CB13-15 Redevelopment
Traffic Impact Assessment

Prepared for:

University of Technology, Sydney

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The Transport Planning Partnership

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Traffic Impact Assessment

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1 Executive Summary

This Traffic Impact Assessment report has been prepared on behalf of University of Technology Sydney (UTS) in support of its Ultimo Haymarket Precinct Key Site Master Plan.

The Master Plan is being progressed under the framework established by the Pyrmont Peninsula Place Strategy (PPPS), where UTS is identified as one of four "key sites". The PPPS sets out the NSW Government's 20-year strategic direction and vision for Pyrmont, where Pyrmont's locational advantages in terms of its proximity to Central Sydney, context within the Innovation Corridor and delivery of a new metro station have been embraced as part of its next evolution as the Western Gateway to the CBD.

The UTS Key Site Master Plan is proposing to "rezone" Sites 13-15 in order to establish new planning controls to enable its redevelopment as an Indigenous focussed Residential College, arts centre and library. The masterplan includes 250 beds (over 113 student accommodation apartments. As part of the proposal, improvements to pedestrian connectivity is a key objective with Omnibus Lane being partially pedestrianised and Mary Ann Street being converted to a shared zone between Omnibus Lane and the Good Line walkway, creating a new continuous pedestrian link between the site and Central Railway Station via the Goods Line walkway. These new proposed connections will not have any adverse impacts to traffic flow and capacity as the Omnibus Lane and the Mary Ann Street cul-de-sac is used for local access only. The existing adjoining properties along Omnibus Lane and Mary Ann Street will continue to have vehicular access to their site as per existing conditions.

One vehicle access point to the site will be provided for service vehicles and waste collection vehicles to access the basement loading dock. No car parking is to be provided, which compliant with Council's maximum car parking requirements and also meets the objectives of the PPPS, which aims to prioritise walking and cycling as the main form of transport to/from the site. As such, a secure bicycle parking facility is to be provided on-site with 98 bike spaces to encourage cycling to the site.

Its considered that public transport will also be a major form of transportation to/ from the site. Significant new transport infrastructure projects including the Sydney Metro West Line and City and Southwest Line, which will provide a new metro station at Central and the new Pyrmont Station, approximately 1.2km to the north, will increase the accessibility and capacity of public transport for the surrounding suburb.

2 Introduction

This report has been prepared on behalf of University of Technology Sydney (UTS) in support of its Ultimo Haymarket Precinct Key Site Master Plan.

The Master Plan is being progressed under the framework established by the Pyrmont Peninsula Place Strategy (PPPS), where UTS is identified as one of four "key sites". The PPPS sets out the NSW Government's 20-year strategic direction and vision for Pyrmont, where Pyrmont's locational advantages in terms of its proximity to Central Sydney, context within the Innovation Corridor and delivery of a new metro station have been embraced as part of its next evolution as the Western Gateway to the CBD.

As an identified "key site" it is recognised that UTS has the greatest potential to deliver strategic growth and change across the Peninsula together with leveraging the delivery of broader public benefits and infrastructure.

The Master Plan ultimately seeks to inform updated planning controls in relation to UTS's short-term development plans for UTS Sites 13 -15, where it is planning to deliver Australia's largest Indigenous Residential College (IRC) including Indigenous Arts Centre and Library.

The Transport Planning Partnership (TTPP) has prepared this report to assess the traffic and parking impacts of the development, to support a development application to City of Sydney Council (Council).

2.1 Pyrmont Peninsula Place Strategy (PPPS)

The Pyrmont Peninsula Place Strategy provides a 20-year framework that identifies areas that can accommodate future growth in order to support Pyrmont's evolution as the western gateway to the CBD and a hub for jobs in innovation, technology, creative industries, and media.

A balanced approach to growth has been established within the PPPS to ensure its local character and heritage is protected and it remains a great place to live, with the focus of strategic change occurring within four "key sites", including UTS (refer to Figure 2.1).

The first phase in implementing the PPPS is the preparation of master plans for each of the seven sub-precincts ("places") that make up the Peninsular (Figure 2.2). The master plans will provide the next level of detail, outlining the spatial components of the PPPS, which will be used to inform changes to land use zones, building height and density, and community infrastructure requirements etc.

As a "Key Site", UTS is progressing its own master plan for its "Key Site" which seeks to respond, inform and align with the sub-precinct master plan process and broader aspirations for the Peninsular.

Figure 2.1: Pyrmont Peninsula and Key Sites

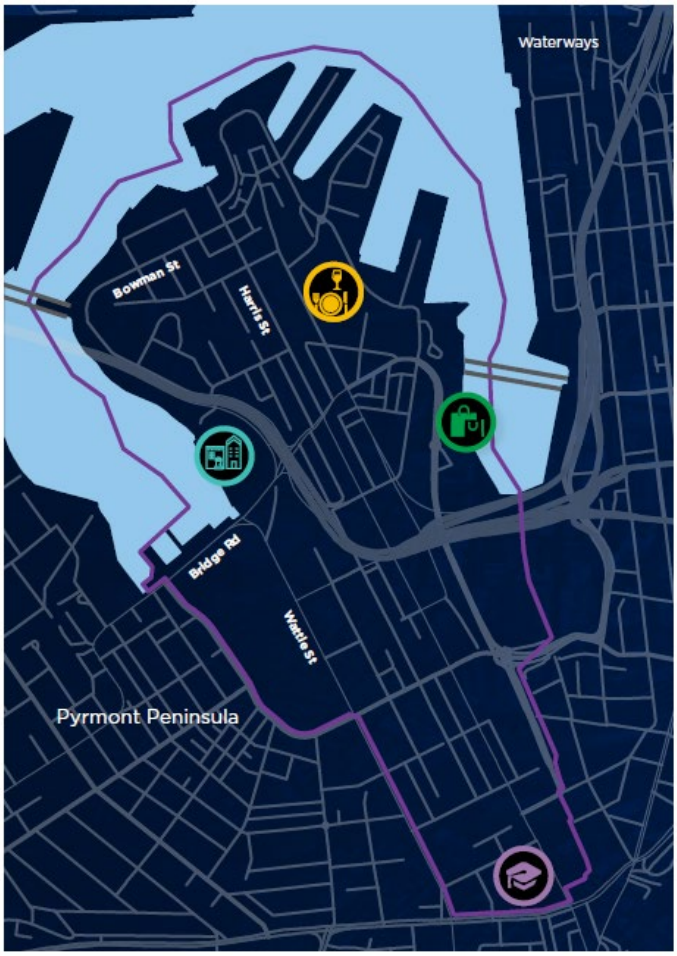


Figure 2.2: Pyrmont Peninsula Sub-Precincts

2.2 Background

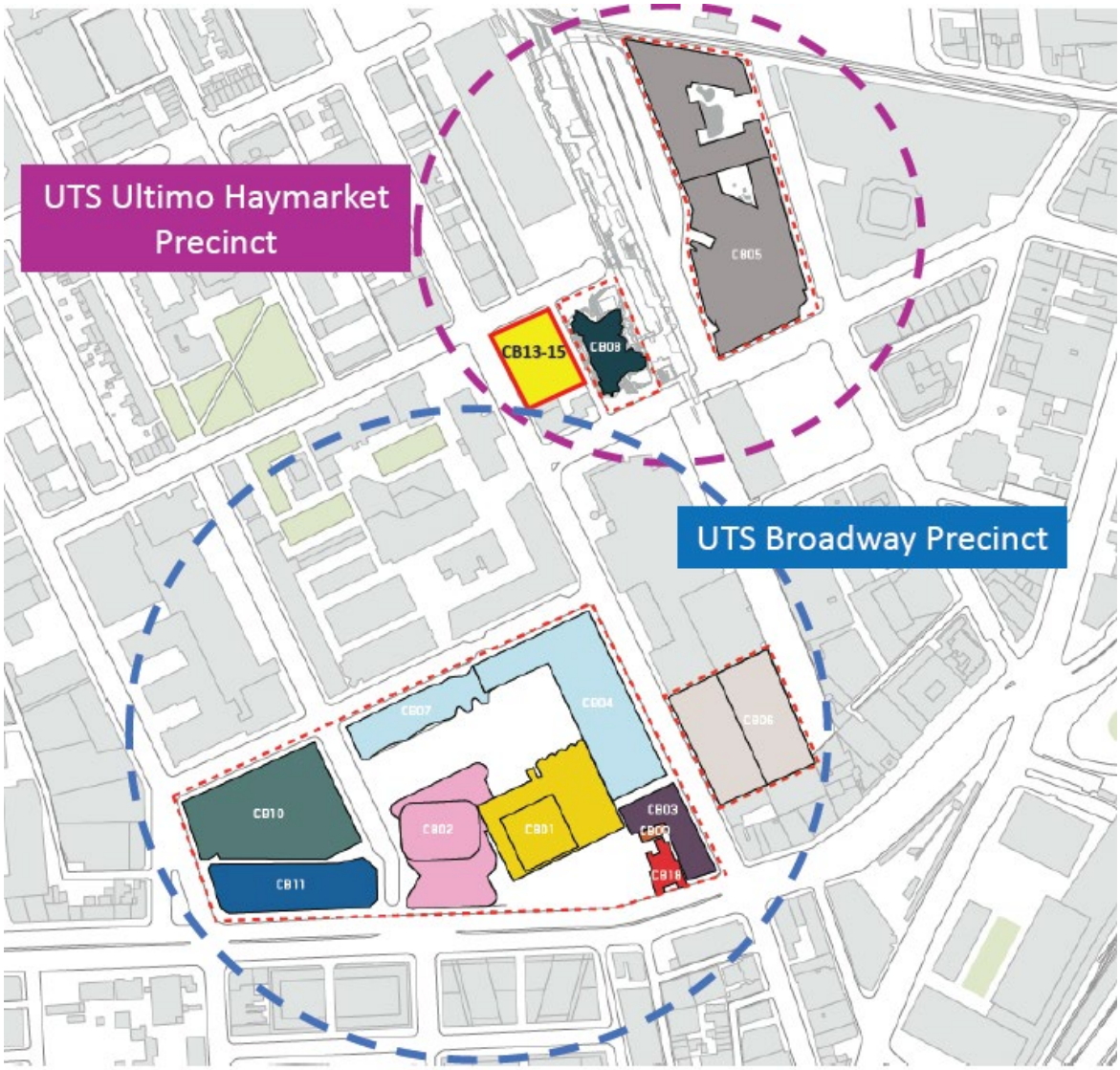
UTS is a public university of technology committed to research, innovation and social justice, indigenous knowledge, and collaboration with industry. With a total enrolment of over 44,000 students, UTS is one of the largest universities in Australia. It has a culturally diverse campus next to Sydney's central business district (CBD).

