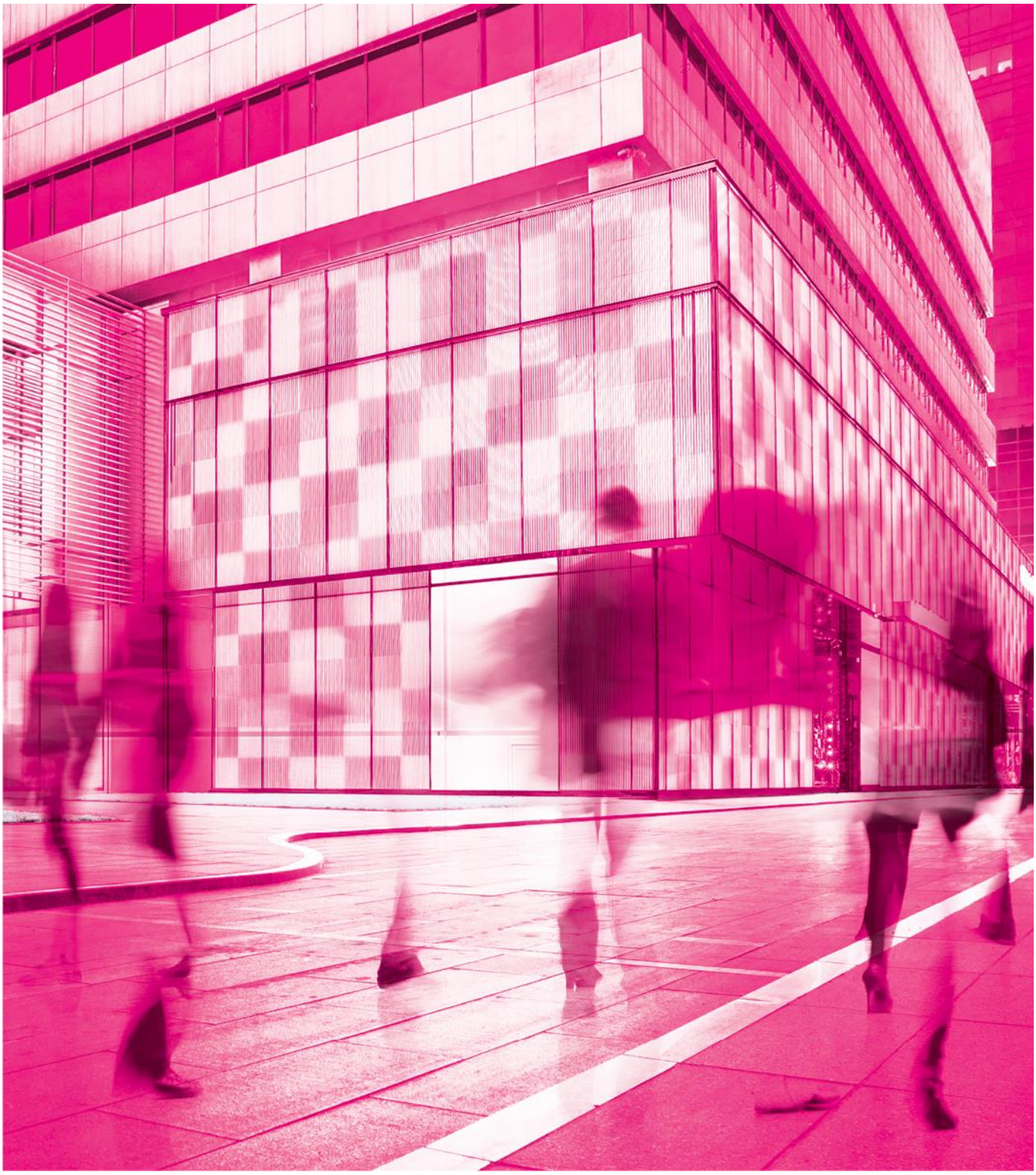

Report;

Edgecliff Centre Transport & Accessibility Impact Assessment

For Longhurst

30 September 2020

parking;
traffic;
civil design;
wayfinding;

ptc.

Document Control

Edgecliff Centre Transport & Accessibility Impact Assessment.

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Contents

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1. Executive Summary

This report presents an assessment of the traffic and parking considerations associated with the proposal to redevelop the Edgecliff Centre in Edgecliff, which forms part of the broader Edgecliff precinct.

By way of context, the overall Edgecliff precinct is located along the southern side of New South Head Road, between Ocean Street and New McLean Street, and was developed in conjunction with the Edgecliff Railway Station. The precinct includes the station, a bus terminal, retail malls, a commercial office tower and residential towers.

It is important to note that the subject development site comprises only the western building (the Edgecliff Centre), which accommodates a retail mall and the commercial office tower. Car parking is also provided in two separate car parks for the retail component and office tenants, while an external loading dock is provided along the southern side of the building.

The retail mall provides an internal connection with the neighbouring building (Eastpoint), which accommodates the railway station, bus terminal and retail mall areas. In many ways, the precinct acts as one destination/facility for the public, however the distinction of the separate buildings is important for the purposes of this assessment.

The proposed development comprises the demolition of the existing building to make way for a building accommodating an improved retail area, a reduced commercial office area and residential apartments.

The building currently accommodates 254 parking spaces for the retail and commercial components, which generate traffic commensurate with these uses. The planning and design of the proposed development has been established with the aim of limiting the traffic activity so that it does not exceed the current number of traffic movements during the morning and afternoon peak periods. This has been achieved through a reduction in the commercial area car parking spaces, and the addition of residential apartments, which are a lower traffic generator.

The proposed parking provision satisfies the requirements of the planning controls and the demand for parking (based on data collected from the existing building), while providing a cap on the traffic activity. This approach is consistent with the design principles of a Transport Orientated Development (TOD) and focuses travel to/from the site on the existing transport infrastructure (railway station and bus terminal) located within the adjacent building. It is noted that the proposed building design includes improvements in the pedestrian connection with the station and the adjoining building as well as improved inter-modal connections and enhanced station entry legibility of the interchange.

The design of the car park involves a single entry/exit within the southern boundary, which removes the existing driveway in close proximity to the New South Head Road intersection, which will reduce the impact of vehicles slowing to manoeuvre into the carpark, which is currently occurring at the site.

It is in this context that the proposed development is consistent with the existing quantum of peak hour traffic, while the change in land-uses improves the distribution of arrivals and departures and the removal of the existing western driveway removes a point of friction in close proximity to New South Head Road. The accumulation of these factors provides an improvement of the proposed redevelopment to the current traffic situation.

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2. Introduction

2.1 Project Summary

ptc. has been engaged by Longhurst Investments No.1 Pty Ltd to prepare a Transport & Accessibility Impact Assessment to accompany a Planning Proposal for the future redevelopment of the Edgecliff Centre at 203-233 New South Head Road in Edgecliff.

The future redevelopment of the existing shopping centre and commercial building will include a residential component and an upgrade of the commercial and retail component. Currently, the Edgecliff Centre includes a two-storey car park, which accommodates 254 parking spaces, whilst, the planning is to incorporate 301 car spaces within the future redevelopment in response to the change in land-uses and proposed yields.

In order to facilitate the future redevelopment of the site for the intended purpose, the planning seeks to:

- Increase the maximum Height of Buildings development standard; and
- Increase the maximum Floor Space Ratio development standard.

As part of the assessment, the proposed development yield for each land-use and the associated parking provision has been determined with regard to the potential impacts on the surrounding road network in a transport and parking context.

The location of the Edgecliff Centre is illustrated in Figure 1.

Figure 1 – Site Location (Source: Google Maps)

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2.2 Purpose of this Report

This report presents the following considerations in relation to the Transport & Accessibility Assessment of the Proposal:

Section 2	Introduction;
Section 3	A description of the project proposal;
Section 4	A description of the road network serving the development property, and existing transport facilities;
Section 5	Transport and Accessibility Assessment;
Section 6	Assessment of the proposed parking provision in the context of the relevant planning control requirements;
Section 7	Determination of the existing traffic volumes at the key local intersections, traffic activity associated with the planning proposal, and the adequacy of the surrounding road network;
Section 8	Assessment of the proposed car park layout, vehicular access and internal circulation arrangements in relation to compliance with the relevant standards, and Council policies; and
Section 9	Conclusion.

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3. Proposal

3.1 Project Site

The Edgecliff Centre is located within the core of Edgecliff local centre which is predominantly zoned B2 Local Centre zone. The surrounds are predominantly B4 (Mixed Use), while R2 (Low Density Residential) and R3 (Medium Density Residential) zones lie within the close proximity. There is a larger B2 zone to the east, and a few RE1 (Public Recreation) zones within the vicinity. This is presented in Figure 2.

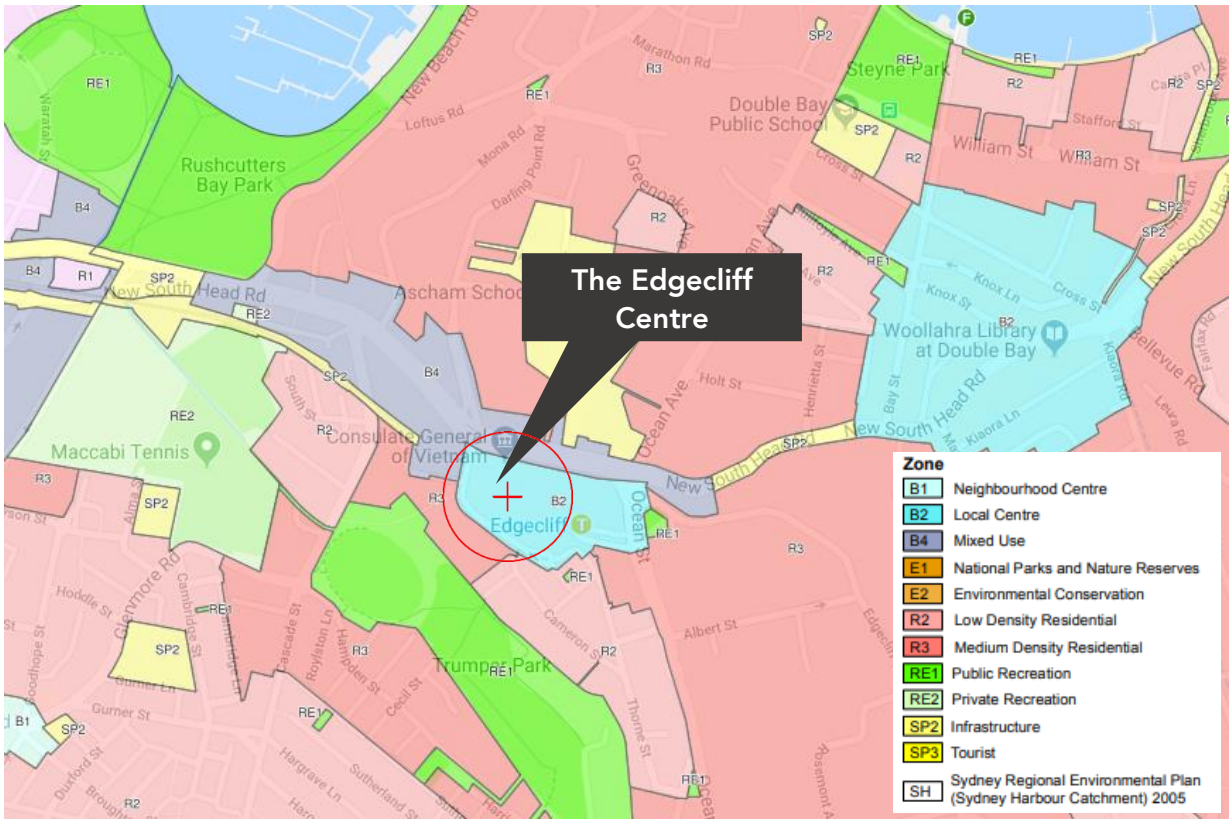

Figure 2 – Land Zoning (Source: NSW Planning Viewer)

The Edgecliff Centre is identified as Lot 203 in Deposited Plan 1113922 and has an approximate site area of 4,900m^2 with frontages along New South Head Road and New McLean Street. These are presented below in Figure 3 and Figure 4, respectively. An aerial view of the site is provided in Figure 5.

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Figure 3 – New South Head Road frontage (Source: Google Maps 2017)

Figure 4 – New McLean Street frontage (Source: Google Maps 2017)

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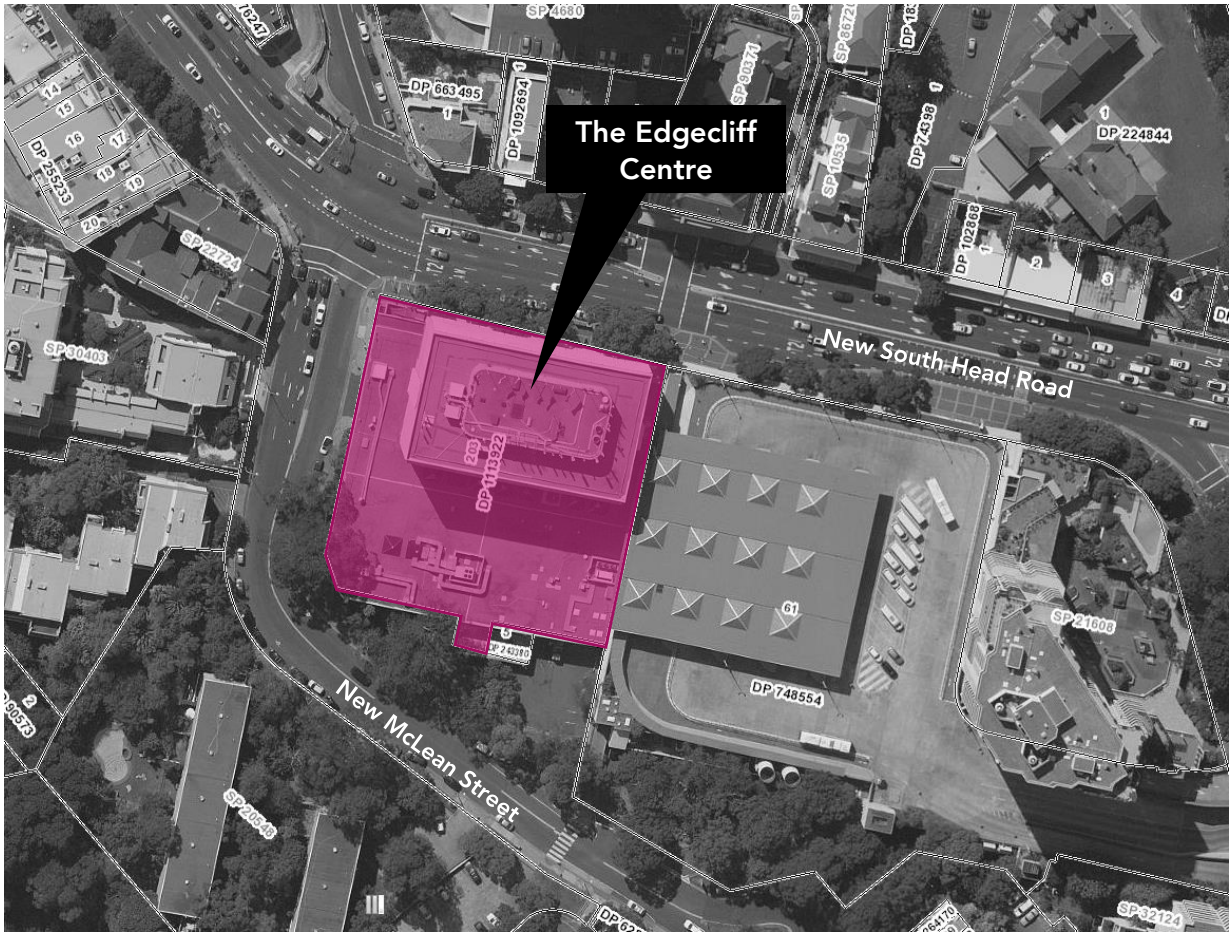

Figure 5 – Aerial View of Subject Site (Source: SIX Maps)

3.2 Planning Proposal

The existing Edgecliff Centre currently includes retail component (a shopping centre), commercial component and medical consulting services with a provision of 254 car spaces (141 car spaces for commercial / offices tenant use and 113 car spaces for retail / medical customer use) within two (2) basement levels.

The purpose of this Planning Proposal is to amend the existing Height of Buildings and Floor Space Ratio (FSR) development standards applicable for this site, in order to facilitate a fully integrated, mixed-use transit-oriented development for the site.

The planning proposal is supported by an indicative development concept. The concept is indicative only and has been prepared for the sole purpose of demonstrating that the planning proposal can deliver a viable scheme within the amended controls being proposed.

The proposal will accommodate a mixed-use podium containing retail, medical and office uses and a residential tower up to a height of RL 195 (167.01M), with an overall gross floor area of approximately 44,190m^2.

The indicative development scheme includes:

- 5,414m^2 of commercial GFA;
- 7,143m^2 of retail GFA;

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- 3092m^2 of medical/wellness GFA; and
- 28,541m^2 of residential (with 235 - 268 residential apartments) which includes:
  - 21 Studios
  - 85 × one-bedroom Units
  - 102 × two-bedroom Units
  - 60 × three-bedroom Units
- Eight levels of basement car parking with capacity for 301 vehicles accessing from the south of the site via New McLean Street which includes:
  - 117 Car spaces for commercial, retail and medical/wellness facilities; and
  - 184 car spaces for residential units
- Revitalisation and enhancement of the existing intermodal and transport interchange within the site;
- Introduction of public community space and open space at podium level; and
- Public domain improvements at ground level including a new plaza and permeable transit interchange entry way.

One of key constraints of the site involves the surrounding road network and access by car. A scenario analysis of the proposed yields in the context of parking and traffic has been undertaken to determine the scale of redevelopment which can be accommodated within the local road network. This has been achieved through the balancing of the proposed land-uses having regard for the differing peak periods of activity. It is also relevant that the site is located above Edgecliff Station, therefore comprising a Transit Oriented Development[1] (TOD).

3.2.1 Proposed access arrangement

The proposed access arrangement consists a separate entry and exit driveway off New McLean Street. A figure showing the proposed access arrangements is as below:

[1] The Property Council of Australia describes TODs as "*high-density, mixed-use projects that are adjacent to, or integrated with, public transport. They are typically master-planned to create interfaces with transport infrastructure and can help to revitalise under-utilised precincts while bringing economic and social benefits to the wider community.*"

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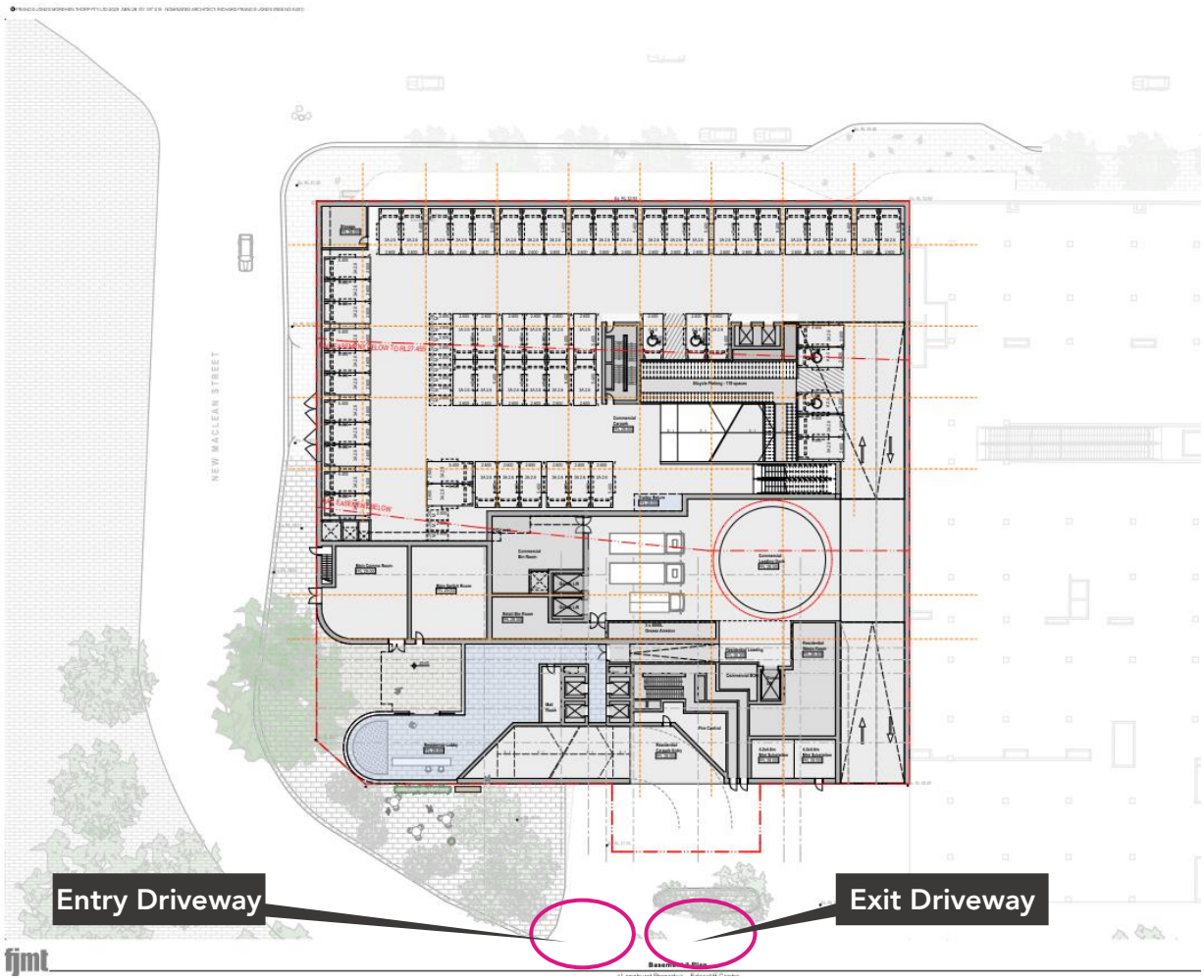

Figure 6 – Proposed Vehicular Access Arrangement (Source: FJMT Architects)

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4. Existing Transport Facilities

4.1 Road Hierarchy

The Edgecliff Centre is located in the suburb of Edgecliff and is primary serviced by New South Head Road (a State Road) to the north and Ocean Street (a Regional Road) to the east. New McLean Street is a local road which runs along the western boundary of the site.

A summary of the key roads serving the Edgecliff Centre is presented in Figure 7 and the following tables.

Figure 7 – Surrounding Road Network (Source: RMS Road Hierarchy)

The NSW administrative road hierarchy comprises the following road classifications, which align with the generic road hierarchy as follows:

State Roads - Freeways and Primary Arterials (RMS managed)

Regional Roads - Secondary or Sub Arterials (Council managed, partly funded by the State)

Local Roads - Collector and Local Access Roads (Council managed)

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Table 1 – New South Head Road (Eastbound)

New South Head Road	
Road Classification	State Road
Alignment	East - West
Number of Lanes	Varies, typically 3 lanes in each direction, including a T2 Transit lane on either side of the carriageway
Carriageway Type	Divided
Carriageway Width	18m
Speed Limit	60km/h
School Zone	Yes
Parking Controls	Eastbound kerbside lane: Clearway 6am-7pm (Mon-Fri), Clearway 9am-6pm (Sat-Sun), Bus Zones & Taxi Zone
Forms Site Frontage	Yes

Figure 8 – New South Head Road (Eastbound towards New McLean Street)

Table 2 – Ocean Street (Southbound)

Ocean Street	
Road Classification	Regional Road
Alignment	North - South
Number of Lanes	Varies, typically 1 lane in each direction, parking lanes on both sides. Road widens to three lanes within the vicinity of the site
Carriageway Type	Divided
Carriageway Width	Varies, 12m in section with 1 lane in each direction plus parking lanes. Approximately 21m in widest section near the site
Speed Limit	50km/h
School Zone	No
Parking Controls	No parking in the close proximity of the site, Generally 2P 8:00am – 6pm (Mon-Fri) where parking available
Forms Site Frontage	No

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Figure 9 – Ocean Street (Southbound towards High Street)

Table 3 – New McLean Street (Northbound)

New McLean Street	
Road Classification	Local Road
Alignment	North – South
Number of Lanes	1 lane in each direction, parking lanes on both sides
Carriageway Type	Divided
Carriageway Width	15m
Speed Limit	50km/h
School Zone	No
Parking Controls	1P 8:30am – 6pm (Mon-Fri), 8:30am – 12:30pm (Sat)
Forms Site Frontage	Yes

Figure 10 – New McLean Street (Northbound towards New South Head Road)

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4.2 Key Intersections

The key intersections within the vicinity of the site are identified as follows:

- New South Head Road / Mona Road – 3 arm signalised intersection
- New South Head Road Signalised Pedestrian Crossing
- New South Head Road / Darling Point Road / New McLean Street – 4 arm signalised intersection
- New South Head Road / Ocean Street / Ocean Avenue– 4 arm signalised intersection

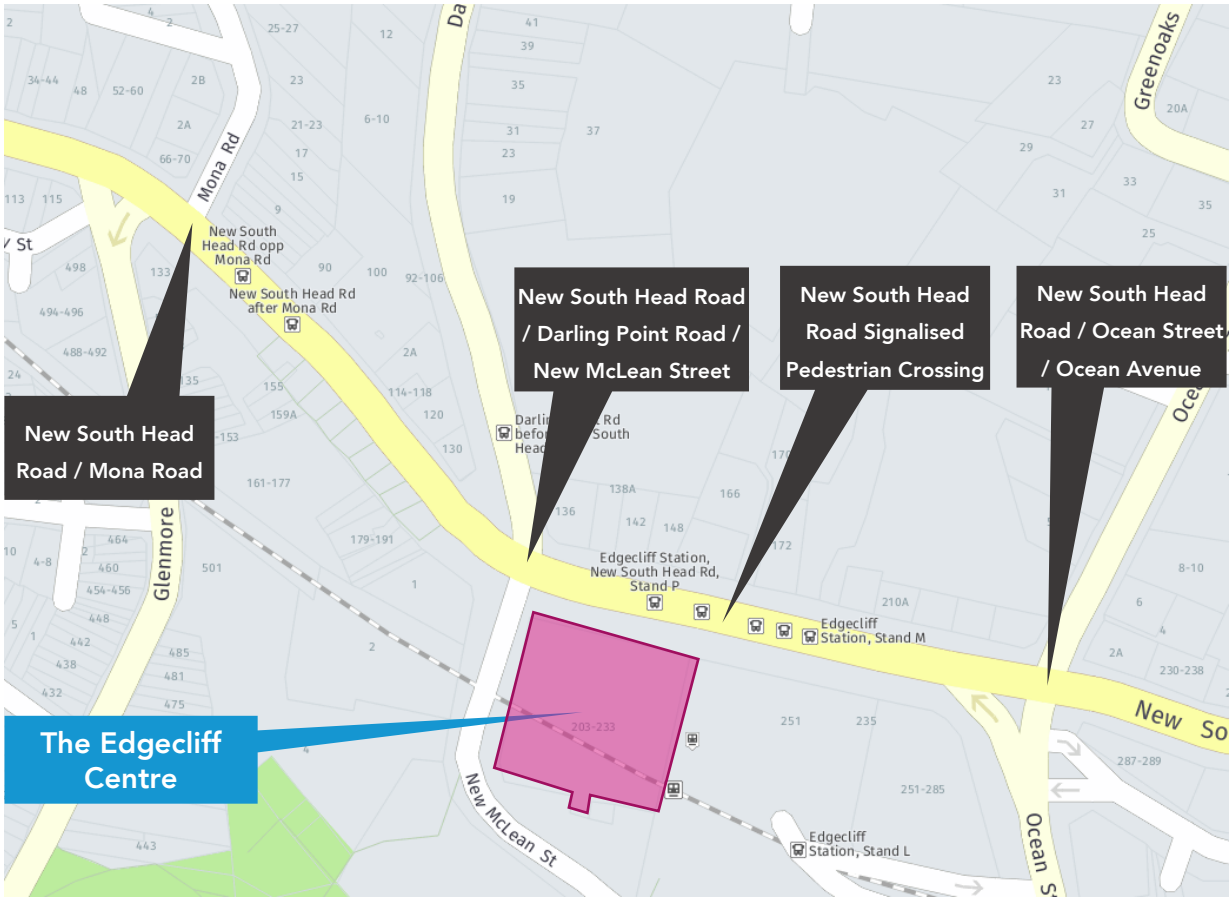

Figure 11 – Key Intersections

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4.3 Public Transport

The locality has been assessed in the context of available forms of public transport that may be utilised by prospective tenants, staff customers and visitors. When defining accessibility, the *NSW Planning Guidelines for Walking & Cycling (2004)* suggests that 400m-800m is a comfortable walking distance.

