

Transport Impact Assessment

5-9 Cowan Road, St Ives

Proposed Residential Development

25011

Prepared for

Prosper 5-9 Cowan Road Pty Ltd

28 August 2025



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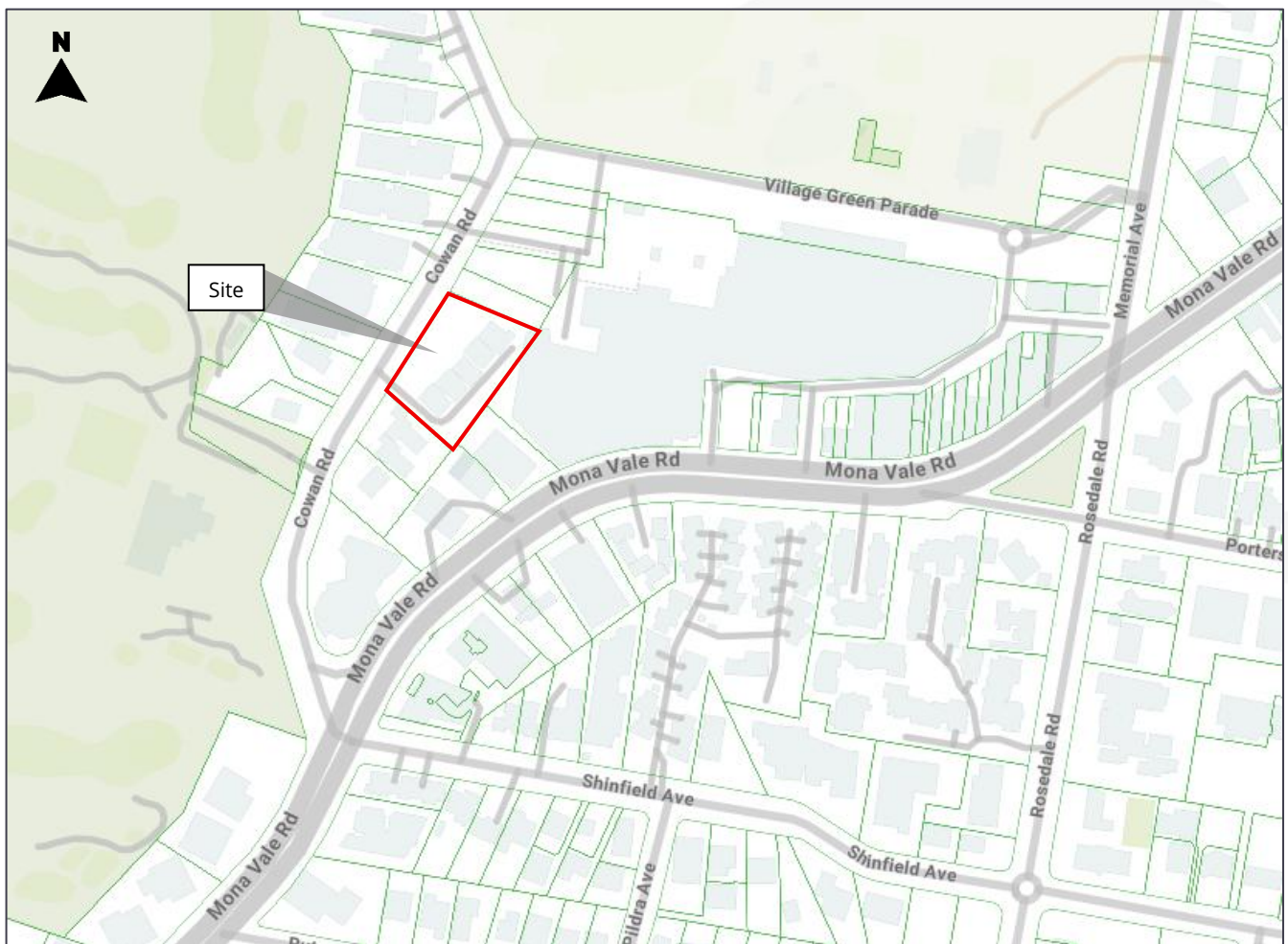
1 Introduction

1.1 Background

This Traffic Impact Assessment (TIA) has been prepared by Genesis Traffic to accompany a detailed State Significant Development Application (SSDA) for a residential development (including in-fill affordable housing) at 5-9 Cowan Road, St Ives (Figure 1-1) within the Ku-ring-gai Local Government Area (LGA).

This report has been prepared to address the Secretary's Environmental Assessment Requirements (SEARs) issued for the project (SSD-88948458) on 25 July 2025.

Figure 1-1 Site Context



Source: Mecone (Modified by Genesis Traffic)

The SSD application seeks development consent for a proposed residential flat building, including in-fill affordable housing at 5-9 Cowan Road, St Ives (the site). The proposed works include demolition of existing structures, site preparation works, excavation and construction of the building and associated landscaping works.



Specifically, the SSDA seeks development consent for:

- demolition of the existing row of 10 attached townhouses at the site;
- construction of an 9-storey residential flat building comprising:
 - 74 new dwellings (62 market residential units and 12 affordable housing units)
 - 3 basement levels for car parking
 - Communal open space at Ground Level and Level 7
- landscaping; and
- associated site works.

The proposal also incorporates 15% of the total gross floor area for affordable housing and seeks to utilise the incentive controls under Chapter 2, Part 2, Division 1, Section 16 of *State Environmental Planning Policy (Housing) 2021* (Housing SEPP) to achieve 30% additional building height and 30% additional floor space ratio (FSR).

This report has been prepared in response to the requirements contained within the Secretary's Environmental Assessment Requirements (SEARs) dated 25 July 2025 and issued for the SSDA (SSD-88948458). Specifically, this report has been prepared to respond to the SEARs requirement issued below.

Item	Description of Requirement	Section Reference
9. Transport	• <i>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.</i>	Section 4 Section 5 Section 6
	• <i>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</i>	Section 7



1.2 Scope of Assessment

The assessment considers a range of traffic, transport, and parking-related matters in conjunction with the TfNSW Guide to Traffic Generating Development and the SEARs criteria. The report is structured in the following manner:

Section 1	Introduction
Section 2	Proposal Description
Section 3	Existing Site & Traffic Circumstances
Section 4	Parking Assessment
Section 5	Access & Circulation Design Assessment
Section 6	Traffic Assessment
Section 7	Preliminary Construction Traffic Management Planning
Section 8	TfNSW Consultation
Section 9	Conclusion

1.3 Reference Documents

Reference has been made to the following documents when preparing this report:

- Australian Standard Part 1: Off-street Car Parking (AS2890.1:2004)
- Australian Standard Part 3: Bicycle Parking (AS2890.3:2015)
- Australian Standard Part 6: Off-street Parking for People with Disabilities (AS2890.6:2022)
- Development Control Plan (Ku-ring-gai Council)
- Guide to Transport Impact Assessment, NSW Government, 2024



2 Development Scheme

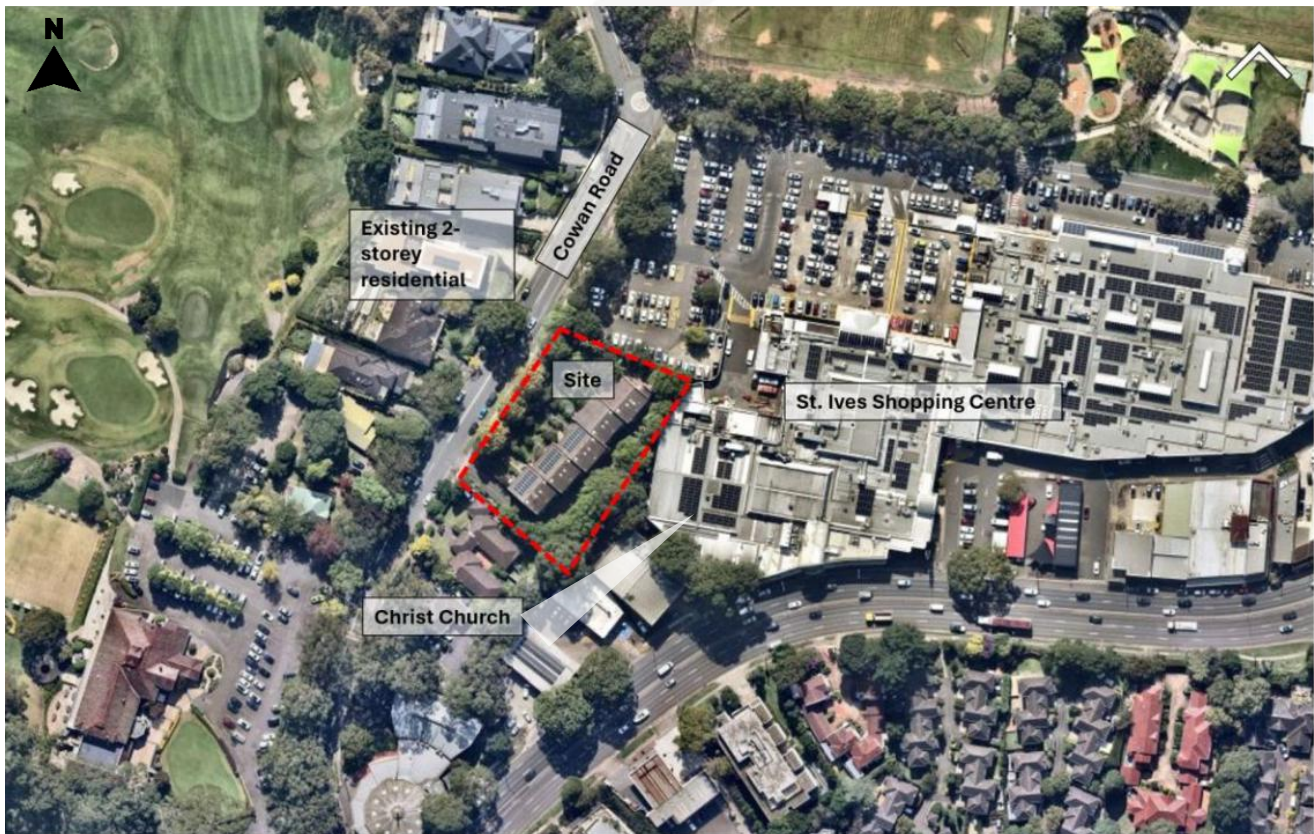
2.1 Site and Surrounding Context

The site (Figure 2-1) is located at 5-9 Cowan Road, St Ives, within the Ku-ring-gai Local Government Area, and is legally described as SP30097. The site has an area of approximately 3,467.7m² and is rectangular in shape.

The site currently contains a single row of ten, two-storey attached townhouses. The site is defined by large mature trees along the northern, eastern and western boundaries. Vehicular access to the site is provided at the southern boundary of the site from Cowan Road. The site is relatively flat.

The site adjoins St Ives Shopping Village to the north and east. Existing residential development (No. 3 Cowan Road) and St Ives Christ Church border the site to the south. To the west, two storey detached houses are located along Cowan Road.

Figure 2-1 Site Location



Source: Nearmap 2025

The site is located 800m east of Cowan Creek which is separated from the site by Pymble Golf Club. The site is also located within 105m of Emerald Fitness Centre, 245m from St Ives Village Green, and 210m from St Ives Playground. The building heights in the immediate locality are generally single to two-storeys, with increased heights of up to 5-storeys on Mona Vale Road, opposite St Ives Christ Church.



The site is accessible via bus services with stops located along Mona Vale Road which is a 4-minute walk to the south, and along Killeaton Street, which is a 9-minute walk to the north. The bus routes connect the site to Mona Vale, Gordon, and the Northern Suburbs.

Figure 2-2 Broader Site Context



Source: Nearmap 2025

2.2 Proposed Development

The SSDA seeks development consent for a proposed residential flat building, including in-fill affordable housing. The proposed works include demolition of existing structures, site preparation works, excavation and construction of the building and associated landscaping works.

Table 2-1 below summarises the development composition.

Table 2-1 Development Yield

Component	Details
Residential	A total of 74 apartments, comprising 12 x affordable units 2 x two-bedroom units 10 x three-bedroom units 62 x non-affordable units



Component	Details
	○ 14 x two-bedroom units ○ 48 x three-bedroom units
Parking	Residential Car Parking: • 142 x residential spaces • 8 x visitor spaces (including 1 loading bay) Total: 150 x spaces
Access	Vehicular access to basement car park via Cowan Road

Details of the proposal are indicated in the architectural plans prepared by PBD Architects which accompany the submission and are reproduced in part in **Attachment 1**.

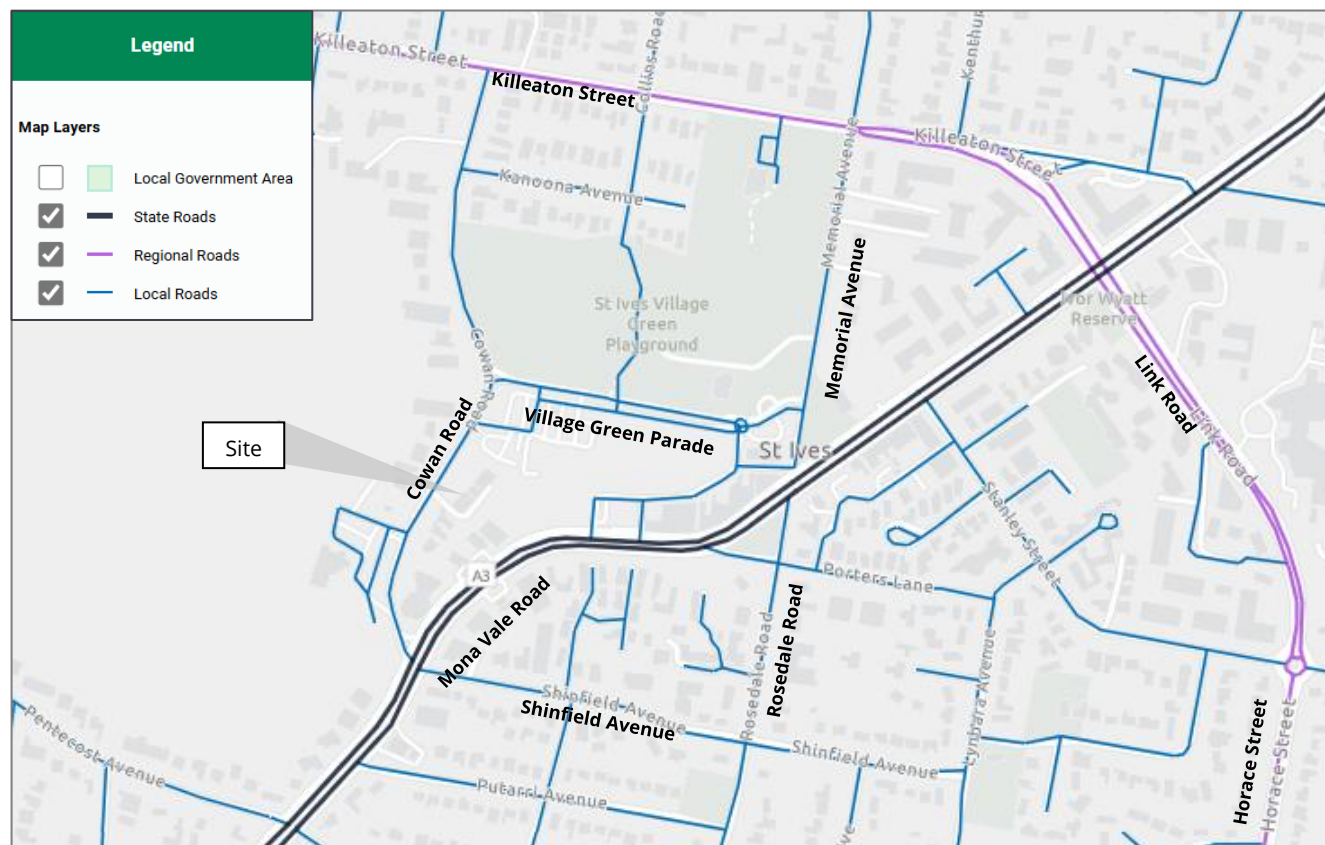


3 Existing Conditions

3.1 Road Network

The existing road network serving the site area (Figure 3-1) are detailed in Table 3-1:

Figure 3-1 Road Network



Source: TfNSW (modified by Genesis Traffic)

Table 3-1 Surrounding Road Network

Road Name	Description
Mona Vale Road	- State Road - Speed limit 60 km/h 3 lanes in each direction - Clearway restriction between 6am – 10am and 3pm – 7pm Monday to Friday, 9am – 6pm Saturday and Sunday along both sides of the street
Killeaton Street	- Regional Road - Speed limit 60 km/h 2 lanes in each direction



	· No Stopping restriction along both sides of the street
Link Road	· Regional Road · Speed limit 40 km/h · 2 lanes in each direction · No Parking restriction along both sides of the street
Cowan Road	· Local Road · Speed limit 40 km/h · 1 lane in each direction · Restricted on-street parking along both sides of the street
Rosedale Road	· Local Road · Speed limit 50 km/h · 1 lane in each direction · Restricted on-street parking along both sides of the street
Village Green Parade	· Local Road · 1 lane in each direction · No Stopping restriction along both sides of the street
Shinfield Avenue	· Local Road · Speed limit 50 km/h · 1 lane in each direction · Restricted on-street parking along both sides of the street

3.2 Traffic Controls

The traffic controls on the road system in the vicinity of the site are detailed in Table 3-2:

Table 3-2 Surrounding Traffic Controls

Traffic Control	Location
Traffic Signal	· Intersections of: ○ Cowan Road and Mona Vale Road ○ Killeaton Street and Memorial Avenue
Roundabout	· Intersections of: ○ Cowan Road and Village Green Parade ○ Shinfield Avenue and Rosedale Road
Give-way / Stop Control	· Intersection of: ○ Cowan Road and Killeaton Street

