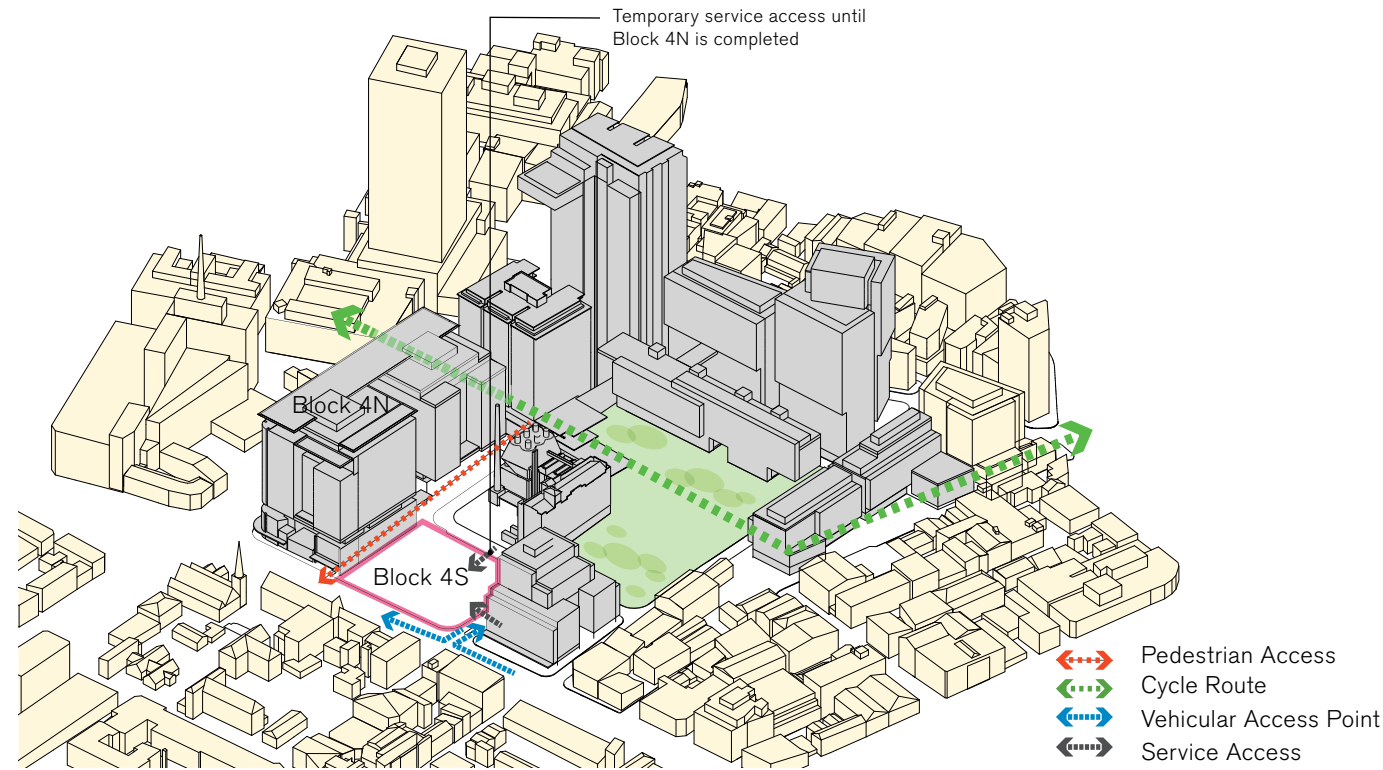


Transportation



**Pedestrian and cycle routes**

Pedestrian and cycle networks at Central Park have been designed to integrate with the proposed Urban Pedestrian Network (UPN) and the City of Sydney's cycle ways program. A main pedestrian footway and cycle route (proposed City Council route 20) will run through the centre of the park connecting Balfour Street across to Broadway and Jones Street in turn leading on to the UTS precinct. Further North-South and East-West pedestrian routes criss-cross the precinct – the plan diagram opposite indicates that Block 4S will have main pedestrian ways on all elevations and a proposed off road/shared path adjacent to the Abercrombie Street elevation.

The principle entrance to Block 4S is located on the North elevation as indicated on plan opposite. Access to the Block 4S bike store is on the South elevation as indicated on the plan opposite.

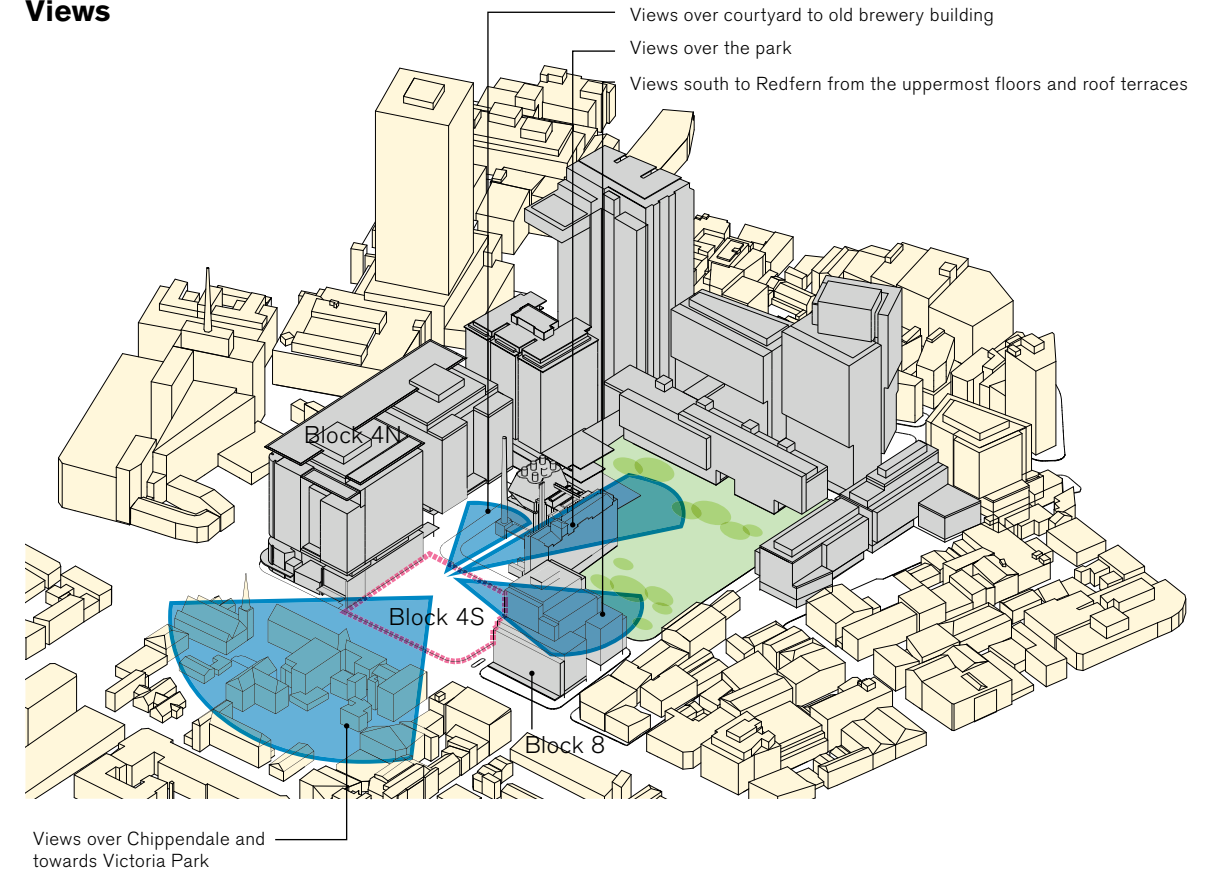
Concept Plan Pedestrian and Cycle Routes with Block 4S highlighted. Main entrance highlighted, bike store entrance highlighted.

**Vehicular access**

The Central Park master plan envisages that surface traffic within the precinct will be markedly reduced by directing cars quickly into an integrated basement and underground road system. Irving Street to the South of Block 4S is a point of access/egress to the precinct from the adjacent one-way Abercrombie Street. Service access to Block 4S will be from basement level. Until the adjacent Block 4N which has an integrated basement and accommodates the service access ramp from Abercrombie Street is complete a temporary at grade service access point will be provided off Central Park Avenue.

Concept Plan Traffic Access, Parking with Block 4S highlighted. Interim/temporary loading access indicated.

Views



**Views**

Views to the North beyond the site will be masked by proposed buildings at Block 4N and Block 1. Block 4S enjoys views to the East and South-East over the Old Brewery Building and the park at the heart of the Central Park Precinct. Limited views to Redfern in the South will be available from the uppermost floors and roof terraces which will be largely obscured by the proposed building at Block 8.



**Design principles behind scheme**

**Building scale and massing**

**Concept Master plan**

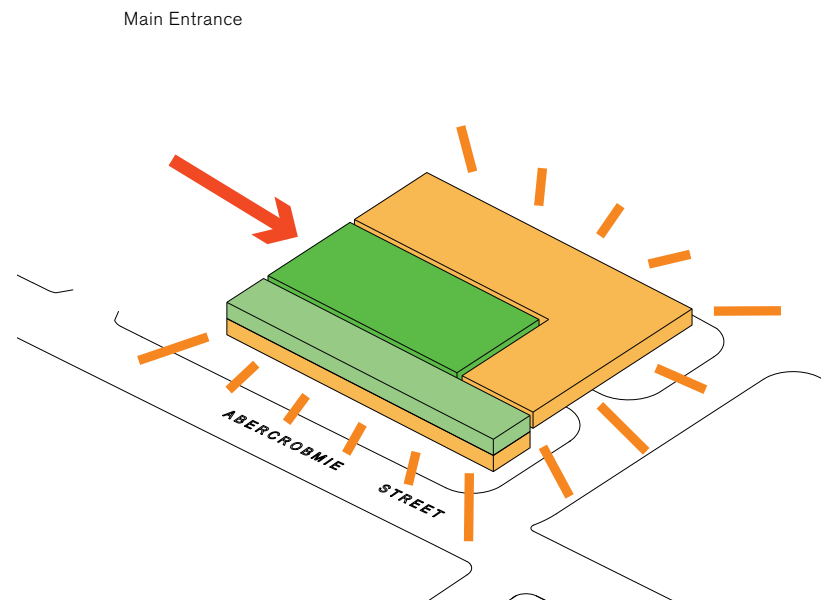
Building heights are greatest close to the city and lower towards Chippendale, mediating between the CBD and inner residential areas, and ensuring significant sunlight in the main park and residential buildings to the south.

