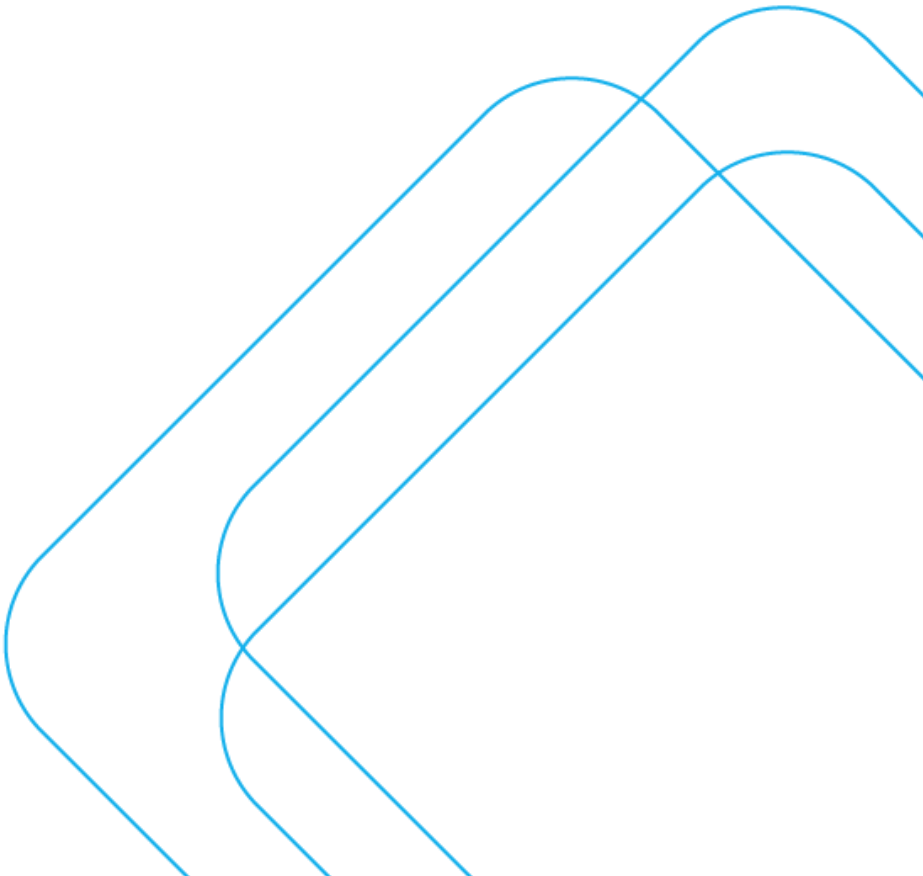
SCT Consulting

1-7 BURTON STREET, 3B-11 LOFTUS STREET & 10-12 GIPPS STREET, CONCORD

Transport Impact Assessment

10 DECEMBER 2025

SCT Consulting acknowledges
the traditional owners of the lands
on which we work.
We pay our respects to Elders
past, present and emerging.



Quality Assurance

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Executive Summary

Introduction

SCT Consulting has been engaged by Impact Group on behalf of LFD Concord Pty Ltd ATF LFD Concord Unit Trust (the proponent) to prepare a transport impact assessment (TIA) to support a State Significant Development Application (SSDA) for an amalgamated site (the site) at 1-7 Burton Street, 3B-11 Loftus Street, and 10-12 Gipps Street, Concord, within the City of Canada Bay local government area (LGA), and to investigate the potential transport impacts associated with the proposal. The site is located adjacent to the north of the future Burwood North Metro Station and within the Burwood-Concord Precinct as identified in the Parramatta Road Corridor Urban Transformation Strategy (PRCUTS).

Strategic context

The subject site is within Stage 2 of the Burwood-Concord Precinct and is recommended by the *PRCUTS Planning and Design Guidelines 2016* to be zoned R3 Medium Density Residential, with a maximum floor space ratio of 2.4:1 and a maximum building height of 40m.

The Parramatta Road Corridor Canada Bay Stage 2 Modelling Outcomes, prepared by Bitzios (2023), has found that the study area encompassing the site is expected to experience a higher level of traffic congestion, mostly on the road network west of Burwood Road, and proposed right-turn bans at Gipps Street (west) to Loftus Street (south) and Burton Road (west) to Burwood Road (south).

At the City of Canada Bay Ordinary Council Meeting on 18 June 2024, the Council resolved that a Council's draft planning proposal for Stage 2 of the Kings Bay and Burwood-Concord Precincts be endorsed for submission to the Department of Planning, Housing and Infrastructure for a Gateway Determination and public exhibition. The intended outcome of the draft proposal is to achieve fine-grained housing precincts that are community and family-friendly, well-designed, sustainable, and resilient. The proposed amended planning controls for the subject site are all consistent with the *PRCUTS Planning and Design Guidelines 2016*. The site is estimated to be able to achieve 275 high-density residential units under the accompanying masterplan. The masterplan also proposes that Moreton Street be extended eastwards to Loftus Street through the middle of the site. The extension ultimately forms part of the requirements under the proposed amended *Canada Bay Local Environment Plan 2013* (the LEP).

Existing conditions

The area surrounding the site can be characterised as a predominantly low-rise residential neighbourhood made up of medium to large blocks. Close to the site are car-based retail uses along Parramatta Road to the south and several public open spaces and amenities, including St Lukes Park and Concord Oval. Burwood town centre is around 1.4km to the south of the site, while Concord town centre is 1.6km to the northwest.

Data from the Australian Bureau of Statistics Census in 2016 and 2021 were analysed to develop an understanding of the existing travel behaviour among the residents in the area around the site at the Concord – Mortlake – Cabarita Statistical Area Level 2 (SA2), where the subject site is located. The results show that of all employed persons, 22 per cent used public transport while 63 per cent used private vehicles and three per cent used active transport. Public transport users largely travelled by train for at least one leg of their trips (15 per cent), followed by bus (3 per cent).

With the urban nature of the area, footpaths are provided along the majority of the roads surrounding the site. The footpaths are generally narrow and serve local foot traffic. Cycling infrastructure around the site is currently limited. While Gipps Street is a designated cycling route, the infrastructure is unsupportive. The *Local Movement Strategy 2019* argues that Gipps Street is not suitable for cycling and instead proposes a secondary link along Patterson, Stanley, and Henry Streets slightly further north.

The subject site benefits from its location close to Parramatta Road, Burwood Road, and the future Burwood North Metro Station, and is served by extensive public transport services.

– The nearest existing train station is Burwood Station, 1.3km to the south, with services providing direct connections between Burwood and many key destinations, including the Sydney CBD, the Parramatta CBD, Rhodes, and Hornsby, and more than 40 services in each direction during both two-hour peak periods.

– The site is less than a 5-minute walk from bus stops on Parramatta Road and Burwood Road. The bus routes provide services to various destinations, catering to both short and long-distance trips, including the Sydney CBD, Burwood, Hurstville, Macquarie Park, and Cabarita.

– The northern entrance of the future Burwood North Metro Station along Sydney Metro West is around 300m from the site. The metro (under construction) will provide a rapid, high-capacity east-to-west connection between the Sydney CBD and Westmead with stops at Parramatta and Sydney Olympic Park.

The proposal

The proposed amendments to planning controls on the amalgamated site are land zoning R4 High-Density Residential, a maximum floor space ratio of 5.4:1, and a maximum building height of 95.5m. These will allow for the construction of residential flat buildings and a maximum floor space of 44,518 sqm.

The proposal has an indicative yield of 560 residential units in a strategically located site close to economic and lifestyle centres and existing amenities, with access to high-capacity public transport services. The development is proposed to be constructed across three buildings and multiple-level car parks, and a public open space.

The proposed 560 units will be further split into 242 built-to-sell apartments and 318 build-to-rent and affordable Housing dwellings. The proposal will deliver 408 car parking spaces in total. Key design approaches are:

– Access for vehicles is provided at two driveways on Burton Street and Loftus Street.

– Pedestrian entries are distributed across the site frontages. The internal footpaths all lead to the internal public open space at the centre of the site and allow for access to all three buildings. Pedestrians also have direct access from the public footpaths to the two buildings on Loftus Street.

Transport impact assessment

The estimation of trip generation associated with the proposal is informed by the recently published *Guide to Transport Impact Assessment* (GTIA) (Transport for NSW, 2024).

The proposal would generate 96 and 73 additional two-way vehicle trips during the AM and PM peak hours, respectively, in addition to the vehicle trips already expected to be generated from current residential dwellings on site. Most vehicles would travel to/from the east, followed by vehicles to/from the west along Burton Street and Gipps Street. Based on the above findings, this report posits that:

– The intersections in the vicinity of the development to the west, Burton Street | Burwood Road, Gipps Street | Burwood Road, Parramatta Road | Burwood Road, would continue to perform satisfactorily with the proposal. The increased demand from the proposal has a minor and manageable impact on the network performance and would not require any infrastructure/network upgrades.

– The future Burwood North Station along Sydney Metro West will be the key public transport hub for residents and workers in the area. Complemented by the extensive bus services within walking distance, all public transport trips generated by the proposal will be catered for sufficiently by both existing and planned services, and no capacity constraints are expected.

– The location of the driveways allows for sufficient visibility of and for vehicles coming in and out of the driveways. It is satisfied that the proposal will pose no safety issues for any road users while encouraging active travel and limiting vehicular traffic around the site.

Conclusion

The transport impact assessment concludes that the proposal will not have significant adverse impacts on the surrounding transport network. In contrast, the proposal will encourage public transport use, while the design approaches will enhance safety for all road users and the quality of the area.

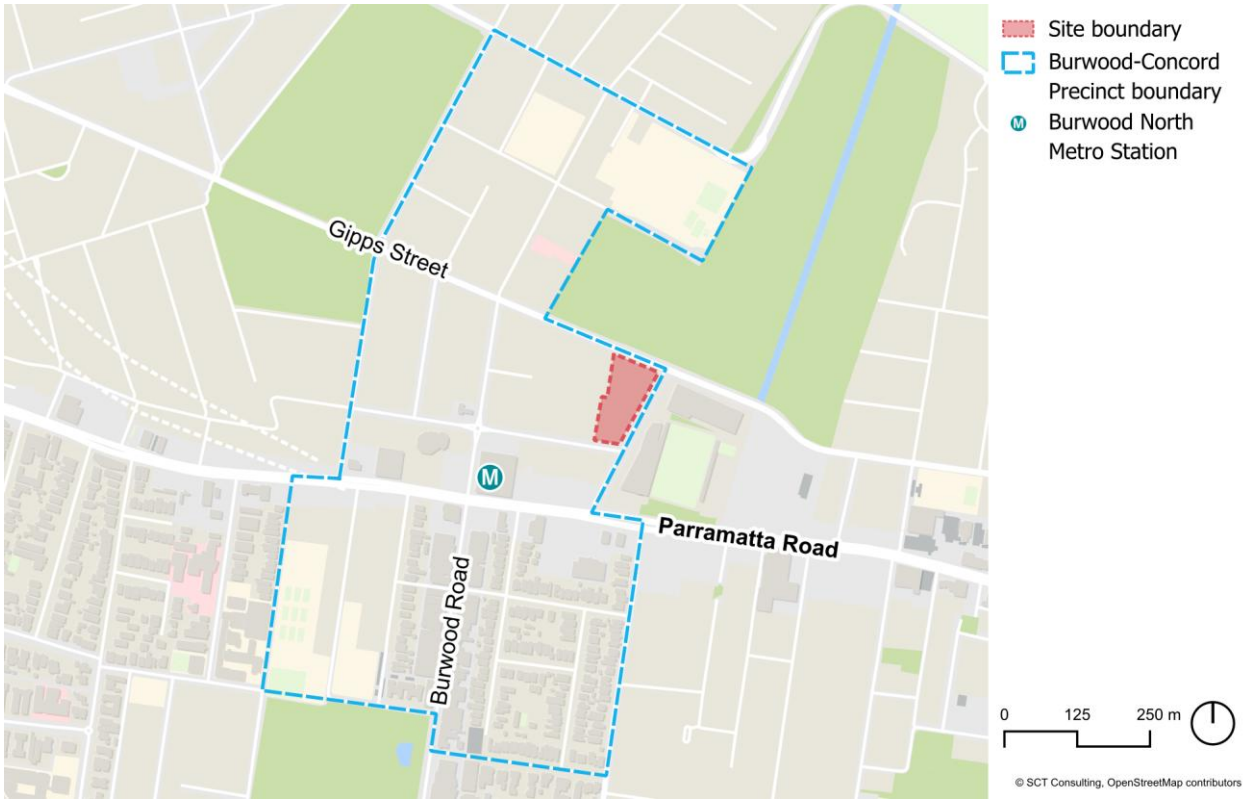
1.0 Introduction

1.1 Background

SCT Consulting was engaged by Impact Group on behalf of LFD Concord Pty Ltd ATF LFD Concord Unit Trust (the proponent) to prepare a transport impact assessment (TIA) to support a State Significant Development Application (SSDA) for the land at 1-7 Burton Street, 3B-11 Loftus Street, and 10-12 Gipps Street, Concord (the site), within the City of Canada Bay local government area (LGA).

The site is located adjacent to the north of the future Burwood North Metro Station and within the Burwood-Concord Precinct as identified in the *Parramatta Road Corridor Urban Transformation Strategy* (PRCUTS), as shown in **Figure 1-1**.

Figure 1-1 Location of the site



PRCUTS envisages the Precinct as a commercial gateway to Burwood town centre, built around the proposed on-street rapid transit from Burwood to the Sydney CBD and recommends that the Precinct be upzoned to allow for higher-density residential development.

The planning proposal to deliver the City of Canada Bay's Stage 1 Implementation Area of PRCUTS was made to the *Canada Bay Local Environmental Plan 2013* in 2022. The City of Canada Bay Council (the Council) adopted amendments to the City of Canada Bay Development Control Plan in March 2023.

The subject SSDA for the site discussed in this document aims to capitalise on emerging opportunities since the development of PRCUTS in 2016, especially with the delivery of the future Sydney Metro West, and the site location close to existing activity centres and amenities, by proposing rezoning and increasing development density to further enhance the creation of vibrant, sustainable, and walkable communities based on the 15-minute city principles and supported by the new high-capacity metro line.

1.2 Purpose and scope

This TIA report has been prepared to support the proposal for amendments to the planning controls applied to the site in Concord. It seeks to investigate the potential transport impacts associated with the proposal and includes the following:

- Review of committed development and future infrastructure delivery in the area surrounding the site
- Study of the existing conditions around the site, including site context, travel behaviour, road network, active transport network, public transport network, and road crashes
- Review of the subject proposal, including the proposed access arrangements and pedestrian links
- Analysis of trip generation and distribution associated with the proposal
- Assessment of the potential transport impacts on the road network, including SIDRA intersection modelling (requested by SEARs), active transport network, public transport network, and safety
- Preliminary construction traffic management plan
- Reference to relevant environmental planning instruments and local planning controls, including the Parramatta Road Corridor Urban Transformation Planning and Design Guidelines 2016, the *Canada Bay Local Environmental Plan 2013* (the LEP), and the *City of Canada Bay Development Control Plan* (the DCP)
- Reference to guides relevant to transport impact assessment, including the *Guide to Transport Impact Assessment* (2024)

1.3 Requirements from government agencies and Council

Relevant council, agency, and authority correspondence received during the scoping proposal are outlined in **Table 1-1**. This report has addressed those comments accordingly.

Table 1-1 Requirements for the proposal

Source	Comments	Section addressed
DPHI (SEARs)	– Provide a Transport Impact Assessment (TIA) in accordance with the processes and methodology recommended in the Guide to Transport Impact Assessment (GITA) published by TfNSW. – The Transport Impact Assessment (TIA) is to address the Traffic and Transport Study and Action Plan prepared by Bitzios on behalf of Stratfield, Burwood and Canada Bay Councils. – If the construction of the development would cause interruptions to regular pedestrian and transport routes (including public transport, active transport or general traffic), a preliminary Construction Traffic (or Transport) Management Plan (CTMP) should be prepared as part of the TIA to mitigate any such impacts. – Provide SIDRA analysis of the intersections at Burwood Road and Burton Street, Burwood Road and Gipps Street and Burwood Road and Parramatta Road and any other deemed relevant by the assessing consultant. – Demonstrate compliance with the provisions of the Sydney Metro Underground Corridor Protection Guidelines, including the requirements for consultation with Sydney Metro for any penetrative subsurface investigations (e.g. boreholes for geotechnical reports) 2m or deeper before the commencement of any drilling.	This report Section 2.4.2 Section 2.4.3 Section 5.3 Section 6.0 Section 5.3 To be addressed by another consultant
TfNSW	– A comprehensive transport impact assessment detailing the expected trips generation of the proposed development and the impact that this will have on the surrounding road network (trip generation inclusive of trips by pedestrians, cyclists, and vehicles) – It is to detail the existing and proposed parking conditions and the suitability of parking and loading arrangements for the development.	Section 5.1 Section 5.2 Section 5.3 Section 4.3 Section 4.4

Source	Comments	Section addressed
	– Daily and peak traffic movements likely to be generated by the proposed development during construction and operation, including a description of heavy vehicle types, haul route origins and destinations.	Section 5.1 Section 6.3
	– Details of the impact of trips generated by the development to nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity and the need/associated funding for upgrades or road improvement works.	Section 5.3
	– Details of light and heavy vehicle movements during construction and operation, including description of heavy vehicle types and haul route origins and destinations.	Section 6.3
	– Details of the proposed site access and the parking provisions associated with the proposed development, including compliance with Austroads and Australian Standards (i.e. turn paths, sight distance requirements, aisle widths, etc.). The proponent must demonstrate that the site plan, site access and surrounding road network can accommodate the largest vehicles entering, exiting, and manoeuvring throughout the site, with consideration to other development access points in the vicinity.	Section 4.6
	– Daily inbound and outbound traffic profiles by time of day and day of week classified by vehicle type.	Section 5.1
	– The Traffic Management Plan should include managing the number of vehicles likely to be generated during construction and operation, awaiting loading, unloading, or servicing that can be accommodated on the site to avoid queuing in the surrounding road network. This is to demonstrate how internal and external traffic can be managed in conjunction with existing traffic on site.	Section 4.3.4
	– A detailed site layout to demonstrate that the site will sufficiently accommodate the most productive parking arrangement on site for the various vehicle types in accordance with the relevant Australian Standard and Council's Development Control Plan.	Section 4.4
	– Measures to integrate the development with the existing/future public transport network.	Section 4.5
	– Details of travel demand management measures to minimise the impact on general traffic, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel Plan) and facilities to increase the non-car mode share for travel to and from the site.	Section 4.7

1.4 Report structure

The remaining of the report is structured into the following sections:

– **Section 2.0** reviews the State, regional, and local strategic contexts around the site.

– **Section 3.0** describes the existing site context, travel behaviour, and transport conditions.

– **Section 4.0** outlines an overview of the proposal.

– **Section 5.0** provides an assessment of the potential transport impacts associated with the proposal on the road, active transport, and public transport networks.

– **Section 7.0** discusses preliminary construction traffic impact and mitigation.

– **Section 7.0** presents the conclusion of the assessment.

2.0 Strategic context

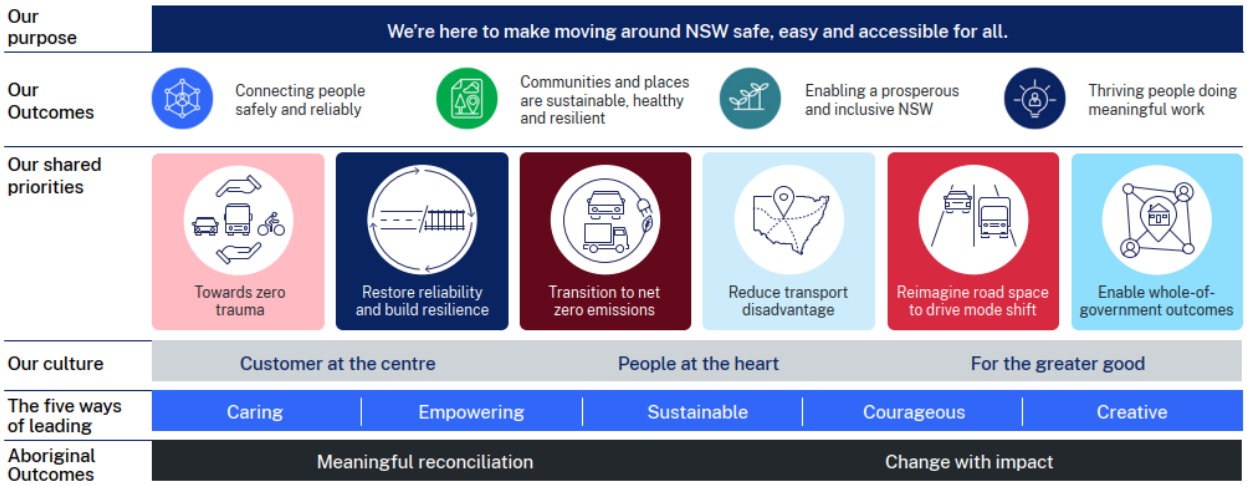
2.1 Connecting NSW Strategy

The *Connecting NSW Strategy* takes a back-to-basics approach in addressing the pressing transport challenges facing NSW. The Strategy sets out key priorities that will inform funding, transport planning, policy development, and reforms.

The Strategy aims to make travel across the state safe, easy, and accessible for everyone. It sets out six integrated priorities that guide how Transport for NSW allocates resources to deliver the greatest impact for passengers, customers, and communities. These priorities work together to enhance travel experience and improve community wellbeing:

- **Towards zero trauma** – Aspire to eliminate trauma across the NSW transport network.
- **Restore reliability and build resilience** – Minimise disruptions, restore reliability, and strengthen network resilience to keep communities and supply chains moving.
- **Transition to net zero emissions** – Reduce emissions and accelerate the shift to a decarbonised transport sector.
- **Reduce transport disadvantage** – Ensure equitable access to jobs, education, and essential services.
- **Reimagine road space to drive mode shift** – Support sustainable travel for a growing population while maintaining quality of life and health outcomes.
- **Enable whole-of-government outcomes** – Collaborate across agencies to deliver broader NSW Government's priorities, including housing, energy transition, and Closing the Gap.

Figure 2-1 Connecting NSW Strategy

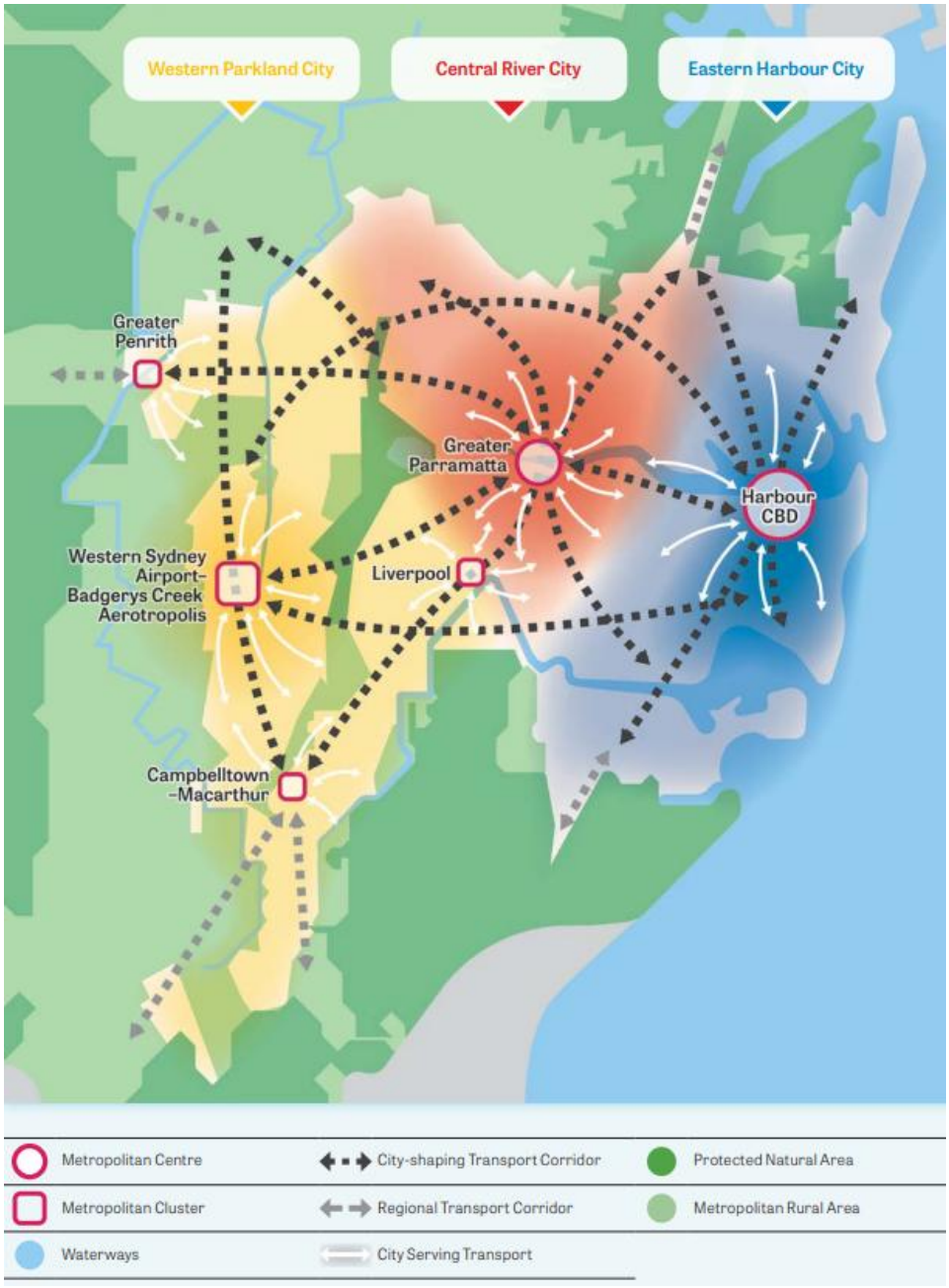


Source: Transport for NSW, October 2025

2.2 Greater Sydney Region Plan – A Metropolis of Three Cities

The Greater Sydney Region Plan – *A Metropolis of Three Cities* envisions transforming Greater Sydney into three interconnected cities: the Western Parkland City, the Central River City, and the Eastern Harbour City, as shown in **Figure 2-2**. This plan aims to enhance liveability, productivity, and sustainability by ensuring that most residents live within 30 minutes of their jobs, education, and health services.

