269 Lane Cove Road, Macquarie Park

Transport Impact Assessment

Prepared for:

NEXTDC Limited

10 October 2025

The Transport Planning Partnership

269 Lane Cove Road, Macquarie Park

Transport Impact Assessment

Client: NEXTDC Limited

Version: V05

Date: 10 October 2025

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Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	07/02/25	Andrew Liu	Ashish Modessa	Ken Hollyoak	Ken Hollyoak
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1 Executive Summary

This Transport Impact Assessment (TIA) has been prepared by The Transport Planning Partnership (TTPP) on behalf of NEXTDC Limited to accompany a detailed State Significant Development Application (SSDA) for the S5 data centre development at 269 Lane Cove Road, Macquarie Park. The legal description of the site is Lot 3 in Deposited Plan (DP) 1129811.

This report has been prepared to address the following:

- Secretary's Environmental Assessment Requirements (SEARs) (SSD-63168959)
- Responses to the submission of the SSDA (SSD-63168959)
- City of Ryde, Pre-lodgement Panel Advice – RTS Consultation and Advice.

This report concludes that the proposed data centre development is suitable for approval.

Existing development includes a two-storey office furniture store (Work Arena) at the northern end of the site and offices and studios associated with Foxtel in the southern portion of the site, with approximately 225 car parking spaces with access via Waterloo Road.

The site is well serviced by public transport with several bus routes operating along Lane Cove Road and Waterloo Road. The entrance to Macquarie Park Metro Station is immediately to the north of the site. The site includes a lengthy frontage to Lane Cove Road which provides access to the M2 Hills Motorway and Epping Road.

The application seeks consent for construction and operation of a data centre development with basement parking for 51 cars including two accessible spaces and 10 EV spaces. The application also includes the delivery of a new road system and an urban plaza adjacent to the Macquarie Park Metro Station entrance in accordance with Council requirements. The new road system to be built as part of this application includes Road 13 that will intersect with Waterloo Rad via a Left-In/ Left-Out arrangement and Road 6 that will intersect with Lane Cove Road via a Left-In Only arrangement.

The proposed car and bicycle parking provision complies with DCP requirements for the site. Appropriate end of trip facilities including showers and lockers will be provided on-site as part of the proposed development.

Based on traffic generation surveys undertaken at comparable sites, the proposed development could be expected to generate 23 vehicle trips during the peak hours. This equates to one vehicle every 2 minutes, which is considered low. Furthermore, it is noted that the existing site has approximately 225 parking spaces whereas the proposal has 51 parking spaces so it is expected that even if there was any traffic impact, it would be minimal and possibly less compared to existing.

Therefore, the proposed development is considered acceptable from a traffic and parking perspective.

2 Introduction

This Transport Impact Assessment (TIA) has been prepared to accompany a detailed SSDA for the proposed S5 data centre development at 269 Lane Cove Road, Macquarie Park (SSD-63168959). The legal description of the site is Lot 3 in Deposited Plan (DP) 1129811.

This report has been prepared to address the following:

- Secretary's Environmental Assessment Requirements (SEARs)
- State Significant Development Application (SSDA) issued for the project (SSD63168959)
- City of Ryde, Pre-lodgement Panel Advice – RTS Consultation and Advice.

2.1 Author Credentials

Table 2.1 provides a summary of the Author Credentials.

Table 2.1: Summary of Author Credentials

Name	Qualifications	Professional Overview
Ken Hollyoak, Director	FIEAust CPEng NER APEC Engineer IntPE (Aus) RPEQ FTPA MICE FICHT Eur Ing BSc (Hons) MSc (Dist)	Ken is a chartered professional engineer and has over 40 years of experience in the road design/ transportation & traffic planning field. He primarily works as traffic advisor preparing transport impact assessments for development applications / planning proposals as part of multidisciplinary development teams.
Ashish Modessa, Associate	BE Civil	Ashish has over 14 years of experience in the field of transport engineering working on projects for both public and private sector clients. He has developed a wide range of professional skills through his involvement in the preparation of transport impact assessments and construction and operation transport management plans for a variety of development projects, covering a range of land uses and sizes.
Andrew Liu, Traffic Engineer	BE Civil & Environmental	Andrew has four years of experience in traffic and transportation engineering. Andrew is experienced in assessing traffic, transport and parking impacts through his involvement in various large to small scale projects.

2.2 Project Description

The application seeks consent for construction and operation of a data centre development and includes site preparation works, bulk earthworks and infrastructure, and construction of the buildings, ancillary facilities, and associated site works. The application also includes the delivery of two internal roads and an urban plaza adjacent to the Macquarie Park Metro Station entrance.

Specifically, the Project comprises the redevelopment of the site as summarised below:

- Site preparation works including demolition and removal of existing structures, tree removal and bulk earthworks.

- Staged construction and operation of two connected data centre buildings (Building A and Building B) with a maximum height of 65 metres and a combined total gross floor area (GFA) of 47,285m^2 comprising 33,142m^2 of technical data hall floor space and 14,143m^2 of office, retail and innovation hub floor space.
- Building A will be delivered in Stage 1 and will comprise the following:
  - Basement parking for 51 car spaces including two accessible spaces and 10 EV spaces
  - Seven storeys of technical data floor space accommodating seven data houses: 16,571m^2
  - Utilities including diesel generators (3MWe), above-ground water tanks for industrial water (600kL each), above-ground diesel storage tanks (100kL each) and an aboveground water tank for fire water (400kL each).
  - Business identification signage facing Waterloo Road and Land Cove Road.
  - Integrated 'Building O' component within Building A, comprising:
    - Two retail tenancies at ground level: 326m^2
    - Lobby and innovation hub including auditorium and training rooms: 3,186m^2
    - NEXTDC and ancillary office floor space on upper levels: 10,631m^2
- Building B will be delivered in Stage 2 and will comprise the following:
  - Seven storeys of technical data floor space accommodating seven data halls: 16,571m^2
  - Utilities including diesel generators (3MWe), above-ground water tanks for industrial water (600kL each), above-ground diesel storage tanks (100kL each) and an aboveground water tank for fire water (400kL each).
  - Business identification signage on the western and southern building facades.
- Landscaping across the site in accordance with the project staging, delivering a mix of native and endemic plant species, shrubs and grasses, including 139 additional trees within a total area of 4,959m^2 deep soil and a resultant tree canopy cover of 5,707m^2
- Staged delivery of public domain works including:
  - Stage 1: construction of Road 13 within the subject site and urban plaza.
  - Stage 2: construction of Road 6 (half-width) within the subject site, including provision for a future pedestrian/cycle overbridge (to be delivered by others), and works along Lane Cove Road.
- Delivery of 90 megawatts of power with a 33kV switching station to be accommodated on site, as well as other site services, including stormwater infrastructure.
- Generate some 490 new jobs for the Macquarie Park Corridor.

2.3 Secretary's Environmental Assessment Requirements

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 8 November 2023 issued for the SSDA (SSD-63168959). Specifically, this report has been prepared to respond to the SEARS requirement as shown in Table 2.2.

Table 2.2: SEARs Compliance

Item	Description of Requirement	Section Reference (this Report)
Traffic and Transport	Traffic and Transport – a quantitative traffic impact assessment prepared in accordance with relevant Roads and Maritime Services and Austroads guidelines, that includes:	This Plan
	▪ details of all traffic types and volumes likely to be generated during construction and operation, including a description of key access / haul routes, breakdown of traffic generation for the different uses on the site, vehicle type and transportation mode (light and heavy vehicles, public transport, pedestrian and cycle trips)	Section 6
	an assessment of: ▪ the predicted impacts of this traffic on the capacity of the road network, including consideration of cumulative traffic impacts on existing performance levels of nearby intersections, using a calibrated SIDRA (or similar) traffic model	Section 6
	▪ the adequacy of existing public and active transport or any future transport infrastructure within the vicinity of the site to accommodate the likely future demand of the proposed development	Sections 3.3 and 3.4
	▪ road and pedestrian safety adjacent to the proposed development	Section 3.4
	o plans demonstrating how all vehicles likely to be generated during construction and operation and awaiting loading, unloading or servicing can be accommodated on the site to avoid queuing in the street network	Section 5.5 and 6. All construction traffic matters are detailed in TTPP's Construction Traffic Management Plan dated 18 April 2024.
	o details and plans of the proposed internal road network, emergency access, loading docks, pedestrian and cycling facilities and on-site parking (including a detailed breakdown for all uses on the site) in accordance with the relevant Australian Standards	Section 4
	o details of the largest vehicle anticipated to access and move within the site, including swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site	Section 5.5
	o details of operational measures to integrate the development with the existing/future public transport network	Section 4
	o details of road upgrades, infrastructure works or new roads or access points required for the development if necessary.	Section 4

2.4 SSDA Comments

This report has been prepared in response amended design and comments provided for the SSDA (SSD-63168959). Specifically, this report has been prepared to respond specifically to the traffic-related items as shown in Table 2.3.

Table 2.3: SSDA Comments

Item ID	Description of Requirement	Section Reference (this Report)
31	Traffic and Access: The Submissions Report must demonstrate how traffic assessment requirements detailed in Table 2.2 of the Transport Impact Assessment have been addressed. This table appears to have referred to existing conditions and site description in response to issues that require detailed assessment (e.g. road and pedestrian safety).	Section 4.2
32	Further information that assesses impacts of the proposed data centre development and public domain works on surrounding intersections and public transport, pedestrians and cyclist networks is required. Note there is no information provided in the Transport Impact Assessment regarding pedestrian, cyclist, and vehicular accessibility and permeability to and within the Macquarie Park Corridor following the introduction of Road 5 and Road 13.	Section 0
33	The proposed number of car parking spaces must be justified, noting the accompanying Green Travel Plan has identified opportunities to reduce parking demand by leveraging on the site's proximity to public transport.	Section 5.1.3
34	Swept path diagrams must be provided to demonstrate emergency vehicles are able to turn around when utilising Road 5 and Road 13 in accordance with the Fire and Rescue NSW Fire Safety Guideline - Access for Fire Brigade Vehicles and Firefighters.	Section 5.6
50	Strategic Transport Insufficient information on how Roads 5 and 13 will function. Road 5 is shown as a cul-de-sac with no driveways, serving no particular purpose except as a turnback and a pedestrian through-site link. Could be used as an activated pedestrian space.	Section 6.1.1
54	Traffic The exit lane from Building A lacks a sight distance splay on the northern side of the driveway. With a footpath adjoining the building footprint, the arrangement presents a pedestrian safety issue. Column locations between spaces 93 to 105 are not compliant with AS2890.1, noting the structural elements adjoin the access aisle however should be setback by 750mm from the edge of this aisle. Garbage truck loading zone to be contained wholly within the site. The 105 Parking spaces to be provided in stage 1 construction.	Section 5.5 & 5.6

2.5 Purpose of the Assessment

This report sets out an assessment of the anticipated transport implications of the proposed development including consideration of the following:

- Existing traffic and parking conditions surrounding the site
- Suitability of proposed parking in terms of quantum and layout
- The traffic generating characteristics of the proposed development
- Suitability of proposed access arrangements for the site
- The transport impacts of the proposed development on the surrounding road network.

2.6 Report Structure

The remainder of this report is set out as follows:

- Chapter 3 discusses the existing conditions including a description of the subject site
- Chapter 4 provides a brief description of the proposed development
- Chapter 5 assesses the proposed on-site parking provisions and internal layout
- Chapter 6 examines the traffic generation and its impact
- Chapter 7 presents the conclusions of the assessment.

2.7 References

In preparing this report, reference has been made to the following:

- An inspection of the site and its surrounds
- City of Ryde Council Development Control Plan 2014 (DCP)
- Australian Standards AS2890 series for parking facilities
- Roads and Maritime Services Guide to Traffic Generating Developments, 2002
- Transport for NSW Guide to Traffic Generating Developments – Updated traffic surveys (TDT2013/04a)
- Transport for NSW Guide to Transport Impact Assessment, 2024 (The Guide)
- Traffic generation surveys undertaken by TTPP
- Architectural plans prepared for the development proposal
- Other documents as referenced in this report.

3 Existing Conditions

3.1 Site Description

The site is located at 269 Lane Cove Road, Macquarie Park and is legally described at Lot 3 in Deposited Plan (DP) 1129811. It is located on the corner of Lane Cove Road and Waterloo Road and is made up of a single rectangular lot and is some 22,380m^2 in size. An aerial photograph of the site is provided at Figure 3.1.

The site is located in the City of Ryde Local Government Area (LGA) within the Macquarie Park corridor, an established employment precinct with a particular focus on innovation. Macquarie Park is a nationally significant research and employment centre and includes the head offices for some of Australia's leading companies including Foxtel, Optus and Siemens. The site is approximately 2km southeast of Macquarie University, and 1.5km southeast of Macquarie Shopping Centre.

Existing development includes a two-storey office furniture store (Work Arena) at the northern end of the site and offices and studios associated with Foxtel in the southern portion of the site. Scattered trees exist along the site boundaries.

Vehicle access to the site is currently provided from Waterloo Road with an internal driveway providing access to several at-grade parking areas, amounting to approximately 225 car parking spaces. A further vehicle crossover has been constructed along the Lane Cove Road frontage; however, it is not currently in use and barriers have been installed prohibiting access.

The site is well serviced by public transport with several bus routes operating along Lane Cove Road and Waterloo Road. The entrance to Macquarie Park Metro Station is immediately to the north of the site. The site includes a lengthy frontage to Lane Cove Road which provides access to the M2 Hills Motorway and Epping Road.

Figure 3.1: Aerial Photograph of Site

Source: Urbis GIS 2023

3.2 Road Network Description

Lane Cove Road is a classified State Road and forms one of the major north-south arterial links in the northern/ north-western suburbs. The road provides good connectivity to the wider arterial road network, notably to Ryde Road, M2 Motorway, Victoria Road and Devlin Street. Within the vicinity of the site, Lane Cove Road runs in a north-east to south-west direction. The road provides three through traffic lanes in each direction separated by a central median. The road has a posted speed limit of 70 km/h in both directions within the vicinity of the site.

Epping Road is a classified State Road and connects to Blaxland Road in the west and Longueville Road in the east. The road provides three through traffic lanes in each direction separated by a central median. The road has a posted speed limit of 70 km/h in both directions within the vicinity of the site.

Waterloo Road is a local road which connects to Wicks Road in the south and University Avenue in the north. The road provides one through traffic lane in each direction. The site will be accessed via the existing site access provided off Waterloo Road.

3.3 Public Transport Facilities

The site is well serviced by a network of public transport services, with the Macquarie Park Metro Station and bus routes along the Lane Cove Road and Waterloo Road frontages of the site.

The subject site proximity to public transport services is shown in Figure 3.2.

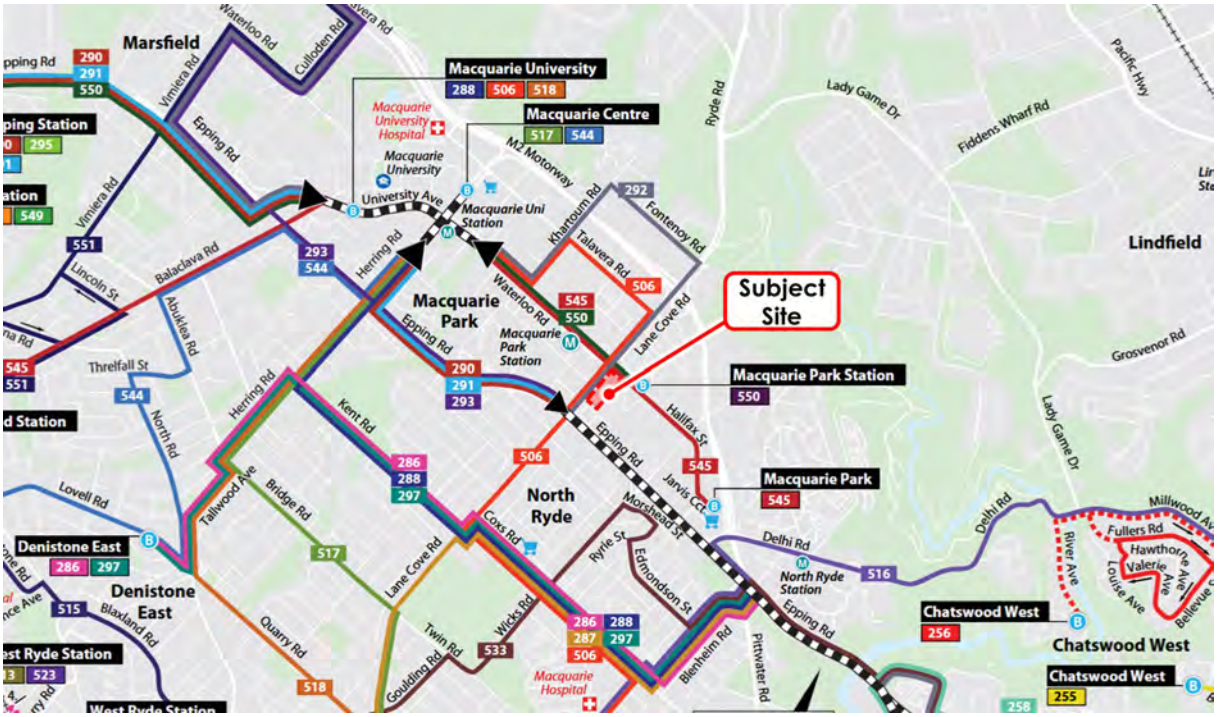
Figure 3.2: Public Transport Network Surrounding the Subject Site

Table 3.1: Available Bus Services and Associated Frequencies

Route Number	Route Name	Distance from Subject Site (m)	Service Frequency
197	Mona Vale to Macquarie University	170m (Waterloo Road)	Peak: 15 minutes Off-peak: 30 minutes
259	Macquarie Centre to Chatswood	Site frontage (Lane Cove Road)	Peak: 15 minutes Off-peak: 30 minutes
292	Marsfield to City Erskine Street		Peak: 5 – 15 minutes Off-peak: 30 minutes
294	Macquarie University to City Wynyard		Peak: 15 minutes Off-peak: No services
410	Macquarie Park to Hurstville		Peak: 10 minutes Off-peak: 15 minutes
506	Macquarie University to City Domain		Peak: 5 - 15 minutes Off-peak: 30 minutes
545	Parramatta to Macquarie Park	Site frontage (Waterloo Road)	Peak: 10 – 20 minutes Off-peak: 20 – 30 minutes
550	Parramatta to Macquarie Park		Peak: 10 minutes Off-peak: 15 – 30 minutes
562	Gordon to Macquarie University	550m (Talavera Road)	Peak: 1 hour Off-peak: No service
565	Chatswood to Macquarie University		Peak: 10 - 30 minutes Off-peak: 1 hour
572	Turramurra to Macquarie University		Peak: 15 minutes Off-peak: 30 minutes
575	Hornsby to Macquarie University		Peak: 20 minutes Off-peak: 30 minutes
611	Blacktown to Macquarie Park	Site frontage (Waterloo Road)	Peak: 5 – 15 minutes Off-peak: 15 - 30 minutes
619	Castle Hill to Macquarie Park		Peak: 15 – 20 minutes Off-peak: No service

Source: TfNSW

Figure 3.3: Local Bus Network Map



Source: TfNSW – North Shore and North West network map, last accessed on 24/09/2025

The Macquarie Park Metro Station entrance is located directly on the north corner of the site. It is expected that the metro would be the main form of transport for staff to/from the site.

The metro station is serviced by Sydney Metro City & Northwest, which runs between Tallawong and Sydenham, and subsequently to Bankstown upon completion of the Sydney Metro Southwest. Metro services arrive every four minutes during the peak periods and every 10 minutes during the off-peak periods. These services also provide connection to the wider Sydney Train suburban line to/from Central and Epping train stations. The Sydney Metro Southwest is expected to be completed in 2026, which will provide further connections to the wider Sydney network.

In summary, the site benefits from good public transport connections to the wider Sydney network.

3.4 Pedestrian and Cycling Facilities

Well-established pedestrian infrastructure is provided near the site. Sealed pedestrian footpaths are provided on Lane Cove Road whereas shared paths between pedestrians and cyclists are provided on Waterloo Road and Epping Road. These footpaths provide pedestrian connection to Macquarie University and Macquarie Park metro stations as well as the surrounding bus stops.

Dedicated pedestrian facilities are provided on three of the four approaches at the intersection between Waterloo Road and Lane Cove Road in the form of signalised crossings or zebra crossing. Pedestrian may use these facilities to safely cross the road.

The site is surrounded by cycling infrastructure, with shared pedestrian and cyclist paths provided on Waterloo Road, Talavera Road and Epping Road as shown in Figure . These shared paths provide good cycling connection to surrounding areas, including commercial offices, retail shops and the shopping centre within Macquarie Park, as well as the surrounding public transport network.

Figure 3.4: Surrounding Cycling Infrastructure

Source: TfNSW Cycleway Finder – last accessed on 24/09/2029.

3.5 Site Investigation

A site visit of the subject site and surrounds was undertaken on Thursday 23 January 2025 in the evening commuter peak period during cloudy conditions to appreciate the existing traffic, pedestrian and cyclist behaviours.