**Waste Strategy**

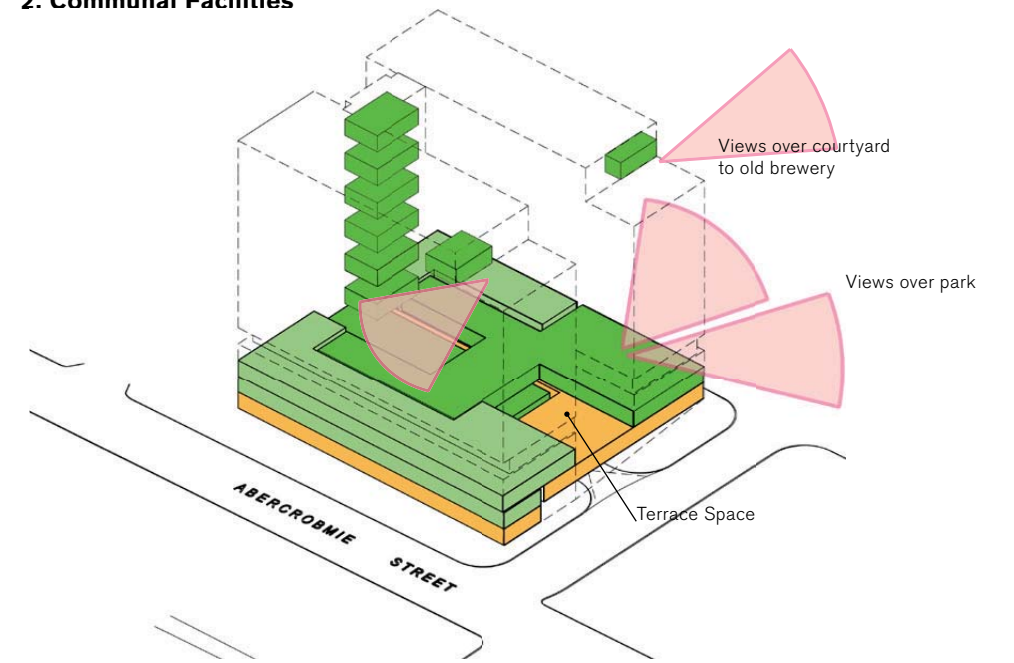
Permanent strategy  
Interim strategy

**Landscape strategy**

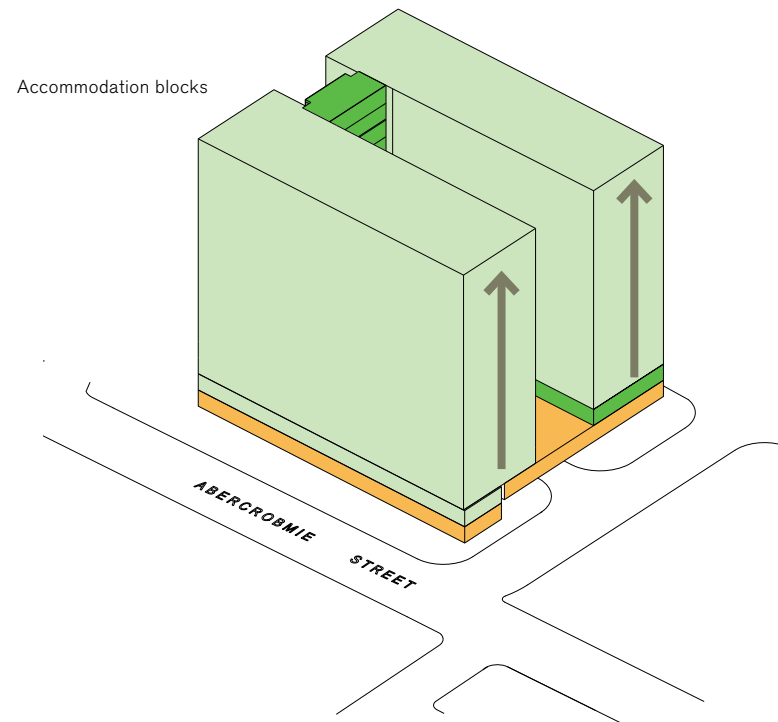
**1. Activated Ground Plane**



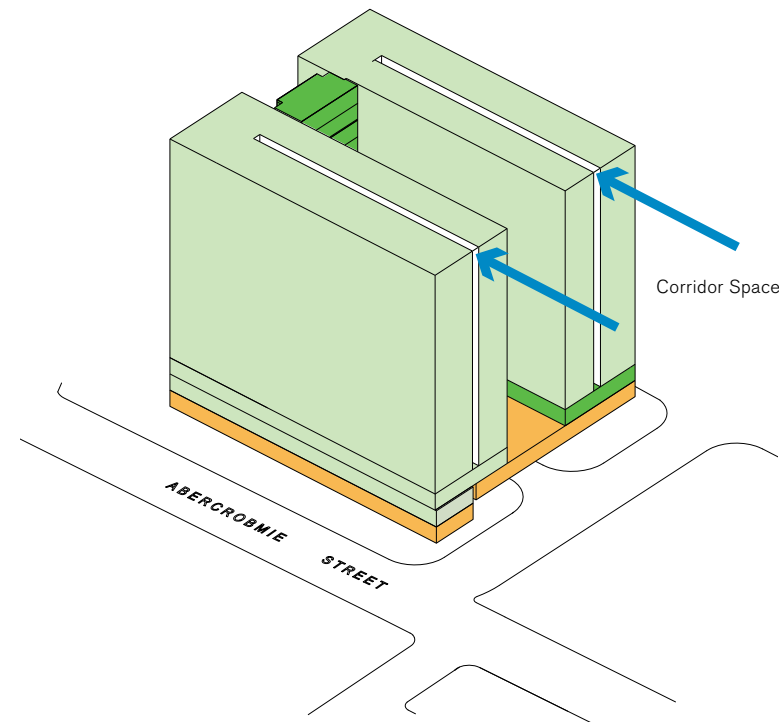
**2. Communal Facilities**



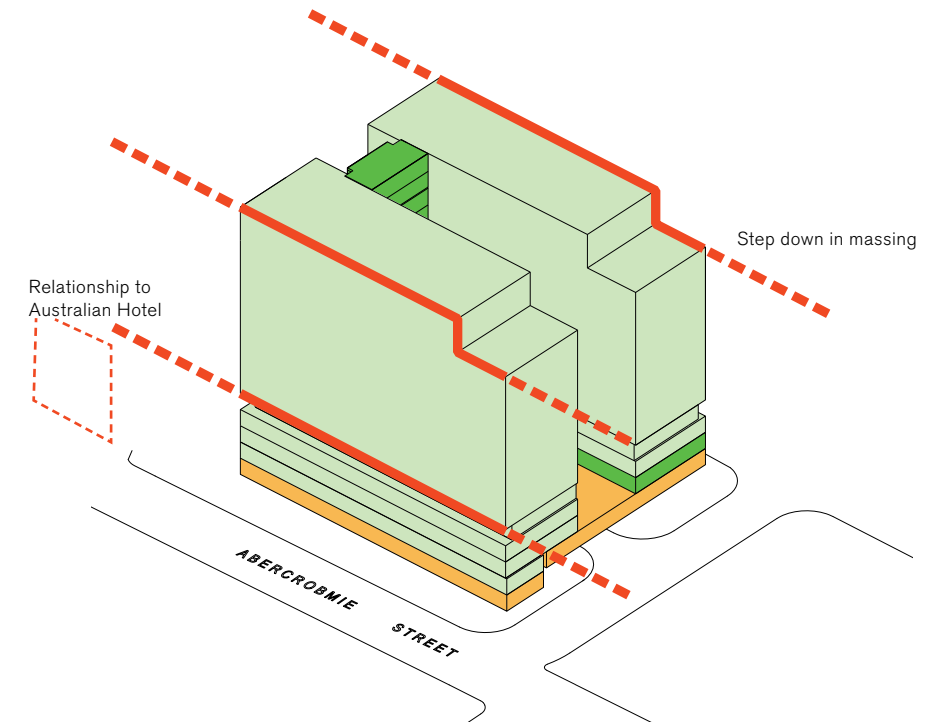
**3. Two Wings Student Accommodation**



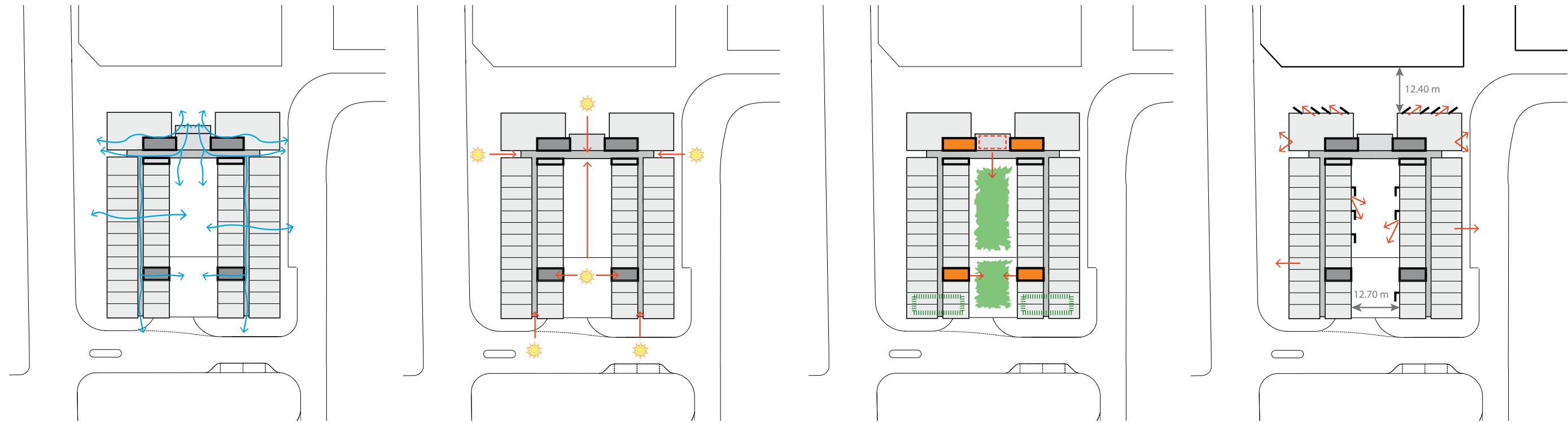
**4. Accommodation Split for Light and Ventilation**



**5. Massing Relationship to Context**



- Retail
- Student Accommodation
- Student Communal Facilities



**Natural ventilation**

Slots are opened on the East, West and South facades that correspond with the corridor location. These are fitted with operable windows to allow the corridor areas to be naturally ventilated. Ventilation is further enhanced with operable glass-louvered facades to the East and West wing stairs (which open to the courtyard) and at the atrium lounge areas. All fire doors to the corridor and stairs are on magnetic lock hold-open devices to maintain natural ventilation throughout the corridor and circulation areas.

The multi-share apartments located either side of the core at the north of the East and West wings are planned in a manner that permits the common areas to be naturally ventilated - operable glass louvers are provided to the living room area as well as the end of the internal corridor to the studios.

**Daylighting to common circulation**

The planning strategy to encourage the natural ventilation of the corridors also serves to ensure that the circulation spaces are well day-lit - of utmost importance to avoid an enclosed and institutional feel. No studios are oriented due south. Refer also to section 5.0 Facades for further information on studio solar access.

**Landscape courtyard**

The accommodation wings are arranged round a central landscaped courtyard and level 02 green roof area. Key interaction spaces such as the atrium lounges located on alternate floors throughout the building overlook the courtyard as do the East and West wing stairs by way of their glazed end walls. Terraces with vegetable gardens are also provided at the southern end of the accommodation wings level 13.

**Views**

The form of the studio facade module reflects its orientation and the need to address the issues of solar access and privacy. Where a degree of visual screening is required to ensure privacy from adjacent structures "saw-tooth" facades are utilised. Such facades allow privacy yet permit sun access and channelled views. On this project these facades are located on the North and at the courtyard. On the East and West facades privacy is less of an issue and facade design addresses primarily the issue of solar access.

# Concept Design

## Ground Floor

A key design objective is to maximise active frontage at ground level.

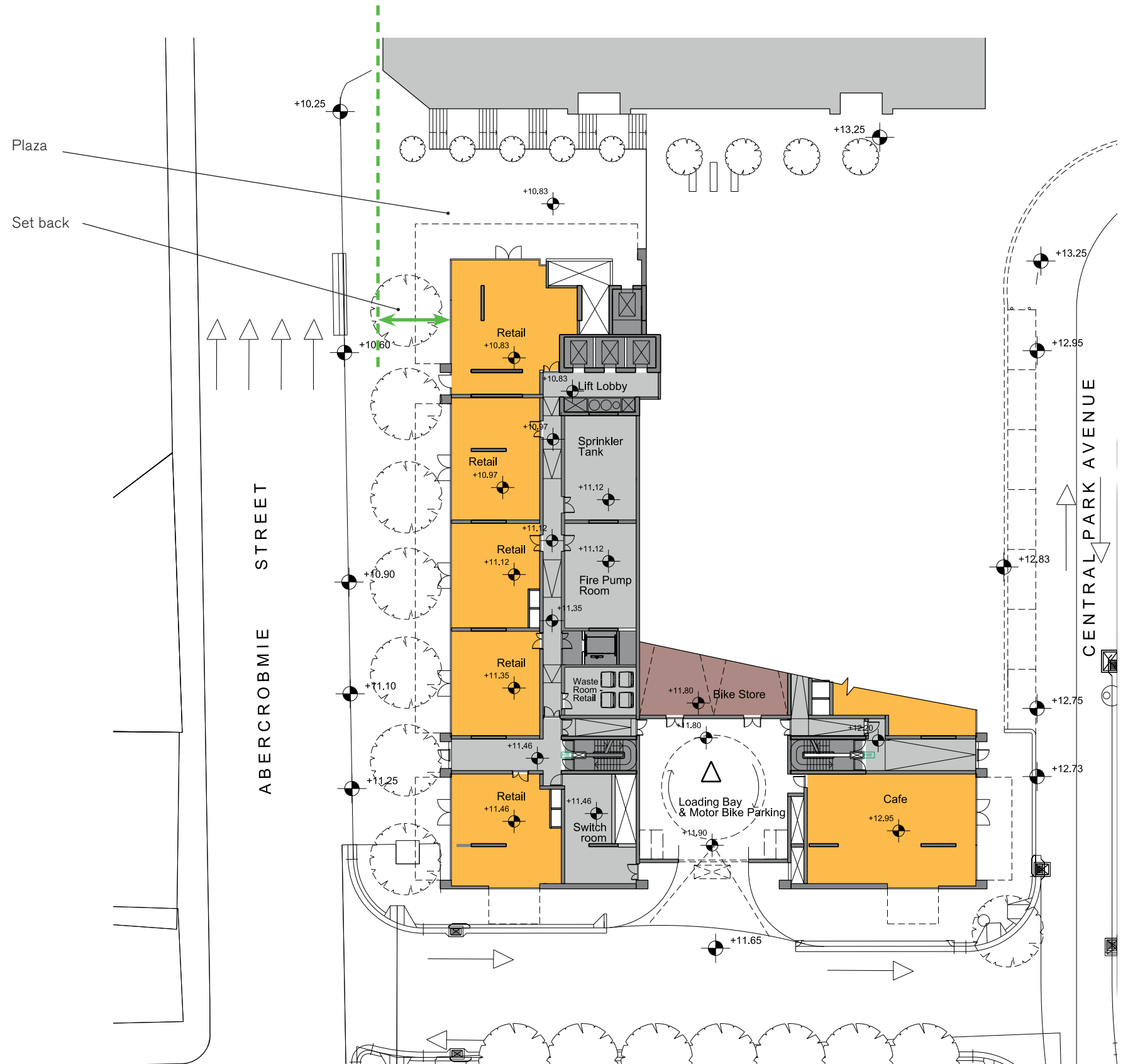
To achieve this, the façade to Abercrombie Street is occupied by retail units at street level the full length of the elevation.