Figure 2-2 Greater Sydney Regional Plan Three Cities



Source: Greater Sydney Commission (2018)

– **Liveability** – The housing supply is diversified and increased to meet the growing and changing needs of the community.

  - Housing the city – Housing options are diverse, affordable, and close to jobs and services. The metropolis is well-connected by public transport and less reliant on private vehicles.
  - A city of great places – Neighbourhoods are walkable, creating vibrant and attractive places that enhance community well-being.

– **Productivity** – Jobs are boosted and spread across the region with a strong focus on economic corridors, health and education precincts and strategic centres.

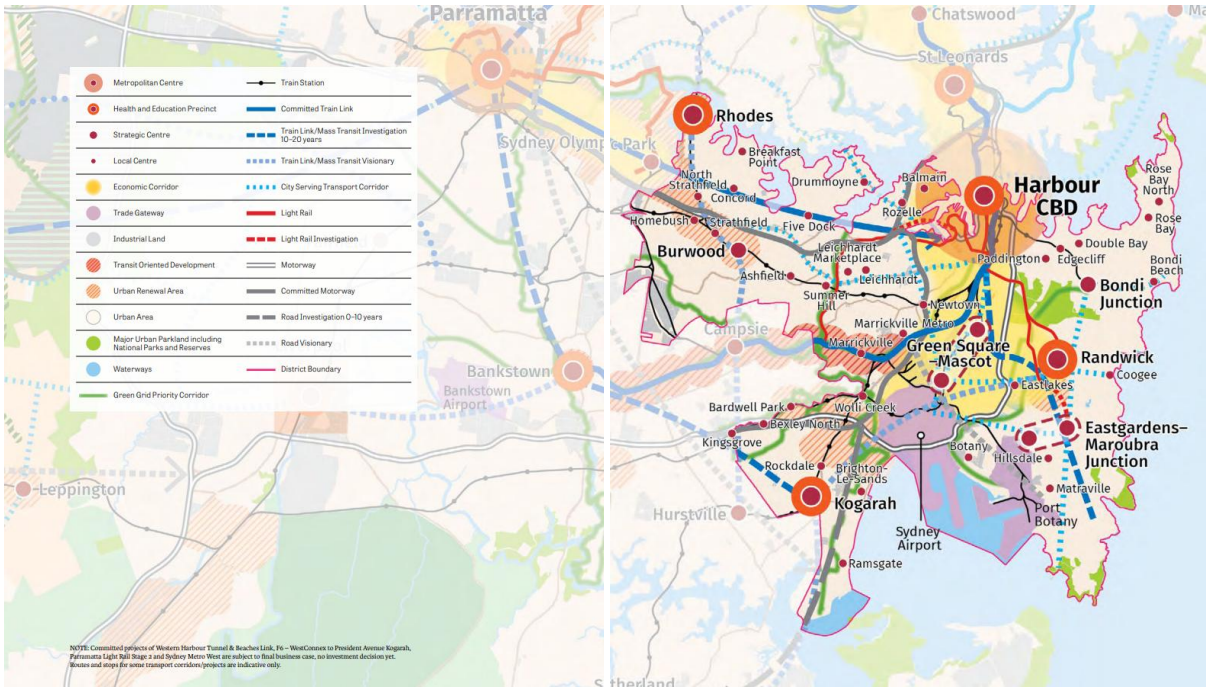
  - A well-connected city – The metropolis is well-connected, built around a comprehensive transport network, ensuring that residents have convenient access to jobs, entertainment, and services.

– **Sustainability** – Urban tree canopy and a network of open space are increased. The environment and natural resources are protected.

2.3 Eastern City District Plan

The *Eastern City District Plan* sets out the priorities and actions for the Eastern City District which encompasses local government areas between Strathfield in the west and Waverley in the east with the Harbour CBD, Australia's global gateway and financial capital, as its metropolitan centre. The vision for the District is to create a vibrant, globally competitive, and sustainable urban area that enhances the quality of life for its residents while driving economic growth and innovation. The structure plan of the Eastern City District is illustrated in **Figure 2-3**.

Figure 2-3 Eastern City District structure plan



Source: Greater Sydney Commission (2018)

As the *Eastern City District Plan* is part of the overarching Greater Sydney Region Plan, the proposal also contributes to the vision for the District across four spatial elements in a similar way to the Greater Sydney Region Plan.

In addition, Planning Priority E5 – *Providing housing supply, choice and affordability, with access to jobs, services, and public transport* is of high relevancy. It emphasises opportunities for urban renewal at high density, supported by high-capacity public transport infrastructure and existing amenities.

2.4 Parramatta Road Corridor Urban Transformation Strategy

2.4.1 The Strategy

The *Parramatta Road Corridor Urban Transformation Strategy* (PRCUTS) identifies areas that will be the focus of growth and change along the Parramatta Road corridor from Camperdown in the east to Granville in the west. The Strategy indicates that the Corridor is expected to accommodate 56,000 additional people in 27,000 new homes over the next 30 years. The population increase in these areas is 3.2 per cent of Sydney's total expected population growth of 1.6 million.

The Strategy identifies seven principles for the transformation of the corridor with those relevant to the planning proposal being outlined below:

– **Housing choice and affordability** – Future development contributes to diverse land use and housing types that create opportunities for people to live and work locally and accommodate a wide range of community needs, with proposals for mixed-use precincts along public transport corridors, urban services, and amenities.

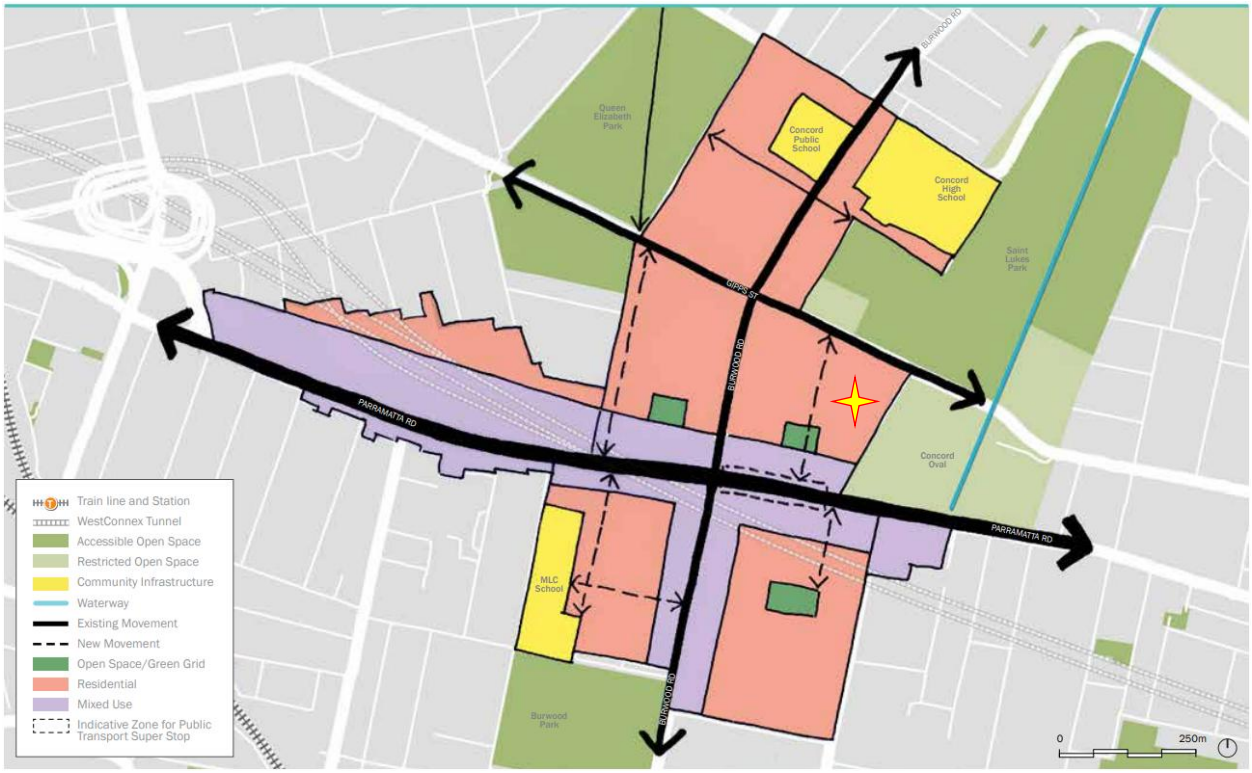
– **Accessible and connected** – Parramatta Road reshapes and better connects places, better serves customers, and encourages sustainable travel. Short-distance travel is done by active transport. Future public transport options will support urban renewal opportunities and connect people to their places of choice.

– **Vibrant communities and places** – Quality places and built form outcomes are promoted. People have access to well-designed, attractive, and greener streets and urban spaces. Precincts are delivered as 15-minute neighbourhoods through land use changes that improve walkability, housing diversity, and access to open spaces and services.

– **Green spaces and links** – Recreational needs of the community are supported by protecting and improving existing while providing new open spaces, improving linkages to create a network of expansive recreational spaces, and ensuring that open spaces and public domain enhance the quality of the local environment.

The Burwood-Concord Precinct, where the site is located, is envisaged as an urban renewal precinct for future growth with prime access to transport and employment opportunities and is expected to experience rapid growth, as shown in **Figure 2-4**.

Figure 2-4 Structure plan of the Burwood-Concord Precinct



Source: UrbanGrowth NSW (2016) Parramatta Road Corridor Urban Transformation Planning and Design Guidelines 2016

The Precinct will focus its growth along Burwood and Parramatta Roads with the former being improved to enhance its role as a lively main street. The Precinct is projected to grow in population by 4,380 in 2050, with 2,020 new dwellings and 1,250 new jobs.

As outlined in the PRCUTS *Planning and Design Guidelines* 2016, new open spaces are encouraged on larger sites as well as green streets, linear parks, and pedestrian through-site links. A north-south through-site link between Gipps Street and Parramatta Road has been identified as a strategic link in the structure plan.

The planning amendments to deliver the City of Canada Bay's Stage 1 Implementation Area have been made to the *Canada Bay Local Environmental Plan 2013* in 2022 and Council adopted amendments to its Development Control Plan in March 2023.

For Stage 2, PRCUTS recommends that the subject site be zoned R3 Medium Density Residential, with a maximum floor space ratio of 2.4:1 and a maximum building height of 40m.

2.4.2 Parramatta Road Corridor Traffic and Transport Study and Action Plan (Bitzios, 2022)

The Traffic and Transport Study and Action Plan report was prepared by Bitzios and published in February 2022 (version 003) as a response to the Ministerial Direction s9.1 which required a precinct-wide traffic study to be completed prior to any rezoning commencing.

The report documents the traffic study to inform the necessary road improvements and upgrades for the Kings Bay, Burwood-Concord, and Homebush Precincts. It provides an integrated traffic and transport strategic response and action plan to support the land use densification proposed for the three precincts.

The study area encompasses land to be rezoned, including the Stage 1 Implementation Area but excluding Stage 2 where the site is located.

It is projected that, by 2036, there will be a 35 to 39 per cent increase in traffic in the study area from the 2019 level. Approximately 75 per cent will be through traffic even some will have been diverted to WestConnex. The modelled traffic congestion indicates the need for improvements to road network capacity and improved provisions of active transport and public transport infrastructure.

The key traffic issues in the Burwood-Concord Precinct are found in the modelling to be related to significant congestion on Parramatta Road. East-west rat-running on local roads would further exacerbate the congestion on Burwood Road. The Burwood Road / Burton Street roundabout is identified as a key pinch point within the Precinct.

The report further proposes initiatives to improve traffic conditions within the Precinct, including:

– Implementing clearways on Burwood Road
– Changing signal phasing at the Burwood Road / Park Avenue / Wilga Street and Gipps Street / Boughton Street intersections
– Converting the Burwood Road / Burton Street roundabout to a signalised intersection with a two-lane approach, two-lane exit, and pedestrian crossing at all approaches
– Implementing a traffic management scheme to limit rat-running via Loftus Street, including traffic calming devices, threshold treatments at entrances, and one-way operation
– Building new pedestrian links to improve permeability and new cycle links to connect existing infrastructure

From a traffic perspective, the report recommends that increased density should be distributed around Parramatta Road, Burwood Road, and the future Burwood North Metro Station.

2.4.3 Parramatta Road Corridor Canada Bay Stage 2 Modelling Outcomes (Bitzios, 2023)

The City of Canada Bay Council commissioned Bitzios to update the Canada Bay Stage 2 development plans associated with the previous Traffic and Transport Study and Action Plan (Bitzios, 2022) by revising the population and employment forecasts and identifying locations for Stage 2 development within the LGA.

The subject site is located in the Strategic Traffic Forecasting Model (STFM) zone 706, named as Burwood (North) in the report. The zone had previously been forecasted to have a population growth towards 2036 of 3,058 and has been updated to a 5,882 increase, which was analysed in the report. This equates to an increase in population of 2,824 and dwellings of 1,345 reflected in this study for Stage 2.

Trip generation rates for high-density residential development were adopted: 0.19 trips per hour in the AM peak hour and 0.15 trips per hour in the PM peak hour. Resultantly, Burwood (North) is expected to generate 256 and 202 additional vehicle trips per hour during the AM and PM peak hours, respectively.

With the forecasted population increase in Burwood (North) and Burwood (West), the areas are expected to experience a higher level of traffic congestion, mostly on the road network west of Burwood Road.

In addition to the recommendations made in the previous report (Bitzios, 2022), this study, among other recommendations, also proposes right-turn bans at the following locations:

– Broughton Street (south) to Gipps Street (east)
– Gipps Street (west) to Loftus Street (south)
– Burton Road (west) to Burwood Road (south)

2.4.4 Council's planning proposal for PRCUTS Stage 2

At the City of Canada Bay Ordinary Council Meeting on 18 June 2024, item 9.2 was held to seek the Council's endorsement for the submission of a planning proposal to the Department of Planning, Housing and Infrastructure (DPHI) to obtain a Gateway Determination for land within Stage 2 of the Kings Bay and Burwood-Concord Precincts of PRCUTS.

Following the meeting, the Council recommended that the draft planning proposal be endorsed for submission to DPHI for a Gateway Determination and for public exhibition, together with the draft DCP and draft Affordable Housing Contribution Scheme.

The draft proposal aims to change the zoning and built form controls and to require and incentivise the delivery of community and sustainability infrastructure within Stage 2. The intended outcome is to achieve fine-grained housing precincts that are community and family-friendly, well-designed, sustainable, and resilient.

The draft proposal was attached with a suite of supporting studies, including urban design masterplans, a public domain plan, a heritage assessment, and an infrastructure strategy, among others. A draft amendment to the DCP was also prepared to guide and influence finer-grain planning outcomes.

According to the masterplan for Burwood-Concord Precinct Stage 2 (Stage 2 Masterplan) prepared by GroupGSA (2024), the subject site is part of Lot I4 where the proposed amended planning controls are all consistent with the PRCUTS *Planning and Design Guidelines 2016*, i.e., land zoning R3 Medium Density Residential, floor space ratio of 2.4:1, and a 40m building height. With a housing mix of 20 per cent one-bedroom units, 60 per cent two-bedroom units, and 20 per cent three-bedroom units, Lot I4 is estimated to be able to achieve 275 high-density residential units. This development scale was included and tested in the traffic study conducted by Bitzios (2023).

The Stage 2 Masterplan also proposes several through-site links in addition to the desired options outlined in the PRCUTS *Planning and Design Guidelines* 2016, as shown in **Figure 2-5**. Moreton Street is proposed to be extended eastwards to Loftus Street via the southern boundary of Lot I3 and through the middle of Lot I4. The extension ultimately forms part of the requirements under the proposed amended LEP (where Lot I4 is referred to as Area 47).

Figure 2-5 Stage 2 proposed through-site links

Source: GroupGSA (2024)

2.5 Movement and Place Framework

The Movement and Place Framework is a whole-of-government integrated approach for planning and managing the road network in NSW. Movement and Place provides a **place-based planning framework** that involves a collaborative, long-term approach to develop contextual responses that better **balance and meet the needs of local people and their local street environment**.

Movement and Place integrates transport planning with urban design to create vibrant, accessible, and people-focused places. It adopts a **'vision and validate' methodology**, which starts with establishing a shared vision with clear desired outcomes, and then works backward to validate that transport and place interventions align with those outcomes—ensuring that planning decisions support the intended character, function, and experience of the place.

2.6 Safe System approach

The Safe System approach is a proven and holistic approach adopted internationally as best practice in preventing road trauma. The *2026 Road Safety Action Plan* builds on Safe System and sets a long-term vision of zero deaths and serious injuries on NSW roads by 2050. This approach is underpinned by three key principles:

– People are human and sometimes make mistakes – a simple mistake shouldn't cost anyone their life.

– Roads, roadsides, and vehicles need to be designed to minimise crashes or reduce forces if a crash happens.

– Road safety is a shared responsibility – everyone needs to make safe decisions on and around the road to prioritise safety.

2.7 Road User Space Allocation Policy

The *Road User Space Allocation Policy* is a strategic framework that guides how road space is distributed among different users to support safe, efficient, and equitable transport outcomes across NSW.

The Policy applies to all proposed, new, and existing classified roads, excluding motorways. It aims to ensure that road space, from property boundary to boundary, is allocated in a way that reflects the corridor's strategic intent and supports broader transport and land use goals. It recognises that road space is a limited public resource and must be managed deliberately to balance competing demands from pedestrians, cyclists, public transport, freight, and private vehicles. Key principles of the Policy are:

– Establish a network vision and primary road functions based on strategies and plans that realise a balance between place and movement

– Allocate road user space based on the network vision and road functions, considering all road users in order of:

  - Walking, including equitable access for people of all abilities
  - Cycling, including micromobility devices
  - Public transport
  - Freight and servicing
  - Point-to-point transport, such as taxis and ride share vehicles
  - General traffic and on-street parking for private vehicles.

2.8 City of Canada Bay Local Strategic Planning Statement

The City of Canada Bay Local Strategic Planning Statement (LSPS) is the core strategic planning document for the Council that will guide the character of centres and neighbourhoods and land use and planning decisions in the LGA.

The site is in one of the identified urban renewal areas, which include the precincts within PRCUTS as well as the Rhodes Planning Precinct. Many of the urban renewal areas are also designated future local centres, including the Burwood-Concord Precinct, where there is an emphasis on active streets and human-scale built forms.

Following community consultation, the LSPS outlines 19 planning priorities across four themes, which are informed by the *Eastern City District Plan*. Planning priorities relevant to the proposal are as follows:

– Provide housing supply, choice, and affordability in key locations

– Enhance employment and economic opportunities in Local Centres

– Identify land use opportunities and implications arising from Sydney Metro West

– Protect and enhance bushland, biodiversity, and scenic and cultural landscapes

– Deliver high-quality open space and recreation facilities.

2.9 City of Canada Bay Development Control Plan

Section K21 of the City of Canada Bay Development Control Plan has been prepared to support the implementation of PRCUTS. The DCP will deliver the desired future character envisaged in PRCUTS, with refinements to achieve better urban design and community outcomes.

Section K21 provides various controls relevant to the development of land within the Stage 1 Implementation Area of PRCUTS. The controls are based on key urban design principles, including creating an active and permeable public realm, promoting active street frontages, minimising the impacts of parking, etc.

Regarding transport matters, the DCP attempts to encourage the uptake of walking, cycling, and public transport while reducing car ownership and reliance on private vehicles. It will achieve this by:

- Requiring new open spaces and pedestrian links in large blocks
- Improving street frontage quality to encourage active travel
- Implementing Crime Prevention Through Environmental Design (CPTED) principles
- Enforcing maximum car parking rates and unbundled parking
- Encouraging carshare and rideshare.

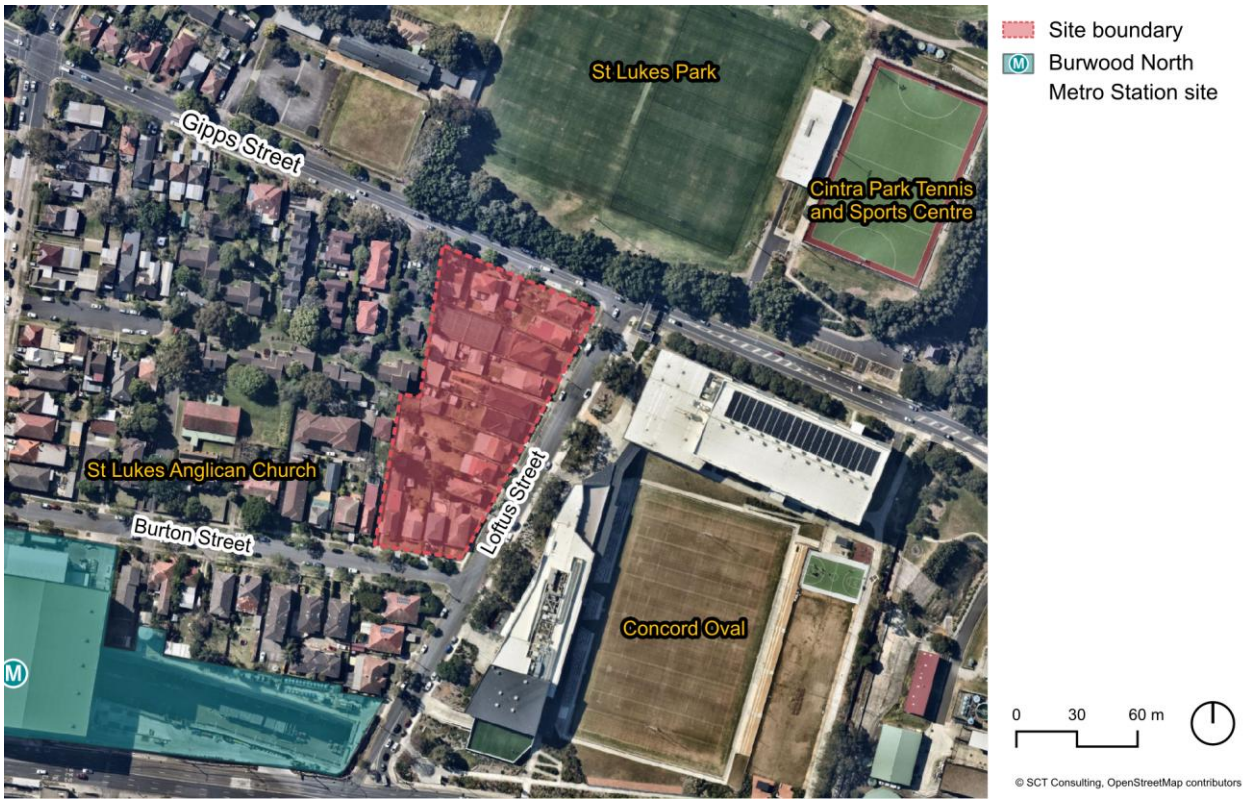
3.0 Existing conditions

3.1 Site context

The subject site is the land consisting of 15 lots at 1-7 Burton Street, 3B-11 Loftus Street, and 10-12 Gipps Street, Concord. It is located almost in the middle between the Sydney CBD and Parramatta CBD, 12km and 14km to each CBD, respectively. The site encompasses an area of 8,270 sqm and has three road frontages to Gipps Street in the north, Loftus Street in the east, and Burton Street in the south. The current use of all 15 lots is for separate houses of one to two storeys.