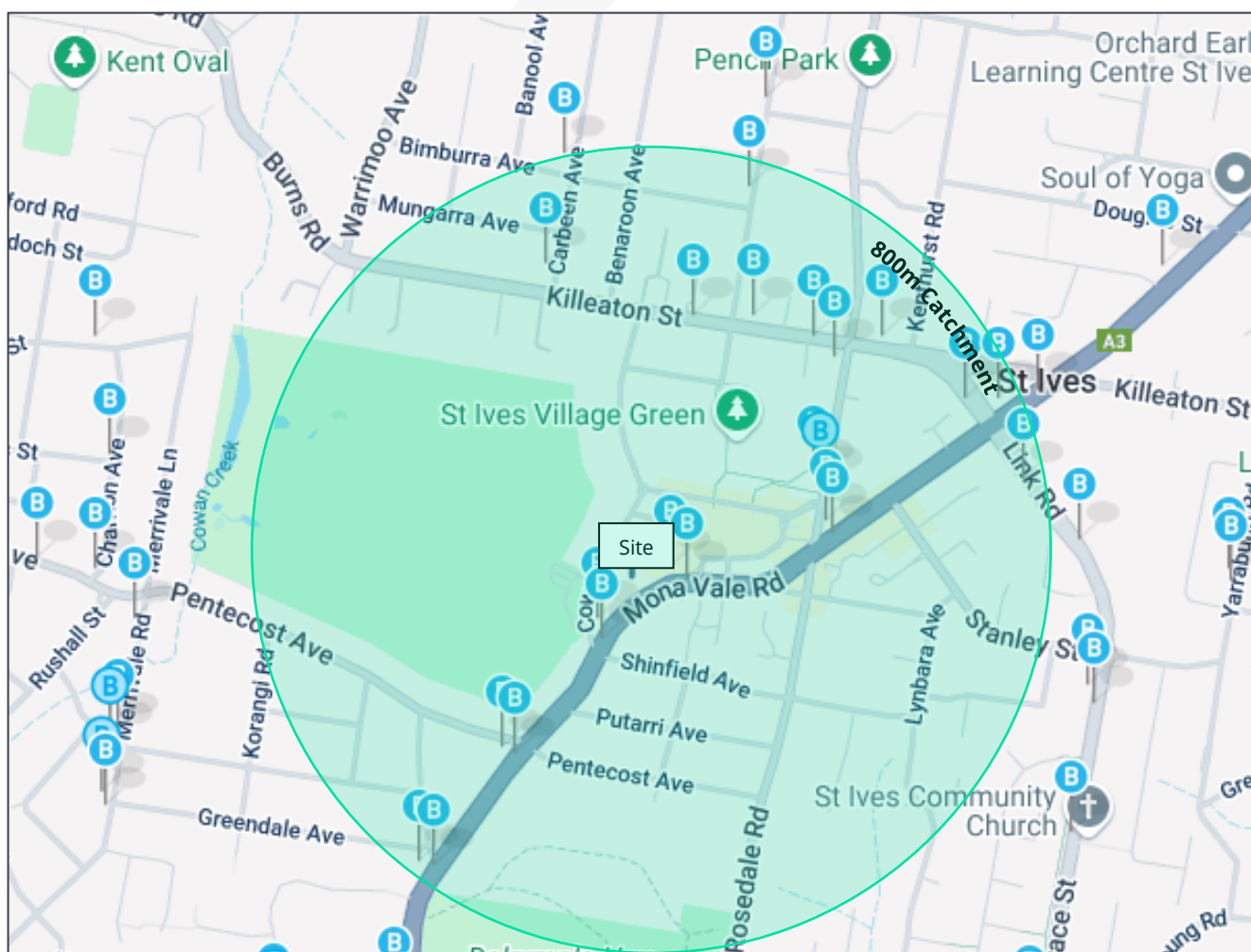


No Right Turn	- Intersection of: - Mona Vale Road and Cowan Road
School Zone	- Along parts of - Link Road
Pedestrian Crossing	- Along parts of - Cowan Road and Mona Vale Road - Village Green Parade and Rosedale Road

3.3 Existing Public Transport Infrastructure

The NSW Guidelines to Walking & Cycling (2004) nominates a comfortable walking distance as being between 400m and 800m. Accordingly, the available public transport services within the 800m catchment are shown in Figure 3-2.

Figure 3-2 Local Public Transport



Source: Google Map (Modified by Genesis Traffic)



3.3.1 Bus Services

The subject site is conveniently situated within walking distance of high-frequency bus services operating in the locality. The nearest bus stop is located 150m from the site on Mona Vale Road. The locations of local bus stops are identified in Figure 3-2 and the available bus services are outlined in Table 3-3.

Table 3-3 Bus Services Provision

Bus Line	Bus Route	Peak Frequency
194	St Ives to City QVB	1-2 trip(s) per hour
194X	St Ives to City QVB (Express Service)	2-3 trip(s) per hour
195	Gordon to St Ives Chase (Loop Service)	2 trip(s) per hour
196	Mona Vale to Gordon	1 trip(s) per hour
197	Mona Vale to Macquarie University via Gordon	2 trip(s) per hour
582	St Ives Shopping Centre to Gordon	1 trip(s) per hour
591	Hornsby to St Ives	1 trip(s) per hour
594	North Turramurra to City QVB	1 trip(s) per day

3.3.2 Train Services

No train station is available within the vicinity of the site. Nevertheless, there are ample bus services that provide connections to the surrounding nearest train services such as Gordon Train Station. This train station provides T1 (North Shore & Western Line) and T9 (Northern Line) service(s).

3.3.3 Car Share

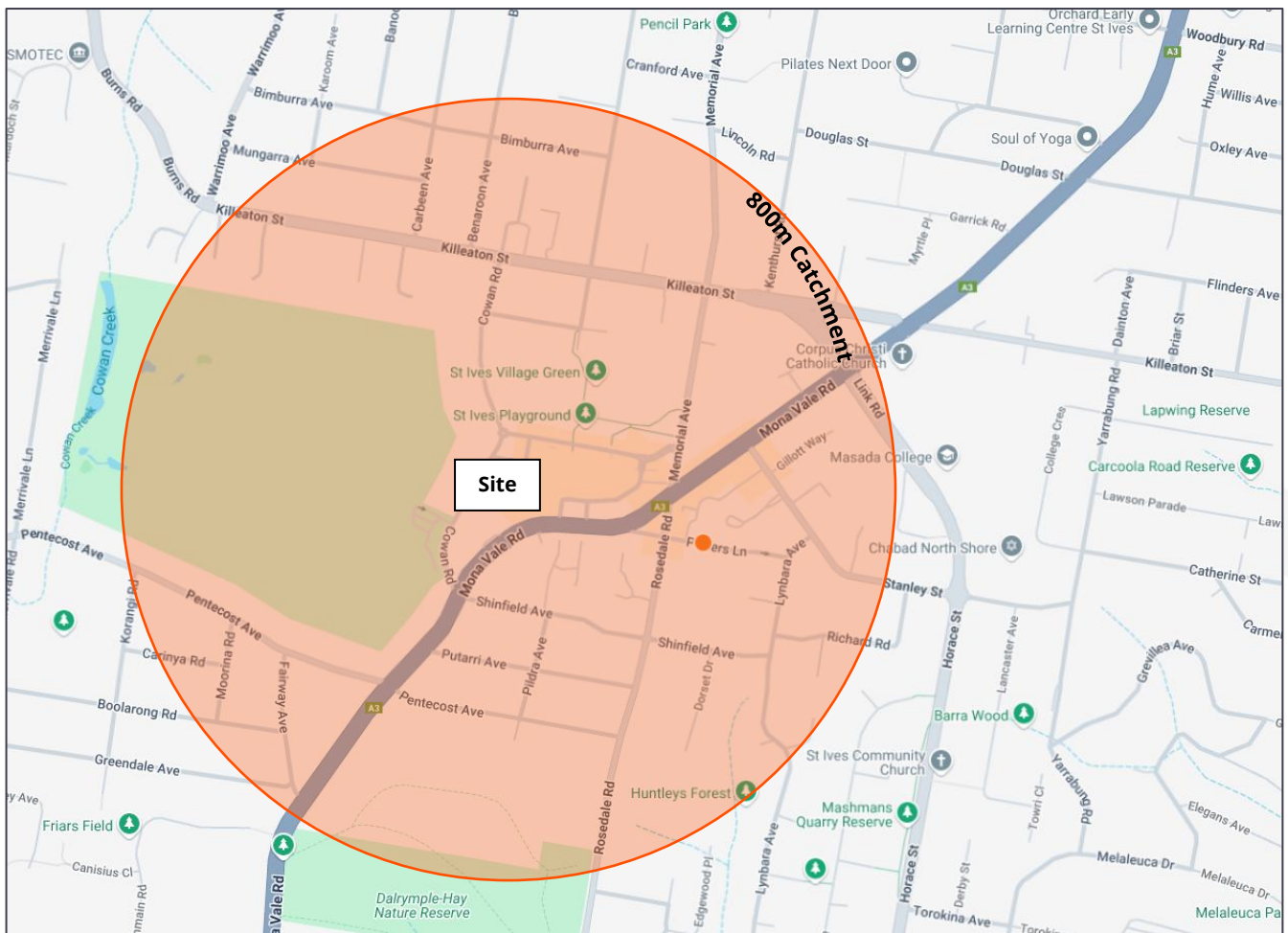
Car share is a relatively established alternative mode of travel by which members join a car ownership club, choose a rate plan, and pay an annual fee. The fees cover fuel, insurance, maintenance, and cleaning. The vehicles are mostly comprised of sedans and hatchbacks but also include SUVs, station wagons, trays, and utility vans. Each vehicle has a home location, referred to as a "pod", either in a parking lot or on a street, typically in a highly populated urban neighbourhood. Members reserve a car via the internet or telephone and use a key card to access the vehicle.

Similar councils (e.g., City of Canada Bay Council) have reported that "each share car replaces between 8 and 23 private car parking spaces, depending on the location of the development".

GoGet, a pioneering car share company in Australia, has a substantial number of vehicles positioned in the city and also in close proximity to the site. GoGet' pods' location within the immediate vicinity of the site is shown in the extract below (Figure 3-3).



Figure 3-3 GoGet Locations



Source: GoGet (modified by Genesis Traffic)

Based on the above, GoGet currently operates approximately 1 GoGet pod within a catchment of approximately 750m from the site. The nearest pod is located at the site frontage on Porters Lane.

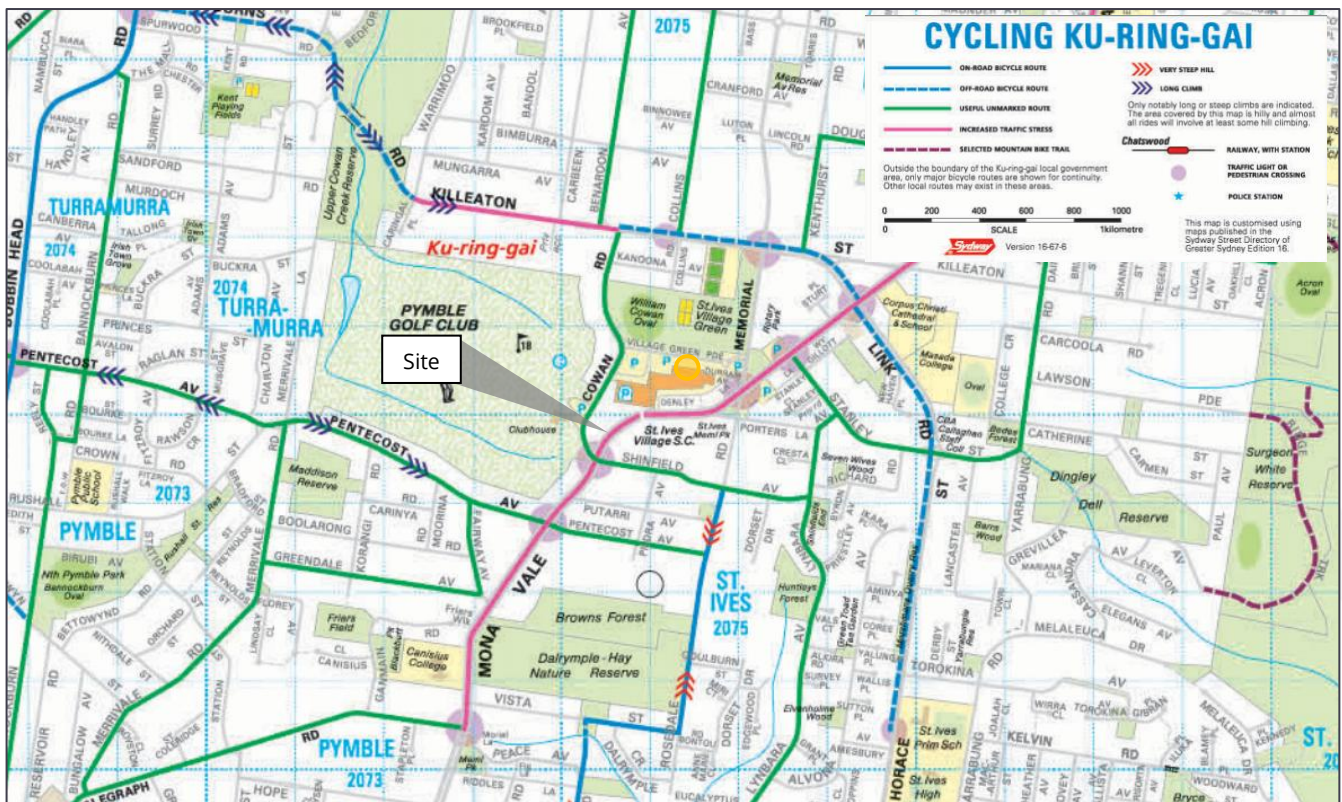
3.4 Existing Active Transport Infrastructure

3.4.1 Bicycle Routes

The bicycle paths map (Figure 3-4) shows the existing cycling infrastructure in the vicinity of the site. The site has ample cycling infrastructures in the surrounding area. Thus, it is expected that cycling would be a suitable alternative mode of transport for its occupants. The site location is signposted as a High Pedestrian Activity Area with a speed limit of 40km/h, highlighting a generally friendly environment for cyclists. Furthermore, there is an existing cycle route along Cowan Road that encourages safe access to the site.



Figure 3-4 Cycling Path



Source: Ku-ring-gai City Council

3.4.2 Pedestrians

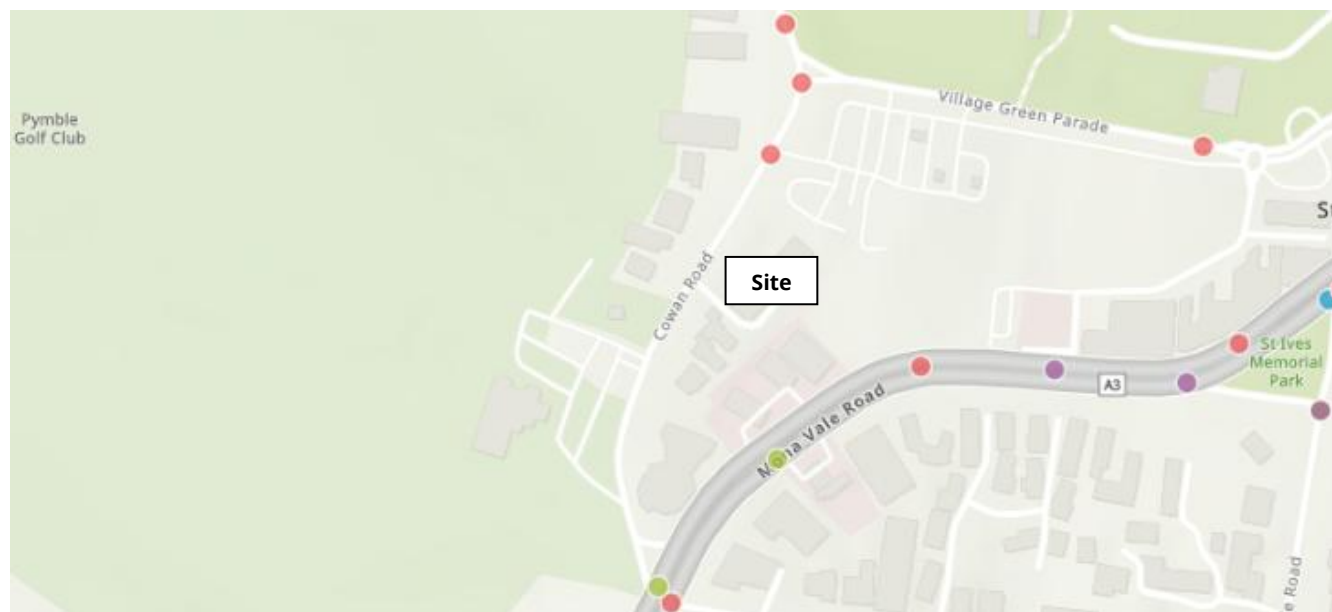
Formal pedestrian footpaths are available near the site. These footpaths have adequate lighting/illumination. In addition, there are appropriate pedestrian crossings for occupants to use when approaching/departing the local public transport services.

3.5 Crash History

Transport for NSW (TfNSW) provides a history of recorded crash data between 2019 and 2023 (data for 2024 is not available at the time of this assessment). The data reveal the following number of crashes within 5 years near the site (Figure 3-5 and Table 3-4).



Figure 3-5 Locations of the Recorded Crashes



Source: TfNSW

Table 3-4 Crash Data Record

Location	Year of Crash	RUM Code	RUM Description	Number Killed	Number Injured	Degree of Cash
Cowan Road	2019	71	Off Rd left => obj	-	-	Non-casualty (towaway)
	2023	30	Rear end	-	-	Non-casualty (towaway)
Cowan Road/Village Green Parade	2022	10	Cross Traffic	-	-	Non-casualty (towaway)
Monna Vale Road/Shinfield Avenue	2023	30	Rear end	-	-	Non-casualty (towaway)
Monna Vale Road	2019	30	Rear end	-	1	Minor/Other Injury
	2021	0	Ped Nearside	-	1	Serious Injury
	2021	81	Off left/rt bnd => obj	-	1	Non-casualty (towaway)
	2023	30	Rear end	-	1	Serious Injury

The data recorded 8 crashes in the site's vicinity in the most recent 5-year period, 2 incidents involved a serious injury. Four (4) crashes occurred along Monna Vale Road.



