



Kingswood Apartments and Hotel Traffic Impact Assessment

Prepared for:
Iris Capital

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The Transport Planning Partnership

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Kingswood Apartments and Hotel Traffic Impact Assessment

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V02	22/11/21	Ashwini Uthishtran	Kelly Yoon	Ken Hollyoak	

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APPENDICES

- A. ARCHITECTURAL PLANS
- B. SWEEP PATH DIAGRAMS

1 Introduction

1.1 Overview

A development application (DA) is to be lodged with Penrith City Council for two buildings located at:

- Northern Site: 180 Great Western Highway (GWH), Kingswood – 79 residential units with ground floor hotel/ pub
- Southern Site: 26 Rogers Street, Kingswood – 54 residential units with a ground-floor bottle shop.

The two buildings will be constructed separately, with the Rogers Street building (Southern Site) constructed first, followed by the GWH building (Northern Site).

The Transport Planning Partnership Pty Ltd (TPPP) has prepared this Traffic Impact Assessment (TIA) report to accompany the Development Application.

1.2 Report Structure

The report assesses the traffic and parking implications of the proposed development and is set out as follows:

- Chapter 2 discusses the existing conditions including a description of the subject site
- Chapter 3 provides a brief description of the proposed development
- Chapter 4 assesses the proposed on-site parking provision and internal layout
- Chapter 5 examines the traffic generation and its impact
- Chapter 6 presents the conclusions of the assessment.

2 Existing Site Conditions

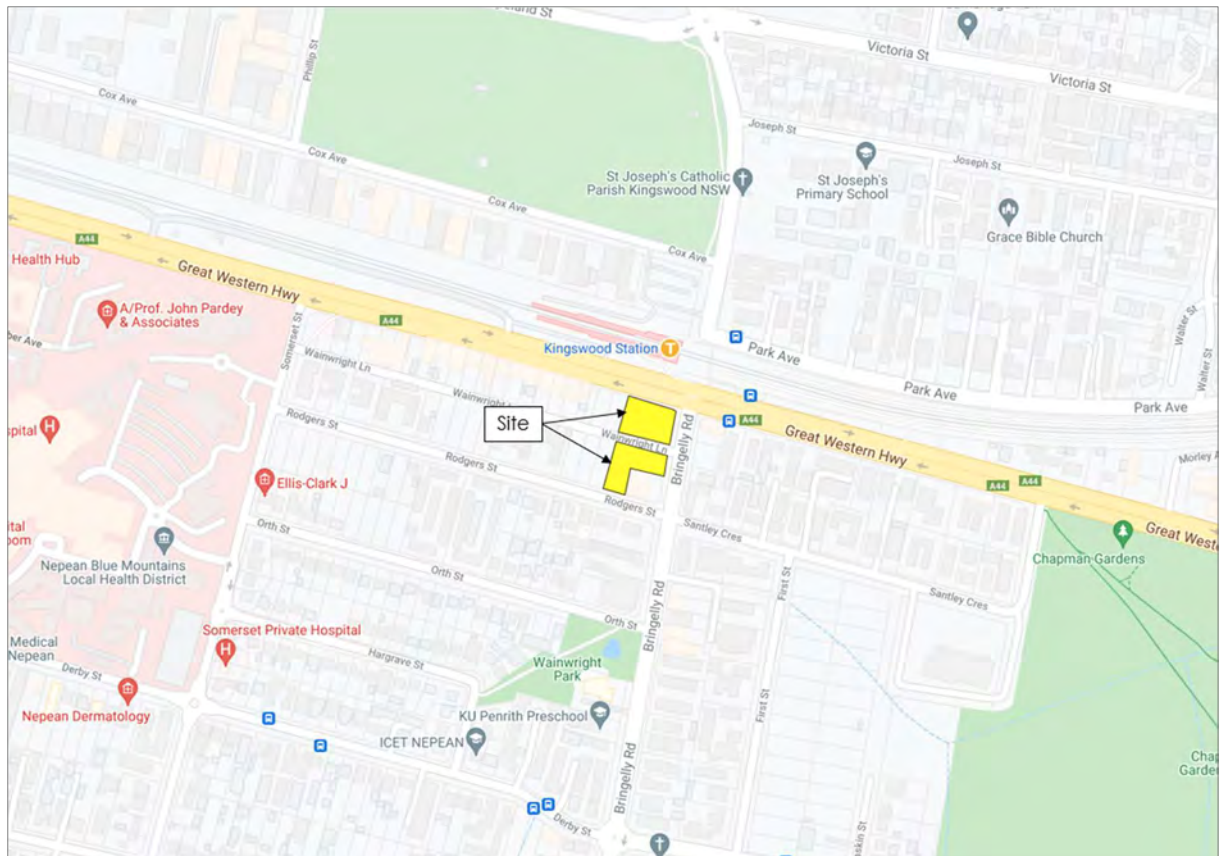
2.1 Site Description

The subject sites are located at 180 Great Western Hwy, Kingswood (Northern Site) and 26 Rogers Street, Kingswood (Southern Site) and falls under the local government area of Penrith City Council (Council).

The site area is currently zoned as B4 Mixed Use. Land uses surrounding the site are primarily residential, mixed use and recreational.

The locations of the subject sites are presented in Figure 2.1.

Figure 2.1: Subject Sites Locations



Base Map Source: Nemap

The subject sites are currently occupied by Kingswood Hotel at 180 Great Western Highway and an associated car park is situated at 26 Rogers Street.

The existing hotel and car park have vehicle access to the sites via Wainwright Lane.

2.2 External Road Network

Great Western Highway is a two-way, six-lane State Road located along the northern boundary of 180 Great Western Highway, generally aligned in the east-west direction between Sydney CBD and Bathurst. Great Western Highway has a posted speed limit of 80km/hr in the vicinity of the site.

Bringelly Road is a higher order local road which has two northbound lanes and one southbound lane near the sites. It is located along the eastern boundary of both sites, generally aligned in the north-south direction between Great Western Highway and The Northern Road. A combination of restricted and unrestricted kerbside parking is permitted. Bringelly Road has a posted speed limit of 50km/hr in the vicinity of the site.

Rodgers Street is an undivided local road with one travel lane in either direction. It is generally aligned in the east-west direction between Bringelly Road and Somerset Street. This street is a restricted parking area and kerbside parking is only permitted in marked bays. There is no posted speed limit on Rodgers Street. Therefore, the default speed limit is 50km/hr.

Wainwright Lane is an undivided two-way road. It is generally aligned in the east-west direction between Bringelly Road and Somerset Street. Kerbside parking is permitted on the northern side of the street. There is no posted speed limit on Wainwright Lane. Therefore, the default speed limit is 50km/hr.

2.3 Public Transport Services

Kingswood Station is located approximately 110m walking distance (or 2-minutes' walk) north of the site. The station is serviced by the T1 North Shore & Western line which provides services to the City, Emu Plains and Richmond. Trains arrive at Kingswood Station every 5 to 20 minutes.

The closest bus stop is located on Great Western Highway, approximately 120m walking distance (or 2-minutes' walk) north of the site. This stop is serviced by the route N70, a night service between Penrith to City Town Hall.

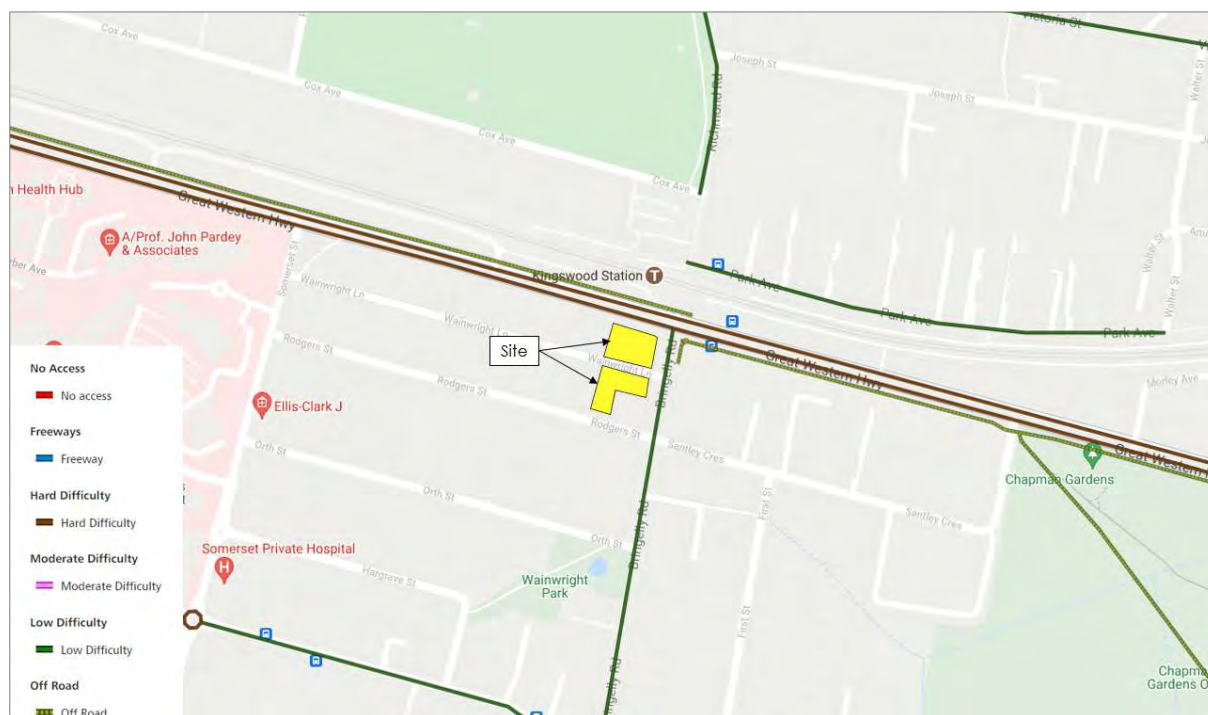
2.4 Pedestrian and Cycling Facilities

Well-established pedestrian facilities are provided within the vicinity of the site. Sealed pedestrian footpaths are provided along the site frontages, except on Wainwright Lane.

There are dedicated pedestrian crossing facilities at the intersection of Great Western Highway and Bringelly Road in the form of signalised crossings. There is also a zebra crossing provided on Bringelly Road, south of Rodgers Street.

Bicycle routes are available on Great Western Highway and Bringelly Road near the site. The existing cycle network is shown in Figure 2.2.

