

THE HAYMARKET **SYDNEY**

SW PLOT DESIGN REPORT FOR SSDA5

June 2013

D E N T O N
C O R K E R
M A R S H A L L

architecture + urban design

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INTRODUCTION

INTRODUCTION



Introduction

This report supports a State Significant Development (SSD) Development Application (DA) submitted to the Minister for Planning and Infrastructure pursuant to Part 4 of the Environmental Planning Assessment Act 1979 (EP&A Act).

The Application (referred to as SSDA 5) follows the submission of a staged SSD DA (SSDA 2) submitted in March 2013 to the Department of Planning and Infrastructure that set out a Concept Proposal for a new mixed use residential neighbourhood at Darling Harbour known as 'The Haymarket'.

The Haymarket forms part of the Sydney International Convention, Exhibition and Entertainment Precinct (SICEEP) project, which will deliver Australia's global city with new world class convention, exhibition and entertainment facilities and support the NSW Government's goal to "make NSW number one again".

More specifically, this subsequent DA seeks approval for mixed use development within the South West development Plot (referred to as the SW Plot) of The Haymarket and associated public domain works.

This DA has been prepared and structured to be consistent with the Concept Proposal.

INTRODUCTION

Executive Summary

The SICEEP Site is located within Darling Harbour. Darling Harbour is a 60 hectare waterfront precinct on the south-western edge of the Sydney Central Business District that provides a mix of functions including recreational, tourist, entertainment and business.

With an area of approximately 20 hectares, the SICEEP Site is generally bound by the Light Rail Line and Darling Drive to the west, Harbourside Shopping Centre and Cockle Bay to the north, Darling Quarter, the Chinese Garden of Friendship and Harbour Street to the east, and Hay Street to the south.

To date two State Significant development applications have been submitted to the Department of Planning and Infrastructure. The Public-Private Partnership (PPP) SSD DA (SSDA 1) includes the core facilities of the SICEEP Project, comprising the new, integrated and world-class convention, exhibition and entertainment facilities along with ancillary commercial premises and public domain upgrades. These facilities are to be accommodated in the northern portion of the SICEEP site.

The Haymarket Concept Proposal SSD DA (SSDA 2) establishes the vision and planning and development framework which will be the basis for the consent authority to assess detailed development proposals within the Haymarket Site. That DA includes the planning and design parameters for the SW Plot. Under the Concept Proposal, the SW Plot will accommodate active ground floor uses, podium apartments and car parking, 2 apartment towers and 1 low-rise apartment building.

SSDA 5 seeks approval for the apartment towers and podium apartments, retail and car park with associated public domain works within the SW Plot.

This Design Report has been prepared to provide a planning and design response with respect to the overall Haymarket Concept Proposal as well as to outline consistency with the Parameter Plans and Design Guidelines specific to the SW Plot and its immediate context.

It also provides the overarching design philosophy for the building and its surrounds, general descriptions and detailed considerations of the high quality planning and design excellence outcomes envisaged for the predominately residential towers and podium apartment function prescribed for the site.

A Public Domain Design Report has also been prepared by Hassell and is included within Appendix B. This report seeks to provide a similar discourse regarding the design of the public domain within the SW Plot development application and its compliance with the Design Guidelines.

The key aims of this Design Report are to:

- Describe the design process and the evolution of the design to ensure design excellence and creativity are achieved;
- Respond to the Director General’s Environmental Assessment Requirements issued by the Department of Planning and Infrastructure;
- Describe in detail the design of the building;
- Describe how the design conforms with the Parameter Plans and Design Guidelines set out in the Stage 1 DA as well as the Urban Design and Public Realm Guidelines prepared by INSW;
- Respond to the design refinements made to the design of the building as a result of the comments of the Design Review Panel; and
- Respond to the feedback resulting from a series of community and stakeholder engagement presentations and workshops.

The Design Report also describes how the building will contribute to the creation of The Haymarket as a vibrant and distinctive mixed use precinct that offers a variety of experiences, and contributes to the liveliness of the existing Darling Harbour/Haymarket areas of Sydney.

Representation of the retail shopfronts are indicative at this stage. Individual Development Applications will be prepared by retail tenants and submitted separately. A set of Design Guidelines have been prepared by Six Degrees to inform, control, and coordinate these design reponses. A copy of these guidelines are located within Appendix C of this report.

Yield Table

Type	# Apartments	% of Total
Studio	31	6
1 Bed	184	34
1 Bed + Study	76	14
2 Bed	236	43
3 Bed	15	3
Total	542	100

Accommodation Summary

Uses	Area (m²)
Residential Building	43 522
Retail/ IQ hub (potential)	1 805

Car parking Summary

Type	# Cars
Resident	395
Accessible	10
Visitor	0
Total	405

INTRODUCTION

Planning + Design Description

The proposed development of the SW Plot within The Haymarket will consist of 2 towers, a low-rise block and podium apartments above a five storey resident car park sheathed in mixed use and retail uses at ground level and residential uses above. The design has been guided by the Parameter Plans and Design Guidelines set out in the Stage 1 DA for The Haymarket.

The design responds to the urban edge presented along the site boundary. Residential towers hold the street edge, and are located at significant urban design gateways. The towers present to the Darling Harbour and CBD skyline views and take maximum advantage of the natural amenity. The architecture is both grounded in the heritage of The Haymarket context, and the new contemporary SICEEP buildings. It provides a legacy for a new chapter in the history of The Haymarket.

The design response has introduced strong visual ordering devices (such as grids and plates) to control the visual filigree typical of mixed use residential buildings. These devices relate to the human micro-scale whilst generating a composition that responds to the macro-scale views.

INTRODUCTION

Design Excellence

Design excellence for the overall SICEEP site is a key objective. To date, a mix of techniques has been adopted to ensure that this objective is achieved.

The development of the overarching Concept Proposal, for which development consent is being sought under the Stage 1 State Significant DA, effectively sets out the Concept Proposal for The Haymarket. This will ensure that the detailed design and architecture for individual buildings is achieved within a defined and consistent framework.

The Parameter Plans and Design Guidelines prepared for the overall site by Denton Corker Marshall are integral components of the Concept Proposal. They are intended to be used as a tool to achieve design excellence and built form that is appropriate within the existing context of Darling Harbour, Haymarket and the CBD. This Design Report demonstrates consistency with these components and hence demonstrates that design excellence is achieved through the proposed building form and architecture.

Design excellence will be achieved for the development by the application of four key principles:

1. Creation of highly efficient and concise building planning and functionality.
2. Clear responses to Stage 1 Concept Proposal (Parameter Plans and Design Guidelines).
3. The application of contemporary ESD principles and a GBCA Green Star target rating of 4 stars.
4. A layered and hierarchal architectural approach which seeks to draw base inspiration from the local natural environment through to the man-made and development heritage of the precinct.

In addition to the elements outlined above, the Design Review Panel established by NSW specifically for the SICEEP project has been involved in the design development for the site. The proposed design has been presented to the Design Review Panel at appropriate stages and their input has been considered.

Principal designer

Denton Corker Marshall is highly regarded internationally for its original, innovative and functionally excellent architecture and urban design. Whilst primarily practising as architects, extensive experience in city planning and urban design, embracing wider urban concerns and social aspirations, delivers genuine benefit to every project.

Denton Corker Marshall is one of Australia's most accomplished architecture and urban design practices. Consistent ability to solve complex design problems and produce the highest quality design and delivery is demonstrated by a significant collection of design awards, for example:

- Leader in achieving AIA National Architecture Awards
- Three times winner of Australia's most prestigious architectural award, the Sir Zelman Cowen Award for Public Buildings
- Twice winner of the AIA International Architecture Award
- Winner of multiple urban design awards including four for Governor's Place, Sydney (the urban plaza to the First Government House site) and Governor Phillip Tower, three for South Bank Brisbane, and two for Webb Bridge, Melbourne
- AIA Gold Medal

Winning and successfully delivering many major national and international design competitions including:

- University of Technology Sydney Broadway Building: under construction
- Stonehenge Visitor and Interpretive Centre, UK: under construction
- Australian Embassy Complex, Jakarta: under construction
- Australian Pavilion, Venice Biennale, Italy: in documentation
- Manchester Civil Justice Centre, UK: completed 2007
- Webb Bridge, Melbourne: completed 2003
- Melbourne Museum, Melbourne: completed 2001
- First Government House Site (Governors Phillip and Macquarie Towers, Museum of Sydney and two public precincts): completed 1995

Consistent repeat commissions from government and private clients attests to the quality of our design, professional service, project delivery and value for money.

- Australian Government, Department of Foreign Affairs and Trade
- South Bank Corporation, Brisbane
- Australian War Memorial, Canberra
- Melbourne Museum
- HM Courts Service, UK
- Monash University, Melbourne
- Lend Lease: more than a dozen projects throughout Australia and UK for Australia's leading residential and commercial developer.

Denton Corker Marshall's design has a durable quality:

- 10 years on, the Distillery, Quarry and Refinery Apartments, plus the Jones Street Townhouses, all at Jacksons Landing, by Denton Corker Marshall for Lend Lease, form a highly successful, well planned and sought after residential contribution to Sydney's urban texture. It is recognised for its placemaking, and the quality of community involvement and integration.
- Governor Phillip Tower and 101 Collins Street, in Sydney and Melbourne, and 20 and 22 years on respectively, are still considered Australia's most lettable commercial buildings.
- No. 1 Collins Street, Melbourne, completed in 1985 and a multiple award winner at the time, was in 2011 awarded the AIA (Vic) Enduring Architecture Award.

Design collaboration

The client has engaged a number of design practices to contribute to the evolution of the Concept Proposal and the SW Plot. A collaborative approach between these disciplines have informed the design narrative and encouraged a richer, more diverse design outcome.

Hassell – developed the detail for the SW Plot public domain within the context of the overall Precinct Plan public domain. Refer to SSDA 5 Public Domain Design Report within Appendix B.

Six Degrees – developed a variety of design concepts for the retail element to inform a set of Haymarket Retail Design Guidelines. These support the SSDA 5 Design Report and will guide the fit-out of the retail shopfronts by the future tenants. Refer to the Retail Design Guidelines within Appendix C.

Sturt Associates – developed the podium landscape design and coordinated the interface between the public domain and building edge condition. Their design is included within the SSDA 5 Design report under the 'Landscape' Section on page 53.

Aspect Studios – provided design input to Hassell to modify the existing pedestrian footbridge over Darling Drive.

Tanner Kibble Denton and Casey & Lowe – provided heritage and archaeological advice to project team.

These consultants supplement a broad team of specialist engineers and consultants providing additional analysis and support for the project.

Response to Stage 1 Concept Proposal

As outlined above, Denton Corker Marshall has established a clear set of Parameter Plans and Design Guidelines to guide the future development of The Haymarket. They have been designed to provide a clear and legible framework within which individual buildings can be delivered to create a vibrant, connected Precinct.

Details are provided throughout this report to demonstrate that the proposed building boundaries are typically compliant with the six Parameter Plans which prescribe maximum height, building envelope, building separation and land use.

The only breach of these parameters is on the western face of the SW1 tower where a section of the facade projects beyond the maximum building envelope of the Concept Proposal. This is discussed in further detail within the 'Massing + built form' section on page 23 of this report.

The design development of the proposed residential building has been undertaken within the framework of the Design Guidelines. These Guidelines have been used as a tool to achieve design excellence rather than as a set of prescriptive "rules". This has allowed for design innovation and flexibility in the detailed design, which is how they are intended to be used.

This Design Report provides details regarding conformity with each of the relevant Design Guidelines.

Response to INSW Urban Design & Public Realm Guidelines

Woods Bagot was engaged by INSW to prepare Urban Design and Public Realm Guidelines (UDPRG) for the SICEEP project, which provided a framework for the realisation of the Project Vision. The UDPRG provided recommendations for urban elements deemed important to delivering the Project Vision as noted below:

- Urban structure
- Urban grain
- Density and mix
- Height and massing
- Public realm
- Streetscape and landscape
- Facade and interface
- Details and materials
- Energy and resource efficiency
- Staging and management

Also within the UDPRG was a determination of key views into and along the SICEEP site and of key landmarks. The Denton Corker Marshall Design Guidelines have been prepared to tailor the design framework more closely to the proposed Concept Proposal, while using the UDPRG as a strong reference point. It is intended that the Design Guidelines, if approved, will supersede the UDPRG. However as the Denton Corker Marshall Design Guidelines have not yet been approved, compliance with the relevant UDPRG has also been addressed in this report.

A visual assessment has been undertaken to evaluate the streetscape, and view sharing analysis for the subject DA. This forms part of the Environmental Impact Statement prepared by JBA.

INTRODUCTION

Overall Planning and Design Description

The SW Plot is proposed within a predominantly residential precinct characterised by mixed-use activation at built-form ground level.

Key contextual issues and urban response sensitivities for the site include: a corner presence/frontage to the new Haymarket Square; The Boulevard frontage and activation; Dickson's Lane frontage; scale and activation and the connectivity, both pedestrian and vehicular from the south and west across Darling Drive.

Considered within the greater urban and city scale, the creation of the Southern Precinct will create a new mixed use residential neighbourhood at Darling Harbour known as 'The Haymarket'.

The Haymarket will form part of the Sydney International Convention, Exhibition and Entertainment precinct (SICEEP) Project, which will deliver Australia's global city with new world class convention, exhibition and entertainment facilities.

Specifically, the SW Plot can be identified as part of a key gateway and built form statement as it presents adjacent to Hay Street and Darling Drive, as well as demarcating a strong presentation edge at 'The Boulevard' as an overall south gateway statement to the new 'Haymarket' Precinct.

Concept Proposal Overview

The SICEEP Precinct Plan has clearly defined a planning and built-form approach which integrates high calibre urban planning and public realm outcomes with pronounced individual built-form elements. These built-form outcomes operate within a strategic public realm framework and overall architectural composition, both in the greater master plan context and at an individual planning level. To this end, the proposed SW Plot development seeks to draw out a subtle visual affinity with the greater SICEEP precinct plan components related to the public focussed uses of The Theatre, and Convention ICC Facilities and the transition to the post-industrial and market heritage buildings of The Haymarket. In this respect, the architecture proposed for the SW Plot carefully addresses the contextual and visual opportunities to:

1. Create a gateway statement on the Hay and Quay Street corner to signify the southern entry point of 'The Boulevard'.
2. Create a secondary gateway that addresses Dickson's Lane and the transition of the Pyrmont Street grid along Macarthur Street into the city CBD grid.
3. To respect the heritage context of the Haymarket and extend the local character and uses into the new development.
4. To generate a signature skyline that heralds the southern end of the SICEEP.
5. To respond to the civic nature of the new square with an enriched, even somewhat playful response which reinterprets the legacy of the former harbour and provides a new layering of built-form history reflecting the latest regeneration of the area.
6. To delight and animate the diversity of ground level functions with a strong palette of colour and materiality to create an inspiring and visually enticing active ground plane.

South West (SW) Plot - Overview

The proposal relates to a detailed ('Stage 2') DA for a mixed use residential development in the South West Plot of The Haymarket together with associated public domain works. The Haymarket Site is to be developed for a mix of residential and non-residential uses, including but not limited to residential buildings, commercial, retail, community and open space. The South West Plot is one of six development plots identified in the Concept Proposal DA.

Under the Concept Proposal DA, the South-West Plot will accommodate a mixed use podium and three residential buildings (SW1, SW2, and SW3) above and within the podium structure. More specifically, this SSD DA seeks approval for the following components of the development:

- Staged demolition of existing site improvements, including the existing Sydney Entertainment Centre (SEC), Entertainment car park, and part of the pedestrian footbridge connected to the Entertainment car park;
- Associated tree removal and planting;
- Construction and use of a five storey mixed use podium, including:
 - retail and potential IQ Hub floor space and residential lobbies on Ground Level;
 - above ground parking; and
 - residential apartments.
- Construction and use of three residential buildings above podium:
- Public domain improvements, including:
 - provision (part) of a new north-south pedestrian connection (known as the Boulevard) eventually linking Quay Street to Darling Harbour;
 - provision (part) of a new east-west pedestrian laneway (known as Dickson's Lane) linking Darling Drive to the Boulevard; and
- upgrade of Hay Street (part) to provide for a pedestrian shareway;
- modification of retained pedestrian footbridge and provision of lift and stair access to the Goods Line;
- provision of vehicle access to the development from Hay Street;
- Landscaping works and communal facilities to the podium roof level; and
- Extension and augmentation of physical infrastructure / utilities as required.

Development plot sizes, development plot separation, building envelopes (maximum height in RLs), building separation, building depths, building alignments and a benchmark for natural ventilation and solar provision for the precinct;

- Land uses across the site, including residential and non-residential uses;
- A maximum total gross floor area (GFA) across The Haymarket Site of 197,236m² for the mixed use development (excluding ancillary above ground car parking), comprising of:
 - A maximum of 49,545m² non-residential GFA; and
 - A maximum of 147,691m² residential GFA;
- Above ground parking including public car parking;
- Residential car parking rates to be utilised in the subsequent detailed (Stage 2) Development Applications, being:
 - Zero (0) spaces per studio apartment;
 - Maximum one (1) space per two (2) one bedroom apartments;
 - Maximum one (1) space per one bedroom + study apartment, plus one (1) additional space per five (5) apartments;
 - Maximum one (1) space per two bedroom apartment, plus one (1) additional space per five (5) apartments; and
 - Maximum two (2) spaces per 3+ bedroom apartment.
- Design Guidelines to guide future development and the public domain; and
- A remediation strategy.

This report has been prepared to support a detailed Stage 2 SSD DA for mixed use development and associated public domain works within The Haymarket (SSDA 5), consistent with the Concept Proposal SSD DA.

Planning Approvals Strategy

The SICEEP Project will result in the lodgement of numerous SSD DAs for the various components of the redevelopment project. SSD DAs have already been lodged for the PPP component of the SICEEP Project (comprising the convention centre, exhibition centre, entertainment facility and ancillary commercial premises and associated public domain upgrades), and the Stage 1 Concept Proposal for The Haymarket. Separate 'Stage 2' SSD DAs for the development of the North West Plot and the Western Plot (Darling Drive) and associated public domain works will be lodged concurrently with this application. Future applications will be lodged for the Hotel complex, and the remaining development plots of The Haymarket Site.