UTS is an anchor institution within the Pyrmont Peninsula and plays an important role in the success of Sydney and NSW, with the Greater Sydney Commission's Sydney Regional and District plan acknowledging this importance and identifying the need to protect and support the growth of education activity within the Harbour CBD Innovation Corridor.

UTS has largely completed its $1 billion+ Broadway Precinct master plan and is now planning for its next growth phase at its Ultimo Haymarket Precinct, leveraging the opportunities and strategic planning focus on innovation, technology, creative industries and diverse housing (Figure 2.3). UTS's immediate short-term plans are focussed on the redevelopment of Sites 13-15 (CB13-15) into an Indigenous Residential College (IRC) including adaptive reuse of the local heritage listed building and public realm improvements. UTS redevelopment plans for its

other significant site (Site 5 – CB05) will be progressed through a separate process with the City of Sydney and its Central Sydney planning framework in the future.

Figure 2.3: UTS City Campus



2.3 The Proposal

The UTS Key Site Master Plan is proposing to "rezone" Sites 13-15 in order to establish new planning controls to enable its redevelopment as an Indigenous focussed Residential College, arts centre and library. Site 13-15 is more specifically identified within Figure 2.4.

Figure 2.4: UTS City Campus

The rezoning and proposed planning controls are based on an envelope informed by detailed site planning considerations and local context analysis, an indigenous led design brief for the college, and tested by a reference design. The proposed new planning controls including LEP amendments and Design Guide respond to the vision, strategic directions, big moves and place priorities established within the PPPS along with site specific opportunities and constraints informed through environmental, social and economic considerations.

The key development outcomes sought to be achieved for Site 13-15 from the Key Site Master Plan process include:

- A new 250 bed Indigenous Residential College and supporting arts centre and library
- Retention and adaptive re-use of a local heritage item accommodating a mix of uses, including potential teaching/university support space
- Creation of new open space within the site
- Creation of a new pedestrian through-site link from Harris Street to Omnibus Lane
- A country led design and landscape outcome
- Potential for additional local public domain works for Omnibus Lane and Mary Ann Street subject to a VPA

Once new planning controls are in place, UTS will progress with the detailed design and planning of the IRC project, including progressing with a design competition and securing development approval for the winning design.

2.4 General Requirements

This report has been prepared with reference to the *General Requirements for Preparing Key Site Master Plans under the Pyrmont Peninsula Place Strategy* and the alignment review prepared by the Department of Planning, Industry and Environment (DPIE) dated 5 May 2021.

This report addresses the above General Requirements which requires the preparation of suitable technical studies, including a "Transport Strategy and Impact Assessment".

3 Existing Conditions

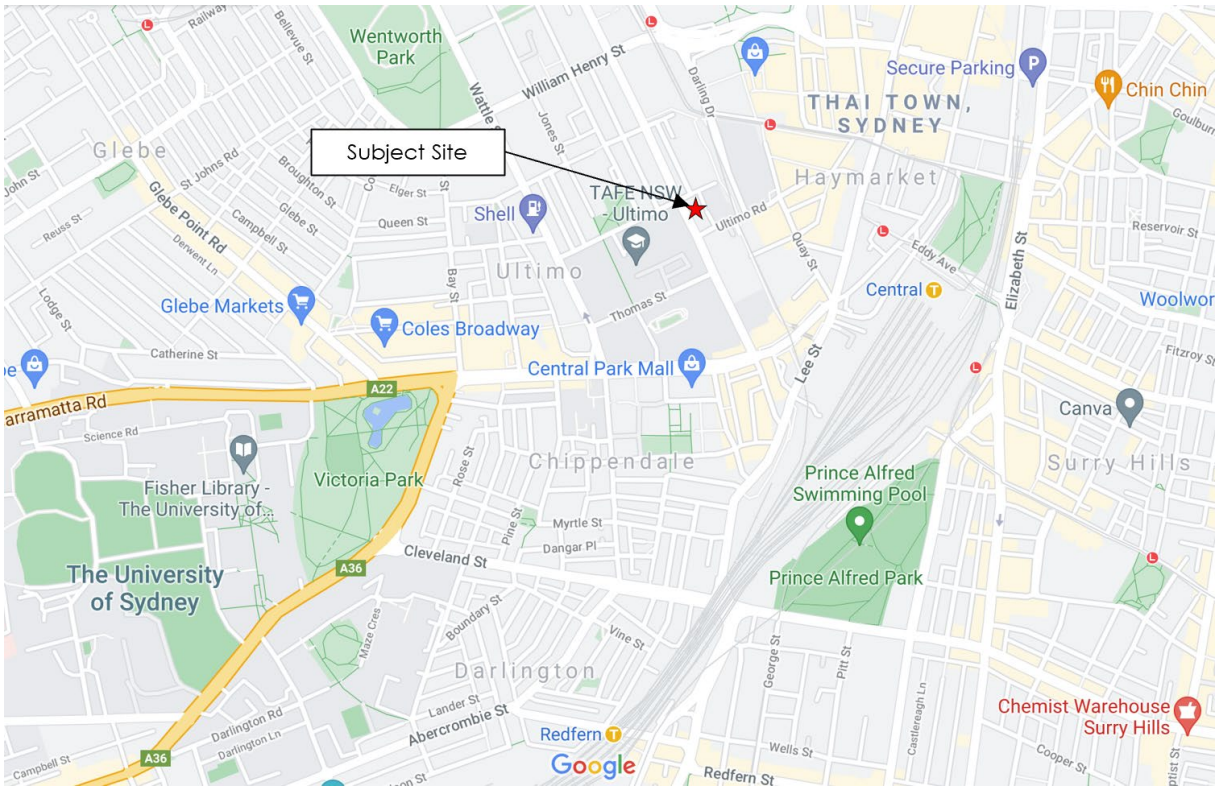
3.1 Site Context

The site is located at 622 – 644 Harris Street, Ultimo. It is part of the Ultimo Haymarket Precinct of UTS and is numbered as City Building 13-15 (CB13-15). The existing site currently accommodates several small UTS departments and some small retail tenancies on the ground floor along Ultimo Road. The site is bound by Omnibus Lane to the east, Mary Ann Street to the north, Harris Street to the west and a mixed-use development (646 Harris Street) to the south.

The site is located within a key education precinct, with TAFE Ultimo located across road to the west, UTS City Building 8 (CB08) to the east, and several other UTS buildings in the surrounding area. Central Railway Station and the Railway Bus Interchange is located within a 500-650m walking distance.

The site context is shown in Figure 3.1 .

Figure 3.1: Site Context



3.2 Road Network

3.2.1 Harris Street

Harris Street is a classified State Road (MR170) and in the vicinity of the site is aligned in a north-south direction. It connects between Pyrmont and South Sydney and fronts the western boundary of the site. In the vicinity of the site, Harris Street is an undivided road with two northbound lanes and three southbound lanes. The posted speed limit is 50km/h.

3.2.1 Omnibus Lane

Omnibus Lane is a minor single lane road which runs in a north-south direction north of the main campus. The road intersects both Ultimo Road and Mary Ann Street but does not provide a vehicular connection between them. Bollards are present on Omnibus Lane which restricts vehicle access between both Ultimo Road and Mary Ann Street, allowing only pedestrians and cyclists to pass through. The road is primarily used by service vehicles for the developments adjacent the lane.

3.2.2 Ultimo Road

Ultimo Road is a local road which runs in an east-west direction northeast of the site. The road typically provides one travel lanes in each direction with time-restricted kerbside parking along some sections. Ultimo road is in a High Pedestrian Activity Area and as such, has a posted speed limit of 40 km/h. East of Quay Street, Ultimo Road is a one-way westbound road.

3.2.3 Marry Ann Street

Mary Ann Street is a one-way eastbound local road which runs in an east-west direction north of the site. The road connects with Wattle Street in the west and is a cul-de-sac in the east. East of Harris Street, Mary Ann Street is a two-way road. Mary Ann Street typically provides one travel lane with both time-restricted parallel and angled kerbside parking along some sections.