The record shows only 1 incident involved pedestrians, and no incidents involving cyclists were recorded over the 5-year period.

3.6 Existing Traffic Conditions

Traffic surveys were commissioned as part of this assessment to record the AM peak and PM peak traffic flows at the following intersections:

- Mona Vale Road, Shinfield Avenue and Cowan Road

The traffic survey data is reproduced in **Attachment 2**.

The existing intersection operation has been assessed using SIDRA traffic modelling program. SIDRA is a micro-analytical tool for individual and network intersection modelling based on collected traffic survey data. SIDRA provides a few performance indicators, as follows:

- Degree of Saturation – the total usage of the intersection expressed as a factor of 1, with 1 representing 100% use/saturation.
- Average Delay – the average delay encountered by all vehicles passing through the intersection.
- 95% Queue Length (Q95) – is defined to be the queue length in metres that has only a 5% probability of being exceeded during the analysis period. It transforms the average delays into measurable distance units.
- Level of Service (LOS) – this is a categorisation of average delay, intended for simple reference. The RMS adopts the following bands (Table 3-5)

Table 3-5 Intersection Performance – Levels of Service

Level of Service	Average Delay (s/veh)	Traffic Signals, Roundabout	Give Way & Stop Signs
A	< 14	Good operation	Good operation
B	15 to 28	Good with acceptable delays & spare capacity	Acceptable delays & Spare capacity
C	29 to 42	Satisfactory	Satisfactory but accident study required
D	43 to 56	Operating near capacity	Near capacity & accident study required
E	57 to 70	At capacity. At signals, incidents would cause excessive delays. Roundabouts require other control mode	At capacity and requires other mode of control



F	> 70	Extra capacity required	Extreme delay, major treatment required
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An indication of the prevailing traffic operations at the following intersections is provided in the SIDRA assessment (Table 3-6).

Table 3-6 Existing Intersection Traffic Circumstance

Intersection	AM Peak			PM Peak		
	LOS	AVD	DOS	LOS	AVD	DOS
Mona Vale Road, Shinfield Avenue and Cowan Road	B	16.0s	0.740	B	16.2s	0.823

Details of SIDRA results are reproduced in **Attachment 3**.

The assessment found the local road network operating with ample spare capacity under existing traffic demand (including the site's existing traffic movements).



4 Parking Assessment

4.1 Car Parking Requirement

Residential Parking

Reference is made to the non-discretionary development standards in Chapter 2, Part 2 (In-fill Affordable Housing) of SEPP 2021, specifically section 19. The relevant minimum car parking rates are provided in Table 4-1.

Table 4-1 Car Parking Rates from SEPP 2021

Land Use	Element	Minimum Parking Rates
SEPP (Housing) 2021		
Affordable Housing	One-Bed	0.4 spaces per unit
	Two-Bed	0.5 spaces per unit
	Three-Bed	1.0 space per unit
Non-affordable Housing	One-Bed	0.5 spaces per unit
	Two-Bed	1.0 space per unit
	Three-Bed	1.5 spaces per unit
Ku-ring-gai DCP		
	Studio	0.5 spaces per unit
	One-Bed	1.0 space per unit
	Two-Bed	1.25 spaces per unit
	Three-Bed	2.0 spaces per unit

Application of the proposal using the above criteria would indicate the following minimum requirements in Table 4-2.

Table 4-2 Required Car Parking Spaces

Element	Unit/GFA	Requirement
SEPP (Housing) 2021		
Affordable Housing	Two-Bed	2 units
	Three-Bed	10 units
	Total: 11 spaces	
Non-Affordable Housing	Two-Bed	14 units
	Three-Bed or more	48 units



		Total: 86 spaces	
		Total	97 spaces
<i>Ku-ring-gai DCP</i>			
	Two-Bed	16 units	20
	Three-Bed	58 units	116
		Total	136 spaces

Accordingly, the minimum parking requirement is 97 car spaces under the SEPP and 136 car spaces under the DCP. The provision of 142 resident car spaces satisfies both the SEPP and DCP requirements.

Residential Visitor Parking

While the SEPP does not specify a visitor parking rate, the applicable DCP requires a minimum of 1 space per 4 dwellings, resulting in a requirement of 19 visitor car spaces for the proposed development. The proposal includes 10 visitor spaces within the basement.

Although this represents a numerical shortfall against the DCP standard, the provision is considered both reasonable and appropriate in the context of the site's location. The development is situated directly adjacent to St Ives Shopping Centre, which offers ample public parking that can effectively accommodate visitor demand during peak periods. Moreover, the site is likely to benefit from a high rate of linked trips—where visitors combine a stop at the development with other activities such as shopping or running errands—thereby reducing the need for dedicated, on-site parking. In light of these considerations, the proposed provision of 10 visitor parking spaces is deemed sufficient to meet the practical needs of the development.

4.2 Bicycle Parking and End of Trip Facility Requirement

The applicable bicycle parking rates (Table 4-3) are provided in Part 7B.2 of DCP.

Table 4-3 Bicycle Parking Rates

Development Type	Element	Parking Rates
Residential Flat	Resident	1 space per 1 dwelling
	Visitor	1 space per 10 dwellings

Application of the above DCP rates to the proposal indicates the following bicycle parking requirement(s) (Table 4-4).



Table 4-4 Required Bicycle Storage/Parking Spaces

Element	Unit/GFA	Requirement	
		Resident/Employee	Visitor
Residential Flat	74 units	74	8
Total		82 spaces	

It is proposed to accommodate residential bike spaces within storage cages, with 7 visitor bicycle spaces located in the basement, to comply with the DCP requirements.

4.3 Loading and Servicing Requirement & Arrangement

The largest service vehicle that will serve the site is a 6.7m long Council waste truck. A suitably sized loading bay will be provided on Basement 1 and the truck will access the site via Cowan Road.



5 Access and Circulation Design

5.1 Access

The proposed access driveway will be located at Cowan Road.

Details of the access design and geometry are discussed in Section 5.2.

5.2 Design Assessment and Internal Circulation

A detailed review of the car park has been undertaken to assess its conformance with the relevant AS2890 design criteria. The assessment outcome is tabulated below for ease of reference.

Table 5-1 Off-street Car Parking (AS2890.1:2004) Criteria

Features	Requirement	Provision	Compliance	Notes
Access Driveways				
Access Driveway Location	6m clear from intersection	Provided	Yes	
Access Width	(Category 2) 6.0m – 9.0m	6.1m	Yes	
Sight Triangle (Pedestrian)	2.5m long x 2.0m wide	Provided	Yes	
Sight Distance (50km/h)	Min 45m	Provided	Yes	
First 6m Ramp Grade	Max 5% (1:20) down Max 12.5% (1:8) up	1:20 @ 5.8m	No	See Note 1
Ramp / Driveway				
Ramp Grade (Private Carpark)	Up to 20m Max 25% (1:4)	1:5	Yes	
Transitions	Min 2.0m	Provided	Yes	
Grade Transitions	Max 12.5% (1:8)	1:8	Yes	
Roadways Width (Two-way)	Min 5.5m	5.5m	Yes	
Curved Ramp Lane Width (Two-way)	Two-way: Min 6.7m	7.4m	Yes	
Vertical Obstruction Clearance / Kerbs	Outside kerb: 500mm Inside kerb: 300mm	Outside kerb: 300mm Inside kerb: 300mm	Yes	
Headroom Clearance	Min 2.2m	2.3m	Yes	
Kerbs	Outside kerb: 500mm Inside kerb: 300mm	Outside kerb: 300mm Inside kerb: 300mm	Yes	



Parking Modules				
Car Space Dimension	User Class 1A 5.4m long x 2.4m wide	5.4m long x 2.4m wide	Yes	
Aisle Width	User Class 1A 5.8m (+ 300mm from wall)	Provided	Yes	
Door Clearance	300mm	Provided	Yes	
Blind Aisle	Min 1.0m	Provided	Yes	
Headroom Clearance	Min 2.2m	3.2m	Yes	
Gradient	Max 5% (1:20) parallel to direction of parking Max 6.25% (1:16) any other direction	Level	Yes	

Table 5-2 Bicycle Parking (AS2890.3:2015) Criteria

Features	Requirement	Provision	Compliance	Notes
Horizontal Bicycle Parking				
Space Dimension	1.8m long x 0.5m wide	Min 2.0m long x 1.0m wide	Yes	
Aisle	1.5m	>1.5m	Yes	
Gradient	Max 5% (1:20)	Level	Yes	
Height Clearance	Min 2.2m	>2.2m	Yes	

Table 5-3 Off-street Parking for People with Disabilities (AS2890.6:2022) Criteria

Features	Requirement	Provision	Compliance	Notes
Space Dimension	5.4m long x 2.4m wide	5.4m long x 2.4m wide	Yes	
Shared Zone + Bollard	5.4m long x 2.4m wide	5.4m long x 2.4m wide	Yes	
Height Clearance	Min 2.5m	3.2m	Yes	
Gradient	Max 2.5% (1:40)	Level	Yes	

Note 1:

The assessment recommends extending 1:20 to 6m long to comply with the AS2890.1 requirement during detailed design stage.

In summary, the assessment confirms that the design provisions in relation to the access, car parking circulation and arrangement in respect to the proposal generally comply with the AS2890 design criteria.



5.3 Loading and Servicing Circulation

The proposed refuse vehicle access and parking arrangements have been assessed against the DCP criteria. The assessment found the proposal generally complies with the following requirements by Council's small refuse vehicle (described herein as SRV):

- The loading bay is to be minimum 3.5m wide and 6.7m long,
- The headroom for residential refuse collection at the ground level is to be a minimum of 2.6m,
- The maximum grade of the driveway is to be a maximum of 1 in 5 (25%).

The refuse vehicle will share use with one of the visitor parking spaces.

5.4 Swept Path Analysis

All critical vehicle movements in the proposed car parking facility have been assessed using Autoturn. Details of the assessment outcome, which demonstrate a satisfactory design provision, are provided in **Attachment 4**.



6 Traffic Assessment

6.1 Existing Traffic Generation

The Guide to Transport Impact Assessment (2024) provides average weekday peak hour traffic generation rates for low-density residential dwellings in Sydney areas, as follows:

Sydney Area (Weekday)

- 0.68 vehicle trips per hour (vtpH) per unit during the AM peak hour
- 0.77 vehicle trips per hour (vtpH) per unit during the PM peak hour

Applying this rate to the existing 5 townhouses would result in a traffic generation outcome of 4 vtpH.

6.2 Development Traffic Generation

The Guide to Transport Impact Assessment (2024) provides regression formulae for high-density residential dwellings with low public transport accessibility in Sydney Metropolitan areas. The relevant formulae (car - based) are as follows:

Sub-Metropolitan Area

AM Peak $0.19P + 1.79$

PM Peak $0.20P$ (See Note 1)

where P = Number of off-street parking spaces

Note 1: GTIA does not provide any formulae for PM peak. Thus, the assessment adopts the Metropolitan PM formula.

Application of these trip rates to the proposed residential units would indicate a peak hour traffic generation outcome in Table 6-1.

Table 6-1 Traffic Generation During Peak Hour

Period	Total	In	Out
AM peak	32 vtpH	6 vtpH	26 vtpH
PM peak	30 vtpH	25 vtpH	5 vtpH

6.3 Development Trip Distribution

The expected overall net traffic generation outcome is tabulated in Table 6-2, as follows:

Table 6-2 Net Peak Hour Traffic Generation



Period	AM Peak (vtph)		PM Peak (vtph)	
	<u>In</u>	<u>Out</u>	<u>In</u>	<u>Out</u>
(Existing)	0	-4	-4	0
Residential	6	26	25	5
Net Traffic	6	22	21	5

The Australian Bureau of Statistics (ABS) 2021 Journey to Work Data provides insights into the local commuting patterns outlining the LGA where local residents work (Table 6-3).

Table 6-3 2021 Journey to Work Data

Residents' Place of Work (POW)	
<u>LGA</u>	<u>Proportion</u>
Ku-ring-gai	26.7%
Sydney	25.7%
Willoughby	8.2%
North Sydney	6.1%
Ryde	6.1%
Northern Beaches	5.0%
Hornsby	4.0%
No usual address (NSW)	2.9%
Parramatta	2.8%
Lane Cove	1.2%
The Hills Shire	1.1%

Accordingly, the proportion of each direction is aggregated and tabulated in Table 6-4.

Table 6-4 Proportion of Inbound and Outbound Traffic

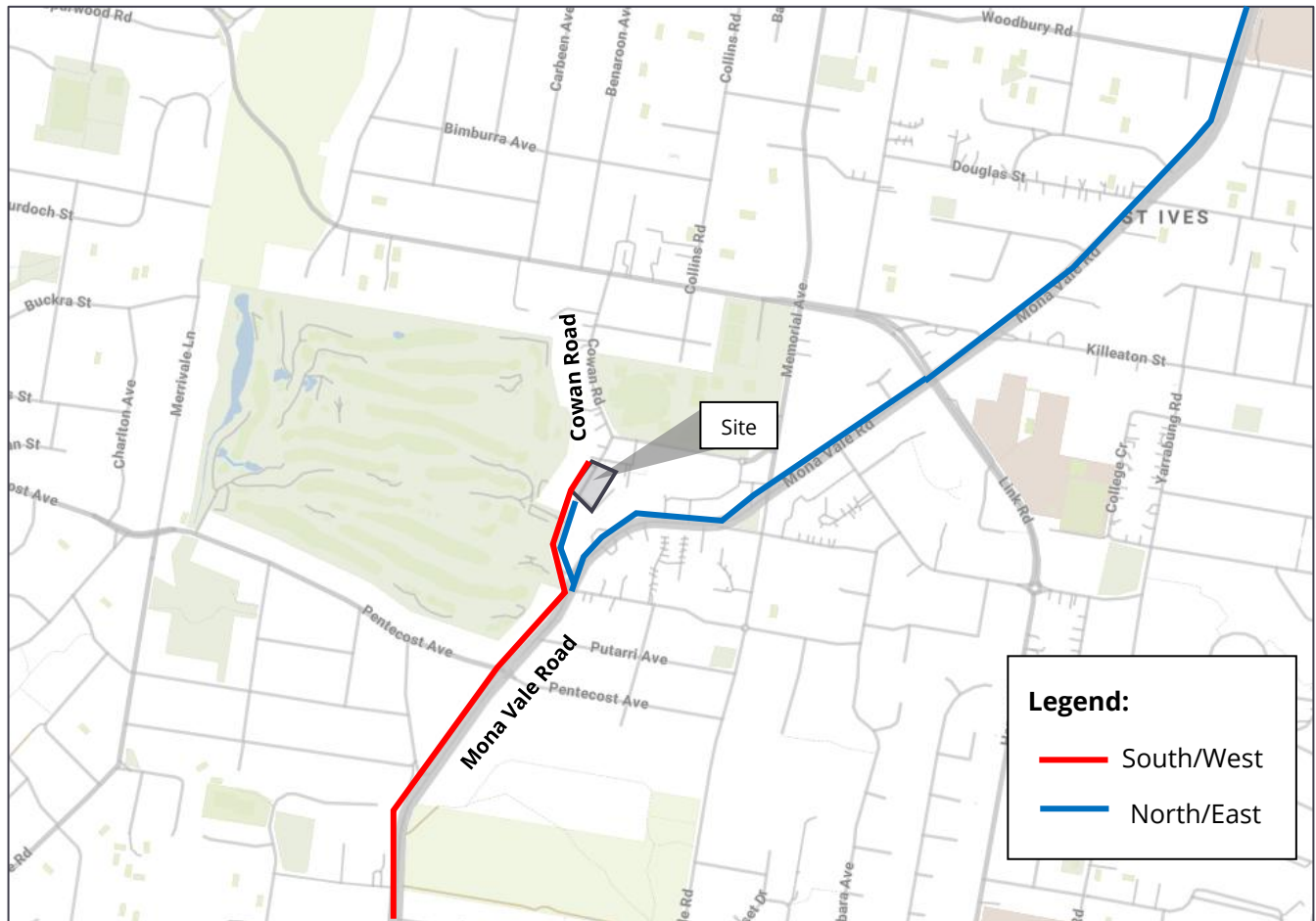
<u>Direction</u>	<u>Proportion</u>
	<u>Residential</u>
North/East	10%
South/West	90%

Source: Australian Bureau of Statistics



The nominal route choices from/to each direction are illustrated in Figure 6-1.

Figure 6-1 Approach and Depart Route Distribution



Source: Mecone (modified by Genesis Traffic)



On this basis, the development generated traffic movement in each direction are illustrated in Figure 6-2.

