#### COMPLIANCE WITH APPROVED CONCEPT PROPOSAL SSDA2





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W2 APPROVED STUDENT HOUSING BUILDING (SSD6010) UNDER CONSTRUCTION



# 04 DESIGN

COMPLIANCE WITH APPROVED CONCEPT PROPOSAL SSDA2





# EASTERN FACADE VIEW







# 04 DESIGN

EVENING STREET VIEW





NORTHERN VIEW FROM RAIL CORRIDOR





## Urban Design

A courtyard is proposed between the two student housing buildings; this will be public open space which will be activated by the student lobbies on either side and playful fixtures, such as the table tennis, and the amphitheatre seating. This 1.5m high amphitheatre provides screening to the space from the light rail corridor and an opportunity for students to gather, catch the afternoon sun, or watch movies (a projection screen located on the overhead bridge between W1 and W2 is proposed in the Section 96 application to modify SSDA6010). The paving to the central courtyard is playful and fine grained to provide colour to the space, while a feature tree in the amphitheatre is proposed to provide colour and greenery. Fixed, linear tables and benches provide space for study and outdoor dining. The space will be well lit throughout the evening and is overlooked by common spaces within both W1 and W2, providing a high level of passive surveillance and security.

The use of this central courtyard, and in particular, the outdoor screen, will be regulated through the Operational Plan of Management prepared by Urbanest. A pocket park is proposed at the northern end of W2 building. Due to its northerly aspect, and relative lack of overshadowing, this space presents an opportunity to create an open, sun filled turf area for passive recreation. The park is an opportunity for a short pit stop on the morning commute along the adjacent shareway, or a relaxed afternoon break between study sessions. Dense planting along the lightrail corridor and in planters at the Darling Drive edge provide a level of separation from the street, whilst also allowing views through for passive surveillance and security. The turf area has a 600mm high mound to the south west with feature shade tree provides a pleasant, shaded space to sit and watch over the park. More detail is provided in the Public Domain Statement and Landscape Drawings (Appendix J and K).

Landscape plan design by Aspect



# 04 DESIGN

#### **URBAN FABRIC**

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04 DESIGN
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#### STREETSCAPE



View of W1 and W2 from Darling Drive



View of courtyard from Darling Drive

Collonade Ground and First floor glazing Street Wall

- provide a generous and sheltered entry sequence.



Indicative section of colonnade & double height entry

• The building has a uniform street level treatment to all public frontages, to create a clear 'street wall' and to avoid turning a 'back' to any public aspect.

• The facades of the building have been set back at lower levels to create a colonnade which provides some shelter for pedestrians and 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 and up to The Theatre, Darling Harbour and the Ian Thorpe Aquatic Centre and light rail stop north of Pier Street.

• The entry to the building has been placed in the south eastern corner of the site in response to desire lines from The Goods Line and signalised crossing on Darling Drive to Darling Square, using the central courtyard between Buildings W1 and W2 to the south of the site as a forecourt. The street level colonnade is deepest at the entry to

- The lowest two floors of the building are devoted to common areas, with the residential floors starting above this, which provides adequate visual privacy to the residental areas from the street.
- Separation from the NW Plot across Darling Drive is 37m, which exceeds SEPP 65 • Apartment Design Guide setbacks, giving the east facing dwellings adequate visual privacy from neighbouring buildings.
- Separation from the Powerhouse museum to the west is 14m from the main building, exceeding the SEPP 65 Apartment Design Guide setbacks. The Powerhouse museum has a predominantely closed elevation facing the student housing builidng. This gives the west facing dwellings a dequate visual privacy from neighbouring buildings and open the second secondspaces.
- Overlooking to and from the Powerhouse Museum and proposed commercial building to the east is not expected to compromise privacy, as occupancy patterns of the two buildings will be quite different; i.e. the Museum and commercial are in use primarily during the day when residents are most likely to be out.
- Visual intrusion from the light rail corridor is expected to be minimal; windows to residential areas are some 9m above the tracks, which is well above the lgiht rail vehicles and the power lines (approx. 5m above the tracks).





 non residential residential Section through site - Powerhouse Museum to the West and Darling Drive to the East