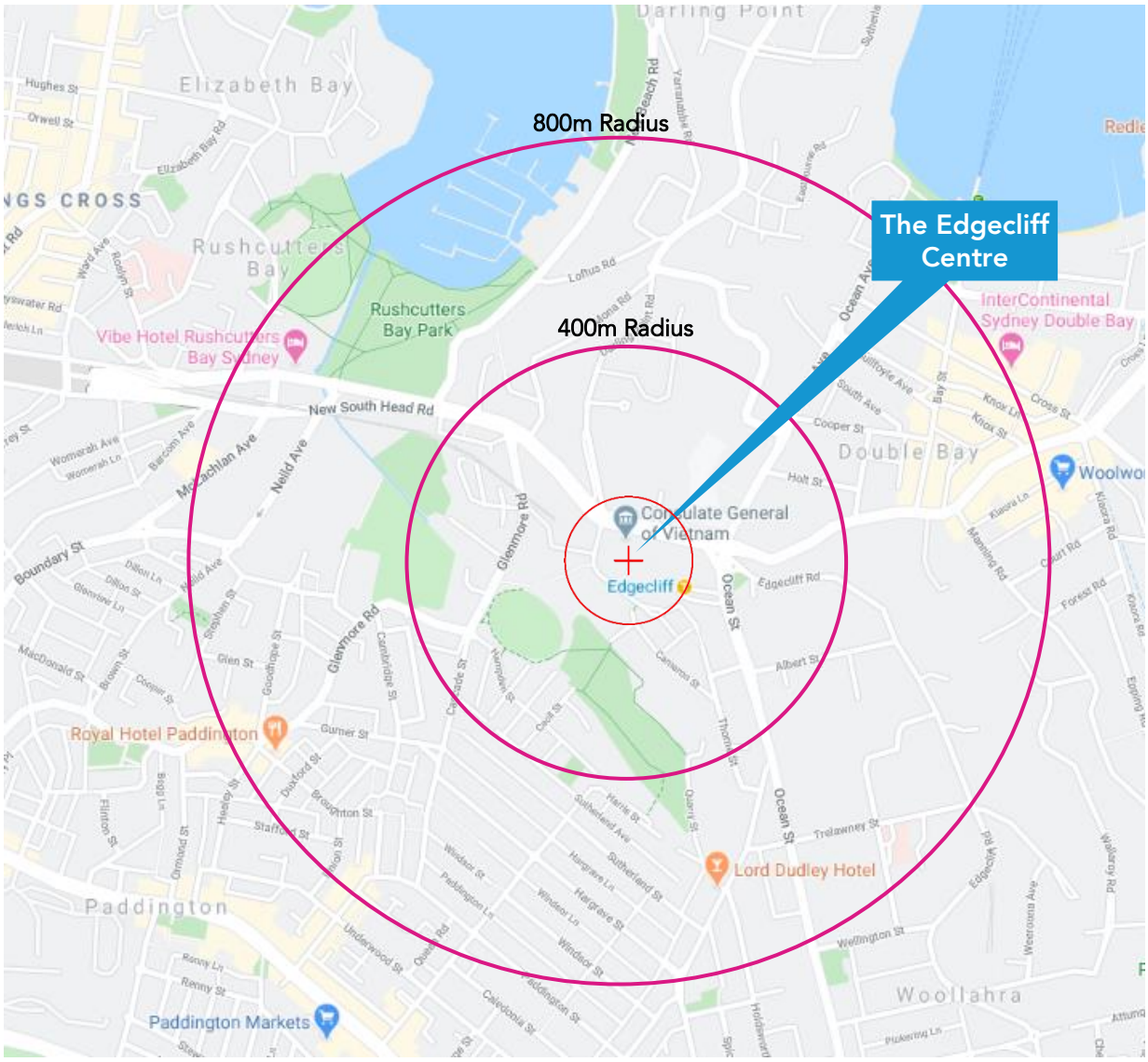

Figure 12 – 400m and 800m radius of the subject site

4.3.1 Train Services

Edgecliff Station is located beneath the Edgecliff Centre; the close proximity to the station makes travel by train a convenient transport option. Edgecliff Station is served by the T4 Eastern Suburbs & Illawarra Line with services operating approximately every 3-5 minutes during the weekdays and every 5-10 minutes during the weekends.

It is noted that Edgecliff Station is three stops away (approximately 8-minute train ride) from Town Hall Station which is served by the T1 North Shore & Western Line, T2 Inner West & Leppington Line, T3 Bankstown Line, T4 Eastern Suburbs & Illawarra Line, and the T8 Airport & South Line. As such, Edgecliff Station provides a

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convenient connection to the wider Sydney Trains Network, thus providing visitors and staff with a very high level of accessibility to and from the site.

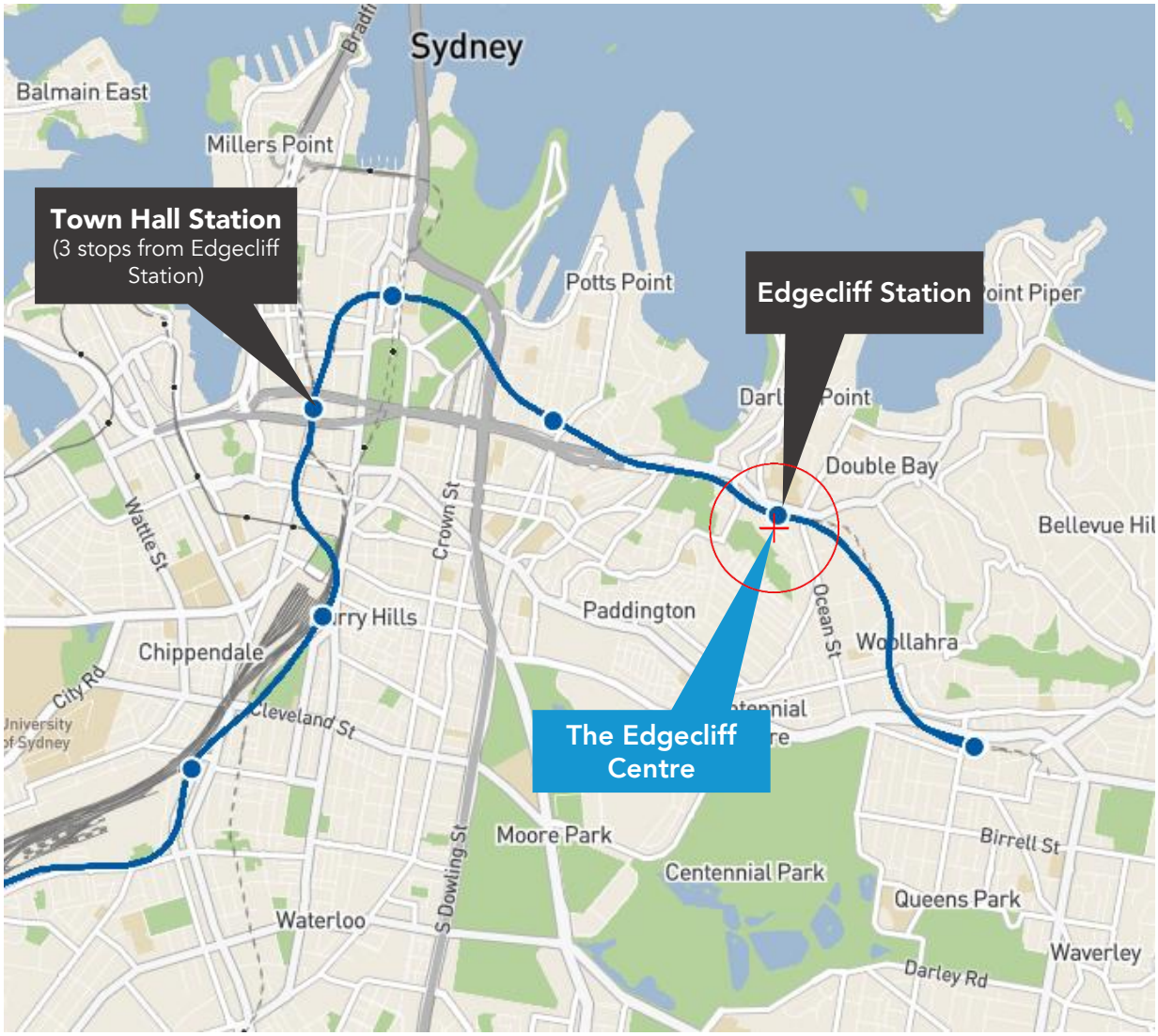

Figure 13 – T4 Eastern Suburbs & Illawarra Line Station Map

4.3.2 Sydney Metro West

The Sydney Metro West is proposed as a future metro line in Sydney, connecting Sydney CBD and Westmead. This metro line is proposed to run parallel to existing main Western Line railways. This is a future connection which will set up more network connectivity to the west from the site.

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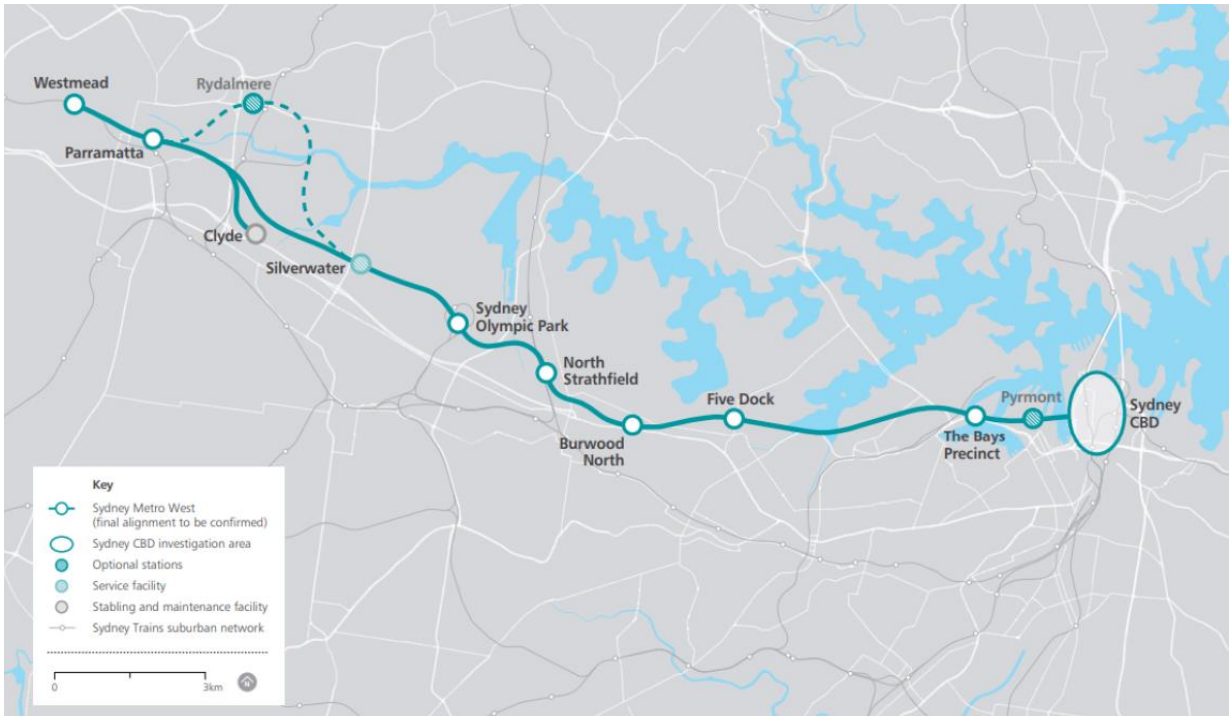

Figure 14 – Futture Sydeney West Metro Line Station Map

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4.3.3 Bus Services

The Edgecliff Centre is also well serviced by numerous bus services within the bus interchange located above Edgecliff Station as well as on New South Head Road near the Edgecliff Station entry. A summary of the nearby bus routes and their coverage is presented in Table 4 and the bus routes servicing the site are illustrated in Figure 15.

Table 4 – Bus Routes servicing the area

Route	Coverage	Frequency (approximate)
200	Chatswood to Bondi Junction	Mon-Fri: Every 20-30 minutes Sat-Sun: No services operating
323	North Bondi to Edgecliff via New South Head Rd	Mon-Fri: Every 20 minutes (PM peak only) Sat-Sun: No services operating
324	Walsh Bay to Watsons Bay via Old South Head Rd	Mon-Fri: Every 10-15 minutes (peak), every 30 minutes (off-peak) Sat-Sun: Every 20 minutes
325	Walsh Bay to Watsons Bay via Vaucluse Rd	Mon-Fri: Every 30 minutes Sat-Sun: Every 30 minutes
326	Edgecliff to Bondi Junction via Bellevue Hill	Mon-Fri: Every 30 minutes (peak), every 60 minutes (off-peak) Sat-Sun: Every 60 minutes
327	Edgecliff to Bondi Junction via Manning Rd & Bellevue Rd	Mon-Fri: Every 30 minutes (peak), every 60 minutes (off-peak) Sat-Sun: Every 60 minutes
328	Bondi Junction to Darling Point via Edgecliff (Loop Service)	Mon-Fri: Every 60 minutes (afternoon and evening only) Sat-Sun: Every 60 minutes
L24	Vaucluse to City Wynyard (Limited Stops)	Mon-Fri: 2 services only in the morning
N91	Bondi Junction to Macquarie Park via City Town Hall	Mon-Thurs: 1 service only in the afternoon Friday: 3 services only in the afternoon Sat: 3 services only in the afternoon Sun: 4 services only in the afternoon

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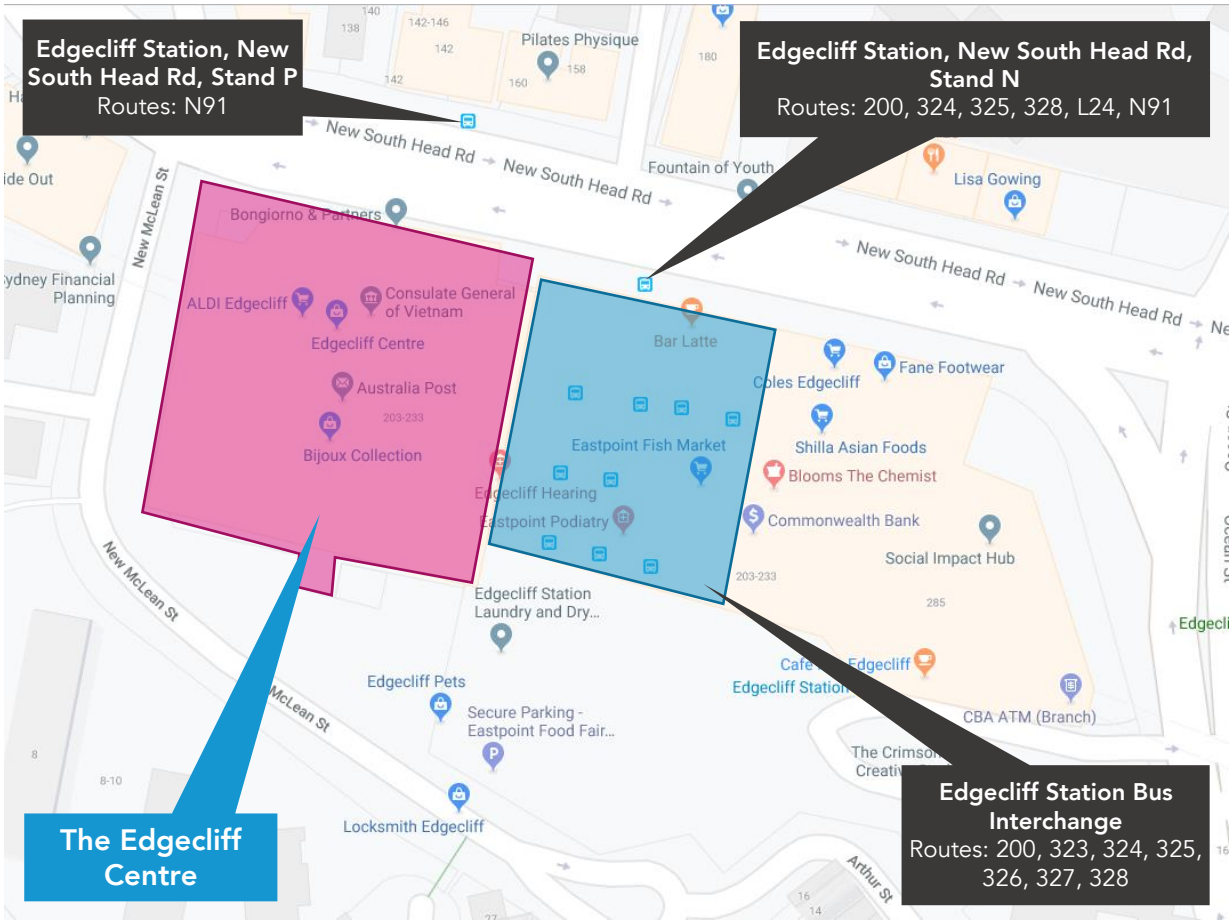

Figure 15 – Nearby Bus Routes (Source: TfNSW, 2019)

4.4 Active Transport

The locality was reviewed for features that would attract active transport trips (walking and cycling), with reference to the NSW Guidelines for Walking and Cycling (2004).

4.4.1 Cycling Infrastructure

A review of the local cycling infrastructure has been undertaken to determine the overall accessibility of the Edgecliff Centre by active transport. Figure 16 presents the existing bicycle routes within the surrounding area. The site is well serviced by both the main bicycle routes and the local bicycle routes, providing access to the city and the surrounding eastern suburbs. Based on the review of the cycling infrastructure, the site is considered to be well served by the nearby cycleways.

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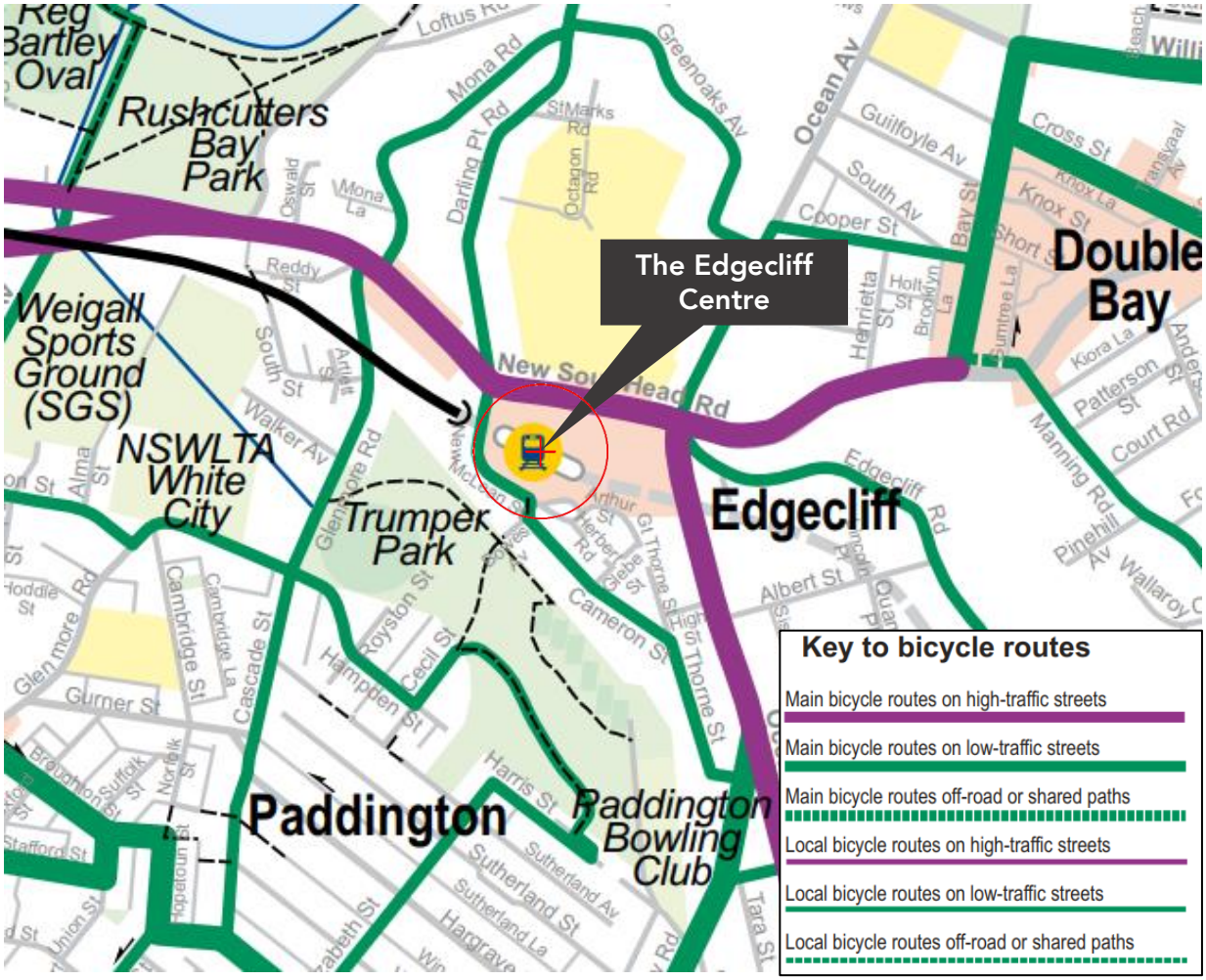

Figure 16 – Local Cycling Network (Source: Cycling in Waverley & Woollahra)

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4.4.2 Pedestrian Facilities

In terms of pedestrian infrastructure, footpaths are generally provided on both sides on all nearby streets. Signalised pedestrian crossings are provided at the major intersections of New South Head Road / New McLean Street and New South Head Road / Ocean Street.

It is acknowledged that the New South Head Road /New McLean Street intersection only has pedestrian crossings connecting the east and western sides of New McLean Street. Pedestrians wishing to cross New South Head Road are able to do so by using the mid-block crossing in front of the Edgecliff Centre (see Figure 17). Alternatively, pedestrians may cross at the New South Head Road / Ocean Street intersection which has pedestrian crossings on all four approach arms.

Figure 17 – Mid-block Pedestrian Crossing on New South Head Road in front of the Edgecliff Centre (Source: Google Maps, 2017)

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5. Transport and Accessibility Assessment

5.1 Transit Orientated Development (TOD)

A Transit Oriented Development is a type of development that includes mixes of residential, commercial, retail, leisure and civic uses within close proximity. The prominent feature of TODs is access to public transport facilities within a walkable distance, highest priority for walkable design and pedestrian infrastructure along with reduced and managed parking.

The Edgecliff Centre provides a mix of uses and is within close proximity of train and bus services which can be easily accessed by walking (internally). Design priority of the indicative scheme has been given to walking / pedestrian experience with the introduction of significant improvements to the expansion of the public domain and connection of the building and transport node to the local site network. This makes the centre both transit-oriented (people transit through the centre to connect with public transport) and a destination that can be accessed by public transport, meaning that the dependence on private vehicle is greatly reduced.

5.2 Planning Policies and Benchmarking

Development Control Plans have historically been set up to respond to parking demands generated by private developments. However, it could be argued that this approach to parking is not applicable for town centres with constrained parking, heavy traffic conditions and direct access to a wide range of public transport. It appears that the Woollahra Council DCP does not take into consideration such circumstances. In comparison, many other DCPs and planning strategies do provide restrictions over the parking provision and the setting of maximum parking provisions is now common within inner city areas.

Woollahra Council's Environmental Sustainability Action Plan 2013-2025 sets out a number of actions on enabling sustainable transport options including the use of public transport. As described in Section 4.3, the site is collocated as part of a public transport hub and in an area supported by social infrastructure. This provides employment and services, which reduces pressure on the road network and makes the living environment more attractive, in line with the Plan's directives.

Reference is made to the Environmental Planning Committee dated 28th October 2019, during which Council presented the Draft Woollahra Integrated Transport Strategy (ITS). Council states that one of the targets is to reduce the car usage by 10% by 2026 and instead increase the use of public and active transport modes. The draft ITS *"outlines how Council's vision will be delivered through four (4) key transport themes: Access and Mobility; Public Transport; Active Transport; Roads, Parking and Delivery, in which Council is planning to develop a Parking Action Plan."* A short term goal for the Parking Action Plan is to *"Put a cap on the number of car parking spaces per dwelling and for other land uses (rather than having a minimum number required)."*

It is noted that the current parking provision rates applicable to the non-residential components of the development are reasonably high and represent a minimum requirement, which follows the policy applied to off-centre/out-of-town development and is not representative of a TOD scenario.

In terms of transport characteristics, the Edgecliff Centre is comparable to the Greenwood Plaza in North Sydney, both being well serviced by bus and train stations and located within the close proximity to those public transport options. However, the maximum car parking rates for commercial, retail and medical uses within North Sydney is 1 space per 400m^2. This compares to the Edgecliff centre car parking rates (refer to Section 6.2.2) which range from 1 space per 66m^2 to 33m^2 (up to 12 times the North Sydney rate). In

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addition, the North Sydney Council DCP stipulates the car parking rates for supermarkets and medical centres within Milson Point and St Leonards, as 1 space per 400m^2, which is much lower than the Woollahra City Council rate for Edgecliff Centre. In this regard, the Planning Proposal seeks a reduced parking provision on the basis of the TOD characteristics of the site. This is described fully in Section 6.

5.3 Traffic Generation and Parking Provision

Traffic activity has a direct connection to the parking provision within (and in the vicinity of) a development site. The site is located adjacent to an arterial road, which carries a large traffic volume during the peak commuter periods, and is therefore subject to congested conditions during these periods. Given the sensitivity of the road network, it has been an important element of the proposal that the traffic generation outcomes should retain the current traffic activity associated with the site, or in other words, in no way worsen the performance of the surrounding intersections. In this regard, the development yields and the proposed parking provision (which will be defined in the subsequent Development Application) have been determined to retain the current peak hour traffic generation, albeit the distribution of entry and exit movements is subject to change in line with the new residential component proposed within the development (i.e., the residential component has more outbound trips in the morning, whereas the commercial component has more inbound trips in the morning, and vice versa for the evening trips).

5.3.1 On-street Parking Provision

A high-level review of the existing on-street parking restrictions within the 200 metres of the Edgecliff centre shows that most of the parking spaces available near the site are restricted to 2 hours.

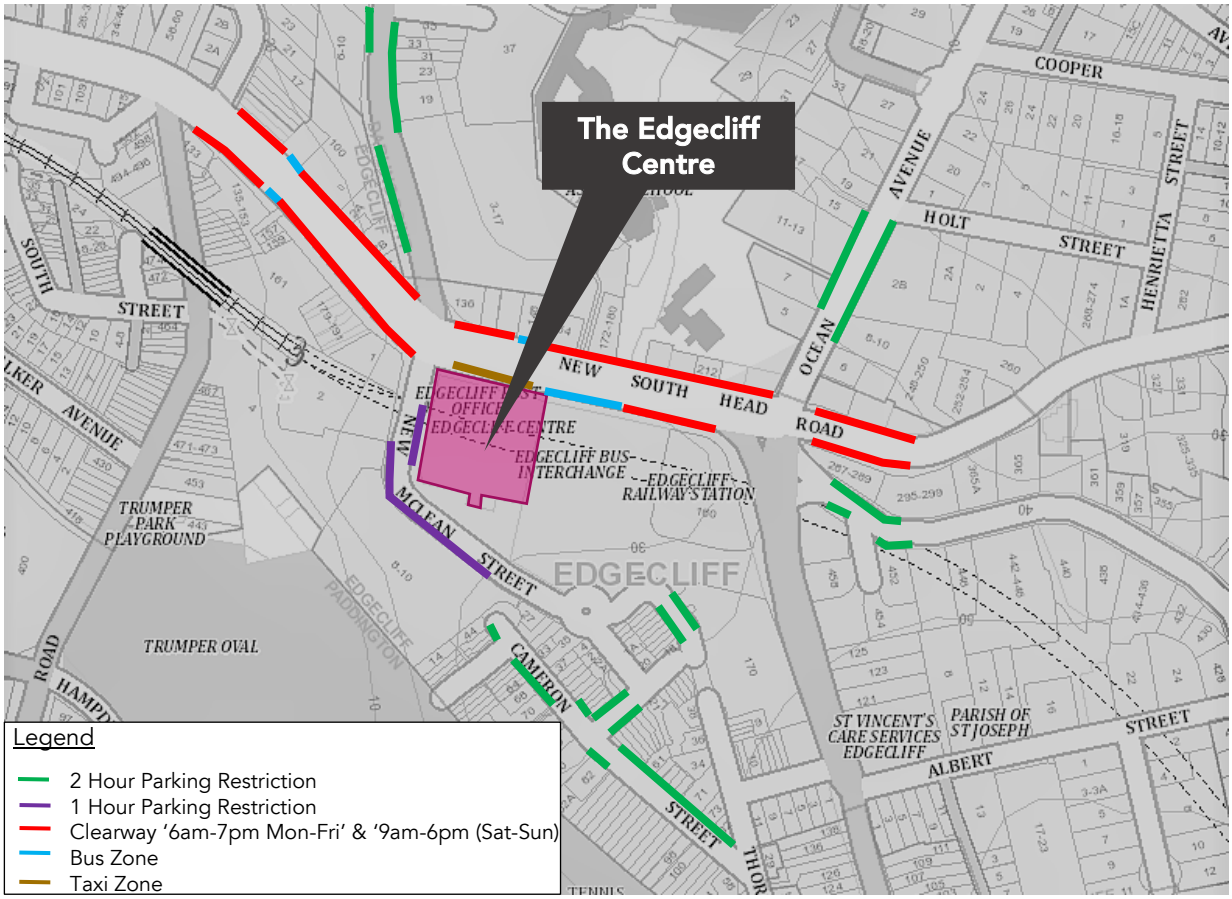

Figure 18 – Traffic Volume during Saturday Peak Hour – Existing Situation

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New South Head Road is mostly a clearway between 6am – 7pm (Mon-Fri) and 9am – 6pm (Sat-Sun) and the parking along Mc Lean Street is restricted to 1 hour. This shows that there is only limited on-street parking available in the close proximity of the site and it is therefore unlikely that additional traffic beyond the on-site parking availability will be generated. The parking provisions are shown in Figure 18 below.

5.4 Public Transport

As discussed in Section 4.3 of this report, The NSW Planning Guidelines for Walking and Cycling (2004) suggests a distance of 800m is a walkable catchment to public transport links. As shown, the site is well serviced by buses and trains that operate within less than 100m walking distance of the site, providing public transport links to the greater Sydney area.

The provision of access to public transport, that the site provides, should encourage users of the site to minimise their reliance on private car usage.

5.5 Active Transport

The major intention behind the regeneration of the Edgecliff Centre is to improve the interface between rail and bus, whilst, creating a sustainable and connected precinct for wider community. This is possible with the provision of the public accessible green space, generous public plaza, volumetric entryway improving the stations legibility and access and a key vertical transportation link unlocking the restrictions around inter-modal connection. The pubic accessible open green space is proposed to be an extension of the existing public domain adjacent to the bus terminal with key connections for pedestrians from the bus terminal with key connections for pedestrians from the bus terminal to the rail concourse. It will provide connectivity synergies with all transport uses on the site. The new volumetric entryway along New South Head Road linking with intermodal vertical connection points will help pedestrians to identify the transport options as well as provide key connections from the local street network into the Edgecliff Station and Bus Terminal. The proposal of incorporating escalators within the plaza will provide this Vertical Inter-modal Transport Link between rail and bus further ingraining the transport links for the community and provide a significantly improved user experience from the current condition. The proposed enhanced infrastructure along with the well facilitated existing pedestrian footpaths and pedestrian crossings (as discussed in Section 4.4), increases the possibility of accessing the site by walking.

As set out in Section 4.4.1 of this report, the site is serviced by strategic on road cycle links, which provides access to the cycle network within Edgecliff, Bondi Junction, Kings Cross and the greater Sydney area.

5.6 Carpooling and Car Share

With the recent trend on increased use of car share such as GoGet and Uber, and carpooling, it is seen that the reliance on private vehicles has been decreasing.

The Woollahra Council DCP states that *'Each car share space has a potential to replace a maximum of 4 regular car parking spaces.'*

Similarly, GoGet mentions that *'The study for car share in Australia found for each car used by 20 members, 10 private cars were removed.'*

Carpooling is another way of reducing the number of private vehicle / trips. With a proper management, the staff working within a same organisation, can be encouraged to carpool.

