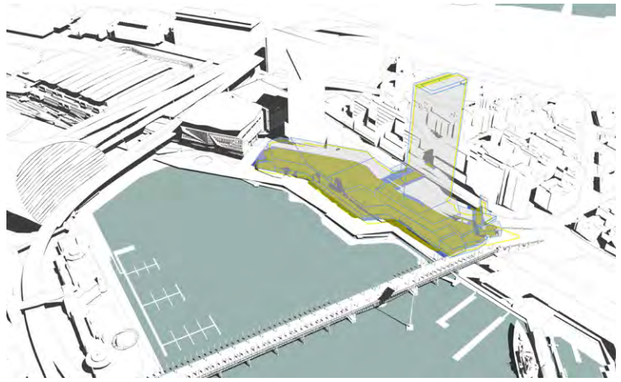

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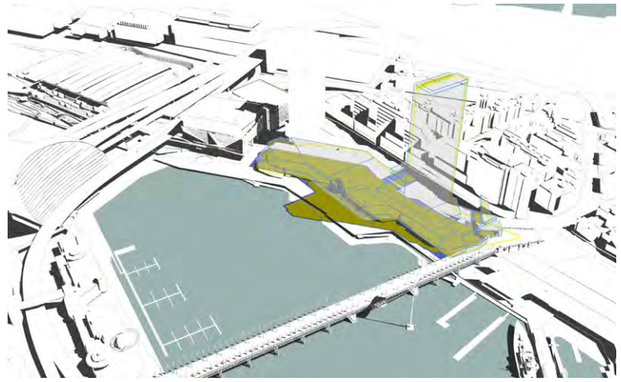

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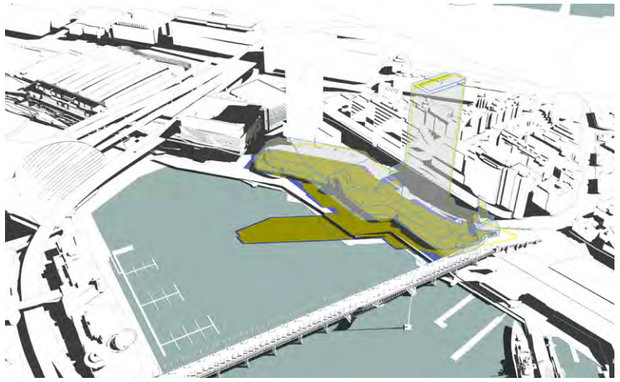

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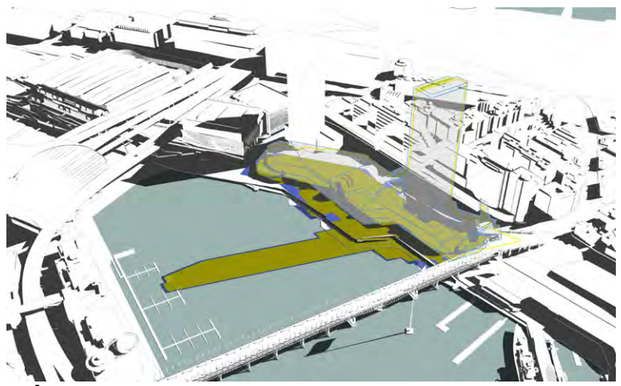


3pm

EXISTING SHADOWS (INCLUDING EXISTING HARBOURSIDE RETAIL)

PROPOSED ENVELOPE SHADOWS

INDICATIVE CONCEPT SCHEME SHADOWS

Summer Shadow Analysis

9am

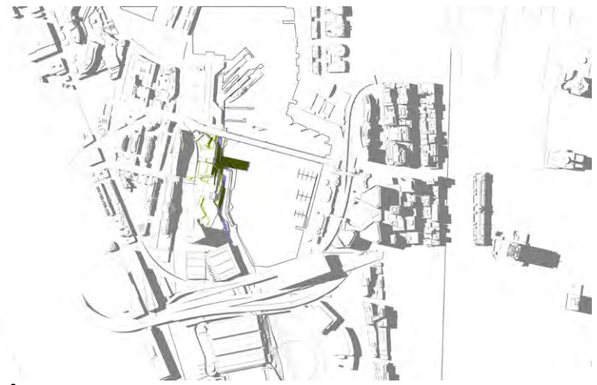
10am

11am

12pm

1pm

2pm



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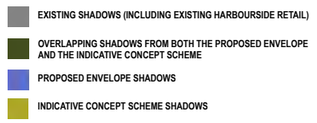
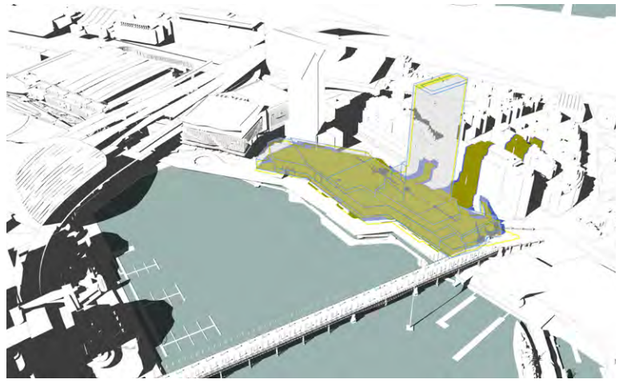


Summer Shadow Analysis



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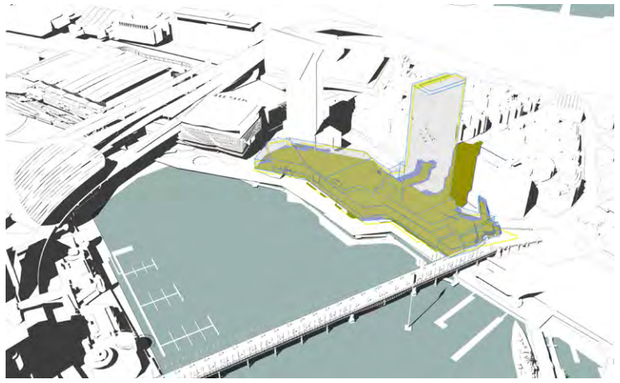

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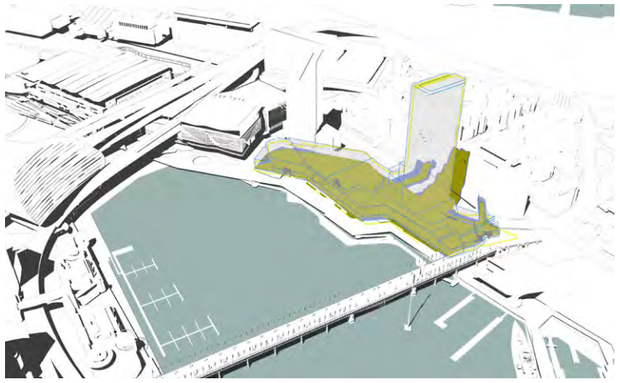
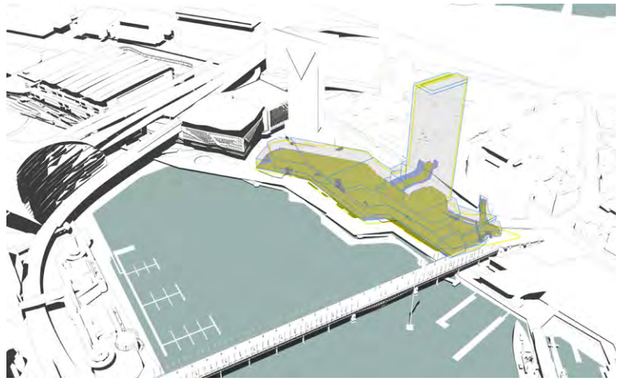


11am



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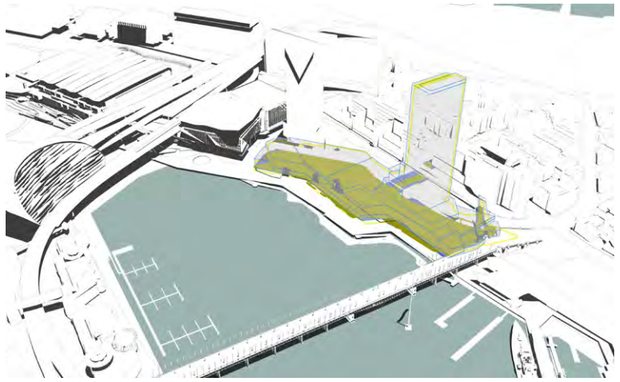

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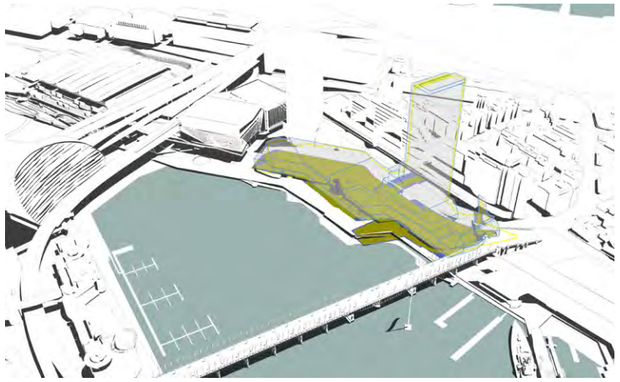

