



One Tasman Pukeahu Park

Transportation Assessment Report

PREPARED FOR: One Tasman Development Limited Partnership | January 2023

We design with community in mind

Rev No.	Date	Description	Signature or Typed Name (documentation on file)			
			Prepared by	Checked by	Reviewed by	Approved by
1	21/12/22	Final Draft for Review	NJ	JW	MGG	MGG
2	30/01/23	Final	NJ	JW	MGG	MGG

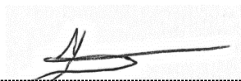


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STATUS | Project No 310204761



Table of Contents

EXECUTIVE SUMMARY	I
1.0 BACKGROUND	1
2.0 INTRODUCTION	2
3.0 EXISTING TRANSPORT ENVIRONMENT	3
3.1 SITE LOCATION	3
3.2 LOCAL ROAD NETWORK	4
3.3 ROAD ENVIRONMENT	5
3.4 SITE ACCESS	6
3.5 SUSTAINABLE TRANSPORT MODES	8
3.6 EXISTING TRAFFIC PATTERNS	10
3.7 ROAD SAFETY RECORD	11
3.8 EXISTING COMMUTER TRAVEL PATTERNS	13
3.9 FUTURE NETWORK CHANGES	13
4.0 DEVELOPMENT PROPOSAL	16
4.1 EXISTING SITE ACTIVITY	16
4.2 PROPOSED DEVELOPMENT	16
5.0 DISTRICT PLAN ASSESSMENT	20
6.0 ACCESS	29
6.1 VEHICLE ACCESS DESIGN	29
6.2 PEDESTRIAN AND CYCLE ACCESS	30
7.0 PARKING	31
7.1 DISTRICT PLAN	31
7.2 FORECAST SITE PARKING DEMAND	31
7.3 PARKING LAYOUT	31
7.4 BICYCLE PARKING	32
7.5 ON-STREET PARKING	32
8.0 DEVELOPMENT SITE TRAFFIC	33
8.1 PROPOSED RESIDENTIAL ACTIVITY	33
8.2 OFF-SITE EFFECTS	34
9.0 SERVICING	35
10.0 FEEDBACK FROM COUNCIL	36
11.0 CONSTRUCTION TRAFFIC	38
12.0 CONCLUSION	39



LIST OF TABLES

Table 3-1: Local Traffic Volumes (Tory Street between Francis Place and Tasman Street).....	10
Table 3-2: Summary of Accident Record.....	12
Table 3-3: Existing Commuter Travel to Work Mode Share (Census 2018).....	13
Table 5-1: Compliance Assessment Against the ODP Standards	20
Table 5-2: Compliance Assessment Against the ODP Policies	23
Table 5-3: Compliance Assessment Against the PDP	25
Table 8-1: Forecast Site Traffic Generation.....	33
Table 10-1: Summary of Council Transport Feedback	36

LIST OF FIGURES

Figure 3-1: Site Location (image sourced from Wellington City Council ePlan)	3
Figure 3-2: Road Hierarchy	4
Figure 3-3: View south along Tasman Street (development Site on the left)	5
Figure 3-4: View north along Tasman Street (leading to National War Memorial Park and Tory Street).....	6
Figure 3-5: Existing Site Vehicle Crossings on Tasman Street.....	7
Figure 3-6: Existing two-way Vehicle Crossing on Tasman Street that Accesses rear Carpark/Garages	7
Figure 3-7: View north along Tasman Street to the Zebra Crossing (100m South of the Site)	8
Figure 3-8: View West along Old Buckle Street and the Commonwealth Walkway	9
Figure 3-9: Bus Services Network Map (source: MetLink website).....	9
Figure 3-10: Daily Traffic Volumes on Tory Street.....	10
Figure 3-11: Crash Location Map (2017-2021).....	11
Figure 3-12: LGWM Indicative Timing (sourced from LGWM RPI)	14
Figure 3-13: LGWM Indicative Timing (sourced from LGWM)	15
Figure 4-1: Proposed Site Plan	16
Figure 4-2: Proposed Surface Level Carpark and Loading Area	17
Figure 4-3: Proposed 'Basement' Level Carpark	18
Figure 4-4: Proposed 'Lower Basement' Level Carpark	18

LIST OF APPENDICES

APPENDIX A	DEVELOPMENT PLANS.....	41
APPENDIX B	ACCESS AND SERVICE VEHICLE TRACKING.....	42



EXECUTIVE SUMMARY

'One Tasman Development Limited Partnership' owns the adjoining sites at #1 to #23 Tasman Street in Mount Cook, and is seeking to redevelop it for comprehensive residential activity. This Transportation Assessment Report has been prepared to assess the relevant traffic and transport matters associated with the proposed Site redevelopment, in the context of the Wellington City District Plan and other applicable industry standards.

Situated on the edge of Wellington City, the proposal Site is well located in terms of proximity and convenience of access to the CBD by walking and cycling. In addition, bus stops located within a 5-minute walk of the Site on both Taranaki Street and Kent/Cambridge Terraces provide access to high frequency services which connect with the CBD, Wellington rail station, and suburbs to the north and south. Further, the current alignment options for the Let's Get Wellington Moving proposed Mass Rapid Transit connection between the City and Wellington hospital include a route along Tasman Street, that would provide further significant public transport benefits for the Site.

The development plans provide for rationalisation of the current Site access arrangements, reducing the number of vehicle crossings at the Site from six down to two, delivering commensurate safety and amenity improvements to the pedestrian environment on the adjacent footpath.

The proposed quantum of on-site car parking is assessed as sufficient to balance the forecast demand from residents whilst encouraging the use of other modes. Specifically, the development includes significant cycle parking provision in the form of 184 cycle parks plus 24 storage units.

The forecast traffic movements at the development Site are assessed as being modest and can be adequately accommodated on the adjacent road network without causing adverse effects.

Overall, it has been concluded that the development proposal can be supported from a transport perspective subject to a resource consent condition that addresses the following:

- a Construction Traffic Management Plan be prepared outlining the mitigation and management measures to control traffic during Site deconstruction and construction.



1.0 BACKGROUND

Stantec prepared a Transportation Assessment Report (**TAR**) dated 17 September 2021 on behalf of 'One Tasman Development Limited Partnership' (the "**Applicant**") for a proposal to construct a new multi-building, multi-storey residential development at #1 to #23 Tasman Street (the "**Site**"), in Mount Cook. That assessment proceeded on the basis that the proposal involved the construction of:

- Northern Apartments: a 10-storey base-isolated building at the northern end of the Site with 104 apartments;
- Southern Apartments: a 9-storey base-isolated building at the southern end of the Site with 92 apartments;
- Terrace Houses: 3-storey terrace houses, five fronting Old Buckle Street and four on the corner of Old Buckle Street and Tasman Street; and
- Courtyard Terraces: eight 2-storey terrace houses situated above the central carpark.

In that September 2021 report, Stantec assessed the traffic and transport effects of the development, and concluded that these could be appropriately accommodated without giving rise to adverse effects on the surrounding environment.

The Applicant subsequently modified the proposal to reduce the height of the Northern and Southern Apartments to 8 and 5-storeys respectively, among other minor amendments. Stantec's assessment of that modified proposal was that the associated traffic and transport effects remained acceptable.

The current proposal is similar to the original proposal assessed in the September 2021 TAR in all respects that are material to Stantec's assessment, with the exception of a minor increase in the number of dwellings (8 additional), some changes to the on-site parking provision, layouts and secure cycle storage arrangements, and minor adjustments to the on-site service vehicle manoeuvring.

Stantec's assessment is that the traffic and transport effects of the current proposal remain acceptable when considered against the environment including the consented 8 and 5-storey development. For completeness, and consistent with our September 2021 TAR, Stantec's assessment is that the traffic and transport effects of the current proposal will not give rise to adverse effects on the transport network when considered against the current, physical characteristics of the Site.



2.0 INTRODUCTION

This TAR has been prepared to examine and describe the transportation effects associated with the Applicant's proposed redevelopment of the Site at #1 to #23 Tasman Street, Mount Cook, on the edge of Wellington CBD.

The proposal allows for redevelopment of the Site's existing residential use, to provide a new mixed-typology residential activity comprising two apartment towers and terrace houses, supported by on-site vehicle and cycle parking. The plans also include a small commercial offering at the site's northwest corner, fronting Tasman Street and the Pukeahu National War Memorial Park, which includes a café.

As described in the previous chapter, the key difference between the current 'proposed' and 'consented' schemes is the height of the apartment buildings / number of dwellings provided, and the number of associated on-site car parks / cycle parks. Overall, the new scheme provides for a higher ratio of on-site parks versus dwellings, to better accommodate Site-related parking demand.

The Site is located within the 'Central Area' Zone, as defined by the Wellington City Operative District Plan (ODP), and 'City Centre Zone' in the Proposed District Plan (PDP).

This TAR forms part of the resource consent application for the redevelopment of the Site and has been progressed with due regard to the policies and standards contained within the ODP / PDP and other relevant industry standards. The TAR has been prepared accordingly, to set out and describe:

- Section 3: Existing Transport Network – describes the Site location in the context of the existing transport environment, including traffic flows, access to public transport services, and active mode provision;
- Section 4: Development Proposal – describes the development plans;
- Section 5: District Plan Assessment – summarises the relevant ODP and PDP Rules, Standards and Policies;
- Section 6: Site Access Arrangements – describes the site's various access and internal circulation arrangements;
- Section 7: Parking – describes the on-site and kerb-side parking arrangements;
- Section 8: Trip Generation – identifies the likely trip generation that can be expected at the site;
- Section 9: Servicing – details the servicing demands, arrangements, and practices;
- Section 10: Feedback from Council – describes the manner in which the development plans have been progressed to satisfy feedback received from Council during the preapplication process; and
- Section 11: Construction Traffic – provides an overview of the expected construction management practices and considerations that would be addressed within a Construction Traffic Management Plan.

These matters present a key focus of this TAR, and by way of summary, it is found that the proposed development can be appropriately and safely accommodated within the existing local transport environment.



3.0 EXISTING TRANSPORT ENVIRONMENT

3.1 SITE LOCATION

The proposal Site extends across #1 to #23 Tasman Street in Mount Cook, on the CBD fringe. The Site is situated at the corner of Tasman Street and Old Buckle Street, to the south of the Pukeahu National War Memorial Park, as illustrated below in **Figure 3-1**.

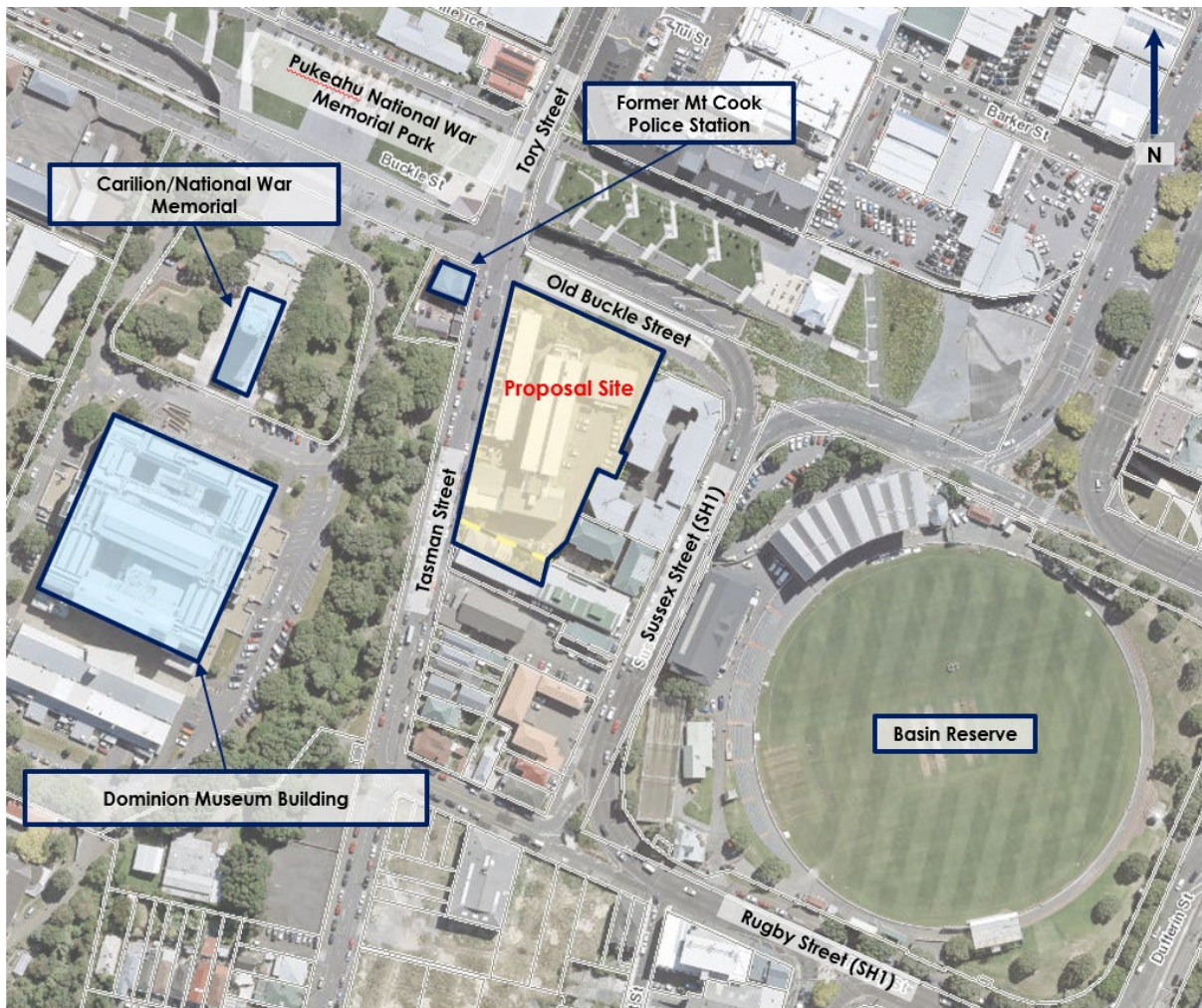


Figure 3-1: Site Location (image sourced from Wellington City Council ePlan)

Land use in the vicinity of the Site comprises of a mixture of commercial, residential and recreational activities, including the Dominion Museum and former Mt Cook Police Station to the west, the Pukeahu National War Memorial Park to the north, the Basin Reserve cricket ground to the east, and a mixture of residential and commercial activities to the south.

3.3 ROAD ENVIRONMENT

Tasman Street, which runs north-south along the site's western boundary, is classified as a Local Road within the ODP roading hierarchy, and as such serves a predominant access function for properties fronting the street. In this location, Tasman Street is a two-lane road (single traffic in each direction), with a straight horizontal alignment which grades down gently from north to south.

