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**THE UNIVERSITY OF NEWCASTLE**  
**NeW SPACE - PART OF THE HUNTER EDUCATION PRECINCT**

**ARCHITECTURAL DESIGN REPORT - SSD DA APPLICATION**

**Lyons**  
WITH  
**EJE** architecture



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# 1.0 NEW SPACE VISION

The NeW Space Project is an extraordinary opportunity to create a campus that will be a catalyst for remaking both the physical and cultural heart of the City of Newcastle. NeW Space is conceived as being like a great gathering space for bringing together the life of the City with the life of the University. It will create spaces for students and academics to meet and gather in a variety of ways, both formally and informally – and many places where students can self organize to create their own sense of a campus community. The building will indeed be like a campus, diverse and open – and open for business in the fullest sense of that word.

The design is made up of many of the specific qualities of the Newcastle Civic Precinct, with active ‘learning’ frontages to Hunter Street, vistas and pedestrian linkages which connect key parts of the city, and laneways that create a vibrant and creative location.

Beautiful, functional and engaging spaces will be created where people want to stay for a while and revisit time and time again. The public nature of the immediate civic precinct introduces the exciting possibilities for the way the buildings and in turn people, can engage with its spaces, streets and lanes. We propose a seamless public realm in, around and through the precinct that connects King and Hunter Streets, and through to the harbour edge to the north and, up to the lower north slope of Cooks Hill to the Gallery, Library and Conservatorium lined to the south. The NeW Space building inflects to unlock views of Nobbys, the Hunter River mouth and the Town Hall Clock Tower.

The design is also conceived as having a powerful quality of ‘civic – mindedness’; the prominent view to the Town Hall from the corner of Hunter and Auckland Streets is protected in perpetuity by creating a diagonal space through the building.



Figure 1.1: NeW Space Precinct

This space also acts as a pedestrian linkage between the primary corner and Christie Place, and beyond to Civic Park and the Art Gallery. At a local scale the form of the building to Hunter Street (expanding over the Town Hall vista) inflects in the direction of Nobbys – drawing this key Newcastle landmark directly into the form of the building.

On arrival from Hunter Street, a student learning hub is highly visible – and provides the students with many ‘choices’ – grab a cup of coffee at the café and sit outside with their laptop to get some work done, or enter into the central axis gathering space, and sit at a large table with friends and do some group work or just head directly into a lecture.

The idea of the campus being open and porous at the lower levels is further reinforced by a high level of interconnectivity vertically through the building, facilitated by escalators, lifts and open stairs – which together form a concept of the ‘vertical campus’. A series of ‘urban rooms’ orientated toward key features of the surrounding context are a highly visible element in the external form of the building further reinforce this idea of the vertical campus. As breakout areas for students, research staff and other academic staff, they are designed to reflect the ‘openness’ of the University.

The design seeks to meet the University’s vision to provide a world leading learning facility for local and international student and academics within a new site in the central Newcastle civic and business district. This facility will relocate existing Business and Law programs from the Callaghan Campus and physically integrate the adjacent historic University House into the development.



Figure 1.2: Hunter St Elevation Context

# 2.0 ARCHITECTURAL DESIGN CONCEPT

## 2.1 A CATALYST FOR THE CITY

NeW Space and the renewal of Newcastle are projects that are in 'lock step', albeit to different timeframes. This is where NeW Space provides such a distinctive opportunity for the city, as an early catalyst project and a key to the future of the University and the city centre. But it also occurs within the context of today's Newcastle – with NeW Space being a bridge between today and tomorrow providing an extraordinary place for today, without restricting its capacity to engage fully with the city of tomorrow. More importantly, our design has a series of clear strategies to bring about positive and enriching change within the surrounding precinct. This is achieved by setting a clear robust structure requiring others who follow, reference and build on what is initially seeded or established by this project – transforming adjacent areas and communities. The project is an opportunity to redraw people's 'mind map' in Newcastle, while providing a structure and other layers to its culture and heritage.

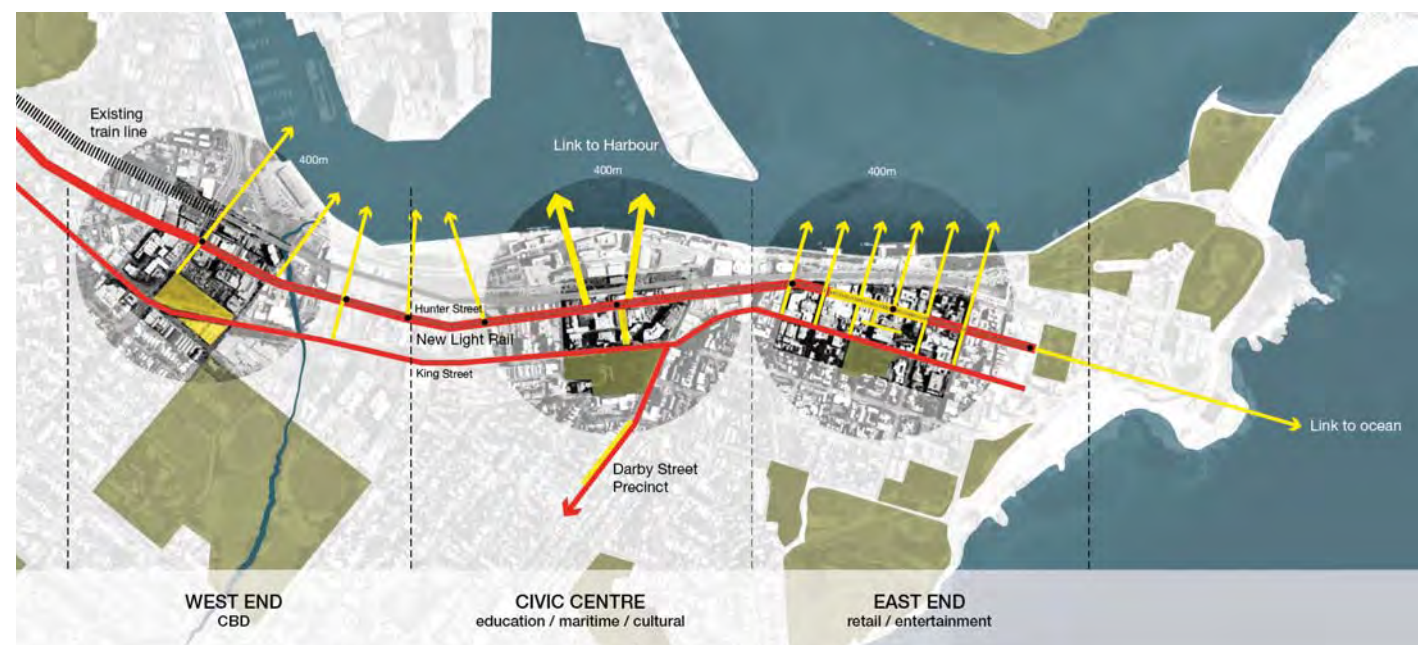


Figure 2.1: Role of the City

## 2.2 MAKING A CITY CAMPUS

The project is conceived as a true 'city campus' – with the NeW Space building making a contribution to the city, while at the same time the city itself is drawn directly into the campus in multiple ways. The design is made up of many of the qualities of the Newcastle central city, with active 'learning' frontages to Hunter Street, vistas and pedestrian linkages which connect key parts of the city, meeting and gathering places for the University and city to connect, and laneways that create a vibrant and creative precinct.

The project will be a major catalyst within the cultural heart of the city – between the Museum and Art Gallery, and immediately adjacent to the Town Hall and the Civic Theatre. The design conceives of the project as a place for exchange and meeting between the University and the city – where the aspirations of the city and the University come together – a place for creative exchange, for events, for meetings, for enhancing the business of the city – as well as creating a great place for students and academics to learn and research.

## 2.3 THE UNIVERSITY WITHIN THE CITY

The University of Newcastle has a wide strategic view, one that is both local and global – looking to reinforce its role as a significant 'citizen' within the City of Newcastle as well as expanding its horizons to Asia and the Pacific Rim. Our design concept, with its series of visible external 'urban rooms', embodies this wide view, looking out both to the specific geography of the immediate city, and also beyond to the world. The design is expansive and open rather than closed and self contained.

As the same time the design reinforces the local environments within the central city. In particular the learning hub over the lower three levels is open and highly visible within the city – inviting access and use by the community, by business and by students and academic staff.

The aim is to create a beautiful, functional and engaging learning space where people want to stay for a while and, revisit time and time again. The public nature of the immediate civic precinct introduces the exciting possibilities for the way the buildings and in turn people, can engage with its spaces, streets and lanes. For instance we propose a seamless public realm in, and around, and through the precinct that connects all the way to the harbour edge to the north and up to the lower north slope of Cooks Hill to the Gallery, Library and Conservatorium lined to the south. Our NeW Space building twists to unlock views of the Nobbys, the Hunter River mouth and the City Hall Tower.

The project imagines a new civic precinct (with NeW Space at the centre), that is a destination – alive and active during the evenings, and on the weekends as well as during weekdays. This is a civic precinct where NeW Space is an active player always contributing to the broader network of public learning, cultural maritime venues and spaces connected by lanes and streets to the waters edge and back to the gallery.

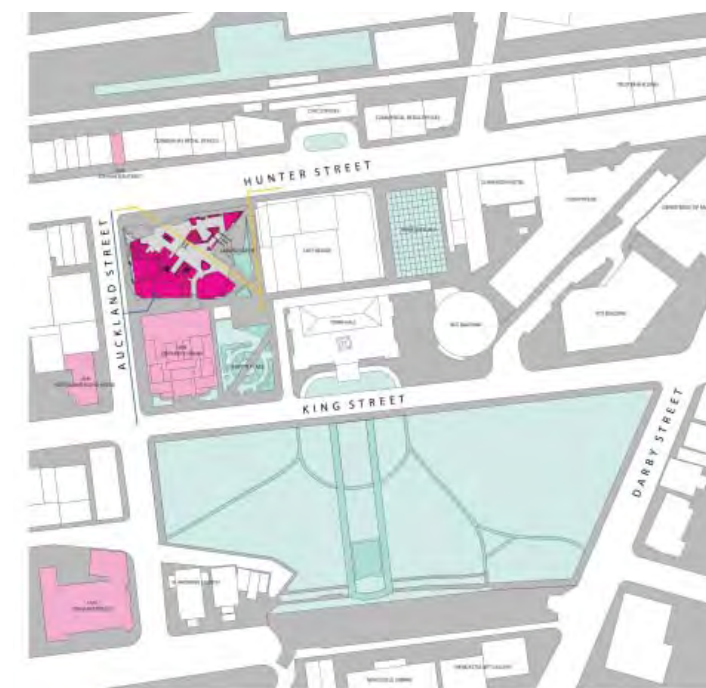


Figure 2.2: Site Context Plan

## 2.4 A DESIGN OF 'CIVIC – MINDEDNESS'

One of the University's primary aspiration for the project is what it will contribute to the city of Newcastle. To that end, the design has a powerful quality of 'civic – mindedness'. For example the prominent view to the Town Hall from the corner of Hunter and Auckland Streets is protected in perpetuity by creating a diagonal space through the building. This space also acts as a pedestrian linkage between this primary corner and Christie Place, and beyond to the city park and Art Gallery.

This strategy combines a strong idea of the civic, as well as providing a practical linkage, particularly for many students that live in the inner city locales. The vista to the Town Hall suggests an openness to the University's vision, and recognizes its unique importance within the city as a 'citizen'.

The proposal is to substantially complete the Hunter Street frontage – creating a 'permanent' presence for the University. We have located a student cafe, learning spaces and a lecture space on this frontage, to make visible the University's activities at work – promoting the idea that these spaces can also be used by the city and local business.

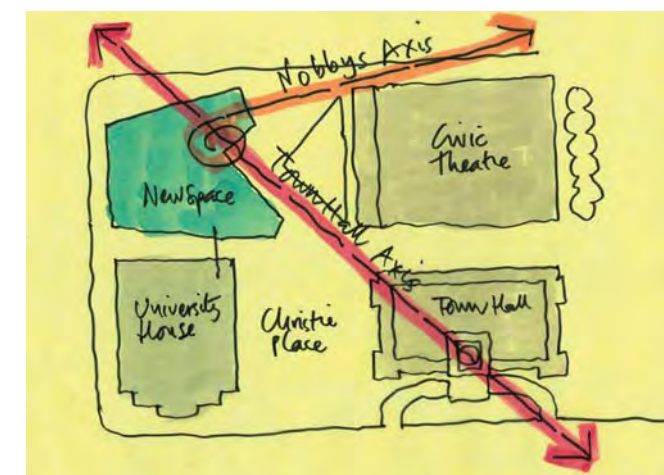


Figure 2.3: Key axis points from NeW Space

Similarly, the proposed incorporates a campus or city 'green' – a place not only for students to breakout from the new building and relax in the sun, but also for other members of the city to enter, use and interact with the University precinct.

At a local scale the form of the building to Hunter Street (expanding over the Town Hall vista) inflects in the direction of the Nobbys – drawing this key Newcastle landmark directly into the form of the building.



Figure 2.4: Diagonal section through Town Hall axis

## 2.5 A GATHERING PLACE

In addition to its civic mindedness, the project is designed to act as a gathering place between the city and the University, between business and academic staff, between staff and students and between students themselves. This concept of 'gathering' can be seen to extend the traditional role of the centre of the city, and this site in particular, as a gathering place for the Awabakal people, the traditional custodians of the site. A favourite camping place was at the mouth of the creek, later called Cottage Creek and the area around it, including this site for NeW Space. Here, for nearly 7,000 years, the Awabakal clans gathered to meet, to feast, and to undertake ritual.

Our spaces are designed to reinforce this idea specifically –interactive learning spaces for the University and the city, active student spaces that connect the space of the city with the interior space, a campus green which can be used for gathering events or activities, and a learning hub which is, in essence, a 'gathering place' for students and academic staff within the building.

The design is organized around the axis which joins together the primary entry corner with Christie Place and the Town Hall. This geometry sets up a further 'cross axis' from Hunter Street – effectively creating a 'cross roads' within the site.

At the centre of the cross roads is the main circulation for the building, as well as the key gathering spaces of the student learning hub.