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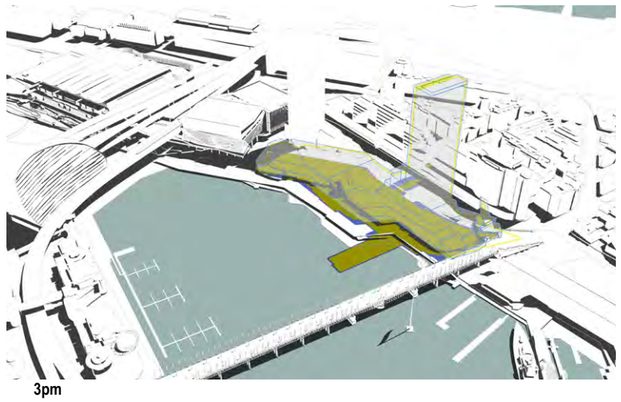

3pm

EXISTING SHADOWS (INCLUDING EXISTING HARBOURSIDE RETAIL)

PROPOSED ENVELOPE SHADOWS

INDICATIVE CONCEPT SCHEME SHADOWS

10.0 SEPP 65 Design Quality Principles & ADG Compliance

SEPP 65

Principle 1: Context and neighbourhood character

Good design responds and contributes to its context. Context is the key natural and built features of an area, their relationship and the character they create when combined. It also includes social, economic, health and environmental conditions. Responding to context involves identifying the desirable elements of an area's existing or future character. Well designed buildings respond to and enhance the qualities and identity of the area including the adjacent sites, streetscape and neighbourhood. Consideration of local context is important for all sites, including sites in established areas, those undergoing change or identified for change.

Principle 2: Built form and scale

Good design achieves a scale, bulk and height appropriate to the existing or desired future character of the street and surrounding buildings. Good design also achieves an appropriate built form for a site and the building's purpose in terms of building alignments, proportions, building type, articulation and the manipulation of building elements. Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

Principle 3: Density

Good design achieves a high level of amenity for residents and each apartment, resulting in a density appropriate to the site and its context. Appropriate densities are consistent with the area's existing or projected population. Appropriate densities can be sustained by existing or proposed infrastructure, public transport, access to jobs, community facilities and the environment.

Principle 4: Sustainability

Good design combines positive environmental, social and economic outcomes. Good sustainable design includes use of natural cross ventilation and sunlight for the amenity and liveability of residents and passive thermal design for ventilation, heating and cooling reducing reliance on technology and operation costs. Other elements include recycling and reuse of materials and waste, use of sustainable materials and deep soil zones for groundwater recharge and vegetation.

Principle 5: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in attractive developments with good amenity. A positive image and contextual fit of well designed developments is achieved by contributing to the landscape character of the streetscape and neighbourhood. Good landscape design enhances the development's environmental performance by retaining positive natural features which contribute to the local context, coordinating water and soil management, solar access, micro-climate, tree canopy, habitat values and preserving green networks. Good landscape design optimises usability, privacy and opportunities for social interaction, equitable access, respect for neighbours' amenity and provides for practical establishment and long term management.

Principle 6: Amenity

Good design positively influences internal and external amenity for residents and neighbours. Achieving good amenity contributes to positive living environments and resident well being. Good amenity combines appropriate room dimensions and shapes, access to sunlight, natural ventilation, outlook, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas and ease of access for all age groups and degrees of mobility.

Principle 7: Safety

Good design optimises safety and security within the development and the public domain. It provides for quality public and private spaces that are clearly defined and fit for the intended purpose. Opportunities to maximise passive surveillance of public and communal areas promote safety. A positive relationship between public and private spaces is achieved through clearly defined secure access points and well lit and visible areas that are easily maintained and appropriate to the location and purpose.

Principle 8: Housing diversity and social interaction

Good design achieves a mix of apartment sizes, providing housing choice for different demographics, living needs and household budgets. Well designed apartment developments respond to social context by providing housing and facilities to suit the existing and future social mix. Good design involves practical and flexible features, including different types of communal spaces for a broad range of people and providing opportunities for social interaction among residents.

Principle 9: Aesthetics

Good design achieves a built form that has good proportions and a balanced composition of elements, reflecting the internal layout and structure. Good design uses a variety of materials, colours and textures. The visual appearance of a well designed apartment development responds to the existing or future local context, particularly desirable elements and repetitions of the streetscape.

Harbourside — Apartment Design Guide Analysis - October 2016				
Clause Number	**Clause Title**	**Objective**	**Design Criteria**	**fjmt Studio Commentary**
PART 03 - SITING THE DEVELOPMENT				
	Site Analysis	**3A-1**	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	• *Refer to Section of the report - Site Location and Analysis*
		3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	• *Refer to the Streetscape section of the report* • *The Apartments are located to optimise solar access and minimise overshadowing within the site and to the significant public domain elements.*
	Orientation	**3B-2**	Overshadowing of neighbouring properties is minimised during mid winter	• *The building forms and orientation have been composed to minimise overshadowing.*
	Public Domain Interface	**3C-1**	Transition between private and public domain is achieved without compromising safety and security	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
		3C-2	Amenity of the public domain is retained and enhanced	• *All apartments are provided with private open space in the form of balconies and larger terraces on the setback levels. The lowest residential level is 30.5m above the waterfront public domain proving good visual and acoustic separation.*
	Communal and Public Open Space	**3D-1**	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping 1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) 2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)	• *Their is opportunity for generous residential amenities on Level 5 as indicated on the illustrative scheme drawings. These facilities can have access to an external landscaped terrace.*
		3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	• *Their is opportunity for generous residential amenities on Level 5 as indicated on the illustrative scheme drawings. These facilities can have access to an external landscaped terrace.*
		3D-3	Communal open space is designed to maximise safety	• *Passive surveillance of space and CPTED principles have been considered throughout the development and can be enhanced with CCTV coverage of the public domain and lobby areas.*
		3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
	Deep Soil Zone	**3E-1**	Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality Deep soil zones are to meet the following minimum requirements: **Site area** / **Min. Dim.** / **Deep Soil zone (% of site area)** <650m2 / - / 7% 650m^2 - 1500m^2 / 3m / 7% >1150m^2 / 6m / 7%	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
	Site Amenity - Visual Privacy	**3F-1**	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room • Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: **Building Height** / **Habitable Room & Balcony** / **Non Habitable Room & Balcony** Up to 12m (4 storeys) / 6m / 3m Up to 12m (5-8 storeys) / 9m / 4.5m Up to 25m (9+ storeys) / 12m / 6m	• *All building separation distances comply with the criteria. The proposed scheme has opportunity for additional visual privacy by providing operable screening to the glazed facade.*
		3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space	• *The Stage 1 SSDA concept proposals achieve this requirement.*
	Site Access - Pedestrian Access and Entries	**3G-1**	Building entries and pedestrian access connects to and addresses the public domain	• *All entries and pedestrian ways address the greater public domain.*

Harbourside — Apartment Design Guide Analysis - October 2016				
Clause Number	**Clause Title**	**Objective**	**Design Criteria**	**fjmt Studio Commentary**
PART 03 - SITING THE DEVELOPMENT				
	Site Analysis	**3A-1**	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	• *Refer to Section of the report - Site Location and Analysis*
		3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	• *Refer to the Streetscape section of the report* • *The Apartments are located to optimise solar access and minimise overshadowing within the site and to the significant public domain elements.*
	Orientation	**3B-2**	Overshadowing of neighbouring properties is minimised during mid winter	• *The building forms and orientation have been composed to minimise overshadowing.*
	Public Domain Interface	**3C-1**	Transition between private and public domain is achieved without compromising safety and security	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
		3C-2	Amenity of the public domain is retained and enhanced	• *All apartments are provided with private open space in the form of balconies and larger terraces on the setback levels. The lowest residential level is 30.5m above the waterfront public domain proving good visual and acoustic separation.*
	Communal and Public Open Space	**3D-1**	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping 1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) 2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)	• *Their is opportunity for generous residential amenities on Level 5 as indicated on the illustrative scheme drawings. These facilities can have access to an external landscaped terrace.*
		3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	• *Their is opportunity for generous residential amenities on Level 5 as indicated on the illustrative scheme drawings. These facilities can have access to an external landscaped terrace.*
		3D-3	Communal open space is designed to maximise safety	• *Passive surveillance of space and CPTED principles have been considered throughout the development and can be enhanced with CCTV coverage of the public domain and lobby areas.*
		3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
	Deep Soil Zone	**3E-1**	Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality Deep soil zones are to meet the following minimum requirements: **Site area** / **Min. Dim.** / **Deep Soil zone (% of site area)** <650m2 / - / 7% 650m^2 - 1500m^2 / 3m / 7% >1150m^2 / 6m / 7%	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
	Site Amenity - Visual Privacy	**3F-1**	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room • Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: **Building Height** / **Habitable Room & Balcony** / **Non Habitable Room & Balcony** Up to 12m (4 storeys) / 6m / 3m Up to 12m (5-8 storeys) / 9m / 4.5m Up to 25m (9+ storeys) / 12m / 6m	• *All building separation distances comply with the criteria. The proposed scheme has opportunity for additional visual privacy by providing operable screening to the glazed facade.*
		3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space	• *The Stage 1 SSDA concept proposals achieve this requirement.*
	Site Access - Pedestrian Access and Entries	**3G-1**	Building entries and pedestrian access connects to and addresses the public domain	• *All entries and pedestrian ways address the greater public domain.*