Design Statement

Pursuant to Clause 50 (1A) of the Environmental Planning and Assessment Regulation 2000, effective from July 26 2003;

I hereby declare that I am a qualified designer, which means a person registered as an architect in accordance with the architects Act 1921 as defined by Clause 3 of the Environmental Planning and Assessment Regulation 2000.

I designed, or directed the design, of the mixed use development stated above and I affirm that the design achieves the design quality principles as set out in Part 2 of the State Environmental Planning Policy No 65 - Design Quality of Residential Flat. I have provided further detail on the design's compliance with the quality principles in this Design Verification Statement, which is attached.



Adrian FitzGerald

11.06.13

Design Director

Denton Corker Marshall

SITE ANALYSIS

SITE ANALYSIS

Regional context

'The Haymarket' Concept Proposal forms a new high density mixed use quarter within the southern end of the SICEEP. The intent is to extend the pedestrian precinct from Darling Harbour through to Hay Street and reinforce the urban experience with new, quality public spaces, diverse buildings and uses to complement a broad programme of uses.

Located on the valley floor between the ridges of the central business district and Pyrmont, the site is the basin for an overland flow catchment.

Central Station sits to the south of the site and a new pedestrian linkage is proposed along Quay Street into Darling Harbour. A similar initiative by the Sydney Harbour Foreshore Authority (SHFA) - the Goods Line - located to the south-west of the site will create a new pedestrian linkage to promote non-vehicular connectivity through the precinct between the university precinct and Darling Harbour.

The new SICEEP Precinct Plan covers approximately 20 hectares, spanning from Darling Harbour in the north to Hay Street in the south, and from the light rail corridor in the west to Harbour Street in the east.

It seeks the redevelopment of Sydney's existing conference building, exhibition centre and entertainment centre and the re-interpretation and expansion of the public spaces. The precinct plan includes additional retail, hotel, office and residential uses to increase the diversity of the precinct and ensure it leaves a legacy of genuine city building. The Haymarket forms the southern end of the precinct.

Within the broader context of the city, The Haymarket is located adjacent to Chinatown. This quarter of the city is an attraction that draws locals and visitors. Its historical link to the city is reflected in the nearby Chinese Garden of Friendship. The influence of this quarter of the city extends well beyond the Chinatown gateways and influences food, commerce and retail activities well into the surrounding streets.

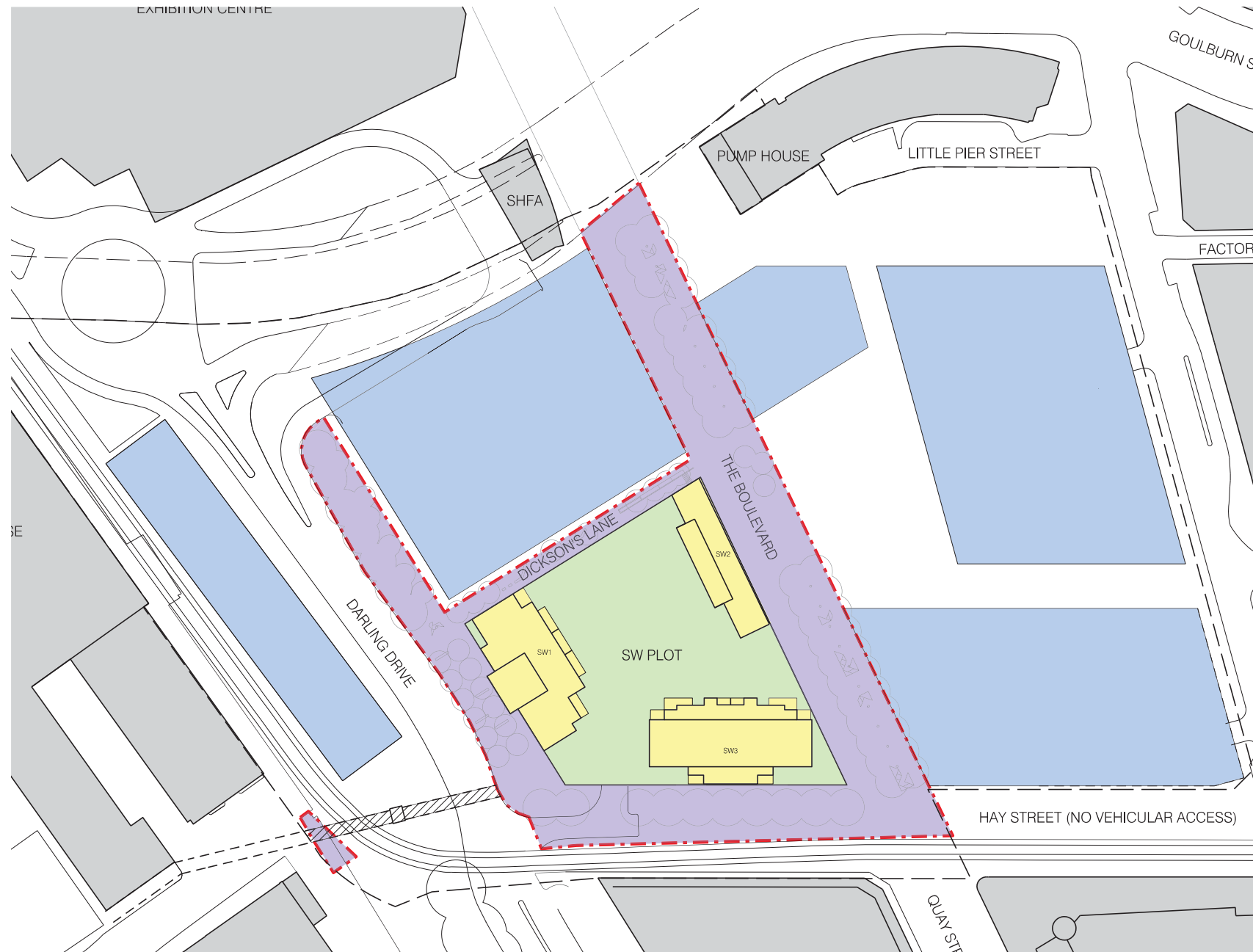
The University of Technology, Sydney (UTS) and Ultimo College TAFE precincts to the south are undergoing a renaissance in redevelopment. Denton Corker Marshall and Frank Gehry have designed two iconic new buildings for the University of Technology, Sydney, both currently under construction.

Tumbalong Park and The Chinese Garden of Friendship provide large, good quality public and private open spaces immediately to the north.

Elsewhere the open space is limited, unstructured and informal due to the legacy of industrial and market use. However, there is a range of gritty, urban spaces which celebrate the character of the area such as the lanes within Chinatown.



Aerial view of the city showing The Haymarket site



The Site

The site referred to as the SW Plot sits within 'The Haymarket' as defined within the SSDA 2 Concept Proposal and is owned by the Sydney Harbour Foreshore Authority (SHFA). The site is one of six new development plots proposed within 'The Haymarket' Concept Proposal. It is bounded by Darling Drive to the west, Hay Street to the south, the new public boulevard to the west and the new Dickson's Lane to the north. A commercial building above a public car park (NW Plot) and a tower of student accommodation (W2 Plot) are located north and west of the site respectively, and will be submitted concurrently with this Development Application.

The SSDA 2 Concept Proposal establishes the alignment of the new streets to support east west connectivity and continuity of streets and urban grain into The Haymarket.

The site sits within the basin of a wider catchment area and is subject to an appropriate stormwater management design. Significant in-ground stormwater infrastructure skirts the eastern and western edges connecting with the open stormwater pit of the SW Plot including a 70m² open stormwater pit, located below Pier Street.

The site sits immediately south of Tumbalong Park, the Chinese Garden of Friendship and the Darling Harbour Precinct, providing generous public space and entertainment amenity. A future square, subject to a subsequent Development Application, is proposed within the Concept Proposal at the heart of The Haymarket, and will deliver more open space for future residents and visitors.

Dickson's Lane and The Boulevard are pedestrian only thoroughfares. Access for services and parking is from the western end of Hay Street. Exhibition Place, a single exit lane from the new Theatre and public car park joins Darling Drive west of the site and new pedestrian crossing points are located at the corner of Hay Street and Darling Drive. Light rail also travels along the southern edge of Hay Street

As an inner city site, the SW Plot is in close proximity to a number of key local amenities. The immediate context consists of the vibrant Chinatown to the east and the former industrial and market buildings along the western and southern edges.

SITE ANALYSIS

Site photographs

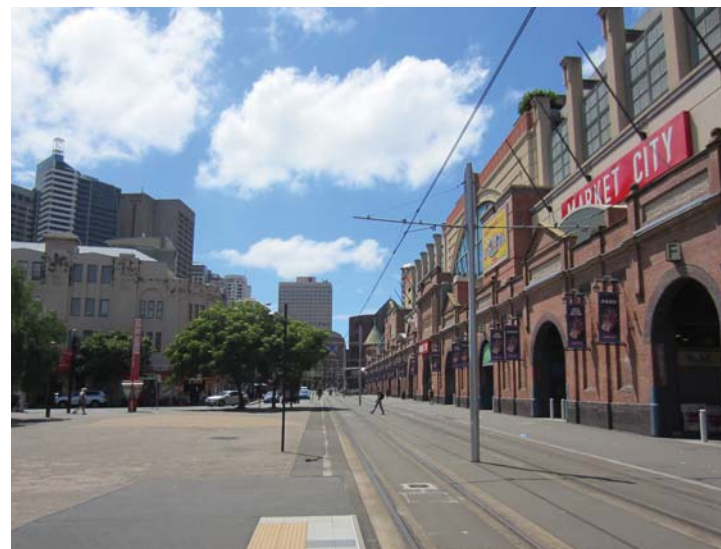
These photographs show the main buildings around the site, and seek to convey the character of some of the surrounding streetscapes.



Entertainment Centre multi-storey car park on Darling Drive



UTS Building 5 on Darling Drive/ Hay Street corner with Peak Apartment Tower in background



Hay Street



Heritage Pumpphouse building

SITE ANALYSIS



Market City main entrance on Hay Street



Kimber Lane viewed from little Hay Street



Factory Lane looking east from Harbour Street



Existing Entertainment Centre



Colonnade along Quay Street (looking north)



Chinatown gateway

SITE ANALYSIS

Context

The NW and W2 Plot DAs will be submitted concurrently with the SW Plot DA. These buildings will collectively define the western edge of the new Haymarket and provide the rich grain of mixed use advocated within the Precinct Plan and Concept Proposal.

Dialogue between the development and design teams has produced a harmonised design that proactively engages with the context rather than reacting to it. The entire Darling Drive realignment, Dickson's Lane connection, Exhibition Place and the Boulevard will be delivered in line with the PPP facilities. The strategy for Dickson's Lane can be considered along both sides of this new connection.

Constraints

The existing site and proposed context will generate some constraints that impact the current design proposal. These have been considered to ensure a robust solution is provided which achieves a quality urban design and built form experience.

No basements

The concept proposal has advocated a non-basement development for The Haymarket. This is due to a number of in-ground conditions around the site that are a legacy of its edge of the city, and its former maritime and industrial past. Specifically for the SW Plot these issues include, but are not limited to:

- the significant in-ground stormwater infrastructure along the eastern and western plot boundaries;
- the contamination strategy;
- the potential in-ground Aboriginal archaeology (former shoreline condition); and
- the in-ground archaeology from Dickson's Dam (southeast corner of site boundary).

Overland flow paths

Located along a significant flood catchment and basin, the site is at risk of significant overland flow paths as a result of extreme weather. As an inactive fringe of city space these flow paths have been managed around and between the existing buildings.

Maintaining these corridors to avoid negatively affecting the existing adjacent buildings has been carefully considered and has been the subject of extensive investigation within the SSDA 2 application and resultant Concept Proposal. The cumulative impacts of climate change and increased forecast flood levels and the City of Sydney allowance for freeboard have significantly influenced the ground plane solution. In order to protect property assets the ground level across the SW Plot, including car park and loading area, has been raised to RL +3.6m. This creates a level change of 500 – 1050mm from existing street level.

A key component of the SSDA2 Concept Proposal is the activation of the ground plane. Commercially, raising retail uses above ground level is not supported. The design response is addressed with the 'Edges + activation' section on page 26.

Water Sensitive Urban Design (WSUD)

As part of the overland flow path mitigation and in line with sustainability principles within the Residential Flat Design Code (RFDC), the public domain strategy for the SW Plot will include deep soil zones and permeable surfaces to improve the existing conditions and enable recharging of the water table. These will be located along the eastern edge of Darling Drive and aligned with the tree line of the Boulevard. Localised contouring of the levels will channel water away from the building and allow water to pool for a short time. Refer to Appendix B Public Domain Design Report prepared by Hassel for the SW Plot SSDA 5.

Building separation

Dickson's Lane, a new east-west connection, was developed to be an intimate lane. Development either side of this lane must address privacy concerns, particularly between the commercial and residential apartment uses, as the minimum separation is less than that prescribed within the RFDC.

Wind

Preliminary wind test analysis has determined that the Concept Proposal does not generate significant wind microclimate issues around the ground level. Further detail found within the [WIND REPORT] prepared by CPP for SSDA 5.

The wind conditions were typically comfortable for walking or standing around the SW perimeter. Provisions of fixed canopies and retail tenant awnings and canopies will further address these issues at ground level and achieve attractive, viable dining and retailing opportunities.

At the landscaped podium levels, some amenities were relocated to avoid placement between SW1 and SW3 towers which under certain wind conditions created an unpleasant environment.

There has been identified the potential for wind issues on some of corner balconies of the tower, however these will be mitigated by the use of 1800 high screens as required.

Stormwater culverts

Sydney Water has significant stormwater culverts running along the western and eastern edges of the existing multi-storey car park. Avoiding building above these culverts was a stakeholder requirement. On the western edge of The Haymarket Square this has resulted in the built edge being set back from the street alignment.

Along the eastern edge of the SW Plot the alignment of the new boulevard and the culvert alignment do not correlate. As a result the stormwater culvert passes under the most north eastern corner of the SW Plot. Structure will need to be offset and to span the culvert and the building line set back at ground level to minimise impacts should future access be required.

DESIGN CONCEPT

DESIGN CONCEPT

The Haymarket presents an opportunity to establish a new Sydney address at close quarters to vibrant Darling Harbour and with convenient access to the CBD and tertiary institutions. Rich in character and diversity, the precinct will become a dynamic new quarter, contributing to the appeal of the wider Haymarket area. The SW Plot will be the first stage in realising this regeneration.

Design brief

The SW Plot has been developed in conjunction with Lend Lease as a new mixed use, high density residential project. As well as developing an architectural and urban response, the design must also be commercially viable. Key principles include:

- efficient floor plates to reduce bulk in towers and podiums;
- a stage-able design;
- the delivery of 500 - 550 apartments;
- a 4 star Green Star rating;
- each building to have a clear identity and individuality;
- the creation of a strong entry statement for residential lobbies;
- the provision of an offer of different apartment types, low, mid- and high-rise with local square and water views in different sized buildings; and
- the provision of a combination of retail and potential IQ incubator hub uses to complement residential living.

Design description

The SW Plot consists of 2 residential towers and a low-rise residential building sitting over a 5 level podium housing a residential building and car park.

Retail and potential IQ incubator hub uses and residential lobbies occupy the perimeter of the podium building at ground floor level.

The residential towers are 25 and 40 storeys high and hold the street edges of the podium form, whilst the low rise 7 storey building flanks Haymarket Square.

The towers contain a mix of studio, 1, 2, and 3 bedroom apartments and the low-rise building provides a mix of 1 and 2 bedroom apartments.

The podium apartments, which house studio, 1 and 2 bedroom apartments, wrap the perimeter of the podium car park.

Apartments range in size from 40m² for studios, 50-60m² for 1 bed, 75-85m² for 2 beds and 110 - 130m² for 3 beds.

A verdant garden sits above the podium. Balancing respite and amenity, the landscape includes shared facilities such as a pool, BBQ area, seating areas, outdoor gym and lawn.

A mix of studio, 1 and 2 bed apartments and architectural screened elements are used to wrap the car park podium. The apartments will provide surveillance of the public domain and streets surrounding the SW Plot, and the car park screens add a visually interesting aesthetic when viewed from the ground plane.



South West Plot viewed from east



Proposal within maximum building envelopes



Note: In the images above the built form of the SW proposal is shown within the maximum building envelope within the SSDA 2 Parameter Plans. The podium grid sits outside of this envelope within the 500mm articulation zone reserved for architectural expression.

Massing + built form

The massing of the two towers SW1 and SW3 typically holds the edge of the site on Darling Drive and Hay Street. The podium holds and reinforces the street edge on these alignments. The articulation of the tower forms provides a setback from the podium and creates a distinct separation between the podium, set in the street scale, and the towers, set in the city scale.

- The massing and articulation of the towers maximises outlook and views and responds to the geometry contained in the Haymarket Concept Proposal with regard to solar orientation and visual separation.
- The two towers, SW1 and SW3, sit above the podium at the perimeter of the site and create a unique and recognisable signature for the city skyline. They are separated by 18 metres to minimise overlooking and respect view corridors across the site.
- SW2 building sits to the south of The Boulevard and holds the western edge of Haymarket Square. Its lower built form responds to its proximity to the square.
- The podium block is a 5 storey gridded form that floats above a retail ground plane.
- The articulation of the tower apartments is contained within built form devices that seek to control and order this arrangement.
- Residential accommodation has been introduced to the street side face of the tower cores. As a result, a portion of the SW1 tower, on axis with Macarthur Street, has been expressed and projects beyond the Parameter Plan maximum building envelope established in SSDA 2. Refer overleaf for more detail.
- In the case of SW1, the rigour is provided by a gridded framework; SW3 is controlled by a square frame that wraps and contains a series of expressed spandrel bands.

DESIGN CONCEPT

Parameter Plan amendment

During concept design, additional apartments were introduced to sleeve the tower cores. This presented a more articulate and visually interesting elevation when looking out accross the site from the south or west.