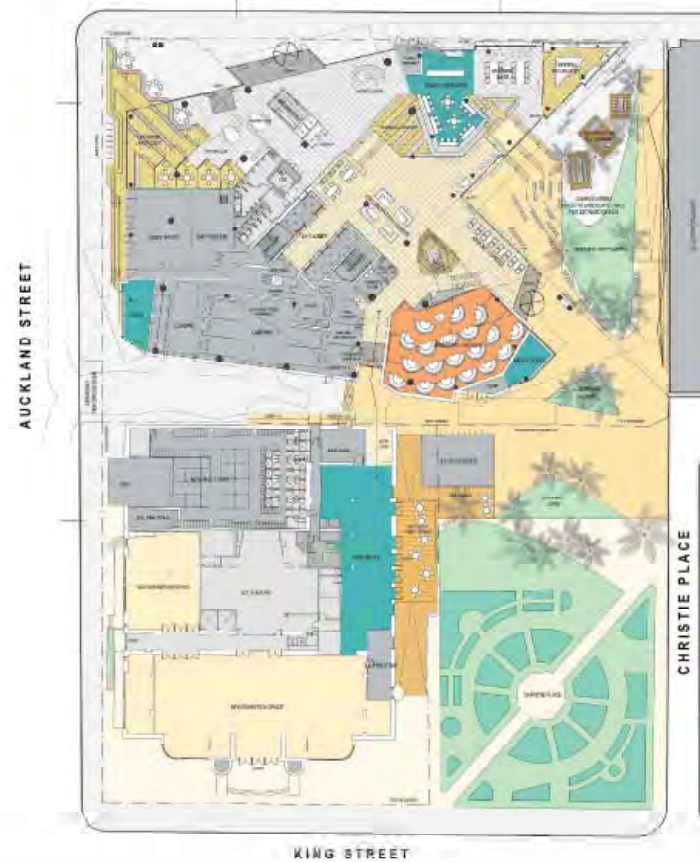


Figure 2.5: Ground floor plan

## 2.6 STUDENTS AT THE CENTRE

In addition to connecting the University with the city, our design is based around placing the students themselves at the very centre of the design thinking. Our design is conceived as being an 'attractor' for students; a place they will want to spend time in and enjoy the 'campus culture'. At the ground level a student learning space directly on the primary corner, makes students activities directly visible into the space to the city, and creates the concept of an urban room right on the footpath. The learning hub is primarily distributed over the lower three levels – an open interconnected, interactive space joined together by two rises of escalators. The campus green, creates a quiet reflective external space directly accessed, and overlooked by, the learning hub student spaces.



Figure 2.6: View into gathering space

## 2.7 THE VERTICAL CAMPUS

The idea of the campus being open and porous at the lower levels is further reinforced by a high level of interconnectivity vertically through the building. The program is organised 'vertically' rather than 'horizontally'. In other words rather than having teaching spaces at lower levels and academic spaces at the upper levels, we have proposed student spaces and learning spaces to all levels of the building. This also builds a strong culture within the building of academic staff connecting with students in a more collegiate manner on every level. This verticality is reinforced through the circulation system of escalators, lifts and open stairs – which together form the concept of the 'vertical campus'.

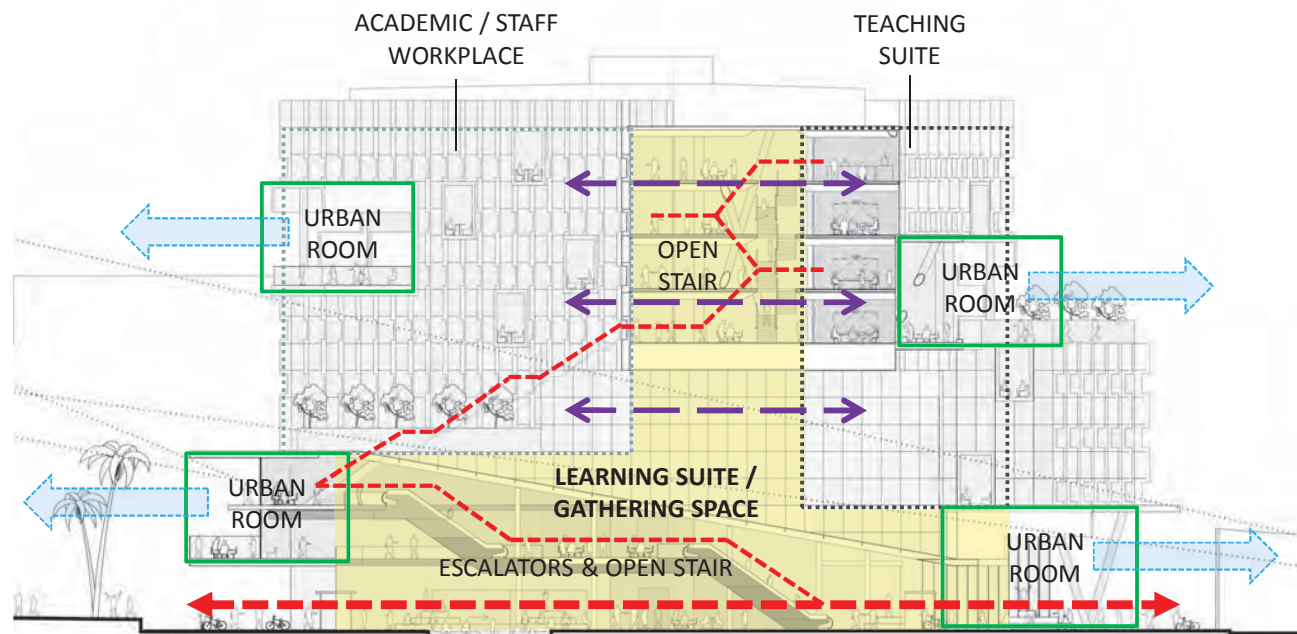


Figure 2.7: Vertical Campus Concept Diagram

A series of 'urban rooms' that are a highly visible element in the external form of the building further reinforce this idea of the vertical campus. As breakout areas for students, research staff and other academic staff, they are designed to reflect the 'openness' of traditional aboriginal shelters. The way that they are arranged around the building (in response to key views) invites exploration up to the very top of the building, placing students at the centre of the design.

## 2.8 CREATING URBAN ROOMS AND LOOKOUTS

Each of these urban rooms or 'lookouts' from the building connects a key NeW Space activity to the wider cityscape and beyond. Through this they can be 'read' by the public as a representation of what the University does within NeW Space. These 'lookouts' include one for the student learning hub (facing Christie Place), for the staff lounge (facing the Town Hall and City Hall), for the Library (facing Auckland Street), for the Research collaboration space (facing the 'business' end of Hunter Street) and for student informal areas (facing Nobbys and the Hunter River).



Figure 2.8: Urban Room key views

## 2.9 A NEW LANEWAY

The design proposal extends the alignment of Christie Lane (between the Town Hall and the Civic Theatre), as a new urban connection between University House and NeW Space. This laneway is a space that expands out towards Auckland Street to create a more expansive and open quality. The space is conceived as being similar in character to Christie Place – a classic urban laneway, combining both functional and service elements with the opportunity to use the space for other creative activities – such as a space for student exhibitions.



Figure 2.9: New laneway with activated edges

## 2.10 INTEGRATING AND CONNECTING UNIVERSITY HOUSE

In response to the University's aspirations to integrate University House with NeW Space, the design incorporates a number of key strategies. Firstly, the primary circulation route between University House and NeW Space occurs on the Christie Place (east) side – which allows the connection to occur at the 'centre' of the NeW Space learning hub, and will also allow student spaces within University House to directly open onto the park – transforming the park frontage from a series of 'dead' services spaces to vibrant active student spaces.

The primary function of the University House Ground Floor is proposed to provide a series of refurbished spaces capitalizing on the connections to the civic frontage of King Street whilst protecting the heritage features of University House. It is also proposed that the café be reestablished on the Christie Place side to further reinforce the sense of activation along this frontage.



Figure 2.10: University House

Centralised loading facilities for NeW Space and University House are proposed within the new building and on this basis the existing loading area/Gallery has been planned as a bicycle parking facility, utilizing the existing building fabric. This facility is connected to the new café space adjacent Christie Park and is provided with change room amenities.

Direct linkages between NeW Space and the University House at each of the four key learning levels are also proposed.

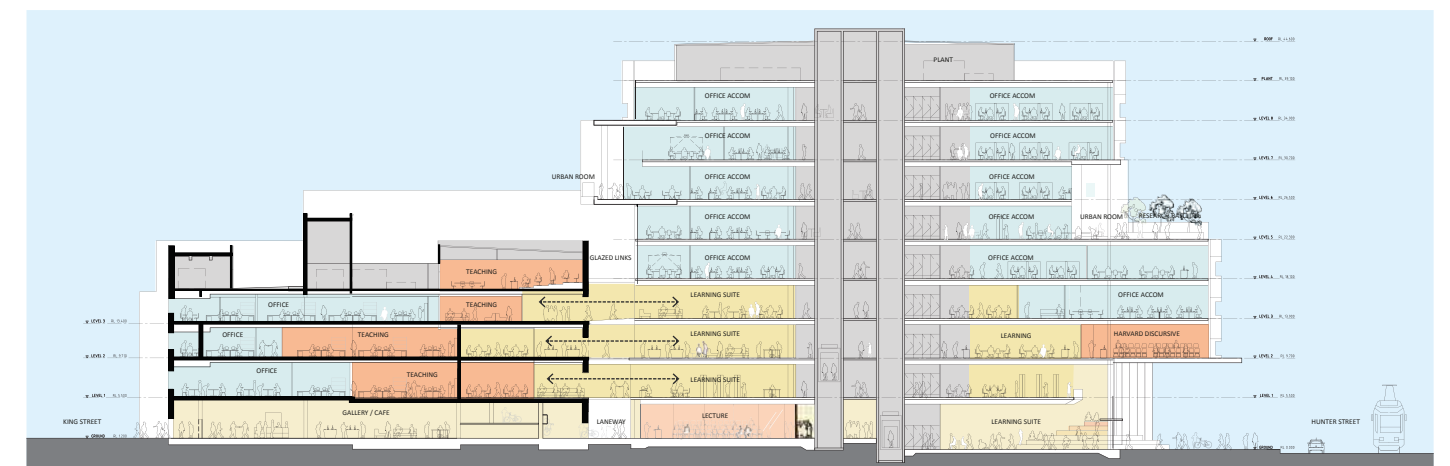


Figure 2.11: Cross section through University House and NeW Space

## 2.11 THE STUDENT EXPERIENCE

On arrival from Hunter Street, the learning hub is highly visible – and provides students with many ‘choices’ – grab a cup of coffee at the café and sit outside with their laptop to get some work done, or enter into the central axis gathering space, and sit at a large table with friends and do some group work or just head directly into a lecture at Level 1. A defined student services hub is located adjacent to the entry for queries and ‘concierge’ services. On entering the building the multi-level learning hub is visibly open and accessible – three levels of open interconnected learning spaces – joined together by escalators, stairs and lifts. The student can choose the type of space they would like to work within – quietly within the Library at level 1, with friends at the upper level overlooking the campus green, or heading outside to this green space and its wireless environment.



Figure 2.12: Gathering space

Figure 2.13: Interaction Spaces

Alternatively, a student may head straight through to the other activities within University House, to check out an exhibition, or grab some lunch and sit in Christie Place. Moving up through the NeW Space building, at every arrival point to each floor, via lifts or stairs, there are informal student spaces – places to hang-out or self organize with other students before a formal class begins within one of the new learning spaces, or places to ‘breakout’ into one of the urban rooms looking out towards Nobbys Lighthouse.

## 2.12 THE ACADEMIC EXPERIENCE

On entering the building there are many spaces in which an academic can informally interact with research students over some coffee or food before the formal day begins, or with a business colleague as part of a collaborative research project. Academic teaching staff can work with students in a variety of ways within the learning spaces – fully integrating all learning activities with both technology and peer to peer interactions.

Rising up to the academic office levels, and before they enter their work areas, they may bump into students within shared informal meetings areas. Within their own office environments there is a strong emphasis on a collegiate layout. Academic offices are at the interior and academic workstations have direct access to natural light and vistas from the upper levels of the building. Within this secure academic workplace, there is a strong emphasis on informal and collaborative spaces – where researchers can get together to discuss their activities, or students are invited in to meet.

## 2.13 LEARNING SUITE

The learning suite has been developed in further detail with the projects Executive User Group to incorporate more detail in the diversity of learning experience throughout the building. A further emphasis has been placed upon forming both quiet space and defining group learning activity around the building, as well as ensuring that the university can install up to 250 PC’s around the building for student access to technology (through spatial and power/data provisions).

The brief for learning suite seat types has been augmented to better suit the principle of creating a diversity of spaces that better suit learning outcomes and the design concept. In this, there are new types of learning seats provided, such as edge

window seats to the ground level, to tiered steps near the main entry, to conversation ‘pits’ on the upper levels. These are complemented by the normal array of seating arrangements; benches, booths, group tables, individual lounges, meeting rooms, and cafe style tables. All areas in the learning suite will be connected to wireless access, with power allocated to as much seating as possible.



Figure 2.14: Ground Floor Cutaway of Learning Suite

As an initiative for encouraging some of the informal space to be able to be used as formal, some learning suite spaces have been planned in-between teaching spaces. These areas can be utilised for formal teaching 'break out' for group activity or as a relief space to spill out some of the students, and have been designed so they can be signed for separation from informal activity if required.

Front of house Student Services facilities are wholly located on the ground floor to the west of the main entry from Hunter st. The location can act as a 'concierge' to the building (and city campus), whilst allowing the roving and fixed staff to give primary and secondary tier support to students and visitors. The space has a tiered waiting area adjacent to two (or three) student service pods that can be disconnected and placed away if required. The back of this area is flanked by 4 meeting rooms for face to face interaction. A digital queuing system will allow for students to wait in any of the lower floor areas for service, include the nearby cafe.



Figure 4.14: Services for Student Hub at Corner

Student infrastructure has been added into the plans to reflect the support equipment that students require in a campus. This includes water points, vending machines, bins, ATMs, lockers, printing devices and auto loading machines.

The below diagram gives a visual indication of the location of these facilities in the project. In summary, the key retail, ATM and vending machines are located in the lower floors with the public spaces, whilst water points, bins and printers are provided on almost all floors.

As part of the learning suite of spaces, a number of support rooms have been added into the project, including an Islamic prayer room ( with separated male and female facilities), a first aid room (in the security room) and a parents room.