Immediately adjacent to the Site, Tasman Street comprises an approximately 9.5m wide carriageway (measured kerb to kerb) accommodating parallel parking on either side of the street, including a mixture of time restricted and coupon parks. Beyond this, generous footpaths are provided on either side of the road. Further details of these roading characteristics are illustrated in the photograph at **Figure 3-3**.



Figure 3-3: View south along Tasman Street (development Site on the left)

Whilst Tasman Street has a posted speed of 50kph, speed cushions with 15kph speed advisory signs located along the Site frontage serve to ensure that vehicle speeds in this location are low.

Immediately to the north of the Site Tasman Street intersects with Old Buckle Street, which runs east west and provides for a shared path (no vehicle access) connection to the Basin Reserve, and limited vehicle access to the Dominion Museum and National War Memorial to the west. North of Old Buckle Street, Tasman Street becomes Tory Street and continues as a two-way local road.

The posted speed limit at the Old Buckle Street intersection has recently been reduced to 30kph (as part of the Central City safer speeds proposal of the Let's Get Wellington Moving project), and the carriageway characteristics shift to a more 'shared area' environment at the interface with the National War Memorial Park, as shown in the photograph at **Figure 3-4** below.



Figure 3-4: View north along Tasman Street (leading to National War Memorial Park and Tory Street)

3.4 SITE ACCESS

A total of six existing vehicle crossings provide access to the proposal Site, all of which connect off #1 Tasman Street. Five of the established vehicle crossings give access to individual garages and two at grade maintenance parks. The sixth crossing provides access to a two-way gated vehicle accessway at the southern end of the Site providing entry and exit to the rear car park and associated garages. In total, the current Site accommodates 45 on-site car parks. Further detail of the existing access arrangements is illustrated in the photographs in **Figure 3-5** and **Figure 3-6** below.

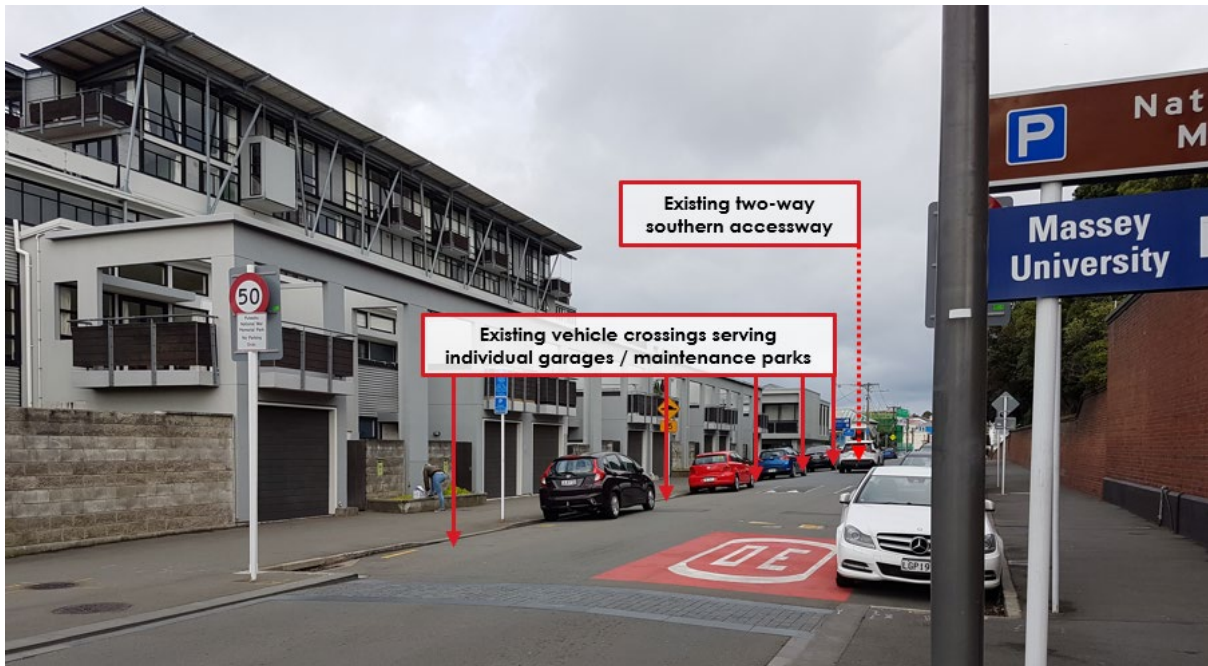


Figure 3-5: Existing Site Vehicle Crossings on Tasman Street

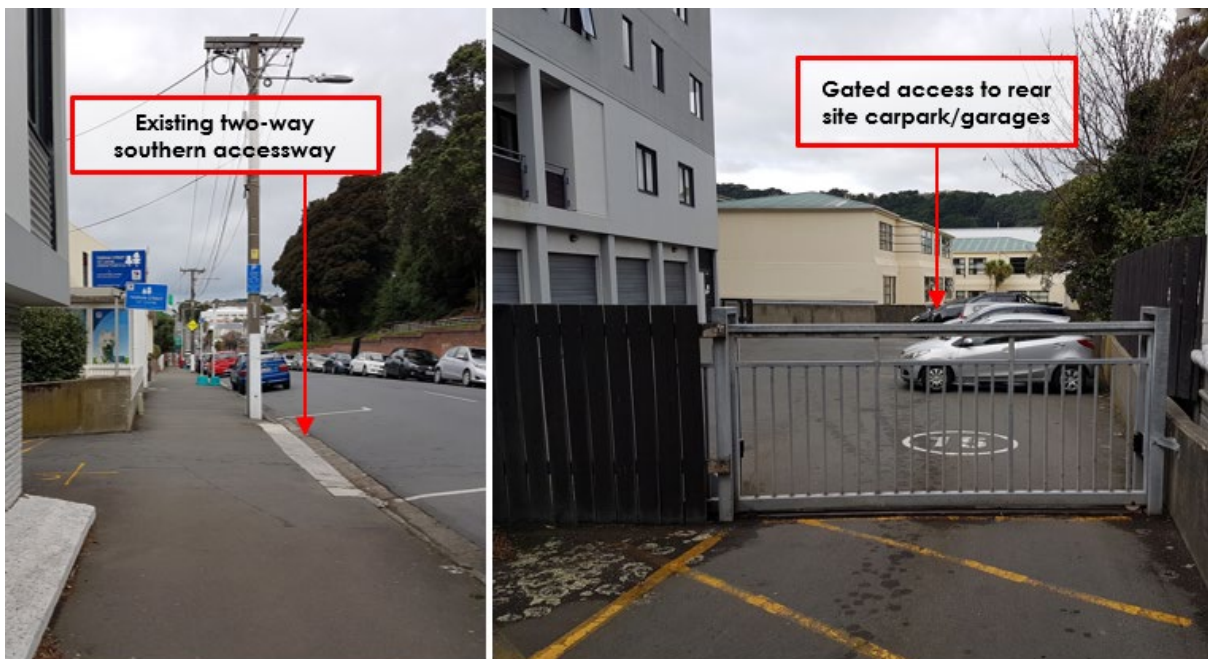


Figure 3-6: Existing two-way Vehicle Crossing on Tasman Street that Accesses rear Carpark/Garages

Pedestrian access to the existing Site is achieved either by means of direct private entry from Tasman Street (for the townhouses directly fronting the road), or via a gated access point just north of the two-way southern vehicle driveway; secondary pedestrian access to the Site is achieved off the pedestrianised section of Old Buckle Street to the north.

3.5 SUSTAINABLE TRANSPORT MODES

The pedestrian network in the vicinity of the Site is well established, with footpaths provided on both sides of Tasman Street and the connecting roads in the vicinity. To the north of the Site, the 'shared area' environment of Tasman / Tory Streets around the National War Memorial Park, with its numerous raised table crossings, surface delineation, and 30kph lower speed environment, provides for pedestrians to safely cross the carriageway and connect with the dedicated pedestrian routes through the Park, which in turn link with the CBD's wider footpath network via the Commonwealth Walkway (a 9km loop in the CBD, connecting significant locations and points of interest, with the aim to inspire people to walk for their physical and mental wellbeing). Approximately 100m south of the site, a zebra crossing provides for pedestrians to safely cross the Tasman Street carriageway, as shown in **Figure 3-7**.



Figure 3-7: View north along Tasman Street to the Zebra Crossing (100m South of the Site)

Cyclists travelling north-south on Tasman Street / Tory Street currently share the carriageway and can make use of the advanced stop boxes at signalised intersections along this corridor. East-west travel is accommodated via shared paths on Old Buckle Street (as illustrated in **Figure 3-8**) and shared space on Martin Square.



Figure 3-8: View West along Old Buckle Street and the Commonwealth Walkway

The proposal Site is located within a 5-minute walk of bus stops on both Taranaki Street and Kent / Cambridge Terraces. These stops serve a number of high frequency bus services including Route #1 'Island Bay – Johnsonville' and Route #3 'Lyall Bay / Rongotai – Wellington', which operate every 10-15 minutes throughout the day and provide connection between Wellington Station and the southern and eastern suburbs. The location of these bus stops and relative distance to the Site are illustrated in **Figure 3-9** below.

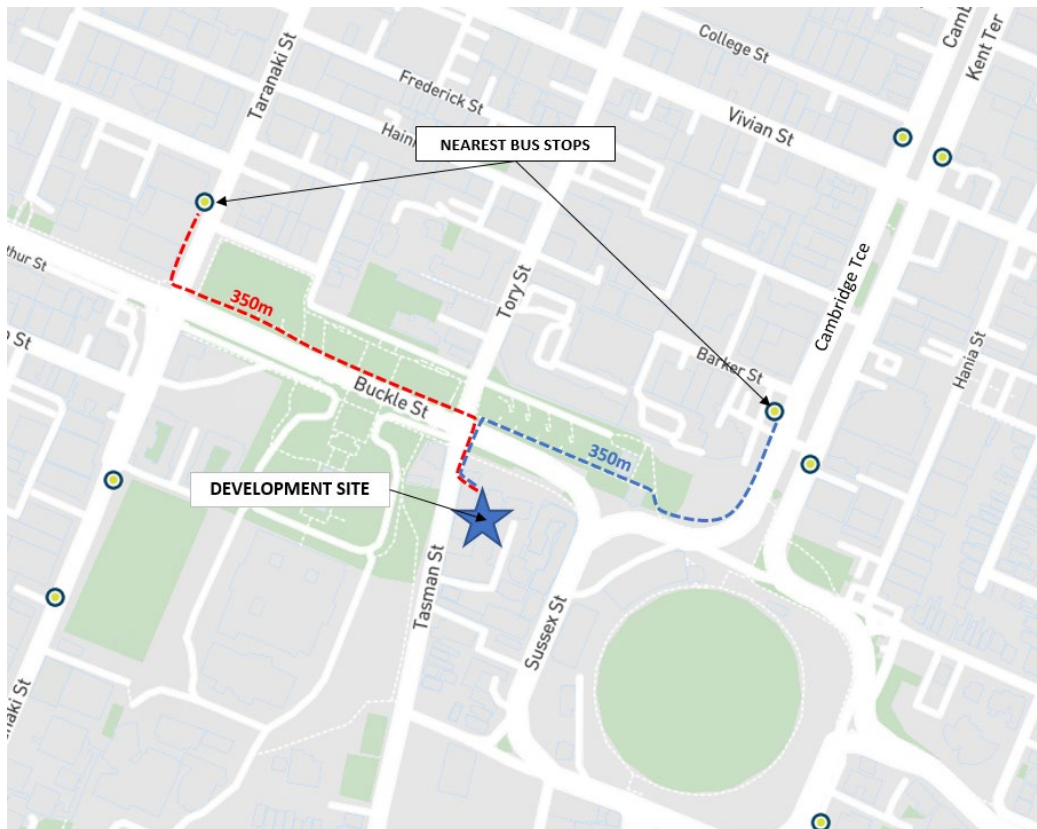


Figure 3-9: Bus Services Network Map (source: MetLink website)

Accordingly, the Site is well placed to support residents choosing to travel by means other than private car, with a high standard of walking and cycling amenity and convenient connections to the CBD, along with frequent bus services operating from stops within a short walk of the development. Accordingly, and as detailed later in this report, the proposal has been specifically designed to support sustainable mode choice including provision of significant on-site cycle storage areas.

3.6 EXISTING TRAFFIC PATTERNS

The most recent available traffic count data (May 2021) has been obtained from Wellington City Council (WCC) for the road network nearest the proposal site. This count, collected approximately 100m north of the Site on Tory Street, between Tasman Street and Francis Place, is summarised in **Table 3-1**.

Table 3-1: Local Traffic Volumes (Tory Street between Francis Place and Tasman Street)

AM Peak Hour	PM Peak Hour	Average Daily Traffic
• (8-9am)	• (4-5pm)	• (5-day)
• 700vph	• 660vph	• 6,610vpd

The count data indicates average weekday traffic volumes on the road network adjacent to the Site of around 6,600 vehicles per day (vpd), with corresponding peak hour volumes of around 700 vehicles per hour (vph) and 660vph for the AM and PM peaks, respectively.

Further analysis of the count data, by hour and direction, serves to demonstrate the daily profile patterns over the course of a week, as illustrated graphically in **Figure 3-10**.