The area surrounding the site can be characterised as a predominantly low-rise residential neighbourhood made up of medium to large blocks. Close to the site are car-based retail uses along Parramatta Road to the south and several public open spaces and amenities, including St Lukes Park, Cintra Park Tennis and Sports Centre, Concord Oval, St Lukes Anglican Church, and Concord High School, among others. Burwood town centre is about 1.4km to the south of the site, while Concord town centre is 1.6km to the northwest. The existing context around the site is shown in **Figure 3-1**.

Figure 3-1 Existing context around the site



Source: Nearmap (2024) / Annotated by SCT Consulting

Under the LEP, all lots within the site are currently zoned R2 Low Density Residential, while land zonings surrounding the site are primarily R2 Low Density Residential, R3 Medium Density Residential, RE1 Public Recreation, MU1 Mixed Use, and E3 Productivity Support, as depicted in **Figure 3-2**. Local provisions currently applying to the site include a maximum floor space ratio (FSR) of 0.5:1 and a maximum building height of 8.5m.

Further, under Part 8 of the LEP, Area 10 on the Key Sites Map, which encompasses lots opposite the site across Burton Street, is allowed for an FSR of up to 3:1 and a building height of up to 78m, providing future development meets certain conditions.

Figure 3-2 Land zoning surrounding the site

Source: *Canada Bay Local Environmental Plan 2013*

3.2 Travel behaviour

Data from the Australian Bureau of Statistics Census in 2016 and 2021 were analysed to develop an understanding of the existing travel behaviour among the residents in the area around the site. Specifically, this report investigates the Method of Travel to Work data to identify how the residents travelled to their place of work, and the Place of Work data for the location of their workplace.

The analysis in this section was carried out for the Concord – Mortlake – Cabarita Statistical Area Level 2 (SA2), where the site is located, which includes the suburbs of Concord, Mortlake, Breakfast Point, and Cabarita.

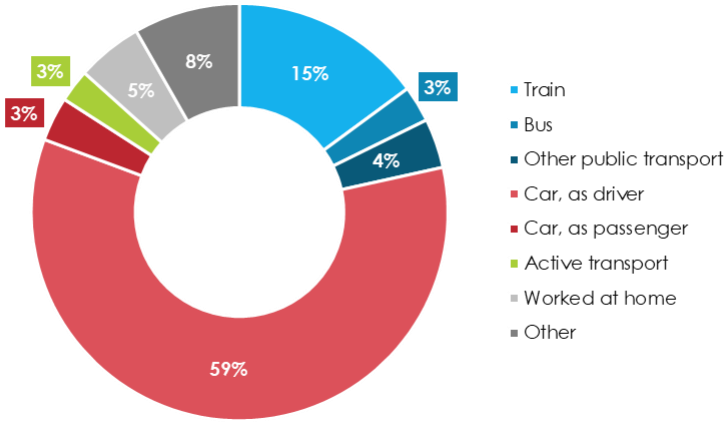
3.2.1 Travel mode share

The Method of Travel to Work data from the 2016 Census was utilised to determine the travel mode share of how the residents travelled to their workplace. This is because the 2021 Census took place during a lockdown period in Sydney as a result of the COVID-19 pandemic, which skewed the results of the survey.

The results show that, of all employed persons in the SA2 in 2016, 22 per cent used public transport while 63 per cent used private vehicles and three per cent travelled by active transport. Public transport users largely travelled by train for at least one leg of their trips (15 per cent), followed by bus (3 per cent). Most of the residents who used private vehicles were car drivers (59 per cent) with only a small number being car passengers (3 per cent). Residents who walked to work accounted for only two per cent of all employed persons in the SA2.

The travel mode share of the residents residing in the Concord – Mortlake – Cabarita SA2 is summarised in **Figure 3-3**.

Figure 3-3 Travel mode share of residents residing in the Concord – Mortlake – Cabarita SA2



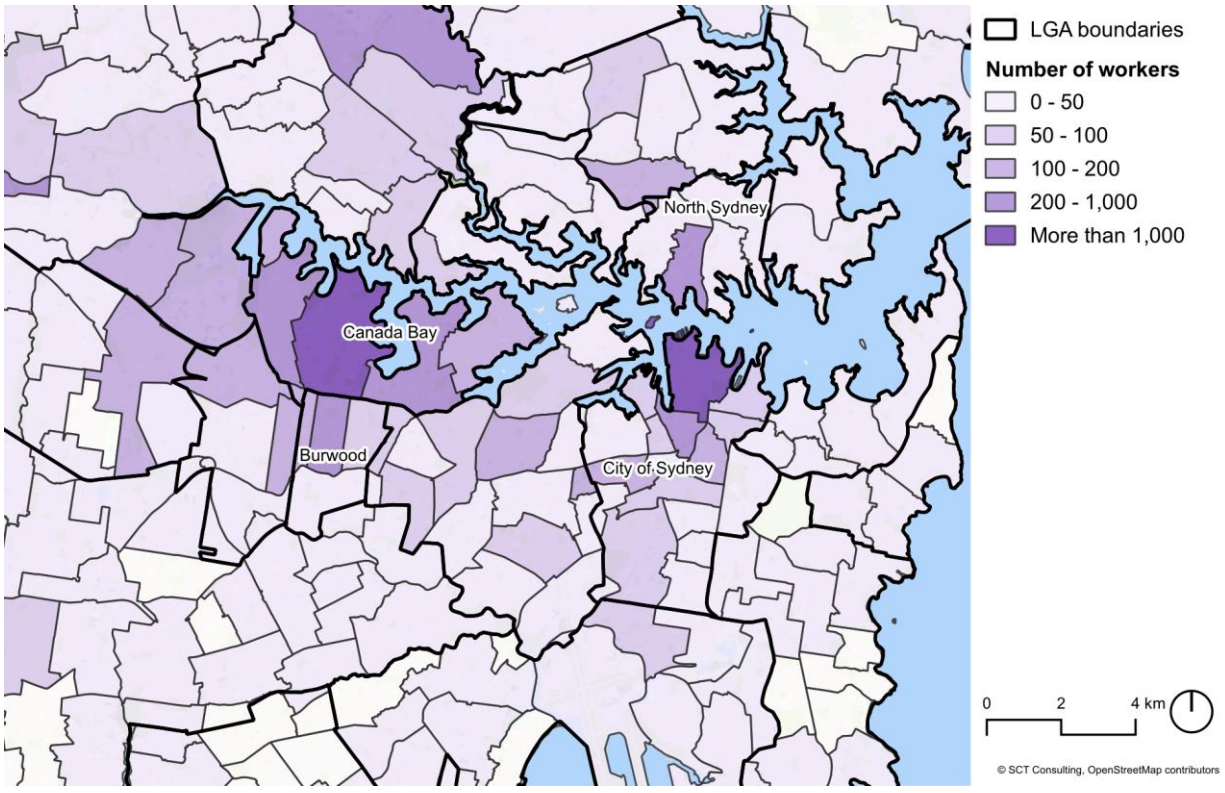
Source: Australian Bureau of Statistics (2016)

3.2.2 Trip containment

The Place of Work data from the 2021 Census was analysed to derive the trip containment of employed persons who resided in the Concord – Mortlake – Cabarita SA2. Trip containment refers to "the proportion of individuals living and working in the same labour market region" as described in the Council's *Local Movement Strategy 2019*. The analysis points out that the SA2's trip containment rate—the proportion of residents who lived and worked in the SA2—is at 17 per cent, which is much lower than the LGA-wide trip containment of 24 per cent, according to the *Local Movement Strategy 2019*.

However, the analysis further considered a larger labour market to include the neighbouring SA2s, such as Concord West - North Strathfield and Burwood (NSW). With these SA2s included, the trip containment of the area increases to 26 per cent, in line with the LGA-wide rate. **Figure 3-4** illustrates the distribution of the Concord – Mortlake – Cabarita SA2 residents' place of work at the SA2 level.

Figure 3-4 Distribution of Concord – Mortlake – Cabarita SA2 residents' place of work



Source: Australian Bureau of Statistics (2021)

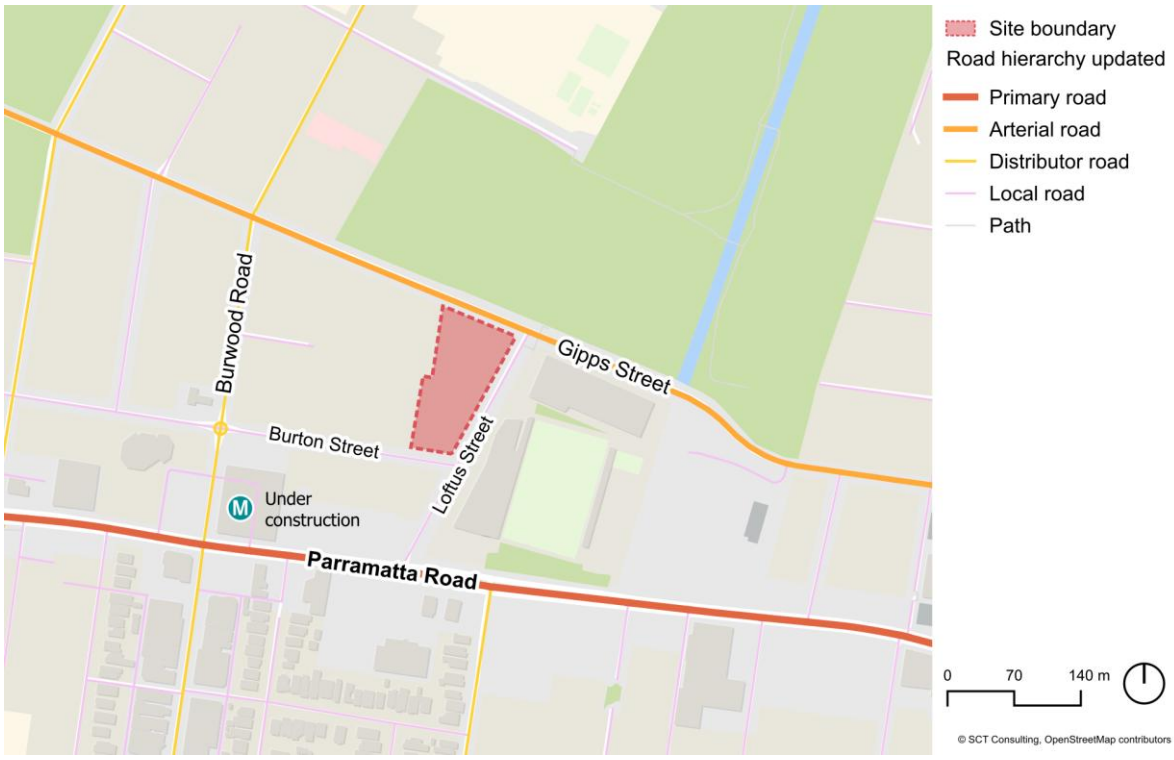
3.3 Road network

3.3.1 Key roads

Key roads in the proximity of the site have been identified, as shown in **Figure 3-5** and described below:

- **Parramatta Road** is a primary road that forms a core east-west spine linking the Sydney CBD and the Parramatta CBD. The road passes through many densely populated suburbs and provides connections to several arterial and local roads throughout its length. At its intersection with Loftus Street to the south of the site, Parramatta Road has three lanes in each direction, separated by a physical median. The road is lined with mostly car-based retail uses, such as petrol stations, car dealerships, and car wash. Footpaths are provided on both sides of the road, but tree canopies are absent.
- **Gipps Street** is an arterial road bordering the north of the site. It begins at the intersection with Patterson Street in the west before running eastwards as Queens Road and ending in Five Dock. The road has one lane in each direction with on-street parking, footpaths, and tree canopies on both sides. It provides both movement functions and access to properties and public parks. Gipps Street has been identified in PRCUTS as a key cycle link in the area.
- **Burwood Road** provides a north-south distributor function from the Parramatta River foreshore to Campsie via Parramatta Road and Burwood town centre. Around the site, the road has two lanes in each direction with footpaths on both sides and scarce tree canopies. Existing uses along Burwood Road in the section north of Parramatta Road are predominantly residential dwellings of up to three storeys. The section south of Parramatta Road contains more diverse uses, including retail, services, commercial, and shop-top housing.
- **Loftus Street** is a local road to the east of the site. It has a total width of 12m, is unmarked, and allows for two-way travel and on-street parking on both sides. Loftus Street terminates at Paramatta Road as a stop-control intersection where only left in/left out is allowed. Along the site frontage are a footpath, a nature strip, and a small number of mature street trees. On the other side is the entrance to Concord Oval where the road's edge is built with a wider footpath and a denser tree canopy.
- **Burton Street** is a local road bordering the south of the site and running parallel to Parramatta Road. At the section between Loftus Street and Burwood Road, it has a width of 9m to 10m, allowing for bi-directional travel and on-street parking on both sides. The road has wide footpaths, nature strips, and tree canopies. It has threshold treatments at both entrances, creating narrower sections for vehicular traffic.

Figure 3-5 Key roads in the proximity of the site



3.3.2 Existing traffic conditions

A traffic model for three intersections west of the site was prepared using the SIDRA Intersection (9.1) modelling software. The model was used to assess the existing network performance and to test the impacts associated with the development. Intersection performance was assessed for the weekday AM and PM peak hours when the development traffic impacts would be the most pronounced. The three intersections were chosen in line with SEARs, and their associated controls were:

– Gipps Street | Burwood Road (signalised)

– Burton Street | Burwood Road (roundabout)

– Parramatta Road | Burwood Road (signalised).

3.3.2.1 Traffic volumes

Traffic volumes used for the existing performance models were determined through an on-site traffic turning movement count survey carried out at the three intersections on Tuesday, 5 August 2025. Based on the highest network traffic volume, the peak hours were:

– Weekday AM peak hour: 7.45-8.45am

– Weekday PM peak hour: 4.45-5.45pm.

The peak hour traffic volumes at each intersection are outlined in **Table 3-1**.

Table 3-1 Traffic volumes at key intersections

Int ID	Intersection name	Hourly demand	
		AM	PM
1	Burton Street | Burwood Road	1,127 veh	1,039 veh
2	Gipps Street | Burwood Road	2,476 veh	2,390 veh
3	Parramatta Road | Burwood Road	4,725 veh	4,259 veh

3.3.2.2 Site layouts and signal timings

Intersection layouts were modelled based on a combination of satellite imageries from Nearmap and Google Street View. The SCATS data of traffic signal phasings and timings were provided TfNSW.

3.3.2.3 Assessment metrics

The following metrics will be used to assess the road transport network performance:

– Level of Service (LoS)

– Degree of Saturation (DoS)

These metrics can be extracted from the outputs of the modelling software SIDRA Intersection (9.1). SIDRA Intersection (9.1) is an advanced micro-analytical traffic evaluation software commonly used to model traffic at this scale. Level of Service (LoS) is a typical measure used by transport professionals to assess the operational performance of roads and intersections based on the average delay experienced by all vehicles passing through the road segment or intersection. The LoS, as defined in the *Traffic Modelling Guidelines* (Roads and Maritime Services, 2013) is provided in **Table 3-2**.

There is a difference between LoS determination between traffic signals and non-signalised. For traffic signals, the average movement delay and level of service should be taken over all movements. For roundabouts and priority control intersections (with Stop and Give Way signs or operating under the T-junction rule), the critical movement for LoS assessment should be the one with the worst movement delay.

As acknowledged in the GTIA, a comparison of the existing and future average delay provides a better appreciation of the impact of a proposal, and not simply the change in the level of service.

Degree of Saturation (DoS) is included to complement the LoS analysis. The DoS measures the volume-to-capacity ratio for the worst turning movement at an intersection. For instance, a DoS of 1.0 implies that the turning movement is at capacity.

Table 3-2 Level of Service definitions

Level of Service	Average delay (d) per vehicle in seconds	Performance explanation
A	d ≤ 14.5	Good operation
B	14.5 < d ≤ 28.5	Good with acceptable delays and spare capacity
C	28.5 < d ≤ 42.5	Satisfactory
D	42.5 < d ≤ 56.5	Operating near capacity
E	56.5 < d ≤ 70.5	At capacity; at signals, incidents will cause excessive delays. Roundabouts require other control method.
F	d > 70.5s	Unsatisfactory with excessive queuing, requires other control method.

Source: Roads and Maritime Services, 2013, *Traffic Modelling Guidelines* and Akcelik & Associates, 2024, *SIDRA Intersection User Guide*.

3.3.2.4 Model Calibration

As part of the traffic modelling process, a SIDRA model was developed and subsequently calibrated and validated to ensure it accurately reflects existing conditions. Calibration involves adjusting model inputs to align the outputs with observed traffic data such as signal timing and driver behaviour. Validation was then carried out by comparing model output results to independent field measurements to confirm the reliability of the calibrated model.

One of the key goals is to calibrate the models such that the degree of saturation of all movements was 1.0 or below. This is a standard procedure to ensure that the models are not over-predicting congestion under current conditions.

The maximum difference between the observed and modelled queues along with the changes in model parameters implemented to achieve model calibration, is highlighted in **Table 3-3**. It is important to note that the model parameters identified in the table are in addition to general (across all intersection types) calibration parameters, such as geometry.

Table 3-3 Model calibration method and results

Intersection	Observed 95th percentile queue	Modelled 95th percentile queue	Maximum Difference	Calibration variables
AM peak				
Gipps Street | Burwood Road	7 cars	10 cars	3 cars	– Phase timing – Extra bunching (W) – Area type factor (E & W) – Lane utilisation ratio (W) – Arrivals during green (W)
Burton Street | Burwood Road	10 cars	8 cars	2 cars	– Environment factor (all)
Parramatta Road | Burwood Road	14 cars	17 cars	3 cars	– Phase timing – End gain (E & W) – Arrivals during green (E & W)
PM peak				
Gipps Street | Burwood Road	7 cars	11 cars	4 cars	– Phase timing – Extra bunching (W) – Area type factor (E) – Lane utilisation ratio (W)
Burton Street | Burwood Road	4 cars	5 cars	1 car	– Environment factor (all)
Parramatta Road | Burwood Road	14 cars	18 cars	4 cars	– Phase timing – End gain (E & W) – Arrivals during green (E & W)

Note: The forecasted queue differences for the Parramatta Road | Burwood Road intersection in the PM reflects the level of congestion on Parramatta Road during this peak.

(X) Letter between brackets signifies the approach with that has been calibrated with the respective method.

3.3.2.5 Modelling results

The outcomes of the intersection analysis are presented in **Table 3-4** based on the modelling assessment by the SIDRA Intersection 9.1 software. The results show that all three intersections are currently operating satisfactorily, with degrees of saturation below the practical capacity thresholds.

– The Burton Street | Burwood Road intersection performs at a DoS ranging from 0.54 to 0.73, corresponding to a LoS of B. This performance suggests a high standard of service with minimal delays.

– With a Dos of 0.93 to 0.98, the Gipps Street | Burwood Road intersection approaches capacity, however remains under. Delays at this intersection range between 36 and 46 seconds, achieving a LoS of C and D in the AM and PM peaks, respectively.

– The Parramatta Road | Burwood Road intersection performs well with minimal delays of 13 to 14 seconds and a DoS ranging between 0.71 to 0.74. With a DoS below the practical capacity and minimal delays, this intersection performs at a LoS of A.

Table 3-4 Existing intersection performance in 2025

Int ID	Intersection name	AM			PM		
		DoS	Delay	LoS	DoS	Delay	LoS
1	Burton Street | Burwood Road	0.73	18.6s	B	0.54	15.7s	B
2	Gipps Street | Burwood Road	0.93	36.2s	C	0.98	46.3s	D
3	Parramatta Road | Burwood Road	0.74	13.3s	A	0.71	14.2s	A

To conclude, the modelling revealed that in its current state, the intersections are performing satisfactorily without major delays. It should be noted that the intersection of Gipps Street and Burwood Road would have minimal remaining capacity to accommodate further traffic growth.

Detailed SIDRA results are shown in **Appendix A**.

3.4 Active transport

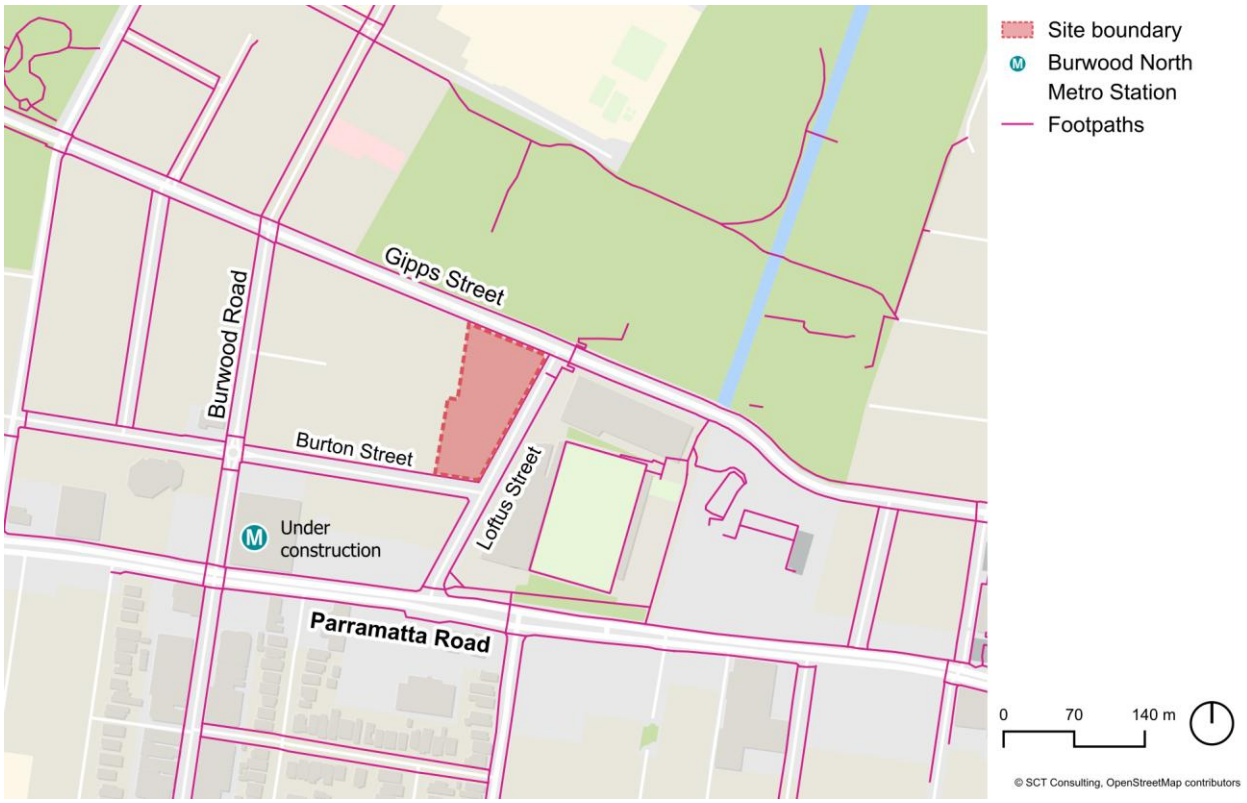
3.4.1 Pedestrian

Pedestrian infrastructure in the vicinity of the site provides pedestrian connectivity to several destinations within walking distance, including open spaces to the north, the future Burwood North Metro Station and Burwood town centre to the south, and Concord town centre to the northwest, as shown in **Figure 3-6**.

With the urban nature of the area, footpaths are provided along almost all of the roads surrounding the site. The footpaths are generally narrow and serve local foot traffic. Tree canopies are particularly dense on the eastern side of Loftus Street and both sides of Burton and Gipps Streets. However, tree canopies are scarce along larger roads, especially Burwood Road and Parramatta Road.

