

### W1 STUDENT ACCOMMODATION BUILDING **DA REPORT SSDA12** SYDNEY INTERNATIONAL CONVENTION, EXHIBITION AND ENTERTAINMENT PRECINCT (SICEEP)

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# W1STUDENTACCOMMODATIONBUILDING DA REPORT SSDA12

SYDNEY INTERNATIONAL CONVENTION, EXHIBITION AND ENTERTAINMENT PRECINCT (SICEEP)



Allen Jack+Cottier Architects Pty Ltd ABN 53 003 782 250

Principals + Nominated Architects Michael Heenan 5264 Peter Ireland 6661

Sydney Office 79 Myrtle Street Chippendale NSW 2008 AUSTRALIA tel +61 2 9311 8222 fax +61 2 9311 8200

architectsajc.com

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## 01 PROJECT BACKGROUND

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#### INTRODUCTION

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

The Application (referred to as SSDA 12) follows the approval of a staged SSD DA (SSDA 2) in December 2013. The approved SSDA 2 sets out a Concept Proposal for a new mixed use residential neighbourhood at Haymarket referred to as "Darling Square", previously known as "The Haymarket". Darling Square 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 a residential building (student accommodation) within the Western development plot (Darling Drive) of Darling Square and associated public domain works. The DA has been prepared and structured to be consistent with the Concept Proposal DA.

#### **OVERVIEW OF PROPOSED DEVELOPMENT**

The proposal relates to a detailed ('Stage 2') DA for a residential building (student accommodation) in the Darling Drive Plot of Darling Square together with associated public domain works. The Darling Square 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 Darling Drive Plot is one of six development plots identified within the approved Concept Proposal.

More specifically, this SSD DA seeks approval for the following components of the development:

- Demolition of existing site improvements;
- Associated tree removal and planting;
- Construction and use of one residential building within the Darling Drive Plot, to be used for student accommodation purposes;
- Public domain improvements, including provision of a new urban courtyard space between student accommodation buildings W1 and W2; and
- Extension and augmentation of physical infrastructure / utilities as required.

#### BACKGROUND

The NSW Government considers that a precinct-wide renewal and expansion of the existing convention, exhibition and entertainment centre facilities at Darling Harbour is required, and is committed to Sydney reclaiming its position on centre stage for hosting world-class events with the creation of SICEEP.

Following an extensive and rigorous Expressions of Interest and Request for Proposals process, a consortium comprising AEG Ogden, Lend Lease, Capella Capital and Spotless was announced by the NSW Government in December 2012 as the preferred proponent to transform Darling Harbour and create SICEEP.

Key features of the Preferred Master Plan include:

- Delivering world-class convention, exhibition and entertainment facilities, including: - Up to 40,000m2 exhibition space;
  - Over 8,000m2 of meeting rooms space, across 40 rooms;
  - Overall convention space capacity for more than 12,000 people;
  - A ballroom capable of accommodating 2,000 people; and
  - A premium, red-carpet entertainment facility with a capacity of 8,000 persons.
- Providing a hotel complex at the northern end of the precinct.
- A vibrant and authentic new neighbourhood at the southern end of the precinct, now called 'Darling Square', including apartments, student accommodation, shops, cafes and restaurants.
- Renewed and upgraded public domain that has been increased by a hectare, including an outdoor event space for up to 27,000 people at an expanded Tumbalong Park; and
- Improved pedestrian connections linking to the proposed Ultimo Pedestrian Network drawing people between Central, Chinatown and Cockle Bay Wharf.

outlined below.

#### PUBLIC PRIVATE PARTNERSHIP SSD DA (12\_5752)

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. SSDA1 was approved on 22 August 2013.

On 21 March 2013 a critical step in realising the NSW Government's vision for the SICEEP Project was made, with the lodgement of the first two SSD DAs with the (now) Department of Planning and Environment. The key components of these proposals are

#### CONCEPT PROPOSAL (SSD 13\_5878)

The approved 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 Darling Square Site. SSDA2 was approved on 5 December 2013. The Stage 1 Concept Proposal approved the following key components and development parameters:

- Indicative staging of demolition and development of future development plots; •
- Land uses across the site including residential and non-residential uses;
- Street and laneway layouts and pedestrian routes; •
- Open spaces and through-site links; •
- Six separate development plots, development plot sizes and separation, building envelopes, building separation, building depths, building alignments, and benchmarks for natural ventilation and solar access provisions;
- A maximum total gross floor area (non-residential and residential GFA);
- Above ground car parking including public car parking;
- Residential car parking rates;
- Design Guidelines to guide future development and the public domain; and
- A remediation strategy.