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5.7 Summary

Based on the surrounding road network and site constraints, in addition to the proposed improvements to the intermodal transport connection, it is more likely that the employees / staff and customers / visitors will rely on buses and trains to travel to Edgecliff Centre.

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6. Car Parking Assessment

6.1 Planning Policy

The potential development is subject to the parking provision rates stipulated in the following planning documents:

- Woollahra Development Control Plan 2015 (DCP)
- Road and Maritime Services (RMS) Guide to Trip Generating Developments 2002 (RMS Guide)
- Disability Standards 2010

6.2 Car Parking

As outlined in Section 3.2 an indicative scheme has been prepared as part of the planning proposal which outlines an apartment range. This report has taken an assumption for the apartment mix with 268 apartments being:

- 268 residential units which includes:
  - 21 Studios
  - 102 two-bedroom units
  - 85 one-bedroom units
  - 60 three-bedroom units
- 5,414m^2 commercial GFA
- 7143m^2 retail GFA
- 3,092m^2 medical / wellness GFA

The details of the car parking requirements are discussed in the following sections.

6.2.1 Residential Car Parking

Applying the relevant rates from the DCP to the potential development results in the following requirements as summarised in Table 5 for residential use.

Table 5 – Car Parking Requirement and Provision for Residential Use

Use	No. of units	DCP Parking Rate (max)	Max Allowable Parking[2]	Proposed Parking Provision
Studio	21 units	0.5 space per unit	11	
1 - bedroom	85 units	0.5 space per unit	43	
2 - bedroom	102 units	1 space per unit	102	184
3 - bedroom	60 units	1.5 space per unit	90	
Visitor	268 units	0.2 space per unit	54	
		Total (Residential)	**300**	**184**

The DCP sets a maximum allowance of 300 car spaces. The indicative scheme proposes 184 car spaces, which is less than the maximum allowance and is therefore compliant with the DCP requirement.

[2] The parking numbers rounded up to the nearest whole number according to the DCP

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6.2.2 Non-residential Car Parking

Applying the relevant rates from the Council's DCP to the potential development results in the following requirements as summarised in Table 6 for non-residential use.

Table 6 – Car Parking Requirement and Provision for Non-Residential Use

Use	GFA	DCP Parking Rate (min)	Parking Multiplier[3]	Minimum Parking Provision Requirement[4]	Proposed Parking Provision
Commercial (Offices)	5,414m^2	2.5 spaces per 100m^2 GFA	0.6	82	
Retail (Shopping Centre)	7,143m^2	3.3 spaces per 100m^2 GFA	0.6	142	117
Medical / Wellness Offering[5]	3,092m^2	5.0 spaces per 100m^2 GFA	0.6	93	
			TOTAL (Non-Residential)	**317**	**117**

It is evident that the DCP requires a minimum of 317 parking spaces for the non-residential component of the potential development and the indicative concept plans include a provision for 117 car parking spaces, which is nominally deficient by 200 car spaces.

During the planning of the development, the parking provision has been defined by four primary characteristics of the site:

- The relationship to the transport hub and ability to travel to and from the site without a car;
- The physical constraints associated with the alignment and depth of the rail tunnel;
- The goal of not increasing the current traffic activity associated with the existing building; and
- To be a sustainable development that aims to reduce car ownership and therefore traffic congestion.

It is considered that there is a net benefit to limiting the non-residential parking provision and, in this regard, this Planning Proposal seeks to provide a parking provision which is adequate provision relative to the indicative design concept and site context. In addition, as discussed in Section 5, the reduction in parking spaces does not have significant effect on TOD's.

[3] In accordance with Chapter E1 of the Council's DCP, parking multipliers are used to discount the base parking generation rate for non-residential uses within Edgecliff Commercial Core B2 Zone

[4] The parking numbers rounded up to the nearest whole number according to the DCP

[5] The planning is to accommodate health consulting rooms, medical centre and pre-emptive health studios, which is unknown at this stage, and therefore, DCP car parking rates for medical centre are used for a conservative assessment

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6.3 Accessible Car Parking

The Council's DCP states that accessible car parking spaces to be provided in accordance to Part D3.5 of Building Code of Australia (BCA) which are as follows:

Table 7 – Accessible Car Parking Requirement and Provision

Use	No. of units / car spaces	BCA Parking Rate (min)	Parking Provision Requirement (min)	Proposed Parking Provision
RESIDENTIAL				
Residential (Adaptable Units)[6]	27 units	1 per each adaptable unit	27	24
Sub-total (Residential)			**27**	**24**
NON-RESIDENTIAL				
Commercial (Offices)[7]	Total 117 car spaces for Non-residential use	1 per 100 car spaces or part thereof	1	4
Retail (Shopping Centre)[8]		1 per 50 car spaces + 1 per additional 100 space	2	
Medical / Wellness Offering[9]		1 per 50 car spaces or part thereof	1	
Sub-total (Non-Residential)			**4 (Approx.)**	**4**
TOTAL			**31**	**28**

According to the planning controls, a total of 31 accessible car spaces is required including 27 car spaces for residential use and 4 car spaces for non-residential use. In response, the indicative scheme provides a total of 28 accessible car spaces including 24 car spaces for residential use and 4 car spaces for non-residential use. The provision is nominally deficit by 3 accessible car spaces for residential use. However, the indicative layout plans show that there is sufficient space in Basement level 8 to accommodate additional residential accessible car spaces, and the accessible parking arrangements would be subject to approval under separate application.

[6] BCA does not provide accessible car parking rates for Class 2 building (a building containing 2 or more sole-occupancy units, each being a separate dwelling) and hence reference is made to Chapter E8 of the Council's DCP which stipulates that the residential flat building with 10 or more dwellings to construct at least 10% of the dwellings to Class A certification under AS 4299 – Adaptable housing. Therefore, a building of 268 units will require to construct at least 27 adaptable dwellings and subsequently 1 accessible car parking spaces is recommended for each adaptable unit.

[7] In accordance with the BCA for Class 5 building (an office building used for professional or commercial purposes)

[8] In accordance with the BCA for Class 6 building (a shop or other building for sale of goods by retail or the supply of services direct to the public) with up to 1000 car parking spaces

[9] In accordance with the BCA for Class 9a building (a health-care building) with up to 1000 car parking spaces

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6.4 Bicycle Parking

The bicycle parking requirements have been calculated in accordance with Chapter E1 of the Council's DCP which are as follows:

Table 8 – Bicycle Parking Requirement

Use		No. of units / GFA	DCP Parking Rate (min)	Parking Provision Requirement (min)[10]	Proposed Parking Provision
RESIDENTIAL					
Residential accommodation	Residents	268 units	1 per dwelling	268	268
	Visitors	268 units	1 per 10 dwellings	27	-
Sub-total (Residential)				**295**	**268**
NON-RESIDENTIAL					
Commercial (Offices)	Employees	5,414m^2 GFA	1 per 150m^2 GFA	37	119
	Customers / Visitors	5,414m^2 GFA	1 per 400m^2 GFA	14	
Retail (Shopping Centre)	Employees	7,143m^2 GFA	1 per 200m^2 GFA	36	
	Customers / Visitors	7,143m^2 GFA	1 per 1,000m^2 GFA	8	
Medical / Wellness Offering	Employees	No of Practitioners TBC	1 per 5 practitioners	TBC	
	Customers / Visitors	3,092m^2 GFA	1 per 200m^2 GFA	16	
Sub-total (Non-Residential)				**111+(TBC)**	**119**
TOTAL				**406+TBC**	**387**

According to the DCP, the planning proposal would be required to provide at least 406 bicycle spaces. While the indicative plans show only 387 spaces, there is sufficient space within the basements to accommodate the additional required number of bicycle spaces. The proposed development is therefore able to satisfy the DCP requirements.

[10] The parking numbers rounded up to the nearest whole number according to the DCP

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6.5 Motorcycle Parking

The motorcycle parking requirements have been calculated in accordance with Chapter E1 of the Council's DCP which are as follows:

Table 9 – Motorcycle Parking Requirement

Use	No. of car spaces	Parking Rate (min)	Parking Provision Requirement (min)[11]	Proposed Parking Provision
Residential[12]	184 spaces	1 per 10 car spaces	19	20
Non-residential[13]	117 spaces	1 per 10 car spaces	12	12
TOTAL			**31**	**32**

The provision of 184 car spaces for residential uses results in a minimum requirement of 19 motorcycle spaces, and the provision of 117 car spaces for non-residential uses results in a minimum requirement of 12 motorcycle spaces. In response, the indicative scheme proposes a total of 32 motorcycle spaces including 20 spaces for residential use and 12 spaces for non-residential uses. However, it is noted that the proposed motorcycle parking arrangements would be required and subject to approval under separate application.

6.6 Service Bay Provision

The service vehicle parking requirements have been calculated in accordance with the Council's DCP. The requirements are summarised in Table 10.

Table 10 – Service Vehicle Parking Requirement and Provision

Use	No. of units/ spaces	Parking Rate (min)	Parking Provision Requirement (min)	Proposed Parking Provision
Residential	-	DCP does not specify service vehicle parking requirements for these land uses. DCP states that loading arrangements may need to be provided where regular deliveries of goods are made to or from the site.		1 Medium Rigid Vehicle (MRV) Bay
Commercial (Offices)	-			
Retail Premises[14]	1	1 space per development	1	1 Heavy Rigid Vehicle (HRV) Bay
Health Services facilities (Medical Centre)[15]	1	1 space per development	1	1 Heavy Rigid Vehicle (HRV) Bay
TOTAL			**2**	**3**

[11] The parking numbers rounded up to the nearest whole number according to the DCP

[12] In accordance with Chapter E1 of the Council's DCP which outlines the requirement of minimum 1 motorcycle space per 10 car spaces for all types of development.

[13] In accordance with Chapter E1 of the Council's DCP which outlines the requirement of minimum 1 motorcycle space per 10 car spaces for all types of development.

[14] In accordance with Chapter E1 of the Council's DCP which outlines the requirement of minimum 1 loading bay for retail premises such as a supermarket

[15] In accordance with Chapter E1 of the Council's DCP which outlines the requirement of minimum one loading bay for health service facilities

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In summary, the indicative scheme will provide three service bays in the form of 2×HRV bays and 1×MRV bay which is considered to be sufficient to adequately service the needs of the development. It is noted that one MRV bay will be shared between residential and commercial uses.

When considering the waste collection requirement, Attachment 1 of the DCP specifies the dimension of the Council's garbage truck for domestic waste collection which is 8 metres long, 2.5 metres wide and 4.3 metres high. The Council's garbage truck is smaller than an MRV (8.8 × 2.5 × 4.5 metres), and therefore can be easily accommodated in the MRV bay provided for residential and commercial uses. The waste collection for commercial, retail and medical premises are to be undertaken either by Council trucks or by private contractors which is to be accommodated within the proposed HRV or MRV bays. It is assumed that the waste collection is typically conducted outside of peak periods (i.e., early in the morning) and occurs once or twice a week, thus the impact this will have on the servicing of the site is anticipated to be minor. As such the shared use of the service bays is considered to be appropriate.

A turntable is provided in the loading dock to ensure that all service vehicles can enter and exit the site in a forward direction. The vehicles exiting the site into McLean Street meet the minimum sight distance requirement of 45 metres (for frontage road speed of 50km/h, minimum sight distance requirement is 45 metres) in accordance with AS 2890.1. In addition, there is a bend on western side of the driveway on McLean Street, because of which, it is more likely that the speed of vehicles approaching towards the driveway is reduced to less than 50km/h. Therefore, the minimum sight distance requirement for vehicles entering the frontage road (McLean Street) is met.

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7. Traffic Impact Assessment

7.1 Existing Traffic Volumes

In order to assess the traffic conditions of the nearby road network, traffic surveys were undertaken on Thursday, 23rd May 2019, between 7am – 10am and 3:30pm – 6:30pm as well as on Saturday 25th May 2019, between 10am to 1pm, at the key intersections described in Section 4.2. The analysis and the results of these surveys are described in the following sections.

7.1.1 Existing Peak Hour Volumes

The following peak hours have been determined for each of the four individual intersections:

Table 11 – Peak Hour Traffic Volumes

Road Intersection	Weekday Peak Period		Saturday Peak Period
New South Head Road / Mona Road	AM Peak	7:15am – 8:15am	11:30am – 12:30pm
	PM Peak	5:00pm – 6:00pm	
New South Head Road / Darling Point Road / New McLean Street	AM Peak	7:15am – 8:15am	11:30am – 12:30pm
	PM Peak	5:15pm – 6:15pm	
New South Head Road Pedestrian Crossing	AM Peak	7:00am – 8:00am	12:00pm – 1:00pm
	PM Peak	5:15pm – 6:15pm	
New South Head Road / Ocean Street / Ocean Avenue	AM Peak	7:15am – 8:15am	12:00pm – 1:00pm
	PM Peak	5:15pm – 6:15pm	

For a more adequate analysis, the four sites were modelled as a network, for which the network peak hours were adopted as follows:

- 7:15am – 8:15am and 5:15pm – 6:15pm during the weekday
- 11:30am – 12:30pm during the Saturday

Figure 19, Figure 20 and Figure 21 illustrate the existing traffic volumes during the weekday morning peak hour (7:15am – 8:15 am), weekday evening peak hour (5:15am – 6:15 pm), and Saturday peak hour (11:30am – 12:30pm) respectively.

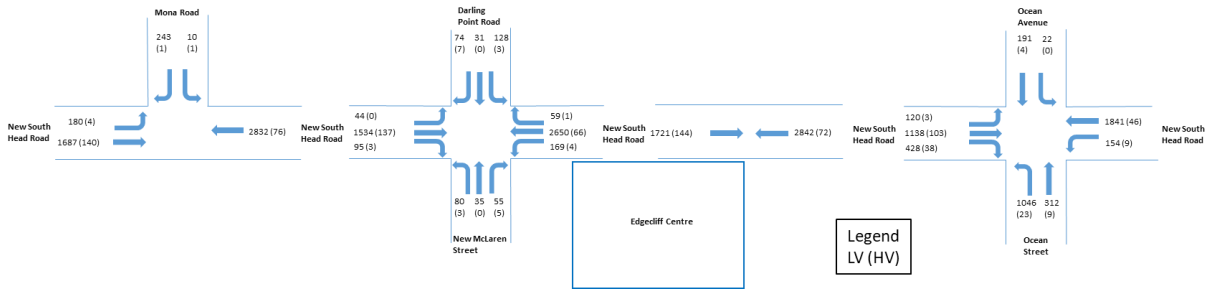

Figure 19 – Traffic Volume during Weekday Morning Peak Hour Volumes – Existing Situation

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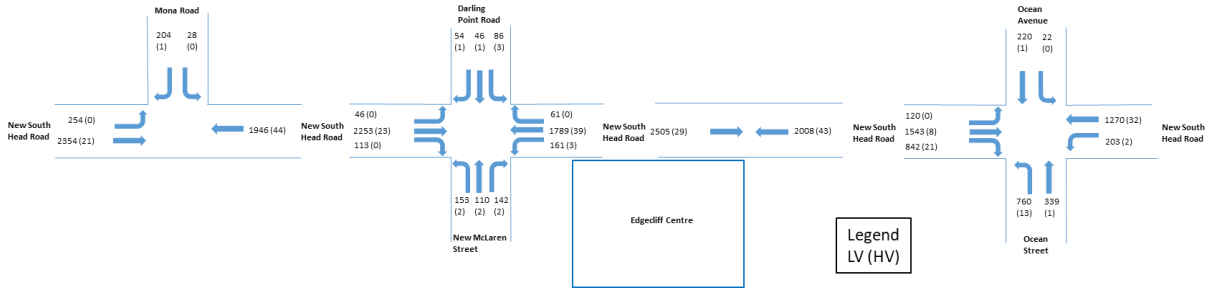

Figure 20 – Traffic Volume during Weekday Afternoon Peak Hour – Existing Situation

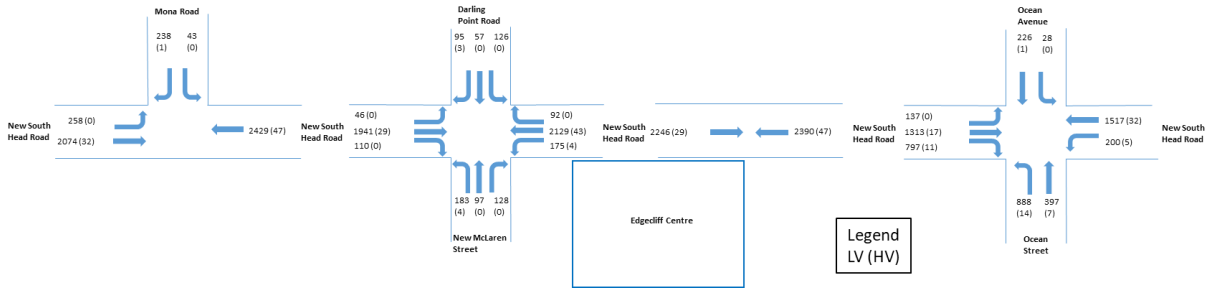

Figure 21 – Traffic Volume during Saturday Peak Hour – Existing Situation

7.2 Traffic Generation

The traffic activity associated with a particular land use can be determined through a number of approaches. In situations where parking spaces do not account for TODs, the building floor areas provide a basis for trip generation. However this does not apply where parking rates have been strategically adopted based on the indicative scheme on top of the highly accessible attributes of the site.

The Edgecliff Centre is considered to a be a TOD, meaning that it is located over a rail station and adjacent to a bus terminal and in this regard, the parking provision for the commercial and retail uses are constrained (refer Section 5). For the purpose of this assessment, the traffic generation has been determined based on the number of parking spaces provided, this is because the indicative scheme is proposing reduced number of car spaces for non-residential uses (details mentioned in Section 6.2) and attracting less traffic otherwise. The reference has been made to the following:

- RMS Technical Direction 2013/04a (TDT), which serves as an update to the Traffic Generating Developments 2002 (Guide) and presents the traffic generation rates for a number of land uses based on recent surveys results; and
- Trip Generation based on First Principles depending upon the number of car parking spaces and existing boom gate data for forecasting the future trips.

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7.2.1 Existing Traffic Generation

As described in Section 3.2, the existing site is comprised of retail, medical consulting services and commercial land uses. The existing trip generation rates are calculated based on the actual trips on the day of the traffic count surveys (i.e., Thursday 23rd May 2019 for weekday and 25th May 2019 for Saturday) during the network peak hours (as mentioned in Section 7.1.1) versus existing parking spaces. It is noted that the Thursday evening traffic is higher than other weekdays.

The existing site consists of two car parks. The tenant (commercial / offices) car park accommodates 141 parking spaces and the customer (retail and medical consulting services visitors) car park accommodates 113 parking spaces. The existing trips and the trip generation rate based on the car park utilisation is shown in Table 12 below.

Table 12 – Existing Traffic Generation

Component	Peak Period	Existing Peak Hour Trips from Boom Gate Data	Existing Inbound Trips	Existing Outbound Trips	Existing Car Spaces	Trip Generation Rate per Car Space
Retail and Medical Consulting Services (Customer Car Park)	Weekday AM Peak	41	30	-	113	0.27 inbound trips/car space
			-	11		0.10 outbound trips/car space
	Weekday PM Peak	179	81	-		0.72 inbound trips/car space
			-	98		0.87 outbound trips/car space
Commercial (Tenant Car Park)	Weekday AM Peak	18	17	-	141	0.12 inbound trips/car space
			-	1		0.01 outbound trips/car space
	Weekday PM Peak	25	3	-		0.02 inbound trips/car space
			-	22		0.16 outbound trips/car space
Retail and Medical Consulting Services (Customer Car Park)	Saturday Midday Peak	232	117	-	113	1.04 inbound trips/car space
			-	115		1.02 outbound trips/car space
Commercial (Tenant Car Park)	Saturday Midday Peak	7	2	-	141	0.01 inbound trips/car space
			-	5		0.04 outbound trips/car space

It is noted that the traffic generation rate per parking rate is low due to vacancies of the commercial areas, which have a direct relation to the occupancy of the car park. On Thursday 23rd May 2019, the boom gate data recorded 73 inbound trips into the commercial car park despite its 141 space capacity. Therefore, it is fair to say that the building has a much higher potential traffic generation rate, which is discussed in the next section.

7.2.2 Potential Existing Traffic Generation

From the boom gate data for 2019 it is noted that the existing tenant car park was not fully utilised on this day, i.e. only 73 inbound trips were recorded, meaning that the car park needs to accommodate at least this amount of vehicles. Taking into consideration a default vacancy in a commercial car park, it is assumed for the purpose of this report that the potential parking provision is 80 instead of 141 spaces, which in turn leads to an increased traffic generation rate per space. The potential existing trip generation rate is summarised in Table 13.

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Table 13 – Potential Existing Traffic Generation Rates

Component	Peak Period	Existing Peak Hour Trips from Boom Gate Data	Existing Inbound Trips	Existing Outbound Trips	Existing Car Spaces	Trip Generation Rate per Car Space
Retail and Medical Consulting Services (Customer Car Park)	Weekday AM Peak	41	30	-	113	0.27 inbound trips/car space
			-	11		0.10 outbound trips/car space
	Weekday PM Peak	179	81	-		0.72 inbound trips/car space
			-	98		0.87 outbound trips/car space
Commercial (Tenant Car Park)	Weekday AM Peak	18	17	-	80 (demand)	0.21 inbound trips/car space
			-	1		0.01 outbound trips/car space
	Weekday PM Peak	25	3	-		0.04 inbound trips/car space
			-	22		0.28 outbound trips/car space
Retail and Medical Consulting Services (Customer Car Park)	Saturday Midday Peak	232	117	-	113	1.04 inbound trips/car space
			-	115		1.02 outbound trips/car space
Commercial (Tenant Car Park)	Saturday Midday Peak	7	2	-	80 (demand)	0.03 inbound trips/car space
			-	5		0.06 outbound trips/car space

Based on the potential trip generation rate, the potential existing number of trips per 141 parking spaces can be calculated, which is as shown in Table 14. These numbers represent the number of trips that would be generated if the car park was fully occupied, whilst the number of trips for customer car park are the actual trips derived from the days of surveys.

Table 14 – Potential Existing Traffic Generation

Component	Period	Trip Generation Rate	Existing Car Spaces	Potential Existing Inbound Trips	Potential Existing Outbound Trips	Total Potential Existing Peak Hour Trips
Retail and Medical Consulting Services (Customer Car Park)	Weekday AM Peak	0.27 inbound trips/car space	113	30	-	41
		0.10 outbound trips/car space		-	11	
	Weekday PM Peak	0.72 inbound trips/car space		81	-	179
		0.87 outbound trips/car space		-	98	
Commercial (Tenant Car Park)	Weekday AM Peak	0.21 inbound trips/car space	141	30	-	31
		0.01 outbound trips/car space		-	1	
	Weekday PM Peak	0.04 inbound trips/car space		6	-	45
		0.28 outbound trips/car space		-	39	
Retail and Medical Consulting Services (Customer Car Park)	Saturday Midday Peak	1.04 inbound trips/car space	113	117	-	232
		1.02 outbound trips/car space		-	115	
Commercial (Tenant Car Park)	Saturday Midday Peak	0.03 inbound trips/car space	141	4	-	12
		0.06 outbound trips/car space		-	8	

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7.2.3 Future Traffic Generation

The indicative scheme proposes to provide a total of 184 parking spaces for the residential component and 117 spaces for retail, medical/wellness and commercial component. The future trips for the residential and non-residential components are estimated based on these parking provisions and are discussed in the following sections.

6.2.2.1 Future Traffic Generation for Residential Component

The rates from the RMS TDT are adopted to estimate the potential future traffic generated by the residential component of the indicative scheme. It is noted that the RMS Guide or TDT does not stipulate traffic generation rates for Saturdays, because traffic generated by residential units on weekends is not high enough to have a significant impact on the surrounding road network. As shown in Table 15 the traffic generated by residential component during the weekday AM peak is 28, so even if the Saturday traffic was considered, it would be likely lower than the weekday AM peak. Therefore, the Saturday traffic for residential component is not accounted for. The traffic generation rates for the weekday peak hours have been summarised below:

- High Density Residential[16]:
    - 0.15 trips per car space in the AM peak
    - 0.12 trips per car space in the PM peak

Applying these to the proposed residential component of the indicative scheme and applying an 80:20 distribution for the inbound and outbound vehicles results in the traffic activity as outlined in Table 15.

Table 15 – Future Traffic Generation for the Residential Component

Component	Period	Trip Generation Rate	Car Spaces	Inbound Trips	Outbound Trips	Total Peak Hour Trips
Residential	Weekday AM Peak	0.15 trips/car space	184	6	22	28
	Weekday PM Peak	0.12 trips/car space		18	4	22

6.2.2.1 Future Traffic Generation for Non-Residential Component

As discussed earlier, the indicative 117 non-residential car spaces will be allocated for retail, medical / wellness and commercial component. As shown in Table 12, the retail and medical component generate more trips than the commercial component, although it is acknowledged that the in and outbound ratio varies between these uses.

Since the number of car spaces for individual non-residential component has not been allocated at this stage, the trip generation rate for retail and medical use (higher trip generation rate) has been used to undertake a conservative assessment. Applying the trip rates forecasted for retail and medical /wellness components from Table 13 estimates the following maximum trips for the indicative scheme.

[16] A building containing 20 or more dwellings

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Table 16 – Future Traffic Generation for Non-Residential Component

Component	Period	Trip Generation Rate	Parking Spaces	Future Inbound Trips	Future Outbound Trips	Total Future Peak Hour Trips
Retail and Medical / Wellness	Weekday AM Peak	0.27 inbound trips/car space	117	32	-	44
		0.10 outbound trips/car space		-	12	
	Weekday PM Peak	0.72 inbound trips/car space		84	-	186
		0.87 outbound trips/car space		-	102	
Commercial	Weekday AM Peak	0.21 inbound trips/car space	0	-	-	-
		0.01 outbound trips/car space		-	-	
	Weekday PM Peak	0.04 inbound trips/car space		-	-	-
		0.28 outbound trips/car space		-	-	
Retail and Medical / Wellness	Saturday Midday Peak	1.04 inbound trips/car space	117	122	-	241
		1.02 outbound trips/car space		-	119	
Commercial	Saturday Midday Peak	0.03 inbound trips/car space	0	-	-	-
		0.06 outbound trips/car space		-	-	

7.2.4 Net Trip Generation

In order to establish the additional traffic that will be generated after completion of the development, the Net Trip Generation needs to be determined. This figure is calculated by subtracting the potential existing traffic generation from the future traffic generation. The net trip generation is summarised in Table 17 below.

Table 17 – Net Trip Generation

Peak Period	Future Trip Generation	Potential Existing Trip Generation	Net Trip Generation
Weekday AM	72 (38 In, 34 Out)	72 (60 In, 12 Out)	0 (-22 In, +22 Out)
Weekday PM	208 (102 In, 106 Out)	224 (87 In, 137 Out)	-16 (+15 In, -31 Out)
Saturday Midday	241 (122 In, 119 Out)	244 (121 In, 123 Out)	-3 (+1 In, -4 Out)

In summary, the indicative scheme will result in no change in the overall number of trips in the morning peak hour. The overall trips for the weekday evening peak hour and Saturday peak hour are expected to be slightly reduced, by 16 and 3 respectively. This equates to approximately 1 reduced trip every 4 minutes for weekday evening peak hour and therefore, it is expected that the intersections performance may improve marginally during the weekday evening peak hour.

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7.3 SIDRA Analysis

In order to determine the performance of the identified key intersections, an assessment has been undertaken using the SIDRA modelling software, a micro-analytical tool for individual intersections and whole-network modelling. Typically, there are three performance indicators used to summarise the performance of an intersection, being:

- Degree of Saturation (DoS) – The total usage of the intersection expressed as a factor of 1, with 1 representing 100% vehicles/capacity (v/c). (e.g. 0.8 = 80% saturation)
- Average Delay – The average delay encountered by all vehicles passing through the intersection. It is often important to review the average delay of each approach as a side road could have a long delay time, while the large free flowing major traffic will provide an overall low average delay.
- 95% Queue Lengths (Q95) – is defined to be the queue length in metres that has only a 5-percent probability of being exceeded during the analysis time period. It transforms the average delay into measurable distance units.
- Level of Service (LoS) – This is a categorization of average delay, intended for simple reference. The RMS adopts the following bands:

Table 18 – Level of Service (LoS) Definitions by RMS

LoS	Average Delay (secs/vehicle)	Traffic Signals & Roundabouts	Give Way & Stop Signs
A	<14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays & spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Operating near capacity	Near capacity and accident study required
E	57 to 70	At capacity. At signals, incidents will cause excessive delays. Roundabouts require other control mode	At capacity, requires other control mode
F	>70	Unsatisfactory with excessive queuing. Requires additional capacity	Unsatisfactory with excessive queuing; requires other control mode

The layout of the modelled network is shown in Figure 22.

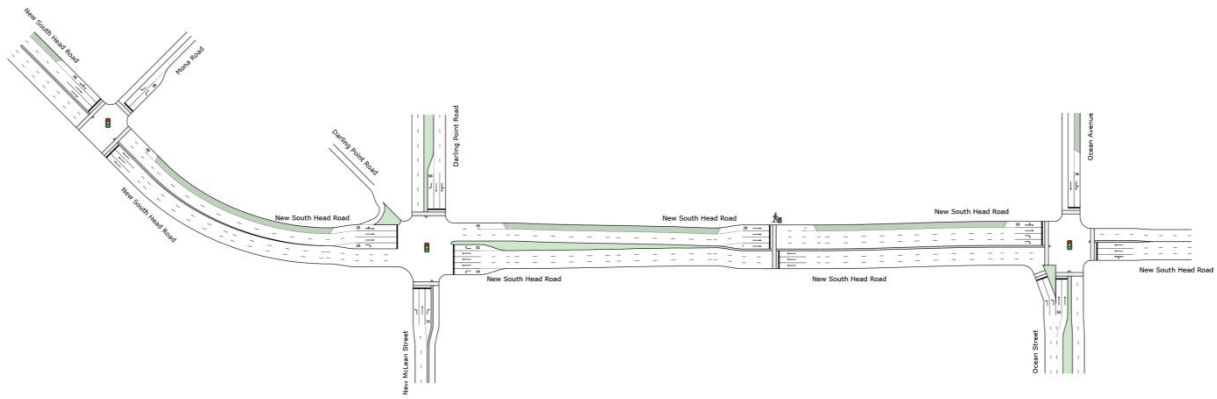

Figure 22 – Layout of Intersection Network

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7.3.1 Existing Network Operation

A summary of the existing traffic conditions, detailing the LoS, Average Delay, DoS and Q95 of the existing situation is shown in Table 19. A full SIDRA calculation is presented in Attachment 3.

