270 Pacific Highway, Crows Nest
Transport Impact Assessment

Prepared for:

Keylan Consulting Pty Ltd

7 October 2025

The Transport Planning Partnership

270 Pacific Highway, Crows Nest
Transport Impact Assessment

Client: Keylan Consulting Pty Ltd

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Quality Record

Version	Date	Prepared by	Reviewed by	Approved by	Signature
V01	25/03/2025	Ashwini Uthishtran	Oasika Faiz	Ken Hollyoak	DRAFT
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V04	7/10/2025	Ashwini Uthishtran	Oasika Faiz	Ken Hollyoak	

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APPENDICES

1 Introduction

The application seeks development consent for the development of a 16 storey mixed use development at 270 Pacific Highway, Crows Nest, comprising 168 build to rent (BTR) units and non-residential uses in the podium. Specifically, the SSDA seeks development consent for:

- demolition of two existing 5 storey commercial buildings
- construction of a maximum 16 storey building, including:
  - 2 basement parking levels (with 82 carparks (incl. 2 courier spaces), 8 motorbike spaces and 226 bicycle spaces)
  - 3 podium levels comprising non-residential uses such as medical centre, retail, and residential uses (build to rent units and residential amenity facilities such as a gym and sauna, steam room, outdoor pool, class space, cinema room, co-working space)
  - 13 storeys of residential uses in the tower, comprising build-to-rent units
  - communal open space
  - landscaping on ground, level 2 – level 15
  - rooftop solar panels
  - internal and external residential amenities space on roof top
- streetscape upgrades
- office and substation along the northwestern boundary

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 31 January 2025 and issued for the SSDA (SSD-79658964). Specifically, this report has been prepared to respond to the SEARs requirement issued as shown in Table 1.1.

Table 1.1: Review of Compliance with SEARs

Item	Description of Requirement	Reference
9. Transport	Provide a Transport Impact Assessment (TIA) in accordance with the processes and methodology recommended in the Guide to Transport Impact Assessment (GITA) published by TfNSW.	This Traffic Impact Assessment Report
	If the construction of the development would cause interruptions to regular pedestrian and transport routes (including public transport, active transport or general traffic), a preliminary Construction Traffic (or Transport) Management Plan (CTMP) should be prepared as part of the TIA to mitigate any such impacts.	Preliminary Construction Traffic Management Plan

The development has previously obtained approval from the Land and Environment Court in 2024 for the construction of a mixed-use development with commercial, medical and retail land uses with basement parking.

1.1 Purpose of Assessment

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

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

1.2 Response to Submissions

The Traffic Impact Assessment prepared by TTPP for this development has been reviewed by Department of Planning, Housing and Infrastructure (DPHI) and comments have been provided as shown in Table 1.2.

Table 1.2: DPHI Comments

DPHI Comments	TTPP Response
The following additional information is to be included in an updated TIA: a) Provide further detail on the TfNSW Services Trip Generation Surveys Medical Centres Analysis Report used to determine the medical centre traffic generation. Detail how it has been determined that 4.08 spaces/100 m2 GFA equates to approximately 1 vehicle trip per 100 m2 GFA.	The text should have said 0.99 and 1.12 trips "per car space" not "per 100m2 GFA". This has been amended. Further clarification has been provided in Section 5.2.
b) Demonstrate where a medical centre trip generation rate approach (i.e., based on parking spaces within a development) has been applied to other developments? The direct link between parking spaces and trip generation has not been clearly articulated.	Addressed in Section 5.2. The traffic generation assessment based on car spaces was adopted in the assessment for the approved development. Therefore, this approach has been adopted in this assessment for consistency.

1.3 References

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

- Australian Standards AS2890 series for parking facilities
- North Sydney Council Development Control Plan 2013 (NSDCP2013)
- The Guide to Transport Impact Assessment 2024
- Trip Generation Surveys Medical Centres Data and Analysis Report
- Traffic Impact Assessment for 270 Pacific Highway prepared by SCT Consulting dated 4 May 2023
- Traffic Impact Assessment for 270 Pacific Highway prepared by TTPP dated 18 March 2024
- Architectural plans prepared for the development proposal

- Other documents as referenced in this report.

1.4 Structure of the Report

The layout of the report is set out as follows:

- Chapter 2 discusses the existing conditions including a description of the site.
- Chapter 3 provides a brief description of the proposed development.
- Chapter 4 assesses the parking implications and requirements.
- Chapter 5 assesses the traffic generation and its implications.
- Chapter 6 presents the conclusion of the assessment.

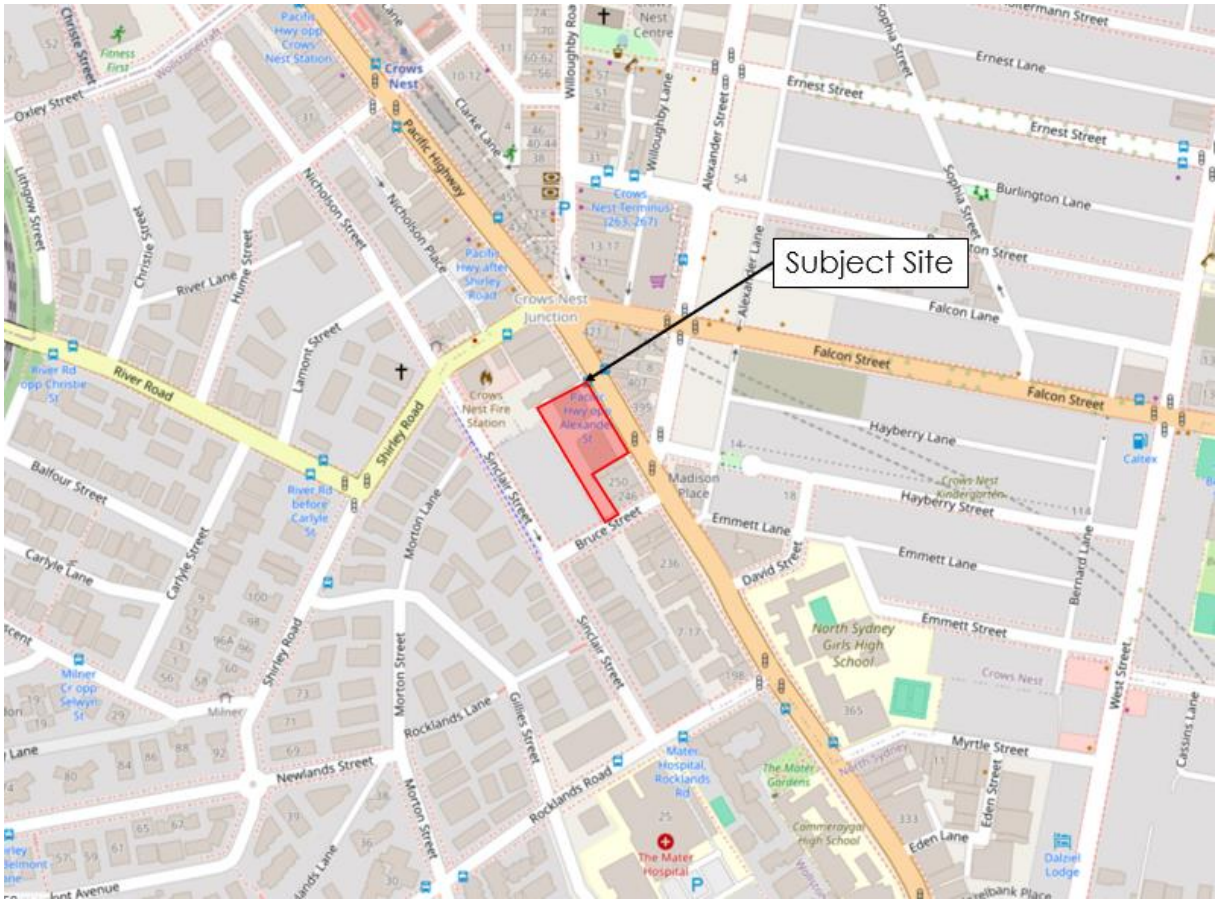
2 Existing Conditions

2.1 Site Location

The site is located at 270 Pacific Highway (Lot 22 DP706776), Crows Nest, within the North Sydney local government area. The site is currently occupied by two 5-storey commercial buildings with individual accesses from Pacific Highway along the eastern boundary and Bruce Street further south. The site has a total area of 3,796m^2, with an existing land use of MU1 – Mixed Use.

The surrounding land uses comprise residential dwellings, commercial centres, and mixed-use developments with retail / commercial components on the ground floor and residentials on the upper floors. The site location and context are shown in Figure 2.1 below.

Figure 2.1: Site Location



Base Map Source: OpenStreetMap, accessed online 07/01/25.

2.2 Surrounding Road Network

Pacific Highway is a classified state road providing a key link between the northern suburbs and Sydney CBD. Pacific Highway is generally configured with three traffic lanes in both northbound and southbound directions. Restricted parking is provided on some sections of

both sides of the road. Parking is prohibited along some sections of the road with all day (i.e., 6:00am – 7:00pm, Monday to Friday and 9:00am – 6:00pm, Saturday and Sunday) clearway restrictions.

Falcon Street is a classified state road providing a connection between St Leonards and Neutral Bay. It is configured with two traffic lanes in both eastbound and westbound directions. Restricted parking is provided along both sides of the road. Clearway restrictions apply during the morning and evening peak on weekdays (i.e. 6:00am – 10:00am and 3:00pm – 7:00pm).

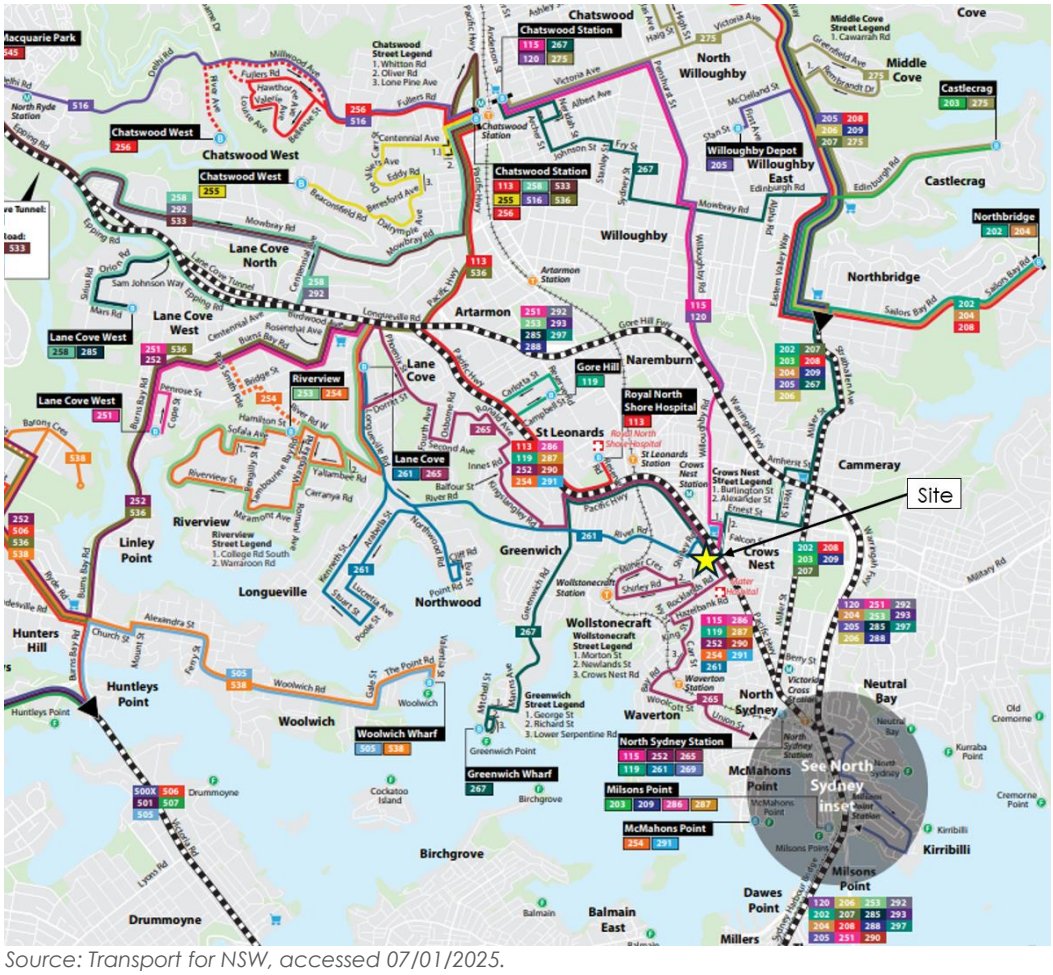
Shirley Road and **River Road** are arterial roads with up to two traffic lanes in both eastbound and westbound directions. Parking is permitted along some sections of Shirley Road and River Road.