On SW3 the tower form was moved northwards to accumulate the increased depth in plan and maintain the street alignment along Hay Street - an important visual connection adjacent heritage buildings. This increase in volume still sits within the Parameter Plan maximum building envelope.

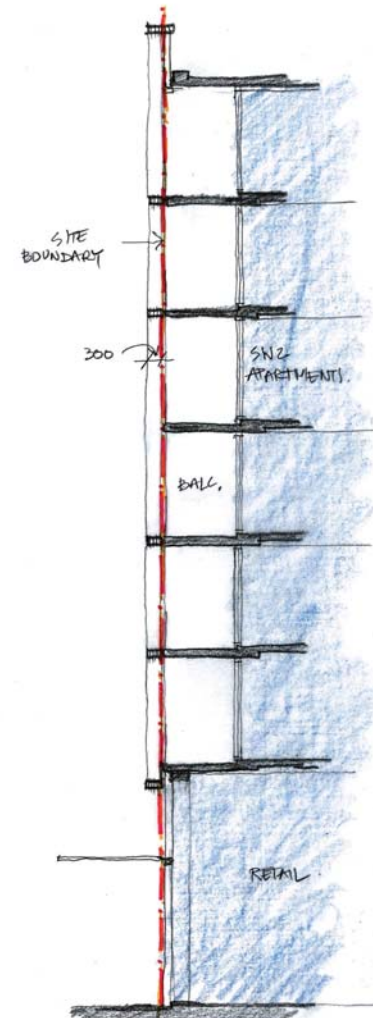
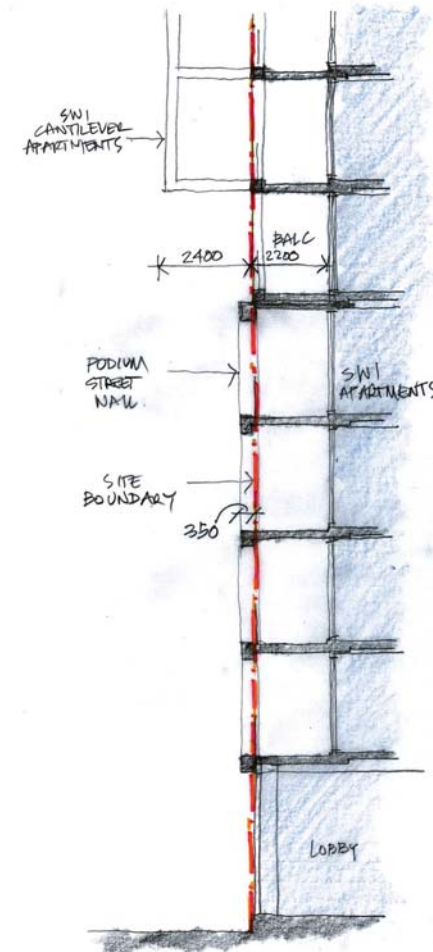
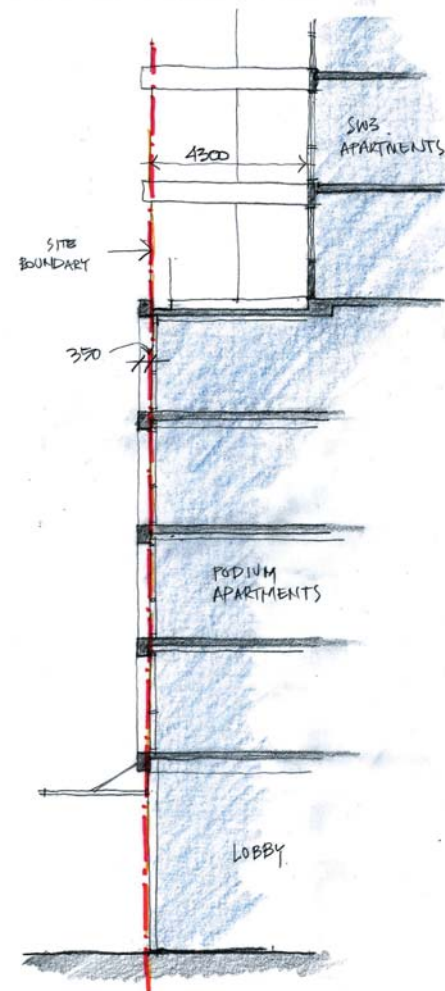
Along Darling Drive the building face has already been set back from the existing street alignment to avoid building over the existing stormwater culverts. With the introduction of a new apartment onto the western facade of SW1, to move the tower further eastward to accomodate the deeper plan form would have impacted the minumum building separation. Therefore the new unit cantilevers out from the tower form by 2.4m.

By maintaining a clear physical separation from the podium streetwall - as discussed overleaf - this projecting bay provides visual relief and interest when viewed down Darling Drive. This projecting bay sits on axis with the key Macarthur Street alignment. This allows the design to address one of the Design Reveiw Panel's comments that the expression of the building respond to this axis and it's change in course. Whilst broaching the Parameter Plot boundry the increased depth of the SW1 tower is 23.5m at its widest point; including balconies, which is still less than the maximum building envelope proposed building depth.

The design team believes that the positives of providing inhabited accommodation instead of a blank core wall on this highly visible elevation, creating a more positive urban design outcome, response to context, and attractive facade, outweighs the limited breach of the Parameter Plan boundary.

Given the low visibility of this elevation, the fact that it has a minimal overshadowing impact on adjoining properties and does not project beyond the street alignment of adjacent Darling Drive, it is hoped that this breach can be approved by the authorities.





Articulation Zone

The Concept Proposal Parameter Plans in SSDA 2 reserved a 500mm articulation zone for architectural expression. This allows flexibility in design development to accommodate sills, shading devices or other elements within the building envelope, but excludes habitable space.

Within the the SW podium design response for the 'portal' architectural ordering devices such as 'plates' and 'super grids' have utilised this zone to create depth and articulation on the facades and a strong architectural reading without compromising the commercial factors.

The adjacent sections highlight these features on each building relative to the plot boundary/ Parameter Plan line.

Re-entrant

The Design Guidelines advocated a strategy where the towers held the street edge and were not set back. A physical separation to distinguish between the tower and the podium 'streetwall' was proposed to address townscape issues.

On SW3 the form of the tower has been set back at the edges by notionally 4m to leave a 12m zone flush with the podium.

On SW1 the tower holds the podium edge and a central section cantilevers over the podium. This has been offset by a storey to reflect the notional re-entrant.

All tower elevations are set back 500mm from the podium face and a change in materiality and architectural expression reinforces the difference between these forms.

DESIGN CONCEPT

Edges + activation

Ground Plane + 'Street Wall'

- Activation of the street edges at ground plane is provided by a variety of retail uses including convenience, food and beverage, lifestyle.
- Residential lobbies for the apartment towers also provide activation and anchor key corners of the site.
- The podium provides a street wall that holds the city street pattern and responds to the character and scale of its context.
- Clean and simple facades maximise visual connectivity into each residential lobby. Material, signage and canopy design will reinforce each residential address.
- Perimeter canopies provide weather and wind protection and a sense of human scale and visual continuity.
- The podium includes some residential apartments to activate the street wall, hide the car park and provide a degree of passive surveillance for the adjacent streets below.



Hay Street edge



The Boulevard edge



Street edge activation



Dickson's Lane edge



Darling Drive edge

DESIGN CONCEPT

Accessibility

The levels on the site are largely dictated by the requirement to locate habitable zones above predicted S/W overland flow levels. This results in RL+3.6m – typically 900 – 1200mm above the actual ground level (refer Hyder Consulting's Flood and Stormwater prepared for SSDA 2).

Accessibility, visibility and viability of retail, and street activation are impacted by this change in level at the building perimeter.

The Concept Proposal sought to raise the public domain around the site to allow at grade access. Where this is not possible, the level changes occur behind the envelope line, becoming an opportunity to create visual interest and spatial definition such as within the residential lobbies. Ramps, platforms, and/or lifts ensure accessibility to all parts of the building for residents and visitors and comply with building standards. An accessibility statement has been prepared by Morris Goding Access Consultants and accompanies this submission.

Retail

Setting back retail to create grade transition zones and locating retail units above ground level significantly impacts the commercial viability of the retail and undermines the Design Guidelines objectives to activate the street edge. Along Dickson's Lane the limited plan depth and lane width prevents localised level change. Instead, the levels have been graded up to the ground level datum.

Through this Development Application, the design seeks approval to deliver the retail at ground level along The Boulevard, which functions as the primary overland flow path where these levels cannot be raised. Instead they run below the recommended flood protection datum. Through consultation with hydraulic engineers and Lend Lease, these retail units will be designed so that assets are located above the flood datum, and reinforced shopfront and entry doors will be specified to resist flood water. Fittings and finishes will be required to be suitably robust to allow easy cleaning, and an escape to a safe refuge above the flood datum is provided.

There are some precedents for addressing similar retail installations within flood risk areas of Sydney. The details will be subject to subsequent detailed applications submitted by the retail tenants. All other retail along Dickson's Lane, the potential IQ incubator hub, residential lobbies and back of house/services areas will be located above the flood datum.

This strategy is supported by a Retail Flood Strategy prepared by Lend Lease (Appendix D) and a Flood Strategy Letter prepared by the Flood Solutions Advisory Group (Appendix E) included within this report.

Retail frontages

Retail frontages are subject to detailed Development Applications to be submitted subsequently to this submission. Retail design guidelines have been prepared by Six Degrees Architects in consultation with the design team and are included within this Development Application. This will inform the treatment to shopfronts, retail signage and the canopies/ awnings.



Indicative retail edge to laneway

DESIGN CONCEPT



View on corner of Dickson's Lane and The Boulevard

DESIGN CONCEPT



SW3 Tower Lobby on corner of Hay Street and The Boulevard

Residential address

The residential use of the SW Plot will generate significant footfall across the site, particularly during the initial stages. The tower lobbies have been strategically located on the key corners of the building, taking advantage of the prestigious new addresses. The SW1 lobby sits on the Darling Drive/Dickson's Lane corner. The SW3 lobby sits on the corner of Hay Street and shares The Boulevard with the SW2 lobby, providing a visual connection between the two. The SW1 lobby has a direct line of sight to the proposed new lobby within the adjacent student accommodation block on Darling Drive.

Residential lobbies sit adjacent the retail shopfronts. A predominantly glazed facade wraps the generous volume of the lobby and maximises visual connection. The lobbies will make a dramatic 'lantern' effect on the corner when approached during the evening. Level changes within the lobbies will ensure furniture and sensitive plant or equipment is located above the stormwater flood datum.

The minimal (transparent) glazed frontage will be in contrast to the retail treatments. Subtle variation and cues will further differentiate the residential address from the retail uses, such as changes to the colouring to the underside of the street canopy.

Signage zones for building identification have been identified on the elevations. Final content and style of the sign will be submitted for approval to the Director General prior to commencement of the relevant works.

DESIGN CONCEPT

Architectural Expression + Articulation

Philosophy

The built form of the SW Plot needs to accommodate a variety of uses at the lower levels and address the diverse mix of balconies and fenestration typical of residential buildings. The architectural expression needs to respond to both the micro (at street level) and apartment scales, present a composition that is readable when viewed from afar and make a unique insertion within the local skyline. As per the UDPRG, each tower should be unique and readily distinguishable from the other.

Architectural ordering devices have been adopted with strong geometry that visually ties together the random forms, articulation, fenestration and uses of each part of the building. A slightly unique treatment provides visual difference whilst still maintaining a degree of standardisation in the apartment design.

Street wall

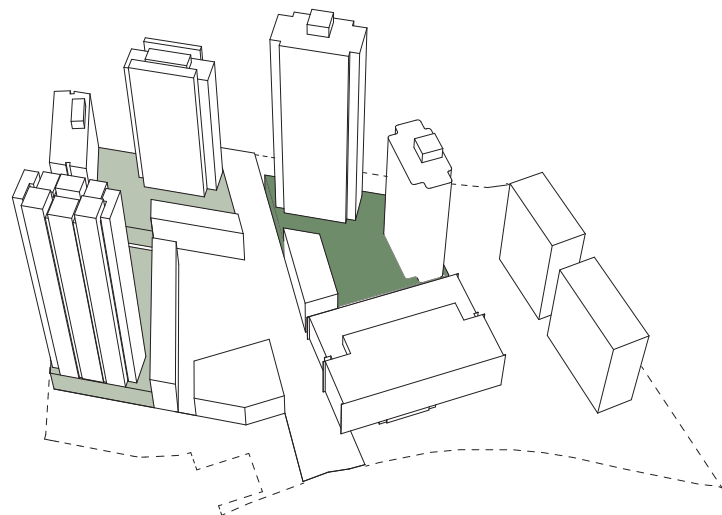
The Concept Proposal advocates a massing strategy whereby the built form holds the street line, and is not set back. It advocates re-entrants that provide a physical setback to delineate between the towers and the urban block to ensure clarity of the street wall.

The SW Plot tower design has adopted a far greater articulated tower footprint which sees the majority of the tower elevation set back from the podium edge. This outcome will reinforce the visual clarity of the podium and towers but also help to improve local micro-climate at the ground level.

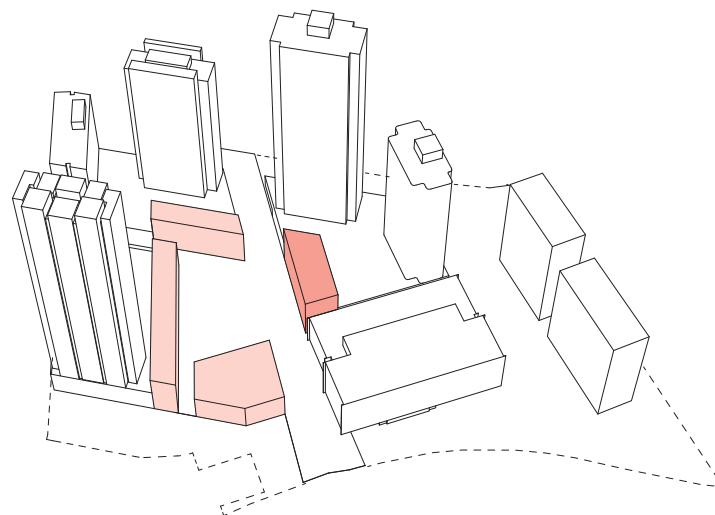
Urban Jigsaw

The diverse architectural treatment and materials adopted within the SW Plot relate to the wider context of the Concept Proposal. The podium treatment is consistent with the scale and expression of the other podia, SW2 relates to a square edge architecture, and the 2 towers relate to a composition of 4.

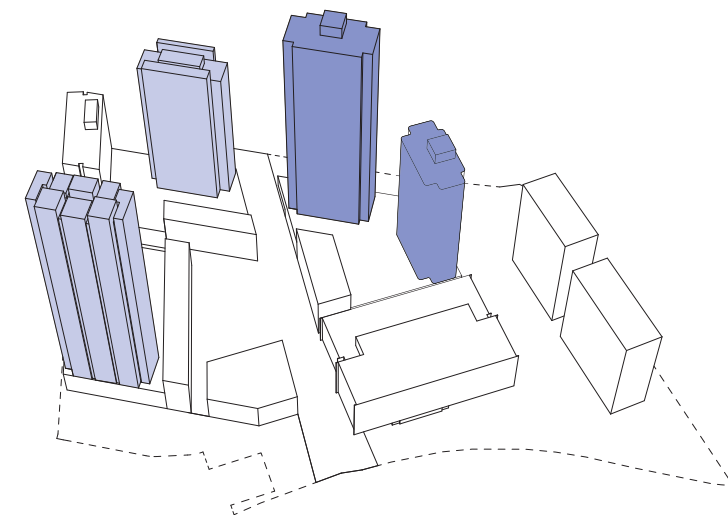
Pieces of the urban jigsaw



Urban blocks

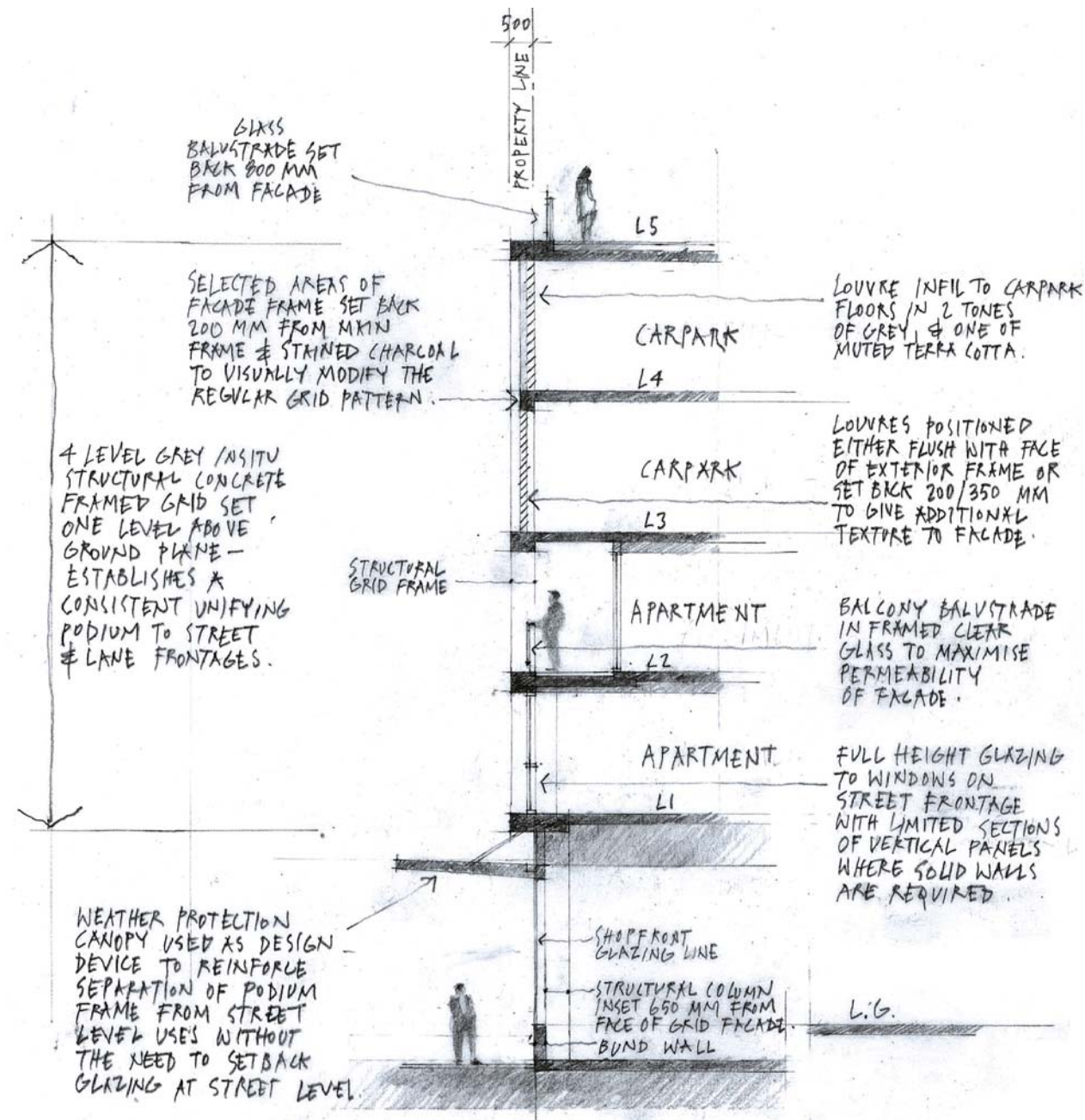


Square edge



Towers

DESIGN CONCEPT



Podium Street Facade - Typical Conditions

Podium (excluding SW2)

The podium is 5 storeys and contains retail at the ground floor and 4 levels of apartments and car park above. The podium roof is landscaped to provide accessible outdoor amenity to all apartments.