Harbourside — Apartment Design Guide Analysis - October 2016				
Clause Number	**Clause Title**	**Objective**	**Design Criteria**	**fjmt Studio Commentary**
PART 03 - SITING THE DEVELOPMENT				
	Site Analysis	**3A-1**	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	• *Refer to Section of the report - Site Location and Analysis*
		3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	• *Refer to the Streetscape section of the report* • *The Apartments are located to optimise solar access and minimise overshadowing within the site and to the significant public domain elements.*
	Orientation	**3B-2**	Overshadowing of neighbouring properties is minimised during mid winter	• *The building forms and orientation have been composed to minimise overshadowing.*
	Public Domain Interface	**3C-1**	Transition between private and public domain is achieved without compromising safety and security	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
		3C-2	Amenity of the public domain is retained and enhanced	• *All apartments are provided with private open space in the form of balconies and larger terraces on the setback levels. The lowest residential level is 30.5m above the waterfront public domain proving good visual and acoustic separation.*
	Communal and Public Open Space	**3D-1**	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping 1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) 2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)	• *Their is opportunity for generous residential amenities on Level 5 as indicated on the illustrative scheme drawings. These facilities can have access to an external landscaped terrace.*
		3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	• *Their is opportunity for generous residential amenities on Level 5 as indicated on the illustrative scheme drawings. These facilities can have access to an external landscaped terrace.*
		3D-3	Communal open space is designed to maximise safety	• *Passive surveillance of space and CPTED principles have been considered throughout the development and can be enhanced with CCTV coverage of the public domain and lobby areas.*
		3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
	Deep Soil Zone	**3E-1**	Deep soil zones provide areas on the site that allow for and support healthy plant and tree growth. They improve residential amenity and promote management of water and air quality Deep soil zones are to meet the following minimum requirements: **Site area** / **Min. Dim.** / **Deep Soil zone (% of site area)** <650m2 / - / 7% 650m^2 - 1500m^2 / 3m / 7% >1150m^2 / 6m / 7%	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
	Site Amenity - Visual Privacy	**3F-1**	Adequate building separation distances are shared equitably between neighbouring sites, to achieve reasonable levels of external and internal visual privacy Note: Separation distances between buildings on the same site should combine required building separations depending on the type of room • Separation between windows and balconies is provided to ensure visual privacy is achieved. Minimum required separation distances from buildings to the side and rear boundaries are as follows: **Building Height** / **Habitable Room & Balcony** / **Non Habitable Room & Balcony** Up to 12m (4 storeys) / 6m / 3m Up to 12m (5-8 storeys) / 9m / 4.5m Up to 25m (9+ storeys) / 12m / 6m	• *All building separation distances comply with the criteria. The proposed scheme has opportunity for additional visual privacy by providing operable screening to the glazed facade.*
		3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space	• *The Stage 1 SSDA concept proposals achieve this requirement.*
	Site Access - Pedestrian Access and Entries	**3G-1**	Building entries and pedestrian access connects to and addresses the public domain	• *All entries and pedestrian ways address the greater public domain.*

Harbourside — Apartment Design Guide Analysis - October 2016				
Clause Number	**Clause Title**	**Objective**	**Design Criteria**	**fjmt Studio Commentary**
PART 03 - SITING THE DEVELOPMENT				
	Site Analysis	**3A-1**	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	• *Refer to Section of the report - Site Location and Analysis*
		3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	• *Refer to the Streetscape section of the report* • *The Apartments are located to optimise solar access and minimise overshadowing within the site and to the significant public domain elements.*
	Orientation	**3B-2**	Overshadowing of neighbouring properties is minimised during mid winter	• *The building forms and orientation have been composed to minimise overshadowing.*
	Public Domain Interface	**3C-1**	Transition between private and public domain is achieved without compromising safety and security	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
		3C-2	Amenity of the public domain is retained and enhanced	• *All apartments are provided with private open space in the form of balconies and larger terraces on the setback levels. The lowest residential level is 30.5m above the waterfront public domain proving good visual and acoustic separation.*
	Communal and Public Open Space	**3D-1**	An adequate area of communal open space is provided to enhance residential amenity and to provide opportunities for landscaping 1. Communal open space has a minimum area equal to 25% of the site (see figure 3D.3) 2. Developments achieve a minimum of 50% direct sunlight to the principal usable part of the communal open space for a minimum of 2 hours between 9 am and 3 pm on 21 June (mid winter)	• *Their is opportunity for generous residential amenities on Level 5 as indicated on the illustrative scheme drawings. These facilities can have access to an external landscaped terrace.*
		3D-2	Communal open space is designed to allow for a range of activities, respond to site conditions and be attractive and inviting	• *Their is opportunity for generous residential amenities on Level 5 as indicated on the illustrative scheme drawings. These facilities can have access to an external landscaped terrace.*
		3D-3	Communal open space is designed to maximise safety	• *Passive surveillance of space and CPTED principles have been considered throughout the development and can be enhanced with CCTV coverage of the public domain and lobby areas.*
		3D-4	Public open space, where provided, is responsive to the existing pattern and uses of the neighbourhood	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
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		3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space	• *The Stage 1 SSDA concept proposals achieve this requirement.*
	Site Access - Pedestrian Access and Entries	**3G-1**	Building entries and pedestrian access connects to and addresses the public domain	• *All entries and pedestrian ways address the greater public domain.*

Harbourside — Apartment Design Guide Analysis - October 2016				
Clause Number	**Clause Title**	**Objective**	**Design Criteria**	**fjmt Studio Commentary**
PART 03 - SITING THE DEVELOPMENT				
	Site Analysis	**3A-1**	Site analysis illustrates that design decisions have been based on opportunities and constraints of the site conditions and their relationship to the surrounding context	• *Refer to Section of the report - Site Location and Analysis*
		3B-1	Building types and layouts respond to the streetscape and site while optimising solar access within the development	• *Refer to the Streetscape section of the report* • *The Apartments are located to optimise solar access and minimise overshadowing within the site and to the significant public domain elements.*
	Orientation	**3B-2**	Overshadowing of neighbouring properties is minimised during mid winter	• *The building forms and orientation have been composed to minimise overshadowing.*
	Public Domain Interface	**3C-1**	Transition between private and public domain is achieved without compromising safety and security	• *The Stage 1 SSDA concept proposals have been developed with consideration of this and the developed proposal can achieve this requirement.*
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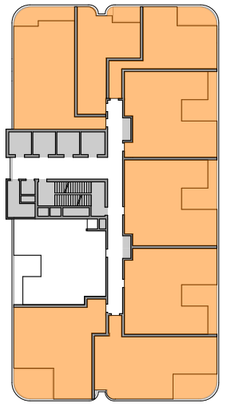
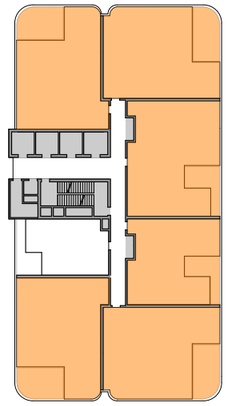
		3F-2	Site and building design elements increase privacy without compromising access to light and air and balance outlook and views from habitable rooms and private open space	• *The Stage 1 SSDA concept proposals achieve this requirement.*
	Site Access - Pedestrian Access and Entries	**3G-1**	Building entries and pedestrian access connects to and addresses the public domain	• *All entries and pedestrian ways address the greater public domain.*

Residential Amenity

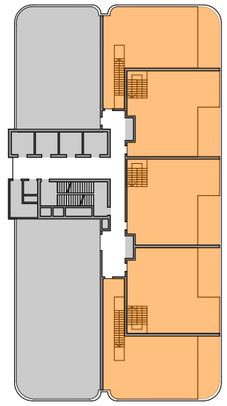
Solar Access :



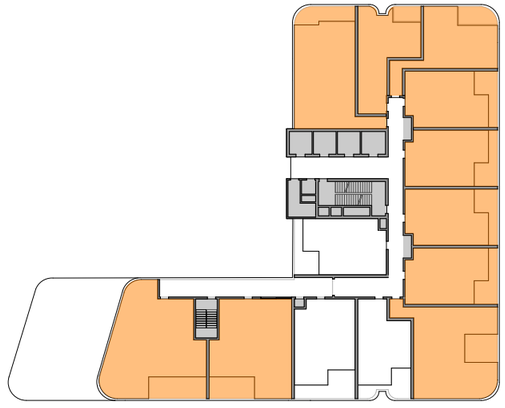
5 Plan Typical 2b (L18-32)
SOLAR ACCESS - 87.5%



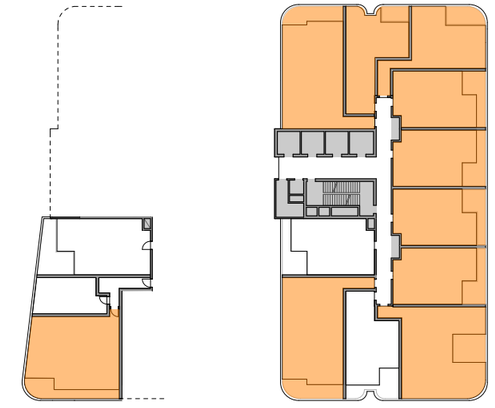
6 Plan Typical 3b (L33-37)
SOLAR ACCESS - 85%



