

# Transport Impact Statement

## Nannup Alpine Resort

### Brockman Hwy and Dunnet Rd

### Nannup



Project number 12062

November 2024

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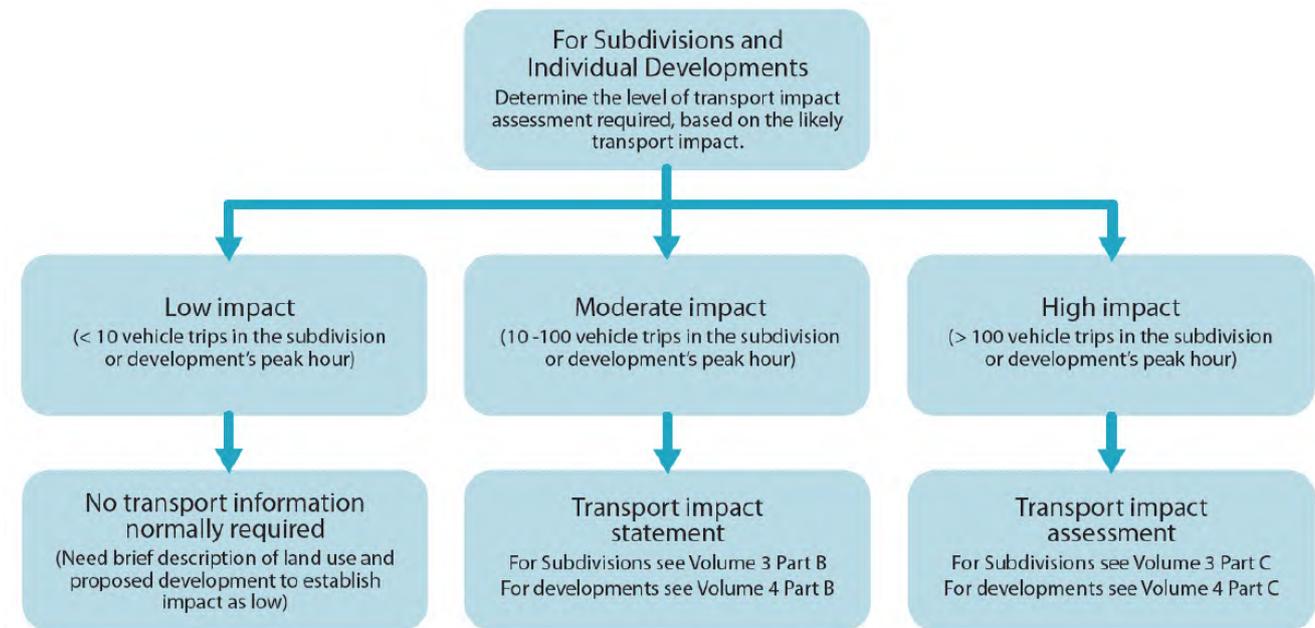
# 1 Introduction

Level 5 Design (L5D) has been commissioned by Paul Meschiati and Associates Pty Ltd to prepare a Transport Impact Statement (TIS) in support of the Development Application for a new development located at Lot 500 Brockman Hwy & Dunnet Road, Nannup (the 'Site').

This TIS has been prepared in accordance with the Western Australian Planning Commission (WAPC) Transport Impact Assessment Guidelines for Developments: Volume 4 - Individual Developments (2016). The Guidelines promote a three-level assessment process, where the required level of assessment is dependent on the likely level of impact, as follows (and as shown in Figure 1.1):

- Low impact – less than 10 peak hour trips, no assessment required.
- Moderate impact – between 10 and 100 peak hour trips, Transport Impact Statement required; and
- High Impact – more than 100 peak hour trips, full Transport Impact Assessment required.

Figure 1.1 Level of transport impact assessment required.



Source: WAPC Transport Impact Assessment Guidelines 2016

The traffic generated by the Site has been determined to be between 10 and 100 vehicle trips in the peak hour, which equates to a moderate impact, and therefore the required level of assessment is a 'Transport Impact Statement'.