Key observations are detailed below.

- Bus stops along Lane Cove Road (Stop ID: 2113202) and Waterloo Road (Stop ID: 2113324) was observed to have frequent usage by bus passengers.
- Lack of pedestrian crossing on the southwestern leg of Lane Cove Road / Waterloo Road require pedestrians to cross three signalised pedestrian crossings, or though the Macquarie Park Metro Station to travel across Lane Cove Road, increasing travel time for pedestrians

- The footpath along Lane Cove Road, south of the existing bus stop (Stop ID: 2113202), is in poor condition with missing concrete pavement. This shown in Figure 3.5. Some pedestrians were observed to traverse along the utility covers as an alternative to the unpaved dirt pathway.
- Minimal cycling activity observed, especially along the existing shared path on the northern side of Waterloo Road.

It is anticipated that the proposal will deliver improvements to the pedestrian network which is detailed further in Section 4.2.

Figure 3.5: Footpath along Lane Cove Road

4 Proposed Development

4.1 Overview

The proposal intends to demolish existing buildings and provide a 90MW IT S5 data centre at 269 Lane Cove Road, Macquarie Park (SSD-63168959).

The main components for the site are:

- **The Data Halls** – there are 14 halls covering a total area of 33,142m^2. It is a facility to house the computer and network systems. It will operate 24 hours per day, 7 days per week with staff numbers varying across the day. Staff trips will be typically long term and outside of peak hours. Customer trips will typically be short term and outside of peak hours

- **Lobby & Innovation Hub** – This includes a lobby, a training Room, meeting rooms, a board room, an auditorium, breakout spaces and technology display areas covering an area of 3,186m^2. These are secure spaces available for NEXTDC staff, customers and invited guests. These amenities support everyday private business and internal communication events, collaborative working, private and invited industry functions. These areas are shared spaces for only NEXTDC staff, Customers and invited guests and adhere to NEXTDC's strict security rules. The auditorium which is also proposed on the first level would not be open to the general public.

- **Ancillary Offices** – these comprise the Mission Critical Offices (MCX) offices and the NEXTDC offices and cover an area of 10,631m^2. The MCX Offices are secure, flexible workspaces available for customers, the offices contain desks and workstations, meeting rooms and office amenities. Customer trips will likely be short term and outside of peak hours. The NEXTDC Offices are secure workspaces for NEXTDC commercial and operational staff, the offices contain desks and workstations, meeting rooms and office amenities. Staff trips will be typically long term and are likely to take place in peak hours.

- The **Retail area** includes publicly accessible retail tenancies which exist on the ground floor fronting the public plaza and in includes back of house. A loading zone is proposed to be explored with Council on Road 13 to service the retail tenancies and surrounds.

The data centre is expected to create some 490 jobs for the Macquarie Park Corridor.

A total of 51 car spaces is proposed to be provided at basement level that will be available through a controlled booking system for all personnel whether permanently or occasionally onsite, visitors or contractors. Access to the car park will be provided from Road 13. An onsite loading dock capable of accommodating two 20m long articulated vehicles is also proposed that will be accessed via Road 13.

In addition, there will be some 19 indented car spaces created along the west side of Road 13 that will contribute to the publicly accessible car parking supply in the area and be available for short-term parking activities associated with the proposed retail tenancy and surrounding uses. The restriction for the new on-street parking will be explored with Council, including the provision for a Loading Zone to service the retail tenancy and surrounds.

The proposed development would expand the surrounding road network with the following:

- Road 13 along the eastern perimeter of the site that will intersect with Waterloo Road, as per Council requirements and be restricted to left turns only.
- Eastbound lane of Road 6 along the southern perimeter of the site that will intersect with Lane Cove Road, as per TfNSW design requirements and be restricted to left-in only.

It is our understanding that Road 6 and Road 13 will be constructed such that it will allow for the future extension of Road 6, by others, and the creation of a formal T-intersection. Until such time of the future extension of Road 6, a temporary turning facility will be provided at intersection of Road 6 and Road 13 that will allow vehicles travelling southbound along Road 13 to U-turn and depart via Waterloo Road.

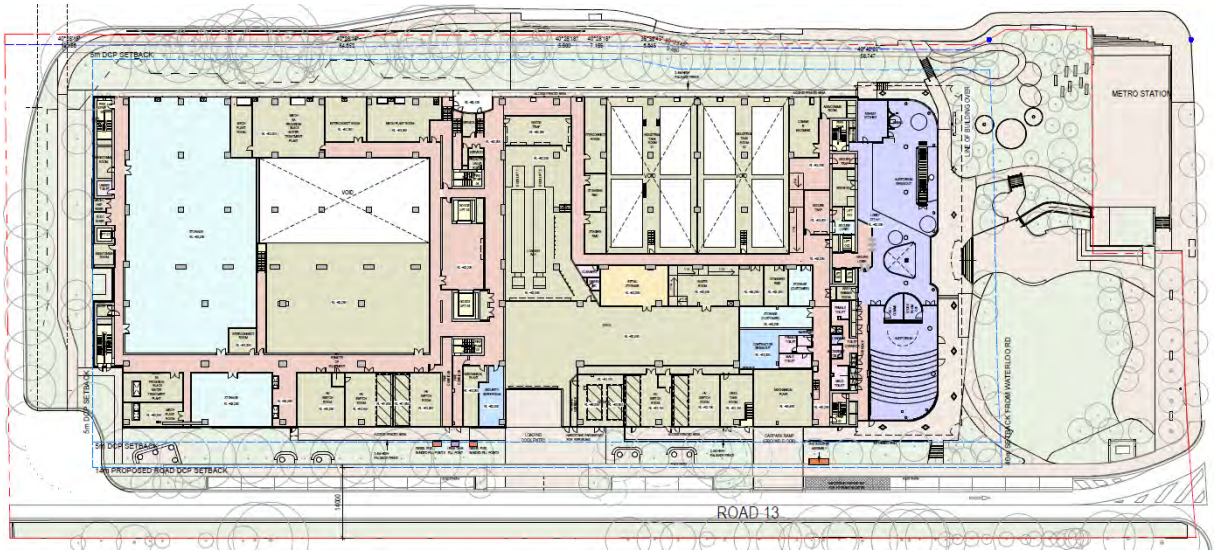
The existing vehicle access off Lane Cove Road (which is currently barricaded off) will be removed as part of road upgrade works proposed along Lane Cove Road.

The ground floor site layout for the proposed development is shown in Figure 4.1, noting that the ultimate arrangement for the Road 13 and Road 6 intersection will change following the future extension of Road 6 (by others) allowing the creation of a formal T-intersection. Appropriate pedestrian and cycle links are provided to/ from key transport hubs (i.e. Metro Station) within the site to provide good connectivity to these existing facilities in the area.

A large verge is provided between Road 6 and the proposed property line for the future addition a future pedestrian and cyclist bridge across Lane Cove Road that is envisaged by Council as part of a north-south active transport corridor through Macquarie Park and to be constructed by others.

Full architectural layout plans are provided in Appendix A.

Figure 4.1: Proposed Site Layout



Source: S5-ARC-HDR-DRG-00000-3001-OVERALL-PLAN---BUILDINGS-A-AND-B---LEVEL-01-[CP03] prepared by HDR

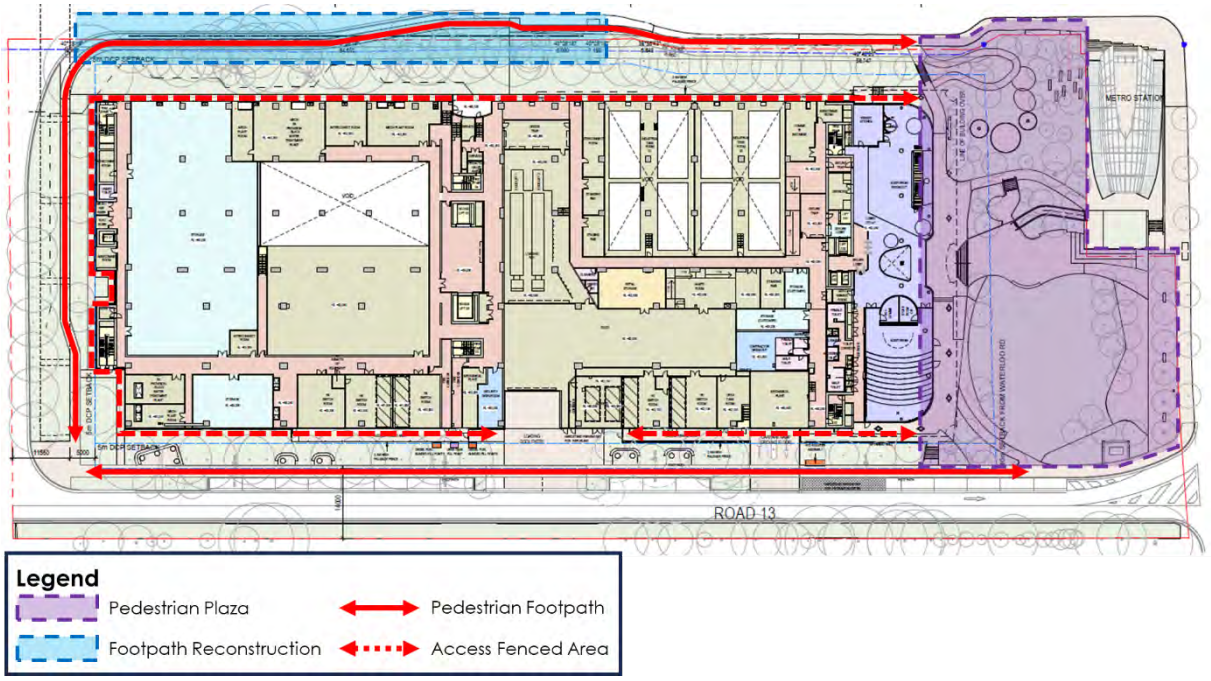
4.2 Pedestrian Access

The proposal intends to deliver the following pedestrian facilities:

- Access fenced area along the perimeter of the building
- Pedestrian plaza along the frontage of Waterloo Road which will provide direct pedestrian access between the Metro station entrance, development entrance and Road 13
- Pedestrian footpath along the western side of Road 13
- Pedestrian footpath along the northern side of Road 6
- Footpath reconstruction along Lane Cove Road.

The proposed pedestrian facilities and access arrangement is shown in Figure 4.2, with the building entrance location providing direct access to the Metro station entrance and also nearby buses thus reducing significant pedestrian volumes on the broader footpath network. The pedestrian plaza also benefits future pedestrian movement between the Metro station entrance and Road 13 by providing a more direct route between and thus reducing additional pedestrian movements along Waterloo Road.

Figure 4.2: Proposed Pedestrian Facilities and Access Arrangements



Source: S5-ARC-HDR-DRG-00000-3001-OVERALL-PLAN---BUILDINGS-A-AND-B---LEVEL-01-[CP03] prepared by HDR

4.3 Staff Occupancy

The anticipated staffing level for the site is a total of 490 specialists and related full-time roles during operation. These staff will comprise the following roles:

- NextDC Staff, including:
  - Facility Managers
  - Security / CSR
  - Sales
  - Engineering & Design
  - Technicians
- External Maintenance contractors
- Café staff
- Customers, contractors and clientele staff.

Council raised a concern that onsite parking would not be available for visitors to the site. In response to this, visitors are expected to make a minor portion of those what will be on site, primarily being people visiting the operational staff listed above.

The proposed data centre will operate 24/7, with many of the above roles working on an 8-hour x 3 shift basis. Based on the information provided by NextDC of its own staffing numbers

and operations from their other data centres within the Macquarie Precinct, Table 4.1 provides a detailed breakdown on the anticipated total roles and maximum staff onsite at any one time.

Table 4.1: Staff Occupancy

Staffing component		Total Roles	Maximum On Site Staff
Next DC	Sales	15	11
	Security / CSR	10	3
	Facility Managers	10	3
	Engineering & Design	6	2
	Technicians	8	3
Café Staff		4	4
Maintenance contractors		12	4
Customers, contractors and clientele staff		425	205
Total		490	235

Endorsed by NextDC, it is anticipated that the proposed development would have a maximum number of 235 operational staff at any one time, equating to 48 per cent of total staff.

5 Parking Assessment

5.1 Car Parking

5.1.1 Parking Requirements

The car parking requirements of the proposed development has been assessed against the City of Ryde Council Development Control Plan 2014 (DCP) Part 9.3. It is noted that the DCP does not provide specific car parking rates for data centres and therefore, the proposed data centre has been assessed as a commercial premises.

The site falls within the Macquarie Park Corridor and therefore car parking for new commercial premises is to be provided at a maximum rate of 1 space per 100m^2.

Further to this, based on the location and scale of the two retail tenancies includes BOH of 326m^2, the retail use is expected to be ancillary to the site and surrounding area and therefore, has been excluded in the below car parking assessment.

Additionally, whilst the overall GFA of the site is 47,285m^2, it is noted that 33,142m^2 is occupied by technical data hall floor space with 14 data halls. Therefore, this space is not used for any purpose other than data storage and thus, has been excluded for the purpose of assessing parking and traffic requirements.

On this basis, the office space has been assessed on the basis of a floor area of 10,631m^2 (i.e. 47,285m^2 minus 33,142m^2 technical storage, 3,186m^2 lobby/innovation hub and 326m^2 retail shop = 10,631m^2).

A summary of the maximum DCP parking requirement against the proposed parking provision for the proposed development is summarised in Table 5.1.

Table 5.1: Car Parking Assessment

Land Use	Size	DCP Parking Rate (Maximum)	Maximum DCP Parking Requirement	Proposed Parking Provision	Complies (Y/N)
Data Centre (Commercial Premises)	10,631m^2	1 space per 100m^2 (maximum rate)	106 spaces	51 spaces	Y

Table 5.1 indicates that the proposed development could provide a maximum of 106 spaces to accord with the DCP.

It is proposed to provide 51 car parking spaces, including 2 accessible spaces and 10 EV spaces. This complies with Council's maximum DCP parking requirement.

The establishment of Road 13 would also provide an additional 18 on-street parking that will be added to the public supply of parking for the area which are intended to be short-term

space for visitors of the site and surrounds. Parking restrictions for the on-street parking is to be further discussed with Council to encourage the turnover of spaces noting the on-street parking spaces and road will be dedicated to Council.

Although the site is expected to generate approximately 490 specialists and related full-time roles during operation, there will be 3 x 8-hour shifts per day. As mentioned in Section 4.3, the site is anticipated to have up to 235 staff on-site at any one time. As such, the proposed parking provision which will only be available through a controlled booking system as detailed in the follow section which would accommodate approximately up to 22 per cent of on-site staff.

As mentioned in Section 3.3, the proposed development is located adjacent to Macquarie Park Metro Station and several bus routes. This proximity to the Metro Station provides convenient public transportation options reducing the need for personal vehicle use and, therefore, reducing the overall parking demand.

As detailed in Section 6.2 of this report, NextDC has an existing data centre that is comparable in size and use in Artarmon. The NextDC Artarmon site provide 100 car spaces; however, it is located more than a 15-minute walk to any railway station compared to this site which has the privilege of being located directly adjacent to the Metro entrance. This further supports the reduced car parking proposed for this site, being less than half of what is permitted by the DCP and contributing to reducing the traffic generation capacity of the development as a result.

5.1.2 Parking Management

To minimise parking demand, a parking management strategy will be implemented to manage the parking demand effectively. Therefore, the following will be implemented:

- NEXTDC staff and maintenance contractors will also work across other NextDC facilities in the Macquarie Park precinct, sharing parking facilities with other sites
- A controlled booking system will be used and available for all personnel whether permanently or occasionally onsite, visitors or contractors
- No parking will be made available for events given the availability of public transport surrounding the site, as mentioned in Section 3.3

Implementing these parking management strategies will help to ensure that the demand does not exceed the supply and aide to reduce the traffic generation of the development. Furthermore, this would actively encourage alternative modes of transport given the prime location of the site to the Metro and buses, and the expansive active transport that is proposed for the Macquarie Park Precinct.

5.1.3 Mode Share Target

A Green Travel Plan (GTP) has been prepared by TTPP to accompany this SSDA (ref: *23217-R05V04-251010-Green Travel Plan*). The GTP encourages the use of transport modes that have low environmental impacts, and its success measured by a mode share target.

Table 5.2 presents the proposed mode share for the proposal development based on the 235 operational staff expected to be on site at any one time as mentioned in Section 4.3, with achievable goals in mind.

Table 5.2: Mode Share Targets

Method of Travel	2021 Benchmark (Connect MPID)	Target	Net Difference
Car (As Driver)	45%	22% [1]	**-23%**
Train / Metro	25%	40%	**+15%**
Bus	12%	14%	**+2%**
Car (As Passenger)	7%	7%	-
Walked Only	5%	5%	-
Bicycle	4%	9% [2]	**+5%**
Motorbike / Scooter	2%	3%	**+1%**
Total	**100%**	**3%**	**-**

[1] based on 235 people in a shift and the proposed 51 car spaces
[2] based on 235 people in a shift, the proposed 20 bicycle spaces and proximity to the planned north-south active transport corridor through Macquarie Park.

The above mode share targets are more ambitious that the 2021 Connect MPID benchmark – that is, a 54 per cent public transport mode share compared to 37 per cent, therefore an increase of 17 per cent.

It is noted that the proposed mode share targets represent a reduction of private car trips by 23 per cent compared to the 2021 Connect MPID benchmark, which factors in the amount of onsite car parking proposed which is possible by the proximity of the site to the Metro Station and bus services.

It is however noted that the future Sydney CBD Metro to Bankstown connection is expected to be opened in 2025/26. This extension of the Metro line to Bankstown will further expand the coverage and accessibility to the site and is likely to increase the public transport uptake within Macquarie Park area.

5.2 Accessible Parking

Council's DCP (Part 9.2) states that an office building is categorised as Class 5 and is required to provide 3 per cent of proposed car spaces as accessible spaces (wide bays). Based on the provision of 51 spaces, it is required to provide two accessible car parking spaces. The proposed carpark will provide two accessible parking spaces, satisfying Council's DCP requirements.

5.3 Bicycle Parking and Facilities

According to Council's DCP (Part 9.3, Section 2.7), every new building, where floor space exceeds 600m^2 GFA (except for dwelling and multi-unit housing) must provide bicycle parking equivalent to 10 per cent of the required car spaces or part thereof.

For the required maximum 106 car spaces, a total of 11 bicycle spaces would be required. It is proposed to provide 20 bicycle spaces which complies with the DCP. The additional bicycle parking proposed supports the lower car parking provision and encourages travel by modes other than single occupancy vehicles. Appropriate end of trip facilities accessible to staff will also be provided on the ground floor to encourage cycling to work.

5.4 Motorcycle Parking

No motorcycle parking rates are currently provided within Council's DCP. However, it is proposed to provide 17 motorcycle spaces, which represents approximately 33 per cent of proposed parking car parking provision. The provision of motorcycle parking supports the lower car parking provision and encourages travel by modes other than single occupancy vehicles.

5.5 Servicing Requirements

Council's DCP states that all developments involving new floor space are required to provide on-site loading and unloading facilities, except:

- Dwelling houses, dual occupancies
- Residential flat buildings and multi dwelling housing with access from the local road network.
- Residential flat buildings and multi dwelling housing located on Main or County Roads are required to provide on-site loading and unloading facilities to ensure that vehicles do not stand on the road or footway.

It is proposed to provide two loading docks on the ground floor, with each loading dock capable to accommodate up to two 20m long articulated vehicles. Waste collection for the data centre will also be undertaken via the loading dock.

In addition to this, refuelling of the diesel tank provided adjacent to Road 13, between the loading dock and car park accesses, will occur by fuel trucks that will stop adjacent to the loading dock driveway. This would allow the fuel trucks to enter and exit the site in a forward direction, using the available loading dock area to complete a three-point turn. Therefore, refuelling activities are to take place wholly within the subject site and not on Road 13. Moreover, refuelling activities are expected to be infrequent and outside of standard operating hours to minimise its impact on surrounding road users.

A swept path assessment was undertaken to assess vehicle accessibility between Waterloo Road and the loading dock using a 20m long articulated vehicle. The outcome of this assessment shows that the 20m long articulated vehicle and a B99 can bypass each other at Waterloo Road / Road 13 but the 20m long articulated vehicle requires encroachment onto the opposing travel lane on Road 13. Therefore, a Traffic control Plan / Traffic Management Plan will be required to manage 20m long articulated vehicle access to the proposed development, which will be addressed in the detailed design stage.

Based on this, all service vehicles could be expected to enter and exit the loading dock in a forward direction.

The swept path assessment is enclosed in Appendix B.

In addition to this, based on the site layout and security requirements of the data centre, the proposed retail shop is unable to use the proposed on-site loading dock for retail loading purposes. Therefore, it is proposed to explore with Council the provision of an on-street loading zone along Road 13 to service the proposed retail use, as well as surrounding land uses in the area. Any on-street loading zone would be subject to Council approval through their local traffic committee.