To manage the change of level between Abercrombie Street and Central Park Avenue a stair with five flights of steps is provided running parallel with the South façade of the future Block 4N to the North. The stair width is deliberately restricted to open a plaza area to the retail unit on the North West corner of the student accommodation building that gives opportunity to incorporate public art. A lift recessed into the North façade is accessed from the plaza and provides step free access to the building entrance and the heart of the precinct.

The façade of the student accommodation building (and that of Block 8 to the South) is set back from the façade line of Block 4N and the heritage buildings to the North. This locally widened stretch of public realm on Abercrombie Street accommodates a line of trees.

A projecting awning provides shelter to the adjacent public realm wraps round the building to the North and South and is stepped in relation to the ground levels.

The South elevation is anchored at each corner by retail units either side of a loading bay. The loading bay is a temporary installation which is planned to operate until permanent facilities located in the basement are commissioned. At this time the loading bay could be in filled with retail units extending the activated ground floor to the full building perimeter (subject to further approvals if required).



A key precinct pedestrian thoroughfare is reinforced with the location of the main entrance on the North elevation and the creation of an activity node. The entrance is clearly signified with a projecting canopy - reception and meeting pods will ensure activation and passive surveillance of the adjacent public realm.

A vehicular drop-off area is located along Central Park Avenue which affords step-free access to the main entrance. In the future this area will provide drop-off for child care in future Block 1+4N. This forms part of the Site Wide Infrastructure Application.

Retail units are located along the full extent of the East elevation which fronts the plaza to the Old Brewery.

Access to the student accommodation is monitored and controlled via the nodal reception desk which performs not only a 24 hours security role but also a welfare monitoring function as students pick up mail and parcels and store luggage in facilities provided in the immediate vicinity.

An open stair and stepped seating arrangement lead to communal facilities on the level above. Motor bike and bikes are stored underneath the stepped seating.

14 student studios are located at this level which overlooks Notre Dame and Abercrombie Street. It is intended to appropriately treat the facade for acoustic separation from street noise.



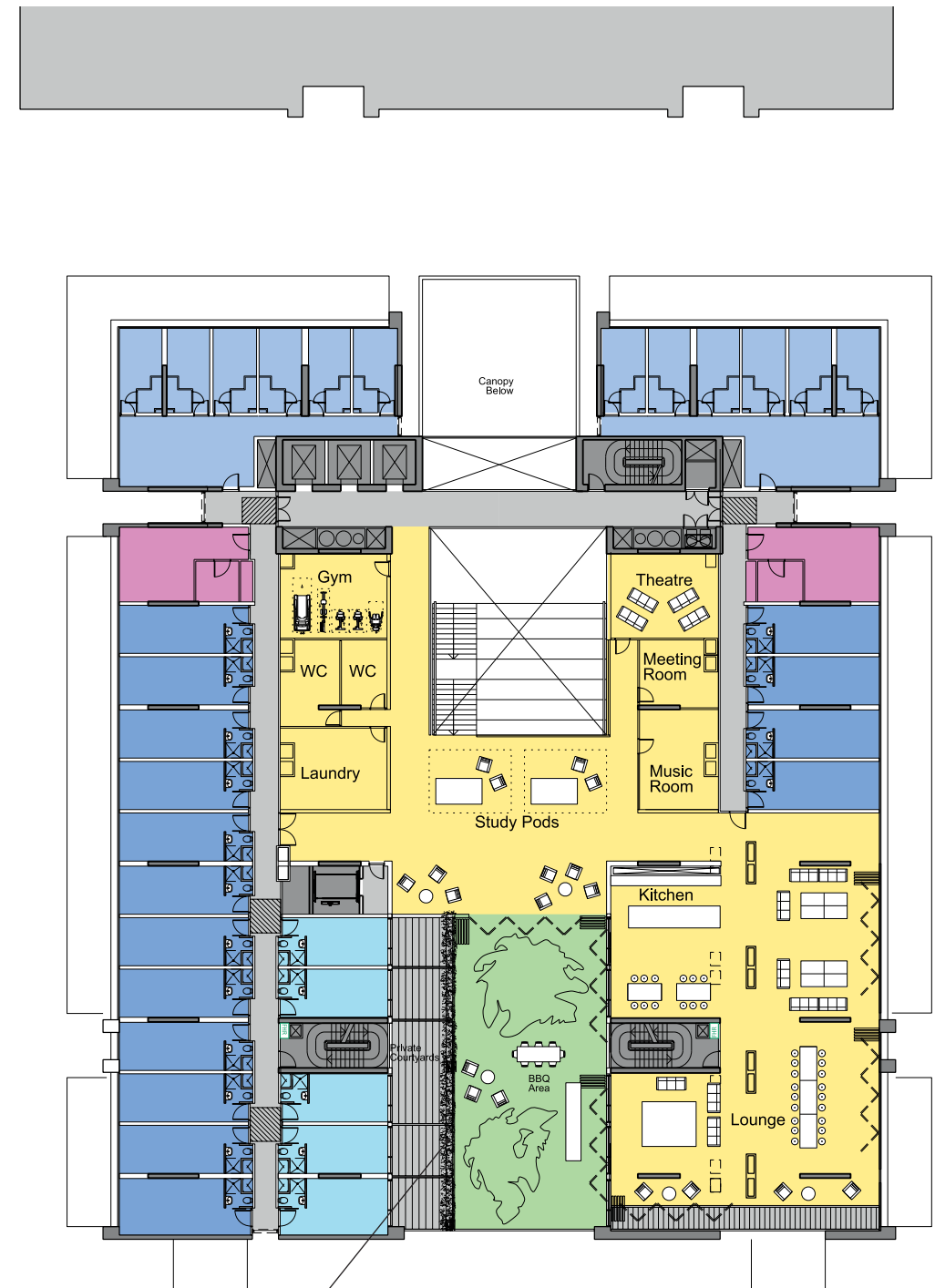
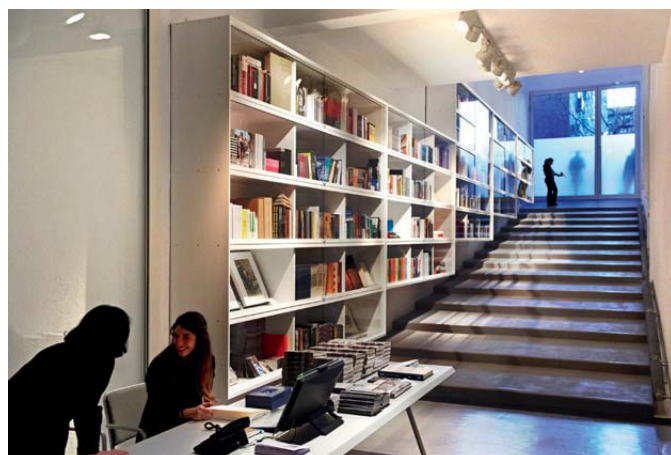
# Concept Design

## Level 01

Level 01 houses key shared facilities for the resident students; a central void is flanked by a gym/laundry/music/meeting room and theatre with an open area housing study pods at the head of the stairs. Folding doors extend this communal space to an external BBQ area. Lounge and kitchen facilities are located in the South East corner to capitalise on the views over the park and the plaza to the Old Brewery. Folding doors are proposed to allow this space to be opened out weather permitting.

The core is arranged in two distinct components; lifts and a riser cluster to the West and stairs and a riser cluster to the East. These elements are connected by a bridge that spans the atrium.

Shared facilities are flanked on the North and West (and partially on the East) by student studios of various sizes. Private yard spaces are provided to studios that front the BBQ area.



Screens for privacy to the private courtyards

## Concept Design

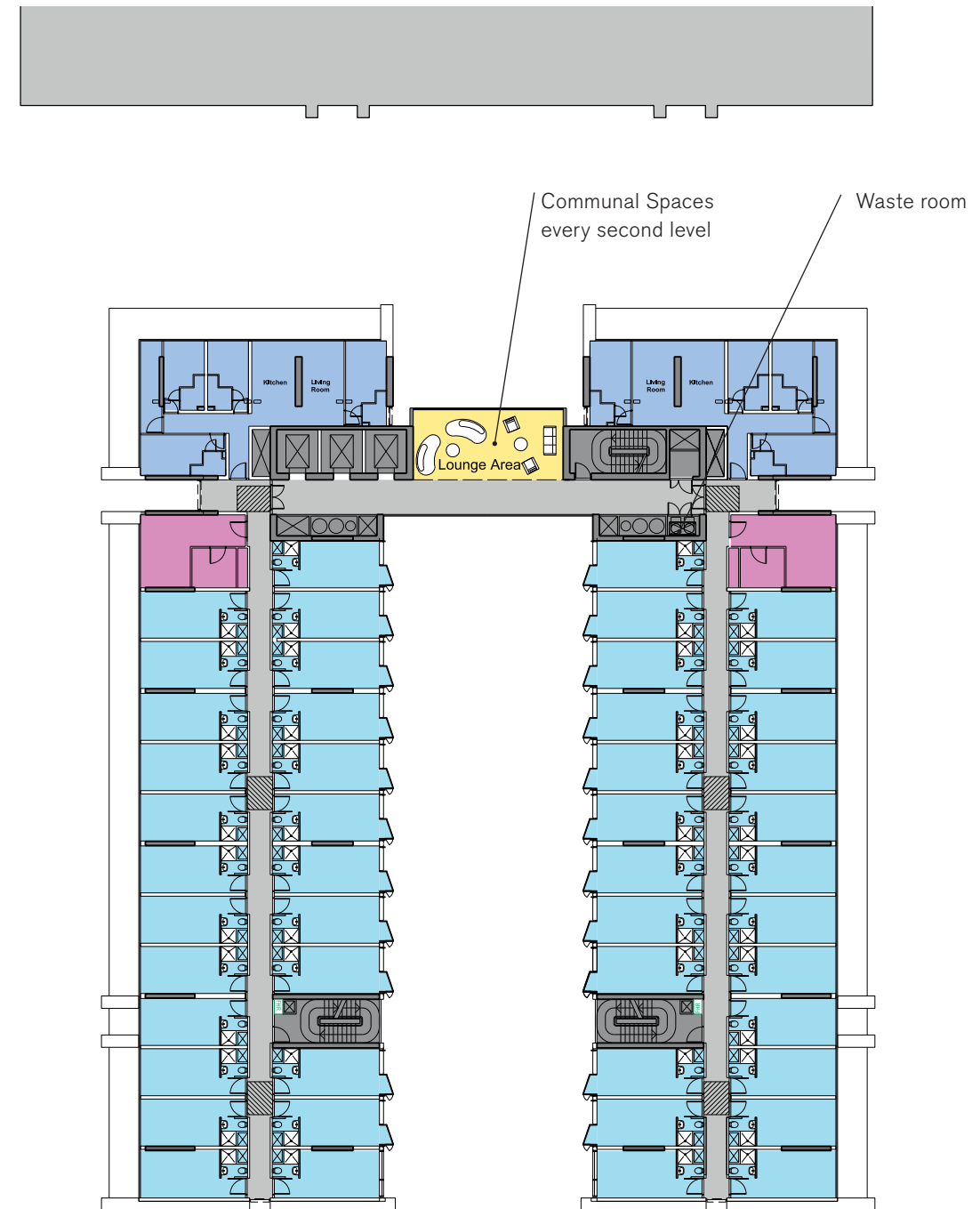
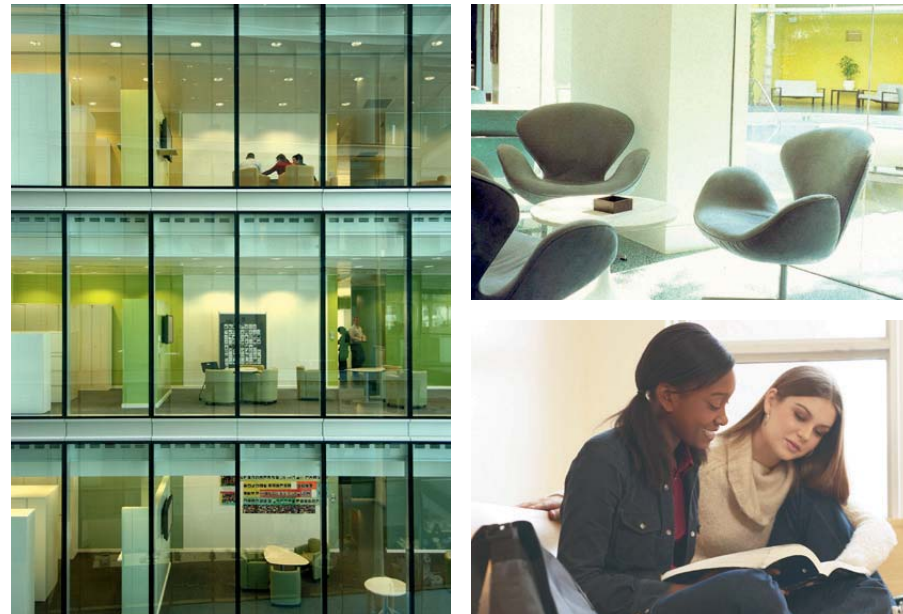
### Level 03 - Neck and Atrium Common Room