8 Plan Pent
SOLAR ACCESS - 100%

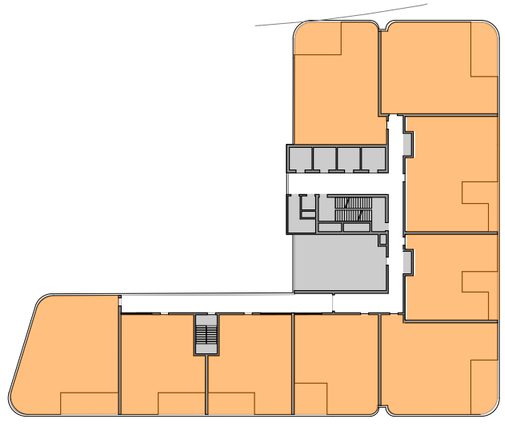


3 Plan Tail 3 (L4-6)
SOLAR ACCESS - 77%

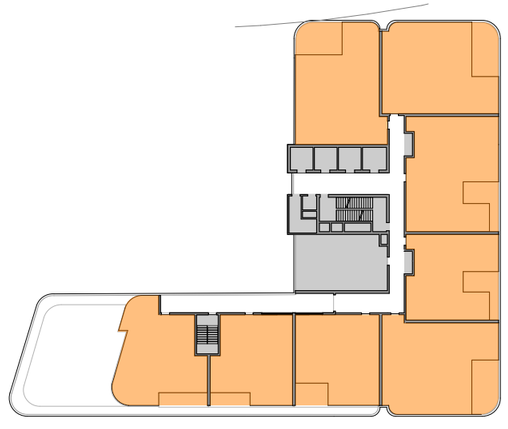


Alternate Corner Arrangement L 8-12

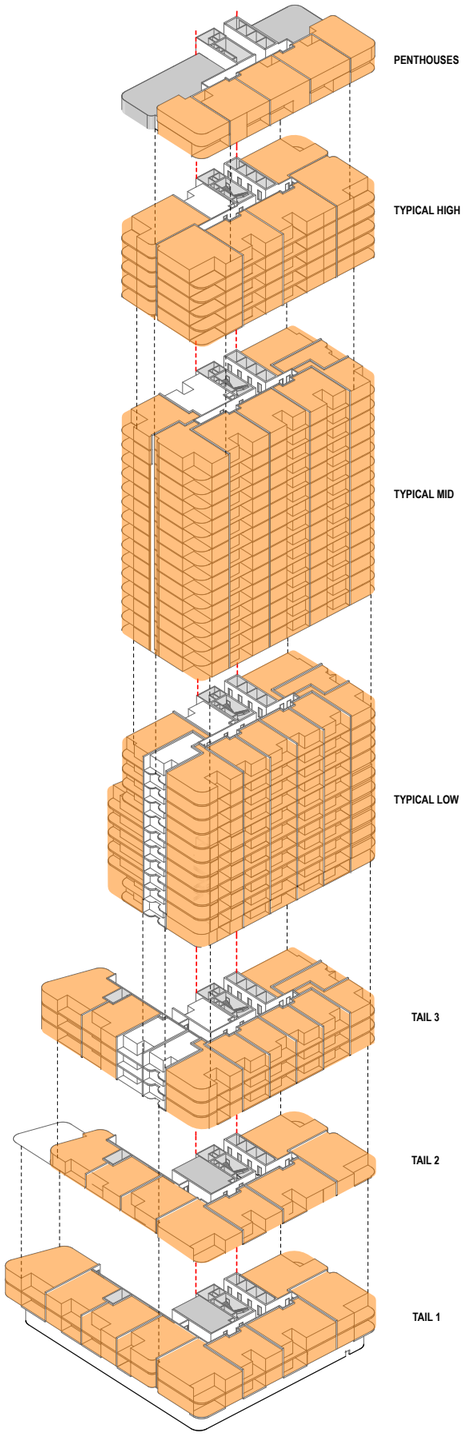
4 Plan Typical 1B (L7-17)
SOLAR ACCESS - 71%



1 Plan Tail 1 (L1-2)
SOLAR ACCESS- 100%



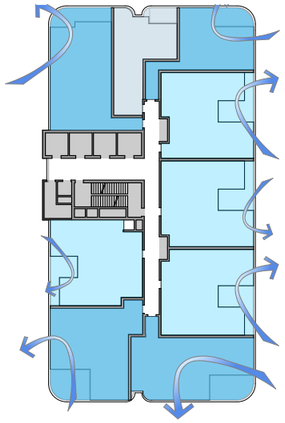
2 Plan Tail 2 (L3)
SOLAR ACCESS - 100%



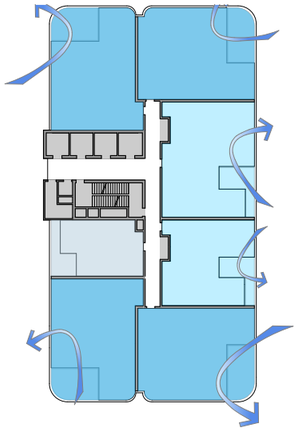
Axonometric Ventilation

Residential Amenity

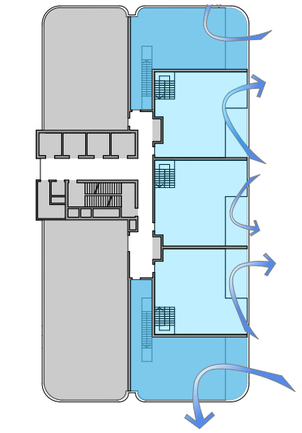
Ventilation :



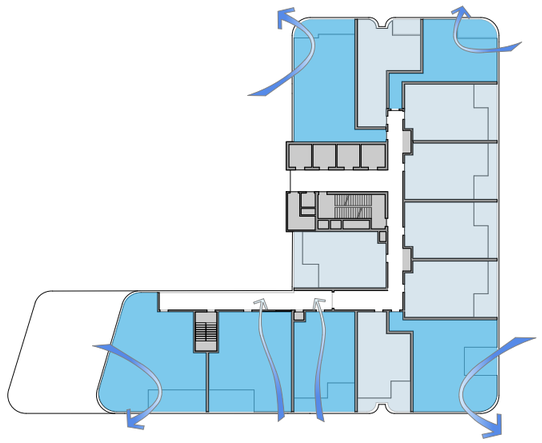
5 Plan Typical 2b (L18-32)
GOOD VENTILATION - 89%



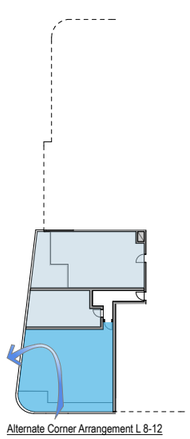
6 Plan Typical 3b (L33-37)
GOOD VENTILATION - 85%



8 Plan Pent
GOOD VENTILATION - 100%

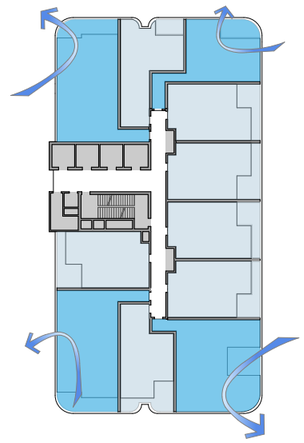


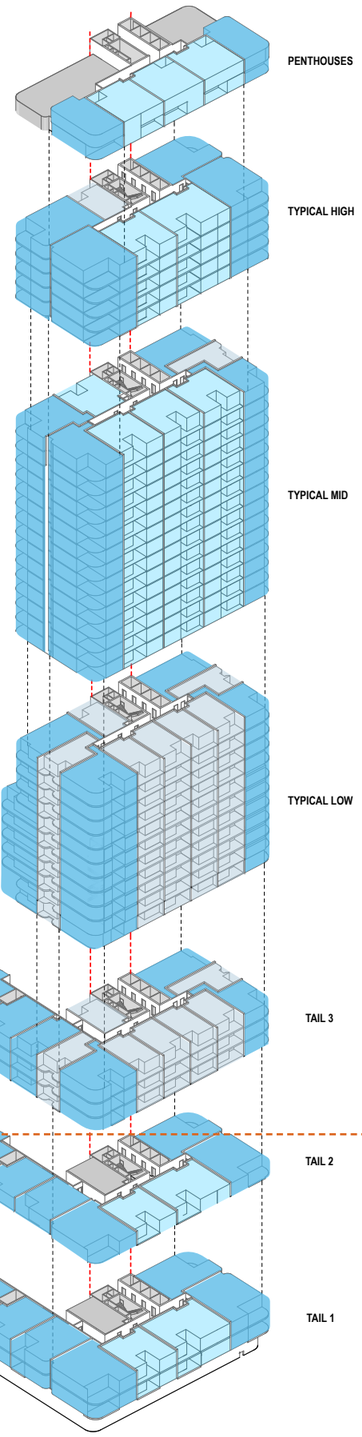
3 Plan Tail 3 (L4-6)
GOOD VENTILATION - 46%