Bruce Street is a local road located south of the proposed development. Time-limited, metered parking is permitted on either side of the street.

2.3 Public Transport Facilities

An extensive bus network can be found around the site, as illustrated in Figure 2.2.

Figure 2.2: Bus Route Map



Source: Transport for NSW, accessed 07/01/2025.

The nearest bus stops are located on the Pacific Highway adjacent to the site. The bus stops are serviced by multiple bus routes listed in Table 2.1.

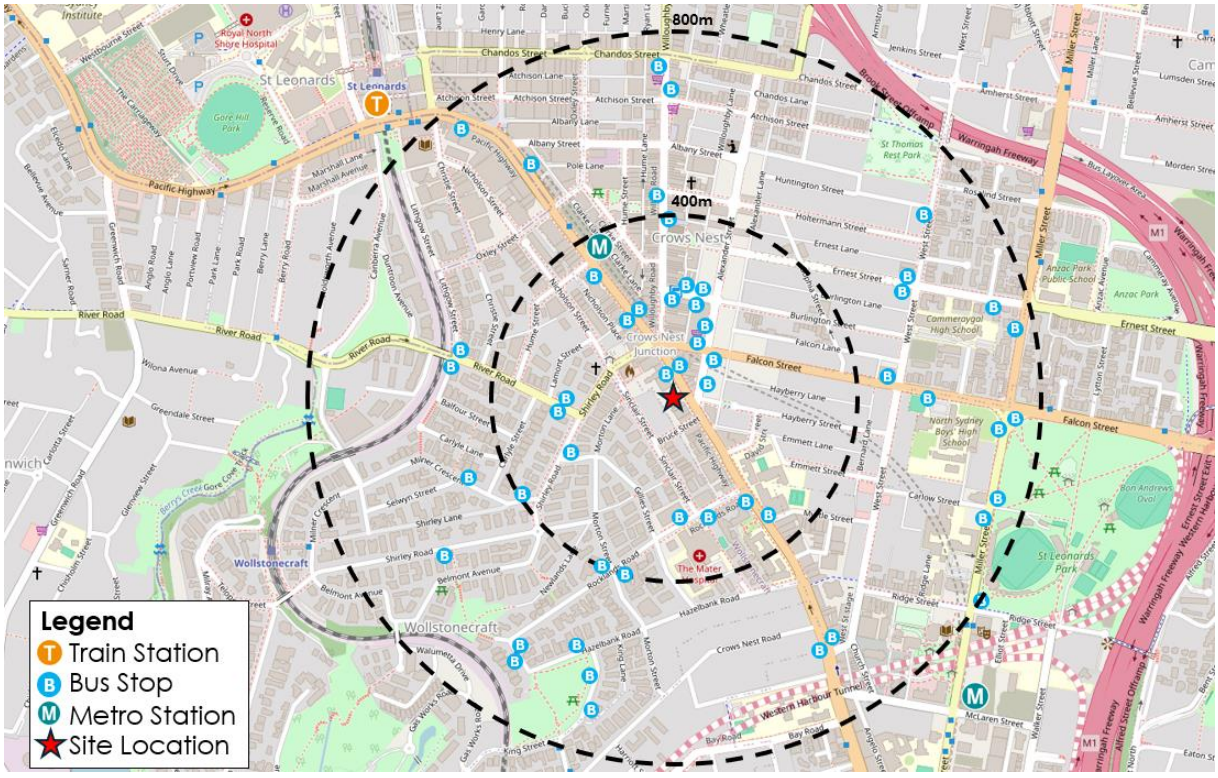
Table 2.1: Bus Routes

Bus Route	Route Description	Distance from Site to Nearest Stop	Peak Service Frequency
119	Gore Hill to North Sydney Station (Loop Service)	20m	30 mins
252	Gladesville to City King Street Wharf via North Sydney		20 mins
254	Riverview to McMahons Point via North Sydney		30 mins
265	North Sydney to Lane Cove via Crows Nest		30 mins
267	Chatswood to Greenwich via Crows Nest		30 mins
286	Denistone East to Milsons Point via St Leonards & North Sydney		40 mins (PM Peak)
287	Ryde to Milsons Point via St Leonards & North Sydney		3 services (PM Peak)
290	Epping to City Erskine St via North Sydney (Night Service)		4 AM Services
291	McMahons Point to Epping via North Sydney		30 mins

Source: Transport for NSW, accessed 07/01/2025.

A summary of the nearby bus stops and the location of St Leonards Train Station and Crows Nest Metro Station is shown in Figure 2.3.

Figure 2.3: Public Transport Facilities



Basemap Source: OpenStreetMap, accessed 07/01/2025.

St Leonard Station is approximately 900m walk (12 minutes) from the site, which services the T1 North Shore Line and the T9 Northern Line. These services run frequently during the peak hour (every 3-5 minutes) and provides connectivity to the wider Sydney rail network.

Crows Nest Metro Station opened in 2024 and is located at 400m walking distance (7-minutes walk) from the site. It provides connectivity between north-west Sydney and Sydenham via the city, with an indicative travel time of 4 minutes to Chatswood Station, 5 minutes to Barangaroo Station, and 8 minutes to Martin Place Station.

Victoria Cross Metro Station is located at 1km walking distance (14-minutes walk) from the site.

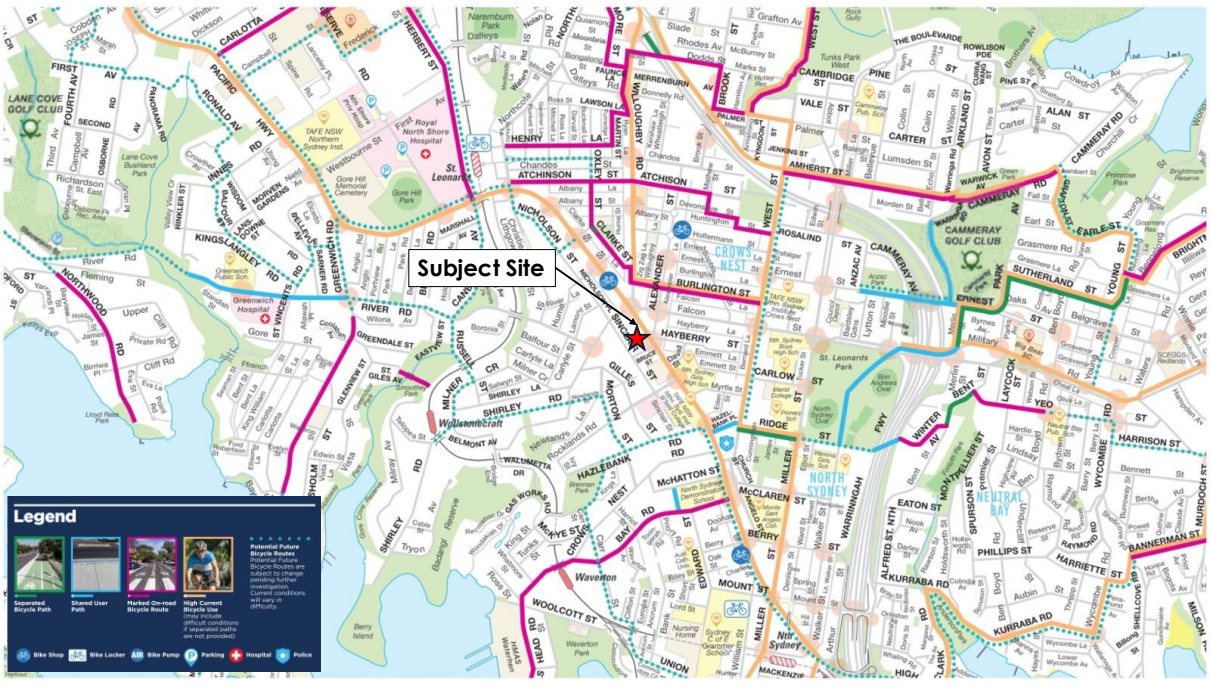
In 2026 the existing rail line from Sydenham to Bankstown will reopen as part of the Metro line further expanding the Metro network and hence coverage for the site.

2.4 Pedestrian and Cyclist Infrastructure

Well-established pedestrian footpaths are provided on both sides of the roads surrounding the site. Signalised pedestrian crossings are available at the intersection of Pacific Highway and Falcon Street, and at the intersection of Pacific Highway and Alexander Street.

Shared paths are located further east and northwest of the site. Closer to the site, there are several marked on-road bicycle routes as seen in Figure 2.4. Several potential future bicycle routes can be seen along Pacific Highway and Miller Street. This will provide more cycle links as part of the plan to encourage people to travel via active transport to and from the site.

Figure 2.4: Cycleway Infrastructure Surrounding the Site



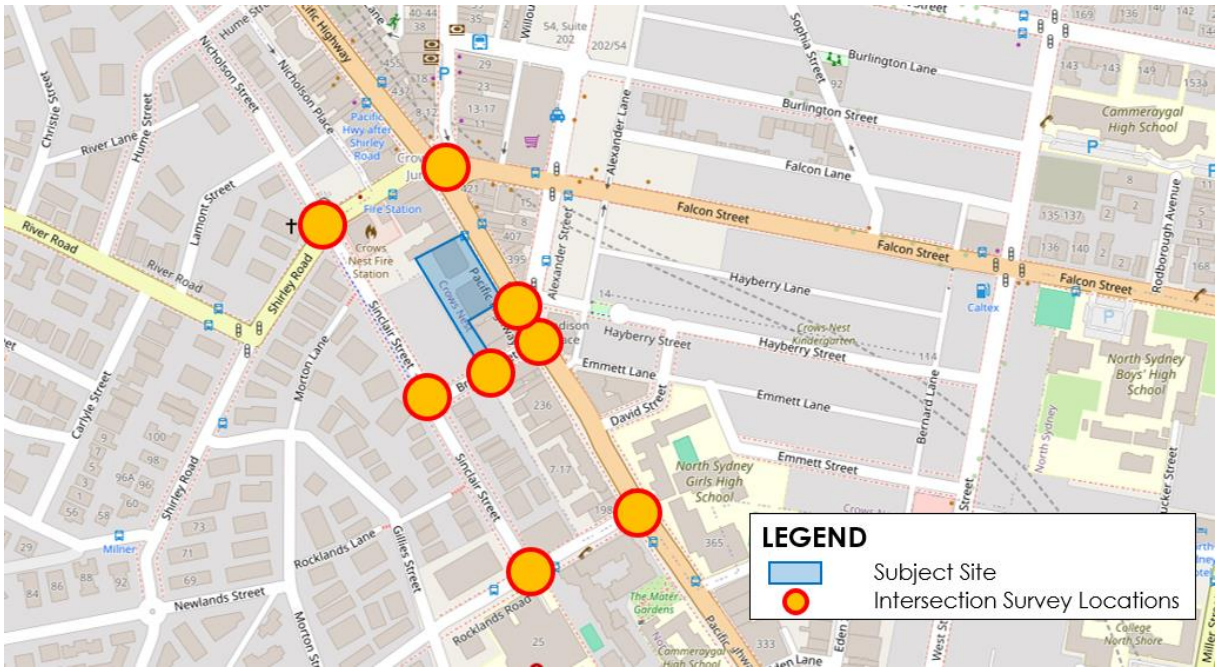
Source: North Sydney Council, accessed 07/01/2025.

2.5 Existing Traffic Volumes

Classified intersection turning movement and queue length surveys were undertaken on Thursday 23rd November 2022 during the AM peak (7am-10am) and PM peak (2:30pm-6:30pm) at the following key surrounding intersections, which are also illustrated in Figure 2.5:

- Pacific Highway/ Shirley Road/ Falcon Street (signalised)
- Pacific Highway/ Alexander Street (signalised)
- Pacific Highway/ Bruce Street (priority)
- Pacific Highway/ Rocklands Road (signalised)
- Sinclair Street/ Rocklands Road (priority)
- Sinclair Street/ Bruce Street (priority)
- Sinclair Street/ Shirley Road/Nicholson Street (priority)
- Bruce Street site access.