## 2 Existing Situation

### 2.1 Existing Site

The subject site (the 'Site') for the proposed development is situated at the intersection of Brockman Highway and Dunnet Road, within the Shire of Nannup. The Site is currently an open greenfield area, located approximately 600 metres east from the Nannup Town Centre.

The Site is surrounded by open green spaces, with its southern boundary along Brockman Highway, the western boundary adjacent to Dunnet Road, and the eastern boundary bordering Asplin Road. An aerial image of the site is shown in Figure 2.1.

Street view images of the Site are included in Appendix A.

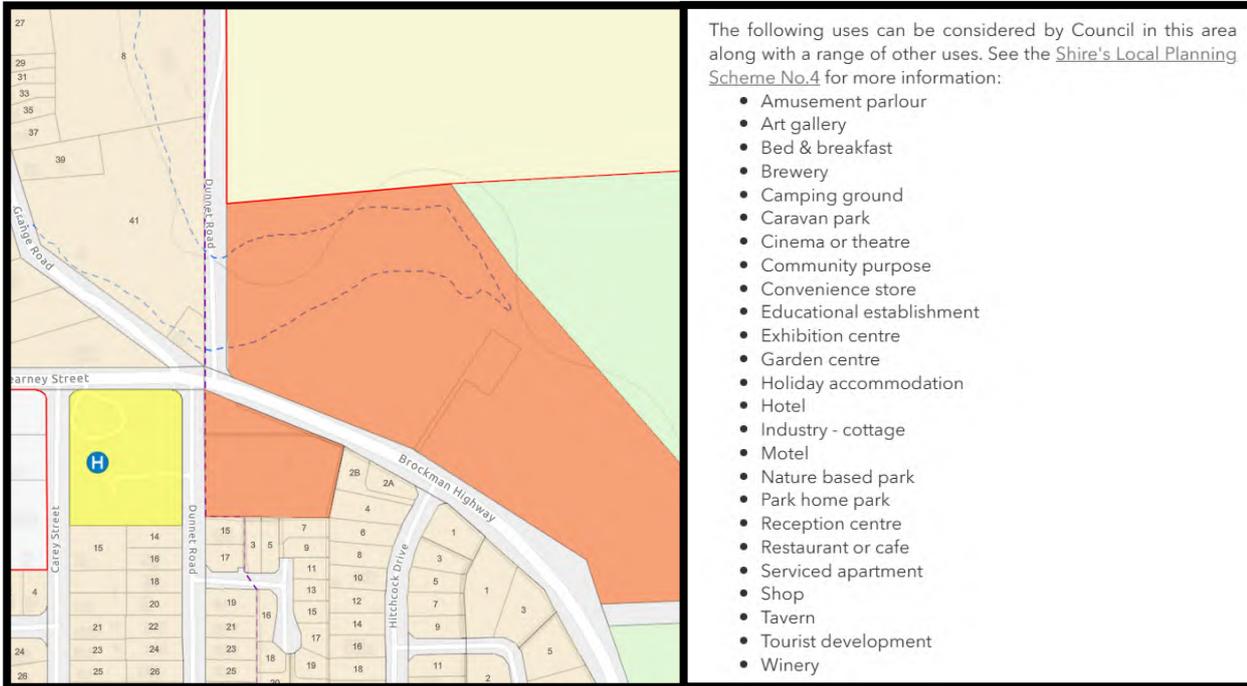
Figure 2.1 Existing subject site



Source: Google Maps 2024

Figure 2.2 shows the existing land uses in the vicinity of the Site. The Site is currently zoned as a 'Tourism Zone'. A list of council approved uses for the Site are listed in Figure 2.2.