The podium elevational treatment is an expressed concrete grid with the vertical elements modulating to suit the apartment layouts.

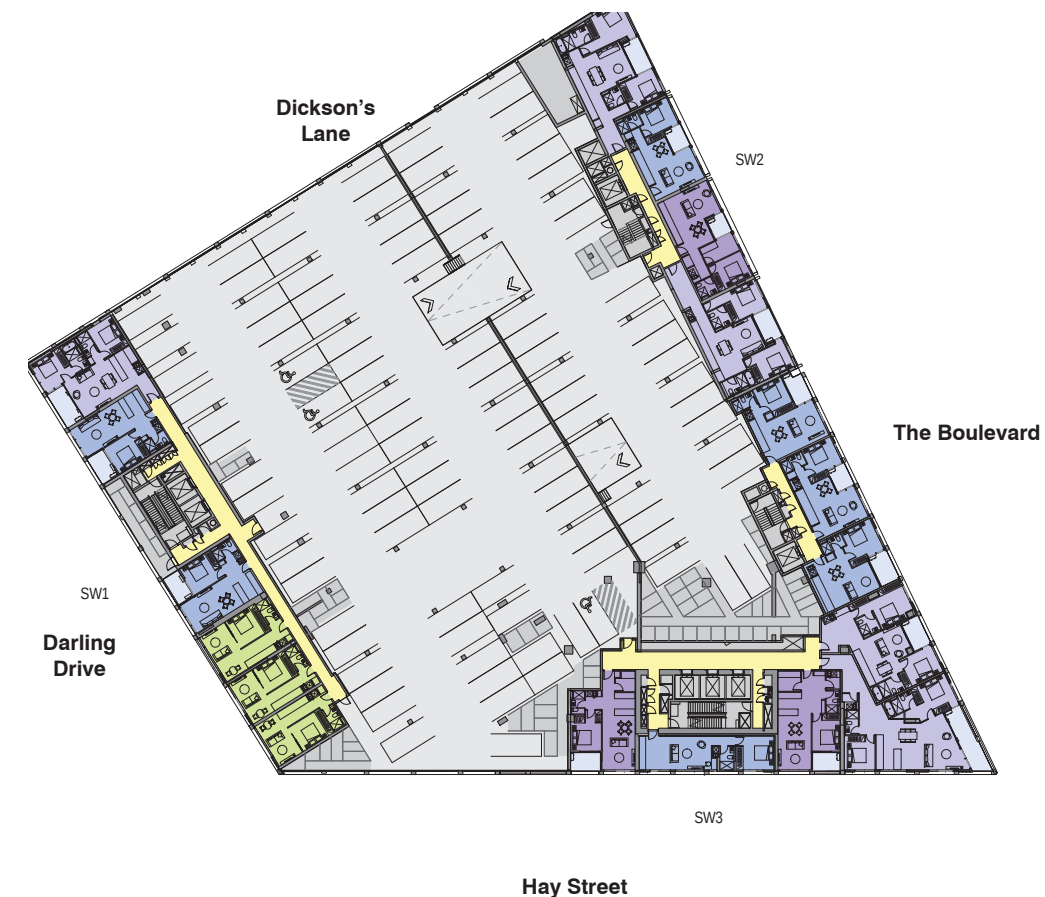
Infill to the grid comprises full height glazing, solid panels, and vertical and horizontal slats at car park locations.

Balconies are inset into the grid framework with glazed balustrades.

Car park ventilation to meet the sustainability brief for a naturally ventilated car park has been provided along the Dickson's Lane elevation. This elevation is deemed to have too poor of a natural amenity, outlook and visual privacy relative to the NW Plot commercial uses. A small portion of south facing Hay Street also provides car park ventilation.

These exposed car park elevations are designed to avoid perceiving that there is car park use beyond.

Horizontal and vertical blades sit within the podium grid and screen the car park, set at different depths and coloured to match the solid residential wall panels to provide visual interest.



Typical Podium Plan

DESIGN CONCEPT



View on Hay Street and The Boulevard corner



Hay Street view looking west

DESIGN CONCEPT

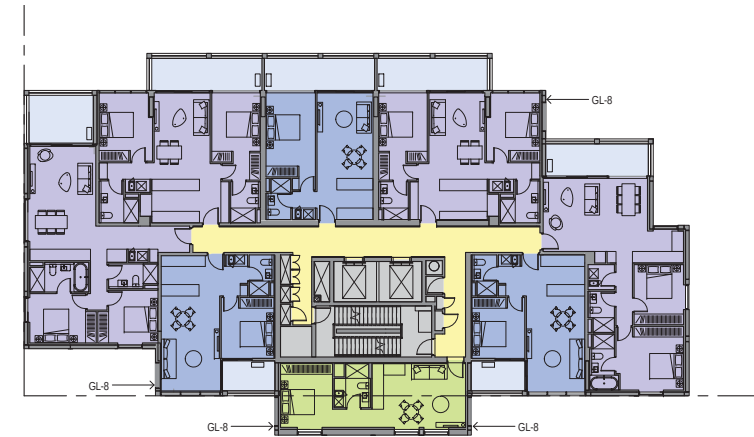
SW1 Tower

SW1 is a 25 storey tower with 8 apartments per floor and a central core. The tower is wrapped in a 300 x 300mm charcoal gridded frame to provide rigour and bring order into the articulation of the apartment forms.

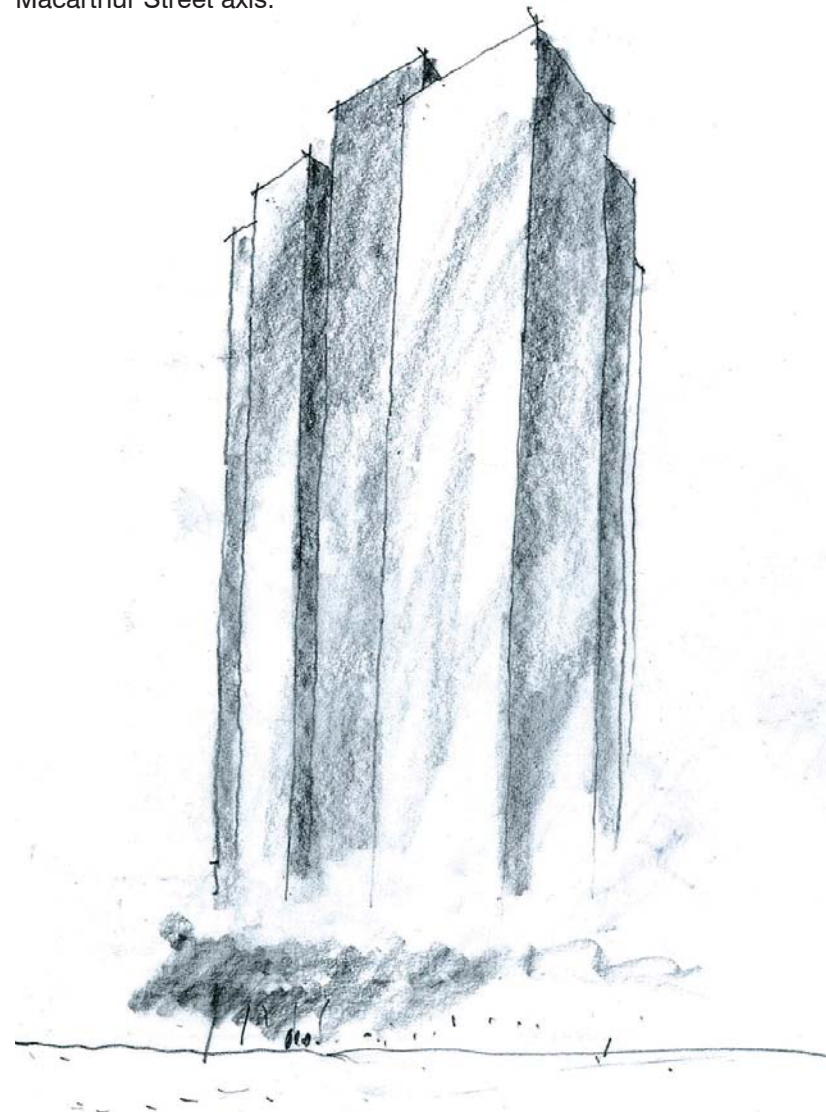
The infill to the grid comprises a mix of precast concrete and glazed panels. At the balconies the grid manifests itself as an expressed frame and in the apartment walls it is set flush with facade panels. The grid is typically darker than the precast concrete panels with randomly placed white strips to add a further level of detail and enliven each vertical volume.

The architectural treatment extends up to a raised parapet and engages with the lift overrun rooftop plant. This produces a crenellated top and provides a more interesting top of tower silhouette.

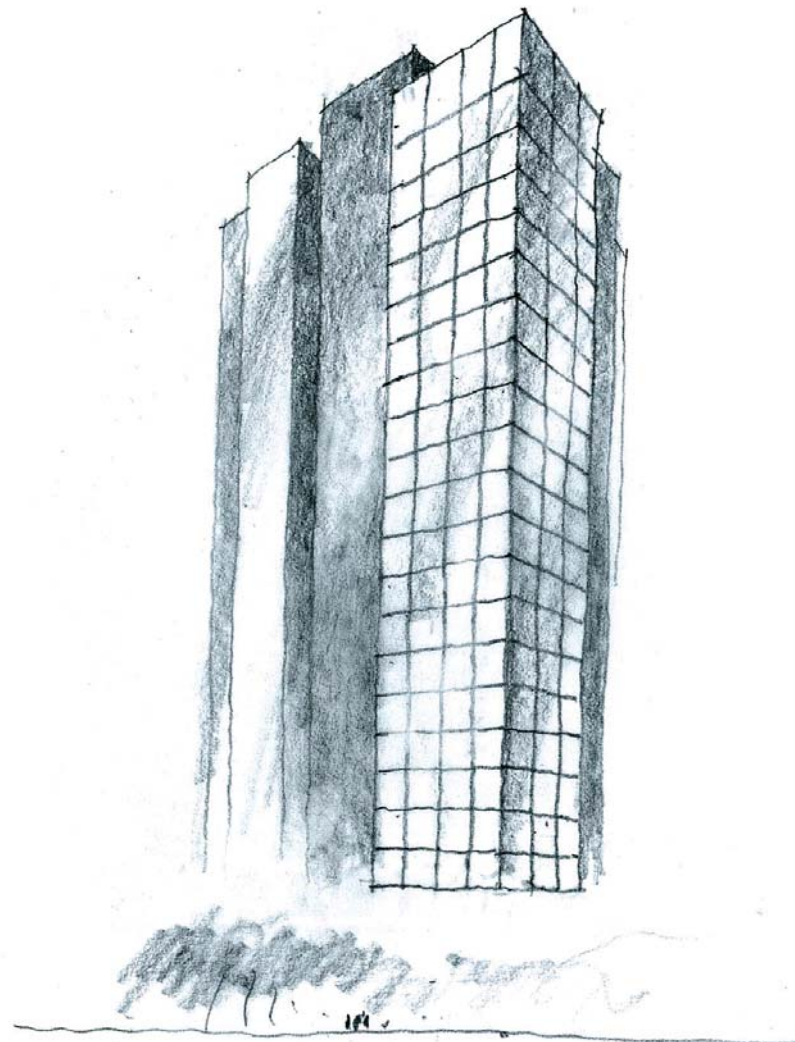
A projecting bay along the western facade responds to the Macarthur Street axis.



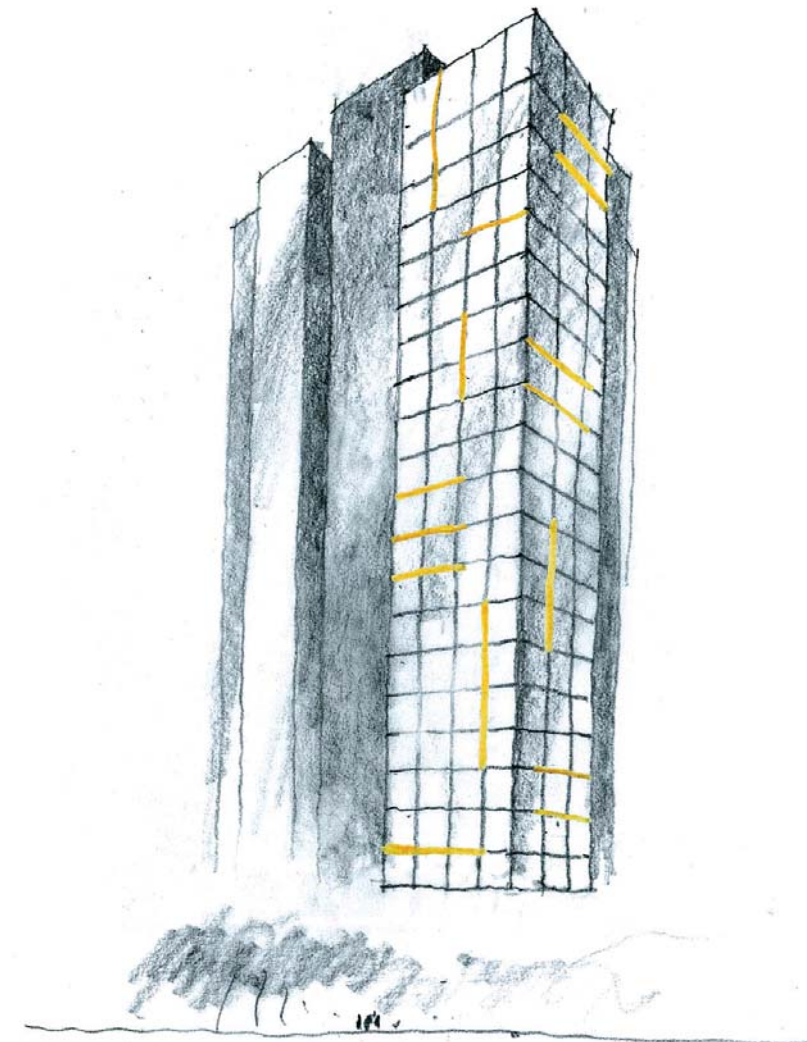
Typical Tower Plan



Building massing - irregular plan form responding to site location, outlook + separation distances



Articulate each vertical volume with a strongly defined rectilinear grid



Colour random vertical and horizontal frame members to enliven and distinguish each vertical volume

DESIGN CONCEPT



SW1 Tower viewed from east



SW1 Tower viewed from south west on Darling Drive

DESIGN CONCEPT

SW2 Low-Rise on Haymarket Square

SW2 is a 7 storey low-rise block with 4 apartments per level on a single loaded plan allowing cross ventilation to the end apartments. Completing the western edge to Haymarket Square, it floats above the ground level retail and is articulated into 4 blocks of 6 stories.

These 4 blocks are contained within a perimeter timber frame as a reference to the early wharf treatment at Darling Harbour. The bays within this framework are infilled with full height glazing and vertical timber battens, and yellow cruciform accents. Apartment balconies are inset into this grid to provide further articulation.

The retail food and beverage units and car park exhaust plant is located on the rooftop, contained within a linear enclosure. A raised parapet reduces the visual impact when viewed from the square. The plant enclosure roof is screened by vertical blades minimising the visual impact when overlooked by the other two residential towers.



Precedent images



Reference images



Typical Floor Plan



SW2 viewed from Haymarket Square

DESIGN CONCEPT

SW3 Tower

The SW3 tower is the signature tower within The Haymarket. SW3 is a 40 storey tower with 9 apartments per typical floor and a central core. The tower is wrapped in a hoop band, punctuated by windows and yellow highlight features on the east and west gable walls.

The tower appears to float above the podium grid reinforced by the verticality of form and the setback of the core and end apartments.

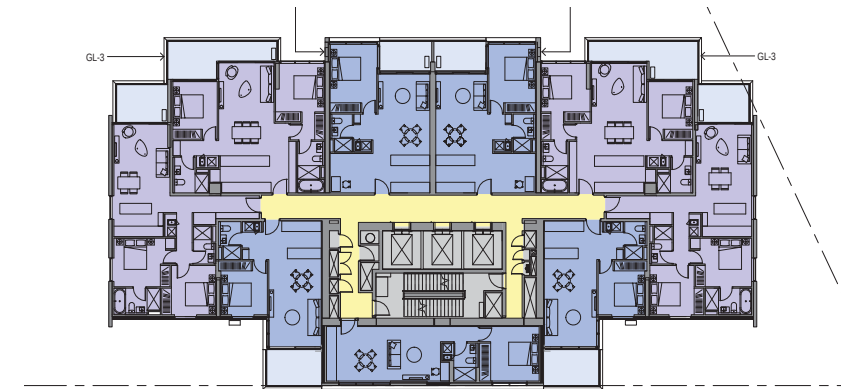
The articulation of the north and south facades adopts a horizontal banding – a series of ‘plates’ – represented in white and charcoal. Initially these ‘plates’ were more uniform along the northern façade where they formed a spandrel along a continuous balcony zone. On the southern façade there were two narrower ‘plates’ either side of the core which achieved a more vertical expression.