Table 19 – Summary of Existing Traffic Conditions

Intersection	Peak Hour	Period	Average LoS	Average Delay (s)		Highest DoS (v/s)		Highest Q95 (m)	
New South Head Road / Mona Road	AM	Existing	F	91.1	-1.5	1.268	-0.004	1020.3	-8.6
		Potential Existing	F	91.9		1.270		1025.5	
		Future	F	90.4		1.266		1016.4	
	PM	Existing	F	73.9	-0.9	1.095	-0.002	793.5	+1.7
		Potential Existing	F	78.1		1.104		803.2	
		Future	F	77.2		1.102		804.9	
	Saturday	Existing	F	100.1	0	1.257	0	1053.5	0
		Potential Existing	F	100.2		1.257		1054.0	
		Future	F	100.2		1.257		1054.0	
New South Head Road / Darling Point Road / New McLean Street	AM	Existing	C	38.9	+1.5	1.045	-0.081	287.2	0
		Potential Existing	C	38.1		1.080		287.2	
		Future	C	39.6		0.999		287.2	
	PM	Existing	B	28.1	+0.1	0.862	-0.005	287.2	0
		Potential Existing	B	28.4		0.883		287.2	
		Future	B	28.5		0.878		287.2	
	Saturday	Existing	F	165.4	-0.2	1.450	0	287.2	0
		Potential Existing	F	165.6		1.450		287.2	
		Future	F	165.4		1.450		287.2	
New South Head Road Pedestrian Crossing	AM	Existing	F	80.7	+0.8	1.084	-0.001	215.4	0
		Potential Existing	F	80.7		1.084		215.4	
		Future	F	81.5		1.083		215.4	
	PM	Existing	A	3.7	+0.1	0.824	+0.003	137.1	+2.6
		Potential Existing	A	3.8		0.826		138.6	
		Future	A	3.9		0.829		141.2	
	Saturday	Existing	A	8.1	0	0.654	-0.001	214.7	0
		Potential Existing	A	8.3		0.654		215.4	
		Future	A	8.3		0.653		215.4	
New South Head Road / Ocean Street / Ocean Avenue	AM	Existing	F	248.0	-0.9	1.492	-0.009	1080.4	-4.9
		Potential Existing	F	250.1		1.498		1085.3	
		Future	F	249.2		1.489		1080.4	
	PM	Existing	B	27.0	0	0.770	+0.002	181.1	+1.2
		Potential Existing	B	27.0		0.771		181.3	
		Future	B	27.0		0.773		182.5	
	Saturday	Existing	E	66.9	+2.5	1.024	+0.002	508.2	+32.3
		Potential Existing	E	68.9		1.034		516.7	
		Future	E	71.4		1.036		549.0	

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New South Head Road / Mona Road Intersection

The overall LoS of this intersection is F for the Weekday AM, Weekday PM and Saturday peak hours, and this intersection is operating with no spare capacity. The future trips do not have much significance in the Weekday AM and PM as well as Saturday peak hours.

New South Head Road / Darling Point Road / New McLean Street Intersection

The overall LoS of this intersection is C, B and F for the Weekday AM, Weekday PM and Saturday peak hours respectively. The right turn movements from each arm are either E or F. It is noted that this intersection is currently operating with no spare capacity. The future trips do not have much significance in the Weekday AM, Weekday PM and Saturday peak hours.

New South Head Road Pedestrian Crossing

The overall LoS of the New South Head Road Pedestrian Crossing is F for the Weekday AM peak hour and this intersection is operating with no spare capacity during this period. The future trips do not have much significance in the Weekday AM, Weekday PM and Saturday peak hours.

New South Head Road / Ocean Street /Ocean Avenue

The overall LoS of this intersection is F and E for the Weekday AM and Saturday peak hours respectively, and the intersection is operating with no spare capacity during these periods. The future trips do not have much significance in the Weekday AM, Weekday PM and Saturday peak hours.

Summary

The modelling confirms that the proposal will not have any detrimental impact on the performance of the intersections. This is primarily related to the key aim of retaining the current traffic activity associated with the existing Edgecliff Centre, albeit the entry / exit distribution is changed slightly by the introduction of a residential component and the evening peak traffic activity is reduced due to the reduction in the retail / commercial component and associated parking.

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8. Design Assessment

The following section presents an assessment of the indicative scheme with reference to the requirements of AS2890.1:2004 (Off-street car parking), AS2890.2:2018 (Off-street commercial vehicle facilities), AS2890.6:2018 (Off-street parking for people with disabilities) and AS2890.3:2015 (Bicycle parking) and industry best practice. It is noted that this is an indicative scheme and approval is not being sought for this scheme at this stage. This section is to be read in conjunction with the architectural plans provided by FJMT Architects shown in Attachment 1.

8.1 Vehicular Access and Circulation

The vehicular access arrangements to comply with the requirements of AS2890.1 for Class 1A (resident / employee facilities) and 3A (short-term shopping centre parking).

- The concept design for 184 Class 1A car spaces with access to New McLean Street (local access road) will require a Category 2 driveway being a combined entry and exit width of 6 to 9 metres.
- The concept design for 117 Class 3A car spaces with access to New McLean Street will require a Category 3 driveway being a separate entry width of 6 metres and exit width of 4 to 6 metres.

The vehicular access, circulation, aisle width and car space dimensions shall comply with AS 2890.1 & 2890.6. Two-way circulation will be provided inside the car park, pick-up & drop-off and vehicular access points, thus no potential queuing on public roads.

A swept path assessment demonstrating two-way passing of a B99 and B85 vehicle with appropriate clearance is included in Attachment 2. Any minor inconsistencies will be refined in design development and subject to further approval processes.

8.1.1 Ramp Design

The access ramp into the basement car park to be designed in accordance with AS2890.1, where:

- Maximum grades do not exceed 1:20 (5%) for the first 6m from the property line;
- Transition grades do not exceed 1:8 (12.5%) for summit grades;
- Maximum grades do not exceed 1:5 (20%) for residential / commercial car park;
- Maximum grades do not exceed 1:4 (25%) for residential car park; and
- Transition grades do not exceed 1:6.7 (15%) for sag grade changes.

8.2 Sight Distance

The sight distance requirements are outlined in Section 3.2 of AS2890.1 and are prescribed on the basis of the posted speed limit or 85th percentile vehicle speeds along the frontage road.

New McLean Street has a speed limit of 50km/h which requires a desirable visibility distance of 69 metres and a minimum stopping sight distance of 45 metres. The proposed driveway along New McLean Street shall be designed to comply with the minimum sight distance requirement.

The proposed driveway shall be designed to provide the minimum sight lines for pedestrian safety, as stipulated in AS2890.1. Triangular pedestrian sight splays (2.0m x 2.5m) to be provided in accordance with the Australian Standards.

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8.3 Car Park Arrangement

8.3.1 Typical Requirements

The car parking arrangements have been assessed against the requirements of AS2890.1:2004, with reference to Class 1A (residential/employee) and Class 3A (short-term shopping centre parking)

Class 1A (residential/employee facilities):

- Car Spaces: 2.4m x 5.4m
- Aisle Width: 5.8m (minimum)

  additional 300mm needs to be provided where one side of the aisle is bounded by high obstruction (i.e. wall or column)

Class 3A (short-term shopping centre parking):

- Car Spaces: 2.6m x 5.4m
- Aisle Width: 6.6m (minimum)

  additional 300mm needs to be provided where one side of the aisle is bounded by high obstruction (i.e. wall or column)

8.3.2 Accessible Parking

All accessible parking spaces shall comply with the requirements of AS2890.6. Accessible parking spaces are to be designed based on the following dimensions:

- Accessible Space: 2.4m x 5.4m
- Adjacent Shared Bay: 2.4m x 5.4m (with bollard)

All shared bays and accessible spaces shall be installed in accordance with AS2890.6, including the installation of bollards and relevant pavement markings. A minimum height clearance of 2.5m is to be maintained above all accessible and shared bays.

8.3.3 Headroom Clearance

Headroom clearances must be provided in accordance with the minimum requirements of AS2890.1 and AS2890.2. These requirements are stipulated below:

- Minimum 2.2m above all general spaces;
- Minimum 2.5m above all accessible spaces and adjacent shared bays; and
- Minimum 2.2m above all bicycle spaces.

8.3.4 Headroom Clearance

A turning bay is proposed for commercial carpark on Basement 1 to facilitate the vehicles to exit forward from the site. A minimum 1m wide blind aisle extension to be provided for end car spaces.

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8.3.5 Bicycle Parking

The bicycle parking devices (BPD's) to be installed as per the following requirements of AS2890.3:2015:

- Horizontal parking: 1800mm x 500mm with 1.5m wide access aisle
- Horizontal multitier parking: 2000mm x 400mm with 2m wide access aisle and 2.7m ceiling height
- Vertical parking: 1200mm x 500mm with 1.5m wide access aisle
- Within storage cages: 1800mm x 500mm with 2m wide access aisle

8.3.6 Motorcycle Parking

The motorcycle spaces to be designed as per the following requirements of AS2890.1:

- Length: 2.5m
- Width: 1.2m

8.3.7 Loading Dock

The loading dock has been designed to accommodate Heavy Rigid Vehicle (HRV) and Medium Rigid Vehicle MRV. The HRV is anticipated to be the largest vehicle requiring access to the site.

The loading bay is located on Basement 2 level. A minimum headroom clearance requirement of 4.5m is to be provided for HRVs.

A swept path assessment has been conducted to ensure the feasibility of the design (see Attachment 2).

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9. Conclusion

This technical report has been prepared for assessing the planning proposal of the Edgecliff Centre in terms of parking provisions and traffic impacts on the surrounding road network.

The following findings have been identified through the assessment:

- The Planning Proposal seeks to increase the maximum Height of Buildings development standard and increase the maximum Floor Space Ratio development standard. The indicative scheme will include a residential component and an upgrade of the commercial, retail and medical consulting services of the Edgecliff Centre located at 203-233 New South Head Road, Edgecliff. The planning proposal also includes upgrades to the transport infrastructure which will unlock opportunities to rely more on active transport;
- The Centre is highly accessible by public transport providing public transport links to the greater Sydney area;
- The DCP allows a maximum of 300 car parking spaces for residential use and requires a minimum of 317 car parking spaces for the non-residential uses. In response, the indicative concept plan proposes a total of 301 car parking spaces within eight (8) basement levels, which includes, 184 spaces within six (6) basement levels for residential use and is in accordance to the DCP, and 117 spaces within two (2) basement levels for non-residential use and is short of 201 parking spaces. The limited provision is considered appropriate based on the good accessibility of the site to public transport, already congested road network, site constraints and indicative concept strategies to improve connectivity between exiting public transport opportunities and encourage sustainable use of transport;
- In context of accessible car spaces, and bicycle and motorcycle parking, the intention is to provide the total number of required spaces and will subject to a further approval process;
- Waste collection is proposed to be conducted on-site, within the loading area which can accommodate one (1) MRV and two (2) HRV's. Final configuration and allocations will be subject to further approval process;
- With reference to most recent RMS survey data and first principle analysis, a review of the potential traffic generation of the site has revealed that the development will generate no additional trips on the Weekday morning peak period. From the assessment, it can be seen that the net trip is reduced by 16 and 3 during the Weekday evening peak hour and Saturday peak hour respectively. As such, the proposed development will not have noticeable impact to the existing road network;
- The proposed car parking facility shall be designed to comply with AS 2890.1:2004, AS 2890.2:2018, AS 2890.3:2015 and AS 2890.6:2009.

In light of the above, the proposed development is endorsed in the context of parking and traffic.

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Attachment 1 - Architectural Plans

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NEW SOUTH HEAD ROAD

NEW MACLEAN STREET

Ex. RL 31.35
Ex. RL 32.93
Ex. RL 33.46
Ex. RL 33.69
Ex. RL 33.10 (Top of Existing Stair)
+31.335
+33.600
+33.600
Ex. RL 30.63
Ex. RL 30.06
Ex. RL 29.63
Ex. RL 28.90
Ex. RL 27.75
Ex. RL 27.57

Retail
FFL 33.600
Commercial Lobby
FFL 33.600
Commercial Lifts
Retail Lifts
Supermarket
Retail
FFL 33.600
Goods Lift
Goods Lift
F+B
Retail
FFL 33.600
Resi
Lobby
FFL 33.600
Goods Lift
Tennant Storage
FFL 33.600
Tennant Storage
FFL 33.600

Ground Floor Plan

<Longhurst Property> - Edgecliff Centre

0 2 5 10m

1:200 @ A1 13/7/20

For Information **2000**

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NEW SOUTH HEAD ROAD

NEW MACLEAN STREET

Ex. RL 33.46
Ex. RL 31.35
Ex. RL 32.93
Ex. RL 33.69
Ex. RL 30.63
Ex. RL 30.00
Ex. RL 29.63
Ex. RL 28.90
Ex. RL 27.75
Ex. RL 27.57

Storage
FFL 30.800

LIFT UNDER RUN
FFL 30.800

Fire Pump Room
FFL 30.800

Fire Tank
FFL 30.800

Commercial
Carpark
FFL 30.800

WM
FFL 30.000

Gas Meter
FFL 30.000

Pump Room
FFL 30.800

Fan Room

Gas Hot Water

Loading Dock Mezzanine
FFL 30.800

Trolley Return
FFL 30.800

Fan Room

Resi Fan Room

Main Switch Room
FFL 29.000

Main Comms Room
FFL 29.000

Goods Lift

Goods Lift

VOID

Residential
Bicycle Storage - 268 Spaces
FFL 30.800

Goods Lift

VOID

VOID

fjmt

Basement 1 Plan

<Longhurst Property> - Edgecliff Centre

0 2 5 10m

1:200 @ A1 13/7/20

For Information **20B1**

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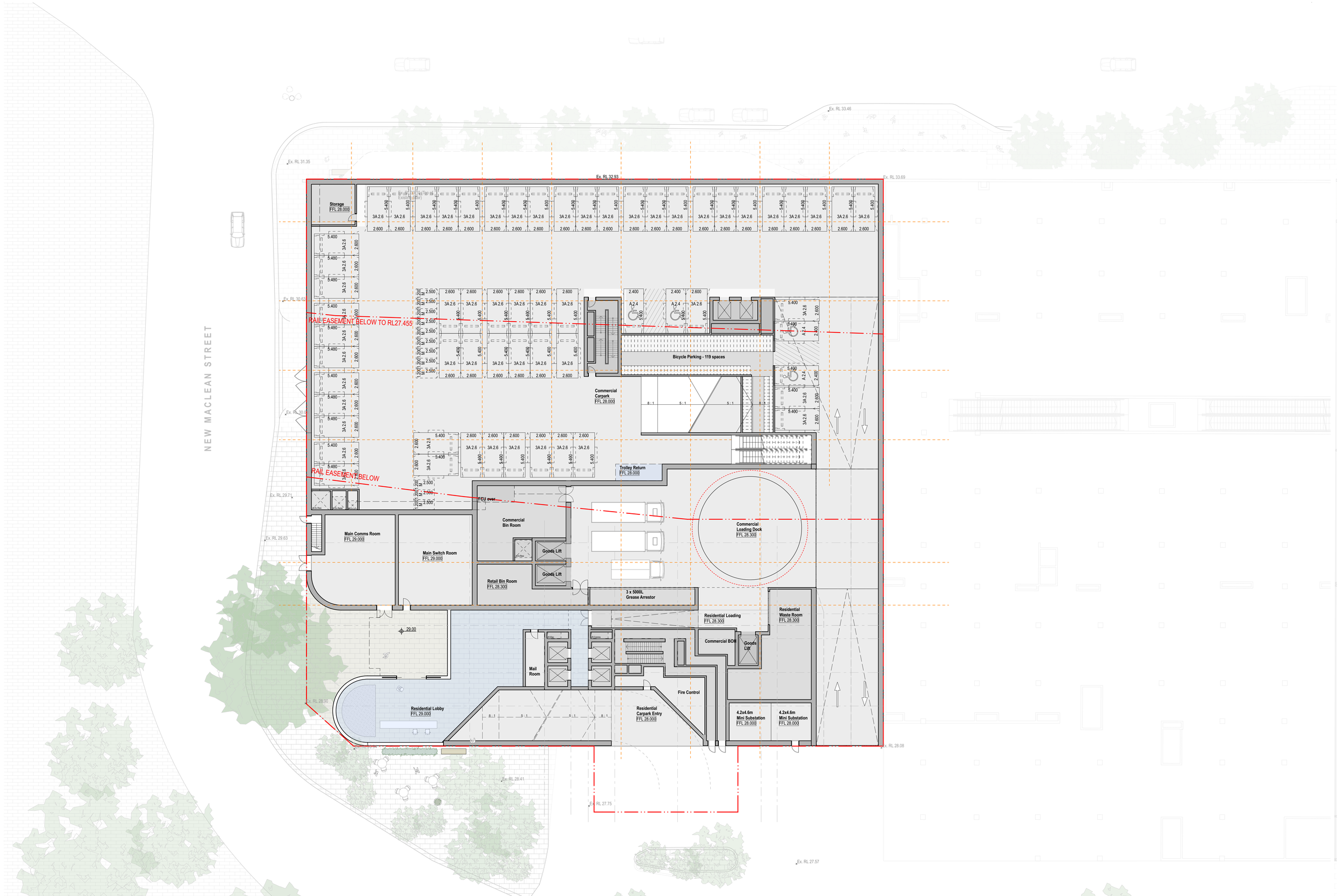

fjmt

Basement 2 Plan

<Longhurst Property> - Edgecliff Centre

0 2 5 10m

1:200 @ A1 13/7/20

For Information **20B2**

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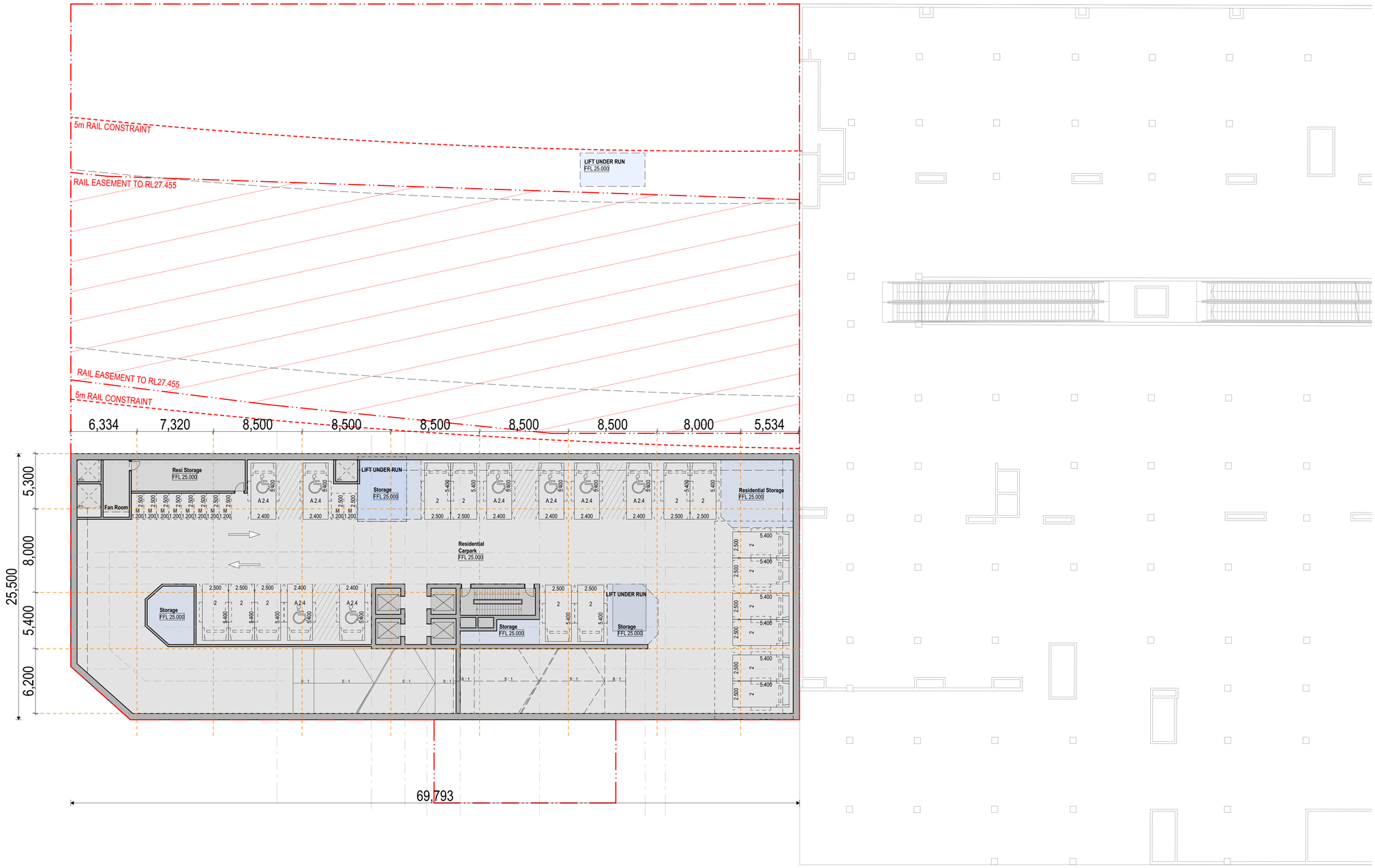

fjmt

Basement 3 Plan / Railway Platform Level

<Longhurst Property> - Edgecliff Centre

0 2 5 10m

1:200 @ A1 13/7/20

For Information **20B3**

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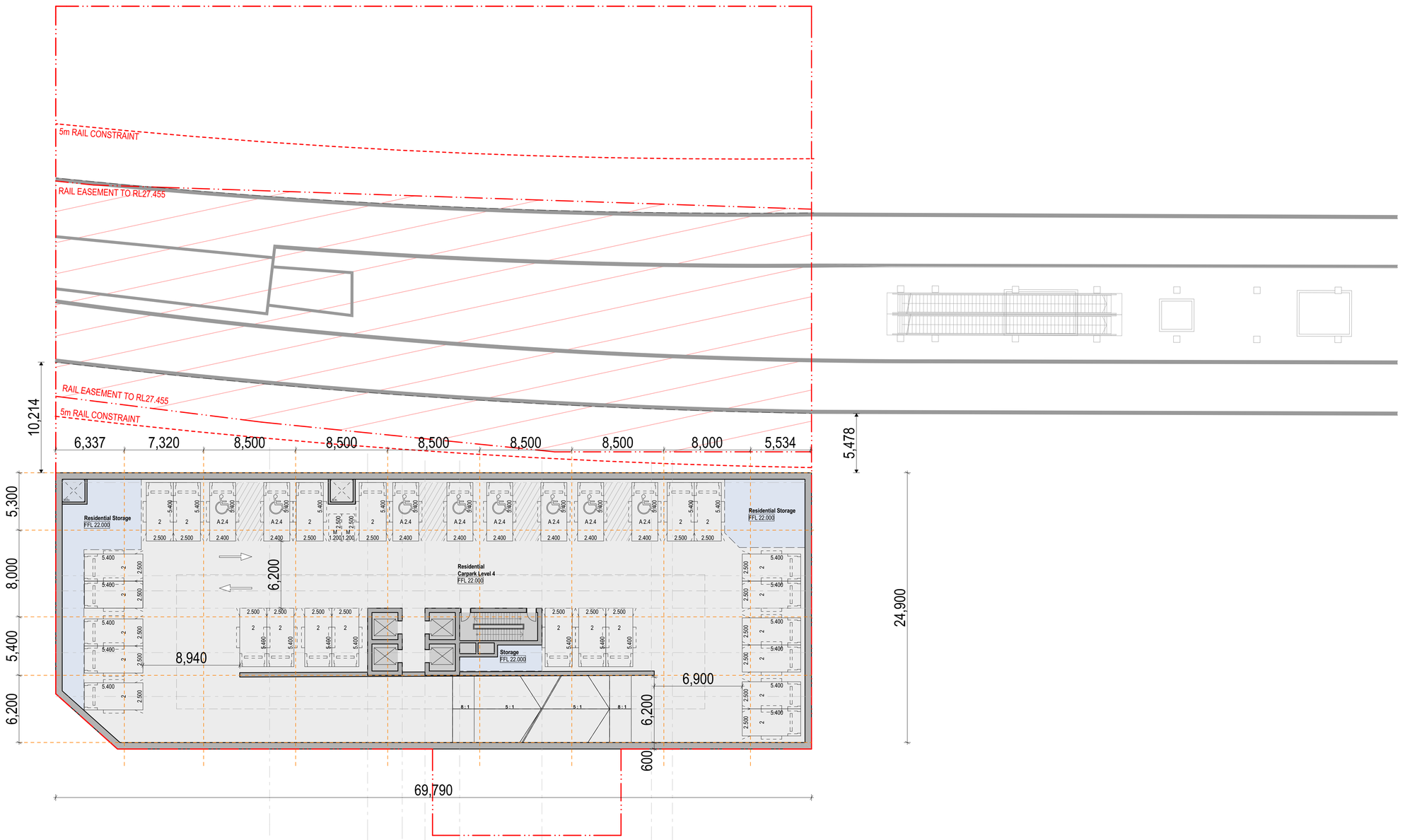

fjmt

Basement 4 Railway Platform

<Longhurst Property> - Edgecliff Centre

0 2 5 10m

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For Information **20B4**

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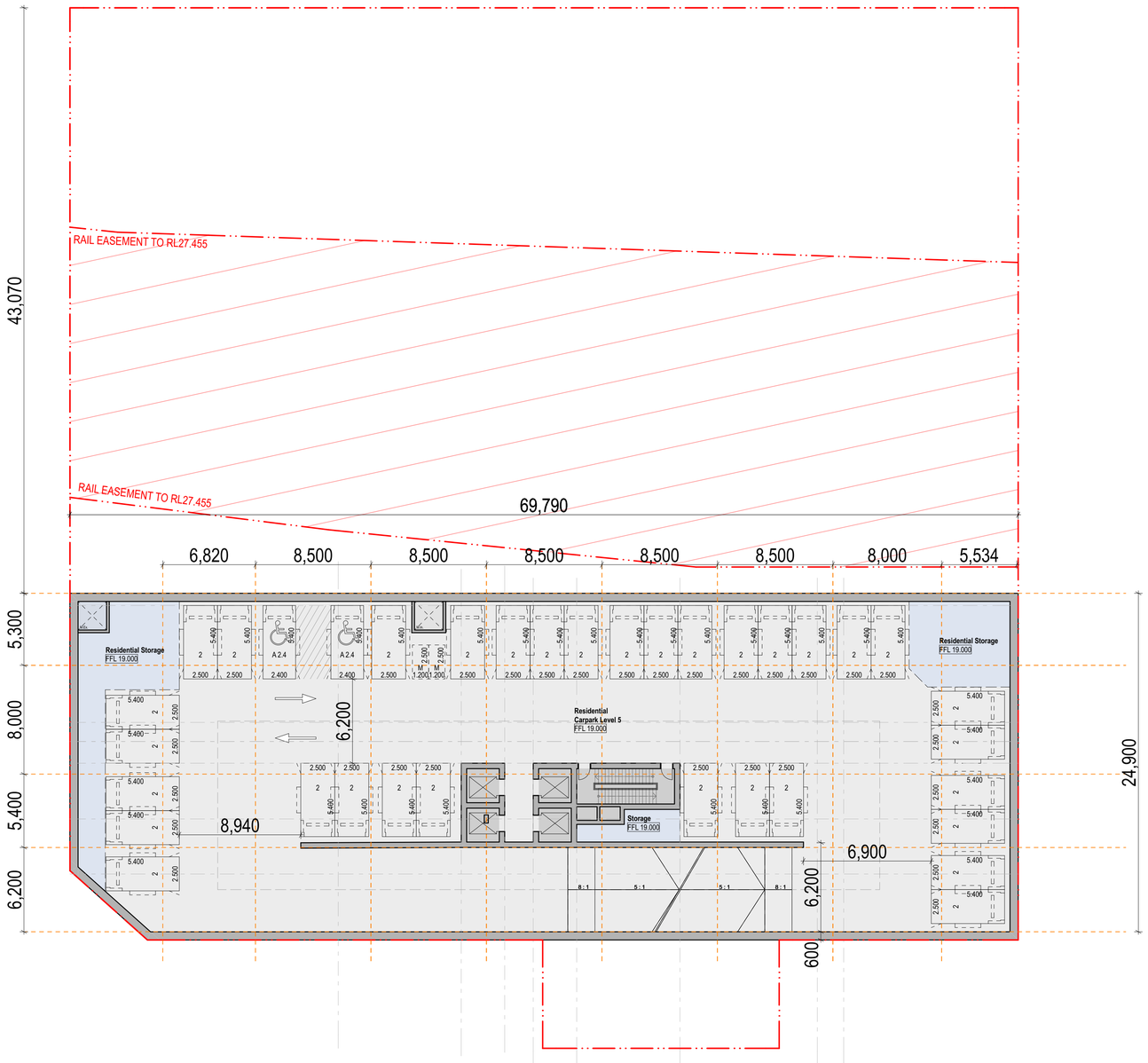

