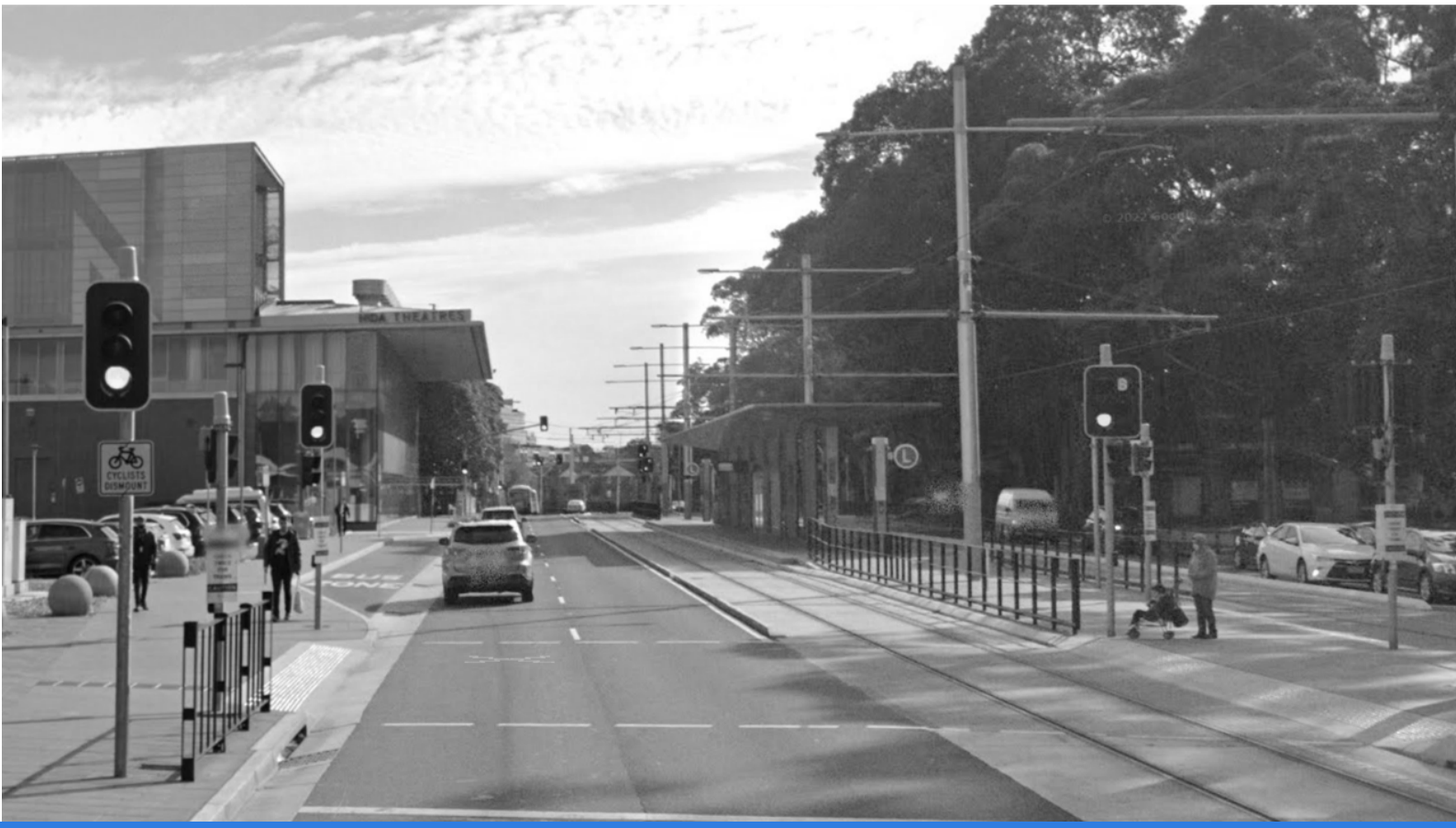

Iglu Student Accommodation
UNSW Western Car Park, 215B Anzac Parade, Kensington

Traffic Impact Assessment

Prepared for:

Iglu

24 July 2024

The Transport Planning Partnership

E: info@ttpp.net.au

Iglu Student Accommodation UNSW Western Car Park, 215B Anzac Parade, Kensington

Traffic Impact Assessment

Client: Iglu

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Date: 24 July 2024

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Quality Record

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V02	3/11/2022	Ashwini Uthishtran	Oasika Faiz	Ken Hollyoak	DRAFT
V03	22/12/2022	Ashwini Uthishtran	Oasika Faiz	Ken Hollyoak	FINAL
V04	31/01/2023	Ashwini Uthishtran	Oasika Faiz	Ken Hollyoak	DRAFT
V05	20/03/2023	Ashwini Uthishtran	Oasika Faiz	Ken Hollyoak	DRAFT
V06	22/02/2024	Ashwini Uthishtran	Oasika Faiz	Ken Hollyoak	DRAFT
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V10	24/07/2024	Ashwini Uthishtran	Oasika Faiz	Ken Hollyoak	

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APPENDICES

1 Introduction

1.1 Background

The Transport Planning Partnership (TTPP) has prepared this transport assessment report, on behalf of Iglu (the 'developer') in relation to a proposed student accommodation at the UNSW Western Carpark at 215B Anzac Parade, Kensington. The proposal seeks approval to provide 881 student accommodation units, retail and commercial area (UNSW space) and associated basement parking.

A development application (DA) has been submitted to Randwick City Council (Council) seeking approval for the proposed development.

The report assesses the traffic and parking implications associated with the proposed development.

The remainder of the report is set out as follows:

- Chapter 2 discusses the existing conditions including a description of the proposal
- Chapter 3 provides a brief description of the proposed development
- Chapter 4 assesses the proposed on-site parking provision and internal layout
- Chapter 5 examines the traffic generation and its impact
- Chapter 7 presents the conclusions of the assessment.

1.2 Authority Comments

As part of the review of the DA, Council has referred the application to TfNSW for comment. TfNSW has provided some advisory comments on the DA and issued a list of conditions that should be included in any consent. The advisory comments are shown in Table 1.1 and the list of recommended conditions of consent is provided in Appendix A).

Council has issued their own set of additional comments as also included Table 1.1.

Table 1.1: TfNSW and Council Comments

Comment	Report Reference
TfNSW Comments	
TfNSW has concerns that the proposed development could lead to an increase in vehicles entering the NIDA service driveway and or reversing back onto Anzac Parade. Recommendation: That Applicant consider closing the Anzac Parade crossover and providing alternate access for vehicles delivering to NIDA.	See Section 3.4
A total of three loading and servicing bays are proposed comprising: • 1 x MRV/garbage vehicle bays. • 1 x SRV bays. • 1 x B99. The TfNSW Urban Freight Forecast tool indicates the proposed loading and servicing provisions would have an average efficacy of 71%, likely resulting in rejected vehicles due to space limitations during busy times. It is important that all loading and servicing demand is catered for on- site to ensure that freight and servicing movements do not detract from the amenity of the precinct, create safety risks, impact network efficiency or generate other negative externalities. Recommendation: That all loading and servicing demands generated by the development occur on-site.	All loading activities to be on-site. See Section 3.3
Council Comments	
Planning Comments - The NIDA ground level large vehicle access arrangement are not adequate, and the turn around arrangement into a recess in the proposed building are questioned as to their day to day practicality of use – the NIDA presentation indicated a larger truck access would be necessary with consequent wider swept path arrangements. - It is clear from the discussion that NIDA are particularly concerned that they will lose the current car parking space numbers and legibility of access – a written agreement between UNSW and NIDA is recommended such that it reassures NIDA that their day-to-day and performance day needs are being considered in an amended proposal.	See Appendix B and Section 3.4
Transport Management Nida Turning Area – It is recommended that NIDA be consulted on the arrangements in terms of dimensions required and operational management.	See Appendix B
Car Share – Section 2.7 of the Traffic Report outlines the value of car share and indicates that agreements shall be sought with Car Share Operators, however, no car share appears to have been allocated for residents. If the proposal is seeking to offset the significant parking shortfall, it is considered essential that appropriate measures are in place to accommodate low-car ownership. Car Share spaces should be provided. These Car Share vehicles should be publicly accessible and not be behind security gates.	See Section 4.4
Bicycle Parking: It is recommended that additional bicycle parking be provided throughout the development site noting this site is directly located upon separated cycle routes linking to Centennial Park, Surry Hills, City of Sydney, to the north and to Coogee to the east and Maroubra Junction to the south. Parking rates will be considered further by Council's Development engineer pursuant to Part E2 of the DCP for the UNSW site.	See Section 4.3.4
Motorcycle parking is required to be provided for the development.	See Section 4.3.4
Public Footpaths & Cycleways – The current proposal should consider providing an appropriately dimensioned cycle link from Day Avenue to the Anzac Parade pedestrian signals, passing 'behind' the New College building. This matter requires further discussion with Council Integrated Transport Department.	Section 3.2
Waste Management Traffic and vehicle movements need to be considered.	See Section 3.3

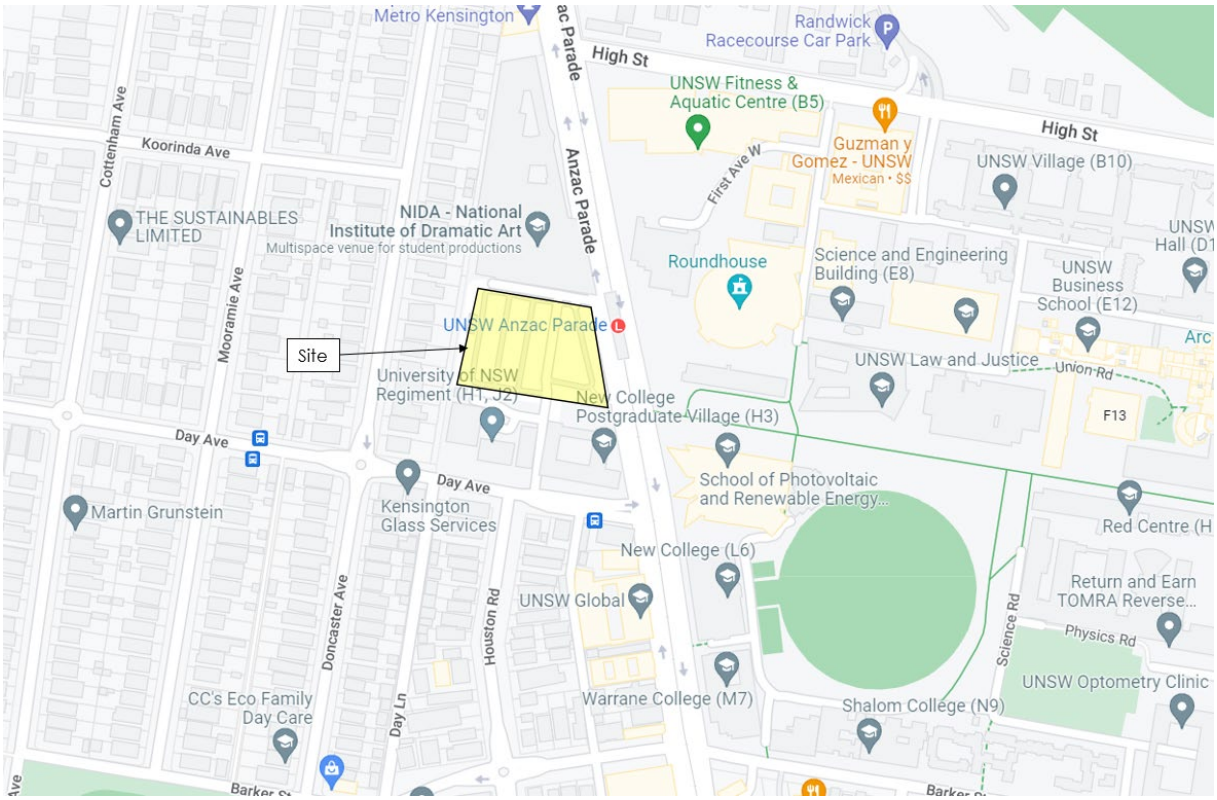
2 Existing Conditions

2.1 Site Description

The subject site is located at the University of New South Wales (UNSW) Western Carpark at 215B Anzac Parade, Kensington and falls within the local government area of Randwick City Council. The site is currently used as an at-grade car park for UNSW.

A locality map of the subject site is shown in Figure 2.1.

Figure 2.1: Locality Map



Basemap Source: Nearmap Australia

2.2 Abutting Road Network

Anzac Parade is a classified State Road and functions as the primary north-south arterial link with good connectivity between the eastern suburbs and the Sydney Central Business District (CBD). The road is located in close proximity to the site forming the eastern frontage, with two lanes in either direction. The two carriageways are separated by the recently constructed light rail corridor in the middle and has been operational since April 2020. Kerbside parking on Anzac Parade in the vicinity of the subject site is generally not permitted.

Anzac Parade provides a bus stop, a light rail stop and a mid-block pedestrian crossing along the frontage of the site.

The posted speed limit is 50km/hr on Anzac Parade.

Day Avenue is a two-way local road with one lane in either direction, aligned in the east to west direction. This road provides access to the site via a two-driveway. Restricted kerbside parking is permitted on both sides of the road.

There is no posted speed limit on Day Avenue, therefore the default speed limit is 50km/hr.

2.3 Existing Vehicle Access

The existing two-way vehicle access to the carpark with 220 car spaces is provided via Day Avenue. This driveway also provides access to the New College Village loading and parking to the east and access to the UNSW Regiment to the west.

The existing vehicle access location is shown in Figure 2.2 and Figure 2.3.

Figure 2.2: Existing Vehicle Access

Source: Google Maps Australia

Figure 2.3: Vehicle Access Location

Additionally, a service only access to Australia's National Institute of Dramatic Art (NIDA) is retained to the north of the site via an existing driveway and easement off Anzac Parade as shown in Figure 2.3..

2.4 Public Transport Facilities

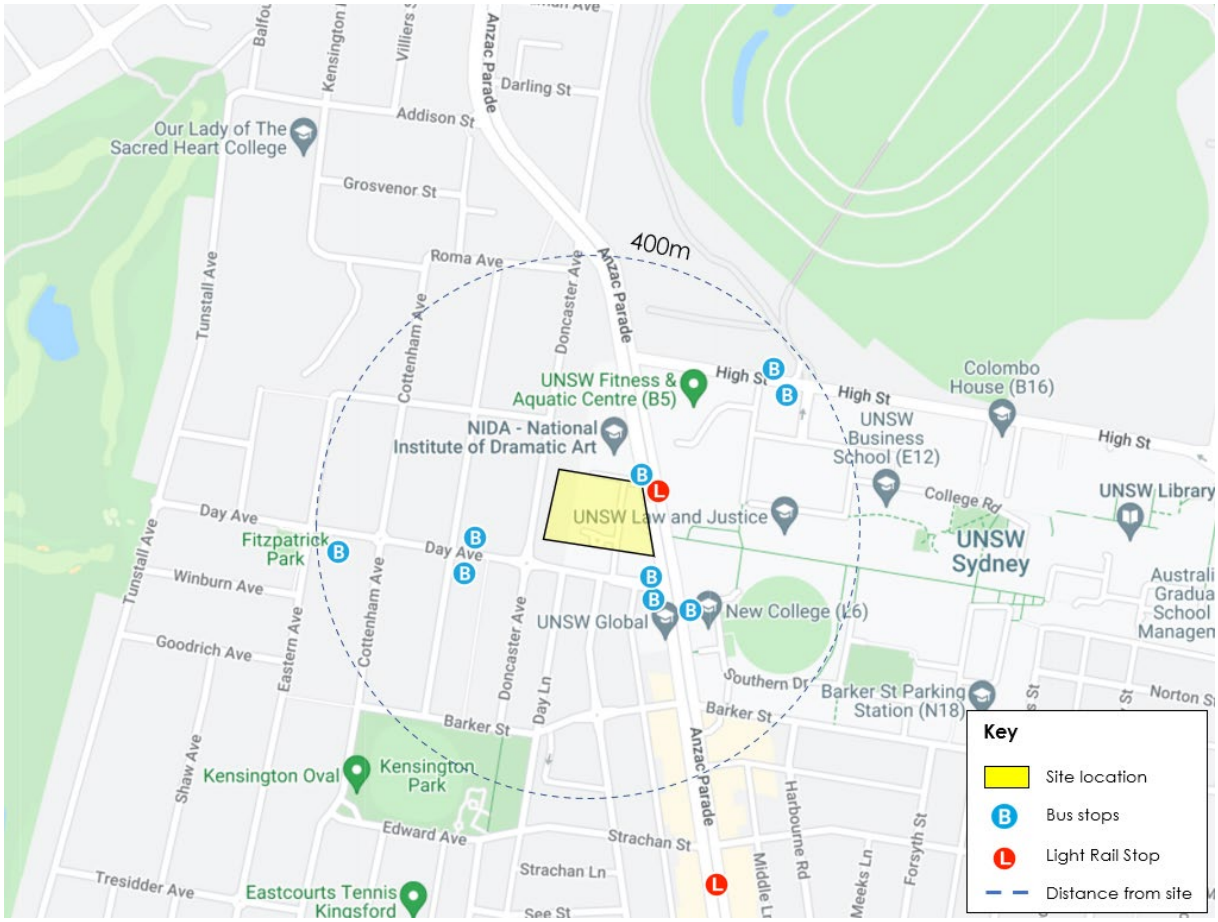
2.4.1 Bus Services

The subject site is located within close proximity of existing high frequency bus services along Anzac Parade, High Street and Day Avenue.