As the concept developed, a more articulate and vertical reading was sought for the north elevation. Breaks have been introduced

into the continuous balcony ‘plates’ and projecting rooms/ winter gardens expressed as vertical glazed columns. The central balcony spandrel ‘plates’ between these glazed faces changes to charcoal to give a more muted appearance.

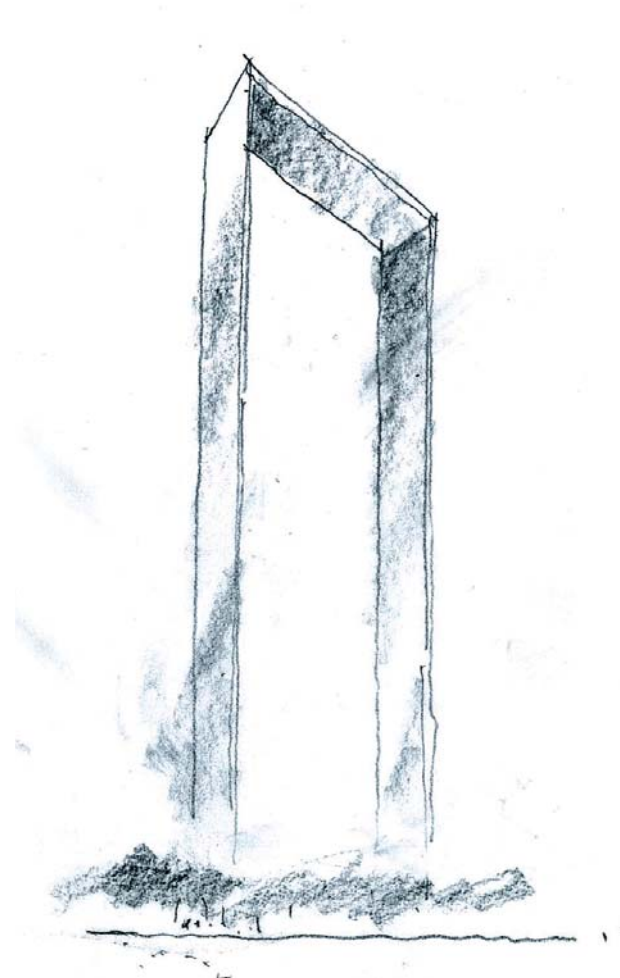
Similarly the introduction of an apartment onto the southern face of the core introduces more active fenestration. The balconies have been located to align with the projecting apartment to create a single volume around which a white spandrel is wrapped; similar in expression to the north elevation.

Where there is no projecting spandrel ‘plate’, a flush charcoal band continues the horizontal datum across the elevation. This subtle variation is only visible when viewed up close, providing a point of difference when viewed at the local scale and does not compete with the interplay of dark and light forms when viewed from afar.

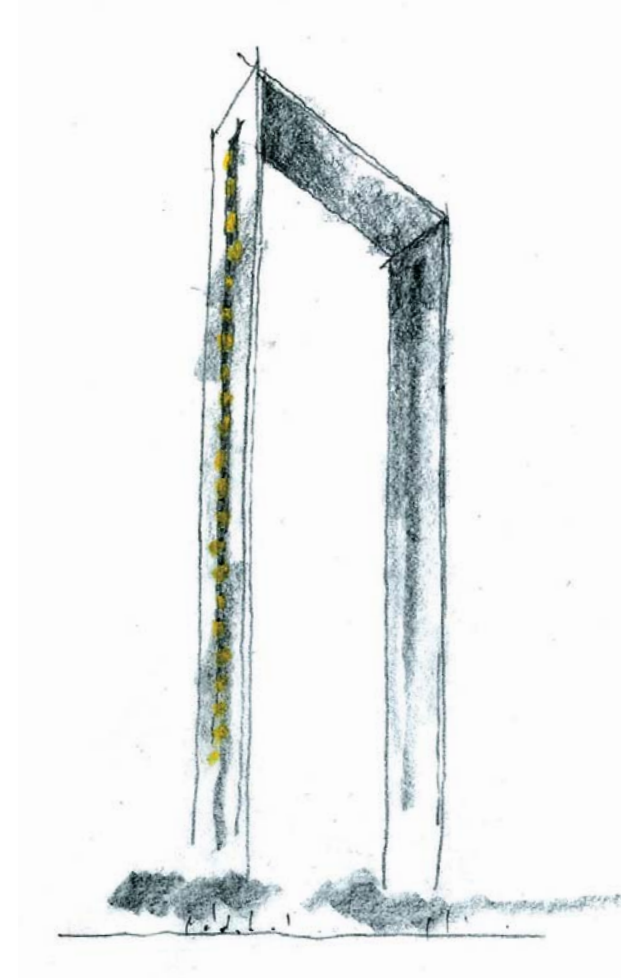


Typical Floor Plan

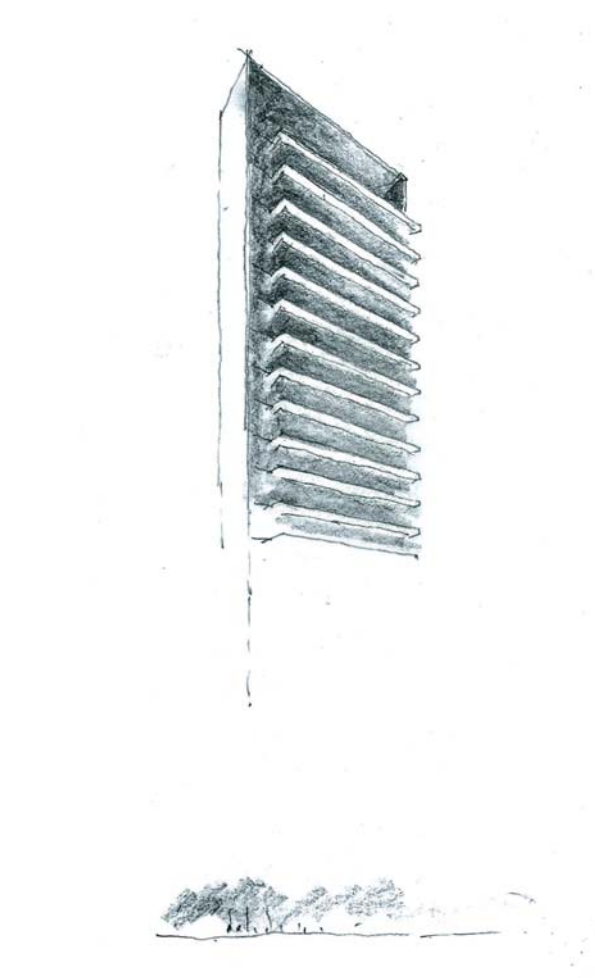
Initial Design Concept



Sliver/ white hoop



Articulate faces with colour inlay between central window slot



Projecting balconies contained within hoop

DESIGN CONCEPT

Design evolution

The design of the northern elevation has been developed to introduce a more vertical, colourful and articulate reading.

The continuous balcony is broken, and a contrasting colour reduces the visual impact of the central section. Amalgamated with the projecting glazed fenestration band running the length of the tower, makes a central feature in the tower facade. This expression is broken down every five floors, emulating the design of the gable walls but at a grander scale.



SW3 previous design viewed from east

DESIGN CONCEPT

Materiality

Design intent

The SW Plot is at a transitional point for many issues including materiality. The PPP facilities of the SICEEP are of bold colour and architectural expression to create a unique and instantly recognisable architectural statement; the Sydney postcard of the future. The Haymarket precinct harks back to the formative European colonial history. The architecture is predominantly of brick Victorian industrial former wharf and market building typologies.

Architecturally, the various buildings respond to this diverse context. The podium adopts a solid, repetitive and highly articulated form, as discussed in the previous pages. The infill borrows from the Haymarket and reinterprets the brick buildings. Solid panels within the podium grid infill are textured and patterned in scale with the brick materiality. These are coloured in a range of greys and terracotta to pick up on the diverse patina of brick around the site. The use of these panels is replicated as the treatment to the hob walls and solid elements of plant at the ground plane. Other elements, such as the car park screen elements also adopt a similar palette of colours with the horizontal blades scaled to emulate vertical and horizontal courses of brickwork. However, towers address the skyline and see the adjacent towers and other large forms as their context. The materiality of the SW2 block is an entirely new representation to provide a unique setting for the proposed new square. The timber expression is reflective of the former maritime past.

Application

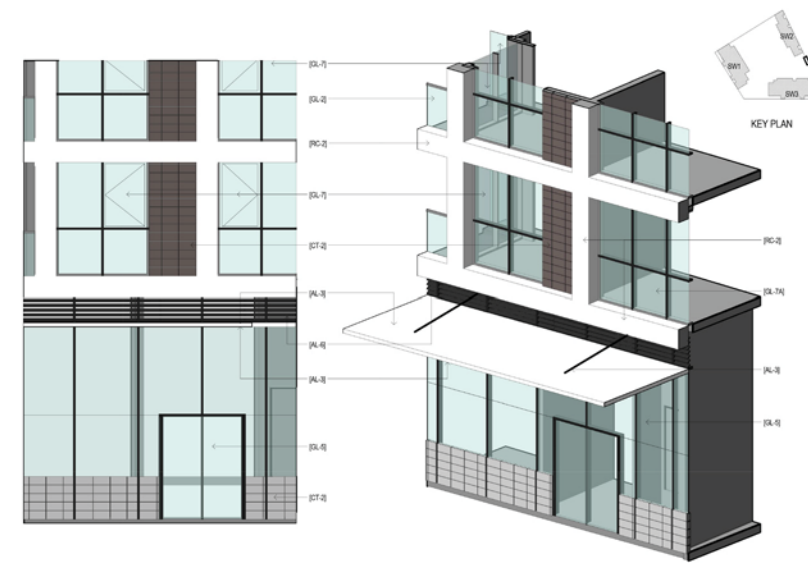
The podium is constructed of an expressed concrete grid frame with infill panels of glazing, painted precast in shades of terracotta, grey and charcoal, vertical slats, and horizontal and vertical metal louvres to car park elevations.

SW1 tower is constructed of precast panels and edge beams with concrete vertical grid columns. The grid frame is painted onto the precast panels. White painted horizontal and vertical sticks add another layer of articulation and highlight the grid.

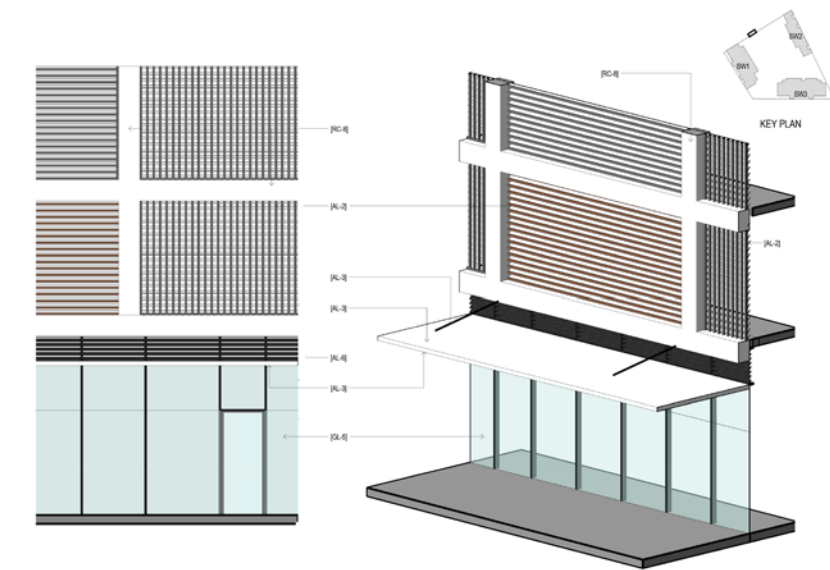
SW2 building is a timber framed block with infills of glazing, vertical timber slats and highlight yellow cruciform composite panels. The sides and rear of the building are of textured precast concrete with a stain finish to represent weathered timber.

SW3 tower is constructed of a precast concrete frame with highlighted painted yellow panels. The horizontal spandrel is white precast concrete with metal framed clear glazing on top. Further light and dark banding provides a subtle differentiation to the solid facades at the microscale but are lost when viewed from afar.

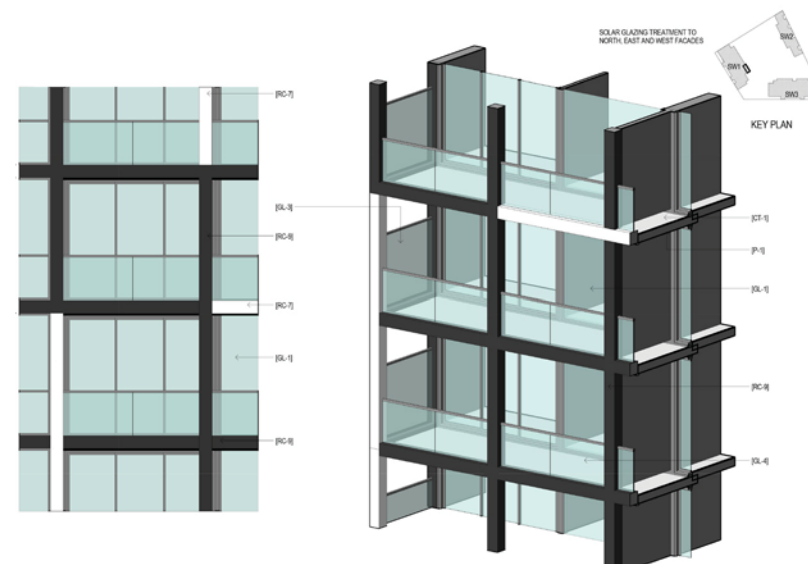
Refer to the Bay Studies included within the planning drawing set for more detail.



Podium facade materials



Podium facade materials



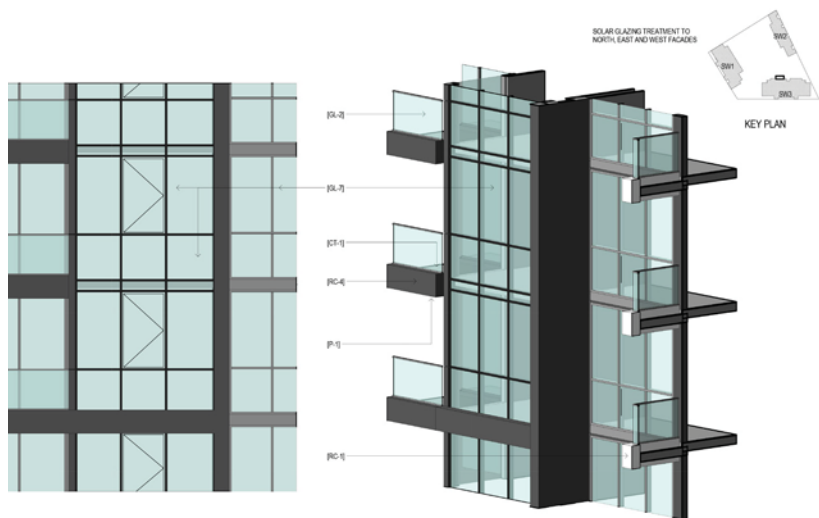
SW1 Tower facade materials



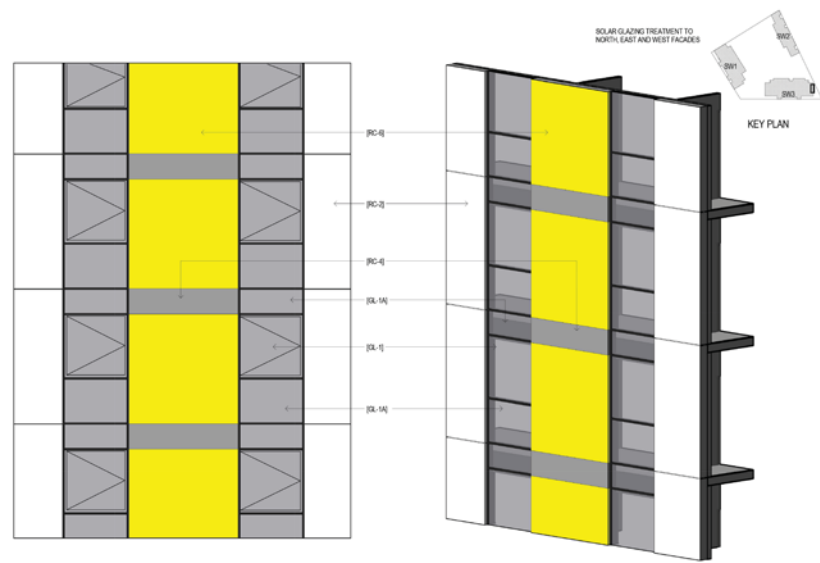
SW1 Tower facade materials



SW2 facade materials



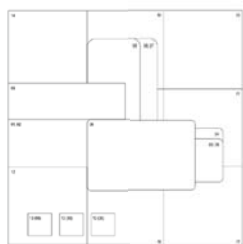
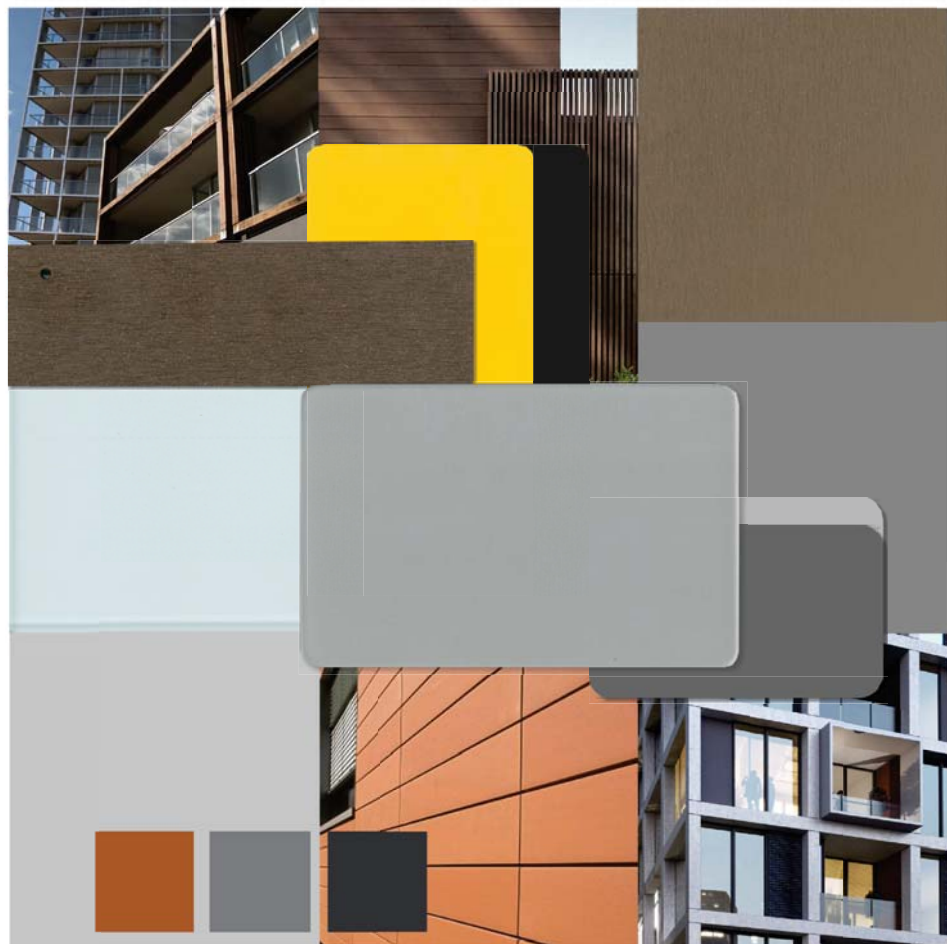
SW3 Tower facade materials