Figure 2.2: Cycle Paths within the Vicinity of the Site



Source: TfNSW Cycleway Finder (accessed 22/10/21)

3 Proposed Development

3.1 Proposal Description

The proposed development will include the demolition of the existing Kingswood hotel and construction of two mixed-use developments located at 180 Great Western Highway and 26 Rodgers Street. The proposed yields at each of these sites are as follows:

- 180 Great Western Highway (Northern Site)
 - 79 residential units
 - 158m² of Bistro
 - 294m² of Sports Bar
 - 301m² of VIP Lounge
 - 166 car spaces (including 2 car wash bays and 2 service vehicle bays)
 - 39 bicycle spaces
 - 6 motorcycle spaces
- 26 Rodgers Street (Southern Site)
 - 54 residential units
 - 603m² bottle shop
 - 107 car spaces (including 2 car wash bays and 1 service vehicle bay)
 - 12 bicycle spaces
 - 10 motorcycle spaces.

The two buildings will be constructed separately, with the Rogers Street building (Southern Site) constructed first, followed by the GWH building (Northern Site).

The existing Kingswood Hotel will remain operational during construction of the Rogers Street building (Southern Site).

During construction of the GWH building, the Kingswood Hotel will be temporarily moved to the Southern Site to include a 77m² bistro, 77m² sports bar, 169m² VIP lounge and a smaller-sized bottle shop with 280m² GFA, in addition to its residential units.

After construction of the Northern Site, the Kingswood Hotel will be permanently relocated back to the new GWH building. At the end of all construction, the bottle shop will remain in the Rogers Street building (Southern Site).

The adequacy of the proposed parking provision is further discussed in Section 4.

The proposed ground floor layout for the Northern Site and Southern Site is shown in Figure 3.1 and Figure 3.2, respectively. The architectural plans are shown in **Appendix A**.

Figure 3.1: Proposed Ground Floor Layout (Northern Site)



Figure 3.2: Proposed Ground Floor Layout (Southern Site)



3.2 Proposed Driveway Location

Vehicle access to the Northern Site is proposed via a driveway on Wainwright Lane and vehicle access to the Southern Site is proposed via a driveway on Rodgers Street.

3.3 Proposed Loading Facilities

Collection and loading will occur in the loading areas within the site, as follows. The loading dock for the Northern Site will be accessible from Wainwright Lane and the loading dock for the Southern Site will be accessible from Rodgers Street.

Council's waste contractor will be the waste service provider for the residential component of the site, while a private contractor will be engaged to service the hotel and retail components of the proposed development from the respective buildings.

A swept path assessment provided in **Appendix B** has been conducted using a 10.4m Council waste truck, which demonstrates appropriate manoeuvrability into and out of the loading dock for both the Northern and the Southern buildings.

4 Parking Assessment

4.1 Car Parking Requirement

The parking requirements for the subject site have been calculated based on the rates stipulated in the Penrith Development Control Plan 2014.

Table C10.2 of Chapter 10.5. Parking, Access and Driveways provides car parking provision rates for various land uses. The following rates are applicable for the proposed developments:

- Residential units:
 - Resident Parking – 1 space per 1- or 2- bedroom units
 - Resident Parking – 2 spaces per 3 or more- bedroom units
 - Visitor Parking – 1 space per 5 dwellings, or part thereof
- Bar/ Bistro/ VIP Lounge: 1 space per 4m² of bar floor area plus 1 per 6m² lounge and dining room
- Bottle Shop: 1 space per 30m².

Table 4.1 and Table 4.2 provides a summary of the DCP parking requirements for the Northern Site and Southern Site, respectively.

Table 4.1: Car Parking Requirements (Northern Site)

Land Use	Yield	DCP Parking Rate	Parking Requirement	Parking Provision
Residential	26 x 1-bedroom units	1 space per 1- or 2-bedroom units	26.0	95
	48 x 2-bedroom units		48.0	
	5 x 3-bedroom units	2 spaces per 3 or more-bedroom units	10.0	
Visitor	79 units	1 space per 5 dwellings, or part thereof	16.0	14
Sports Bar	294m²	1 space per 4m² of bar floor area	73.5	53
Bistro	158m²	1 space per 6m² lounge and dining room	76.5	
VIP Lounge	301m²			
Total			250	162

As shown in Table 4.1, the Northern Site is required to provide 250 car parking spaces and it is proposed to provide 162 car parking spaces.

The adequacy of parking provision is discussed in Section 4.2.

Table 4.2: Car Parking Requirements (Southern Site)

Land Use	Yield	DCP Parking Rate	Parking Requirement	Parking Provision
Residential	12 x 1-bedroom units	1 space per 1- or 2-bedroom units	12.0	67
	35 x 2-bedroom units		35.0	
	7 x 3-bedroom units	2 spaces per 3 or more-bedroom units	14.0	
Visitor	54 units	1 space per 5 dwellings, or part thereof	11.0	11
Bottle Shop	603m ²	1 space per 30m ²	20.1	26
Total			92	104

As shown in Table 4.2, the Southern Site is required to provide 92 car parking spaces and it is proposed to provide 104 car parking spaces, which satisfies the DCP requirements.

In addition, Table 4.3 provides the car parking requirements during the temporary relocation of the hotel component at the Southern Site.

Table 4.3: Temporary Car Parking Requirements for the Hotel Component (Southern Site)

Land Use	Yield	DCP Parking Rate	Parking Requirement	Parking Provision
Sports Bar	77m ²	1 space per 4m ² of bar floor area	19.3	26
Bistro	77m ²	1 space per 6m ² lounge and dining room	12.8	
VIP Lounge	169m ²		28.2	
Bottle Shop	280m ²	1 space per 30m ²	9.3	
Total			70	26

As shown in Table 4.3, during the temporary relocation of the Kingswood Hotel to the Southern Site, it is required to provide 70 car parking spaces for the hotel component, while the provision of car parking remains as 26 spaces.

The adequacy of parking provision is discussed in Section 4.2.

4.2 Adequacy of Car Parking

4.2.1 Northern Site

The car parking provision for the residential component of the Northern Site satisfies the DCP requirements. However, there is a shortfall of 88 car spaces for the hotel component.

Parking Demand (Bar, Bistro and VIP Lounge Areas)

Since the introduction of random breath testing, there has been an increase in awareness of responsible drink-driving attitude with patrons carpooling with designated drivers or use of taxi/ride sharing services.

Based on a study undertaken by Deloitte on 'Economic effects of ridesharing in Australia' (2016), the following findings are noted:

- *Ridesharing has been argued to have a negative influence on drink driving due to its cost advantages and impact on increasing availability through the electronic platform. (page 45)*
- *Importantly, a survey undertaken as part of the MADD study revealed attitudes towards Uber and drink driving. It found that 88 per cent of respondents over the age of 21 agreed that Uber has made it easier to avoid driving home after having too much to drink, and 78 per cent said that since Uber launched in their city, their friends are less likely to drive after drinking. (page 46)*
- *The impact on parking can be significant. According to the Capital Metropolitan Transportation Authority in Texas, the implementation of carpooling incentives in Minneapolis and St. Paul reduced trips to work by between 27 per cent and 37 per cent. Associated with this was a reduction in parking demand by between 11 per cent and 21 per cent. (page 54).*

In summary, carpooling with designated drivers or use of taxi/ride sharing services have resulted in a considerable reduction in parking demands generated by developments with a hotel component.

More specifically, it is expected that visitors of the proposed bar, bistro and VIP lounge areas would comprise primarily of residents as well as employees in the vicinity of the site, who will be able to walk to the hotel at lunch time or after work.

Therefore, it is unlikely that the proposed bar, bistro and VIP lounge areas would generate a parking demand of 150 spaces as required by Council's DCP parking rates.

Proposed Parking Demand Management

In addition, it is considered appropriate to manage parking demand by adopting the following measures:

- Promotion of responsible drink-driving attitude with carpooling with designated drivers and taxi services.
- Encourage the use of alternative transport modes as the site is conveniently located in close vicinity to bus stops which provide night services and within walking distance to Kingswood train station which provides frequent services.
- Monitor the use of on-site parking by staff and assign parking to a small proportion of staff members only to ensure the availability of customer parking spaces.
- Produce a Transport Access Guide which can be given to staff and customers to indicate how they can travel to the site by means other than car.

Other Similar-sized Hotel (Wentworth Hotel)

The Traffic and Parking Assessment Report (Varga Traffic Planning, 2018) for 195 Parramatta Road, Homebush (Wentworth Hotel), comprising a similar-sized licensed floor area to the Northern Site, has been referenced to compare car parking demand for the hotel.

Based on parking surveys undertaken for the study for a week in September 2015, the average maximum on-site parking demand at Wentworth Hotel with a licensed floor area of 850m² was 25 car spaces. The maximum car parking demand recorded was around 45 car parking spaces.

It is proposed to provide 53 car parking spaces for the hotel component at the Northern Site. Hence, based on car parking survey undertaken at other similar sized hotel, the proposed car parking space provision is considered satisfactory.

4.2.2 Southern Site

As shown in Table 4.2, in the long term, the parking provision at the Southern Site satisfies the DCP parking requirement.

As shown in Table 4.3, during the temporary relocation of the hotel component to the Southern Site, there would be a shortfall of 44 hotel car parking spaces.

However, as it is a temporary shortfall (i.e. only during construction of the Northern Site), it is not considered necessary to provide additional car spaces during the relocation period. Furthermore, the parking demand management measures mentioned in Section 4.2.1 can also be applied during this time.

Therefore, the car parking provision at the Southern Site is considered acceptable.

4.3 Accessible Parking Requirement

Council's DCP states that accessible parking should be provided in accordance with the Access to Premises Standards, Building Code of Australia (BCA) and AS2890.

The accessible car parking requirements are shown in Table 4.4 for the Northern Site and in Table 4.5 for the Southern Site.

Table 4.4: Accessible Parking Requirements (Northern Site)

Use	Yield	Parking Rates	Accessible Parking Requirement	Accessible Parking Provision
Residential	8 adaptable units	1 accessible space per adaptable unit	8	8
Hotel	53 spaces	Up to 1,000 car parking spaces: 1 space for every 50 car parking spaces or part thereof	1	2
Total			9	10

The BCA does not specify requirements for residential accessible parking. However, one accessible space per adaptable unit is to be provided. There are eight proposed adaptable units, therefore, eight residential accessible car parking spaces will be provided. The proposed hotel uses at the site may be classified as Class 6 according to the BCA. Therefore, one accessible space for hotel uses is required. It is proposed to provide two spaces which satisfies the requirement.