Figure 2.4 below shows the site's proximity to existing public transport facilitates within a 400m radius.

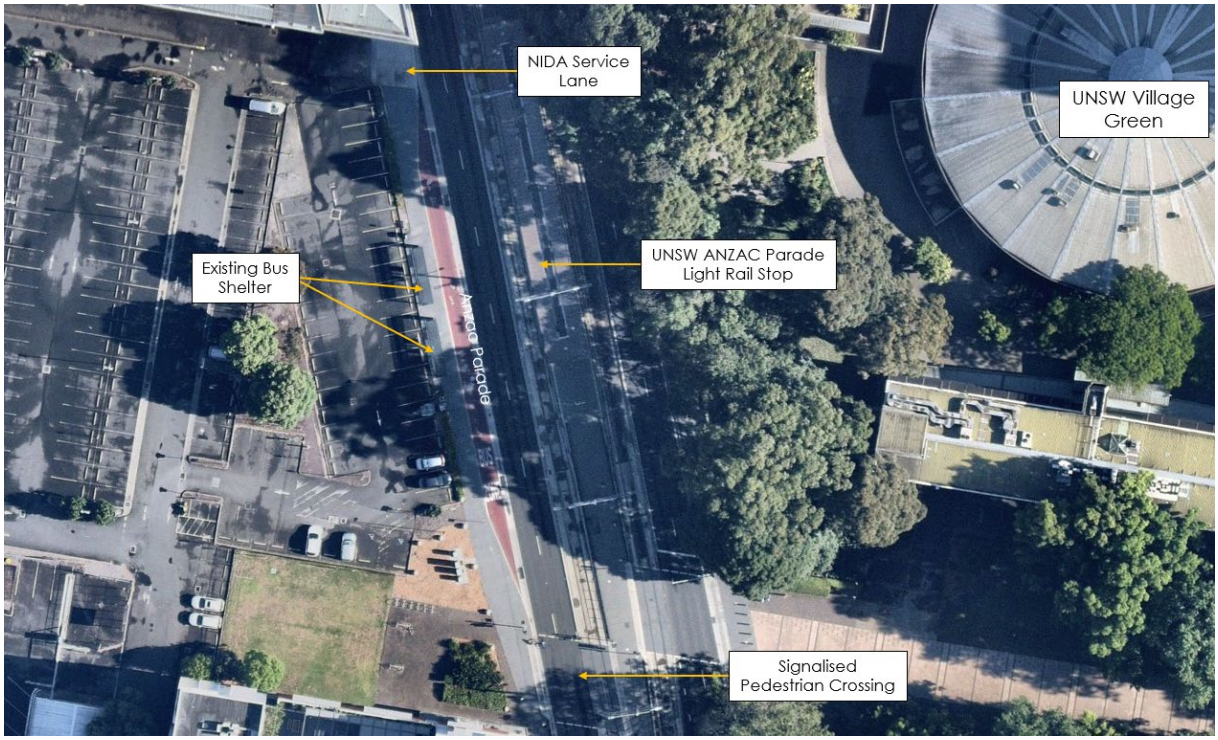
The existing shelters at the closest bus stop are shown in Figure 2.5.

Figure 2.4: Surrounding Public Transport



Basemap Source: Google Maps Australia

Figure 2.5: Existing Bus Shelter Locations



Basemap Source: Nearmap

Table 2.1 provides a summary of the existing bus services within the vicinity of the site and their associated frequencies.

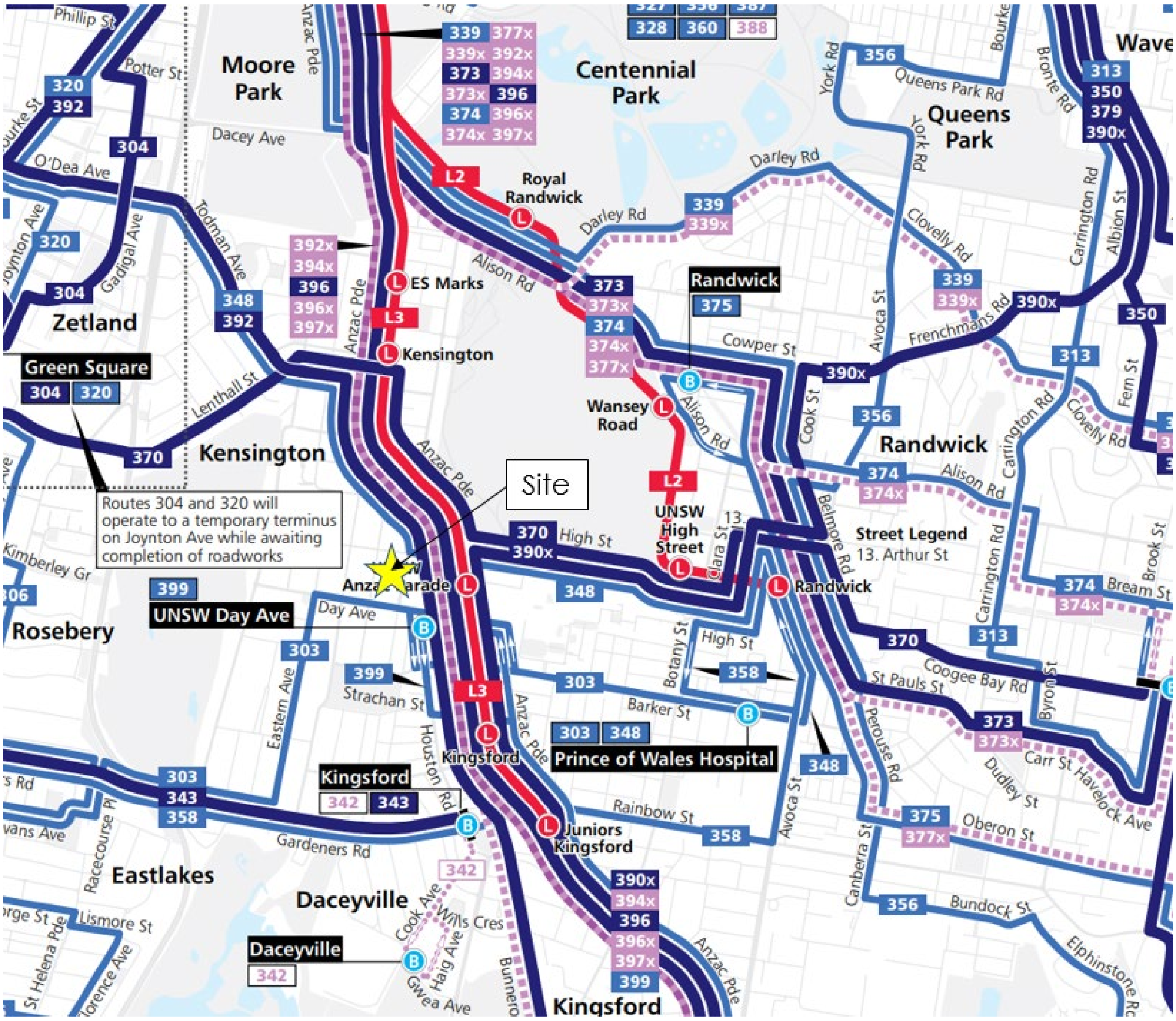
Table 2.1: Existing Bus Services and Frequencies

Bus Route	Bus Route Description	Service Location	Site Proximity	Frequency
303	San Souci to Prince of Wales Hospital	Anzac Parade	Adjacent to the site	1 peak service/ no off-peak service
390X	La Perouse to Bondi Junction (Express Service)			Every 5-10 minutes
392	Little Bay to Redfern			Every 10 minutes
392N	Matraville to City Circular Quay (Night Service)			5 night services
392X	Little Bay to City Museum (Express Service)			Every 10-15 mins
396	Maroubra Beach to City Circular Quay			Every 5-10 mins
399	Little Bay to UNSW (Loop Service)	Day Avenue	<150m	Every 20 mins
348	Wolli Creek to Prince of Wales Hospital	High Street	<500m	Every 5-30 mins
370	Coogee to Glebe Point	High Street		Every 5-10 mins

Source: Transport for NSW

Figure 2.6 presents a map of the existing bus network surrounding the site.

Figure 2.6: Existing Bus Network



Source: TfNSW – Eastern and South Eastern suburbs public transport network

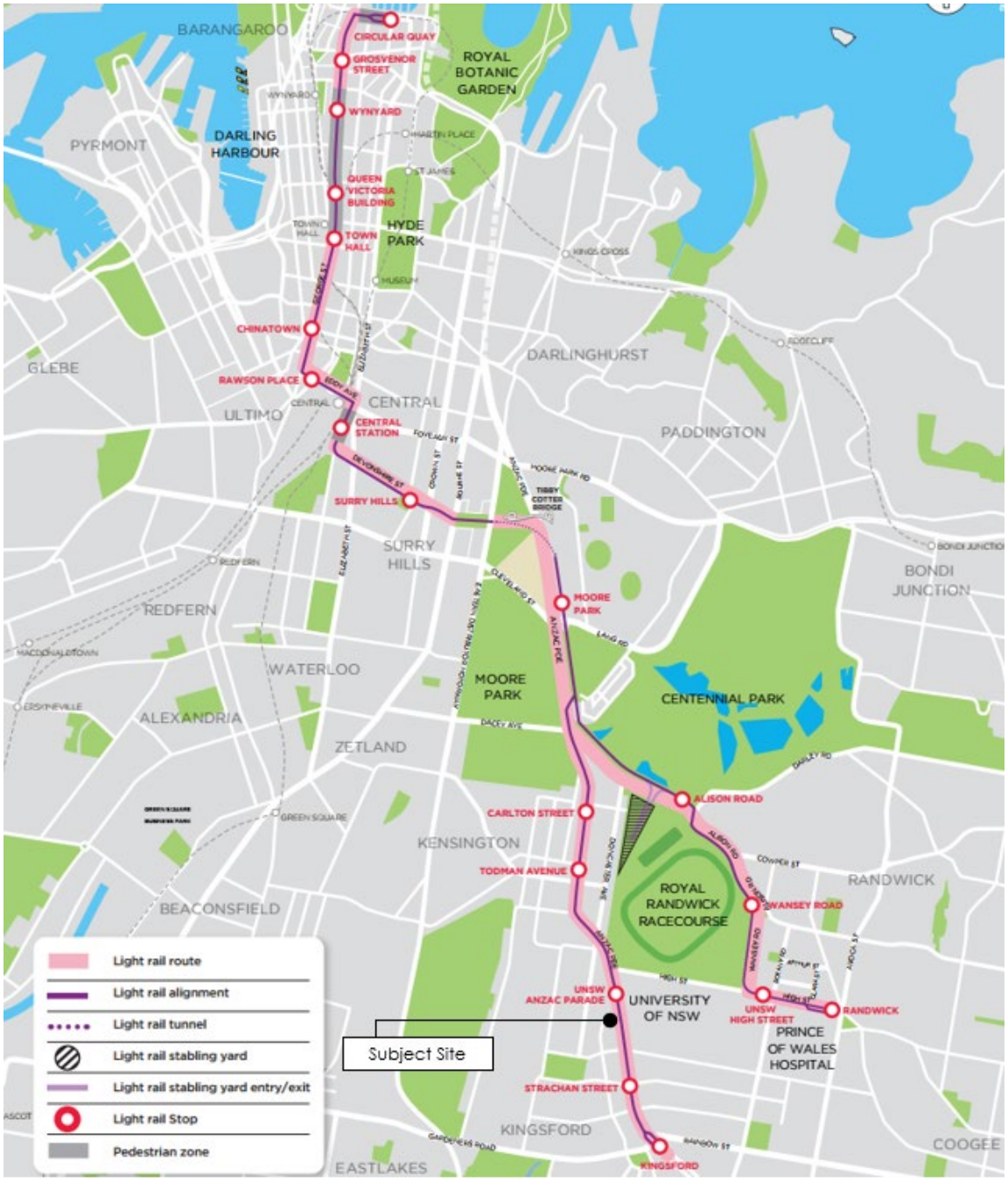
2.4.2 CBD and South East Light Rail

The CBD and South East Light rail corridor is a 12km route featuring 19 stops, extending from Circular Quay along George Street to Central Station, through Surry Hills to Moore Park, then to Kensington and Kingsford via Anzac Parade and Randwick via Alison Road and High Street.

The site is serviced by the UNSW Anzac Parade light rail stop which serves the L3 Kingsford light rail line. Regular services run every 4-8 minutes between Circular Quay and Moore Park, and every 8-12 minutes between Moore Park and Kingsford during 7am-7pm on weekdays.

The CBD and South East Light Rail route and stop locations is shown in Figure 2.7.

Figure 2.7: CBD and South East Light Rail route



Source: mysydney.nsw.gov.au

2.5 Pedestrian and Cyclist Infrastructure

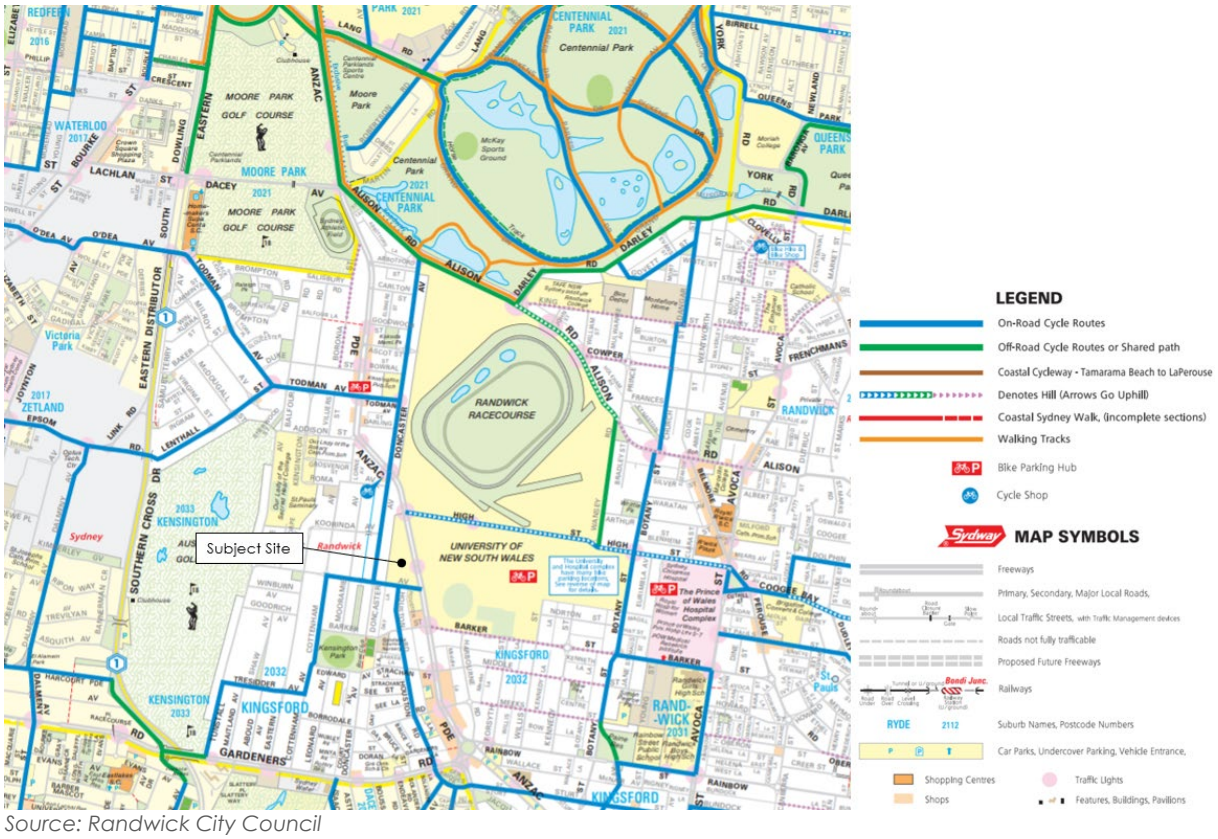
The surrounding streets have paved pedestrian footpaths on both sides of the carriageway, providing good access to nearby educational facilities. There is a signalised crossing facility on Anzac Parade adjacent to the site, which leads to the main entrance of UNSW. These features promote pedestrian safety as students can safely walk and cross the street to their destination.

The development site includes easements for pedestrian access from New College, and also through site pedestrian access to New College, NIDA, the UNSW Regiment and between Day Avenue and Anzac Parade.

The development will retain these connections and enhance the pedestrian experience through provision of new activated with quality surface treatments.

There are on-road cycleway facilities available on Day Avenue and Doncaster Road which provide good connectivity to the wider cycle network as shown in Figure 2.8.