fjmt

Basement 5 - 7 Plan Typical

<Longhurst Property> - Edgecliff Centre

0 2 5 10m

1:200 @ A1 13/7/20

For Information **20B5**

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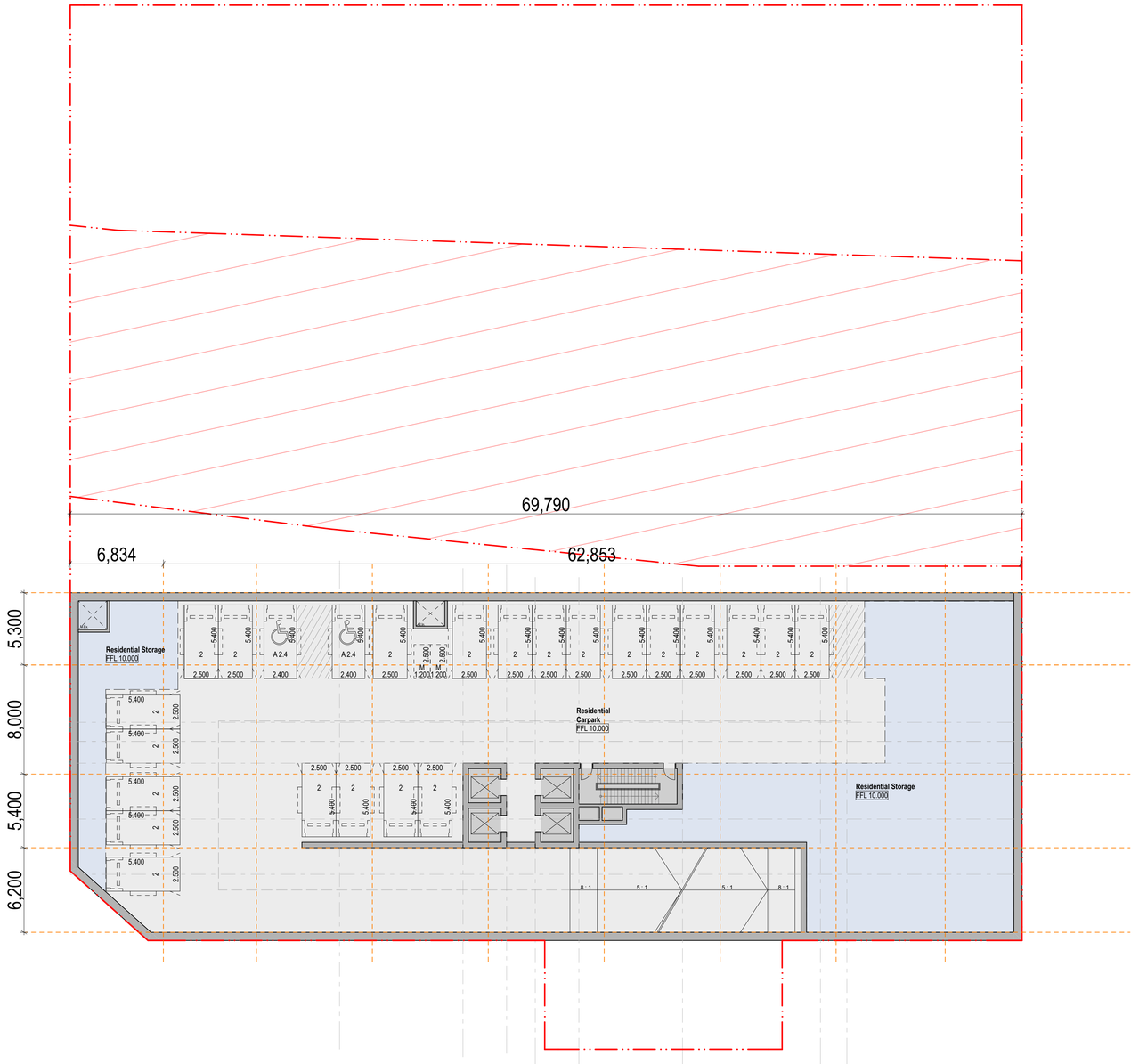

fjmt

Basement 8 Plan

<Longhurst Property> - Edgecliff Centre

0 2 5 10m

1:200 @ A1 13/7/20

For Information **20B8**

Attachment 2 - Compliance Assessment

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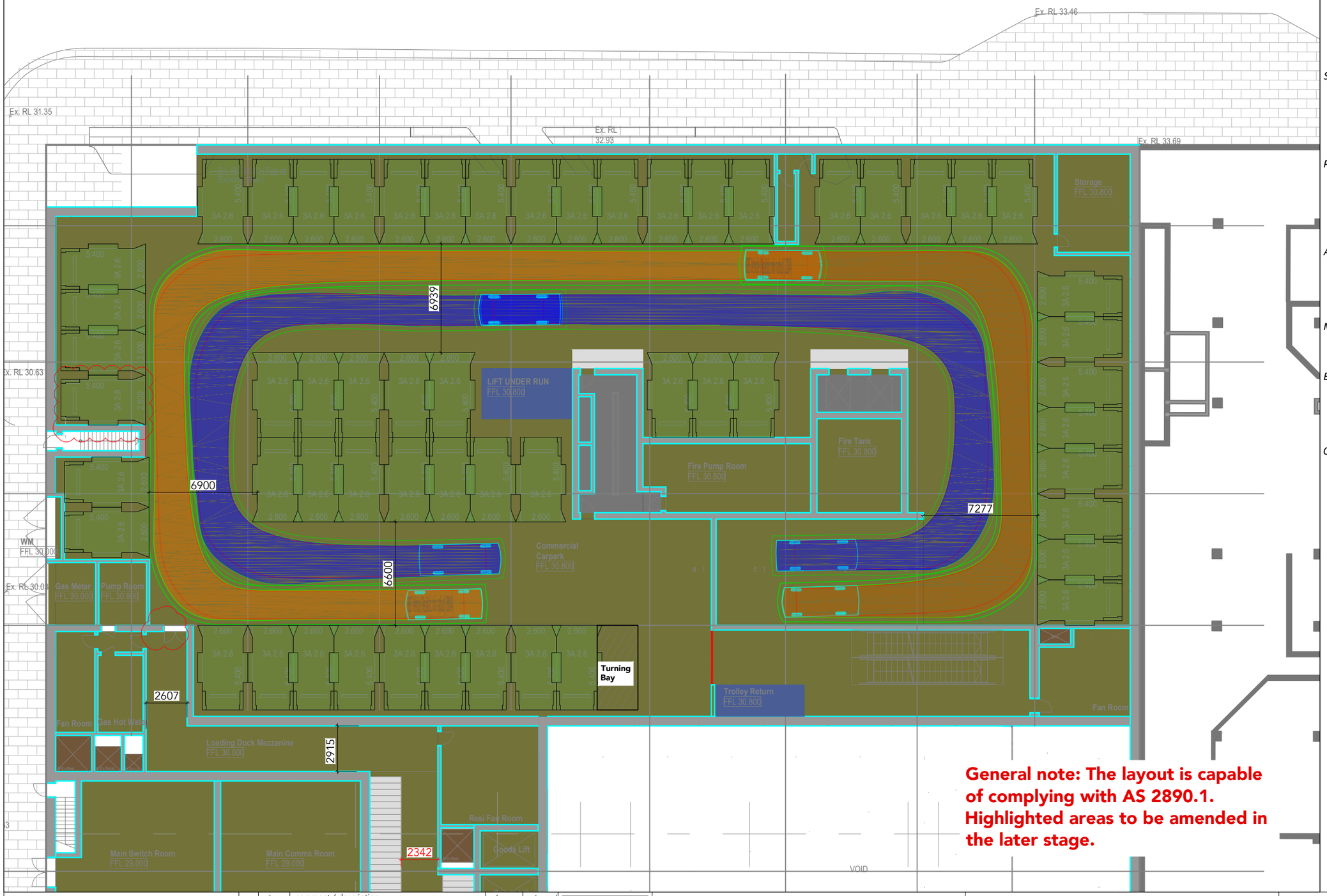


General note: The layout is capable of complying with AS 2890.1. Highlighted areas to be amended in the later stage.

comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **2.2m** (min) throughout all areas of the car park accessible to vehicles and bicycles.
2.5m above accessible and shared bays
X wherever access is required for a refuse vehicle (and safety clearance envelope)

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

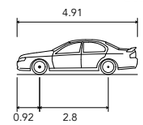
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

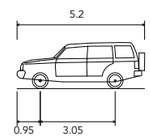
Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

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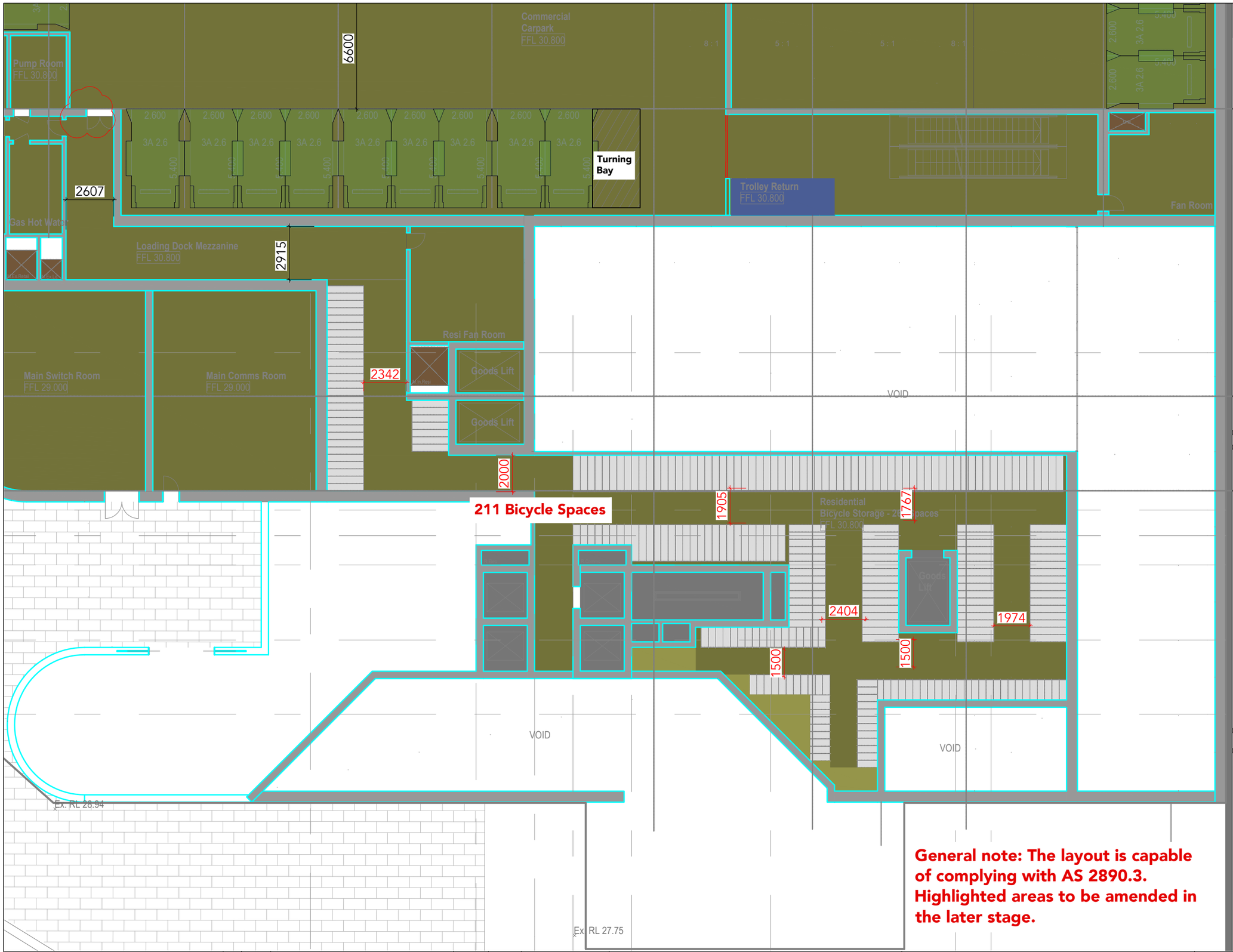
rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 1 - Carpark Design Review

client	Longhurst Group
drawing #	ptc-001
project #	AM-2621
scale	1 : 250

rev 3



General note: The layout is capable of complying with AS 2890.3. Highlighted areas to be amended in the later stage.

comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **2.2m** (min) throughout all areas of the car park accessible to vehicles and bicycles.
2.5m above accessible and shared bays
X wherever access is required for a refuse vehicle (and safety clearance envelope)

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

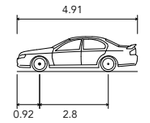
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

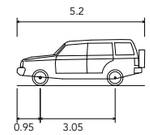
Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

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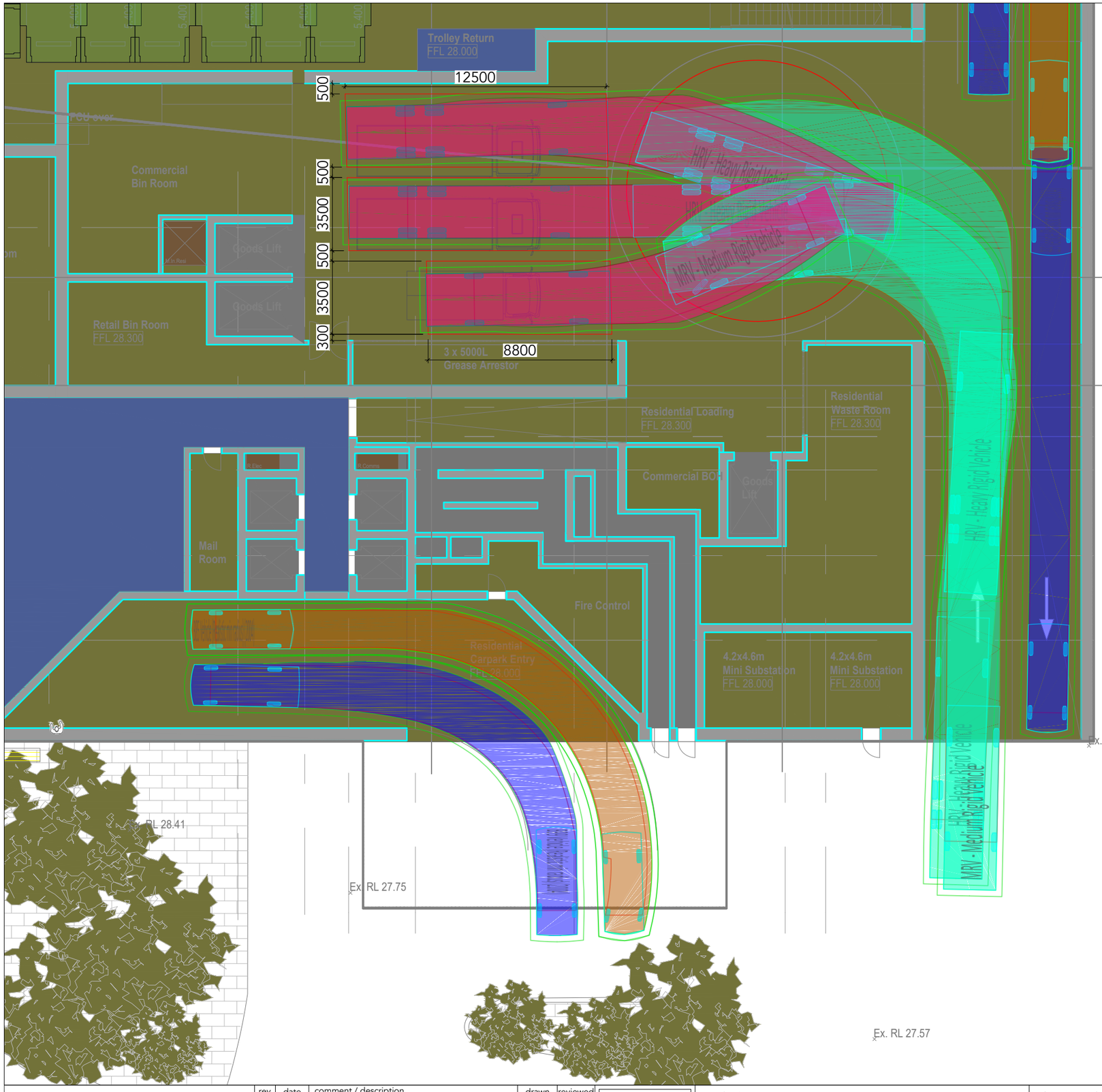
rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 1 - Design Review (Bicycle Parking Spaces)

client	Longhurst Group
drawing #	ptc-002
project #	AM-2621
scale	1 : 200

rev 3



comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **4.5m** (min) throughout the HRV and MRV bays

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

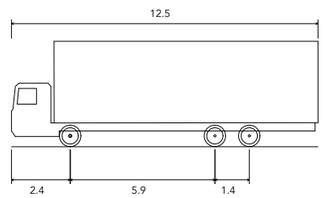
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

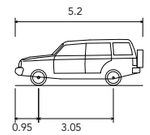
Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



HRV - Heavy Rigid Vehicle	
Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m



B99 Vehicle (Realistic min radius) (2004)	
Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

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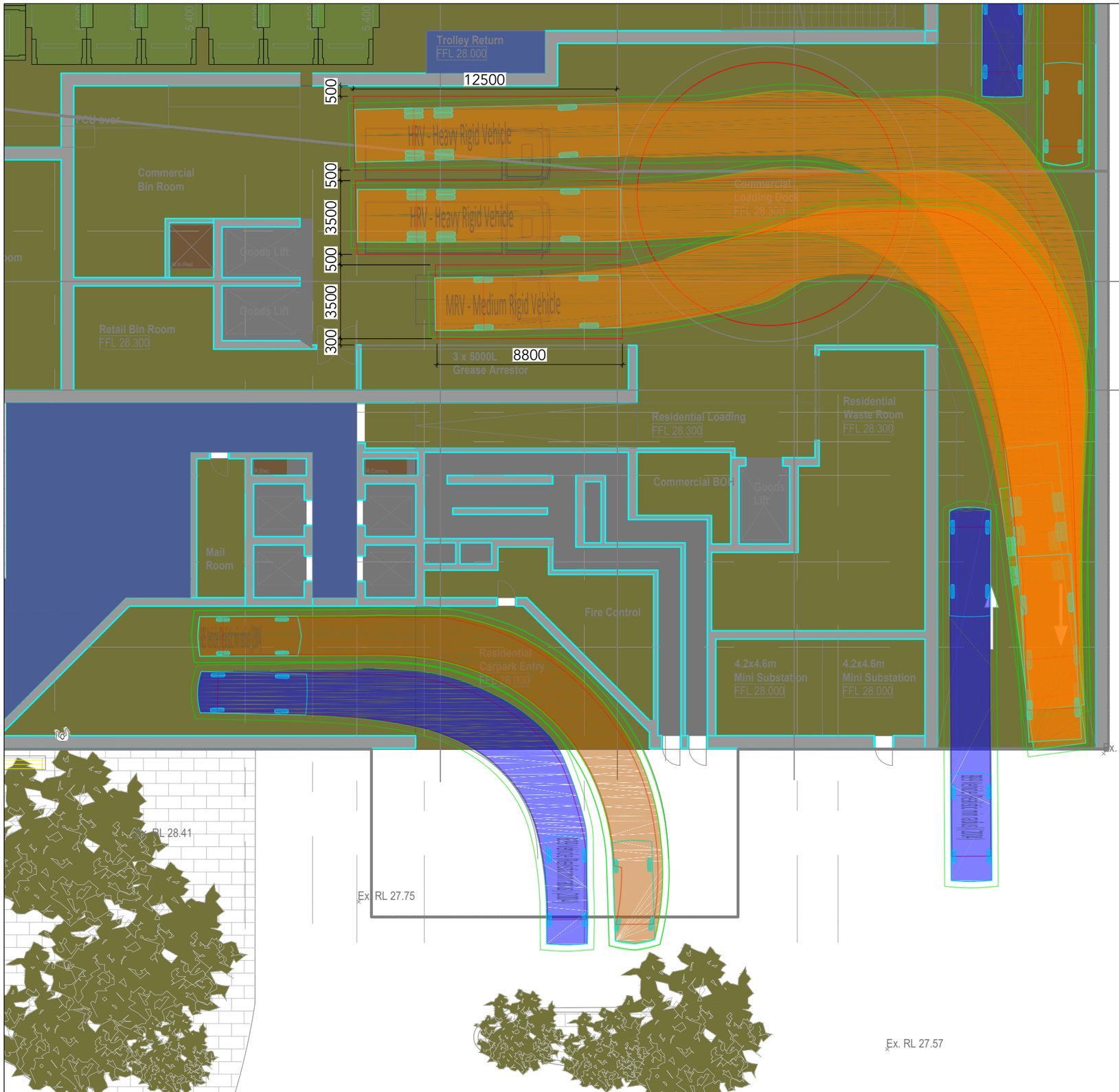
rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 2 - Loading Dock Design Review
2 x HRV and 1 x MRV Inbound Movements

client	Longhurst Group
drawing #	ptc-003
project #	AM-2621
scale	1 : 200

rev 3



comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **4.5m** (min) throughout the HRV and MRV bays

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

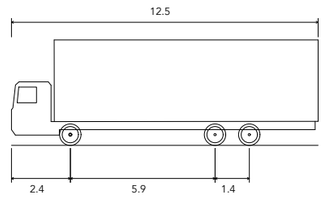
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

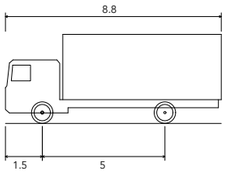
Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



HRV - Heavy Rigid Vehicle

Overall Length	12.500m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.417m
Track Width	2.500m
Lock-to-lock time	6.00s
Curb to Curb Turning Radius	12.500m



MRV - Medium Rigid Vehicle

Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	3.633m
Min Body Ground Clearance	0.428m
Track Width	2.500m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10.000m

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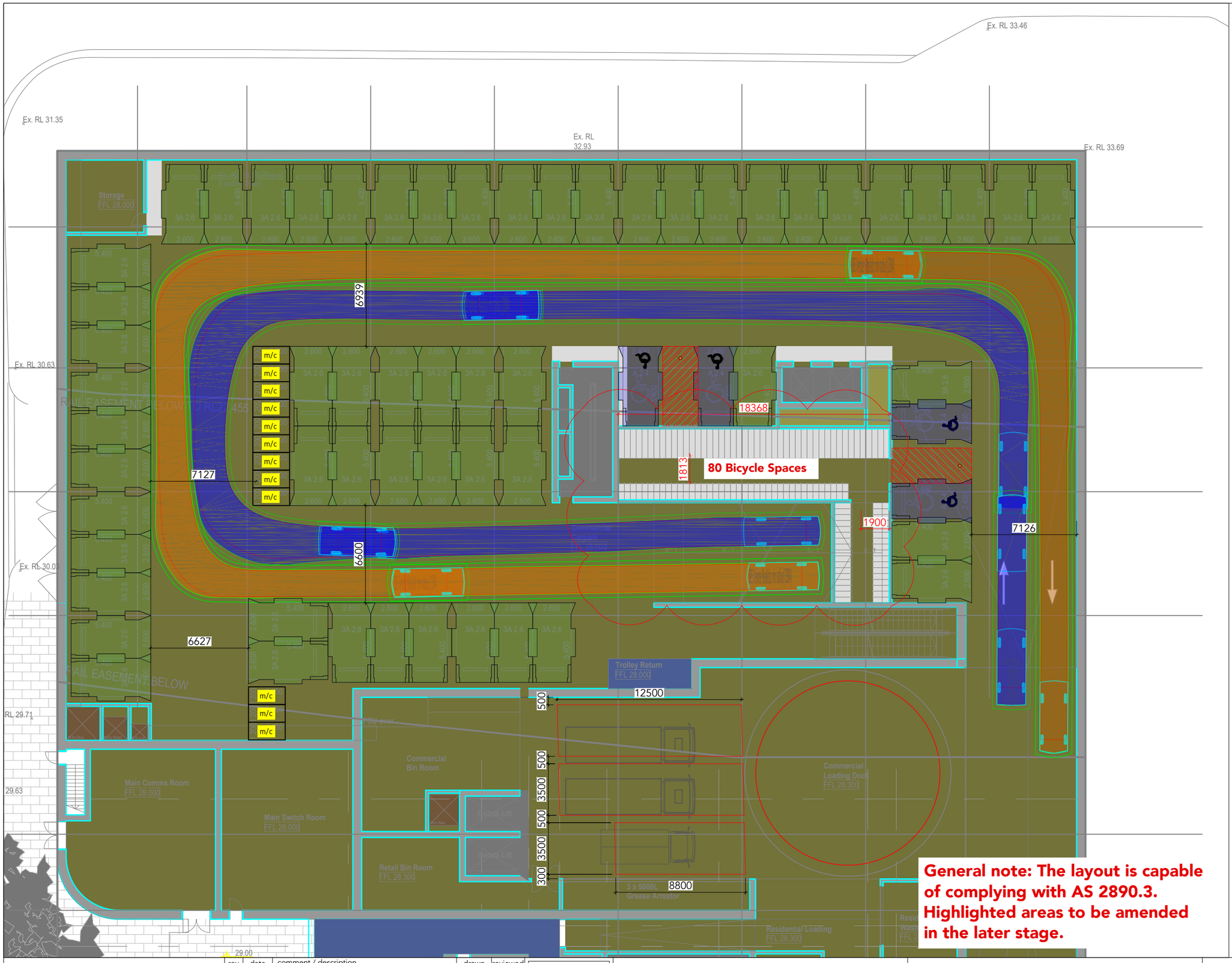
rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 2 - Loading Dock Design Review
2 x HRV and 1 x MRV Outbound Movements

client	Longhurst Group
drawing #	ptc-004
project #	AM-2621
scale	1 : 200

rev 3



General note: The layout is capable of complying with AS 2890.3. Highlighted areas to be amended in the later stage.

comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **2.2m** (min) throughout all areas of the car park accessible to vehicles and bicycles.
2.5m above accessible and shared bays **X** wherever access is required for a refuse vehicle (and safety clearance envelope)

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

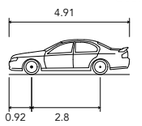
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

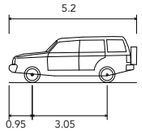
Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

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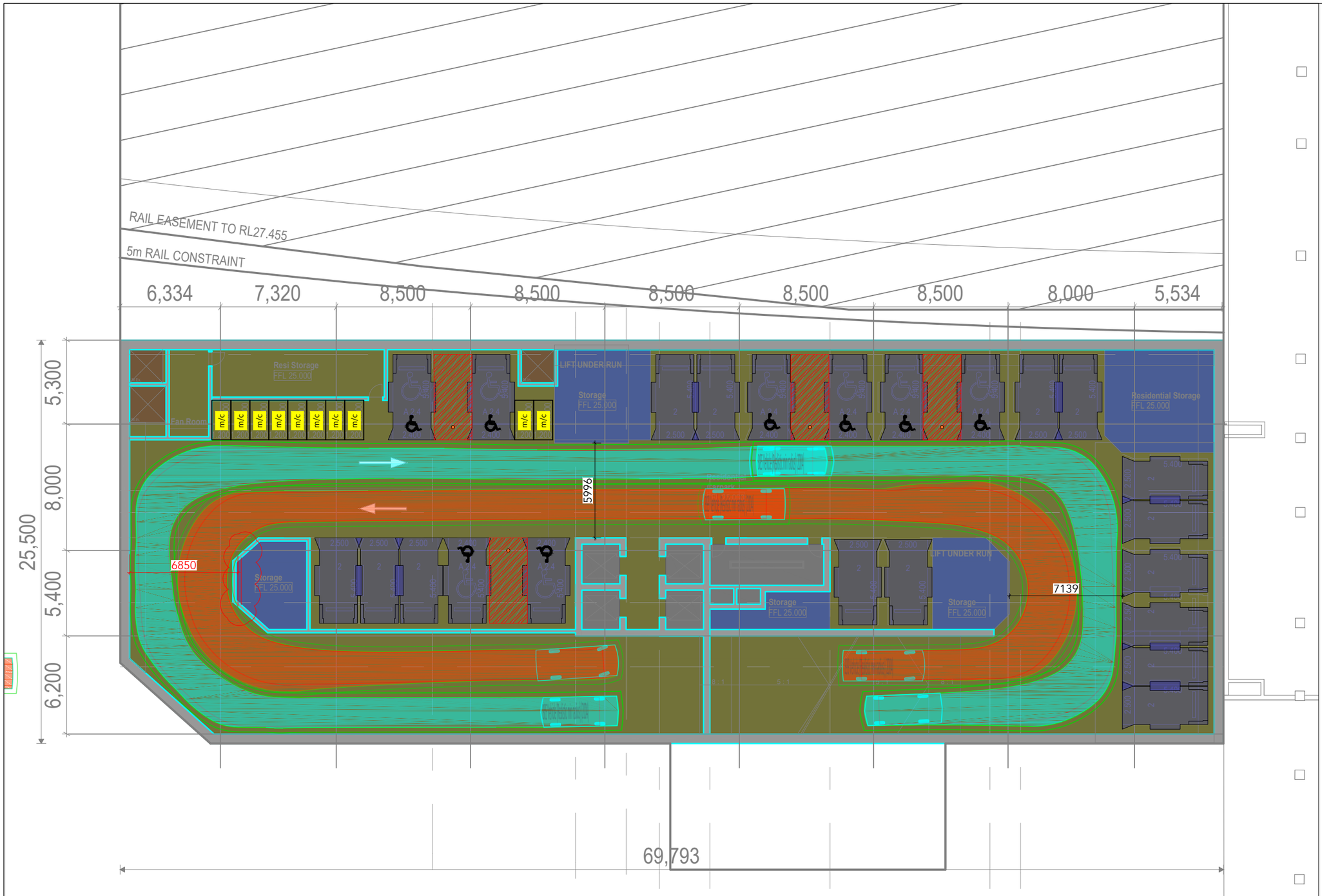
rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 2 - Carpark Design Review

client	Longhurst Group
drawing #	ptc-005
project #	AM-2621
scale	1 : 250

rev 3



General note: The layout is capable of complying with AS 2890.1. Highlighted areas to be amended in the later stage.

comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **2.2m** (min) throughout all areas of the car park accessible to vehicles and bicycles.
2.5m above accessible and shared bays
X wherever access is required for a refuse vehicle (and safety clearance envelope)

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

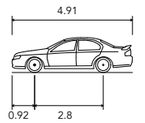
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

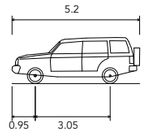
Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