Table 4.5: Accessible Parking Requirements (Southern Site)

Use	Yield	Parking Rates	Accessible Parking Requirement	Accessible Parking Provision
Residential	6 adaptable units	1 accessible space per adaptable unit	6	6
Bottle Shop	26 spaces	Up to 1,000 car parking spaces: 1 space for every 50 car parking spaces or part thereof	1	2
Total			7	8

Similarly, the rate of one accessible space per adaptable unit has also been adopted for the Southern Site. There are six proposed adaptable units, therefore, six residential accessible car parking spaces will be provided. The proposed bottle shop may also be classified as Class 6 according to the BCA. Therefore, one accessible space for the bottle shop is required. It is proposed to provide two spaces which satisfies the requirement.

4.4 Car Wash Bay Requirement

The DCP provides a requirement for car wash bays at the rate of one car wash space for every 50 units, with up to a maximum of four spaces per building.

According to this rate, the Northern Site which has 79 units requires two car wash bays and the Southern Site which has 54 units also requires one car wash bay.

It is proposed to provide two car wash spaces at the Northern Site and two car wash spaces at the Southern Site which complies with the DCP requirements.

4.5 Service Bay Requirement

The DCP provides a requirement for service bays at the rate of one space per 40 units.

According to this rate, the Northern Site which has 79 units requires two service bays and the Southern Site which has 54 units requires one service bay.

It is proposed to provide two service bays at the Northern Site and one service bay at the Southern Site which satisfies the DCP requirements.

4.6 Bicycle Parking Requirement

The DCP states that on-site bicycle parking spaces are to be provided in accordance with the Planning Guidelines for Walking and Cycling (2004). The bicycle parking requirement is shown in Table 4.6 and Table 4.7 for the Northern Site and Southern Site, respectively.

Table 4.6: Bicycle Parking Requirements (Northern Site)

Parking Type	Size	DCP Parking Requirement	Resident/Staff Parking Requirement	Customer/Visitor Parking Requirement
Residential	79 Units	20-30% of units	15.8	-
		5-10% of units	-	4.0
Hotel	6 Staff	3-5% of staff	0.2	-
	463 Seats	3-5% of seating capacity	-	13.9
Total			16	18

Table 4.6 shows that the Northern Site requires 16 resident/staff bicycle parking spaces and 18 customer/ visitor bicycle spaces. It is proposed to provide 21 resident bicycle spaces within basement levels 2 and 3, and 18 bicycle spaces on the first floor of the basement for visitors and customers.

Table 4.7: Bicycle Parking Requirements (Southern Site)

Parking Type	Size	DCP Parking Requirement	Resident/Staff Parking Requirement	Customer/Visitor Parking Requirement
Residential	54 Units	20-30% of units	10.8	-
		5-10% of units	-	2.7
Bottle Shop	4 Staff	3-5% of staff	0.0	-
		5-10% of staff	-	0.1
Total			11	3

Table 4.7 shows that the Southern Site requires 11 resident/staff bicycle parking spaces and three customer/ visitor bicycle spaces. It is proposed to provide eight resident bicycle spaces within basement levels 1 and 2, and four bicycle spaces on the lower ground for visitors and customers. Also, storage units can be utilised as bicycle spaces for residents.

4.7 Motorcycle Parking Requirement

The DCP does not specify a motorcycle parking rate. However, six motorcycle spaces are proposed for the Northern Site and ten motorcycle spaces are proposed for the Southern Site. These provisions are expected to satisfy the motorcycle parking demand.

4.8 Car Park Design Compliance

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. Residential, domestic and employee parking to be provided as Class 1A parking spaces. Long-term city and town centre parking, sports facilities, entertainment centres, hotels, motels, airport visitors (generally medium-term parking) to be provided as Class 2 parking spaces.

Table 4.8 summarises the minimum dimensions required for the parking spaces in the proposed development.

Table 4.8: Car Parking Dimensions

Uses	Class	Width	Length	Aisle Width
Residential/ Staff	1A	2.4m	5.4m	5.8m
Hotel patrons	2	2.5m	5.4m	5.8m

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

Carpark review and swept path diagrams are included in **Appendix B**.

In summary, the car park and associated elements generally comply with design requirements set out in the Australian Standards, namely AS2890.1:2004 and AS2890.6:2009. It is however, envisaged that a condition of consent would be imposed requiring compliance with these standards and as such, any minor amendments can be resolved prior to the issue of a Construction Certificate.

5 Transport Assessment

5.1 Trip Generation

The Transport for New South Wales (TfNSW) provide trip generation rates for different land uses in their 'Guide to Traffic Generating Developments 2002' and updated 'Technical Direction (TDT 2013/04a' (Guide). This section assesses the potential traffic generation and impacts associated with the development proposal.

The following traffic generation rates are adopted for various uses:

- Residential: 0.29 vehicle trips/ unit
- Bistro/ Sports Bar/ VIP Lounge and Bottle Shop: 1 trip per space.

It is noted that the TfNSW Guide does not include traffic generation for gaming rooms, bars or bottle shops. However, it is anticipated that visitors of the proposed bar, bistro and VIP lounge would comprise primarily of residents as well as employees in the vicinity of the site who will be able to walk to the hotel at lunch time or after work.

Notwithstanding the above, a conservative approach was adopted in assuming that the proposed bistro/bar/VIP lounge area and bottle shop would generate up to one trip per parking space.

The total estimated trip generation of the proposed developments is summarised in Table 5.1.

Table 5.1: Trip Generation

Uses	Yield	Trip Generation Rates		Trip Generation	
		AM Peak	PM Peak	AM Peak	PM Peak
Residential	133 Units	0.29 vehicle trips/ unit	0.29 vehicle trips/ unit	39	39
Bistro/ Sports Bar/ VIP Lounge/ Bottle Shop	79 Spaces	-	1 trip per space	-	79
Sub-total				39	118

Based on the above, the Northern Site and Southern Site in total are expected to generate up to 39 vehicle trips during the AM peak and up to 118 vehicle trips during the PM peak.

The licensed floor area of the existing Kingswood Hotel is expected to be similar in size to the proposed licensed floor area at the Northern Site. Hence, the existing Kingswood Hotel is expected to generate around 79 vehicle trips during the PM peak period.

Therefore, the net increase in trip generation would be as a result of the residential component, which is expected to be 39 additional vehicle trips per hour during the AM and

PM peak periods. This is equivalent to one additional vehicle trip every one to two minutes, which is considered negligible.

Hence, the proposed development traffic is considered minimal and it is not expected to result in any noticeable traffic impacts on the surrounding road network.

6 Conclusion

This report examines the traffic and parking implications of the proposed development at 180 Great Western Highway, Kingswood and 26 Rodgers Street, Kingswood. The key findings of the report are presented below.

- The proposed development involves the demolition of the existing Kingswood Hotel and construction of two mixed-use buildings at 180 Great Western Highway (Northern Site) and 26 Rodgers Street (Southern Site). Both sites also comprise of basement parking.
- Vehicle access to the Northern Site will be via Wainwright Lane and access to the Southern Site will be via Rodgers Street.
- The proposed developments include 166 basement car spaces (including 2 car wash bays and 2 service vehicle bays) in the Northern Site and 107 basement car spaces (including 2 car wash bays and 1 service vehicle bay) in the Southern Site. In addition, 39 bicycle parking spaces and 6 motorcycle spaces are proposed in the Northern Site, and 12 bicycle spaces and 10 motorcycle spaces are proposed in the Southern Site.
- The proposed parking provision at both sites are expected to accommodate parking demands generated by the proposed developments.
- The car park and access arrangements are generally designed in accordance with AS2890.
- The net increase in trip generation is expected to be 39 additional vehicle trips per hour during the AM and PM peak periods. This is equivalent to one additional vehicle trip every one to two minutes, which is considered negligible.

Overall, it is concluded that the proposed development is considered acceptable from a traffic and parking perspective and is not expected to cause any noticeable adverse traffic impacts on the surrounding road network.

Appendix A

Architectural Plans

(Ground and Basement Levels Only)

KINGSWOOD APARTMENTS - NORTH BUILDING

180 GREAT WESTERN HIGHWAY, KINGSWOOD NSW 2747

DEVELOPMENT APPLICATION

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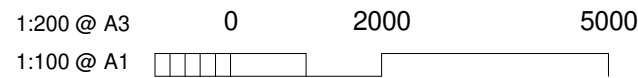


STATUS

DEVELOPMENT APPLICATION

Do not scale drawing. Verify all dimensions on site. Report any discrepancies in documentation to architect. This drawing is for the purpose of council approval and as such, is not suitable for construction.

GRAPHIC SCALE



DRAWING NOTES



DA SHEET LIST		
NUMBER	NAME	CURRENT REVISION
- DA GENERAL		
DA-001	COVER SHEET, DRAWING LIST, SITE LOCATION PLAN	A
DA-010	SITE ANALYSIS PLAN	A
DA-011	SITE PLAN	A
DA-030	EXISTING & DEMOLITION PLAN	A
- DA NORTH BUILDING		
DA-N097	FLOOR PLAN - BASEMENT 3	A
DA-N098	FLOOR PLAN - BASEMENT 2	A
DA-N099	FLOOR PLAN - BASEMENT 1	A
DA-N100	FLOOR PLAN - GROUND FLOOR	A
DA-N101	FLOOR PLAN - LEVEL 1	A
DA-N102	FLOOR PLAN - LEVEL 2-3	A
DA-N103	FLOOR PLAN - LEVEL 4-6	A
DA-N104	FLOOR PLAN - LEVEL 7	A
DA-N107	ROOF - FLOOR PLAN NORTH	A
DA-N201	ELEVATION - SHEET 1	A
DA-N202	ELEVATION - SHEET 2	A
DA-N203	ELEVATION - SHEET 3	A
DA-N204	ELEVATION - SHEET 4	A
DA-N301	BUILDING SECTION - SHEET 1	A
DA-N302	BUILDING SECTION - SHEET 2	A
DA-N501	GFA CALCULATIONS	A
DA-N531	LANDSCAPE AREA	A
DA-N601	SOLAR ACCESS PLANS	
DA-N603	STORAGE CALCULATIONS	A
DA-N610	CROSS VENTILATION PLANS	A