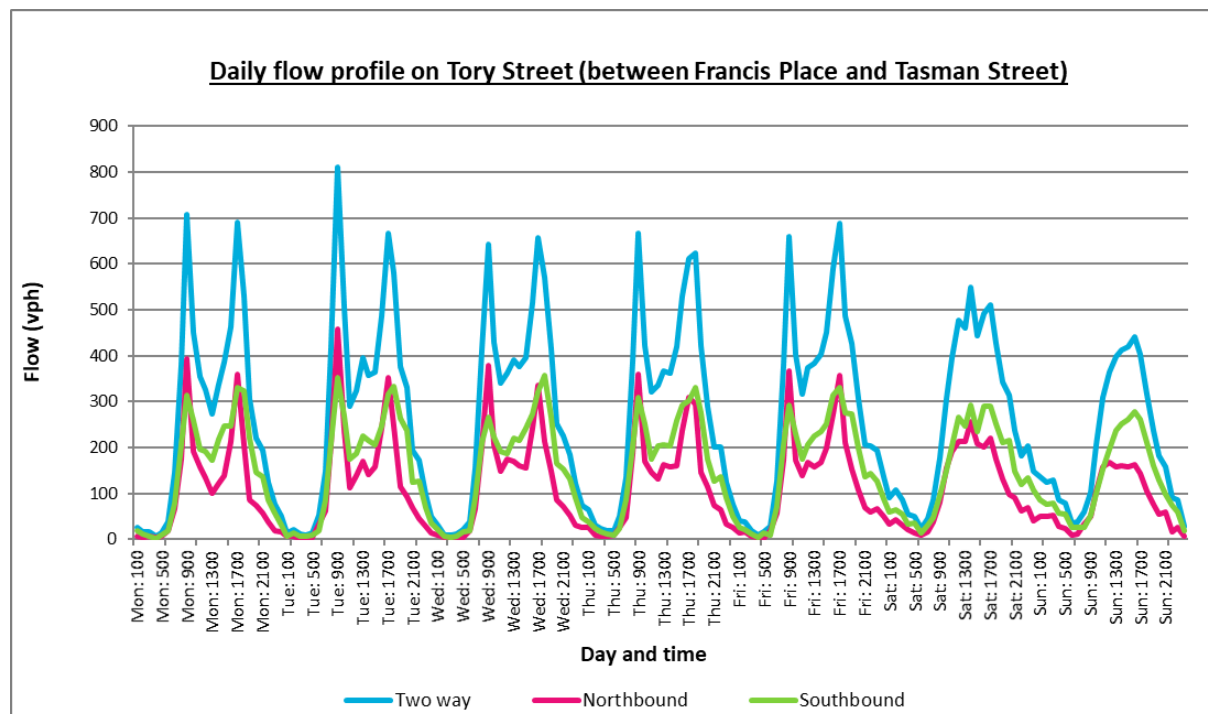


Figure 3-10: Daily Traffic Volumes on Tory Street

As shown, traffic volumes adjacent the Site show typical weekday commuter peaks, with tidal patterns characteristic of northbound commuter trips in the AM along Tasman Street to the CBD, and corresponding homeward southbound trips in the PM. Two-way volumes are shown to generally peak at between 700-800vph, which sit within the capacity of the carriageway.

3.7 ROAD SAFETY RECORD

A search of the Waka Kotahi NZ Transport Agency (**Waka Kotahi**) 'Crash Analysis System' database has been undertaken for the purposes of reviewing the road safety in the vicinity of the Site, for the most recent complete five-year period from 2017 to 2021.

The search area is illustrated in **Figure 3-11** and includes the length of Tasman Street and Tory Street between Rugby Street and Francis Place. This area was considered to be the relevant extent for which movements to/from the proposal Site will be concentrated.

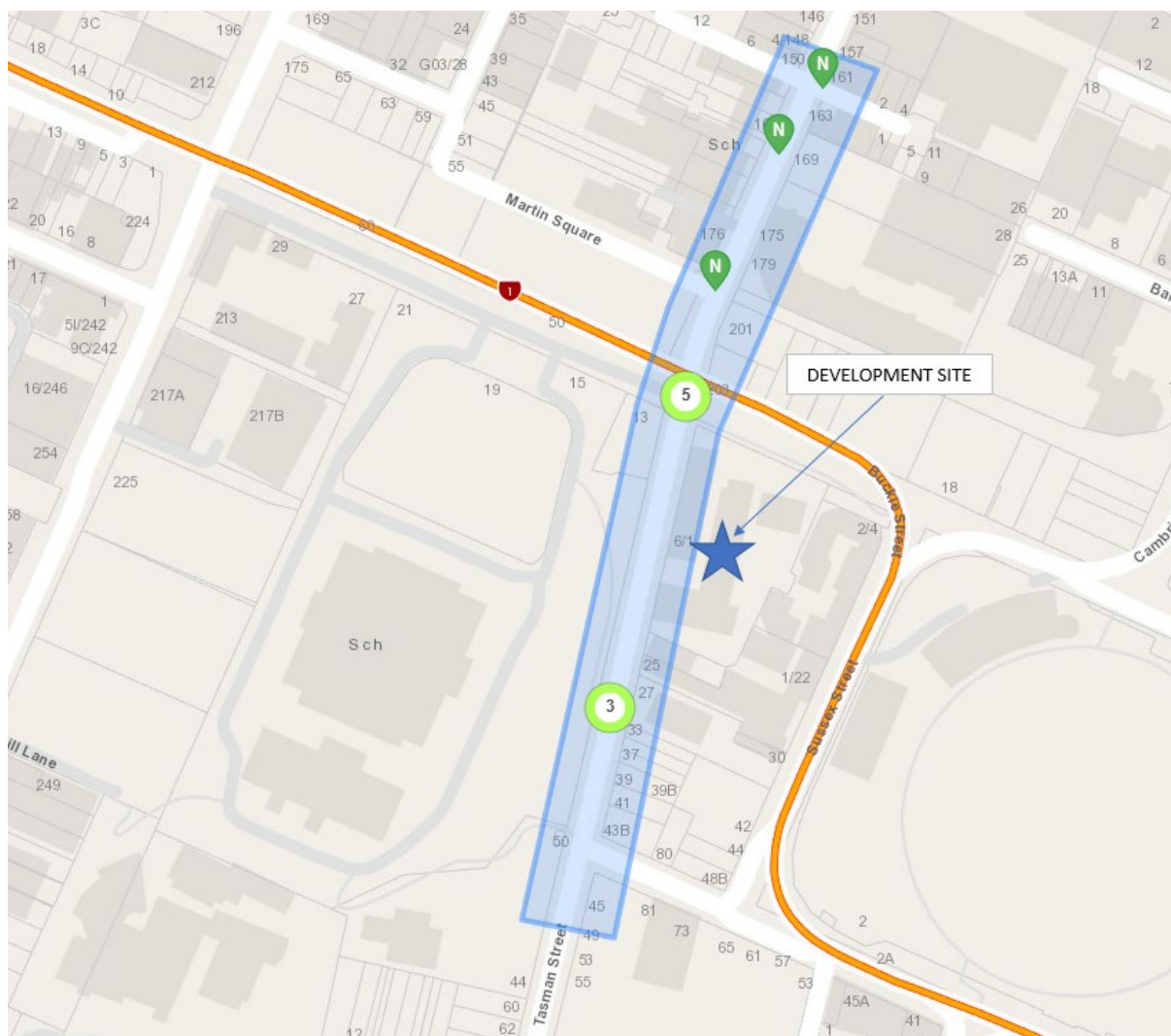


Figure 3-11: Crash Location Map (2017-2021)

A total of ten crashes have been recorded within the search area between 2017 and 2021, as summarised in **Table 3-2**. Of these ten crashes, all were non-injury (i.e. damage only).

Table 3-2: Summary of Accident Record

Location	Date/Time	Severity	Description
<ul style="list-style-type: none"> Tasman Street (btwn Rugby Street and Tory Street) 	<ul style="list-style-type: none"> Saturday 20 May 2017, 2:30pm 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Vehicle collided with a parked car while performing a turning manoeuvre.
	<ul style="list-style-type: none"> Saturday 9 December 2017, 11:38pm 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Southbound vehicle on Tasman Street hit a vehicle waiting to turn right out of #25. Driver suspected to be intoxicated.
	<ul style="list-style-type: none"> Friday 5 January 2018, 9:20am 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Southbound vehicle on Tasman Street has collided with a parked vehicle.
	<ul style="list-style-type: none"> Tuesday 1 January 2019, 7:14am 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Southbound vehicle on Tasman Street collided with a parked vehicle.
<ul style="list-style-type: none"> Tory Street (btwn Tasman Street and Francis Place) 	<ul style="list-style-type: none"> Friday 4 August 2017, 1:00pm 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Northbound vehicle on Tory Street struck by vehicle approaching from the left, who failed to give-way. Approaching vehicle was driving the wrong way out of Pukeahu National War Memorial.
	<ul style="list-style-type: none"> Tuesday 29 May 2018, 8:20am 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Northbound cyclist on Tory Street was struck when turning left into Martin Square by a vehicle turning right out of Martin Square. Cyclist did not fall off.
	<ul style="list-style-type: none"> Sunday 8 July 2018, 1:30am 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Parked police patrol vehicle collided with streetlight when driving off.
	<ul style="list-style-type: none"> Monday 18 December 2017, 10:01pm 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Northbound vehicle on Tory Street collided with a post when performing a U-turn manoeuvre.
	<ul style="list-style-type: none"> Wednesday 4 March 2020, 3:00pm 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Bus reversed into a parked vehicle on Tory Street, outside Mt Cook Preschool.
	<ul style="list-style-type: none"> Wednesday 27 October 2021, 12:41pm 	<ul style="list-style-type: none"> Non-injury 	<ul style="list-style-type: none"> Truck travelling west on Francis Place lost control and collided with building. Misjudged speed, too far right recorded as causal factors.

Significantly, there is no record of any crashes having occurred involving vehicles turning to or from the existing vehicle crossings which form part of the proposal Site. Even then, it is noteworthy that the number of existing vehicle crossings serving the Site will be reduced, affording a better (and safer) pedestrian environment.

The recorded accidents have all been damage only (i.e. non-injury), which is reflective of the low speed environment on the adjacent road network. This is not an unusual safety record, and it is assessed that there are no existing deficiencies with the current road network in the vicinity of the Site that require attention in response to the development proposal.

3.8 EXISTING COMMUTER TRAVEL PATTERNS

Data from the 2018 census provides details of travel to work by census area unit, with the Site being located within the ‘Mt Cook-Wallace Street’ area unit (ref. 573300). The catchment has a resident population of around 2,800 people, with approximately 1,800 recorded as employed on census day. Mode share for those individuals that travelled to work is set out in **Table 3-3**.

Table 3-3: Existing Commuter Travel to Work Mode Share (Census 2018)

Mode of Transport	% of Trips (Mt Cook East)
Walk or jog	47%
Public bus	21%
Drive a private car, truck, or van	16%
Work at home	5%
Bicycle	4%
Drive a company car, truck or van	2%
Other	2%
Passenger in a car, truck, van or company bus	2%
Train	1%
Ferry	0%

As shown, and as can be expected for the central area/city fringe location, walk or jog was by far the dominant travel mode choice for journey to work, accounting for almost half of all trips, whilst bus trips accounted for 21% of mode share. Only around 1 in 6 people drove a vehicle (with a further 2% car passengers).

On this basis, new residential development within this same census area unit is expected to reflect this high reliance on active mode and bus travel for commuting purposes.

3.9 FUTURE NETWORK CHANGES

The Let’s Get Wellington Moving (**LGWM**) project is a joint partnership between Waka Kotahi, Greater Wellington Regional Council (**GWRC**) and WCC, to address Wellington’s transport challenges and potential opportunities. The vision is to move more people with fewer cars, with improvements to deliver better walking facilities, connected cycleways, high-quality mass rapid transit, and more reliable bus services, all forming part of the current Recommended Programme of Investment (**RPI**), released in late 2018.

A number of ‘early delivery’ items of the RPI include improvements to make travel by bus to and through the central city faster and more reliable, and create a better environment for people walking and cycling. On the latter, one such initiative which has already been implemented (as identified earlier in Section 3.3) is the ‘Central City Safer Speeds’ project.



Other major changes of relevance to the proposal Site include the Mass Rapid Transit (MRT) project, which envisages a new MRT route connecting the Railway Station with Newtown and the eastern suburbs. This MRT route will form part of the wider public transport network, with high frequency / high-capacity electric vehicles, fast loading and unloading, dedicated lanes and signal priority along the route.

The first stage of the MRT is proposed to connect between the Railway Station and Newtown, and would route past the proposal Site as illustrated in the LGWM¹ map in **Figure 3-12**.

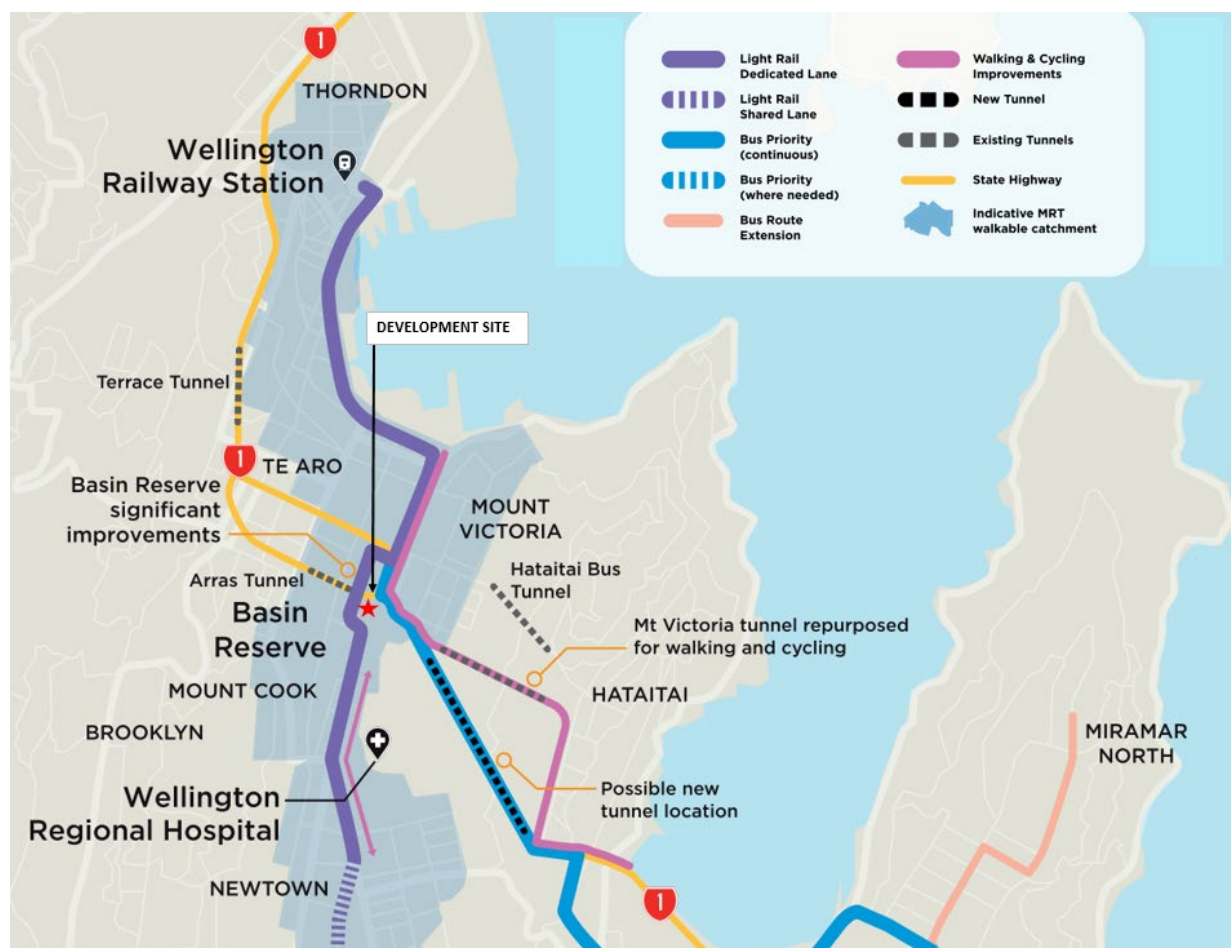


Figure 3-12: LGWM Indicative Timing (sourced from LGWM RPI)

Whilst the exact route is yet to be determined, a number of options are being considered which would provide convenient access for residents of the development Site, as illustrated by the coloured lines in **Figure 3-13** below.