Alternate Corner Arrangement L 8-12

4 Plan Typical 1B (L7-17)
GOOD VENTILATION - 57%

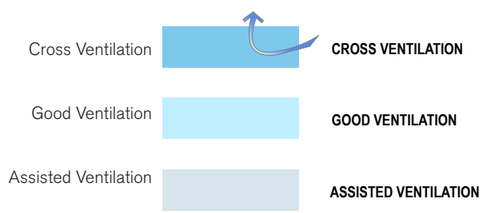


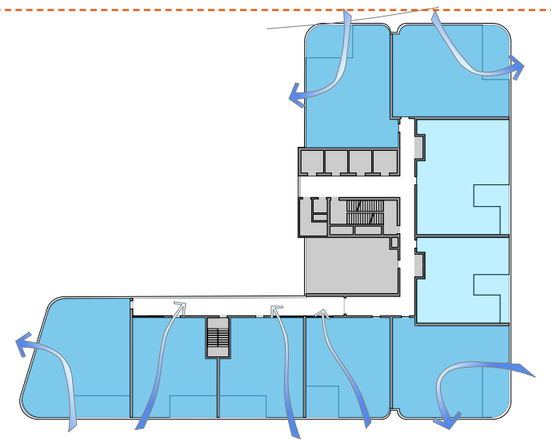


Axonometric Ventilation

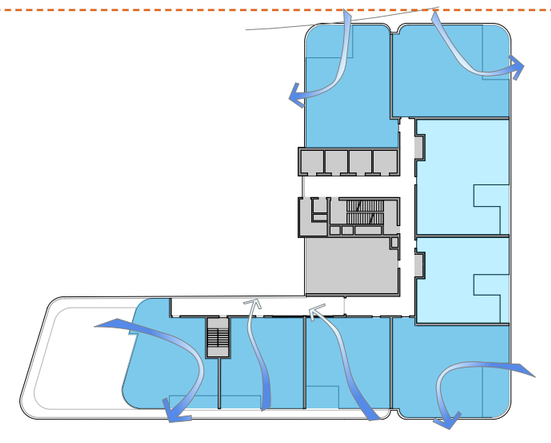
ADG Compliance measured to level 9 of proposal only (inclusive of Tail 2)

(Levels above shown for illustrative purposes only)





1 Plan Tail 1 (L1-2)
CROSS VENTILATION - 78%

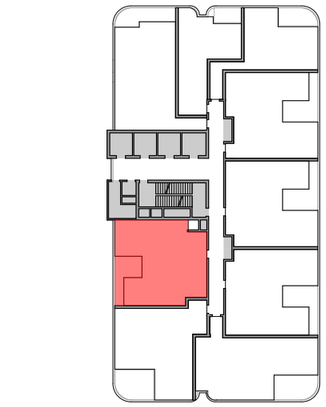


2 Plan Tail 2 (L3)
CROSS VENTILATION - 75%

Residential Amenity

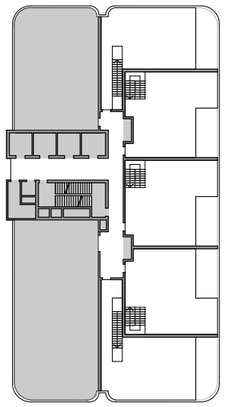
South facing:

ADG compliance - sections

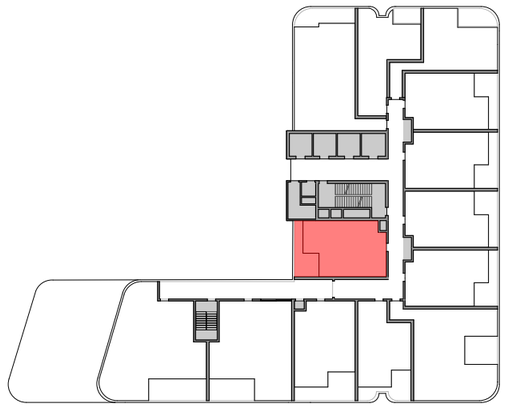


6 Plan Typical 2b (L18-32)

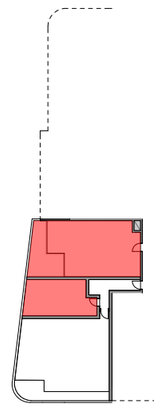
7 Plan Typical 3b (L33-37)



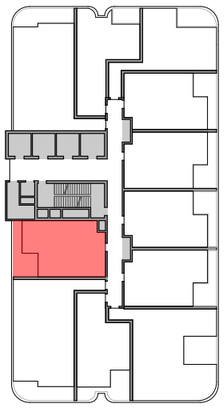
8 Plan Pent



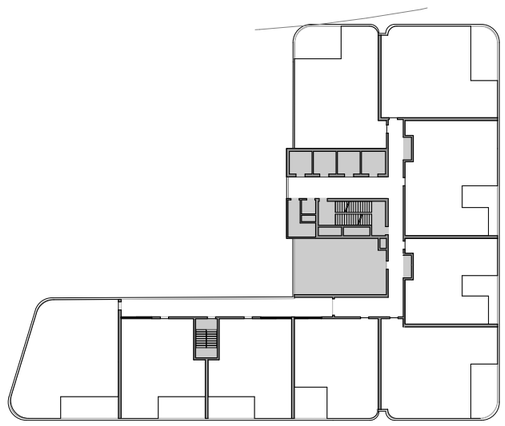
4 Plan Tail 3 (L4-6)



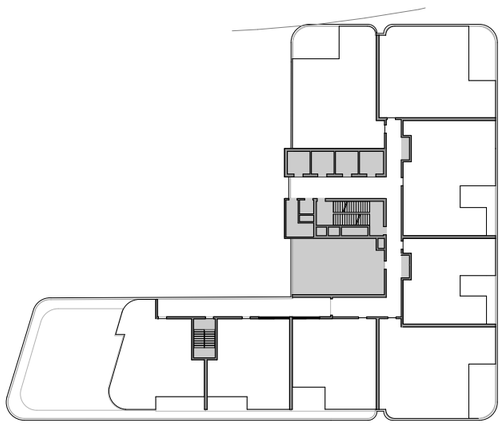
Alternate Corner Arrangement L 8-12



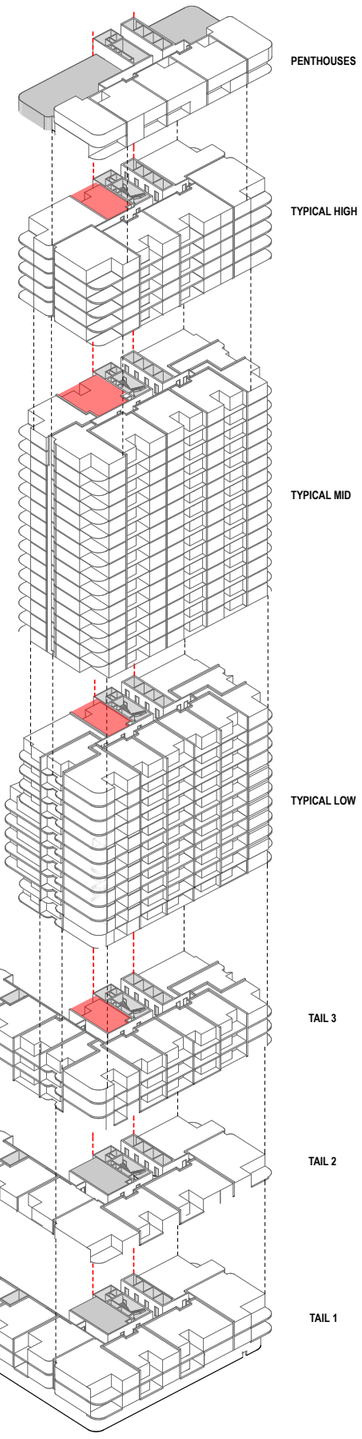
5 Plan Typical 1B (L7-17)



2 Plan Tail 1 (L1-2)



3 Plan Tail 2 (L3)



Axonometric South Facing

Solar analysis to 50 Murray Street

This study reviews the impact of the proposal upon the direct solar access to the east (city side) of 50 Murray Street at mid winter. The analysis adopts the solar access benchmark Provisions of Sydney DCP 2012, Section 4.1.3.1 Solar Access, ie:

— Development sites and neighbouring dwellings are to achieve a minimum of 2 hours direct sunlight between 9am and 3pm on 21 June onto at least 1sqm of living room windows and at least 50% of the minimum amount of private open space.

— New development must not create any additional overshadowing where solar access is less than two hours between 9am and 3pm on 21 June. This control does not apply to windows on a side boundary or windows only separated from a side boundary or passageway.

The following study checks if 2 hours direct sunlight between 9am and 3pm at mid winter is currently achieved across the east (city side) of 50 Murray Street. The analysis also considers how the Harboursdie proposals impact upon the results. Specialist software (Grasshopper for Rhino with specialist plug-ins) has been used to determine hours of direct sunlight across the facades. The analysis has been undertaken based on the SSDA Stage 1 envelope, ie: not the illustrative scheme form.