Figure 6-2 Inbound and Outbound Traffic during AM Peak

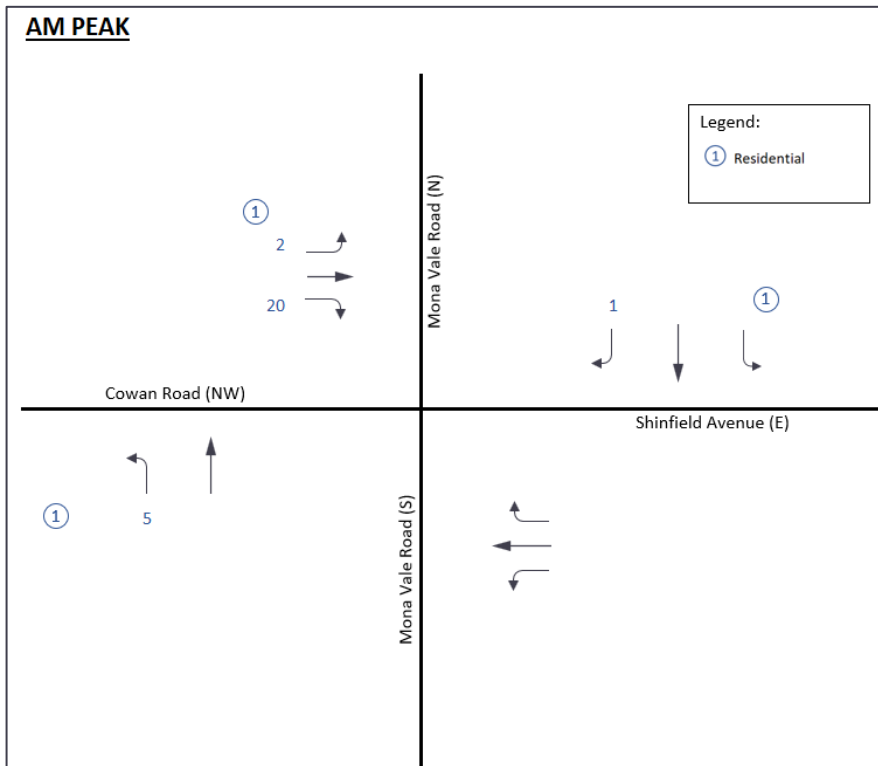
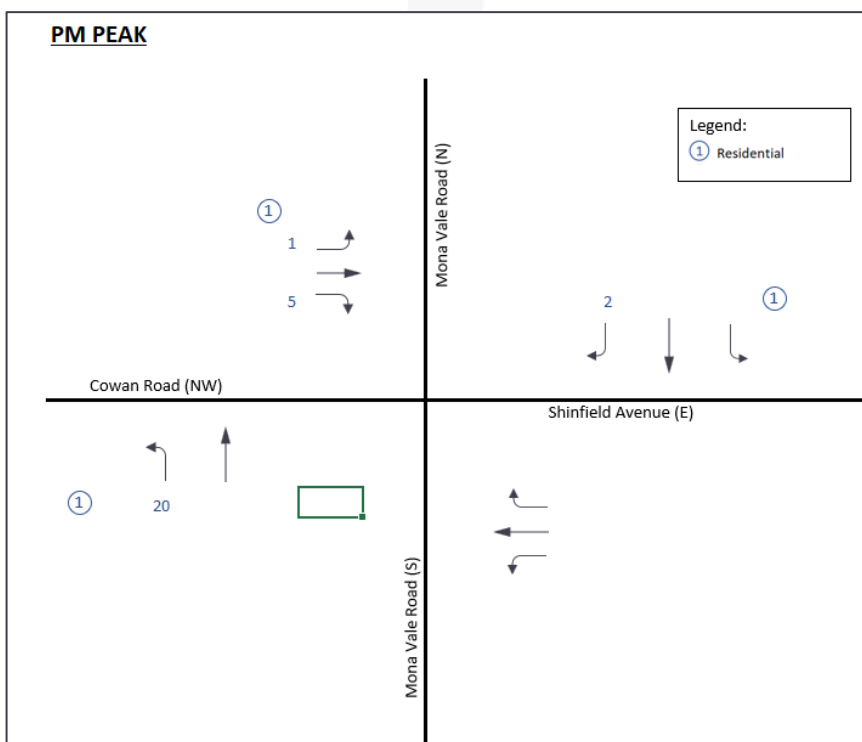


Figure 6-3 Inbound and Outbound Traffic during PM Peak





The projected development traffic is then added onto the background traffic and reanalysed using SIDRA. The assessment considers the existing state and post development state to provide an objective comparison in terms of traffic generation impact on the network. The assessed model outcome is summarised in Table 6-5.

Table 6-5 Existing and Post-Development SIDRA Assessment Outcome

Intersection	AM Peak			PM Peak		
	LOS	AVD	DOS	LOS	AVD	DOS
Pre-development						
Mona Vale Road, Shinfield Avenue and Cowan Road	B	16.0s	0.740	B	16.2s	0.823
Post Development						
Mona Vale Road, Shinfield Avenue and Cowan Road	B	17.0s	0.754	B	16.4s	0.831

The SIDRA output is reproduced in **Attachment 3**.

The assessment found the existing road network operate with ample spare capacity and the existing level of service will be maintained following the addition of the subject development.

On this basis, the assessment concludes that the development would not adversely impact the existing road network operation. Therefore, no infrastructure upgrades are required.

6.4 Cumulative Impact Assessment

There are no known recently approved major developments surrounding the site. However, this will be subject to further consultation with TfNSW or Council.



7 Preliminary Construction Traffic Management Plan

This Preliminary Construction Traffic Management Plan (CTMP) presents the proposed construction activities associated with the proposal. It is noted however that a detailed CTMP cannot be produced without the involvement of a builder and consideration of all final design selections. The Preliminary CTMP is intended to provide a framework within which a future CTMP can be prepared.

7.1 Scope of Works

The scope of this Preliminary CTMP includes the following:

- Provides details of construction programs detailing the anticipated construction duration, construction truck movement and number of workers
- Identify heavy vehicle routes to and from the site that have the minimal impact on the surrounding local road network
- Identify heavy vehicle access points to and from the site
- Identify any major construction activities of other developments in the surrounding area
- Identify temporary on-street parking for construction workers
- Assess potential impacts on existing traffic, pedestrian, and bicycle networks

7.2 Overview of Construction Works

7.2.1 Construction Program

Table 7-1 indicates a preliminary phasing outline of each construction stage, including estimated duration. These estimations may be subject to change following the appointment of a contractor.

Table 7-1 Works Program

Phase	Program	Estimated Period (Months)
1	Site Establishment	2
2	Demolition	2
3	Excavation / Earthworks	6
4	Construction / Concrete Pouring	10
5	Fitout	6

7.2.2 Construction Hours

The proposed work hours will accord with the consent details; however, it is expected that construction activities will be limited to the following period (Table 7-2):

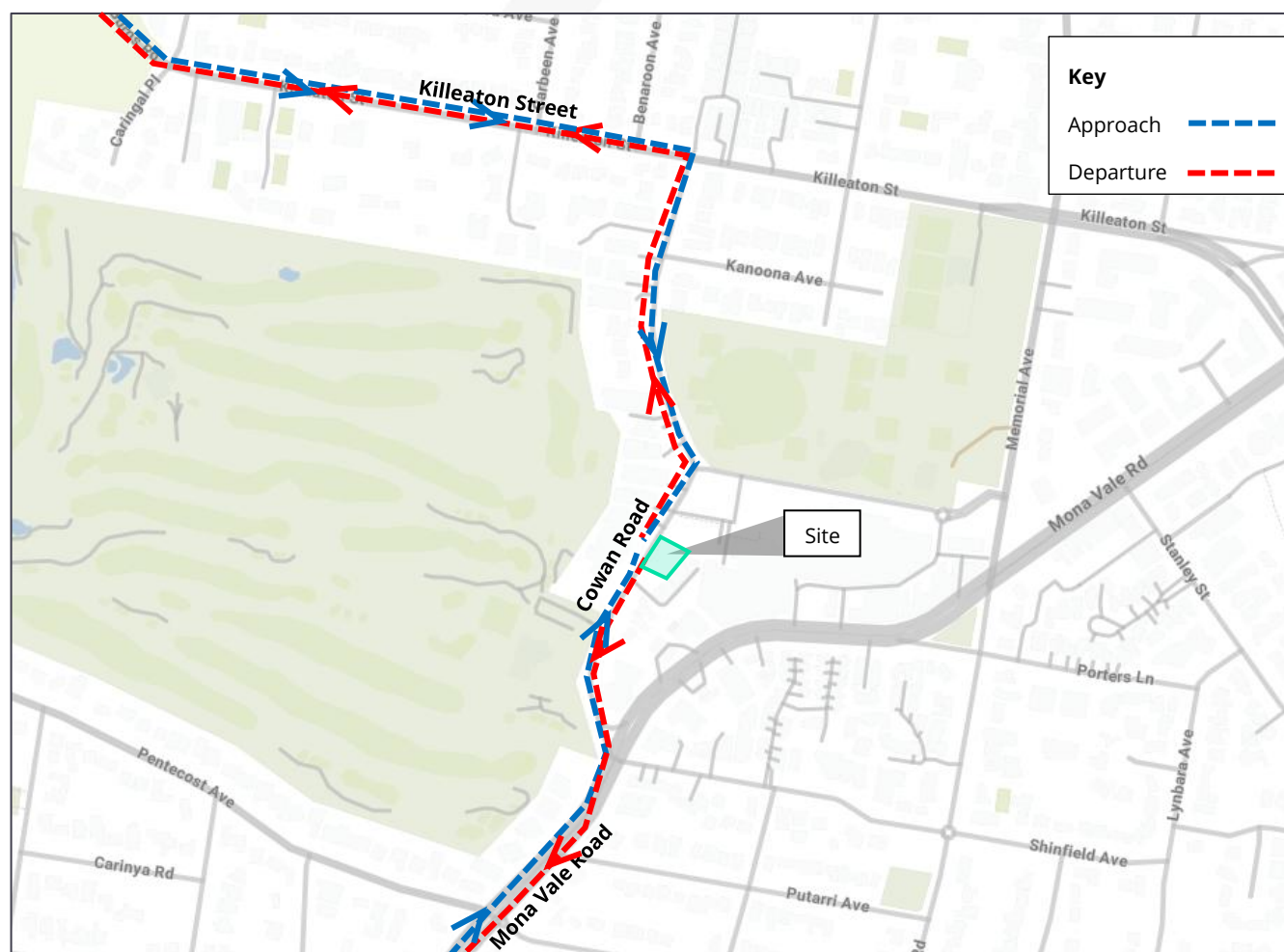
Table 7-2 Permitted Work Hours

Day(s)	Permitted Work Hours
Mondays to Friday	7.00am to 6.00pm
Saturday	8.00am to 1.00pm
Sunday and Public Holidays	No Work

7.2.3 Construction Vehicle Route

Truck movements associated with the construction processes will approach and depart the site using the existing vehicular access via Cowan Road, as illustrated in Figure 7-1. No queuing of heavy vehicles is to occur on the surrounding streets unless previously approved by the Council or TfNSW.

Figure 7-1 Truck Approach and Departure Route



Source: Mecone (modified by Genesis Traffic)



During the course of construction, all trucks will approach and depart the site in a forward direction. In the event where construction vehicles are unable to manoeuvre from/to the site, a Works Zone will be established along the site frontage. Vehicles will approach, stand within the Works Zone and depart forwards. All necessary oversized mobile crane/truck access will be subject to a separate permit issued by the Council before the planned event. If reversing is necessary, vehicle movements should be undertaken under the supervision of accredited traffic controllers.

The manner in which typical construction truck-and-dog will approach and depart from the site is shown in the construction vehicle swept path diagrams in **Attachment 5**.

7.2.4 Emergency Vehicle Access

All site access points will be gated and manned by traffic personnel during work hours. Emergency vehicles will be able to access the site via all construction access points. Contact details of the site-nominated supervisor must be displayed prominently adjacent to each site gate.

7.2.5 Materials Handling

All materials must be loaded/off-loaded and stored within the site boundary at all times. During the excavation of the site, the excavated materials will be loaded/unloaded on site. No materials are to be stored outside the site boundary at any time.

7.2.6 Traffic Guidance Scheme

The Traffic Guidance Scheme (TGS) will be developed when details of the construction scheme are available. TGSs shall be developed in accordance with the TfNSW Traffic Control at Work Sites Technical Manual. The control of traffic at work sites must be undertaken with reference to Workcover requirements and the contractor's Constructions Workplace Health and Safety Manuals.

7.2.7 Other Construction Activities

There is no major construction activity within 250m from the site (Figure 7-2).

Figure 7-2 Surrounding Construction Activities



Source: Metromap (modified by Genesis Traffic)

7.2.8 Construction Worker Parking

There will be no on-site car parking available for workers during the earlier construction stage. Once the internal driveway and basement car park are built (and when construction activity is most intensive), workers can park in the basement.

Given the proximity of the site to high-frequency public transport services, all workers will be encouraged at all times to utilise the highly accessible public transport system which exists in the vicinity of the site or to carpool wherever possible.

A tool drop-off and storage facility will be provided within the site. This would allow tradespeople to drop-off and store their tools and machinery, allowing them to use public transport to travel to/ from the site daily.

Workers will also be informed of appropriate tool/equipment drop-off and storage arrangements made within site sheds and amenities provided on-site. Bus and train schedules will be provided to all workers during site induction to demonstrate alternative modes of transport available.



7.2.9 Site Induction

All workers and visitors employed on the site by the appointed contractor (including sub-contractors) will be required to undergo a formal 'site induction' process and all inductions will be performed specifically to each trade according to SafeWork OH & S requirements.

The induction will include details of approved access routes to and from the construction site for site staff and delivery vehicles, parking arrangements, as well as standard environmental, WHS, driver protocols and emergency procedures. The agreed work hours must be included as part of this induction.

7.3 Construction Impact

7.3.1 Public Notification & Communication

The nominated contractor shall prepare notification letters to advise the following neighbouring properties of the proposed construction works and timing thereof. A minimum notice period of 14 days shall be applicable for all external communications.

The nominated contractor shall also engage with the surrounding building teams at the time of construction to establish the extent of truck delivery movements with an aim to minimise overlapping movements on the same routes.

The following addresses will be notified by letterbox drop prior to the start of works, providing information relating to the project schedule:

Adjacent to the site	3 and 11-21 Cowan Road
Opposite the site	16 and 18 Cowan Road
At the rear of the site	Shop 1A 166 and 164A Mona Vale Road

7.3.2 Road Serviceability

The nominated contractor will be responsible for ensuring that the road pavement, kerb, gutter and footpath along each road frontage shall remain in clean and serviceable states during the course of the construction at no cost to Council.

7.3.3 Impact on Public Transport Services

The nominated heavy vehicle haulage routes will largely be limited to State Roads and Regional Roads which are designed to accommodate heavy vehicle movements. As such, there will be no adverse impact on existing public transport services.

While the nominated truck routes will overlap with bus routes during the construction period, it is not expected that estimated truck movements would have no material effect on the existing bus services.



7.3.4 Impact on Emergency Vehicle Access

A site personnel will be on-site regularly with contact details prominently displayed and visible from the road frontage. Access to the site and neighbouring sites by emergency vehicles would not be affected by the construction activities. There will be no adverse impact on emergency vehicle access to the site or other neighbouring properties as a result of the proposed activities.

7.3.5 Impact on Road Network

The nominated heavy vehicle haulage routes will largely be limited to State Roads and Regional Roads which are designed to accommodate heavy vehicle movements to minimise the impact on immediate local road network. As such, it is not expected to have an adverse impact onto the surrounding road users including cyclists.

7.3.6 Impact on Pedestrians

To ensure the pedestrian's safety, temporary fencings will be established along the construction site perimeter to cordon off the site from pedestrian movements along the site frontages and neighbouring properties where applicable. All construction-related traffic movements along the frontages will occur under the supervision of on-site trained personnel, with trucks escorted between the site access and associated frontage to ensure pedestrian safety.



8 TfNSW Consultation

In satisfaction of the SEARs requirement, a package of the proposed development's information is issued to the TfNSW via its official development portal Development.Sydney@transport.nsw.gov.au on 26th August 2025.

Details of the consultation package and correspondence are provided in **Attachment 6**.





9 Conclusion

The traffic and parking assessment undertaken for the Proposed Residential Development at 5-9 Cowan Road, St Ives has concluded that:

- the proposal is not expected to result in an adverse traffic impact in the local road network
- the proposed parking provision will comply with the SEPP (Housing) 2021 criteria and will adequately serve the development.
- the proposed residential parking provision complies with the DCP requirements, while the visitor parking falls short of the minimum DCP rate. Notwithstanding, it is considered sufficient to meet the anticipated parking demand.
- the proposed access, internal circulation and parking arrangements will be appropriate to AS design criteria.
- The first 6m of the driveway for 5% should be amended to provide a maximum gradient of 5% in accordance with the AS2890.1 criteria during detailed design stage.
- the proposed loading and serving arrangement are consistent with the Council's DCP specification.
- the proposed construction program and site set up arrangement will be subject to builder's advice; however, it has been demonstrated that a truck- and-dog vehicle can approach and depart the site within the local road network without undue difficulty.