Figure 2.15: Student Infrastructure Diagram

The Library on level 1 is divided into two main areas; an collaborative study library zone containing the main entry, help points, self checkout, collaborative tables, booths and printing devices. The second area towards Hunter st is designated as a 'quiet' area with more enclosed bench seating, lounges and the law library collection. This also enclosed three group meeting rooms. The library back of house has been wrapped close to the core, and allows staff to enter from the rear of the library as well as the 'service' end, and contains staff work points, printing, book storage and layout space.

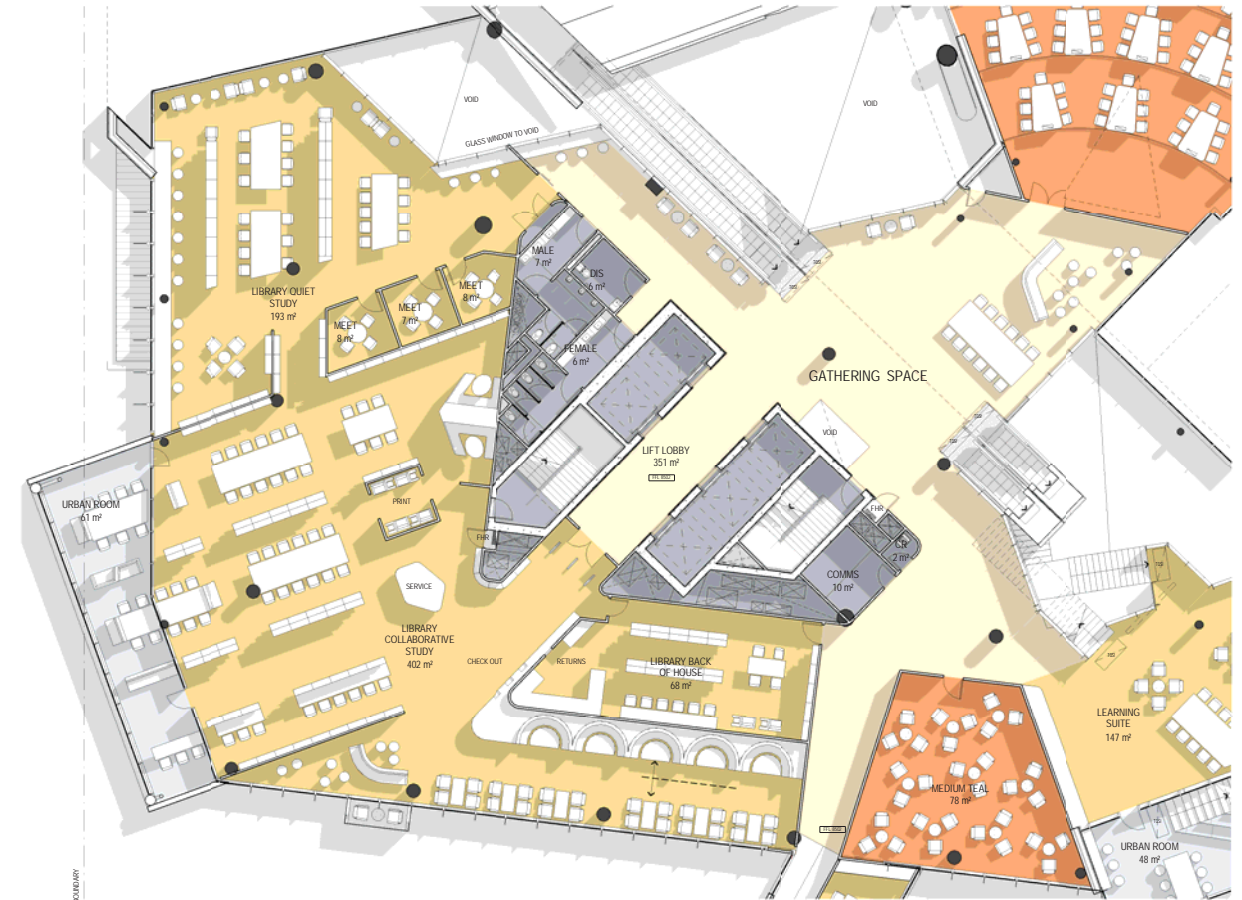


Figure 2.16: Library Plan on Level 1

Figure 2.22: Part Level 6 Workplace Concept Plan

## 2.14 RETAIL STRATEGY

Four key tenanted retail spaces are provided in the scheme and strategised as 'activators' of the ground floor edges of NeW space, and of the Christie Place facing facade of University House. The proposal also suggests closing the Auckland St facing retail in University House, with the potential of Watt Space Gallery to move into this area.

The retail spaces and summary infrastructure provided within the current floor plans are as follows;

SPACE	LOCATION	SIZE	INFRASTRUCTURE
Retail 1 (shell) Food retail	Ground Floor (Hunter St)	30-90m <sup>2</sup>	water / power / data / sewer
Retail 2 (shell) Cooking retail	Ground Floor (Auckland St)	50m <sup>2</sup>	water / power / data / gas / extract / sewer
Retail 3 (shell) Food retail	Ground Floor (SE corner)	20m <sup>2</sup>	water / power / data / sewer
Retail 4 (shell) Cooking retail	University House (Christie Place)	Up to 120m <sup>2</sup>	water / power / data / gas / extract / sewer
Student Kitchen Reheat facility	First Floor (south)	10m <sup>2</sup>	Wall unit – BWU / water / power / data / sewer
ATMs	Ground Floor x 2	4m <sup>2</sup>	Power / data
Vending	Ground Floor / Second Floor x 6	9m <sup>2</sup>	Power / data
Watt Space	University House	100m <sup>2</sup>	Gallery lighting / AHU / power / data

A series of three cage storage spaces are being provide in the loading bay for retail storage if required.

It should be noted that any of these space can be utilised for non-food retail in preferred in any of these spaces, but it is recommended that retail 1 and 4 are preferable for food retail to support the student / staff learning environment.

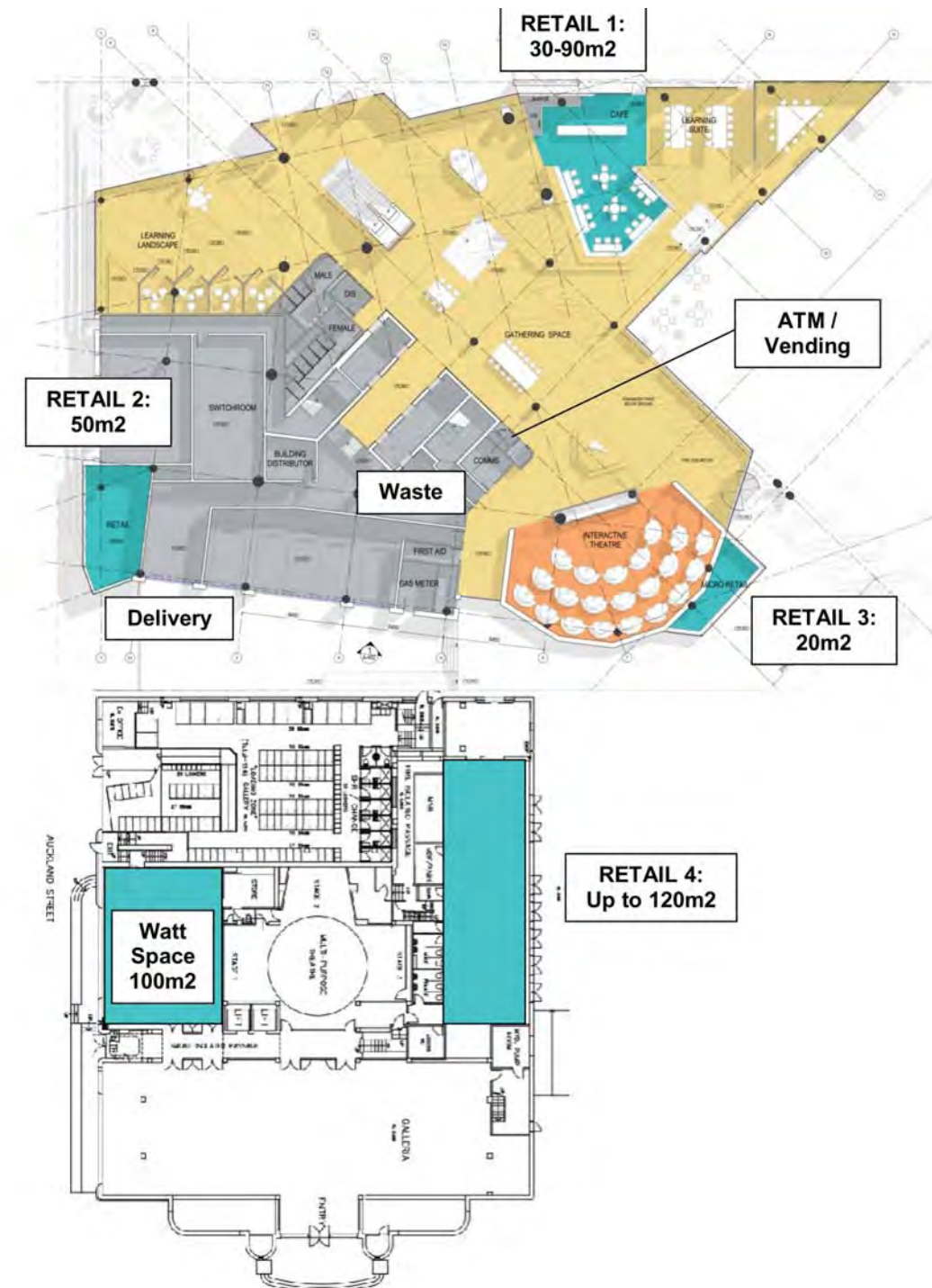


Figure 2.23: Retail Strategy Concept Plan

### 2.14.1 SHARED BACK OF HOUSE / AMENITIES

To serve retail requirements in the current proposed design, there will be a need to share services with prospective retail tenants. This will include;

- Toilets to ground floor to be open with retail hours / used by retail staff
- Waste bins to be accessed by tenant
- Delivery dock to be used by tenant

Electricity and water usage will be separately metered to allocate to retail tenants if required.

## 2.15 STREETSCAPE ACTIVATION

The nature of a University Campus as the inhabitant of this site has resulted in a briefed program of spaces that can be very open and engaging to the surrounding street and public interfaces. The internal brief to the lower levels is predominantly open social study and learning area that lends itself to highly visible and transparent spaces to areas that will activate the streetscape around. The architectural design has effectively allowed for clear glazing (>=60% VLT) to all possible interfaces that are not required to be closed off as plant or 'back of house' spaces.

Where plant and vehicle access is required, it has been located to the smallest footprint possible at the south west corner, to retain this level of activation. The formation of a laneway to the south between NeW Space and University House, not only extends Christie Lane all the way to Auckland St, but has also enabled some of the back of house areas to be located 'off' the street to maximise the transparency and activation to Hunter and Auckland streets. The following is a more detailed description of the streetscape highlights from each orientation of the site.

### 2.15.1 CORNER HUNTER & AUCKLAND ST

The major entry to the building is located on this significant public corner. The architectural treatment has been to form a two level high 'Urban Room' that includes a significant canopy that extends to the footpath alignment and provides undercover space for students and the public to meet and socialise. This space has inbuilt terraced sandstone and timber seating to allow for public interaction to take place at the entry, and to activate the street outside of the interior spaces. The canopy itself, clad in sandstone to its face, has an extruded coloured soffit that continues back into the internal spaces incorporating the student services (at ground) and library (at level 1). This gesture connects the interior activity to the street. An automatic sliding glass door is provided to this corner, as well as a 3m revolving door under the sloped roof (gesturing the view to the clock tower beyond). An additional auto door and escape door are located either side of the revolving door for both 'good weather' access and disabled entry.



Figure 2.24: Corner Hunter and Auckland Streets

### 2.15.2 HUNTER STREETSCAPE

From the east end of the Hunter St interface, the site is open to the 'campus green' beyond with a gap in the building form from the Civic Theatre. The space is both a thoroughfare to Christie Place and Civic Park beyond and an important external social learning space for the University. The ground floor space from this point to the main entry to the corner of Hunter and Auckland St is filled with student activated 'learning suite' space with a retail cafe in the middle of the street frontage. This ground faced has several openable areas, including louvres for natural ventilation, doors leading into more intimate retail and learning space and a tilt panel for the retail space to serve directly onto the street.

The street level glazing is made up of high performing IGU's that will be greater than 60% VLT providing for this transparency from the street. A series of seats and external table forms have been incorporated at ground level that enables student and passers-by to rest or socially interact.

The level 1 theatre forms the upper section of the two level form on the 'middle' section of Hunter Street, enhanced by an overhanging sandstone faced canopy, with an extruded coloured soffit that continues inside the theatre space. This connects the learning space with the street form and provides a dialogue between the two.

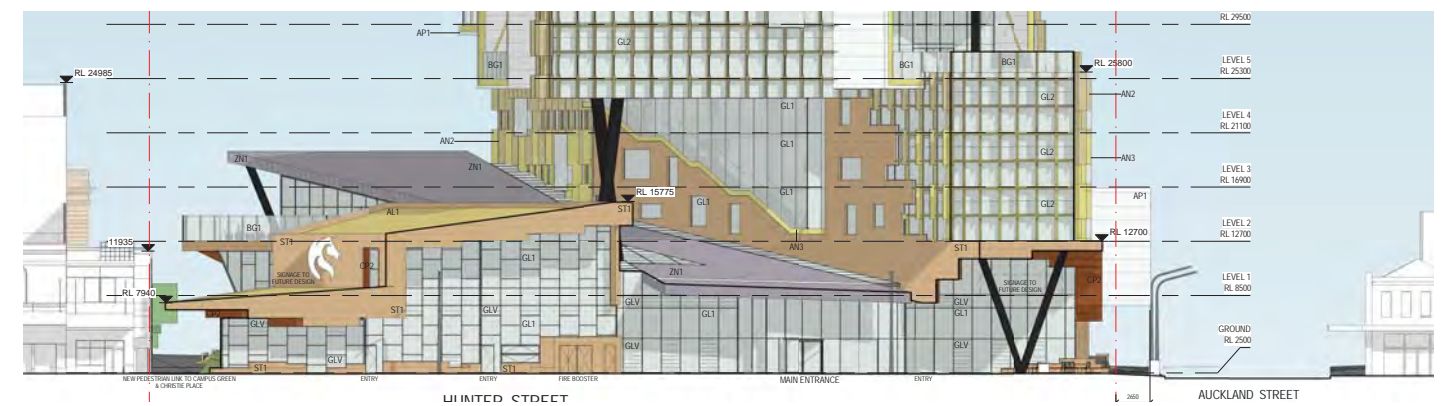


Figure 2.25: Hunter Streetscape

### 2.15.3 AUCKLAND STREETSCAPE

The 'Urban Room' to the corner of Auckland and Hunter St extends around into Auckland St to form a student 'learning landscape' of tiered seating and study opportunities both on the street and inside the space looking out. The external tiered sandstone steps extend around the corner and become inhabitable seats, bike parking and steps up to the (required) elevated substation. This design feature both integrates the 'plant' facade of the substation into the design as well as supports activation of what would otherwise deemed a blank facade. This tiered seating space then forms the outside space in front of the retail tenancy on the corner of Auckland St and the laneway – a key activator of this end of the site, which breaks apart the plant areas on Auckland St and the 'back of house' entries on Christie lane. The retail area has an entry onto Auckland St and glazing to its full width allowing for key visibility into this space.