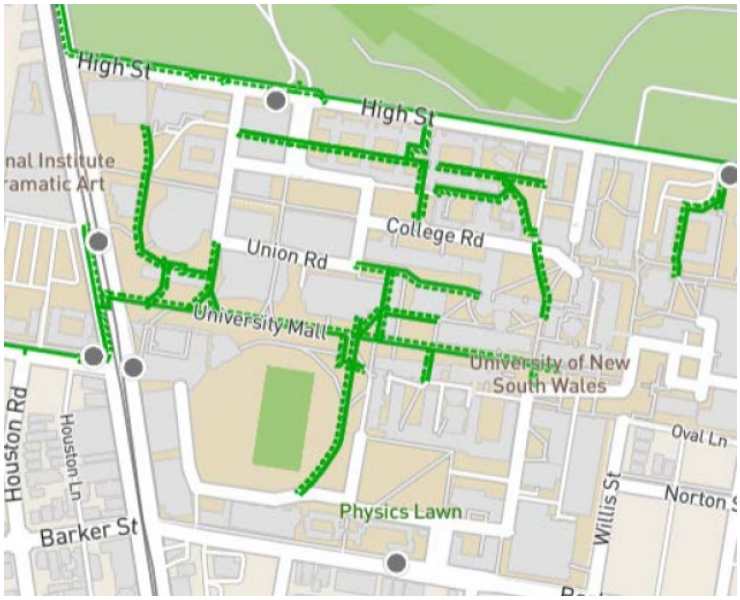
Figure 2.8: Existing Cycle Network



Source: Randwick City Council

There are also shared paths and road connections throughout the campus of UNSW. This is shown in Figure 2.9.

Figure 2.9: Shared Paths



2.6 Bike Share

Dock-less bike share is a relatively new program which provide users with the opportunity to ride a public bike anytime one is available. Users will be required to download one of the appropriate bike share apps such as *MoBike* and/or *Lime* to reserve and unlock a bike. Bicycles can be used for return or one-way trips and can be picked-up and returned to bicycle parking areas, train stations, or even on footpaths provided that the footpath is not too busy and is wide enough so the bicycles will not impede the flow of pedestrians.

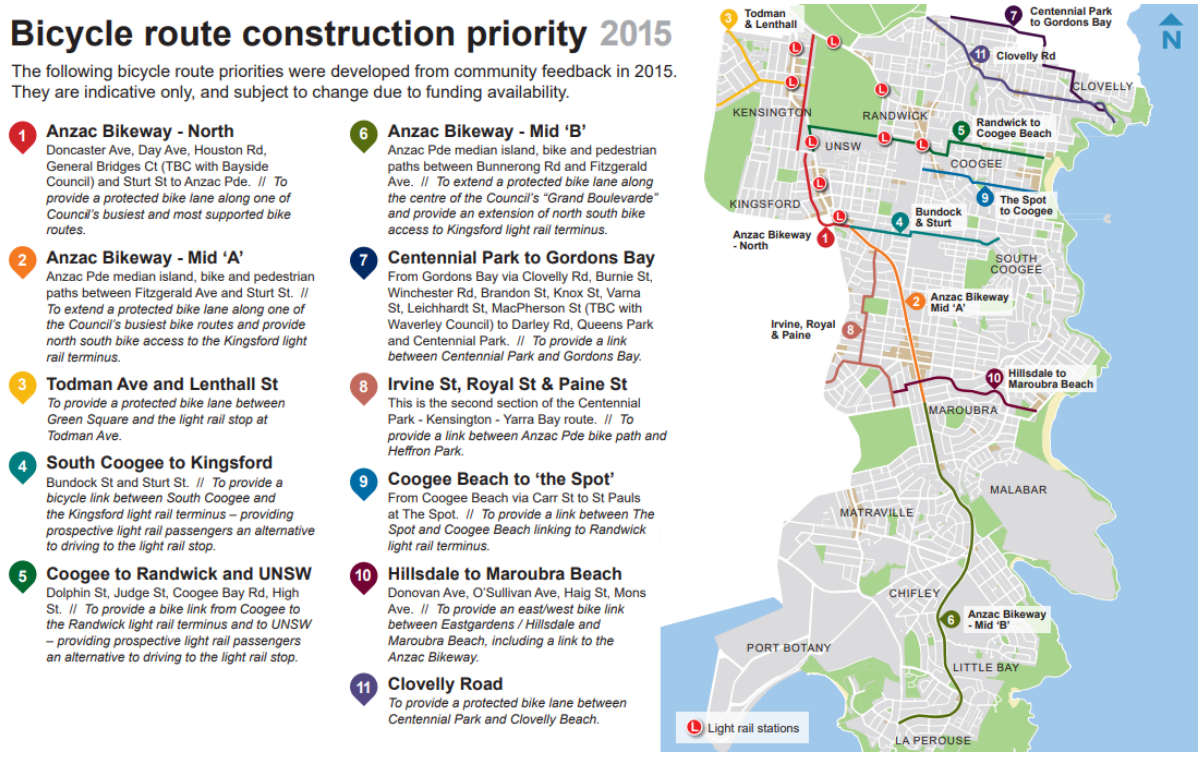
In December 2017, six Sydney councils (including Randwick City Council) devised the Inner Sydney Bike Share Guidelines. These guidelines set out expectations for bike share operators and users and apply across the six municipalities of Canada Bay, City of Sydney, Inner West, Randwick, Waverley and Woollahra.

Bike sharing programs offer flexibility and opportunities for people to choose active transport for short trips, especially for those who are less likely to own bicycles.

Several dockless bike sharing services are operational in the Randwick area, particularly near key hotspots near UNSW. Dockless bike sharing services provide users with the opportunity to ride on a bike anytime. Users would be required to download the app to reserve and unlock a bike.

Council's Bicycle Plan Route Priorities is shown in Figure 2.10.

Figure 2.10: Council Bicycle Plan Route Priorities



Source: Randwick City Council

In summary, the existing site is well-serviced by cycling facilities and infrastructure.

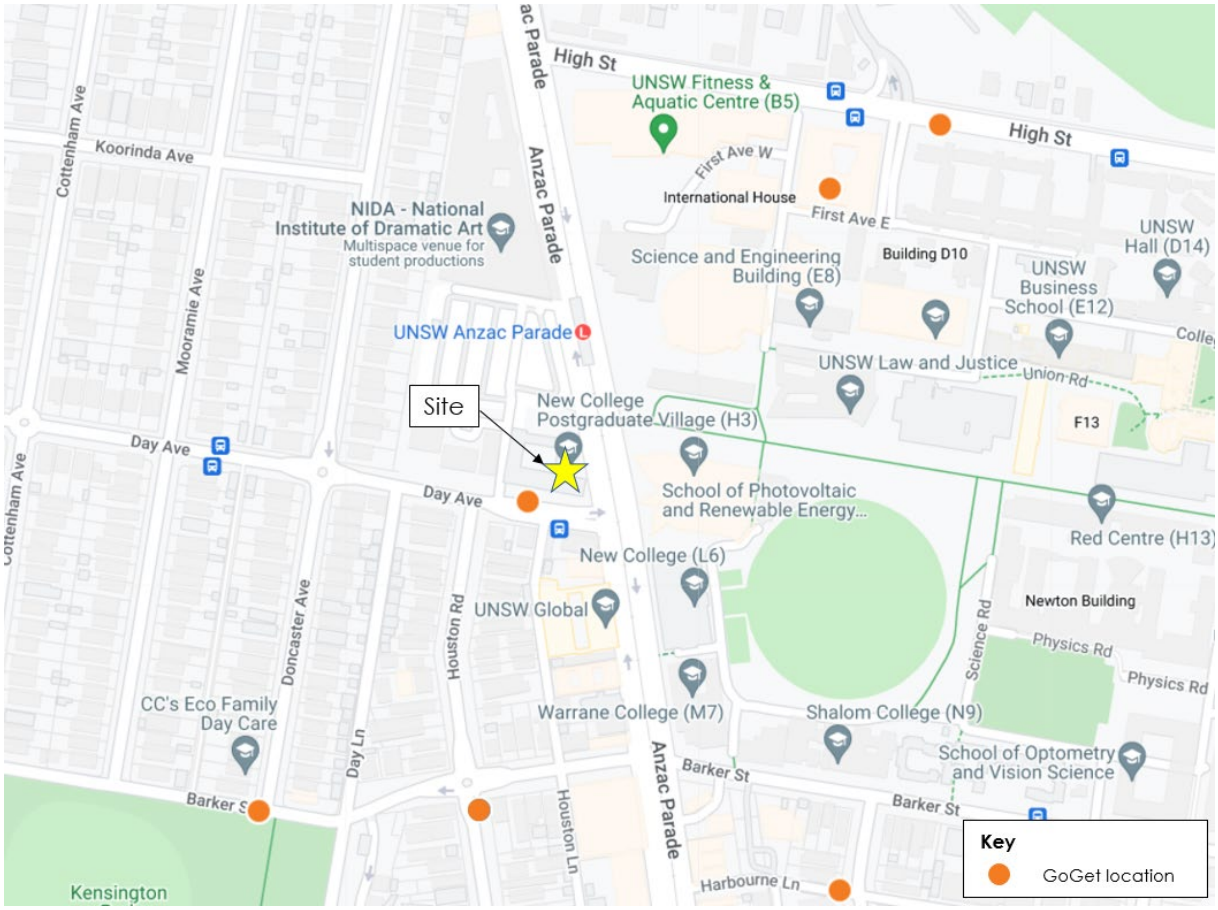
2.7 Car Share Facilities

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 is a car share company operating in Australia, with a number of vehicles positioned within the Kingsford/Randwick Area. However, several other public car share services are also available in the local area. Figure 2.11 shows the locations of existing GoGet vehicles and pods in the area.

A study was commissioned by the International Carsharing Association in 2016, to review the impact of the car share services in Australia after more than a decade of operation (Phillip Boyle & Associates, 2016). The study focuses on the City of Sydney council area which had about 20,000 users and 805 car share vehicles at the time of the study. The findings of the study indicate that car share users reduce their overall vehicle kilometres travelled (VKT) per year by 50 per cent compared with people who own a private vehicle. The resulting impact is reduced congestion on roads, lower levels of CO_2 pollution, fewer casualty accidents and an increase in use of active transport methods.

TTPP experience in recent Land and Environment Court Proceedings reveals that Randwick Council will equate 1 GoGet car share to 5 ordinary car parking spaces.

Figure 2.11: GoGet Car Locations



Source: GoGet.com.au

Students would be able to use the GoGet car share vehicles when they need to travel via car, without the cost and hassle of car ownership. These GoGet cars are booked based on the number of hours you need or for a full day via their app, mobile site or online booking system. Information regarding these GoGet car share facilities would be provided as part of their information pack once they move in.

Students also receive low membership fees as part of the GoStudent membership disincentivising private vehicle ownership, provided they:

- Study at an Australian university, TAFE or private college
- Have a full-time study load (3 or 4 subjects, or equivalent)
- Apply using a student email address (or show a student ID).

The student accommodation provider would be seeking to negotiate a bulk deal with GoGet to ensure students residing at the proposed development have the best options available.

2.8 BTS Journey to Work

Mode share patterns within the Kensington area were analysed using 2011 and 2016 method of travel to work (MTW) Census data from the Bureau of Transport Statistics (via the profile.ID.com.au website) to provide guidance on how future transport modes would likely be distributed within the area.

In addition, UNSW undertook travel surveys in 2019. The overall trends and modes of travel of staff/ students summarised in Table 2.2, alongside the general travel patterns of the surrounding Kensington Area.

Table 2.2: BTS Method of Travel to Work – Mode of Travel (Year 2011, 2016)

Model of Travel	2011 Census	2016 Census	2019 UNSW Survey
Car (incl. car passengers)	41%	37% (-4%)	15%
Bus	27%	28% (+2%)	54%
Train	5%	6% (+1%)	
Tram/Ferry	0%	0% (0%)	
Motorbike/ Bicycle	3%	4% (+1%)	6%
Walked only	10%	10% (0%)	20%
Worked at Home or Did not go to Work	14%	15% (+1%)	Other - 5%
Total	**100%**	**100%**	**100%**

Note: Other includes taxi, motorcycle & living on campus.

Table 2.2 indicates that the most popular mode of travel for UNSW staff/ students is public transport (54%) followed by walking (20%) and car (15%).

The data indicates that the car mode share of students is considerably lower than the typical travel patterns of employees working in the surrounding area with car being the most popular mode of travel (37%), following by public transport (34%).

The low car mode share for students is assumed to attributed to two factors; the high costs associated with owning and operating a car, and the accessibility of UNSW and the subject accommodation which is well serviced by public transport. On this basis, it is considered that car share is likely to be a similarly unpopular option amongst students.

The census data in Table 2.2 indicates that the current 2016 proportion of car trips have since decreased by four per cent from previous 2011 census data. Comparably, it is noted that a 37 per cent uptake in car travel is considered low compared to current MTW data within the Greater Sydney region, which is 57 per cent for car travel.

It is also noted that the impacts of the newly operational light rail corridor along Anzac Parade would most likely further reduce the number of car trips made to/from the Kensington area. Subsequently, it is be anticipated that public transport (i.e., bus, train, tram/ferry) uptake would show an increase in the results from the Census undertaken in 2021.

Early results from travel surveys that UNSW undertook in 2022 have not been published but indicate a decrease in respondents travelling by car.

3 Proposed Development

3.1 Proposal Description

The proposed development involves the construction of a student accommodation building with retail and commercial area (UNSW space) and an associated basement car park located at the UNSW western car park (215B Anzac Parade, Kensington).

The proposed development yield are as follows:

- 881 student accommodation units (953 beds)
- 1,197m^2 GFA of retail area
- 2,144m^2 GFA of UNSW area
- 250 basement car parking spaces (220 UNSW car spaces and 30 additional spaces i.e. 5 retail staff spaces and 25 IGLU staff spaces)
- 108 Iglu resident bicycle spaces
- 30 retail staff, commercial (UNSW) and Iglu Staff bicycle spaces
- 36 end of trip lockers
- 5 unisex showers/ change cubicles

There are ongoing discussions regarding the temporary replacement of the existing 220 car spaces (which will be lost during construction) into the secure car park at Randwick Racecourse. These spaces would then be reinstated in the new basement car park at the site after construction is complete.

License plate recognition and a boom gate would be used for access control to the parking in addition to the roller door when the car park is not open.

The proposed ground floor layout and first basement level is presented in Figure 3.1 and Figure 3.2 respectively.