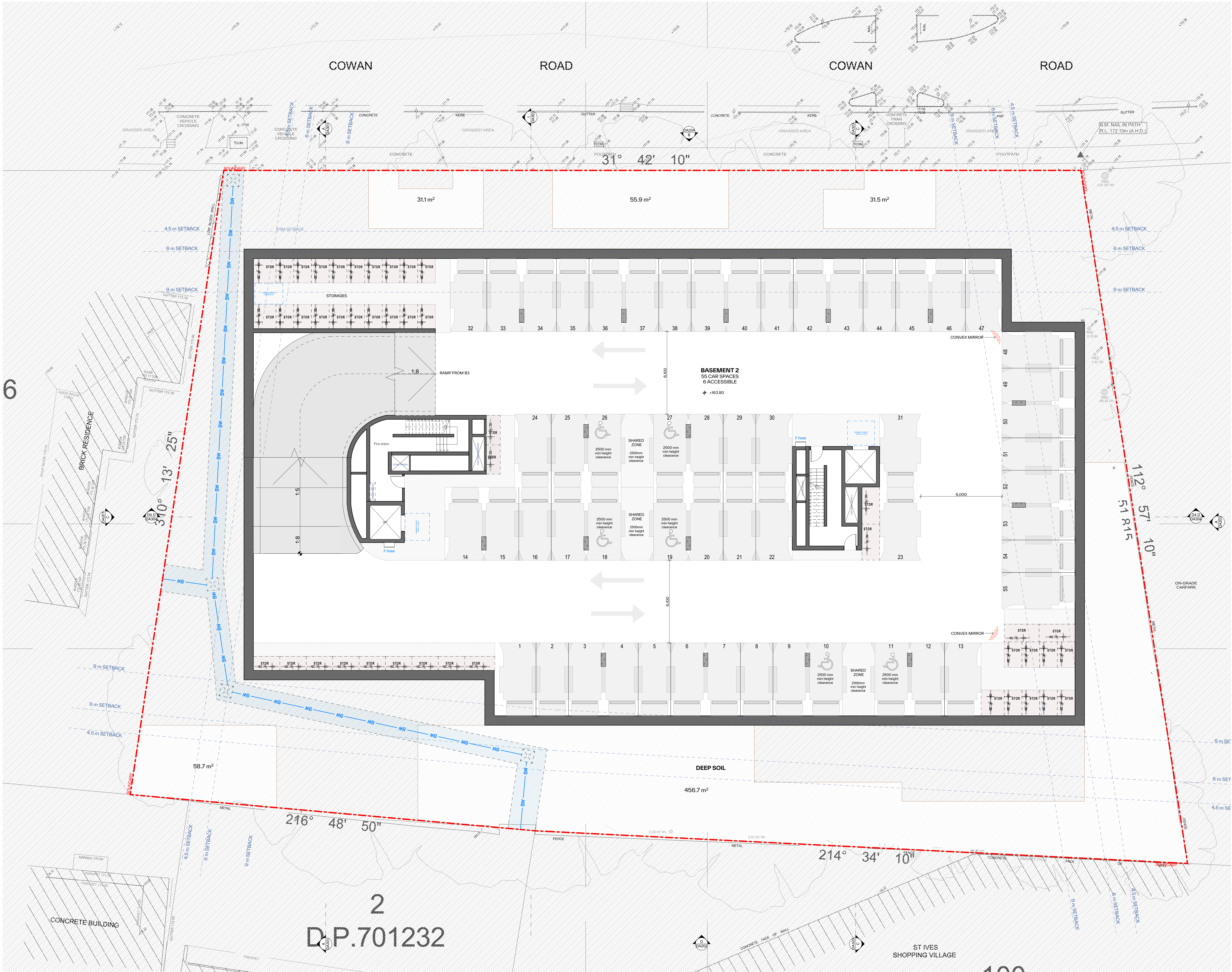


Attachment 1

Architectural Plan



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SCALE: 1:100 @ A0	DRAWING NO: DA100	ISSUE: P5
PROJECT NO: 2518		



GENERAL NOTES:

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LEGEND:

AW AWNING
AH ACCESS HATCH
AC AIR-CONDITIONER UNITS
FH FIRE HYDRANT
FHR FIRE HOSE REEL
FS FIRE STAIRS
GC GARBAGE CHUTE
HW HIGHLIGHT WINDOW
MV MECHANICAL RISER TO FUTURE DETAIL
MB MAILBOX TO FUTURE DETAIL
R 250L RECYCLING BIN
SK SKYLIGHT
ST STORAGE
HWU HOT WATER UNITS

MATERIALS LEGEND:

AFS ALUMINIUM FRAMED GLAZING
LV ALUMINIUM ELLIPTICAL FIXED LOUVERS
AW AWNING (TO FUTURE DETAIL)
CONC CONCRETE
FS FACE BRICK
GB FRAMELESS TOUCHED-GLASS BALUSTRADE (TO BCA/AUS STANDARDS)
MB METAL BALUSTRADE
MC METAL CLADDING
FCE METAL FENCING (TO FUTURE SELECTION)
PC COMPOSITE PANEL CLADDING
PSK PRIVACY SCREEN (TO FUTURE SELECTION)
PT PAINT FINISH TYPE X
RD ROLLER DOOR
RP RIVER PILES
RW RENDERED FINISH/SELECTED PAINT FINISH
TC THINER CLADDING
VB EXTERNAL VENEER BLINDS

TREES LEGEND

EXISTING TREES TO BE RETAINED
EXISTING TREES TO BE REMOVED

Issue	Date	Description
P1	04/07/2025	For Review
P2	04/08/2025	For Review
P3	05/08/2025	For Review
P4	20/08/2025	Draft Development Application
P5	25/08/2025	Draft Development Application

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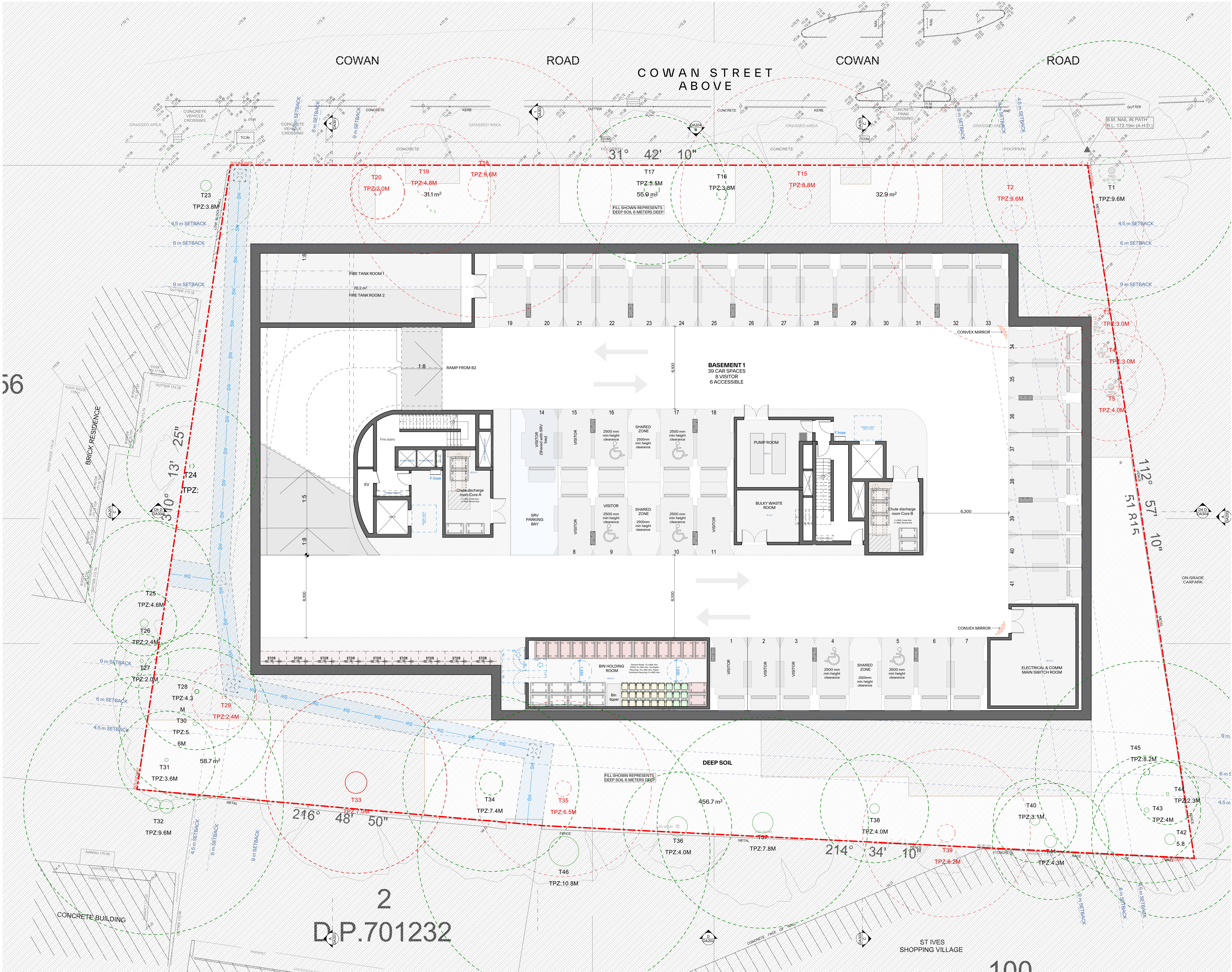
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PROJECT:
RESIDENTIAL FLAT BUILDING
5-9 COWAN ROAD ST IVES NSW 2075

DRAWING TITLE:
Basement 2 plan

DRAWING BY: CAD Technician XX	CHECKED BY: Checked by XX	
SCALE: 1:100 @ A1	DRAWING NO: DA101	ISSUE: P5
PROJECT NO: 2518		



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LEGEND:

AW AWNING
AH ACCESS HATCH
AC ACCUMULATOR UNITS
FH FIRE HYDRANT
FHR FIRE HOSE REEL
FS FIRE STAIRS
GC GARBAGE CHUTE
HW HIGHLIGHT WINDOW
MV MECHANICAL RISER TO FUTURE DETAIL
MB MAILBOX TO FUTURE DETAIL
R 250L RECYCLING BIN
SK SKYLIGHT
ST STORAGE
HWM HOT WATER UNITS

MATERIALS LEGEND:

AFS ALUMINUM FRAMED GLAZING
LV ALUMINUM ELIPTICAL FIXED LOUVERS
AW AWNING (TO FUTURE DETAIL)
CONC CONCRETE
FS FACE BRICK
GB FRAMELESS TOUCHED GLASS BALUSTRADE (TO BOCA/US STANDARDS)
MB METAL BALUSTRADE
MC METAL CLADDING
FCE METAL FENCING (TO FUTURE SELECTION)
PC COMPOSITE PANEL CLADDING
PSK PRIVACY SCREEN (TO FUTURE SELECTION)
PF PAINT FINISH TYPE X
RD ROLLER DOOR
RFR ROOF FIBREGLASS
RW RENDERED FINISH/SELECTED PAINT FINISH
T3 THINER CLADDING
VB EXTERNAL VENTILATION BLINDS

TREES LEGEND

EXISTING TREES TO BE RETAINED
EXISTING TREES TO BE REMOVED

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P1	06/07/2025	For Review
P2	04/08/2025	For Review
P3	15/08/2025	For Review
P4	20/08/2025	Draft Development Application
P5	25/08/2025	Draft Development Application

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PROSPER



PROJECT:
RESIDENTIAL FLAT BUILDING
5-9 COWAN ROAD ST IVES NSW 2075

DRAWING TITLE:

Basement 1 plan

DRAWING BY: CAD Technician XX	CHECKED BY: Checked by XX	
SCALE: 1:100 @ A0	DRAWING NO: DA102	ISSUE: P5
PROJECT NO: 2518		

COWAN STREET

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FHR FIRE HOSE REEL
FS FIRE STAIRS
OC GARBAGE CHUTE
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MV MECHANICAL RISER TO FUTURE DETAIL
MB MAILBOX TO FUTURE DETAIL
R 240L RECYCLING BIN
ST SKYLIGHT
ST STORAGE
HMO HOT WATER UNITS

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PFK PAINT FINISH TYPE XX
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RP RIVER PILES
RW RENDERED FINISH/ SELECTED PAINT FINISH
TR TRIM CLADDING
VB EXTERNAL VENEER BLINDS

TREES LEGEND

EXISTING TREES TO BE RETAINED
EXISTING TREES TO BE REMOVED

Date	Description
15/08/2025	For Review
15/08/2025	For Review
15/08/2025	For Review
20/08/2025	Draft Development Application
25/08/2025	Draft Development Application

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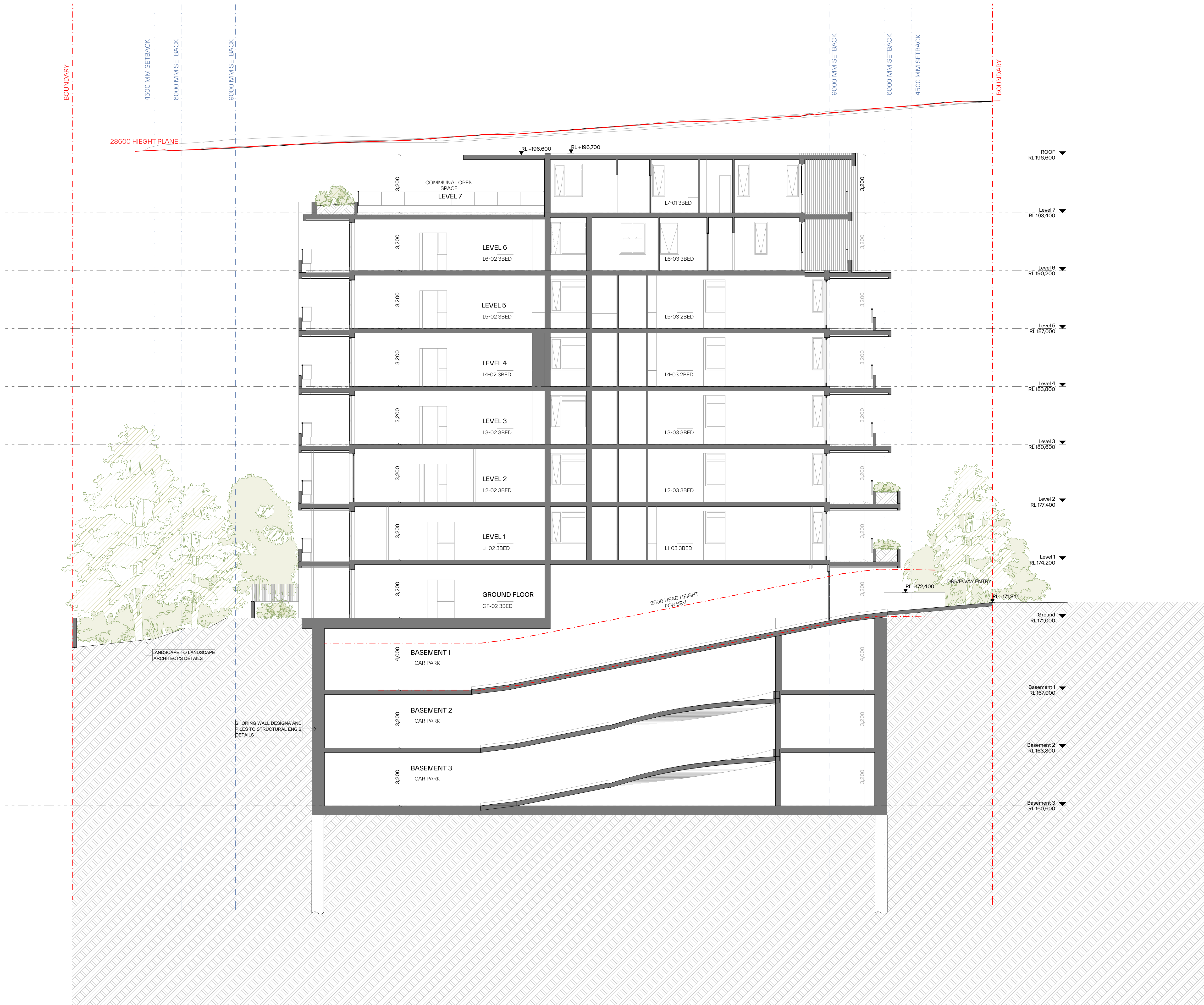
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PROJECT:
RESIDENTIAL FLAT BUILDING
5-9 COWAN ROAD ST IVES NSW 2075

DRAWING TITLE:
Ground floor plan

DRAWING BY: CAD Technician XX	CHECKED BY: Checked by XX	ISSUE:
SCALE: 1:100 @ A1	DRAWING NO: DA103	P5
PROJECT NO: 2518		



1 SECTION A
1:100

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R 240L RECYCLING BIN
SK SKYLIGHT
ST STORAGE
HWU HOT WATER UNITS

MATERIALS LEGEND:

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LV ALUMINUM ELIPTICAL FIXED LOUVERS
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T3 THINER CLADDING
VB EXTERNAL VENEER BLINDS

Issue	Date	Description
P1	05/07/2025	For Review
P2	05/08/2025	For Review
P3	05/08/2025	For Review
P4	25/08/2025	Draft Development Application
P5	25/08/2025	Draft Development Application

Scale Bar 1: 100 @ A1

CLIENT:

PROSPER



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E: info@pbdarchitects.com.au
W: www.pbdarchitects.com.au
Level 7, 52 Abdon Street,
Sunny Hills NSW 2070
ABN 36 147 035 550
Notified Architect
Paul Buljanovic NSW 7708

PROJECT:
RESIDENTIAL FLAT BUILDING
5-9 COWAN ROAD ST IVES NSW 2075

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Section Sheet 1

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SCALE: 1:100 @ A0	DRAWING NO: DA301	ISSUE: P5
PROJECT NO: 2518		