3.3 Public Transport

3.3.1 Rail Network

Central Railway Station serves as the key rail hub in Sydney for CityRail services to destinations across the Sydney Metropolitan Area, the Illawarra, Blue Mountains and Central Coast.

Central Station is also the hub for interstate rail services in Sydney. Central Station is also the main terminus for the Central to Dulwich Hill Light Rail Network.

Central Station services the following train lines:

- T1 – North Shore Line
- T1 – Northern Line
- T1 – Western Line
- T2 – Inner West and Leppington Line
- T3 – Bankstown Line
- T4 – Eastern Suburbs & Illawarra Line
- T8 – Airport and South Line
- Blue Mountains Line
- Central Coast and Newcastle Line
- South Coast Line
- Southern Highlands Line

Train services to and from Central Station typically run every few minutes during the morning and evening peak hours.

3.3.2 Bus Network

Bus stops located within the immediate vicinity of the site include Route 501 – West Ryde to Central Pitt Street via Pyrmont & Ultimo. There are 132 daily services that travel past the proposed site on weekdays and 75 to 89 daily services on weekends.

In addition, the Central Transport Interchange features five main bus hubs at Railway Square, George Street, Eddy Avenue and Chalmers Street which serve destinations across the Sydney Metropolitan Area including Sydney's south, eastern suburbs, inner-west, northern beaches and north-west.

3.3.3 Light Rail Network

Light rail services run from Central Station and goes to Dulwich Hill, Randwick and Circular Quay. Weekday service frequency is every 8-10 minutes during peak periods. Weekend service frequency is typically every 10-15 minutes.

3.3.4 Future Public Transport Network

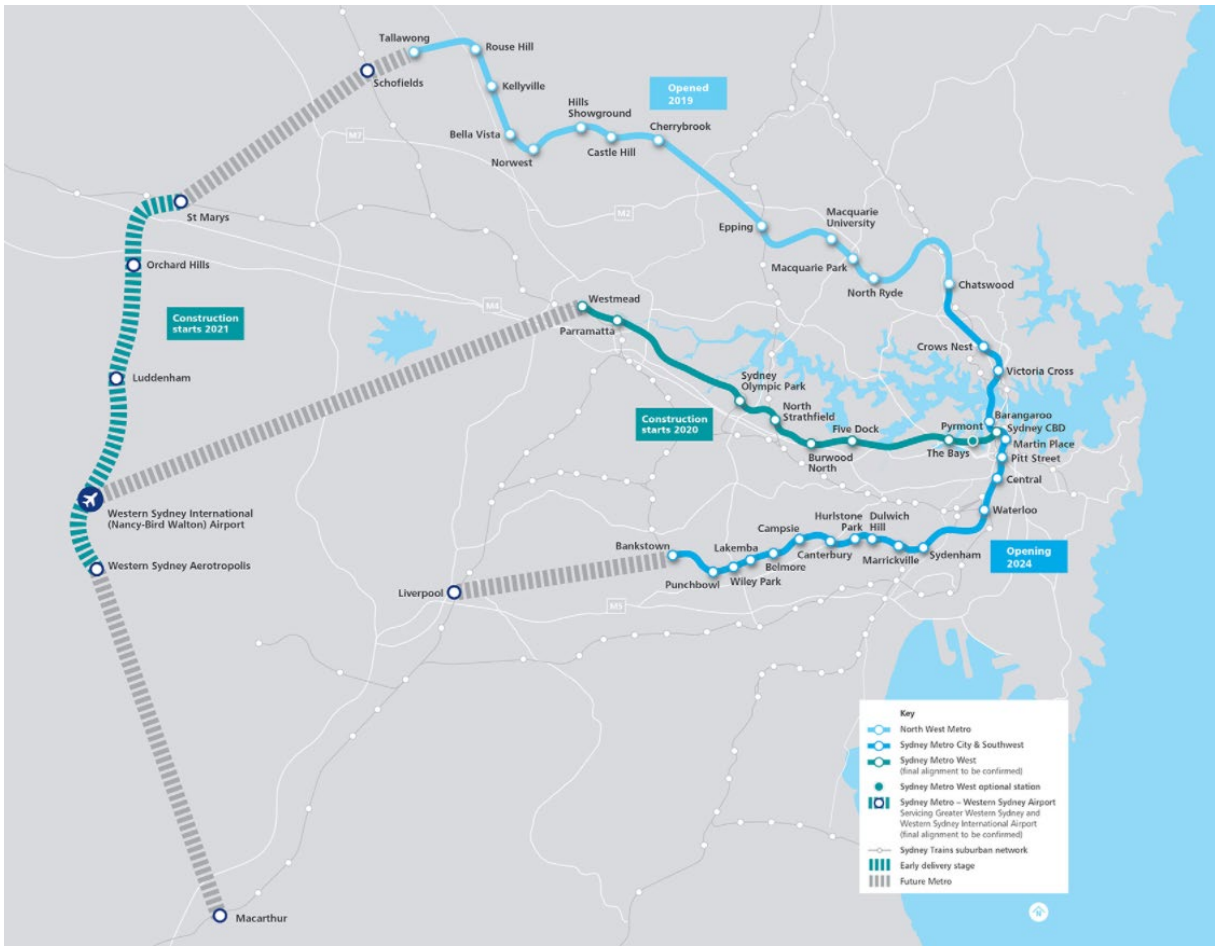
Access to the Sydney CBD will be enhanced through future public transport systems including the Sydney Metro.

This is expected to increase capacity for patrons accessing the Sydney CBD as well as improve travel times as a result of increased services during peak periods. This increased capacity in the surrounding public transport network will directly improve public transport accessibility of the subject site.

Sydney Metro is Australia's biggest public transport project, consisting of Sydney Metro Northwest line (Stage 1) which opened in 2019 and is currently in operation, and Sydney Metro City & Southwest line (Stage 2), which is scheduled for completion in 2024. The next stages are the Sydney Metro West line which began construction in 2020 and Sydney Metro – Western Sydney line, which has not commenced however, construction was planned to start in 2021.

The proposed Sydney Metro network map is shown in Figure 3.2.

Figure 3.2: Sydney Metro Network Map



Source: https://www.planning.nsw.gov.au/Assess-and-Regulate/State-Significant-Projects/Sydney-Metro/Overview, last updated 16/03/21

The City & Southwest line of Sydney Metro includes the construction and operation of a new metro rail line from Chatswood, under Sydney Harbour through Sydney's CBD to Sydenham and on to Bankstown through the conversion of the existing line to metro standards. It involves the delivery of eight new metro stations, including at Central. Once completed, Sydney Metro will have the ultimate capacity for 30 trains an hour (one every two minutes) through the CBD in each direction – a level of service never seen before in Sydney.

The West line is to link Sydney CBD to Westmead via eight new metro stations, the nearest to the site being Pyrmont Station, approximately 1.2km to the north.

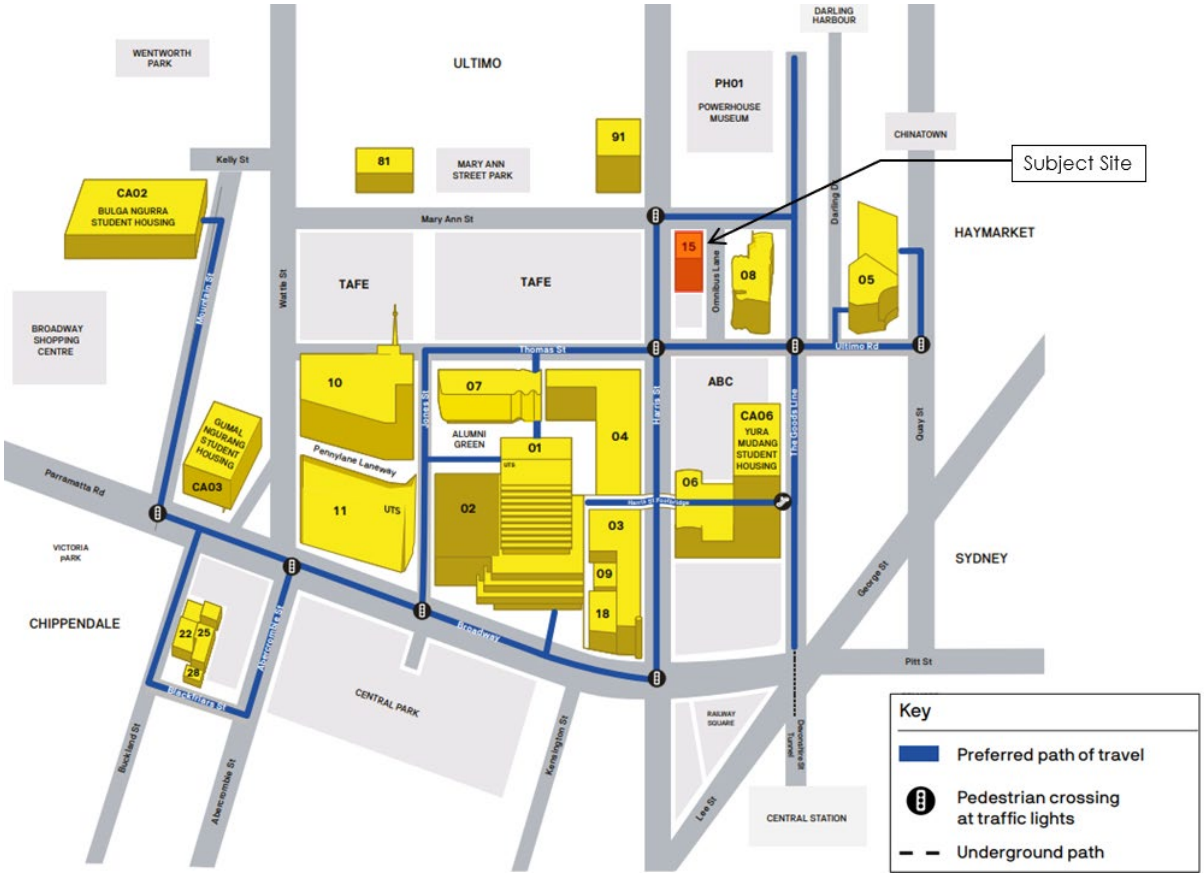
3.4 Pedestrian Infrastructure

The pedestrian network surrounding the site is well established with pedestrian paths located on both sides of the surrounding roads.