# 04 DESIGN

PRIVACY/ OVERLOOKING ANALYSIS







# **05 DENSITY AND MIX**

W1 STUDENT ACCOMMODATION BUILDING DA REPORT SSDA12 35

						1				2	AJ		+Cottier
Apartment type	<b>Type A -</b> Single Ensuite	<b>Type B -</b> Twin Ensuite	<b>Type C -</b> Accessible Single Ensuite	<b>Type D -</b> Corner twin ensuite	<b>Type E -</b> South single ensuite	Manager		Gross Building Area (m <sup>2</sup> )	<b>Gross Floor Area</b> (m <sup>2</sup> )	<b>Common areas</b> (m2)	Total Apartments	Total Beds	Rooms ARH SEPP
Apartment no. of beds	1	2	1	2	1	1							
Ground								597.6	435	175	0	0	
1								665.3	474	344	0	0	0
2	16	6		2	1	1		734.5	623	27	26	34	26
3	17	6		2	1			734.5	623	26	26	34	26
4	17	6		2	1			734.5	606	8	26	34	26
5	17	6		2	1			734.5	623	26	26	34	26
6	17	6		2	1			734.5	606	8	26	34	26
7	17	6		2	1			734.5	623	26	26	34	26
8	17	6		2	1			734.5	606	8	26	34	26
9	17	6		2	1			734.5	623	26	26	34	26
10	18	6	1	1				734.5	606	8	26	33	26
11	18	6	1	1				734.5	623	27	26	33	26
12	18	6	1	1				734.5	606	8	26	33	26
13	18	6	1	1				734.5	623	27	26	33	26
14	18	6	1	1				734.5	606	8	26	33	26
15	18	6	1	1				734.5	623	27	26	33	26
16	18	6	1	1				734.5	606	8	26	33	26
17	18	6	1	1				734.5	623	27	26	33	26
18	18	6	1	1				734.5	606	8	26	33	26
19	18	6	1	1				734.5	623	27	26	33	26
20	18	6	1	1				734.5	606	8	26	33	26
21	18	6	1	1				734.5	616	51	26	33	26
L22 Roof								330.0					
							TOTAL						
TOTAL APARTMENTS	351	120	12	28	8	1	AREAS	16282.9	13209	908	520	668	520
TOTAL BEDS	351	240	12	56	8	1	TARGET		DIFF.				

# 05 DENSITY AND MIX

DENSITY TABLE





LEVEL 21

LEVEL 20

LEVEL 19

LEVELS 10-18 (TYPICAL UPPER FLOOR PLAN)



# 05 DENSITY AND MIX

AXONOMETRIC PLANS



RESIDENTIAL LEVEL COMMON AREAS



casual seating areas or a balcony located on the upper level.

ground floor and level 1.

natural light to the light lobbies.

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,

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 rooms.

A common laundry is located on level 2, convenient to the principal common spaces on

These common spaces are expressed in the facade with double height picture windows spanning the full height of each space, which allow expansive views out and provide



Type A- Single Bed storage, bed, desk and chair.





# 05 DENSITY AND MIX

APARTMENT LAYOUT

Each non accessible sole occupancy bedroom contains an ensuite bathroom, 1.7m<sup>3</sup> of

Natural light and ventilation is provided by a top hung openable window 800x1800mm.

Apartments = 352 Beds = 352



APARTMENT LAYOUT



### Type B-Twin Ensuite

and chair per occupant.

living/study area.

per occupant.



Twin Ensuite apartments are a more affordable product. Each sole occupancy twin share bedroom contains an ensuite bathroom as well as 2.8m<sup>3</sup> of storage, bed, desk,

Each bed area will have a 2100mm high privacy screen, that can be closed from the

Natural light and ventilation is provided by a top hung openable window 800x1800mm

Apartments = 120 Beds = 240



## Type D- Corner Twin Ensuite

chair per occupant.

living/study area.

area.





# **05 DENSITY AND MIX**

APARTMENT LAYOUT

Special twin bed apartments are located in each corner of the floor plan; these have windows on two sides and benefit from additional natural light and ventilation.