Attachment 2

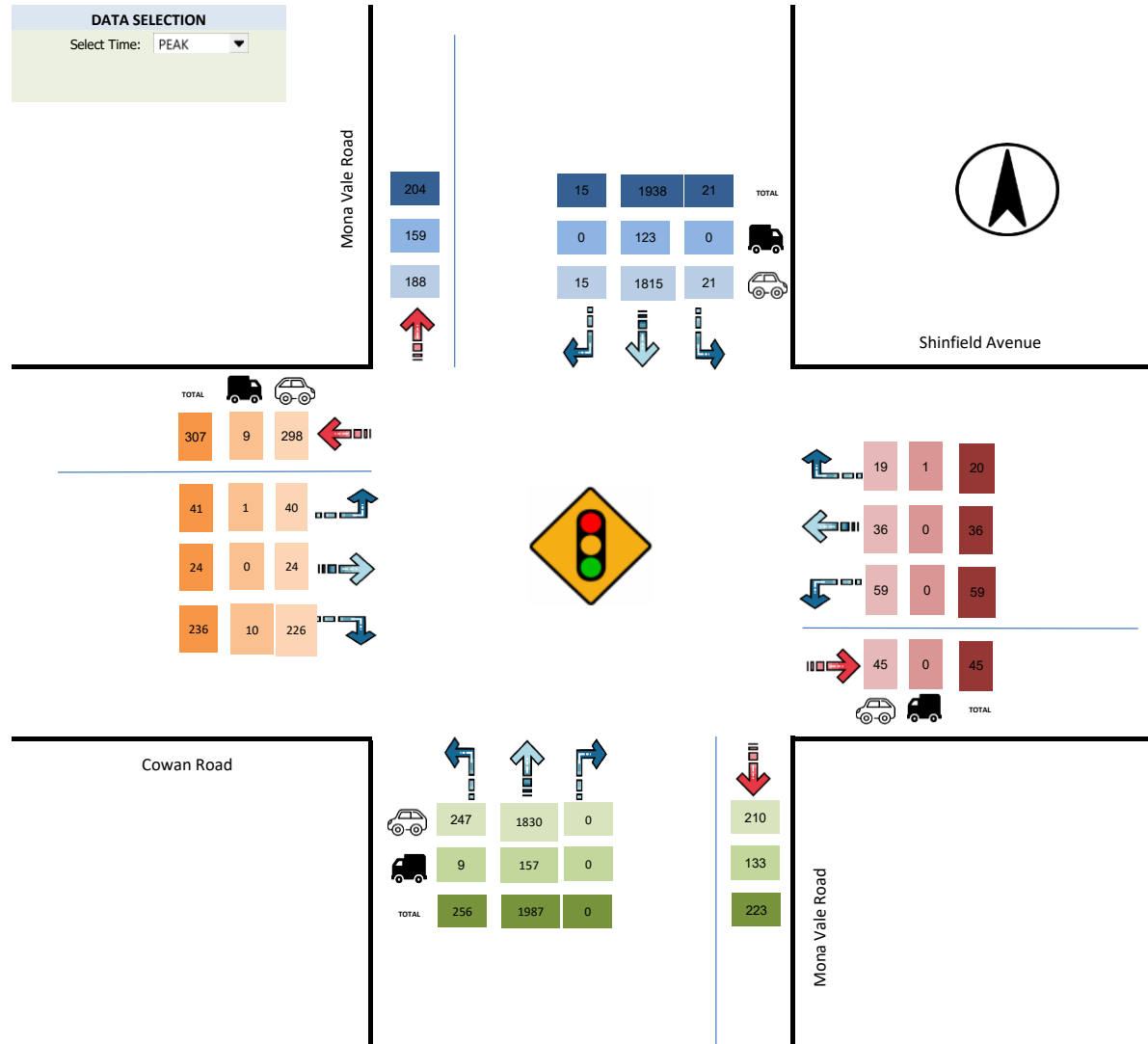
Traffic Survey

Location
Mona Vale Road
Shinfield Avenue
Mona Vale Road
Cowan Road
Suburb
ST IVES

Duration
7:00 - 9:00
16:00 - 18:00
Date
Thursday, 26 June 2025
Weather
Dry

DATA SELECTION
Select Time:

TIME RANGE		
PEAK	-	AM
PEAK		
7:30	-	8:30



Traffic Information Specialist

ABN: 42 613 389 923
Email info@tistraffic.com.au

Location **Mona Vale Road**
 Shinfield Avenue
 Mona Vale Road
 Cowan Road
 Suburb **ST IVES**

Duration **7:00 - 9:00**
 -
 16:00 - 18:00

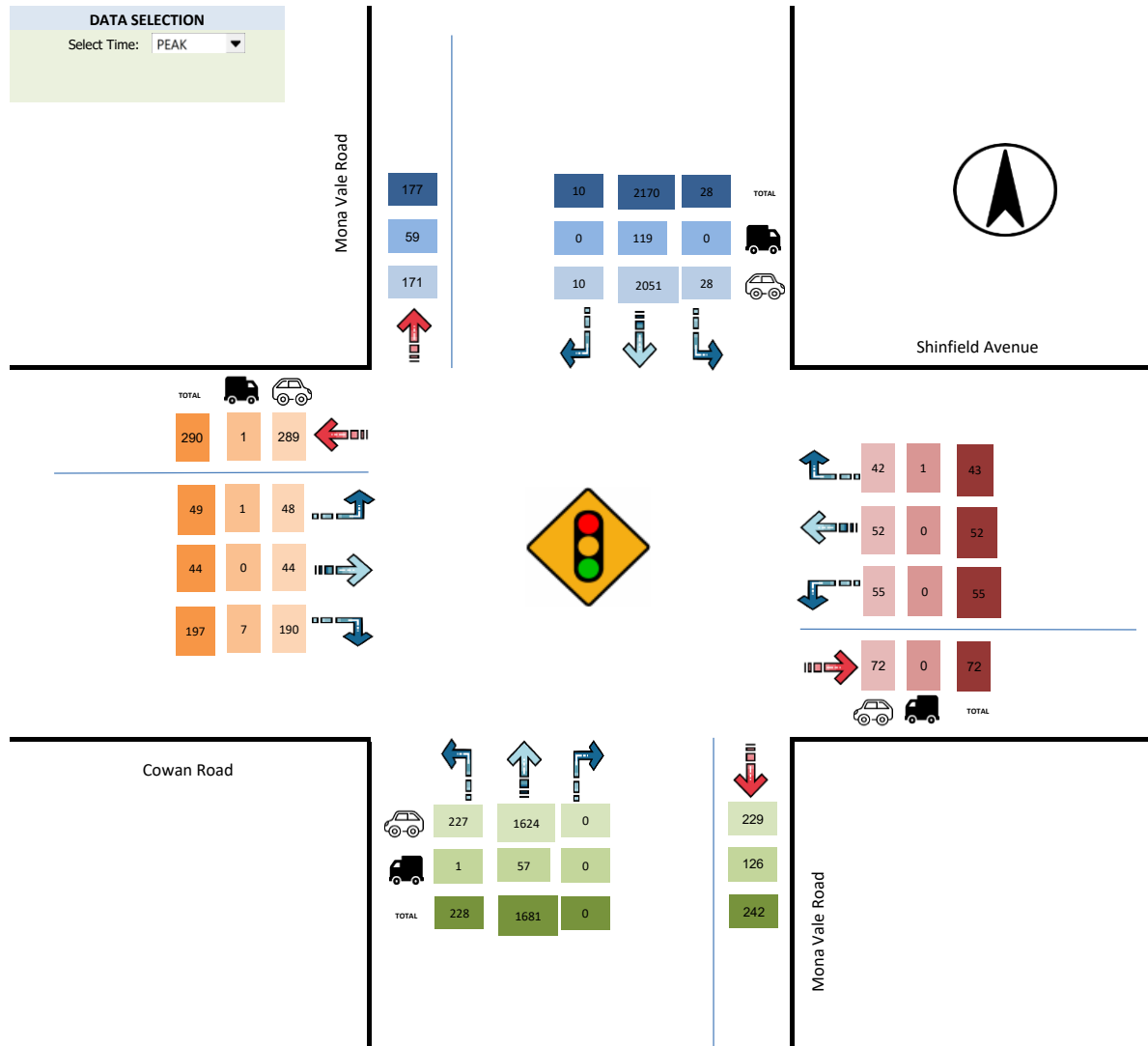
Date **Thursday, 26 June 2025**

Weather **Dry**

DATA SELECTION

Select Time: **PEAK** ▼

TIME RANGE		
PEAK	-	PM
PEAK		
16:00	-	17:00



Traffic Information Specialist

ABN: 42 613 389 923
 Email info@tistraffic.com.au



Attachment 3

SIDRA Result

Site: [101 (2)] Mona Vale Road | Cowan Road | Shinfield Avenue (Existing Development -AM Peak)

AM Peak 7:30am-8:30am
Site Category: Base Year
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 140.0 seconds (Site User-Given Cycle Time)
Site Scenario: 1 | Local Volumes

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

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Shinfield Avenue (E)												

P2 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
North: Mona Vale Road (N)											
P3 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
NorthWest: Cowan Road (NW)											
P7 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
All Pedestrians	150	158	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92

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

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Shinfield Avenue (E)												

P2 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
North: Mona Vale Road (N)											
P3 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
NorthWest: Cowan Road (NW)											
P7 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
All Pedestrians	150	158	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92

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

Site: [101 (3)] Mona Vale Road | Cowan Road | Shinfield Avenue (Post Development -AM Peak)

AM Peak 7:30am-8:30am
Site Category: Base Year
Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 140.0 seconds (Site User-Given Cycle Time)
Site Scenario: 1 | Local Volumes

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

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Shinfield Avenue (E)												

P2 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
North: Mona Vale Road (N)											
P3 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
NorthWest: Cowan Road (NW)											
P7 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
All Pedestrians	150	158	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

Site: [101 (4)] Mona Vale Road | Cowan Road | Shinfield Avenue (Post Development -PM Peak)

AM Peak 7:30am-8:30am
 Site Category: Base Year
 Signals - EQUISAT (Fixed-Time/SCATS) Isolated Cycle Time = 140.0 seconds (Site User-Given Cycle Time)
Site Scenario: 1 | Local Volumes

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

Pedestrian Movement Performance												
Mov ID	Crossing	Input Vol.	Dem. Flow	Aver. Delay	Level of Service	AVERAGE BACK OF QUEUE		Prop. Qued	Eff. Stop Rate	Travel Time	Travel Dist.	Aver. Speed
		ped/h	ped/h	sec		[Ped ped	Dist] m			sec	m	m/sec
East: Shinfield Avenue (E)												

P2 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
North: Mona Vale Road (N)											
P3 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
NorthWest: Cowan Road (NW)											
P7 Full	50	53	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92
All Pedestrians	150	158	64.3	LOS F	0.2	0.2	0.96	0.96	218.1	200.0	0.92

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)

Pedestrian movement LOS values are based on average delay per pedestrian movement.

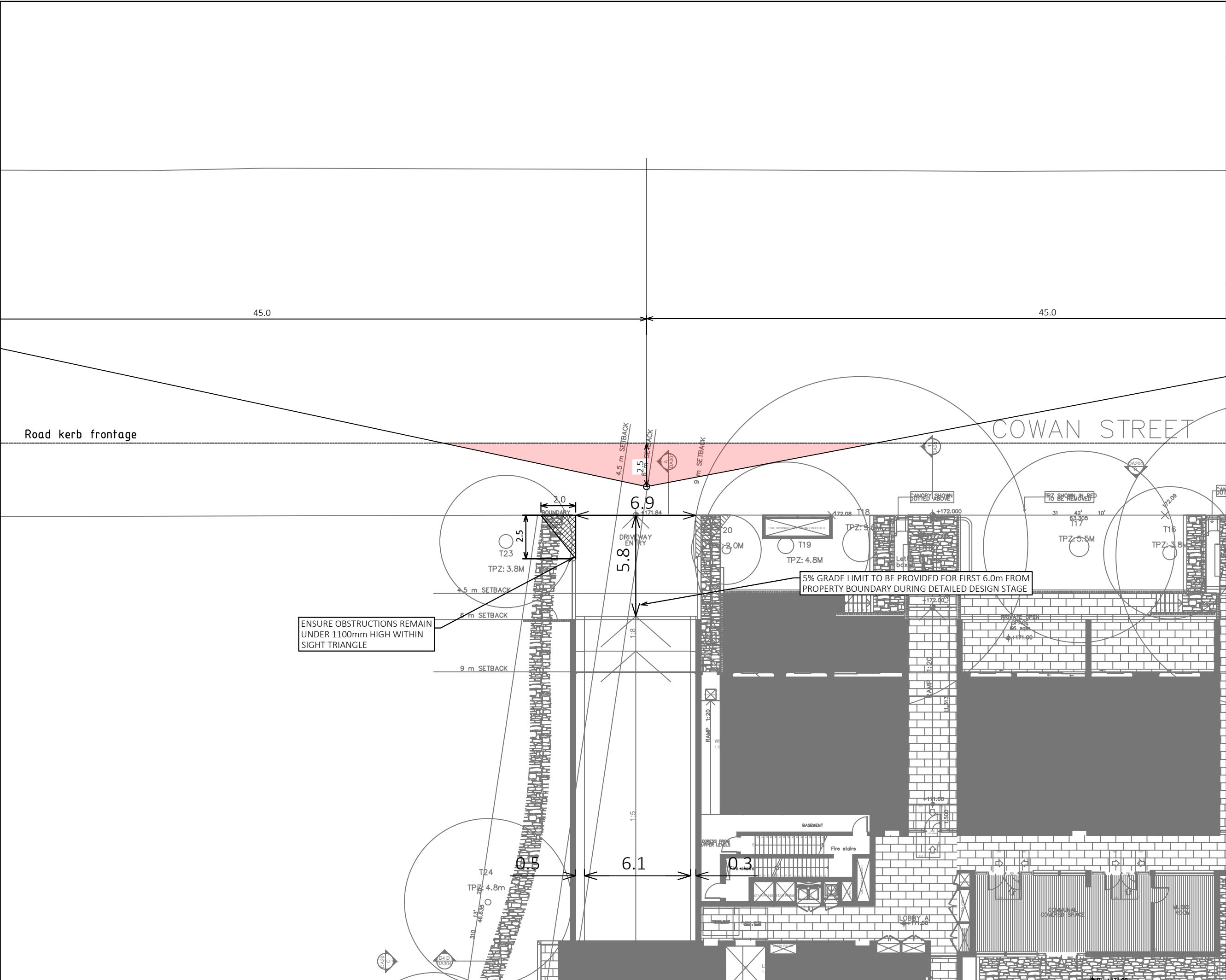
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

SIDRA INTERSECTION 10.0 | Copyright © 2000-2025 Akcelik and Associates Pty Ltd | sidrasolutions.com
 Organisation: GENESIS TRAFFIC | Licence: NETWORK / 1PC | Processed: Wednesday, 23 July 2025 10:32:34 AM
 Project: G:\2025\25011 - 5-9 Cowan Road, St Ives\Model\25011-V1.1-SIDRA\5-9 Cowan Road, St Ives.sipx



Attachment 4

Turning Path Assessment



GenesisTraffic.

PROJECT

5-9 COWAN ROAD, ST IVES

TITLE

COMPLIANCE CHECK

GROUND FLOOR

SCALE

A3

1:200

0

2.0

4.0

DESIGNED BY

L.NG / B.BUI

REVIEWED BY

B.LO

DRAWING REFERENCE (SOURCE):

G:\2025\25011 - 5-9 COWAN ROAD, ST IVES\DRAWINGS\DA\20250825

ISSUE DATE

26 August 2025

SHEET NO.

01 OF 09

DRAWING REF NO.

25011-V1.7-SP

LEGENDS/NOTES

-

MAXIMUM CHANGE IN GRADE FOR CARS SHOULD BE 1:8 OVER 2m

-

MINIMUM HEIGHT CLEARANCE OF 2.2m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE CIRCULATION AISLES AND PARKING SPACES

-

MINIMUM HEIGHT CLEARANCE OF 2.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE ACCESSIBLE PARKING SPACES

-

MINIMUM HEIGHT CLEARANCE OF 4.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE SERVICE VEHICLE ACCESS ROADWAYS AND LOADING DOCKS

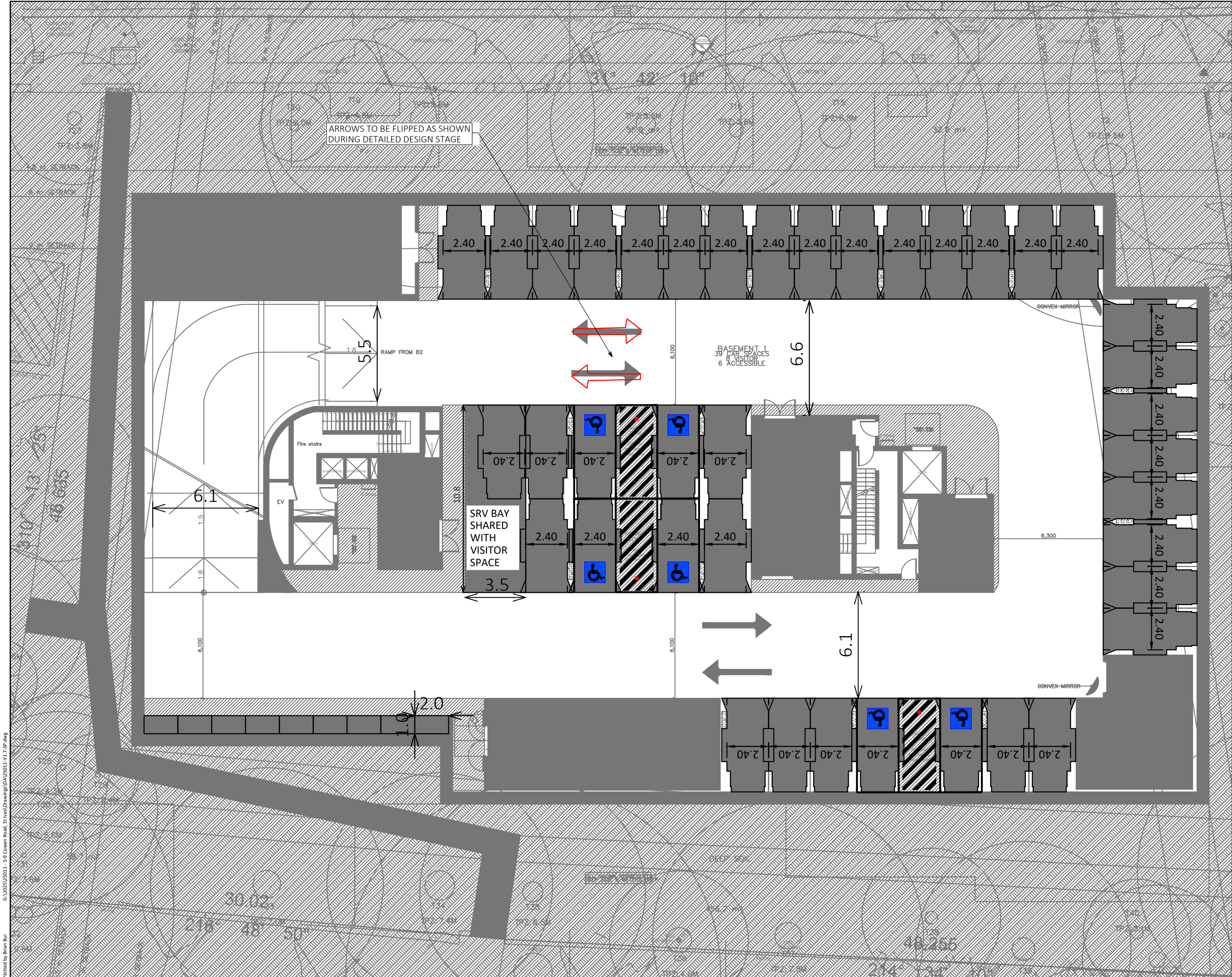
-

HEIGHT CLEARANCE ABOVE A SAG CHANGE IN GRADES SHOULD BE MEASURED IN ACCORDANCE WITH FIGURE 5.3 AS2890.1:2004

-

ANY VERTICAL DROPS EXCEEDING 0.6m IN HEIGHT SHOULD BE PROTECTED BY STRUCTURAL WALL/BARRIER

G:\2025\25011 - 5-9 Cowan Road, St Ives\Drawings\DA\25011-V1.7-SP.dwg
Plotted by Brian Bui



PROJECT

5-9 COWAN ROAD, ST IVES

TITLE

COMPLIANCE CHECK

BASEMENT 1

SCALE

A3

1:200

DESIGNED BY

L.NG / B.BUI

REVIEWED BY

B.LO

DRAWING REFERENCE (SOURCE):

G:\2025\25011 - 5-9 COWAN ROAD, ST IVES\DRAWINGS\DA\20250825

ISSUE DATE

26 August 2025

SHEET NO.