Figure 2.26: Auckland Streetscape

### 2.15.4 CHRISTIE LANE / CHRISTIE PARK STREETScape

The corner retail element that holds the entry to the laneway can also act as an activator of the space when used for student events or 'outside' retail (markets) in the future. The laneway functions on the NeW Space side will include a double height loading bay (serving both University House and NeW Space) that allows for loading delivery and waste pickup (off the street and laneway). A carpark entry for 5 services vehicles is adjacent to this space that will be low use and incorporate warning lighting for vehicular movements to 'protect' what will be more of a pedestrian environment. The treatment of the facade of these spaces will be a louvered timber facade (over metal louvers to plant areas where required). This treatment will warm up the laneway and make it feel less like a 'service' zone, and more like a useable urban space for the University. Further to the east is an entry into the main ground floor learning space, and a ground floor 'immersive' theatre with a window into the laneway.

On the University House side, a key window into the bicycle store will be built into the existing sandblasted brick wall that will retain the 'memory' of the previous buildings up on the rear face of University House. In this brick wall, it is envisaged that art works may be displayed in curated light boxes by the University to activate this laneway. A new entry into University House will be built into the east end of the rear face of University House, above which are the 3 upper floor links into University House from NeW Space. These links incorporate meeting rooms that will look down into the laneway for further 'passive' surveillance. Advance to the Ground floor link is a continuation of the pedestrian access up the eastern side of University House that will incorporate a new timber decking / seating area for retail purposes, and a direct link into NeW Space into the laneway entry.

From Christie Place, the approach from the Civic Park is presented as 'open' to the Campus Green, with a major entry (with revolving door and auto sliders) to the ground floor learning suite along the 'Town Hall' axis from the Hunter / Auckland St corner. This fully glazed entry sits alongside a small retail bar that will service pedestrians entering the University from this side.



Figure 2.27: Christie Park Streetscape



Figure 2.28: Christie Park Elevation

### 2.15.5 CAMPUS GREEN STREETScape

Although not a 'streetscape' the internal ground facades to the Campus green are just as important to the civic realm and its success as an activated urban experience. This green space (described more in the landscape report) contains a series of students seating, table and grassed zones for learning experiences, as well as a major new public thoroughfare from Christie Place through to Hunter St – crucially linking Civic Park to the Honeysuckle precinct and the newly envisaged tram stops. The lower ground faced is treated predominantly with glazing, with operable sections of the ground floor for natural ventilation. Another entry to the ground floor is situated on the inner corner of this landscaped zone.

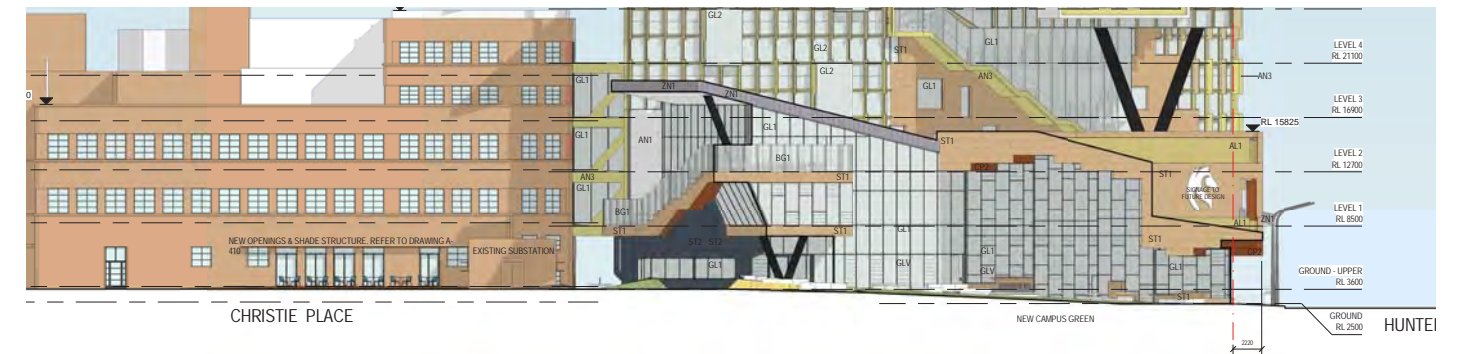


Figure 2.29: Campus Green Streetscape

## 2.16 FLOOD PLAIN RESPONSE

The Newcastle City Council flood certificate was issued for the site. A single design level of 3.8m AHD was documented and provided for a 500mm freeboard.

A meeting was undertaken with the author of the certificate, Newcastle City Council engineer Alistair Peddie. The meeting was attended by Ethan Clark (APP), Anthony Furniss (EJE) and Michael Blyth (Aurecon). The meeting resulted in email correspondence from Alistair Peddie to Anthony Furniss (EJE) confirming the following:

- Acceptance of a 300mm freeboard
- Provision of two design levels; 3.0m AHD at the Hunter Street boundary and 3.6m AHD at the Christie Place boundary.

Both Hunter and Auckland Street footpaths are below 3.0m AHD, therefore in order to provide level transitions into NeWSpace and active street frontage, a portion of the project would be below the flood line. The Newcastle City Council engineer confirmed at the meeting that council would not object to the provision of space below the design levels, on the basis that life safety was not compromised and that essential services were located at or above the design level. It was noted that those spaces below the flood level were to be designed to mitigate damage to property. The position was taken in the context of the approval of previous developments on Hunter Street, in order to maintain active street frontages.

The NeWSpace ground plane has been designed accordingly, with level street frontage terracing up to the design flood level, on which essential services such as the substation and main switch room are located. Equitable access is maintained within the ground plane by taking one lift down to street level, together with the use of pedestrian ramps within the campus green and Christie Lane.

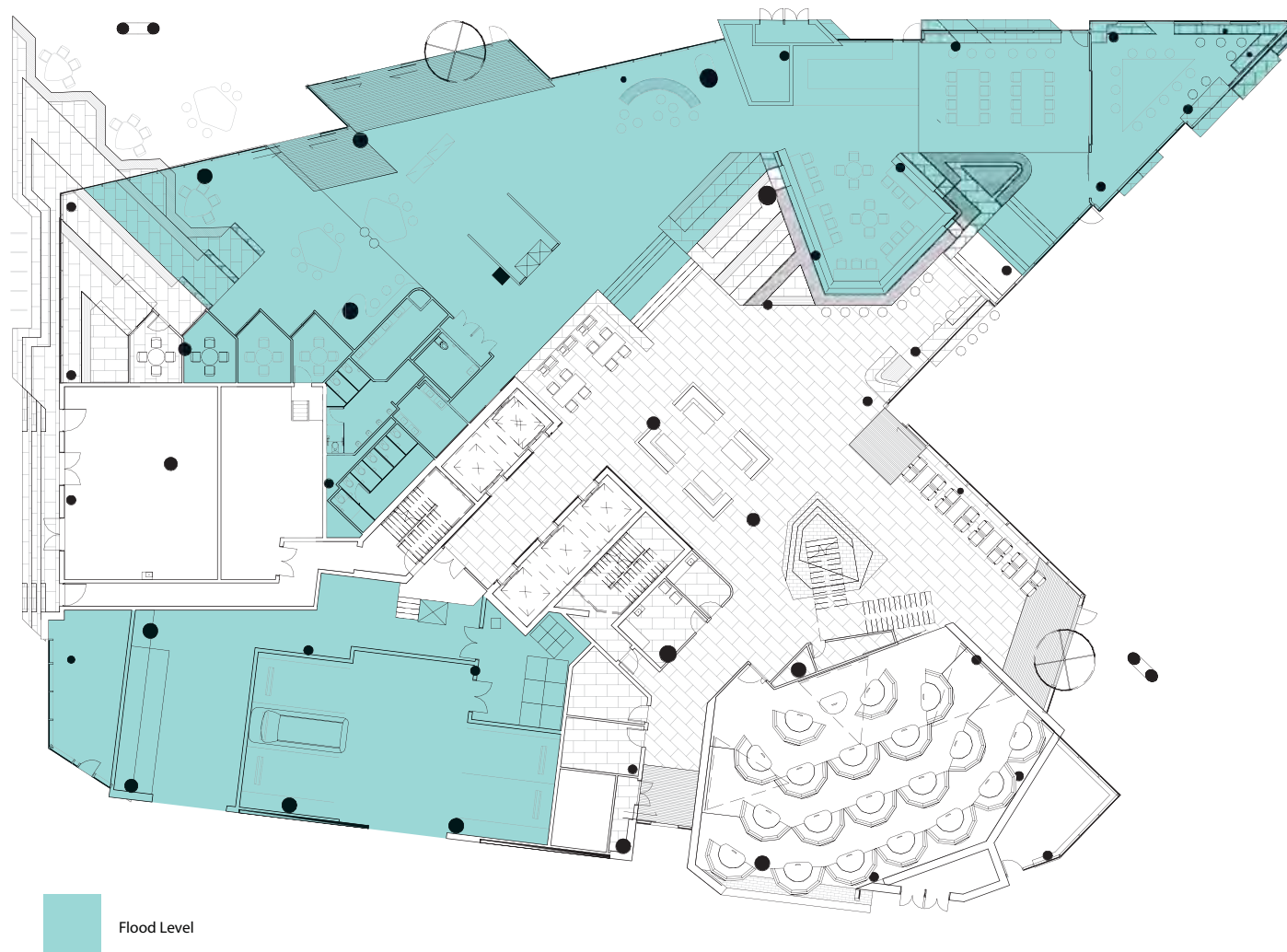


Figure 2.30: Area of Ground Floor Plan below the Floodplain

## 2.17 BUILDING POPULATIONS

The NeW Space populations have been developed from the University brief, including allowances for student & teaching areas, academic workspace, functions and visitors to the building. Refer populations summary table below for overview for the population requirements for the building.

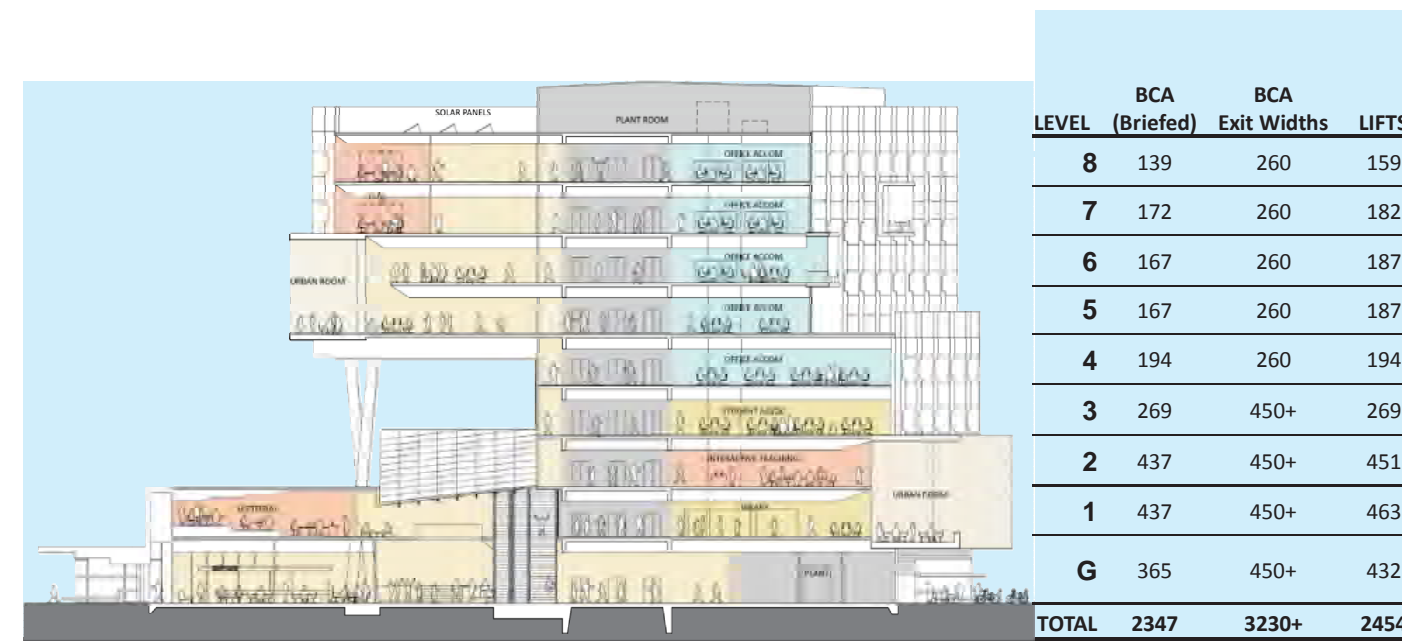


Figure 2.31: Building Populations Diagram

### 2.17.1 BRIEFED POPULATION:

The briefed population for the NeW Space includes a total building population of 2347, including students, staff, and public distributed across all levels of the building, with the denser populations located to the lower half of the building where significant proportion of the teaching, learning accommodation, Library and public gathering areas.

### 2.17.2 AMENITIES:

Amenities, including male, female, and accessible pans, basins and urinals have been calculated on the total briefed population of 2347 including both students and staff, on the rate required by the Building Code of Australia (BCA). These numbers of facilities required have been distributed evenly throughout the levels, with an increased number of toilet facilities provided to Ground Level where increased use is expected. Ambulant cubicles have been provided as part of the pan requirement to each of the amenities areas provided.