Twin Bed apartments are a more affordable product. Each sole occupancy twin share bedroom contains an ensuite bathroom as well as 2.8m<sup>3</sup> of storage, bed, desk, and

Each bed area will have a 2100mm high privacy screen that can be closed off from the

Natural light and ventilation is provided by a top hung openable window 800x1800mm per occupant, with an additional openable window located in the living

> Apartments = 28 Beds = 56







# **06 ARTICULATION AND FACADE**

W1 STUDENT ACCOMMODATION BUILDING DA REPORT SSDA12 43

MATERIAL DEVELOPMENT - NORTH EAST



Part of the Eastern Facade Elevation

The North Eastern Corner of the building has been given additional emphasis, as this is where the building emerges from behind the NW building and opens out to views of Tumbalong Park and to Darling Harbour beyond.

In the middle of the East Facade, the double height common spaces are expressed in the facade with large picture windows spanning the full height of each space, which allow expansive views out and provide natural light to the light lobbies.

Larger areas of glazing to the rooms in the Northeast corner of the building take advantage of the views with an expressed overlay of vertical and horizontal elements.

This façade is light in colour and substaintiably glazed. It includes:

- Clear glass;
- Dark grey aluminium glazing frame
- Coloured metal panels in shades of pale blue and silver
- Perforated metal panels in shades of light blue and silver; and .
- Vertical and horizontal feature blades and strips in white and silver









Bayuquan Theater in China





Northern Facade

44

Draft Render of Eastern Facade in morning light





Sydney Harbour, Lloyd Rees, 1972



Eastern facade materials, generally.







Saltire Centre, Glascow Caledonian University, BDP



Het Kasteel, HVDN Architects

- Glass elements are always vertical.

Materials are expressed metal profiles making up the overlaid grid pattern, metal infill panels and glass with aluminium framing within the openings. Spandrels are set in the glazing with colourback glass panels to match the windows

•

- Clear glass;
- •
- Dark grey aluminium glazing frame; and •
- Faceted metal panels in shades of blue and pale grey. •



# 06 ARTICULATION AND FACADE

### MATERIAL DEVELOPMENT -NORTH & EAST

The Northern and Eastern façades will be read in the context of the Darling Square and as such is designed to be part of the 'family' of buildings planned for the site. The treatment of the Nothern and Eastern façades responds to the rest of the precinct and the harbour, with a panelised façade system using subtle variations in size and angle to create a dynamic visual effect akin to the play of light on water.

The façade has an overlaid feature grid pattern with faceted infill panels; these are angled so as to catch and reflect various angles of sunlight and create a shimmering effect to visually break up the bulk of the building.

This façade is light in colour and reflective in nature. It includes:

Dark grey colourback glass to spandrels;



# 06 ARTICULATION AND FACADE

MATERIAL DEVELOPMENT - STREET LEVEL



Darling Harbour Railway Yard (City of Sydney Image Library)



Powerhouse Museum (State Library)



'Street wall' facade materials





Idea Store Whitechapel, David Adjaye (a+u David Adjaye)

Clear Glass The character of the lower 2 levels responds to the functions on these levels and their relationship to the street. Conceptually, the tough outer 'bark' of the building above has been stripped away on the lower floors, revealing the fresh green 'sapwood' beneath, inviting the visitor to enter the soft, light inner core of the building.

This treatment extends to the north, east and south facades at the lower level, expressing a relationship to the public realm on each side. The Western Facade continues the pattern of the other three facades, but has a more solid appearance, as it mostly contains service areas. Panels of metal louvres provide ventilation to plant areas and there are glazed zones to the first floor dining hall and servery on the north-west corner and the kitchen back of house areas on the ground floor. The facades of the public / common spaces on these level are primarily glazed to form a visual connection with the street and publicise their function.

building's scale as you approach.

Dark Grey Glass

This facade is fresh and light. It contains:

- Clear Glass
- Light coloured timber panels
- Light grey aluminium framing
- Charcoal columns



# 06 ARTICULATION AND FACADE

### MATERIAL DEVELOPMENT - STREET LEVEL



The language of these facades is scaled down to reflect the human scale of the public realm. The colonnade provides an interface with the public realm, and modulating the

- Translucent glass (pale green), Opaque glass (pale green)
- Colourbacked glass & louvres to bike store / services