A signalised pedestrian crossing is provided at the nearest intersections including Harris Street – Ultimo Street and Ultimo Street – Darling Drive. Significantly, the Goods Line walkway is located some 45m to the east and can be accessed from Mary Ann Street or via CB08. The Goods Line walkway provides a direct connection to Central Railway Station and includes a pedestrian bridge over Ultimo Road.

The existing pedestrian connections to the UTS City Campus is shown in Figure 5.2.

Figure 3.3: Existing Pedestrian Connections

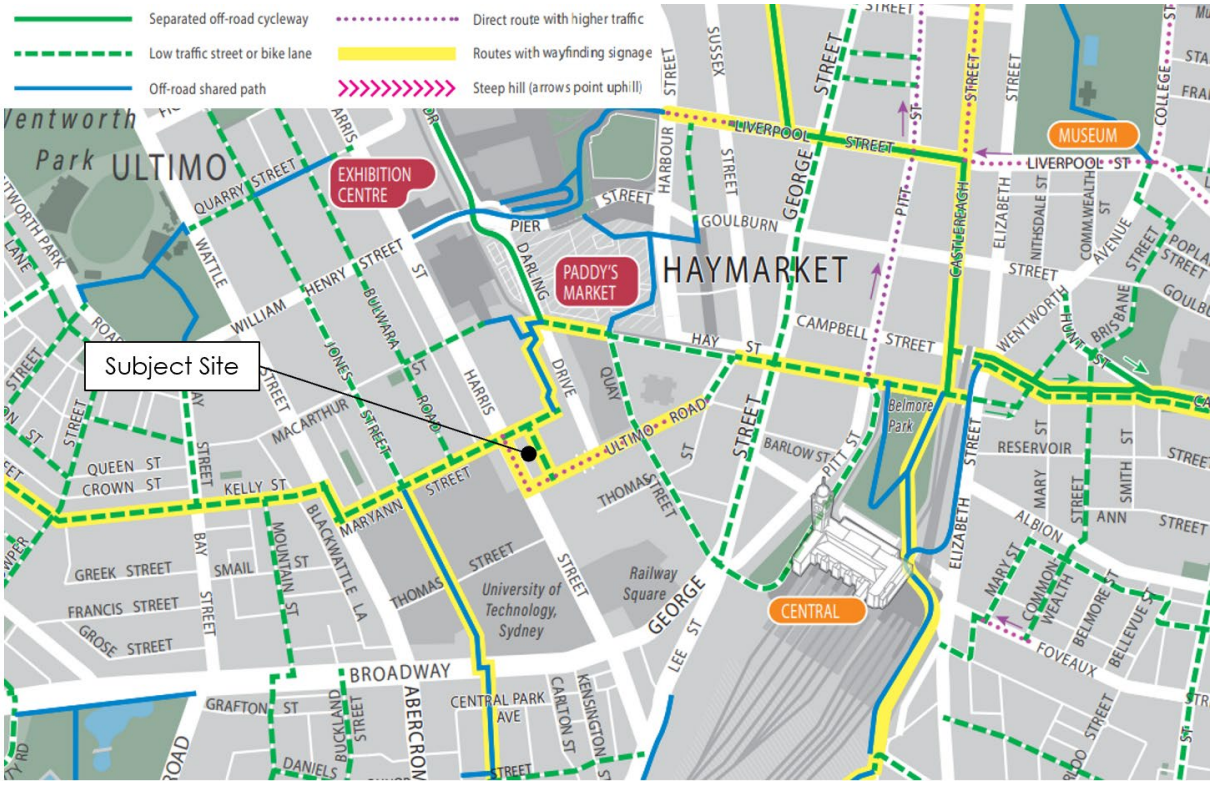


Source: https://www.uts.edu.au/partners-and-community/initiatives/city-campus-master-plan/campus-development-news/2018-news/get, accessed 28/08/2018

3.5 Cycle Infrastructure

The site is located within close proximity to both on and off-road cycling facilities as indicated in an extract from the City of Sydney's cycle network map shown in Figure 2.4. Notably, all roads bounding the property are marked cycling routes. These routes link to further on-road and off-road cycling connections.

Figure 3.4: Cycle Network



Source: City of Sydney, Sydney Cycling Map, accessed 26/09/2019

3.6 Car Sharing Pods

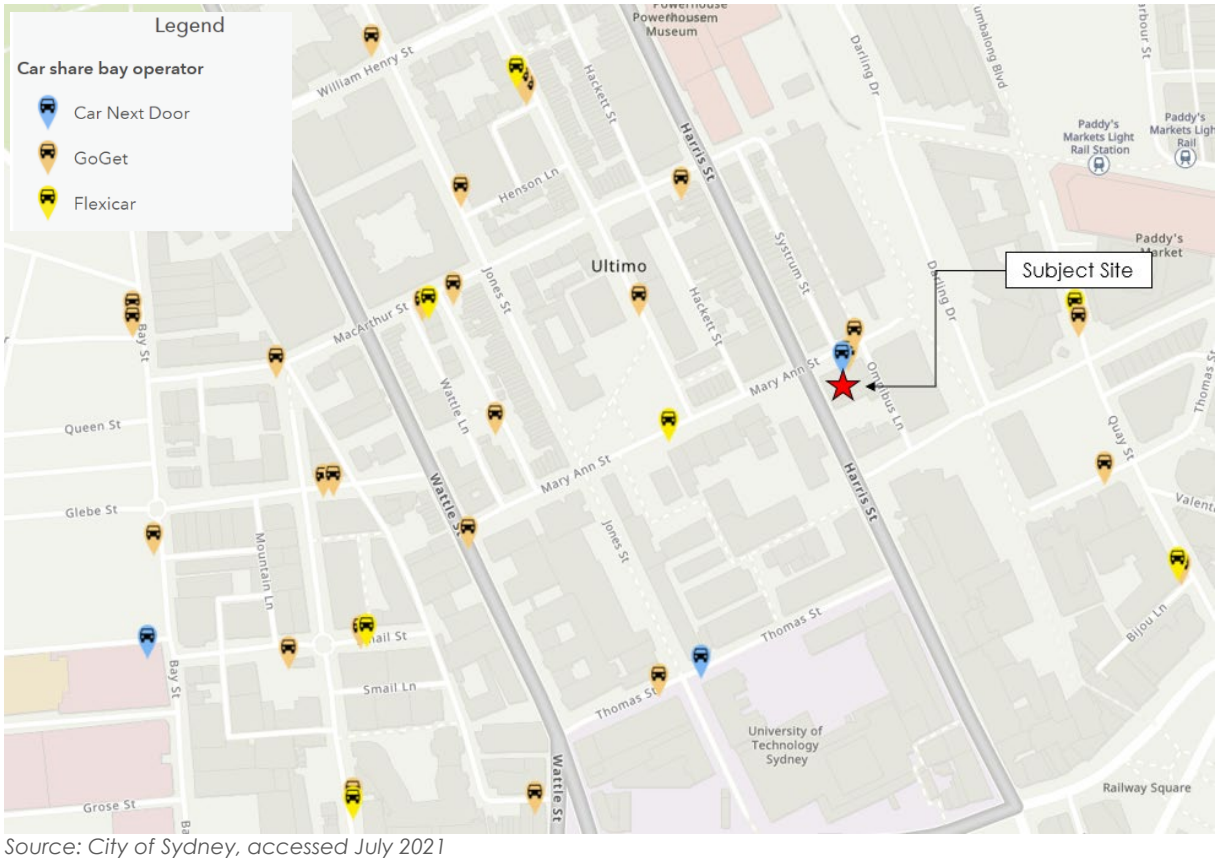
Car sharing is a flexible, cost effective alternative to car ownership and is a convenient and reliable way for residents to use a car when they need one. GoGet, Flexicar and Car Next Door are car share companies operated in Australia with a number of vehicles positioned within the area.

Car share is a concept by which members join a car ownership club, choose a rate plan and pay an annual fee. The fees cover fuel, insurance, maintenance, and cleaning. The vehicles are mostly sedans, but also include SUVs, station wagons and vans. Each vehicle has a home location, referred to as a "pod", either in a parking lot or on a street, typically in a highly populated urban neighbourhood. Members reserve a car by web, telephone and use a key card to access the vehicle.

The locations of car sharing pods in the vicinity of the site are shown in Figure 3.5.

There are three pods located immediately north of the site (two GoGet and one Car Next Door) along Mary Ann Street. This is reflective of the higher level of demand for car share in the area and the demographic within the education precinct.