Figure 3.1: Ground Plan

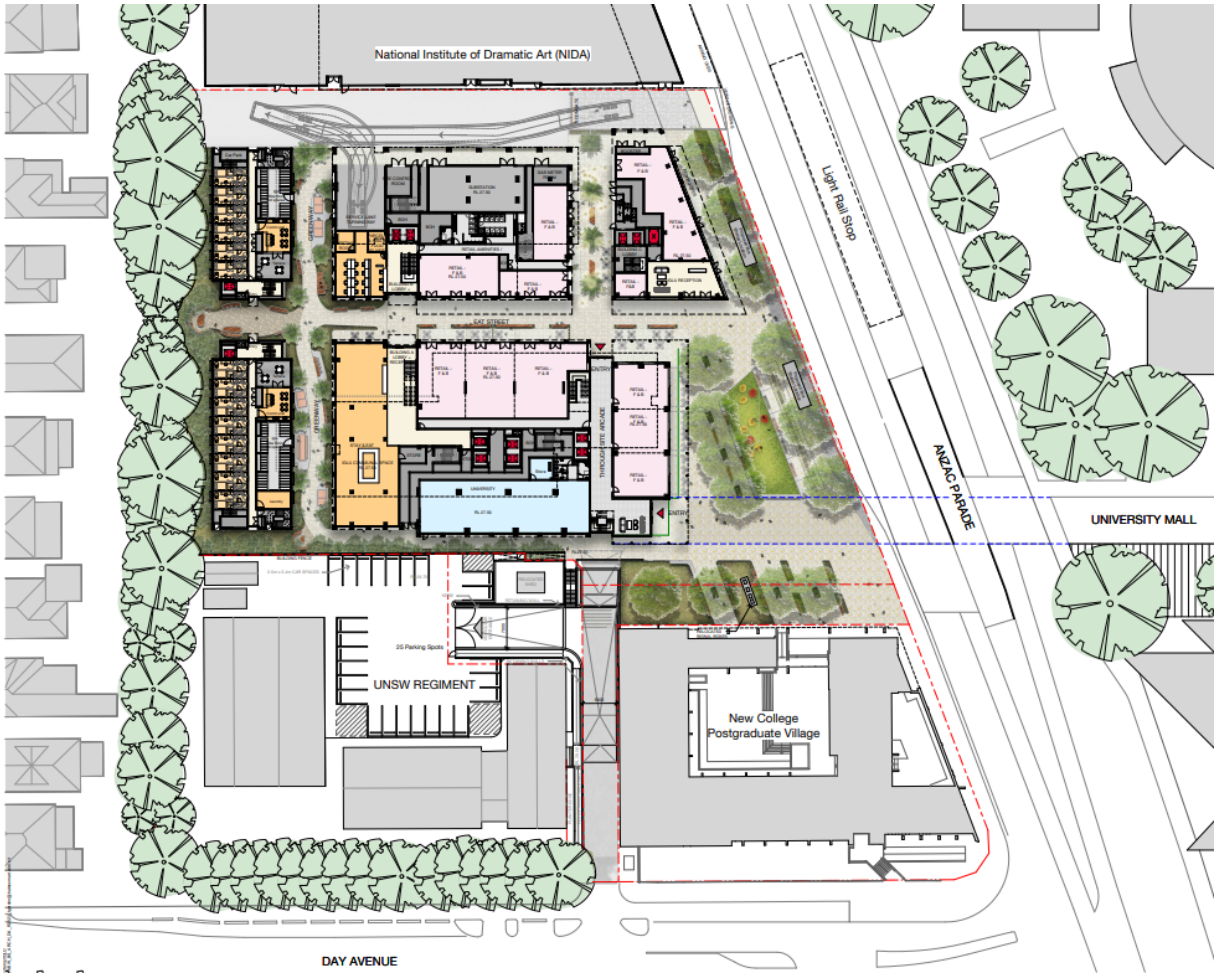


Figure 3.2: Basement Level 1

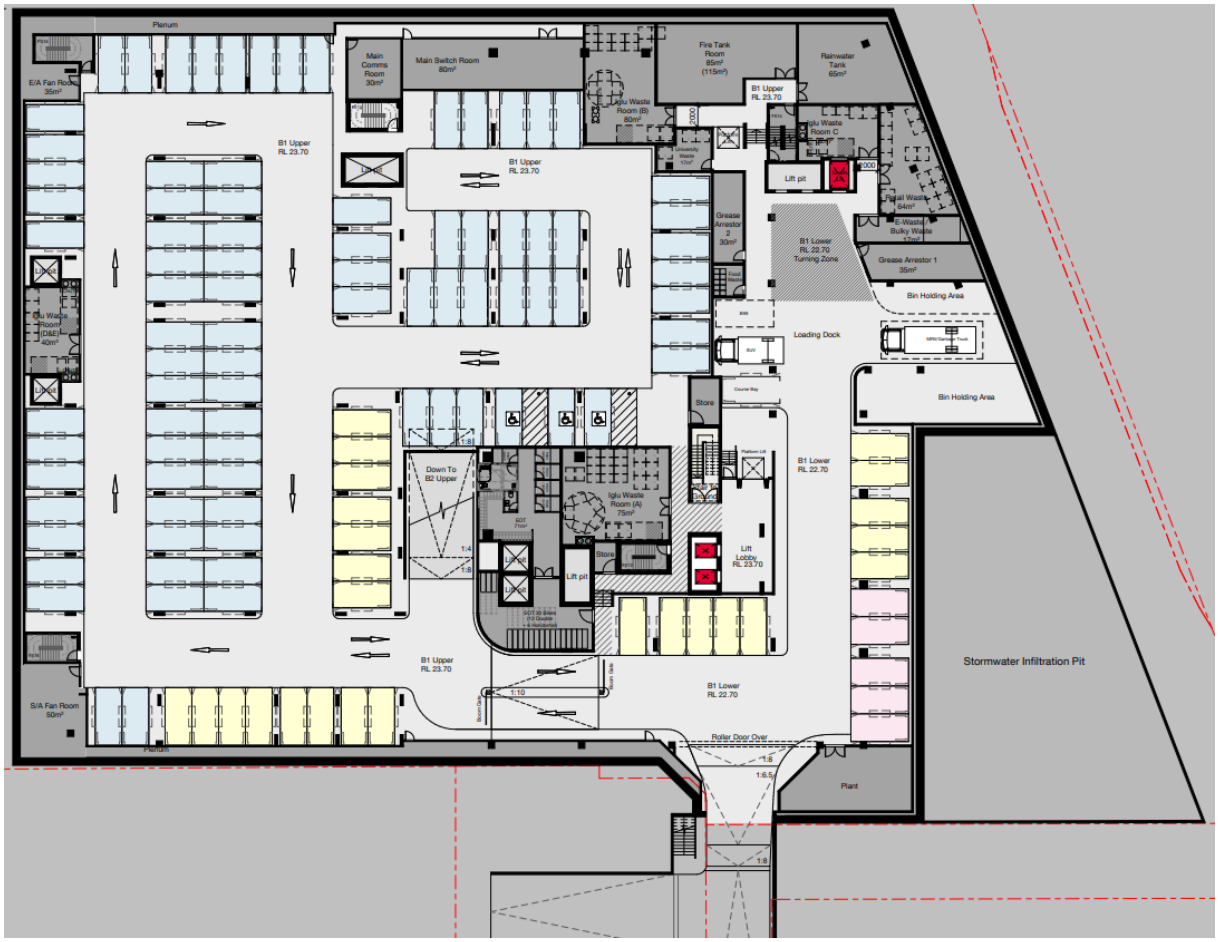


Figure 3.3: Basement Level 2

Additional amendments include changes to the Regiment driveway and security line, retention of emergency egress from New College as per easements, retention and enhancement of through site links for pedestrians.

Specifically, modification to the regiment driveway includes the re-grading of the existing access ramp to the regiment site from the Day Avenue access road. This ramp is designed in accordance with all relevant Australian Standards.

3.2 Proposed Vehicle Access for the Development

It is proposed to maintain the existing two-way vehicle site access off Day Avenue. A vehicle access ramp will be provided to the basement car park.

It is noted that Council has provided feedback to consider the provision of a cycleway along the driveway off Day Avenue. The driveway off Day Avenue is existing and is constrained by existing buildings and structures on either side. On this basis, it is not feasible to widen the driveway to facilitate the provision of a cycleway through the site.

In addition, UNSW strategy is for all cyclists to dismount and walk their bikes when on Campus grounds. Therefore, a linked cycleway between Day Avenue and the UNSW site would offer little benefit, with cyclists requiring to dismount shortly after leaving the site.

The proposed development will not have an impact on public transport services with the bus stops located along the site's frontage to be retained.

3.3 Proposed Refuse Collection and Loading Facilities

An on-site loading dock is to be provided containing four loading bays including one for a vehicle up to a Small Rigid Vehicle (SRV), one for a vehicle up to and including a Medium Rigid Vehicle (MRV) with a height less than 3.5m and two courier bays for B99 vehicles.

The loading dock within the basement will service all loading and unloading activities including waste collection associated with the proposed development. Waste collection is to be undertaken by a private contractor using a small truck.

It's noted that all rooms are fully furnished, therefore, students will not be required to move furniture.

As such, it is anticipated that all student loading and unloading activities would be generally carried by a car or possibly a small van based on typical residential servicing requirements. All student loading and unloading activities would be managed via a booking system or similar to ensure appropriate allocation is provided on-site and that all deliveries are managed throughout the day. This would allow students to have an allotted time to ensure their belongings are loaded and unloaded efficiently. This booking system would be particularly imperative during typical move-in periods, such as February and March.

A student accommodation site manager would be appointed to oversee and manage all loading and unloading activities associated with students. All tenants would be made aware and agree to the measures and conditions as part of their tenancy agreement.

Based on this, the proposed loading facilities are considered adequate and appropriate to manage the servicing requirements for the site. Further to this, all loading will be managed by a booking system or similar to ensure appropriate operation and use of the loading bay.

As recommended by TfNSW (see Appendix A), a loading dock management plan is to be prepared prior to issue of an Occupation Certificate.

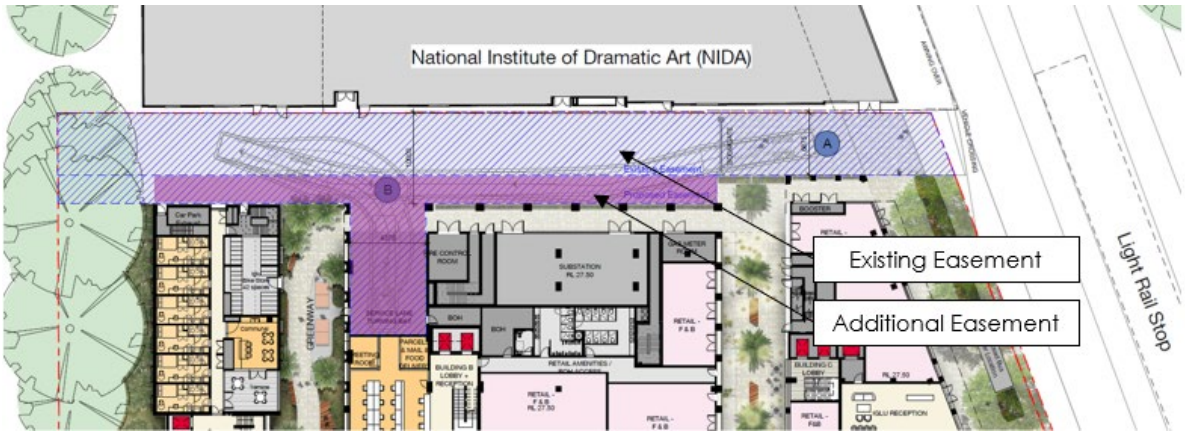
3.4 NIDA Service Access

Vehicles access the NIDA access easement on the subject site via Anzac Parade, via a 'left in, left out' arrangement.

The service access to NIDA will be maintained along the existing 6.875m wide right of way (ROW) to Anzac Parade. However, the NIDA service lane will be widened to 10m except for the first 17m from Anzac Parade which is to be retained at 6.875m. The widening will facilitate HRV & 12.5m bus manoeuvring requirements. - Refer swept path analysis in Appendix B. The throat width is to be maintained at 6.875m so as not to impact on the existing STA bus stops located immediately to the south of the existing cross over on Anzac Parade.

Figure 3.4 shows the existing easement for access in blue and the additional access easement to be provided in purple.

Figure 3.4: NIDA ROW Access



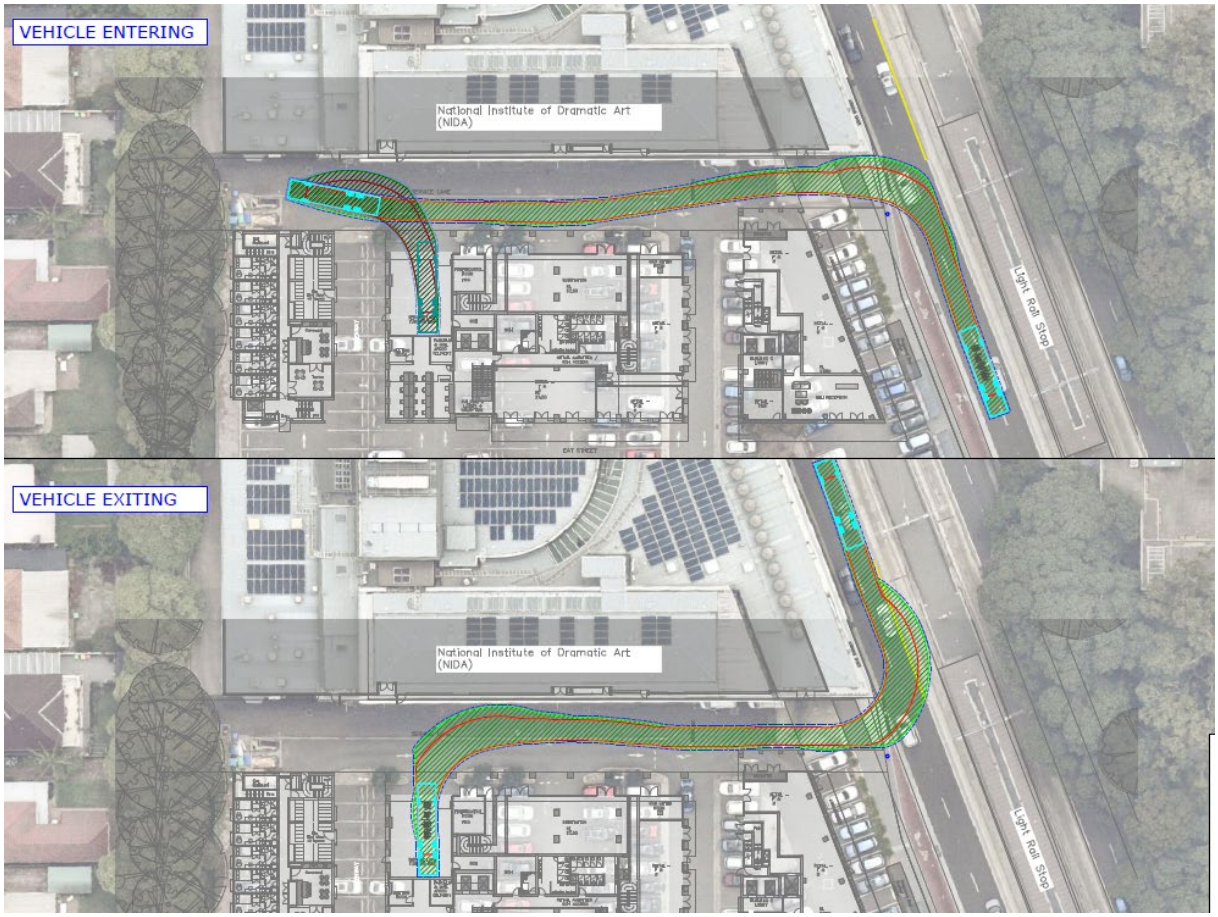
There is also a 2-3m wide pedestrian undercroft provided to the southern side of the service lane for the length of buildings B & C. This will provide safe, separated, covered pedestrian access between the NIDA stage doors and the proposed development and underground car park.

NIDA vehicles have informally taken advantage of the space available in the western car park site from time to time, outside of the area allocated for vehicular access to the NIDA building as outlined in the Plan of Subdivision Terms of Easement. This is possibly due to there being no kerbs at both the east and western ends of the interface between the NIDA service lane and the western car park.

In the proposed development, a turning area within the building has been allocated to facilitate a safe turn-around manoeuvre of NIDA's HRV service vehicles and 12.5m bus, should they need to turn back upon having entered the service lane from Anzac Parade. This will avoid any need for these vehicles to reverse onto Anzac Parade.

The proposed service lane, turning bay and swept path for a HRV is shown in Figure 3.5.

Figure 3.5: NIDA Truck Turning Circle



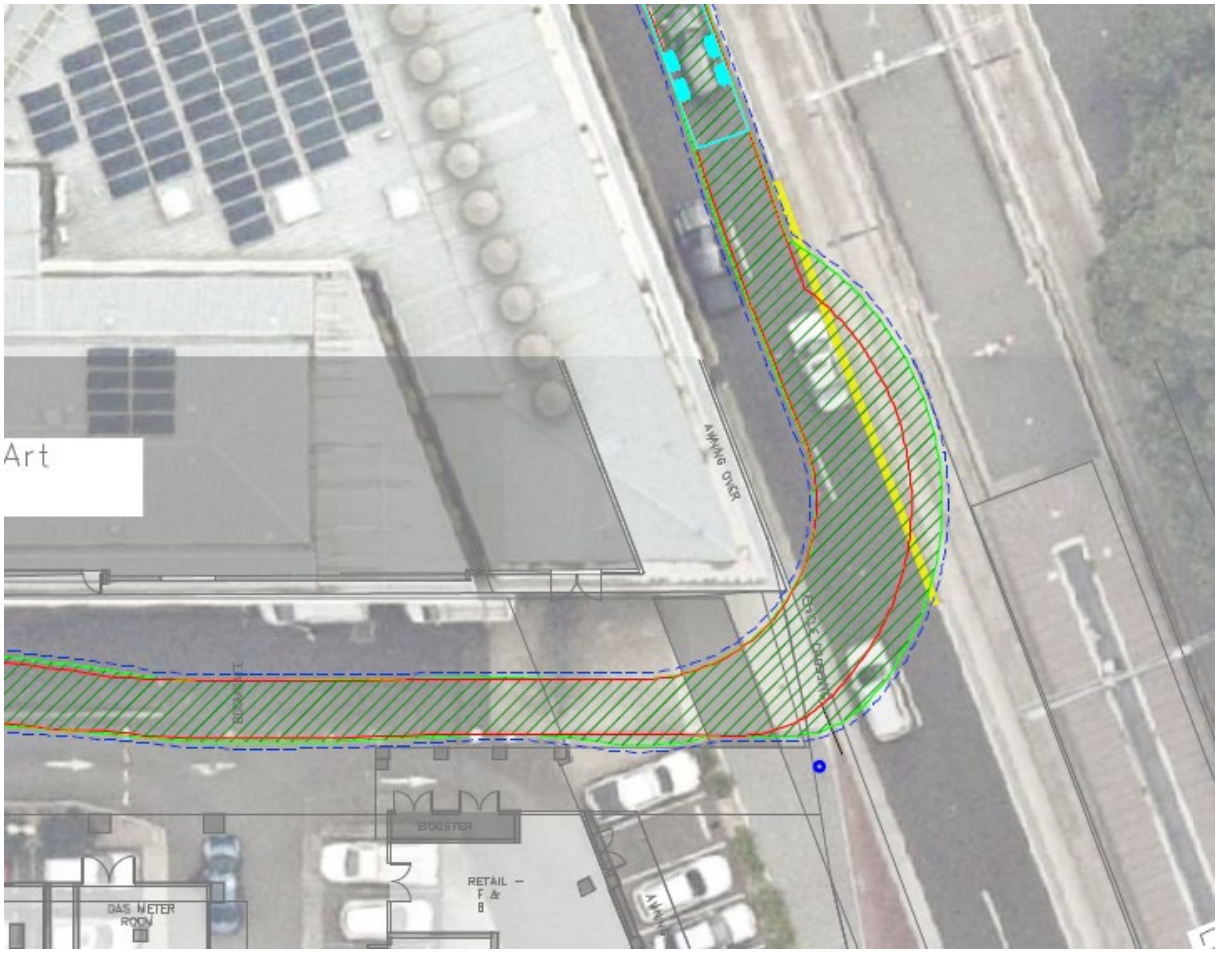
At Anzac Parade, the existing 6.875m vehicular crossover off Anzac Parade, as shown in Figure 3.6, will be retained.