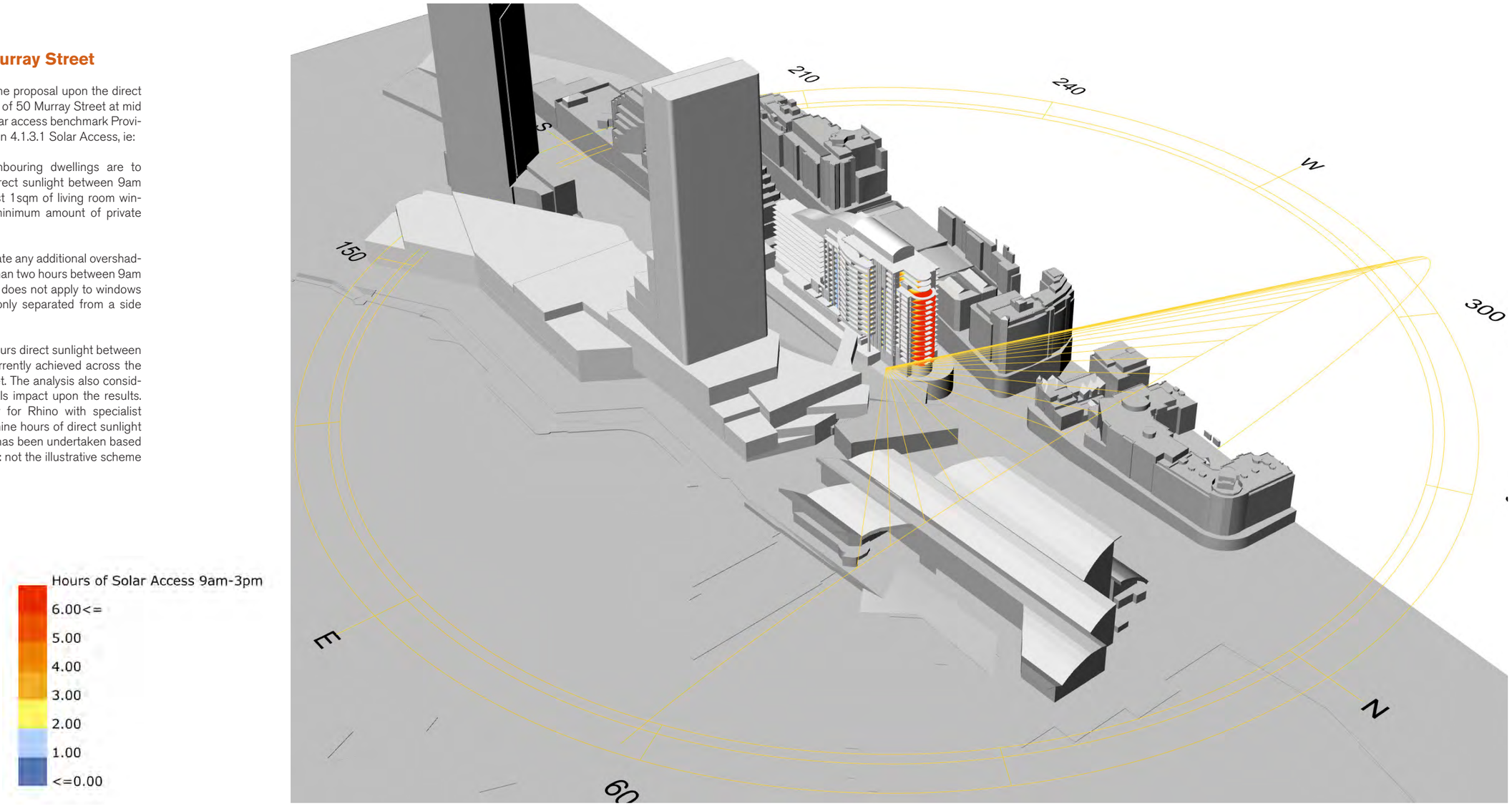


Image 134 Solar analysis methodology and legend - radial line in yellow indicate sun path between 9.00am and 3.00pm.

Mid Winter:

Solar analysis to 50 Murray Street

Results indicate that the existing building does not currently achieve 2 hours of direct sunlight to all living rooms and balconies between 9am and 3pm as highlighted in blue. This is predominately due to the large balcony overhangs and siting of the building. (image: 135). The north facing balconies (as highlighted in red) clearly achieve good direct solar access as expected.

For the 21st of June the Harbourside proposal has nil impact upon the solar access of the living rooms and balconies of 50 Murray Street due to the angle of the sun from 9am-3pm - shown on the drawings below. (image: 136)

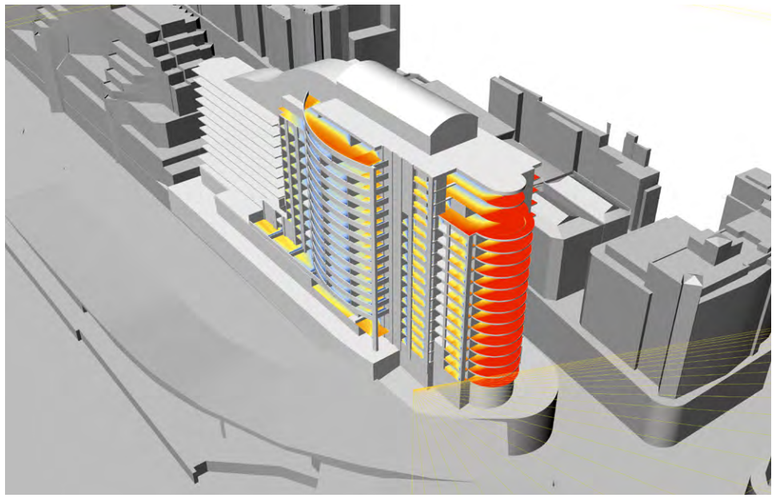
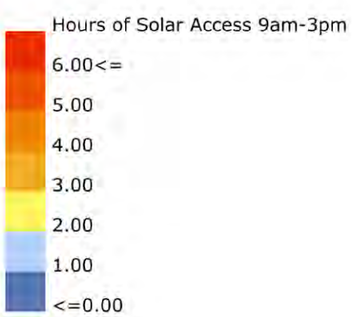


Image 135 Solar analysis of 50 Murray Street: Existing 21 June

Image 136 Solar analysis of 50 Murray Street: Proposed 21 June



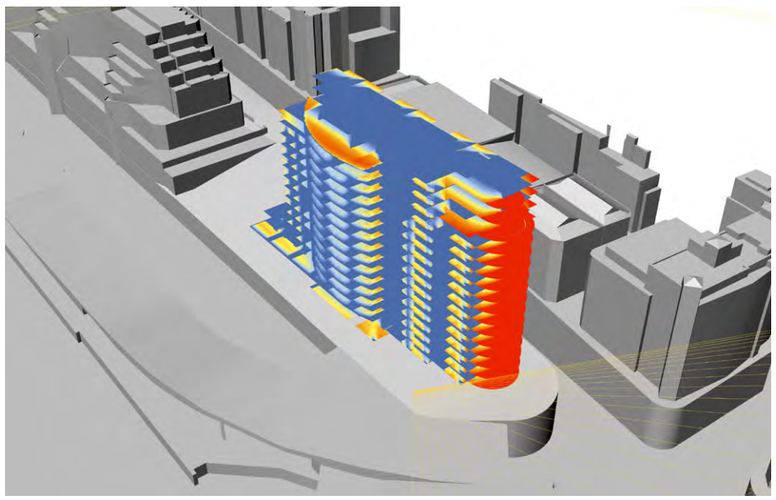


Image 137 Solar analysis of 50 Murray Street: Existing with floorplates only for clarity 21 June

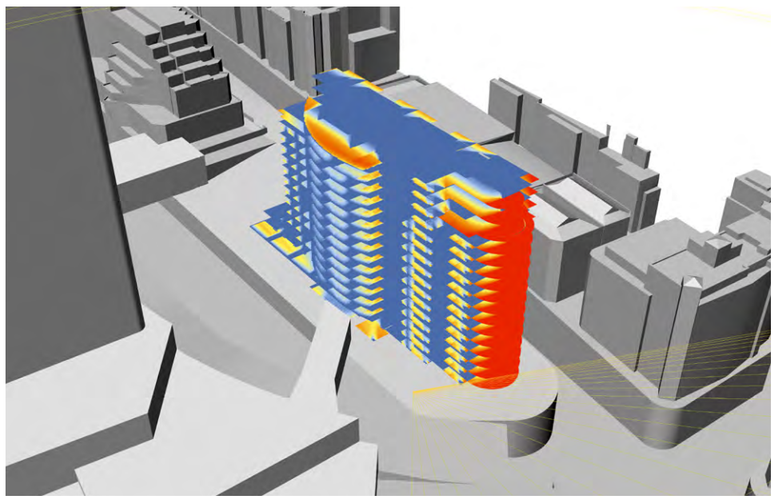


Image 138 Solar analysis of 50 Murray Street: Proposed with floorplates only for clarity 21 June

Mid summer:

Solar analysis to 50 Murray Street

While the provisions of Sydney DCP 2012, Section 4.1.3.1 Solar Access do not require analysis for the mid summer condition, this modelling has been undertaken and is included at right for information.