Figure 3.5: Car Sharing Pods

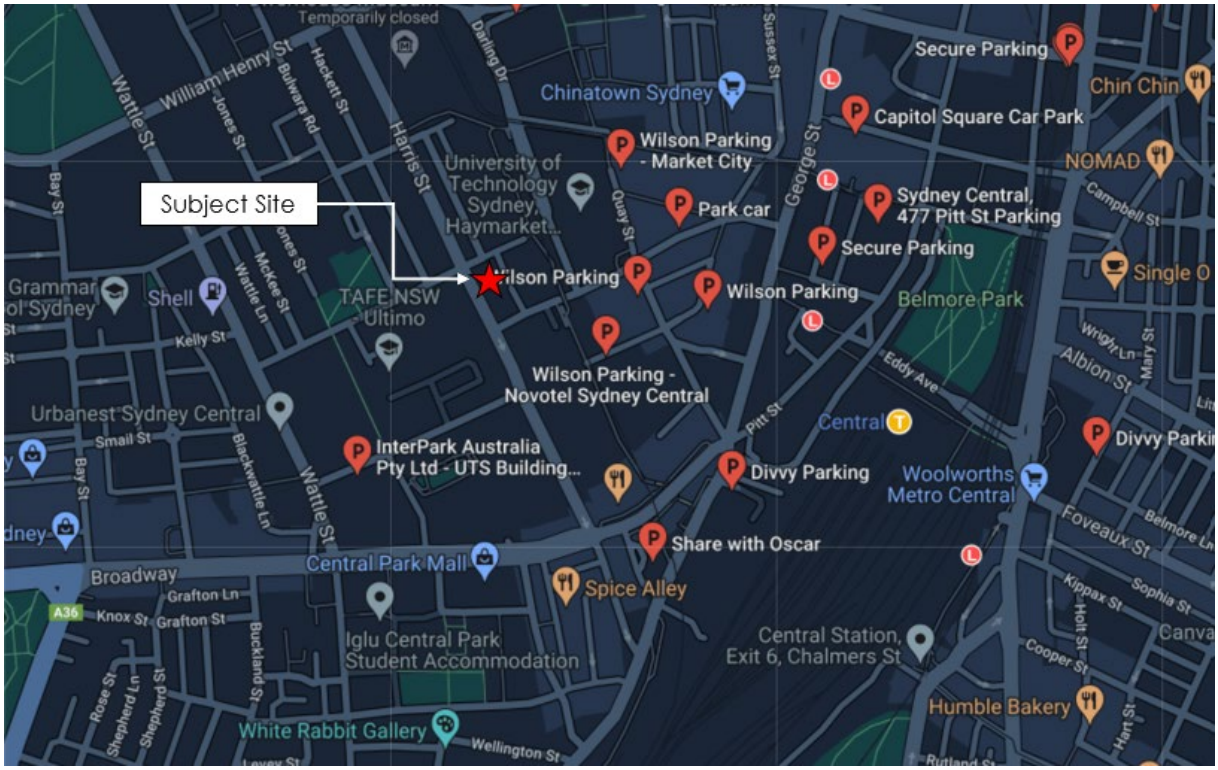


Source: City of Sydney, accessed July 2021

3.7 Commercial Car Parks

For those who need to park their private vehicle, several commercial car parks are located near the site. The nearby off-street car parks are presented in Figure 3.6.

Figure 3.6: Off-Street Car Parks



Source: Google Maps Australia

4 Masterplan

4.1 Proposal Description

UTS is proposing to redevelop CB13-15 to an Indigenous Residential College with the following land uses:

- Student accommodation with a total of 113 units (250 beds) including:
  - 40 studio units
  - 10 one-bedroom units
  - 26 two-bedroom units, and
  - 37 four-bedroom units.
- a publicly accessible Indigenous Arts Centre of 1,132m^2 (492m^2 of outdoor space and 640m^2 of indoor space)
- a publicly accessible Indigenous Library of 303m2
- UTS Education/ teaching space of 1,416m^2
- Staff offices 114m^2
- Ancillary common areas for student residents.

The development will not provide any car parking spaces, in an aim to take advantage of the public transport accessibility of the site and minimise car travel at UTS. This in line with current government practice as well as being in line with the existing UTS Green Travel Plan initiatives to minimise parking.

4.2 Waste Collection and Loading Arrangements

Omnibus Lane is currently used for service vehicle access and waste collection. There is two to three driveways to the site which will be consolidated into one new access to a new basement loading dock, accessed from Omnibus Lane via Ultimo Road. The existing access point along Omnibus Lane to the adjoining property immediately south of the site (646 Ultimo Road) would be retained.

The loading dock will provide access for vehicles sized up to Council's 9.5m Waste Truck. A turntable will be provided at the loading dock to assist with vehicle manoeuvring in the basement.

The basement floor layout of the site is shown in Figure 4.1, with the architectural plan provided in Appendix A.

Figure 4.1: Basement Floor Site Layout

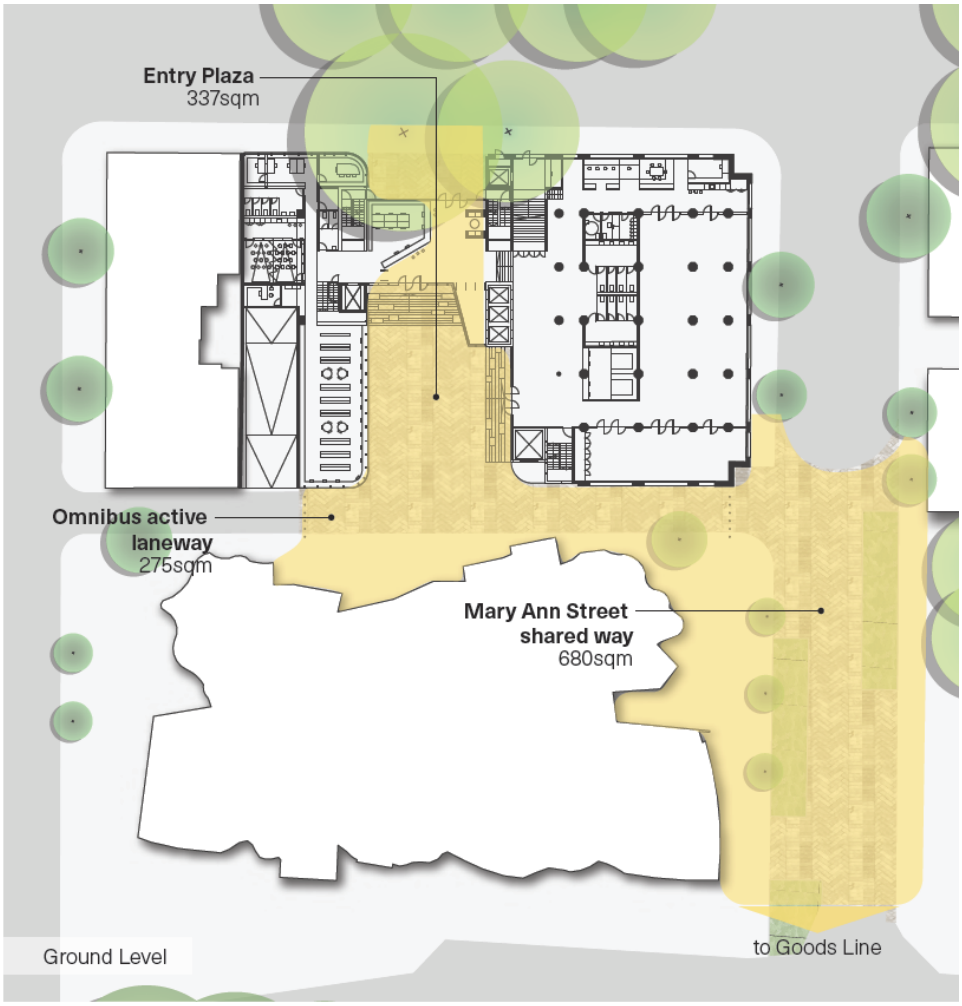
4.3 Pedestrian Improvements

Improvements to pedestrian connectivity is a key objective of the masterplan. As part of the proposal, it is proposed to:

- convert Omnibus Lane, between Mary Ann Street and the site's proposed loading dock access, into a pedestrian only, public domain area
- convert Mary Ann Street, between Omnibus Lane and the Goods Line walkway, into a shared zone.

The above areas are shown figuratively in Figure 4.2.

Figure 4.2: New Pedestrian Connections



The proposed changes are anticipated to have negligible impact in terms of vehicle access.

Omnibus Lane is currently restricted access only, with bollards provided on both ends, restricting through vehicle movements along Omnibus Lane, from Mary Ann Street or Ultimo Road. UTS provides limited access to Omnibus Lane, with service vehicles being the main user, to access existing loading areas. However, the redevelopment of the site will consolidate all the driveways along this road to a singular loading dock (excluding the existing access to the property immediately south of the site) with access off Omnibus Lane, via Ultimo Road. North of the loading dock access, Omnibus Lane is to be redeveloped to create a pedestrian space that would be used as an active outdoor space.

Mary Ann Street, south of Omnibus Lane is a no-through road, and provides vehicular access to one property; 84a Mary Ann Street. The driveway to this property provides access to approximately 15 car spaces. The proposed shared zone would continue to permit vehicular access to 84a Mary Ann Street. Four one-hour time restricted car spaces and one car share pod are located within the proposed shared zone area. It is proposed to reinstate these spaces within the new shared zone.