In calculating the numbers required and accessible toilet is provided to each level, and included as within the calculation as 1 of the pans required for both the male and female toilets as allowed by the BCA. Although not technically required, an additional pan has been provided to the female amenities to all levels, as there is often increased pressure on these facilities.

### 2.17.3 VERTICAL TRANSPORT.

The vertical transport strategy, including lifts, escalators and stairs, has been developed with the University to provide and affective delivery of building users to their classrooms, study or workspace. Five passenger lifts serve Ground Level to Level 8, with escalators serving Ground Level, Level 1 and 2, with ground level access provided from the main Hunter Street entry. A connected stairway for interfloor circulation is provided between floors to all publically accessed levels.

In order to calculate the effectiveness of the developed transport strategy at peak operation periods such as class changeover periods the following building assumptions have been made:

- Briefed population used for calculations
- 56% Utilization of Teaching and Learning Space as per TEFMA Standards

- Additional 56% for students arriving for class
- 35 second target waiting time for lifts
- 5 minute 25% handling capacity
- 90% of visitors to Levels 1 & 2 will utilise stairs and escalators
- 20% interfloor circulation

With the above assumptions the simulated vertical transport results exceeding the benchmarks set for the project for the briefed population with a 5 minute handling capacity of 25%

## 2.18 INDIGENOUS REFERENCES

Through some preliminary sessions with the Wollotuka Institute, the design team have produced a list of applicable words for NeW Space that could be incorporated into ground plane paving treatments, names for theatres and urban rooms or as art installations in the campus green or laneway. The usage of the words is fully developed, integration into the ground floor paving of the gathering space, potential option as an historical and continuing link to the Awabakal people.

The words are taken directly from the 'Awabakal Word Finder' by John Maynard (2004), which contains the written works of Rev L.E Threlkeld and Percy Haslam. A starting list of proposed words are included below, and are for future discussion with the University and the local Awabakal elders (through the Wollotuka Institute) in order to gain the right context and appropriate usage of this language.

AWABAKAL	TRANSLATION	POTENTIAL USAGE
bulkara-kolag	towards the hill	Towards Galley/Park
bulwara	high lofty	Top level
coquon	Hunter River.	Urban Room to Hunter Street
garaka	entrance or mouth of anything	All entries
kara-uwilliko	to seek carefully with a wish to find	
kau-ma	gathered together - assembled	Lecture Space on Ground Floor
kau-tilliko	to assemble or collect together, of themselves	
kirul	green as a young tree	Campus green
koe-kera	bark shelter	Window seating boxes
koom-boroe-khan	the brain (the Suffix 'Khan' is interesting. It denoted a living agency to create and direct)	Somewhere in Learning Suite
kotelliko	to think and continue to think; to be thinking	Library
meekariba	(honeysuckle Newcastle), plenty honey here	Urban room Facing Hunter River
nug-gurrawolliko	to meet	
purai	earth- land, the world	
umulliko	to do, to make, to create	Creative Space?
wee-yellee-koe	talk, say, tell	Lecture Space
wee-yellee-ngale	the place of speaking	Lecture Space
wiyelliko	speak, say, talk , converse, communicate	
whibay-gamba	Nobbys	Urban Room
wollotuka	eating and meeting place	Meeting rooms
yellawa-bunbilliko	permit to sit	Learning Landscape
yellawolliko	cross legs on the ground, sit, rest	Café/ Retail Spaces

## 2.19 LANDSCAPE

The landscape design for NeW Space encompasses the interface with the public realm along the perimeter of the site as well as the provision of a central courtyard which will provide both students and public a variety of different uses. The space is of triangular shape, bordered along two shorter sides by the new facility and a longer edge along the existing Civic

Theatre wall. This wall is proposed to be fronted with a 7m tall green wall structure allowing climbers to occupy horizontal bands of wire mesh.

Taking reference to the underlying geological history of the site as well as building upon the unique situation of a University facility in close proximity to both the CBD and the city beach, the central courtyard is developed as a fluent surface of lawn and stone sweeping in a generous curve within the boundaries of the space. The management of the two different levels between North and South result in an amphitheatre like arrangement of a combination of tilted lawn and tiered seating steps around a central flat area. This spatial composition allows both, the lawn and the seating steps to be used as a audience seating area with a focal point onto the stage like flat central area. Both parts further focus onto a tilted plane on the green wall which allows for projection screens to be potentially mounted.

A series of loosely arranged furniture provides additional multiple opportunities for groups of 2 to 16 to assemble for formal and informal working/ teaching which transitions without barrier into the inner teaching facilities at Hunter Street level.

The space is developed with an understanding of its relationship to the adjacent open lawn area of Christie Place and the civic centre piece of municipal Newcastle, Wheeler Place. In its strategic location between the vibrant new Honeysuckle precinct to its north and the successful Civic Park to the south, the central courtyard will play a key role in connecting these public spaces providing opportunities to establish a great connection and dialogue between students and public.



Figure 2.32: View from south east corner



Figure 2.33: Campus Green

## 2.20 EXTERNAL MATERIALS CONCEPT

The NeW Space project will be a unique building in the civic precinct of Newcastle and on this basis we have carefully selected materials for the project that provide an appropriate sense of connecting with the existing (heritage) buildings of this precinct whilst establishing a distinctive and yet unique presence for the University that points to the future rather than the past.



Figure 2.34: Lower Floor Entry Canopies

The materials have also been selected to create a strong impression of warmth and openness throughout all levels of the building, utilising colour texture and transparency to enrich the experience of student's staff and visitors. This is particularly emphasised over the lower levels of the building where the Learning Suite and street interfaces are composed materials that will feel generous and inviting.

We also recognise that NeW Space represents a substantive new asset to the University and in this respect it is critical to make material selections on the basis of high performance, lowering maintenance requirements and longevity.

Materials such as glass and aluminium have also been utilised to create a high performing curtain wall system that will deliver maximum connection with natural daylight and the surrounding views whilst maintaining passive sun control and thermal insulation. The proposed configuration and composition of the curtain wall system (incorporating profiled sunshade fins) is the key to effectiveness of the materials.

The following summarises key spaces and architectural design features of the project and the material selection applicable to each:

**University House** – Our New Space building material selection is also considerate of establishing a contemporary connection with the University House through the use of vertical aluminium sunshade fins that create a literal reference to the sun-shading system that characterises University House's Western facade.

**The Learning Suite** – The floor plane of the Learning Suite will be articulated with local stone – Porphyry and Karuah Red granite to create a strong sense of texture and liveliness throughout the lower levels of the building, in particular the interfaces with the Christie Park, Hunter and Auckland Streets. The street paving and lower ground interface will be paved in bluestones and NCC paving units.



Figure 2.35: Porphyry Stone

**Bridge Link** – The University House/ NeW Space Building bridge link will be comprised of clear planar structural glazing, silicone butt jointed to emphasise a polite offset between the two buildings enhancing the concept of an open lane way.

**Lower Ground Canopies** – These street enclosing elements are clad to the face with sandstone, with a feature painted metal underside in ochre orange.

**Curtain Wall** - The curtain wall will provide high performance thermal control through a double glazed curtain wall complete with low E film and thermally engineered aluminium framing. The spandrel glass will be selected to match the vision panels.

**Bay Window Pods** – These projecting flush glazed bay windows provide unique breakout points at the perimeter of the building. They are clad with anodised aluminium to match the adjacent facade colour, and internally will be provided with bespoke timber bench seating and tables.

**Sunshade Fins** – The sun-shade fins are integrated coloured anodised sheet aluminium (nom. 12mm thick), profiled to provide maximum sightlines, view angles and thermal performance. They are designed to work in concert with the glass curtain wall for optimum thermal effect. These are optimised to differing depths dependent upon orientation.



Figure 2.36: External sunshade anodised aluminium colours

**University House Openings** - New windows and door openings to University House have been design to integrate with the heritage features of the building, also providing new activation of University House in relation to Christie Park. Double glazed windows and doors with sandstone infill pillars to match existing have been utilised to provide this feature of the design proposal.

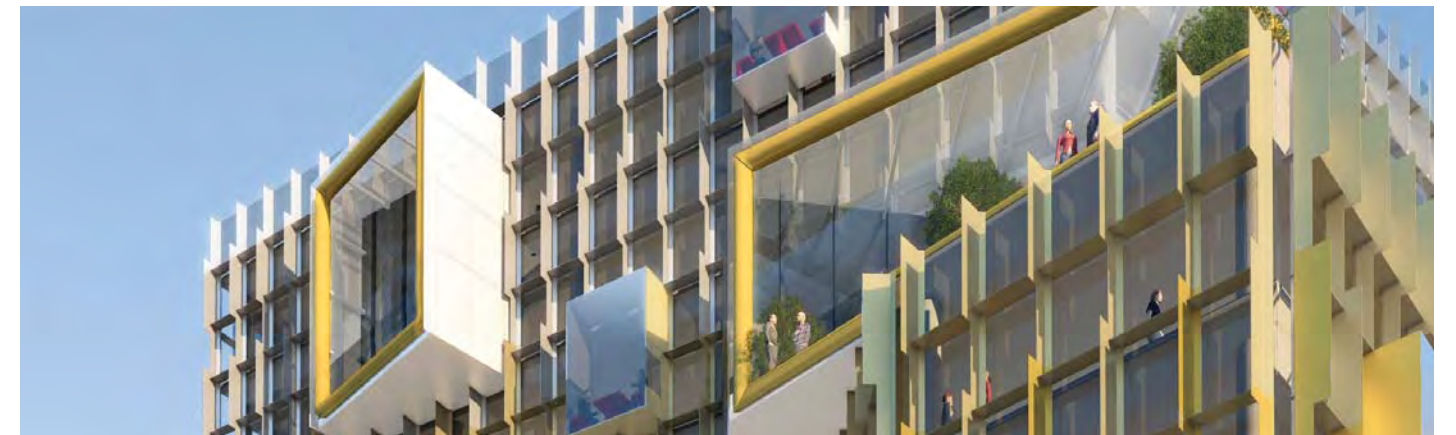


Figure 2.37: Upper Building Materiality

**Gathering Space Roof** – The sloped zinc and glass roof over the Learning Suite (Lower three levels) is proposed as a zinc clad standing seam roof with high performance double glazed system to its edges supported by light weight high span steel structure.

**Shop Front Glazing** - Shop front glazing has been used throughout the lower levels of the building to enhance the feeling of connection and transparency. The system is proposed as double glazed clear flush panels supported by steel framed strong-backs.

**Street Furniture** – To create a lively streetscape and ground plane we have proposed a series of furniture elements that are designed specifically to engage and activate the street frontages and landscapes spaces. The furniture is proposed a bespoke solid timber and sandstone benching and seating.

**Urban Room Hoods** – The distinctive hoods that frame the Urban Rooms / lookouts are proposed as steel framed with perforated powder coated aluminium cladding. The cladding is white aluminium to both faces with a feature colour to the surrounding steel tube support structure. All Urban Rooms will be provided with stone decking.

**Plant Room Enclosure** - The plant room enclosure comprises vertical silver spandek panelling and matching aluminium acoustic louvres.

# 3.0 INTERNAL PLANNING DESCRIPTION

## 3.1 GROUND LEVEL

At the Ground level there are multiple entries to NeW Space connecting the City to the University to the City urban context. The building organises itself around the axis which joins the primary Hunter Street corner entry with Christie Place and the town hall via the Atrium gathering spaces. Further intermediate entries are provided from Hunter street via the student 'shopfront's and the Campus green, as well as Auckland Street access via the covered laneway and new link to University House.



Figure 3.1: Learning Corner to Hunter Street



Figure 3.2: Main Hunter Street Entry Foyer

On entry in to the atrium from Hunter Street into double height Gateway Space with impressive 'X' column which extends through the glass roof, visually connecting to the underside of the mass of the cantilevered teaching spaces above. Escalators directly ahead orient students and visitors, connecting to the upper atrium 'mezzanine' levels and extending to level 2. Alternatively access to the upper floors via continuous path of stairway, as well as 5 passenger lifts, accessed of the upper tier of the Atrium main axis.

A roving 'conciierge' will invite visitors in the building and offer higher level general assistance for queries and directions on arrival, or directing to the Student Hub located off to the side of the main Gathering Space, forming part of the Integrated Services Model, with side-by-side service as well as meeting and tiered lounge space for longer consultations.

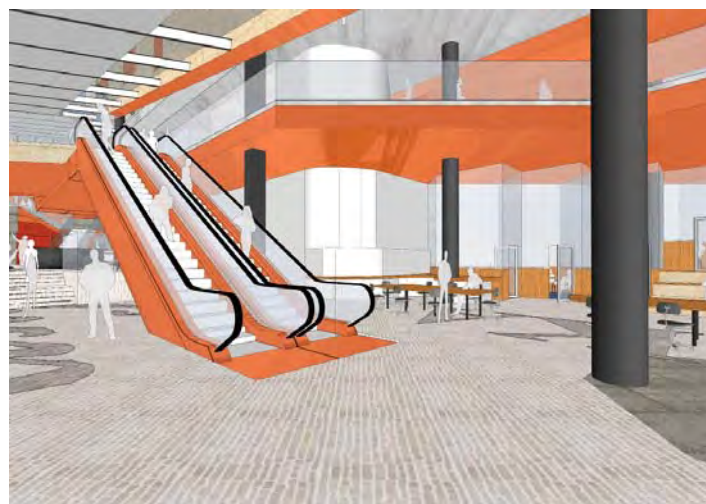


Figure 3.3: Student Services Hub



Figure 3.4: Looking into Immersive Theatre

In order to respond to City Council flood level requirements, the ground level has been stepped by 1.2m to mitigate from potential flooding. Whilst raising essential services from flooding risk, the stepped floor provides an opportunity for a terraced ground floor terrain, further providing distinct zones for varied Learning Suite types, including varied tables, benches, lounges, booths and learning landscapes. A shallow stair of 8 or so steps provides access to the central gathering space, without impeding on the visual connection to Christie Place and the new Campus Green. Accessible access is provided by a double sided lift within the centralised lift core.

The Gathering Space distinguished by triple height void between the upper mezzanines of the atrium with premier aspect to the terraced landscape of the College Green. The Gathering Space provides a significant area with possible uses for exhibitions, student orientation or overflow from the large 'cabaret' style Immersive theatre.