As illustrated on the images to the right, the proposal has minimal solar impact to 50 Murray Street between 9.00am and 3.00pm. Impact is limited to the balconies to the south of 50 Murray Street with the edges of these balconies maintaining 2 hours of direct solar access.

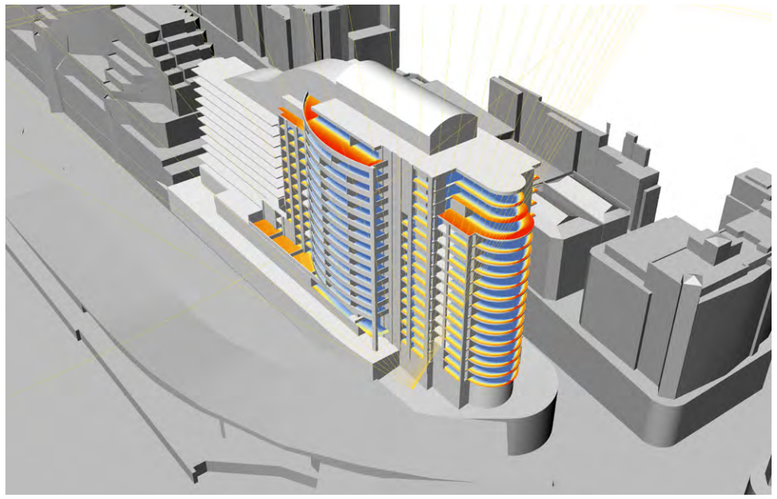


Image 141 Solar analysis of 50 Murray Street: Existing 21 Dec

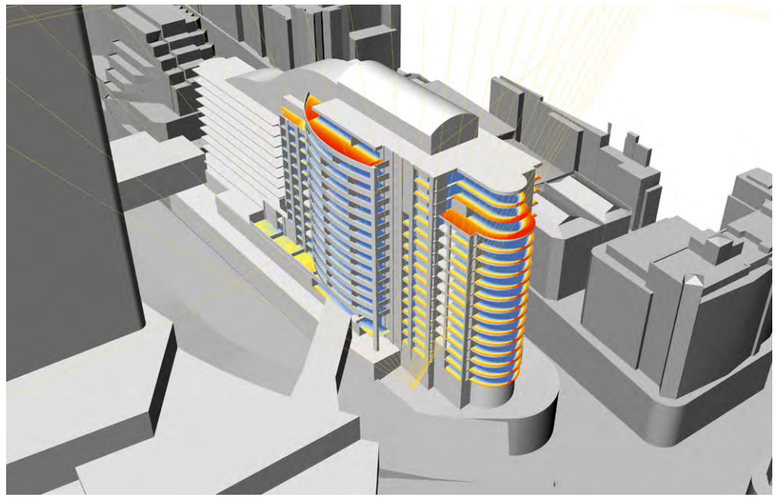
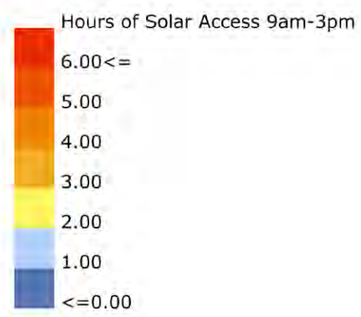


Image 142 Solar analysis of 50 Murray Street: Proposed 21 Dec



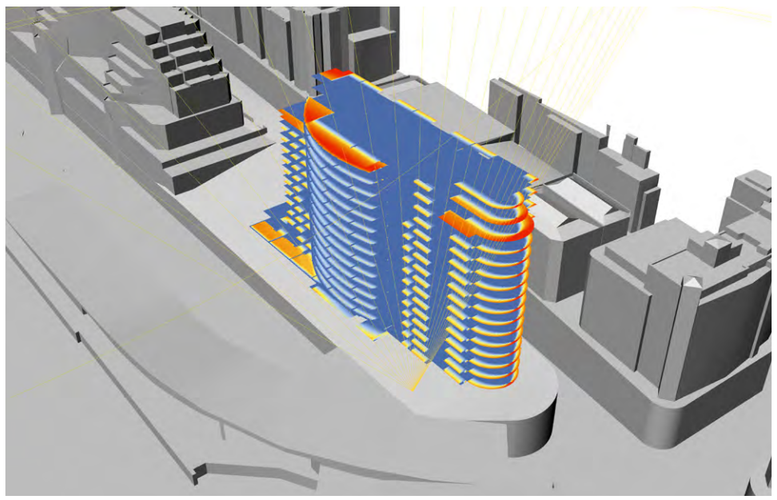


Image 139 Solar analysis of 50 Murray Street: Existing with floorplates only for clarity 21 Dec

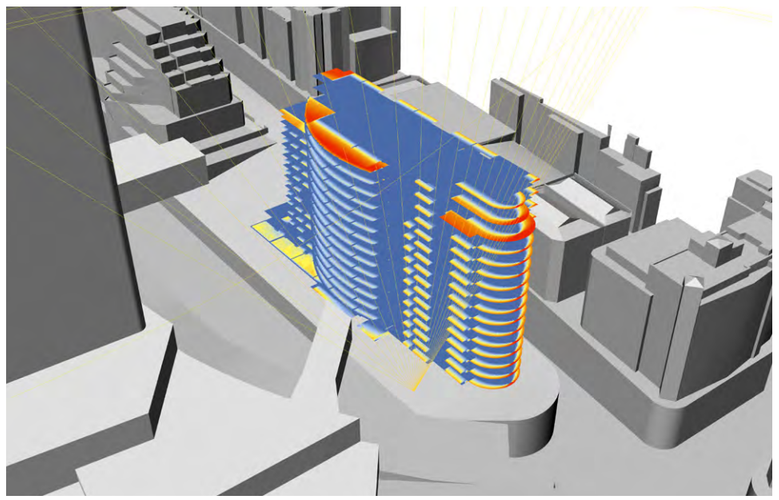


Image 140 Solar analysis of 50 Murray Street: Proposed with floorplates only for clarity 21 Dec