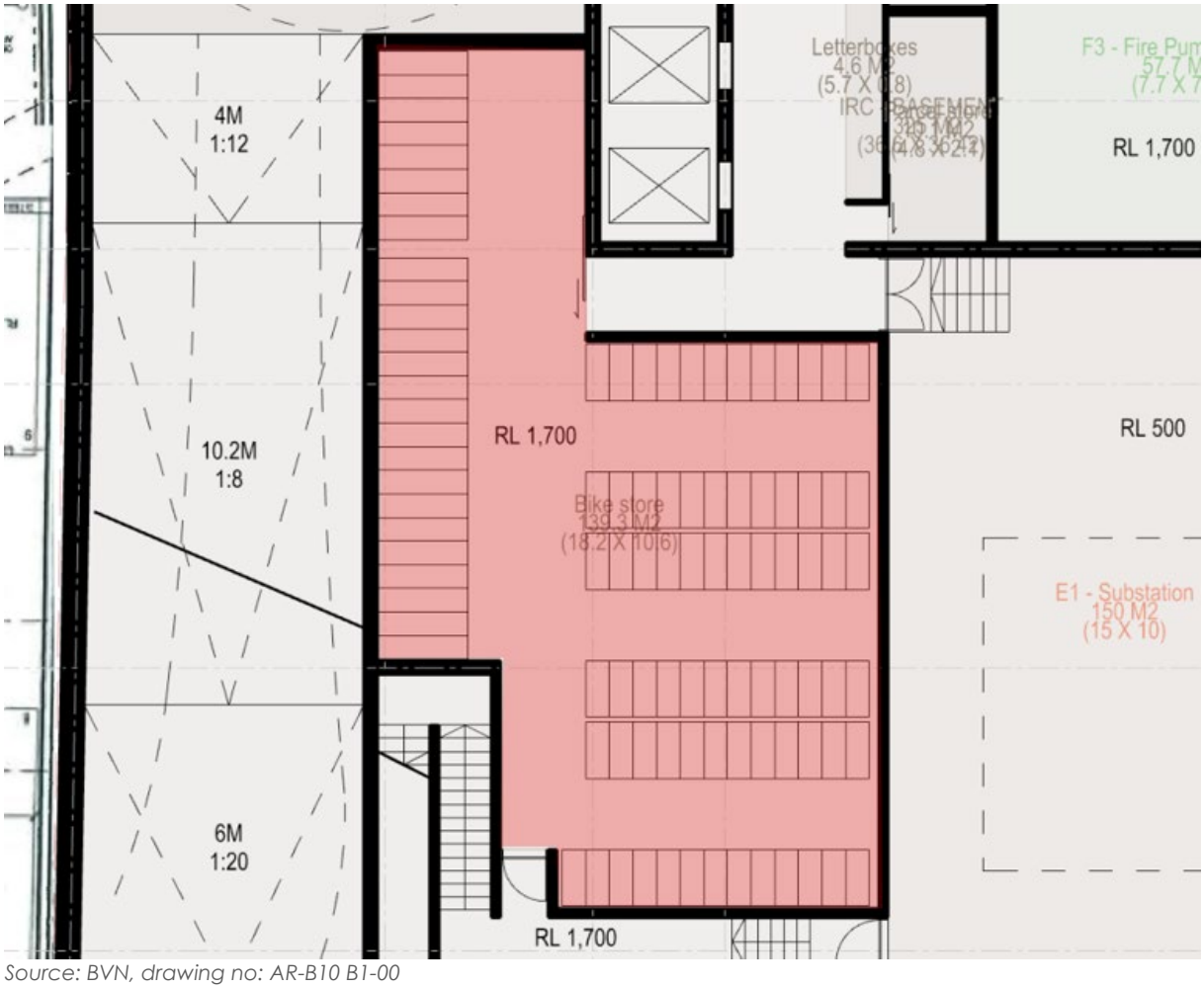
A new cul-de-sac turning circle would be provided west of Omnibus Lane for vehicles to turn around at the end of the road, prior to the start of shared zone.

The new shared zone will create a space that is flush with the new pedestrian area on Omnibus Lane and create a continuous pedestrian connection from the site to the Goods Line walkway.

4.4 Bicycle Parking

The proposed development would provide a total of 98 bicycle spaces within the basement level (B1) as shown in Figure 4.3.

Figure 4.3: Bicycle Parking within Basement Level 1



Source: BVN, drawing no: AR-B10 B1-00

5 Parking Assessment

5.1 Parking Requirements – Student Accommodation

The parking requirements for the proposed student accommodation development have been assessed with reference to the following documents:

- State Environmental Planning Policy (Affordable Rental Housing) 2009
- Sydney Local Environmental Plan (SLEP) 2012 and Sydney Development Control Plan (SDCP) 2012
- City of Sydney Boarding Houses Development Control Plan (Boarding Houses DCP) 2004

In addition to the above, the parking assessment for the site has been compared with travel survey data of an existing student accommodation site located at Quay Street, Ultimo (by Urbanest).

5.1.1 SEPP Affordable Rental Housing (SEPP ARH)

Division 3 of the SEPP ARH pertains to Boarding Houses, which is defined as "means a room or suite of rooms within a boarding house occupied or so constructed or adapted as to be capable of being occupied by one or more lodgers". The proposed student housing falls under this category.

Clause 29(2) of SEPP ARH provides circumstances in which a development cannot be refused by a consent authority, where the particular requirements of the Clause are achieved. In relation to car parking:

- at least 0.5 parking spaces are provided for each boarding room
- not more than 1 parking space is provided for each person employed.

This equates to a minimum of 125 car parking spaces (based on 250 beds and assuming the student accommodation would have one employee). However, in accordance with Clause 29(4) of the SEPP ARH, a consent authority can approve a development proposal with proposed parking provision at a lesser parking rate if it considers it reasonable in the circumstances. In this case, it is proposed to provide nil car parking for reasons explained in Section 5.1.6.

SEPP ARH also requires at least one bicycle parking space and one motorcycle parking space for every five boarding rooms. Therefore, 50 bicycle and 50 motorcycle spaces are required to satisfy the SEPP ARH requirement. Motorcycle parking is not to be provided for the same reasons as not providing car spaces.

Bicycle parking is further discussed in Section 5.4.

5.1.2 Sydney Local Environmental Plan 2012 and Sydney Development Control Plan 2012

The Sydney Local Environmental Plan (SLEP) 2012 does not contain any car parking rates specifically for student accommodation use. Similarly, the Sydney Development Control Plan (SDCP) 2012 does not specify any bicycle rates for student accommodation use.

The SDCP states that "*in all buildings that provide onsite parking, 1 motorcycle parking space for every 12 car parking spaces is to be provided*". On this basis, as no car parking will be provided on-site, no motorcycle parking spaces will be required under the SDCP. As such, it is not proposed to provide any motorcycle parking spaces in accordance with the SDCP.

5.1.3 City of Sydney Boarding Houses Development Control Plan 2004

The Boarding Houses DCP requires bicycle parking spaces to be provided at a rate of two racks per six bedrooms. Therefore, the Boarding Houses DCP requires 83 bicycle spaces (based on 250 beds proposed) be provided.

5.1.4 Student Travel Behaviour

A travel behaviour questionnaire survey was conducted (by Cardno as part of their traffic assessment for a proposed development at 157-163 Cleveland Street, Redfern) at an existing student accommodation development at Urbanest Quay Street.

The Urbanest Quay Street site has some 334 beds, while the masterplan site has 250 beds. .

Urbanest Quay Street is located some 300m south-east of the subject development site. Therefore, the Urbanest Quay Street site has similar characteristics to that of the subject site in that it is located within walking distance to public transport services and both sites are located near existing tertiary educational campuses. In addition, both sites are located within a town centre environment where amenities, services and shops are located at the doorsteps of both sites.

The salient findings from that survey at Urbanest Quay Street site were as follows:

- 76% of residents studied at either University of Sydney or UTS
- for trips with a study purpose:
  - **0% of respondents travelled via car**
  - 23% used public transport
  - 65% walked, and
  - 1% travelled via motorbike/scooter
- for trips with a work purpose:

  - **0% of the respondents travelled via car**
  - 23% used public transport
  - 59% walked
  - 2% travelled via motorbike/scooter, and
  - 2% took a taxi
- for trips with a social/recreational purpose
  - **0% of the respondents travelled via car**
  - 2% travelled as a car passenger
  - 33% used public transport
  - 61% walked
  - 0% travelled via motorbike/scooter or bicycle, and
  - 4% took a taxi
- bicycles are the transport mode of choice for the respondents; 14% said that they owned or planned to own a bicycle during their stay at Urbanest which compares with 10% for a car and 6% for a motorbike/scooter
- of those that took public transport, approximately 70% outlined that this was their preference as it was either faster, cheaper or more convenient than the other alternatives
- 14% of respondents said they either owned, or planned to own, a bicycle during their residences at Quay Street
- of the residents that owned a car, 40% parked in a paid parking space and 60% used a friend or relatives' space
- for 55% of residents, their friends and relatives did not visit by car and of those visitors who arrived by car, 66% visited once per week or less.

Based on the above, it should be noted that zero per cent of the respondents travelled by car for either study, work or social purposes. It is further noted that the majority of respondents travelled to/from the site via public transport or by walking.