Whilst the significant area of program has been provided to the Learning Suite, Ground Level also provides a number of cafe and retail spaces that help activate all entrances and corners site, as well encouraging public engagement with the NeW Space grounds and building.

A parents room is provided in addition to the public toilet amenities, located on the corridor link to University House from the Gathering Space, adjacent to the large Immersive teaching space. A Security/First Aid room is located next to this providing lockers for lost property and first aid equipment. The main cleaners store is also provided on this corridor.

A secure back of house area is provide with both laneway access as well as direct access to the Lift Lobby, with scissor lift to negotiate the change in levels. Areas housed within this space include, loading bay with lockable stores, dedicated bin store and waste room and the car parking. A large proportion of required plant including substation, switch room are also house in this area of the Ground floor level, with mechanical air handling plant located within a mezzanine level above the car park between level 1.

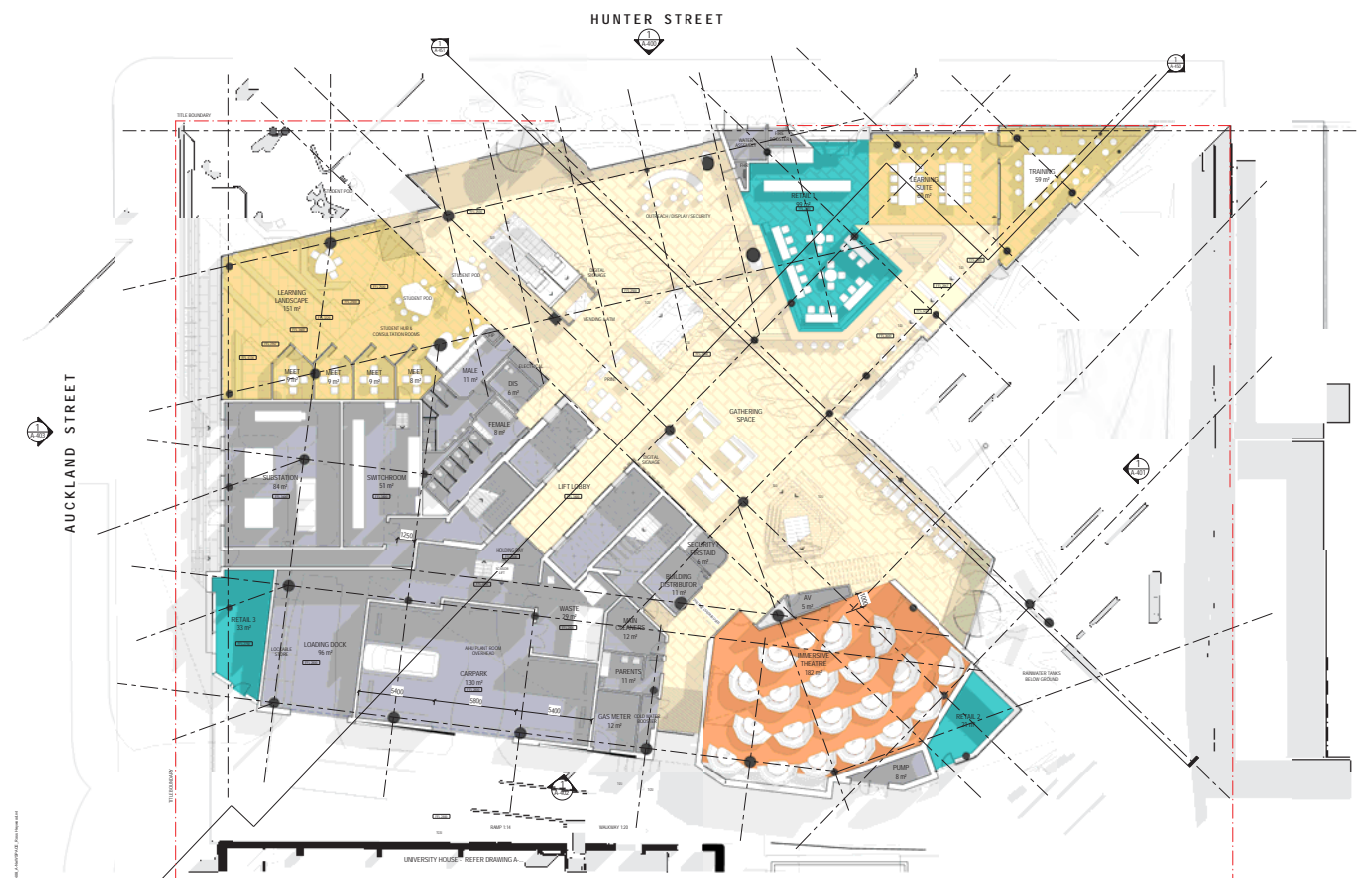


Figure 3.5: Ground Level Floor Plan

### 3.2 LEVEL 1

Visitors to this level can quickly arrive from ground via escalators and stairs to the heart of the atrium. Positioned centrally within the atrium, Level 1 provides a large open gathering space visibly connects to the levels above and below via generous voids, overlooking the learning suites to Hunter street and vistas to the College Green and Christie Place. The centralised lift core and stairs and escalators are positioned directly in the line of sight to level to create a clear way finding strategy for the NeW Space building.

The wide open 'bridge' link to the connecting to the Lectorial Theatre provides additional breakout spaces to facilitate, functions, or registration for conferences that may be held within the theatre.

To the south of the central gathering space further learning suite overlooking Christie Place provides a variety of spatial types for student study, whilst being supported by small meeting rooms and student kitchen where tea, coffee can be prepared or meals heated in microwaves provided. From the Student Kitchen access to the expansive deck of the urban room is provided with benches and tables are provided as well as a tiered landscape with access to level 2 overlooking Christie Place.

The Library, accessed directly from the lift lobby, offers a more focused learning experience with its 'secure' entry line. Learning suite is provided between the bookshelves to promote a quiet focussed learning experience via varied study space choices, including large shared tables, meeting rooms and booths for group work, quiet study and lounge areas. Students have access to the outdoor Urban Room balcony that looks over Auckland Street.

An enclosed bridge link to the south is provided to connect directly to University House on this level with accommodation provided for various groups within student societies.

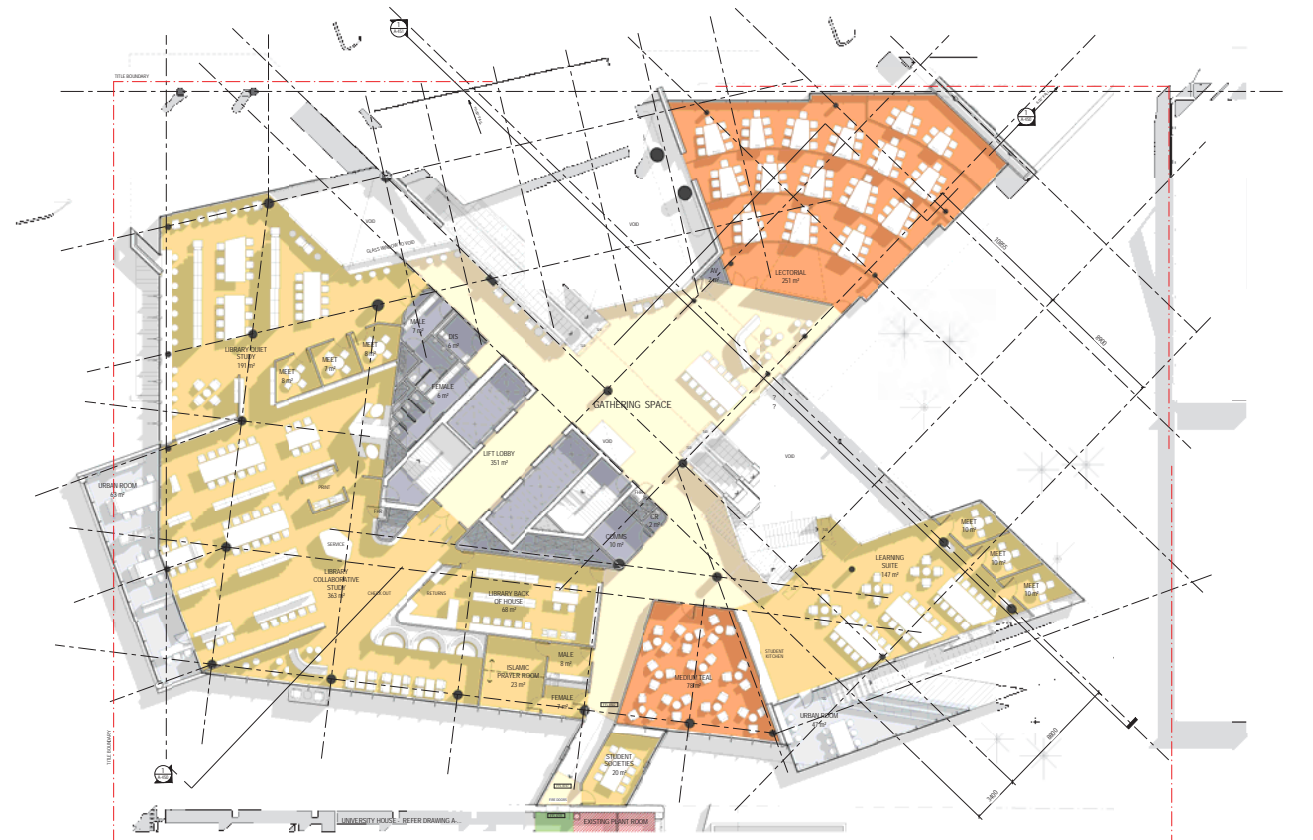


Figure 3.6: Level 1 Floor Plan

### 3.3 LEVEL 2

Level 2 to provided and extensive floor plate level of varied Teaching and Learning Suites areas serviced by a high amenity of access provided direct access via Lifts, Escalators and stairs from ground level. The Teaching and Learning spaces include rooms which cater for various modes of teaching, including a large column free Harvard style Interactive space, and medium and large Teal spaces. Where possible Learning suite has been provided adjacent or between these teaching spaces to provided student study and informal learning space, as well as allowing for breakout sessions from timetabled classes.

Learning suite provides the destination space to the top of the escalators, with associated outdoor balcony and tiered deck overlooking the Christie Place and the College Green. The adjacent enclosed bridge link to the south provides a direct connection to University House on this level, with accommodation provided for various groups within student societies.

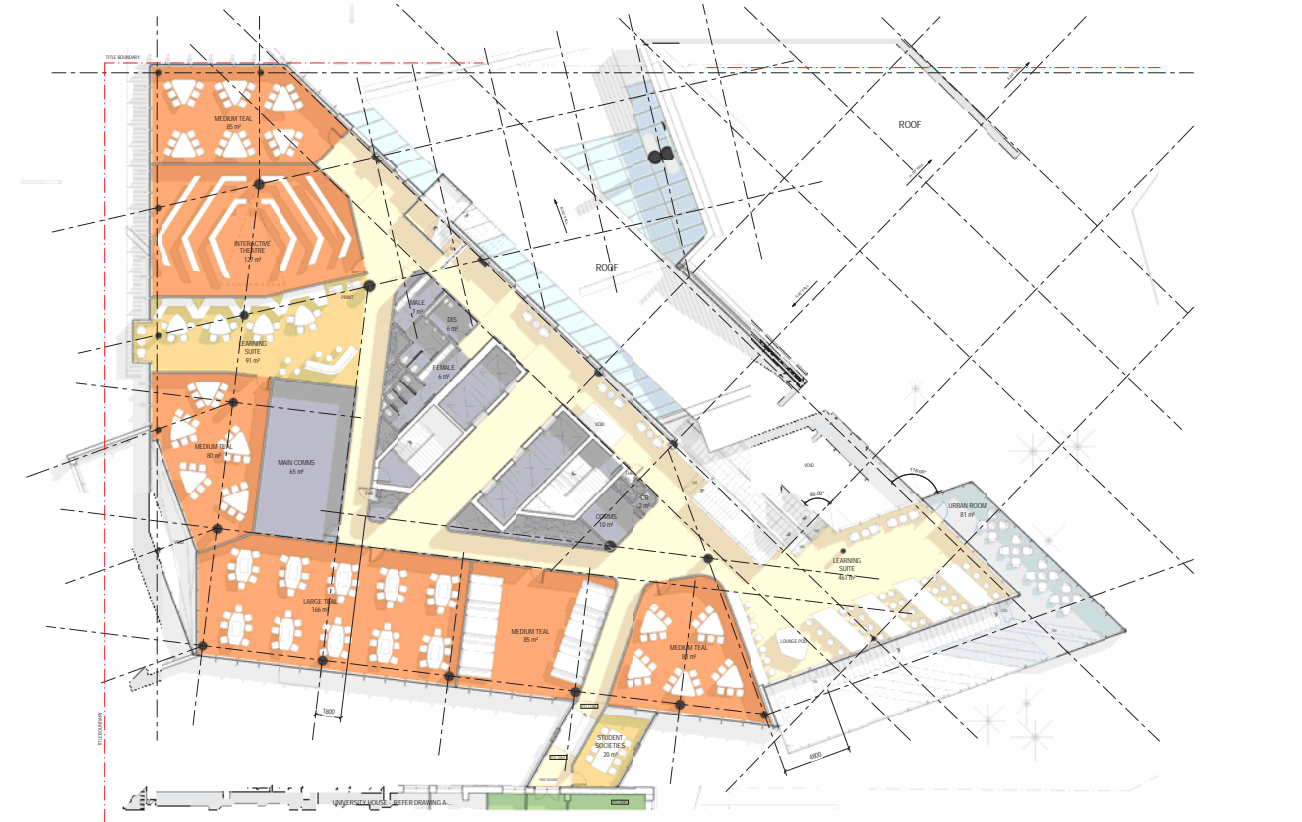


Figure 3.7: Looking down into gathering space

### 3.4 LEVEL 3

This level marks the introduction of the staff academic areas to the floor plate. This equity of the academics to student spaces continues up through the remaining levels of the building, with staff areas provided access provide to the south of the lift lobby via secure doors throughout. To the east the student spine along the facade is established providing a north south connection to formal teaching and learning, and informal learning suites. Access to levels above and below via open shared communication stairs is encouraged by providing these adjacent to the lift lobby on the established circulation spine, as well as being a visual vertical circulation statement within the facade. An enclosed bridge link is provided to connect directly to University House, with accommodation provided for student society groups.