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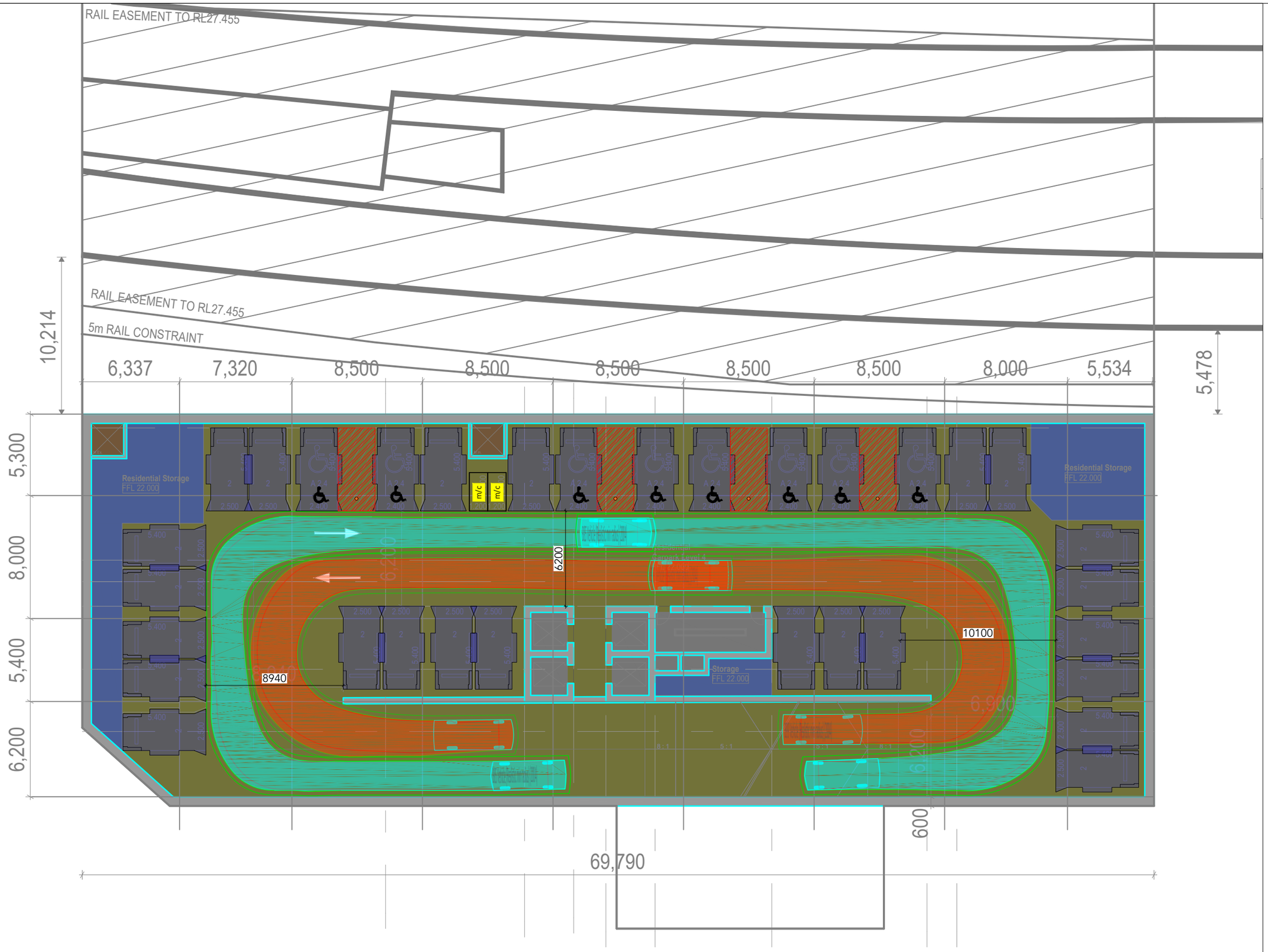
rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 3 - Carpark Design Review

client	Longhurst Group
drawing #	ptc-006
project #	AM-2621
scale	1 : 250

rev 3



comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **2.2m** (min) throughout all areas of the car park accessible to vehicles and bicycles.
2.5m above accessible and shared bays **X** wherever access is required for a refuse vehicle (and safety clearance envelope)

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

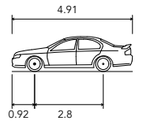
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

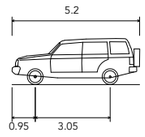
Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

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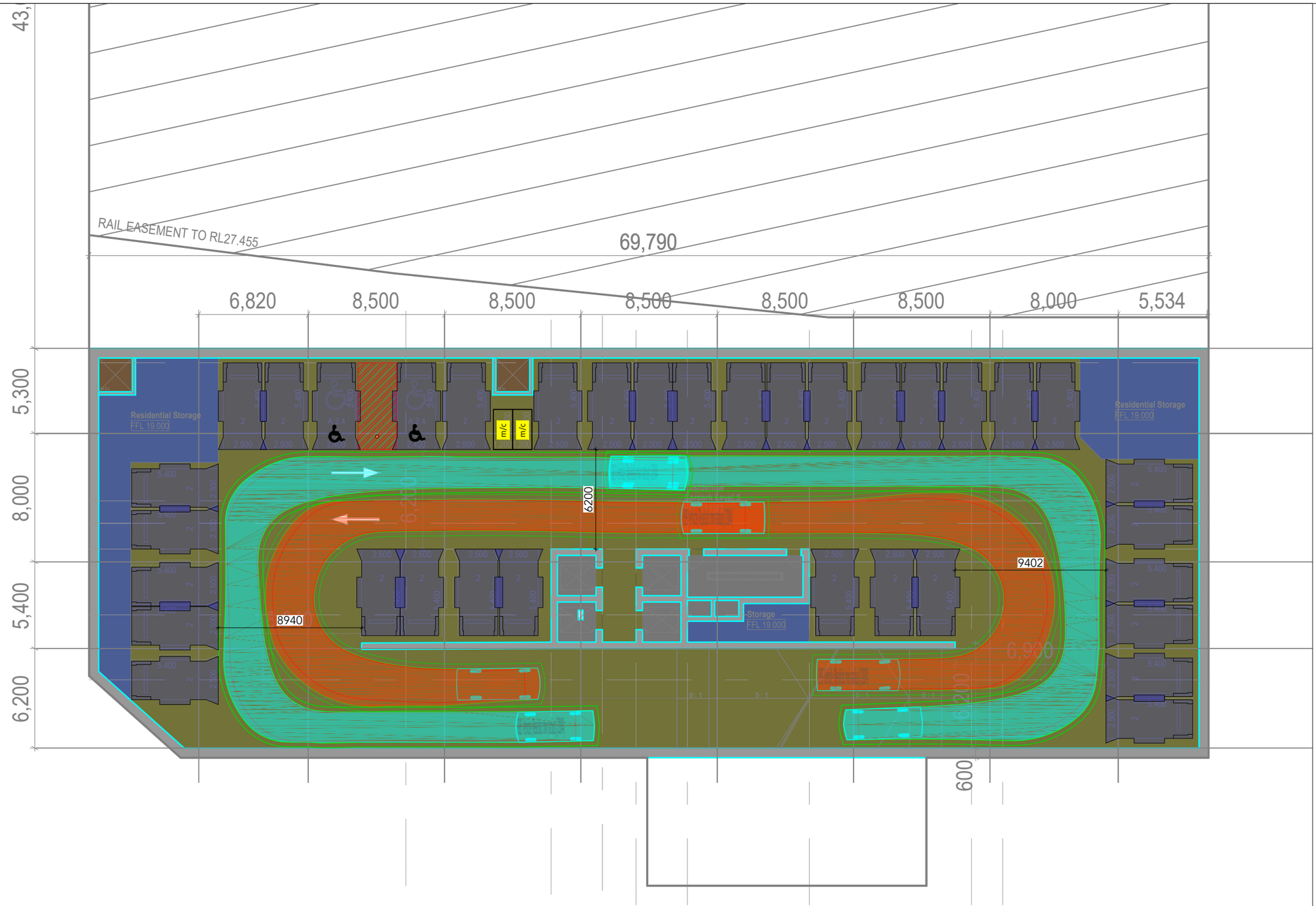
rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 3 - Carpark Design Review

client	Longhurst Group
drawing #	ptc-007
project #	AM-2621
scale	1 : 250

rev 3



comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **2.2m** (min) throughout all areas of the car park accessible to vehicles and bicycles.
2.5m above accessible and shared bays **X** wherever access is required for a refuse vehicle (and safety clearance envelope)

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

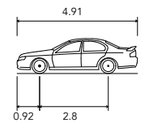
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

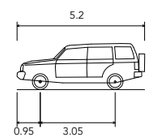
Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

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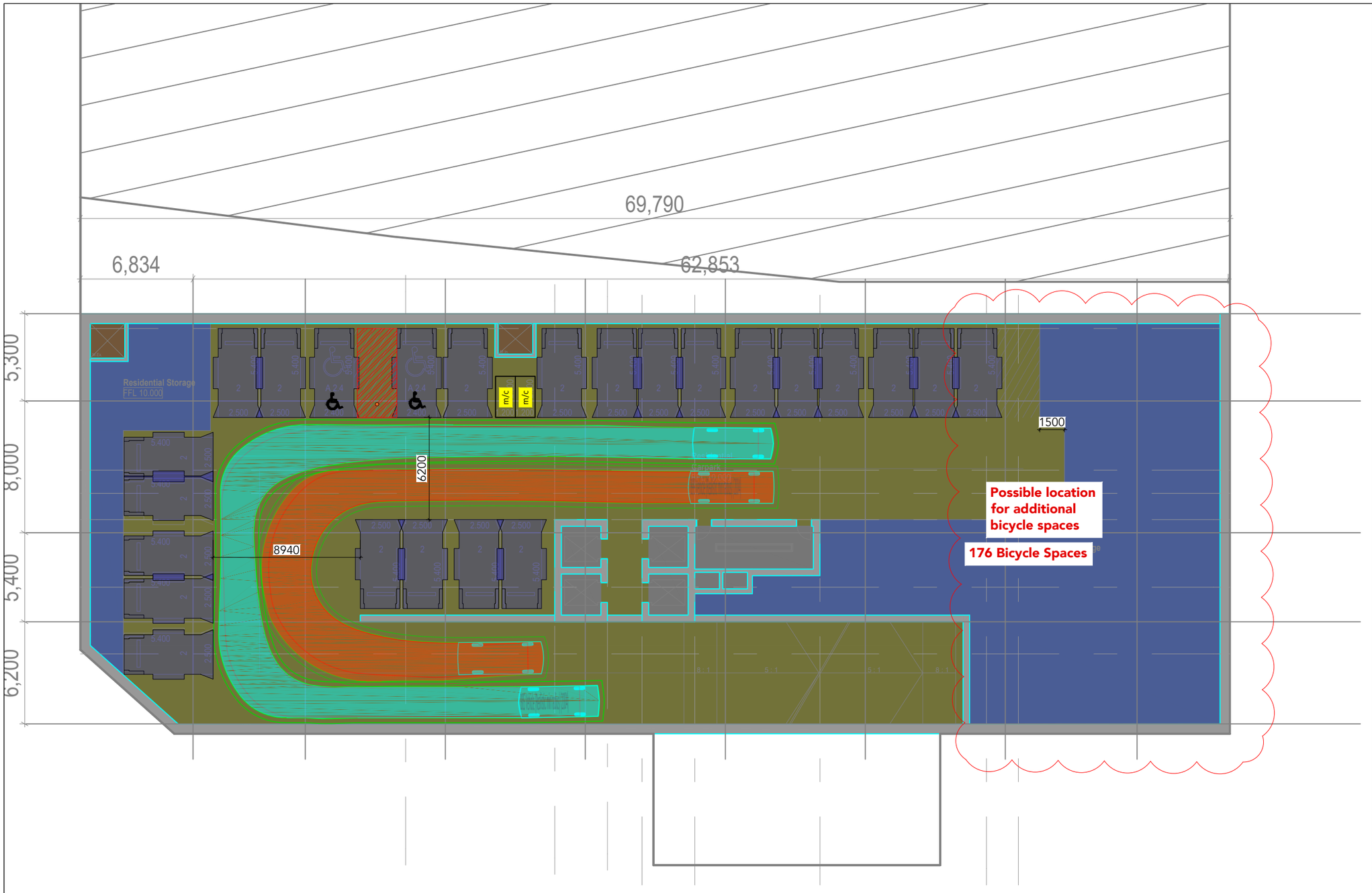
rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 5, 6 & 7 - Carpark Design Review

client	Longhurst Group
drawing #	ptc-008
project #	AM-2621
scale	1 : 250

rev 3



General note: The layout is capable of complying with AS 2890.3. Highlighted areas to be amended in the later stage.

comments

A3

TYPICAL

Please note the following compliance requirements:

Height Clearance: **2.2m** (min) throughout all areas of the car park accessible to vehicles and bicycles.
2.5m above accessible and shared bays **X** wherever access is required for a refuse vehicle (and safety clearance envelope)

Sight Splays: Visibility splays in the form of a **2.5m x 2m** right-angled triangle to be provided (AS2890.1). Ensure design avoids visual obstructions in sight splay (i.e. dense landscaping, tall fencing/walls etc.)

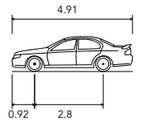
Parking Spaces: The parking envelopes , must be kept clear of all physical obstructions, including height clearance reductions. Ensure that grades within the parking module do not exceed 1:20 (1:40 for accessible bays).

Accessible Spaces: To be designed in accordance with AS2890.6. i.e, standard parking space with adjacent shared bay (2.4m x 5.4m), to be installed as per AS2890.6 requirements (bollard and markings).

Motorcycle Parking: Motorcycle bays to be designed as a 2.5m x 1.2m envelope (AS2890.1).

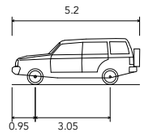
Bicycle Parking: Bicycle spaces are to allow for a envelope of 500mm by 1800mm, with an aisle width of 2000mm for locker storage, or 1500mm for racks.

Control Measures: Please note recommended control measures, including line markings, signage, bollards, convex mirrors, lights etc.



B85 Vehicle (Realistic min radius) (2004)

Overall Length	4.910m
Overall Width	1.870m
Overall Body Height	1.421m
Min Body Ground Clearance	0.159m
Track Width	1.770m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	5.750m



B99 Vehicle (Realistic min radius) (2004)

Overall Length	5.200m
Overall Width	1.940m
Overall Body Height	1.878m
Min Body Ground Clearance	0.272m
Track Width	1.840m
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6.250m

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rev	date	comment / description	drawn	reviewed
3	15.07.20	For Review	PS	KB
2	30.04.20	For Review	PS	KB
1	14.04.20	For Review	PS	KB

project
Edgecliff Centre

drawing title
Basement 8 - Carpark Design Review

client	Longhurst Group
drawing #	ptc-009
project #	AM-2621
scale	1 : 250

rev 3

Attachment 3 - SIDRA Outputs

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MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Mona Rd AM]

Network: N101 [Existing AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	2908	2.6	2544	2.7	0.625	5.5	LOS A	15.1	108.4	0.28	0.40	0.28	44.1
Approach		2908	2.6	2544[N1]	2.7	0.625	5.5	LOS A	15.1	108.4	0.28	0.40	0.28	44.1
NorthEast: Mona Road														
24	L2	11	9.1	11	9.1	0.033	46.9	LOS D	0.5	3.9	0.84	0.67	0.84	19.9
26	R2	244	0.4	244	0.4	0.704	54.9	LOS D	13.7	96.4	0.99	0.85	1.02	21.6
Approach		255	0.8	255	0.8	0.704	54.5	LOS D	13.7	96.4	0.98	0.84	1.02	21.5
NorthWest: New South Head Road														
27	L2	184	2.2	184	2.2	0.428	8.6	LOS A	5.6	41.2	0.20	0.34	0.23	45.9
28	T1	1827	7.7	1827	7.7	1.268	223.6	LOS F	136.8	1020.3	0.61	1.70	2.02	2.5
Approach		2011	7.2	2011	7.2	1.268	203.9	LOS F	136.8	1020.3	0.57	1.58	1.86	3.3
All Vehicles		5174	4.3	4810[N1]	4.6	1.268	91.1	LOS F	136.8	1020.3	0.44	0.92	0.98	9.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St AM]

Network: N101 [Existing AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	83	3.6	83	3.6	0.177	41.8	LOS C	3.8	27.2	0.82	0.74	0.82	14.7
2	T1	35	0.0	35	0.0	0.154	52.3	LOS D	1.9	13.2	0.93	0.69	0.93	25.2
3	R2	60	8.3	60	8.3	0.747	72.1	LOS F	3.9	29.2	1.00	0.88	1.28	10.0
Approach		178	4.5	178	4.5	0.747	54.1	LOS D	3.9	29.2	0.90	0.78	0.99	15.6
East: New South Head Road														
4	L2	173	2.3	145	2.3	0.124	10.8	LOS A	2.0	14.5	0.26	0.61	0.26	33.0
5	T1	2716	2.4	2273	2.4	0.640	9.7	LOS A	16.2	115.9	0.47	0.43	0.47	19.9
6	R2	60	1.7	50	1.7	0.299	65.9	LOS E	3.0	21.4	1.00	0.75	1.00	20.1
Approach		2949	2.4	2469[N1]	2.4	0.640	10.9	LOS A	16.2	115.9	0.47	0.45	0.47	21.3
North: Darling Point Road														
7	L2	131	2.3	131	2.3	0.278	43.9	LOS D	6.1	43.8	0.84	0.77	0.84	24.3
8	T1	31	0.0	31	0.0	0.136	53.4	LOS D	1.7	11.6	0.93	0.69	0.93	26.4
9	R2	81	8.6	81	8.6	0.621	67.0	LOS E	4.9	36.9	1.00	0.80	1.07	18.6
Approach		243	4.1	243	4.1	0.621	52.8	LOS D	6.1	43.8	0.91	0.77	0.93	22.5
West: New South Head Road														
10b	L3	44	0.0	42	0.0	0.199	15.7	LOS B	4.9	36.4	0.40	0.50	0.40	39.7
11	T1	1671	8.2	1608	8.2	0.994	72.8	LOS F	38.3	287.2	0.82	1.15	1.26	8.3
12	R2	98	3.1	94	3.1	1.045	137.3	LOS F	9.0	64.7	1.00	1.19	2.13	9.0
Approach		1813	7.7	1745[N1]	7.7	1.045	74.9	LOS F	38.3	287.2	0.82	1.14	1.29	8.7
All Vehicles		5183	4.4	4634[N1]	4.9	1.045	38.9	LOS C	38.3	287.2	0.64	0.74	0.82	12.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing AM]

Network: N101 [Existing AM]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2914	2.5	2365	2.5	1.084	142.1	LOS F	30.1	215.4	1.00	1.69	1.94	3.4
Approach		2914	2.5	2365[N1]	2.5	1.084	142.1	LOS F	30.1	215.4	1.00	1.69	1.94	3.4
West: New South Head Road														
8	T1	1865	7.7	1865	7.7	0.625	2.7	LOS A	10.1	75.6	0.20	0.18	0.20	34.4
Approach		1865	7.7	1865	7.7	0.625	2.7	LOS A	10.1	75.6	0.20	0.18	0.20	34.4
All Vehicles		4779	4.5	4230[N1]	5.1	1.084	80.7	LOS F	30.1	215.4	0.65	1.03	1.17	4.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St AM] **Network: N101 [Existing AM]**

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	1069	2.2	1069	2.2	1.492	496.9	LOS F	109.8	783.0	1.00	2.33	3.63	0.9
2	T1	331	2.7	331	2.7	0.745	52.2	LOS D	13.6	97.3	0.98	0.84	1.04	15.8
Approach		1400	2.3	1400	2.3	1.492	391.8	LOS F	109.8	783.0	0.99	1.98	3.02	1.5
East: New South Head Road														
4	L2	163	5.5	163	5.5	1.039	114.1	LOS F	58.9	424.0	1.00	1.41	1.71	14.8
5	T1	1887	2.4	1887	2.4	1.484	399.6	LOS F	151.2	1080.4	1.00	2.56	3.18	4.3
Approach		2050	2.7	2050	2.7	1.484	376.9	LOS F	151.2	1080.4	1.00	2.47	3.06	4.6
North: Ocean Avenue														
7	L2	22	0.0	22	0.0	0.346	52.9	LOS D	5.6	39.6	0.93	0.75	0.93	27.0
8	T1	195	2.1	195	2.1	0.346	48.3	LOS D	5.8	41.5	0.93	0.74	0.93	16.5
Approach		217	1.8	217	1.8	0.346	48.8	LOS D	5.8	41.5	0.93	0.74	0.93	17.9
West: New South Head Road														
10	L2	123	2.4	123	2.4	0.499	7.9	LOS A	5.7	42.6	0.16	0.24	0.16	46.4
11	T1	1241	8.3	1241	8.3	0.499	2.4	LOS A	5.8	43.4	0.16	0.19	0.16	56.0
12	R2	466	8.2	466	8.2	0.759	59.4	LOS E	13.9	103.9	0.99	0.87	1.07	12.7
Approach		1830	7.9	1830	7.9	0.759	17.3	LOS B	13.9	103.9	0.37	0.36	0.39	39.0
All Vehicles		5497	4.3	5497	4.3	1.492	248.0	LOS F	151.2	1080.4	0.79	1.58	2.08	5.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mona Rd PM]

Network: N101 [Existing PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	1990	2.2	1990	2.2	0.476	2.1	LOS A	4.2	30.2	0.07	0.25	0.07	50.3
Approach		1990	2.2	1990	2.2	0.476	2.1	LOS A	4.2	30.2	0.07	0.25	0.07	50.3
NorthEast: Mona Road														
24	L2	28	0.0	28	0.0	0.172	51.8	LOS D	1.5	10.2	0.89	0.73	0.89	18.7
26	R2	205	0.5	205	0.5	0.706	56.2	LOS D	11.6	81.4	0.98	0.85	1.04	21.3
Approach		233	0.4	233	0.4	0.706	55.6	LOS D	11.6	81.4	0.97	0.83	1.02	21.0
NorthWest: New South Head Road														
27	L2	254	0.0	254	0.0	1.095	138.0	LOS F	103.4	727.6	1.00	1.55	1.92	11.7
28	T1	2375	0.9	2375	0.9	1.095	128.9	LOS F	112.5	793.5	1.00	1.64	1.91	4.1
Approach		2629	0.8	2629	0.8	1.095	129.7	LOS F	112.5	793.5	1.00	1.63	1.91	5.0
All Vehicles		4852	1.4	4852	1.4	1.095	73.9	LOS F	112.5	793.5	0.62	1.02	1.11	10.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St PM]

Network: N101 [Existing PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	155	1.3	155	1.3	0.206	28.9	LOS C	5.8	41.0	0.68	0.73	0.68	18.8
2	T1	112	1.8	112	1.8	0.410	51.6	LOS D	6.1	43.4	0.96	0.76	0.96	25.4
3	R2	144	1.4	144	1.4	0.848	70.9	LOS F	9.4	66.8	1.00	0.99	1.33	10.1
Approach		411	1.5	411	1.5	0.848	49.8	LOS D	9.4	66.8	0.87	0.83	0.99	17.7
East: New South Head Road														
4	L2	164	1.8	164	1.8	0.182	19.2	LOS B	3.8	27.0	0.43	0.68	0.43	27.1
5	T1	1828	2.1	1828	2.1	0.708	14.4	LOS A	16.3	115.9	0.55	0.49	0.55	16.8
6	R2	61	0.0	61	0.0	0.152	56.1	LOS D	3.5	24.6	1.00	0.77	1.00	21.4
Approach		2053	2.0	2053	2.0	0.708	16.0	LOS B	16.3	115.9	0.55	0.51	0.55	18.8
North: Darling Point Road														
7	L2	89	3.4	89	3.4	0.120	28.0	LOS B	3.2	23.0	0.66	0.71	0.66	28.1
8	T1	47	2.1	47	2.1	0.172	49.5	LOS D	2.5	17.5	0.92	0.69	0.92	25.9
9	R2	55	1.8	55	1.8	0.418	63.1	LOS E	3.2	22.9	0.98	0.76	0.98	18.2
Approach		191	2.6	191	2.6	0.418	43.4	LOS D	3.2	23.0	0.81	0.72	0.81	24.1
West: New South Head Road														
10b	L3	46	0.0	46	0.0	0.852	38.0	LOS C	40.7	287.2	0.94	0.90	0.99	23.6
11	T1	2276	1.0	2276	1.0	0.852	31.9	LOS C	40.7	287.2	0.89	0.86	0.95	16.3
12	R2	113	0.0	113	0.0	0.862	63.4	LOS E	7.0	49.2	0.95	0.93	1.33	16.6
Approach		2435	0.9	2435	0.9	0.862	33.4	LOS C	40.7	287.2	0.90	0.87	0.97	16.5
All Vehicles		5090	1.5	5090	1.5	0.862	28.1	LOS B	40.7	287.2	0.75	0.72	0.80	17.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing PM]

Network: N101 [Existing PM]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2051	2.1	2051	2.1	0.824	7.5	LOS A	19.2	137.1	0.36	0.37	0.40	31.9
Approach		2051	2.1	2051	2.1	0.824	7.5	LOS A	19.2	137.1	0.36	0.37	0.40	31.9
West: New South Head Road														
8	T1	2534	1.1	2534	1.1	0.452	0.6	LOS A	1.8	12.5	0.04	0.04	0.04	51.9
Approach		2534	1.1	2534	1.1	0.452	0.6	LOS A	1.8	12.5	0.04	0.04	0.04	51.9
All Vehicles		4585	1.6	4585	1.6	0.824	3.7	LOS A	19.2	137.1	0.19	0.19	0.20	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St PM] **Network: N101 [Existing PM]**

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	773	1.7	773	1.7	0.377	20.2	LOS B	12.5	88.4	0.60	0.73	0.60	15.2
2	T1	340	0.3	340	0.3	0.752	49.5	LOS D	16.1	113.0	0.97	0.85	1.03	16.4
Approach		1113	1.3	1113	1.3	0.752	29.1	LOS C	16.1	113.0	0.71	0.76	0.73	15.8
East: New South Head Road														
4	L2	205	1.0	205	1.0	0.770	43.4	LOS D	25.5	181.1	0.92	0.85	0.94	28.1
5	T1	1302	2.5	1302	2.5	0.770	37.1	LOS C	25.5	181.1	0.91	0.82	0.92	27.3
Approach		1507	2.3	1507	2.3	0.770	37.9	LOS C	25.5	181.1	0.91	0.82	0.93	27.4
North: Ocean Avenue														
7	L2	22	0.0	22	0.0	0.314	49.0	LOS D	6.1	42.8	0.90	0.73	0.90	28.2
8	T1	221	0.5	221	0.5	0.314	44.4	LOS D	6.1	43.2	0.90	0.72	0.90	17.4
Approach		243	0.4	243	0.4	0.314	44.8	LOS D	6.1	43.2	0.90	0.73	0.90	18.7
West: New South Head Road														
10	L2	120	0.0	120	0.0	0.616	6.8	LOS A	4.0	27.9	0.09	0.16	0.09	48.7
11	T1	1551	0.5	1551	0.5	0.616	2.3	LOS A	9.3	65.5	0.16	0.18	0.16	56.2
12	R2	863	2.4	863	2.4	0.767	47.4	LOS D	22.5	160.6	0.93	0.86	0.96	15.1
Approach		2534	1.1	2534	1.1	0.767	17.9	LOS B	22.5	160.6	0.42	0.41	0.43	37.8
All Vehicles		5397	1.4	5397	1.4	0.770	27.0	LOS B	25.5	181.1	0.64	0.61	0.65	29.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mona Rd Sat]

Network: N101 [Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	2476	1.9	2476	1.9	0.565	4.6	LOS A	16.8	119.6	0.23	0.37	0.23	45.7
Approach		2476	1.9	2476	1.9	0.565	4.6	LOS A	16.8	119.6	0.23	0.37	0.23	45.7
NorthEast: Mona Road														
24	L2	43	0.0	43	0.0	0.163	54.0	LOS D	2.2	15.7	0.91	0.73	0.91	18.2
26	R2	239	0.4	239	0.4	0.999	104.6	LOS F	19.8	138.9	1.00	1.17	1.72	14.2
Approach		282	0.4	282	0.4	0.999	96.9	LOS F	19.8	138.9	0.99	1.11	1.60	14.6
NorthWest: New South Head Road														
27	L2	258	0.0	258	0.0	0.424	8.1	LOS A	5.9	42.0	0.18	0.37	0.18	45.9
28	T1	2106	1.5	2106	1.5	1.257	224.1	LOS F	148.6	1053.5	0.57	1.70	1.99	2.5
Approach		2364	1.4	2364	1.4	1.257	200.5	LOS F	148.6	1053.5	0.53	1.56	1.79	3.5
All Vehicles		5122	1.6	5122	1.6	1.257	100.1	LOS F	148.6	1053.5	0.41	0.96	1.03	8.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St Sat]

Network: N101 [Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	187	2.1	187	2.1	0.350	40.6	LOS C	8.6	61.5	0.84	0.78	0.84	15.0
2	T1	97	0.0	97	0.0	0.260	44.7	LOS D	4.9	34.1	0.89	0.71	0.89	27.1
3	R2	128	0.0	128	0.0	1.279	325.2	LOS F	20.8	145.6	1.00	1.75	3.08	2.5
Approach		412	1.0	412	1.0	1.279	130.0	LOS F	20.8	145.6	0.90	1.07	1.55	8.1
East: New South Head Road														
4	L2	179	2.2	179	2.2	0.161	8.4	LOS A	1.4	9.9	0.14	0.60	0.14	36.7
5	T1	2172	2.0	2172	2.0	0.618	3.6	LOS A	10.7	76.1	0.20	0.18	0.20	36.4
6	R2	92	0.0	92	0.0	0.991	93.0	LOS F	6.8	47.3	1.00	0.99	1.59	15.5
Approach		2443	1.9	2443	1.9	0.991	7.3	LOS A	10.7	76.1	0.22	0.24	0.25	29.6
North: Darling Point Road														
7	L2	126	0.0	126	0.0	0.233	39.2	LOS C	5.6	39.1	0.80	0.76	0.80	23.9
8	T1	57	0.0	57	0.0	0.153	43.6	LOS D	2.8	19.5	0.87	0.67	0.87	27.5
9	R2	98	3.1	98	3.1	0.637	62.7	LOS E	5.8	42.0	1.00	0.83	1.07	18.3
Approach		281	1.1	281	1.1	0.637	48.3	LOS D	5.8	42.0	0.88	0.76	0.91	22.5
West: New South Head Road														
10b	L3	46	0.0	40	0.0	0.295	17.2	LOS B	5.0	35.4	0.46	0.45	0.46	38.7
11	T1	1970	1.5	1714	1.5	1.450	421.5	LOS F	40.5	287.2	0.95	2.66	3.23	1.6
12	R2	110	0.0	96	0.0	1.111	172.5	LOS F	10.3	72.1	1.00	1.17	2.12	7.3
Approach		2126	1.4	1849[N1]	1.4	1.450	399.9	LOS F	40.5	287.2	0.94	2.54	3.11	1.8
All Vehicles		5262	1.6	4985[N1]	1.7	1.450	165.4	LOS F	40.5	287.2	0.58	1.19	1.45	4.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing Sat]

Network: N101 [Existing Sat]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2437	1.9	2437	1.9	0.654	9.7	LOS A	30.2	214.7	0.50	0.46	0.50	28.1
Approach		2437	1.9	2437	1.9	0.654	9.7	LOS A	30.2	214.7	0.50	0.46	0.50	28.1
West: New South Head Road														
8	T1	2275	1.3	1741	1.2	0.642	5.9	LOS A	11.5	81.6	0.32	0.29	0.32	22.8
Approach		2275	1.3	1741 N1	1.2	0.642	5.9	LOS A	11.5	81.6	0.32	0.29	0.32	22.8
All Vehicles		4712	1.6	4178 N1	1.8	0.654	8.1	LOS A	30.2	214.7	0.42	0.39	0.42	26.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St Sat]