It is expected that similar travel patterns would arise from the proposed development as it is located within close proximity to public transport services and key tertiary educational campuses such as the UTS.

5.1.5 Pyrmont Peninsula Place Strategy (PPPS) Objectives

Additionally, the nil parking provision supports the objectives of the PPPS, which seeks to prioritise walking and cycling as the main form of transport to/from the site. Adequate

provision of bicycle parking facilities would help encourage this mode of transport to/from the site and along with nil parking, would only help incentivise travel by walking and cycling.

5.1.6 Proposed Parking Provision

On the above basis, the proposed provision of nil car parking is satisfactory for a student accommodation establishment.

Providing no car parking for the proposed student accommodation development would discourage car travel to/from the site, particularly as the site is surrounded by well-established pedestrian and cycle infrastructure, high frequency public transport services and community facilities and amenities. This is considered to align with Council's key objectives to maximise sustainable travel modes such as public transport, walking and cycling, and discourage car use, particularly single occupancy car trips.

Further to this, existing on-street car parking is limited and restricted to short-term car parking, as such students and visitors would not be able to park on-street for significant periods of time. Students would be advised of the limited car parking conditions and thus, be discouraged from owning a car or having visitors drive to the site. While it is noted that a resident parking scheme is in operation in the area, it is Council does not typically provide residents of student housing developments with on-street parking permits *(When the City of Sydney approves the construction, conversion or major refurbishment of multi-unit residential developments, we often include a condition that restricts residents of the property from gaining a residential parking permit. This limits traffic congestion from new developments and protects existing on-street parking from excessive demand. It also ensures that new housing is affordable and sustainable, and provides more housing choices for households that do not need a car. Building owners and real estate agents must inform prospective buyers and tenants about any relevant restrictions.)*.[1]

It is also expected that the tenancy agreements will not permit students to bring a vehicle to the site, as is typical for most student accommodation sites.

It is noted that there are multiple existing student accommodation sites nearby to the site which do not provide on-site parking provisions. Some examples are shown in Table 5.1.

[1] *https://www.cityofsydney.nsw.gov.au/transport-parking/apply-residential-parking-permit*

Table 5.1: Student Accommodation with Nil Parking Provisions

Provider	Address	No. of Beds	Approx. Walking Distance to the Closest University	No. of Car Parking Spaces
Iglu – Redfern	66 Regent St, Redfern	370	900m (University of Sydney, Main Campus)	0
Iglu - Broadway	9 Kensington St, Chippendale	271	280m (University of Technology Sydney)	0
Iglu - Central	1 Regent St, Chippendale	98	150m (University of Technology Sydney)	0
Iglu – Central Park	6 Central Park Ave, Chippendale	770	250m (University of Technology Sydney)	0
Scape – Abercrombie Street	267-269 Abercrombie St, Darlington	54	450m (University of Sydney, Main Campus)	0
Urbanest – Cleveland Street	142 Abercrombie St, Redfern	461	885m (University of Sydney, Main Campus)	0
Urbanest – Wattle Street	473 Wattle Street, Ultimo	665	300m (University of Technology Sydney)	0
Urbanest – Quay Street	83 Quay Street, Haymarket	334	260m (Sydney TAFE)	0

The travel survey data of the Urbanest Quay Street site as discussed in Section 5.1.4, notably indicates that nil parking provision is an effective method of promoting a culture of sustainable transport, with 0% of student respondents indicating that they travel by car.

Taking the above into consideration, the provision of nil car parking is considered satisfactory and could not be expected to result in any significant impact on existing parking amenities surrounding the road network, nor operate any differently from other existing student accommodation developments within the area and with no parking provisions.

As such, the provision of nil car parking is considered acceptable and favourable from a sustainable transport perspective.

Notwithstanding the above, it is noted that there a number of car sharing pods in the vicinity of the subject site which can provide a real alternative to travel by private vehicles which is also flexible, cost effective and convenient for students who require the use of a car. The location of nearby car sharing pods is shown in Figure 3.5.

5.2 Parking Requirements – Commercial Premises

The number of staff proposed on the site is not known at this stage, as such the parking rate for a commercial office space has been adopted.

The development includes staff office space of approximately 114m^2 GFA. Based on the Sydney LEP, the site is permitted parking at a maximum rate of one space per 125m^2.

Therefore, the development is permitted a maximum of one car space. The development is compliant with a nil provision of parking. The bicycle parking requirement for office space is once space per 150m^2 GFA for staff and 1 space per 400m^2 for visitors. Therefore, the site is required 2 bicycle spaces for the office spaces.

5.3 Parking Requirements – Information and Education Facilities

The proposed education facilities, the Indigenous Arts Centre and the Indigenous Library falls under the category of 'Information and Education Facilities'. The LEP requires parking for information and education facilities to be provided at a maximum rate of one space per 200m^2 GFA.

The information and education facilities on the proposed site equates to a total GFA of 2,851m^2. These land uses are permitted a maximum provision of 14 car spaces. The proposal for nil parking is compliant with LEP requirements.

Nonetheless, the library and education/ teaching space is to be largely ancillary to the student accommodation on-site, therefore, the above estimate is conservative

The SDCP provides bicycle parking rates for following similar land uses:

- Library – 1 space per 10 staff and 2 plus 1 per 200m^2 GFA for visitors
- Art gallery or museum – 1 space per 1,000m^2 GFA and 1 space per 200m^2 GFA
- Education/ teaching space – 1 space per 10 staff and 10 students.

It's assumed that the library may have around 2-3 staff members. As noted the teaching space is to be ancillary and would not substantially generate an increase on the population on-site. Based on this, the masterplan site with 303m^2 library and 1,132m^2 Arts Centre is expected to require around 3 library bike spaces and 7 Arts Centre bike spaces (10 spaces).

5.4 Bicycle parking Provision

The proposed masterplan will provide 98 bicycle parking spaces in a secure room within the basement level. This parking provision is sufficient to meet the DCP requirements of the site which include:

- Boarding Houses – 50 spaces as per the SEPP ARH or 83 spaces as per the Boarding Houses DCP
- Teaching staff/ office space – 3 spaces as per the SDCP
- Library and art gallery – 10 spaces as per SDCP.

5.5 Design Compliance

The vehicle access, loading dock and bicycle parking is to be designed in accordance with relevant standards, including:

- ramp grades are to be provided as per the SDCP for Council's waste truck and Australian Standard (AS) 2890.2:2018 for a standard medium rigid vehicle
- bicycle parking dimensions are to be in accordance with AS2890.3:2015.

6 Transport Assessment

6.1 Vehicle Trip Generation

The proposed development will not provide any car parking provision, which is consistent with the existing site. On this basis, there is not expected to be any increases to car traffic as a result of the development.

6.2 Future Public Transport Capacity

Sydney is undergoing significant upgrades to its public transport capacity with the Sydney Metro under construction and expected to be complete by 2024.

It is understood that the Sydney metro would increase rail capacity for an additional 100,000 customers per hour or more[2] across the Sydney CBD rail lines. The proposed improvement to heavy rail capacity would additionally relieve capacity of bus services with some customer demand anticipated to displace on to the future rail services.

Notably, the new metro stations, Central Station and Pyrmont Station, would improve transport accessibility and capacity of the area surrounding the site.

The future trip generation of the proposed residential college with potentially 358 residents is expected to be minor compared to the capacity of the public transport network. Additionally, given residents would also be studying at UTS, public transport trips generated by the site would be minimal.

6.3 Green Travel Plan

As required by City of Sydney's general requirements for development consent, a green travel plan is to be prepared to promote sustainable travel. A green travel plan applicable to students, staff and visitors travelling to site would be prepared as part of a future DA and implemented upon occupation of the precinct. The key objective of this green travel plan would be to:

- Identify the existing travel behaviour and mode share of the Campus
- Identify initiatives to encourage sustainable transport modes
- Identify a methodology to monitor the implementation of the green travel following occupation of the precinct
- Set targets to measure the success of initiatives implemented in the green travel plan.

[2] *Sydney Metro Chatswood to Sydenham EIS*

7 Conclusions

The University of Technology, Sydney (UTS) is proposing to redevelop Buildings 13-15 at its City Campus to an Indigenous Residential College, teaching facilities and a publicly accessible Indigenous Arts Centre and Library. This report has been prepared in response to the "General Requirements for preparing key site masterplans under the Pyrmont Peninsula Place Strategy", which requires that the masterplan be supported by appropriate and comprehensive technical studies.