Figure 2.5: Traffic Survey Locations



Based on the traffic surveys, the following peak hours were identified:

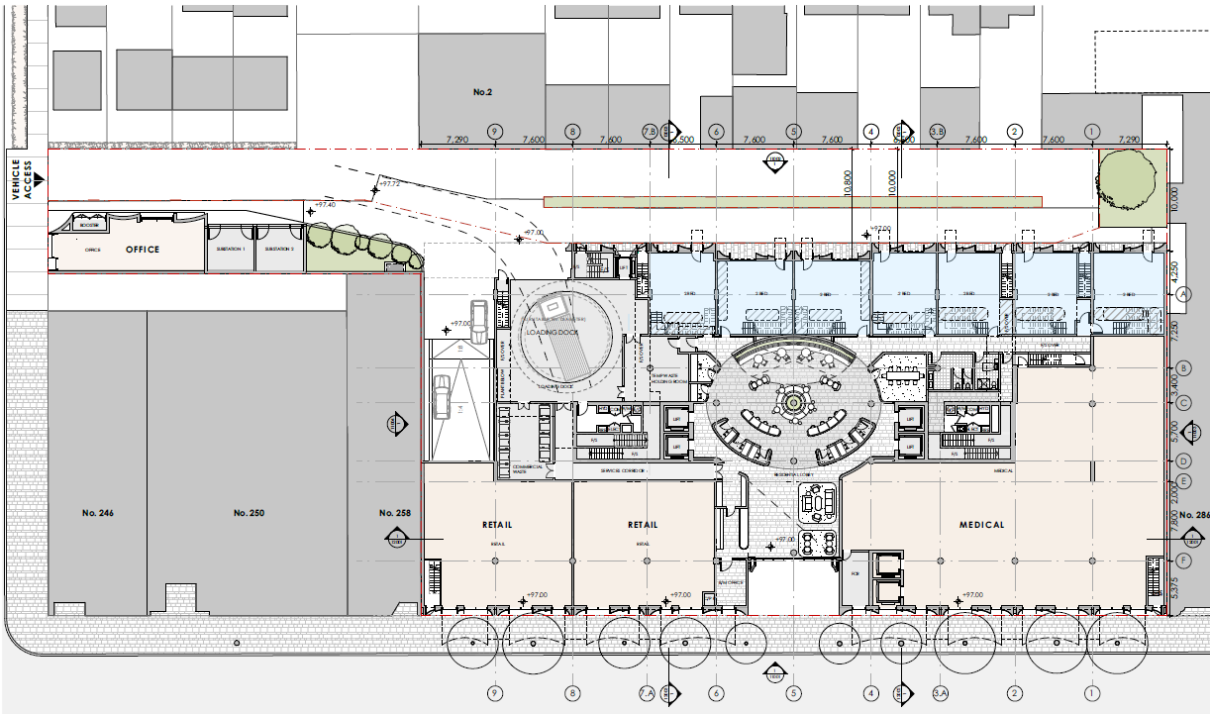
- Morning peak: 7:30am-8:30am
- Evening peak: 4:45pm-5:45pm.

3 Development Proposal

3.1 Overview

The proposed development will comprise the demolition of the two existing buildings at 270 Pacific Highway and construction of a 16-storey mixed use development with build-to-rent housing units and non-residential land uses. The development will include two basement levels containing car, motorcycle and bicycle parking spaces. Figure 3.1 illustrates the proposed ground floor layout of the development, with architectural plans provided in Appendix A.

Figure 3.1: Proposed Ground Level Plan



Source: Fitzpatrick + partners, ground level (November 2024)

A comparison of the proposed yields to the existing and approved yields is provided in Table 3.1.

Table 3.1: Comparison of Site Yield

Use	Existing Yields	Approved Yields	Proposed Yield
Residential	N/A	N/A	168 Build-to-Rent Units
Commercial (GFA)	4,940 m²	20,051 m²	65 m²
Retail (GFA)	1,035 m²	307 m²	396 m²
Medical (GFA)	551 m²	806 m²	3,132 m²
Car Parking	97 spaces	72 spaces	82 spaces (incl. 2 courier spaces)

3.2 Site Access

Vehicular access to the basement car park level and loading dock of the development is proposed via a two-way driveway on Bruce Street. The proposed access will be shared with the properties at 63 to 77 Sinclair Street as per the existing arrangement.

Bicycle access to bicycle parking and end of trip facilities located on Basement Level 1 will be provided via the lifts from the ground floor entrance, alternatively the vehicle access ramp from Bruce Street may be used.

Pedestrian access will be provided from Pacific Highway which will lead into the main lobby.

3.3 Section 2.119 of the State Environmental Planning Policy (Transport and Infrastructure) 2021

Section 2.119 of the State Environmental Planning Policy (Transport and Infrastructure) 2021 (Transport and Infrastructure SEPP) states the following:

(1) The objectives of this section are—

(a) to ensure that new development does not compromise the effective and ongoing operation and function of classified roads, and

(b) to prevent or reduce the potential impact of traffic noise and vehicle emission on development adjacent to classified roads.

(2) The consent authority must not grant consent to development on land that has a frontage to a classified road unless it is satisfied that—

(a) where practicable and safe, vehicular access to the land is provided by a road other than the classified road, and

(b) the safety, efficiency and ongoing operation of the classified road will not be adversely affected by the development as a result of—

(i) the design of the vehicular access to the land, or

(ii) the emission of smoke or dust from the development, or

(iii) the nature, volume or frequency of vehicles using the classified road to gain access to the land, and

(c) the development is of a type that is not sensitive to traffic noise or vehicle emissions, or is appropriately located and designed, or includes measures, to ameliorate potential traffic noise or vehicle emissions within the site of the development arising from the adjacent classified road

Whilst the development does have frontage on a classified road (Pacific Highway), the access will be maintained on Bruce Street which is a lower order road and is therefore in accordance with Clause 2a of Section 2.119 of the Transport and Infrastructure SEPP.

Furthermore, traffic assessment undertaken in Section 5 shows that the site will generate less traffic than the existing site and will result in an insignificant impact to the road network and Pacific Highway. Therefore, the safety, efficiency and ongoing operation of Pacific Highway will not be compromised and hence the development is compliant with Section 2.119 of Transport and Infrastructure SEPP.

4 Parking Assessment

4.1 Car Parking Requirements

The parking requirements for the proposed development have been assessed against the North Sydney Council Development Control Plan 2013 (NSDCP 2013). The site is within a High Accessibility Area as defined by the NSDCP 2013.

On 26 April 2023, new car parking rates were adopted for the NSDCP 2013 which modified the non-residential parking requirement for the site from 1 space per 60m^2 GFA to 1 space per 400m^2 GFA for locations within a High Accessibility Area.

It is also worth noting that the NSDCP 2013 stipulates a maximum parking rate of 4 spaces per 100m^2 of GFA for a medical centre; however, the parking rate for "High Accessibility Areas" take precedence over these car parking rates for specific non-residential uses.

On this basis, a "general" parking rate of 1 space per 400m^2 GFA applies for the site, regardless of its use (e.g. whether it is a commercial or medical centre use, which, in our view, would generate different parking demands/behaviours).

A summary of the parking requirement for the site under the Housing SEPP 2021 and NSDCP 2013 is provided in Table 4.1.

Table 4.1: DCP Parking Requirement

Use	Yield	Housing SEPP 2021/ NSDCP 2013 Parking Rate	DCP Required Parking Spaces	Proposed Parking Spaces
Residential	168 Build-to-Rent Units	0.2 spaces per dwelling (Housing SEPP 2021)	34	34
Commercial	65 m^2 GFA	Maximum - 1 space per 400m^2 GFA (NSDCP 2013)	0	0
Retail	396 m^2 GFA		1	1
Medical Centre	3,132 m^2 GFA		7	45
Total			**42**	**80**

Table 4.1 indicates that according to the NSDCP 2013, the proposed development can provide a maximum of 1 space for retail use and 7 spaces for the medical centre. The Housing SEPP 2021 requires the provision of 34 spaces for the build to rent residential use.

It is proposed to provide 80 car parking spaces, with 34 residential, 1 retail and 45 medical centre spaces. This represents a surplus of 38 spaces against the applicable NSDCP maximum parking rates for the medical centre use.

Whilst this does not comply with current DCP parking controls for the site, it is worth noting that the proposed car parking provision for the medical centre is consistent with the medical centre car parking rate under the NSDCP 2013 for specific non-residential uses of 4 spaces per 100m^2.

In addition, the previous site approval consisted of a medical centre with floor area of 806m^2 GFA and 20 medical centre car spaces, which is an approved car parking provision rate of 1 space per 40m^2.

It is proposed to provide a medical centre with 3,132m^2 GFA and 45 medical centre car spaces, which is a car parking provision rate of 1 space per 70m^2. Therefore, the proposed car parking provision rate is lower than the approved car parking provision rate. On this basis, the proposed car parking provision for the medical centre is considered acceptable.

4.2 Accessible Parking Requirements

The Housing SEPP does not require provision of accessible parking for Build-to-Rent developments. However, it is proposed to provide three accessible parking spaces for residents.

NSDCP 2013 states that 1-2% of all non-residential parking spaces are to be designated for use by the disabled. Therefore, for the proposed 46 non-residential car spaces, it is required to provide 1 accessible space. It is proposed to provide four accessible spaces which complies with the DCP requirements.

4.3 Bicycle Parking Requirements

NSDCP 2013 provides the minimum bicycle parking rates shown in Table 4.3. The Housing SEPP does not provide any bicycle parking requirements for BTR developments. Therefore, the bicycle parking rates for residential accommodation has been referenced from the DCP.

Table 4.2: Minimum Bicycle Parking Rates

Proposed Use	Yield	Occupant Rate	Visitor/Customer Rate	Occupant Spaces	Visitor Spaces
Residential	168 Units	1 space per dwelling	1 space per 10 dwellings	168	17
Commercial – Office Premises	65 m^2 GFA	1 space per 150 m^2 GFA	1 space per 400 m^2 GFA	1	1
Retail – Shop, Restaurant or cafe	396 m^2 GFA	1 space per 250 m^2 GFA	2 spaces plus 1 space per 100 m^2 over 100 m^2 GFA	2	5
Medical Centre	80 Practitioners 3,132m^2 GFA	1 space per 5 practitioners	1 space per 200 m^2 GFA	16	16
TOTAL				**187**	**39**

Overall, the development is required to provide a minimum of 187 spaces for occupants and 39 spaces for visitors/customers, resulting in a total of 226 spaces.

The DCP also stipulates that secure bicycle parking facilities are to be provided in accordance with the following:

- Security Level A or B facilities occupants of residential dwellings

- Security Level B facilities for staff/employees of any land use
- Security Level C facilities for visitors of any land use.

The development proposes to provide 226 bicycle spaces and will be provided as Security Level B which meets the minimum DCP requirements.

4.3.1 End-of-Trip Facilities

The DCP also states that the following end-of-trip facilities for bike parking are to be provided:

- 1 personal locker for each bike parking space,
- 1 shower and change cubicle for up to 10 bike parking spaces,
- 2 shower and change cubicles for 11 to 20 or more bike parking spaces,
- 2 additional shower and change cubicles for each additional 20 bike parking spaces or part thereof.

It is proposed to comply with the DCP requirements for end-of-trip facilities.

4.4 Motorcycle Parking Requirements

NSDCP 2013 states that motorcycle parking must be provided at a rate of 1 space per 10 car spaces. Based on the provision of 80 car spaces, it is required to provide 8 motorcycle parking spaces. The proposed development provides 8 motorcycle spaces, and therefore meets the requirements stipulated by the DCP.

4.5 Waste Collection and Loading

The objective of DCP is to ensure that adequate off-street loading, delivery and servicing facilities are provided. Off-street loading and unloading facilities are a requirement for all major commercial and industrial premises. The DCP does not specify a required number of spaces; instead, the number and size of loading bays are determined by Council on a case-by-case basis, having regard for the intended use of the premises, frequency of deliveries, size of the deliveries, size of the vehicles, the practicality of accommodation and impacts on traffic and safety on adjoining roads.

Residential developments containing more than 60 dwellings must provide at least one service delivery space, capable of accommodating at least one heavy rigid vehicle or two medium rigid vehicles.

The loading dock is accessed via Bruce Street on the southern side of the site. A truck turntable is proposed to ensure trucks enter and exit the loading dock in a forward direction and avoid any reversing in such a compact site. This turntable is proposed to be used for loading and waste collection activities.

Waste is to be collected by a private waste contractor. Bins will be taken from the waste rooms and loaded into waste collection vehicles parked on the turntable.

Service vehicles will be required to give way to vehicles entering and exiting the ramp to the basement at all times. This would be managed by a Loading Dock Management Plan which could be conditioned as part of any development approval for the site.

In addition, two courier spaces are provided on basement level 1 which can accommodate up to a B99 vehicle. These spaces can be used for any delivery or servicing requirements.

The loading, delivery and servicing facilities provided is considered sufficient to cater for the needs of the site. Notwithstanding, the BTR units will be furnished so there will be no need for additional loading area during change of tenants.

A loading management plan is to be implemented, involving a loading dock booking system, which ensures that all deliveries are done by appointment.

4.6 Car Park Access and Layout

The car park layout has been reviewed against the requirements of the Australian Standards for Off-Street Car Parking (AS2890.1:2004). The Australian Standard requires car parking spaces to be provided according to its use. Employee parking is to be provided as Class 1A parking spaces and visitor parking is to be provided as Class 3 parking spaces.