DA SHEET LIST		
NUMBER	NAME	CURRENT REVISION
- DA SOUTH BUILDING		
DA-S098	FLOOR PLAN - BASEMENT 2	A
DA-S099	FLOOR PLAN - BASEMENT 1	A
DA-S100	FLOOR PLAN - LOWER GROUND FLOOR	A
DA-S101	FLOOR PLAN - GROUND FLOOR	A
DA-S101a	FLOOR PLAN - DRIVEWAY	A
DA-S102	FLOOR PLAN - LEVEL 1-3	A
DA-S103	FLOOR PLAN - LEVEL 4	A
DA-S104	FLOOR PLAN - LEVEL 5	A
DA-S105	ROOF - FLOOR PLAN SOUTH	A
DA-S201	ELEVATION - SHEET 1	A
DA-S202	ELEVATION - SHEET 2	A
DA-S203	ELEVATION - SHEET 3	A
DA-S204	ELEVATION - SHEET 4	A
DA-S301	BUILDING SECTION - SHEET 1	A
DA-S302	BUILDING SECTION - SHEET 2	A
DA-S501	GROSS FLOOR AREA CALCULATIONS	A
DA-S531	LANDSCAPE AREA PLAN	A
DA-S601	SOLAR ACCESS PLANS	A
DA-S603	STORAGE CALCULATIONS	A
DA-S610	CROSS VENTILATION PLANS	A

- DA OVERALL SITE		
DA-431	SUN'S EYE VIEW SHEET 1	A
DA-432	SUN'S EYE VIEW SHEET 2	A
DA-433	BUILDING HEIGHT PLANE DIAGRAM	A
DA-610	SHADOW STUDY PLAN WINTER SOLSTICE-PROPOSED	A
DA-611	SHADOW STUDY PLAN WINTER SOLSTICE-PROPOSED	A

Grand total: 49

A 12.11.21 For Development Application
ISS DATE PURPOSE OF ISSUE

CLIENT

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NOMINATED ARCHITECT

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17219 (VIC), 3677 (QLD), AR1173 (NT)

PROJECT

KINGSWOOD APPARTMENTS & HOTEL

DRAWING NO.

DA-001

ISSUE

A

JOB NO.

IRI2006

SCALE

@ A1

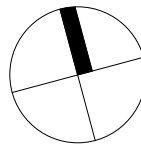
DATE

12.11.21

DRAWING TITLE
COVER SHEET, DRAWING LIST, SITE LOCATION PLAN

DRAWN BY

CHECKED BY



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GRAPHIC SCALE

200 @ A3 0 2000 5000
100 @ A1

DRAWING NOTES

A ISS	12.11.21 DATE	For Development Application PURPOSE OF ISSUE
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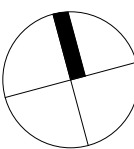
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& HOTEL

DRAWING NO. ISSUE
DA-N097 A

JOB NO.	SCALE	DATE
IRI2006	1 : 100@ A1	12.11.21

DRAWING TITLE
FLOOR PLAN - BASEMENT 3

DRAWN BY _____ CHECKED BY _____





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GRAPHIC SCALE

1:200 @ A3
1:100 @ A1

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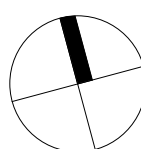
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DRAWING NO. ISSUE
DA-N098 A

JOB NO. SCALE DATE
IRI2006 1 : 100@ A1 12.11.21

DRAWING TITLE
FLOOR PLAN - BASEMENT 2

DRAWN BY CHECKED BY





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GRAPHIC SCALE

1:200 @ A3
1:100 @ A1

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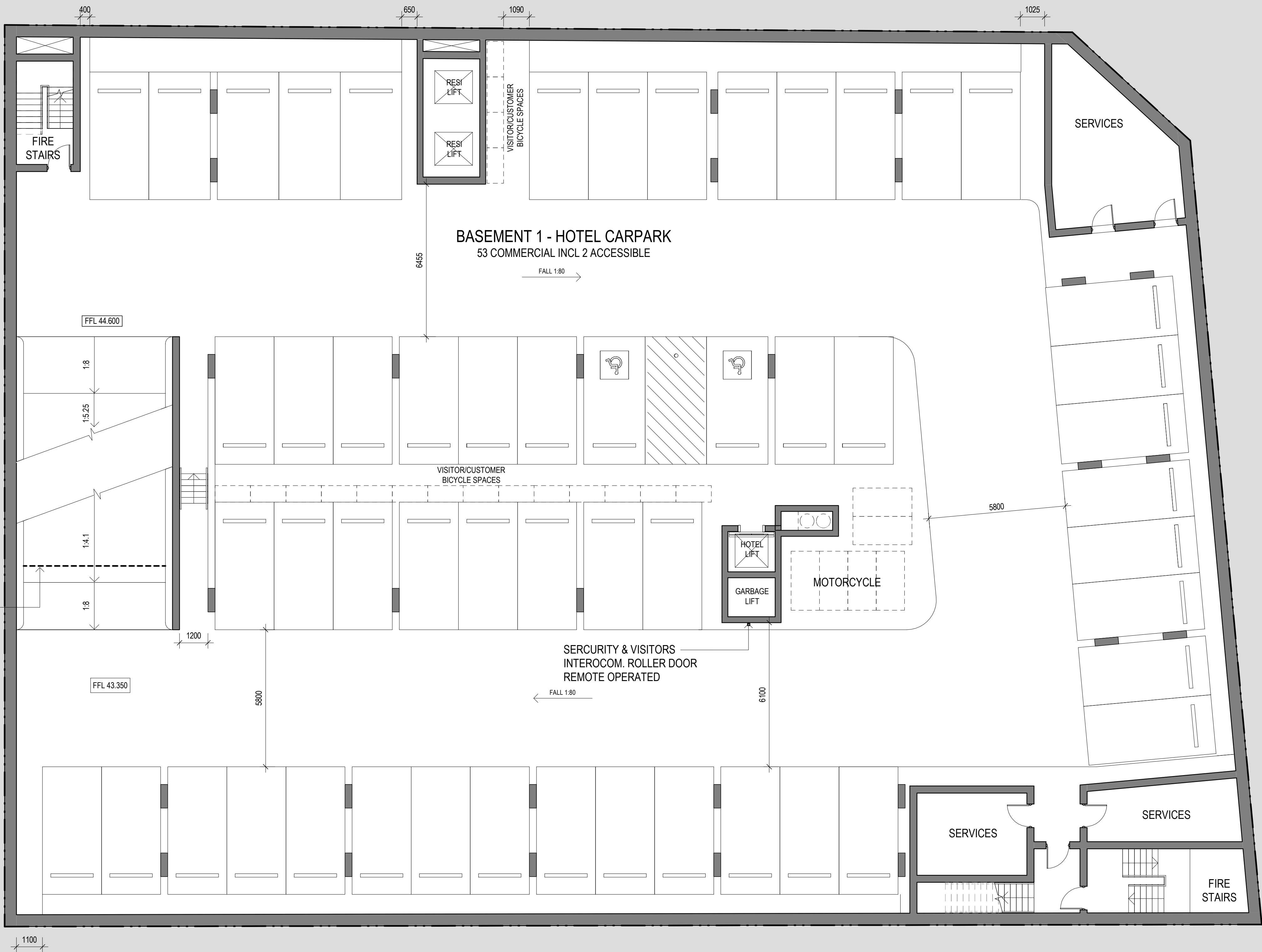
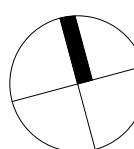
PROJECT
KINGSWOOD APPARTMENTS & HOTEL

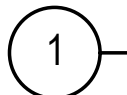
DRAWING NO. ISSUE
DA-N099 A

JOB NO. SCALE DATE
IRI2006 1 : 100@ A1 12.11.21

DRAWING TITLE
FLOOR PLAN - BASEMENT 1

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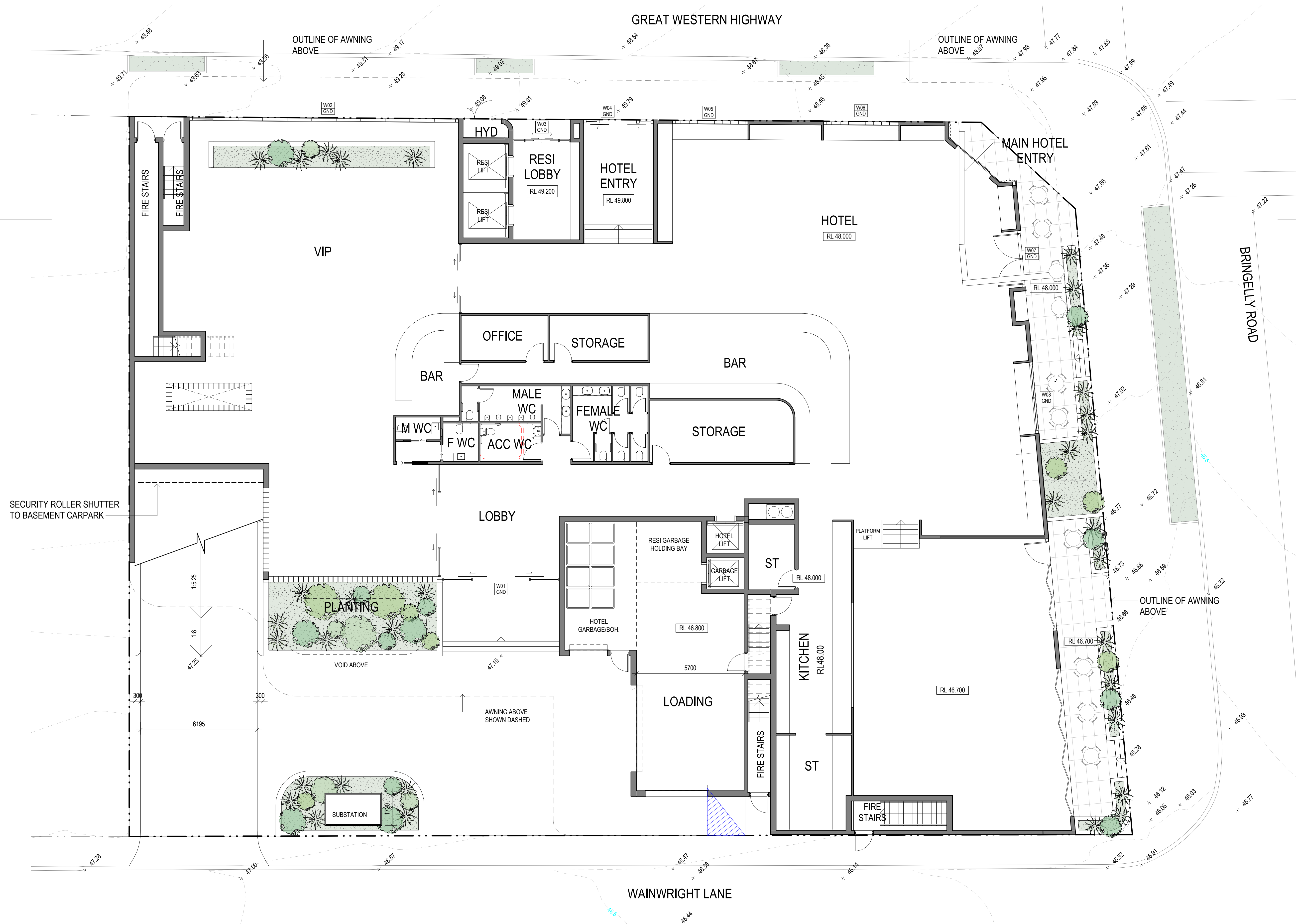
GROUND LEVEL - N
1 : 100 @ A1