Figure 3.6: NIDA Vehicular Crossover - Streetview

As can be seen Figure 3.6, opposite the NIDA access, the low kerb alongside the light rail track, has been removed and replaced with yellow line marking to allow large vehicles from the NIDA service lane to exit the site.

It is understood that the light rail was specifically designed as such to accommodate the HRV turn out of the site which was an existing movement and which would need to have been maintained as an objective of the project. The HRV swept path, as shown in Figure 3.7, confirms that the left tun out of the site by an HRV is possible by traversing the track, as was planned as part of the design of the light rail line.

Figure 3.7: HRV Swept Path at NIDA Access



It is noted that elsewhere on Anzac Parade, for example, at Abbotsford Road, the low kerb along the light rail track on Anzac Parade (as marked in Figure 3.8), has been removed for a short distance (with an associated yellow marking), to accommodate the wide sweep of large vehicles and buses to allow them to enter the light rail corridor for a short distance to facilitate their manoeuvre from the minor road.

Figure 3.8: Abbotsford Rd – Anzac Pde Intersection

This typical condition is proposed to continue, unchanged, during construction and following completion of the development.

4 Parking Assessment

4.1 Car Parking Requirement

4.1.1 Randwick Council

The subject site is located within the Randwick Education and Health Precinct Specialised Centre. The car parking requirements for the proposed development site have been assessed against Part E2 and Part B of Council's Development Control Plan (DCP) 2013. A summary of the car parking requirements for the proposed development is provided in Table 4.1.

Table 4.1: DCP Car Parking Requirements

Land Use	Size	Minimum DCP Car Parking Rate	Car Parking Requirement
Student Accommodation	953 beds	1 car space per 15 students/staff	64 spaces
Retail	1,197m² GFA	1 car space per 40m² GFA	30 spaces
Commercial (UNSW Space)	2,144m² GFA	1 car space per 100m² GFA	22 spaces
Existing car spaces to be reinstated	-	-	220 spaces
Total			**336 spaces**

Table 4.1 indicates that the proposed development would require at least 336 car parking spaces, in accordance with Council DCP requirements and number of existing car spaces to be reinstated.

4.1.2 State Environment Planning Policy (Housing) 2021

The State Environmental Planning Policy (Housing) 2021 (Housing SEPP) details parking controls for boarding houses and student accommodation sites.

However, the student accommodation portion of this development has been characterised as "campus student accommodation" under Section 3.3 of the State Environmental Planning Policy (Transport and Infrastructure) 2021 (T&I SEPP) due to its association with the University, the intent to rely on the Crown Development pathway, and location on campus. As such, the requirements of the Housing SEPP are not applicable to this development.

Notwithstanding, for the purposes of assessing the adequacy of parking, a review of the Housing SEPP rates has been undertaken.

Reference is made to Clause 24(2) of Housing SEPP. Clause 24(2) 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:

- *i-(i) for development on land within an accessible area—0.2 parking spaces for each boarding room,*
- *(ii) otherwise—0.5 parking spaces for each boarding room,*
- *j- if a relevant planning instrument specifies a requirement for a lower number of parking spaces—the lower number specified in the relevant planning instrument.*

The Housing SEPP states that an "*accessible area*" means land that is within: -

- *400m walking distance of—*

  (i) a public entrance to a light rail station, or

  (ii) for a light rail station with no entrance—a platform of the l400 metres walking distance of a public entrance to a light rail station or, in the case of a light rail station with no entrance, 400 metres walking distance of a platform of the light rail station, or
- *400m walking distance of a bus stop used by a regular bus service, within the meaning of the Passenger Transport Act 1990, that has at least 1 bus per hour servicing the bus stop between—*

  (i) 6am and 9pm each day from Monday to Friday, both days inclusive, and

  (ii) 8am and 6pm on each Saturday and Sunday.

Based on the above, the proposed development is in an accessible area. Therefore, a rate of 0.2 parking spaces for each boarding room has been adopted, which results in a requirement of 177 car parking spaces.

Clause 24(2)-j of Housing SEPP indicates that the development should provide the lower of 177 and 64 (DCP parking requirement-see Table 4.1) car spaces. Therefore, 64 car spaces are required to be provided for the student accommodation land use based on the Housing SEPP.

4.2 Adequacy of Car Parking Provision

4.2.1 Student Accommodation

It is proposed to provide a basement car park with 250 car spaces of which 25 spaces will be allocated to Iglu staff only. There will be a nil provision of car spaces for students in the student accommodation which is less than the car parking requirements set out in the relevant Council DCP.

Providing nil parking for students in student accommodation sites is in line with current practice. Student accommodation sites do not typically generate a demand for car parking,

as such accommodation sites are specifically targeted at students who do not have a car and attend nearby tertiary education campuses. In addition to this, the site is well-serviced by high frequency public transport services, including local amenities, services and recreational facilities.

Notably, Randwick City Council stipulates a nil car parking requirement for student accommodation in Part E6 of the DCP, which is specific to Kensington and Kingsford town centres. This is reflective of typical car parking demand at student accommodation sites where car ownership is low. The proposed site does not fall within the area that this part of the DCP applies to, however, noting that the site is located directly opposite UNSW, the nil car parking requirement is even more applicable at this site.

Notably, the Randwick Integrated transport strategy features the goal to reduce the proportion of private vehicle trips from 2018-2019 baseline of 58% to 45% by 2031. Reduction/limited car parking availability will be a critical factor in achieving this goal.

Furthermore, the majority of other student accommodation sites provide nil parking for students. Table 4.2 and Table 4.3 contains a list of existing student accommodation developments that provides nil on site car parking.

Table 4.2: UNSW Student Accommodation Sites

Provider	No. of Beds	No. of Car Parking Spaces
UNSW Colombo House	242	0
UNSW Fig Tree Hall	158	0
UNSW International House	170	0
UNSW Kensington Colleges (Baxter, Basser & Goldstein)	540	0
UNSW Creston College	25	0
UNSW New College	247	0
UNSW New College Village	315	0
UNSW Shalom College	133	0
UNSW Warrane College	140	0
UNSW Village	1,021	0
UNSW Barker Street	230	0
UNSW University Terraces	405	0

Table 4.3: Other Student Accommodation Sites

Provider	Address	No. of Beds	Approx. Walking Distance to the Closest University	No. of Car Parking Spaces	No. of Motorcycle Parking Spaces
Iglu - Chatswood	73 Albert Ave, Chatswood	395	NA (10 minute train trip to Macquarie University	0	-
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	0
Iglu – Central Park	6 Central Park Ave, Chippendale	770	250m (University of Technology Sydney)	0	-
Urbanest – Cleveland Street	142 Abercrombie St, Redfern	461	885m (University of Sydney, Main Campus)	0	0
Urbanest – Wattle Street	473 Wattle Street, Ultimo	665	300m (University of Technology Sydney)	0	86
Urbanest – Haymarket	83 Quay Street	334	320m (TAFE NSW, Ultimo)	0	-
Urbanest – Darlington	150 City Road	471	200m (Uni of Sydney, Main Campus)	0	-
UniLodge @ UNSW	1 Lorne Ave, Kensington	231	700m (University of NSW)	0	-
Urbanest – Quay Street	83 Quay Street, Haymarket	334	260m (Sydney TAFE)	0	0

As shown above, there are numerous high occupancy student accommodation sites that provide no car parking.

Further to this, as part of Cardno's traffic assessment of the approved student accommodation development at 157-163 Cleveland Street, Redfern, a survey questionnaire was conducted to understand the travel patterns of existing students living at Urbanest Quay Street, Haymarket which is located approximately 300m from UTS and 1km from University of Sydney.

The university offers discounted parking permits for commercial car parks in the surrounding areas. However, survey data from Cardno's traffic report suggest that students generally do not drive.

The key findings of the surveys from the Cardno report were as follows:

- *76% of residents studied at either University of Sydney or UTS (within walking distance of either development site)*
- *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 purpose (going out, dinner etc), **0% of the respondents travelled via car** as a driver, 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 vehicle of choice for the respondents; 14% said that they owned or planned to own a bicycle during their stay at urbanest. This 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 (note that this compares consistently with the requirements of the draft City of Sydney DCP for student accommodation that bicycle parking should be provided at rates of 1 per 6 beds, or approximately 17% of demand).*
- *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, with a majority of respondents travelling either by public transport or 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 education campuses such as UNSW, NIDA, TAFE NSW Randwick College etc.

Further to this, existing on-street car parking near the site is limited and restricted to short-term car parking and so, students 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.

In addition to this, the nil car parking provision of the student accommodation site 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 tertiary educational campuses. This is considered to align with Council's key objectives to maximise walking and cycling and discourage car use, particularly single occupancy car trips.

Further, students will be able to utilise the car sharing facilities adjacent to the site as shown in Section 2.7.

Taking the above into consideration, the proposed car parking provision 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.

The car parking provision would be monitored regularly and managed by the management team to ensure appropriate car park operation and minimal impacts on the surrounding road network. In addition to this, conditions would be in place for all students and form part of their tenancy agreement to mitigate any parking impact on the surrounding road network.

4.2.2 Tenancy Agreements

As indicated above, conditions will be in place for all students, which will form part of their tenancy agreement. The tenancy agreements will include the following key points:

- unauthorised parking will be prohibited and any breach of this may lead to termination of tenancy agreements
- all students will forfeit the right to apply for any resident parking permits
- all students moving into/out of the site will need to coordinate with the management team to ensure appropriate allocation of loading facilities and to stagger arrival times such that students do not move in at the same time. In addition to this, students will be required to adhere to their designated time slot for all loading and unloading activities.

Any breaches in the above agreement could result in termination of the agreement. In addition to this, a contact phone number will be provided to students to report any potential breaches of parking or other matters.

4.2.3 Retail/ Commercial (UNSW space)

It is proposed to provide nil commercial (UNSW) car parking spaces and public transport use will be encouraged for both staff and visitors.

It is also proposed to provide 5 retail car spaces which is a shortfall of 25 car spaces when compared to the DCP requirements.

However, UNSW offers parking to anyone who pays for a permit (when permit times apply). This may include retail staff and patrons. UNSW's current parking regime does not allocate spaces to a specific user, within the conditions of relevant parking permit zones.

License plate recognition and a boom gate would be used for access control to the parking in addition to the roller door when the car park is not open.

Notwithstanding this, it is assumed that visitors of the retail space would comprise primarily of nearby residents, and university students and staff who will be able to walk from the UNSW campus or student accommodation.

Therefore, the parking provision is considered acceptable to satisfy the parking demand of the retail/ commercial area.

4.3 Motorcycle and Bicycle Parking Requirements

4.3.1 State Environmental Planning Policy (Housing) 2021

As discussed above, the requirements of the Housing SEPP are not applicable to this development. Notwithstanding, for the purposes of assessing the adequacy of parking, a review of the Housing SEPP parking rates has been undertaken.

Clause 69 (1) of the Housing SEPP states the following in relation to bicycle and motorcycle parking for co-living housing:

> *(1) Development consent must not be granted for development for the purposes of co-living housing unless the consent authority is satisfied that -*
>
> > *(h) the co-living housing will include adequate bicycle and motorcycle parking spaces.*

Based on the above the bicycle and motorcycle parking requirements for the site have been based on an analysis of the DCP requirements and survey data of comparable student accommodation sites. This analysis detailed in the following.

4.3.2 Council Development Control Plan 2013

In accordance with Council's DCP 2013, motorcycle and bicycle parking would be required as per the requirements summarised in Table 4.4 and Table 4.5 respectively.

Table 4.4: Council DCP Motorcycle Parking Requirements

Land Use	Size	Motorcycle Parking Rate	Parking Requirement
Student Accommodation	881 rooms	1 space per 5 bedrooms	177 spaces
Retail use	1,197m² GFA	5% of the car parking rate	1 space
Commercial Use (UNSW space)	2,144m² GFA		1 space
Total			**179 spaces**

Table 4.4 shows that as per the DCP, the development would require a total of 179 motorcycle spaces.

Table 4.5: Council DCP Bicycle Parking Requirements

Land Use	Size	DCP Minimum Bicycle Rates		DCP Bicycle Requirement
		Resident/Employee	Customer/Visitor	
Student Accommodation	881 rooms	1 bike space per 2 rooms	1 space per 10 rooms	441 resident spaces 89 visitor spaces
Retail use	1,197m² GFA (5 car spaces)	1 bike space per 10 car parking spaces		1 space
Commercial Use (UNSW space)	2,144m² GFA (nil car spaces)			0 spaces
Total				**531 spaces**

As such, the proposed student accommodation would require 441 resident/employer bicycle parking, 89 customer/visitor bicycle parking and 1 bicycle space for retail use.

4.3.3 Iglu Survey Data

A survey of car, bicycle and motorcycle parking has been undertaken within nine Iglu student accommodation sites, including five sites in New South Wales (NSW), two in Victoria (VIC) and two in Queensland (QLD). The survey included a count of demand, once a month between September 2019 and July 2022.

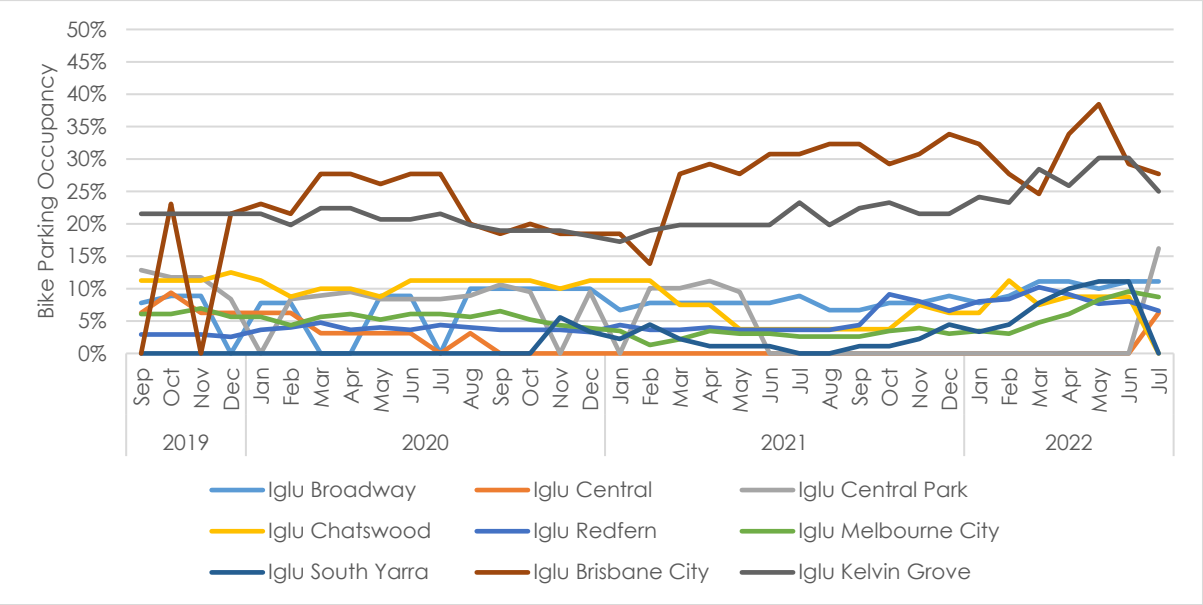
The surveyed sites provide bike parking at a ratio ranging between 1 space in 3 beds and 1 space in 6 beds as summarised in Table 4.6. None of the sites provided motorcycle parking.

Table 4.6: Bike Parking Utilisation at Iglu Properties

Property	Property Characteristics				Bike Parking Demand			
	State	Number of beds	Bike Spaces Provided	Ratio of bike spaces provided per bed	Average bike spaces used	Ratio of Average bike spaces used per bed	Max. bike spaces used	Ratio of Max bike spaces used per bed
Iglu Broadway	NSW	271	90	1 in 3	7	1 in 39	10	1 in 27
Iglu Central	NSW	98	32	1 in 3	1	1 in 123	3	1 in 33
Iglu Central Park	NSW	770	179	1 in 4	17	1 in 45	29	1 in 27
Iglu Chatswood	NSW	395	80	1 in 5	7	1 in 56	10	1 in 40
Iglu Redfern	NSW	635	274	1 in 2	14	1 in 47	28	1 in 23
Iglu Melbourne City	VIC	594	230	1 in 3	11	1 in 54	22	1 in 27
Iglu South Yarra	VIC	448	90	1 in 5	4	1 in 128	10	1 in 45
Iglu Brisbane City	QLD	414	65	1 in 6	17	1 in 24	25	1 in 17
Iglu Kelvin Grove	QLD	454	116	1 in 4	25	1 in 18	35	1 in 13
Average						**1 in 59**		**1 in 28**

The bike parking demand during the survey period was consistently lower than 15% occupancy for the NSW and VIC sites, while the QLD sites saw demand ranging between 15-40% occupancy. The occupancy data per month is shown in Figure 4.1, while Table 4.6 details the average and maximum demand over the survey period.

Figure 4.1: Bike Parking Occupancy



Based on the maximum demands summarised in Table 4.6, Iglu student accommodation sites generate a bicycle parking demand of around 1 space in 28 beds.