In addition to the approval of SSDA2, the following approvals have been granted for various stages of the Darling Square site:

- Darling Drive (part) development plot (SSDA12) for the construction and use of a residential building/W2 (student accommodation) and the provision of associated public domain works approved on 7 May 2014;
- North-West development plot (SSDA4) for the construction and use of a mixed use commercial development and public car park building and associated public domain works approved on 7 May 2014; and
- South-West development plot (SSDA5) construction and use of a mixed use residential development and associated public domain works approved on 21 May 2014.
- North-East development plot (SSDA7) construction and use of a mixed use residential development and associated public domain works approved on 16 April 2014.

Approval was also granted on 15 June 2014 for SSDA6 which includes the construction and use of the International Convention Centre (ICC) Hotel and provision of public domain works.

This report has been prepared to support a detailed Stage 2 SSD DA for a residential building/W1 (student accommodation) and associated public domain works within Darling Square (SSDA 12), consistent with the approved Concept Proposal (SSDA 2).



### 01 PROJECT BACKGROUND



#### SITE DESCRIPTION

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 to the west, Harbourside shopping centre and Cockle Bay to the north, Darling Quarter, the Chinese Garden and Harbour Street to the east, and Hay Street to the south (refer to Figure 1). The Darling Square Site is:

- Located in the south of the SICEEP Site, within the northern portion of the suburb of Haymarket;
- Bounded by the Powerhouse Museum to the west, the Pier Street overpass and Little Pier Street to the north, Harbour Street to the east, and Hay Street to the south; and
- Irregular in shape and occupies an area of approximately 43,807m<sup>2</sup>.

The Application Site area relates to the northern portion of the Western Plot and surrounds as detailed within the architectural and landscape plans submitted in support of the DA.



Figure 1 – Aerial Photograph of the SICEEP Site



Figure 2 – Works Boundary for subject DA

Figure 3 - Darling Square Site



#### 01 PROJECT BACKGROUND

The Concept Proposal DA provides for six (6) separate development plots across the Darling Square Site (refer to Figure 3):

North East Plot;

North Plot;

South East Plot;

South West Plot;

North West Plot; and

Western Plot (Darling Drive).

The Application Site area relates to the southern portion of the Western Plot and surrounds as detailed within the architectural and landscape plans submitted in support of the DA (see Figure 2 – Works Boundary for subject DA).







## **02 PROJECT INTRODUCTION**

W1 STUDENT ACCOMMODATION BUILDING DA REPORT SSDA12 11



View from Pier Street overpass looking South

Allen Jack+Cottier believe that good student accommodation creates an environment that fosters the development of a supportive community. This involves a combination of factors contributed by educational establishments, the students, management and local environment, but must be underpinned by the well-considered design of the buildings themselves and their relation to the residents and the environment.

The design of this project is based on the following principles:

- To provide a high quality living environment for students; with inspiring spaces for residents in which to live, socialise and study;
- Ultimo;
- •
- •

• To form an integral part of Darling Square, both as a member of the 'family' of residential towers and as the point of interface with the neighbouring suburb of

To play an active part of the new urban environment of the Precinct and streetscape of Darling Drive and act as an anchor for the northern end of The Goods Line; and To complement and integrate with Urbanest's student housing building, currently under construction on W2, both functionally and aesthetically.



Building W1, will accommodate 668 beds with the principal common areas for residents on the lower two floors, residential rooms and smaller common areas on the upper floors, providing a variety of environments and spaces to meet the residents' needs. These functions are expressed in the building façade, with full height panelised glazing to the common spaces behind a colonnade of double height columns along the Darling Drive frontage. The colonnade creates a legible 'street wall' that clearly denotes the common floors as distinct from the residential floors above, provides protection for the building entries and contributes to an active and inviting streetscape.

The residential floors are expressed as a tower above the colonnade. The tower has two distinct aspects, reflecting its position on the edge of the Darling Square precinct: the eastern and northern sides, facing the precinct, are related to the 'family' of towers planned for this area through their similar height, proportions and the use of similar materials and patterns on the eastern façade. These façades use an overlaid grid with sunshading, faceted infill panels of metal and glazing to create a light, shimmering effect alluding to sunlight dancing on the harbour. The common areas on the residential floors are expressed on the eastern facade through a vertical thread of larger windows; and

- punched openings.