Figure 2.2 Local planning scheme



Source: Shire of Nannup - Local Planning Scheme

## 2.2 Existing Road Network

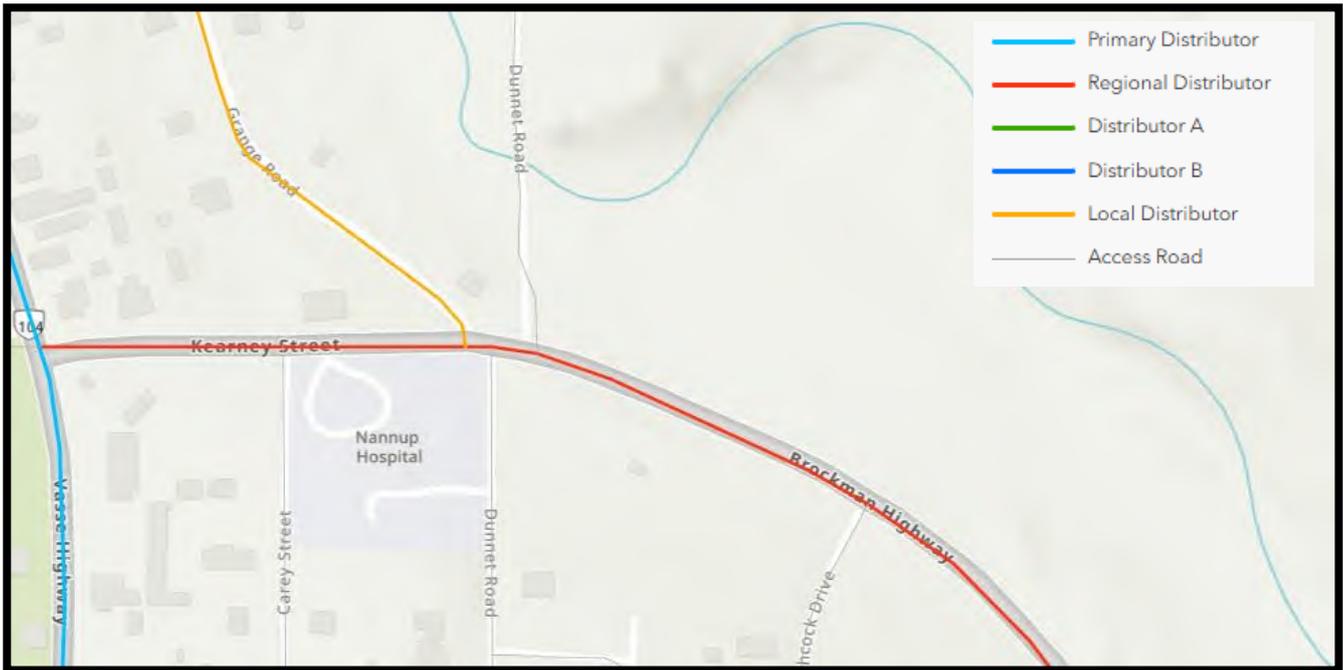
The road classification in the vicinity of the Site as classified by Main Roads is shown in Figure 2.3. Brockman Hwy is a Regional Distributor, and all other roads in the vicinity of the Site are classified as local 'Access Roads'. Table 2.1 summarises the characteristics of the road network in the vicinity of the Site.

Table 2.1 Road network characteristics

Road Name	Road Hierarchy	Jurisdiction	No. of Lanes	Posted Speed (km/h)
Brockman Hwy	Regional distributor	Local Government	2	60
Dunnet Rd	Access Road	Local Government	2	50
Hitchcock Dr	Access Road	Local Government	2	50
Asplin Rd	Access Road	Local Government	2	50

Source: Road Information Mapping System (October 2024)

Figure 2.3 Road network classification



Source: Road Information Mapping System (July 2024)

### 2.3 Existing Traffic Volumes

Traffic volume data for the Section of Brockman Hwy between Dunnet Rd and Asplin Rd has been obtained from the Shire of Nannup. The data is summarised in Table 2.2. and a visual representation can be found in Figure 2.4.

The weekday AM and PM peak hours in the vicinity of the Site consistently occurs between 10:00 - 11:00 AM and 15:00 – 16:00 PM.