5.6 Emergency Vehicle Access

The NSW Guidelines Access for Emergency Vehicles advises that *"any carriageway that extends longer than 120 m from an intersection and does not lead directly to an exit of connecting carriageway (i.e. dead end) is to have a suitable turnaround area so that a fire appliance does not need to reverse out"*.

Road 13, west of the loading dock access, is about 80m long therefore less than the 120m requirement. Road 13 will intersect with Road 6 (one-way eastbound from Lane Cove Road) with a temporary turning facility to be provided until such time that Road 6 is extended east once the adjacent sites are redeveloped, thus eliminating the need for the temporary turning facility.

The temporary turning facility at the intersection of Road 6 and Road 13 has been designed to facilitate a U-turn manoeuvre of vehicles up to a 12.5m heavy rigid vehicle (incl. specialist fire appliance), noting that the loading dock driveway (which has been designed to accommodate up to a 20m long articulated vehicle) can also be used to perform a three-point turn to depart, as shown in the attached swept paths in Appendix B.

5.7 Parking Layout

The car park and associated elements are proposed to comply with design requirements set out in the Australian Standard, namely AS2890.1:2004 and AS2890.6:2009. The car parking spaces have been designed as Class 1A parking facilities, with a minimum 2.4m wide by 5.4m long space and 5.8m aisle, which is considered appropriate for the intended use (i.e. staff/employees).

It is envisaged that a condition of consent would be imposed requiring compliance with these standards and as such, any minor amendments can be dealt with prior to the issue of a Construction Certificate.

6 Transport Impact Appraisal

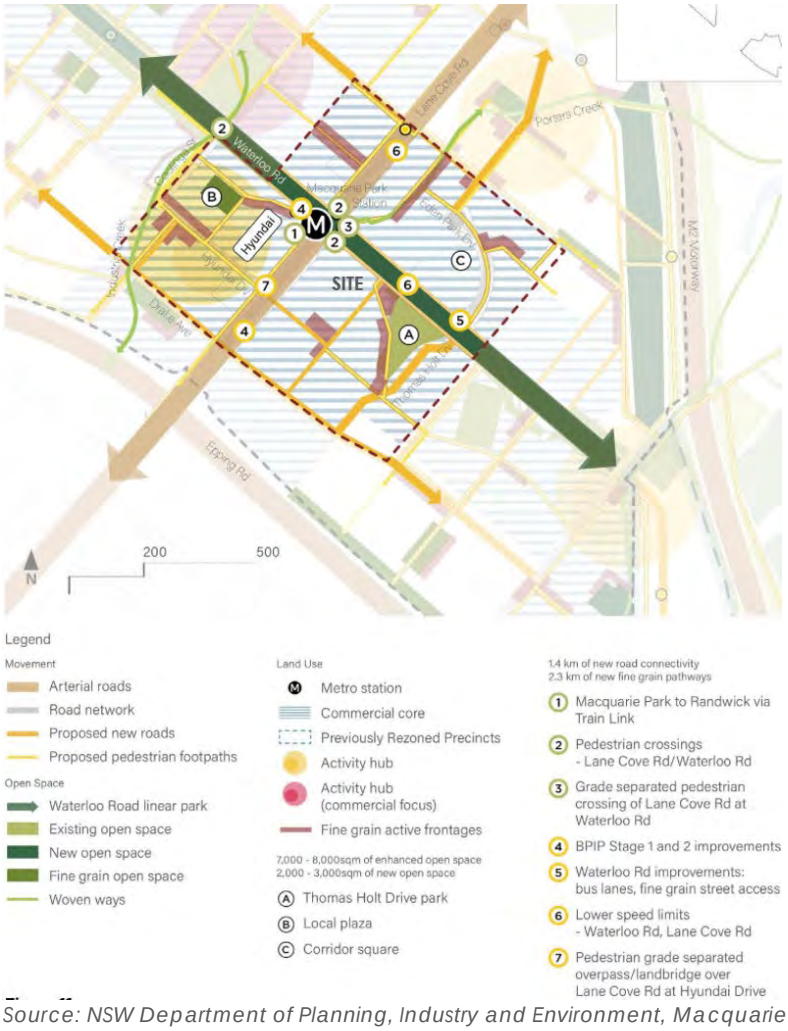
6.1 Access Considerations

The site is located within the Macquarie Living Station – Gari Nawi (Saltwater Canoe) around Macquarie Park Metro Station. Macquarie Park Place Strategy (MPPS) envisages the area as a place of activity with a commercial core and new residential development. New public roads are proposed to be delivered to service the new commercial core and residential development.

The proposed development will help facilitate with MPPS strategic vision for the site being a commercial core, as shown in Figure 6.1.

The Applicant will deliver the planned Road 13 and Road 6 which would connect Waterloo Road (Left-In/ Left-Out) and Lane Cove Road (Left-In only) respectively with the future local road network planned for this precinct, which would be delivered by other developers.

Figure 6.1: Proposed Structure Plan, Macquarie Living Station – Gari Nawi (Saltwater Canoe)



Source: NSW Department of Planning, Industry and Environment, Macquarie Park Place Strategy

6.1.1 Road 5 Removal

An original SSDA of the proposed development was lodged in the first half of 2024 that provided a Road 5 that split the site however did not connect with Lane Cove Road which was consistent with NSW Department of Planning, Housing and Infrastructure (DPHI) and Council planning strategies at the time.

Submissions received by authorities on the original SSDA in the early second half of 2024 did not raise any issues that Road 5 did not connect with Lane Cove Road and subsequent discussions with DPHI raised questions whether Road 5 was required as it did not serve any purpose, including not providing any vehicle or pedestrian access to the proposed development with no active frontage or connection to Lane Cove Road.

In December 2024, the applicant had put forward the proposal to remove Road 5 to Council. However, Council had advised that Road 5 was required to be retained as part of the Stage 2 Macquarie Park Structure Plan (MPSP), released in November 2024. The MPSP showed that Road 5 (and Road 6) was necessary and required to be connected to Lane Cove Road to facilitate the proposed level of uplift in the MPSP.

It should be noted that the original SSDA was lodged prior to the publication of the MPSP. The proposed development had demonstrated to be consistent with the Macquarie Park Innovation Precinct Place Strategy, published in August 2022.

TfNSW was subsequently consulted on whether they would support a road connection between Road 5 and Lane Cove Road in February 2025. TfNSW provided the following conditions that would need to be met to obtain their support:

- Maintain a minimum indented bus zone length of approximately 66 m (suitable for independent draw in/ draw out of two 14.5-metre-long rigid buses)
- Provide a minimum left turn deceleration of approximately 50 to 60 m physically separated from the bus bay
- Provide large directional sign and safety barrier in approximately the same location.
- Remove the existing unused driveway along the frontage

The project team was advised to assess the impact on buses, consider design speed, road safety and constructability. In addition, the project team was requested to assessment pedestrian routes to the public transport interchange with the removal of Road 5.

In lieu of any traffic modelling, the project team tested a series of design options that includes and excludes Road 5 into the design and whether Road 5 connection to Lane Cove Road can realistically be accommodated given other competing infrastructure requirements. The proposed schematic design for Lane Cove Road/ Road 6 that received support from Transport for NSW is provided in Appendix C, which also illustrates other road network related works to be completed along Road 6 and Road 13.

Details of the analysis that was completed to with TfNSW to justify the removal of Road 5 is provided below.

6.1.1.1 Movement Characteristics

Waterloo Road, Road 5 and Road 6 would provide parallel connections between Lane Cove Road and Road 13. Despite the similarities, Waterloo Road provides pedestrian connectivity between the Metro station and the proposed development, whilst Road 6 would help facilitate the strategic cycleway corridor within Macquarie Park's active transport network with a pedestrian and cyclist bridge envisaged over Lane Cove Road along this alignment. Therefore, compared to Waterloo Road and Road 6, Road 5 is considered to have a lower strategic importance in providing connectivity within the active transport network for the Macquarie Park precinct, with not importance to the development site.

6.1.1.2 Bus Stop Impact

A key point communicated during the TfNSW discussions was that impact to the existing indented bus zone on Lane Cove Road was to be avoided. This was considered in developing options to retain Road 5.

If the bus zone was to be retained in generally the same location, it would have required Road 5 to be moved some 55 metres south of the planned location to provide the required deceleration lane having undesirable impacts on the developable area between Road 5 and future Road 6 with only 45 metres remaining between the two roads. If Road 6 was also to connect with Lane Cove Road there would not be sufficient length along Lane Cove Road to provide a suitable deceleration lane for Road 6.

If Road 5 was generally retained in the planned location being midway between Waterloo Road and the future Road 6, the requirement of a deceleration would have required the bus zone to be relocated south of Road 5 increasing the walking distance between the bus stop and Metro Station entrance. However, it is noted that the remaining distance between Road 5 and Road 6 of around 105 metres would not be sufficient to provide both a 66-metre bus zone and a deceleration lane for the future Road 6.

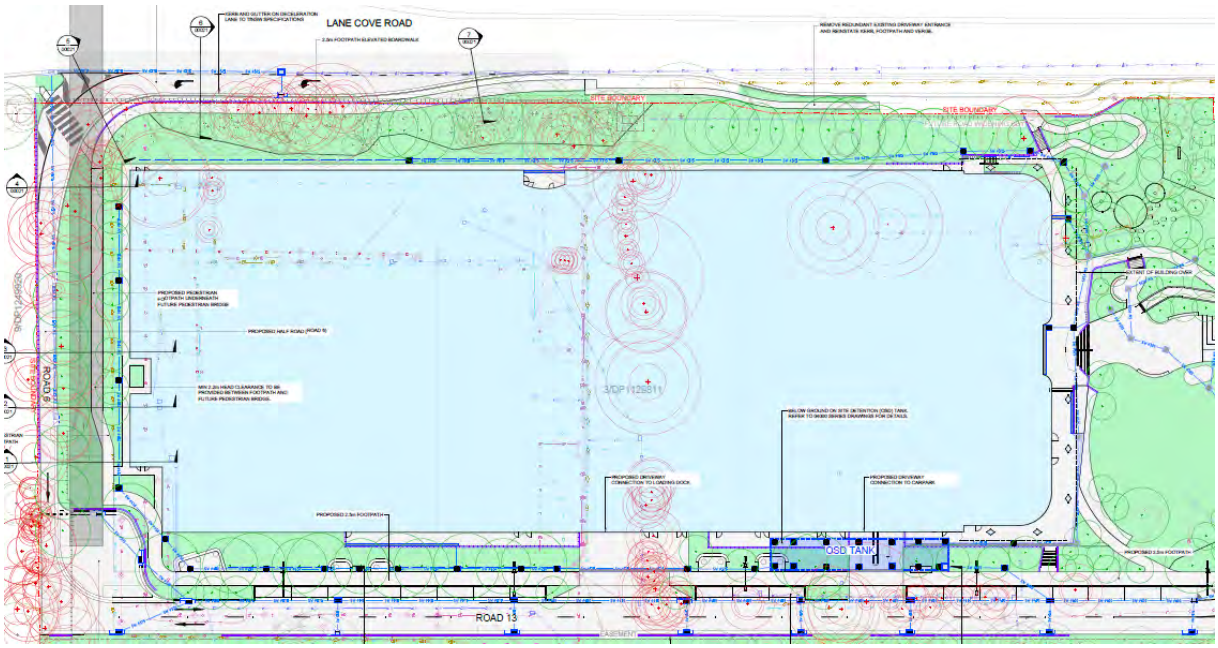
6.1.1.3 Preferred Option

The preferred option, shown in Figure 6.2 and included in Appendix C, illustrates a scenario whereby Road 6 is connected to Lane Cove Road with the TfNSW advised deceleration lane length. This option allows the existing indented bus zone to be retained (with the removal of the existing unused driveway) and provides greater separation and reduces potential conflict between bus movements out of the bus zone and cars into the deceleration lane. It also reduces the impact of constructability on the bus zone operation with the separation.

Given the proximity of Road 6 to the Epping Road intersection, which whilst could meet the 105-metre spacing Austroads requirement of side roads, any left turn egress from Road 6 would not be supportable as a result of the possible conflicts created being adjacent to several traffic lanes. As such, the preferred option considers a left-in only intersection arrangement, which allows westbound traffic along Lane Cove Road to access the precinct

and site via Road 6 and Road 13. Vehicles departing the precinct still have Road 13 connection to Waterloo Road to do so and left onto Lane Cove Road to access all turning movements at Epping Road intersection.

Figure 6.2: Road 6 Schematic Design



Source: TTW, 221661-TTW-00-DR-CI-00011-K

6.1.1.4 Traffic Modelling

TfNSW has undertaken an internal traffic assessment, facilitated by Aimsun modelling software, to assess the following scenarios:

- Reference case (Updated Scenario 2 model from the Macquire Park Detailed Precinct Transport Study, November 2023 that considered Road 5 and Road 6 as left-in/ left-out at Lane Cove Road, Road 13 being left-in/ left-out at Waterloo Road)
- Road 5 left-in/ left-out at Lane Cove Road, with Road 6 as an active transport link
- Road 6 left-in only at Lane Cove Road, with no Road 5.

The outcome of TfNSW's internal traffic assessment, which is included in Appendix D, defined TfNSW's preferred design option, being:

- Removal of Road 5
- Maintaining the existing bus stop on Lane Cove Road
- Inclusion of Road 6 with a left-in only arrangement.

TfNSW's endorsement of the removal of Road 5 indicated that although there could be some increased congestion on Waterloo Road in the weekday PM peak compared to the reference case, when accounting for the constructability and road safety of retaining Road 5, the removal of the roadway was acceptable in the context of the strategic road network for the Macquarie Park precinct. It is understood that the modelling completed by TfNSW did

not factor in the traffic generating characteristics of the proposed development, rather the planned land use and yield potential for the site which could have a higher traffic generation.

6.1.1.5 Pedestrian Movement Analysis

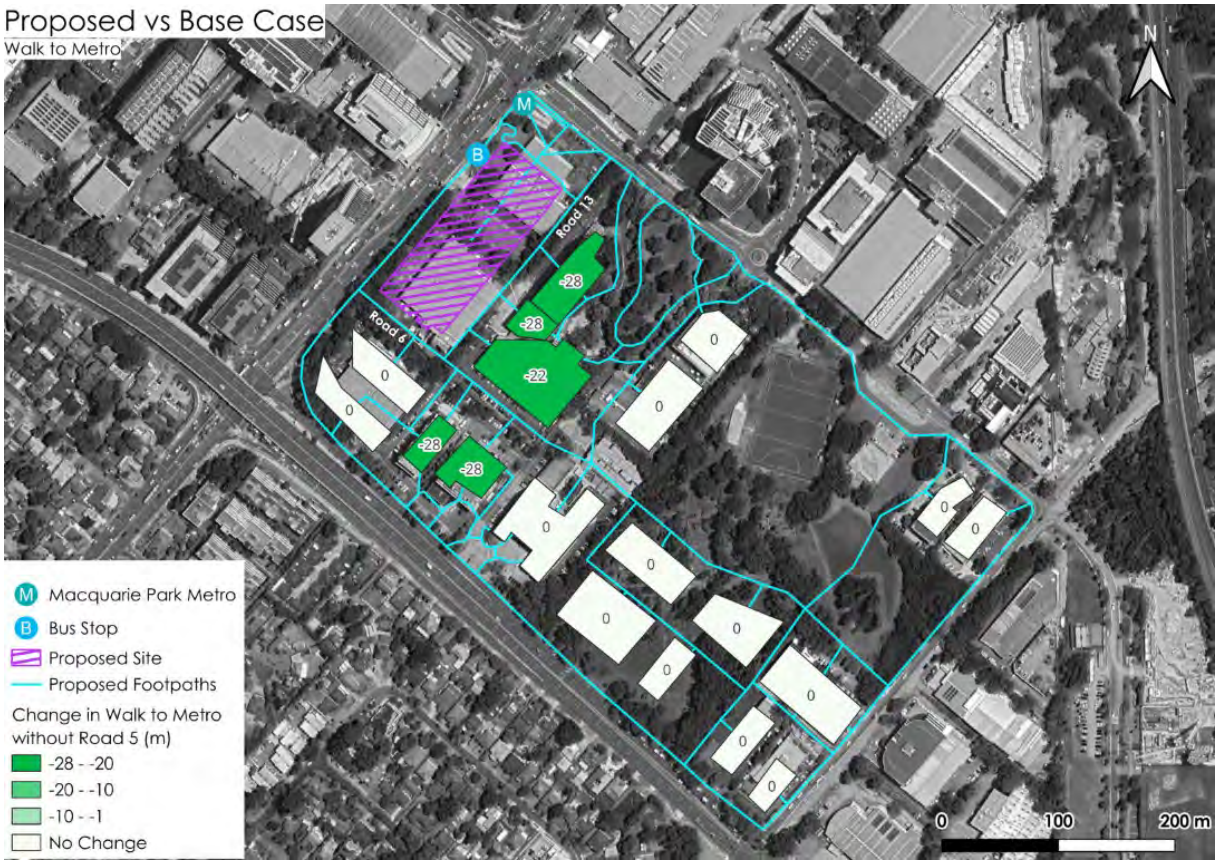
At the request of TfNSW following the outcomes of their internal traffic assessment, pedestrian movement analysis was conducted, facilitated by QGIS software, to understand the impact of the removal of Road 5 and improvements to the civic plaza adjacent to Waterloo Road to pedestrian movements within the precinct. The change in pedestrian travel distance to the Macquarie Park Sydney Metro entrance and to the westbound Lane Cove Road bus stop are shown in Figure 6.3 and Figure 6.4, respectively.

The pedestrian movement analysis suggests that:

- Removal of Road 5 and expansion of the civic plaza reduces walking distances to/from the Metro entrance for at least two buildings on Epping Road and three on Thomas Holt Drive. If direct access to Road 13 is not provided for the buildings along Thomas Holt Drive, there is no impact. There is also no impact to pedestrian travel distance to the other surrounding developments.
- Removal of Road 5 may add up to 60 seconds' walking time to the Lane Cove Road bus stop for three buildings on Thomas Holt Drive. If direct access to Road 13 is not provided, there is no impact to these buildings, which are understood to have lower maximum incentive heights compared to other precinct sites. There is also no impact to pedestrian travel distance to the other surrounding developments.

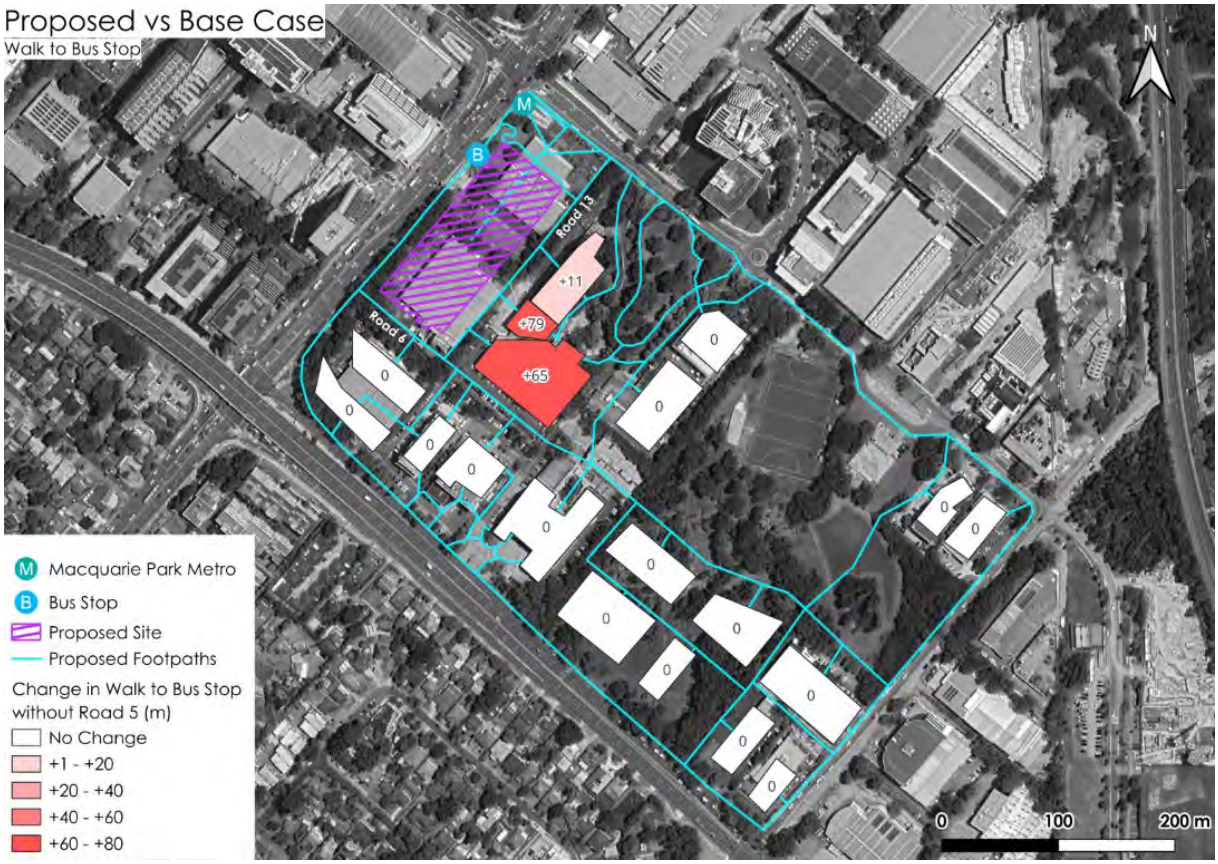
Overall, the pedestrian movement analysis showed that Road 5 had limited benefits to the overall precinct accessing the bus stop on Lane Cove Road. Alternatively, the removal of Road 5 and improvements to the civic plaza had wider improved access to the Macquarie Park Metro Station, that would yield high patronage number than the bus stop.