4.5

Level 03 is the “neck” level where a recess is expressed on the North, East and West facades that engages/relates to the scale of the heritage buildings at the corner of Abercrombie Street and Broadway that are retained in the precinct master plan. A non-accessible terrace area is provided on these three sides.

Multi- functional communal spaces and lounge areas are provided on every second level between the lift and stair cores. These spaces are strategically located to enjoy views both to the North and to the South over the courtyard between the accommodation wings and to provide an interaction node for students with space for group study, TV and video games, library/ book-swap, and similar uses.

Waste rooms are conveniently located at every level close to the stairs and are provide with chutes for general and recycling waste.



### Concept Design

#### Level 04 Typical Student Accommodation Layout

levels 6, 8, 10,12 similar; levels 5, 7, 9 ,11 are similar and have common lounge area at bridge link

Level 04 represents a typical floor plate arrangement for the project.

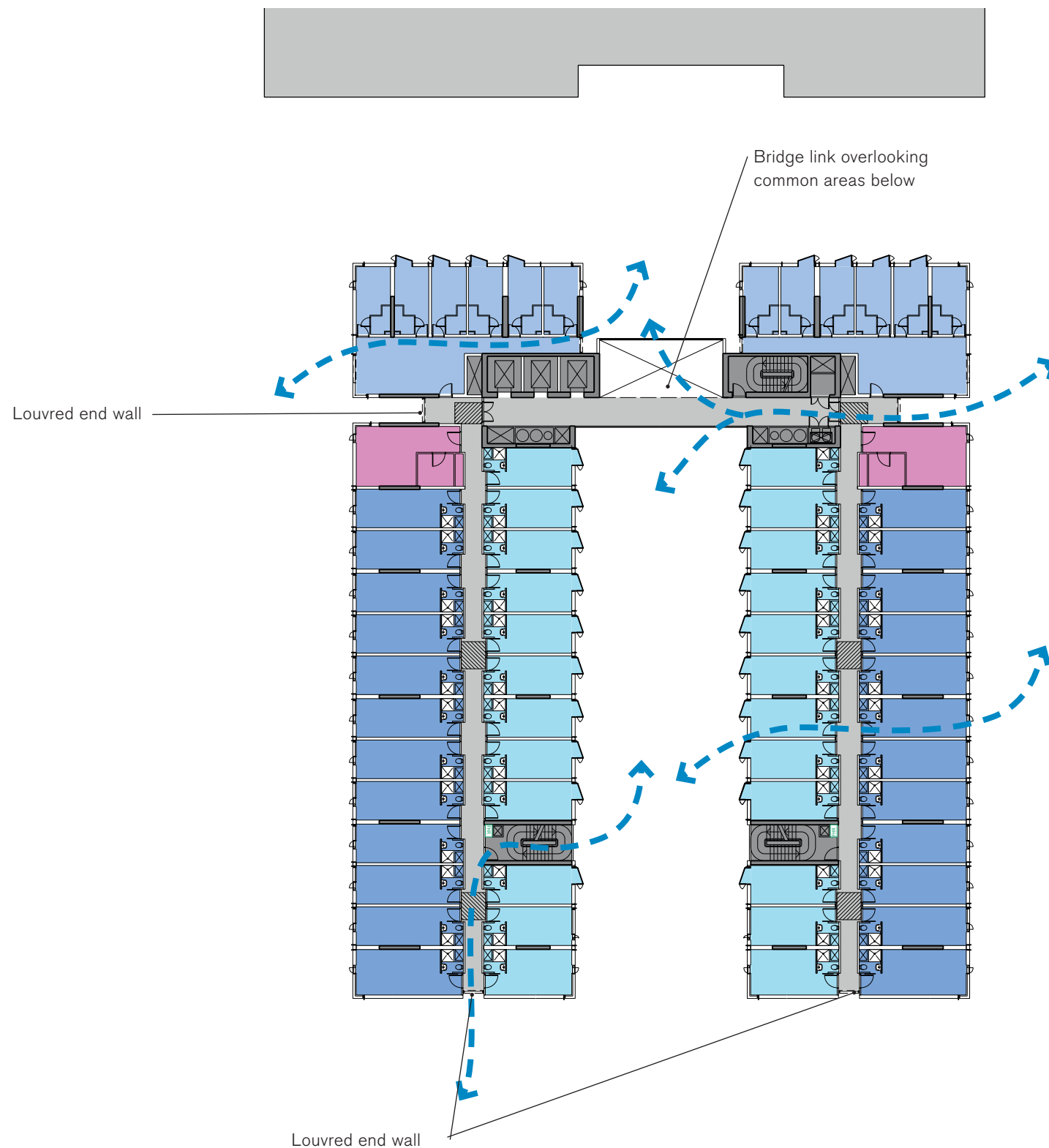
Access corridors to the studios are naturally ventilated and receive daylight from the glazed atrium, the slots opened in the East at West facades in the vicinity of the core, and from glazed/louvered end-walls to the escape stairs and the corridor ends to the South.

The common lounge areas between the lift and stair cores are located on every second level. This plan illustrates the intermediate bridge link condition overlooking the courtyard on the south side and common area below on the north side.

Typically standard studios are arranged around the central courtyard and elongated "studio longs" are arranged on the East and West.

Deluxe/accessible studios designed specifically with the requirements of wheelchair users in mind are located immediately to the South of the ventilation/daylight recesses in the East and West facades.

Six bedroom multi-share apartments are located North of the core. These units are configured in a manner that permits natural ventilation of the communal space, kitchen and dining area of the apartment.

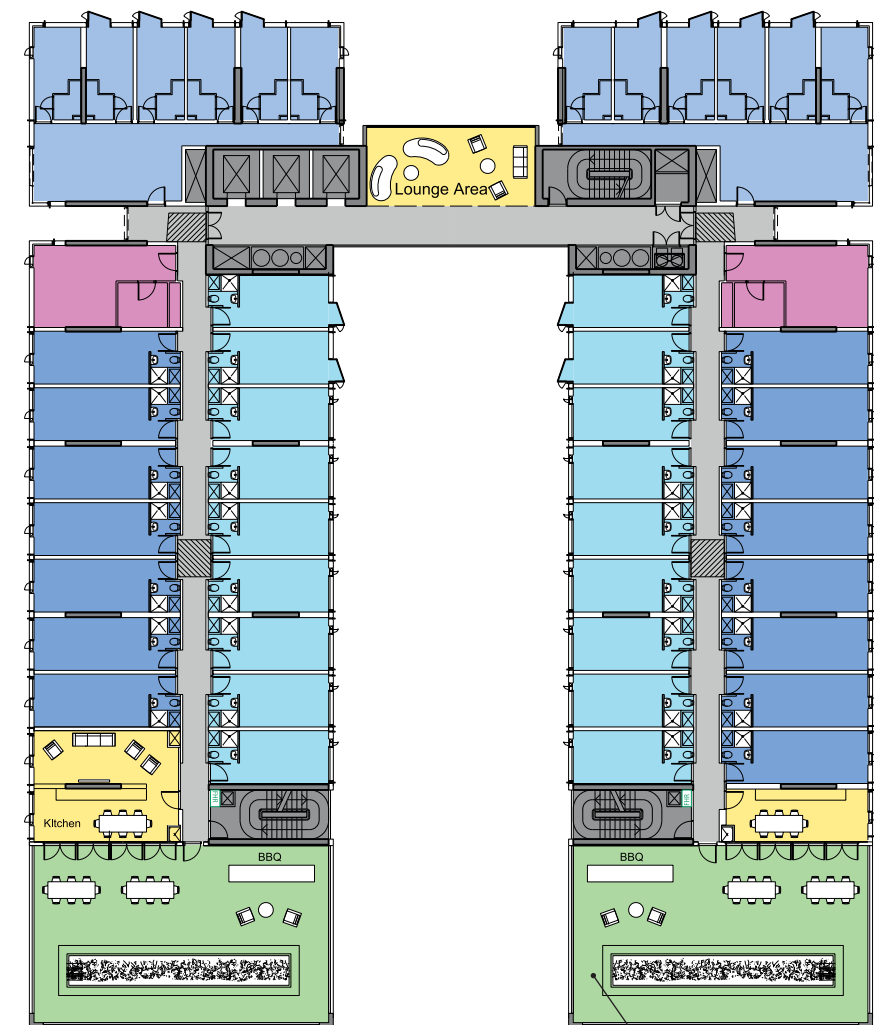


# Concept Design

## Level 13 - Terrace

At Level 13 terraces accessible to all students are introduced at the Southern extremities of the accommodation wings. Indoor kitchen/common areas are provided adjacent outdoor BBQ facilities.

Vegetable gardens are integrated on the terraces and designed to be managed by the students to increase their sustainability awareness.