Formalised pedestrian crossings are provided at the intersections of Gipps Street | Burwood Road and Parramatta Road | Burwood Road. A pedestrian footbridge is located immediately to the northeast of the site, providing direct access to St Lukes Park and Cintra Park Tennis and Sports Centre on the other side of Gipps Street, but is not accessible for less mobile pedestrians or people with prams. Nevertheless, the review identifies that a mid-block pedestrian crossing is missing on Loftus Street, which will be beneficial for pedestrians accessing Concord Oval from Burwood Road in the west.

Figure 3-6 Pedestrian infrastructure around the site



Source: Open Street Map (2024)

3.4.2 Cycling

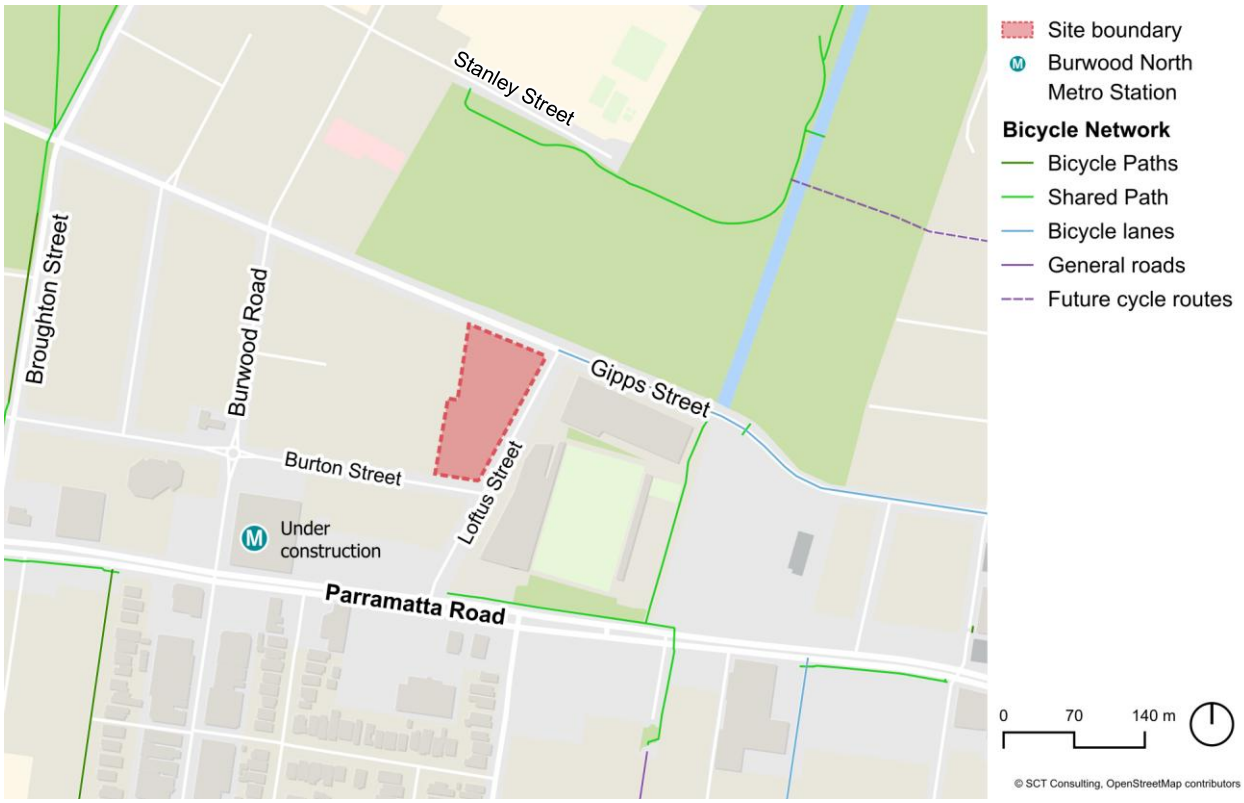
Cycling infrastructure around the site is currently limited with no separate cycling facilities in proximity, as shown in **Figure 3-7**.

While Gipps Street is a designated cycling route, the infrastructure is unsupportive. East of Loftus Street, the road allows for cycling on the shoulders where there are “no stopping” signs and markings for cyclists. Westwards from Loftus Street, cyclists are to share road space with parked vehicles on the shoulders.

A cycling route to Burwood town centre across Parramatta Road is provided along Broughton Street and Britannia Avenue via a footbridge to the west of the site.

Gipps Street has been identified in PRCUTS as a key cycling link in the area continuing towards Five Dock town centre. However, the *Local Movement Strategy 2019* argues that the road is not suitable for cycling and instead proposes a secondary link along Patterson, Stanley, and Henry Streets slightly further north.

Figure 3-7 Bicycle network around the site

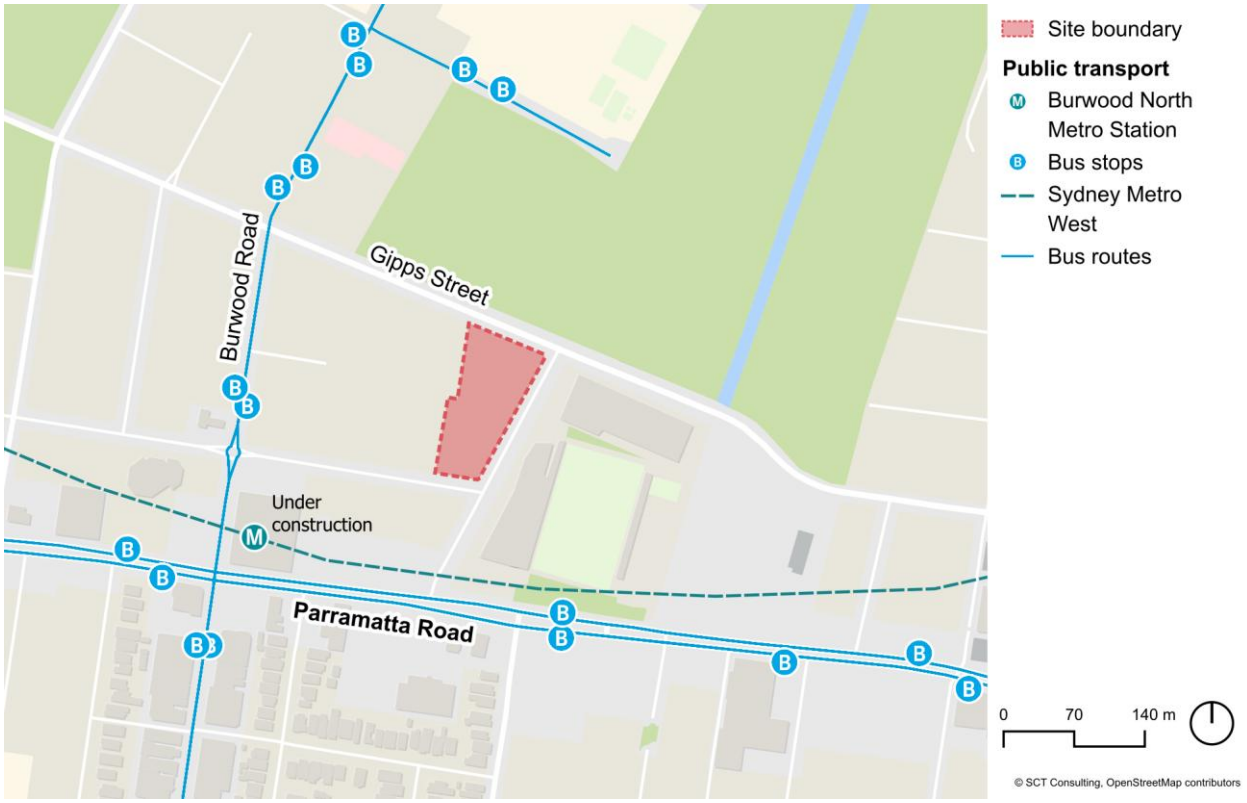


Source: Transport for NSW (2024)

3.5 Public transport

The subject site benefits from its location close to Parramatta Road, Burwood Road, and the future Burwood North Metro Station, and is served by extensive public transport services, as shown in **Figure 3-8**.

Figure 3-8 Existing and planned public transport services around the site



Source: Transport for NSW (2024)

3.5.1 Rail

The nearest existing train station from the site is Burwood Station, 1.3km to the south. The station is a stop along the T1 North Shore and Western Line, T2 Inner West and Lepping Line, and T9 Northern Line. The train services provide direct connections between Burwood and many key destinations, including the Sydney CBD, the Parramatta CBD, Rhodes, and Hornsby. **Table 3-5** summarises train services at Burwood Station during the weekday peak periods.

Table 3-5 Train services at Burwood Station during the weekday peak periods

Origin	Destination	Number of train services	
		AM peak (7am – 9am)	PM peak (5pm – 7pm)
T1 North Shore and Western Line			
Strathfield	Gordon or Hornsby via Central	2	8
Gordon	Strathfield via Central	9	1
Parramatta	Wynyard	9	8
Wynyard	Parramatta	8	8
T2 Inner West and Lepping Line			
Leppington or Parramatta	City Circle	23	16
City Circle	Leppington or Parramatta	18	22

Origin	Destination	Number of train services	
		AM peak (7am – 9am)	PM peak (5pm – 7pm)
T9 Northern Line			
Hornsby	Gordon via Central	8	14
Gordon	Hornsby via Central	14	9
Total			
Burwood	Central	42	46
Central	Burwood	49	40

Source: Transport for NSW (2024)

It is noted that the average frequency of the train service at Burwood is less than three minutes during peak hours per direction.

3.5.2 Bus

The site is less than a 5-minute walk from the nearest bus stops on Parramatta Road and Burwood Road. The bus routes stopping at these stops provide services to various destinations catering to both short and long-distance trips. These include bus routes to the Sydney CBD, Burwood, Hurstville, Macquarie Park, and Cabarita. **Table 3-6** lists bus services around the site during the weekday peak periods. It is noted that the average frequency of the bus service on Parramatta Road and Burwood are around 5-10 minutes during peak hours per direction.

Table 3-6 Bus services around the site during the weekday peak periods

Origin	Destination	Number of bus services	
		Morning peak (7am – 9am)	Evening peak (5pm – 7pm)
Parramatta Road			
415			
Campsie	Chiswick	4	4
Chiswick	Campsie	5	4
461X			
City	Burwood	8	13
Burwood	City	12	9
530			
Chatswood	Burwood	4	6
Burwood	Chatswood	5	5
Burwood Road			
410			
Hurstville	Macquarie Park	11	9
Macquarie Park	Hurstville	11	11
464			
Ashfield	Mortlake	9	12
Mortlake	Ashfield	12	11
466			
Burwood	Cabarita	3	5
Cabarita	Burwood	8	4

Source: Transport for NSW (2024)

3.5.3 On Demand service

The site is located within the Inner West On Demand service area which operates across the suburbs of Rhodes and Concord to Burwood and Five Dock, as shown in **Figure 3-9**.

The Inner West On Demand is operated by BRIDJ. The On Demand service is a flexible public transport option that aims to cover the first-mile last-mile connections between major transport nodes and users' final destinations by allowing users to book a trip, either when needed or in advance, via a mobile application. Once a booking is confirmed, users will be notified of an estimated pick-up and drop-off time at their chosen location.

The Inner West On Demand service area around the site operates between 6am and 11.30pm on weekdays and 8am and 8.30pm on weekends. A total of 3,600 trips were booked in the service area in September 2024, in equivalent to seven trips per hour.[1]

Figure 3-9 Inner West On Demand service area

Source: Transport for NSW (2024)[2]

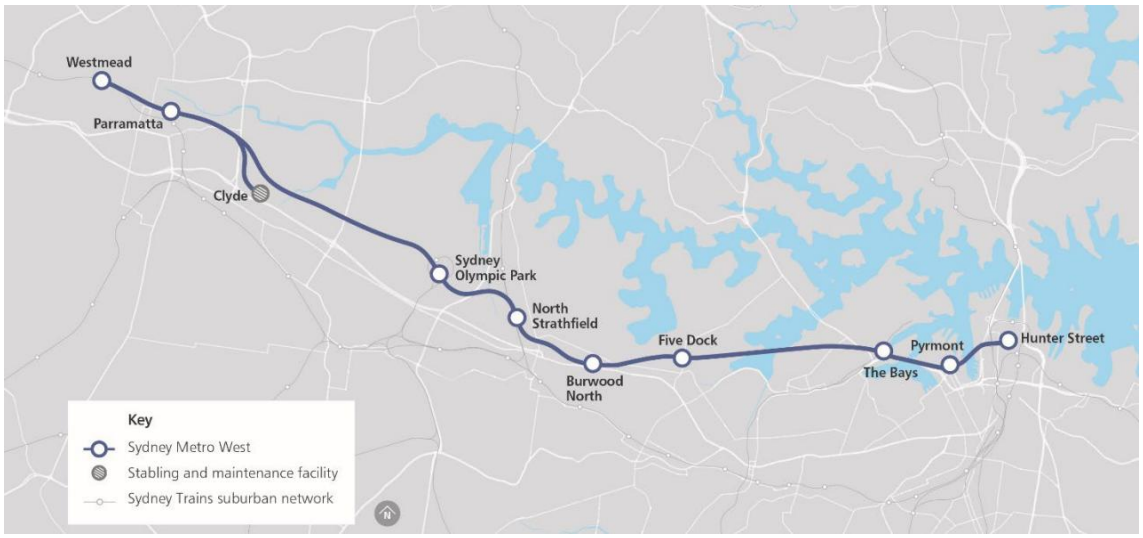
[1] Transport for NSW (2024) On-Demand Patronage

[2] Transport for NSW (2024) Inner West On Demand service

3.5.4 Sydney Metro West

The site is located around 300m from the northern entrance of the future Burwood North Metro Station along Sydney Metro West. Sydney Metro West is a new metro line that will provide a rapid, high-capacity east-to-west connection between the Sydney CBD and Westmead with stops at Parramatta and Sydney Olympic Park, shown in **Figure 3-10**.

Figure 3-10 Sydney Metro West alignment



Source: Sydney Metro (2022) Sydney Metro West Environmental Impact Statement | Rail infrastructure, stations, precincts and operations

The metro is currently under construction and scheduled to begin operations in 2032. Once complete, Sydney Metro West will become an attractive transport option for people living within the catchment areas and unlock opportunities to support high-density development around the stations, in line with the NSW Government's Transport Oriented Development program.

Figure 3-11 illustrates an indicative layout of Burwood North Metro Station as provided in the metro's environmental impact statement. The station area includes aboveground infrastructure, public domain, and over-station development.

Two entries are proposed for the station on Burwood Road on either side of Parramatta Road. New bus stops are proposed on Burwood Road north of Parramatta Road, as well as taxi and kiss-and-ride areas. Pedestrians will cross Parramatta Road via an underground link, while a cycling route is proposed through the middle of the station area.

Figure 3-11 Burwood North Metro Station layout

Source: Sydney Metro (2022)

3.6 Road crash statistics

Road crash statistics between 2019 and 2023 were obtained from the Transport Open Data Hub (Transport for NSW, 2023) to develop an understanding of the nature of road crashes that occurred in the vicinity of the site. The locations of the crashes recorded in the five-year period are shown in **Figure 3-12**.

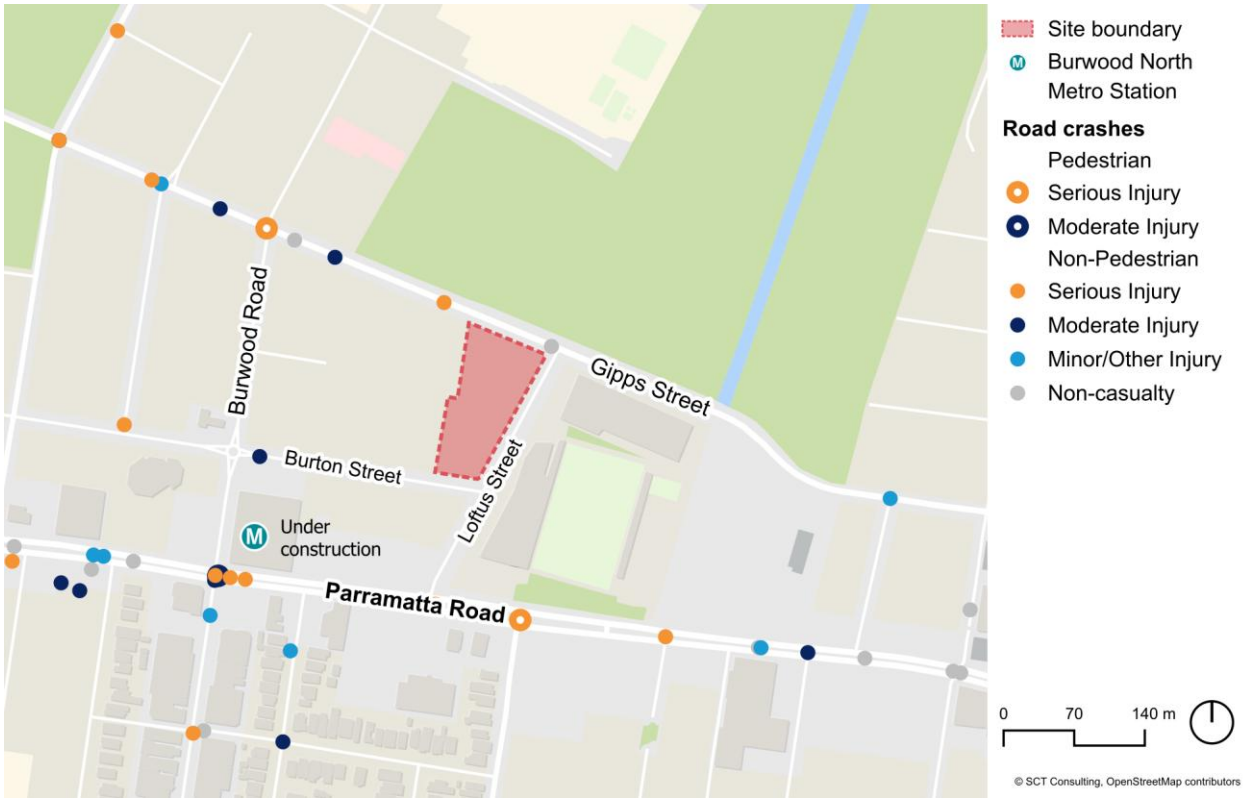
Over the recorded period, a total of 109 crashes were reported, including 58 crashes on Parramatta Road, 29 on Gipps Street, 18 on Burwood Road and one on Burton Street. The accidents resulted in 20 incidents of serious injury, 29 moderate injuries, 22 minor injuries, 38 non-casualty crashes, and zero fatalities.

Rear-end collisions (RUM Code 30) were the most common type of crashes, involving 28 incidents. Rear-end collisions are generally associated with traffic congestion: 21 incidents occurred on Parramatta Road, five on Burwood Road and two on Gipps Street.

Other prevalent causes of crashes were a right-turning vehicle colliding with a vehicle coming through from the opposite direction (RUM Code 21) and cross-traffic collisions (RUM Code 10), resulting in 13 and 9 incidents, respectively. 10 of these crashes took place along Gipps Street at its intersection with Burwood Road (four crashes), Broughton Street (five crashes), and Leigh Avenue (one crash).

Nine of the crashes involved pedestrians, including five serious injury crashes.

Figure 3-12 Road crash statistics 2019-2023 in the vicinity of the site



Source: Transport for NSW (2023)

4.0 The proposal

4.1 Proposed planning amendments

The proposed amendments to planning controls on the site are summarised in **Table 4-1**.

Table 4-1 Proposed planning amendments

Control	Canada Bay LEP 2013 (Current)	Council's planning proposal for Stage 2	Proposal
Zoning	R2	R3	**R4**
Floor space ratio (X :1)	0.5	2.4	**5.4**
Height of buildings (m)	8.5	40	**95.5**

The proposal will allow for the construction of three residential flat buildings on the site where it is currently prohibited. The proposed FSR will result in a maximum floor space of 44,518 sqm, as opposed to 19,484 sqm achievable under the Council's draft planning proposal for Stage 2, while the proposed building height limit will allow for a building of 95.5m.

The development is proposed to be constructed across three buildings and multiple-level car parks and a public open space. The indicative development yields are summarised in **Table 4-2**, which totals 560 units for a combination of built-to-rent (BTR) and built-to-sale (BTS) apartments.

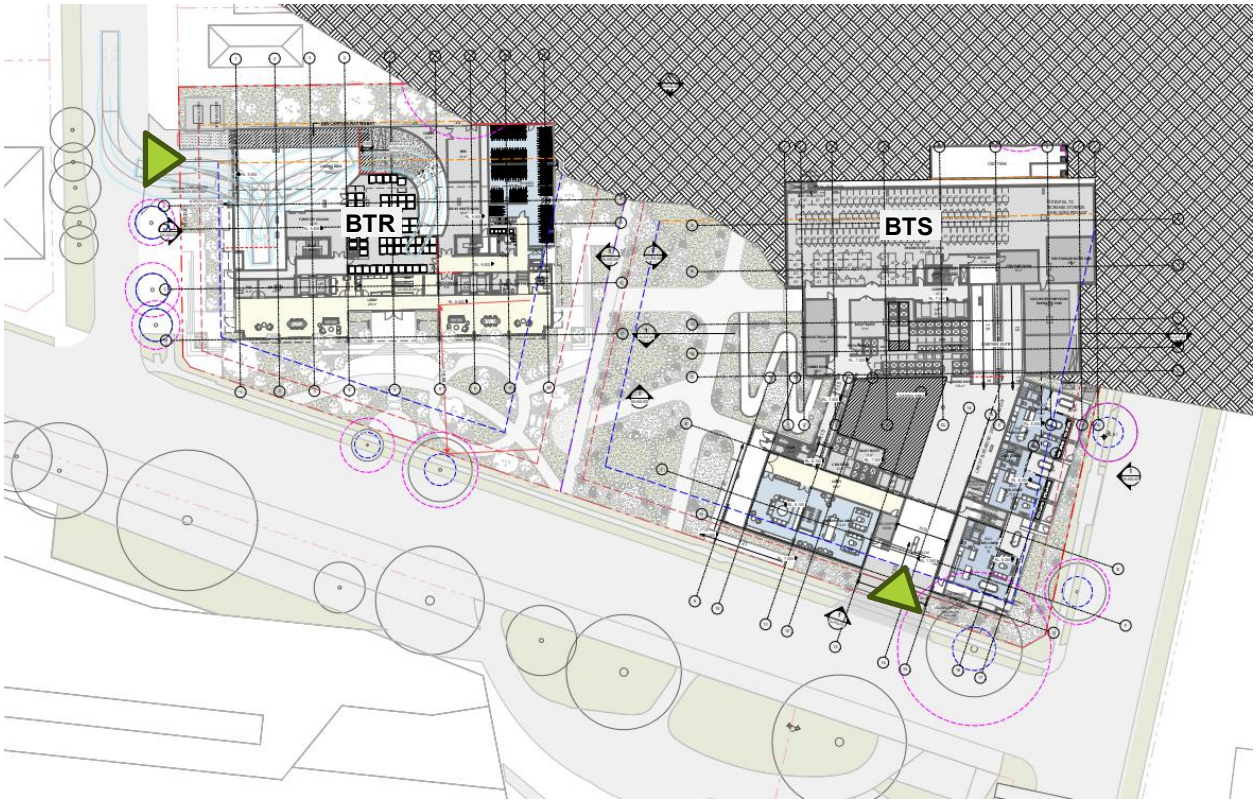
Table 4-2 Indicative development components

Component	BTR	BTS
Studio	80 units	-
One-bedroom units	94 units	22 units
Two-bedroom units	130 units	50 units
Two-bedroom plus units	-	72 units
Three-bedroom units	14 units	88 units
Four-bedroom units	-	10 units
Total	**318 units**	**242 units**

4.2 Access arrangements

A site access arrangement is depicted in **Figure 4-1**.

Figure 4-1 Access arrangements



Source: Rothelowman (2025)

4.2.1 Vehicles

Access for vehicles is provided at two driveways on

– Burton Street for BTR – The driveways will lead vehicles directly to the loading dock at grade and a three-level above-ground car park.

– Loftus Street for BTS – The driveways will lead vehicles directly to the loading dock at grade and a four-level basement car park.