SW3 Tower facade materials

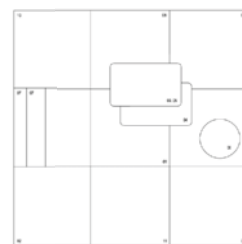
DESIGN CONCEPT

PODIUM & SW2 BLOCK
EXTERNAL FINISHES



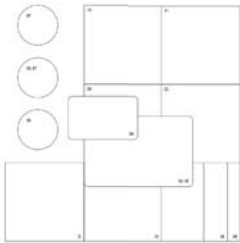
- 01. CLEAR WINDOW GLAZING & BALCONY BALUSTRADES
- 02. CLEAR RETAIL SHOP FRONT GLAZING
- 03. ALUMINIUM WINDOW FRAMES, MID GREY
- 04. ALUMINIUM BALUSTRADE FRAMES, LIGHT GREY
- 05. COMPOSITE ALUMINIUM CLADDING, YELLOW & CHARCOAL
- 06. COMPOSITE ALUMINIUM CLAD CANOPY, LIGHT GREY & DARK GREY SUPPORT RODS
- 07. ALUMINIUM LOUVRE, CHARCOAL
- 08. HORIZONTAL & VERTICAL ALUMINIUM BLADES, RANGE OF COLOURS TO MATCH THOSE OF PRECAST SAMPLES (13)
- 09. TIMBERFRAME WITH VERTICAL TIMBER SLATS
- 10. PRECAST CONCRETE WALLS, PAINT/ STAIN TO MATCH TIMBER
- 11. EXPRESSED GRID (CONCRETE WITH SKIM COAT), LIGHT GREY PAINT
- 12. COMPRESSED CEMENT SHEET, MID GREY PAINT
- 13. PATTERNED PRECAST, GREY, CHARCOAL & TERRACOTTA PAINT
- 14. PRECEDENT IMAGE OF TIMBER PORTAL FRAME
- 15. PRECEDENT IMAGE OF VERTICAL TIMBER SLATS
- 16. PRECEDENT IMAGE OF TERRACOTTA TILES (FOR COLOUR)
- 17. PRECEDENT IMAGE OF EXPRESSED CONCRETE GRID

SW1 TOWER
EXTERNAL FINISHES



- 01. GREY TINTED WINDOW GLAZING
- 02. CLEAR GLASS BALCONY BALUSTRADES
- 03. ALUMINIUM WINDOW FRAMES, MID GREY
- 04. ALUMINIUM BALUSTRADE FRAMES, LIGHT GREY
- 05. ALUMINIUM LOUVRES TO ROOF, MID GREY
- 06. PRECAST CONCRETE, GREY PAINT/STAIN
- 07. EXPRESSED GRID (CONCRETE & GRC), CHARCOAL & WHITE PAINT
- 08. BALCONY SOFFITS, GREY TEXTURED PAINT
- 09. PRECEDENT IMAGE OF PAINTED PRECAST CONCRETE
- 10. PRECEDENT IMAGE OF PRECAST CONCRETE PANELS (PANELISATION ONLY)
- 11. PRECEDENT IMAGE OF WINDOW GLAZING WITHIN GRID

SW3 TOWER
EXTERNAL FINISHES



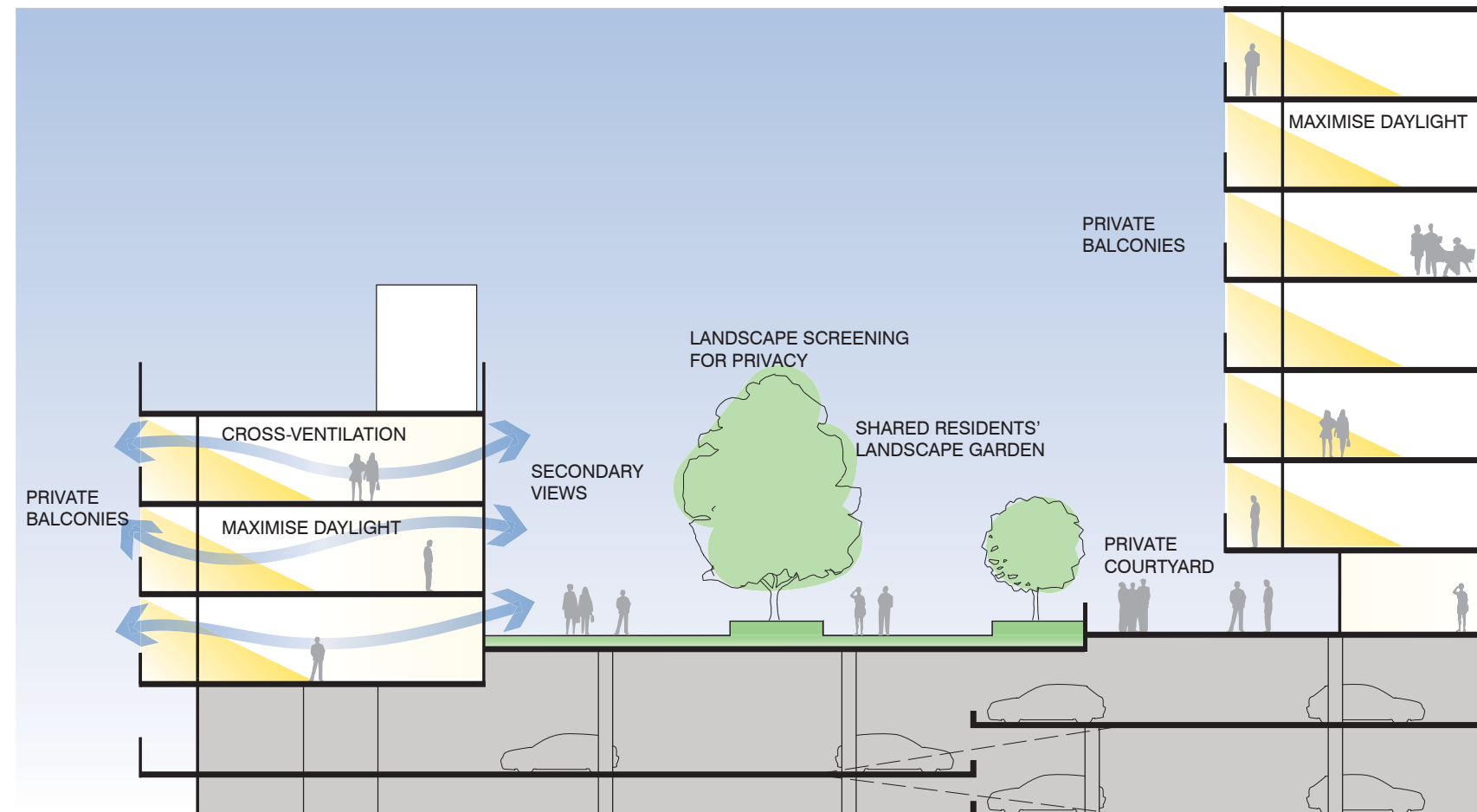
- 01. GREY TINTED WINDOW GLAZING
- 02. CLEAR WINDOW GLAZING & BALCONY BALUSTRADES
- 03. ALUMINIUM WINDOW FRAMES, MID GREY
- 04. ALUMINIUM BALUSTRADE FRAMES, LIGHT GREY
- 05. ALUMINIUM LOUVRES TO ROOF, MID GREY
- 06. PRECAST CONCRETE BALCONY SPANDREL; WHITE PAINT & CHARCOAL PAINT/STAIN
- 07. PRECAST CONCRETE; LIGHT GREY & MID GREY PAINT/STAIN
- 08. PRECAST CONCRETE HIGHLIGHT FEATURE, MID GREY & YELLOW PAINT
- 09. BALCONY SOFFITS, GREY PAINT
- 10. PRECEDENT IMAGE OF PRECAST CONCRETE PANELS (PANELISATION ONLY)
- 11. PRECEDENT IMAGE OF YELLOW HIGHLIGHT PANEL
- 12. PRECEDENT IMAGE OF WINDOW GLAZING

DESIGN CONCEPT

Exterior Finishes Schedule

Proposed Finish Type	
Reference	Description
AL-1	Aluminium cladding and louvres; grey
AL-2	Aluminium horizontal and vertical blades; muted terracotta, grey and charcoal
AL-3	Composite aluminium clad canopy; Light grey colour, dark grey colour support rods
AL-4	Composite aluminium cladding; yellow
AL-5	Composite aluminium cladding; charcoal
AL-6	Aluminium louvre; charcoal
CFC-1	Paint finish on compressed cement sheet cladding; grey
CT-1	Ceramic floor tiles
CT-2	Paint finish on patterned pre-cast; terracotta, grey and charcoal
GL-1	Aluminium glazing system; grey tinted glazing with low E coating and mid-grey frame
GL-1A	Aluminium insulated glazing spandrel system; colour matched to grey tint glazing and mid-grey frame
GL-2	Metal framed glazed balustrade system; clear glass and light grey frame
GL-3	1800 high privacy screen
GL-4	Metal framed balustrade system; clear glass, 80% external light grey frit and light grey frame or flush mounted aluminium panel in metal frame; flat, high grey
GL-5	Aluminium glazing system; clear glazing and mid-grey frame Retail shop fronts subject to separate development applications by retail tenant
GL-6	Glazed balustrade system; clear glass and stainless steel handrail/ fixings
GL-7	Aluminium glazing system; clear glazing with low E coating and mid-grey frame
GL-7A	Aluminium insulated glazing spandrel system; colour matched to clear glazing and mid-grey frame
GL-7B	Aluminium glazing system with projecting external mullions; clear glazing with low E coating and mid-grey frame
GL-8	Opaque window or flush finish solid panel for ventilation; grey to match RC-3
GL-9	Aluminium clear glass window or horizontal louvre; mid-grey frame and louvre
P-1	Textured paint to in-situ concrete soffit; grey
RC-1	Paint/stain finish on concrete; white
RC-2	Paint/stain finish on concrete; light grey
RC-3	Paint/stain finish on concrete; grey
RC-4	Paint/stain finish on concrete; charcoal
RC-6	Paint finish on concrete; yellow
RC-10	Paint/ stain finish on concrete; warm grey/brown (to match TI-1)
TI-1	Timber frame with vertical timber slats
TI-2	Vertical timber slats fixed to CFC-1; timber to match TI-1

The materials within the schedule are illustrative to support the design intent and be reflective of the quality of materials and finishes proposed in this Development Application. Final selection and approval of materials to be subject to agreement with the Director General at a later stage but prior to commencement of construction on site.



Rooftop podium amenity section

Residential amenity

The residential apartments within the podium and tower have been designed to maximise the opportunities and natural amenity that their setting provides.

The following series of sketches summarises how the design and organisation of the accommodation within the towers capitalises on the potential aspects.

The principles applied are in line with the design recommendations and guidelines of the RFDC. Refer to section RFDC 'Rules of Thumb' Assessment on page 65 for more detail.

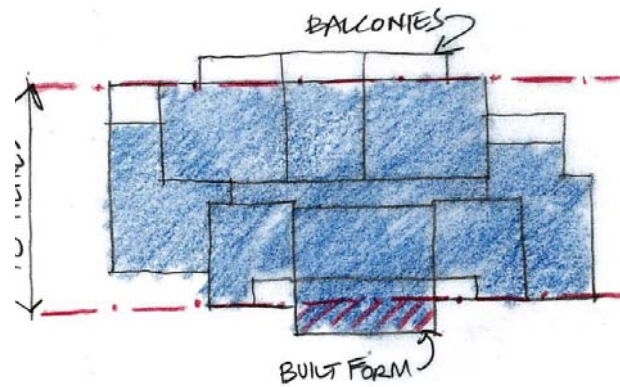
The SW Plot design includes a shared residential garden above the podium. This provides generous facilities for residents' enjoyment and provides some semi-private open space within the very public setting of The Haymarket.

The design and use of planting is carefully considered to maximise privacy for garden edge apartments and pod users.

More detail is provided within the landscape section on page 49.

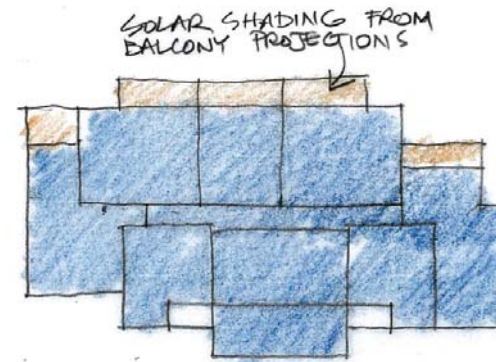
DESIGN CONCEPT

SW1 Tower - Design Strategy



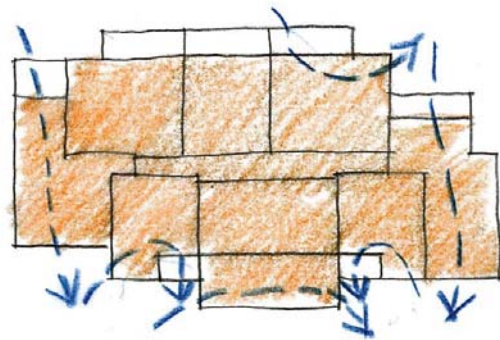
PLAN DEPTH

Built form including balconies is deeper than 18m as recommended in the RFDC. However, articulation of facades as noted above means that glass line to glass line dimensions are typically 18m or less.



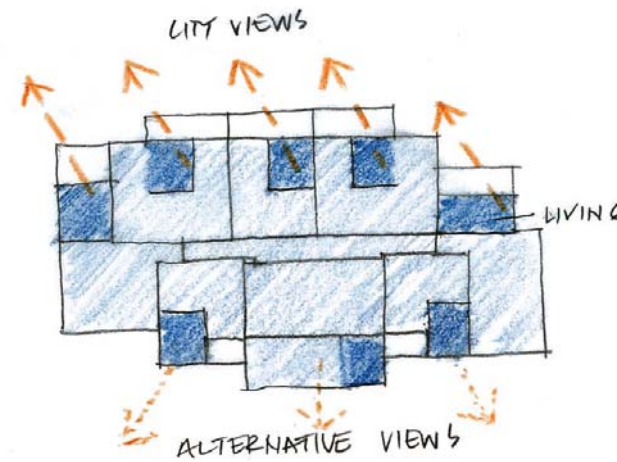
ORIENTATION

The core is located on the western facade to maximise the number of apartments with great aspects and minimise heat loads. The projecting balconies protect the facades from high summer sun.



CROSS VENTILATION

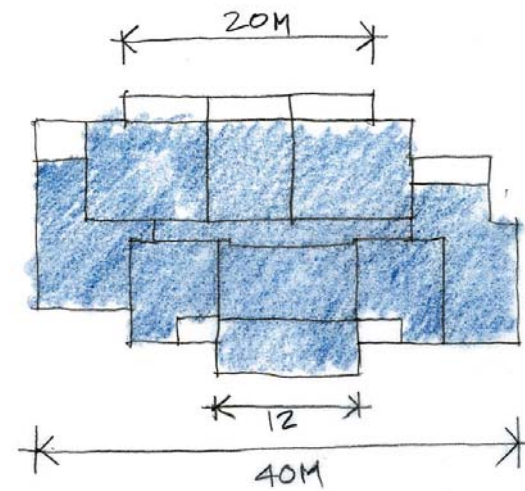
The staggered plan form affords opportunity to achieve openings on two different aspects to facilitate natural cross ventilation.



OUTLOOK

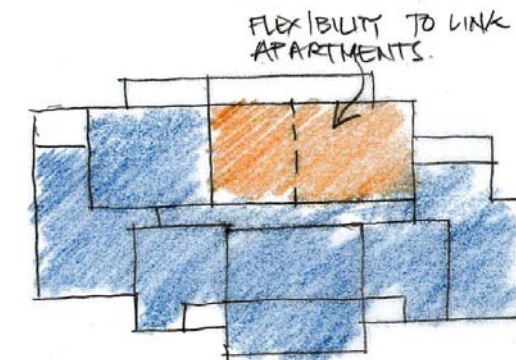
The Haymarket benefits from views across to Darling Harbour and the city skyline. Locating the core to the south west elevation maximises the number of units with views. Living spaces have been oriented towards the view.