Network: N101 [Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	902	1.6	902	1.6	1.024	120.6	LOS F	46.9	332.5	1.00	1.31	1.75	3.4
2	T1	404	1.7	404	1.7	0.854	53.6	LOS D	20.6	146.6	0.97	0.95	1.14	15.5
Approach		1306	1.6	1306	1.6	1.024	99.9	LOS F	46.9	332.5	0.99	1.20	1.56	5.9
East: New South Head Road														
4	L2	205	2.4	205	2.4	1.012	102.5	LOS F	48.0	342.1	1.00	1.30	1.60	16.1
5	T1	1549	2.1	1549	2.1	1.012	88.5	LOS F	71.3	508.2	1.00	1.30	1.53	15.6
Approach		1754	2.1	1754	2.1	1.012	90.2	LOS F	71.3	508.2	1.00	1.30	1.54	15.6
North: Ocean Avenue														
7	L2	28	0.0	28	0.0	0.304	47.2	LOS D	6.3	43.9	0.88	0.73	0.88	28.6
8	T1	227	0.4	227	0.4	0.304	42.6	LOS D	6.3	44.4	0.88	0.72	0.88	17.9
Approach		255	0.4	255	0.4	0.304	43.1	LOS D	6.3	44.4	0.88	0.72	0.88	19.5
West: New South Head Road														
10	L2	137	0.0	107	0.0	0.434	8.2	LOS A	4.5	31.4	0.15	0.23	0.15	46.0
11	T1	1330	1.3	1036	1.2	0.434	2.7	LOS A	4.5	31.8	0.15	0.18	0.15	55.6
12	R2	808	1.4	630	1.3	0.821	59.0	LOS E	18.8	133.4	1.00	0.90	1.11	12.8
Approach		2275	1.2	1773[N1]	1.2	0.821	23.0	LOS B	18.8	133.4	0.45	0.44	0.49	34.0
All Vehicles		5590	1.6	5088[N1]	1.7	1.024	66.9	LOS E	71.3	508.2	0.80	0.94	1.15	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Mona Rd AM]

Network: N101 [Existing AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	2908	2.6	2544	2.7	0.625	5.5	LOS A	15.1	108.4	0.28	0.40	0.28	44.1
Approach		2908	2.6	2544[N1]	2.7	0.625	5.5	LOS A	15.1	108.4	0.28	0.40	0.28	44.1
NorthEast: Mona Road														
24	L2	11	9.1	11	9.1	0.033	46.9	LOS D	0.5	3.9	0.84	0.67	0.84	19.9
26	R2	244	0.4	244	0.4	0.704	54.9	LOS D	13.7	96.4	0.99	0.85	1.02	21.6
Approach		255	0.8	255	0.8	0.704	54.5	LOS D	13.7	96.4	0.98	0.84	1.02	21.5
NorthWest: New South Head Road														
27	L2	184	2.2	184	2.2	0.428	8.6	LOS A	5.6	41.2	0.20	0.34	0.23	45.9
28	T1	1827	7.7	1827	7.7	1.268	223.6	LOS F	136.8	1020.3	0.61	1.70	2.02	2.5
Approach		2011	7.2	2011	7.2	1.268	203.9	LOS F	136.8	1020.3	0.57	1.58	1.86	3.3
All Vehicles		5174	4.3	4810[N1]	4.6	1.268	91.1	LOS F	136.8	1020.3	0.44	0.92	0.98	9.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Pedestrian Back of Queue ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St AM]

Network: N101 [Existing AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	83	3.6	83	3.6	0.177	41.8	LOS C	3.8	27.2	0.82	0.74	0.82	14.7
2	T1	35	0.0	35	0.0	0.154	52.3	LOS D	1.9	13.2	0.93	0.69	0.93	25.2
3	R2	60	8.3	60	8.3	0.747	72.1	LOS F	3.9	29.2	1.00	0.88	1.28	10.0
Approach		178	4.5	178	4.5	0.747	54.1	LOS D	3.9	29.2	0.90	0.78	0.99	15.6
East: New South Head Road														
4	L2	173	2.3	145	2.3	0.124	10.8	LOS A	2.0	14.5	0.26	0.61	0.26	33.0
5	T1	2716	2.4	2273	2.4	0.640	9.7	LOS A	16.2	115.9	0.47	0.43	0.47	19.9
6	R2	60	1.7	50	1.7	0.299	65.9	LOS E	3.0	21.4	1.00	0.75	1.00	20.1
Approach		2949	2.4	2469[N1]	2.4	0.640	10.9	LOS A	16.2	115.9	0.47	0.45	0.47	21.3
North: Darling Point Road														
7	L2	131	2.3	131	2.3	0.278	43.9	LOS D	6.1	43.8	0.84	0.77	0.84	24.3
8	T1	31	0.0	31	0.0	0.136	53.4	LOS D	1.7	11.6	0.93	0.69	0.93	26.4
9	R2	81	8.6	81	8.6	0.621	67.0	LOS E	4.9	36.9	1.00	0.80	1.07	18.6
Approach		243	4.1	243	4.1	0.621	52.8	LOS D	6.1	43.8	0.91	0.77	0.93	22.5
West: New South Head Road														
10b	L3	44	0.0	42	0.0	0.199	15.7	LOS B	4.9	36.4	0.40	0.50	0.40	39.7
11	T1	1671	8.2	1608	8.2	0.994	72.8	LOS F	38.3	287.2	0.82	1.15	1.26	8.3
12	R2	98	3.1	94	3.1	1.045	137.3	LOS F	9.0	64.7	1.00	1.19	2.13	9.0
Approach		1813	7.7	1745[N1]	7.7	1.045	74.9	LOS F	38.3	287.2	0.82	1.14	1.29	8.7
All Vehicles		5183	4.4	4634[N1]	4.9	1.045	38.9	LOS C	38.3	287.2	0.64	0.74	0.82	12.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing AM]

Network: N101 [Existing AM]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2914	2.5	2365	2.5	1.084	142.1	LOS F	30.1	215.4	1.00	1.69	1.94	3.4
Approach		2914	2.5	2365[N1]	2.5	1.084	142.1	LOS F	30.1	215.4	1.00	1.69	1.94	3.4
West: New South Head Road														
8	T1	1865	7.7	1865	7.7	0.625	2.7	LOS A	10.1	75.6	0.20	0.18	0.20	34.4
Approach		1865	7.7	1865	7.7	0.625	2.7	LOS A	10.1	75.6	0.20	0.18	0.20	34.4
All Vehicles		4779	4.5	4230[N1]	5.1	1.084	80.7	LOS F	30.1	215.4	0.65	1.03	1.17	4.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St AM] **Network: N101 [Existing AM]**

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	1069	2.2	1069	2.2	1.492	496.9	LOS F	109.8	783.0	1.00	2.33	3.63	0.9
2	T1	331	2.7	331	2.7	0.745	52.2	LOS D	13.6	97.3	0.98	0.84	1.04	15.8
Approach		1400	2.3	1400	2.3	1.492	391.8	LOS F	109.8	783.0	0.99	1.98	3.02	1.5
East: New South Head Road														
4	L2	163	5.5	163	5.5	1.039	114.1	LOS F	58.9	424.0	1.00	1.41	1.71	14.8
5	T1	1887	2.4	1887	2.4	1.484	399.6	LOS F	151.2	1080.4	1.00	2.56	3.18	4.3
Approach		2050	2.7	2050	2.7	1.484	376.9	LOS F	151.2	1080.4	1.00	2.47	3.06	4.6
North: Ocean Avenue														
7	L2	22	0.0	22	0.0	0.346	52.9	LOS D	5.6	39.6	0.93	0.75	0.93	27.0
8	T1	195	2.1	195	2.1	0.346	48.3	LOS D	5.8	41.5	0.93	0.74	0.93	16.5
Approach		217	1.8	217	1.8	0.346	48.8	LOS D	5.8	41.5	0.93	0.74	0.93	17.9
West: New South Head Road														
10	L2	123	2.4	123	2.4	0.499	7.9	LOS A	5.7	42.6	0.16	0.24	0.16	46.4
11	T1	1241	8.3	1241	8.3	0.499	2.4	LOS A	5.8	43.4	0.16	0.19	0.16	56.0
12	R2	466	8.2	466	8.2	0.759	59.4	LOS E	13.9	103.9	0.99	0.87	1.07	12.7
Approach		1830	7.9	1830	7.9	0.759	17.3	LOS B	13.9	103.9	0.37	0.36	0.39	39.0
All Vehicles		5497	4.3	5497	4.3	1.492	248.0	LOS F	151.2	1080.4	0.79	1.58	2.08	5.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mona Rd PM]

Network: N101 [Existing PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	1990	2.2	1990	2.2	0.476	2.1	LOS A	4.2	30.2	0.07	0.25	0.07	50.3
Approach		1990	2.2	1990	2.2	0.476	2.1	LOS A	4.2	30.2	0.07	0.25	0.07	50.3
NorthEast: Mona Road														
24	L2	28	0.0	28	0.0	0.172	51.8	LOS D	1.5	10.2	0.89	0.73	0.89	18.7
26	R2	205	0.5	205	0.5	0.706	56.2	LOS D	11.6	81.4	0.98	0.85	1.04	21.3
Approach		233	0.4	233	0.4	0.706	55.6	LOS D	11.6	81.4	0.97	0.83	1.02	21.0
NorthWest: New South Head Road														
27	L2	254	0.0	254	0.0	1.095	138.0	LOS F	103.4	727.6	1.00	1.55	1.92	11.7
28	T1	2375	0.9	2375	0.9	1.095	128.9	LOS F	112.5	793.5	1.00	1.64	1.91	4.1
Approach		2629	0.8	2629	0.8	1.095	129.7	LOS F	112.5	793.5	1.00	1.63	1.91	5.0
All Vehicles		4852	1.4	4852	1.4	1.095	73.9	LOS F	112.5	793.5	0.62	1.02	1.11	10.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St PM]

Network: N101 [Existing PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	155	1.3	155	1.3	0.206	28.9	LOS C	5.8	41.0	0.68	0.73	0.68	18.8
2	T1	112	1.8	112	1.8	0.410	51.6	LOS D	6.1	43.4	0.96	0.76	0.96	25.4
3	R2	144	1.4	144	1.4	0.848	70.9	LOS F	9.4	66.8	1.00	0.99	1.33	10.1
Approach		411	1.5	411	1.5	0.848	49.8	LOS D	9.4	66.8	0.87	0.83	0.99	17.7
East: New South Head Road														
4	L2	164	1.8	164	1.8	0.182	19.2	LOS B	3.8	27.0	0.43	0.68	0.43	27.1
5	T1	1828	2.1	1828	2.1	0.708	14.4	LOS A	16.3	115.9	0.55	0.49	0.55	16.8
6	R2	61	0.0	61	0.0	0.152	56.1	LOS D	3.5	24.6	1.00	0.77	1.00	21.4
Approach		2053	2.0	2053	2.0	0.708	16.0	LOS B	16.3	115.9	0.55	0.51	0.55	18.8
North: Darling Point Road														
7	L2	89	3.4	89	3.4	0.120	28.0	LOS B	3.2	23.0	0.66	0.71	0.66	28.1
8	T1	47	2.1	47	2.1	0.172	49.5	LOS D	2.5	17.5	0.92	0.69	0.92	25.9
9	R2	55	1.8	55	1.8	0.418	63.1	LOS E	3.2	22.9	0.98	0.76	0.98	18.2
Approach		191	2.6	191	2.6	0.418	43.4	LOS D	3.2	23.0	0.81	0.72	0.81	24.1
West: New South Head Road														
10b	L3	46	0.0	46	0.0	0.852	38.0	LOS C	40.7	287.2	0.94	0.90	0.99	23.6
11	T1	2276	1.0	2276	1.0	0.852	31.9	LOS C	40.7	287.2	0.89	0.86	0.95	16.3
12	R2	113	0.0	113	0.0	0.862	63.4	LOS E	7.0	49.2	0.95	0.93	1.33	16.6
Approach		2435	0.9	2435	0.9	0.862	33.4	LOS C	40.7	287.2	0.90	0.87	0.97	16.5
All Vehicles		5090	1.5	5090	1.5	0.862	28.1	LOS B	40.7	287.2	0.75	0.72	0.80	17.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing PM]

Network: N101 [Existing PM]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2051	2.1	2051	2.1	0.824	7.5	LOS A	19.2	137.1	0.36	0.37	0.40	31.9
Approach		2051	2.1	2051	2.1	0.824	7.5	LOS A	19.2	137.1	0.36	0.37	0.40	31.9
West: New South Head Road														
8	T1	2534	1.1	2534	1.1	0.452	0.6	LOS A	1.8	12.5	0.04	0.04	0.04	51.9
Approach		2534	1.1	2534	1.1	0.452	0.6	LOS A	1.8	12.5	0.04	0.04	0.04	51.9
All Vehicles		4585	1.6	4585	1.6	0.824	3.7	LOS A	19.2	137.1	0.19	0.19	0.20	36.8

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St PM] **Network: N101 [Existing PM]**

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	773	1.7	773	1.7	0.377	20.2	LOS B	12.5	88.4	0.60	0.73	0.60	15.2
2	T1	340	0.3	340	0.3	0.752	49.5	LOS D	16.1	113.0	0.97	0.85	1.03	16.4
Approach		1113	1.3	1113	1.3	0.752	29.1	LOS C	16.1	113.0	0.71	0.76	0.73	15.8
East: New South Head Road														
4	L2	205	1.0	205	1.0	0.770	43.4	LOS D	25.5	181.1	0.92	0.85	0.94	28.1
5	T1	1302	2.5	1302	2.5	0.770	37.1	LOS C	25.5	181.1	0.91	0.82	0.92	27.3
Approach		1507	2.3	1507	2.3	0.770	37.9	LOS C	25.5	181.1	0.91	0.82	0.93	27.4
North: Ocean Avenue														
7	L2	22	0.0	22	0.0	0.314	49.0	LOS D	6.1	42.8	0.90	0.73	0.90	28.2
8	T1	221	0.5	221	0.5	0.314	44.4	LOS D	6.1	43.2	0.90	0.72	0.90	17.4
Approach		243	0.4	243	0.4	0.314	44.8	LOS D	6.1	43.2	0.90	0.73	0.90	18.7
West: New South Head Road														
10	L2	120	0.0	120	0.0	0.616	6.8	LOS A	4.0	27.9	0.09	0.16	0.09	48.7
11	T1	1551	0.5	1551	0.5	0.616	2.3	LOS A	9.3	65.5	0.16	0.18	0.16	56.2
12	R2	863	2.4	863	2.4	0.767	47.4	LOS D	22.5	160.6	0.93	0.86	0.96	15.1
Approach		2534	1.1	2534	1.1	0.767	17.9	LOS B	22.5	160.6	0.42	0.41	0.43	37.8
All Vehicles		5397	1.4	5397	1.4	0.770	27.0	LOS B	25.5	181.1	0.64	0.61	0.65	29.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mona Rd Sat]

Network: N101 [Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	2476	1.9	2476	1.9	0.565	4.6	LOS A	16.8	119.6	0.23	0.37	0.23	45.7
Approach		2476	1.9	2476	1.9	0.565	4.6	LOS A	16.8	119.6	0.23	0.37	0.23	45.7
NorthEast: Mona Road														
24	L2	43	0.0	43	0.0	0.163	54.0	LOS D	2.2	15.7	0.91	0.73	0.91	18.2
26	R2	239	0.4	239	0.4	0.999	104.6	LOS F	19.8	138.9	1.00	1.17	1.72	14.2
Approach		282	0.4	282	0.4	0.999	96.9	LOS F	19.8	138.9	0.99	1.11	1.60	14.6
NorthWest: New South Head Road														
27	L2	258	0.0	258	0.0	0.424	8.1	LOS A	5.9	42.0	0.18	0.37	0.18	45.9
28	T1	2106	1.5	2106	1.5	1.257	224.1	LOS F	148.6	1053.5	0.57	1.70	1.99	2.5
Approach		2364	1.4	2364	1.4	1.257	200.5	LOS F	148.6	1053.5	0.53	1.56	1.79	3.5
All Vehicles		5122	1.6	5122	1.6	1.257	100.1	LOS F	148.6	1053.5	0.41	0.96	1.03	8.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St Sat]

Network: N101 [Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	187	2.1	187	2.1	0.350	40.6	LOS C	8.6	61.5	0.84	0.78	0.84	15.0
2	T1	97	0.0	97	0.0	0.260	44.7	LOS D	4.9	34.1	0.89	0.71	0.89	27.1
3	R2	128	0.0	128	0.0	1.279	325.2	LOS F	20.8	145.6	1.00	1.75	3.08	2.5
Approach		412	1.0	412	1.0	1.279	130.0	LOS F	20.8	145.6	0.90	1.07	1.55	8.1
East: New South Head Road														
4	L2	179	2.2	179	2.2	0.161	8.4	LOS A	1.4	9.9	0.14	0.60	0.14	36.7
5	T1	2172	2.0	2172	2.0	0.618	3.6	LOS A	10.7	76.1	0.20	0.18	0.20	36.4
6	R2	92	0.0	92	0.0	0.991	93.0	LOS F	6.8	47.3	1.00	0.99	1.59	15.5
Approach		2443	1.9	2443	1.9	0.991	7.3	LOS A	10.7	76.1	0.22	0.24	0.25	29.6
North: Darling Point Road														
7	L2	126	0.0	126	0.0	0.233	39.2	LOS C	5.6	39.1	0.80	0.76	0.80	23.9
8	T1	57	0.0	57	0.0	0.153	43.6	LOS D	2.8	19.5	0.87	0.67	0.87	27.5
9	R2	98	3.1	98	3.1	0.637	62.7	LOS E	5.8	42.0	1.00	0.83	1.07	18.3
Approach		281	1.1	281	1.1	0.637	48.3	LOS D	5.8	42.0	0.88	0.76	0.91	22.5
West: New South Head Road														
10b	L3	46	0.0	40	0.0	0.295	17.2	LOS B	5.0	35.4	0.46	0.45	0.46	38.7
11	T1	1970	1.5	1714	1.5	1.450	421.5	LOS F	40.5	287.2	0.95	2.66	3.23	1.6
12	R2	110	0.0	96	0.0	1.111	172.5	LOS F	10.3	72.1	1.00	1.17	2.12	7.3
Approach		2126	1.4	1849[N1]	1.4	1.450	399.9	LOS F	40.5	287.2	0.94	2.54	3.11	1.8
All Vehicles		5262	1.6	4985[N1]	1.7	1.450	165.4	LOS F	40.5	287.2	0.58	1.19	1.45	4.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing Sat]

Network: N101 [Existing Sat]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2437	1.9	2437	1.9	0.654	9.7	LOS A	30.2	214.7	0.50	0.46	0.50	28.1
Approach		2437	1.9	2437	1.9	0.654	9.7	LOS A	30.2	214.7	0.50	0.46	0.50	28.1
West: New South Head Road														
8	T1	2275	1.3	1741	1.2	0.642	5.9	LOS A	11.5	81.6	0.32	0.29	0.32	22.8
Approach		2275	1.3	1741 N1	1.2	0.642	5.9	LOS A	11.5	81.6	0.32	0.29	0.32	22.8
All Vehicles		4712	1.6	4178 N1	1.8	0.654	8.1	LOS A	30.2	214.7	0.42	0.39	0.42	26.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St Sat]

Network: N101 [Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	902	1.6	902	1.6	1.024	120.6	LOS F	46.9	332.5	1.00	1.31	1.75	3.4
2	T1	404	1.7	404	1.7	0.854	53.6	LOS D	20.6	146.6	0.97	0.95	1.14	15.5
Approach		1306	1.6	1306	1.6	1.024	99.9	LOS F	46.9	332.5	0.99	1.20	1.56	5.9
East: New South Head Road														
4	L2	205	2.4	205	2.4	1.012	102.5	LOS F	48.0	342.1	1.00	1.30	1.60	16.1
5	T1	1549	2.1	1549	2.1	1.012	88.5	LOS F	71.3	508.2	1.00	1.30	1.53	15.6
Approach		1754	2.1	1754	2.1	1.012	90.2	LOS F	71.3	508.2	1.00	1.30	1.54	15.6
North: Ocean Avenue														
7	L2	28	0.0	28	0.0	0.304	47.2	LOS D	6.3	43.9	0.88	0.73	0.88	28.6
8	T1	227	0.4	227	0.4	0.304	42.6	LOS D	6.3	44.4	0.88	0.72	0.88	17.9
Approach		255	0.4	255	0.4	0.304	43.1	LOS D	6.3	44.4	0.88	0.72	0.88	19.5
West: New South Head Road														
10	L2	137	0.0	107	0.0	0.434	8.2	LOS A	4.5	31.4	0.15	0.23	0.15	46.0
11	T1	1330	1.3	1036	1.2	0.434	2.7	LOS A	4.5	31.8	0.15	0.18	0.15	55.6
12	R2	808	1.4	630	1.3	0.821	59.0	LOS E	18.8	133.4	1.00	0.90	1.11	12.8
Approach		2275	1.2	1773[N1]	1.2	0.821	23.0	LOS B	18.8	133.4	0.45	0.44	0.49	34.0
All Vehicles		5590	1.6	5088[N1]	1.7	1.024	66.9	LOS E	71.3	508.2	0.80	0.94	1.15	16.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Ocean St AM - Potential Existing]

Network: N101 [Potential Existing AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	1073	2.1	1073	2.1	1.498	501.8	LOS F	110.8	789.5	1.00	2.34	3.65	0.8
2	T1	331	2.7	331	2.7	0.745	52.2	LOS D	13.6	97.3	0.98	0.84	1.04	15.8
Approach		1404	2.3	1404	2.3	1.498	395.8	LOS F	110.8	789.5	0.99	1.99	3.03	1.5
East: New South Head Road														
4	L2	163	5.5	163	5.5	1.041	115.4	LOS F	59.3	427.0	1.00	1.41	1.72	14.6
5	T1	1891	2.4	1891	2.4	1.487	401.9	LOS F	151.9	1085.3	1.00	2.57	3.18	4.3
Approach		2054	2.7	2054	2.7	1.487	379.2	LOS F	151.9	1085.3	1.00	2.48	3.07	4.6
North: Ocean Avenue														
7	L2	22	0.0	22	0.0	0.346	52.9	LOS D	5.6	39.6	0.93	0.75	0.93	27.0
8	T1	195	2.1	195	2.1	0.346	48.3	LOS D	5.8	41.5	0.93	0.74	0.93	16.5
Approach		217	1.8	217	1.8	0.346	48.8	LOS D	5.8	41.5	0.93	0.74	0.93	17.9
West: New South Head Road														
10	L2	123	2.4	123	2.4	0.499	7.9	LOS A	5.7	42.6	0.16	0.24	0.16	46.4
11	T1	1241	8.3	1241	8.3	0.499	2.4	LOS A	5.8	43.3	0.16	0.19	0.16	56.0
12	R2	466	8.2	466	8.2	0.759	59.4	LOS E	13.9	103.9	0.99	0.87	1.07	12.7
Approach		1830	7.9	1830	7.9	0.759	17.3	LOS B	13.9	103.9	0.37	0.36	0.39	39.0
All Vehicles		5505	4.3	5505	4.3	1.498	250.1	LOS F	151.9	1085.3	0.79	1.58	2.09	5.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mona Rd AM - Potential Existing]

Network: N101 [Potential Existing AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	2908	2.6	2537	2.7	0.623	5.5	LOS A	15.1	107.8	0.28	0.40	0.28	44.1
Approach		2908	2.6	2537[N1]	2.7	0.623	5.5	LOS A	15.1	107.8	0.28	0.40	0.28	44.1
NorthEast: Mona Road														
24	L2	11	9.1	11	9.1	0.033	46.9	LOS D	0.5	3.9	0.84	0.67	0.84	19.9
26	R2	244	0.4	244	0.4	0.704	54.9	LOS D	13.7	96.4	0.99	0.85	1.02	21.6
Approach		255	0.8	255	0.8	0.704	54.5	LOS D	13.7	96.4	0.98	0.84	1.02	21.5
NorthWest: New South Head Road														
27	L2	184	2.2	184	2.2	0.429	8.6	LOS A	5.6	41.3	0.20	0.34	0.23	45.9
28	T1	1831	7.6	1831	7.6	1.270	225.2	LOS F	137.5	1025.5	0.61	1.71	2.03	2.4
Approach		2015	7.1	2015	7.1	1.270	205.4	LOS F	137.5	1025.5	0.57	1.58	1.86	3.3
All Vehicles		5178	4.3	4807[N1]	4.6	1.270	91.9	LOS F	137.5	1025.5	0.44	0.92	0.98	9.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St AM - Potential Existing]

Network: N101 [Potential Existing AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	83	3.6	83	3.6	0.177	41.8	LOS C	3.8	27.2	0.82	0.74	0.82	14.7
2	T1	35	0.0	35	0.0	0.154	52.3	LOS D	1.9	13.2	0.93	0.69	0.93	25.2
3	R2	60	8.3	60	8.3	0.744	72.0	LOS F	3.9	29.2	1.00	0.88	1.27	10.0
Approach		178	4.5	178	4.5	0.744	54.0	LOS D	3.9	29.2	0.90	0.78	0.99	15.7
East: New South Head Road														
4	L2	181	2.2	151	2.2	0.129	10.9	LOS A	2.1	15.2	0.26	0.61	0.26	33.0
5	T1	2716	2.4	2267	2.4	0.639	9.7	LOS A	16.2	115.9	0.47	0.43	0.47	19.9
6	R2	60	1.7	50	1.7	0.298	65.9	LOS E	3.0	21.3	1.00	0.75	1.00	20.1
Approach		2957	2.4	2468[N1]	2.4	0.639	10.9	LOS A	16.2	115.9	0.46	0.44	0.46	21.4
North: Darling Point Road														
7	L2	131	2.3	131	2.3	0.278	43.9	LOS D	6.1	43.8	0.84	0.77	0.84	24.3
8	T1	32	0.0	32	0.0	0.141	53.5	LOS D	1.7	12.0	0.93	0.70	0.93	26.4
9	R2	81	8.6	81	8.6	0.621	67.0	LOS E	4.9	36.9	1.00	0.80	1.07	18.6
Approach		244	4.1	244	4.1	0.621	52.8	LOS D	6.1	43.8	0.91	0.77	0.93	22.5
West: New South Head Road														
10b	L3	44	0.0	42	0.0	0.197	15.7	LOS B	4.9	36.1	0.39	0.50	0.39	39.7
11	T1	1671	8.2	1603	8.2	0.987	69.0	LOS E	38.3	287.2	0.81	1.12	1.23	8.7
12	R2	102	2.9	98	2.9	1.080	160.5	LOS F	10.3	73.7	1.00	1.24	2.27	7.9
Approach		1817	7.7	1743[N1]	7.7	1.080	72.9	LOS F	38.3	287.2	0.81	1.11	1.26	8.9
All Vehicles		5196	4.4	4633[N1]	4.9	1.080	38.1	LOS C	38.3	287.2	0.63	0.73	0.81	13.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing AM - Potential Existing]

Network: N101 [Potential Existing AM]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2922	2.5	2365	2.5	1.084	142.1	LOS F	30.1	215.4	1.00	1.69	1.94	3.4
Approach		2922	2.5	2365[N1]	2.5	1.084	142.1	LOS F	30.1	215.4	1.00	1.69	1.94	3.4
West: New South Head Road														
8	T1	1865	7.7	1859	7.7	0.622	2.7	LOS A	10.1	75.2	0.20	0.18	0.20	34.4
Approach		1865	7.7	1859[N1]	7.7	0.622	2.7	LOS A	10.1	75.2	0.20	0.18	0.20	34.4
All Vehicles		4787	4.5	4224[N1]	5.1	1.084	80.7	LOS F	30.1	215.4	0.65	1.03	1.17	4.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mona Rd PM - Potential Existing]

Network: N101 [Potential Existing PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	1996	2.2	1996	2.2	0.477	2.2	LOS A	4.4	31.2	0.07	0.25	0.07	50.2
Approach		1996	2.2	1996	2.2	0.477	2.2	LOS A	4.4	31.2	0.07	0.25	0.07	50.2
NorthEast: Mona Road														
24	L2	28	0.0	28	0.0	0.172	51.8	LOS D	1.5	10.2	0.89	0.73	0.89	18.7
26	R2	205	0.5	205	0.5	0.706	56.2	LOS D	11.6	81.4	0.98	0.85	1.04	21.3
Approach		233	0.4	233	0.4	0.706	55.6	LOS D	11.6	81.4	0.97	0.83	1.02	21.0
NorthWest: New South Head Road														
27	L2	254	0.0	254	0.0	1.104	145.7	LOS F	106.6	750.1	1.00	1.59	1.97	11.2
28	T1	2376	0.9	2376	0.9	1.104	136.8	LOS F	113.9	803.2	1.00	1.68	1.96	3.9
Approach		2630	0.8	2630	0.8	1.104	137.7	LOS F	113.9	803.2	1.00	1.67	1.96	4.8
All Vehicles		4859	1.4	4859	1.4	1.104	78.1	LOS F	113.9	803.2	0.62	1.04	1.14	10.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St PM - Potential Existing]

Network: N101 [Potential Existing PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	161	1.2	161	1.2	0.214	29.0	LOS C	6.0	42.7	0.69	0.73	0.69	18.7
2	T1	117	1.7	117	1.7	0.428	51.8	LOS D	6.4	45.4	0.96	0.76	0.96	25.3
3	R2	150	1.3	150	1.3	0.883	74.5	LOS F	10.2	72.0	1.00	1.03	1.41	9.7
Approach		428	1.4	428	1.4	0.883	51.2	LOS D	10.2	72.0	0.87	0.85	1.02	17.4
East: New South Head Road														
4	L2	166	1.8	166	1.8	0.184	19.3	LOS B	3.8	27.4	0.43	0.68	0.43	27.1
5	T1	1828	2.1	1828	2.1	0.709	14.4	LOS A	16.3	115.9	0.55	0.49	0.55	16.8
6	R2	61	0.0	61	0.0	0.152	56.1	LOS D	3.5	24.6	1.00	0.77	1.00	21.4
Approach		2055	2.0	2055	2.0	0.709	16.0	LOS B	16.3	115.9	0.55	0.52	0.55	18.8
North: Darling Point Road														
7	L2	89	3.4	89	3.4	0.120	28.0	LOS B	3.2	23.0	0.66	0.71	0.66	28.1
8	T1	47	2.1	47	2.1	0.172	49.5	LOS D	2.5	17.5	0.92	0.69	0.92	25.9
9	R2	55	1.8	55	1.8	0.429	63.3	LOS E	3.2	22.9	0.99	0.76	0.99	18.2
Approach		191	2.6	191	2.6	0.429	43.4	LOS D	3.2	23.0	0.81	0.72	0.81	24.0
West: New South Head Road														
10b	L3	46	0.0	46	0.0	0.852	39.0	LOS C	40.7	287.2	0.94	0.91	1.00	23.2
11	T1	2276	1.0	2276	1.0	0.852	32.2	LOS C	40.7	287.2	0.90	0.87	0.96	16.1
12	R2	114	0.0	114	0.0	0.868	62.6	LOS E	7.0	48.9	0.93	0.93	1.32	16.8
Approach		2436	0.9	2436	0.9	0.868	33.8	LOS C	40.7	287.2	0.91	0.88	0.98	16.3
All Vehicles		5110	1.5	5110	1.5	0.883	28.4	LOS B	40.7	287.2	0.76	0.72	0.80	17.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing PM - Potential Existing]