Table 4.3 summarises the minimum dimensions required for the parking spaces in the proposed development.

Table 4.3: Car Parking Dimensions

Uses	Class	Width	Length	Aisle Width
Residents/Staff	1A	2.4m	5.4m	5.8m
Visitors	3	2.6m	5.4m	5.8m

The proposed car park layout complies with the above minimum requirements. Hence, the proposed car parking layout is satisfactory.

The accessible space is designed as 2.4m by 5.4m, with a shared area adjacent to the parking space. The shared area would contain a bollard to prevent vehicles parking in the space. The design of the accessible space and shared area are compliant with AS 2890.6:2022.

Bike spaces are designed in accordance with the Australian Standard for Bicycle Parking AS2890.3 (2015).

Motorcycle spaces are designed to have a width of 1.2m and a length of 2.5m.

The swept path assessment is provided in Appendix B.

In summary, the car park and associated elements complies with the design requirements set out in the Australian Standards.

5 Traffic Assessment

5.1 Approved Traffic Generation

The traffic generation for the approved development has been obtained from the Traffic Impact Assessment report prepared by TTPP for the earlier scheme in 2024 (2024 TTPP Traffic Report) as shown in Table 5.1.

Table 5.1: Approved DA Traffic Generation

	Land Use	Parking Spaces	Trip Rate (veh/parking space)		Trip Generation Estimate	
			AM Peak	PM Peak	AM Peak	PM Peak
Existing	Commercial	29	0.77	0.59	22	17
	Medical	68	0.99	1.12	67	76
	Total	97	-	-	89	93
Proposed	Commercial	52	0.77	0.59	40	31
	Medical	32	0.99	1.12	32	36
	Total	84	-	-	72	67
Net Total					**-18**	**-26**

Source: TTPP Traffic Impact Assessment prepared 18 March 2024 (23353-R01V06-240318-TIA)

Table 5.1 shows that the approved development was estimated to generate 72 vehicles in the AM peak and 67 vehicles in the PM peak.

5.2 Proposed Traffic Generation

The Guide to Transport Impact Assessment does not provide trip rates for build to rent developments. Therefore, the trip rates for high density residential flat buildings have been adopted, that is 0.19 trips per unit in the AM peak and 0.15 trips per unit in the PM peak.

The trip rates shown in Table 5.1 have been adopted for the proposed medical centre to be consistent with the assessment undertaken for the approved development. This rate was determined from Transport for NSW's (TfNSW) Services *Trip Generation Surveys Medical Centres Analysis Report*. For the sites within the Sydney Area, the average trips generated per 100m^2 was 4 trips during the weekday AM peak and 4.6 trips during the PM peak. However, as the site will have limited parking, a rate per parking space is deemed more suitable for assessment. The same Sydney sites from the aforementioned medical centre analysis report had an average peak parking rate of 4.08 spaces per 100m^2. If 4 trips are generated by 4.08 car spaces in the AM peak, this is equivalent to 0.99 trips per car space (4 ÷ 4.08 = 0.99). Similarly, if 4.6 trips are generated by 4.08 car spaces in the PM peak, this is equivalent to 1.12 trips per car space (4.6 ÷ 4.08 = 1.12).

The commercial office is only 65m^2 with no parking provided to this use, therefore it has been assumed that it will not generate any traffic.

It is expected that the retail component would largely generate foot traffic, that is, customers from the site and developments within a walking catchment. Therefore, one car space is allocated to the retail component for a staff member. A rate of 1 trip per space has been adopted in both peak periods.

Table 5.2: Proposed Traffic Generation

Scenario	Land Use	Number of Parking Spaces/ Number of Units	Trip Rate		Trip Generation Estimate	
			AM Peak	PM Peak	AM Peak	PM Peak
Proposed	Residential	168 units	0.19 trips/ unit	0.15 trips/ unit	32	25
	Medical	45 car spaces	0.99 trips/ space	1.12 trips/ space	44	50
	Retail	1 car space	1 trip/ space	1 trip/ space	1	1
	Total	-	-	-	*77*	*76*
Approved Development Total					**72**	**67**
Net Difference from Approved					*+5*	*+9*

It is expected that the proposed site will generate 77 trips in the AM peak and 76 trips in the PM peak.

As evident in Table 5.2, the proposed development will generate a net addition of 5 trips in the AM peak and 9 trips in the PM peak compared to the approved uses.

Notwithstanding, the trip rate adopted for the proposed BTR units is considered conservative noting that the Housing SEPP 2021 requires a low car parking rate of 0.2 spaces per dwelling. The development is proposed to provide 34 car spaces.

TFNSW's High Density Residential Trip Generation report provides trip generation rates based on car spaces, that is 0.15 trips per car space in the AM peak and 0.12 trips per car space in the PM peak. Based on these trip rates, the BTR units are expected to generate 5 trips in the AM peak and 4 trips in the PM peak. Therefore, it is anticipated that the proposed BTR units may generate between 5-32 trips in the AM peak and 4-25 trips in the PM peak.

The 2024 TTPP traffic report estimated that the approved development would generate 72 trips in the AM peak and 67 trips in the PM peak. The proposed development could generate up to 5 additional trips in the AM peak and 9 additional trips in the PM peak, if the higher trip rate for BTR units is adopted (worst-case scenario). However, based on the low parking provision, the total traffic generation is likely to be less than the approved development.

The 2024 TTPP traffic report analysed the performance of nearby intersections using SIDRA Intersection Modelling for the approved development as discussed below.

5.3 Intersection Operation

5.3.1 Overview

Intersection capacity analysis was conducted for the approved development using SIDRA Intersection modelling software for key surrounding intersections to assess its traffic implications. The following scenarios have been assessed:

- **Scenario 0 (S0)** – 2022 Existing Base case analysis
- **Scenario 1 (S1)** – Scenario 0, plus approved development
- **Scenario 2 (S2)** – 2032 Future Base with background traffic growth
- **Scenario 3 (S3)** – Scenario 2, plus approved development.

5.3.2 Level of Service Criteria

Transport for NSW uses the performance measure level of service to define how efficient an intersection is operating under given prevailing traffic conditions. Level of service is directly related to the delays experienced by traffic travelling the intersection. Level of service ranges from LoS A to LoS F. LoS A indicates the intersection is operating with spare capacity, while LoS F indicates the intersection is operating above capacity. LoS D is the long-term desirable level of service.

At signalised intersections, the average delay is the volume weighted average of all movements. For roundabouts and priority (give way and stop sign) controlled intersections, the average delay relates to the worst movement.

Table 5.3 shows the criteria that SIDRA Intersection adopts in assessing the level of service.

Table 5.3: TfNSW Level of Service Criteria

Level of Service (LoS)	Average Delay per vehicle (secs/veh)	Traffic Signals, Roundabout	Give Way & Stop Sign
A	Less than 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	29 to 42	Satisfactory	Satisfactory, but accident study required
D	43 to 56	Near capacity	Near capacity, 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	Greater than 70	Unsatisfactory, requires additional capacity	Unsatisfactory, requires other control mode or major treatment

5.3.3 Intersection Capacity Analysis Results

A summary of the weekday AM peak and PM peak traffic modelling results for the existing and approved development is provided in Table 5.4 and Table 5.5, respectively.

Table 5.4: Intersection Operation – Weekday AM Peak

Intersection	Control	S0 – Existing Base		S1 – Existing Base + Development		S2 – Future Base		S3 – Future Base + Development	
		Avg Delay (s)	LoS	Avg Delay (s)	LoS	Avg Delay (s)	LoS	Avg Delay (s)	LoS
Pacific Hwy/Shirley Rd/Falcon St	Signal	52	D	55	D	57	E	61	E
Pacific Hwy/Alexander St	Signal	14	A	14	A	14	A	15	B
Pacific Hwy/Bruce St	Priority	8	A	8	A	8	A	8	A
Pacific Hwy /Rocklands Rd	Signal	17	B	18	B	17	B	18	B
Sinclair St/Rocklands Rd	Priority	10	A	10	A	10	A	10	A
Sinclair St/Bruce St	Priority	5	A	5	A	5	A	5	A
Sinclair St/Shirley Rd/Nicholson St	Priority	30	C	30	C	32	C	32	C
Bruce St site access	Priority	6	A	30	C	6	A	6	A

Table 5.5: Intersection Operation – Weekday PM Peak

Intersection	Control	S0 – Existing Base		S1 – Existing Base + Development		S2 – Future Base		S3 – Future Base + Development	
		Avg Delay (s)	LoS	Avg Delay (s)	LoS	Avg Delay (s)	LoS	Avg Delay (s)	LoS
Pacific Hwy/Shirley Rd/Falcon St	Signal	42	C	42	C	44	D	44	D
Pacific Hwy/Alexander St	Signal	14	A	14	A	14	A	14	A
Pacific Hwy/Bruce St	Priority	8	A	8	A	8	A	8	A
Pacific Hwy /Rocklands Rd	Signal	14	A	15	B	14	A	15	B
Sinclair St/Rocklands Rd	Priority	10	A	10	A	10	A	10	A
Sinclair St/Bruce St	Priority	5	A	5	A	5	A	5	A
Sinclair St/Shirley Rd/Nicholson St	Priority	30	C	30	C	30	C	30	C
Bruce St site access	Priority	6	A	6	A	6	A	6	A

Table 5.4 and Table 5.5 show that all modelled intersections perform at a satisfactory level of service A-C in the existing and future scenarios except the Pacific Highway-Falcon Street intersection.

During the AM peak, the Pacific Highway-Falcon Street intersection operates at LoS D in the existing scenario and LoS E in the future. The addition of the approved development had a minor increase in average delay of up to 4 seconds. During the PM peak, the same intersection operates at LoS C in the existing scenario and LoS D in the future. The addition of approved development did not increase the average delay.

Therefore, a maximum of 5 additional trips in the AM peak and 9 additional trips in the PM peak (worst-case scenario) generated by the proposed development compared to the

estimated trips for the approved development will not have an adverse impact on the surrounding intersections.

6 Conclusion

This report examines the traffic and parking implications for a 16-storey mixed use development at 270 Pacific Highway Crows Nest, comprising build to rent (BTR) units and non-residential uses in the podium.

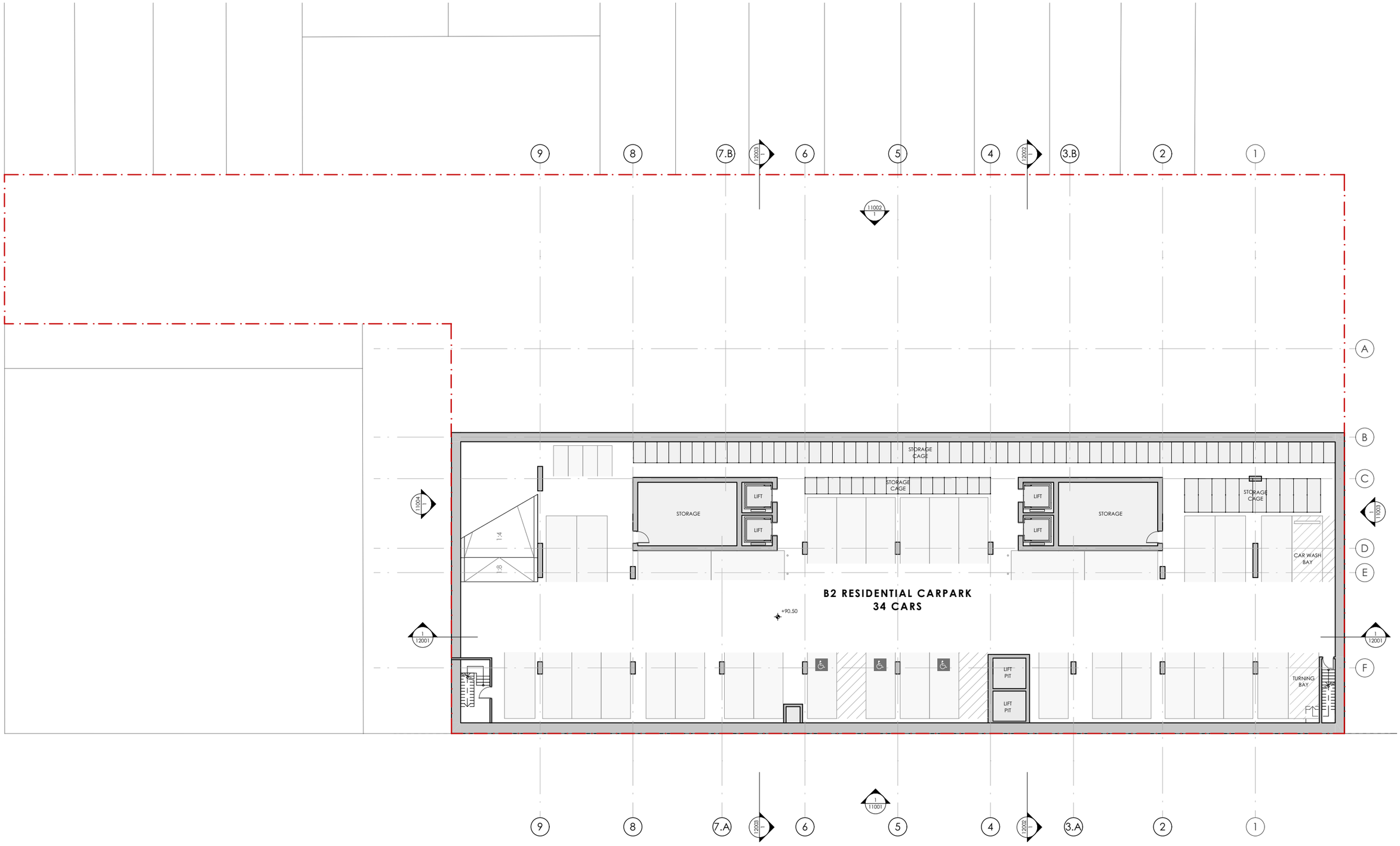
The key findings of the assessment are presented below:

- The proposal will have 168 BTR units, 3,132m^2 GFA medical area, 396m^2 GFA retail area and 65m^2 GFA commercial area.
- In early 2023 Council amended the parking rates in its DCP such that all non-residential uses located in "High Accessibility Areas" would have a maximum rate of 1 space per 400m^2.
- Under the Housing SEPP 2021 and NSDCP 2013, the site would be permitted to provide a maximum of 42 spaces which includes 34 residential, 1 retail and 7 medical centre spaces.
- Based on the intended use and users of the site, it is proposed to provide 80 spaces (34 residential, 1 retail and 45 medical centre spaces). This is a surplus of 38 spaces for the medical centre use.
- Although the parking rate of the new DCP is not met for the medical centre, the proposed parking meets the end user requirements for medical centres. Namely, that visitors may be vulnerable, impaired and more dependent on private car use.
- The proposed car parking provision of 45 spaces for the medical centre use is considered appropriate for its size and intended use. This car parking provision is also consistent with the NSDCP car parking rate for medical centres for specific non-residential uses.
- Vehicle access to the basement car park will be provided off Bruce Street, and the car park and associated elements complies with the design requirements set out in the Australian Standards.
- The proposed site is expected to generate 77 trips in the AM peak and 76 trips in the PM peak in the worst case scenario. This is a net addition of 5 trips in the AM peak and 9 trips in the PM peak compared to the approved uses.

In summary, the proposed development is not expected to have an adverse impact on the local road network.

Appendix A

Architectural Plans



NOTES:
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a. LEVEL 6, 9 CASTLEREAGH STREET, SYDNEY 2000, AUSTRALIA

AMENDMENTS

REV.	DATE	DESCRIPTION	CHK
03	14/04/2025		

PROJECT
270 PACIFIC HWY BTR
270 PACIFIC HIGHWAY
CROWS NEST NSW 2064
AUSTRALIA

PHASE: Development Application

PROJECT NORTH

CLIENT
SILVERNIGHT
Darling Park Tower 2, L16, 201 Sussex Street, Sydney
NSW 2000 Australia

SCALE	DRAWN BY	APPROVED BY
1:300 @A3		
30mm ON ORIGINAL		PRINT DATE 14/04/2025

DRAWING
GENERAL ARRANGEMENT PLANS
BASEMENT 02

PROJECT NUMBER	DRAWING NUMBER	ISSUE
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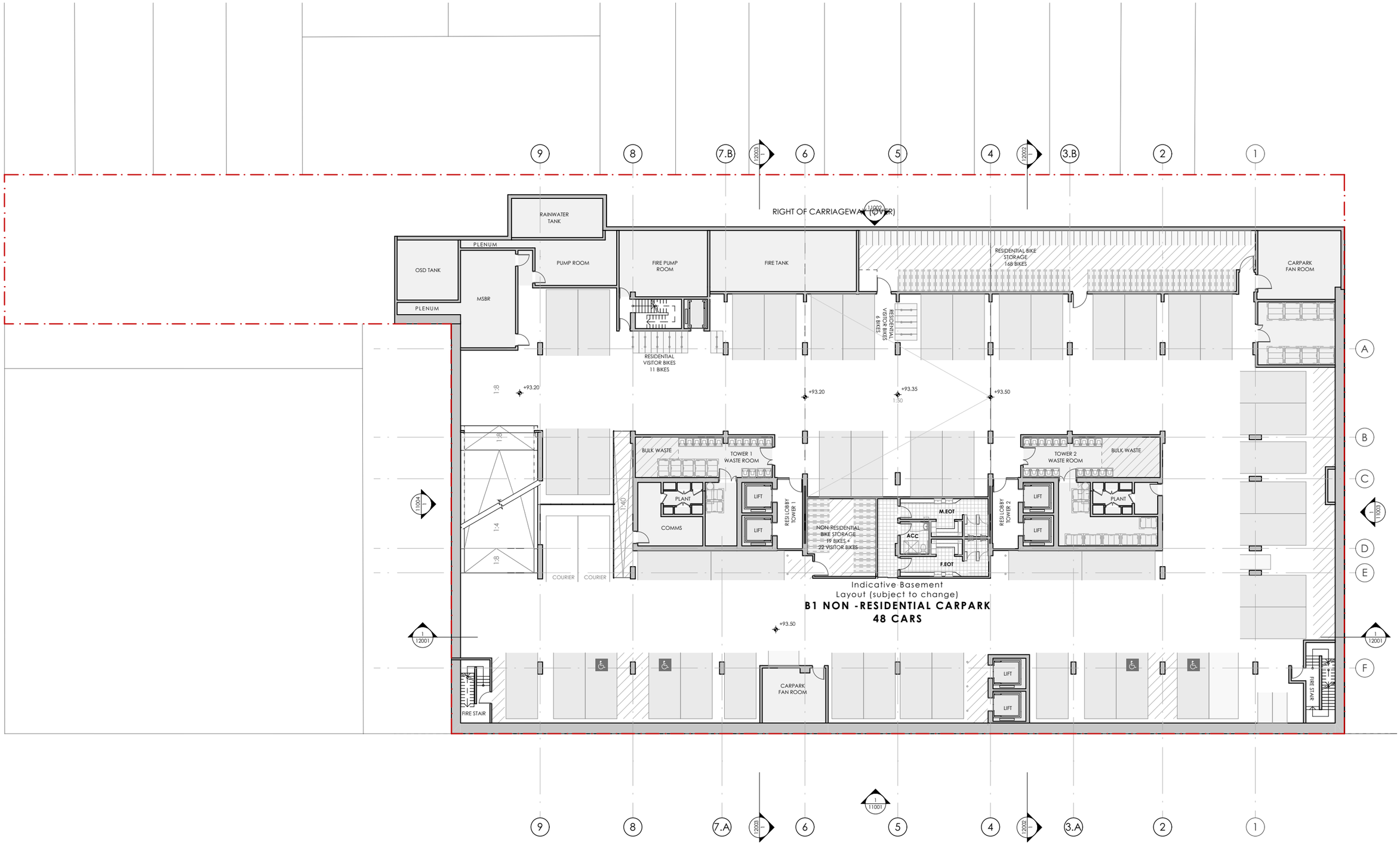

BASEMENT 01
1:300

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AMENDMENTS

REV.	DATE	DESCRIPTION	CHK
03	14/04/2025		

PROJECT
270 PACIFIC HWY BTR
270 PACIFIC HIGHWAY
CROWS NEST NSW 2064
AUSTRALIA

PHASE: Development Application

PROJECT NORTH

CLIENT
SILVERNIGHT
Darling Park Tower 2, L16, 201 Sussex Street, Sydney
NSW 2000 Australia

SCALE	DRAWN BY	APPROVED BY
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30mm ON ORIGINAL		PRINT DATE 14/04/2025

DRAWING
GENERAL ARRANGEMENT PLANS
BASEMENT 01

PROJECT NUMBER	DRAWING NUMBER	ISSUE
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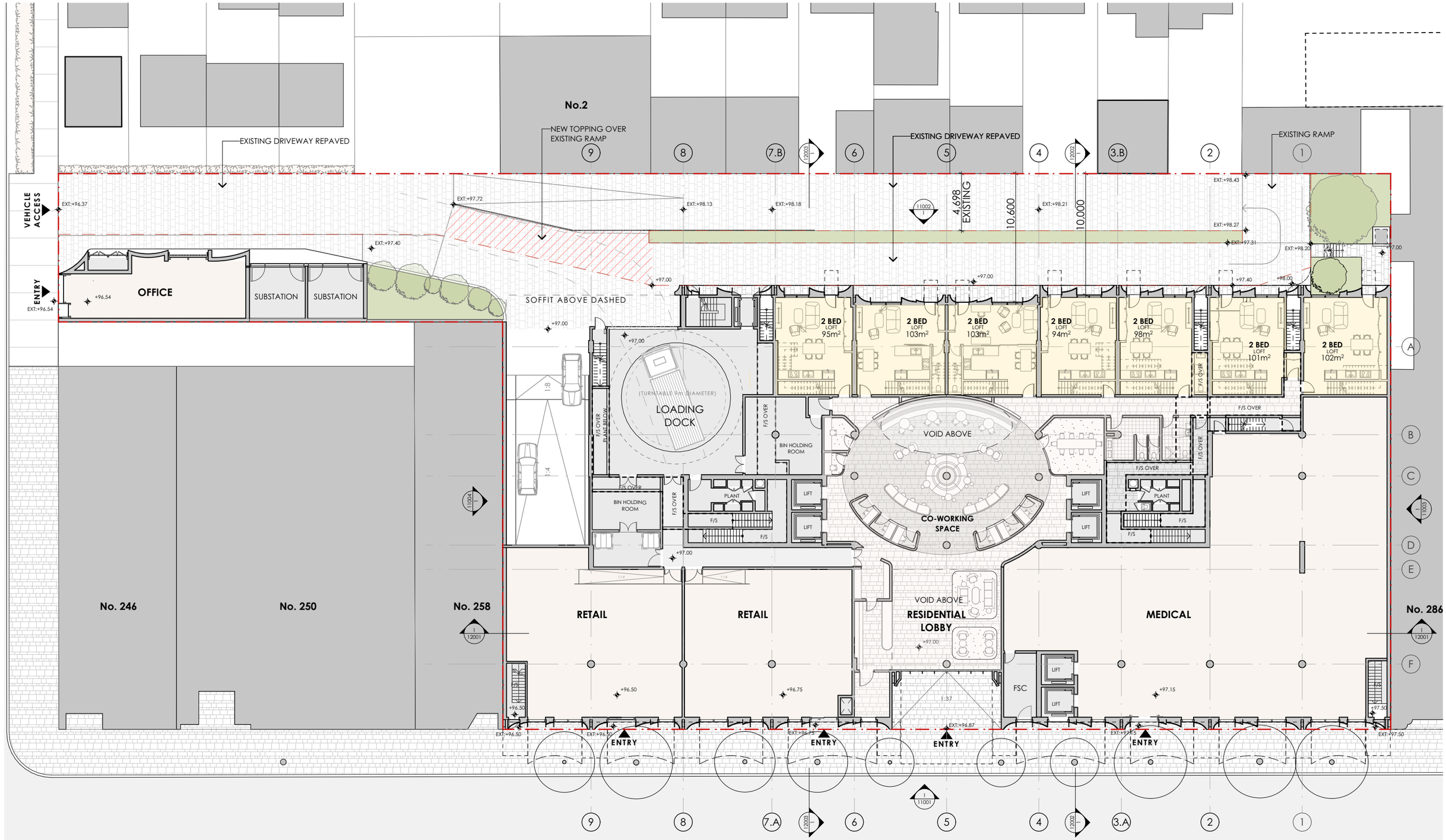

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AMENDMENTS

REV.	DATE	DESCRIPTION	CHK
03	14/04/2025		

PROJECT
270 PACIFIC HWY BTR
270 PACIFIC HIGHWAY
CROWS NEST NSW 2064
AUSTRALIA

PHASE: Development Application

PROJECT NORTH

CLIENT
SILVERNIGHT
Darling Park Tower 2, L16, 201 Sussex Street, Sydney NSW 2000 Australia

SCALE	DRAWN BY	APPROVED BY
1:300 @A3		
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DRAWING
GENERAL ARRANGEMENT PLANS
GROUND FLOOR

PROJECT NUMBER	DRAWING NUMBER	ISSUE
22501	**DA-10003**	**03**

Area Schedule - BTR SCHEME (draft)