A queue analysis has been conducted to consider a car entering the new proposed driveway for BTR and BTS during the worst case of PM peak hour, respectively:

– For BTR, the one-lane ramp will provide access to the parking area. It considers a worst-case scenario where cars are waiting to enter the aboveground parking while the green light is given to exiting traffic only. A SIDRA model is built to simulate a one-lane operation on the ramp, where the all-red time is expected to be 70 seconds (travel time for vehicles exiting the site during the PM peak hour). The results show that there would be a queue of five cars behind the boom gate located at the bottom of the ramp. The design has allowed for the queue to be fully accommodated within the site boundary.

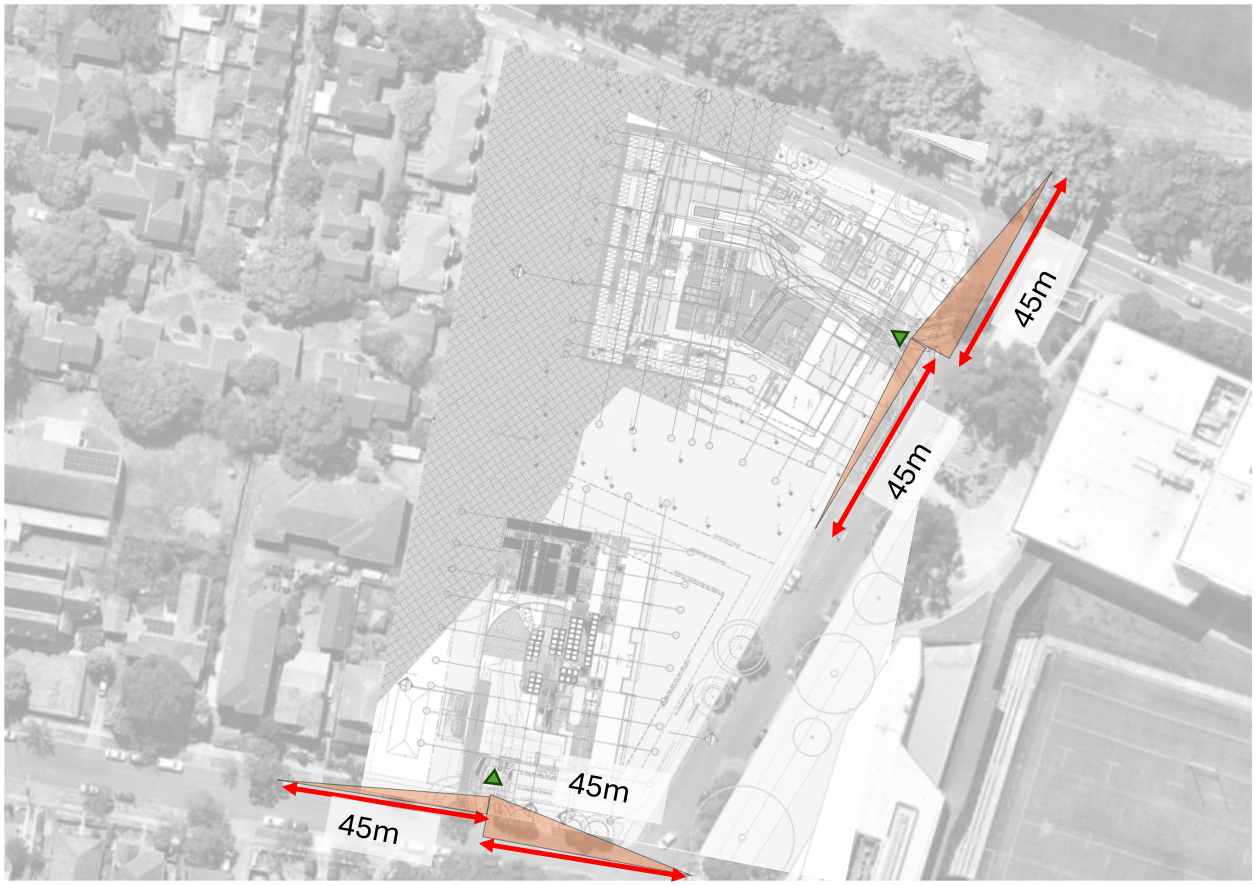
– For BTS, the queue analysis adopts the M/G/1 queue system where the service time is 12 seconds per vehicle. The analysis shows there is an 89 per cent chance that there would be no entry queue at the driveway, with an average queue length of less than one vehicle. Even when there is a queue, it will remain on the driveway without blocking the pedestrian path or causing overspill onto Loftus Street.

According to the AS 2890.1 *Off-street parking facilities*, the proposed driveway is required to provide a minimum sight distance of 45m, assuming a posted speed of 50km/h. Given the proximity to the priority intersection at Gipps Street | Loftus Street and Loftus Street | Burton Street, drivers are expected to already be decelerating to a low speed near the proposed driveway. Therefore, the travel speed around the proposed driveway is expected to be less than 30km/h.

A desktop sight distance assessment confirms that there are no permanent obstructions within the sight line triangles at the proposed Loftus Street driveway, except on-street parking and electricity posts. There are clear sight lines to

observe traffic in both directions. The plantation on the north side of Burton Street is expected to be removed as part of this proposal (**Figure 4-2**).

Figure 4-2 Sight distance assessment



4.2.2 Pedestrians

Pedestrian entries are distributed across the site frontages. They have direct access from the public footpaths to the two buildings fronting Loftus Street via entrances to the lift lobbies. The building to the west of BTS will have access to the open space between the BTR and BTS.

All pedestrian entrances are entirely separated from vehicle access, which ensures a safe environment for people accessing the site on foot.

4.2.3 Cyclists

For both sub-sites, the bicycle storage is provided at ground floor, which can be accessed via the lobby. Cyclists are expected to push their bikes to the storage area from the public domain.

4.2.4 Servicing

The service vehicles are expected to share the access with private cars. They are able to enter and exit in a forward direction. However, the reversing manoeuvre is required within the loading dock area. The delivery vehicle should be equipped with appropriate reversing sensors and alarms to alert nearby pedestrians and other vehicles of the reversing movement. Given the site constraint, the maximum allowed truck type for BTR and BTS is HRV. A loading dock management plan is expected to be prepared at a later stage of the development to ensure minimised conflicts between service vehicles and other car park users.

4.3 Parking requirement and provision

A review of the parking requirements, including City of Canada Bay DCP, PRCUTS Planning and Design Guidelines and Housing SEPP has been conducted. **Table 4-3** provides a breakdown of the indicative key parking requirements applicable to the proposal.

Table 4-3 Indicative parking requirements applicable to the proposal

Development Type	Development component	Yield	Rate	Source	Required parking	Parking provision
Car parking						
BTR	Residential dwellings	318 dw	(Min) 0.2 spaces per dwelling	Housing SEPP (2021)	64	90
BTS			(Max)	City of Canada Bay DCP (2022) category B		318
	One-bedroom	22 dw	0.6 per dwelling		14	
	Two-bedroom	50 dw	0.9 per dwelling		45	
	Two-bedroom +	72 dw	0.9 per dwelling		65	
	Three-bedroom	88 dw	1.4 per dwelling		124	
	Four-bedroom	10 dw	1.4 per dwelling		14	
	Visitor	242 dw	0.2 per dwelling		49	
	Accessible parking (additional shared space required)				2	
	Car share	242 dw	0.05 of the total provision		13	
Total car parking spaces					**64+326**	**90+318**
Bicycle parking						
BTR	Residents Visitors	318 dw	1 space per dwelling 1 space per 10 dwellings	PRCUTS Planning and Design Guidelines (2016)	318 32	202
BTS	Residents Visitors	242 dw	1 space per dwelling 2 spaces per 10 dwellings	City of Canada Bay DCP (2022)	242 48	242
Total minimum bicycle parking spaces **For residents** **For visitors**					 **560** **80**	 **444** **At grade**
Motorcycle parking						
BTR & BTS	Car parking spaces	408	1 space per 30 car parking spaces	City of Canada Bay DCP (2022)	14	12
Total minimum motorcycle parking spaces					**14**	**12**

Note: There may be discrepancies from rounding and the total values are the final numbers.

In general, car parking provision is fully consistent with the recommended parking rates.

Although the bicycle parking for BTR is underprovided, it still could achieve a very high bicycle mode share up to 60 per cent, i.e. 202 bicycle parking spaces for 318 units. Given the nature of built-to-rent units, it is considered that this level of bicycle parking is sufficient in the short term. The building manager needs to monitor the occupancy of the bicycle parking area to confirm if more parking is required in the long term. Visitors who cycle can use the racks at grade.

The shortage of two motorcycle parking spaces is considered negligible.

4.4 Proposed parking layout

For BTR, the three-level aboveground parking is connected via a single lane circular ramp. A signal control system will be proposed to manage the one-way operation of the ramp for BTR. People can access the residential apartments directly from the parking area at each level.

For BTS, the four-level basement is serviced via a two-lane ramp with a median. Tandem parking spaces are included across different levels, where each pair (one in the front and one on the back) is expected to be dedicated to one unit.

4.5 AS2890 review

A car park review and related swept path assessment were conducted based on the latest drawings. The review confirmed that car parking and access are appropriately designed to ensure compliance with Australian Standards. However, the corresponding mitigation measures have been proposed to reduce the collision risks as shown in **Table 4-4**.

Table 4-4 Key design issues and mitigations

Hazard	Root cause	Mitigation measures
Challenging vehicle manoeuvres using the ramp and driveway in the basement. Drivers need to give way to the opposing vehicles.	The basement parking area is constraint environment. Providing bigger turning radius is not realistic.	– Installation of convex safety mirrors at the turning points from the ramp to the circulation path. – Considering this is a single land use residential apartment, the car park would likely have a lower than normal rate of traffic meeting each other in opposing directions given the tidal traffic effect, hence, minimising the conflicts.
The proposed ramp of BTR only allows one-way operation for the vehicle movements.	The site is constraint and providing a two-lane ramp will be infeasible.	– A signal control system will be proposed to manage the parking access for BTR. • If the red light is given for the incoming cars before the boom gate, the exiting movement will be permitted on the ramps. A queuing area of five vehicles is provided at ground level. • If the green light is given for the incoming cars before the boom gate, red lights will be given to the cars within the parking and no cars within the parking area are allowed to move out of the parking spaces. • Once a truck enters the loading dock area, no green light will be given to the exiting cars until the truck finishes manoeuvring and parks at the loading bay.
The truck manoeuvring for BTS conflicts with car movements.	The site is constraint and providing a separate loading area will be infeasible.	– A signal control system will be proposed to manage the parking access of BTS. • Once a truck enters or exits the loading dock area, no green light will be given to the cars until the truck finishes manoeuvring in the loading area or leaves the site.

The detailed swept path analysis is shown in **Appendix B**.

4.6 Travel Demand Management

Sustainable transport and Travel Demand Management (TDM) strategies involve the application of policies, objectives, measures and targets to influence travel behaviour and to encourage the uptake of sustainable forms of transport, i.e. non-car modes, wherever possible. TDM measures have proven to reduce congestion created by growth within urban areas and unlock urban renewal opportunities. They result in travel behaviour that uses less road space than a single-occupant vehicle commute and takes advantage of spare transport capacity outside the morning and afternoon peaks.

TDM strategies generally guide all relevant customers (residents, employees and visitors) in changing their travel behaviour in the following ways:

– Reduce travel

– Re-mode (consideration of travel via alternative modes)

– Re-time (consideration of travel at alternative times)

– Re-route.

A Travel Plan should be developed by future developers and monitored by strata management to deliver best-practice travel programs and initiatives to manage travel demand for transit-oriented development. Key initiatives and measures of Travel Demand Management Strategies should be further developed into a Travel Plan to:

– Re-think the mode of travel
  - Walking and cycling:
    - A highly permeable and safe pedestrian network throughout and surrounding the development
    - Dedicated cycle routes that connect to the regional routes and major transport hubs
    - Key design principles to integrate walking and cycling networks and facilities into the planning and delivery of the development
    - High-quality, safe and accessible end-of-trip facilities (centralised cycle hubs that are integrated within the development at convenient locations, on-street secure bicycle storage located conveniently at end of cycle destinations, parking hubs for shared bikes, lockers and showers)
    - Promotion of bicycle initiatives – NSW bicycle week, cycle to work day, free bike check-up events
    - Establishment of a Bicycle User / Consultation Group.
  - Public transport:
    - Good quality public transport stops in the vicinity of the development
    - Tailored information with clear mapping and walking catchments at public transport stops
    - Provision of public transport information from the office via television or app.
  - Parking measures to encourage alternative modes of travel:
    - Reduced parking rates with flexibility in parking arrangements such as shared parking between non-conflicting uses, shared vehicles parking and/or carpooling to accommodate the parking needs of all employees
    - Parking spaces dedicated to electric vehicles, with charging stations
    - Parking spaces dedicated to car-share schemes and community car-share vehicles, both on-street and incorporated in easily accessed public car parks.
  - Development and use of carpooling app for the wider precinct.

– Re-time and Re-route journeys:
  - Development of specific app/ engagement program to enable changing travel behaviour which includes:
    - Active and public transport maps
    - Personalised journey planner
    - Notifications of the latest travel information
    - Shared vehicles information
    - Car-pooling opportunities
    - Other precinct-related information
  - Real-time information embedded into development and public transport stops
  - Employers promote and encourage flexible working hours and arrangements.

While it is important to develop a Travel Plan that is aimed at managing travel demand and reducing reliance on car travel, it is more important to monitor and evaluate the effectiveness of individual measures and the need to adjust the measures. The planning and implementation of a targeted Travel Plan with the above green travel initiatives/principles could support the delivery of a transit-oriented development that provides significant opportunities for alternative travel options and reduces the need for car travel.

5.0 Transport impact assessment

5.1 Trip generation and distribution

Trip generation

The estimation of trip generation associated with the proposal is informed by the recently published *Guide to Transport Impact Assessment* (GTIA) (Transport for NSW, 2024).

The proposed development would be considered a high-density residential development with high public transport accessibility, whereas the existing houses on site are considered low-density residential dwellings. Hence, the trip generation rates as suggested in Table 5.11 and Table 5.3 in the GTIA were adopted.

Ultimately, the trip generation for the assessment are as summarised in **Table 5-1** below.

Table 5-1 Summary of trip generation rates

Trip generation	High Density Residential (proposal)		Low Density Residential (existing)		Net traffic increase
Yield	**560 dwellings**		**15 dwelling**		**+545 dwellings**
Vehicle trips					
AM peak hour	0.19 veh/ dw	106 trips	0.68 veh/ dw	10 trips	**+96 trips**
PM peak hour	0.15 veh/ dw	84 trips	0.77 veh/ dw	11 trips	**+73 trips**
Daily	1.52 veh/ dw	850 trips	8.12 veh/ dw	121 trips	**+729 trips**
Person trips					
AM peak hour	0.66 per/ dw	369 trips	1.09 per/ dw	15 trips	**+353 trips**
PM peak hour	0.56 per/ dw	313 trips	1.14 per/ dw	16 trips	**+297 trips**
Daily	4.49 per/ dw	2,510 trips	8.2 per/ dw*	123 trips	**+2,387 trips**

This is proportionate to the ratio between peak hour trip rates to daily trip rates from high-density given the lack of data from GTIA.

Additionally, the trip generation rates provided above refer to two-way trips, i.e., incoming to and outgoing from the development. As a general practice regarding vehicle trips, the two-way peak-hour trips were split into incoming and outgoing trips, to reflect the directions of travel depending on land uses and the time-of-day, before conducting further analyses. The split ratios for both land uses adopted in the assessment are provided in **Table 5-2**.

Table 5-2 Vehicle trip generation split ratios

Direction	AM peak hour	PM peak hour
Incoming	10%	90%
Outgoing	90%	10%

Trip distribution

The Place of Work data from the 2021 Census analysed in **Section 3.2** provided a basis for estimating the distribution of vehicle trips generated. The assessment showed that the directional distribution of vehicle trips was consistent during both AM and PM peak hours.

Each SA2 was assigned to one of the possible travel directions depending on its location relative to the site and, ultimately, the distribution of vehicle trips travelling in each direction could be determined.

As summarised in **Table 5-3**, vehicles travelling to/from the Sydney CBD in the east along Parramatta Road made up the largest single travel direction, followed by vehicles to/from the west along Gipps Street, the north along Burwood Road, and the west via Parramatta Road.

As requested by TfNSW, three intersections to the west of the site are covered in the traffic modelling, where the development trips are assigned.

Table 5-3 Vehicle trip distribution split ratios

Direction	Key destinations/origins	Direction split
West – Gipps Street	Concord West, North Strathfield, Macquarie Park, Marsfield, Silverwater, Homebush Bay	15%
West – Burton Street	Concord, Mortlake, Cabarita, Parramatta, Rosehill, Strathfield, Homebush	29%
South – Burwood Road (from Burton Street east)	Burwood	3%
East – not included in the modelling	Sydney, Haymarket, The Rocks, Croydon, Burwood, Five dock, Abbotsford, North Sydney, Lavender Bay, Ultimo, Pyrmont, Surry Hills, St Leonards, Naremburn, Newtown, Camperdown, Darlington, Drummoyne, Rodd Point, Ashfield	53%
Total		**100%**

Trip assignment

Resultantly, the proposal would generate an additional 96 and 73 vehicle trips per hour during the AM and PM peak hours, respectively. The distribution of additional vehicle trips generated by the proposal during the peak hours is provided in **Table 5-4**. Based on the calculation, most vehicles would travel to/from the east.

In the westbound direction, 28 trips and 21 trips will be generated on Burton Street, which will take the biggest traffic volumes from the proposed development. They are expected to be further split to Burton Street (west) and Burwood Road (south), and vice versa.

Table 5-4 Vehicle trip distribution

Direction	Vehicle trips per hour			
	AM peak hour		PM peak hour	
	Incoming	Outgoing	Incoming	Outgoing
West - Gipps Street	+1 trips	+13 trips	+10 trips	+1 trips
West - Burton Street	+3 trips	+25 trips	+19 trips	+2 trips
South - Burwood Road	+0 trips	+3 trips	+2 trips	+0 trips
East – not included in the modelling	+5 trips	+46 trips	+35 trips	+4 trips
Total	**+10 trips**	**+87 trips**	**+66 trips**	**+7 trips**

5.2 Modal split

The modal split of future residents and visitors of the proposed development was derived based on the calculated trip generation, relevant surveys presented in the GTIA, the travel behaviour analysis as presented in **Section 3.2**, and the Household Travel Survey at the Canada Bay SA3 for the financial year 2022/23 (Transport for NSW, 2024)[3].

Crucially, walking and cycling mode share is expected to be high among future residents and visitors throughout the day. The Household Travel Survey shows that non-work-related trips accounted for more than two-thirds of all trips made on an average weekday within the Canada Bay SA3. Considering the location of the site close to two activity centres in Concord and Burwood, it is expected that a large proportion of daily non-work-related trips would be done by walking, cycling, and other micromobility devices, in line with the modal split found in the Household Travel Survey at the Canada Bay SA3. The limited car parking provided will offer opportunities to accommodate no-car households and reduce the reliance on private vehicles.

[3] Transport for NSW (2024) Household Travel Survey

Assuming a typical vehicle occupancy rate of 1.2 persons per vehicle, the private vehicle mode share of future residents and visitors is estimated to be an average of 34 per cent during the peak hours and 40 per cent throughout the day. Public transport mode share during the peak hours is expected to be 62 per cent and across the day at 36 per cent. Walking and cycling would cover the rest of four per cent in the peak hours and 24 per cent daily.

The modal split during the peak hours is consistent with the surveyed ranges as suggested in the GTIA for both high-density residential and commercial land uses but represents a lower private vehicle mode share than the Concord – Mortlake – Cabarita SA2's Method of Travel to Work.

The estimated modal split for the proposal is presented in **Table 5-5**.

Table 5-5 Estimated modal split

Mode	GTIA survey Residential	Concord – Mortlake – Cabarita SA2	Proposal Peak hours	Proposal Daily
Private vehicle	37% (27% to 56%)	63%	**34%**	**40%**
Public transport	N/A	22%	**62%**	**36%**
Walking and cycling	62% (43% to 73%)	3%	**4%**	**24%**

Source: SCT Consulting based on GTIA, 2024

5.3 Road network impact

A comparison of the background traffic was conducted in **Table 5-6** based on the traffic counts in 2021 from *Sydney Metro West Environmental Impact Statement | Rail infrastructure, stations, precincts and operations* and the traffic survey conducted in 2025 as part of this study. It is evident that traffic volumes have been reducing in the past few years on the local road network. Hence, no background traffic growth will be included in the future year modelling.

Table 5-6 background traffic comparison

Int ID	Intersection name	Peak hour	2021	2025	Change p.a.
1	Burton Street | Burwood Road	AM	1,188	1,127	-1.0%
		PM	1,086	1,039	-0.9%
2	Gipps Street | Burwood Road	AM	2,646	2,476	-1.3%
		PM	2,611	2,390	-1.7%
3	Parramatta Road | Burwood Road	AM	5,071	4,725	-1.4%
		PM	4,797	4,259	-2.2%

The Parramatta Road Corridor Canada Bay Stage 2 Modelling Outcomes (Bitzios, 2023) finds that the Burwood-Concord Precinct is expected to experience a higher level of traffic congestion mostly on the road network west of Burwood Road. The report also proposes a right-turn ban from Burton Road (west) to Burwood Road (south) and from Gipps Street (west) to Loftus Street (south), which have been found in the traffic modelling to significantly alleviate the traffic congestion on the road network in the area.

However, it is confirmed through SIDRA modelling that the additional vehicle trips generated by the proposal will not significantly have an adverse impact on the surrounding road network and intersections.

Table 5-7 Future year with development modelling results

Int ID	Intersection name	AM			PM		
		DoS	Delay	LoS	DoS	Delay	LoS
1	Burton Street | Burwood Road	0.74 (+0.01)	19.2 (+0.6)	B	0.54 (0)	15.7 (0)	B
2	Gipps Street | Burwood Road	0.95 (+0.02)	38.5 (+2.3)	C	0.98 (0)	46.5 (+0.02)	D
3	Parramatta Road | Burwood Road	0.75 (+0.01)	13.3 (0)	A	0.71 (0)	14.2 (0)	A

Note that the delay is an average of all arms of the signalised intersections and the worst approach for priority-controlled intersections.
(XX) Number between the brackets signifies the change from the existing year performance.

All intersections would continue to perform satisfactorily with traffic generated by the proposal. The increased demand from the proposal has a minor and manageable impact on the network performance and would not require any infrastructure/network upgrades. A detailed SIDRA output is shown in **Appendix B**.

5.4 Active transport impact

The design proposal allocates pedestrian through-site links along both north-south and east-west axes, complemented by a large public open space at the centre of the site. The pedestrian links and open space will allow for greater connectivity and a safer environment for pedestrians and cyclists and facilitate social interactions and activation of the public domain.

The site is located in a high-amenity area, close to two activity and lifestyle centres in Concord and Burwood, and within walking distance of expansive open spaces nearby.

Walking and cycling mode share is expected to be high but will be accommodated comfortably by both existing and planned infrastructure. The proposal is not expected to create any adverse impact on the surrounding footpaths and bicycle network. In contrast, the proposal will create a better place outcome and a safer environment for pedestrians and cyclists through the provision of pedestrian links and public open space and the improvement of Loftus Street by active street frontage and pedestrian crossing to Concord Oval.

5.5 Public transport impact

The nearest existing bus stops within walking distance of the site are located on both Parramatta Road and Burwood Road. The bus stops are served by extensive bus routes with more than 20 services per direction during both two-hour peak periods, equating to around one bus every six minutes.

However, the future Burwood North Station along Sydney Metro West is the potential key public transport hub for residents and workers in the area. The metro will provide a rapid, high-capacity transport option towards the Sydney CBD in the east and the Parramatta CBD in the west and will allow for a modal shift alternative towards the metro, especially for private vehicle users. The metro and the limited provision of car parking spaces will likely reduce reliance on private vehicles.

Public transport is anticipated to be the most common mode of travel among future residents and visitors during the peak hours, while accounting for more than two-thirds of all trips made throughout the day. This is equivalent to around 230 public transport users, based on the mode share split discussed in **Table 5-5**. Considering the existing wide-ranging bus services and the future Sydney Metro West, all public transport trips generated by the proposal will likely be catered for sufficiently by both existing and planned services and no capacity constraints are expected.

5.6 Safety impact

The concept plan proposes two vehicular access points, on Burton Street and Loftus Street, respectively. The two driveways are located sufficiently away from the nearest tangent points. Complemented with at least a 3m setback between all building walls and the site boundary, the plan allows for adequate visibility of and for vehicles coming in and out of the driveways to ensure the safety of all road users.