¹ Let's Get Wellington Moving Programme – Preferred Option Report (June 2022)

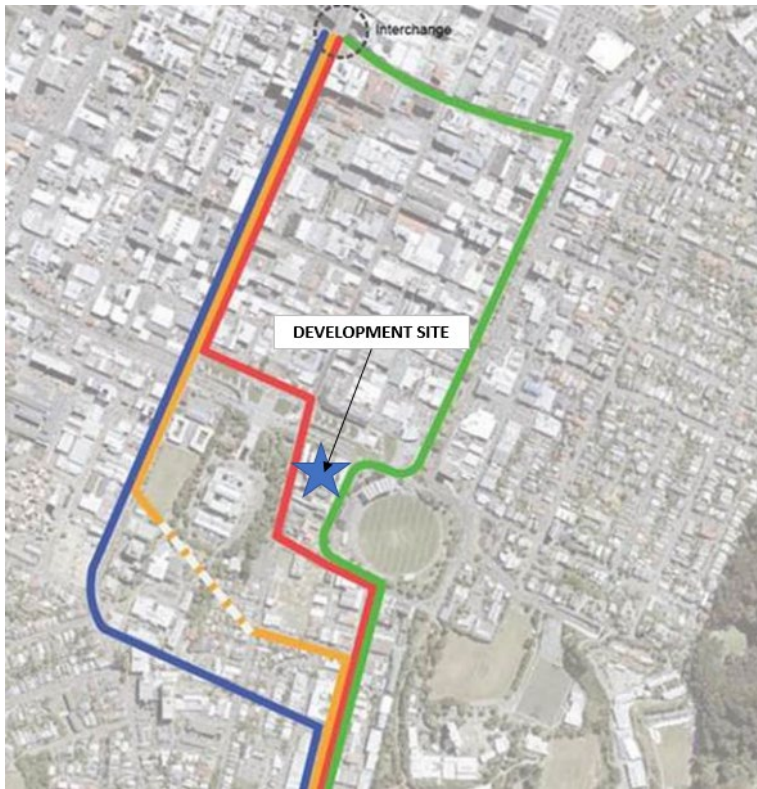


Figure 3-13: LGWM Indicative Timing (sourced from LGWM²)

For the purposes of this TAR it is assumed that the preferred MRT alignment would sit within the existing road carriageway. As such, if Tasman Street were the chosen route this would have little impact of the development Site operation, outside of the significant benefits it will afford residents in respect of convenient public transport connectivity to the wider City.

² LGWM – Preferred Mass Transit Route ‘Response to further Queries’

4.0 DEVELOPMENT PROPOSAL

4.1 EXISTING SITE ACTIVITY

The Site currently accommodates 42 residential apartments with an internal gated carpark accessed off Tasman Street. The exiting residential complex was developed in the 1990's and included the conversion of an existing four-storey police barracks building, alongside new two-storey townhouses. The development currently accommodates approximately 45 on-site car parks.

Pedestrian access to the apartments is provided via gated common entrances off Old Buckle Street and Tasman Street, with the newer street-front townhouses having their own direct private access off Tasman Street.

4.2 PROPOSED DEVELOPMENT

It is proposed to clear the existing Site to make way for a new residential development providing a total of 221 units comprising a mixture of dwelling typologies, as illustrated in **Figure 4-1** and summarised below:

- **Northern Apartments:** base isolated apartment building accommodating 106 apartments (between 1 and 3-bedroom) across ten storeys;
- **Southern Apartments:** base isolated apartment building accommodating 98 apartments (between 1 and 3-bedroom) across nine storeys;
- **Pukeahu / Buckle Terrace houses:** 3-storey townhouses, 5 x fronting Old Buckle Street and 4 x on the corner of Tasman Street / Old Buckle Street + ground floor café; and
- **Courtyard Terrace houses:** 8 x 2-storey 1-2 bed terrace houses

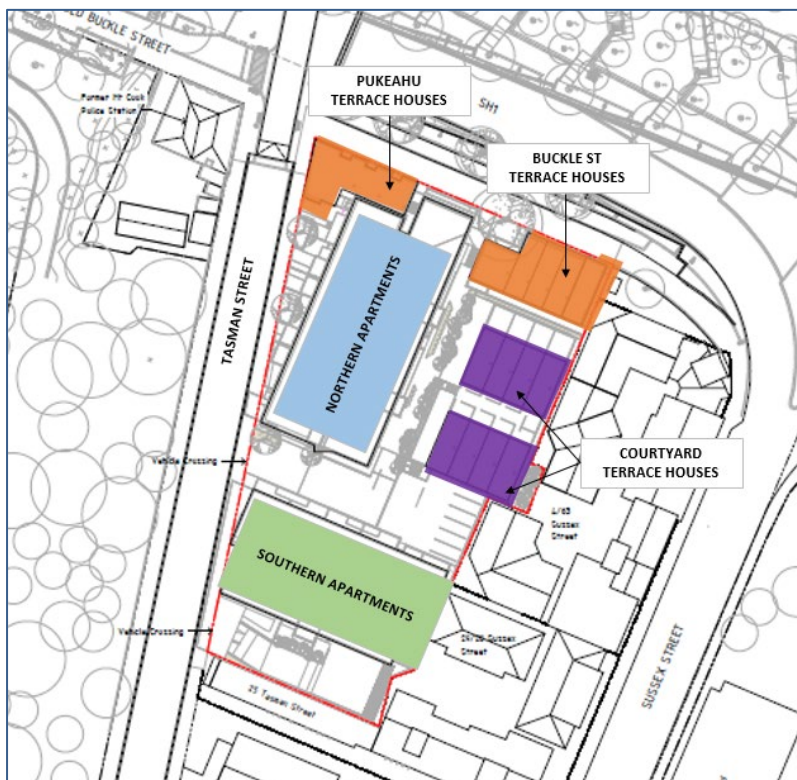


Figure 4-1: Proposed Site Plan

The fuller detailed development plans are included at **Appendix A**.

The new buildings will have a combined Gross Floor Area (**GFA**) of approximately 19,400m² GFA. With the exception of a small café activity at the corner of Tasman Street and Old Buckle Street, the proposed development will operate as residential.

A total of 138 on-site parking spaces (spread across three levels) will be provided to support the development, with 56 parks on the 'lower' basement level, 48 parks at basement level, and 34 spaces within the surface level carpark. These on-site parking arrangements are illustrated within the detail of **Figure 4-2** to **Figure 4-4**, below.

Access to the lower-level carpark will be provided via a two-way vehicle ramp that connects with Tasman Street at the southern end of the site. A second two-way vehicle driveway approximately midway along the Site's Tasman Street frontage will provide access to the surface level carpark and on-site loading zone / centralised rubbish area.

The six existing vehicle crossings are to be removed, with all access to the proposed development achieved via 2 x two-way vehicle driveways, noting that adequate provision for visibility splays has been included within the design of both to ensure safe intervisibility between drivers and pedestrians.

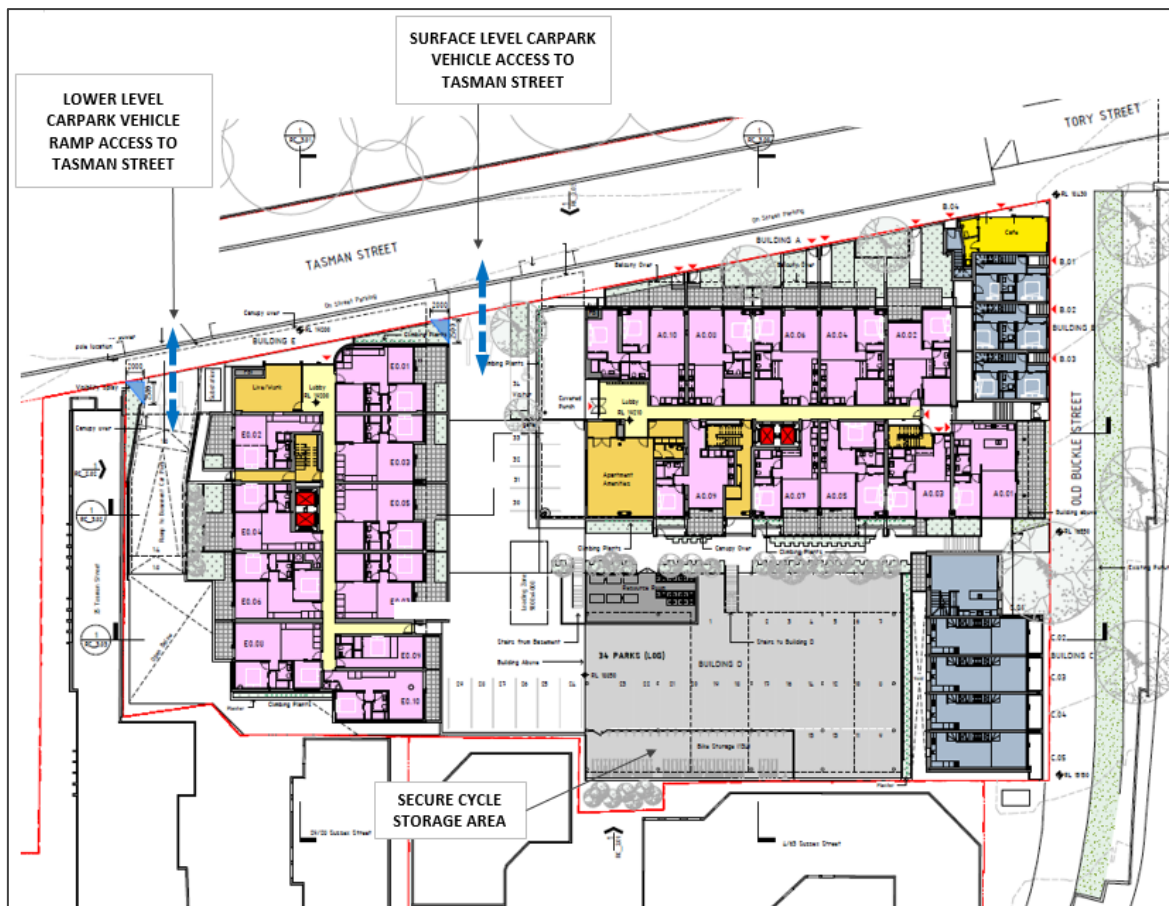


Figure 4-2: Proposed Surface Level Carpark and Loading Area

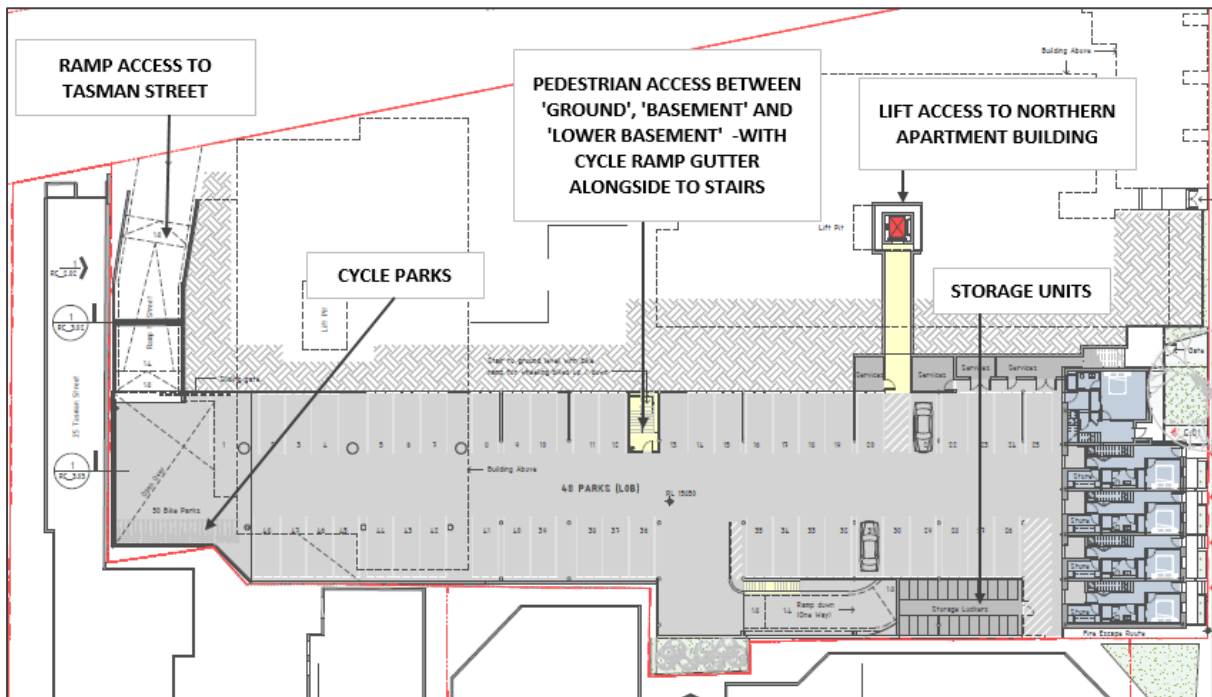


Figure 4-3: Proposed 'Basement' Level Carpark

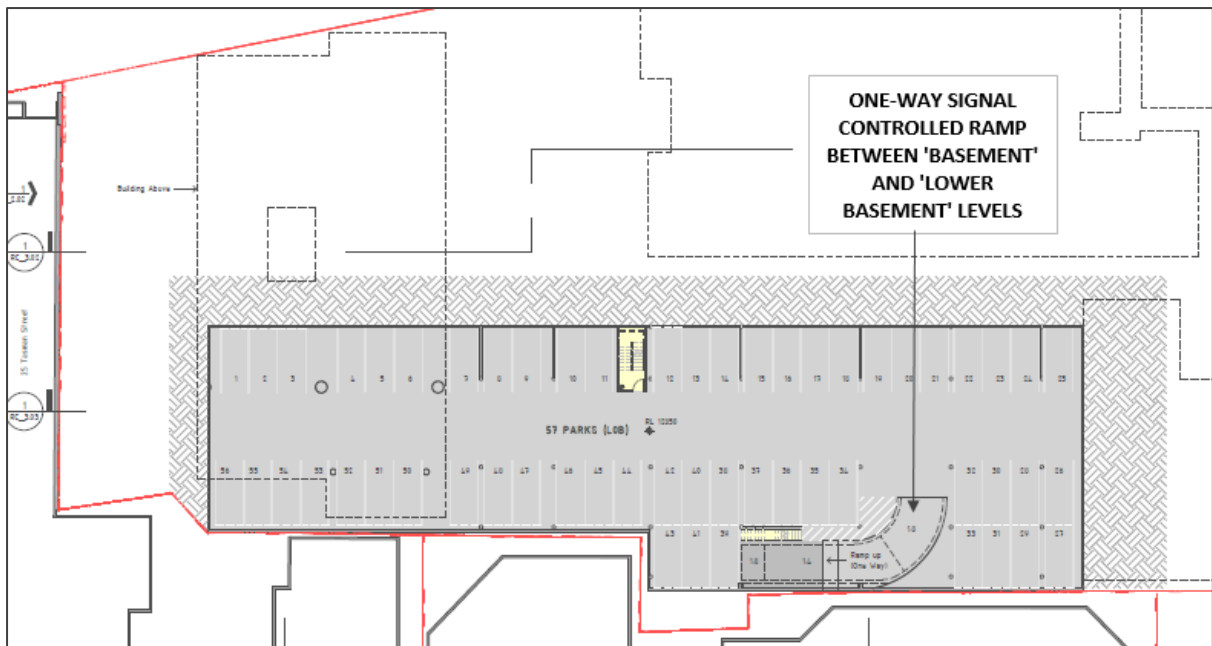


Figure 4-4: Proposed 'Lower Basement' Level Carpark

Provision of 184 secure on-site bike parks has been made for those residents choosing to store them outside of their unit. Further provision for cycle parking is available within the 24 storage units within the basement level carpark.