This rate applied to the proposed development with 953 beds equates to a requirement of 35 bicycle parking spaces.

4.3.4 Proposed Bicycle and Motorcycle Parking

It is proposed to provide a total of 108 bicycle parking spaces for student use. This equates to a rate of 1 bicycle space per 10 beds.

The provision of bicycle parking ensures that there is an oversupply of bicycle parking, above the anticipated bike parking demand, which is estimated to be 1 space per 28 beds based on the survey data in Table 4.6. An oversupply of parking will encourage residents to cycle and is considered an effective measure to influence people's travel choices.

In addition to this, a total of 30 retail, commercial (UNSW) and iglu staff bicycle spaces and associated end-of-trip facilities i.e., 36 lockers and 5 shower/ change cubicles are to be provided.

It is considered that the bicycle parking provision is sufficient for the current year, public transport being the main travel mode and bicycle usage being relatively lower. However, as

part of the Green Travel Plan (GTP) initiatives of the site, it is proposed to gradually increase bicycle usage. Monitoring the bicycle parking demand of the site will be undertaken regularly, to enable additional bicycle parking spaces to be provided in the future, as demand increase. The GTP aim would be ensure that the site has parking provision that exceeds the bicycle parking demand by around 20%, in order to encourage cycling to and from the site.

On this basis, the proposed preliminary bicycle parking provision is considered sufficient and acceptable.

No motorcycle parking is proposed on-site, which is consistent with other Iglu student accommodation sites. Notably, none of the sites in Table 4.6 contain motorcycle parking on-site. Additionally, it is appropriate considering that no car parking is provided and that it will support the key measure of the proposed GTP to encourage and take advantage of the public transport opportunities around the site.

4.4 Car Share

As discussed in Section 2.8, car usage and mode share amongst students is low. It is expected that that usage of car share vehicles would be similarly low. Therefore, it is expected that the existing car share vehicles located around the site would be sufficient to accommodate any car share demand.

4.5 Car Parking Layout

The proposed car park and associated access arrangements have been designed in accordance with requirements of the Australian Standard for off-street car parking, AS2890.1 (2004).

The car spaces have been designed in accordance with a Class 2 parking facility, with minimum dimensions of 2.5m wide by 5.4m long spaces with a 5.8m aisle.

The accessible parking spaces have been designed in accordance with the Australian Standard for Off-street Parking for People with Disabilities, AS2890.6 (2009) with dimensions of 2.4m wide by 5.4m long space with an adjoining shared area of the same dimensions.

The bicycle parking spaces have been designed in accordance with AS2890.3 (2015), with dimensions of 0.5m wide, 1.8m long with a minimum aisle width of 1.5m.

Swept path analysis of the proposed car parking layout is presented in Appendix C.

5 Traffic Assessment

5.1 Traffic Generation

Transport for New South Wales (TfNSW) provides traffic generation rates for different land uses in their Guide to Traffic Generating Developments 2002 (Guide) and in their technical direction TDT 2013/4a containing revised rates. It is noted that these guides do not have specific traffic generation rates for student accommodation sites and thus, the proposed development traffic has been assessed against the traffic generation rates set out for high density residential developments.

A summary of the net additional traffic generation estimates is provided in Table 5.1.

Table 5.1: Net Additional Traffic Generation Estimates

Land Use	Yield	Trip Rate		Trip Generation Estimate	
		AM Peak	PM Peak	AM Peak	PM Peak
Retail	1,197m² GFA	1.15 trips[2] per 100m²	2.3 trips[1] per 100m²	+14 trips	+28 trips
Commercial (UNSW space)	2,144m² GFA	1.6 trips per 100m²	1.2 trips per 100m²	+34 trips	+26 trips
Total				+48 trips	+54 trips

[1] *50% factor has been applied to the PM peak rate of 4.6 trips per 100m² (TfNSW Guide) to allow for the low parking provision, and noting that majority of customers would be from the University, walking to the site*
[2] *It is generally assumed that half the trips generated by retail in the PM peak are generated in the AM peak.*

Table 5.1 indicates that the proposed development would likely result in an additional 48 trips in the AM Peak and additional 54 trips in the PM peak hour. This is considered low and is not expected to result in any adverse impacts on the surrounding road network.

It would not register any difference in any traditional traffic modelling program in with and without development traffic scenarios,

In any event, given the nature of the proposed development and its proximity to key tertiary educational campuses (e.g., UNSW), a Green Travel Plan (GTP) would be suitable for this development to encourage sustainable travel and a mode shift away from car travel.

6 Construction Traffic Impact

A detailed Construction Traffic Management Plan would be prepared prior to the commencement of construction activities. However, a preliminary review of the construction details for the project are set out below.

It is noted that without the engagement of contractors, finalised design or any authority approvals the below information is indicative only.

6.1 Construction Activity and Staging

Once a construction contractor has been engaged, the construction staging and timing will be refined and details of construction activities will be provided.

The indicative construction stages are:

- Demolition
- Excavation
- Construction
- Fitout/ finishes and commissioning
- External works and civil works

6.2 Work Hours

It is proposed that construction works be only undertaken during the approved hours consistent with any relevant consent conditions. At this stage, the proposed development has not been approved, however, it is expected there will be a consent condition stipulating similar work hours to the following:

- 7:00am – 5:00pm, Monday to Friday, Saturday
- No work to be undertaken on Sundays or Public Holidays.

Any works outside the above work hours (as amended by the relevant consent conditions) will be subject to a separate application to Council.

6.3 Construction Staff Parking

Due to the constraints of the site, on-site parking is not feasible. Therefore, parking for construction staff will not be provided.

Instead, all construction staff will be encouraged to use public transport to travel to/from the site and instructed not to park on public roads.

This will be incorporated in the workers induction program to ensure minimal parking impact on the surrounding streets.

Taking the above into consideration, it is proposed to implement the following measures to encourage workers to use public transport:

- provide an on-site tool drop-off and storage facility to allow tradespeople to drop off and store their specific machinery for the project to prevent the need to drive equipment in everyday
- inform staff during the induction and regular management meetings that no on-site car parking will be available for staff
- instruct staff to use public transport to access the site during the induction and regular management meetings, and
- display public transport timetable information at key locations within the work site and ensure that it is easily accessible by staff.

6.4 Construction Vehicle Types

All construction activities will generally be carried out by small to heavy rigid vehicles, no larger than a 12.5m long heavy rigid vehicle. It may also be necessary to use 19m long articulated vehicles for larger deliveries to/from the works site (e.g. delivery of plant equipment).

6.5 Construction Vehicle Routes

The construction vehicle routes to and from the site are likely to be made via the M1, Anzac Parade and Day Avenue.

To minimise the impact of construction traffic on local streets, dedicated construction routes will be developed to provide the shortest distances to/from the arterial road network.

6.6 Construction Traffic Generation

It is expected that there will be up to 4 vehicles per hour during construction, but this may increase to 6-8 during any concrete pours.

6.7 Pedestrian and Cyclists

Pedestrian and cycle safety shall be maintained at all times, particularly when trucks are entering and exiting the site. This will be achieved by site personnel managing vehicles entering/leaving the site.

6.8 Public Transport

Construction activities are not expected to result in any impact on existing public transport services or infrastructure.

6.9 Emergency Vehicles

No special provisions for emergency service vehicles are required as part of the proposed construction works. Emergency vehicle access shall be maintained at all times.

6.10 Construction Traffic Management Plan

A site-specific Construction Traffic Management Plan is to be submitted to TfNSW and Council to appropriately detail the staging, timing and activities during the construction phase, indicate the designated haul routes, explain traffic control measures to be implemented at the site and assess the construction traffic volumes.

Access to Nida's service road is to be continuously maintained throughout construction.

This plan will be developed in consultation with relevant stakeholders and neighbouring properties.

7 Conclusions

This report discusses the traffic and parking implications of the proposed student accommodation at UNSW Western Carpark located at 215B Anzac Parade, Kensington. The key findings of the report are:

- The development proposal aims to construct a student accommodation development, comprising of 881 rooms, 1,197m^2 of retail space, 2,144m^2 of commercial space (UNSW space) and associated basement car park, containing 250 car parking spaces, 108 resident bike spaces and 30 retail, commercial (UNSW) and Iglu staff bicycle parking spaces.
- Conditions would be imposed on students through their student handbook, which would be referenced as part of their tenancy agreement, to ensure that no car parking spaces would be assigned to students, all students would forfeit the right to apply for any resident permits and all students moving into/out of the site would need to coordinate with the management team. Any breach of this agreement may result in termination of their tenancy agreement.
- Given the nature of the use and proximity to high frequency public transport links, car ownership within the proposed development would most likely be low. It is noted that a number of GoGet car share facilities are available for students surrounding the site, should car travel be necessary.
- Vehicle access to the site would be maintained off Day Avenue.
- The proposed development is anticipated to generate an additional 48 trips during the AM peak hour and an additional 54 trips during the PM peak hour. The traffic implications arising from the proposed development is considered negligible.
- Travel survey at similar student accommodation sites indicate that most occupants either walk or use public transport to travel to/from the site.
- It is proposed that a Green Travel Plan (GTP) would be implemented to ensure sustainable modal split targets are achieved for the development. A GTP document has been prepared to accompany the DA submission, noting that this GTP would have to be updated post-occupation of the site.

To conclude, the traffic and parking implications associated with the proposed development is not expected to result in any noticeable impacts on the surrounding road network, with management measures in place to ensure minimal traffic and parking impact.

Appendix A

TfNSW Comments

Transport for NSW

11 August 2023

TfNSW Reference: SYD23/00843/01
Council's Reference: DA2023/0222 (CNR-57871)

Mr Ray Brownless
General Manager
Randwick City Council
30 Frances Street
Randwick NSW 2031

Attention: Louis Coorey

CONSTRUCT MIXED USE STUDENT ACCOMMODATION DEVELOPMENT
215B ANZAC PARADE, KENSINGTON

Dear Mr Brownless,

Reference is made to Council's correspondence, concerning the abovementioned development application which was referred to Transport for NSW (**TfNSW**) for comment in accordance with clause 2.119 and 2.122 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021*.

TfNSW has reviewed the application and requests the conditions at **TAB A** are included in any determination issued by Council. Advisory comments are also provided at **TAB A** for Council's consideration in the determination of the application.

For more information, please contact Matthew Houlden, Land Use Planner via email at development.sydney@transport.nsw.gov.au.

Yours sincerely,

Rachel Davis
Senior Land Use Planner
Land Use Assessment Eastern
Planning and Programs, Greater Sydney Division

TAB A.

Recommended Conditions:

TfNSW requests that the following conditions are included in any consent issued by Council:

1. Any improvements integral to the future use of the site, are to be wholly within the freehold property unlimited in height or depth along the Anzac Parade boundary.

2. Detailed design plans and hydraulic calculations of any changes to the stormwater drainage system are to be submitted to TfNSW for approval, prior to the commencement of any works. Please send all documentation to development.sydney@transport.nsw.gov.au

   A plan checking fee will be payable and a performance bond may be required before TfNSW approval is issued.

3. The developer is to submit design drawings and documents relating to the excavation of the site and support structures to TfNSW for assessment, in accordance with Technical Direction GTD2020/001.

   The developer is to submit all documentation at least six (6) weeks prior to commencement of construction and is to meet the full cost of the assessment by TfNSW. Please send all documentation to development.sydney@transport.nsw.gov.au

   If it is necessary to excavate below the level of the base of the footings of the adjoining roadways, the person acting on the consent shall ensure that the owner/s of the roadway is/are given at least seven (7) days notice of the intention to excavate below the base of the footings. The notice is to include complete details of the work.

4. The proposed development should be designed such that road traffic noise from Anzac Parade is mitigated by durable materials in order to satisfy the requirements for habitable rooms under Clause 2.120 (3) of State Environmental Planning Policy (Transport and Infrastructure) 2021.

5. If construction works will impact pedestrian or vehicular access to the bus stop adjacent to the site on Anzac Parade, the bus stop shall be temporarily relocated to a suitable location to be determined in consultation with Transdev John Holland Buses (NSW) Pty Ltd and TfNSW. After the construction works affecting access to the bus stop are complete, the bus stop and shelters shall be returned to the bus stop. These works shall be at no cost to TfNSW.

6. The proposed permanent bus shelter relocation shall be undertaken following consultation with Transdev John Holland Buses (NSW) Pty Ltd and TfNSW. These works shall be at no cost to TfNSW.

7. A revised Green Travel Plan should be prepared in consultation with TfNSW and a copy of the final plan should be submitted for TfNSW endorsement, prior to the issue of the Occupation Certificate. Please send the GTP for review to development.sco@transport.nsw.gov.au.

8. A Loading Dock Management Plan shall be prepared in consultation with TfNSW (via: development.sco@transport.nsw.gov.au). The Plan needs to specify, but not be limited to, the following:
   - Details of the development's freight and servicing profile, including the forecast freight and servicing traffic volumes by vehicle size, frequency, time of day and duration of stay.
   - Swept paths of vehicles entering and exiting the loading dock.
   - Management of any queuing along Day Avenue as a result of the proposed loading dock arrangement.
   - The details of alternate loading zones to redirect vehicles if there is extensive queuing at the access to the loading dock.
   - Management of incidents at the access to the loading dock.
   - Loading dock management details including measures to minimise freight and service vehicle movements during peak periods.
   - Management of conflicts between cars accessing the car park and vehicle movements to/from the loading dock.
   - Actions to be taken to reduce the likelihood of conflict at the NIDA Anzac Parade driveway (between road users travelling on Anzac Parade or the Anzac Parade footpath) and to ensure that access to the existing driveway will be restricted to NIDA service vehicles only.

   A copy of the final plan should be submitted for TfNSW endorsement, prior to the issue of the Occupation Certificate.

9. A Construction Traffic Management Plan detailing construction vehicle routes, number of trucks, hours of operation, access arrangements, impact on pedestrians and vehicles along Anzac Parade and traffic control should be submitted to Council and TfNSW (via: development.sco@transport.nsw.gov.au) for approval prior to the issue of a Construction Certificate.

10. A Road Occupancy Licence (ROL) should be obtained from the Transport Management Centre (TMC) for any works that may impact on traffic flows on the subject section of Anzac Parade during construction activities. A ROL can be obtained through https://myrta.com/oplinc2/pages/security/oplincLogin.jsf

Advisory comments:

1. **NIDA Access Driveway**

Comment:
TfNSW has concerns that the proposed development could lead to an increase in vehicles entering the NIDA service driveway and or reversing back onto Anzac Parade.

Recommendation:
That Applicant consider closing the Anzac Parade crossover and providing alternate access for vehicles delivering to NIDA.

2. **Loading and servicing**

Comment:
A total of three loading and servicing bays are proposed comprising:

- 1 x MRV/garbage vehicle bays.
- 1 x SRV bays.
- 1 x B99.

The TfNSW Urban Freight Forecast tool indicates the proposed loading and servicing provisions would have an average efficacy of 71%, likely resulting in rejected vehicles due to space limitations during busy times. It is important that all loading and servicing demand is catered for on-site to ensure that freight and servicing movements do not detract from the amenity of the precinct, create safety risks, impact network efficiency or generate other negative externalities.

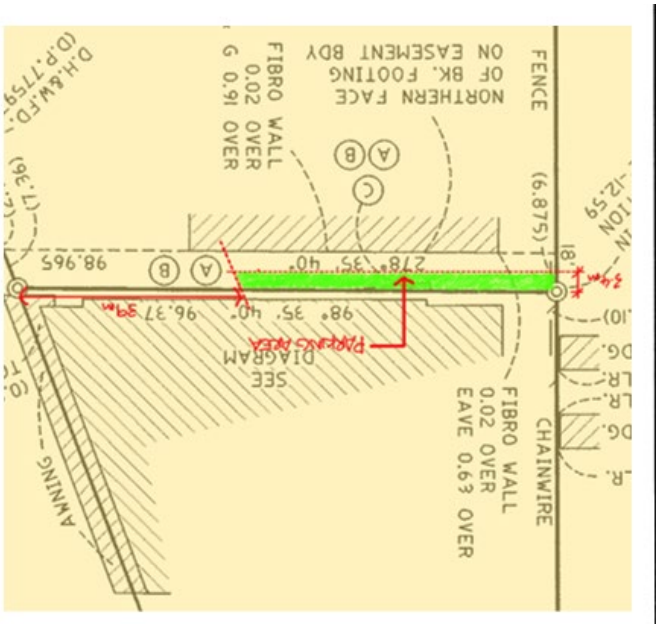
Recommendation:
That all loading and servicing demands generated by the development occur on-site.