### 02 PROJECT INTRODUCTION

#### OVERVIEW

the western and southern sides, facing the Powerhouse Museum and Ultimo, are inspired by the robust masonry nature of the Powerhouse Museum and warehouses in Ultimo and forms a strong edge to the Precinct. These façades are expressed as solid walls; coloured, textured and panelised to reference brickwork,





## **03 ANALYSIS**

**03 ANALYSIS** 



Darling Harbour Goods Line (City of Sydney Image Library)

Concept Proposal Stage 2

which connects the site to UTS and Central station to the south. The site is almost flat, with a gentle fall to the north and east. The Pier Street flyover to the north is roughly 8m above ground (between RL11-12). Above this level (second floor) on the northern and eastern sides there are views north-east over Tumbalong Park and the Chinese Gardens to Darling Harbour and the

The part public car park/commercial building on the NW plot to the east is approximately 50m high (RL53.2 to the roof). Above this level (sixteenth floor) on the eastern side there are views to the city and eastern suburbs beyond.

The Powerhouse Museum is to the west of the site; the turbine hall to the north west being approximately 30m (ridge line level approximately RL35.50 - 36.50). From upper levels (above sixth floor) on the western side, there are views over the Powerhouse to Ultimo, Blackwattle Bay and Glebe beyond.

Building W2, currently under construction to the south is approximately 65m high (RL68.8 to the roof). The top floor will have views south to Central Station and Alfred

There are no existing buildings on the Subject Site.



#### **03 ANALYSIS**

#### LOCATION AND CONTEXT

The site is located on Darling Drive between the Pier Street flyover to the north and Macarthur and Hay Streets to the south. The site forms part of the western edge of the Darling Square precinct. To the west is the light rail corridor and Powerhouse Museum. To the south of the site The Goods Line provides a highly active linear park

#### NOISE / SUN / VIEWS







#### Noise

Traffic noise from the Pier Street overpass will present noise impacts as it is approximately 30m to the north.

Acoustic impact will be mitigated during the detailed design phase by measures such as using thicker glass and acoustic seals to windows.

While all windows will be openable, alternative mechanical ventilation will be provided to areas of the facade affected by noise.

Refer to the Noise & Vibration report submitted with this SSDA12 for more detail regarding noise and acoustic issues.

#### Sun

The site axis is about 36 degrees west of North, giving good solar access to the eastern, northern and western sides of the site.

Refer to Appendix F: Shadow Diagrams for more detail regarding solar access.

#### Views

From upper levels (above second floor) on the northern and eastern sides, there are views north over the SICEEP Central Precinct to Darling Harbour and the city beyond. From upper levels (above sixth floor) on the western side, there are views over the Powerhouse to Sydney University and inner western suburbs.

Lift lobbies of residential levels are connected to common areas on the eastern side of the building, bringing views and natural light into the common corridor, refer to section 7: ESD more information regarding natural light and ventilation to the lift lobbies.







#### Landscape / Open Space

The link to the Darling Square is acknowledged by locating the common spaces of the tower at the terminus to the pedestrian lane, creating a visual connection between this site and the heart of the Southern Precinct.

Major open spaces such as Tumbalong Park and the Chinese Garden are just north of the site.

A courtyard space between Buildings W1 and W2 and a pocket park to the north of W1 are proposed, refer to the landscaping report submitted with this SSDA12 for more detail regarding landscaping and open space, already approved on the Western Pbt.

#### Access

The entry to the building is positioned at the south eastern corner, closest to the major pedestrian routes past the site. The site is accessible by vehicle and bicycle from Darling Drive; vehicle bays on Darling Drive on the eastern side of the site. All loading and waste removal is to be via the central courtyard.

There is a direct pedestrian link to the 'Public Square' at the heart of the Darling Square via the proposed pedestrian lane between the office and residential buildings.

The Goods Line terminates at the southern side of the site, and is directly connected to Macarthur Street, and connected by stairs and ramps to Darling Drive at the intersection of Hay Street / Darling Drive.

#### Transport

The Goods Line leads directly to the southern end of the W2 site; providing pedestrian access to both UTS and Central Station.

To the west is the light rail corridor and Powerhouse Museum. Tram stops are located on Hay St east of the site and on Darling Drive north of the site.

Bridge Road.



#### **03 ANALYSIS**

#### LANDSCAPE / ACCESS / TRANSPORT

To Darling Harbour and City

To Ian Thorpe Aquatic Centre

A shared way along the western side of Darling Drive extends northwards to Pyrmont





### 04 DESIGN

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MASSING AND BUILT FORM



#### Massing and View Lines

The building forms part of the 'valley wall' envisaged in the Urban Design and Public Realm Guidelines prepared by Woods Bagot for Infrastructure NSW in 2012.

The building forms arise directly from the shape of the site, being long, narrow blocks oriented roughly northwest-southeast along the site axis. The Eastern and Western Elevations of the proposed building have been aligned with the W2 building currently under construction.