DESIGN CONCEPT



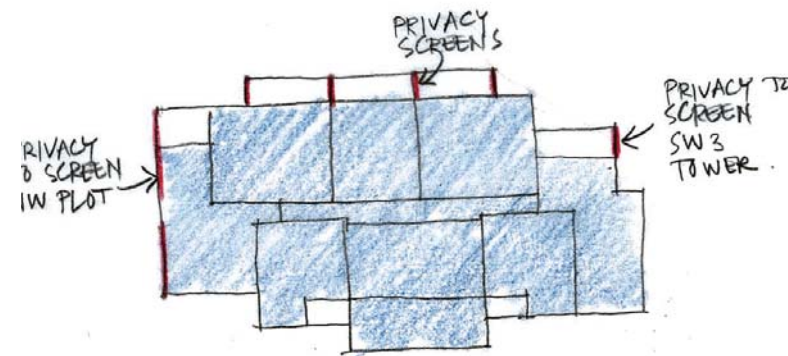
TOWER ARTICULATION

Articulation of the primary tower faces breaks down the mass of the elevation to provide greater interest and reduces visual impact when viewed obliquely along streets. Max face < 30m in line with SSDA2 Design Guidelines.



FLEXIBILITY

Non-load bearing party wall affords the opportunity to consolidate a 1B and a 2B apartment into a 3B apartment on the prime north east corner of the tower.

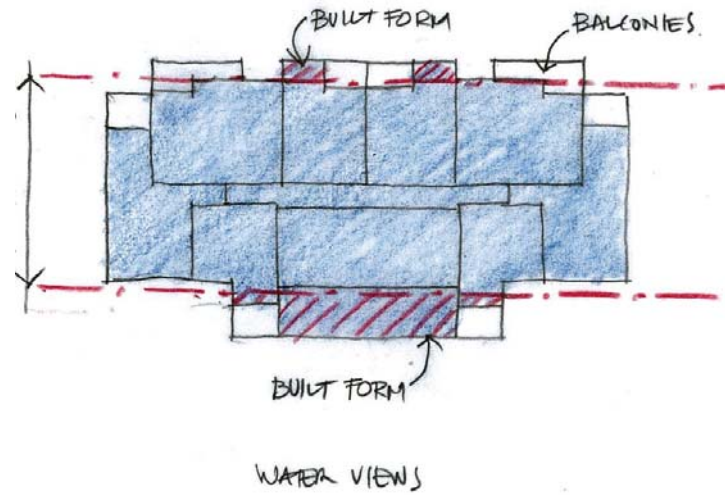


AMENITY PRIVACY

The tower design seeks to physically separate balconies with built form to maximise privacy. Where balconies are adjacent a full height, solid screens provide separation. Additional screening and restricted fenestration is provided along the lower levels on the tower facing onto the NW Plot.

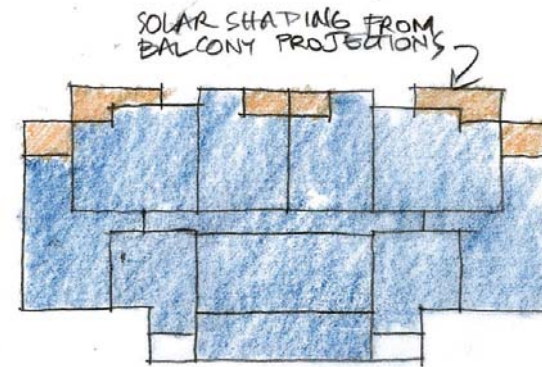
DESIGN CONCEPT

SW3 Tower - Design Strategy



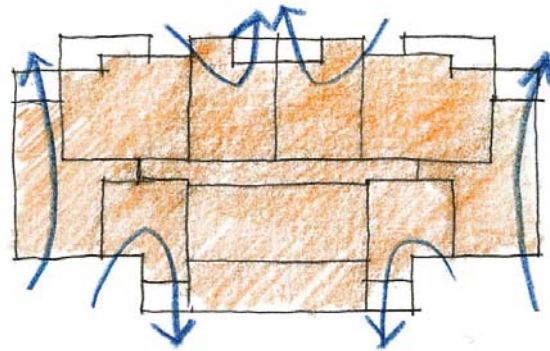
PLAN DEPTH

Built form including balconies is deeper than 18m as recommended in the RFDC. However, articulation of facades as noted above means that glass line to glass line dimensions are typically 18m or less.



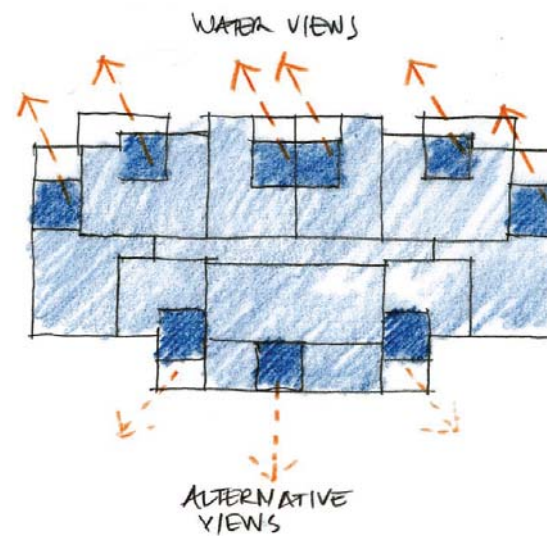
ORIENTATION

The core is located on the southern facade to maximise north facing apartments. The projecting balconies protect the facades from over-exposure to the afternoon sun.



CROSS VENTILATION

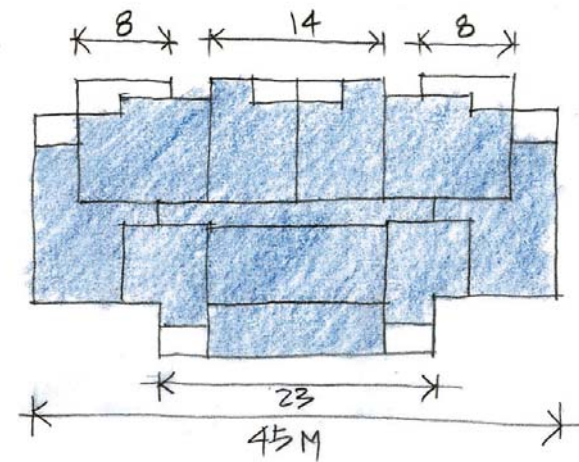
The staggered plan form affords opportunity to achieve openings on two different aspects to facilitate natural cross ventilation.



OUTLOOK

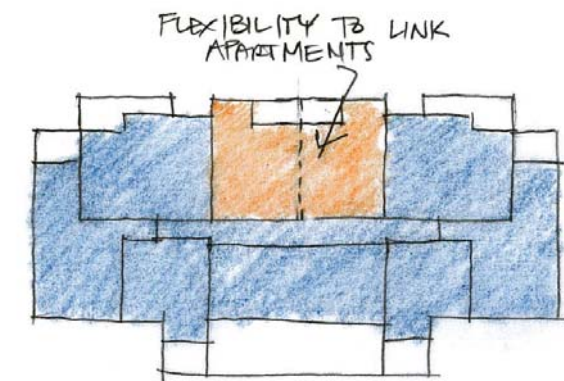
The Haymarket benefits from views across to Darling Harbour and the city skyline. Locating the core to the southern elevation maximises the number of units with views. Living spaces have been oriented towards the view.

DESIGN CONCEPT



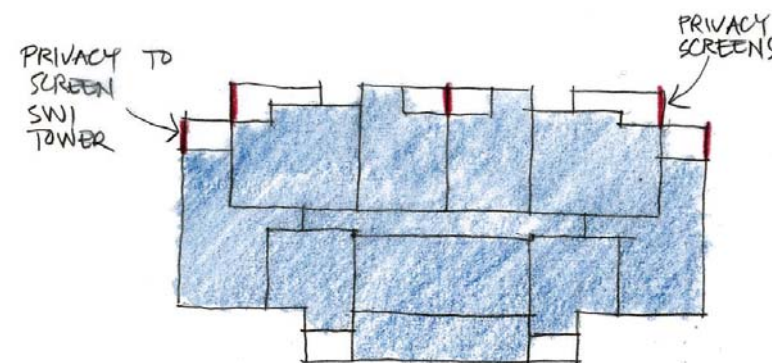
TOWER ARTICULATION

Articulation of the primary tower faces breaks down the mass of the elevation to provide greater interest and reduce visual impact when viewed obliquely along streets. Max face < 30m in line with SSDA2 Design Guidelines.



FLEXIBILITY

Non-load bearing party wall affords the opportunity to consolidate two 1B apartments into a 3B apartment on the north face of the tower.



AMENITY PRIVACY

The tower design seeks to physically separate balconies with built form to maximise privacy. Where balconies are adjacent a full height, solid screens provide separation.

DESIGN CONCEPT

Traffic, car parking + services access

The new theatre and NW Plot public car park exit lane that feeds into Darling Drive via Exhibition Place precludes any vehicle access and drop off for the SW Plot on this edge of the building. As Dickson's Lane and The Boulevard are pedestrian only thoroughfares all resident and services vehicles will enter the building via a single ramped entry point on Hay Street. Retail staff and resident bicycle access will also enter at this point along a grade separated path. A roller shutter will control access.

Private resident and service traffic are separated upon entering the building. Secondary control barriers restrict access to the private residential parking on the upper levels and 13 spaces at ground level. A total of 405 cars will be provided including 10 accessible car park bays to service the adaptable units. No visitor or retail car parking will be provided on site as a public car park is located in close proximity.

The loading area is configured to permit drive in/drive out of service, refuse and goods vehicles access, with manoeuvring occurring outside of the resident car park roadways. Clear height of 4.1m will accommodate a typical City of Sydney refuse vehicle and small rigid vehicles (SRV) servicing the retail. The loading area can accommodate two trucks and two courier vehicles. Retail deliveries are at ground floor loading to the rear of retail premises.

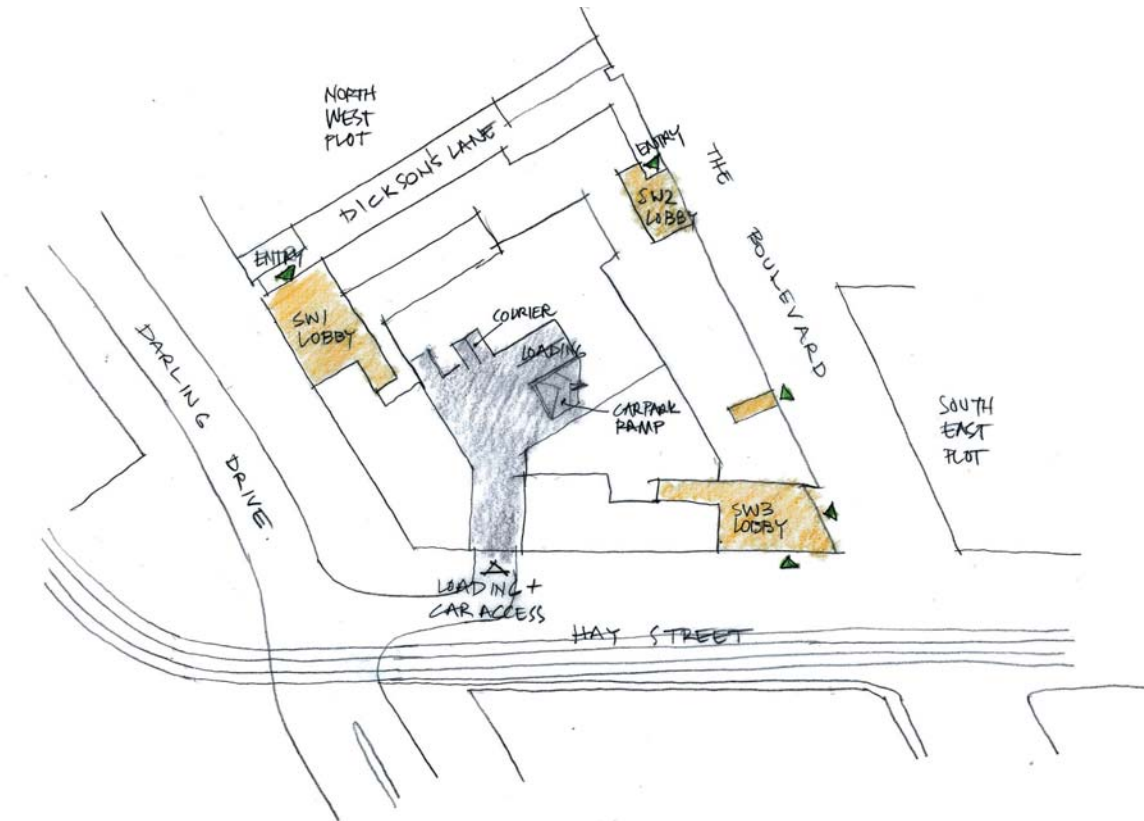
The car park and loading area will be a combination of natural and assisted ventilation.

End-of-trip cycle facilities will be provided for the retail staff and potential IQ incubator hub tenants, consisting of 10 cycle bays in a secure room, a unisex shower and 10 lockers. An additional 50 cycles will be located at ground level to meet the Green Star requirement for visitor cycle parking to 10% of the total apartments.

The residents' storage will be located within the car park. Each storage enclosure will be provided with a hook to allow for the vertical storage of a bicycle. This will be supplemented by additional storage space provided within each apartment.

Refer to page 54 for a summary of all residential car and cycle parking provision within the SW Plot.

Refer to the traffic report prepared by Hyder Consulting for further detail.



Vehicle + service access

DESIGN CONCEPT



Public Domain

As part of the SSDA 5 for the SW Plot an extensive portion of 'The Haymarket' public domain is to be submitted for approval including the new Dickson's Lane and 'The Boulevard.'

This will ensure that the key north/south connection – one of the 5 Principles of the SICEEP Precinct Plan – is completed in time for the opening of the SICEEP Core Facilities in 2016.

Along with the delivery of stage 1 of the Student Accommodation and the NW Plot the western half of the site will be largely completed.

Key elements of the public domain are:

Dickson's Lane

A new pedestrian linkage, this thoroughfare provides connectivity from Darling Drive and the new student precinct to the square.

The lane is ramped at both ends to allow at grade retailing above the flood datum.

Pockets of raised planters incorporating trees, fixed seating and catenary lighting further reduce the scale and increase the intimacy of the setting.

The landscape design supports the creation of pockets of sit-out dining by future retail tenants to enliven the lane.

The Boulevard

One of the 5 key Principles within the SICEEP Precinct Plan, the Boulevard extends across the Haymarket site.

This grand space incorporated large tree planting and fixed furniture elements proposed of the entire precinct to provide continuity.

A change in paving treatment differentiates it from the adjacent future square.

The SW Plot holds the western edge of the Boulevard and the mix of retail uses and residential lobbies provide activation.

Hay Street

The west end of Hay Street will facilitate vehicle access to the carpark, loading, and services areas.

Tree planting will be provided to soften the street and provide respite and shelter for pedestrians.

Darling Drive

The verge along the eastern edge of Darling Drive will be hard paved to allow pedestrian access to the potential IQ Hub and SW1 residential lobby as well as connection into Dickson's Lane.

This landscaped zone includes areas of permeable surfaces as part of the overall Water Sensitive Urban Design (WSUD) strategy.

Further discourse on the proposed design, material and planting approach is contained within the Public domain Design Report prepared by Hassell included within Appendix B of this report.

DESIGN CONCEPT

Signage

Residential building

Building naming and/ or identification signage is to be provided to all residential lobby entrances to assist in wayfinding as noted within the drawings. Residential signage to consist of two types:

- Above door signage – building numbering and / or identification
- Vertical signage – precinct or development address and/ or building name
- Building ID signage - located at top of both residential towers

Signage locations to be limited to entrance lobby areas. Diagrams opposite indicate signage locations. All signage to be integral to the building and facade design and should be fabricated to a suitably robust and quality appearance. Signage may include lighting to improve legibility and provide more visual interest.

Local signage will be required at door entry points as part of the door control system.

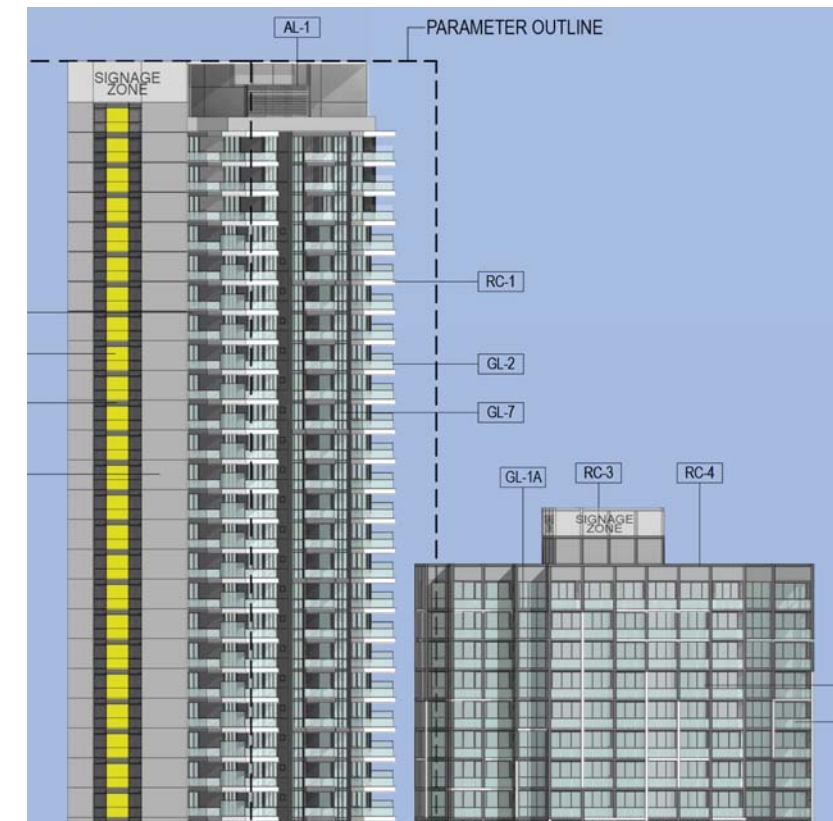
Final signage content for the new residential buildings is to be submitted to the Director General for approval at a later stage.