A number of pedestrian accesses will serve the wider site, including dedicated pedestrian entrances off Tasman Street to the two apartment buildings, individual unit access to the terrace houses off Old Buckle Street, and connection to the internal courtyard terraces off the corner of Tasman Street and Old Buckle Street.

On-site loading, which for the residential activity will comprise mainly rubbish and recycling collections, and for the café some daily deliveries, will be accommodated via a dedicated loading zone adjacent to the surface level carpark, with service vehicles using the associated northern driveway. Adequate provision for service trucks to turn on-site has been made, avoiding the need for any reverse manoeuvres to or from the public street.



5.0 DISTRICT PLAN ASSESSMENT

The proposed development is zoned 'Central Area' within the provisions of the ODP, and as such, an assessment of the proposal's compliance with the relevant transport Rules and Standards has been undertaken, as set out in **Table 5-1** below.

Table 5-1: Compliance Assessment Against the ODP Standards

Reference	Rules/Standards	Assessment of Compliance
Chapter 13.6 Central Area Standards		
Chapter 13.6.1.3 Vehicle Parking, Servicing and Site Access		
	<u>Vehicle Parking</u>	
13.6.1.3.1	“Activities in the Central Area are not required to provide on-site vehicle parking, but where parking is provided, it must not exceed a maximum of one space per 100m ² gross floor area. Note, for developments providing more than 70 parking spaces, Rules 13.3.1 and 13.3.8 apply. Note, section 3.2.2.16 sets out requirements for a Traffic Report for any proposals to provide more than 70 carparks.”	Complies The proposed development includes a total of 138 on-site car parks, to support the approximately 19,400m ² GFA. Hence, the ratio of parks to GFA does not exceed a maximum of one space per 100m ² , and complies with this Rule. However, as the proposed parking spaces is more than 70, this requires the need for a Traffic Report.
13.6.1.3.2	“All parking shall be provided and maintained in accordance with sections 1, 2 and 5 of the joint Australian and New Zealand Standard 2890.1 - 2004, Parking Facilities, Part 1: Off-Street Carparking.”	Complies On-site parking has been designed in accordance with the AS/NZ 2890.1 – 2004, Parking Facilities, Part 1: Off-Street Parking, and further detailed in Section 7.0.
13.6.1.3.3	“Open vehicle parking areas must not be situated at ground level at the front of sites to which standard 13.6.3.7.1 (display windows) applies.”	Complies All on-site vehicle parking areas are either setback from the street or provided internally.
	<u>Servicing</u>	
13.6.1.3.4	“On each site in the Central Area at least one loading area must be provided.”	Complies One on-site external loading area is provided.
13.6.1.3.5	“Turning paths shall be based on the standard for a medium rigid truck as illustrated.”	Complies Turn path analysis indicates that the manoeuvring areas provided for a service vehicle access to the loading zone can accommodate a medium rigid truck, as shown in Appendix B and detailed in Section 9.0.



13.6.1.3.6	<p>“For loading areas located outdoors, the minimum width shall be 3 metres and the minimum length 9 metres.”</p>	<p>Complies The proposed on-site loading zone satisfies these dimension requirements.</p>
13.6.1.3.7	<p>“For loading areas within a building, the minimum width shall be 4 metres and the minimum length 9 metres.”</p>	<p>Does not Apply No internal loading area is proposed.</p>
13.6.1.3.8	<p>“Where loading areas are located within a building, a minimum height clearance of 4.6 metres is required.”</p>	<p>Does not Apply No internal loading area is proposed.</p>
13.6.1.3.9	<p>“For buildings serviced by lifts, all levels shall have access to a loading area by way of a lift.”</p>	<p>Complies The Northern and Southern apartment buildings are serviced by lifts and have internal connections which provide access to the loading zone.</p>
13.6.1.3.10	<p>“The loading area shall be located no further than 15 metres from a lift and there shall be level access between them.”</p>	<p>Does not Comply Whilst the loading area is situated more than 15m from the lifts serving the Northern and Southern apartment buildings, the proposed residential nature means that any goods needed to be transported to/from the lifts will be infrequent.</p>
<u>Site Access for Vehicles</u>		
13.6.1.3.11	<p>“Site access shall be provided and maintained in accordance with section 3 of the joint Australian and New Zealand Standard 2890.1 – 2004, Parking Facilities, Part I: Off-Street Car Parking.”</p>	<p>Complies The two Site accesses have been designed in accordance with section 3 of the AS/NZ 2890.1 – 2004, Parking Facilities, Part 1: Off-Street Parking, and further detailed in Section 7.0.</p>
13.6.1.3.12	<p>“No vehicle access is permitted to a site across any restricted road frontage identified on District Plan Map 34 provided that this shall not prevent the continuation or the undertaking of any Permitted Activity on a site involving the use of any lawfully established vehicle access.”</p>	<p>Complies Tasman Street is not identified as a frontage off which vehicle access is restricted (on ODP Map 34).</p>

13.6.1.3.13	“There shall be a maximum of one vehicle access to any site except that sites with more than one frontage may have one access across each frontage.”	Does not Comply The proposed access arrangements provide for a reduction in the number of vehicle crossings serving the Site (from 6 driveways to 2), and will provide an overall improvement to the pedestrian amenity on Tasman Street as a result.
13.6.1.3.14	“Both the entry and exit of vehicles onto the carriageway of the most adjacent street shall be in a forward direction.”	Complies The proposed development provides sufficient internal space for vehicles to turn on-site, removing the need for any reverse manoeuvres to or from the public street.
13.6.1.3.15	“The width of any vehicle crossing to a site shall not exceed 6 metres.”	Does not Comply A vehicle crossing width of 6.0m and 6.8m is proposed to be provided at the basement carpark and ground level access points, respectively. Whilst the proposed 6.8m is wider than the ODP standard, this driveway has been designed to enable safe tracking of a service vehicle to enter and exit the Site.
13.6.1.3.16	“Where vehicular access can be provided from a service lane, a right of-way registered in favour of the site or other private road, or private right-of-way, no vehicle access shall be from a street.”	Complies The Site does not have any service lane or private way access.
13.6.1.3.17	“Subject to standard 13.6.1.3.12 no vehicular access shall be situated closer to an intersection than the following: - Arterial, principal and collector streets: 20m - Other streets: 15m.”	Complies The proposed two vehicle crossings are more than 15m from the nearest intersection (of Rugby Street or Old Buckle Street).
13.6.1.3.18	“No access shall be provided to a primary street on a site that also has frontage to a secondary street.”	Does not Apply Vehicular access to the proposed Site is only available from Tasman Street.

It is noted that in addition to the standards set out above, **Rule 13.3.1** separately states that:

“Any activity involving the provision of more than 70 vehicle parking spaces per site, is a Discretionary Activity (Restricted) in respect of:

- 13.3.1.1 the movement of vehicular traffic to and from the site
- 13.3.1.2 the movement of vehicular traffic within the surrounding street network.”

With a total of 138 parking spaces provided for under the development proposal, this exceeds the 70-space maximum threshold identified within Rule 13.3.1, and is therefore classified as a **Restricted Discretionary Activity**.

As such, several relevant policies (12.2.15.1 to 12.2.15.8) require consideration when assessing the proposed resource consent application, which specifically relate to the ‘Access’ Objective defined by 12.2.15:

“To enable efficient, convenient, and safe access for people and goods within the Central Area.”

Accordingly, an assessment of the development proposal in relation to these policies is provided in **Table 5-2**.

Table 5-2: Compliance Assessment Against the ODP Policies

Reference	Policies	Assessment of Compliance
12.2.15.1	<i>“Seek to improve access for all people, particularly people travelling by public transport, cycle or foot, and for people with mobility restrictions.”</i>	The proposed development’s location on the City fringe and sited within close proximity to key public transport corridors including Taranaki Street and Cambridge Terrace, as detailed in Section 3.5, mean it is well placed to support sustainable transport for people wanting convenient access to the CBD, thereby reducing car dependence, as evidenced by the census data trends described at Section 3.8.
12.2.15.2	<i>“Manage the road network to avoid, remedy or mitigate the adverse effects of road traffic on the amenity of the Central Area and the surrounding Residential Areas.”</i>	As detailed in Section 8.0, the forecast traffic movements at the development Site can be accommodated on the adjacent road network without causing adverse effects. This, in addition to the proximity of the proposed residential activity to the City and its amenities, will act to limit traffic generation on the network to well below typical residential activity levels elsewhere.
12.2.15.3	<i>“Manage the road system in accordance with a defined road hierarchy.”</i>	Vehicle access is only via Tasman Street, with the proposal development reducing the number of vehicle crossings from six to two. The traffic generation forecast for the proposed activities can be well accommodated within the existing flows on the adjacent streets, as detailed in Section 8.0.
12.2.15.6	<i>“Manage the supply of commuter car parking.”</i>	With the exception of an on-site park allocated to the commercial tenancy, and a dedicated maintenance vehicle space, car parks provided within the development will be provided for resident use. The convenient City fringe location of the Site will also serve to encourage commuter trips by non-car modes for those living at the development, as

		demonstrated by the census data (Section 3.8) which indicates high active mode and public transport travel choice for existing residents in the locality of the Site.
12.2.15.7	<p><i>“Consider waivers from parking requirements where:</i></p> <ul style="list-style-type: none"> - <i>The nature of the activity on the site necessitates the provision of additional parking; or</i> - <i>The additional provision is for short-stay customer parking.”</i> 	The nature of the development’s central location will mean that trip rates associated with the residents would be much lower than that associated with suburban residential areas, resulting in lower trip generation rates. This is further detailed in Section 8.0.
12.2.15.8	<i>“Manage on-site parking to ensure any adverse effects on the surrounding street network are avoided, remedied or mitigated.”</i>	As detailed in Section 8.0, the forecast traffic movements at the development Site can be accommodated on the adjacent road network, without causing adverse effects. The proposed vehicle access arrangements, controls and internal vehicle areas have been designed to ensure any queuing that may occur can be accommodated within the site, thereby ensuring queues do not extend on to the road network.
12.2.15.9	<i>“Require the provision of servicing or loading facilities for each site in the Central Area.”</i>	As described earlier at Section 4.2, the proposal plans include provision of a dedicated on-site loading zone to facilitate the site’s servicing activities, clear of the public street.
12.2.15.10	<i>“Ensure that the design and location of the servicing or loading facilities is appropriate having regard to the nature of the development and the existing or likely future use of the site.”</i>	As described earlier at Table 5-1, the on-site loading zone has: been designed to meet the dimension requirements of the ODP; is positioned conveniently to the site’s rubbish collection area (which will account for the majority of servicing trips to the site); and enables servicing trucks to turn on-site within the available manoeuvre aisles to enter and exit in a forward direction.
12.2.15.13	<i>“Require all vehicular access to sites to be safe.”</i>	As described in Table 5-1, the proposed two Site driveways have been designed to meet the ODP’s access requirements in satisfying each of the relevant standards set out in AS/NZS2890.1 including in relation to driveway width, gradient and visibility splays at the footpath interface.

Accordingly, the development proposal aligns well with the intentions of the ODP, in complying with the relevant standards and Policies, or intentions of these standards and Policies, with respect to transportation matters.

Following notification of the PDP last year, there is a need for new resource consent applications to consider proposed development against both the ODP and PDP. Accordingly, an assessment of the development against the relevant transport standards included in the PDP is set out in **Table 5-3**.