The W1 Building is taller than W2 to effect scale and transtion between Darling Square Precinct and Ultimo/Pyrmont

The tower is envisaged to provide the mix of accommodation desired and to give the proposed accommodation models a distinct character and student experience.

The strategy has been to maximise the amount of façade available for habitable space, which creates more building corners for dual aspect accommodation and allows shorter corridor runs to serve the residential floors.

The tower achieves the optimum mix of accommodation typologies, which creates an ideal living space and dynamic for future residents.





The site's major address at ground level is to Darling Drive with secondary addresses to the central courtyard to the south and the pocket park to the north.

The site is a key part of the entry experience to Darling Square to the Darling Square precinct for pedestrians and cars from the north and east off Pier Street.

The northern, eastern and southern edges of the building have been set back at lower levels to create a visual colonnade which acts as a threshold space for interaction along these edges. This contributes to the creation of a pedestrian friendly environment that extends from The Goods Line, through the western side of the Darling Square Precinct along Darling Drive to The Theatre, Darling Harbour and the Ian Thorpe Aquatic Centre and light rail stop north of Pier Street.

It is expected that the majority of residents will be studying at UTS or Sydney University, therefore the major desire lines are to the south along The Goods Line towards Central Station and the universities and east across the signalised pedestrian crossing on Darling Drive towards Darling Square. The entry to the building has been located in the south eastern corner in response to these desire lines, using the central courtyard between DS1 and DS2 to the south of the site as a forecourt.



#### 04 DESIGN

#### **BUILDING PLANNING**

#### 04 DESIGN

**BUILDING PLANNING** 





LEVEL 21

The building provides a mix of accommodation and common facilities:

- bike parking and services.
- •
- .
- which has an ensuite bathroom.
- rooms.

Lifts, stairs and services are placed in the middle of the floor plates to allow bedrooms and living spaces to be arranged around the entire perimeter of the building.

Cross ventilation and natural light are provided to the common corridors on the residential levels through the common rooms on the east façade and via louvres and windows at the end of each corridor on the east, west and south facades.

Axonometric of entire structure from Ground Floor to Level 21

The ground floor contains reception with security entry, an open study / lounge area,

The first floor has a dining hall for residents with a balcony on the northern and eastern sides, with a kitchen and servery to the west and south.

A link bridge is proposed on the first floor to connect this building with the W2 Building currently under construction. This link bridge is addressed by a seperate a Section 96 Application to modify the DA approval (SSDA 6010) for Building W2. The residential levels of the building have a mix of single and twin bedrooms, each of

Each residential level has a common space located opposite the lift lobby. The majority of these are double height with a lounge, study or TV area on the lower level and study pods, casual seating areas or a balcony located on the upper level. These function both as more intimate places for residents to study in small groups away from the larger common areas on the lower levels and also as social hubs where residents can meet and interact with others away from the seclusion of their own

Having secured the opportunity to design adequate to both the W1 and W2 sites, Urbanest undertook a comprehensive review of the proposed building operations in light of the opportunity presented by developing two adjoining student accommodation facilities in the Darling Square precinct. This review focussed on:

- Determining the most efficient, secure and safe method of provision of services and . amenities.
- Rationalisation of services and amenities (where possible and appropriate).
- Product type market positioning.

With a single ownership of two student accommodation facilities, the opportunity exists to create a diverse student community that would not have been possible had two different student accommodation operators been co-located on the W1 and W2 sites, nor if an alternate land use had been proposed for this site. With this in mind, the two buildings that will constitute the Urbanest student accommodation community in Darling Square must be considered and designed as a single facility and not as two separate buildings.

Although it is not the subject of this application, the design of Building W2 currently under construction on the W2 site has influenced the design of this building and is therefore relevant to what is proposed in this DA. Reference is also made to a seperate section 96 application to modify the DA consent (SSD6010) to locate certain services in W2 to be shared by both buildings, such as a roof terrace, substation and larger gym.

Consequently, this has allowed Urbanest to propose a unique and innovative product type aimed more specifically at first year students. This will support the Universities' (UTS and Sydney University) objective to guarantee accommodation for the first year student cohort and in doing so, allow the Universities to compete in an increasingly global student education market.

The proposed dining hall is intended to serve the predominantly first year residents in W1 as their needs and means differ from the often older, more independent students who are envisaged as residents of the self-catered accommodation currently under construction on the W2 site.



**GROUND FLOOR PROGRAMS** 

W1

W2

FIRST FLOOR PROGRAMS



#### 04 DESIGN

#### **BUILDING PLANNING**



DARLING DRIVE