GREAT WESTERN HIGHWAY

OUTLINE OF AWNING ABOVE

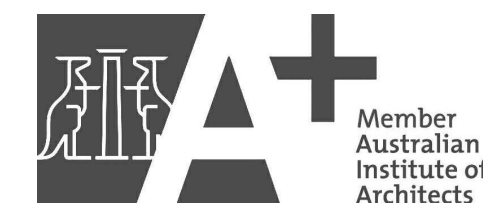
BRINGELLY ROAD

WAINWRIGHT LANE



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GRAPHIC SCALE

1:200 @ A3
1:100 @ A1

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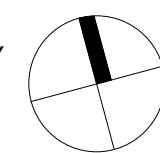
PROJECT
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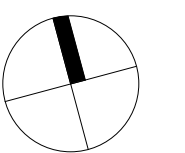
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DA-N100 A

JOB NO. SCALE DATE
IRI2006 1 : 100@ A1 12.11.21

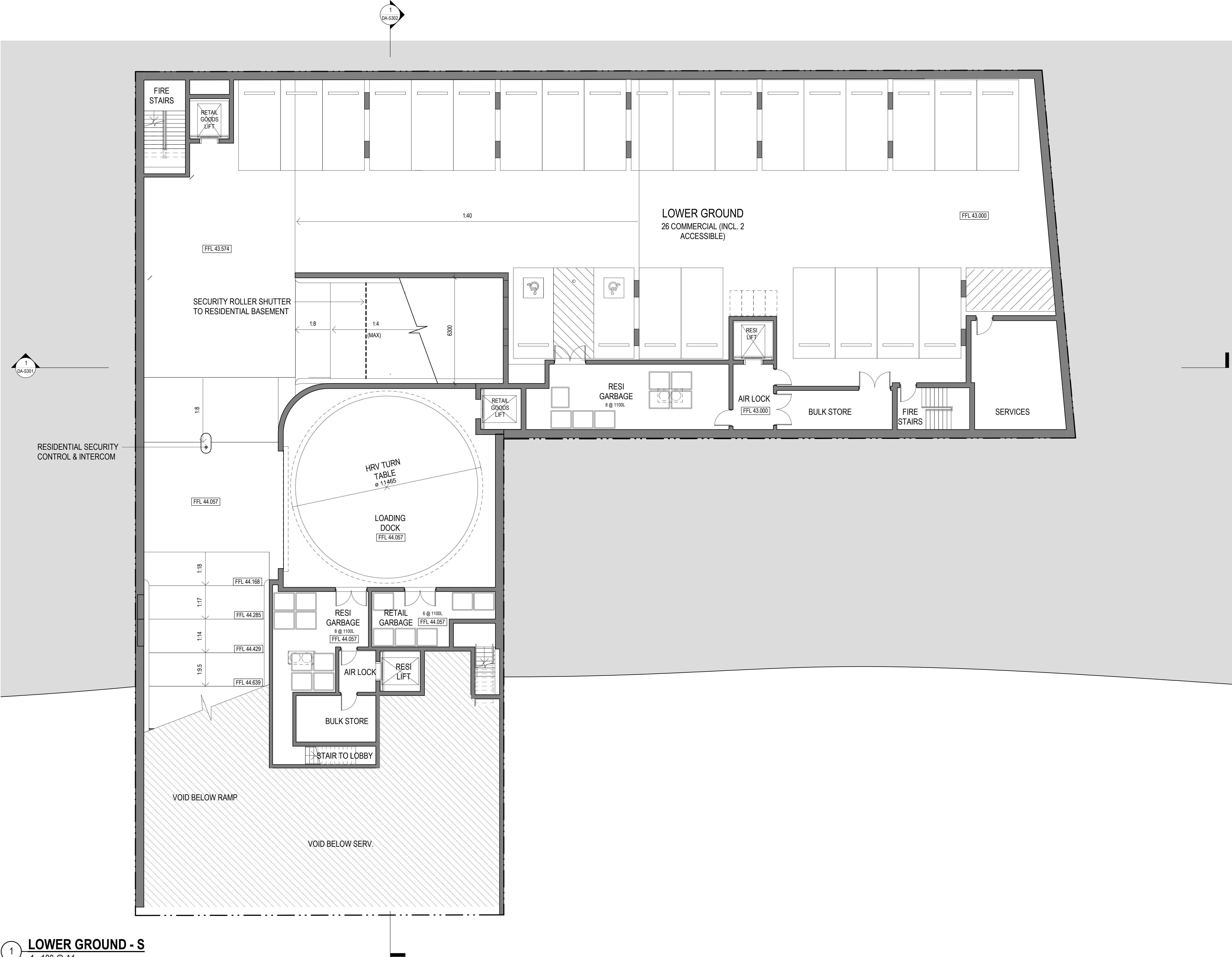
DRAWING TITLE
FLOOR PLAN - GROUND FLOOR

DRAWN BY CHECKED BY





<u>TOTAL CARSPACES</u>	
(OVER 3 LEVELS)	107
LOWER GROUND PARKING	
COMMERCIAL	26
B1 + B2 PARKING	
RESIDENTIAL	67
VISITOR	11
SERVICE	01
CAR WASH	02
<hr/>	
MOTORCYCLE	10
BICYCLE	08



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GRAPHIC SCALE

1:200 @ A3 0 2000 5000
1:100 @ A1

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DA-S100

ISSUE

A

JOB NO.

IRI2006

SCALE

1 : 100@ A1

DATE

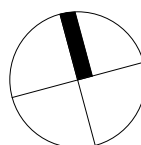
12.11.21

DRAWING TITLE

FLOOR PLAN - LOWER GROUND FLOOR

DRAWN BY

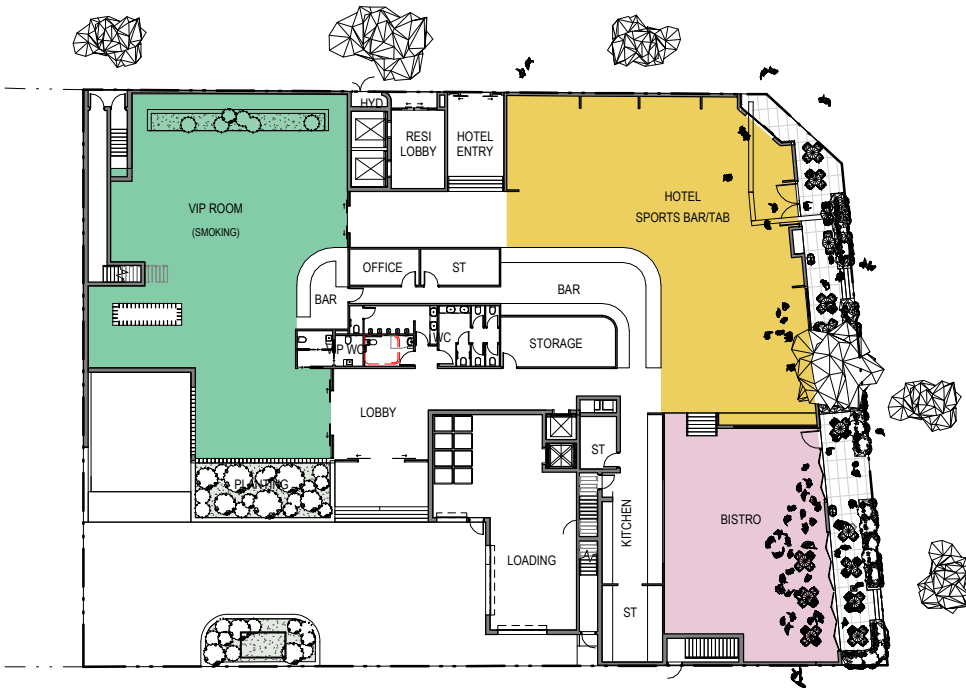
CHECKED BY



1

LOWER GROUND - S

1 : 100 @ A1



1 **GROUND LEVEL - N POPULATION**
1 : 250 @ A1



2 **GROUND LEVEL - S POPULATION**
1 : 250 @ A1

PATRON AREAS FOR TRAFFIC CALCULATIONS

	INTERNAL AREA	INTERNAL POPULATIONS
BISTRO	158 SQM	79 PAX
SPORTS BAR	294SQM	294 PAX
VIP LOUNGE	301 SQM	90 PAX
TOTAL	753SQM	463 PAX

PATRON AREAS FOR TRAFFIC CALCULATIONS

	INTERNAL AREA	INTERNAL POPULATIONS
BISTRO + SPORTS BAR	154 SQM (77SQM +77SQM)	115 PAX (38 PAX+77PAX)
VIP	169SQM	169 PAX
TOTAL	323SQM	284 PAX
BOTTLE SHOP	280 SQM	
FUTURE BOTTLE SHOP	603 SQM	