The following controls are to be adopted from the SSDA2 Design Guidelines:

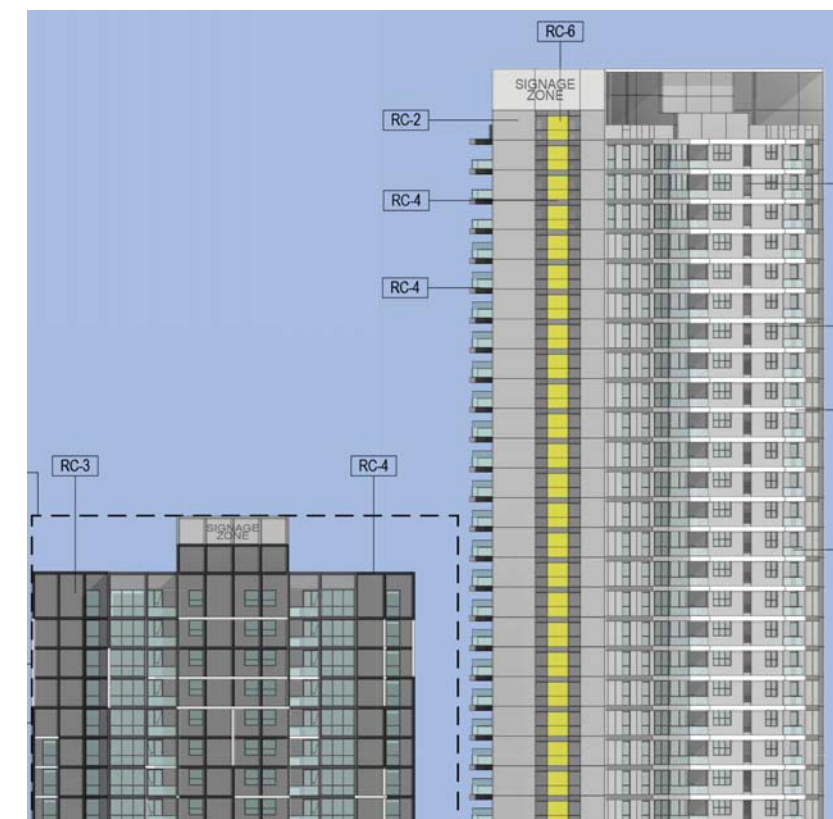
- Content of permanent signage shall relate to building naming/ identification;
- Content of temporary signage within the zones identified may include for the developers branding or other advertising;
- Detailed design of signage to be considered as part of the overall design of the building.

Retail/ IQ hub (potential)

Retail and potential IQ incubator hub signage to submitted to the Director General for approval at a later stage.

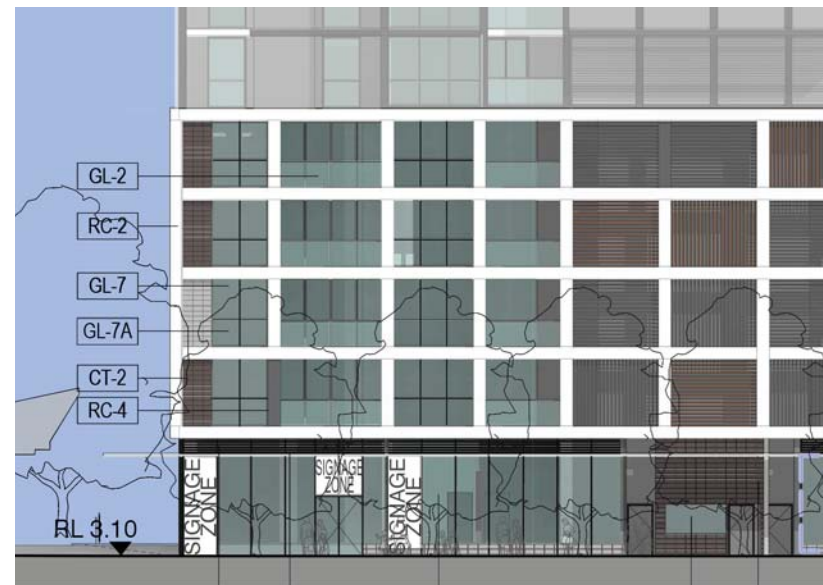


SW1 + SW3 towers rooftop signage zone (east elevation)

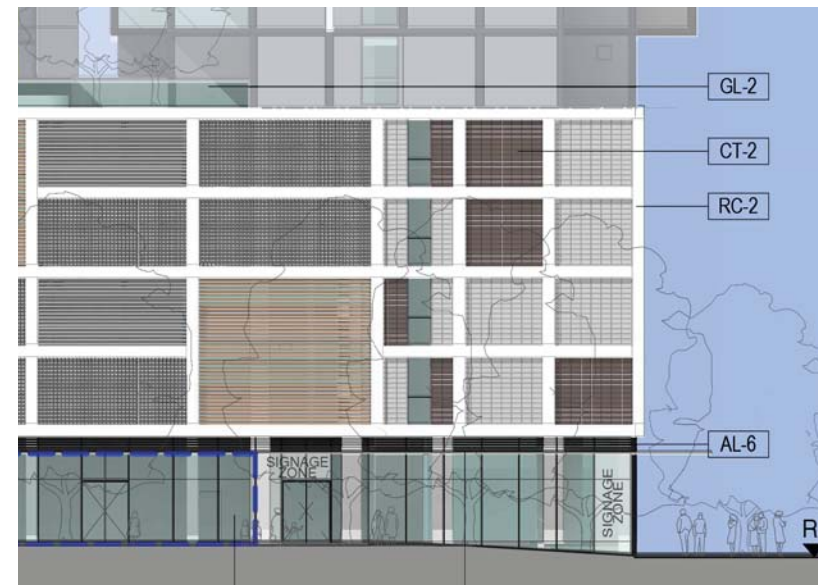


SW1 + SW3 towers rooftop signage zone (west elevation)

DESIGN CONCEPT



SW1 lobby signage zones - west elevation



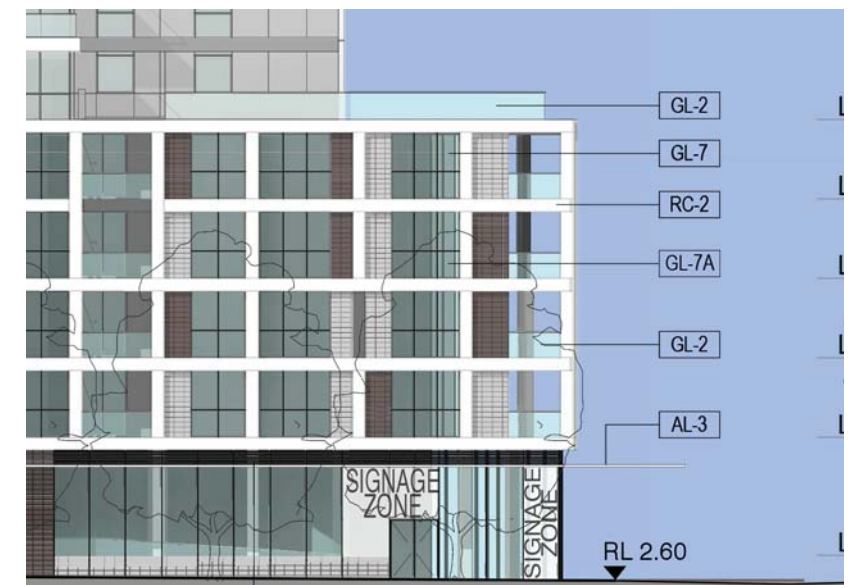
SW1 lobby signage zones - north elevation



SW2 lobby signage zones - east elevation



SW3 Lobby + SW3 podium lobby signage zones - east elevation



SW3 lobby signage zones - south elevation

DESIGN CONCEPT

Sustainability

The Haymarket residential development will achieve the sustainability aspirations set for SICEEP precinct.

This project aims to deliver a sustainable residential building, with low operational energy consumption, reduced potable water use, minimisation of waste to landfill and appropriate materials selection, while maintaining a good level of indoor environmental quality through appropriate mechanical design, facade configuration and materials selection.

Initiatives for sustainability include:

- LED fluorescent fittings
- common area ventilation only
- energy efficient appliances
- efficient heating and cooling systems
- rain water harvesting for podium landscape irrigation

The residential development will be committing to a 4 Star Design and As-Built Green Star ratings under the Green Star Multi-Unit Residential v1 tool.

Initiatives targeted within this Green Star tool will ensure significant sustainability principles will be incorporated into the design, appropriate management practices are applied through the construction period and facilities and resources are provided to ensure the delivery and operation of the building has the potential to achieve the sustainability objectives.

Initiatives currently proposed will also enable the minimum NSW sustainability performance requirements set by BASIX to be comfortably met.

Refer to the Sustainability Reports for SSDA 5 prepared by Lend Lease Design.

DESIGN CONCEPT

Landscape

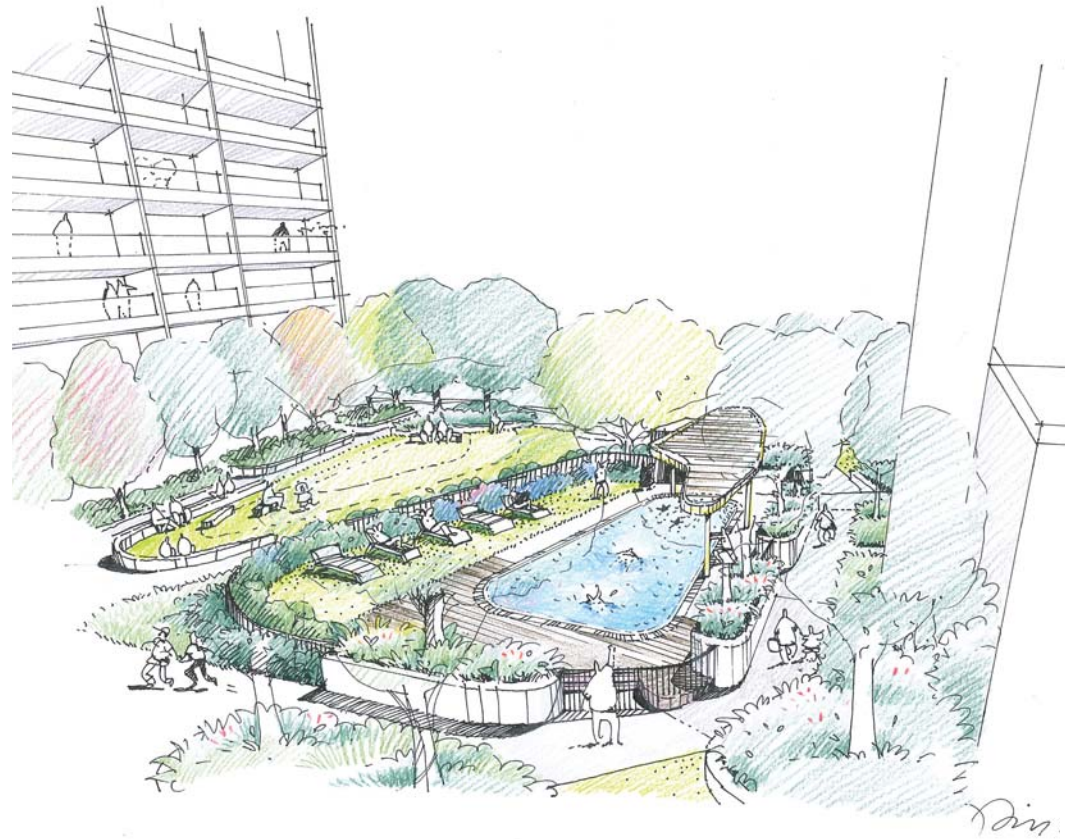
The landscape is a strong contemporary design and utilises curvilinear language that relates to other green spaces in the Darling Harbour precinct including the children's playground and Tumbalong Park.

This creates a restful contrast to the more urban edge of the public domain and is suitable for the residential development's anticipated residents.

The selection and location of the planting has been carefully considered to balance the needs for privacy of garden users whilst maintaining some visual connectivity and passive surveillance.

The location of this planting screen considers the solar impact to avoid generating further overshadowing of the amenities. A large bank of trees along the north eastern edge provides visual privacy from the adjacent commercial building.

Additional screening is provided around the base of the tall residential towers which will assist with any micro-climate issues. Deciduous trees will be used to allow winter sunlight when the pool is least likely to be used.



Illustrative Podium Landscape sketch - view looking north east



Illustrative Podium Landscape sketch - view looking north west

DESIGN CONCEPT



Reference planting

Landscape

Major features include the following items:

- Courtyard gardens: deep gardens are provided to units facing onto the podium landscape, each with a gate providing direct access.
- Seats and tables: contemporary timber and steel.
- Custom designed, insitu off white bench seats.
- The shelters are custom designed to suit all the curves. Wide flatbar on edge curved round outside with stained HW timber on edge internal as shade device. Steel finish in grey micaceous paint.
- Paving is large unit size concrete in light/ white with contrast to lobby entry points. Planters adjacent to pool to have a 1.2m smooth face as they are working as pool fence. The lower half in situ, off white concrete, and top half a glazed coloured brick to reference the colourful frames of the proposed building facade.
- The swimming pool is large (15 x7m pool) and has a shallow children's section at the north end with a shade shelter overhead. Fully tiled with wet edge/ grating surround to maximise pool depth.
- Timber decking: a large area of timber decking provides a sunbathing area when the lawn is not suitable/ dry for sunning.
- Sunbathing lawn: a large area of lawn for residents to sun themselves next to the pool.
- Pool pergola: a wide flatbar on edge curved round outside with stained HW timber on edge internal as shade device. Steel finish in grey micaceous paint. Battens graded to provide varying degrees of sunlight and privacy protection.
- Pool building: a small structure set under pool pergola. Lightweight steel frame construction clad with a vertical timber element rolling around the curve. Incorporates baby change facilities, toilets and pool plant/ equipment. The location of the structure will form part of the pool fence reducing the amount of "visible" fence.
- Pool fence: designed as a sculptural element. The fence detail itself is simple with the structure sweeping out into the lawn and mostly buried in a line of planting. Segments of the same detail fence will link the 1.2m tall planters with matching gates. The pool boundary arranged in this way makes a real visual contribution to the space. Designed as a large smooth sculptural curve of 1.2m

palisade with simple thick flat bar top to accentuate curve. Finished in dark grey micaceous paint and plant along both sides. Planting would cover bulk of the fence allowing the top edge to show the long curve. The thickened curved flatbar top finished in a white or bright orange to accentuate the line of the curve as seen from the ground and from above. Adjoining planting will accentuate the curve and allow privacy when sitting/lying on towel while maintaining long views to landscape across site when standing or walking. The east side of the pool area allows general privacy from passers-by and screening overhead from trees and shelter. However it avoids an exclusion zone and generates interest by breaking the planters into separated bubbles with fence segments allowing glimpses in and out of pool area.

Planters: large raised planters are all to be 450mm above ground to facilitate ample seating. The landscape has 300mm set down overall so this will give 700mm planting depth. All island planters are to be 1:5 mounded to centre up to 1m soil depth so this will also give sufficient depth for large trees.

All peripheral raised planters should be 450mm at the edge and will be a double thickness recycled brick with a bullnose soldier course top radiating the curves.

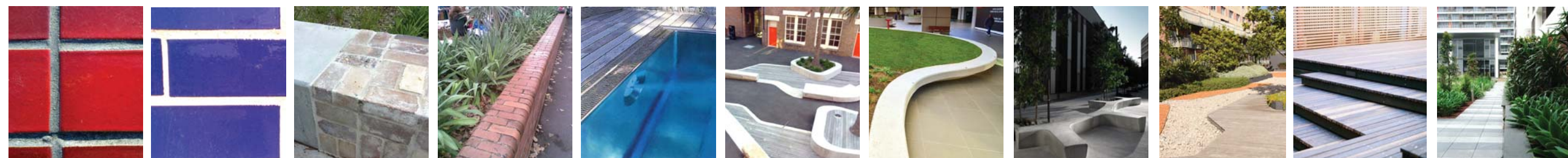
Outdoor gym: exercise equipment is located near the pool area and would include at least 3 active pieces of equipment within one module.

BBQ: a BBQ and associated tables are located to be as far away from bedrooms as possible and break out onto the adjacent lawn area.

Private courtyards: ground floor apartments are designed as garden apartments with generous outdoor spaces. Timber decking is provide outside living spaces for alfresco dining and areas outside bedrooms can be either planted, paved or pocket lawns.

Small trees will be located adjacent to ground floor garden apartments and generally specified as deciduous species to maintain winter sunlight to the units.

Medium specimen trees will be located where deep soil allows for screening and dramatic effect.



Reference materials



Level 5 Landscaped podium

DEVELOPMENT SUMMARY

DEVELOPMENT SUMMARY

Development Summary

Uses (GFA)	Residential	A	43 522m²
	Retail/ IQ hub (potential)	B	1 805m²
Total		A+B	45 327m²

Site Area	12 096m²
Plot Area	5 072m²
Floor Space Ratio (FSR) based upon site area	3.7 : 1
FSR based upon plot area	8.9 : 1

Accommodation Summary Table

Type	Size	Total	% of Total
Studio	46m²	31	6
1 Bed	48 - 72m²	184	34
1 Bed + Study	60 - 62m²	76	14
2 Bed	73 - 87m²	236	43
3 Bed	110 - 133m²	15	3
Total		542	100

Car Parking

Residents	Total
Standard	395
Accessible	10
Retail	0
Visitors	0
Total	405

Storage

Unit	Volume (m³)
542 units	4.7/ unit
Cycle storage	
Visitor cycle spaces (10%)	54
Retail staff cycle spaces	10
Total	64