Figure 6.3: Pedestrian Movement Analysis – Distance to Metro Station



Source: QGIS

Figure 6.4: Pedestrian Movement Analysis – Distance to Bus Stop



Source: QGIS

6.1.2 Road 6 Inclusion

Following the presentation of pedestrian movement analysis and further schematic designs for Road 6 Left-In Only, TfNSW acknowledged significant impact of Road 5 on existing public transport infrastructure (during construction and operation) and that they were "amenable" to the removal of Road 5, inclusion of half Road 6 construction with left turn in slip lane from Lane Cove Road, and the allowance for the active transport bridge.

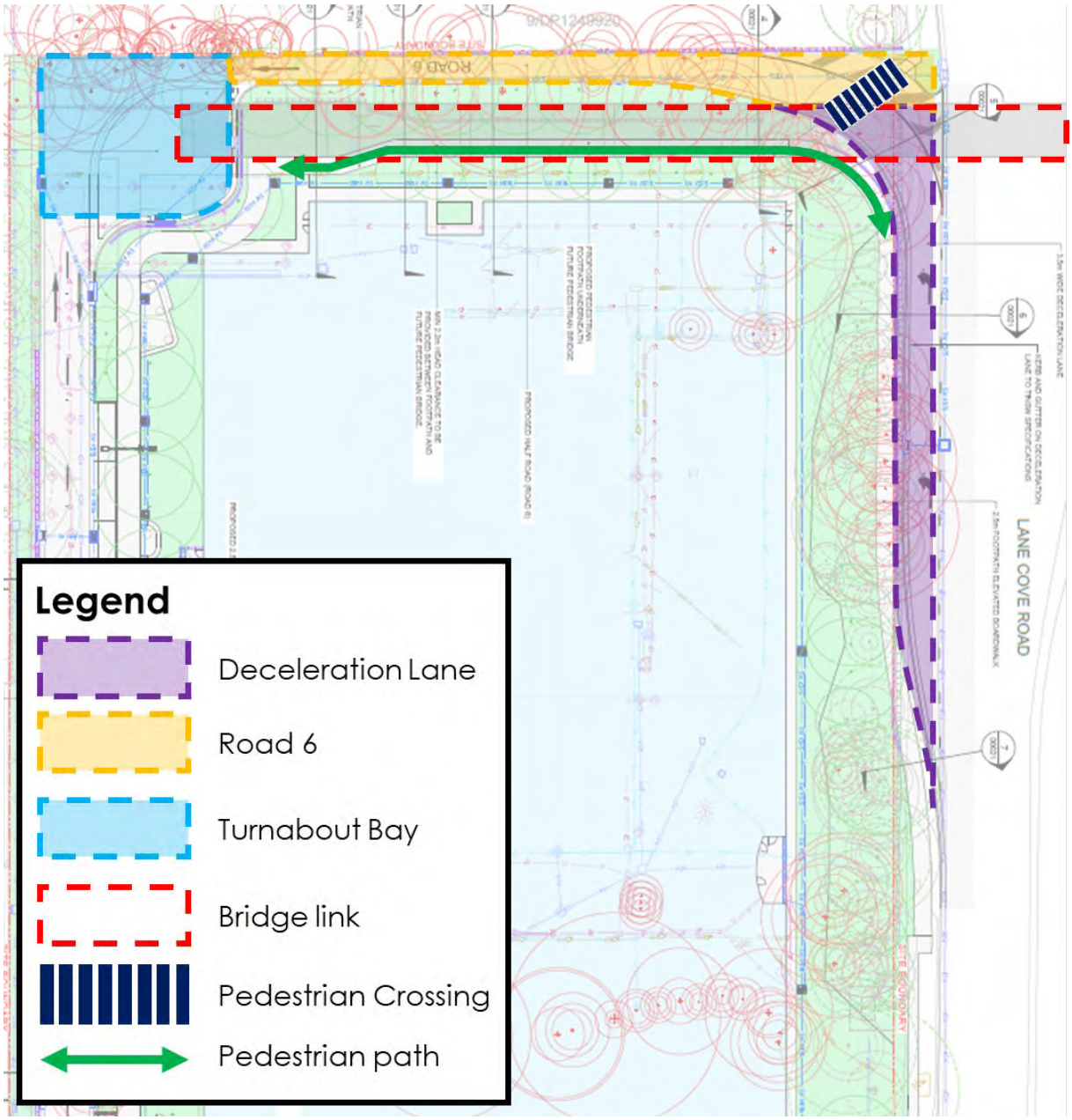
To endorse the inclusion of Road 6, TfNSW had provided design requirements that is outlined in Table 6.1 with the relevant correspondence included in Appendix D. The proposed design of Road 6, accordance with TfNSW design requirements, is shown in Figure 6.5.

Table 6.1: TfNSW Design Requirements

Component	Requirement
Road 6	• Deceleration lane for an Articulated Vehicle from Lane Cove Road • One way into the site • No access from Road 6 to Lane Cove Road due to proximity of slip lane to Epping Road
Swept Path Analysis	• Fire truck vehicle through turnaround bay • Articulated vehicle entry from Road 6

Shared Path Bridge	• Allowance for shared pedestrian and cyclist bridge to land onto the site • Top of bridge level based on 6m above highest road surface that it crosses • Accessible walkways required at 1:21 with landings every 15m at 1:41 • Bridge able to be accommodated within the length of the site when remainder of Road 6 is completed and cyclist/pedestrian demand is generated • Internal clear width of 5.8m required between handrails or barriers

Figure 6.5: Proposed Road 6 Design



Source: 221661-TTW-00-DR-CI-00011-K] prepared by TTW

6.1.3 Deceleration Lane

In accordance with TfNSW's design requirements, the proposed deceleration lane along Lane Cove Road has been designed with the following:

- Total Length of 66 m with a storage length of 43 metres which has a capacity of two articulated vehicles, or seven light passenger vehicles.
- Inbound only access to the site via Road 6 and Road 13
- Pedestrian crossing facility to improve pedestrian movement along Lane Cove Road
- No impact to the existing bus stop on Lane Cove Road.

6.2 Traffic Generation

There are no traffic generation rates specified for data centres in TfNSW's *Guide to Transport Impact Assessment 2024* (GTIA). Therefore, TTPP undertook traffic generation surveys at a comparable NextDC data centre in terms of size and use in Artarmon.

Traffic generation surveys were undertaken across a 7-day period between Sunday 4 February and Saturday 10 February 2024 at the NEXTDC data centre located at 2 Broadcast Way, Artarmon.

It is understood that this data centre currently is comparable in size, and a typical shift (8-hour shift) would generally have about 285 persons. A total of 100 car parking spaces is currently provided with secure access via Broadcast Way. Although this is more car parking than proposed for this development, the NextDC Artarmon site is not located above a Metro line like the subject site, with the nearest railway station being more than a 15-minute walk away.

A summary of the 7-day traffic generation profile of the NEXTDC Artarmon site is shown in Figure 6.6.

Figure 6.6: Traffic Generation Profile – NEXTDC Artarmon

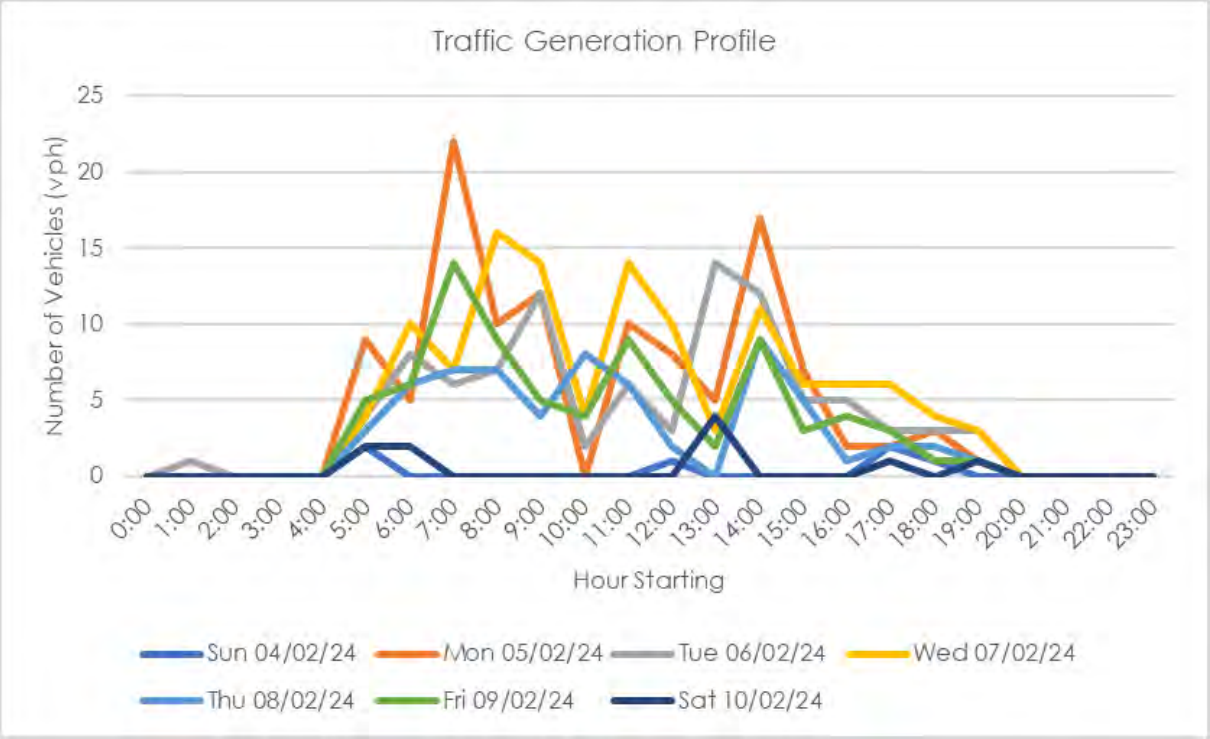


Figure 6.6 indicates that the existing NEXTDC Artarmon site currently generates up to 22 vehicle trips per hour, which occurred on Monday at 7am.

Based on 100 spaces at the NEXTDC Artarmon site, this equates to a trip rate of 0.22 trips per car space.

Comparably, traffic generation surveys were also undertaken at the existing data centre at 8 Khartoum Road, Macquarie Park (Ason Group, 2018) to develop a 'trip per parking space rate'. The following average parking space trip rates were applicable for the site:

- Weekday AM peak: 0.45 trips per parking space
- Weekday PM peak: 0.36 trips per parking space.

Application of the above peak hour trip rate of 0.22 trips per car space, the proposed development with 51 spaces could be expected to generate up to 11 vehicle trips per hour, which is negligible. Using the higher traffic generation rates from Ason Group (2018) of 0.45 trips per parking space, the site could generate up to 23 vehicle trips during peak periods. This equates to one vehicle every 2 minutes.

In both scenarios, the level of development traffic is considered low.

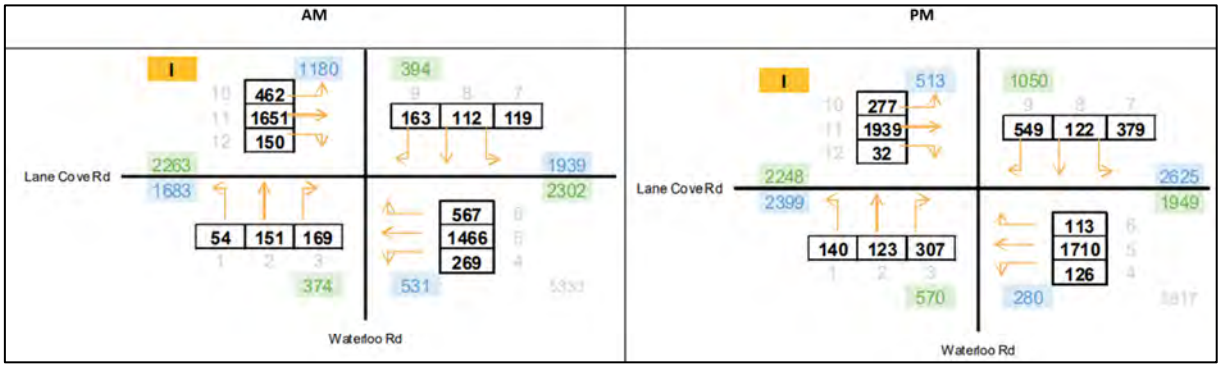
6.3 Traffic Impact

At an intersection level, the expected low development traffic would be further diluted due to it being distributed to different turning movements and across a number of intersections. As such, it is not expected to create any noticeable traffic effects to the nearby intersections.

In addition, it is noted that the nearby intersections carry significantly higher traffic flows than that generated by the proposed development.

Traffic surveys undertaken at Lane Cove Road and Waterloo Road in February 2023 indicate that peak hour two-way flow on Lane Cove Road is in the order of 2,300 to 2,600 vehicles per hour. Similarly, Waterloo Road has peak hour volumes ranging from 374 to 1,050 vehicles per hour, as shown in Figure 6.7.

Figure 6.7: Peak Hour Traffic Volumes at Lane Cove Road / Waterloo Road



Source: 35 Waterloo Road, Macquarie Park – Transport Management & Accessibility Plan (Ason Group)

It is further noted that variances in traffic from day to day could be up to 10 per cent. Therefore, an expected development traffic level of 23 vehicle trips per hour during the busiest peak period would not create any material change in the performance of the nearby road network.

Further to this, the existing site has approximately 225 parking spaces whereas the proposal has 51 parking spaces so it is expected that even if there was any traffic impact, it would be minimal and less compared to what the existing site could have generated at its peak operation.

GTA Consultants' *Trip Generation and Parking Generation Surveys (Office Blocks) – Analysis & Data Report (2010) was prepared to* facilitate updated traffic generation rates for office blocks in GTTIA. The 2010 Study included traffic data for an office block at 16 Giffnock Avenue Macquarie Park (OB5 Macquarie Park), located 500 m from the subject site. This provides a reasonable traffic comparison with the existing office land use on the subject site due to proximity and similar land use. From the Analysis & Data Report, OB5 peak road network traffic generation is 119 trips, and has 269 car spaces. This results in a vehicle trip to car space ratio of 44% during peak hour.

Utilising the trip to car space ratio, the existing site with 225 parking spaces could be or have been generating 100 vehicle trips per hour. By comparison, the proposed site having 51 parking spaces is expected to generate 23 vehicle trips per hour. This results in a reduction of 77 trips during peak hour for the proposed site.

6.3.1 Traffic Modelling

As mentioned in Section 6.1.1.4, TfNSW had modelled the road network with the preferred design which includes the removal of Road 5, and Road 6 Left-in only arrangement. TfNSW also modelled Road 13 with a Left-in & Left-out arrangement at Waterloo Road, as reflected in the proposed design, given that the proximity of Road 13 to Lane Cove Road being about 80 metres and the current provision for up to six traffic lanes adjacent to the site reducing to three lanes to the east would not make it practical to allow for right turn movements without comprising the operation and safety of the road network. Traffic wanting to turn right into the site can either use Road 6 by turning left from Lane Cove Road or U-turn at the existing roundabout located at Eden Park Drive/ Thomas Holt Drive and in the future use the expanded new road network planned for the precinct.

The TfNSW modelling showed acceptable impact on the road network with only some increased congestion expected on Waterloo Road during the weekday PM Peak period compared to the reference case. This is detailed in TfNSW findings included in Appendix D. As previously mentioned, it is understood that the modelling completed by TfNSW did not factor in the traffic generating characteristics of the proposed development, rather the planned land use and yield potential for the site which could have a higher traffic generation.

Therefore, considering the reduction in traffic volumes generated by the site compared to the existing land use, traffic modelling of the Macquarie Park precinct road network undertaken by TfNSW, and the removal of right turn movements at Waterloo Road, any intersection modelling software (such as SIDRA) is unlikely to register any adverse changes in the intersection performance. That is, modelling results are not expected to return any meaningful intersection performance output.

It is clear that, therefore, the low level of generated traffic possible by the reduced car parking provisions could not be expected to result in any adverse traffic impact on the surrounding road network.

6.3.2 Surrounding Road Network

Council had raised concerns of the potential traffic impact at the following intersections:

- Lane Cove Road / Waterloo Road
- Lane Cove Road / Road 6
- Waterloo Road / Road 13
- Road 13 / Road 6.

The potential traffic impact at these locations is detailed in Table 6.2

Table 6.2: Traffic Impact to Surrounding Road Network

Intersection	Traffic Impact
Lane Cove Road / Waterloo Road	When considering the traffic generation of the development is going to be 77 trips per hour less than the existing site that could generate, since the number of parking spaces would be reduced from 225 spaces down to 51 spaces. There could be a minor improvement to the Lane Cove Road / Waterloo Road intersection performance when considered in isolation.
Lane Cove Road / Road 6	Provision for a deceleration lane on Lane Cove Road to Road 6 separates left turning traffic from the southbound through traffic. This separation enhances the main southbound traffic flow and maintains the same level of service along Lane Cove Road.
Waterloo Road / Road 13	The proposed left-in & left-out (LILO) arrangement prohibits any right turn movements at the intersection. This removes any delays caused by right turn vehicles interrupting the main eastbound through traffic along Waterloo Road. Moreover, the existing access arrangement is currently a LILO arrangement with right turning movements prohibited, although informally on Waterloo Road. As such, the proposed intersection design not only maintains but also formalises the LILO arrangement.
Road 13 / Road 6	As part of the SSDA, Road 6 only extends up to Road 13, the remaining to be built by others. Under this arrangement Road 6 inbound vehicles would only yield to vehicles performing a turnabout manoeuvre at the end of Road 13, an infrequent occurrence. Consequently, Road 6 traffic would generally enter Road 13 as a through road uninterrupted minimising upstream traffic impact towards Lane Cove Road. When Road 6 is further extended, Road 6 will have priority for the T-intersection arrangement that will be created and if Road 6 (between Lane Cove Road and Road 13) remains one-way only, the intersection would be expected to operation satisfactorily.

Based on the proposed design for Road 6 and Road 13, and reduction in traffic volumes expected by the proposed development, compared with the existing development, it is not expected that the proposed site would yield any adverse impacts to the surrounding road network.

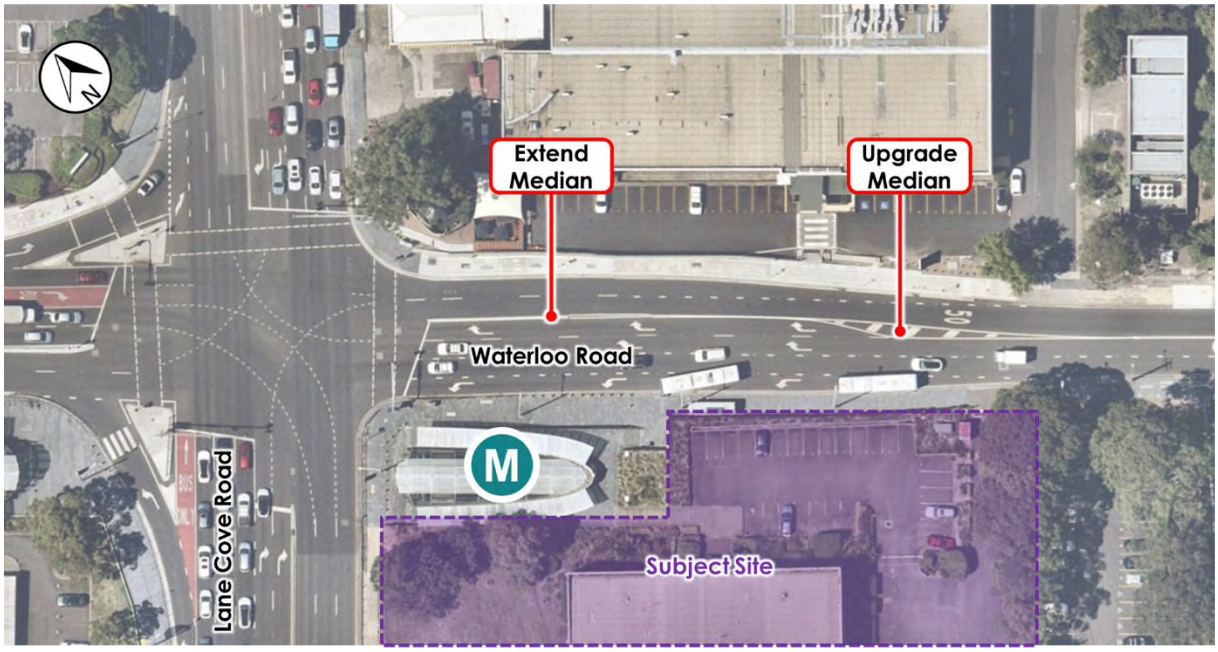
6.3.3 No Right Turn Treatment

A no right turn treatment along Waterloo Road, fronting the site, is recommended to be considered in consultation with Council and TfNSW to prohibit any right turn movements at Road 13. This upgrade would compose of:

- Upgrading the existing marked median with a raised concrete median
- Extending the existing median, southwest of Lane Cove Road / Waterloo Road intersection, to the upgraded median

The upgrades to facilitate the no right turn treatment along Waterloo Road is summarised in Figure 6.8. Schematic design for the no right turn treatment should be completed pending outcomes of Council and TfNSW engagement however this is not considered necessary to be resolved for the SSDA approval as it is not being triggered by the development.