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DRAWING NO. ISSUE
SK-700

JOB NO. SCALE DATE
IRI2006 1 : 250@ A1

DRAWING TITLE
POPULATION PLANS

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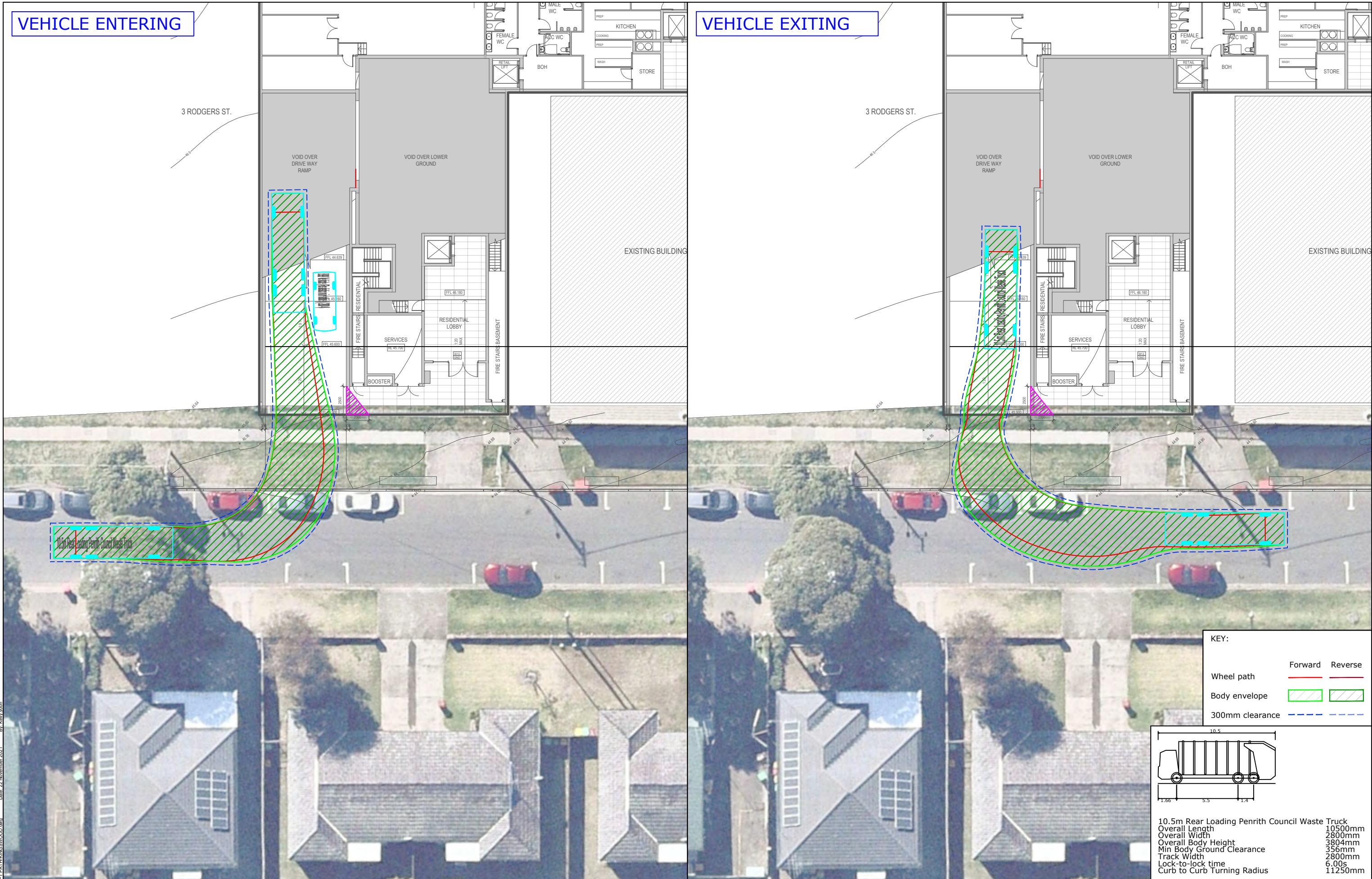


Appendix B

Swept Path Diagrams

VEHICLE ENTERING

VEHICLE EXITING



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21

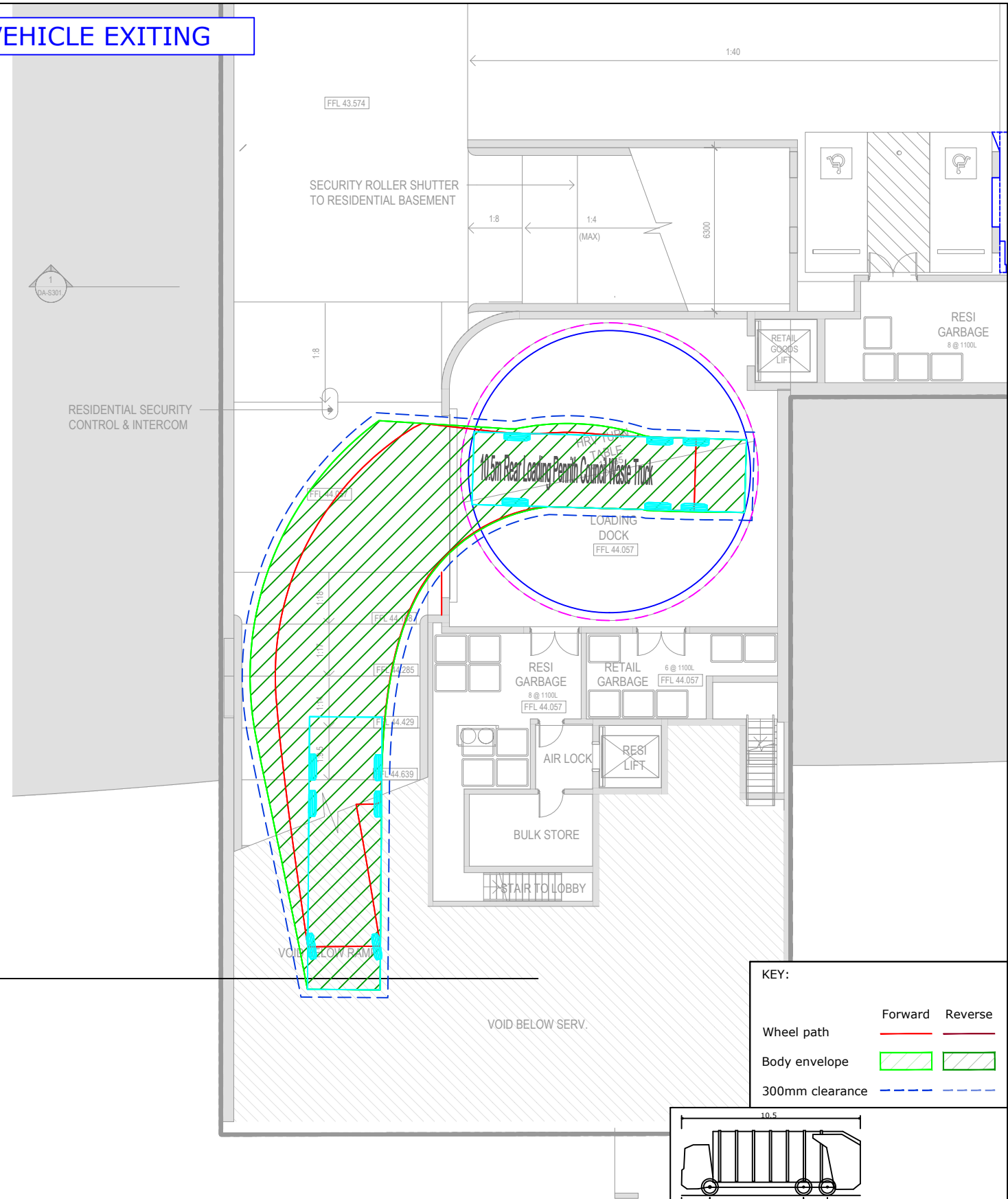
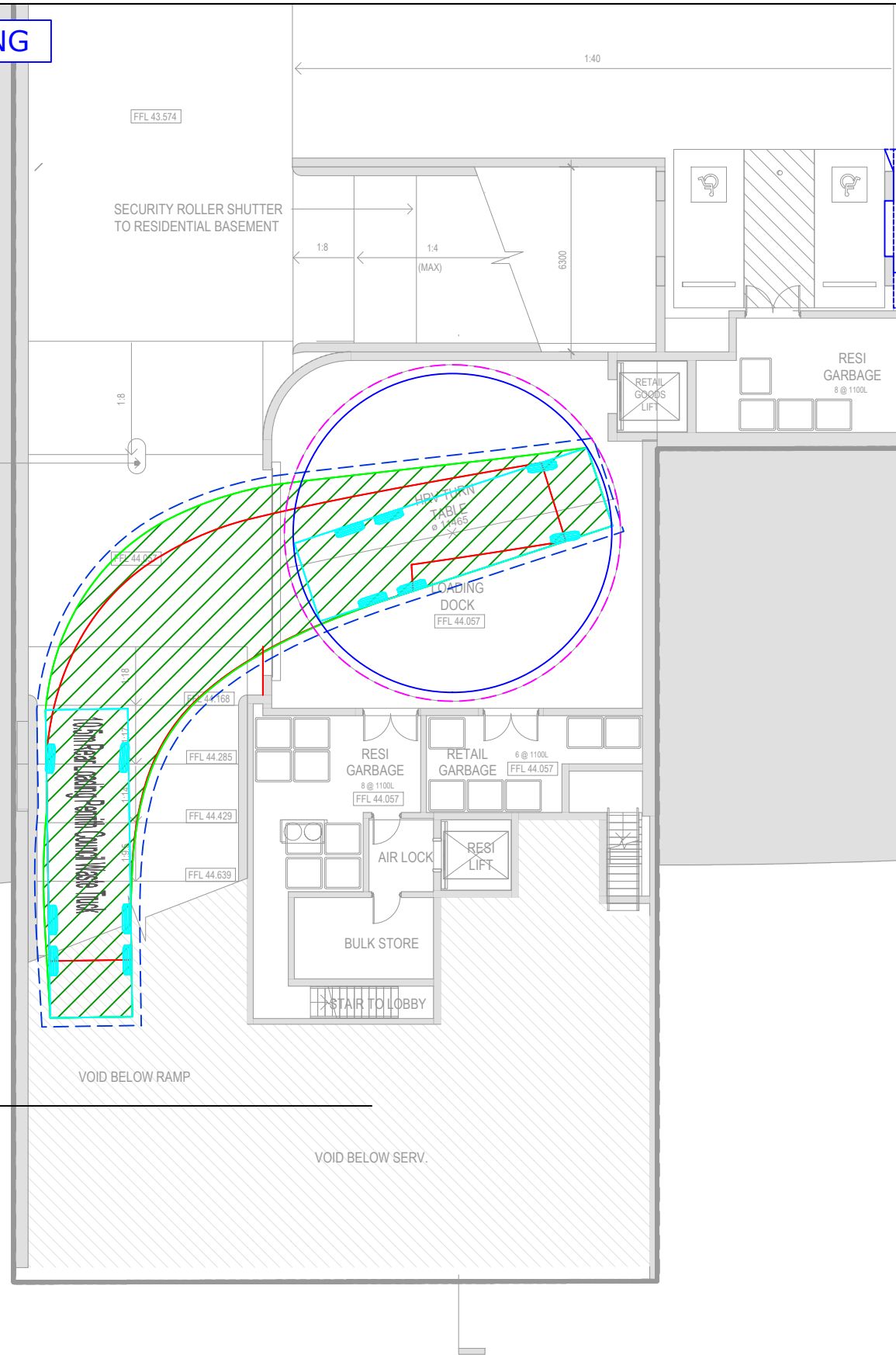