Within the secure academic workspace there is a strong emphasis on a collegiate layout with a mix of enclosed offices and meeting space, opening to defined areas of collaborative workspace. Largely column free area provided allows for an adaptable floor space for future arrangements and uses, as well as ensuring that the academic workspace has direct access to natural light and vistas towards Auckland Street.

On this level the teaching areas are located to the north and are organised so that they achieve column free learning environments, including the large TEAL space, with a high amenity to natural light. An informal lounge area is provided directly outside these rooms to allow for congregating students at class changeovers and conversations between students and academic following timetabled classes.

To the south the learning suite operates as the student lounge over looking to Christie Place with access to a meeting and training room. The first of the school receptions opens onto the Student lounge behind the secure line of the academic workspace.

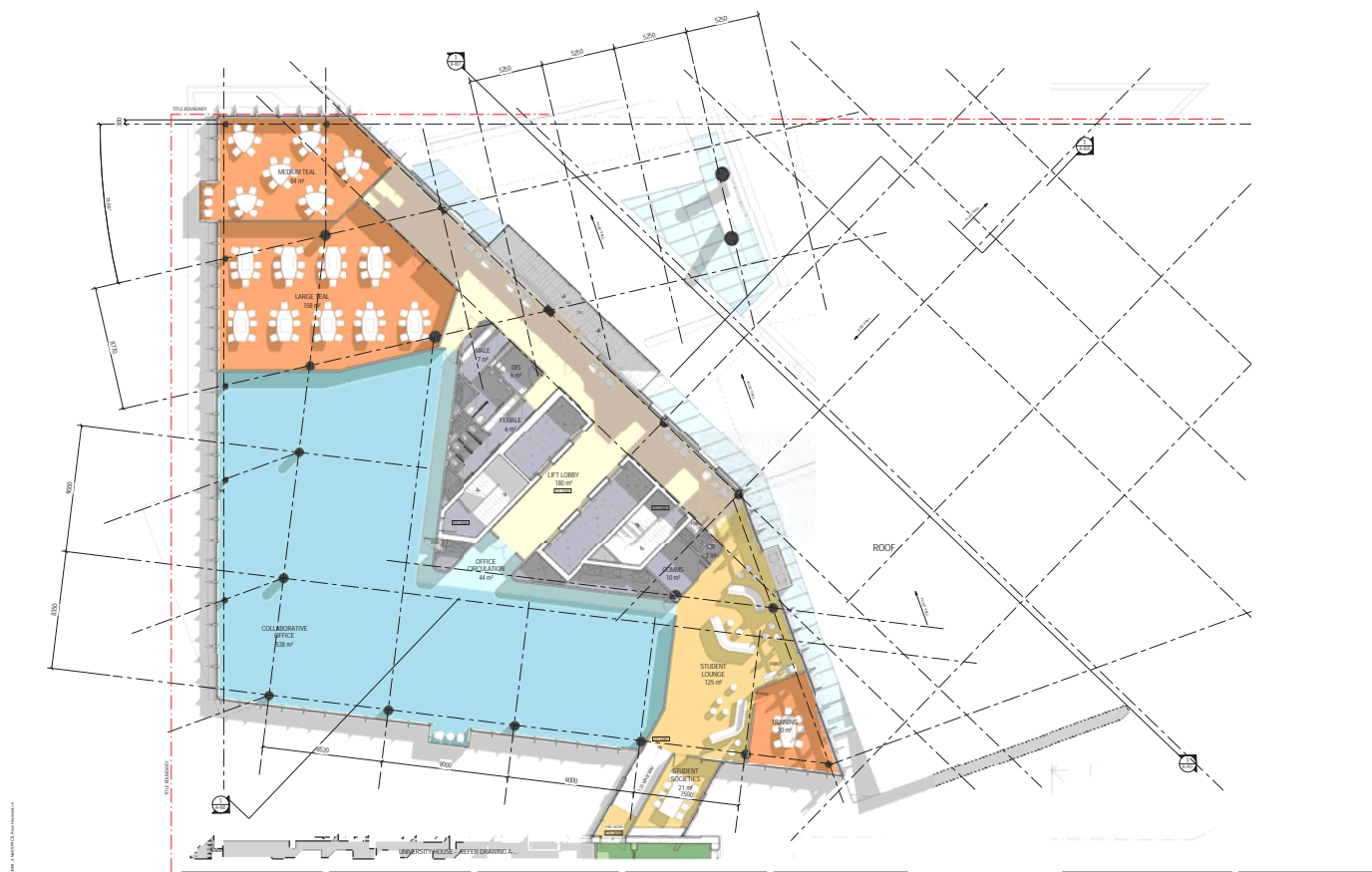


Figure 3.8: Level 3 Floor Plan

### 3.5 LEVEL 4

This level continues the established teaching spine to the northern side of the lift lobby with secure access provided to the academic workspace to the south. Access to the upper and lower floors is encouraged by providing the shared communication stairs directly outside the lift lobby.

To the north two teaching spaces are provided with generous access to natural light. These teaching spaces are provided with a learning suite for students, as well having the option to be utilised for class breakout activities.

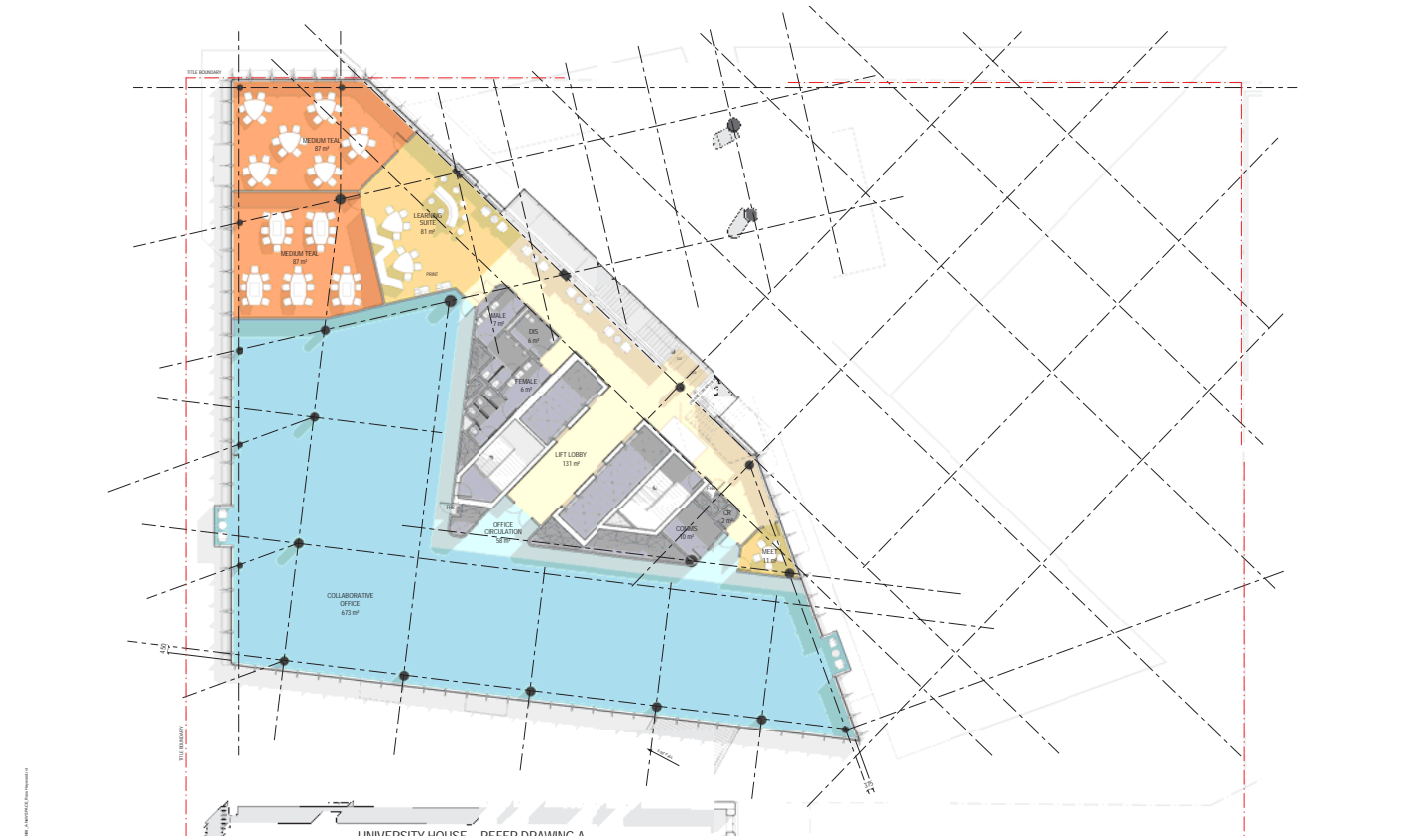


Figure 3.9: Level 4 Floor Plan



### 3.8 LEVEL 7

This level provides further Academic Workspace, including Head of School Office Suite, School Reception and a board room with vistas over the Town Hall and Civic Park

The Teaching and Learning spaces and Learning Suite with outdoor Urban Room overlook Hunter Street to the Hunter River. Within the teaching and learning spaces including the Moot Court with fantastic views towards Nobbys. Directly associated to these spaces are the Negotiation and Learning Suites that can be utilised for breakout class activities.

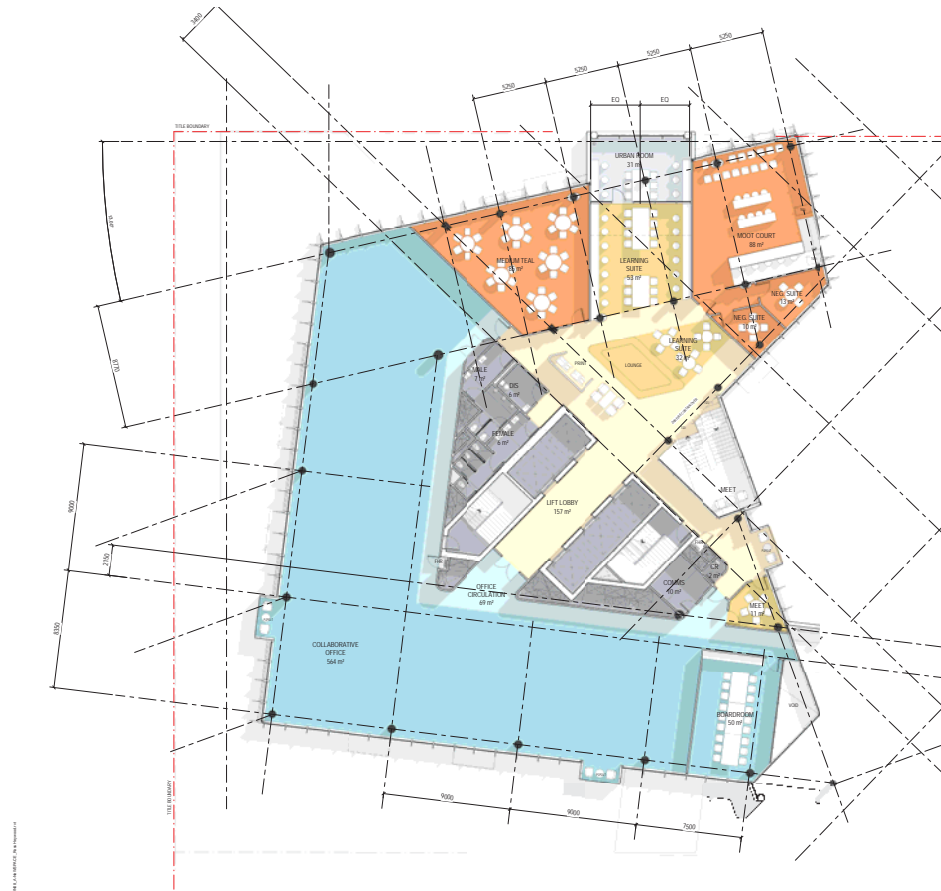


Figure 3.12: Level 7 Floor Plan

### 3.9 LEVEL 8

The uppermost inhabited floor of the building provides further academic workspace, Learning Suite and Teaching and Learning accommodation, which includes the Mock Boardroom that looks through the Urban Room to vista's of the Hunter River.

To make use of the prime views from the upper most accessible floor the teaching space that looks towards vistas of both the Nobby's and the Hunter river is to be provided with a flexible fit out to allow for functions to be held within the space.

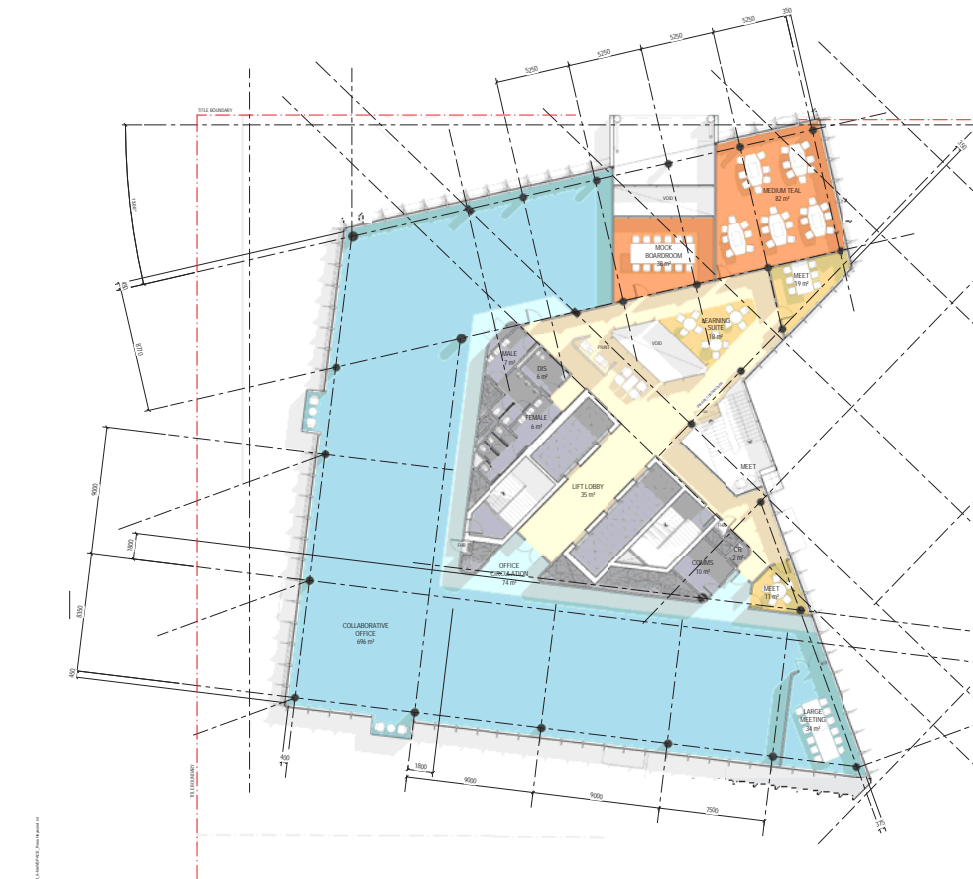


Figure 3.13: Level 8 Floor Plan

### 3.10 LEVEL 9 / ROOF

Level 9 houses a large proportion of the required plant for the building. Internal space has been provided for air handling units, condensers and chillers, boiler plant, fire sprinkler tanks, lift motor rooms and photovoltaic cells, which form some of the environmental and Green Star credentials for the facility. The area provided in the plant room and risers also includes space for future expansion of required services equipment for the future development site and University House. A single lift extends to this level for safe plant access by maintenance staff and for ease of moving equipment up to this level.