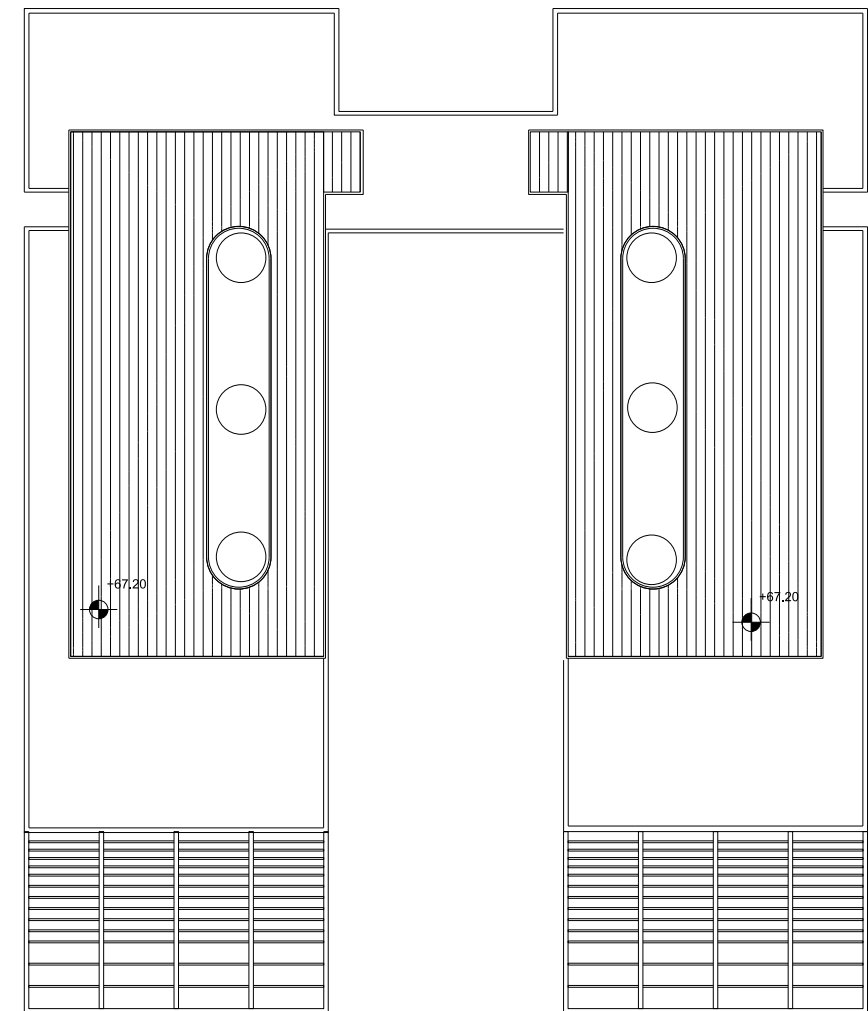


Vegetable gardens

# Concept Design

## Roof Plan

A louvered enclosure will be provided to the roof top plant.  
A metal cowling will bring the three cooling tower chimneys together in a single form.



**Studio Long**

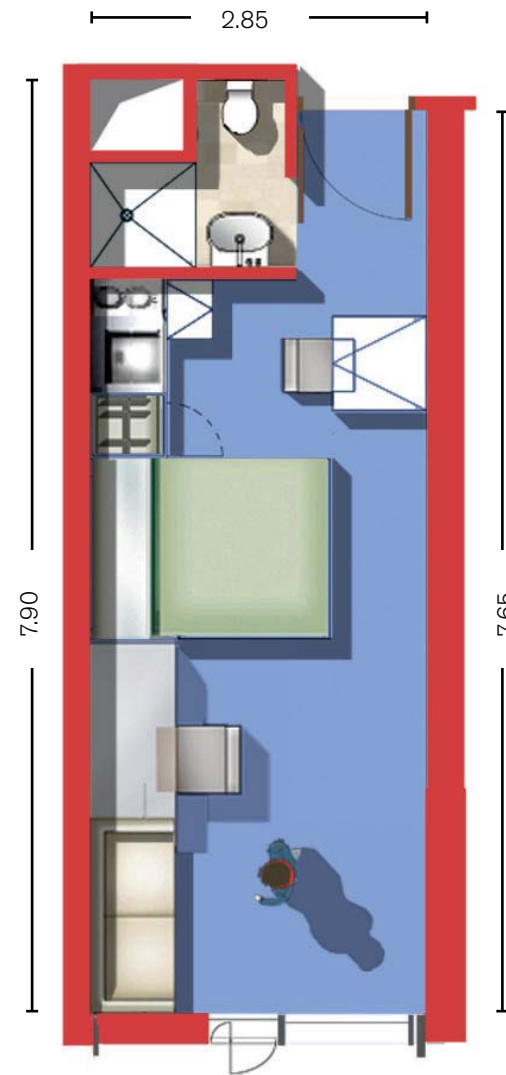
The design and space planning concept is to maximise the main living space provided within the studio by keeping the size of the shower room as small and efficient as possible. The kitchenette, bed, desk and seating are arranged linearly within the room; storage is integrated into wall units. The façade is kept as simple elegant design with a full height fixed glass window, that is positioned adjacent to the wall to make maximum use of the daylight, by reflecting the light from the wall into the room. A very simple rotating vertical solid ventilation panel is provided to provide natural ventilation. Refer to façade design description for further details.

**Standard Studio**

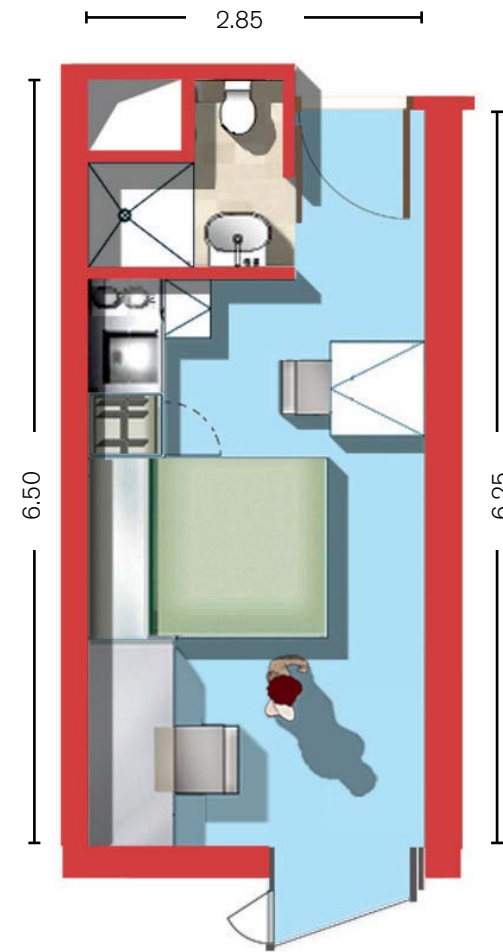
The design of the Standard Studio follows the concepts established in the planning of the Studio Longs to maximise the main living space. The standard studios have different façade designs, depending on the location in the building - both in plan and floor level. The Standard studios that are lower in the building and to the North of the courtyard, have the benefit of bay windows that provide space to gain views diagonally down the courtyard space to the south. Standard studios without bay window have a façade design concept similar to the Studio Longs, but the window size comes in two different sizes; one being the same as the Studio Long, and the other providing a larger window size for studios that are less exposed to solar gain.

**Studio Deluxe/ Accessible**

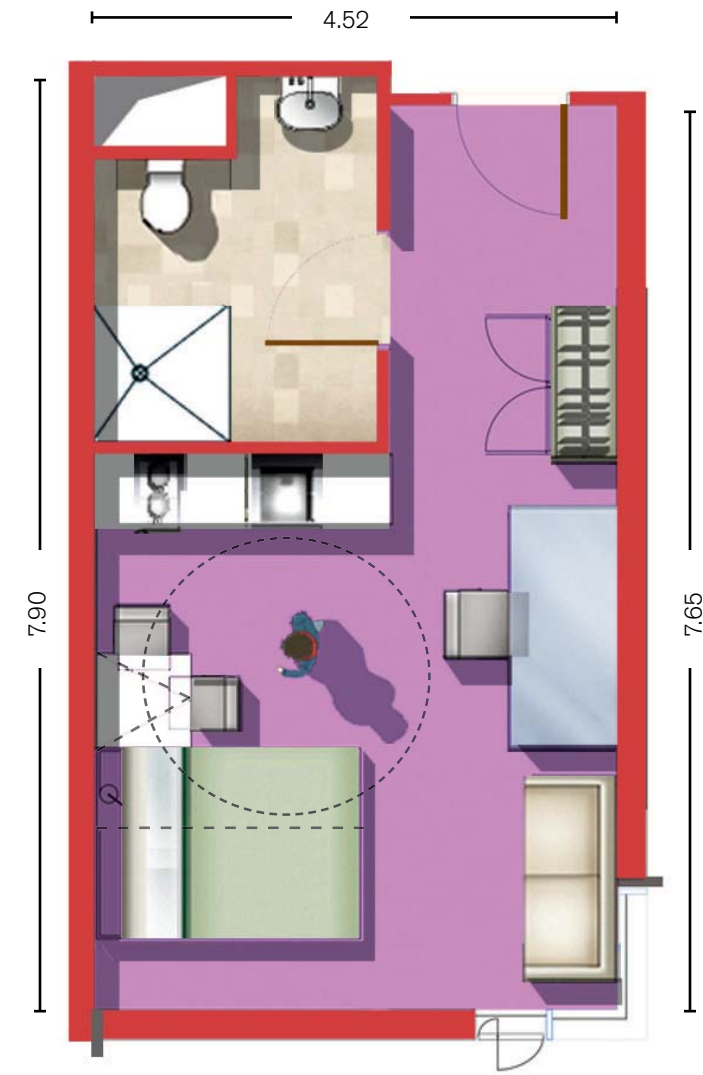
The design of the Deluxe Studio has been configured to optimise the proportions of the room. The bathroom layout has been planned to provide a high quality of practicality based on current accessible space planning requirements. The Deluxe Studios also have full height corner windows to take advantage of their position within the overall building plans with views to the East and West. Corner windows also provide good daylight penetration within the studios as they wash the adjacent wall with daylight that is reflected by the wall into the room.



Studio Long



Studio Standard



Studio Deluxe / Accessible

**Multishare Typical**

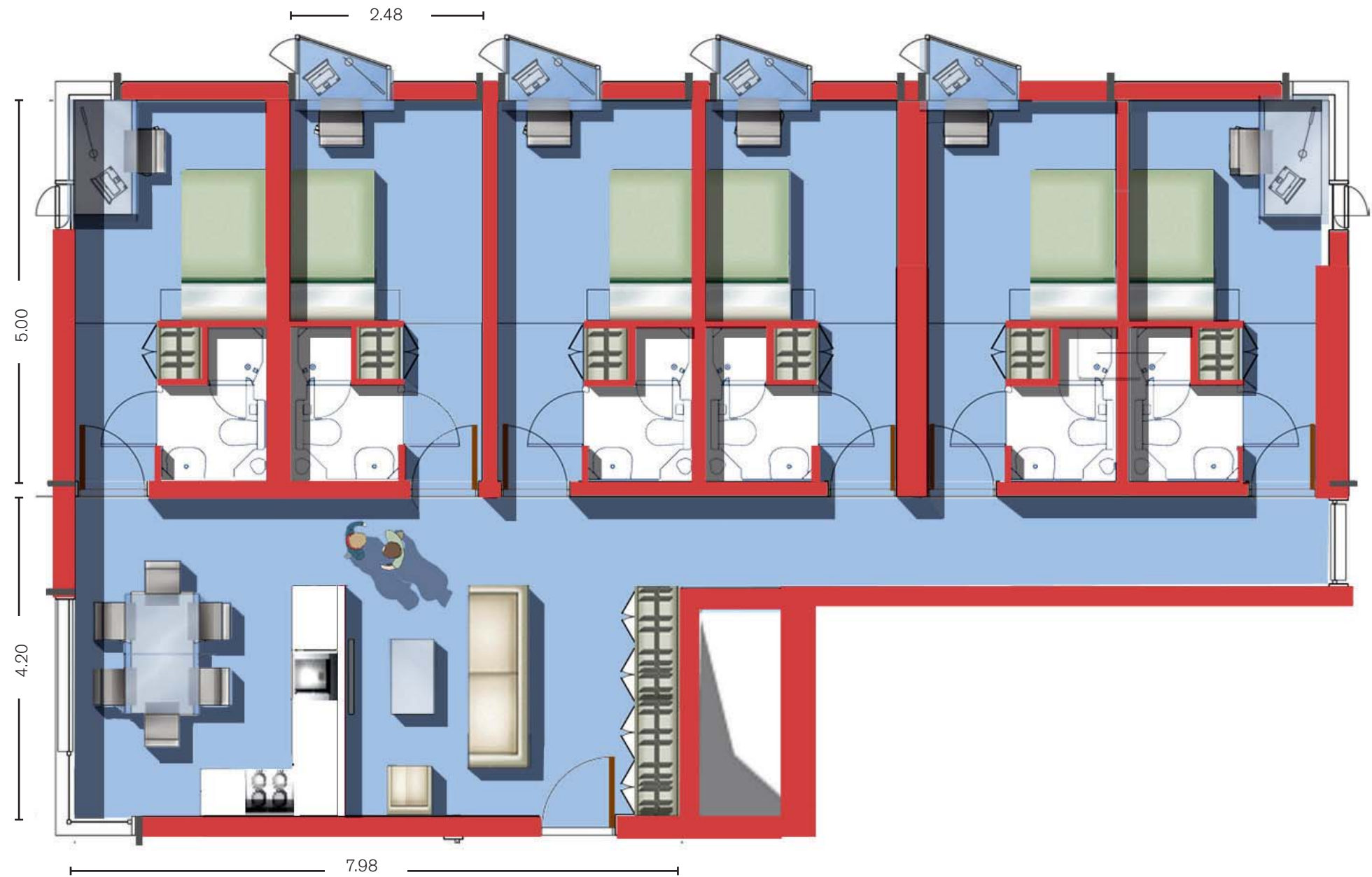
Typically two Multibed apartments are provided per floor. Multibed apartments contain six bedrooms (each with their individual shower and WC pods) and shared lounge, kitchen and dining areas.