PROJECT	IBIS HOTEL KINGSWOOD				
TITLE	SWEPT PATH ANALYSIS - SOUTH BUILDING - GROUND LEVEL 10.4m PENRITH CITY COUNCIL WASTE TRUCK				

DWG No.	21021CAD021		
	FIGURE 1		
DATE STAMP	22 NOVEMBER 2021		
PROJECT No.	SCALE	REV.	
21021	1:300 @A3	A	

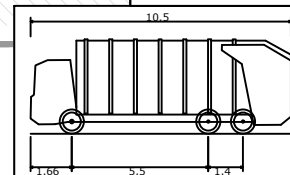
VEHICLE ENTERING

VEHICLE EXITING



KEY:

	Forward	Reverse
Wheel path		
Body envelope		
300mm clearance		

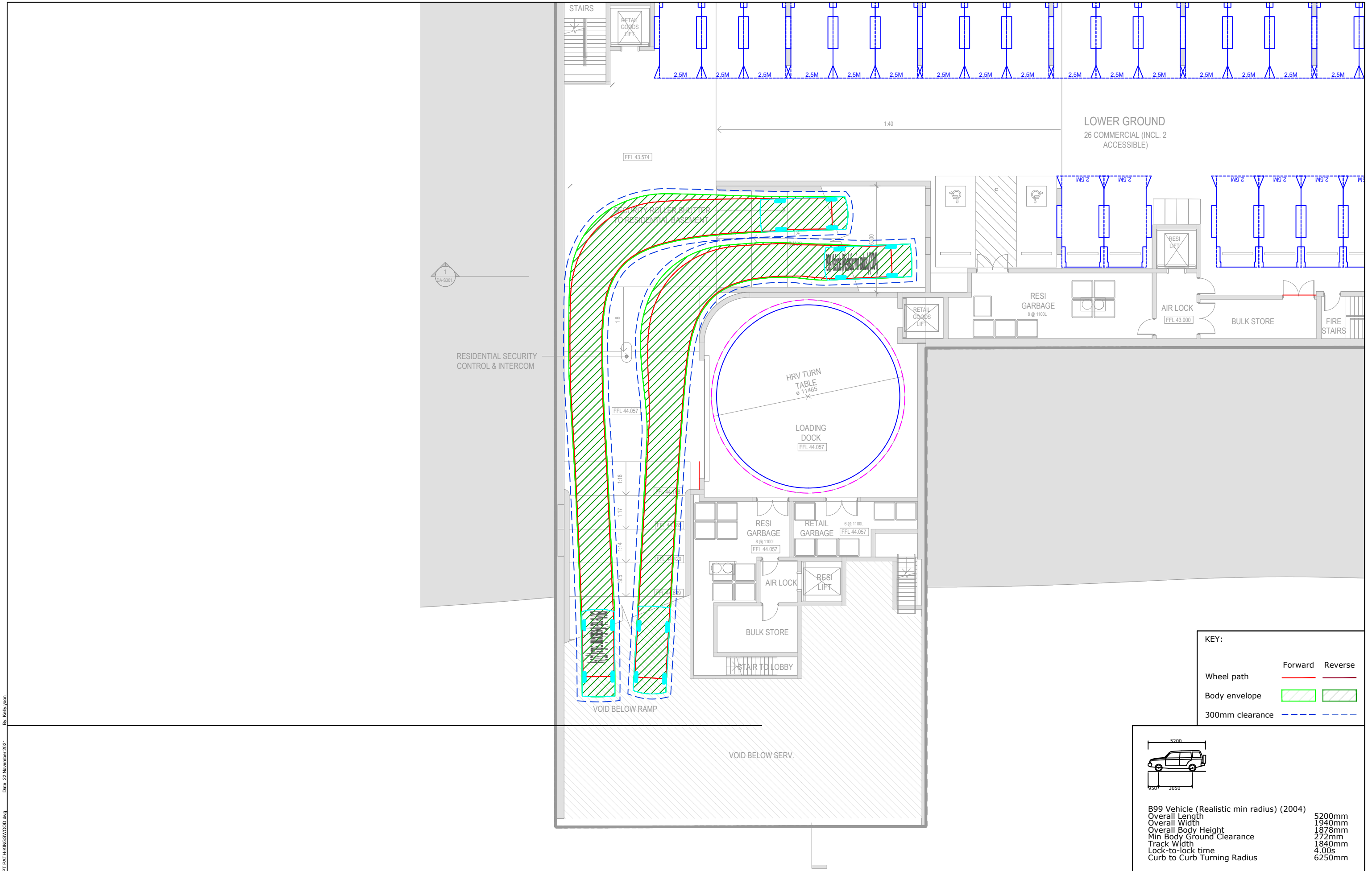


10.5m Rear Loading Penrith Council Waste Truck
Overall Length 10500mm
Overall Width 2800mm
Overall Body Height 3804mm
Min Body Ground Clearance 356mm
Track Width 2800mm
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 11250mm

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21



PROJECT		IBIS HOTEL KINGSWOOD		DWG No. 21021CAD021 FIGURE 2	
TITLE		SWEPT PATH ANALYSIS - SOUTH BUILDING - LOWER GROUND LEVEL 10.4m PENRITH CITY COUNCIL WASTE TRUCK		DATE STAMP 22 NOVEMBER 2021	
		PROJECT No. 21021	SCALE 1:200 @A3	REV. A	