Entrances for pedestrians are entirely separated from vehicular access, while cyclists are encouraged to access parking facilities via lift lobbies. The multiple access points for pedestrians and cyclists limit the tendency of mixing vehicular traffic with the other more vulnerable road users.

Considering all the design approaches mentioned above, the proposal will pose no safety issues for any road users. On the contrary, the proposal will encourage active travel, limit vehicular traffic, and foster a safer, more stress-free environment for pedestrians and cyclists.

6.0 Preliminary construction management plan

6.1 Proposed works

The residential development features the demolition of multiple existing houses and the construction of three residential buildings. The breakdown of the expected works includes:

– Site establishment

– Demolition of existing houses, trees and car park

– Installation of building footings and new services

– Delivery, installation and connection of demountable buildings

– Construction of new basement parking and towers.

A waste generation estimate is shown as follows:

– Approximately 17,000m^3 of waste will be generated during the demolition/excavation phase of the development.

– Approximately 120,000m^3 of material would be generated during the construction based on the proposed scale of the development.

Imported material will be limited to soils for planting.

6.2 Program and working hours

It is intended that the works would be carried out as shown in **Table 6-1**:

Table 6-1 Summary of the estimated construction program

Construction activities	Demolition	Excavation	Structure	Fit out	External works
Estimated duration	8 weeks	32 weeks	40 weeks	30 weeks	20 weeks

Construction work is anticipated to be undertaken in accordance with the recommended hours of operation for work within the City of Canada Bay LGA as follows:

– Monday to Friday, 7am to 6pm

– Saturday, 8am to 1pm

– No work on Sundays and public holidays

The work does not involve blasting. Workers would be advised of the approved work hours during induction. Any work outside of the approved work hours would be subject to specific prior approval from the appropriate authorities.

6.3 Construction activities

Construction workers would typically arrive in light vehicles. The estimated on-site workers for different stages and the estimated light vehicle trips are shown in **Table 6-2**. It is expected that one worker generates one inbound trip in the morning and one outbound trip in the afternoon.

Table 6-2 Light vehicle trip generation

Construction activities	Demolition	Excavation	Structure	Fitout	External works
Estimated site staff/attendees	5-10 per day	10-20 per day	50-60 per day	60-80 per day	30-40 per day
Daily trips*	8-17 trips	17-34 trips	84-100 trips	100-140 trips	48-70 trips

*This has considered a vehicle occupancy of 1.2 people/car due to the carpooling.

The heavy construction vehicle types and the generation are estimated in **Table 6-3** and **Table 6-4**. The heavy vehicle movements are likely to be spread throughout the day and minimised/avoided during peak hours where possible.

Table 6-3 Heavy vehicle types

Construction vehicle	Vehicle length	Purpose
Heavy Rigid Vehicle	12.5m	Mobile concrete booms, concrete trucks, Regenerated electrical output (REO) deliveries
Semi-trailer	19m	Piling rig delivery
Truck and dog	22m	Material loading out and bring in

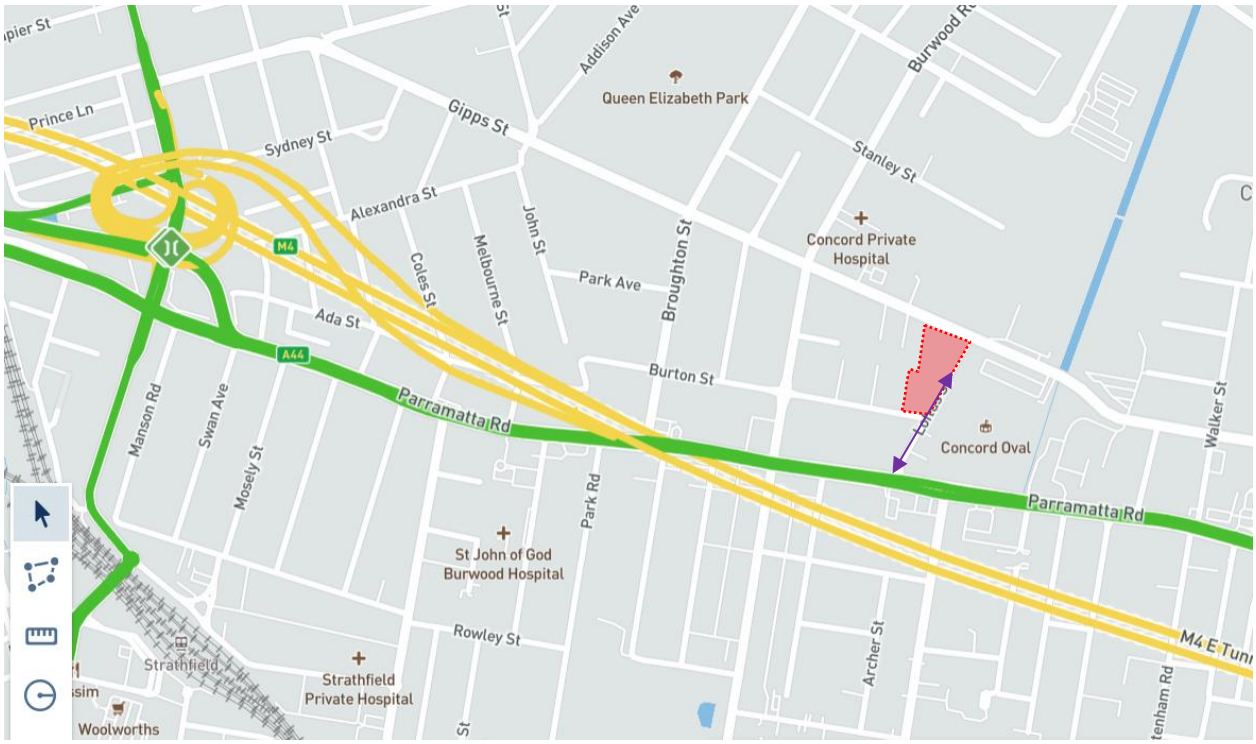
Table 6-4 Heavy vehicle trip generation

Construction activities	Demolition	Excavation	Structure	Fit out	External works
Estimated truck movements	5 per day (Truck & Dog Vehicles)	10-20 per day (Truck & Dog Vehicles)	10-20 per day (Semi-Trailers, Concrete Trucks, Concrete Pumps etc.)	10 per day (Semi-Trailers etc.)	5 per day (Semi-Trailers, Concrete Trucks, Concrete Pumps etc.)

6.4 Access routes

Access routes to/from the site are estimated that trucks (mostly semi-trailers, truck & dog vehicles and concrete trucks) would gain access via Parramatta Road where there is no load restriction for heavy vehicles and Loftus Street where the access might need to be approved by Council. **Figure 6-1** shows the higher mass limits network in the vicinity of the site.

Figure 6-1 Higher Mass Limits Network for 23m B-Double Routes



Source: TfNSW, 2025

The majority of construction will be within site the subject site, bounded by fencing to prevent unintended access by pedestrians.

6.5 Construction traffic impacts and mitigation

6.5.1 Parking impacts

A work zone may be required along the property frontage. The intention would be to complete all loading and unloading activities from within the site boundary. On-site parking will be provided once the basement has been constructed. On-street parking may be required for the initial phase of the project until the basement can be utilised.

It is expected that the construction vehicle parking area on-site would accommodate parking for a workforce of up to 100 cars / 120 people, which could satisfy the on-site parking demand for each stage. Construction staff have good access to public transport, given the site is within walking distance to bus stops in the vicinity, hence they are not expected to drive and park on surrounding local residential streets. Construction workers will be encouraged to carpool, further reducing the impact on the road network and local parking demands.

6.5.2 Pedestrian and cyclist access impacts

Pedestrian and cyclist access and safety need to be prioritised and alternative routes should be provided where needed. Footpaths adjacent to work sites, particularly sites with high volumes of construction vehicle movements, are proposed to be traffic-controlled to manage the conflict between construction vehicles and pedestrians. Where work sites have an impact on footpaths, consideration will be given to the requirements of all pedestrians and especially users with specific requirements (e.g. elderly, strollers, disabled).

The footpath close to the site would experience a moderate pedestrian demand given the proximity to the sports facility, open space and surrounding residential development. Hence, there would be conflicts between construction vehicles and pedestrians at the access driveways. It is expected that Traffic Control Plans (TCP) would include appropriate warning signage at these locations for pedestrians. The presence of traffic controllers is required at these locations.

6.5.3 Construction impacts mitigation

Road network impacts by worker traffic to the site will be mitigated by the construction workers generally starting earlier and finishing earlier than the commuter peak periods and would likely not coincide with the school or road network peak periods.

Construction staff has good access to public transport given the site is within walking distance to bus stops, hence they are not expected to drive and park on surrounding local residential streets. Construction workers will be encouraged to carpool, further reducing the impact on the road network and local parking demands.

So as not to adversely impact the traffic system during the construction period, the construction traffic is expected to be managed as follows:

– Truckloads would be covered during transportation off-site.

– All activities, including the delivery of materials, would not impede traffic flow along local roads.

– Materials would be delivered, and spoil would be removed during standard construction hours.

– Avoid idling trucks alongside sensitive receivers.

– Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at the site at any one time.

To manage drivers' conduct the following measures are to be implemented:

– All truck movements will be scheduled.

– Vehicles are to enter and exit the site in a forward direction along the travel path shown on delivery maps.

– Drivers are to always give way to pedestrians and cyclists.

It is not expected that there will be other major concurrent construction activities except Burwood North Metro Station. A further review of potential concurrent construction should occur as part of the detailed Construction Traffic Management Plan (CTMP) to ensure that this remains the case or that mitigations are proposed.

As shown in **Table 6-3** and **Table 6-4**, the level of construction traffic will be typical of similar construction activities associated with residential buildings and hence the impacts of the construction activities and additional delays to the network should be insignificant.

A detailed CTMP, which will include a construction TCP will be prepared, separate from this report at a later stage. This will be done prior to commencement of construction and in accordance with the *Traffic Control at Work Sites Technical Manual* (2010).

The CTMP will address the overall traffic management of the site during the construction phase, including provision for vehicular and pedestrian access, parking for construction vehicles and appropriate wayfinding. The vehicular movements and expected routes to and from the site will also be further quantified and defined.

6.5.4 Traffic controllers

Traffic controllers will be used to stop traffic on the public streets and access to allow trucks to enter or leave the site. Where possible, vehicles must enter and exit the site in a forward direction. They must wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site, the vehicles already on the road have the right-of-way. Vehicles entering, exiting, and driving around the site will be required to always give way to pedestrians.

The proposed location for traffic controllers is shown in **Figure 6-2**.

Road Occupancy Licenses will be applied following approval for locations where traffic control is required.

Figure 6-2 Proposed locations for traffic controllers

Source: Nearmap, 2025

6.5.5 Construction traffic management measures

Other construction traffic management measures would include:

- Road openings will be required for the connection of services to authority mains.
- A work zone will be required on the frontage of the site along Loftus Street.
- Permits will be required for the erection and dismantling of the tower crane via a mobile crane.
- Traffic control will only be required for high traffic activities, such as concrete pours, crane erection, excavation disposal (truck runs)
- Warning signs, traffic control and pedestrian management systems will be in place to align with the approved CTMP.

7.0 Conclusion

This transport impact assessment has been prepared to support the SSDA for land at 1-7 Burton Street, 3B-11 Loftus Street, and 10-12 Gipps Street, Concord, within the City of Canada Bay local government area. The proposal aims to capitalise on the site location close to existing amenities and the future Burwood North Station along the rapid, high-capacity Sydney Metro West. It includes rezoning and increasing development density to support the delivery of a greater housing supply.

The assessment seeks to investigate the potential transport impacts associated with the proposal and has found that:

- Access for vehicles is provided at two driveways on Burton Street and Loftus Street, while entrances for pedestrians and cyclists are distributed across the site frontages.
- The proposal would provide 408 car parking spaces and at least 444 bicycle parking spaces and associated end-of-trip facilities. This level of the provision is considered reasonable in line with its good public transport accessibility.
- The proposal is estimated to generate an addition of up to 96 vehicle trips per peak hour.
- Vehicles travelling to/from the Sydney CBD in the east will make up the largest single travel direction, followed by vehicles to/from the west along Burton Street and Gipps Street.
- The modal split of future residents and visitors is estimated to be:
  - During peak hours: 34% private vehicles, 62% public transport, and 4% active transport
  - Daily: 40% private vehicles, 36% public transport, and 24% active transport
- SIDRA modelling has confirmed that the additional vehicle trips generated by the proposal will not have an adverse impact on the surrounding road network and no further upgrades incurred by the proposal are required. The road hierarchy will remain unchanged, while Loftus Street has the potential to turn from a *local street* to a *place for people*.
- The provision of pedestrian links and open space will allow for greater connectivity for pedestrians and cyclists. The proposal is not expected to create any adverse impact on the surrounding footpaths and bicycle network, but rather create a better place outcome and a safer environment for the more vulnerable road users.
- The future Burwood North Metro Station along Sydney Metro West will be the key public transport hub for residents and workers in the area. Complemented by the extensive bus services within walking distance, all public transport trips generated by the planning proposal will be catered for sufficiently by both existing and planned services and no capacity constraints are expected.

Based on the above findings, the transport impact assessment concludes that the proposal will not have adverse impacts on the surrounding transport network when compared to the baseline development scale. In contrast, the proposal will encourage public transport use, while the concept design approaches will enhance safety for all road users and the place quality in the area.

APPENDIX A

SIDRA OUTPUT

MOVEMENT SUMMARY

Site: 1AM_BY [BUR_BUR_25_AM_BY (Site Folder: 2025 AM Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2025 AM Existing Network (Network Folder: 2025 Existing Network)]

Burwood Road | Burton Street
8.00-9.00am (AM Peak)
3.15-4.15pm (PM Peak)
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	99	3.2	99	3.2	0.478	5.1	LOS A	4.1	30.0	0.30	0.50	0.30	37.7
2	T1	All MCs	320	4.9	320	4.9	0.478	4.9	LOS A	4.1	30.0	0.30	0.50	0.30	30.2
3	R2	All MCs	14	0.0	14	0.0	0.478	7.6	LOS A	4.1	30.0	0.30	0.50	0.30	38.1
3u	U	All MCs	48	2.2	48	2.2	0.478	9.0	LOS A	4.1	30.0	0.30	0.50	0.30	30.2
Approach			481	4.2	481	4.2	0.478	5.4	LOS A	4.1	30.0	0.30	0.50	0.30	33.2
East: Burton Street (E)															
4	L2	All MCs	17	0.0	17	0.0	0.113	14.7	LOS B	0.7	4.8	0.82	0.77	0.82	27.2
5	T1	All MCs	17	0.0	17	0.0	0.113	14.5	LOS B	0.7	4.8	0.82	0.77	0.82	33.3
6	R2	All MCs	5	0.0	5	0.0	0.113	17.3	LOS B	0.7	4.8	0.82	0.77	0.82	27.2
6u	U	All MCs	1	0.0	1	0.0	0.113	18.6	LOS B	0.7	4.8	0.82	0.77	0.82	33.4
Approach			40	0.0	40	0.0	0.113	15.1	LOS B	0.7	4.8	0.82	0.77	0.82	30.5
North: Burwood Road (N)															
7	L2	All MCs	9	11.1	9	11.1	0.730	13.9	LOS A	7.9	58.2	0.69	0.86	0.89	33.6
8	T1	All MCs	389	6.2	389	6.2	0.730	13.6	LOS A	7.9	58.2	0.69	0.86	0.89	26.8
9	R2	All MCs	37	8.6	37	8.6	0.730	16.4	LOS B	7.9	58.2	0.69	0.86	0.89	32.7
9u	U	All MCs	2	0.0	2	0.0	0.730	17.6	LOS B	7.9	58.2	0.69	0.86	0.89	26.8
Approach			438	6.5	438	6.5	0.730	13.8	LOS A	7.9	58.2	0.69	0.86	0.89	27.8
West: Burton Street (W)															
10	L2	All MCs	18	0.0	18	0.0	0.391	9.7	LOS A	2.8	19.5	0.74	0.67	0.74	29.3
11	T1	All MCs	23	0.0	23	0.0	0.391	9.2	LOS A	2.8	19.5	0.74	0.67	0.74	36.0
12	R2	All MCs	186	0.0	186	0.0	0.391	12.0	LOS A	2.8	19.5	0.74	0.67	0.74	29.3
12u	U	All MCs	1	0.0	1	0.0	0.391	13.3	LOS A	2.8	19.5	0.74	0.67	0.74	34.6
Approach			228	0.0	228	0.0	0.391	11.5	LOS A	2.8	19.5	0.74	0.67	0.74	30.4
All Vehicles			1187	4.1	1187	4.1	0.730	10.0	LOS A	7.9	58.2	0.55	0.68	0.62	30.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 2AM_BY [GIP_BUR_25_AM_BY (Site Folder: 2025 AM Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2025 AM Existing Network (Network Folder: 2025 Existing Network)]

Gipps Street | Burwood Road
TCS 466
8.00-9.00am (AM Peak)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 83 seconds (Site User-Given Phase Times)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	76	0.0	76	0.0	0.234	19.5	LOS B	4.1	29.6	0.77	0.69	0.77	27.5
2	T1	All MCs	240	6.1	240	6.1	0.770	34.8	LOS C	9.1	66.8	0.94	0.88	1.07	22.7
3	R2	All MCs	36	0.0	36	0.0	0.770	65.4	LOS E	9.1	66.8	1.00	0.94	1.18	33.4
Approach			352	4.2	352	4.2	0.770	34.6	LOS C	9.1	66.8	0.91	0.84	1.02	25.2
East: Gipps Street (E)															
4	L2	All MCs	49	4.3	49	4.3	0.925	75.9	LOS F	18.2	129.5	1.00	1.17	1.51	27.7
5	T1	All MCs	608	1.9	608	1.9	* 0.925	70.3	LOS E	18.2	129.5	1.00	1.17	1.51	31.3
6	R2	All MCs	1	100.0	1	100.0	0.925	110.7	LOS F	18.1	129.1	1.00	1.17	1.52	29.7
Approach			659	2.2	659	2.2	0.925	70.8	LOS F	18.2	129.5	1.00	1.17	1.51	26.8
North: Burwood Road (N)															
7	L2	All MCs	209	5.0	209	5.0	0.871	44.5	LOS D	20.6	151.8	1.00	1.05	1.25	33.0
8	T1	All MCs	292	7.6	292	7.6	0.871	40.0	LOS C	20.6	151.8	1.00	1.05	1.29	13.1
9	R2	All MCs	83	2.5	83	2.5	* 0.871	62.7	LOS E	6.5	47.6	1.00	1.05	1.48	18.0
Approach			584	5.9	584	5.9	0.871	44.8	LOS D	20.6	151.8	1.00	1.05	1.31	23.3
West: Gipps Street (W)															
10	L2	All MCs	60	3.5	60	3.5	0.507	11.9	LOS A	9.8	69.2	0.43	0.42	0.43	41.9
11	T1	All MCs	861	1.3	861	1.3	0.676	7.5	LOS A	9.8	69.2	0.47	0.47	0.47	52.6
12	R2	All MCs	92	3.4	92	3.4	* 0.676	25.2	LOS B	8.2	58.3	0.54	0.55	0.54	32.6
Approach			1013	1.7	1013	1.7	0.676	9.3	LOS A	9.8	69.2	0.48	0.47	0.48	51.5
All Vehicles			2607	3.1	2607	3.1	0.925	36.2	LOS C	20.6	151.8	0.78	0.83	1.00	32.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: Burwood Road (S)										
P1	Full	5	35.7	LOS D	0.0	0.0	0.93	0.93	202.4	200.0	0.99
East: Gipps Street (E)										
P2	Full	12	35.7	LOS D	0.0	0.0	0.93	0.93	202.4	200.0	0.99
North: Burwood Road (N)										
P3	Full	26	35.8	LOS D	0.1	0.1	0.93	0.93	202.4	200.0	0.99
West: Gipps Street (W)										
P4	Full	13	35.7	LOS D	0.0	0.0	0.93	0.93	202.4	200.0	0.99
All Pedestrians		56	35.7	LOS D	0.1	0.1	0.93	0.93	202.4	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 3AM_BY [PAR_BUR_25_AM_BY (Site Folder: 2025 AM Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2025 AM Existing Network (Network Folder: 2025 Existing Network)]

Parramatta Road | Burwood Road
TCS 827
7.45-8.45am (AM Peak)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 104 seconds (Site User-Given Phase Times)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	91	5.8	91	5.8	0.295	37.9	LOS C	5.7	41.5	0.84	0.74	0.84	20.3
2	T1	All MCs	393	4.3	393	4.3	0.743	38.3	LOS C	17.0	125.3	0.96	0.86	1.00	11.0
3	R2	All MCs	7	100.0	7	100.0	* 0.743	62.3	LOS E	17.0	125.3	0.97	0.88	1.02	21.2
Approach			491	6.0	491	6.0	0.743	38.6	LOS C	17.0	125.3	0.93	0.84	0.97	13.3
East: Parramatta Road (E)															
4	L2	All MCs	81	13.0	81	13.0	0.526	12.2	LOS A	11.1	81.2	0.40	0.41	0.40	41.6
5	T1	All MCs	1709	3.9	1709	3.9	0.526	5.6	LOS A	11.1	81.2	0.38	0.36	0.38	50.0
Approach			1791	4.3	1791	4.3	0.526	5.9	LOS A	11.1	81.2	0.38	0.36	0.38	49.6
North: Burwood Road (N)															
7	L2	All MCs	141	3.0	141	3.0	0.624	40.7	LOS C	14.1	101.9	0.93	0.81	0.93	21.7
8	T1	All MCs	496	4.2	496	4.2	0.624	35.5	LOS C	14.4	104.5	0.93	0.80	0.93	16.8
Approach			637	4.0	637	4.0	0.624	36.6	LOS C	14.4	104.5	0.93	0.80	0.93	18.1
West: Parramatta Road (W)															
10	L2	All MCs	99	3.2	99	3.2	0.608	12.4	LOS A	14.3	104.8	0.46	0.46	0.46	37.5
11	T1	All MCs	1957	5.4	1957	5.4	* 0.608	6.1	LOS A	14.3	104.8	0.43	0.41	0.43	49.4
Approach			2056	5.3	2056	5.3	0.608	6.4	LOS A	14.3	104.8	0.43	0.41	0.43	49.0
All Vehicles			4974	4.8	4974	4.8	0.743	13.3	LOS A	17.0	125.3	0.53	0.49	0.53	38.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Burwood Road (S)											
P1	Full	26	46.2	LOS E	0.1	0.1	0.94	0.94	212.9	200.0	0.94
East: Parramatta Road (E)											

P2	Full	18	46.2	LOS E	0.0	0.0	0.94	0.94	212.9	200.0	0.94
North: Burwood Road (N)											
P3	Full	5	46.2	LOS E	0.0	0.0	0.94	0.94	212.8	200.0	0.94
West: Parramatta Road (W)											
P4	Full	44	46.3	LOS E	0.1	0.1	0.94	0.94	212.9	200.0	0.94
All Pedestrians		94	46.2	LOS E	0.1	0.1	0.94	0.94	212.9	200.0	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 1PM_BY [BUR_BUR_25_PM_BY (Site Folder: 2025 PM Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2025 PM Existing Network (Network Folder: 2025 Existing Network)]