The apartments are configured in a manner that permits high quality cross ventilation with facade openings provided on opposing surfaces at the end of the bedroom access corridor and at the kitchen/dining area.

Living room

Corner windows are provided in the kitchen/dining area to take advantage of the views either to the East over the Old Brewery or to the West over Abercrombie Street. Window configurations differentiate the two different bedroom types.

Bedrooms which have two external walls feature corner windows. The glass to the North facing portion is translucent, permitting a degree of light penetration whilst ensuring privacy from Block 4N located immediately to the North. The portion of glass to the East or West is clear vision glass. The other bedrooms incorporate saw-tooth bay windows similar to those located in courtyard facing studios. Glazing to the North of the bay is translucent, vision glass in an operable ventilation panel is provided in either the East or West face depending on location of the unit.



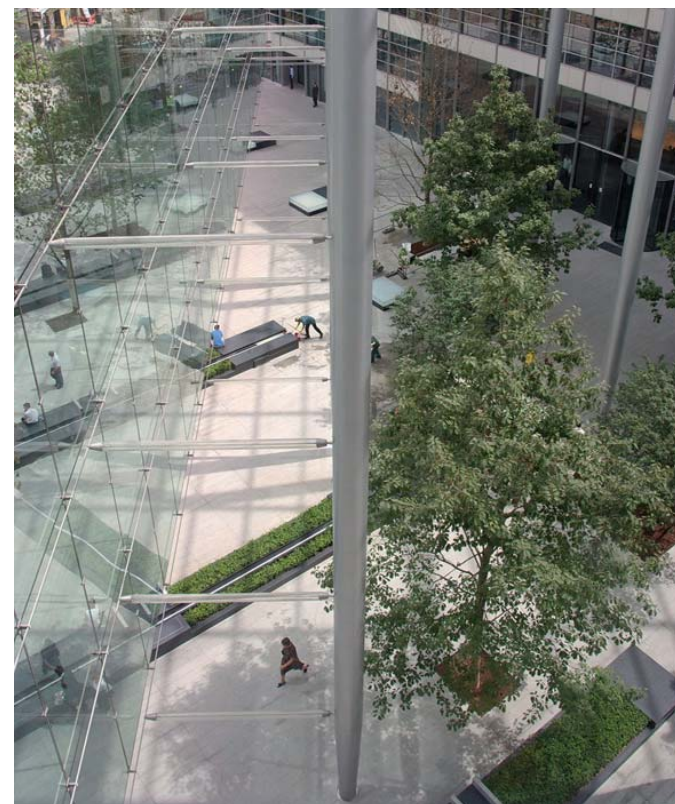
**Multishare**

**Concept Design**  
Section 01 - Long Section

The section overleaf illustrates clearly the relationship of the shared spaces (shown in yellow) with the central courtyard and therefore highlights the role played by this space in the communal life of the building.

The double height lobby space leads via a terraced seating area to an outdoor BBQ area which has deep soil landscaping. Rich planting of both this level and the non-accessible roof to level 01 provides visual amenity for those circulating the building at the atrium links and for the inward oriented studios.

The section clearly picks out the spatial configuration of the atrium with bridge links interspersed with lounge spaces at alternate levels. These communal spaces enjoy good day lighting levels and natural ventilation with extensive louvered facades on opposing faces. Lounges are strategically located between vertical circulation elements (lifts and stairs) to encourage social interaction in these "vertical villages".



**Concept Design**  
Section 02 - Short Section

The section overleaf clearly illustrates the distribution of standard studios that overlook the central courtyard and studio "longs" that face outwards to the East and West. The section also picks up the recessed "neck" level that articulates 'podium' portion of the building which acknowledges the scale and materiality of it's neighbours. Active frontage is provided at ground level with retail units located at Abercrombie Street and Central Park Avenue. Communal spaces (shown in yellow) are located to take advantage of views in to the heart of Central Park and inwards, to the shared BBQ terrace.





**Concept Design**

Area Schedule

Level	Total m2 GFA	Retail m2 NLA	Residential Area m2	Internal Common Area m2	External Common Area m2 *
Level GF	684	434	-	-	-
Level 00	1,420	416	482	249	-
Level 01	1,730	-	920	749	240
Level 02	1,573	-	1573	-	-
Level 03	1,415	-	1377	38	-
Level 04	1,573	-	1573	-	-
Level 05	1,613	-	1573	38	-
Level 06	1,573	-	1573	-	-
Level 07	1,613	-	1573	38	-
Level 08	1,573	-	1573	-	-
Level 09	1,613	-	1573	38	-
Level 10	1,573	-	1573	-	-
Level 11	1,613	-	1573	38	-
Level 12	1,573	-	1573	-	-
Level 13	1,313	-	1207	66	260
Level 14	1,313	-	1275	-	-
Basement	0	-	-	-	-
<b>Total</b>	<b>23,763</b>	<b>851</b>	<b>20,991</b>	<b>1,253</b>	<b>500</b>

\*Note:

1. Any areas indicated on this spreadsheet are approximative and indicative only
2. GFA excludes bay windows

Level	Studio Standard*		Studio Long*		Studio Deluxe/ Accessible*		Multi-share*		Total	
	Apts	Beds	Apts	Beds	Apts	Beds	Apts	Beds	Apts	Beds
Level 00	-	-	-	-	-	-	-	-	-	-
Level 00	-	-	12	12	1	1	1	3	14	16
Level 01	5	5	16	16	2	2	2	12	25	35
Level 02	24	24	24	24	2	2	2	12	52	62
Level 03	48	48	-	-	2	2	2	8	52	58
Level 04	24	24	24	24	2	2	2	12	52	62
Level 05	24	24	24	24	2	2	2	12	52	62
Level 06	24	24	24	24	2	2	2	12	52	62
Level 07	24	24	24	24	2	2	2	12	52	62
Level 08	24	24	24	24	2	2	2	12	52	62
Level 09	24	24	24	24	2	2	2	12	52	62
Level 10	24	24	24	24	2	2	2	12	52	62
Level 11	24	24	24	24	2	2	2	12	52	62
Level 12	24	24	24	24	2	2	2	12	52	62
Level 13	18	18	15	15	2	2	2	12	37	47
Level 14	18	18	18	18	2	2	2	12	40	50
Level 15	-	-	-	-	-	-	-	-	-	-
Level 16	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>329</b>	<b>329</b>	<b>301</b>	<b>301</b>	<b>29</b>	<b>29</b>	<b>29</b>	<b>167</b>	<b>688</b>	<b>826</b>

\*Note:

Studio Standard: includes only Type 1

Studio Long: is present at each level from L00 to L14, except L03

Studio Deluxe/ accessible: includes Type 1 (from L01 to L02 and from L04 to L14), Type 2 (at L03 only) and Type 3 (at L00 'manager's accomodation)

Multishare: includes Type 1 (from L01 to L02 and from L04 to L14) and Type 2 (at L00 '4beds')

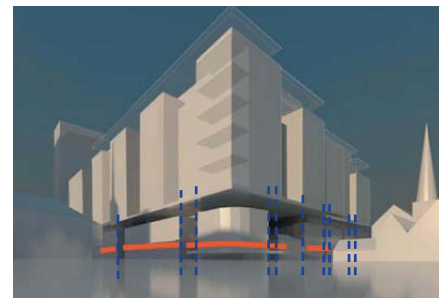
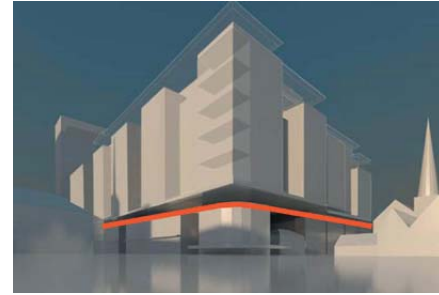


**City Datum**

As part of the master plan exercise for Central Park and the subsequent building design development of Block 4N (immediately to the North of B4S) key city datum lines were identified.

On B4N the datum drawn from the parapet of the Australian Hotel established a "neck" zone to formally respect the scale of the heritage buildings at the corner of Broadway and Abercrombie Street.

The B4N facade at the neck level is significantly recessed from the face of the heritage facades below and the new building above whilst new build elements below the city datum pick up on the scale and materials of the retained buildings.

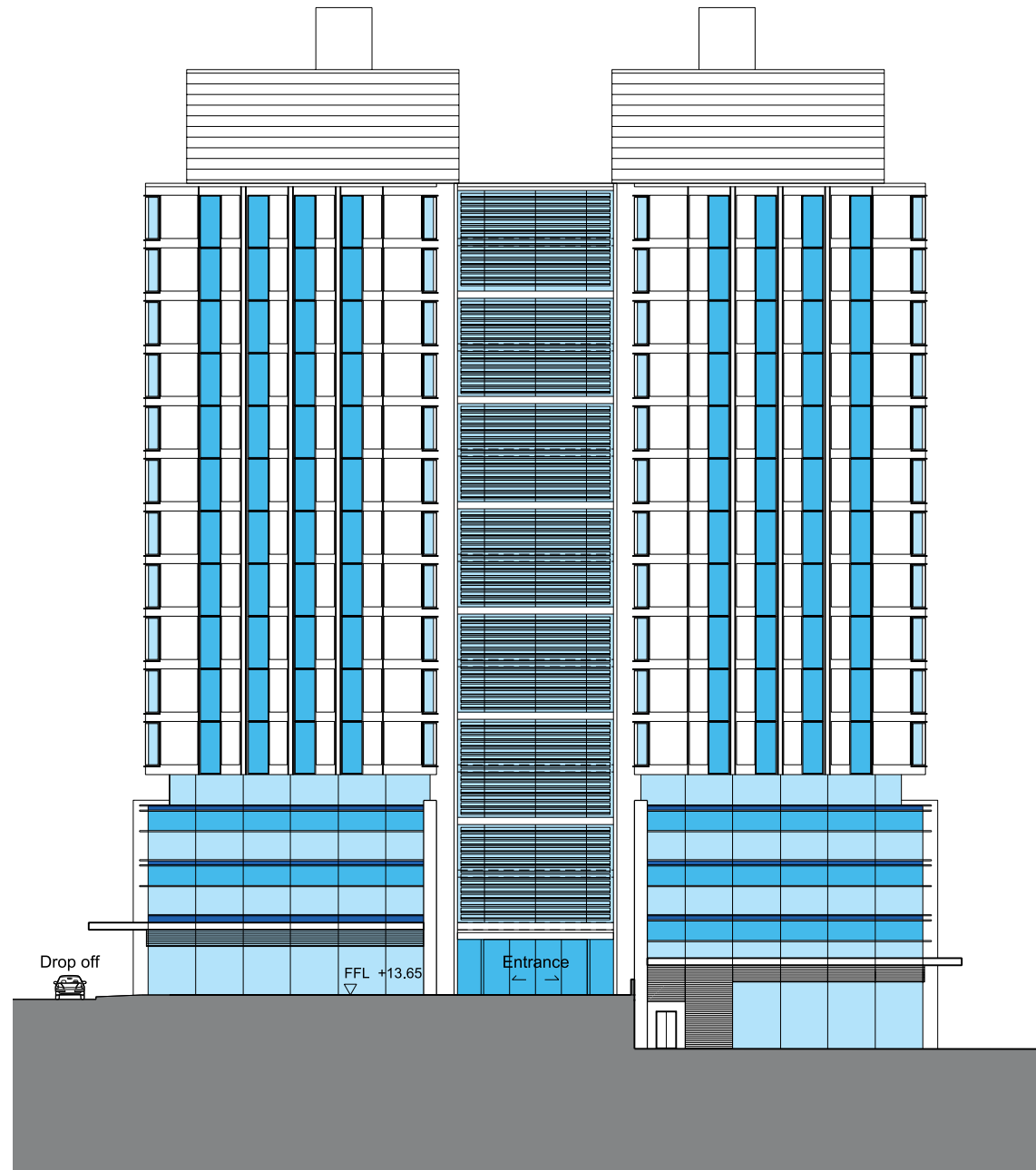


This strategy is adopted on the proposal for B4S where the city datum is extended to define a 'podium' portion of the building which acknowledges the scale and materiality of its neighbours on the other side of Abercrombie Street as well as those on B4N.