Project Title / Address	**270-272 Pacific Highway, Crows Nest**
Document	
Issue	O
Date	14/04/2025
Prepared by	QY
Checked by	PR
Site	
Site Area	3,796m²
Allowable FSR	5.60
Proposed FSR Excl. Basement GFA	**5.60:1**
Residential FSR	4.6:1
Non-Residential FSR	1:1
Allowable GFA	21,258m²
Proposed Total GFA	**21,258m²**
Proposed Height	16 Storeys
Total height above ground	53.55m
Affordable Housing	
Affordable Housing 3% Residential GFA	526m²
Apartments	
Total Apartment Numbers	168 Apts
Total Adaptable Apartments	42 Apts
Parking	
Cars Req Commercial (1/400sqm)	1 spaces
Cars Req BTR (0.2/Dwelling)	34 spaces
Cars Req Medical(1/70sqm) by TTPP	45 spaces
Courier Parking	2 spaces
Bikes	
Residential	
Bike (1/1 Dwelling)- Residential	168
Visitor Bikes (1/10 Residential Dwellings)	17
Non - Residential Bikes	
Bike (1/150sqm)- Commercial	1
(1/5 Practitioners) - Medical	16
(1/250sqm)- Retail Service	2
Visitor Bikes (1/400sqm) - Commercial	1
(1/200sqm) - Medical	16
(2+1/100sqm over 100sqm) - Retail	5
Non-Residential EOT Shower (1/10 Bikes)	4
Motorcycle Parking (1/10 Carspace)	8

as per Section 74 (d)(i)

Level B Security
Level C Security
Level B Security
Practitioner assumption 80
Level C Security

Level	Use	RL (m)	Floor-to-Floor (m)	GBA (sqm)	Non-Residential GFA* (sqm)	Non-Residential NSA/NLA (sqm)	Residential GFA* (sqm)	Residential NSA/NLA (sqm)	GFA/GBA (%)	NLA/GFA (%)	Resi-Communal (GFA) Internal Amenities (sqm)	Resi-Communal Outdoor Terrace (sqm)
roof	Lift over run/Solar Farm	150.55	2.00									
Level 15	Residential	147.40	3.15	430			333	264	77%	79%		
Level 14	Residential/Plant/Communal Terrace	144.25	3.15	545			435	269	80%	62%	100	200
Level 13	Residential	141.00	3.25	1,362			1,103	945	81%	86%		
Level 12	Residential/Communal Terrace	137.85	3.15	1,510			1,205	950	80%	79%	100	235
Level 11	Residential	134.60	3.25	1,613			1,313	1,148	81%	87%		
Level 10	Residential	131.45	3.15	1,672			1,313	1,148	79%	87%		76
Level 9	Residential	128.30	3.15	1,613			1,313	1,148	81%	87%		
Level 8	Residential	125.15	3.15	1,672			1,313	1,148	79%	87%		76
Level 7	Residential	122.00	3.15	1,613			1,313	1,148	81%	87%		
Level 6	Residential	118.85	3.15	1,672			1,313	1,148	79%	87%		76
Level 5	Residential	115.70	3.15	1,613			1,313	1,148	81%	87%		
Level 4	Residential	112.55	3.15	1,672			1,289	1,118	77%	87%		76
Level 3	Residential / Plant/Communal Terrace	109.40	3.15	1,608			1,289	1,118	80%	87%		
Level 2	Non-Residential	105.70	3.70	2,375	969	953	925	430	80%	73%	427	225
Level 1	Non-Residential	102.00	3.70	2,416	1,601	1,581	520	506	88%	98%		
Ground	Resi-Lobby/Loading/Non-Residential	97.00	5.00	2,623	1,023	968	944	363	75%	68%	425	
Basement 1	Parking Bike/Store/EOT	94.00	3.00	3,087	128	-	303	-			-	-
Basement 2	Parking/Store	91.00	3.00	1,803								
Cars	82 spaces		53.6m	30,899m²	**3,721m²**	**3,502m²**	**17,537m²**	**13,999m²**	69%	82%	**1,052m²**	**964m²**
Motorcycles	8 spaces											
Bikes	226 spaces											

Total GFA	**21,258m²**
Total NLA	**17,501m²**
% Site Area	**53.11%**
Area/Dwelling	**12m²**

Apartment Typology

TYPOLOGY STUDIO	1 BED	2 BED	3 BED	4 BED	#APARTMENTS	ADAPTABLE APTS
	2	2	-		4	1
	2	1	-		3	1
1	4	4	3		12	3
1	4	3	3		11	3
2	4	4	4		14	4
2	4	4	4		14	4
2	4	4	4		14	4
2	4	4	4		14	4
2	4	4	4		14	4
2	4	4	4		14	4
2	4	4	4		14	4
2	6	2	4		14	4
2	8	-	2	2	14	2
		2	3		5	
		6	1		7	
APARTMENT NUMBER					TOTAL APTS	TOTAL ADAPTABLE
20	54	48	44	2	**168 Apts**	42 Apts
APARTMENT MIX						
12%	32%	29%	26%	1%	100%	25%

Car Space

	Retail (sqm)	Office (sqm)	Medical (sqm)	Residential (Apts)
				4
				3
				12
				11
				14
				14
				14
				14
				14
				14
				14
				14
				14
			969	5
			1,601	
	396	65	562	7
Total Area	396m²	65m²	3,132m²	
Total Apartment	-		-	168 Apts
Cars	1 cars		45 cars	34 cars

Notes

1) Area schedule is a draft and subject to review and update with design development

2) GBA for basement levels not included in the overall calculations

Definitions

Gross Floor Area

GFA is typically defined by the relevant Planning Authority for a project.

GFA is measured from the internal face of external walls or from the internal face of walls separating the building from any other building, measured at a height of 1.4 metres above the floor.

Net Lettable Area

NLA as defined by PCA Method of Measurement 2008

NLA means the sum of its whole floor lettable area, which is measured by the internal finished surfaces of permanent internal walls and the internal finished surfaces of dominant portions of the permanent outer building walls.

i.e
included dividing wall between sole-occupancy units for the apartment floors
stairs within the sole occupancy units are measured on both floors

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AMENDMENTS

REV.	DATE	DESCRIPTION	CHK
03	14/04/2025		

PROJECT
270 PACIFIC HWY BTR
270 PACIFIC HIGHWAY
CROWS NEST NSW 2064
AUSTRALIA

PHASE: Development Application

CLIENT
SILVERNIGHT
Darling Park Tower 2, L16, 201 Sussex Street, Sydney NSW 2000 Australia

SCALE @A3
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APPROVED BY
30mm ON ORIGINAL
PRINT DATE 14/04/2025

DRAWING
AREA SCHEDULES
AREA SCHEDULE SUMMARY

PROJECT NUMBER **22501**
DRAWING NUMBER **DA-92001**
ISSUE **03**

Appendix B

Swept Path Analysis

TRUCKS TO GIVE WAY TO CARS ENTERING THE BASEMENT

No.2

No. 246

No. 250

No. 258

EXISTING DRIVEWAY REPAVED

NEW TOPPING OVER

VEHICLE ACCESS

ENTRY

EXT:+96.54

OFFICE

SUBSTATION

SUBSTATION

+96.54

EXT:+97.72

EXT:+97.70

EXT:+95.72

EXT:+95.16

SOFFIT LEVEL DATUM

+97.00

1:8

1:4

1:8

1:14

F/S OVER PLANT BELOW

MRV - Medium Rigid Vehicle

(TURNING CIRCLE 21m DIAMETER)

LOADING DOCK

F/S OVER

BIN HOLDING ROOM

F/S OVER

PLANT

LIFT

F/S

LIFT

F/S

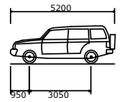
+97.00

2 B

95

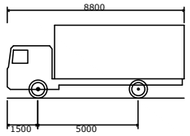
KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



B99 Vehicle (Realistic min radius) (2004)

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



MRV - Medium Rigid Vehicle

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	15/05/25

ttpp transport planning

PROJECT

270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE

SWEPT PATH ANALYSIS - LOADING DOCK
AS2890.1 5.2m B99 VEHICLE & AS2890.2 8.8m MEDIUM RIGID VEHICLE

DWG No. 23353CAD016
FIGURE 1

DATE STAMP 15 MAY 2025

PROJECT No.	SCALE	REV.
23353	1:200 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg

TRUCKS TO GIVE WAY TO CARS EXITING THE BASEMENT

NEW TOPPING OVER EXISTING RAMP

EXISTING DRIVEWAY REPAVED

VEHICLE ACCESS

ENTRY

EXT:+96.54

+96.54

OFFICE

SUBSTATION

SUBSTATION

EXT:+97.72

EXT:+98.18

SOFFIT ABOVE DASHED

+97.00

+97.60

MRV - Medium Rigid Vehicle

MRV - Medium Rigid Vehicle

LOADING DOCK

F/S OVER PLANT BELOW

F/S OVER

BIN HOLDING ROOM

F/S OVER

PLANT

F/S

F/S

+97.00

1:8

1:14

1:14

1:4

No. 246

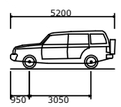
No. 250

No. 258

RETAIL

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



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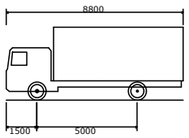

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Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10000mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	15/05/25