Table 5-3: Compliance Assessment Against the PDP

Reference	Rules / Standards	Assessment of Compliance
TR-S1	<p><u>Vehicle trip generation</u></p> <ol style="list-style-type: none"> Activities must not exceed the following maximum thresholds <ul style="list-style-type: none"> Light: 200 movements per day Heavy: 8 per week 	<p>Does not Comply.</p> <p>The development proposals traffic generation will exceed this threshold, and therefore in accordance with TR-R2.2 this Integrated Transport Assessment has been prepared to determine the traffic impacts, as set out at Section 8.0. This analysis concludes the Site traffic can be safely and appropriately accommodated on the adjacent transport network.</p>
TR-S2	<p><u>Micromobility device parking</u></p> <ol style="list-style-type: none"> Cycling and micromobility parking must be provided in accordance with Table TR-7. <p>Table TR-7</p> <ul style="list-style-type: none"> Short Stay (in the City Centre Zone) = Nil Long Stay (staff, residents, students) = 1 per residential unit. 	<p>Complies.</p> <p>The 221 residential units included within the proposal plans require a total of 221 cycle parks to satisfy this standard. The plans provide for a total of 184 cycle parks plus 24 storage units in the basement carpark capable of accommodating cycles, with further provision for the storage of bikes being available within the secure outdoor spaces serving the ground floor apartments and terrace houses. In practice then, the total provision for cycle parks included at the Site will satisfy the minimum 221 parks required, noting that some residents may even choose to store bikes within their units.</p>
TR-S3	<p><u>Micromobility parking design</u></p> <ol style="list-style-type: none"> Where long stay cycling and micromobility parking spaces are required to be provided by TR-S2, they must be located: <ol style="list-style-type: none"> In a covered area where access by the general public is excluded, and at least one wheel is able to be secured. 	<p>Complies.</p> <p>All cycle parks are located within secure access areas / carpark buildings, and will provide for at least one wheel to be secured.</p>
TR-S4	<p><u>On-site pedestrian, cycling and micromobility paths.</u></p> <ol style="list-style-type: none"> On-site pedestrian, cycling and micromobility paths must achieve the following: <ol style="list-style-type: none"> Provide pedestrian access from the road to each residential unit on the site. Provide cycling and micromobility access from the road to each building on the site that provides cycle and micromobility device storage. Connect to minimum width of 1.8m at the road boundary. 	<p>Complies.</p> <p>Footpath connections between the road and individual units / apartment building lobbies are provided for.</p> <p>Complies.</p> <p>Cyclists and other micromobility users will be able to share the internal vehicle circulation routes (which have been designed as slow speed / shared space laneways) in order to access the storage areas.</p> <p>Complies.</p> <p>The on-site internal circulation routes provide for a minimum 1.8m at the road boundary.</p>

	<p>d) Have a minimum formed width of 1.2m or, for paths accessing more than 1 residential units, 1.5m, and</p> <p>e) If stairs are necessary between cycling and micromobility storage and the legal road, a ramp at least 300mm wide on one side of the stairs must be provided.</p>	<p>Complies. Internal circulation routes satisfy this requirement.</p> <p>Complies. Where cyclists / Micromobility users are required to navigate stairs in order to access the storage areas, including the basement carpark, a cycle gutter will be provided to appropriately accommodate cycles/scooters.</p>
TR-S5	<p><u>Classification of Driveways.</u></p> <p>1. Driveways must be classified according to Table 8 – TR: Classification of Driveways.</p>	<p>Each of the proposed Site driveways will accommodate >200 vehicle movements per day (thereby being classified as ‘Specific design as part of High Trip Generating activity consideration’).</p> <p>Accordingly, these have been specifically designed to accommodate the types and frequency of vehicle movements they will accommodate, as described in more detail at Section 6.0.</p>
TR-S6	<p><u>Design of Driveways</u></p> <p>1. The minimum design vehicle used for a driveway must be a 4.91m x 1.87m vehicle (85th percentile vehicle); and</p> <p>2. Driveways must be designed to achieve design speeds, minimum widths, maximum gradients and seal requirements in Table 9 – TR: Design of Driveways.</p>	<p>Complies. Each of the two Site driveways are designed to accommodate at least an 85th percentile vehicle.</p> <p>Complies. Each of the two driveways are designed in a manner that satisfies these design requirements, with further detail on the specific arrangements set out in Section 6.0.</p>
TR-S7	<p><u>Design requirements for on-site vehicle parking, circulation and manoeuvring</u></p> <p>1. Where parking is provided on a site, car parking spaces and associated circulation and manoeuvring areas must be designed to accommodate a 4.91m x 1.87m vehicle (85th percentile vehicle) as the minimum design vehicle, with 300mm clearance per side to obstructions and a minimum outside turning radius of 5.8m.</p> <p>2. Car parking spaces must:</p> <p>a) Comply with the minimum dimensions of Figure 5 – TR Parking and Table 10 – TR Parking Space Dimensions</p> <p>b) Have a maximum gradient of 5% in any direction</p>	<p>Complies. The on-site parking areas have been designed to accommodate the 85th percentile vehicle as a minimum.</p> <p>Does not Comply. Whilst deviating from the generic (i.e. non-specific user-group) 2.5m minimum car park width set out in Table 10 – TR, the on-site spaces have been designed to a 2.4m width (for residential user class) to fully satisfy the industry standard AS/NZSS2890.1.</p> <p>Complies. All carparks will have a minimum gradient of 5%</p>

	<p>c) Have a minimum height clearance of 2.3m; and</p> <p>d) For residential on-site car parking spaces, be electric charging ready by being serviced with an electrical cable conduit from the electricity supply to the edge of the carpark.</p> <p>3. Blind aisles must extend at least 1m beyond the last parking space they provide access to.</p> <p>4. On-site circulation and manoeuvring areas must have a maximum gradient of 12.5%.</p> <p>5. On-site circulation and manoeuvring areas must be provided so that vehicles can enter and exit the site in a forward direction...</p> <p>6. On-site circulation and manoeuvring areas must not be located on:</p> <p>a. The public road reserve; or</p> <p>b. Areas for provided for parking, loading or storage; and</p> <p>7. On-site parking, circulation and manoeuvring must not include ramps, turntables, lifts or stackers.</p>	<p>Complies.</p> <p>All carparks have a clear height of 2.3m.</p> <p>Complies.</p> <p>Parking spaces will be 'electric charging ready'.</p> <p>Complies.</p> <p>Blind aisles will be provided with a 1m extension to allow vehicles to manoeuvre at end spaces.</p> <p>Does not Comply.</p> <p>As per TR-S7.7 below, the use of vehicle ramps serving the basement level parking means the proposal deviates from these Permitted Activity standards, and is instead considered a Restricted Discretionary Activity. Importantly, the ramps serving the basement carparks have been designed to a maximum gradient of 1:4 (7%) with appropriate transitions at either end, which fully aligns with the design requirements set out in the industry standard AS/NZS2890.1.</p> <p>Complies.</p> <p>All vehicles will be able to turn on-site, removing the need for any reverse manoeuvres to/from the public street.</p> <p>Complies.</p> <p>No on-site vehicle circulation or manoeuvring areas are located within the road reserve or areas provided for loading/storage.</p> <p>Does not Comply.</p> <p>The on-site car parking arrangements include a basement carpark accessed via a vehicle ramp. These internal arrangements have been designed in accordance with the industry standard AS/NZS2890.1</p>
TR-S8	<p><u>Provision of on-site loading areas</u></p> <p>1. At least one on-site loading area must be provided for buildings with a building footprint of 450m² or more;</p>	<p>Complies.</p> <p>The proposal plans include a dedicated on-site loading area to accommodate the Site's servicing demands.</p>

TR-S9	<p><u>Design requirements for on-site loading, circulation and manoeuvring.</u></p> <ol style="list-style-type: none"> 1. On-site loading and associated circulation and manoeuvring areas must be designed to accommodate an 8.0m x 2.5m medium rigid truck as the minimum design vehicle, with 300mm clearance per side to obstructions and a minimum turning radius of 10m; 2. Loading areas must have a minimum height clearance of 4.5m; and 3. Loading, circulation and manoeuvring areas must not be located on the public road reserve. 	<p>Complies.</p> <p>The on-site access, loading and internal circulation arrangements for service vehicles has been designed to accommodate at least an 8m rigid vehicle, as set out in detail at Section 9.0.</p> <p>Complies.</p> <p>The access, circulation areas and on-site loading zone include a height clearance of >4.5m.</p> <p>Complies.</p> <p>All loading, circulation and manoeuvring areas are provided for on-site, clear of the public street.</p>
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As shown, the development plans align with each of the ‘permitted activity’ standards of the PDP, except for the following:

- TR-S1 ‘Vehicle trip generation’: given the proposal will exceed the daily 200 light vehicle movement traffic generation threshold, this Transport Assessment has been prepared to appropriately assess the associated traffic impacts on the local network;
- TR-S7.2 ‘Design requirements for on-site vehicle parking, circulation and manoeuvring’: whilst the proposed parking space width of 2.4m within the on-site car parks provided at the site deviates from the 2.5m minimum identified in the PDP, these proposed widths fully satisfy the industry standard 2890.1 for residential users, which takes account of the lower turnover of this type of parking, and familiarity of the users; and
- TR-S7.4 and TR-S7.7: the inclusion of vehicle ramps to serve the basement level carparks means the development is considered a Restricted Discretionary Activity. It is noted that the on-site parking arrangements have been designed to satisfy the industry standard AS/NZS2890.1, including in respect to the vehicle ramp gradients, as described further in the following chapter.

In addition to the above, TR-R5³ [sic] ‘Car Sharing Activities’ identifies that where parking is provided on a site, provision should be made for car share vehicles. As described later at Section 7.5, the reduction in the number of vehicle crossings serving the Site provides an opportunity to increase the number of kerbside parks along the adjacent section of Tasman Street, which would usefully include the allocation of at least one dedicated car share space to serve local demand (including residents of the Site).

³ Should be TR-R6

6.0 ACCESS

As described earlier, the proposal plans provide for the closure of four existing vehicle crossings to the Site on Tasman Street, with the remaining two reconfigured to accommodate the proposed respective access driveways to the surface level and lower-level carpark. Removal of the four established vehicle crossings provides considerable benefit to the adjacent network, in both rationalising the Site access arrangements and contributing to an improved pedestrian and cycle environment with less conflict points along the Tasman Street frontage.

6.1 VEHICLE ACCESS DESIGN

The proposed Site vehicle crossings will accommodate two-way vehicle movements and have been designed to a 6.0m and 6.8m wide crossing at the boundary for the basement carpark and ground level carpark accesses, respectively. Whilst this proposed driveway width for the surface level carpark exceeds the ODP standard of 6m, it has been designed to enable safe tracking of a service vehicle to turn to/from the Site. This minor deviation from the standard is not assessed as having any material adverse impact on the driveway operation, noting pedestrian intervisibility splays at the adjacent Tasman Street footpath are able to be fully met, as described further below.

The northern driveway into the surface level carpark grades down gently at 1:25 from the street. A security gate that will be closed out of hours is setback approximately 10m from the boundary, ensuring that a vehicle entering the site when the gate is shut can wait, clear of the footpath.

The proposed southern driveway ramps down into the lower-level carparks and includes a 6m length of minimum 1:20 grade, from the back of the footpath, in line with the access standard requirements of AS/NZS2890.1:2004 Part 1: 'Parking Facilities - Off-street car parking' (AS/NZS2890.1). This, along with the provision of compliant visibility splays at the footpath edge (in the manner described in more detail below), will ensure that vehicles exiting the Site have clear view of any pedestrians on the adjacent footpath. Beyond this, the ramp extends into the Site at maximum gradient of 1:4 with associated transitions of 1:8 at either end (for a minimum length of 2m), ensuring that it complies with the design standards set out in AS/NZS2890.1 at Section 3.3. A sliding gate at the base of the main ramp will provide for carpark security out of hours. An existing streetlight within the adjacent Tasman Street footpath will need to be relocated, to accommodate the new driveway connection.

Vehicle access between the basement and lower basement level is proposed via a one-way vehicle ramp that will be controlled by traffic signals. The signal would be actuated by vehicles as they arrive at the ramp, with adequate space provided at the top and bottom for vehicles to wait, clear of an opposing vehicle exiting the ramp.

Pedestrian visibility splays for vehicles exiting private driveways are identified in AS/NZS 2890.1 at Figure 3.3, as requiring a minimum 2m clear area either side of the driveway, at a distance of 2.5m back from the property boundary. Compliance of each of the two Site driveways design with respect to this pedestrian visibility splay is illustrated within the detail of the plans included at Appendix A. Appropriate surface treatments will be used at the boundary, so as to manage vehicle speeds within the Site as well as prompt exiting drivers of the potential presence of pedestrians using the footpath on Tasman Street.



Due to the straight alignment of Tasman Street adjacent to the Site, sightlines in the vicinity of the proposed two driveways satisfy the minimum distances set out in 'RTS 06: Guidelines for visibility at Driveways' (**RTS 6**) of 40m, for driveways connecting to Local Roads with a 50kph posted speed limit. In practice, operating speeds on the adjacent section of Tasman Street are generally lower than the posted limit, as influenced by the speed cushions and 15kph advisory within the carriageway at the northern end of the Site, and 30kph speed limit north of the Old Buckle Street intersection. As with any situation where kerbside parking is available on-street, there is potential for sightlines at accesses to be hindered by parked vehicles. RTS 6 includes specific guidance in this respect, noting that there are to be no permanent obstructions but that parked vehicles can obstruct sightlines occasionally. In this manner the proposed driveways are no different to the Site's prior vehicle access arrangements which have to date operated without safety issues.

Furthermore, ample space is provided within the proposed carparks for vehicles to turn on-site, meaning there will be no requirement for vehicles to reverse to or from the street, which represents an improvement over the existing Site arrangements.

6.2 PEDESTRIAN AND CYCLE ACCESS

Each of the apartment buildings include a dedicated pedestrian access from Tasman Street, as well as internal connections within the Site itself. Additional pedestrian access points at the northern end of the Site off Tasman Street, as well as off Old Buckle Street, will provide connectivity to the courtyard terrace units and the terraces fronting to Old Buckle Street. Cyclists can access the dedicated on-site cycle parking within the surface level carpark via the northern vehicle driveway, or use the pedestrian stairs with associated cycle gutter to access the lower level cycle parks and storage lockers.



7.0 PARKING

The proposal plans include a total of 138 car parks provided across the combined lower basement, basement, and surface level carparks.

7.1 DISTRICT PLAN

As described earlier in Section 5.0, there are no minimum parking requirements under the District Plan, with Central Area zone developments historically encouraged to maximise Site potential through minimizing space for carparking, and to support sustainable mode choice to mitigate further vehicle trips within the city.

Notwithstanding this, where a development provides more than 70 car parks then analysis of the associated traffic effects under Rule 13.3.1 is required. Accordingly, an assessment of the development site's traffic generation and associated impacts has been set out in the following chapter.

7.2 FORECAST SITE PARKING DEMAND

By way of providing an assessment of the quantum of parking demand generated by the proposed development, vehicle ownership data collected by Stantec at other analogous City fringe comprehensive residential developments around Wellington has been drawn upon, which indicates a rate of ownership averaging at 0.46 vehicles 'per unit'. Applying this rate to the proposal's 221 dwellings provides a forecast demand for 102 vehicles. Accordingly, with a total of 138 on-site parking spaces provided, this demand could be wholly accommodated within the site, with a surplus that provides for an approximate +35% variation above this average.

Notwithstanding this, some residents may choose not to lease an on-site car park and instead make use of other options, including parking vehicles at places of work (if working locally), leasing other private off-street parks, or utilising kerbside parking, including on Tasman Street. With regard to kerbside parking, it is noted that the on-street parks adjacent to the Site are a mixture of time restricted and coupon spaces. These coupon spaces along Tasman Street are generally well utilised Monday-Friday during the day by commuters (driving into fringe areas such as this to then park and walk to nearby sites or the CBD), but exhibit good levels of residual capacity outside of these times. In this manner, when the residential demand associated with the Site is at its peak during evenings and weekends, there is available capacity within the existing kerbside resource to accommodate overspill demand, without impacting on the existing daytime parking amenity. Site parking demand will be lowest during the day (Monday-Friday) and, assuming say 10% of the 'total' demand chose to park on-street, this would amount to less than 10 vehicles. Such modest demand is not assessed as having any material impact on the current use of the kerbside parking resource, which is provided to support a range of user groups and land use activities.