Network: N101 [Potential Existing PM]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2053	2.1	2053	2.1	0.826	7.7	LOS A	19.4	138.6	0.37	0.37	0.40	31.5
Approach		2053	2.1	2053	2.1	0.826	7.7	LOS A	19.4	138.6	0.37	0.37	0.40	31.5
West: New South Head Road														
8	T1	2540	1.1	2540	1.1	0.454	0.6	LOS A	1.8	12.6	0.04	0.04	0.04	51.9
Approach		2540	1.1	2540	1.1	0.454	0.6	LOS A	1.8	12.6	0.04	0.04	0.04	51.9
All Vehicles		4593	1.6	4593	1.6	0.826	3.8	LOS A	19.4	138.6	0.19	0.19	0.20	36.4

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St PM - Potential Existing]

Network: N101 [Potential Existing PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	774	1.7	774	1.7	0.378	20.2	LOS B	12.5	88.6	0.60	0.73	0.60	15.2
2	T1	340	0.3	340	0.3	0.752	49.5	LOS D	16.1	113.0	0.97	0.85	1.03	16.4
Approach		1114	1.3	1114	1.3	0.752	29.1	LOS C	16.1	113.0	0.71	0.76	0.73	15.8
East: New South Head Road														
4	L2	205	1.0	205	1.0	0.771	43.4	LOS D	25.5	181.3	0.92	0.85	0.94	28.1
5	T1	1303	2.5	1303	2.5	0.771	37.1	LOS C	25.5	181.3	0.91	0.82	0.92	27.3
Approach		1508	2.3	1508	2.3	0.771	37.9	LOS C	25.5	181.3	0.91	0.82	0.93	27.4
North: Ocean Avenue														
7	L2	22	0.0	22	0.0	0.314	49.0	LOS D	6.1	42.8	0.90	0.73	0.90	28.2
8	T1	221	0.5	221	0.5	0.314	44.4	LOS D	6.1	43.2	0.90	0.72	0.90	17.4
Approach		243	0.4	243	0.4	0.314	44.8	LOS D	6.1	43.2	0.90	0.73	0.90	18.7
West: New South Head Road														
10	L2	120	0.0	120	0.0	0.618	6.8	LOS A	4.0	28.0	0.09	0.16	0.09	48.7
11	T1	1555	0.5	1555	0.5	0.618	2.4	LOS A	9.5	67.1	0.16	0.18	0.16	56.2
12	R2	865	2.4	865	2.4	0.768	47.5	LOS D	22.6	161.5	0.93	0.87	0.96	15.1
Approach		2540	1.1	2540	1.1	0.768	17.9	LOS B	22.6	161.5	0.42	0.41	0.43	37.8
All Vehicles		5405	1.4	5405	1.4	0.771	27.0	LOS B	25.5	181.3	0.64	0.61	0.65	29.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mona Rd Sat - Potential Existing]

Network: N101 [Potential Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	2477	1.9	2477	1.9	0.565	4.6	LOS A	17.0	120.9	0.24	0.37	0.24	45.6
Approach		2477	1.9	2477	1.9	0.565	4.6	LOS A	17.0	120.9	0.24	0.37	0.24	45.6
NorthEast: Mona Road														
24	L2	43	0.0	43	0.0	0.163	54.0	LOS D	2.2	15.7	0.91	0.73	0.91	18.2
26	R2	239	0.4	239	0.4	0.999	104.6	LOS F	19.8	138.9	1.00	1.17	1.72	14.2
Approach		282	0.4	282	0.4	0.999	96.9	LOS F	19.8	138.9	0.99	1.11	1.60	14.6
NorthWest: New South Head Road														
27	L2	258	0.0	258	0.0	0.424	8.1	LOS A	5.9	42.0	0.18	0.37	0.18	45.9
28	T1	2107	1.5	2107	1.5	1.257	224.3	LOS F	148.6	1054.0	0.57	1.71	1.99	2.5
Approach		2365	1.4	2365	1.4	1.257	200.7	LOS F	148.6	1054.0	0.53	1.56	1.79	3.5
All Vehicles		5124	1.6	5124	1.6	1.257	100.2	LOS F	148.6	1054.0	0.41	0.96	1.03	8.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Darling Point Rd / New McLean St Sat - Potential Existing]

Network: N101 [Potential Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	190	2.1	190	2.1	0.356	40.7	LOS C	8.8	62.6	0.84	0.78	0.84	15.0
2	T1	98	0.0	98	0.0	0.262	44.7	LOS D	4.9	34.4	0.89	0.71	0.89	27.1
3	R2	129	0.0	129	0.0	1.289	333.6	LOS F	21.3	148.8	1.00	1.77	3.12	2.5
Approach		417	1.0	417	1.0	1.289	132.3	LOS F	21.3	148.8	0.90	1.07	1.56	8.0
East: New South Head Road														
4	L2	180	2.2	180	2.2	0.162	8.4	LOS A	1.4	9.8	0.14	0.60	0.14	36.8
5	T1	2172	2.0	2172	2.0	0.618	3.6	LOS A	10.5	74.9	0.20	0.18	0.20	36.4
6	R2	92	0.0	92	0.0	0.991	93.0	LOS F	6.8	47.3	1.00	0.99	1.59	15.5
Approach		2444	1.9	2444	1.9	0.991	7.3	LOS A	10.5	74.9	0.22	0.24	0.25	29.7
North: Darling Point Road														
7	L2	126	0.0	126	0.0	0.233	39.2	LOS C	5.6	39.1	0.80	0.76	0.80	23.9
8	T1	57	0.0	57	0.0	0.153	43.6	LOS D	2.8	19.5	0.87	0.67	0.87	27.5
9	R2	98	3.1	98	3.1	0.645	63.0	LOS E	5.9	42.1	1.00	0.83	1.07	18.3
Approach		281	1.1	281	1.1	0.645	48.4	LOS D	5.9	42.1	0.88	0.76	0.91	22.5
West: New South Head Road														
10b	L3	46	0.0	40	0.0	0.295	17.2	LOS B	5.0	35.4	0.46	0.45	0.46	38.7
11	T1	1970	1.5	1713	1.5	1.450	421.5	LOS F	40.5	287.2	0.95	2.66	3.23	1.6
12	R2	111	0.0	97	0.0	1.121	180.4	LOS F	10.7	74.7	1.00	1.19	2.16	7.1
Approach		2127	1.4	1850 N1	1.4	1.450	400.1	LOS F	40.5	287.2	0.94	2.54	3.11	1.8
All Vehicles		5269	1.6	4992 N1	1.7	1.450	165.6	LOS F	40.5	287.2	0.58	1.19	1.46	4.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing Sat - Potential Existing]

Network: N101 [Potential Existing Sat]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2438	1.9	2438	1.9	0.654	10.0	LOS A	30.3	215.4	0.52	0.48	0.52	27.6
Approach		2438	1.9	2438	1.9	0.654	10.0	LOS A	30.3	215.4	0.52	0.48	0.52	27.6
West: New South Head Road														
8	T1	2274	1.3	1739	1.2	0.646	5.9	LOS A	11.5	81.6	0.32	0.30	0.32	22.8
Approach		2274	1.3	1739[N1]	1.2	0.646	5.9	LOS A	11.5	81.6	0.32	0.30	0.32	22.8
All Vehicles		4712	1.6	4177[N1]	1.8	0.654	8.3	LOS A	30.3	215.4	0.44	0.40	0.44	26.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St Sat - Potential Existing]

Network: N101 [Potential Existing Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	902	1.6	902	1.6	1.034	126.9	LOS F	47.7	338.1	1.00	1.34	1.80	3.2
2	T1	404	1.7	404	1.7	0.854	53.6	LOS D	20.6	146.6	0.97	0.95	1.14	15.5
Approach		1306	1.6	1306	1.6	1.034	104.3	LOS F	47.7	338.1	0.99	1.22	1.59	5.7
East: New South Head Road														
4	L2	205	2.4	205	2.4	1.016	105.3	LOS F	48.2	343.6	1.00	1.31	1.63	15.7
5	T1	1550	2.1	1550	2.1	1.016	91.0	LOS F	72.5	516.7	1.00	1.31	1.55	15.3
Approach		1755	2.1	1755	2.1	1.016	92.7	LOS F	72.5	516.7	1.00	1.31	1.56	15.3
North: Ocean Avenue														
7	L2	28	0.0	28	0.0	0.304	47.2	LOS D	6.3	43.9	0.88	0.73	0.88	28.6
8	T1	227	0.4	227	0.4	0.304	42.6	LOS D	6.3	44.4	0.88	0.72	0.88	17.9
Approach		255	0.4	255	0.4	0.304	43.1	LOS D	6.3	44.4	0.88	0.72	0.88	19.5
West: New South Head Road														
10	L2	137	0.0	107	0.0	0.435	8.3	LOS A	4.5	31.9	0.15	0.23	0.15	45.9
11	T1	1331	1.3	1038	1.2	0.435	2.7	LOS A	4.5	32.2	0.15	0.18	0.15	55.6
12	R2	808	1.4	630	1.3	0.822	59.1	LOS E	18.9	133.7	1.00	0.90	1.11	12.8
Approach		2276	1.2	1775[N1]	1.2	0.822	23.1	LOS B	18.9	133.7	0.45	0.44	0.49	33.9
All Vehicles		5592	1.6	5091[N1]	1.7	1.034	68.9	LOS E	72.5	516.7	0.80	0.95	1.16	16.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mona Rd AM - Future] Network: N101 [Future AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	2918	2.6	2557	2.6	0.628	5.7	LOS A	15.9	114.0	0.28	0.41	0.28	43.8
Approach		2918	2.6	2557[N1]	2.6	0.628	5.7	LOS A	15.9	114.0	0.28	0.41	0.28	43.8
NorthEast: Mona Road														
24	L2	11	9.1	11	9.1	0.033	46.9	LOS D	0.5	3.9	0.84	0.67	0.84	19.9
26	R2	244	0.4	244	0.4	0.704	54.9	LOS D	13.7	96.4	0.99	0.85	1.02	21.6
Approach		255	0.8	255	0.8	0.704	54.5	LOS D	13.7	96.4	0.98	0.84	1.02	21.5
NorthWest: New South Head Road														
27	L2	184	2.2	184	2.2	0.427	8.6	LOS A	5.6	41.1	0.20	0.34	0.23	45.9
28	T1	1824	7.7	1824	7.7	1.266	222.4	LOS F	136.2	1016.4	0.61	1.70	2.01	2.5
Approach		2008	7.2	2008	7.2	1.266	202.8	LOS F	136.2	1016.4	0.57	1.57	1.85	3.3
All Vehicles		5181	4.3	4820[N1]	4.6	1.266	90.4	LOS F	136.2	1016.4	0.44	0.92	0.98	9.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Darling Point Rd / New McLean St AM - Future] Network: N101 [Future AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	93	3.2	93	3.2	0.198	42.0	LOS C	4.3	30.6	0.82	0.75	0.82	14.7
2	T1	39	0.0	39	0.0	0.171	52.5	LOS D	2.1	14.7	0.94	0.69	0.94	25.2
3	R2	68	7.4	68	7.4	0.968	98.7	LOS F	5.4	39.9	1.00	1.12	1.87	7.7
Approach		200	4.0	200	4.0	0.968	63.3	LOS E	5.4	39.9	0.90	0.86	1.20	14.0
East: New South Head Road														
4	L2	168	2.4	141	2.4	0.120	10.8	LOS A	2.0	14.0	0.26	0.61	0.26	33.0
5	T1	2716	2.4	2276	2.4	0.640	9.7	LOS A	16.2	115.9	0.47	0.43	0.47	19.9
6	R2	60	1.7	50	1.7	0.299	65.9	LOS E	3.0	21.4	1.00	0.75	1.00	20.1
Approach		2944	2.4	2467[N1]	2.4	0.640	10.9	LOS A	16.2	115.9	0.47	0.45	0.47	21.3
North: Darling Point Road														
7	L2	131	2.3	131	2.3	0.278	43.9	LOS D	6.1	43.8	0.84	0.77	0.84	24.3
8	T1	30	0.0	30	0.0	0.132	53.4	LOS D	1.6	11.2	0.93	0.69	0.93	26.5
9	R2	81	8.6	81	8.6	0.652	67.7	LOS E	5.0	37.3	1.00	0.82	1.10	18.5
Approach		242	4.1	242	4.1	0.652	53.0	LOS D	6.1	43.8	0.91	0.78	0.94	22.4
West: New South Head Road														
10b	L3	44	0.0	42	0.0	0.200	15.7	LOS B	4.9	36.4	0.39	0.50	0.39	39.8
11	T1	1671	8.2	1578	8.2	0.999	76.1	LOS F	38.3	287.2	0.82	1.17	1.28	8.0
12	R2	95	3.2	90	3.2	0.999	109.4	LOS F	7.3	52.7	1.00	1.12	1.95	11.1
Approach		1810	7.7	1710[N1]	7.7	0.999	76.4	LOS F	38.3	287.2	0.81	1.15	1.30	8.5
All Vehicles		5196	4.4	4618[N1]	5.0	0.999	39.6	LOS C	38.3	287.2	0.64	0.74	0.83	12.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Mid-Block Crossing AM - Future]

Network: N101 [Future AM]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2909	2.5	2363	2.5	1.083	141.6	LOS F	30.1	215.4	1.00	1.69	1.93	3.4
Approach		2909	2.5	2363[N1]	2.5	1.083	141.6	LOS F	30.1	215.4	1.00	1.69	1.93	3.4
West: New South Head Road														
8	T1	1873	7.7	1803	7.7	0.601	2.8	LOS A	9.4	69.9	0.21	0.19	0.21	33.6
Approach		1873	7.7	1803[N1]	7.7	0.601	2.8	LOS A	9.4	69.9	0.21	0.19	0.21	33.6
All Vehicles		4782	4.5	4167[N1]	5.2	1.083	81.5	LOS F	30.1	215.4	0.66	1.04	1.19	4.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St AM - Future] Network: N101 [Future AM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	1067	2.2	1067	2.2	1.489	494.5	LOS F	109.4	779.7	1.00	2.33	3.63	0.9
2	T1	328	2.7	328	2.7	0.737	52.0	LOS D	13.4	96.1	0.98	0.84	1.03	15.8
Approach		1395	2.3	1395	2.3	1.489	390.4	LOS F	109.4	779.7	0.99	1.98	3.01	1.5
East: New South Head Road														
4	L2	163	5.5	163	5.5	1.039	114.1	LOS F	58.9	424.0	1.00	1.41	1.71	14.8
5	T1	1887	2.4	1887	2.4	1.484	399.6	LOS F	151.2	1080.4	1.00	2.56	3.18	4.3
Approach		2050	2.7	2050	2.7	1.484	376.9	LOS F	151.2	1080.4	1.00	2.47	3.06	4.6
North: Ocean Avenue														
7	L2	22	0.0	22	0.0	0.346	52.9	LOS D	5.6	39.6	0.93	0.75	0.93	27.0
8	T1	195	2.1	195	2.1	0.346	48.3	LOS D	5.8	41.5	0.93	0.74	0.93	16.5
Approach		217	1.8	217	1.8	0.346	48.8	LOS D	5.8	41.5	0.93	0.74	0.93	17.9
West: New South Head Road														
10	L2	124	2.4	121	2.4	0.489	8.1	LOS A	6.0	44.4	0.17	0.25	0.17	46.1
11	T1	1246	8.3	1214	8.3	0.489	2.6	LOS A	6.0	45.2	0.17	0.20	0.17	55.8
12	R2	468	8.1	456	8.1	0.742	58.9	LOS E	13.5	100.8	0.99	0.86	1.05	12.8
Approach		1838	7.8	1790 N1	7.8	0.742	17.3	LOS B	13.5	100.8	0.38	0.37	0.39	39.0
All Vehicles		5500	4.3	5452 N1	4.3	1.489	249.2	LOS F	151.2	1080.4	0.79	1.58	2.09	5.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Mona Rd PM - Future] Network: N101 [Future PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	1985	2.2	1985	2.2	0.475	2.1	LOS A	4.1	29.5	0.07	0.25	0.07	50.3
Approach		1985	2.2	1985	2.2	0.475	2.1	LOS A	4.1	29.5	0.07	0.25	0.07	50.3
NorthEast: Mona Road														
24	L2	28	0.0	28	0.0	0.172	51.8	LOS D	1.5	10.2	0.89	0.73	0.89	18.7
26	R2	205	0.5	205	0.5	0.706	56.2	LOS D	11.6	81.4	0.98	0.85	1.04	21.3
Approach		233	0.4	233	0.4	0.706	55.6	LOS D	11.6	81.4	0.97	0.83	1.02	21.0
NorthWest: New South Head Road														
27	L2	254	0.0	254	0.0	1.102	143.9	LOS F	105.8	744.7	1.00	1.58	1.96	11.3
28	T1	2381	0.9	2381	0.9	1.102	134.9	LOS F	114.1	804.9	1.00	1.67	1.95	4.0
Approach		2635	0.8	2635	0.8	1.102	135.7	LOS F	114.1	804.9	1.00	1.66	1.95	4.8
All Vehicles		4853	1.4	4853	1.4	1.102	77.2	LOS F	114.1	804.9	0.62	1.04	1.13	10.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Darling Point Rd / New McLean St PM - Future] Network: N101 [Future PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	150	1.3	150	1.3	0.200	28.9	LOS C	5.6	39.5	0.68	0.73	0.68	18.8
2	T1	108	1.9	108	1.9	0.420	52.6	LOS D	5.9	42.3	0.96	0.76	0.96	25.1
3	R2	139	1.4	139	1.4	0.872	73.7	LOS F	9.3	66.0	1.00	1.02	1.40	9.8
Approach		397	1.5	397	1.5	0.872	51.0	LOS D	9.3	66.0	0.87	0.84	1.01	17.4
East: New South Head Road														
4	L2	173	1.7	173	1.7	0.192	19.3	LOS B	4.0	28.7	0.43	0.68	0.43	27.1
5	T1	1828	2.1	1828	2.1	0.711	14.4	LOS A	16.3	115.9	0.55	0.49	0.55	16.7
6	R2	61	0.0	61	0.0	0.146	55.4	LOS D	3.5	24.5	1.00	0.77	1.00	21.6
Approach		2062	2.0	2062	2.0	0.711	16.0	LOS B	16.3	115.9	0.55	0.52	0.55	18.8
North: Darling Point Road														
7	L2	89	3.4	89	3.4	0.120	28.0	LOS B	3.2	23.0	0.66	0.71	0.66	28.1
8	T1	50	2.0	50	2.0	0.195	50.7	LOS D	2.6	18.9	0.93	0.70	0.93	25.6
9	R2	55	1.8	55	1.8	0.439	64.2	LOS E	3.2	23.1	0.99	0.76	0.99	18.0
Approach		194	2.6	194	2.6	0.439	44.1	LOS D	3.2	23.1	0.82	0.72	0.82	23.9
West: New South Head Road														
10b	L3	46	0.0	46	0.0	0.854	39.2	LOS C	40.7	287.2	0.95	0.91	1.00	23.1
11	T1	2276	1.0	2276	1.0	0.854	32.4	LOS C	40.7	287.2	0.90	0.87	0.96	16.1
12	R2	119	0.0	119	0.0	0.878	63.9	LOS E	7.4	51.8	0.93	0.95	1.33	16.5
Approach		2441	0.9	2441	0.9	0.878	34.1	LOS C	40.7	287.2	0.90	0.88	0.98	16.3
All Vehicles		5094	1.5	5094	1.5	0.878	28.5	LOS B	40.7	287.2	0.76	0.72	0.80	17.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Mid-Block Crossing PM - Future]

Network: N101 [Future PM]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network Site User-Given Phase Times)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2046	2.1	2046	2.1	0.829	8.1	LOS A	19.8	141.2	0.37	0.38	0.41	30.7
Approach		2046	2.1	2046	2.1	0.829	8.1	LOS A	19.8	141.2	0.37	0.38	0.41	30.7
West: New South Head Road														
8	T1	2543	1.1	2543	1.1	0.452	0.6	LOS A	1.8	13.0	0.04	0.04	0.04	51.9
Approach		2543	1.1	2543	1.1	0.452	0.6	LOS A	1.8	13.0	0.04	0.04	0.04	51.9
All Vehicles		4589	1.6	4589	1.6	0.829	3.9	LOS A	19.8	141.2	0.19	0.19	0.21	35.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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: [Existing New South Head Rd / Ocean St PM - Future] Network: N101 [Future PM]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	773	1.7	773	1.7	0.377	20.2	LOS B	12.5	88.4	0.60	0.73	0.60	15.2
2	T1	340	0.3	340	0.3	0.752	49.5	LOS D	16.1	113.0	0.97	0.85	1.03	16.4
Approach		1113	1.3	1113	1.3	0.752	29.1	LOS C	16.1	113.0	0.71	0.76	0.73	15.8
East: New South Head Road														
4	L2	205	1.0	205	1.0	0.773	43.5	LOS D	25.7	182.5	0.93	0.85	0.95	28.1
5	T1	1308	2.4	1308	2.4	0.773	37.2	LOS C	25.7	182.5	0.91	0.82	0.93	27.2
Approach		1513	2.2	1513	2.2	0.773	38.1	LOS C	25.7	182.5	0.91	0.82	0.93	27.4
North: Ocean Avenue														
7	L2	22	0.0	22	0.0	0.314	49.0	LOS D	6.1	42.8	0.90	0.73	0.90	28.2
8	T1	221	0.5	221	0.5	0.314	44.4	LOS D	6.1	43.2	0.90	0.72	0.90	17.4
Approach		243	0.4	243	0.4	0.314	44.8	LOS D	6.1	43.2	0.90	0.73	0.90	18.7
West: New South Head Road														
10	L2	120	0.0	120	0.0	0.615	6.8	LOS A	3.9	27.7	0.09	0.16	0.09	48.7
11	T1	1548	0.5	1548	0.5	0.615	2.3	LOS A	9.0	63.3	0.15	0.18	0.15	56.3
12	R2	861	2.4	861	2.4	0.765	47.3	LOS D	22.3	159.7	0.93	0.86	0.95	15.2
Approach		2529	1.1	2529	1.1	0.765	17.8	LOS B	22.3	159.7	0.41	0.41	0.42	37.9
All Vehicles		5398	1.4	5398	1.4	0.773	27.0	LOS B	25.7	182.5	0.64	0.61	0.65	29.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Darling Point Rd / New McLean St Sat - Future] Network: N101 [Future Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: New McLean Street														
1	L2	186	2.2	186	2.2	0.349	40.6	LOS C	8.6	61.2	0.84	0.78	0.84	15.0
2	T1	97	0.0	97	0.0	0.260	44.7	LOS D	4.9	34.1	0.89	0.71	0.89	27.1
3	R2	128	0.0	128	0.0	1.279	325.2	LOS F	20.8	145.6	1.00	1.75	3.08	2.5
Approach		411	1.0	411	1.0	1.279	130.2	LOS F	20.8	145.6	0.90	1.07	1.55	8.1
East: New South Head Road														
4	L2	181	2.2	181	2.2	0.163	8.4	LOS A	1.4	9.9	0.14	0.60	0.14	36.8
5	T1	2172	2.0	2172	2.0	0.618	3.6	LOS A	10.5	74.9	0.19	0.18	0.19	36.6
6	R2	92	0.0	92	0.0	0.991	93.0	LOS F	6.8	47.3	1.00	0.99	1.59	15.5
Approach		2445	1.9	2445	1.9	0.991	7.3	LOS A	10.5	74.9	0.22	0.24	0.24	29.7
North: Darling Point Road														
7	L2	126	0.0	126	0.0	0.233	39.2	LOS C	5.6	39.1	0.80	0.76	0.80	23.9
8	T1	57	0.0	57	0.0	0.153	43.6	LOS D	2.8	19.5	0.87	0.67	0.87	27.5
9	R2	98	3.1	98	3.1	0.635	62.7	LOS E	5.8	42.0	1.00	0.83	1.06	18.3
Approach		281	1.1	281	1.1	0.635	48.3	LOS D	5.8	42.0	0.88	0.76	0.91	22.5
West: New South Head Road														
10b	L3	46	0.0	40	0.0	0.295	17.2	LOS B	5.0	35.4	0.46	0.45	0.46	38.7
11	T1	1970	1.5	1713	1.5	1.450	421.5	LOS F	40.5	287.2	0.95	2.66	3.23	1.6
12	R2	111	0.0	97	0.0	1.121	180.4	LOS F	10.7	74.7	1.00	1.19	2.16	7.1
Approach		2127	1.4	1850 N1	1.4	1.450	400.1	LOS F	40.5	287.2	0.94	2.54	3.11	1.8
All Vehicles		5264	1.6	4987 N1	1.7	1.450	165.4	LOS F	40.5	287.2	0.58	1.19	1.45	4.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		105	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Ocean St Sat - Future] Network: N101 [Future Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Ocean Street														
1	L2	903	1.6	903	1.6	1.017	116.3	LOS F	45.9	325.3	1.00	1.30	1.72	3.5
2	T1	404	1.7	404	1.7	0.821	50.4	LOS D	19.8	140.8	0.97	0.91	1.09	16.2
Approach		1307	1.6	1307	1.6	1.017	95.9	LOS F	45.9	325.3	0.99	1.18	1.52	6.2
East: New South Head Road														
4	L2	205	2.4	205	2.4	1.036	118.5	LOS F	50.8	362.3	1.00	1.37	1.72	14.3
5	T1	1550	2.1	1550	2.1	1.036	104.5	LOS F	77.1	549.0	1.00	1.38	1.65	13.7
Approach		1755	2.1	1755	2.1	1.036	106.1	LOS F	77.1	549.0	1.00	1.38	1.66	13.8
North: Ocean Avenue														
7	L2	28	0.0	28	0.0	0.293	46.2	LOS D	6.2	43.4	0.87	0.72	0.87	28.9
8	T1	227	0.4	227	0.4	0.293	41.7	LOS C	6.2	43.9	0.87	0.71	0.87	18.2
Approach		255	0.4	255	0.4	0.293	42.2	LOS C	6.2	43.9	0.87	0.71	0.87	19.7
West: New South Head Road														
10	L2	137	0.0	108	0.0	0.444	8.6	LOS A	5.1	35.9	0.17	0.24	0.17	45.3
11	T1	1330	1.3	1047	1.2	0.444	3.1	LOS A	5.1	36.3	0.17	0.19	0.17	55.1
12	R2	808	1.4	636	1.3	0.830	59.6	LOS E	19.2	135.9	1.00	0.91	1.12	12.7
Approach		2275	1.2	1792[N1]	1.2	0.830	23.5	LOS B	19.2	135.9	0.46	0.45	0.51	33.7
All Vehicles		5592	1.6	5109[N1]	1.7	1.036	71.4	LOS F	77.1	549.0	0.80	0.97	1.18	15.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P1	South Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P1B	South Slip/Bypass Lane Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P2	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P3	North Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P4	West Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		263	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Mona Rd Sat - Future] Network: N101 [Future Sat]

Site Category: (None)
Signals - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
SouthEast: New South Head Road														
22	T1	2475	1.9	2475	1.9	0.565	4.6	LOS A	16.7	119.1	0.23	0.37	0.23	45.7
Approach		2475	1.9	2475	1.9	0.565	4.6	LOS A	16.7	119.1	0.23	0.37	0.23	45.7
NorthEast: Mona Road														
24	L2	43	0.0	43	0.0	0.163	54.0	LOS D	2.2	15.7	0.91	0.73	0.91	18.2
26	R2	239	0.4	239	0.4	0.999	104.6	LOS F	19.8	138.9	1.00	1.17	1.72	14.2
Approach		282	0.4	282	0.4	0.999	96.9	LOS F	19.8	138.9	0.99	1.11	1.60	14.6
NorthWest: New South Head Road														
27	L2	258	0.0	258	0.0	0.424	8.1	LOS A	5.9	42.0	0.18	0.37	0.18	45.9
28	T1	2107	1.5	2107	1.5	1.257	224.3	LOS F	148.6	1054.0	0.57	1.71	1.99	2.5
Approach		2365	1.4	2365	1.4	1.257	200.7	LOS F	148.6	1054.0	0.53	1.56	1.79	3.5
All Vehicles		5122	1.6	5122	1.6	1.257	100.2	LOS F	148.6	1054.0	0.41	0.96	1.03	8.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate
P5	SouthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P6	NorthEast Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
P7	NorthWest Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		158	54.3	LOS E			0.95	0.95

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.

MOVEMENT SUMMARY

Site: [Existing New South Head Rd / Mid-Block Crossing Sat - Future]

Network: N101 [Future Sat]

Site Category: (None)
Pedestrian Crossing (Signals) - Fixed Time Coordinated Cycle Time = 120 seconds (Network User-Given Cycle Time)

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
East: New South Head Road														
2	T1	2439	1.9	2439	1.9	0.651	9.9	LOS A	30.3	215.4	0.52	0.48	0.52	27.7
Approach		2439	1.9	2439	1.9	0.651	9.9	LOS A	30.3	215.4	0.52	0.48	0.52	27.7
West: New South Head Road														
8	T1	2275	1.3	1741	1.2	0.653	5.9	LOS A	11.5	81.6	0.33	0.30	0.33	22.6
Approach		2275	1.3	1741 N1	1.2	0.653	5.9	LOS A	11.5	81.6	0.33	0.30	0.33	22.6
All Vehicles		4714	1.6	4180 N1	1.8	0.653	8.3	LOS A	30.3	215.4	0.44	0.40	0.44	26.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network 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.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

N1 Arrival Flow value is reduced due to capacity constraint at oversaturated upstream lanes.

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate
P1	East Full Crossing	53	54.3	LOS E	0.2	0.2	0.95	0.95
All Pedestrians		53	54.3	LOS E			0.95	0.95

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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