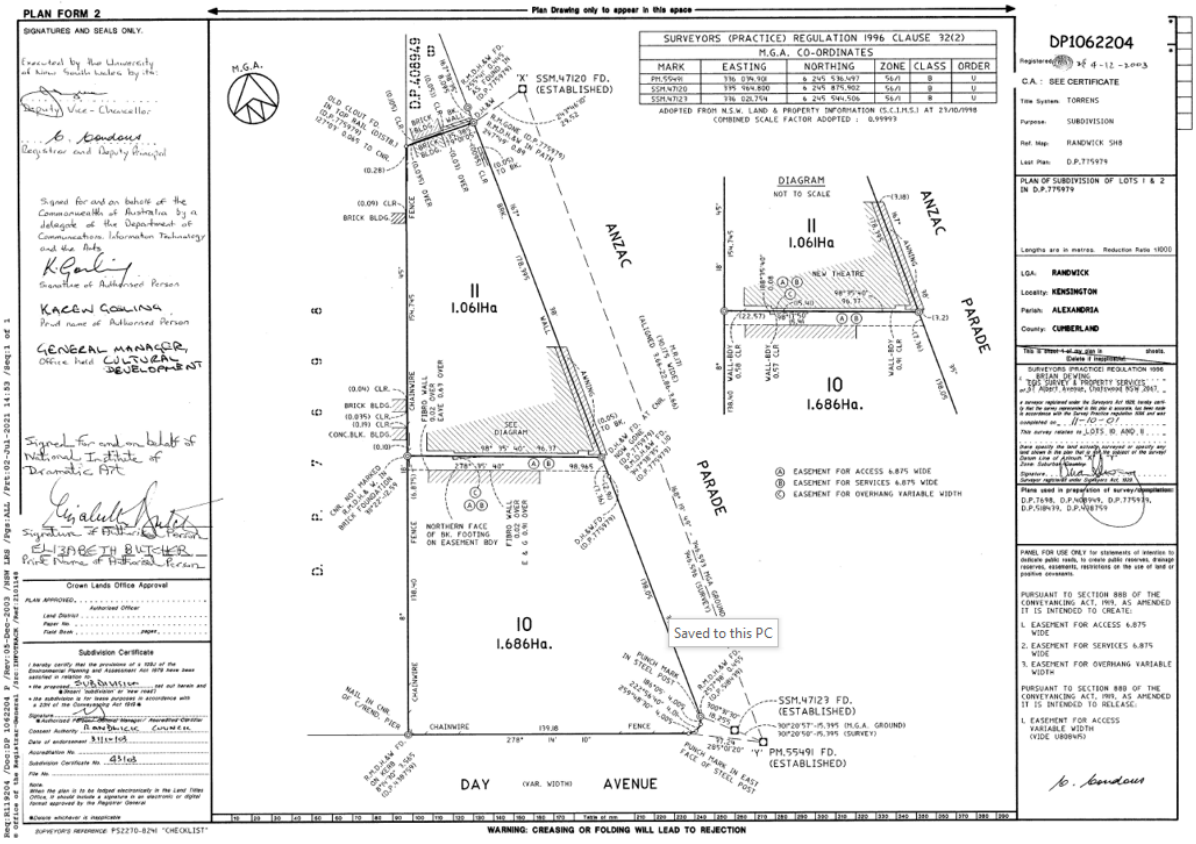
Appendix B

Assessment of NIDA Access

Issues and proposals for NIDA access right of way

TTPP was instructed that NIDA have rights of access to cross the right of way adjacent to the NIDA site to reach Anzac Parade.





DP1062204

PART 2

1. Terms of Easement for Access 6.875 wide firstly referred to in the abovementioned Plan

Full and free right for every person who is at any time entitled to an estate or interest in possession in the land herein indicated as the dominant tenement or any part thereof with which the right shall be capable of enjoyment, and every person authorised by that person to go, pass and repass at all times and for all purposes with or without animals or vehicles or both to and from the said dominant tenement or any such part thereof provided however that:-

(a) on no account shall any person so entitled or any person authorised by that person park any vehicle or permit same to stand or stop thereon except as provided in subclauses (b) and (c);

(b) the person who is at any time entitled to an estate or interest in possession in the land herein indicated as the dominant tenement may permit an outside broadcast vehicle (OBV) to be parked and allow it to stand on the said easement for access on no more than 12 occasions in each calendar year (and an occasion commences when the OBV first parks and ceases when it cases to stand which period may be for more than one day) where such OBV cannot reasonably be parked or be allowed to stand in the dominant tenement and provided firstly the number of days that an OBV can be parked in any calendar year shall not exceed 60 and provided secondly that any such OBV so parked or standing will not impede the access to the lot burdened by persons who at any time are entitled to an estate or interest in possession in the land burdened and every person authorised by that person;

(c) the person who is at any time entitled to an estate or interest in possession in the land herein indicated as the dominant tenement may permit vehicles to stand on the said easement for access for the purposes of loading and unloading goods provided firstly that the vehicles shall only be allowed to stand on or near the boundary between the said Lot 10 and the said Lot 11 in the deposited plan or no further than 3.4 metres therefrom and shall be at least 39 metres from Anzac Parade;

(d) the right so granted in sub-clauses (b) and (c) is conditional upon the person who is so entitled (and every person authorised by that person) complying with the reasonable and other parking and security conditions imposed by the proprietor for the time being of the lot burdened including the condition that the person so entitled and the person so authorised use security cards, discs or keys to enable access to the easement for access;

(e) this easement for access shall only apply while there shall be no more than 37 car parking spaces on the dominant tenement that can have access to the

13214_1.mh

DP1062204

INSTRUMENT SETTING OUT TERMS OF EASEMENTS AND RESTRICTIONS AS TO USE INTENDED TO BE CREATED OR RELEASED PURSUANT TO SECTION 88B OF THE CONVEYANCING ACT, 1919

(Sheet 3 of 4 Sheets)

easement for access and if there shall be an increase in the number of car parking spaces on the dominant tenement that can have access to the easement for access beyond such number then while ever such number of spaces exceed that number the easement for access shall be suspended;

(f) there shall be no such easement for access granted unless the person entitled to an estate or interest in possession in the land indicated herein as the dominant tenement has done all things reasonably necessary for the installation of the pavement, which must be asphaltic or concrete pavement of a quality complying with any necessary government or local government ordinances and authorities and which must have been prior approved by the proprietor of the lot burdened and the person so entitled to such estate or interest in possession must:-

(i) ensure that all work is done properly;

(ii) cause as little inconvenience as is practicable to the owner and all occupiers of the lot burdened;

(iii) cause as little damage as is practicable to the lot burdened and any improvements on it; and

(iv) make good any collateral damage.

2. **Terms of Easement for Services 6.875 wide secondly referred to in the abovementioned Plan**

Easement for services as defined in Part 11 of Schedule 8 to the Conveyancing Act 1919 as amended.

3. **Terms of Easement for Overhang variable width thirdly referred to in the abovementioned Plan**

Easement for overhang as defined in Part 10 of Schedule 8 to the Conveyancing Act 1919 as amended.

The easement appears to be 6.875m wide and allows NIDA to traverse between their building and Anzac Parade with limits of 12 calendar days per year day and serving no more than 37 parking spaces.

However, over recent years, the connection to Anzac Parade is restricted by a barrier and is used very infrequently (e.g. by appointment). Vehicles servicing NIDA, and the associated below ground car park, have been achieving access to/from Day Avenue by traversing the existing at-grade university car park.

Indeed, TTPP undertook a count of the NIDA use and it was recorded that 55 vehicles per day were crossing the car park to reach Day Avenue

R.O.A.R. DATA
Reliable, Original & Authentic Results
Ph. Mob.0418-239019

Client : TTPP
Job No/Name : 7868 KENSINGTON UNSW Easement
Day/Date : Wednesday 28th June 2023

	IN from Open Car Park							***OUT to Open Car Park***							
	Lights		Vans		Trucks			Lights		Vans		Trucks			
Time Per	Cars	Ute	Small	Large	Small	Medium	Large +12.5m	Cars	Ute	Small	Large	Small	Medium	Large +12.5m	**TOTAL**
0700 - 0715	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
0715 - 0730	0	1	1	0	0	0	0	0	0	0	0	0	0	0	**2**
0730 - 0745	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
0745 - 0800	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
0800 - 0815	0	0	0	0	0	0	0	0	0	1	0	0	0	0	**1**
0815 - 0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0845 - 0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
0900 - 0915	0	0	1	0	1	0	0	0	0	1	0	1	0	0	**4**
0915 - 0930	0	1	0	0	0	0	0	0	1	1	0	0	0	0	**3**
0930 - 0945	0	0	1	0	0	0	0	0	0	1	0	0	0	0	**2**
0945 - 1000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1000 - 1015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1015 - 1030	0	0	1	0	0	0	0	0	1	0	0	0	0	0	**2**
1030 - 1045	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1045 - 1100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1100 - 1115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1115 - 1130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1130 - 1145	0	0	1	0	0	0	0	0	0	1	0	0	0	0	**2**
1145 - 1200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1200 - 1215	0	0	0	0	1	0	0	0	0	0	0	0	0	0	**1**
1215 - 1230	0	0	1	0	0	0	0	0	0	1	0	0	0	0	**2**
1230 - 1245	0	0	0	0	0	0	0	0	0	1	0	1	0	0	**2**
1245 - 1300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1300 - 1315	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1315 - 1330	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1330 - 1345	1	0	1	0	0	0	0	1	2	0	0	0	0	0	**5**
1345 - 1400	0	0	1	0	0	0	0	0	0	0	0	0	0	0	**1**
1400 - 1415	0	0	1	0	0	0	0	0	0	2	0	0	0	0	**3**
1415 - 1430	0	0	0	0	0	0	0	0	0	1	0	0	0	0	**1**
1430 - 1445	0	1	0	0	0	0	0	0	0	0	0	0	0	0	**1**
1445 - 1500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1500 - 1515	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1515 - 1530	0	0	1	0	0	0	0	0	0	2	0	0	0	0	**3**
1530 - 1545	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1545 - 1600	1	0	0	0	0	0	0	1	2	1	0	0	0	0	**5**
1600 - 1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1615 - 1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1630 - 1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1645 - 1700	1	0	0	0	0	0	0	1	0	0	0	0	0	0	**2**
1700 - 1715	1	1	0	0	0	0	0	1	1	1	0	0	0	0	**5**
1715 - 1730	1	0	0	0	0	0	0	1	1	0	0	0	0	0	**3**
1730 - 1745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1800 - 1815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1815 - 1830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1830 - 1845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
1845 - 1900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Per End	**5**	**6**	**13**	**0**	**2**	**0**	**0**	**5**	**8**	**14**	**0**	**2**	**0**	**0**	**55**

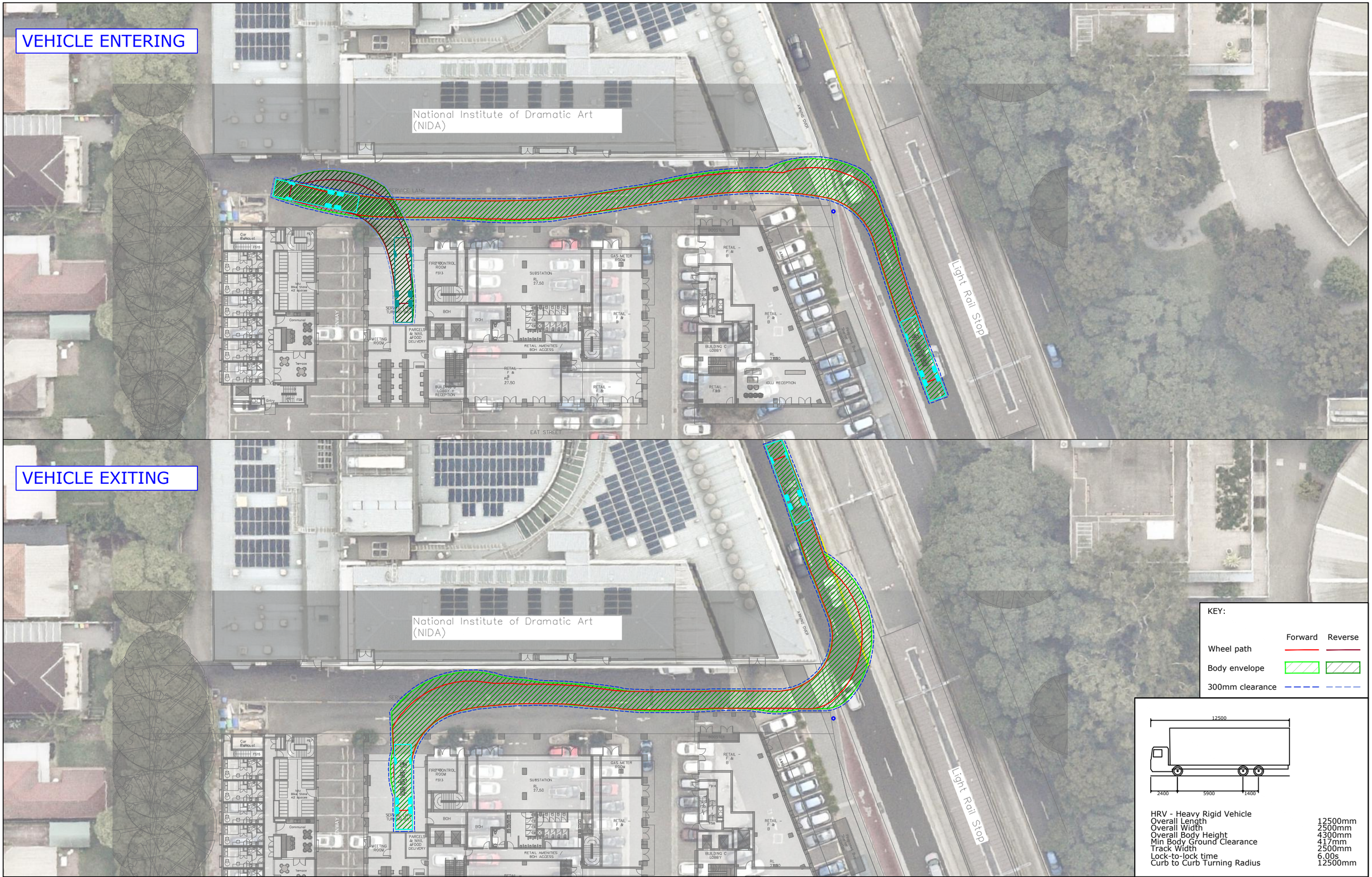
It was noted in the count that the number of 12.5m large rigid vehicles or larger was recorded as zero with the largest vehicles being a medium rigid vehicle.

Consequently, the existing vehicular crossover have been retained, which permits vehicles up to a 12.5m HRV or Bus to enter and exit the site in a forward direction. On-site, a turnaround facility, by virtue of a recessed building, has been provided to allow trucks to turn around.

Swept path analysis of the proposed on-site turnaround facility and existing vehicular crossover is overleaf.

VEHICLE ENTERING

VEHICLE EXITING



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

HRV - Heavy Rigid Vehicle

Overall Length	12500mm
Overall Width	2500mm
Overall Body Height	4300mm
Min Body Ground Clearance	417mm
Track Width	2500mm
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12500mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	24/07/24

ttpp transport planning

PROJECT

IGLU KENSINGTON

TITLE

SWEPT PATH ANALYSIS - GROUND LEVEL
12.5M HEAVY RIGID VEHICLE - EXISTING ACCESS ARRANGEMENT

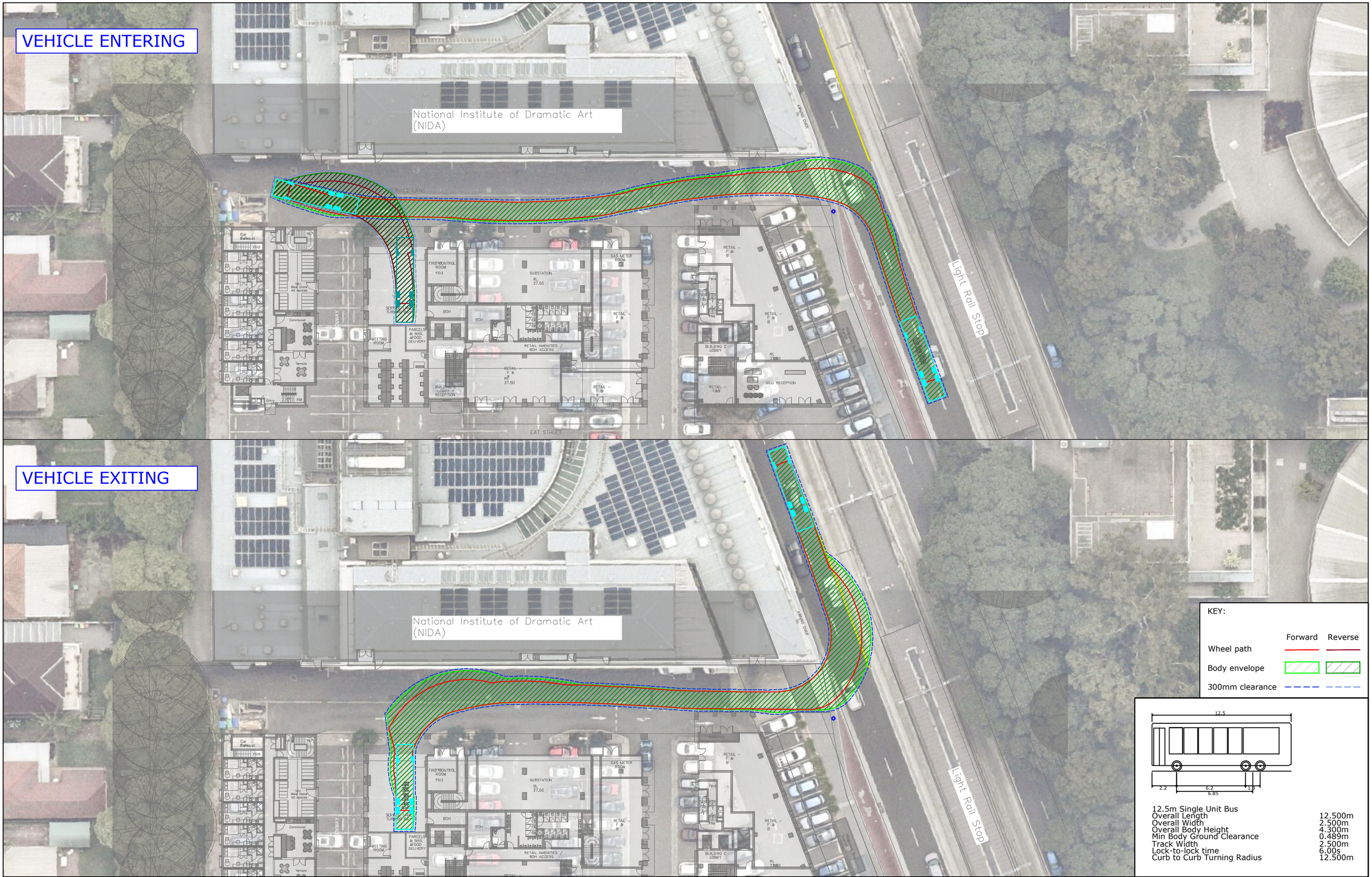
DWG No. 21435CAD022 FIGURE _1

DATE STAMP 24 JULY 2024

PROJECT No.	SCALE	REV.
21435	1:500 @A3	B

VEHICLE ENTERING

VEHICLE EXITING



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

12.5m Single Unit Bus

Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.489m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	24/07/24

ttpp transport planning

PROJECT

IGLU KENSINGTON

TITLE

SWEPT PATH ANALYSIS - GROUND LEVEL
12.5M SINGLE RIGID BUS

DWG No. 21435CAD022 FIGURE _2

DATE STAMP 24 JULY 2024

PROJECT No.	SCALE	REV.
21435	1:500 @A3	B

Appendix C

Swept Path Assessment

VEHICLE ENTERING

VEHICLE EXITING

B1 Upper
RL 23.70

Room (B80m²)