7.3 PARKING LAYOUT

The surface level carpark accommodates a total of 34 spaces, comprising 23 internal parking spaces within the ground floor of the proposed new courtyard terraces building, and 11 across the balance of the carpark.

The basement and lower basement level carparks provide 48 and 56 spaces, respectively, which includes a number of tandem spaces.



The on-site parking spaces provided have been designed to meet the dimension requirements and minimum aisle widths prescribed within AS/NZS2890.1 for user class 1 (resident parking), at 2.4m wide by 5.4m long parking stall and a minimum 5.8m manoeuvre aisle. The vehicle circulation routes and internal parking areas have also been designed to the access standards set out in AS/NZS2890.1.

7.4 BICYCLE PARKING

Provision for 134 cycle parks has been made within a secure storage room within the surface level carpark, whilst the provision a further 50 cycle parks is included within the basement carpark; these facilities will include provision for Ebike / Scooter charging. In addition, provision of 24 storage units within the basement carpark provides for further cycle storage capacity, should residents require it, with secure outdoor areas serving the terrace houses and ground floor apartments providing additional storage options.

7.5 ON-STREET PARKING

The reduction in vehicle crossings accessing the Site (from six to two) will provide an opportunity to increase the number of kerbside parks along Tasman Street in this location. Discussions with Council's Traffic Engineer during the earlier pre-application meetings indicates support in principle of a dedicated drop-off and pick-up zone adjacent to the Site to accommodate taxi / rideshare vehicles, as well provision for a dedicated 'car share' space, noting that such details will need to be progressed outside of the resource consent process. An indicative arrangement for this kerbside space parking layout is including in the proposal plans in Appendix A.



8.0 DEVELOPMENT SITE TRAFFIC

Site traffic generation is influenced by the level of on-site car parking provided, and the associated activity the parking serves. Accordingly, forecast trip rates have been calculated below for the proposed residential activity which the on-site parking will serve (based on the number of car parks provided), for the particular purpose of assessing network traffic additions.

8.1 PROPOSED RESIDENTIAL ACTIVITY

In order to establish the likely vehicle movement demands generated by the 138 on-site parking spaces serving the proposed residential activity, data from previous traffic generation surveys undertaken by Stantec at other established city apartment developments around the country has been examined.

From this data, which includes surveys of six central area residential apartment developments (comprising a mixture of Wellington and Auckland examples), average traffic generation rates 'per parking space' were recorded as follows:

- AM peak hour: 0.26 veh/per space (24% inbound / 76% outbound); and
- PM peak hour: 0.33 veh/per space (56% inbound / 44% outbound).

Other industry standards, such as the RTA 'Guide to Traffic Generating Developments' 2002 (**RTA Guide**) provide similar trip generation rates of 0.24 vehicles per unit during the peak hour, noting these are based on residential units, rather than car parks. With the proposal plans providing for only around 65% of the number of parking spaces (138) versus dwellings units (221), such trip generation is likely to over-estimate demand. Accordingly, the observed rates set out above have been used to determine the forecast traffic activity at the Site.

Applying the AM and PM peak hour traffic generation rates to the proposed 138 parking spaces, and utilising the surveyed traffic distributions (i.e. inbound and outbound proportions), gives the following forecast vehicle movement demands, as summarised in **Table 8-1**.

Table 8-1: Forecast Site Traffic Generation

Direction	AM Peak Hour	Pm Peak Hour
Inbound	9	26
Outbound	27	20
Total	36	46



8.2 OFF-SITE EFFECTS

As has been shown, the total Site traffic generation from the residential development is expected to amount to around 36-46vph (combined inbound and outbound, across the two Site driveways) during the peaks.

Noting that the Site currently accommodates approximately 45 on-site carparks, application of the adopted trip rates above indicates a baseline traffic generation of around 15vph (0.33×45 spaces) during the peak hour. In this manner, the development proposal represents an increase in this prior traffic activity of around 20-30vph, or around 1 additional vehicle every 2-minutes. Such small additions will not have a material impact on Tasman Street or the performance of local intersections along this corridor.



9.0 SERVICING

Servicing requirements for residential developments are typically limited to refuse collection and occasional household deliveries and removals, whilst some minor servicing of the café activity is expected to include 1-2 deliveries per day. Waste and recycling collections at the Site are anticipated to be undertaken at least every other day.

The proposed development includes a dedicated on-site loading zone within the surface level carpark accessed off the northern driveway, to accommodate the servicing demands described above, clear of the public street. Example tracking paths for a standard 8m rigid truck to access the Site, manoeuvre to the loading zone, before then turning within the parking circulation aisle to the south and exiting the Site in a forward direction, is illustrated within **Appendix B**.



10.0 FEEDBACK FROM COUNCIL

A number of transport matters were identified by Council's Traffic engineer through the pre-application meeting process for the now consented scheme that remain relevant to this revised application, as summarised in **Table 10-1** below, along with a response.

Table 10-1: Summary of Council Transport Feedback

Feedback Matter	Design Response
<i>"Bike parking – at a minimum one easily reachable/accessible bike parking per apartment must be considered."</i>	As detailed at Section 7.4, the development plans include provision of 184 cycle parks with a further 24 spaces available within storage units in the lower level carpark (total of 208) to serve the 221 residential dwellings.
<i>"Parking for trade vehicles."</i>	A car park adjacent to the entrance of the surface level carpark will be made available for maintenance and trade vehicles.
<i>"Car share should be considered."</i>	Consideration of a car share scheme was given by the developer, however an existing arrangement at another development Site in the central area has proven unsuccessful. Notwithstanding this, there are a number of publicly available car share schemes currently operating in Wellington (e.g. Mevo and Cityhop) which could operate from the adjacent section of Tasman Street, with the allocation of some associated car share spaces within the kerbside resource as described at Section 7.5.
<i>"E-bike/Scooter/Motorbike parking should be considered."</i>	As described at Section 7.4, the proposal plans include dedicated provision to accommodate secure parking for Ebikes / Escoters within the Site.
<i>"EV Charging station"</i>	Access to power points for charging EV vehicles will be available within the lower level carparks, as well as the internal parking beneath the courtyard terraces building within the surface level carpark.
<i>"PUDO – Pick up and drop off zone for delivery/uber (it could be considered on street where existing kerb crossing is removed or on-site before gate)."</i>	As described at Section 7.5, with an increase in kerbside space created through the reduction of existing vehicle crossings serving the Site (from six to two), there is an opportunity to introduce some dedicated pick-up and drop-off spaces.
<i>"The applicant must explain about the proposed number of car parks. The proposed car parks is expected to meet their demand. Noting that Tasman Street has no capacity to accommodate additional parking. Coupon parking is available on Tasman Street."</i>	An assessment of the site's parking demand is provided in Section 7.2 and indicates the proposed provision of 138 on-site car parks is expected to adequately accommodate the demand generated by the development.
<i>"Safety at this section of Tasman Street must be addressed in the report from a vehicle access and traffic perspective."</i>	As described in Chapter 6.0, Site access has been designed to satisfy the requirements of the District Plan and AS/NZS2890.1 in terms of vehicle crossing widths, gradients, and sightline splays at the footpath interface. In addition, and as described at Section 3.7, a review of the current crash record does not indicate any existing traffic safety issues on the adjacent section of Tasman Street.
<i>"A rubbish area must be provided. The Council's Waste Operations Engineer will</i>	The on-site waste storage areas have been designed in line with the Council's 'Multi-Unit Development waste storage and



<i>comment on the size. Tracking curves for a rubbish truck must be provided, and the expected number of trips per week should be mentioned in the application. Private collection will be required.”</i>	servicing’ guidance document, to ensure adequate capacity is provided. Details on expected frequency of such servicing visits is given in Chapter 9.0, whilst Appendix B includes swept path analysis confirming that a medium rigid truck can access the on-site loading area, turn on-site, and then exit to Tasman Street in a forward direction.
<i>“Way finding signs should be provided at all accesses.”</i>	Wayfinding signage will provided at the street interface to direct pedestrians to the various residential buildings within the development site.
<i>The proposal has two vehicle crossings. A sightline assessment should be provided.”</i>	An assessment of the available sightlines at the proposed driveways is provided at Section 6.1.
<i>All redundant vehicle crossings must be reinstated with kerb and channel.”</i>	All existing crossings that are removed will have the kerb and channel reinstated.
<i>“A gate has been proposed on both driveways. There is space for one car before the gate. This must be justified and should be increased if applicable.”</i>	As described in Section 8.1, vehicle movements at the Site are expected to peak at around 26 ‘inbound movements’ across the two driveways, during the weekday PM peak. As detailed in Chapter 6.0, the site’s northern driveway includes a gate set approximately 10m inside the boundary. With this driveway providing access to around 25% of the on-site car parks, around 7 vehicle entry movements (26 x 0.25), or one vehicle every 8-9-minutes, can be expected during the busy peak hour. With a delay of less than 10-seconds for the gate to open, the probability of two inbound vehicles arriving whilst the gate is closed is small. The Site’s southern driveway includes a sliding gate at the base of the ramp which provides 20m (or 3 vehicles) of available internal Site stacking space, to adequately accommodate any queuing that may occur.
<i>“Public transport routes nearby should be stated in the application.”</i>	The nearby bus stops that are within easy walking distance of the Site are described and illustrated in detail at Section 3.5.
<i>“All proposed car parks must meet NZS2890.1:2004 standards. Gradients must be marked on the plan.”</i>	As described at Chapter 7.0, all on-site car parks have been designed to satisfy the dimension requirements and manoeuvre aisle widths of AS/NZS2890.1. Gradients within the site’s parking and vehicle circulation aisles are identified in the attached plans at Appendix A.

As shown, Council’s feedback has been properly captured in the development of the proposal plans.



11.0 CONSTRUCTION TRAFFIC

A detailed Construction Management Plan (**CMP**) addressing the phasing and construction of the buildings will be prepared and submitted to Council in due course.

In this respect, it is noted that the proposed development will be undertaken in stages, noting design details and construction scheduling will be better confirmed after resource consent is granted, and a contractor has been appointed.

It is recommended that a Construction Traffic Management Plan (**CTMP**) be prepared to set out details of the work phases, associated forecast construction traffic volumes for each phase, and related management thereof. As a component of the broader CMP, the CTMP will be submitted to Council for approval prior to any Site works beginning.

It is anticipated that vehicle access to the Site during deconstruction and construction would be handled via existing vehicle crossings on Tasman Street.

The Site itself will be laid out to allow all vehicles, where practicable, to access and egress the Site in a forward direction, without requiring any reverse manoeuvres on the adjacent road network. On occasion, when specialist machinery is being delivered or collected from the site; where space precludes larger vehicles from turning on-site or when works are being undertaken close to the Site frontages, it may be necessary to require some Temporary Traffic Management (**TTM**). This will be undertaken in a manner that is satisfactory to Council.

These and other specific details will be documented in the CTMP to be prepared in due course, that will be submitted to Council for approval prior to Site works commencing. The actual content of the Plan will include details of:

- the timing of specific work phases;
- key activities during each work phase;
- anticipated traffic levels and access arrangements for each work phase;
- provision for maintaining safe pedestrian movements in the vicinity of the site;
- wheel washing requirements for Site vehicles;
- route restrictions, for both large trucks and any over-sized vehicles;
- arrangements for TTM, including with regard to pedestrians, parking, and servicing;
- how servicing and access to adjacent Site activities will be provided for through the various construction phases; and
- contact telephone number for key Site staff.

Consideration of pedestrian safety and amenity will necessarily have to be included within the CTMP, potentially including protective gantries constructed over footpaths in the vicinity of the site, as required. Appropriate works signage clearly communicating any necessary diversions will be erected in accordance with the 'Code of Practice for Temporary Traffic Management' (**COPTTM**). Again, full details of these arrangements will be provided within the CTMP.



12.0 CONCLUSION

A detailed assessment of the transport related effects of a proposed new comprehensive residential redevelopment at #1-23 Tasman Street on the City fringe has been undertaken, with due regard to the provisions and requirements set out within the District Plan and relevant best practice.

Based on the assessment presented in this report, it is concluded that the transport related needs of the proposed new residential activity can be accommodated at the Site, and in the manner proposed, with little adverse effects on the surrounding transport network.

An assessment of the development Site's forecast traffic activity has shown that vehicle volumes generated on the adjacent roading network will be small, and will not give rise to any material impacts in terms performance. Furthermore, the Site's proximity and easy pedestrian and cycle access to the CBD and its associated amenities, along with convenient access to key bus stops located within a short walk of the Site that connect with high frequency bus services to/from the CBD and surrounding wider suburbs, supports the use of sustainable transport modes over private vehicle transport.

Noting that on-street parking in the adjacent streets is already under pressure, the level of on-site car parking provision included in the proposal plans has been designed to provide sufficient resource to meet the forecast demand from residents. From a vehicle access perspective, the proposed development provides for an overall reduction in the number of current vehicle crossings serving the site, from six to two, delivering commensurate safety and amenity benefits to the adjacent pedestrian footpath environment.

Overall, it is assessed that the proposed redevelopment of this Site to provide a high-quality mixed typology of residential housing, can be supported from a traffic engineering and transportation planning perspective.