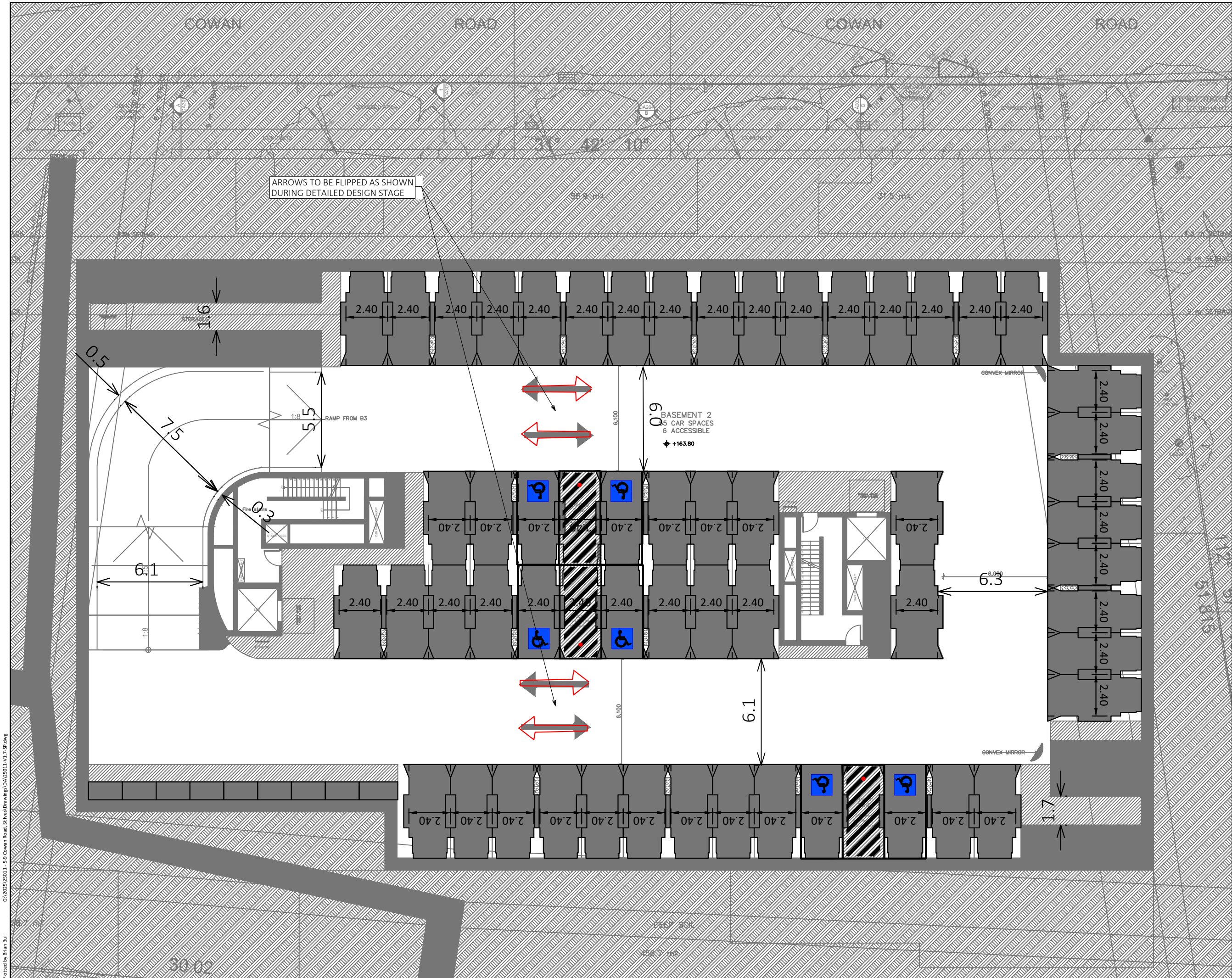
02 OF 09

DRAWING REF NO.

25011-V1.7-SP

LEGENDS/NOTES

- MAXIMUM CHANGE IN GRADE FOR CARS SHOULD BE 1:8 OVER 2m
- MINIMUM HEIGHT CLEARANCE OF 2.2m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE CIRCULATION AISLES AND PARKING SPACES
- MINIMUM HEIGHT CLEARANCE OF 2.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE ACCESSIBLE PARKING SPACES
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- HEIGHT CLEARANCE ABOVE A SAG CHANGE IN GRADES SHOULD BE MEASURED IN ACCORDANCE WITH FIGURE 5.3 AS2890.1:2004
- ANY VERTICAL DROPS EXCEEDING 0.6m IN HEIGHT SHOULD BE PROTECTED BY STRUCTURAL WALL/BARRIER



GenesisTraffic

PROJECT

5-9 COWAN ROAD, ST IVES

TITLE

COMPLIANCE CHECK

BASEMENT 2

SCALE

A3

1:200

0

2.0

4.0

DESIGNED BY

L.NG / B.BUI

REVIEWED BY

B.LO

DRAWING REFERENCE (SOURCE):

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ISSUE DATE

26 August 2025

SHEET NO.

03 OF 09

DRAWING REF NO.

25011-V1.7-SP

LEGENDS/NOTES

-

MAXIMUM CHANGE IN GRADE FOR CARS SHOULD BE 1:8 OVER 2m

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MINIMUM HEIGHT CLEARANCE OF 2.2m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE CIRCULATION AISLES AND PARKING SPACES

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MINIMUM HEIGHT CLEARANCE OF 2.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE ACCESSIBLE PARKING SPACES

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MINIMUM HEIGHT CLEARANCE OF 4.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE SERVICE VEHICLE ACCESS ROADWAYS AND LOADING DOCKS

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HEIGHT CLEARANCE ABOVE A SAG CHANGE IN GRADES SHOULD BE MEASURED IN ACCORDANCE WITH FIGURE 5.3 AS2890.1:2004

-

ANY VERTICAL DROPS EXCEEDING 0.6m IN HEIGHT SHOULD BE PROTECTED BY STRUCTURAL WALL/BARRIER

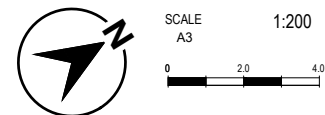
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Plotted by Brian Bui

PROJECT
5-9 COWAN ROAD, ST IVES

TITLE
COMPLIANCE CHECK

BASEMENT 3



DESIGNED BY
L.NG / B.BUI

REVIEWED BY
B.LO

DRAWING REFERENCE (SOURCE):
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ST IVES\DRAWINGS\DA\20250825

ISSUE DATE 26 August 2025
SHEET NO. 04 OF 09
DRAWING REF NO. 25011-V1.7-SP

- LEGENDS/NOTES
- MAXIMUM CHANGE IN GRADE FOR CARS SHOULD BE 1:8 OVER 2m
 - MINIMUM HEIGHT CLEARANCE OF 2.2m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE CIRCULATION AISLES AND PARKING SPACES
 - MINIMUM HEIGHT CLEARANCE OF 2.5m (TO SERVICES AND STRUCTURE) SHOULD BE PROVIDED ABOVE ACCESSIBLE PARKING SPACES
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 - HEIGHT CLEARANCE ABOVE A SAG CHANGE IN GRADES SHOULD BE MEASURED IN ACCORDANCE WITH FIGURE 5.3 AS2890.1:2004
 - ANY VERTICAL DROPS EXCEEDING 0.6m IN HEIGHT SHOULD BE PROTECTED BY STRUCTURAL WALL/BARRIER

ARROWS TO BE FLIPPED AS SHOWN
DURING DETAILED DESIGN STAGE

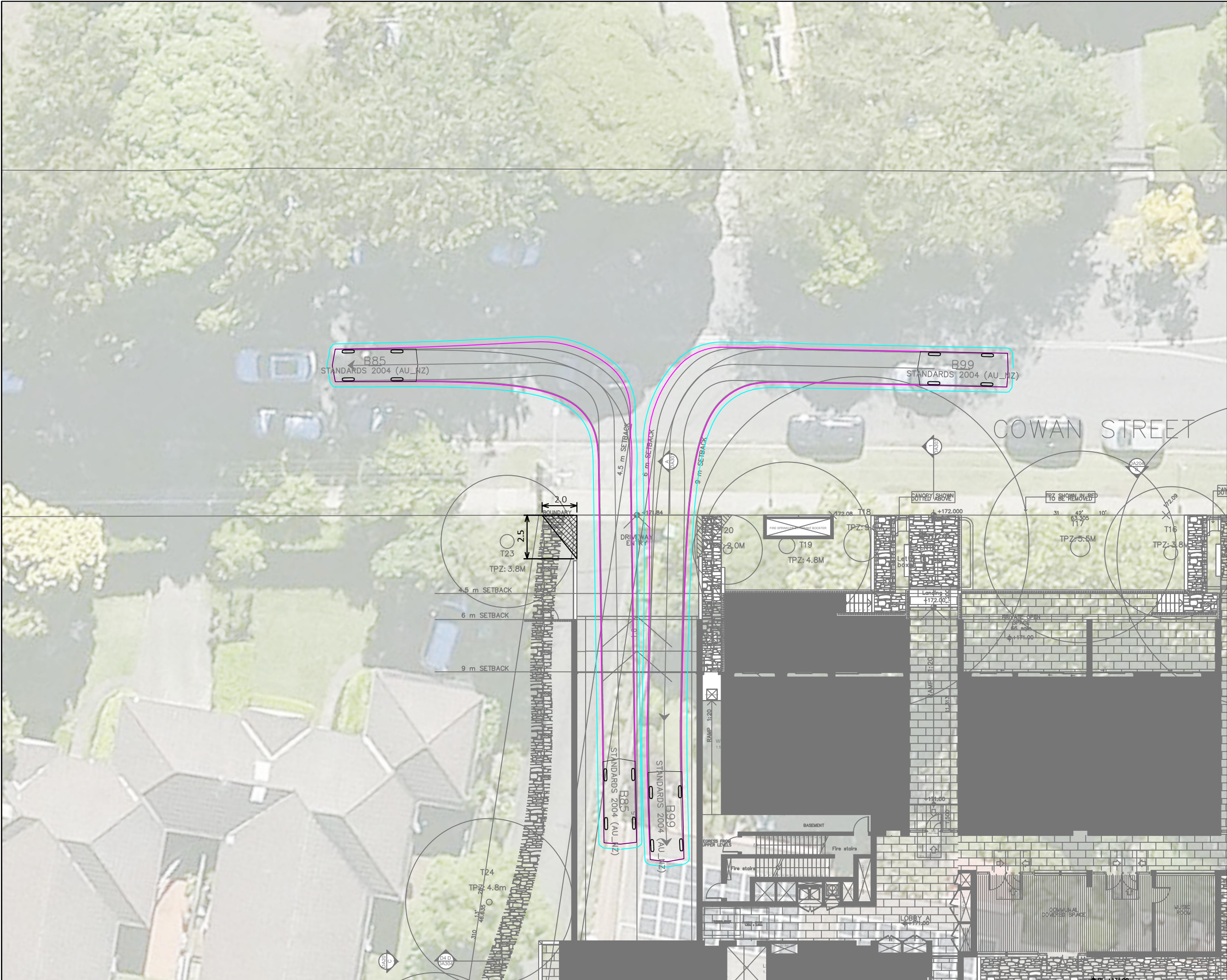
BASEMENT 3
56 CAR SPACES
3 ACCESSIBLE
+160.60

CONVEX-MIRROR

CONVEX-MIRROR

SERVICE ROOM

POTABLE WATER ROOM



GenesisTraffic.

PROJECT
5-9 COWAN ROAD, ST IVES

TITLE
SWEPT PATH ASSESSMENT

B85 AND B99 PASSING

GROUND FLOOR

SCALE
A3
1:200
0 2.0 4.0

DESIGNED BY
L.NG / B.BUI

REVIEWED BY
B.LO

DRAWING REFERENCE (SOURCE):
G:\2025\25011 - 5-9 COWAN ROAD, ST IVES\DRAWINGS\DA\20250825

ISSUE DATE
26 August 2025

SHEET NO.
05 OF 09

DRAWING REF NO.
25011-V1.7-SP

LEGENDS/NOTES

SWEPT PATH KEY:

—

VEHICLE CENTRE LINE

—

VEHICLE TYRE PATH

—

VEHICLE BODY PATH

—

300mm CLEARANCE FROM VEHICLE BODY

4.91

0.92 2.80

B85

Width : 1.87

Track : 1.77

Lock to Lock Time : 6.0

Steering Angle : 34.1

5.20

0.95 3.05

B99

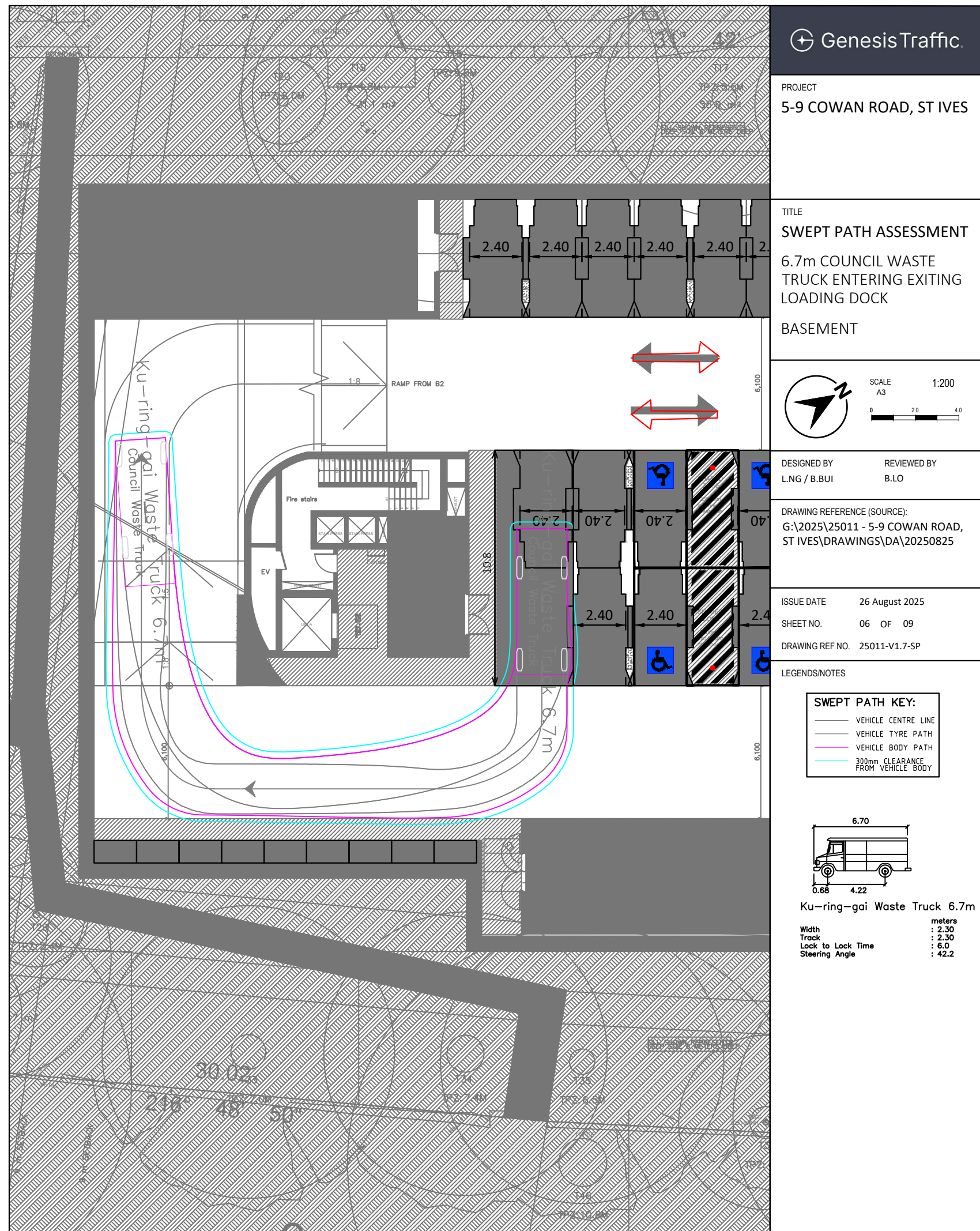
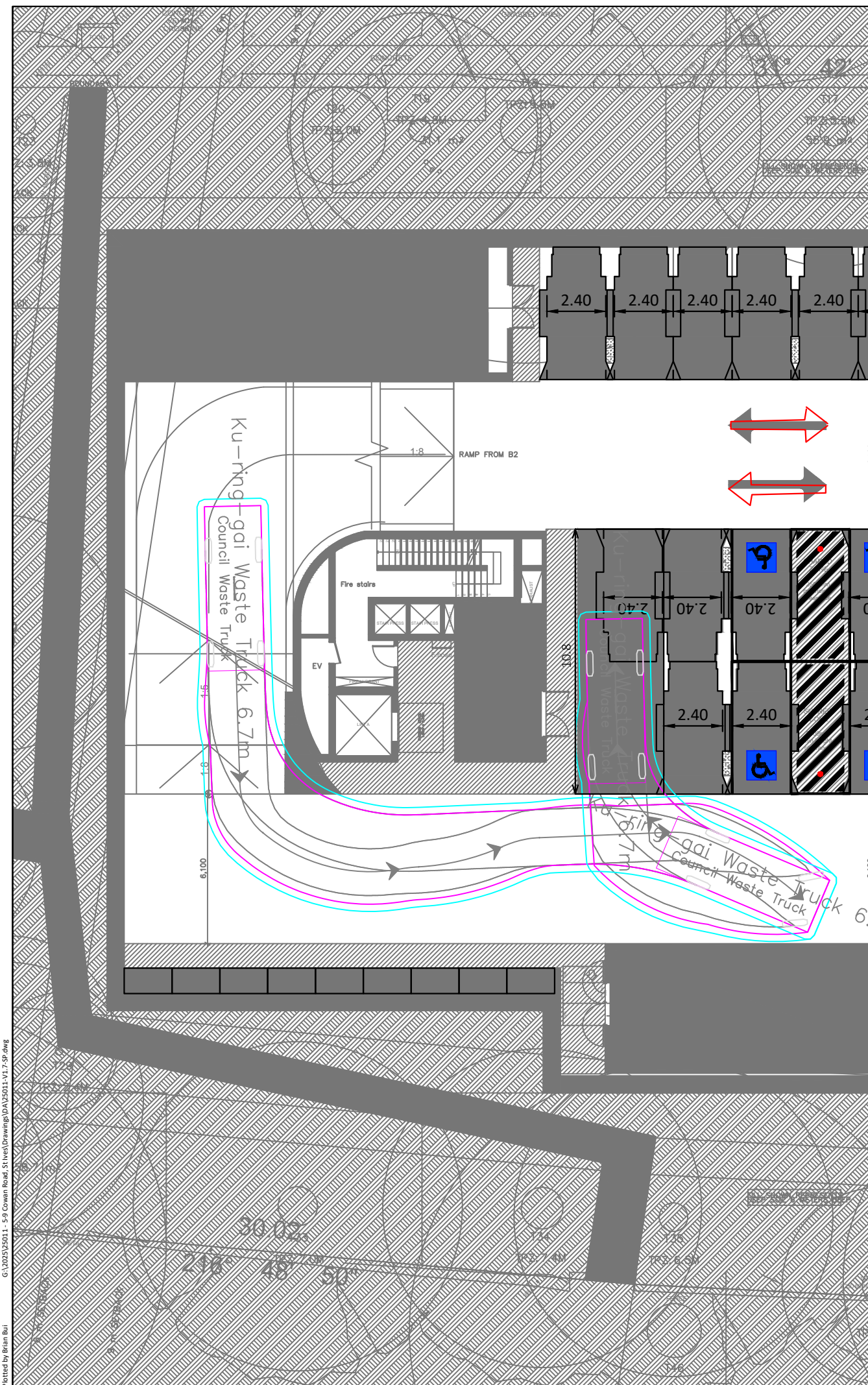
Width : 1.94