Appendices

A - Architectural

i) Envelope

ii) Illustrative Concept Plan

iii) Shadow Studies

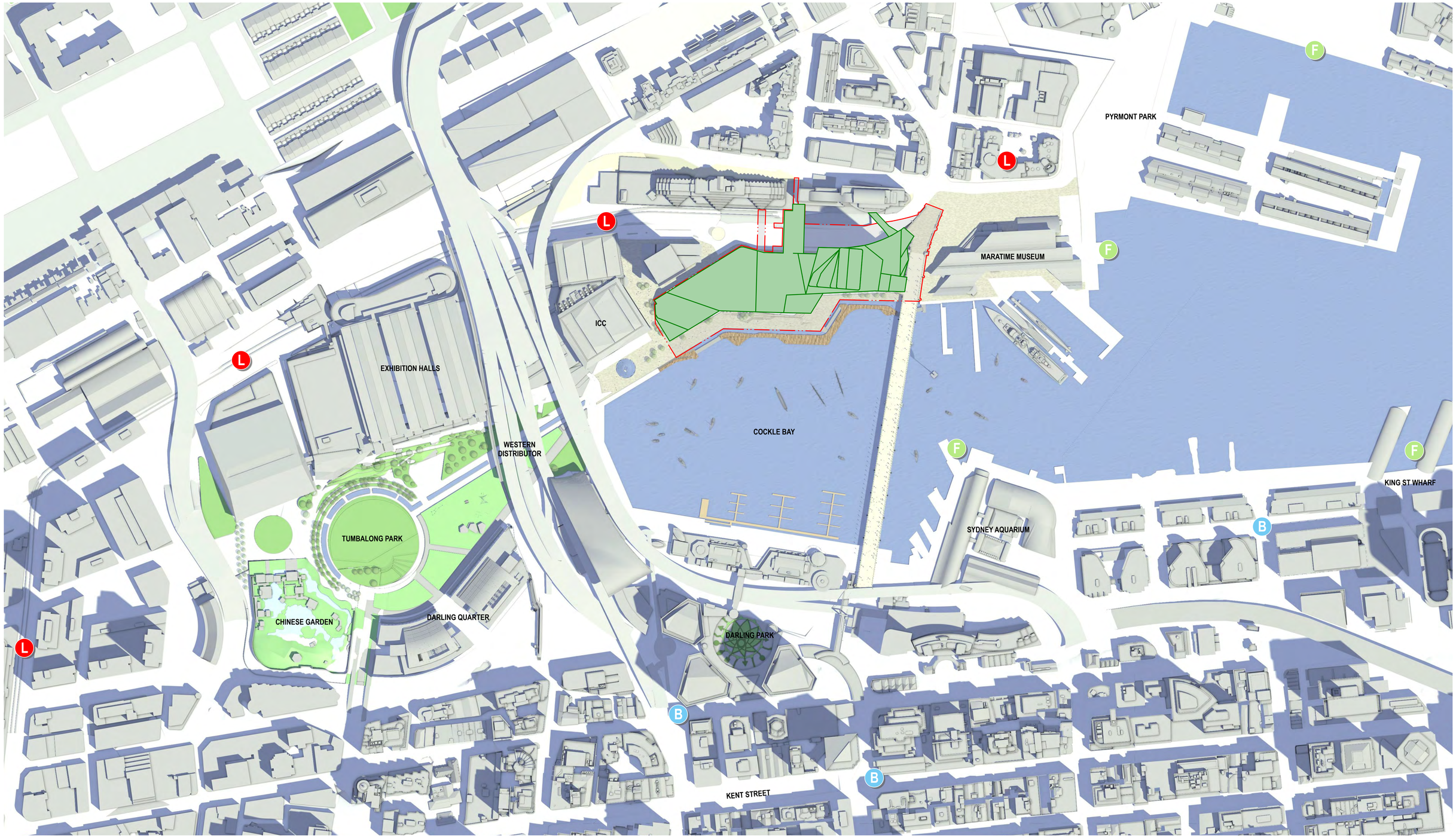
iv) Compliance

Appendix A - Architectural

STAGE 1 DA HARBOURSIDE

STAMP PLANS
SSDA1-000 Cover Page.pdf
SSDA1-001 Location Plan.pdf
SSDA1-002 Context Plan.pdf
SSDA1-003 Site Analysis.pdf
SSDA1-004 Existing Site Plan.pdf
SSDA1-100 Envelope Plan - Podium.pdf
SSDA1-101 Envelope Plan - Tower.pdf
SSDA1-102 Envelope Plan - Basement.pdf
SSDA1-103 Envelope East Elevation.pdf
SSDA1-104 Envelope West Elevation.pdf
SSDA1-105 Envelope Cross Sections.pdf
SSDA1-200 Demolition Plan - Existing Harbourside & Monorail Station.pdf

Illustrative Scheme
SSDA1-300 Indicative Plan Only - B2.pdf
SSDA1-301 Indicative Plan Only - B1.pdf
SSDA1-302 Indicative Plan Only - Ground Floor Retail.pdf
SSDA1-304 Indicative Plan Only - Level 1 Retail.pdf
SSDA1-305 Indicative Plan Only - Level 2 Retail.pdf
SSDA1-306 Indicative Plan Only - Level 3 Retail.pdf
SSDA1-307 Indicative Plan Only - Level 4 Retail.pdf
SSDA1-308 Indicative Plan Only - Level 5 Communal Residential.pdf
SSDA1-310 Indicative Plan Only - Typical Tail 1 (L1 & 2).pdf
SSDA1-311 Indicative Plan Only - Typical Tail 2 (L3).pdf
SSDA1-312 Indicative Plan Only - Typical Tail 3 (L4-6).pdf
SSDA1-313 Indicative Plan Only - Typical 1B + Tail (L8-12).pdf
SSDA1-314 Indicative Plan Only - Typical 1B (L7, L13-17).pdf
SSDA1-315 Indicative Plan Only - Typical 2B (L18-32).pdf
SSDA1-316 Indicative Plan Only - Typical 3B (L33-37).pdf
SSDA1-317 Indicative Plan Only - Penthouse (L38).pdf
SSDA1-318 Indicative Plan Only - Penthouse (L38 Mezz).pdf
SSDA1-319 Indicative Plan Only - Roof Plan.pdf
SSDA1-320 Indicative Elevation Only - East.pdf
SSDA1-321 Indicative Elevation Only - West.pdf
SSDA1-322 Indicative Plan Only - Section (23.1).pdf
SSDA1-400 Shadow Analysis - Winter Solstice - 21st of June 9-10am.pdf
SSDA1-401 Shadow Analysis - Winter Solstice - 21st of June 11-12pm.pdf
SSDA1-402 Shadow Analysis - Winter Solstice - 21st of June 1-2pm.pdf
SSDA1-403 Shadow Analysis - Winter Solstice - 21st of June 3pm.pdf
SSDA1-404 Shadow Analysis - Equinox - 21st of Sept 9-10am.pdf
SSDA1-405 Shadow Analysis - Equinox - 21st of Sep 11-12pm.pdf
SSDA1-406 Shadow Analysis - Equinox - 21st of Sep 1-2pm.pdf
SSDA1-407 Shadow Analysis - Equinox - 21st of Sep 3pm.pdf
SSDA1-408 Shadow Analysis - Summer - 21st Dec 9-10am.pdf
SSDA1-409 Shadow Analysis - Summer - 21st Dec 11-12pm.pdf
SSDA1-410 Shadow Analysis - Summer - 21st Dec 1-2pm.pdf
SSDA1-411 Shadow Analysis - Summer - 21st Dec 3pm.pdf
SSDA1-420 Shadow Analysis - Perspective - Winter Solstice June 21st.pdf
SSDA1-421 Shadow Analysis - Perspective - Equinox 21st Sept.pdf
SSDA1-422 Shadow Analysis - Perspective - Summer Solstics 21st Dec.pdf
SSDA1-500 Amenity Diagrams - Solar Access.pdf
SSDA1-501 Amenity Diagrams - Natural Ventilation.pdf
SSDA1-502 Amenity Diagrams - South Facing.pdf



BOUNDARY LEGEND

- PROPOSED SSDA 1 BOUNDARY
- WATERFRONT & PYRMONT BRIDGE SETBACKS
- ENVELOPE EXTENT

0 20 50 100m

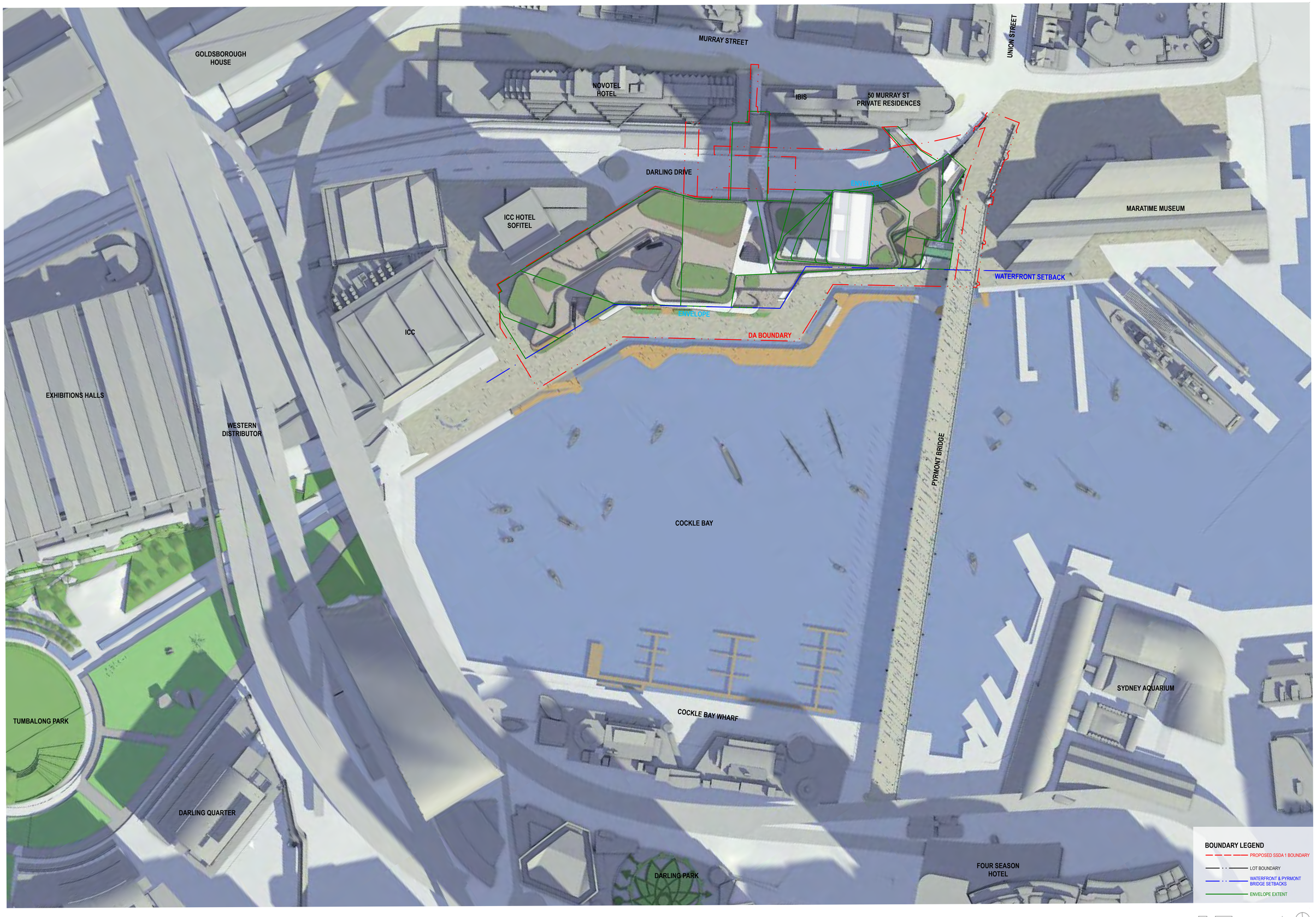
fjmt

Location Plan

Mirvac - Harbourside

1:2000 @ A1 4/11/2016

For Information **SSDA1-001**



fjmt

Context Plan

Mirvac - Harbourside

0 10 20 50m

1:1000 @ A1 4/11/2016

For Information **SSDA1-002**