Burwood Road | Burton Street
8.00-9.00am (AM Peak)
3.15-4.15pm (PM Peak)
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	89	0.0	89	0.0	0.537	5.7	LOS A	4.9	35.5	0.39	0.52	0.39	37.5
2	T1	All MCs	375	4.5	375	4.5	0.537	5.5	LOS A	4.9	35.5	0.39	0.52	0.39	29.5
3	R2	All MCs	13	0.0	13	0.0	0.537	8.2	LOS A	4.9	35.5	0.39	0.52	0.39	37.8
3u	U	All MCs	32	3.3	32	3.3	0.537	9.6	LOS A	4.9	35.5	0.39	0.52	0.39	29.5
Approach			508	3.5	508	3.5	0.537	5.9	LOS A	4.9	35.5	0.39	0.52	0.39	32.4
East: Burton Street (E)															
4	L2	All MCs	24	0.0	24	0.0	0.156	11.8	LOS A	1.0	7.2	0.76	0.70	0.76	29.8
5	T1	All MCs	34	0.0	34	0.0	0.156	11.6	LOS A	1.0	7.2	0.76	0.70	0.76	35.3
6	R2	All MCs	15	7.1	15	7.1	0.156	14.4	LOS A	1.0	7.2	0.76	0.70	0.76	29.8
6u	U	All MCs	1	0.0	1	0.0	0.156	15.7	LOS B	1.0	7.2	0.76	0.70	0.76	35.3
Approach			74	1.4	74	1.4	0.156	12.3	LOS A	1.0	7.2	0.76	0.70	0.76	33.0
North: Burwood Road (N)															
7	L2	All MCs	3	0.0	3	0.0	0.487	6.9	LOS A	3.6	26.6	0.46	0.59	0.46	39.3
8	T1	All MCs	334	5.7	334	5.7	0.487	6.7	LOS A	3.6	26.6	0.46	0.59	0.46	34.8
9	R2	All MCs	36	0.0	36	0.0	0.487	9.4	LOS A	3.6	26.6	0.46	0.59	0.46	38.4
9u	U	All MCs	5	0.0	5	0.0	0.487	10.7	LOS A	3.6	26.6	0.46	0.59	0.46	34.8
Approach			378	5.0	378	5.0	0.487	7.0	LOS A	3.6	26.6	0.46	0.59	0.46	35.4
West: Burton Street (W)															
10	L2	All MCs	18	0.0	18	0.0	0.238	9.6	LOS A	1.6	11.1	0.70	0.69	0.70	29.3
11	T1	All MCs	9	11.1	9	11.1	0.238	9.5	LOS A	1.6	11.1	0.70	0.69	0.70	35.8
12	R2	All MCs	107	1.0	107	1.0	0.238	12.0	LOS A	1.6	11.1	0.70	0.69	0.70	29.3
12u	U	All MCs	1	0.0	1	0.0	0.238	13.3	LOS A	1.6	11.1	0.70	0.69	0.70	34.6
Approach			136	1.6	136	1.6	0.238	11.5	LOS A	1.6	11.1	0.70	0.69	0.70	30.1
All Vehicles			1096	3.7	1096	3.7	0.537	7.4	LOS A	4.9	35.5	0.48	0.58	0.48	33.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

MOVEMENT SUMMARY

Site: 2PM_BY [GIP_BUR_25_PM_BY (Site Folder: 2025 PM Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2025 PM Existing Network (Network Folder: 2025 Existing Network)]

Gipps Street | Burwood Road
TCS 466
8.00-9.00am (AM Peak)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 88 seconds (Site User-Given Phase Times)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	91	0.0	91	0.0	0.297	24.2	LOS B	5.6	39.9	0.80	0.71	0.80	26.4
2	T1	All MCs	272	5.4	272	5.4	* 0.978	56.0	LOS D	14.9	108.5	0.94	1.13	1.45	16.9
3	R2	All MCs	52	4.1	52	4.1	0.978	97.0	LOS F	14.9	108.5	1.00	1.30	1.73	25.5
Approach			414	4.1	414	4.1	0.978	54.1	LOS D	14.9	108.5	0.92	1.06	1.35	19.9
East: Gipps Street (E)															
4	L2	All MCs	55	0.0	55	0.0	0.933	76.2	LOS F	24.6	172.6	1.00	1.18	1.46	27.5
5	T1	All MCs	780	0.4	780	0.4	* 0.933	70.6	LOS F	24.6	172.6	1.00	1.18	1.47	31.1
6	R2	All MCs	1	100.0	1	100.0	0.933	125.8	LOS F	24.4	171.9	1.00	1.18	1.47	29.6
Approach			836	0.5	836	0.5	0.933	71.1	LOS F	24.6	172.6	1.00	1.18	1.47	26.8
North: Burwood Road (N)															
7	L2	All MCs	100	0.0	100	0.0	0.588	34.2	LOS C	11.3	83.0	0.91	0.79	0.91	36.9
8	T1	All MCs	212	8.0	212	8.0	0.588	30.0	LOS C	11.3	83.0	0.92	0.79	0.92	16.4
9	R2	All MCs	52	0.0	52	0.0	0.588	55.3	LOS D	2.8	19.9	1.00	0.80	1.09	18.4
Approach			363	4.6	363	4.6	0.588	34.7	LOS C	11.3	83.0	0.93	0.79	0.94	24.9
West: Gipps Street (W)															
10	L2	All MCs	58	0.0	58	0.0	0.511	16.3	LOS B	14.2	99.6	0.62	0.58	0.62	37.1
11	T1	All MCs	731	0.4	731	0.4	0.851	15.7	LOS B	14.6	102.4	0.73	0.72	0.80	43.9
12	R2	All MCs	114	0.9	114	0.9	* 0.851	85.1	LOS F	14.6	102.4	1.00	1.09	1.25	13.1
Approach			902	0.5	902	0.5	0.851	24.5	LOS B	14.6	102.4	0.75	0.76	0.85	40.5
All Vehicles			2515	1.7	2515	1.7	0.978	46.3	LOS D	24.6	172.6	0.89	0.95	1.15	29.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec

South: Burwood Road (S)										
P1	Full	6	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98
East: Gipps Street (E)										
P2	Full	4	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98
North: Burwood Road (N)										
P3	Full	3	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98
West: Gipps Street (W)										
P4	Full	12	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98
All Pedestrians		25	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 3PM_BY [PAR_BUR_25_PM_BY (Site Folder: 2025 PM Existing)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2025 PM Existing Network (Network Folder: 2025 Existing Network)]

Parramatta Road | Burwood Road
TCS 827
7.45-8.45am (AM Peak)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 119 seconds (Site User-Given Phase Times)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	69	1.5	69	1.5	0.281	40.6	LOS C	6.6	47.3	0.81	0.71	0.81	20.1
2	T1	All MCs	415	4.1	415	4.1	0.707	39.2	LOS C	18.2	135.3	0.93	0.81	0.93	10.8
3	R2	All MCs	12	100.0	12	100.0	* 0.707	61.6	LOS E	18.2	135.3	0.95	0.83	0.96	20.9
Approach			496	5.9	496	5.9	0.707	39.9	LOS C	18.2	135.3	0.91	0.79	0.91	12.6
East: Parramatta Road (E)															
4	L2	All MCs	118	8.9	118	8.9	* 0.526	13.9	LOS A	12.9	93.7	0.42	0.45	0.42	39.6
5	T1	All MCs	1619	3.4	1619	3.4	0.526	6.8	LOS A	12.9	93.7	0.39	0.37	0.39	48.3
Approach			1737	3.8	1737	3.8	0.526	7.3	LOS A	12.9	93.7	0.39	0.38	0.39	47.7
North: Burwood Road (N)															
7	L2	All MCs	124	0.8	124	0.8	0.456	42.3	LOS C	11.7	83.9	0.87	0.77	0.87	21.3
8	T1	All MCs	375	5.6	375	5.6	0.456	36.1	LOS C	11.9	87.2	0.86	0.74	0.86	16.6
Approach			499	4.4	499	4.4	0.456	37.7	LOS C	11.9	87.2	0.86	0.75	0.86	17.9
West: Parramatta Road (W)															
10	L2	All MCs	95	1.1	95	1.1	0.523	13.5	LOS A	12.6	89.2	0.41	0.43	0.41	35.8
11	T1	All MCs	1656	1.5	1656	1.5	0.523	6.7	LOS A	12.6	89.2	0.38	0.36	0.38	48.5
Approach			1751	1.4	1751	1.4	0.523	7.1	LOS A	12.6	89.2	0.38	0.37	0.38	48.1
All Vehicles			4482	3.2	4482	3.2	0.707	14.2	LOS A	18.2	135.3	0.50	0.46	0.50	37.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Burwood Road (S)											
P1	Full	23	53.7	LOS E	0.1	0.1	0.95	0.95	220.4	200.0	0.91
East: Parramatta Road (E)											

P2	Full	33	53.7	LOS E	0.1	0.1	0.95	0.95	220.4	200.0	0.91
North: Burwood Road (N)											
P3	Full	14	53.7	LOS E	0.0	0.0	0.95	0.95	220.3	200.0	0.91
West: Parramatta Road (W)											
P4	Full	66	53.8	LOS E	0.2	0.2	0.95	0.95	220.5	200.0	0.91
All Pedestrians		136	53.8	LOS E	0.2	0.2	0.95	0.95	220.4	200.0	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 1AM_BY [BUR_BUR_25_AM_FY_with dev (Site Folder: 2035 AM Future with Dev)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2035 AM Future Network (Network Folder: 2035 Future Network (with dev))]

Burwood Road | Burton Street
8.00-9.00am (AM Peak)
3.15-4.15pm (PM Peak)
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	Aver. Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	99	3.2	99	3.2	0.518	5.7	LOS A	1.8	13.2	0.38	0.53	0.38	37.2
2	T1	All MCs	320	4.9	320	4.9	0.518	5.5	LOS A	1.8	13.2	0.38	0.53	0.38	29.3
3	R2	All MCs	15	0.0	15	0.0	0.518	8.2	LOS A	1.8	13.2	0.38	0.53	0.38	37.6
3u	U	All MCs	48	2.2	48	2.2	0.518	9.5	LOS A	1.8	13.2	0.38	0.53	0.38	29.3
Approach			482	4.1	482	4.1	0.518	6.0	LOS A	1.8	13.2	0.38	0.53	0.38	32.5
East: Burton Street (E)															
4	L2	All MCs	20	0.0	20	0.0	0.196	15.2	LOS B	0.5	3.4	0.84	0.77	0.84	27.0
5	T1	All MCs	43	0.0	43	0.0	0.196	15.0	LOS B	0.5	3.4	0.84	0.77	0.84	33.1
6	R2	All MCs	5	0.0	5	0.0	0.196	17.8	LOS B	0.5	3.4	0.84	0.77	0.84	27.0
6u	U	All MCs	1	0.0	1	0.0	0.196	19.2	LOS B	0.5	3.4	0.84	0.77	0.84	33.2
Approach			69	0.0	69	0.0	0.196	15.4	LOS B	0.5	3.4	0.84	0.77	0.84	31.4
North: Burwood Road (N)															
7	L2	All MCs	9	11.1	9	11.1	0.741	14.5	LOS A	3.3	24.1	0.70	0.88	0.92	33.3
8	T1	All MCs	389	6.2	389	6.2	0.741	14.1	LOS A	3.3	24.1	0.70	0.88	0.92	26.4
9	R2	All MCs	37	8.6	37	8.6	0.741	16.9	LOS B	3.3	24.1	0.70	0.88	0.92	32.3
9u	U	All MCs	2	0.0	2	0.0	0.741	18.1	LOS B	3.3	24.1	0.70	0.88	0.92	26.4
Approach			438	6.5	438	6.5	0.741	14.4	LOS A	3.3	24.1	0.70	0.88	0.92	27.3
West: Burton Street (W)															
10	L2	All MCs	18	0.0	18	0.0	0.405	9.7	LOS A	1.1	8.0	0.75	0.68	0.75	29.3
11	T1	All MCs	26	0.0	26	0.0	0.405	9.3	LOS A	1.1	8.0	0.75	0.68	0.75	35.9
12	R2	All MCs	186	0.0	186	0.0	0.405	12.0	LOS A	1.1	8.0	0.75	0.68	0.75	29.3
12u	U	All MCs	1	0.0	1	0.0	0.405	13.4	LOS A	1.1	8.0	0.75	0.68	0.75	34.6
Approach			232	0.0	232	0.0	0.405	11.6	LOS A	1.1	8.0	0.75	0.68	0.75	30.5
All Vehicles			1221	4.0	1221	4.0	0.741	10.6	LOS A	3.3	24.1	0.59	0.70	0.67	29.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 2AM_BY [GIP_BUR_25_AM_FY_with dev (Site Folder: 2035 AM Future with Dev)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2035 AM Future Network (Network Folder: 2035 Future Network (with dev))]

Gipps Street | Burwood Road
TCS 466
8.00-9.00am (AM Peak)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 83 seconds (Site User-Given Phase Times)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	Aver. Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	76	0.0	76	0.0	0.234	19.5	LOS B	2.5	18.1	0.77	0.69	0.77	27.5
2	T1	All MCs	240	6.1	240	6.1	0.770	34.8	LOS C	5.6	40.9	0.94	0.88	1.07	22.7
3	R2	All MCs	36	0.0	36	0.0	0.770	65.4	LOS E	5.6	40.9	1.00	0.94	1.18	33.4
Approach			352	4.2	352	4.2	0.770	34.6	LOS C	5.6	40.9	0.91	0.84	1.02	25.2
East: Gipps Street (E)															
4	L2	All MCs	49	4.3	49	4.3	0.948	83.8	LOS F	12.2	86.8	1.00	1.23	1.61	25.8
5	T1	All MCs	622	1.9	622	1.9	* 0.948	78.2	LOS F	12.2	86.8	1.00	1.23	1.61	29.3
6	R2	All MCs	1	100.0	1	100.0	0.948	120.7	LOS F	12.1	86.5	1.00	1.23	1.61	27.9
Approach			673	2.2	673	2.2	0.948	78.7	LOS F	12.2	86.8	1.00	1.23	1.61	25.3
North: Burwood Road (N)															
7	L2	All MCs	209	5.0	209	5.0	0.871	44.5	LOS D	12.6	93.0	1.00	1.05	1.25	33.0
8	T1	All MCs	292	7.6	292	7.6	0.871	40.0	LOS C	12.6	93.0	1.00	1.05	1.29	13.1
9	R2	All MCs	83	2.5	83	2.5	* 0.871	62.7	LOS E	4.0	29.2	1.00	1.05	1.48	18.0
Approach			584	5.9	584	5.9	0.871	44.8	LOS D	12.6	93.0	1.00	1.05	1.31	23.3
West: Gipps Street (W)															
10	L2	All MCs	60	3.5	60	3.5	0.515	11.9	LOS A	6.1	43.6	0.44	0.42	0.44	41.9
11	T1	All MCs	862	1.3	862	1.3	0.687	7.5	LOS A	6.1	43.6	0.48	0.48	0.48	52.5
12	R2	All MCs	92	3.4	92	3.4	* 0.687	25.9	LOS B	5.0	35.5	0.55	0.57	0.55	32.2
Approach			1014	1.7	1014	1.7	0.687	9.4	LOS A	6.1	43.6	0.48	0.48	0.48	51.4
All Vehicles			2622	3.1	2622	3.1	0.948	38.5	LOS C	12.6	93.0	0.79	0.85	1.03	32.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: Burwood Road (S)										
P1 Full	5	35.7	LOS D	0.0	0.0	0.93	0.93	202.4	200.0	0.99
East: Gipps Street (E)										
P2 Full	12	35.7	LOS D	0.0	0.0	0.93	0.93	202.4	200.0	0.99
North: Burwood Road (N)										
P3 Full	26	35.8	LOS D	0.1	0.1	0.93	0.93	202.4	200.0	0.99
West: Gipps Street (W)										
P4 Full	13	35.7	LOS D	0.0	0.0	0.93	0.93	202.4	200.0	0.99
All Pedestrians	56	35.7	LOS D	0.1	0.1	0.93	0.93	202.4	200.0	0.99

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 3AM_BY [PAR_BUR_25_AM_FY_with dev (Site Folder: 2035 AM Future with Dev)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2035 AM Future Network (Network Folder: 2035 Future Network (with dev))]

Parramatta Road | Burwood Road
TCS 827
7.45-8.45am (AM Peak)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 104 seconds (Site User-Given Phase Times)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	Aver. Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	91	5.8	91	5.8	0.296	37.9	LOS C	3.5	25.5	0.84	0.74	0.84	20.3
2	T1	All MCs	394	4.3	394	4.3	0.745	38.3	LOS C	10.4	77.0	0.96	0.86	1.00	11.0
3	R2	All MCs	7	100.0	7	100.0	* 0.745	62.4	LOS E	10.4	77.0	0.97	0.88	1.03	21.1
Approach			492	6.0	492	6.0	0.745	38.6	LOS C	10.4	77.0	0.94	0.84	0.97	13.2
East: Parramatta Road (E)															
4	L2	All MCs	81	13.0	81	13.0	0.526	12.2	LOS A	6.8	49.7	0.40	0.41	0.40	41.6
5	T1	All MCs	1709	3.9	1709	3.9	0.526	5.6	LOS A	6.8	49.7	0.38	0.36	0.38	50.0
Approach			1791	4.3	1791	4.3	0.526	5.9	LOS A	6.8	49.7	0.38	0.36	0.38	49.6
North: Burwood Road (N)															
7	L2	All MCs	141	3.0	141	3.0	0.627	40.8	LOS C	8.7	62.8	0.93	0.81	0.93	21.7
8	T1	All MCs	499	4.2	499	4.2	0.627	35.5	LOS C	8.9	64.4	0.93	0.80	0.93	16.8
Approach			640	3.9	640	3.9	0.627	36.7	LOS C	8.9	64.4	0.93	0.80	0.93	18.1
West: Parramatta Road (W)															
10	L2	All MCs	99	3.2	99	3.2	0.608	12.4	LOS A	8.8	64.2	0.46	0.46	0.46	37.5
11	T1	All MCs	1957	5.4	1957	5.4	* 0.608	6.1	LOS A	8.8	64.2	0.43	0.41	0.43	49.4
Approach			2056	5.3	2056	5.3	0.608	6.4	LOS A	8.8	64.2	0.43	0.41	0.43	49.0
All Vehicles			4978	4.8	4978	4.8	0.745	13.3	LOS A	10.4	77.0	0.53	0.49	0.53	38.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Burwood Road (S)											
P1	Full	26	46.2	LOS E	0.1	0.1	0.94	0.94	212.9	200.0	0.94

East: Parramatta Road (E)										
P2 Full	18	46.2	LOS E	0.0	0.0	0.94	0.94	212.9	200.0	0.94
North: Burwood Road (N)										
P3 Full	5	46.2	LOS E	0.0	0.0	0.94	0.94	212.8	200.0	0.94
West: Parramatta Road (W)										
P4 Full	44	46.3	LOS E	0.1	0.1	0.94	0.94	212.9	200.0	0.94
All Pedestrians	94	46.2	LOS E	0.1	0.1	0.94	0.94	212.9	200.0	0.94

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 1PM_BY [BUR_BUR_25_PM_FY_with dev (Site Folder: 2035 PM Future with Dev)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2035 PM Future Network (Network Folder: 2035 Future Network (with dev))]

Burwood Road | Burton Street
8.00-9.00am (AM Peak)
3.15-4.15pm (PM Peak)
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	Aver. Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	89	0.0	89	0.0	0.542	5.8	LOS A	2.0	14.5	0.40	0.52	0.40	37.4
2	T1	All MCs	375	4.5	375	4.5	0.542	5.6	LOS A	2.0	14.5	0.40	0.52	0.40	29.4
3	R2	All MCs	15	0.0	15	0.0	0.542	8.3	LOS A	2.0	14.5	0.40	0.52	0.40	37.7
3u	U	All MCs	32	3.3	32	3.3	0.542	9.6	LOS A	2.0	14.5	0.40	0.52	0.40	29.4
Approach			511	3.5	511	3.5	0.542	5.9	LOS A	2.0	14.5	0.40	0.52	0.40	32.3
East: Burton Street (E)															
4	L2	All MCs	24	0.0	24	0.0	0.162	11.8	LOS A	0.4	3.0	0.76	0.70	0.76	29.8
5	T1	All MCs	36	0.0	36	0.0	0.162	11.6	LOS A	0.4	3.0	0.76	0.70	0.76	35.3
6	R2	All MCs	15	7.1	15	7.1	0.162	14.5	LOS A	0.4	3.0	0.76	0.70	0.76	29.8
6u	U	All MCs	1	0.0	1	0.0	0.162	15.7	LOS B	0.4	3.0	0.76	0.70	0.76	35.3
Approach			76	1.4	76	1.4	0.162	12.3	LOS A	0.4	3.0	0.76	0.70	0.76	33.0
North: Burwood Road (N)															
7	L2	All MCs	3	0.0	3	0.0	0.510	7.4	LOS A	1.5	11.2	0.49	0.61	0.49	38.9
8	T1	All MCs	334	5.7	334	5.7	0.510	7.2	LOS A	1.5	11.2	0.49	0.61	0.49	34.1
9	R2	All MCs	36	0.0	36	0.0	0.510	9.9	LOS A	1.5	11.2	0.49	0.61	0.49	38.0
9u	U	All MCs	5	0.0	5	0.0	0.510	11.2	LOS A	1.5	11.2	0.49	0.61	0.49	34.1
Approach			378	5.0	378	5.0	0.510	7.5	LOS A	1.5	11.2	0.49	0.61	0.49	34.7
West: Burton Street (W)															
10	L2	All MCs	18	0.0	18	0.0	0.274	9.8	LOS A	0.7	5.3	0.71	0.69	0.71	29.4
11	T1	All MCs	29	3.6	29	3.6	0.274	9.5	LOS A	0.7	5.3	0.71	0.69	0.71	36.0
12	R2	All MCs	107	1.0	107	1.0	0.274	12.2	LOS A	0.7	5.3	0.71	0.69	0.71	29.4
12u	U	All MCs	1	0.0	1	0.0	0.274	13.5	LOS A	0.7	5.3	0.71	0.69	0.71	34.7
Approach			156	1.4	156	1.4	0.274	11.4	LOS A	0.7	5.3	0.71	0.69	0.71	31.3
All Vehicles			1120	3.6	1120	3.6	0.542	7.7	LOS A	2.0	14.5	0.50	0.59	0.50	33.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).

Vehicle movement LOS values are based on average delay per movement.

Intersection and Approach LOS values are based on average delay for all vehicle movements.

Roundabout Capacity Model: SIDRA Standard.

Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).

Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.

Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).

HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

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MOVEMENT SUMMARY

Site: 2PM_BY [GIP_BUR_25_PM_FY_with dev (Site Folder: 2035 PM Future with Dev)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2035 PM Future Network (Network Folder: 2035 Future Network (with dev))]

Gipps Street | Burwood Road
TCS 466
8.00-9.00am (AM Peak)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 88 seconds (Site User-Given Phase Times)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	Aver. Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	91	0.0	91	0.0	0.297	24.2	LOS B	3.4	24.4	0.80	0.71	0.80	26.4
2	T1	All MCs	272	5.4	272	5.4	* 0.978	56.0	LOS D	9.1	66.5	0.94	1.13	1.45	16.9
3	R2	All MCs	52	4.1	52	4.1	0.978	97.0	LOS F	9.1	66.5	1.00	1.30	1.73	25.5
Approach			414	4.1	414	4.1	0.978	54.1	LOS D	9.1	66.5	0.92	1.06	1.35	19.9
East: Gipps Street (E)															
4	L2	All MCs	55	0.0	55	0.0	0.934	76.7	LOS F	15.1	106.4	1.00	1.19	1.47	27.4
5	T1	All MCs	781	0.4	781	0.4	* 0.934	71.1	LOS F	15.1	106.4	1.00	1.19	1.47	31.0
6	R2	All MCs	1	100.0	1	100.0	0.934	126.3	LOS F	15.1	105.9	1.00	1.19	1.47	29.5
Approach			837	0.5	837	0.5	0.934	71.6	LOS F	15.1	106.4	1.00	1.19	1.47	26.7
North: Burwood Road (N)															
7	L2	All MCs	100	0.0	100	0.0	0.588	34.2	LOS C	6.9	50.8	0.91	0.79	0.91	36.9
8	T1	All MCs	212	8.0	212	8.0	0.588	30.0	LOS C	6.9	50.8	0.92	0.79	0.92	16.4
9	R2	All MCs	52	0.0	52	0.0	0.588	55.3	LOS D	1.7	12.2	1.00	0.80	1.09	18.4
Approach			363	4.6	363	4.6	0.588	34.7	LOS C	6.9	50.8	0.93	0.79	0.94	24.9
West: Gipps Street (W)															
10	L2	All MCs	58	0.0	58	0.0	0.516	16.3	LOS B	8.8	61.9	0.62	0.58	0.62	37.1
11	T1	All MCs	741	0.4	741	0.4	0.859	16.0	LOS B	9.1	64.2	0.73	0.73	0.81	43.7
12	R2	All MCs	114	0.9	114	0.9	* 0.859	86.5	LOS F	9.1	64.2	1.00	1.10	1.27	13.0
Approach			913	0.5	913	0.5	0.859	24.8	LOS B	9.1	64.2	0.76	0.77	0.85	40.4
All Vehicles			2526	1.7	2526	1.7	0.978	46.5	LOS D	15.1	106.4	0.89	0.96	1.15	29.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE [Ped	Dist]	Prop. Que	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed

	ped/h	sec		ped	m			sec	m	m/sec
South: Burwood Road (S)										
P1 Full	6	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98
East: Gipps Street (E)										
P2 Full	4	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98
North: Burwood Road (N)										
P3 Full	3	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98
West: Gipps Street (W)										
P4 Full	12	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98
All Pedestrians	25	38.2	LOS D	0.0	0.0	0.93	0.93	204.9	200.0	0.98

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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MOVEMENT SUMMARY

Site: 3PM_BY [PAR_BUR_25_PM_FY_with dev (Site Folder: 2035 PM Future with Dev)]

Output produced by SIDRA INTERSECTION Version: 9.1.6.228

Network: N101 [2035 PM Future Network (Network Folder: 2035 Future Network (with dev))]

Parramatta Road | Burwood Road
TCS 827
7.45-8.45am (AM Peak)
Site Category: (None)
Signals - EQUISAT (Fixed-Time/SCATS) Coordinated Cycle Time = 119 seconds (Site User-Given Phase Times)

Vehicle Movement Performance

Mov ID	Turn	Mov Class	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	Aver. Back Of Queue [Veh. veh	Dist] m	Prop. Que	Eff. Stop Rate	Aver. No. of Cycles	Aver. Speed km/h
South: Burwood Road (S)															
1	L2	All MCs	69	1.5	69	1.5	0.282	40.6	LOS C	4.1	29.1	0.81	0.71	0.81	20.1
2	T1	All MCs	417	4.0	417	4.0	0.709	39.3	LOS C	11.2	83.4	0.93	0.81	0.93	10.8
3	R2	All MCs	12	100.0	12	100.0	* 0.709	61.7	LOS E	11.2	83.4	0.95	0.83	0.96	20.9
Approach			498	5.9	498	5.9	0.709	40.0	LOS C	11.2	83.4	0.91	0.80	0.92	12.6
East: Parramatta Road (E)															
4	L2	All MCs	118	8.9	118	8.9	* 0.526	13.9	LOS A	7.9	57.4	0.42	0.45	0.42	39.6
5	T1	All MCs	1619	3.4	1619	3.4	0.526	6.8	LOS A	7.9	57.4	0.39	0.37	0.39	48.3
Approach			1737	3.8	1737	3.8	0.526	7.3	LOS A	7.9	57.4	0.39	0.38	0.39	47.7
North: Burwood Road (N)															
7	L2	All MCs	124	0.8	124	0.8	0.456	42.3	LOS C	7.1	51.4	0.87	0.77	0.87	21.3
8	T1	All MCs	375	5.6	375	5.6	0.456	36.1	LOS C	7.3	53.4	0.86	0.74	0.86	16.6
Approach			499	4.4	499	4.4	0.456	37.7	LOS C	7.3	53.4	0.86	0.75	0.86	17.9
West: Parramatta Road (W)															
10	L2	All MCs	95	1.1	95	1.1	0.523	13.5	LOS A	7.7	54.6	0.41	0.43	0.41	35.8
11	T1	All MCs	1656	1.5	1656	1.5	0.523	6.7	LOS A	7.7	54.6	0.38	0.36	0.38	48.5
Approach			1751	1.4	1751	1.4	0.523	7.1	LOS A	7.7	54.6	0.38	0.37	0.38	48.1
All Vehicles			4484	3.2	4484	3.2	0.709	14.2	LOS A	11.2	83.4	0.50	0.46	0.50	37.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Override Site Data tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Control Delay: Geometric Delay is included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Green.
Gap-Acceptance Capacity Formula: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

* Critical Movement (Signal Timing)

Pedestrian Movement Performance

Mov ID	Crossing	Dem. Flow ped/h	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Ped ped	Dist] m	Prop. Que	Eff. Stop Rate	Travel Time sec	Travel Dist. m	Aver. Speed m/sec
South: Burwood Road (S)											
P1	Full	23	53.7	LOS E	0.1	0.1	0.95	0.95	220.4	200.0	0.91

East: Parramatta Road (E)										
P2	Full	33	53.7	LOS E	0.1	0.1	0.95	0.95	220.4	200.0	0.91
North: Burwood Road (N)										
P3	Full	14	53.7	LOS E	0.0	0.0	0.95	0.95	220.3	200.0	0.91
West: Parramatta Road (W)										
P4	Full	66	53.8	LOS E	0.2	0.2	0.95	0.95	220.5	200.0	0.91
All Pedestrians		136	53.8	LOS E	0.2	0.2	0.95	0.95	220.4	200.0	0.91

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

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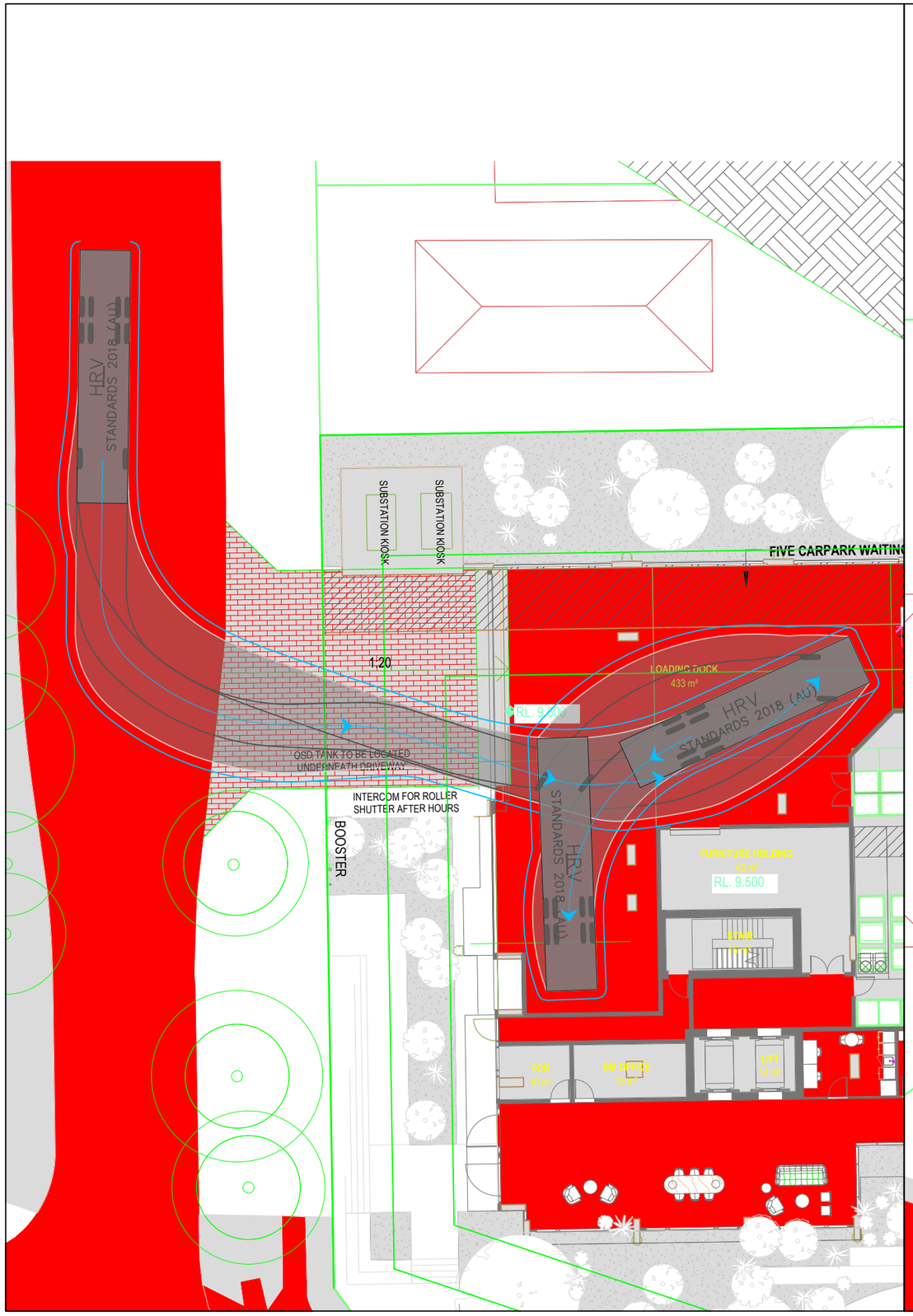
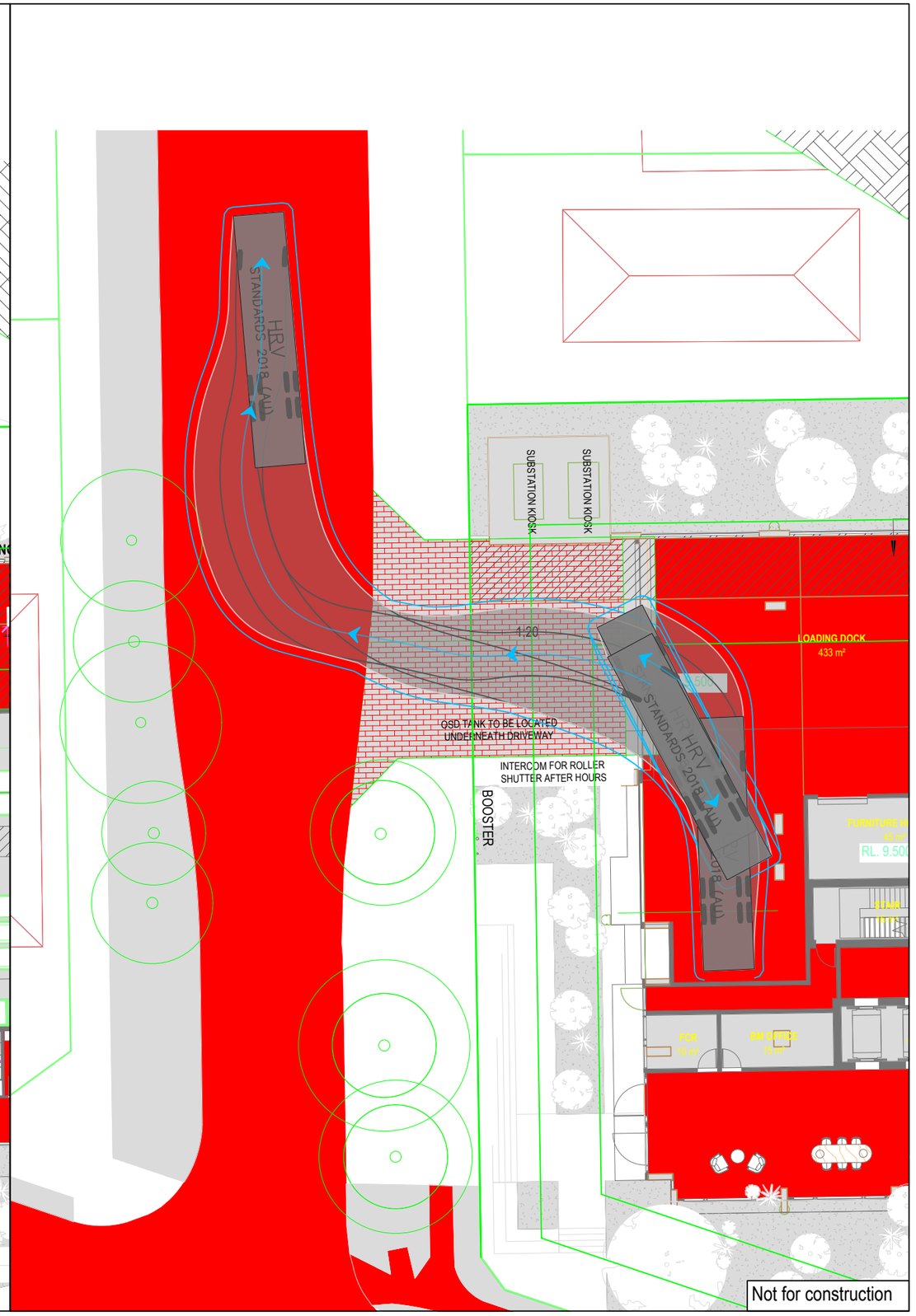
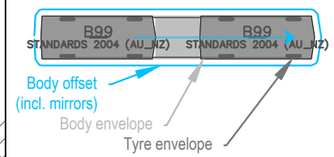
APPENDIX B

SWEPT PATH



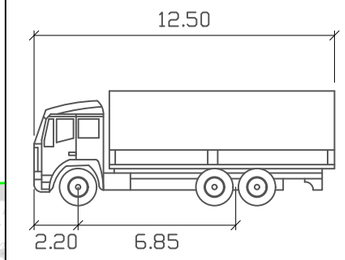


Legend



This swept path assessment is based on:

- 450mm body offset
- Vehicle speed of 5-10km/h
- An HRV



HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.7

When a service vehicle is operating in the loading dock area, the outgoing traffic will be given red light and pause to minimise the conflicts and ensure safety. The loading dock management plan needs to regulate the use of the loading dock. There will be no conflicts between serivce vehicle and incoming traffic.

v	Description	Date
1.0	PRELIMINARY DRAFT	10/12/2025

SCT Consulting

Prepared for: LFD DEVELOPMENTS

Quality information	
Date	12/25
Prepared	S.C
Reviewed	J.B
Authorised	J.B

Scale @ A3

0 2 4

Scale 1:250

Project: Loftus St Concord SSDA

Title: Swept path for HRV entry / exit for BTR

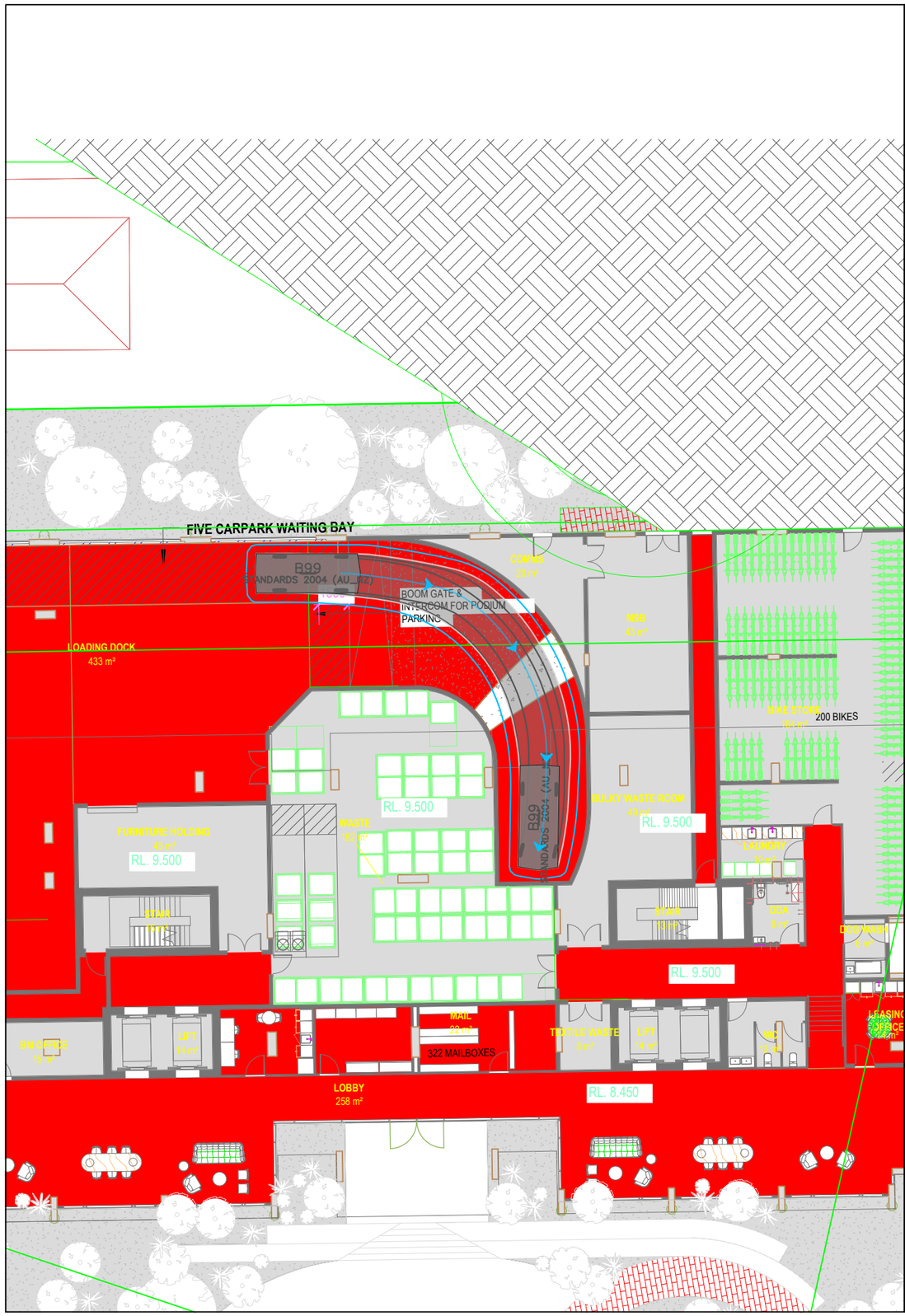
Project Number: SCT_00790_CAD_01

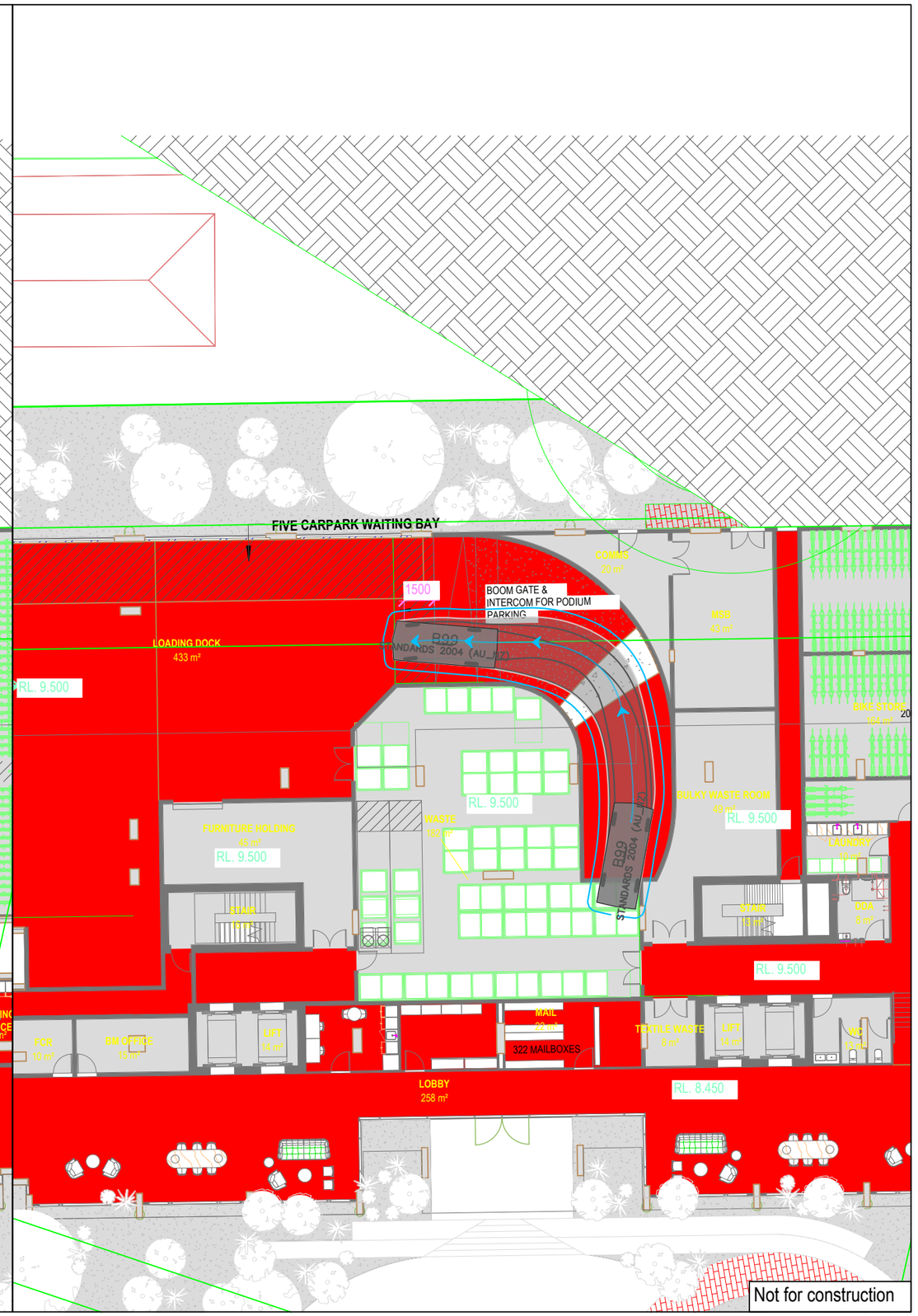
Sheet number: 01

A3

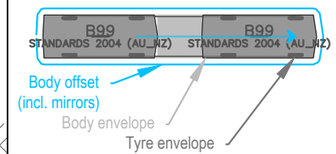
S:\Projects\SCT_00790_Loftus St Concord BTR SSDA\4. Tech Work\5. Engineering\SCT_00790_Loftus St Concord SSDA_SWP_v0.4

XREF DATE | FILE NAME | PROVIDER



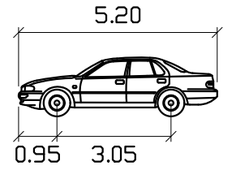


Legend



This swept path assessment is based on:

- 450mm body offset
- Vehicle speed of 5-10km/h
- An B99



B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

Not for construction

Traffic lights will be in place to manage one lane traffic on the ramp.

V	Description	Date
1.0	PRELIMINARY DRAFT	10/12/2025

Prepared for: LFD DEVELOPMENTS

Quality information	
Date	12/25
Prepared	S.C
Reviewed	J.B
Authorised	J.B

Scale @ A3

0 2 4

Scale 1:250

Project: Loftus St Concord SSDA

Title: Swept path for B99 entry / exit for BTR

Project Number: SCT_00790_CAD_01

Sheet number: 01

A3

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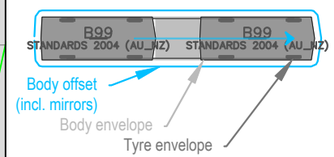
XREF DATE | FILE NAME | PROVIDER

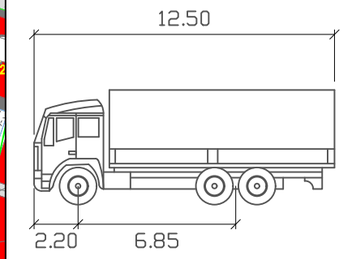
Not for construction

Legend



This swept path assessment is based on:

- 450mm body offset
- Vehicle speed of 5-10km/h
- An HRV



HRV

	meters
Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 36.7

When a service vehicle is operating in the loading dock area, traffic in both directions will be given red light and pause to minimise the conflicts and ensure safety. The loading dock management plan needs to regulate the use of the loading dock.

SCT Consulting

V	Description	Date
1.0	PRELIMINARY DRAFT	10/12/2025

Prepared for: LFD DEVELOPMENTS

Quality information	
Date	12/25
Prepared	S.C
Reviewed	J.B
Authorised	J.B

Scale @ A3

0 2 4

Scale 1:250

Project: Loftus St Concord SSDA

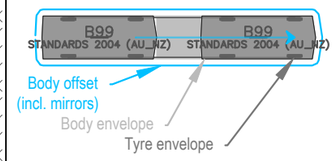
Title: Swept path for HRV entry / exit for BTS

Project Number: SCT_00790_CAD_01

Sheet number: 01

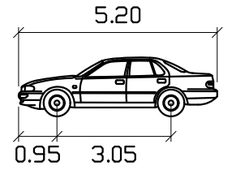
A3

Legend



This swept path assessment is based on:

- 450mm body offset
- Vehicle speed of 5-10km/h
- A B99



B99

	meters
Width	: 1.94
Track	: 1.84
Lock to Lock Time	: 6.0
Steering Angle	: 33.9

V	Description	Date
1.0	PRELIMINARY DRAFT	10/12/2025

SCT Consulting

Prepared for: LFD DEVELOPMENTS

Quality information	
Date	12/25
Prepared	S.C
Reviewed	J.B
Authorised	J.B

Scale @ A3

0 2 4

Scale 1:250

Project: Loftus St Concord SSDA

Title: Swept path for B99 entry / exit for BTS

Project Number: SCT_00790_CAD_01

Sheet number: 01

A3

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XREF DATE | FILE NAME | PROVIDER

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