Track : 1.84

Lock to Lock Time : 6.0

Steering Angle : 33.9

G:\2025\25011 - 5-9 Cowan Road, St Ives\Drawings\DA\25011-V1.7-SP.dwg
Plotted by Brian Bui

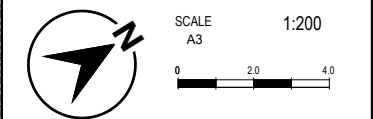


PROJECT
5-9 COWAN ROAD, ST IVES

TITLE
SWEPT PATH ASSESSMENT

B85 AND B99 PASSING

BASEMENT 1



DESIGNED BY
L.NG / B.BUI

REVIEWED BY
B.LO

DRAWING REFERENCE (SOURCE):
G:\2025\25011 - 5-9 COWAN ROAD,
ST IVES\DRAWINGS\DA\20250825

ISSUE DATE 26 August 2025

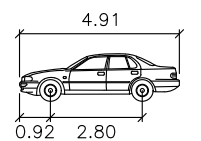
SHEET NO. 07 OF 09

DRAWING REF NO. 25011-V1.7-SP

LEGENDS/NOTES

SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



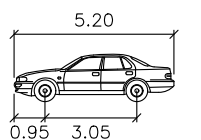
B85

Width : 1.87 meters

Track : 1.77

Lock to Lock Time : 6.0

Steering Angle : 34.1



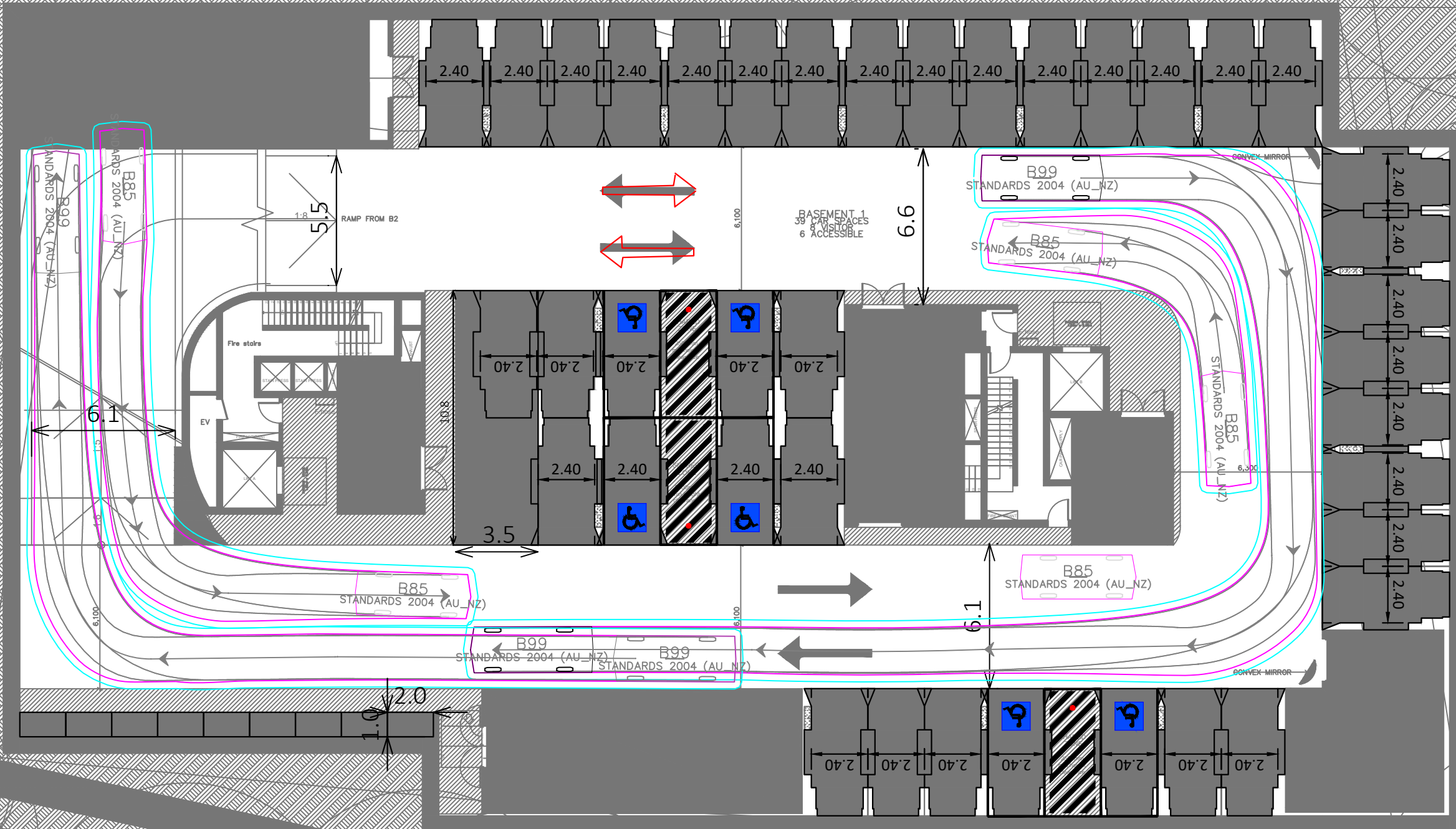
B99

Width : 1.94 meters

Track : 1.84

Lock to Lock Time : 6.0

Steering Angle : 33.9

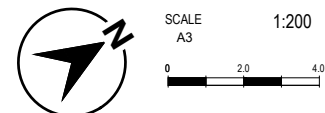


PROJECT
5-9 COWAN ROAD, ST IVES

TITLE
SWEPT PATH ASSESSMENT

B85 AND B99 PASSING

BASEMENT 2



DESIGNED BY
L.NG / B.BUI

REVIEWED BY
B.LO

DRAWING REFERENCE (SOURCE):
G:\2025\25011 - 5-9 COWAN ROAD, ST IVES\DRAWINGS\DA\20250825

ISSUE DATE 26 August 2025

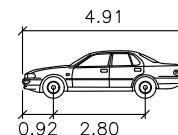
SHEET NO. 08 OF 09

DRAWING REF NO. 25011-V1.7-SP

LEGENDS/NOTES

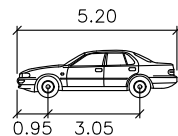
SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



B85

Width : 1.87 meters
Track : 1.77
Lock to Lock Time : 6.0
Steering Angle : 34.1



B99

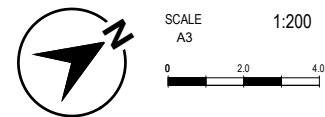
Width : 1.94 meters
Track : 1.84
Lock to Lock Time : 6.0
Steering Angle : 33.9

PROJECT
5-9 COWAN ROAD, ST IVES

TITLE
SWEPT PATH ASSESSMENT

B85 AND B99 PASSING

BASEMENT 3



DESIGNED BY
L.NG / B.BUI

REVIEWED BY
B.LO

DRAWING REFERENCE (SOURCE):
G:\2025\25011 - 5-9 COWAN ROAD,
ST IVES\DRAWINGS\DA\20250825

ISSUE DATE 26 August 2025

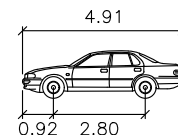
SHEET NO. 09 OF 09

DRAWING REF NO. 25011-V1.7-SP

LEGENDS/NOTES

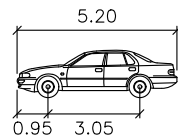
SWEPT PATH KEY:

- VEHICLE CENTRE LINE
- VEHICLE TYRE PATH
- VEHICLE BODY PATH
- 300mm CLEARANCE FROM VEHICLE BODY



B85

Width : 1.87 meters
Track : 1.77
Lock to Lock Time : 6.0
Steering Angle : 34.1



B99

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



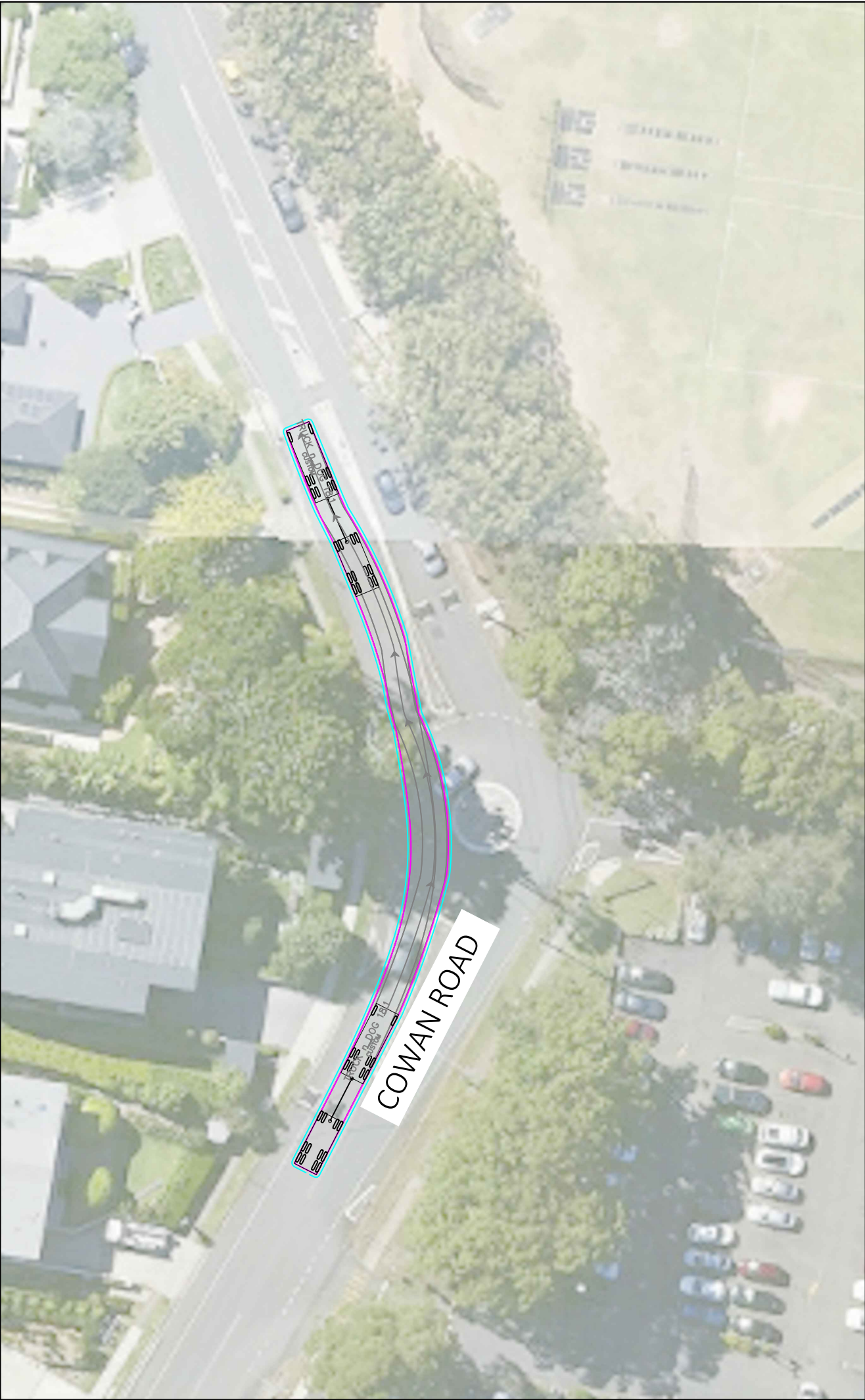
Attachment 5

Construction

Vehicle

Turning

Assessment



GenesisTraffic.

PROJECT
5-9 COWAN ROAD, ST IVES

TITLE
SWEPT PATH ASSESSMENT
TRUCK DEPART FROM SITE

N

SCALE
A3
1:500
0 5.0 10.0

DESIGNED BY
A.XIA

REVIEWED BY
B.LO

DRAWING REFERENCE (SOURCE):

ISSUE DATE
23 July 2025

SHEET NO.
01 OF 01

DRAWING REF NO.
25011-V1.1-CTMP-SP

LEGENDS/NOTES

SWEPT PATH KEY:

—

VEHICLE CENTRE LINE

—

VEHICLE TYRE PATH

—

VEHICLE BODY PATH

—

300mm CLEARANCE FROM VEHICLE BODY

7.83

9.40

1.30

0.74

5.45

0.72

5.00

6.50

Truck n Dog 20m

First Unit Width : 2.50

Trailer Width : 2.50

First Unit Truck : 2.50

Trailer Track : 2.50

Lock to Lock Time : 6.0

Steering Angle : 34.0

Articulating Angle : 70.0

G:\2025\25011 - 5-9 Cowan Road, St Ives\Drawings\DA\25011-V1.1-CTMP-SP.dwg
Plotted by Avery Xia



Attachment 6

TfNSW Consultation

Documents/Correspondence

Lamone Ng

From: Lamone Ng
Sent: Tuesday, 26 August 2025 5:53 PM
To: Development Sydney
Subject: Proposed Residential Development at 5-9 Cowan Road, St Ives

Dear colleague,

I am writing to address the subject matter above, which pertains to a proposed residential development at 5-9 Cowan Road, St Ives, comprising:

Component	Details
Residential	A total of 74 apartments , comprising 12 x affordable units ○ 2 x two-bedroom units ○ 10 x three-bedroom units 62 x non-affordable units ○ 14 x two-bedroom units ○ 48 x three-bedroom units
Parking	Residential Car Parking: 142 x residential spaces 8 x visitor spaces (including 1 loading bay) Total: 150 x spaces
Access	Vehicular access to basement car park via Cowan Road

This communication is part of the consultation process required by the SSDA SEARs.

As part of the submission, Genesis Traffic has prepared a Traffic Impact Assessment (TIA) for this proposal, available in the link below.

 [25011 - 5-9 Cowan Road, St Ives - SSDA TIA - Issue 2 \(Final\) - 26082025.pdf](#)

TfNSW's feedback is highly appreciated as part of the engagement process. Should you wish to speak with us, please don't hesitate to contact us at 7255 8198. Alternatively, I await your advice via email.

Thank you.

Kind Regards,

Lamone Ng
Senior Consultant
T 02 7255 8198
E lamone@genesistraffic.com.au



Better Developments with
Genesis Traffic