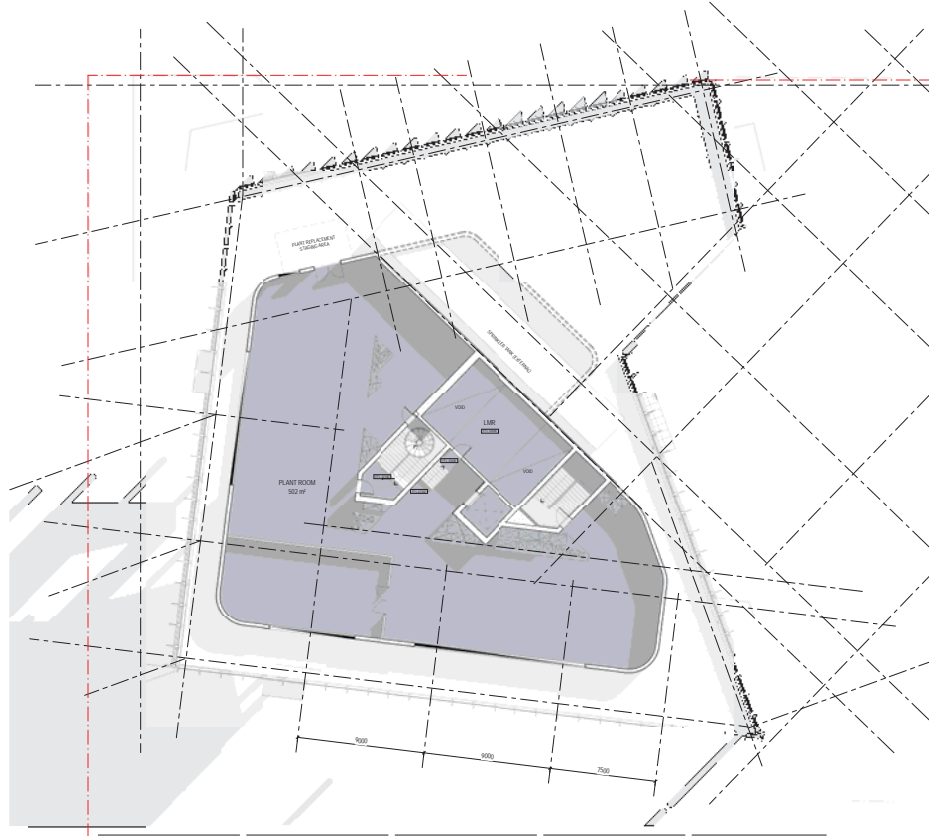


Figure 3.14: Level 9 Roof Floor Plan

# 4.0

## UNIVERSITY HOUSE

### 4.1 UNIVERSITY HOUSE –PROPOSED MODIFICATIONS

As part of the NeWSpace project the adjacent University House building is proposed to be refurbished. Areas critical to its integration within NeWSpace have been identified for reconfiguration and repurposing, with the majority occurring on the ground floor.

New ground floor uses include the city campus secure bike store adjacent the new building, exhibition space on King and Auckland Streets and a new cafe/bar opening onto Christie Park. As a result the Watt Space Gallery, an existing fire isolated exit, and utility rooms are required to be relocated.

New bridges are proposed at several upper levels to provide additional connections between the two buildings. Minor internal alterations are proposed at these junctures, to facilitate logical circulation through the connections.

Given the building is a state registered heritage item, a detail extent of works is provided in the Heritage Impact Statement for the project. Below is a summary of the works.

### 4.2 EXTERNAL WORKS

#### 4.2.1 CHRISTIE PARK (EAST ELEVATION)

In order to activate the northern elevation of University House to Christie Park, a series of existing window openings are proposed to be modified to form new doorways.

In addition, to provide cover over the new doorways a continuous steel plate projection is proposed to be fixed to the head of the new doorways and continue beyond, with rounded returns back to the building face, in line with existing horizontal projections.

Due to the elevation of the existing ground floor of University House, in relation to Christie Park, a new light weight deck is proposed to provide an outdoor area for loose seating and tables. Ramps are proposed at either end of the deck to provide equitable access.

#### 4.2.2 NORTH ELEVATION

The northern facade of University House is largely rendered, as opposed to the exposed stone found on the remainder of the building. The elevation currently indicates the previous constructions that once existed on the neighbouring site, by way of exposed brickwork. It is proposed that the existing render be patched and painted in a colour similar to the existing and that the face brickwork be cleaned of loose surface material and left exposed.

The new building on the neighbouring site is set back from University House creating a laneway along the length of the north elevation. In order to provide a level of activation at ground level, a series of new fixed glass windows is proposed, sized and located to align with existing windows above. The window will provide visual access from the laneway of the new bike store proposed for University House (refer to 'Internal works').

Two additional doorways are proposed for the ground level; one to provide access to the new building, at ground level, the other to provide emergency egress, relocated from the eastern elevation.

Within the storey above, a series of surface mounted light boxes are proposed. The light boxes are to be constructed from an exposed aluminium frame with opal Perspex, allowing light to be emitted and provide an opportunity to exhibit artwork.

#### 4.2.3 WEST ELEVATION (AUCKLAND STREET)

The extent of external modifications proposed to the Auckland Street elevation are restricted to the removal of the existing steel roller doors; access to the existing Watt Space Gallery, the other to the basement store.

It is proposed that Watt Space Gallery be relocated from University House to allow change of use for secure bicycle storage and end of trip facilities, including showers and lockers. In addition the existing basement store will be converted for the same purpose.

As a result the existing roller doors are not suitable for access, and it is proposed the openings be in-filled and new hinged doors be provided.

The roller doors are to be replaced with new steel bar grilles to allow natural ventilation of the bike store, and provide visibility to promote the use of the store and bicycling as a choice of transport.

### 4.3 INTERNAL WORKS

#### 4.3.1 BASEMENT LEVEL

The existing basement store located at the northern end of the building is proposed to be re-purposed for a new secure bike store with end of trip facilities.

The new works include the reduction in floor area through the deletion of the north eastern corner to allow a new concrete floor, forming an extension of the existing ground floor slab. Additions include the construction of new shower and toilet facilities, and fixing of new bike storage racks to the existing masonry walls.

#### 4.3.2 GROUND FLOOR MEZZANINE (EXISTING WATT SPACE GALLERY)

The existing ground floor mezzanine located at the northern end of the building, above the basement is proposed to be re-purposed for additional new secure bike store with end of trip facilities. The space is currently used as a gallery exhibition space.

The new works include the reduction in floor area through the demolition of the north eastern corner to allow a new concrete floor, forming an extension of the existing ground floor slab. Further demolition includes a concrete mezzanine and associated masonry wall located above a ground floor portion of the gallery, to allow for the connection of University House ground floor to the new building, at the north eastern corner. Additional internal masonry and light weight walls within the gallery are also proposed to be demolished to provide an efficient layout for the bike store.

Additions include the construction of new shower and toilet facilities, and fixing of new bike storage racks to the existing masonry walls.

#### 4.3.3 GROUND FLOOR – EAST

The internal alterations to eastern portion of the ground floor are proposed to open the ground floor to Christie Place. The existing functions include a fire isolated corridor, an access bathroom, PABX and Main Switch Room and a store. All of these areas are proposed to be demolished, and relocated elsewhere within the building.

The resulting open plan space is proposed to be fitted out as a cafe/bar. The seating area is intended to be used by NeWSpace patrons outside of cafe/bar trading, therefore will be fitted out as part of this application. Service connections such as mechanical, power and hydraulic will be provided to the servery bar and kitchen, however it's fit-out will be the responsibility of the tenant, and acknowledge that further planning application may be required for these works.

#### 4.3.4 GROUND FLOOR – SOUTH

The internal alterations to southern portion of the ground floor are restricted to the de-fit of the existing City Hub and Information Common residing in the original showroom space. Joinery and applied floor finishes will be removed and the original travertine floor patched and redundant floor service penetrations capped using methods consistent with existing. The existing offices located at the western end of the showroom are proposed to be retained.

The future use of the space is proposed for temporary exhibition or function.

#### **4.3.5 GROUND FLOOR – WEST**

The internal alterations to the western portion of the ground floor are restricted to the de-fit of the existing cafe. All internal fabric is to remain intact, however patched where required as a result of the de-fit. The future use of the space is proposed for temporary exhibition or function.

#### **4.3.6 LEVEL 1**

The internal alterations to level 1 are restricted to the demolitions associated with the new bridge connection to the new building. The works include the demolition of an store room, which is not deemed original fabric.

#### **4.3.7 LEVEL 2**

The internal alterations to level 2 are restricted to the construction of a new PABX cupboard, and demolitions associated with the new bridge connection to the new building.

#### **4.3.8 LOCATION OF NEW PABX CUPBOARD**

The proposed new PABX cupboard is located adjacent the existing network room to utilise existing vertical service reticulation routes within the building. The works will require the relocation of the existing fire hose reel. The new construction and finish of the room will be consistent with existing.

The bridge connection demolition works include the demolition of an existing office, which is not deemed original fabric.

#### **4.3.9 LEVEL 3**

The internal alterations to level 3 are restricted to the demolitions associated with the new bridge connection to the new building. The works include the demolition of existing offices, which are not deemed original fabric.

# 5.0 AREA SCHEDULES

## 5.1 UNIVERSITY BRIEF

The NewSpace Accommodation Schedule v3.4 is presented below and is fully incorporated within the floors plans submitted with the PA. The total area briefed is 10,219 UFA with a total of 14,000 GFA.

It should be noted that this table represents the briefed areas required by the University. The actual GFA's (as defined by the Newcastle CEP) are reported in the following section 5.2.

Item	Description	Current Schematic Design Area	Concept Design Area (m2)	Comments / Questions
<b>1</b>	<b>Teaching Suite</b>			<i>Provision for 945 teaching seats</i>
1.1	<i>Tiered spaces</i>	<b>705</b>	705	
1.2	<i>Flat floor spaces</i>	<b>1,611</b>	1,611	
<b>Total: Learning Spaces</b>		<b>2,316</b>	2,316	<b>UFA</b>
<b>2</b>	<b>Learning Suite</b>			<i>Provision for 730 learning seats</i>
2.1	<i>Student Support</i>	<b>313</b>	250	
2.2	<i>Library</i>	<b>650</b>	580	<i>increased study space by 140m2</i>
2.3	<i>Learning Suite</i>	<b>1,452</b>	1,532	
<b>Total: Learning Suite</b>		<b>2,415</b>	2,362	<b>UFA</b>
<b>3</b>	<b>Office Accommodation</b>			<i>Provision for 410 staff / HDR</i>
3.1	<i>Enclosed Offices</i>	<b>496</b>	496	
3.2	<i>Open Plan Offices</i>	<b>2,338</b>	2,456	<i>decreased workstation size to 7m2</i>
3.3	<i>Support Spaces</i>	<b>500</b>	300	<i>increased collaborative areas</i>
3.4	<i>Bookable Spaces</i>	<b>308</b>	378	<i>some incorporated into 3.3</i>
	<i>Subtotal Office Accommodation</i>	3,642	3,630	
	<i>plus 20% internal grossing</i>	728	726	
<b>Total: Office Accommodation</b>		<b>4,370</b>	4,356	<b>NLA</b>
<b>4</b>	<b>Public / Shared</b>	<b>725</b>	800	
<b>Total: Public</b>		<b>725</b>	800	<b>NLA</b>
<b>5</b>	<b>Ancillary</b>	<b>393</b>	386	
<b>Total: Ancillary</b>		<b>393</b>	386	<b>UFA</b>
<b>SUBTOTAL:</b>		<b>10,219</b>	10,219	<b>UFA</b>
<b>TOTAL BUILDING AREA</b>		<b>14,000</b>	14,000	<b>GFA</b>

## 5.2 DA PLANNING AREAS

The following table is the measured Gross Floor Area of the New Space DA drawings, and is measured in accordance with the Newcastle Local Environmental Plan (LEP). This defines GFA as the following: gross floor area means the sum of the floor area of each floor of a building measured from the internal face of external walls, or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor, and includes:

(a) the area of a mezzanine, and

(b) habitable rooms in a basement or an attic, and

(c) any shop, auditorium, cinema, and the like, in a basement or attic,

but excludes:

(d) any area for common vertical circulation, such as lifts and stairs, and

(e) any basement:

(i) storage, and

(ii) vehicular access, loading areas, garbage and services, and

(f) plant rooms, lift towers and other areas used exclusively for mechanical services or ducting, and

(g) car parking to meet any requirements of the consent authority (including access to that car parking), and

(h) any space used for the loading or unloading of goods (including access to it), and

(i) terraces and balconies with outer walls less than 1.4 metres high, and

(j) voids above a floor at the level of a storey or storey above."

AREA SCHEDULE (GFA)	
LEVEL	AREA
Ground - Upper	1606m2
Level 1	1792m2
Level 2	1480m2
Level 3	1257m2
Level 4	1224m2
Level 5	1425m2
Level 6	1195m2
Level 7	1241m2
Level 8	1211m2
	12434m2