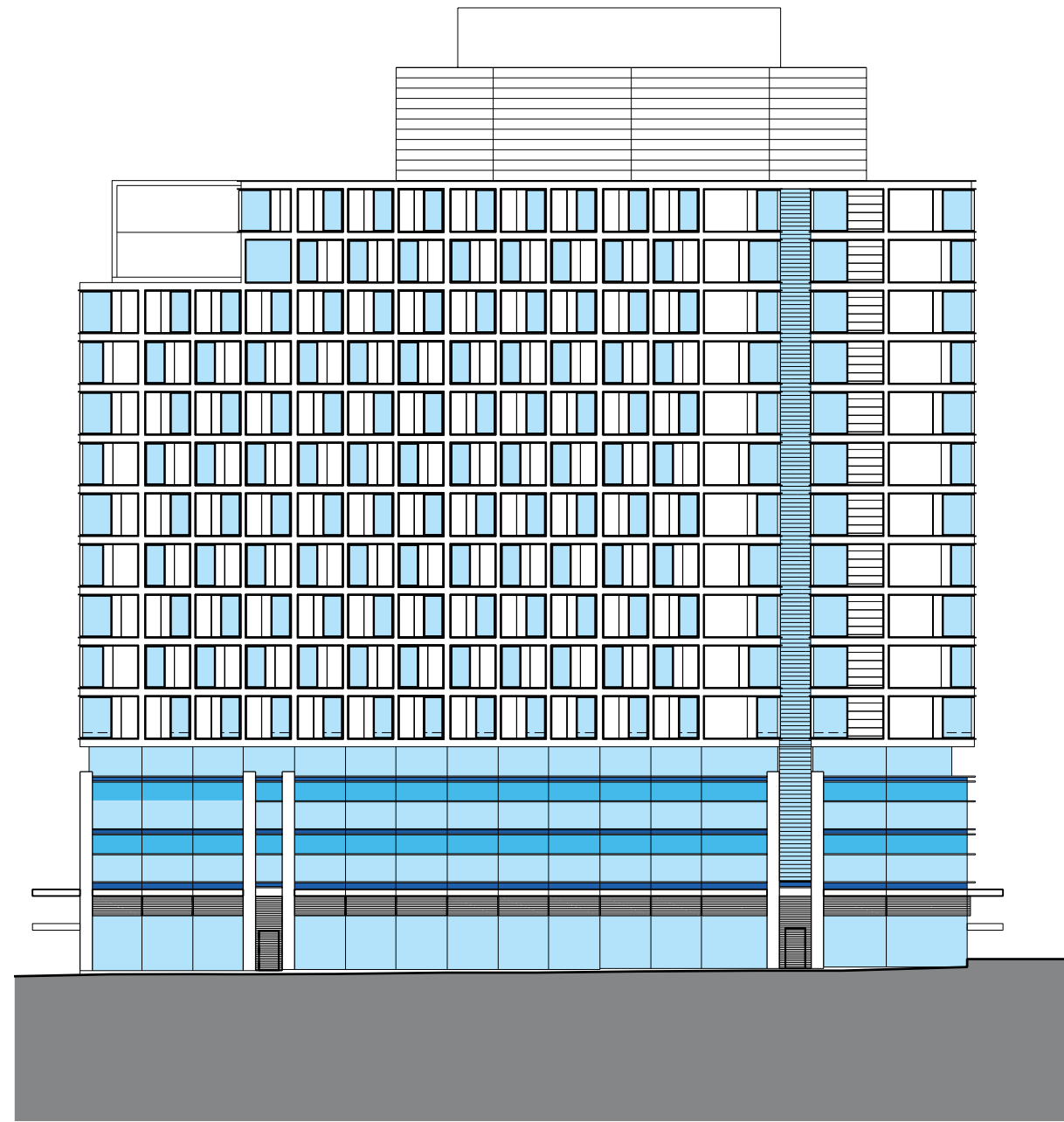
The floor above the city datum on B4S is recessed from the floors above and below it. This recessed floor and the ones below respond to the horizontal lines projected on from the heritage facades at the North-West corner of the site by using them to define the banding of the new facade.

In a further nod to the design direction taken by B4N vertical blade walls are introduced to define the "wrap-around" corner facade treatment at these lower levels.