Figure 6.8: No Right Turn Treatment



Source: Nearmap

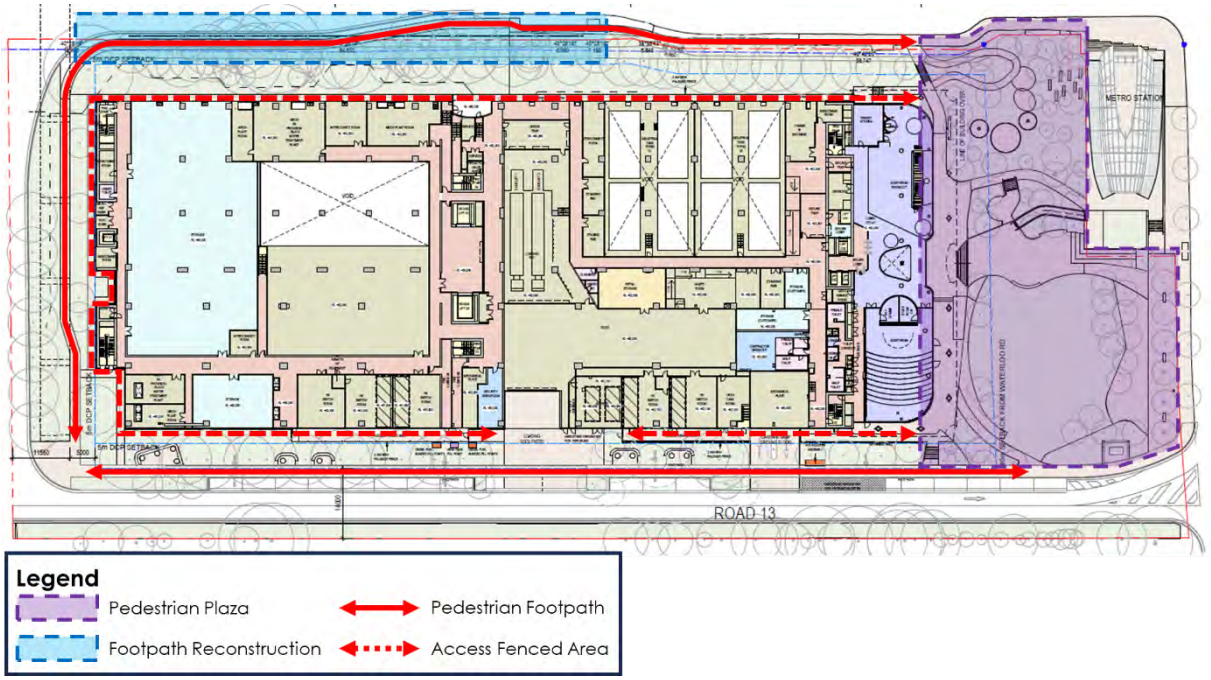
6.4 Active Transport

Council had published the Public Domain Technical Manual – Chapter 6: Macquarie Park Corridor to promote the revitalisation of the Macquarie Park Corridor. One of the objectives of the Public Domain is to, '*Improve pedestrian, cycle, and vehicular accessibility and permeability to and within the Macquarie Park Corridor'* with a focus on Waterloo Road as a main street with boulevard character.

6.4.1 Civic Plaza

As detailed in Section 4, the pedestrian facilities proposed for the development will assist in this objective with the civic plaza proposed along Waterloo Road. The civic plaza improves the connectivity between Road 13, the proposed development and the Metro station for pedestrians and cyclists. Furthermore, the wide-open space of the plaza, which has been even widened with the removal of Road 5, minimises the conflict between pedestrians, cyclists, and public domain elements. Therefore, the civic plaza provides a safe pedestrian environment and improves the accessibility and permeability of Waterloo Road. The pedestrian facilities are repeated in Figure 6.9.

Figure 6.9: Proposed Pedestrian Facilities and Access Arrangements



Source: S5-ARC-HDR-DRG-00000-3001-OVERALL-PLAN---BUILDINGS-A-AND-B---LEVEL-01-[CP03] prepared by HDR

6.4.2 Road 13

As a minimum, a pair of kerb ramps will be provided on Road 13 at Waterloo Road to facilitate pedestrian and cyclist movement along Waterloo Road. Given the need to accommodate large vehicles such as 12.5m heavy rigid vehicles and 20m articulated vehicles, a wide intersection is required with line marked median currently proposed to better delineate the approach and departure lanes for all other vehicles.

Council's preference is for a continuous footpath to be provided across Road 13 at Waterloo Road to prioritise pedestrians, with such treatment requiring detailed consideration from a safety perspective as part of ongoing design development.

Likewise, any continuous footpath treatments on either Road 6 (at Lane Cove Road) and Road 13 (at Road 6) as suggested by Council will also require detailed consideration from a safety perspective as part of ongoing design development noting that all locations are being used by vehicles up to 20m articulated vehicles. The inclusion of such treatment on Road 13 at Road 6 would only be possible following the extension of Road 6 further east (by others) to create a formal T-intersection as this would remove the need to provide a temporary turning facility where Road 13 intersects with Road 6 which will be required until then.

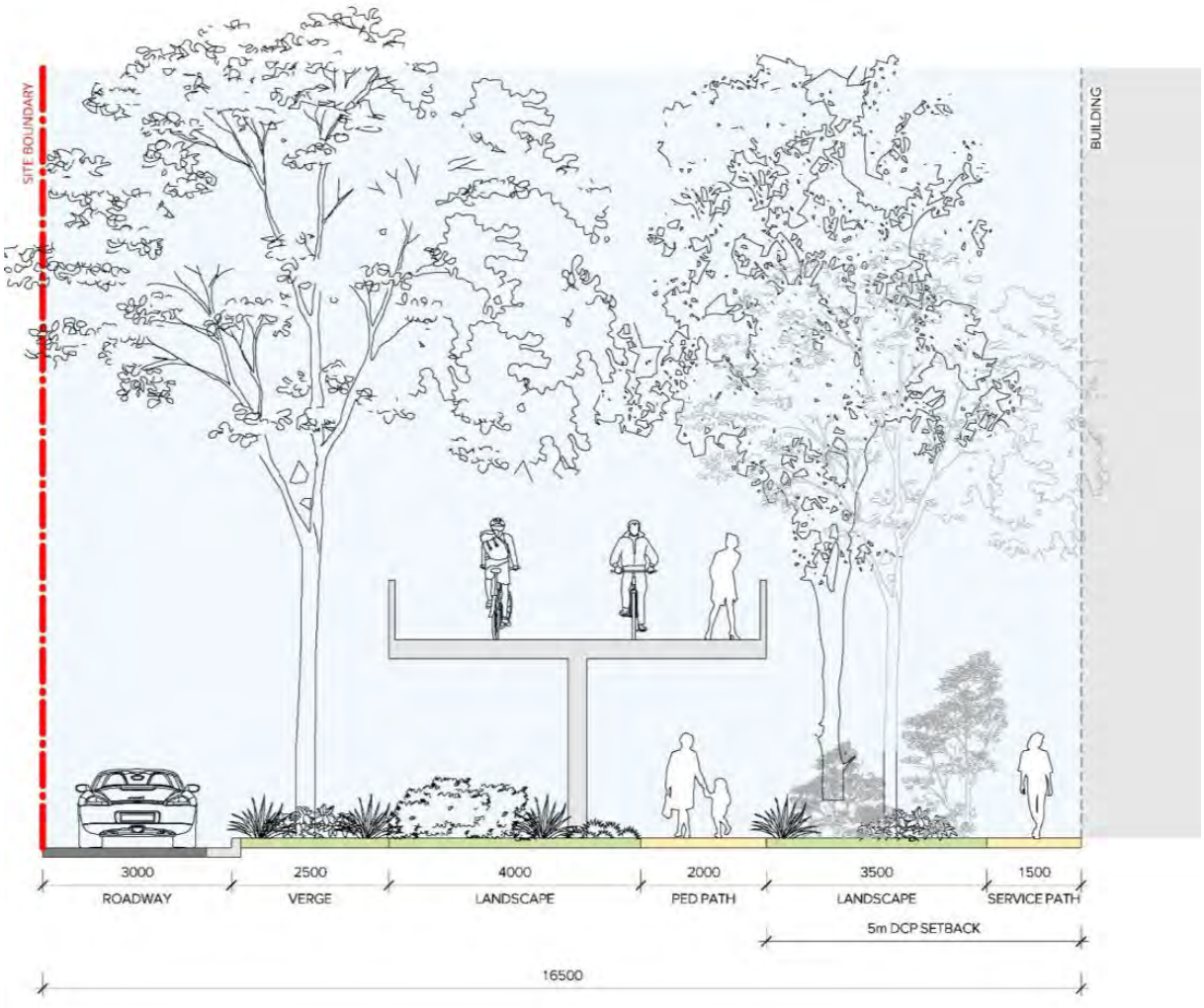
6.4.3 Future Shared Pedestrian and Cyclist Bridge

A footpath is proposed along Road 6 with the proposed verge width been widened to accommodate the future shared pedestrian and cyclist bridge and associated footings that

will go over Lane Cove Road. This bridge facilitates the future north-south active transport corridor through Macquarie Park and to be constructed by others. As agreed with TfNSW, the bridge will be straight with the landing expected to be closer to Road 13 than Lane Cove Road to provide the appropriate height clearance above traffic lanes and grades for pedestrians and cyclists whilst remaining on the desire line of the future north-south active transport corridor. As a result, the at-grade footpath along Road 6 will be coexist providing connection between Road 13 and Lane Cove Road.

A cross-sectional design of the shared path bridge along Road 6 is illustrated in Figure 6.10.

Figure 6.10: Shared Path Bridge along Road 6



Source: 250818_NEXTDC S5 SSDA Proposed Amendments

6.4.4 Lane Cove Road

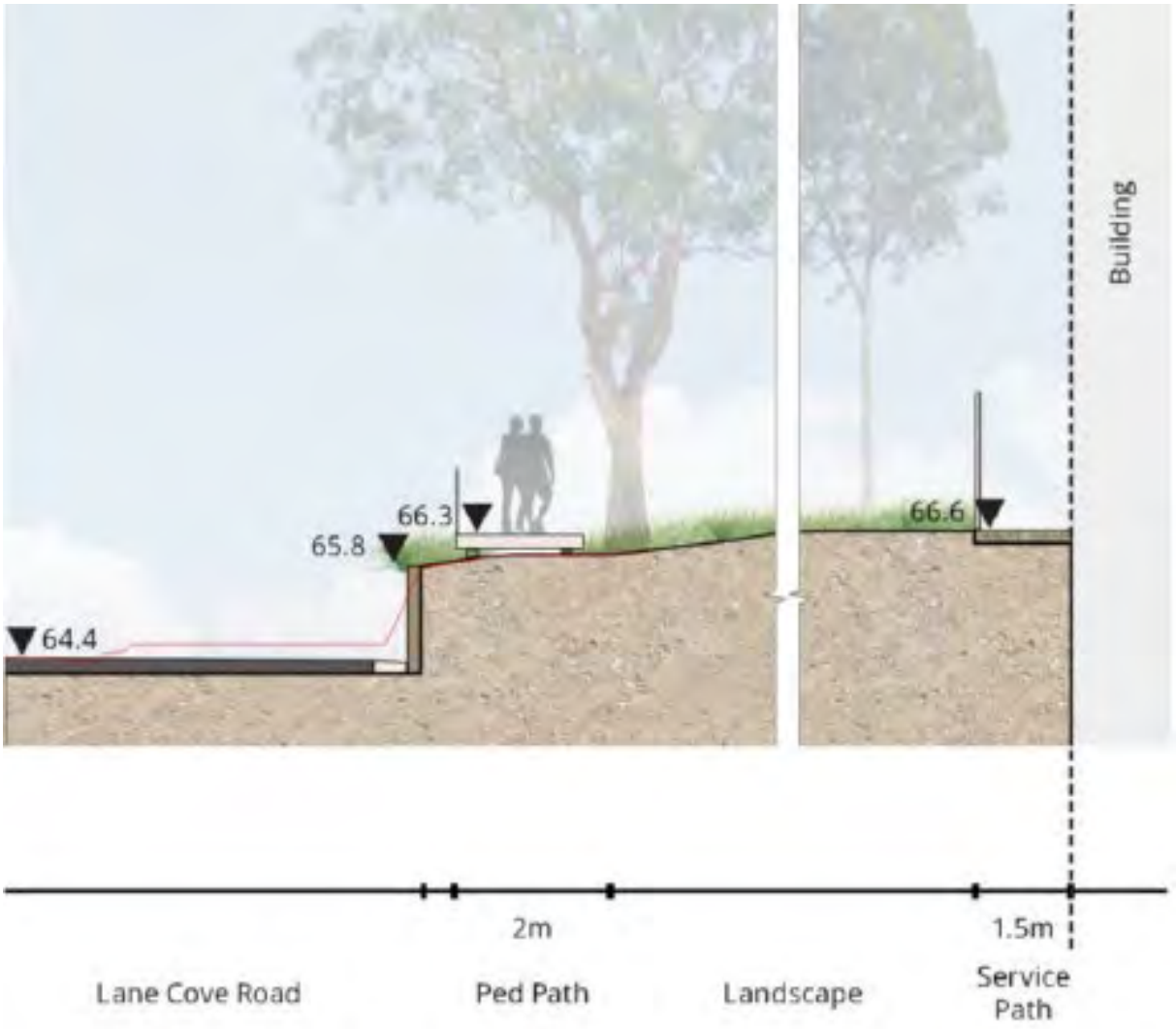
As mentioned in 3.5, the existing footpath along Lane Cove Road, south of the existing bus stop (Stop ID: 2113202), is in poor condition with missing concrete pavement. As part of the

project works, the footpath will be reconstructed along the Lane Cove Road frontage improving the overall pedestrian facility network and accessibility adjacent to the site.

Endorsed by TfNSW, the footpath will be raised above Lane Cove Road to improve safety for pedestrian with a greater separation from the major and high traffic along Lane Cove Road. Pedestrian fencing will be provided adjacent to the footpath given the level difference to Lane Cove Road. The raised footpath helps to increase tree retention along the site frontage, with detailed consideration required to be given to the tie in with at-grade footpaths along Lane Cove Road and Road 6 at part of ongoing design development.

A cross-sectional design of the Lane Cove Road footpath is illustrated in Figure 6.11.

Figure 6.11: Lane Cove Road Footpath, Endorsed by TfNSW



Source: 250818_NEXTDC S5 SSDA Proposed Amendments

6.5 Public Transport

The existing bus stop along Waterloo Road (Stop ID: 2113324) will be retained and no adverse impact to its operation is expected.

It is understood that Council has requested the relocation of this bus stop to the southeast of Waterloo Road/ Road 13 intersection. Relocation of existing bus stop could be explored in consultation with TfNSW and Bus operators noting it has no impact on the development proposal, however, will increase the walking distance between the Metro entrance and the bus stop which might not be their preference.

The inclusion of Road 6 only has aided to limit impact on the existing indented bus stop on Lane Cove Road, providing the greatest separation during construction and operation. This was a major factor in TfNSW preference for the proposed road interface with Lane Cove Road with the relocation of the existing bus stop away from the Metro entrance a strong objection.

Therefore, overall, the proposed development is not expected to have any notable impact on existing public transport services with the increased civic plaza only expected to improve access to the Metro and bus services.

7 Conclusion

This report examines the traffic and parking implications of the proposed NextDC 90MW IT S5 data centre development at 269 Lane Cove Road, Macquarie Park (SSD-63168959). This report has been prepared to adequately address the SEARs dated 8 November 2023 as well as subsequent submissions and engagement with DPIE, TfNSW and Council. The key findings of this report are presented below.

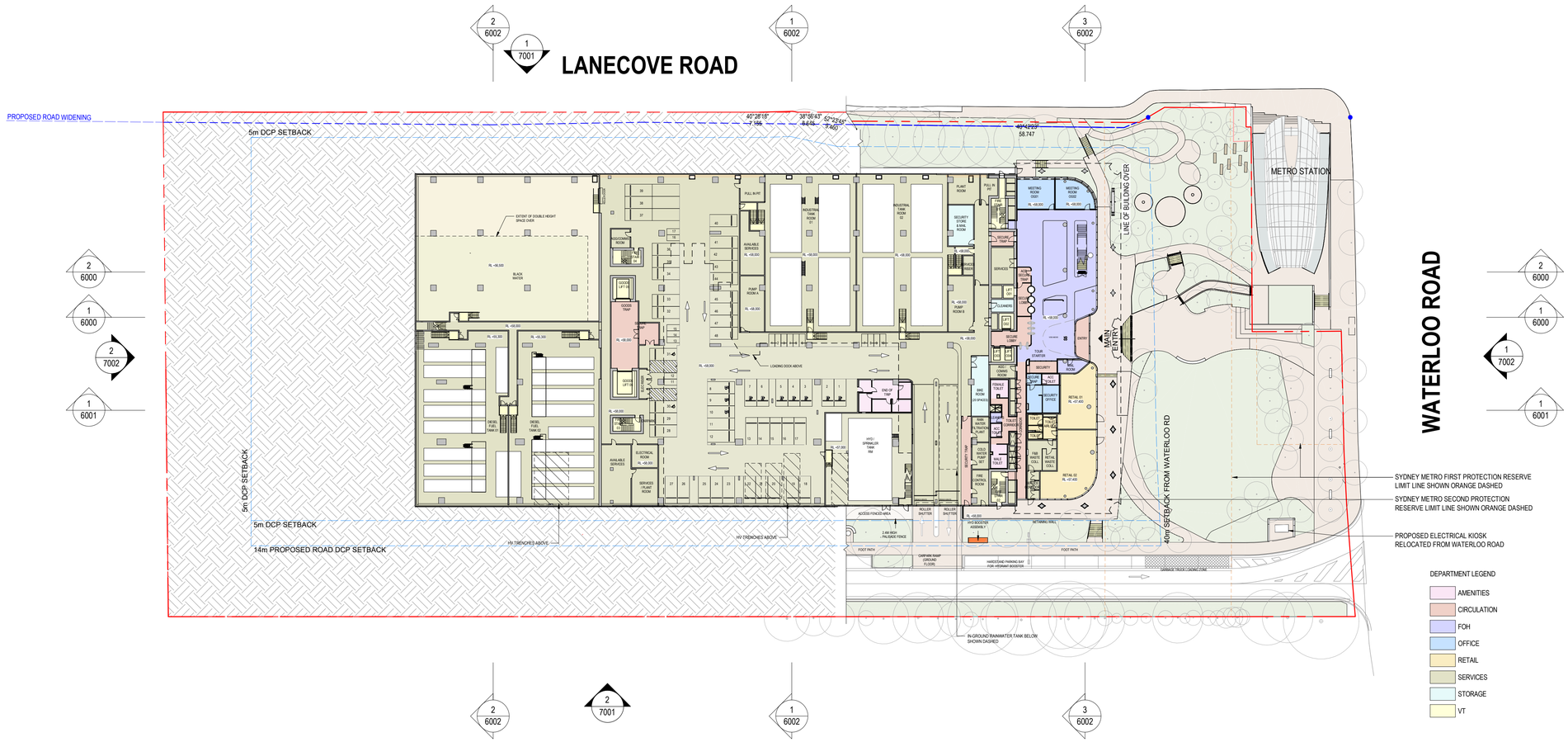
- The new data centre building would have the following areas:
  - Data halls/technical: 33,131m^2
  - Lobby and innovation hub: 3,074m^2
  - Ancillary office: 10,068m^2
  - Retail including BOH 333m^2
- Road 13 will be constructed along the eastern perimeter of the site that will intersect with Waterloo Road, as per Council requirements and be restricted to left turns only. A civic plaza will be constructed adjacent to Waterloo Road and the Macquarie Park Metro station entrance as part of these works.
- Road 6 will be partially constructed (eastbound lane only) along the southern perimeter of the site that will intersect with Lane Cove Road, as per TfNSW design requirements and be restricted to left-in only.
- A temporary turning facility will be constructed at the intersection of Road 6 and Road 13 that will allow vehicles travelling southbound along Road 13 to U-turn and depart via Waterloo Road until such time Road 6 is extended east (by others), providing an alternate egress route and allowing the creation of a formal T-intersection.
- The proposed site would yield an anticipated total number of 490 specialists and related full-time roles during operation. However, it is it is anticipated that on a typical day, there will be up to 235 operational staff on site at any one time.
- It is proposed to provide basement parking for 51 cars including two accessible spaces and 10 EV spaces, which is notably less than Council's maximum DCP requirement aiding to reduce the traffic generation capacity of the development and leveraging the sites proximity to the Metro entrance and bus routes.
- To minimise parking demand and ensure that the parking demand does not exceed the supply a parking management strategy would be implemented. This strategy would include having NextDC staff to work at nearby NextDC facilities, all car spaces to be managed by a booking system and available to all, and no parking would be provided for events given the availability of frequent public transport.
- Motorcycle parking and bicycle parking is provided above, the latter above the minimum DCP requirement to support the lower car parking provision and encourages travel by modes other than single occupancy vehicles.