ttpp transport planning

PROJECT

270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE

SWEPT PATH ANALYSIS - LOADING DOCK
AS2890.1 5.2m B99 VEHICLE & AS2890.2 8.8m MEDIUM RIGID VEHICLE

DWG No. 23353CAD016 FIGURE 2

DATE STAMP 15 MAY 2025

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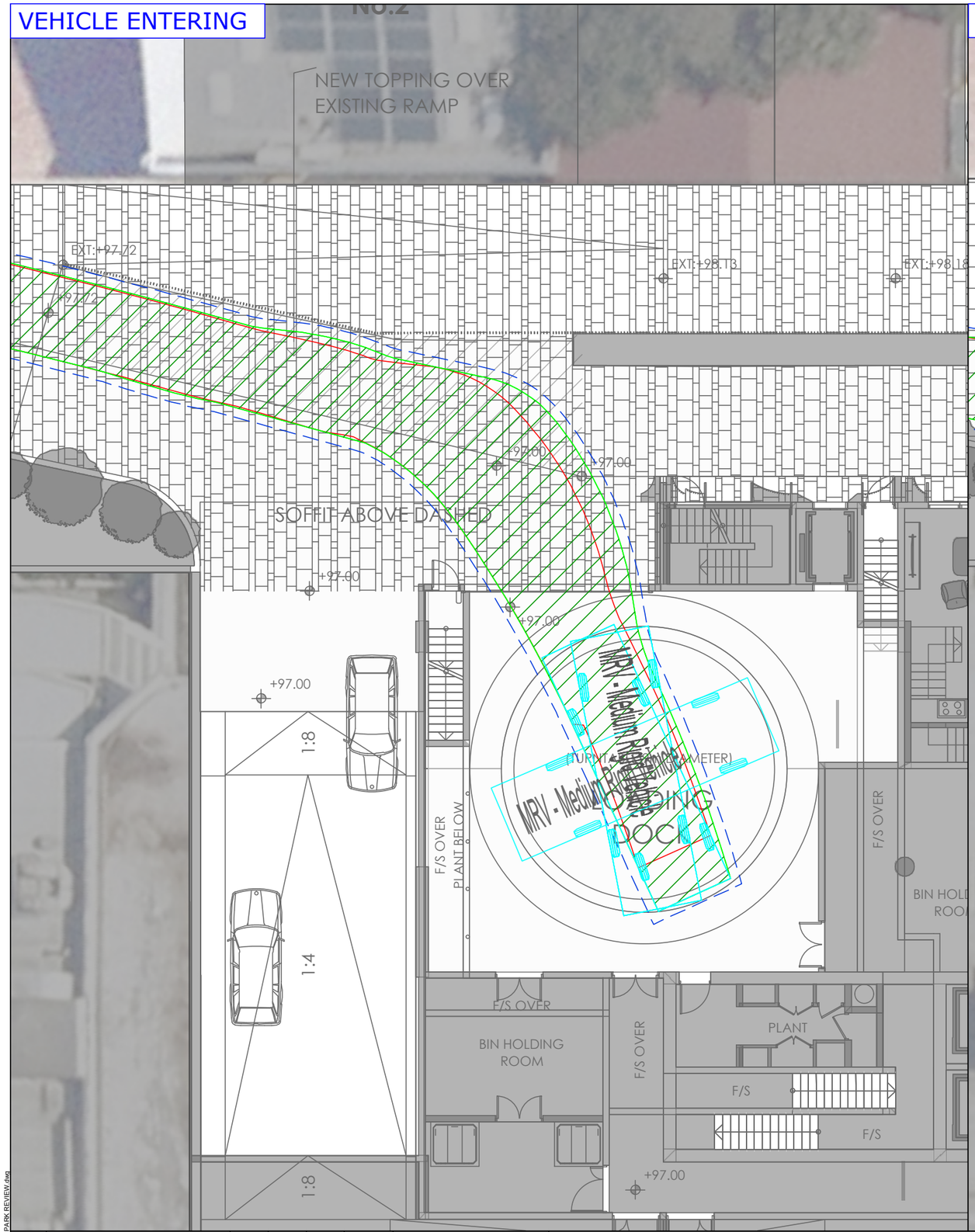
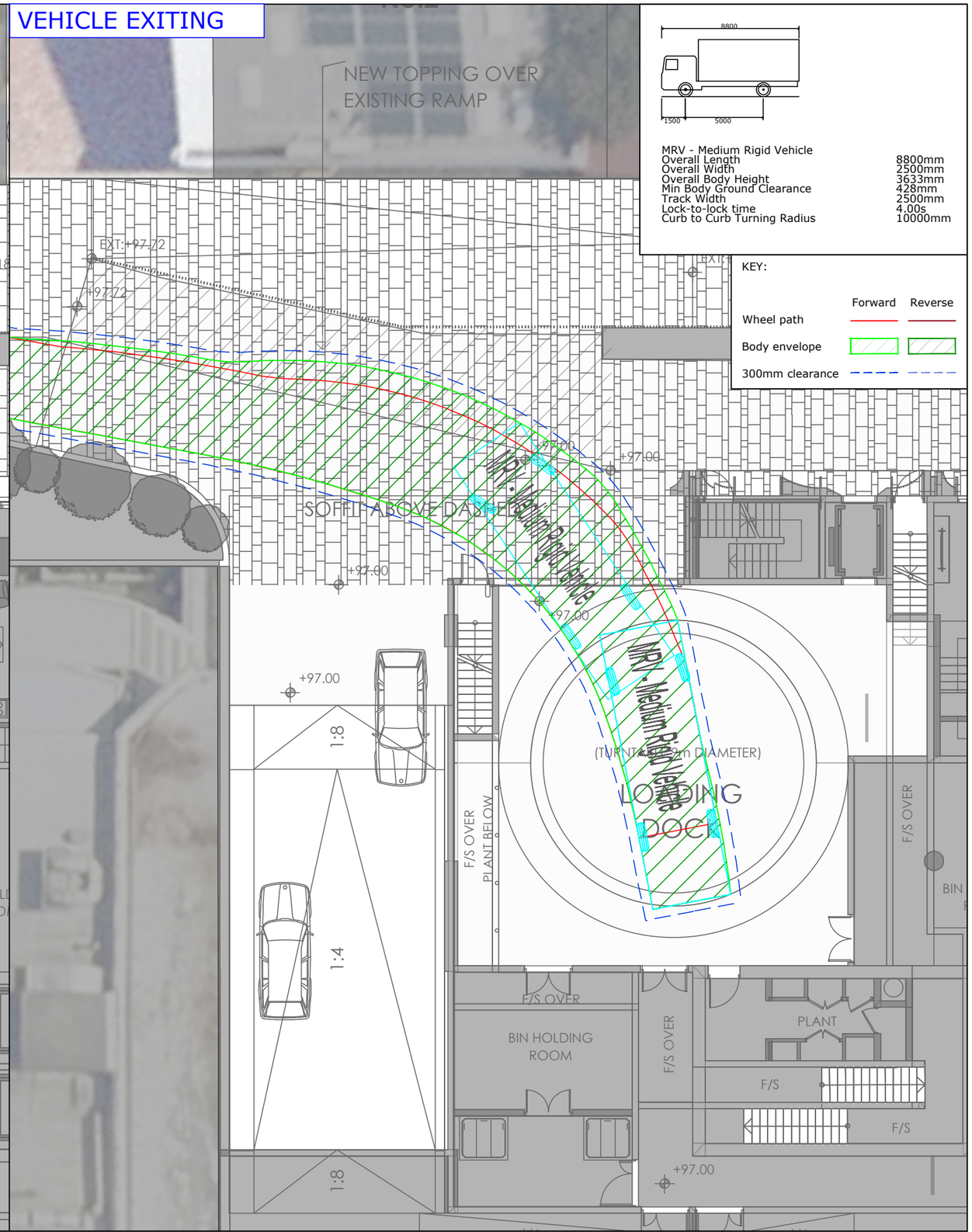
Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg

VEHICLE ENTERING



VEHICLE EXITING



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Track Width	2500mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	10000mm

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	15/05/25

ttpp transport planning

PROJECT: 270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE: SWEPT PATH ANALYSIS - LOADING DOCK
AS2890.2 8.8m MEDIUM RIGID VEHICLE

DWG No. 23353CAD016
FIGURE 3

DATE STAMP: 15 MAY 2025

PROJECT No.	SCALE	REV.
23353	1:150 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg

EXISTING DRIVEWAY REPAVED

NEW TOPPING OVER EXISTING RAMP

VEHICLE ACCESS

ENTRY

EXT:+96.54

+96.54

OFFICE

SUBSTATION

SUBSTATION

EXT:+97.22

EXT:+97.40

EXT:+97.73

EXT:+98.18

+97.00

+97.06

SLOPE ABOVE DASHED

+97.00

+97.00

(TURNTABLE 9m DIAMETER)

LOADING DOCK

F/S OVER PLANT BELOW

F/S OVER

BIN HOLDING ROOM

F/S OVER

F/S OVER

BIN HOLDING ROOM

F/S OVER

1:4

1:8

1:14

1:2003

No. 246

No. 250

No. 258

RETAIL

1:2001

+96.50

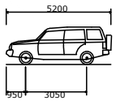
+96.50

F/S

ENTRY

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



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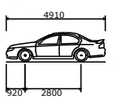
Min Body Ground Clearance	272mm
Track Width	1840mm
Lock-to-lock time	4.00s
Curb to Curb Turning Radius	6250mm



B85 Vehicle (Realistic min radius) (2004)

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	15/05/25

ttpp transport planning

PROJECT

270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE

SWEPT PATH ANALYSIS - GROUND LEVEL
AS2890.1 4.91m B85 VEHICLE & AS2890.1 5.2m B99 VEHICLE

DWG No. 23353CAD016 FIGURE 4

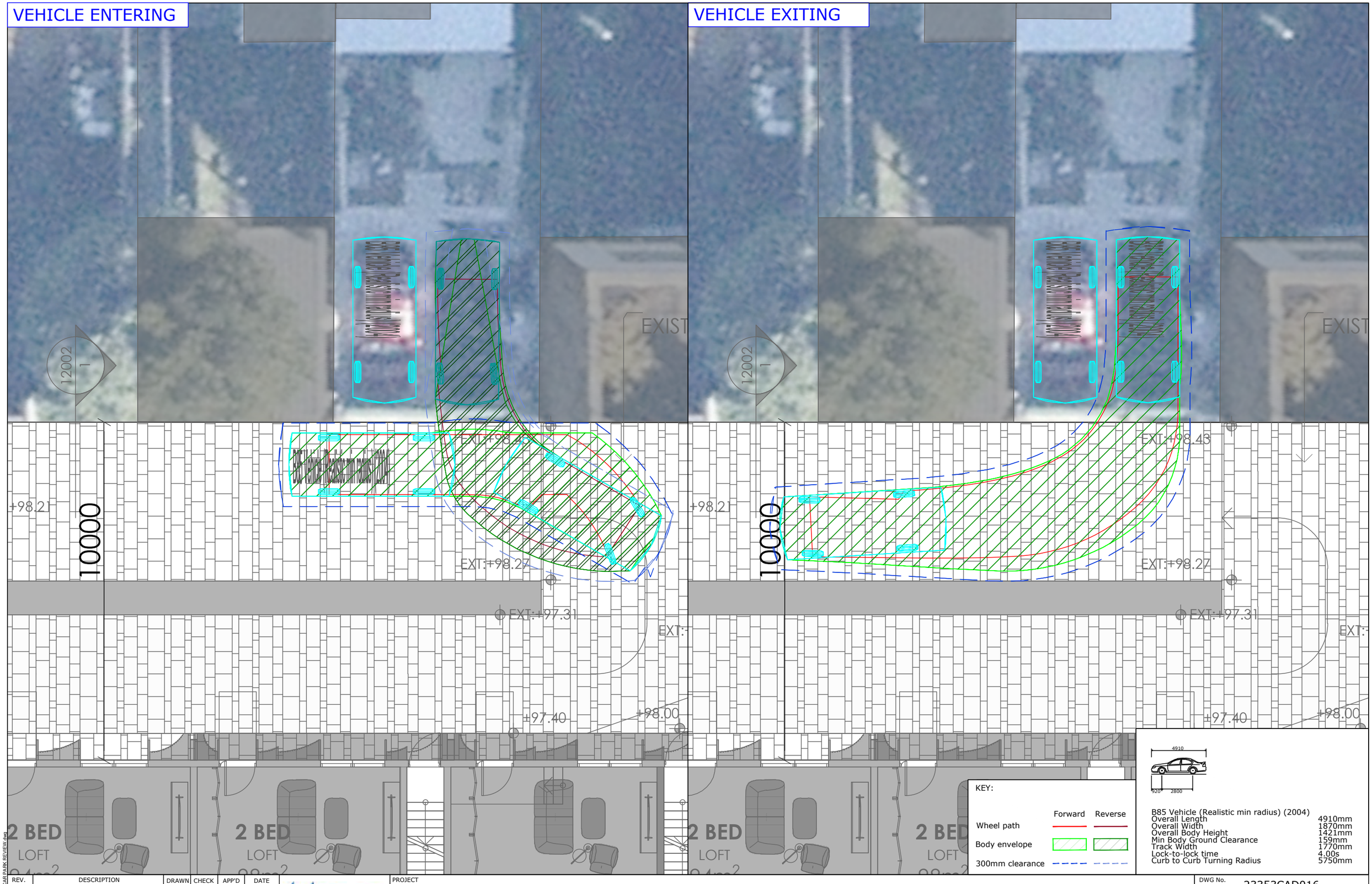
DATE STAMP 15 MAY 2025

PROJECT No.	SCALE	REV.
23353	1:200 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg

VEHICLE ENTERING

VEHICLE EXITING



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	15/05/25

ttpp transport planning

PROJECT

270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE

SWEPT PATH ANALYSIS - EXISTING NEIGHBOURING DOUBLE GARAGE
AS2890.1 4.91m B85 VEHICLE

DWG No. 23353CAD016 FIGURE 5

DATE STAMP 15 MAY 2025

PROJECT No.	SCALE	REV.
23353	1:100 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg

VEHICLE ENTERING

VEHICLE EXITING

3-POINT TURN REQUIRED TO EXIT

EXIST

12002
1

EXT:+98.43

EXT:+98.27

EXT:+97.31

EXT:-

+98.21

10000

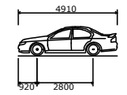
+97.40

+98.00

2 BED
LOFT

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



B85 Vehicle (Realistic min radius) (2004)

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	15/05/25

ttpp transport planning

PROJECT

270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE

SWEPT PATH ANALYSIS - EXISTING NEIGHBOURING DOUBLE GARAGE
AS2890.1 4.91m B85 VEHICLE

DWG No. 23353CAD016
FIGURE 6

DATE STAMP 15 MAY 2025

PROJECT No.	SCALE	REV.
23353	1:100 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg

VEHICLE ENTERING

VEHICLE EXITING

ING OVER
AMP

ING OVER
AMP

12003
1

12003
1

EXT:+98.18

EXT:+98.18

EXT:+98.18

EXT:+98.18

+97.00

+97.00

+97.00

+97.00

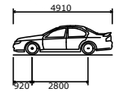
DASHED

DASHED

2 B

KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



B85 Vehicle (Realistic min radius) (2004)