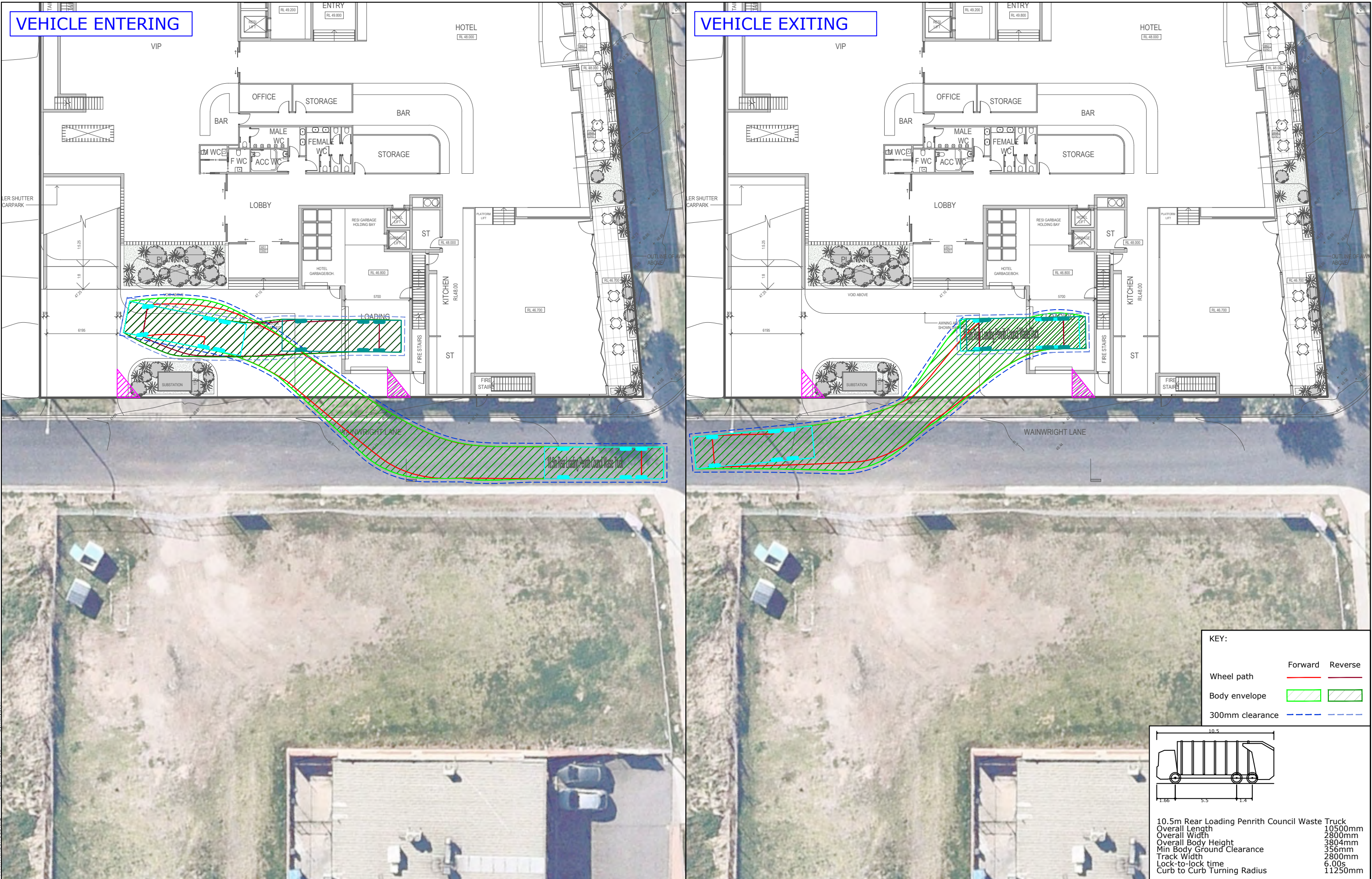


REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21



PROJECT	IBIS HOTEL KINGSWOOD
TITLE	SWEPT PATH ANALYSIS - SOUTH BUILDING - LOWER GROUND LEVEL AS2890.1 5.2m B99 VEHICLE

DWG No.	21021CAD021
FIGURE 4	
DATE STAMP	22 NOVEMBER 2021
PROJECT No.	21021
SCALE	1:200 @A3
REV.	A

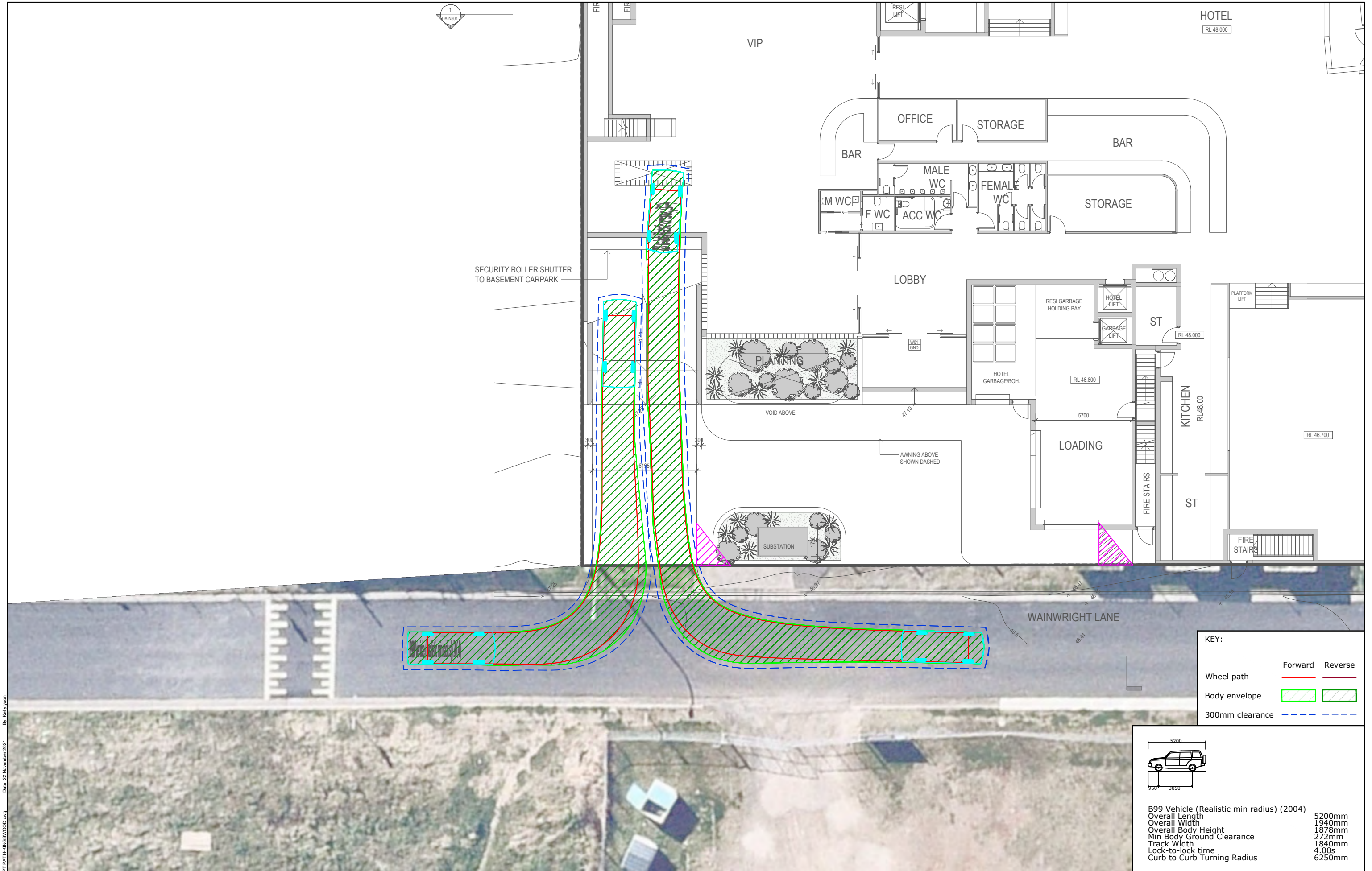


REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21



PROJECT	IBIS HOTEL KINGSWOOD	
TITLE	SWEPT PATH ANALYSIS - NORTH BUILDING - GROUND LEVEL - OPTION 2 10.4m PENRITH CITY COUNCIL WASTE TRUCK	

DWG No.	21021CAD021	
	FIGURE 5	
DATE STAMP	22 NOVEMBER 2021	
PROJECT No.	SCALE	REV.
21021	1:300 @A3	A



REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21



PROJECT	IBIS HOTEL KINGSWOOD	
TITLE	SWEPT PATH ANALYSIS - NORTH BUILDING - GROUND LEVEL AS2890.1 5.2m B99 VEHICLE	

DWG No. 21021CAD021 FIGURE 6	
DATE STAMP 22 NOVEMBER 2021	
PROJECT No. 21021	SCALE 1:200 @A3
REV. A	

Filename: 21021CAD021-211122-SWEPT PATH KINGSWOOD.dwg
By: Kelly Wong
Date: 22 November 2021

VEHICLE ENTERING

KEY:

- Vertical Clearance
- Driveway / Ramp Profile
- 50mm Clearance from Surface

Vehicle Dimensions:

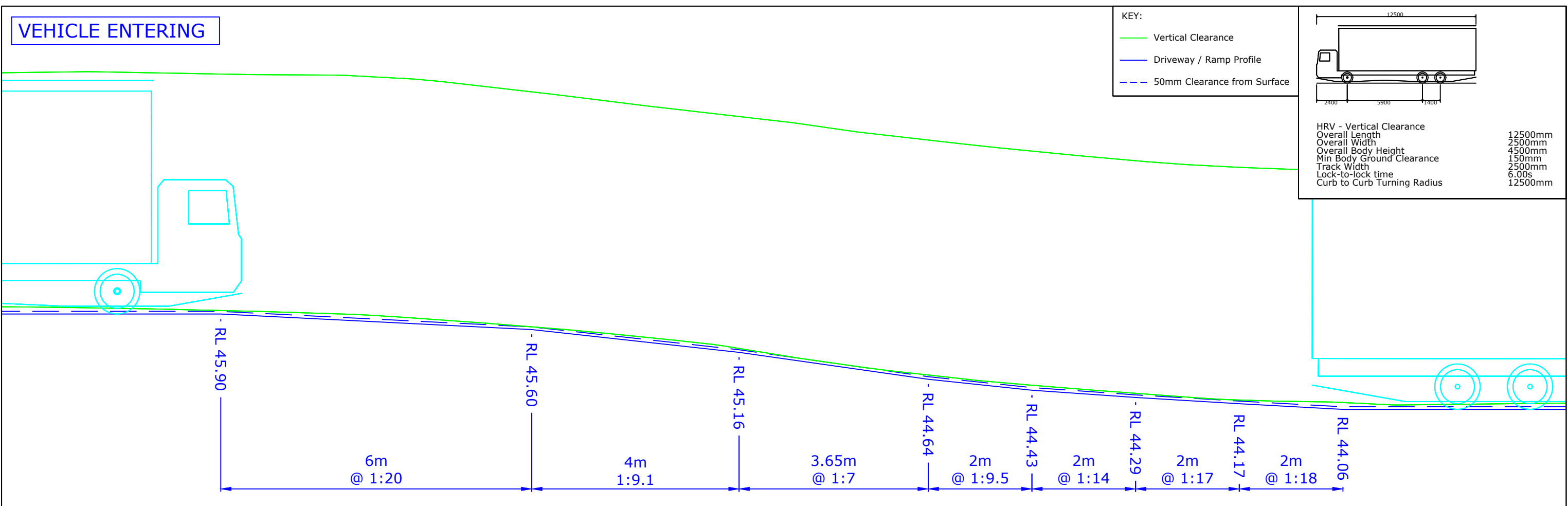
- HRV - Vertical Clearance
- Overall Length
- Overall Width
- Overall Body Height
- Min Body Ground Clearance
- Track Width
- Lock-to-lock time
- Curb to Curb Turning Radius

Dimensions:

- 12500mm
- 2500mm
- 4500mm
- 1500mm
- 2500mm
- 6.00s
- 12500mm

Profile Data:

- RL 45.90
- 6m @ 1:20
- RL 45.60
- 4m 1:9.1
- RL 45.16
- 3.65m @ 1:7
- RL 44.64
- 2m @ 1:9.5
- RL 44.43
- 2m @ 1:14
- RL 44.29
- 2m @ 1:17
- RL 44.17
- 2m @ 1:18
- RL 44.06





VEHICLE EXITING


HRV - Vert


Diagram illustrating the vertical alignment of a road exit ramp. The diagram shows the profile of the road surface (green line) and the profile of the vehicle exiting (blue line). The road surface is defined by a series of points and slopes:

- Point 1: RL 45.90
- Point 2: RL 45.60 (Slope: 6m @ 1:20)
- Point 3: RL 45.16 (Slope: 4m @ 1:9.1)
- Point 4: RL 44.64 (Slope: 3.65m @ 1:7)
- Point 5: RL 44.43 (Slope: 2m @ 1:9.5)
- Point 6: RL 44.29 (Slope: 2m @ 1:14)
- Point 7: RL 44.17 (Slope: 2m @ 1:17)
- Point 8: RL 44.06 (Slope: 2m @ 1:18)

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE		PROJECT			IBIS HOTEL KINGSWOOD			DWG No. 21021CAD021 FIGURE 7		
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21		TITLE			GROUND CLEARANCE ASSESSMENT - GROUND TO LOWER GROUND LEVEL AS2890.2 12.5m HEAVY RIGID VEHICLE			DATE STAMP 22 NOVEMBER 2021		
													PROJECT No. 21021		
													SCALE 1:75 @A3		
													REV. A		

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE		PROJECT			IBIS HOTEL KINGSWOOD			DWG No. 21021CAD021 FIGURE 7		
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21		TITLE			GROUND CLEARANCE ASSESSMENT - GROUND TO LOWER GROUND LEVEL AS2890.2 12.5m HEAVY RIGID VEHICLE			DATE STAMP 22 NOVEMBER 2021		
													PROJECT No. 21021		
													SCALE 1:75 @A3		
													REV. A		

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE		PROJECT			IBIS HOTEL KINGSWOOD			DWG No. 21021CAD021 FIGURE 7		
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21		TITLE			GROUND CLEARANCE ASSESSMENT - GROUND TO LOWER GROUND LEVEL AS2890.2 12.5m HEAVY RIGID VEHICLE			DATE STAMP 22 NOVEMBER 2021		
													PROJECT No. 21021		
													SCALE 1:75 @A3		
													REV. A		

REV.	DESCRIPTION	DRAWN	CHECK	APP'D	DATE		PROJECT			IBIS HOTEL KINGSWOOD			DWG No. 21021CAD021 FIGURE 7		
A	ISSUE FOR DISCUSSION	KM	KY	KH	22/11/21		TITLE			GROUND CLEARANCE ASSESSMENT - GROUND TO LOWER GROUND LEVEL AS2890.2 12.5m HEAVY RIGID VEHICLE			DATE STAMP 22 NOVEMBER 2021		
													PROJECT No. 21021		
													SCALE 1:75 @A3		
													REV. A		

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