Appendices



Appendix A DEVELOPMENT PLANS



105 AMRITSAR STREET
WELLINGTON 6035
PO BOX 3364
WELLINGTON 6140
NEW ZEALAND
TEL 64 4 499 1727
FAX 64 4 499 1960

MAIL@ATHFIELDARCHITECTS.CO.NZ
WWW.ATHFIELDARCHITECTS.CO.NZ

NOTES:

- Apartments
- Townhouses
- Cafe
- Apartment Amenities
- Circulation
- Lifts
- Stairwell
- Services
- Covered Parking

KEY:



STRUCTURAL ENGINEER:
Dunning Thornton Consultants

SERVICES ENGINEER:
AURECON GROUP

FIRE ENGINEER:
Holmes Fire

No.	Description	Date
01	Resource Consent	30.09.21
02	RC Updates	20.10.22
03	Resource Consent	20.12.22



One Tasman Pukeahu Park 20-42
Wellington

GA Plan Ground

1 : 400 @ A3

RC_1.02-



NOTES:

- Apartments
- Townhouses
- Cafe
- Apartment Amenities
- Circulation
- Lifts
- Stairwell
- Services
- Covered Parking

KEY:



STRUCTURAL ENGINEER:
Dunning Thornton Consultants

SERVICES ENGINEER:
AURECON GROUP

FIRE ENGINEER:
Holmes Fire

No.	Description	Date
01	Resource Consent	30.09.21
02	RC Updates	20.10.22
03	Resource Consent	20.12.22

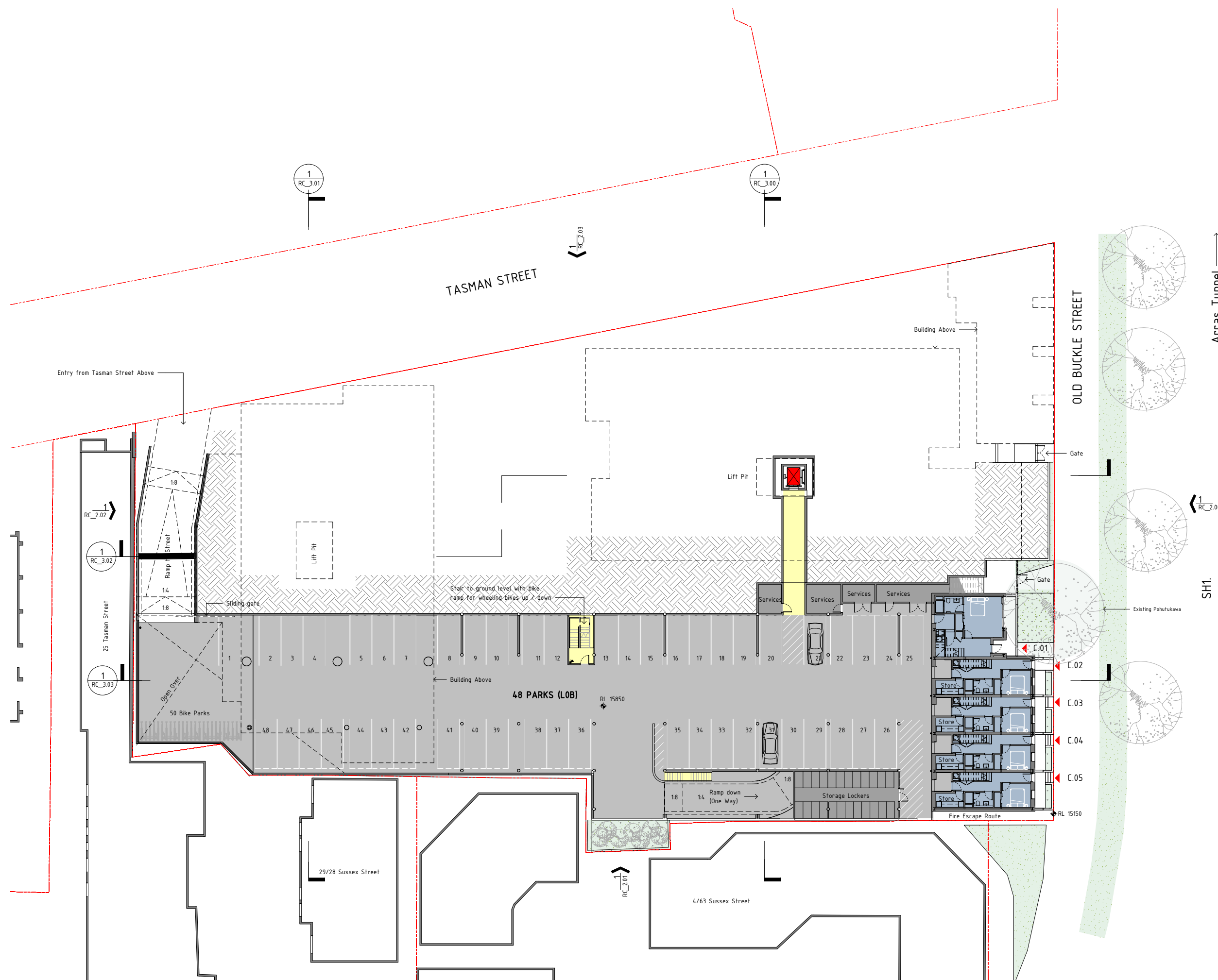


One Tasman Pukeahu Park 20-42
Wellington

GA Plan Basement

1 : 400 @ A3

RC_1.01-



NOTES:

- Apartments
- Townhouses
- Cafe
- Apartment Amenities
- Circulation
- Lifts
- Stairwell
- Services
- Covered Parking

KEY:



STRUCTURAL ENGINEER:
Dunning Thornton Consultants

SERVICES ENGINEER:
AURECON GROUP

FIRE ENGINEER:
Holmes Fire

No.	Description	Date
01	Resource Consent	20.12.22

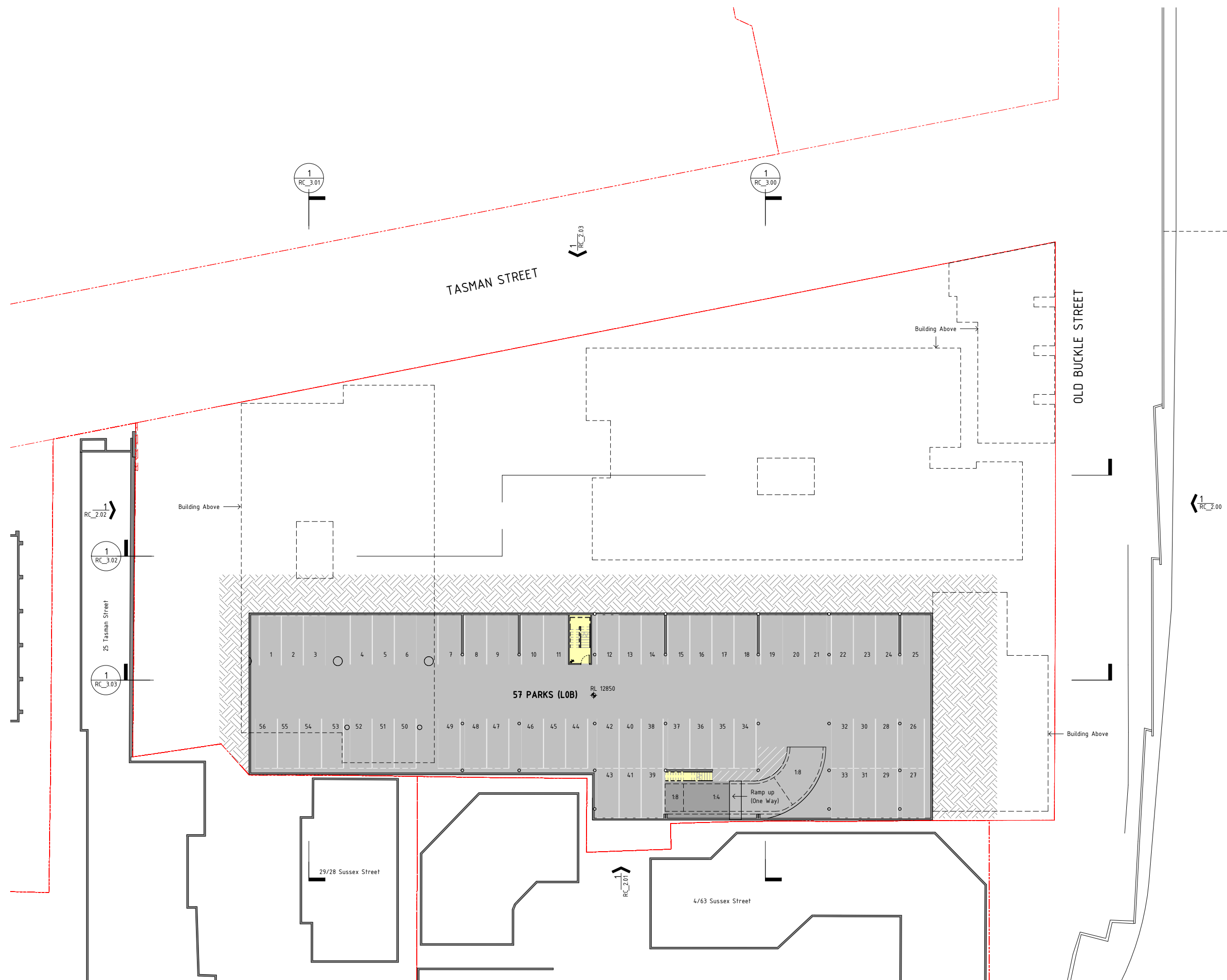


One Tasman Pukeahu Park 20-42
Wellington

GA Plan Lower Basement

1 : 400 @ A3

RC_1.00B-



Appendix B VEHICLE TRACKING



200 mm

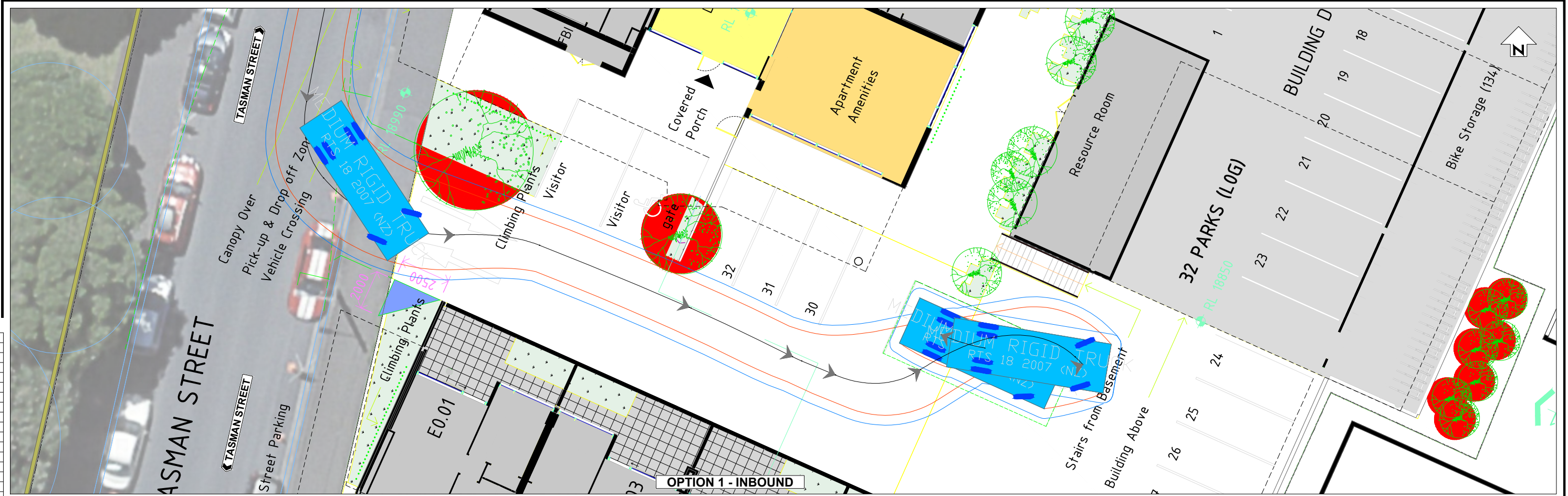
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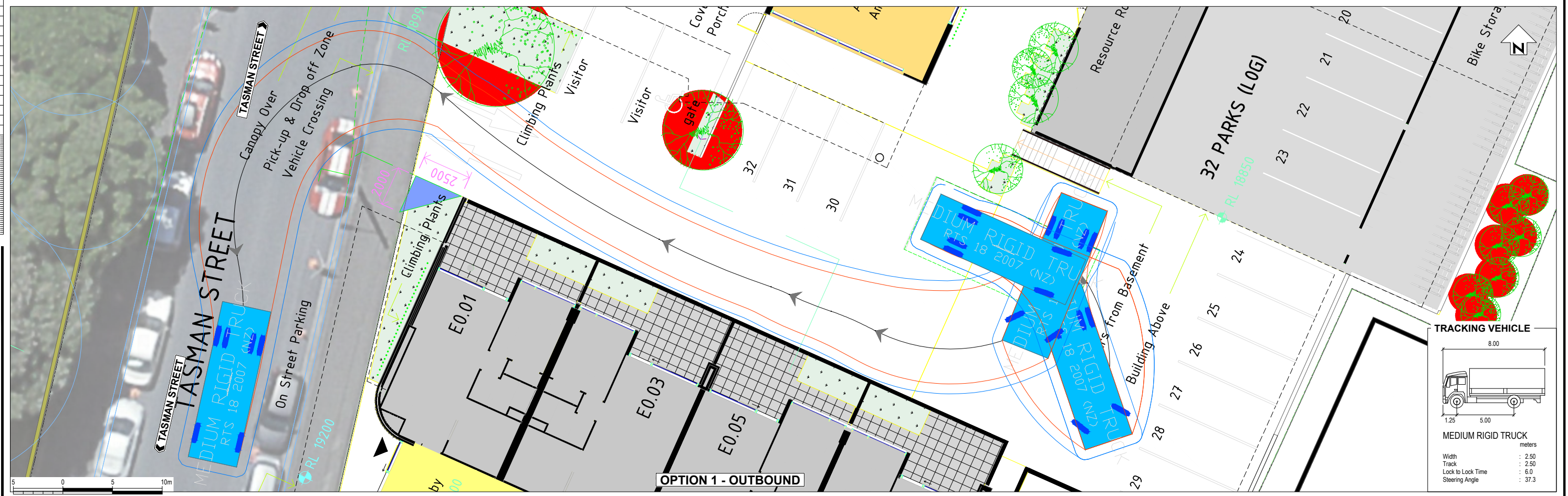
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SCALE 1:200

20/11/2018 4:43 p.m.

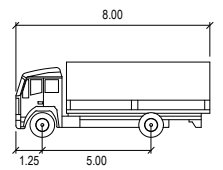


OPTION 1 - INBOUND



OPTION 1 - OUTBOUND

TRACKING VEHICLE



MEDIUM RIGID TRUCK

Width	: 2.50
Track	: 2.50
Lock to Lock Time	: 6.0
Steering Angle	: 37.3

NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE	BY	CHK	APP
B	UPDATED BASE	19.10.22	JW		
A	FOR REVIEW	17.10.22	JW		

SURVEYED		
DESIGNED		
DRAWN	SIU PULETIUATO	17.10.22
CAD REVIEW		
APPROVED	NOT APPROVED	
PROF REGISTRATION:		



ONE TASMAN PUKEAHU PARK
TASMAN STREET, MOUNT COOK, WELLINGTON

VEHICLE TRACKING

Status Stamp	FOR REVIEW
Date Stamp	19.10.22
Scales	1: 200 @ A1 / 1: 400 @ A3
Drawing No.	310204761-01-001-SK002
Rev	B

Stantec

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