- Access to the car parking and loading dock will be provided via Road 13 which have been designed to accommodate the relevant design vehicles allowing the vehicles to enter and exit the site in a forward direction.
- The loading dock is capable to accommodate up to two 20m long articulated vehicles simultaneously.
- Considerable traffic, design and pedestrian assessment was completed in consultation with TfNSW for the removal of Road 5 and any connection with Lane Cove Road. TfNSW concluded that they were "amendable" for the removal of Road 5, with the partial construction of Road 6 added to allow left turn into the precinct from Lane Cove Road. TfNSW endorsed the final Road 6 arrangement meeting their design requirements.
- Ultimately, the removal of Road 5 from the proposed design addressed key TfNSW concerns relating to the retention of the existing indented bus zone on Lane Cove Road whilst ensuring constructability and safety without impacting the bus zone operation even though their own modelling suggested that there may be some increased congestion on Waterloo Road during the weekday PM peak period the benefits of its removal outweighed the retention of it.
- Traffic generation of the site is expected to be up to 23 vehicle trips in any weekday peak hour, which is considered low particularly when considering this traffic would be diluted onto various intersections/movements.
- The proposed road and access design, and reduced traffic generation of the site would mitigate and adverse traffic impact to the surrounding road network.
- When accounting for the fact that the existing site has approximately 225 parking spaces, compared to the proposed 51 parking spaces for the proposed development, any impacts on the surrounding road network will be minimal and possibly less compared to existing land uses. Furthermore, the reduced provision of parking spaces would facilitate in the reduce mode share of private vehicle trips.
- The wider civil plaza would improve the active transport permeability and connectivity along Waterloo Road, and enhancing the boulevard characteristics, aligning with the Macquarie Park Corridor Public Domain objectives. Footpaths provided around the site, including a wider verge for Road 6 to accommodate a future shared pedestrian and cyclist bridge and associated footings that will go over Lane Cove Road and facilitate a future north-south active transport corridor through Macquarie Park (constructed by others), all contribute towards improving the pedestrian and cyclist amenity that will be able around the site whilst also seeking to improve tree retention opportunities along Lane Cove Road.

Overall, the proposed development can be supported from a traffic, transport and parking perspective.

Appendix A

Architectural Layout



SITE LEGEND

- BOUNDARY LINE
- PROPOSED ROAD WIDENING
- DCP SETBACKS

DEPARTMENT LEGEND

- AMENITIES
- CIRCULATION
- FOH
- OFFICE
- RETAIL
- SERVICES
- STORAGE
- VT

TREE LEGEND:

- PROPOSED TREE
- EXISTING TREE

PARKING SPACES LEGEND:

NUMBER OF CAR SPACES (INCLUDING 10 EV's AND 2 ACCESSIBLE CAR SPACES) =48 SPACES

NUMBER OF EVS=10 SPACES

NUMBER OF MOTORBIKES (MB)=17 SPACES

NUMBER OF BICYCLES=20 SPACES

SSDA Parking Schedule

Level	Type	Count
GROUND FLOOR		
GROUND FLOOR	Parking - 2500 x 1200 - Motorbike	17
GROUND FLOOR	Parking - 5400 x 2400 - Accessible Car	2
GROUND FLOOR	Parking - 5400 x 2400 - Standard Car	36
GROUND FLOOR	Parking - 5400 x 2400 - Standard Car EV	10
GROUND FLOOR	Parking - 5400 x 2400 - Standard Car Waiting Space	3
GROUND FLOOR	Parking - 5400 x 2700 - Acessible Zone	1

DATE	No.	REVISION HISTORY	DRW	CHK	QA
26/08/25	CP03	SSDA ISSUE	HDR	HDR	HDR
24/04/02	CP02	SSDA ISSUE	HDR	HDR	HDR
24/03/22	CP01	SSDA ISSUE	HDR	HDR	HDR

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Architect HDR

Services ARUP

Structural TTW

PRINCIPAL CONTRACTOR

CLIENT

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VIC Cate Cowlishaw 15211
ACT Cate Cowlishaw 2767
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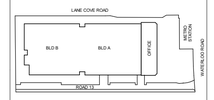
QLD Cate Cowlishaw 6139

Document Author Project Number

10374547

Key Plan



KEYPLAN ABOVE SHOWS PROJECT NORTH, NOT TRUE NORTH

Site:	Stage:	Phase:
S5		

NEXTDC Project Number:

S5.0003

Project Address:

269 Lane Cove Rd, Macquarie Park, Sydney, NSW 2113

Project Name:

NEXTDC S5

Drawing title

OVERALL PLAN - BUILDINGS A AND B - GROUND

Drawing Status:

SPATIAL COORDINATION

Drawn	Date
PM	26/08/25
CHK	Date
AW	26/08/25

Scale:	Sheet:	File Name:
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Drawing Number	Rev
S5-ARC-HDR-DRG-00000-3000	CP03

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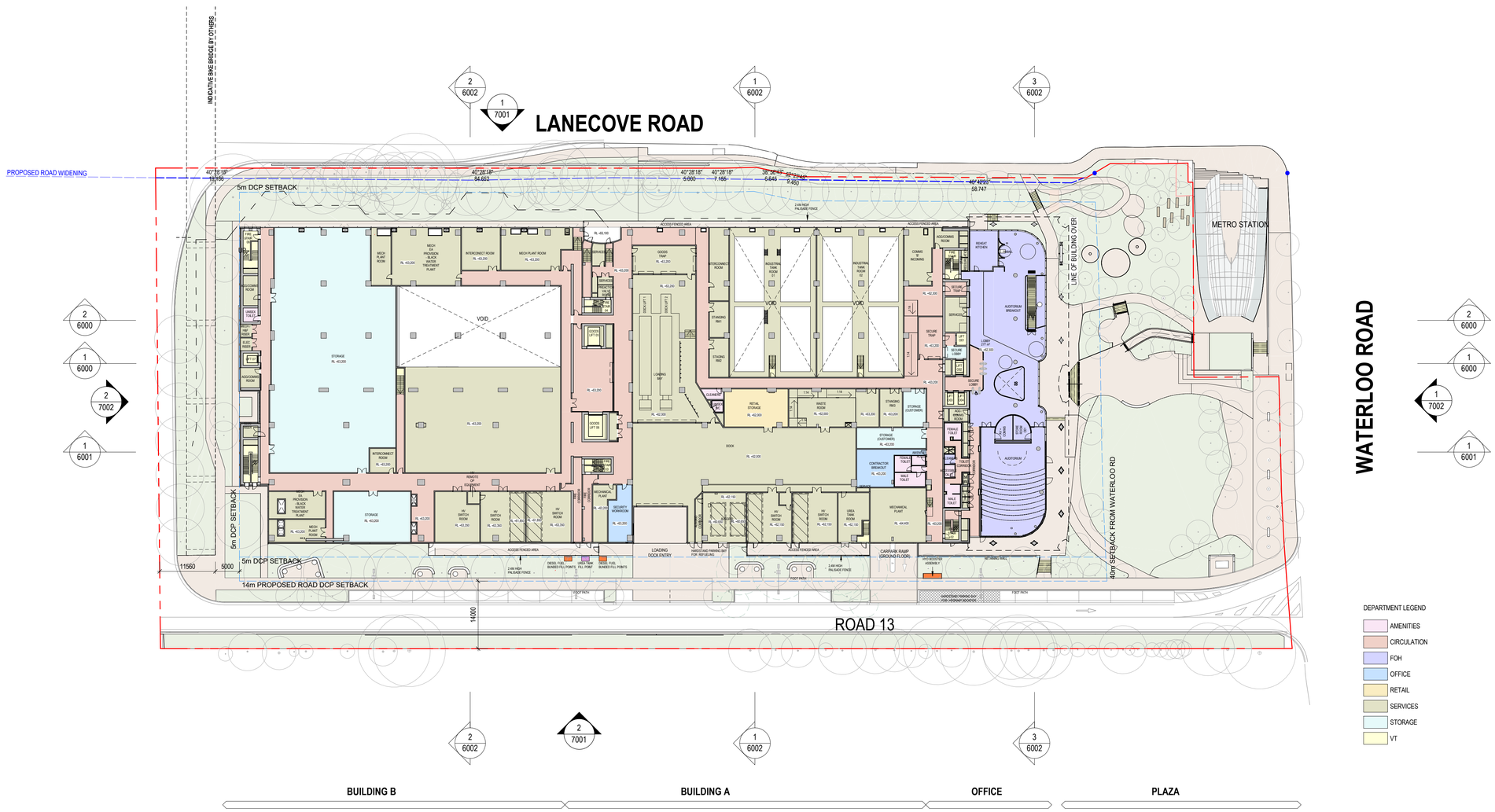

DEPARTMENT LEGEND

- AMENITIES
- CIRCULATION
- FOH
- OFFICE
- RETAIL
- SERVICES
- STORAGE
- VT

DATE	No.	REVISION HISTORY	DRW	CHK	QA
26/08/25	CP03	SSDA ISSUE	HDR	HDR	HDR
24/04/02	CP02	SSDA ISSUE	HDR	HDR	HDR
24/03/22	CP01	SSDA ISSUE	HDR	HDR	HDR

SITE LEGEND

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- DCP SETBACKS

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Services ARUP

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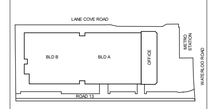
Key Plan



KEYPLAN ABOVE SHOWS PROJECT NORTH, NOT TRUE NORTH

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S5		

NEXTDC Project Number:
S5.0003

Project Address:
269 Lane Cove Rd, Macquarie Park, Sydney, NSW 2113

Project Name:
NEXTDC S5

Drawing title
OVERALL PLAN - BUILDINGS A AND B - LEVEL 01

Drawing Status:
SPATIAL COORDINATION

Drawn	Date
PM	26/08/25
CHK	Date
AW	26/08/25

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Drawing Number	Rev
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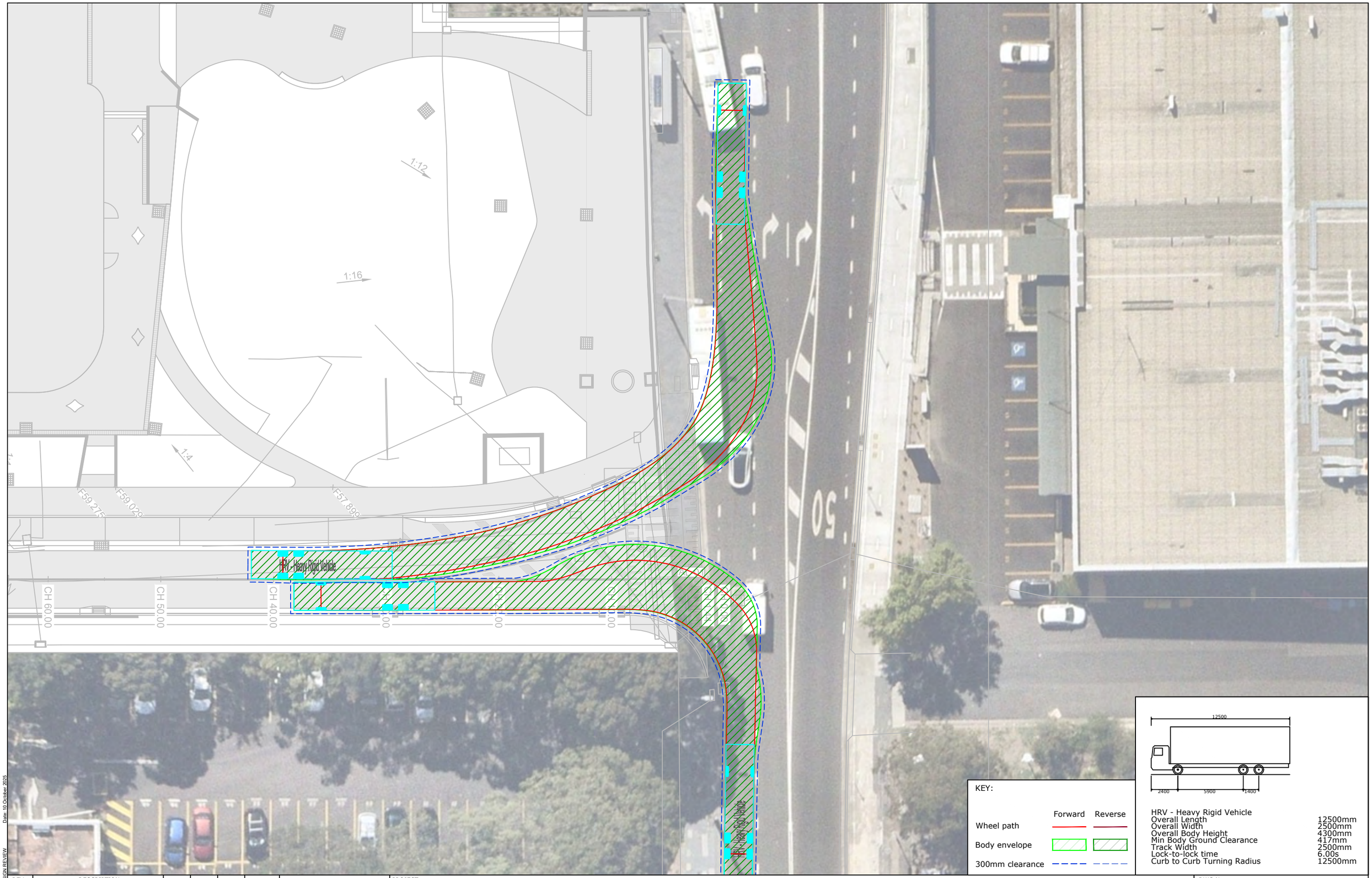
Appendix B

Swept Path Analysis



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	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT

NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE

SWEPT PATH ANALYSIS - WATERLOO ROAD / ROAD 13
12.5 M HEAVY RIGID VEHICLE

DWG No. 23217CAD025
FIGURE (1)

DATE STAMP 10 OCTOBER 2025

PROJECT No.	SCALE	REV.
23217	1:300 @A3	A

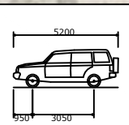
Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW

TRAFFIC CONTROL PLAN REQUIRED FOR 20 M ARTICULATED VEHICLE ACCESS TO ROAD 13 GIVEN ADDITIONAL ENCROACHMENT ONTO ADJACENT OPPOSING TRAVEL LANE ON ROAD 13.

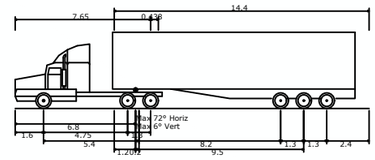
KEY:

	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



AV - Articulated Vehicle (2018)

Overall Length	20.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418m
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	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT

NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE

SWEPT PATH ANALYSIS - WATERLOO ROAD / ROAD 13
20 M ARTICULATED VEHICLE & 5.2 M B99 VEHICLE

DWG No. 23217CAD025
FIGURE (2)

DATE STAMP 10 OCTOBER 2025

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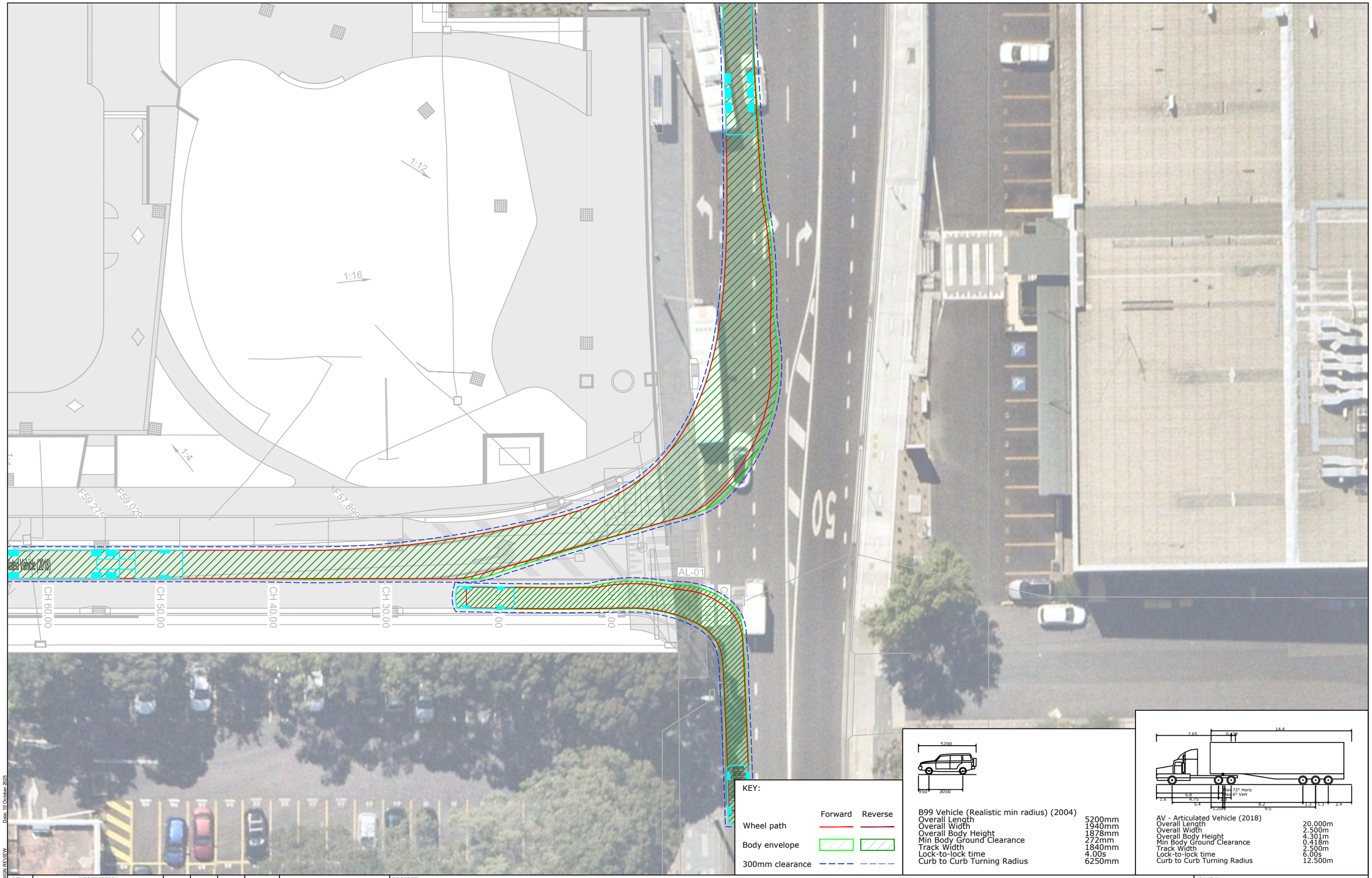
Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

B99 Vehicle (Realistic min radius) (2004)

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

AV - Articulated Vehicle (2018)

Overall Length	20.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418m
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	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT

NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE

SWEPT PATH ANALYSIS - WATERLOO ROAD / ROAD 13
19 M ARTICULATED VEHICLE & 5.2 M B99 VEHICLE

DWG No. 23217CAD025
FIGURE (3)