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	15/05/25

ttpp transport planning

PROJECT

270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE

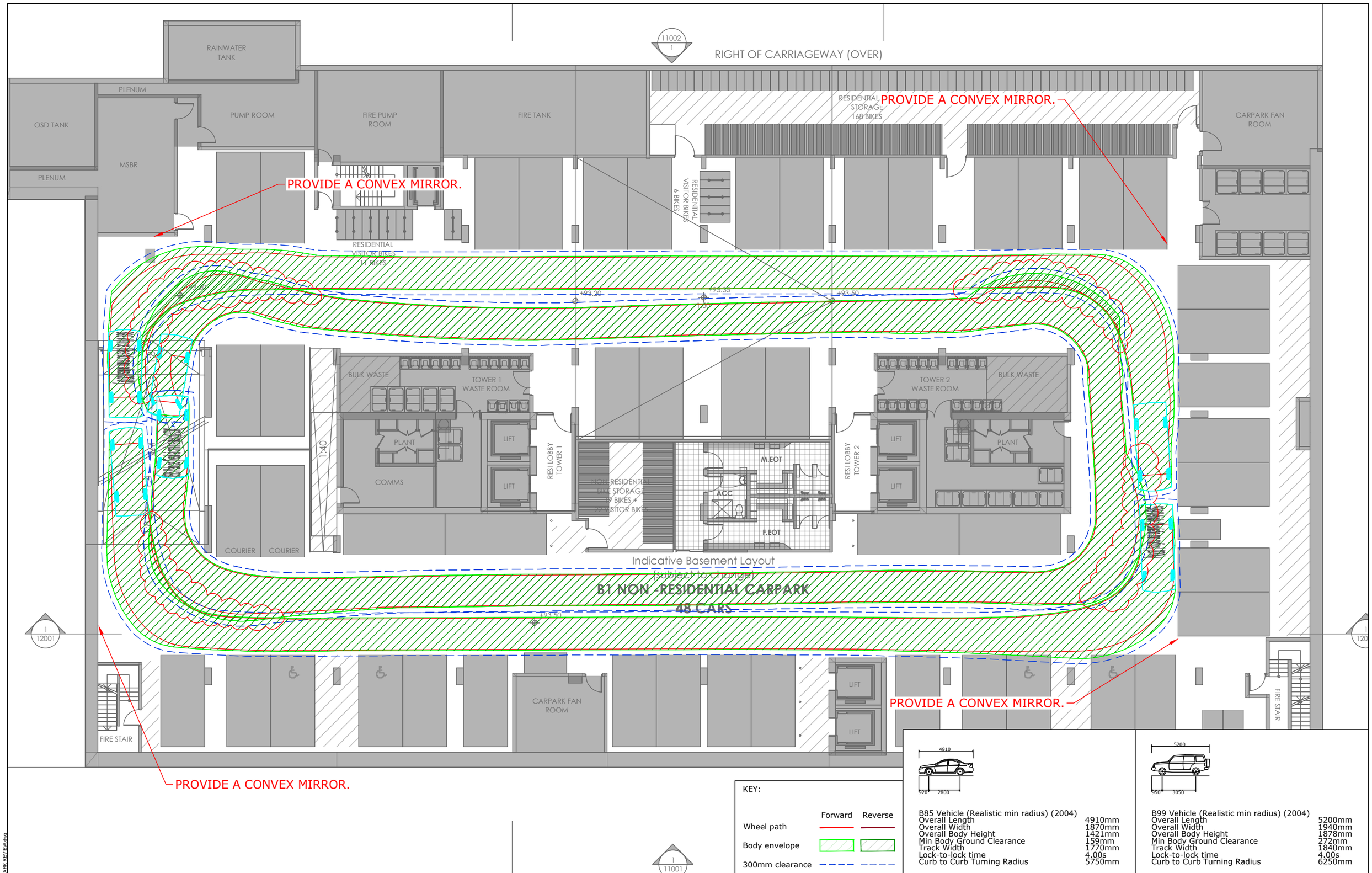
SWEPT PATH ANALYSIS - EXISTING NEIGHBOURING SINGLE GARAGE
AS2890.1 4.91m B85 VEHICLE

DWG No. 23353CAD016
FIGURE 7

DATE STAMP 15 MAY 2025

PROJECT No.	SCALE	REV.
23353	1:100 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

B85 Vehicle (Realistic min radius) (2004)

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

B99 Vehicle (Realistic min radius) (2004)

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

1
11001

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	HT	OF	KH	15/05/25

ttpp transport planning

PROJECT

270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE

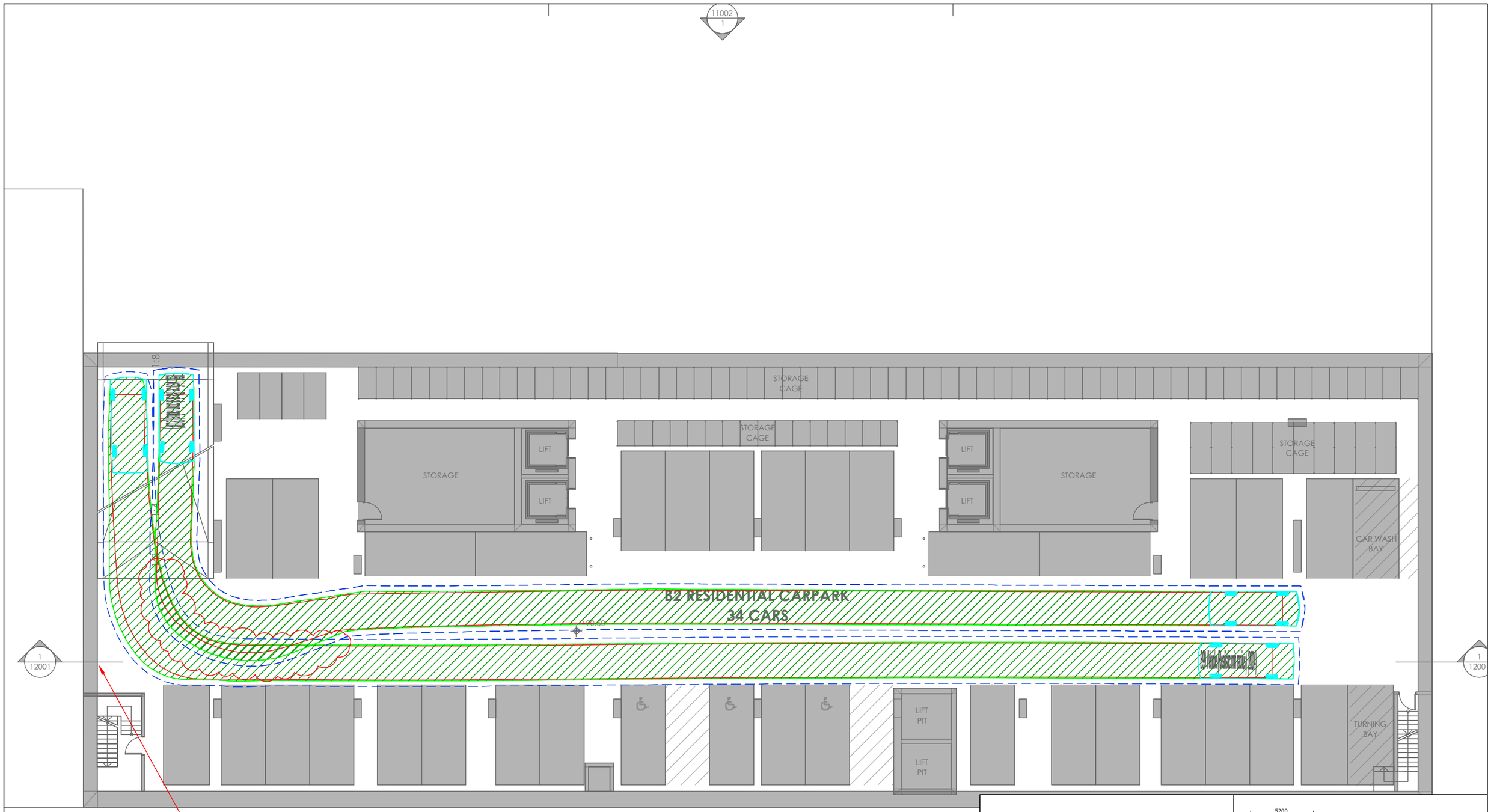
SWEPT PATH ANALYSIS - BASEMENT LEVEL 1
AS2890.1 4.91m B85 VEHICLE & AS2890.1 5.2m B99 VEHICLE

DWG No. 23353CAD016
FIGURE 8

DATE STAMP 15 MAY 2025

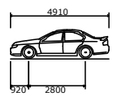
PROJECT No.	SCALE	REV.
23353	1:200 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg



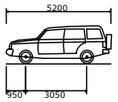
KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		



B85 Vehicle (Realistic min radius) (2004)

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



B99 Vehicle (Realistic min radius) (2004)

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
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ttpp transport planning

PROJECT

270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE

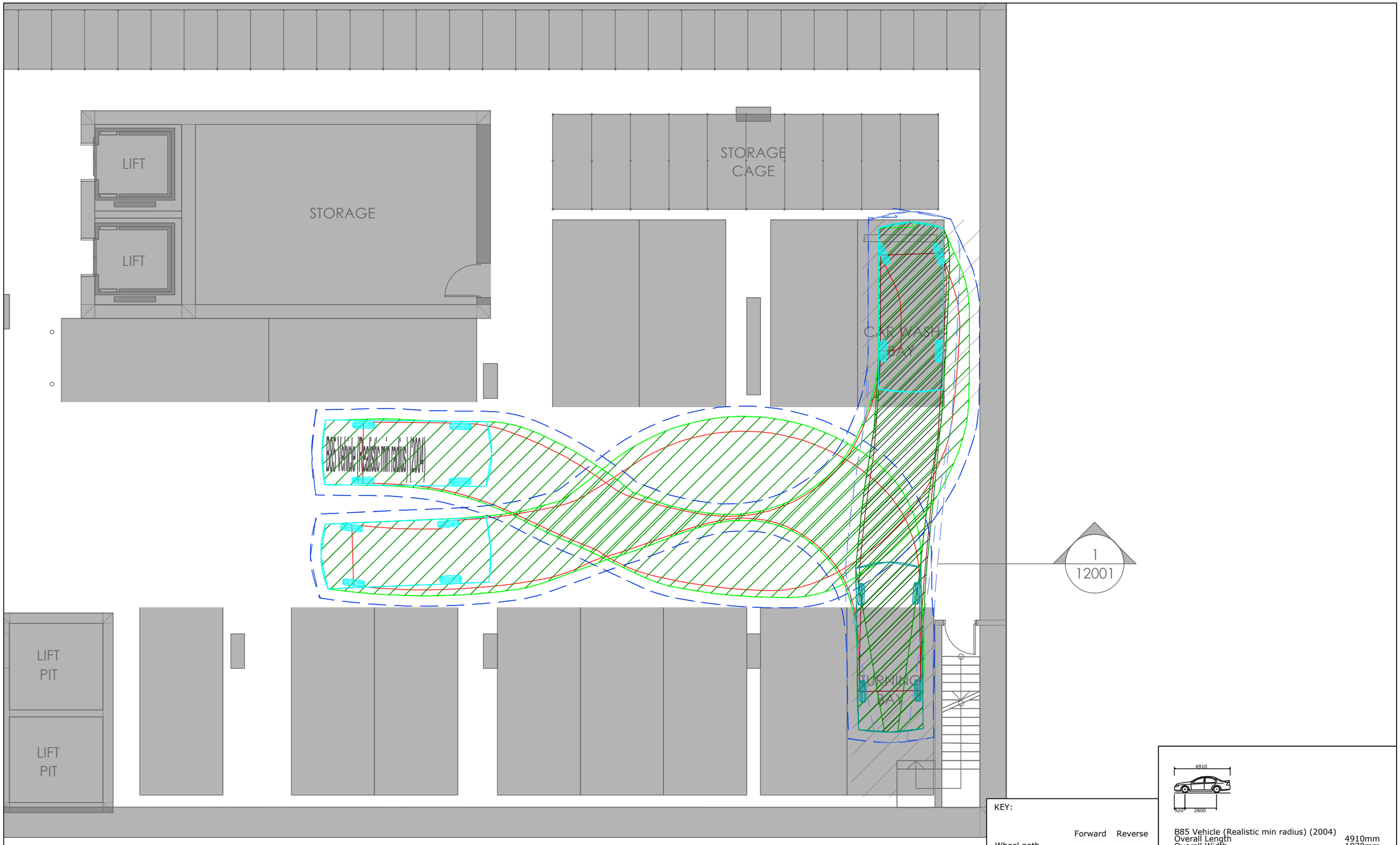
SWEPT PATH ANALYSIS - BASEMENT LEVEL 2
AS2890.1 4.91m B85 VEHICLE AND AS2890.1 5.2m B99 VEHICLE

DWG No. 23353CAD016
FIGURE 9

DATE STAMP 15 MAY 2025

PROJECT No.	SCALE	REV.
23353	1:200 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

B85 Vehicle (Realistic min radius) (2004)

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

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
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PROJECT
270-272 PACIFIC HIGHWAY, CROWS NEST

TITLE
4.9m B85 VEHICLE - VEHICLE TURNING AROUND USING THE TURNING BAY AND CAR WASH BAY

DWG No. 23353CAD016
FIGURE 10

DATE STAMP 15 MAY 2025

PROJECT No.	SCALE	REV.
23353	1:100 @A3	A

Filename: 23353CAD016-250515-CAR PARK REVIEW.dwg

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