University Waste 17m²

Platform Lift

Iglu Waste Room C 32m²

Lift pit

Goods Lift

2000

Retail Waste 64m²

E-Waste Bulky Waste 17m²

Grease Arrestor 2 30m²

Grease Arrestor 1 35m²

Food Waste

Bin Holding Area

B99

SUV

Loading Dock

MRV - Medium Rigid Vehicle

Courier Bay

Store

Stair to Ground

Platform Lift

B1 Lower
RL 22.70

Iglu Waste Room (A75m²)

EOT 71m²

Lift pit

Lift Lobby RL 23.70

EOT 30 Bikes Double + 6 Horizontal

Boom Gate

1:10

Roller Door Over

1:8

1:6

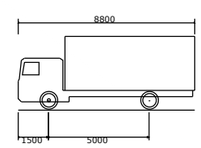
Plant

Stormwater Infiltration Pit

B1 Lower
RL 22.70
Turning Zone

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



MRV - Medium Rigid Vehicle

Overall Length	8800mm
Overall Width	2500mm
Overall Body Height	3633mm
Min Body Ground Clearance	428mm
Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	19/04/24

ttpp transport planning

PROJECT

IGLU KENSINGTON

TITLE

SWEPT PATH ANALYSIS - LOADING DOCK (BASEMENT LEVEL 1)
8.8M MEDIUM RIGID VEHICLE

DWG No. 21435CAD015
FIGURE 8

DATE STAMP 19 APRIL 2024

PROJECT No.	SCALE	REV.
21435	1:300 @A3	A

Filename: 21435CAD015-240419- CARPARK REVIEW.dwg

Date: 19 APRIL 2024

VEHICLE ENTERING

VEHICLE EXITING

B1 Upper
RL 23.70

B1 Lower
RL 22.70
Turning Zone

Iglu Waste
Room C
32m²

Retail Waste
64m²

E-Waste
Bulky Waste
17m²

Grease Arrestor 1
35m²

Grease
Arrestor
2
30m²

University
Waste
17m²

Food
Waste

Bin Holding Area

MRV/Garbage Truck

B99

Courier Bay

Store

Platform
Lift

Stair to
Ground

Iglu Waste
Room
(A)5m²

EOT
71m²

Lift
Lobby
RL 23.70

Lift
pit

Goods
Lift

Loading Dock

Stormwater Infiltration
Pit

Plant

Boom Gate

1:10

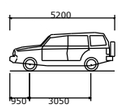
Roller Door Over

1:8

1:6.2

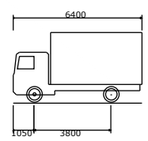
KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5200mm
Overall Width	1940mm
Overall Body Height	1878mm
Min Body Ground Clearance	272mm
Track Width	1840mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6250mm



SRV - Small Rigid Vehicle

Overall Length	6400mm
Overall Width	2330mm
Overall Body Height	3500mm
Min Body Ground Clearance	398mm
Track Width	2330mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	7100mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	19/04/24

ttpp transport planning

PROJECT

IGLU KENSINGTON

TITLE

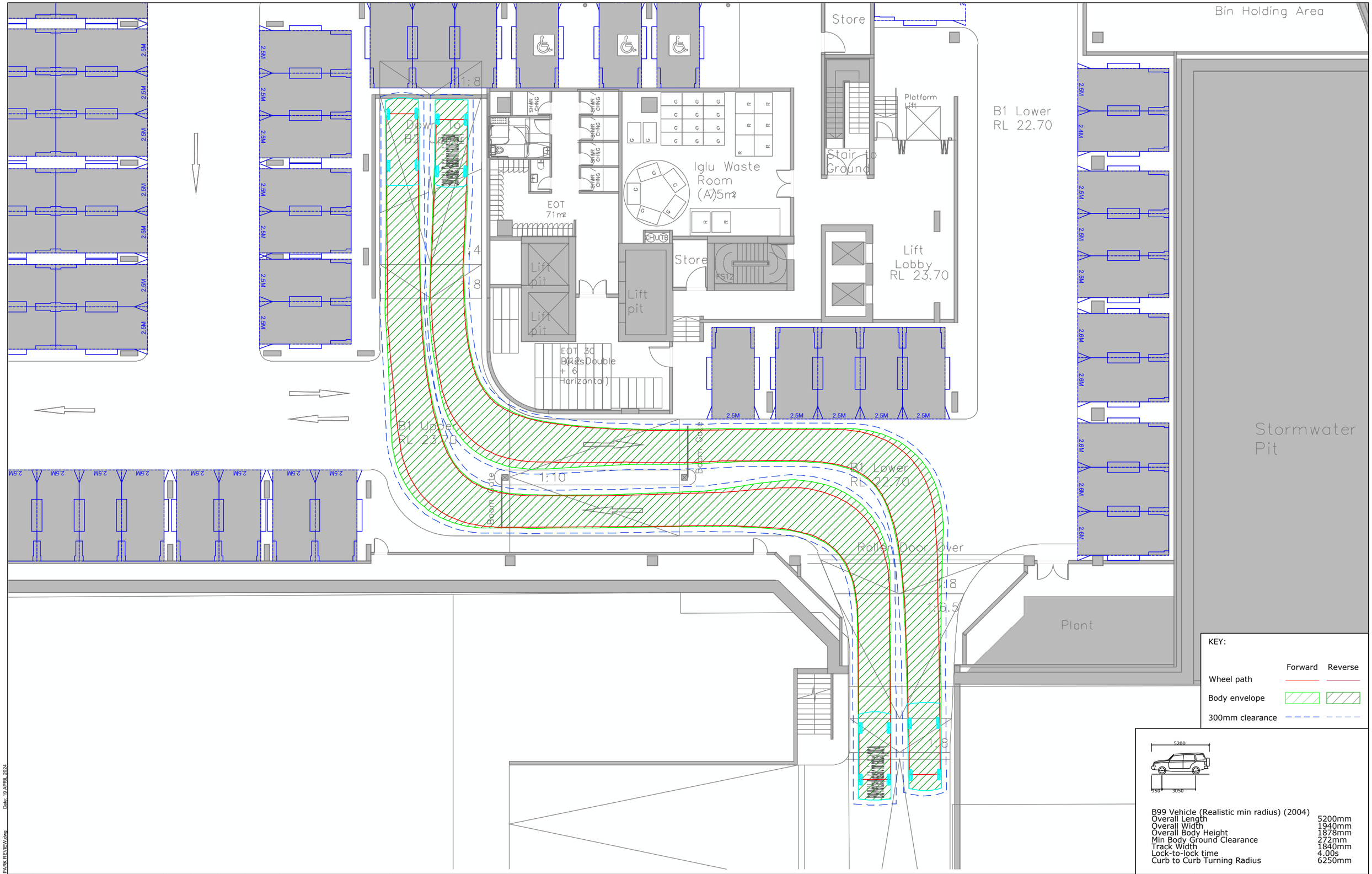
SWEPT PATH ANALYSIS - LOADING DOCK (BASEMENT LEVEL 1)
6.4M SMALL RIGID VEHICLE

DWG No. 21435CAD015
FIGURE 9

DATE STAMP 19 APRIL 2024

PROJECT No. 21435 | SCALE 1:300 @A3 | REV. A

Filename: 21435CAD015-240419- CAR PARK REVIEW.dwg Date: 19 APRIL 2024



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

B99 Vehicle (Realistic min radius) (2004)

Overall Length	5200mm
Overall Width	1940mm
Overall Body Height	1878mm
Min Body Ground Clearance	272mm
Track Width	1840mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6250mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	19/04/24

ttpp transport planning

PROJECT

IGLU KENSINGTON

TITLE

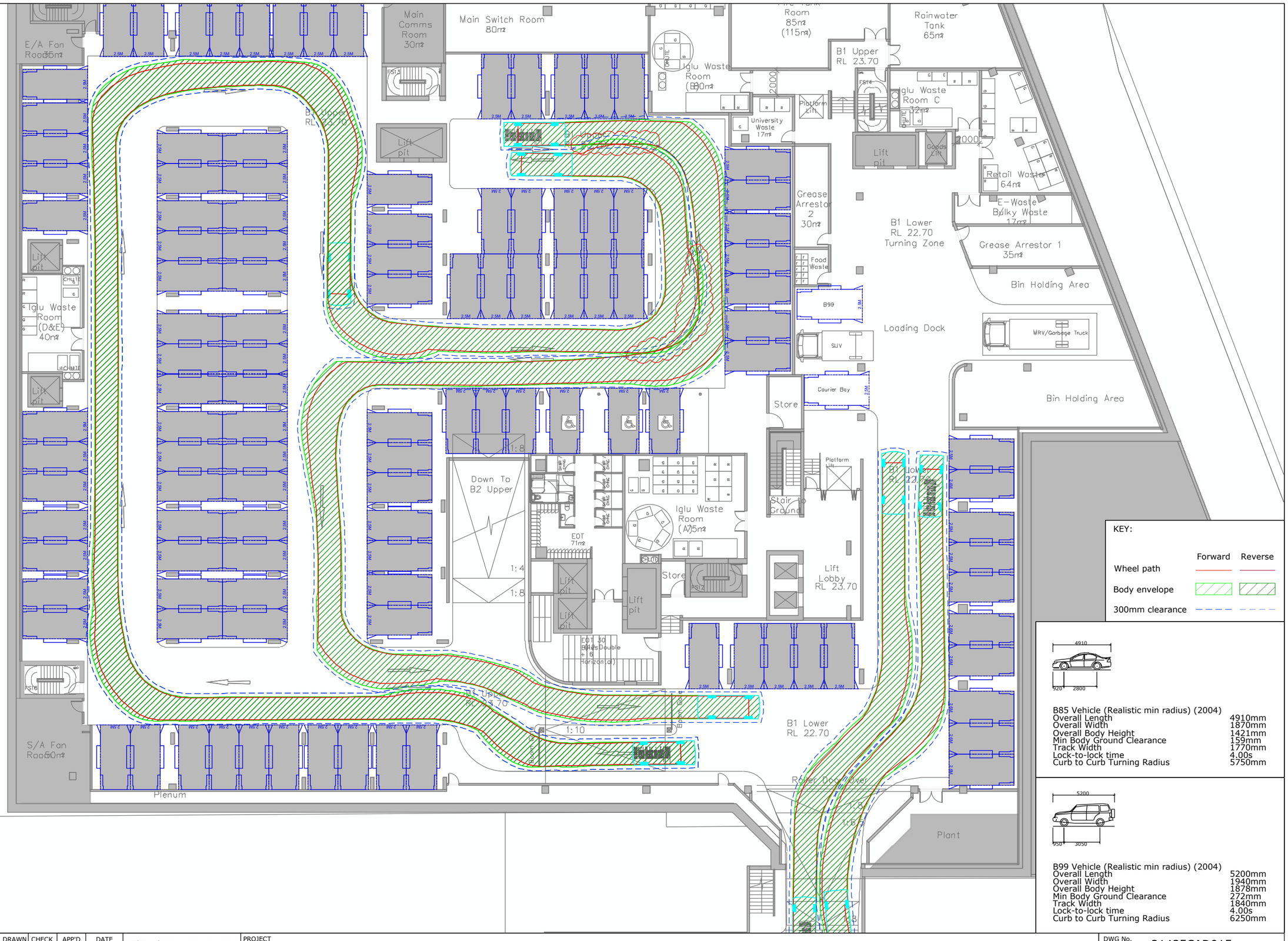
SWEPT PATH ANALYSIS - BASEMENT LEVEL 1
AS2890.1 5.2m B99 VEHICLE

DWG No. 21435CAD015
FIGURE 10

DATE STAMP 19 APRIL 2024

PROJECT No.	SCALE	REV.
21435	1:200 @A3	A

Filename: 21435CAD015-240419- CAR PARK REVIEW.dwg Date: 19 APRIL 2024



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

B85 Vehicle (Realistic min radius) (2004)

Overall Length	4910mm
Overall Width	1870mm
Overall Body Height	1421mm
Min Body Ground Clearance	159mm
Track Width	1770mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5750mm

B99 Vehicle (Realistic min radius) (2004)

Overall Length	5200mm
Overall Width	1940mm
Overall Body Height	1878mm
Min Body Ground Clearance	272mm
Track Width	1840mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6250mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	19/04/24

ttpp transport planning

PROJECT: IGLU KENSINGTON

TITLE: SWEPT PATH ANALYSIS - BASEMENT LEVEL 1
AS2890.1 5.2m B99 VEHICLE & 4.91m B85 VEHICLE

DWG No. 21435CAD015 FIGURE 11

DATE STAMP 19 APRIL 2024

PROJECT No.	SCALE	REV.
21435	1:300 @A3	A

Filename: 21435CAD015-240419- CAR PARK REVIEW.dwg Date: 19 APRIL 2024

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	19/04/24

ttpp transport planning

PROJECT

IGLU KENSINGTON

TITLE

SWEPT PATH ANALYSIS - BASEMENT LEVEL 2
AS2890.1 5.2m B99 VEHICLE

DWG No. 21435CAD015
FIGURE 12

DATE STAMP 19 APRIL 2024

PROJECT No.	SCALE	REV.
21435	1:300 @A3	A

Date: 19 APRIL 2024

Filename: 21435CAD015-240419- CAR PARK REVIEW.dwg

VEHICLE ENTERING

UNIVERSITY

THROUGH SITE ARCADE

3.5M HEADROOM AVAILABLE AT THIS LOCATION.

BALUSTRADE TO LANDSCAPE ARCHITECT'S DETAIL

EXISTING GROUND LINE SHOWN DOTTED IN RED

4000

1800

3600

LOADING DOCK ENTRY + CAR PARK

B2 LOWER CAR PARK

Plenum

RL. 22.700

RL. 23.030

RL. 23.680

RL. 24.010

RL. 24.010

RL. 24.340

RL. 24.960

RL. 25.110

RL. 24.870

RL. 24.500

RL 26.64 FOOTING

FOOTING LINE FOR BLOCK CLADDING

Driveway Entrance to Regiment Site

Special MRV - Vertical Clearance

VEHICLE EXITING

3.5M HEADROOM AVAILABLE AT THIS LOCATION.

THROUGH SITE ARCADE

BALUSTRADE TO LANDSCAPE ARCHITECT'S DETAIL

EXISTING GROUND LINE SHOWN DOTTED IN RED

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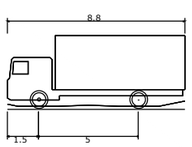
FOOTING LINE FOR BLOCK CLADDING

Driveway Entrance to Regiment Site

Special MRV - Vertical Clearance



Special MRV - Vertical Clearance	
Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.150m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.000m

KEY:

- Vertical Clearance
- Driveway / Ramp Profile
- 50mm Clearance from Surface

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	19/04/24

ttpp transport planning

PROJECT: IGLU KENSINGTON

TITLE: RAMP GRADE REVIEW - GROUND TO LOADING AREA
8.8M MEDIUM RIGID VEHICLE (WITH 3.6M HEIGHT)

DWG No.	21435CAD015 FIGURE 13
DATE STAMP	19 APRIL 2024
PROJECT No.	21435
SCALE	1:150 @A3
REV.	A

Date: 19 APRIL 2024

Filename: 21435CAD015-240419- CAR PARK REVIEW.dwg

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