DATE STAMP 10 OCTOBER 2025

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Date: 10 October 2025

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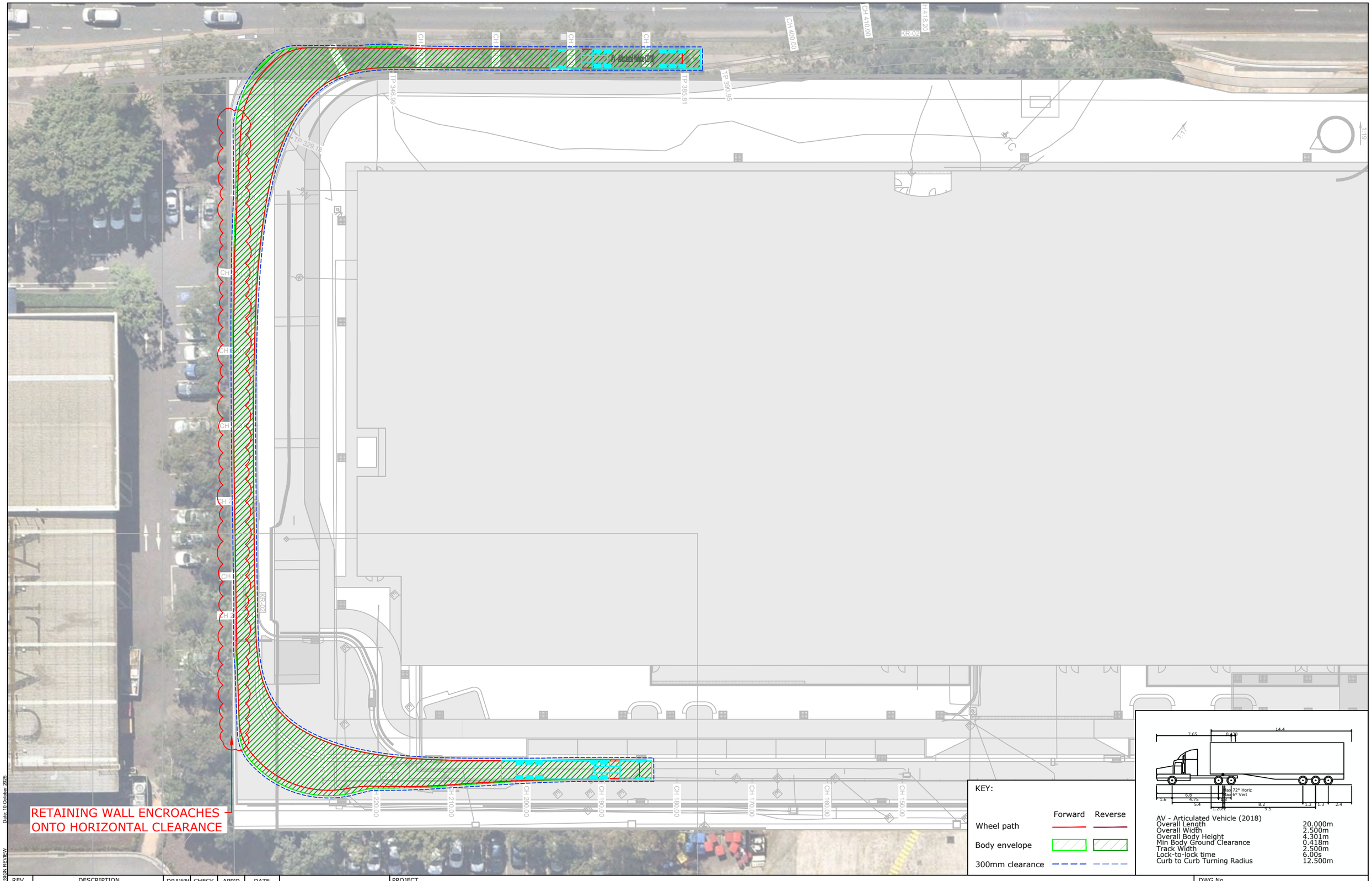

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A	ISSUE FOR DISCUSSION	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT

NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE

SWEPT PATH ANALYSIS - ROAD 6
20 M ARTICULATED VEHICLE

DWG No. 23217CAD025 FIGURE (4)

DATE STAMP 10 OCTOBER 2025

PROJECT No. 23217 | SCALE 1:450 @A3 | REV. A

Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW

VEHICLE ENTERING

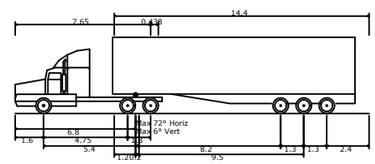
SPLAY REQUIRED TO BE WIDENED TO ACCOMMODATE 20 M AV SWEPT PATH

AV - Articulated Vehicle (2018)

AV - Articulated Vehicle (2018)

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



AV - Articulated Vehicle (2018)

Overall Length	20.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418m
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	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT

NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE

SWEPT PATH ANALYSIS - LOADING DOCK
20 M ARTICULATED VEHICLE

DWG No. 23217CAD025
FIGURE (5)

DATE STAMP 10 OCTOBER 2025

PROJECT No.	SCALE	REV.
23217	1:300 @A3	A

Date: 10 October 2025

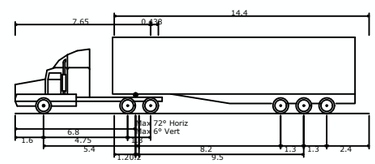
Filename: 23217CAD025-251010-DESIGN REVIEW

VEHICLE EXITING

SPLAY REQUIRED TO BE WIDENED TO ACCOMMODATE 20 M AV SWEPT PATH

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



AV - Articulated Vehicle (2018)

Overall Length	20.000m
Overall Width	2.500m
Overall Body Height	4.301m
Min Body Ground Clearance	0.418m
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	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT

NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE

SWEPT PATH ANALYSIS - LOADING DOCK
20 M ARTICULATED VEHICLE

DWG No. 23217CAD025
FIGURE (6)

DATE STAMP 10 OCTOBER 2025

PROJECT No.	SCALE	REV.
23217	1:300 @A3	A

Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW

VEHICLE ENTERING

FIRE CORRIDOR

MECHANICAL PLANT

RL +63,200

SECURITY WORKROOM

RL +63,200

AUSGRID CORRIDOR

RL +62,150

AUSGRID

RL +60,650

RL +60,650

HV SWITCH ROOM

RL +62,150

HV SWITCH ROOM

RL +62,150

UREA TANK ROOM

RL +62,150

SERVICE

ACCESS FENCED AREA

LOADING DOCK ENTRY

HARDSTAND PARKING BAY FOR REFUELING

A TANK POINT

DIESEL FUEL BUNDED FILL POINTS

2.4M HIGH PALISADE FENCE

FOOT PATH

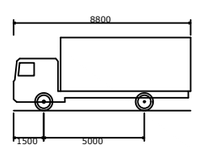
ATH

ROAD

MRV - Medium Rigid Vehicle

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

Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT

NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE

SWEPT PATH ANALYSIS - HARDSTAND PARKING BAY
8.8 M MEDIUM RIGID VEHICLE

DWG No. 23217CAD025
FIGURE (7)

DATE STAMP 10 OCTOBER 2025

PROJECT No.	SCALE	REV.
23217	1:150 @A3	A

VEHICLE EXITING

FIRE CORRIDOR

MECHANICAL PLANT

RL +63,200

SECURITY WORKROOM

RL +63,200

AUSGRID CORRIDOR

RL +62,150

AUSGRID

RL +60,650

RL +60,650

HV SWITCH ROOM

RL +62,150

HV SWITCH ROOM

RL +62,150

UREA TANK ROOM

RL +62,150

SERVICE

LOADING DOCK ENTRY

HARDSTAND PARKING BAY

MRV - Medium Rigid Vehicle

ACCESS FENCED AREA

A TANK POINT

DIESEL FUEL BUNDED FILL POINTS

2.4M HIGH PALISADE FENCE

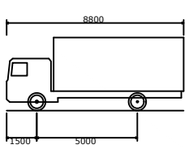
FOOT PATH

ATH

ROAD

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

Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT

NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

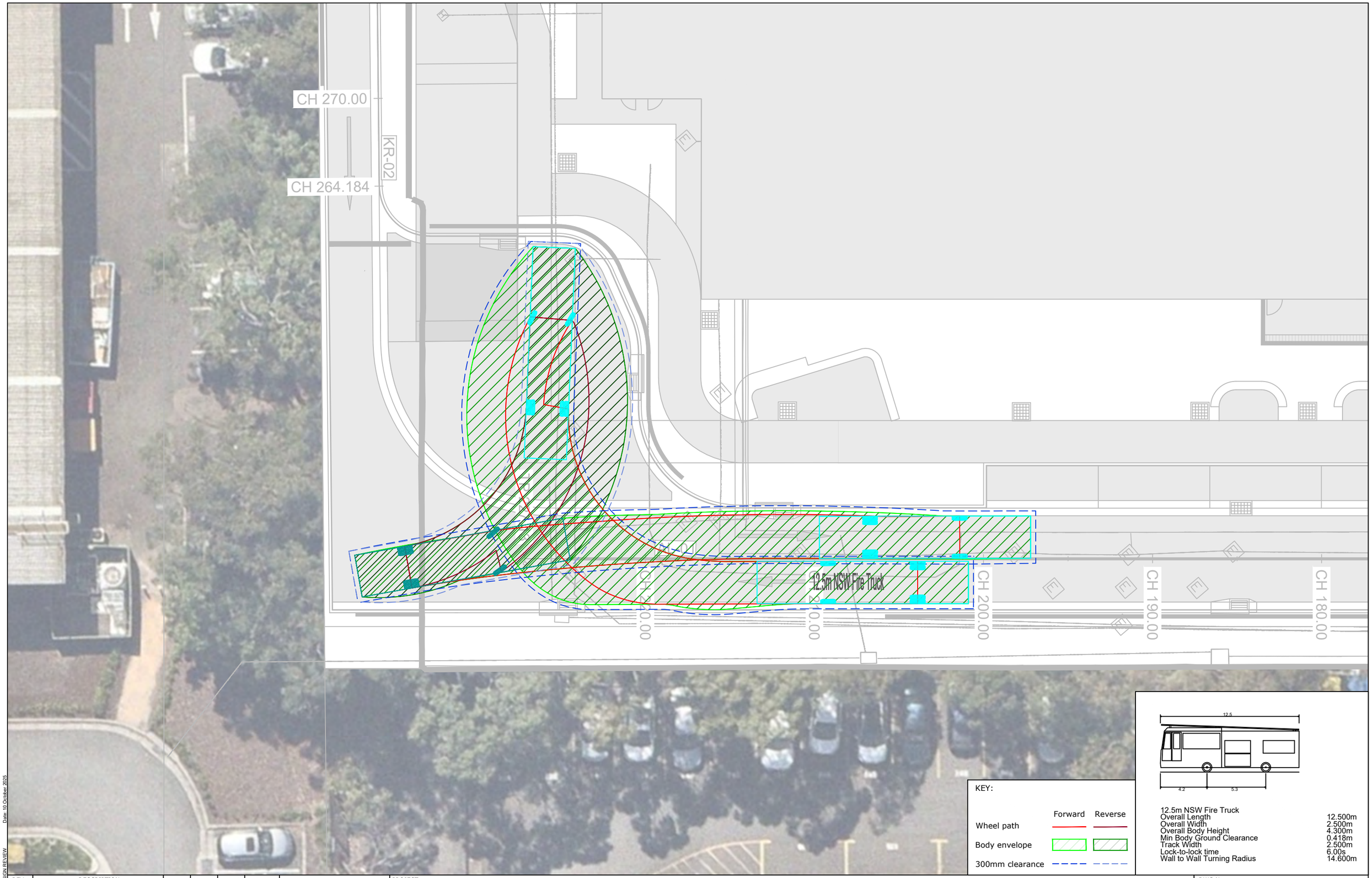
TITLE

SWEPT PATH ANALYSIS - HARDSTAND PARKING BAY
8.8 M MEDIUM RIGID VEHICLE

DWG No. 23217CAD025
FIGURE (8)

DATE STAMP 10 OCTOBER 2025

PROJECT No.	SCALE	REV.
23217	1:150 @A3	A



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

12.5m NSW Fire Truck	
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.418m
Track Width	2.500m
Lock-to-lock time	6.00s
Wall to Wall Turning Radius	14.600m

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT: NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

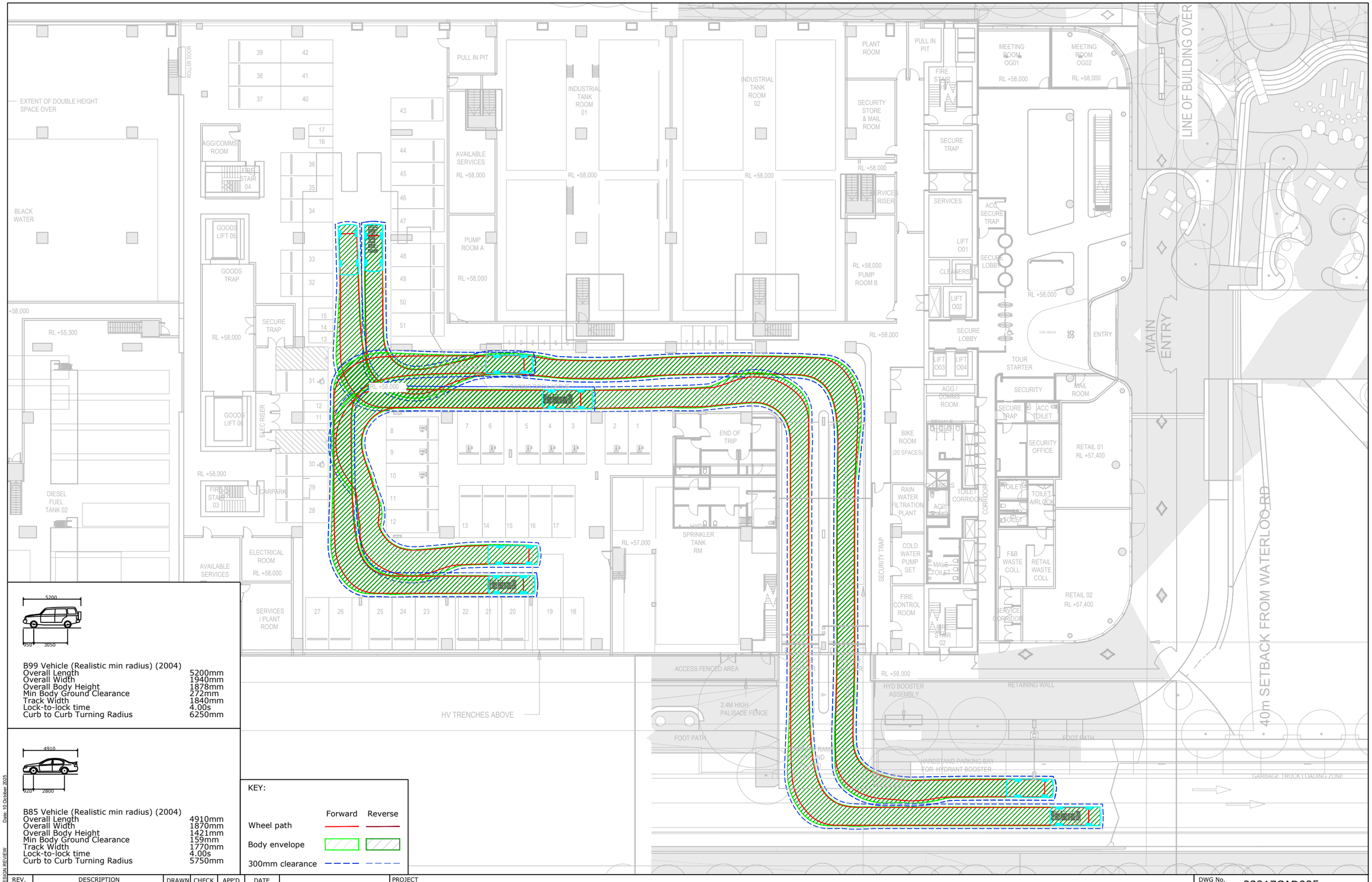
TITLE: SWEPT PATH ANALYSIS - TURNING BAY
12.5 M NSW FIRE TRUCK

DWG No. 23217CAD025
FIGURE (9)

DATE STAMP: 10 OCTOBER 2025

PROJECT No.	SCALE	REV.
23217	1:200 @A3	A

Filename: 23217CAD025-251010-DESIGN REVIEW
Date: 10 October 2025



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

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

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT: NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE: SWEPT PATH ANALYSIS - OFF-STREET CAR PARK
5.2 M B99 VEHICLES & 4.9 M B85 VEHICLES

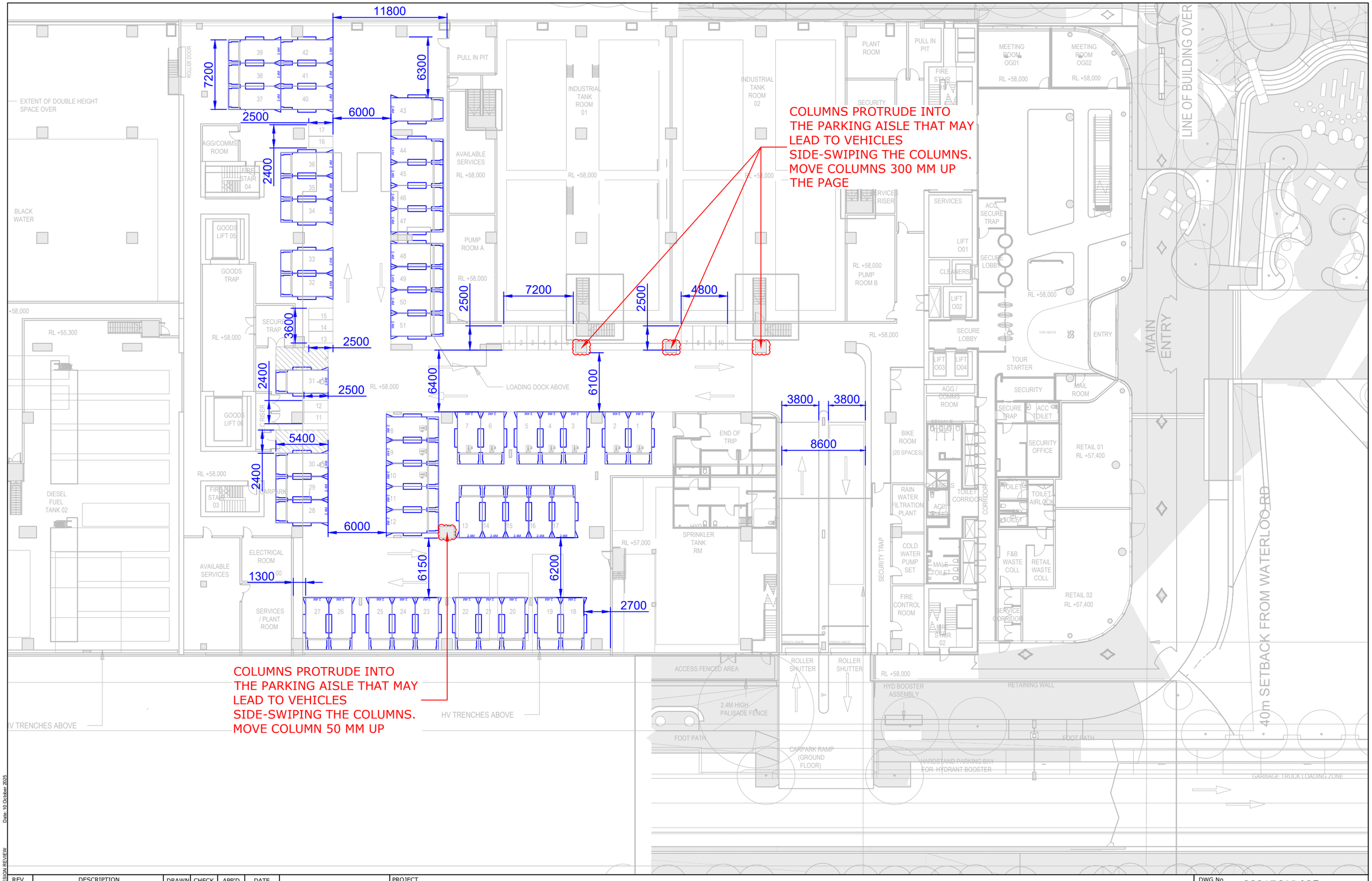
DWG No. 23217CAD025 FIGURE (10)

DATE STAMP 10 OCTOBER 2025

PROJECT No. 23217 | SCALE 1:350 @A3 | REV. A

Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT: NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE: OFF-STREET CAR PARK REVIEW

DWG No. 23217CAD025 FIGURE (11)

DATE STAMP 10 OCTOBER 2025

PROJECT No.	SCALE	REV.
23217	1:350 @A3	A

Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	AL	AM	KH	10/10/25

ttpp transport planning

PROJECT
NEXTDC DATA CENTRE, LANE COVE ROAD, MACQUARIE PARK

TITLE
ROAD 13 ON-STREET CAR PARK REVIEW

DWG No. 23217CAD025
FIGURE (12)

DATE STAMP
10 OCTOBER 2025

PROJECT No. 23217

SCALE 1:500 @A3

REV. A

Date: 10 October 2025

Filename: 23217CAD025-251010-DESIGN REVIEW

Appendix C

Lane Cove Road Interface and New Road Network Civil Designs

FUTURE PEDESTRIAN BRIDGE (BY OTHERS, NOT PART OF THIS APPLICATION)

3.5m WIDE DECELERATION LANE

KERB AND GUTTER ON DECELERATION LANE TO TINSW SPECIFICATIONS

LANE COVE ROAD

2.5m FOOTPATH ELEVATED BOARDWALK

REMOVE REDUNDANT EXISTING DRIVEWAY ENTRANCE AND REINSTATE KERB, FOOTPATH AND VERGE.

SITE BOUNDARY

SITE BOUNDARY

ENTIRE ROAD WIDENING DEDICATION

EXISTING SYDNEY METRO SITE

1/DP1129811

WATERLOO ROAD

EXTENT OF BUILDING OVER

PROPOSED PEDESTRIAN FOOTPATH UNDERNEATH FUTURE PEDESTRIAN BRIDGE

PROPOSED HALF ROAD (ROAD 6)

MIN 2.2m HEAD CLEARANCE TO BE PROVIDED BETWEEN FOOTPATH AND FUTURE PEDESTRIAN BRIDGE.