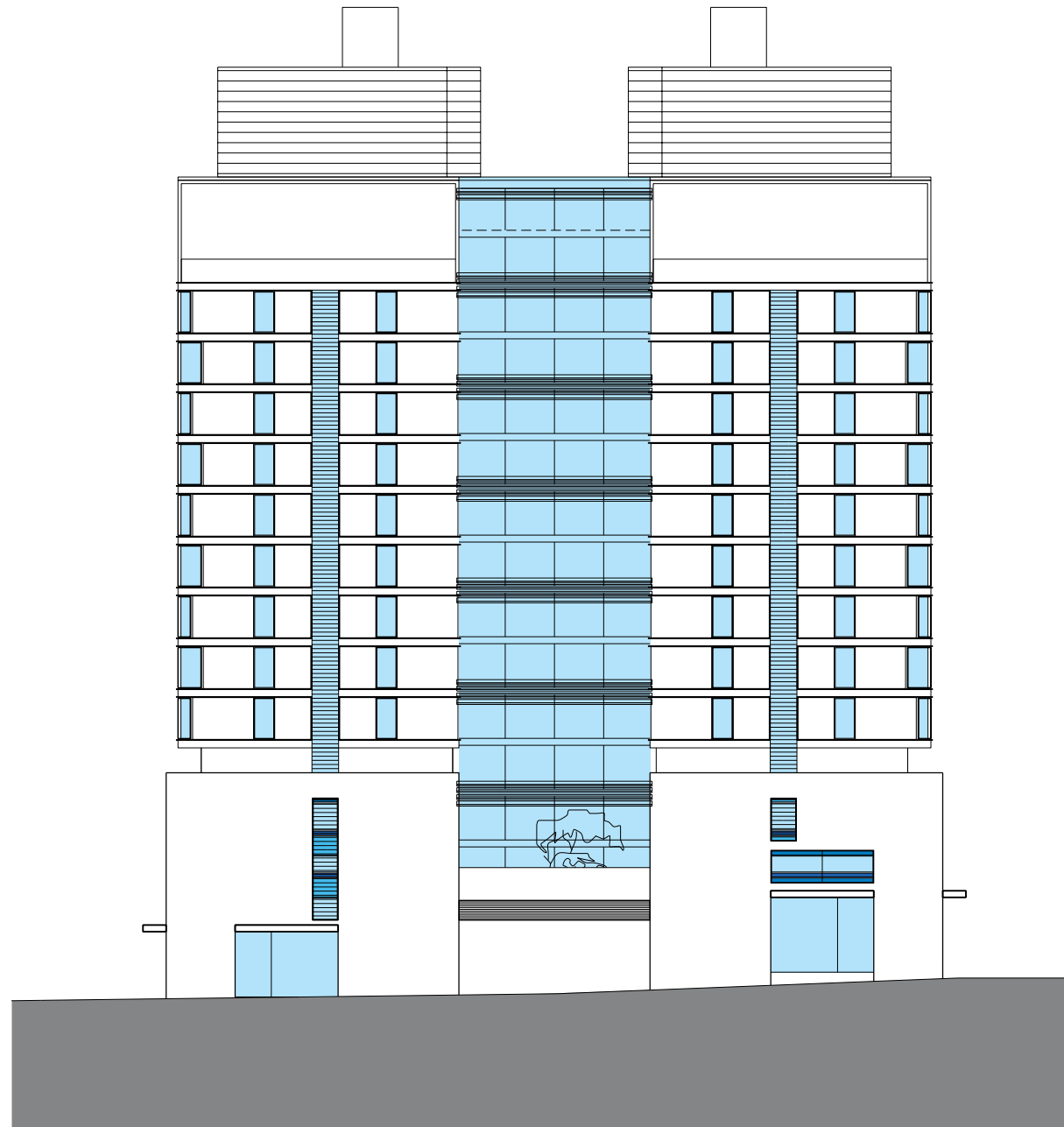




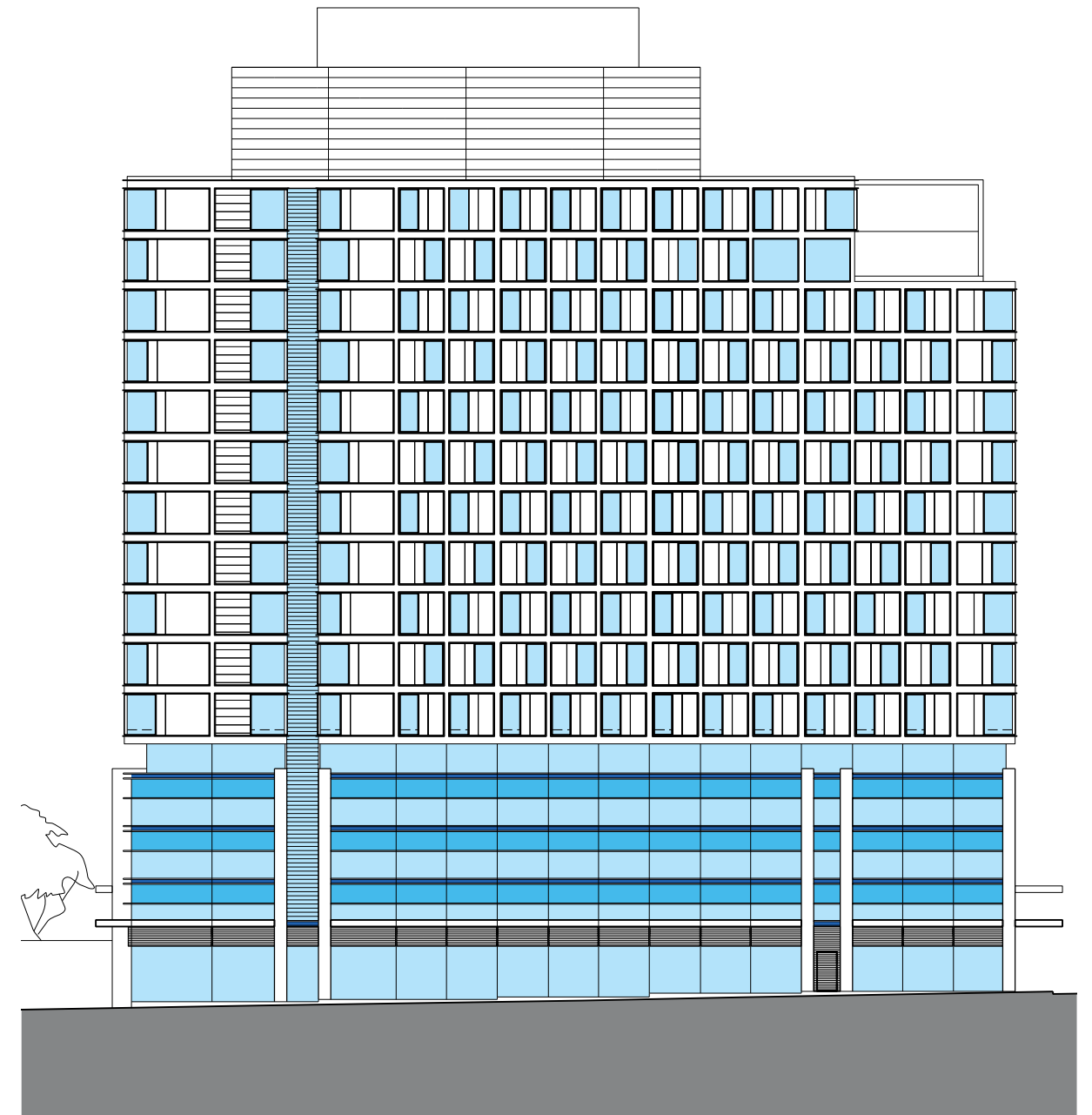
**North Elevation**



**East Elevation**



**South Elevation**



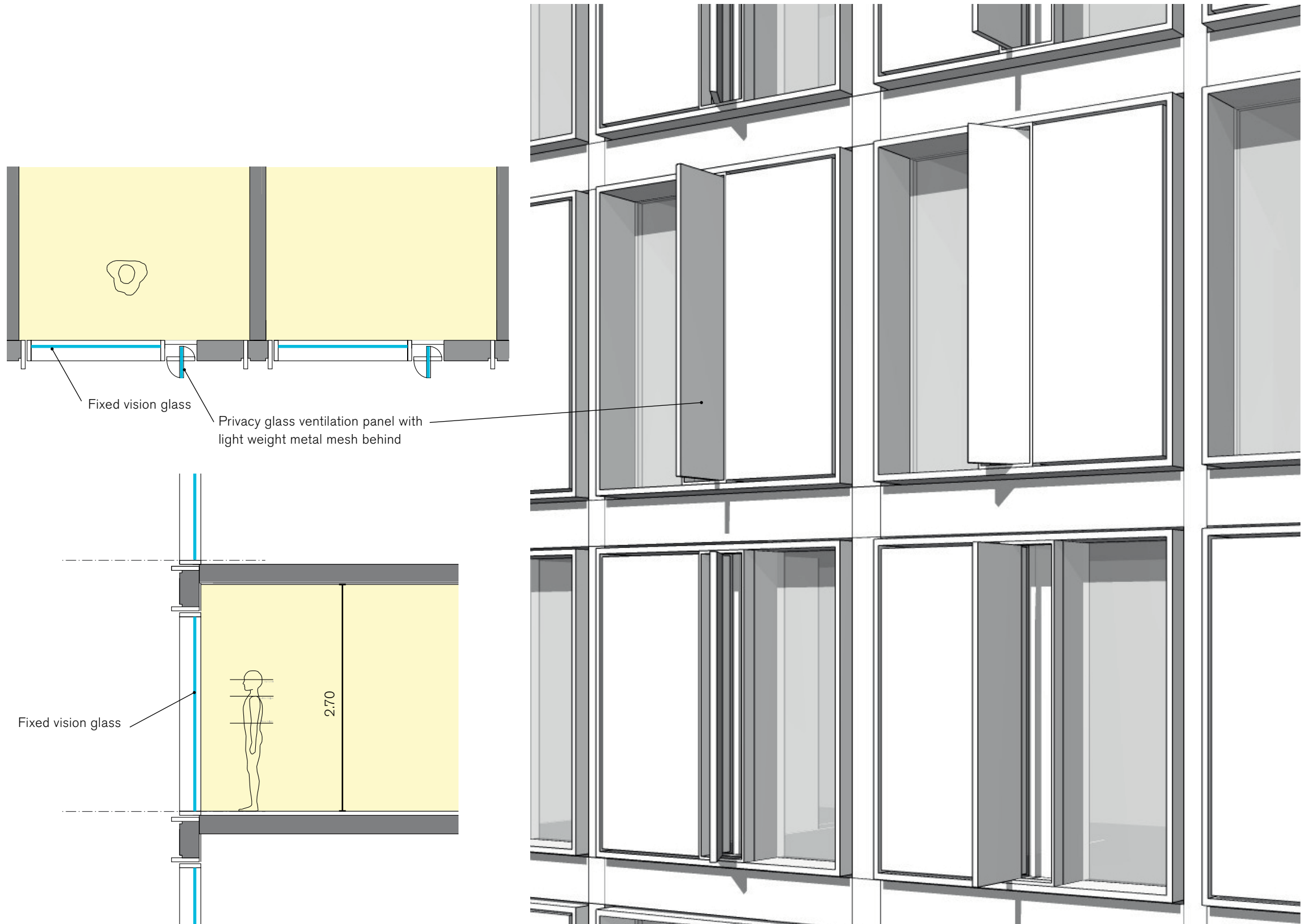
**West Elevation**

**East and West studio facade**

The design direction for the facade of this B4S proposal above the podium portion has been the honest expression of orientation requirements. These requirements manifest themselves in devices that retain privacy and channel views and those that house operable panels to encourage ventilation. This has been married with the careful consideration of the proportion of vision glass and the location of that glass within the depth of the facade zone to create a family of facade treatments.

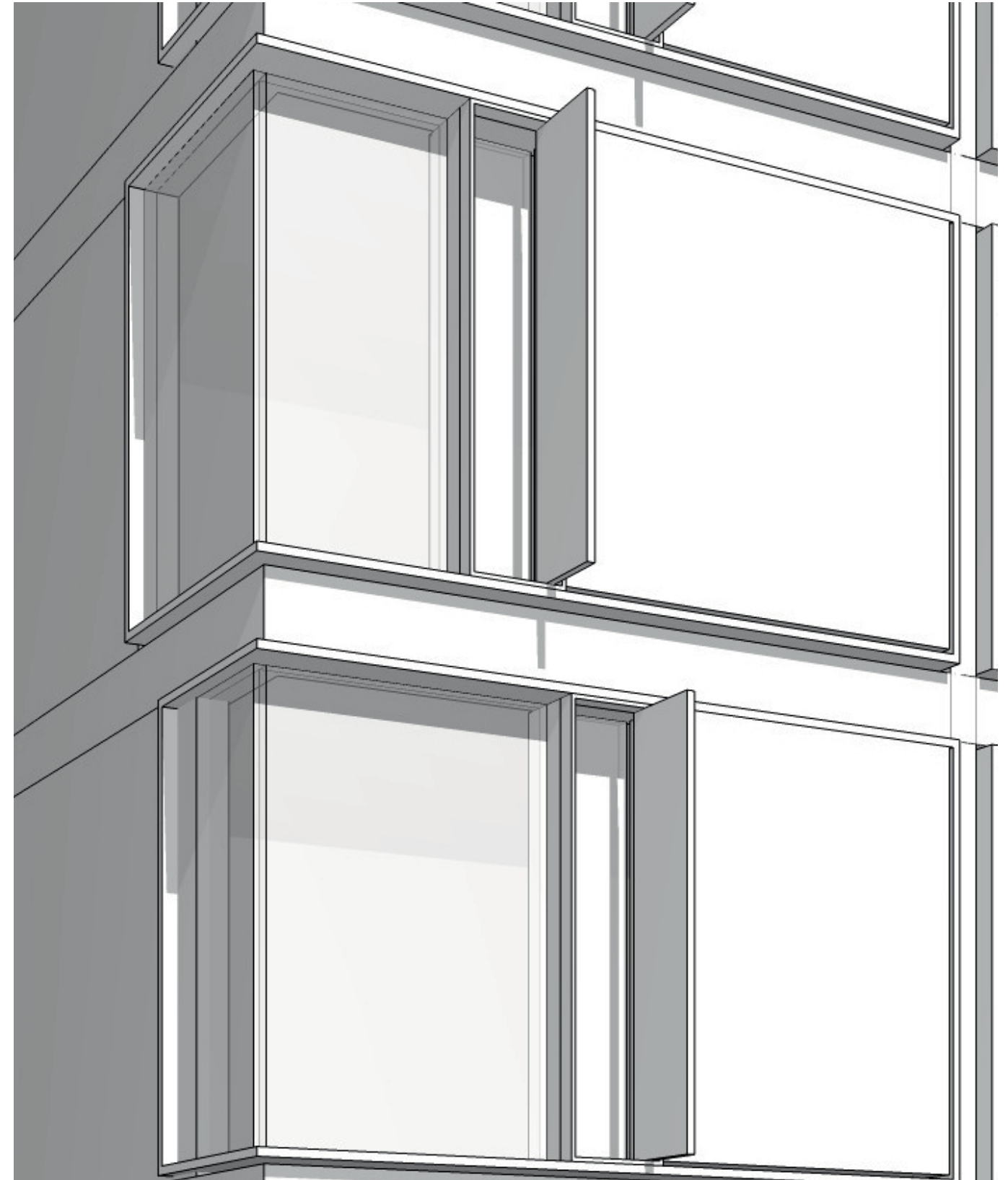
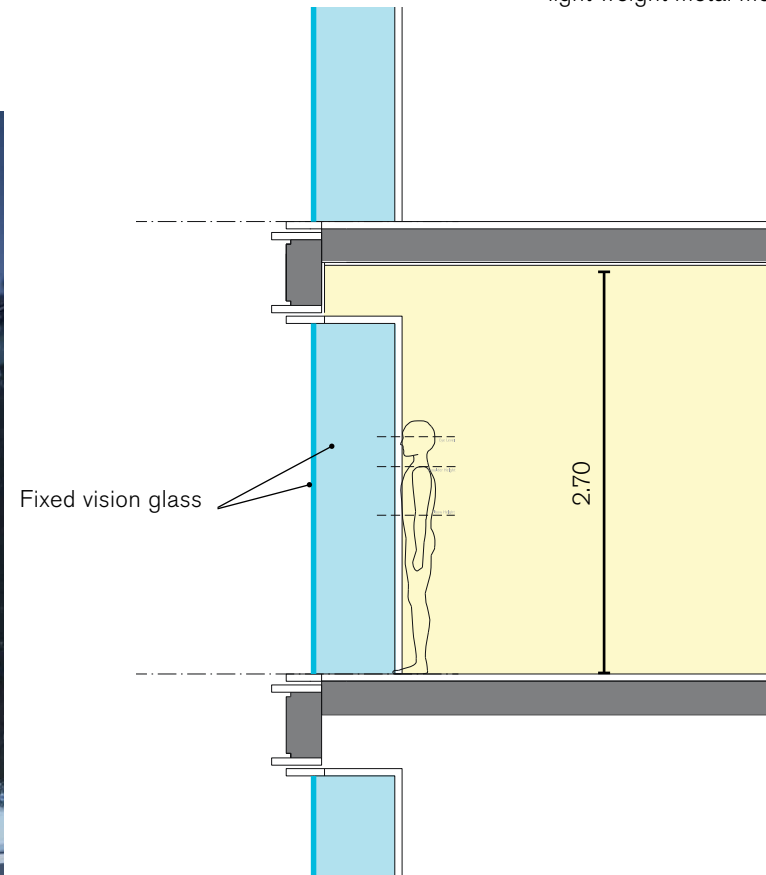
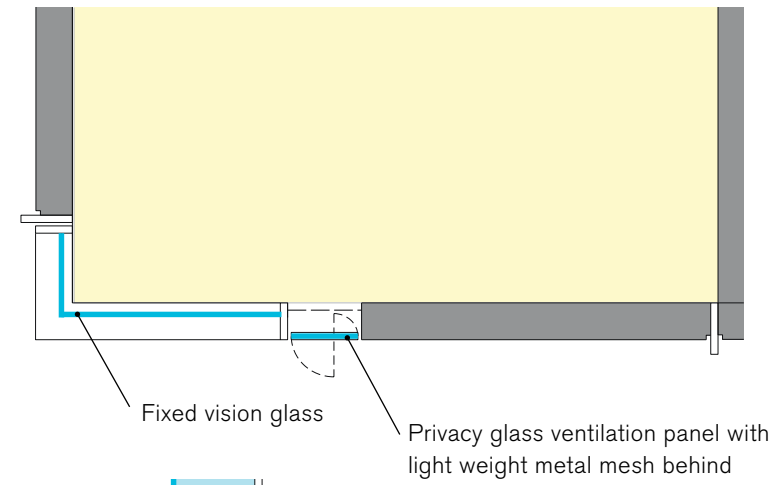
It is important to order the different facade treatments within a unifying framework. A common black-grey metal superstructure cladding is applied to the slab edge and wall edge of each studio module on all elevations. Within this grid an expressed picture frame delineates each module in finer detail. This frame is also common to all studio facades.

The facade expression on the East and West is driven principally by sun access and ventilation as these elevations are not significantly overlooked. Glazing is restricted to approximately 1/3 of the module facade area to limit solar gain on these orientations that are exposed to low-angle sun. The glass is recessed some 250-300mm inboard from the picture frame edge in order to control solar gain. An operable, pivoted ventilation panel is provided next to the vision panel. This panel is metal clad with a fine ribbed texture. The adjacent fixed panel matches the pivot panel in colour - silver - but is differentiated with a flat surface. An insect mesh will be provided to the inside face of the pivot panel.



**East and West delux studio facade**

Deluxe/accessible studios are located to the South of the ventilation/daylighting slot cut into the East and West facades. This corner condition is celebrated with a set back corner glazed window.



**North Façade**

The North façade will be largely protected from high level noon sun by Block 4N located immediately to the North of B4S. The principle issue to respond to on this façade is the need to ensure privacy from overlooking by near neighbour Block 4N. The common language of the East and West façades is carried through to the North - black/grey superstructure, projecting picture frame mullions and transoms, and fixed metal infill panel. To ensure daylight penetration yet maintain privacy projecting saw-tooth bay windows are proposed. The angled, North facing wall to these bays will be a privacy glass that will admit light but obscure views in/out. The return edge of the bay window will be vision glass and operable to facilitate ventilation.