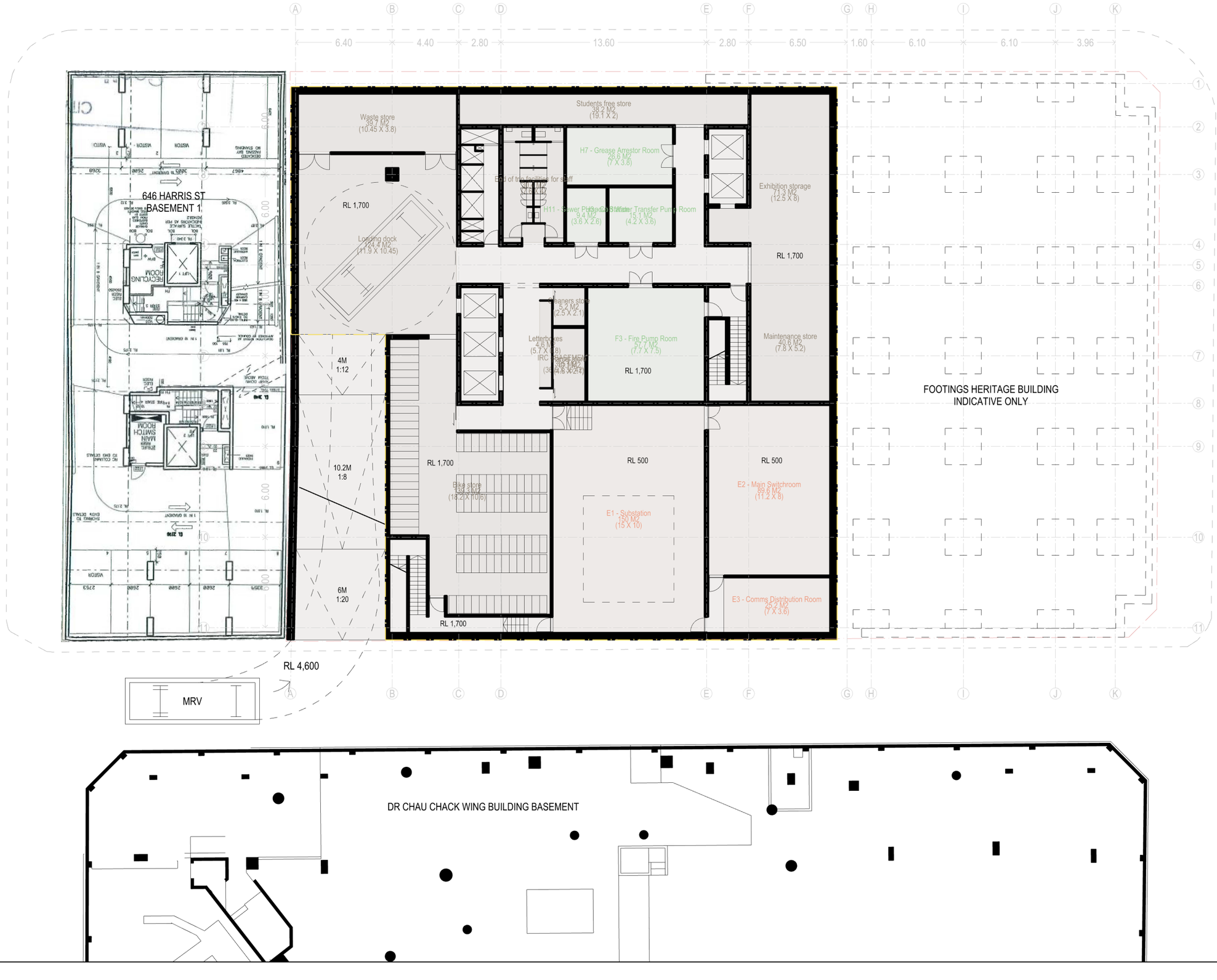
The findings of the above traffic and parking assessment are detailed as follows:

- The development includes 250 beds over 113 units, 1,132m^2 Indigenous Arts Centre, a 303m^2 Indigenous Library, 1,416m^2 of teaching space, and 114m^2 staff offices.
- The masterplan provides one driveway, into a new loading dock, accommodating up to a 9.5m Council Waste Truck.
- The development includes extensive improvements to pedestrian connectivity including:
  - convert Omnibus Lane, between Mary Ann Street and the site's proposed loading dock access, into a pedestrian only, public domain area
  - convert Mary Ann Street, between Omnibus Lane and the Goods Line walkway, into a shared zone.

  The proposed connections are not expected to impact existing traffic flows or vehicle access arrangements.
- The development will not provide any car parking. This is in line with the existing site, as well as the typical practice for student accommodation and educational facilities in the city and is considered acceptable. It also aligns with the objectives of the PPPS which prioritises walking and cycling as the key travel mode to the site.
- 98 bicycle parking spaces is provided in a secure facility in basement level 1. This provision is compliant with the requirements of the SEPP ARH and Council DCPs.

Appendix A

Architectural Plans



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NOTE

CONTRACTOR TO CHECK AND VERIFY ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORK OR PREPARATION OF SHOP DRAWINGS. DO NOT SCALE THIS DRAWING

LEGEND - SOA

- ARTS - INTERIOR
- ARTS - OUTDOOR
- IRC - INDOOR
- INDIGENOUS LIBRARY
- UTS EDUCATION
- BASEMENT
- ROOF PLANT
- IRC GREEN ROOF
- UTS INDIGENOUS GARDEN OUTDOOR SPACE
- UTS INDIGENOUS GARDEN INDOOR SPACE

CLIENT

UNIVERSITY OF TECHNOLGY SYDNEY

PROJECT MANAGER

PROJECT

INDIGENOUS RESIDENTIAL COLLEGE

BVN PROJECT NUMBER

1901013

TRUE NORTH | PROJECT NORTH

SCALE

1:250 @ A3

0 2500 7500

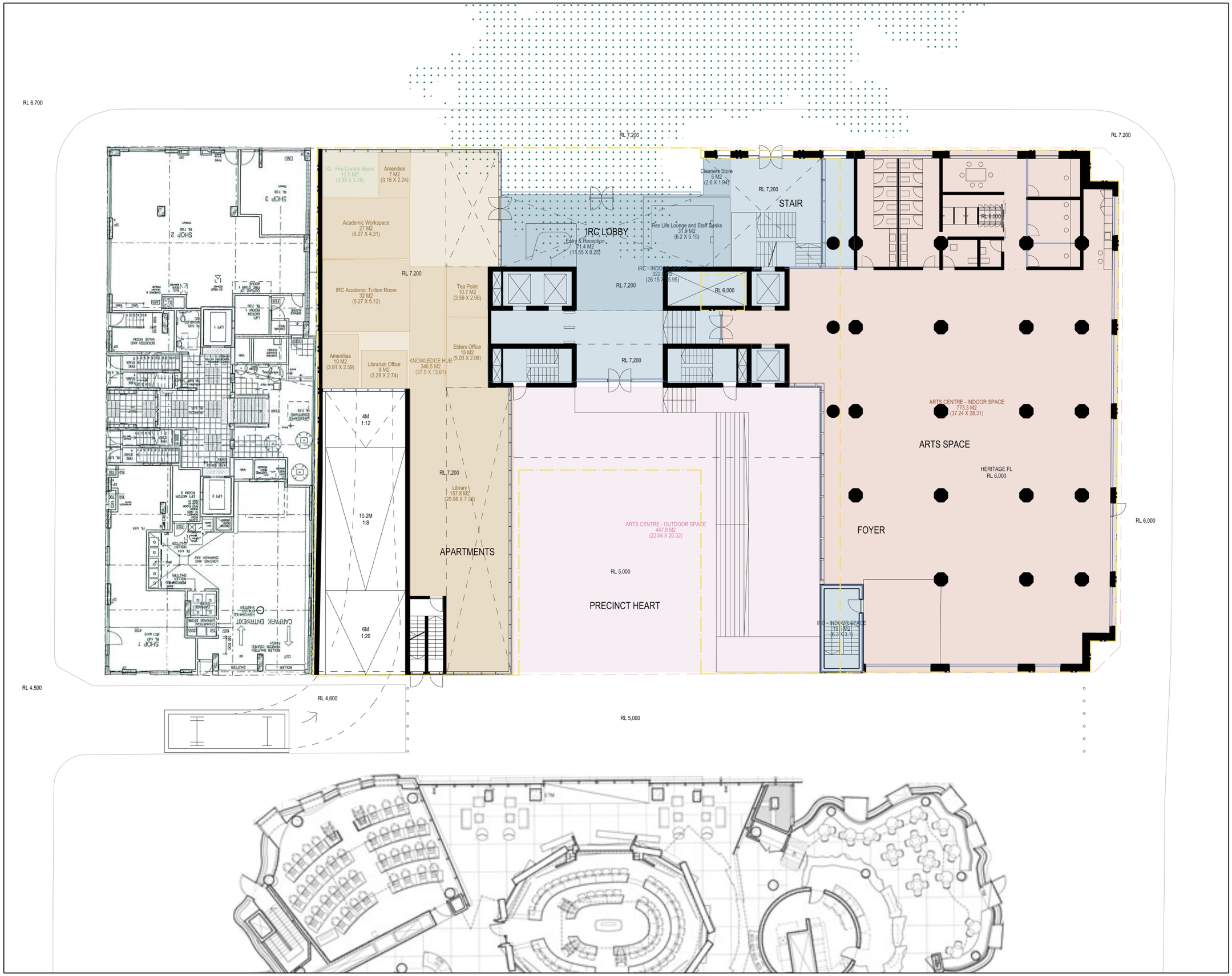
STATUS

DRAWING

GA PLAN
BASEMENT 1

DRAWING NUMBER	ISSUE
AR-B10 B1-00	

28/7/2021



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CLIENT

UNIVERSITY OF TECHNOLGY SYDNEY

PROJECT MANAGER

PROJECT

INDIGENOUS RESIDENTIAL COLLEGE

BVN PROJECT NUMBER

1901013

TRUE NORTH

PROJECT NORTH

SCALE

1:250 @ A3

0 2500 7500

STATUS

DRAWING

GA PLAN
GROUND LEVEL

DRAWING NUMBER	ISSUE
AR-B10 00-00	

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