9/DP1249926

3/DP1129811

ROAD 6

SITE BOUNDARY

PEDESTRIAN FOOTPATH

BELOW GROUND ON SITE DETENTION (OSD) TANK. REFER TO 04000 SERIES DRAWINGS FOR DETAILS.

PROPOSED DRIVEWAY CONNECTION TO LOADING DOCK

PROPOSED DRIVEWAY CONNECTION TO CARPARK

PROPOSED SUBSTATION LOCATION. REFER TO SERVICES CONSULTANT DOCUMENTATION FOR DETAILS

RELOCATION OF EXISTING SUBSTATION. REFER TO SERVICES CONSULTANT DOCUMENTATION FOR DETAILS

EXISTING HYDRANT WITHIN PROPOSED DRIVEWAY IN THIS VICINITY. REFER TO SERVICES CONSULTANT DOCUMENTATION

PROPOSED 2.5m FOOTPATH

OSD TANK

PROPOSED 2.5m FOOTPATH

ROAD 13

EASEMENT

SITE BOUNDARY

NO EXISTING TREES IN THIS ZONE

12/DP1043041

RAISED PEDESTRIAN CROSSING FOR CONTINUOUS PEDESTRIAN TRAVEL PATH. DETAILS TO BE CONFIRMED AY DETAILED DEVELOPMENT STAGE.

TURNING HEAD

PROPOSED RETAINING WALL

PARKING BAYS IN ACCORDANCE WITH AS2890.5 (ON STREET PARKING)

PROPOSED LINEMARKING FOR VEHICULAR SWEPT PATHS

SERVICES CONSULTANT TO REVIEW DEPTH AND ALIGNMENT OF EXISTING BELOW GROUND SERVICES AND PROVIDE ADVICE ON POSSIBLE PROTECTION OR RELOCATION

0.0 5.0 10.0 15.0 20.0m
1:250 A0

NOT FOR CONSTRUCTION

Z:\jobs\22\22166\cw\sheets\09\22166-TTW-00-DR-CI-00011.dwg

Comments:

DATE	No.	REVISION HISTORY DESCRIPTION	BY	CHK
9.10.2025	K	SSDA ISSUE	RT	CG
19.09.2025	J	DRAFT SSDA ISSUE	ES	GC
27.03.2025	I	SSDA ISSUE	RH	RH
07.03.2025	H	SSDA ISSUE	ARW	SH
14.02.2025	G	SSDA	ARW	GC
30.08.2024	F	DRAFT TENDER	SS	GC
17.05.2024	E	ISSUE FOR LOD 200	SS	GC
15.04.2024	D	SSDA	SS	GC
02.04.2024	C	SSDA	SS	GC
15.03.2024	B	PRELIMINARY ISSUE	SS	GC
06.03.2024	A	SCHEMMINARY ISSUE	SS	GC

NOTE:
1. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH ASSOCIATED SPECIFICATION
2. DO NOT SCALE FROM DRAWINGS
3. CONFIRM ALL MEASUREMENTS ON SITE
4. CHECK ON SITE PRIOR TO ANY CONSTRUCTION AND REPORT ANY DISCREPANCIES
5. ENSURE COORDINATION WITH OTHER TRADES ON SITE
6. ASL = ABOVE SLAB LEVEL

PRINCIPAL CONSULTANTS:

ARCHITECT: HDR

SERVICES: AURECON

STRUCTURAL: TTW

PRINCIPAL CONTRACTOR: MULTIPLEX

CLIENT

NEXTDC

NEXTDC
GPO Box 3219
Brisbane QLD 4001
T: +61 7 3177 4777

[Contractor / Consultant / Document Author]

TTW
www.ttwengineers.com

Document Author Project Number: 221661

Key Plan:

Site: SS | Stage: | NEXTDC Project Number: S5.0003

Project Address: 269 LANE COVE ROAD MACQUARIE PARK, NSW 2113

Project Name: NEXTDC S5

Drawing Title: GENERAL ARRANGEMENT PLAN DAY FINAL

Drawing Status: SSDA

Drawn (DRN): ARW | Date: -

Check (CHK): GC | Date: -

Scale: 1:250 | Sheet: A0 | File Name:

Drawing Number: 221661-TTW-00-DR-CI-00011 | REV: K

Appendix D

Transport for NSW Material & Correspondence

TRANSPORT

Macquarie Park Road 5/6 Options Discussion

28/5/2025

NSW GOVERNMENT

Overview

- DPHI to provide an update on the Application
- TfNSW to present modelling results
- Way Forward and Discussion
- Next steps

Modelling Task

- Aimsun Model of the Macquarie Park precinct was developed in 2022.
- TfNSW compared the 2022 and 2024 traffic volume data (via SCATS) and travel time data (via HERE). AM model is a good reflection of today's traffic in both directions, the travel time PM northbound on Lane Cove Road is longer today than previously modelled. Model is considered fit-for-purpose.
- The 2041 modelling year was used for this assessment

Options Modelled

Total of 3 Options Modelled

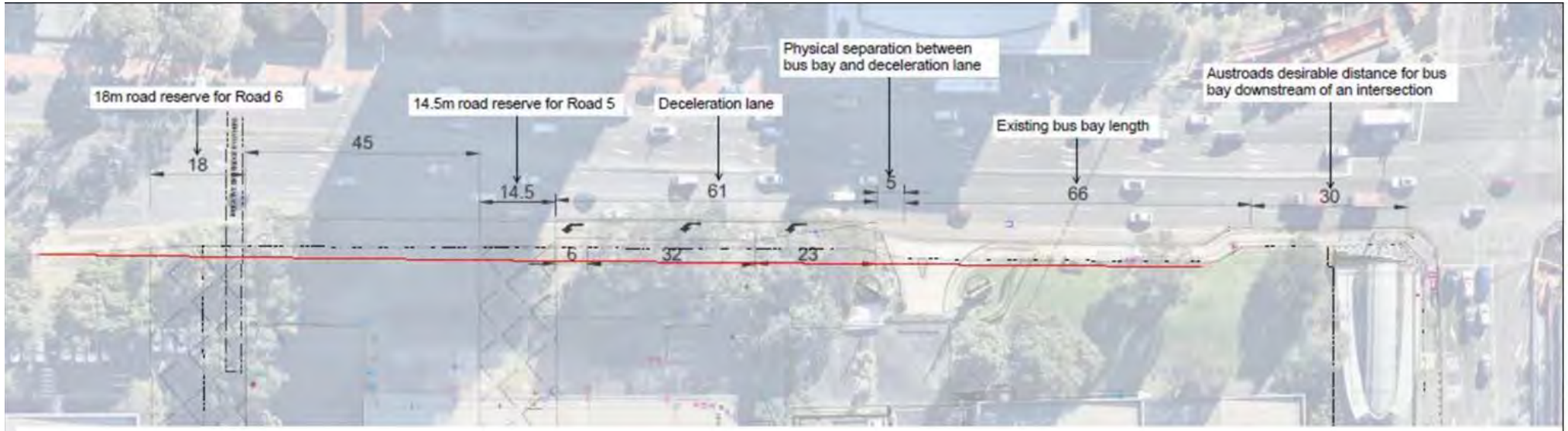
Reference Case

- Scenario 2 from the high-level strategic study is the benchmark scenario
- Road 5 and Road 6 allows left-in and left-out movements to Lane Cove Road.
- Right turns to and from Waterloo Road are prohibited from Road 13.

Summary of Options Modelled

- Reference Case – Updated Scenario 2 model from the Macquarie Park Detailed Precinct Transport Study, November 2023
- Option 1 – TTPP Option (left in / left out at Road 5, Road 6 is an active transport Link)
- Option 3 – TTPP Option (left in at Road 6 only).

Option 1



Option 1 – Maintain Existing Bus Stop Location

- Pros
  - Maintains existing bus stop is similar location.
- Cons
  - Requires Road 5 to be moved ~55m south of planned location.
  - Reduces distances between Road 5 and 6 to ~45m, less than the desirable 105m spacing of side roads if both roads connect with Lane Cove Road.
  - Insufficient length to provide a deceleration lane for Road 6 if it connects with Lane Cove Road.
  - Increases left-turn conflicts if both Road 5 and Road 6 connect with Lane Cove Road.
  - Reduces developable area between Road 5 and Road 6.

Option 3

Option 3 – Exclude Road 5

- Pros
  - Maintains existing bus stop is similar location.
  - Provides greater separation of Road 6 deceleration lane and the bus stop.
  - Maintains Austroads desirable 105m spacing between side roads
  - Less impacts of construction on bus stop operation.
- Cons
  - Left turn out of Road 6 unlikely supportable given proximity to Epping Road intersection. Road 13 and Waterloo Road still provides this egress path and allows vehicles to access all turning movement at Epping Road intersection.

Model Findings

Option 1 – Access via Road 5

- Shows some benefits to alleviating congestion on Waterloo Road in the PM peak in position originally proposed (reference case)

- Relocating Road 5 further south is expected to make it more difficult for vehicles to exit Road 5 resulting in vehicles seeking other routes out of the Precinct in the PM peak

- There are other consideration to take into account such as:

  - Road safety considerations (which includes such things as the potential for weaving movements from the left out of Road 5 across to the RT lane on Lane Cove to head right onto Epping Road is a concern
  - Considerations with regards to compliance with relevant Austroads standards for the provision of a deceleration lane
  - Considerations for the relocation of a significant road sign structure in the road reserve amongst other civil works considerations
  - Potential impacts to the Sydney Metro Station box and Existing bus stop interchange pedestrian area

Model Findings

Option 3 – Access via Road 6 with Road 5 removed

- Shows some increase to congestion on Waterloo Road in the PM peak
- Limits access to the precinct to one access point at the southern end of the site
- It has the potential to reduce permeability through the site and does not promote a finer grained road network as envisioned in the MPIP rezoning
- It also potentially reduces pedestrian connectivity to the Public Transport nodes (Rapid Bus Network and Sydney Metro Station)
- Reduces amount of civil works required at the northern end of the site near the public transport interchange

Way Forward and Discussion

- TfNSW's preferred option would be to deliver Option 3 with the following considerations:
    - Vehicular access is to be provided via a new Road 6 along the southern boundary of the site, via a left in only access for vehicles including the delivery of an Austroads compliant deceleration lane
    - A shared path is to be provided as part of Road 6 which includes details of the land required to enable the provision of the future active transport bridge link as shown in the MPIP rezoning including a landing area
    - TfNSW's preference would be in lieu of a vehicular connection at Road 5 that a pedestrian shared path be provided at the same location as Road 5 with a connection to Lane Cove Road, however upon further discussion with DPHI, we understand that there are other consideration that DPHI are taking into account such as tree removal / wind tunnel effects / CPTED principles etc. and that by massing the building and utilising the road space toward an increase in the civic plaza area around the Sydney Metro Station, could provide better public amenity opportunities and activation of this area where there is likely to be significant pedestrian activity
    - TfNSW is aware that Council has raised an objection with regards to removing any connection of Road 5 to Lane Cove Road and would like to see a pedestrian shared path at this location as a minimum. Therefore, we would suggest that the proponent undertake an analysis of the comparison of removing the Road 5 pedestrian connection in lieu of increasing the civic plaza and demonstrating that there is no material disbenefit to pedestrian accessibility to the civic plaza, Rapid Bus stop and Sydney Metro station

Way Forward and Discussion

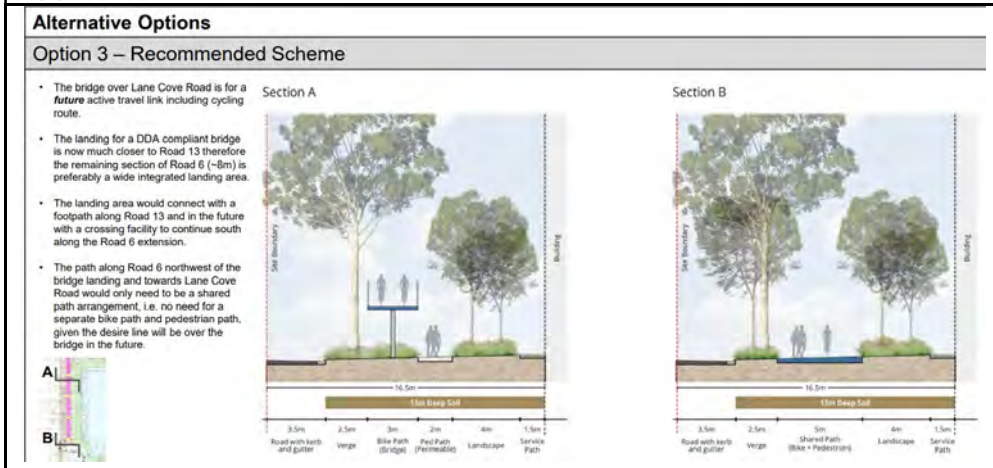
- TfNSW's preferred option would be to deliver Option 3 with the following considerations:
    - Option 3 will allow for vehicular access to the precinct via Lane Cove Road. However, the onus will be on the proponent to demonstrate to DPHI and TfNSW that the proposed design promotes pedestrian and active transport connectivity to the existing Public Transport nodes (Rapid Bus Stop and Sydney Metro Station) in lieu of a connection at Road 5. A pedestrian modelling exercise should be undertaken by the proponent. Catchment area should include the precinct area SE of the site up to Wicks Road
    - Option 3 minimises complicated design considerations mentioned previously, that will need to be undertaken to satisfy TfNSW SME's to be able to provide an 'in principle' agreement to the strategic concept design
    - This option would also significantly reduce the amount of civil works at the northern end of the site near the public transport interchange, such as issues associated with complexities around the deceleration lane near existing bus operations, potential relocation of significant road sign structure in road reserve and any other civil considerations
    - The proponent will need to provide a strategic design of the proposed civil works on Lane Cove Road (i.e. deceleration lane providing access via Road 6) prior to the determination of the SSDA.

Ashish Modessa

From: Matt Houlden (CTP CONSULT) <Matt.Houlden@transport.nsw.gov.au>
Sent: Thursday, 31 July 2025 10:44 AM
To: Ashish Modessa
Cc:
Subject: FW: TfNSW Summary - Meeting to discuss 269 Lane Cove Road, Macquarie Park on 22 May 2025 (TfNSW Ref: SYD24-01355/03) [Filed 31 Jul 2025 11:48]

Hi Ashish,

TfNSW has now had an opportunity to consider the questions provided in your email received 11 July 2025. This email provides a response to all questions except one, with the final answer expected shortly from our road design team.

Applicant's Question	TfNSW Answer
	TfNSW is amenable to the recommended Option 3 design. The issues to consider are as follows: • A minimum internal width of 5.8m between hand rails or barriers is required for the active transport bridge. • The bridge is required to be a minimum of 6.1m above all travel lanes on Lane Cove Road. This will mean that its landing point and potentially maximum slope may need to change to achieve this height. • Maximum ramp gradients for DDA compliance o Ramp design for cyclists should be based on guidance set out in AS 1428.1 for ramp requirements, Transport for NSW Cycle Design Toolbox, Austroads Guide to Road Design 6A: Walking and Cycling and Austroads Aspects to Walking and Cycling. In particular the following design considerations would apply: • Where higher bicycle volumes are expected or steeper gradients occur (leading to significant speed differences), a wider design should be considered. • For main routes, it is advisable to incorporate a design speed of 30km/h, with special consideration given to

	down-gradient of >3% where design speeds should be closer to 35-40km/h. • Many recreational cyclists travel at relatively high speeds and the radii of curves should be chosen to cater for the expected operating speed on the particular section of path. Tight curves should not be provided to improve visual amenity. • Longitudinal gradients on paths should be as flat as possible. The potential hazard for cyclists due to high speeds on steep downgrades is as important as the difficulty of riding up the grade when determining maximum gradients on two-way paths. • Steep grades must not be combined with sharp horizontal curvature (i.e. curves < 20mradius) • At gradients above 3% the acceptable length reduces rapidly, and it is considered this is the desirable maximum gradient for use on paths. In cases where 3% cannot be achieved consideration should be given to limiting gradient to a maximum of about 5% and providing short flatter sections (~20m long) at regular intervals to give cyclists travelling both uphill and downhill some relief from the gradient • Maintenance requirements ○ Allowance should be made for future access for maintenance around the sub structure/superstructure. Generally, 3m offset clearance from the structure is required to access for the maintenance of the bridge structure but will depend on access for maintenance vehicles.
Removal of Road 5	TfNSW is amenable to the removal of the previously proposed Road 5. DPHI will need to be satisfied that the proposed Macquarie Park Metro Station plaza is satisfactorily increased in size with an appropriate level of pedestrian amenity provided and ability to access the Metro and bus stop.
Landscape Opportunities on Lane Cove Road	Advice from the TfNSW Road Design team is still being sought and additional information will be provided as soon as possible.

Other Issues to Consider	DPHI and Council will need to ~~shall~~ be satisfied as to the design of the intersection of Road 13 / Waterloo Road

I trust the above assists to allow you to continue with the design of your site however should you have any questions, please contact me via email at development.sydney@transport.nsw.gov.au.

Kind regards,

Matthew Houlden
Land Use Planner, Land Use Assessment - Eastern
Transport Planning
Planning, Integration and Passenger
Transport for NSW

M 0439 064 432 **E** matt.houlden@transport.nsw.gov.au

Level 4, 4 Parramatta Square
12 Darcy Street
Parramatta NSW 2150

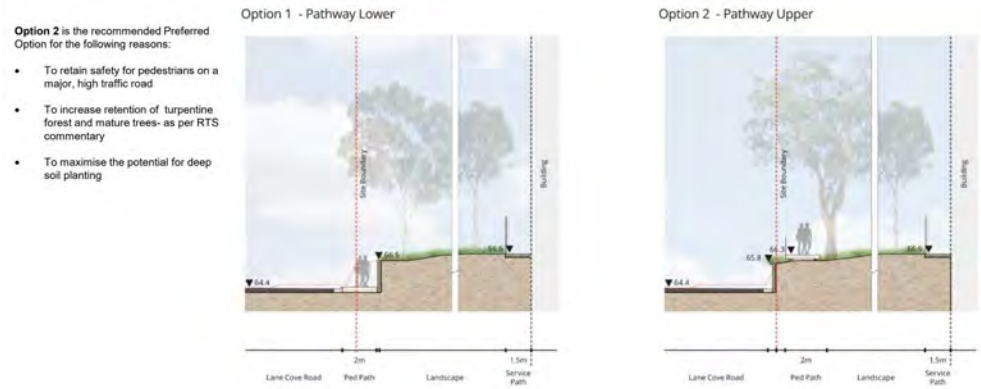
Transport for NSW

From: Matt Houlden (CTP CONSULT)
To: Ashish Modessa
Cc:
Subject: FW: TfNSW Summary - Meeting to discuss 269 Lane Cove Road, Macquarie Park on 22 May 2025 (TfNSW Ref: SYD24-01355/03) [Filed 07 Aug 2025 15:40]
Date: Thursday, 7 August 2025 3:34:09 PM
Attachments:

Hi Ashish,

TfNSW has now had an opportunity to consider the request for Option 2 for Lane Cove Road. Details are in Table 1 below:

Table 1: Option 2 Question and Answer

Applicant's Question	TfNSW Answer
Lane Cove Road Interface 	TfNSW is amenable Option 2 for Lane Cove Road in-principle. The following should be considered as part of the concept design and provided to TfNSW for review and comment: • Structural wall details and what the wall profile would look like and drainage details for the wall. That is, how will you drain the road as well as manage the drainage from the vegetation? • While typically there would need to be 2m clearance to a wall in a location such as this, a lower clearance of approximately 1m may be considered from the face of the gutter to the wall. This lower clearance may be considered subject to appropriate justification and meeting required Austroads and TfNSW standards. • The type of drainage pits used will impact the distance that the face of kerb may be from the wall. • Crossfall on Lane Cove Road that runs back

		toward the wall and any changes to the pavement on Lane Cove Road. • The property boundary will need to be realigned to ensure that all services and utilities are located within the road reserve and the footpath is fully accessible at all times. Any boundary re-adjustment required for the footpath and services is to be dedicated to Council at no cost. • Pedestrian fencing on the top of the wall to Austroads and TfNSW standards. • As the pedestrian fence is considered a blockage to sightlines, ensure that Safe Intersection Sight Distance can be provided to pedestrians crossing Road 6 at Lane Cove Road intersection and the pedestrian fencing and slope up to the top of the wall is set back appropriately from the intersection. • Consideration is to be given to an appropriate crossing location and design for pedestrians walking along Lane Cove Road, crossing Road 6. • Clear information on the vertical and

	horizontal clearance to the trees and tree branches from the pedestrian path. • DDA compliant pedestrian path to be provided with the width and slope to be dimensioned on the plans.

We would be happy to meet throughout the design process to answer questions from the design team. If required, please send a meeting request to me via development.sydney@transport.nsw.gov.au.

Kind regards,

Matthew Houlden
Land Use Planner, Land Use Assessment - Eastern
Transport Planning
Planning, Integration and Passenger
Transport for NSW

M 0439 064 432 **E** matt.houlden@transport.nsw.gov.au

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Transport
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