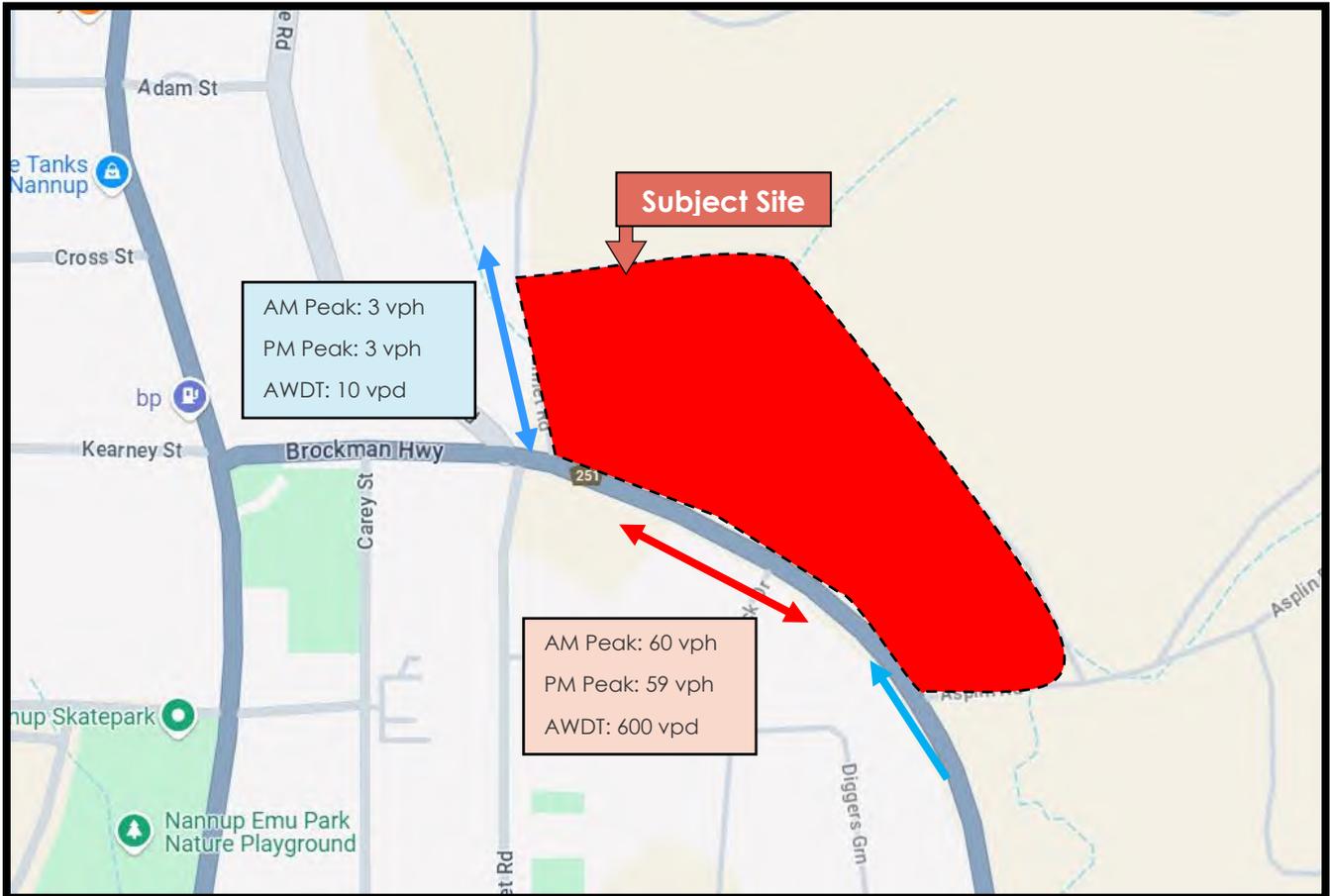
Recorded traffic volumes show that the surrounding network operates efficiently and well within its capacity limits, indicating smooth traffic flow and minimal congestion even during peak periods.

Table 2.2 Existing traffic volumes

Road Network	Weekday AM peak (vph)	Weekday PM peak (vph)	Ave daily traffic volume (vpd)
Brockman Hwy	60	59	600
Dunnet Rd	3	3	10

Source: Shire of Nannup (October 2024)

Figure 2.4 Existing Traffic Volumes



Source: Shire of Nannup

## 2.4 Existing Access Arrangements and Parking Situation

The Site's primary access is currently via Brockman Highway, positioned directly opposite the intersection with Hitchcock Drive. Given the undeveloped nature of the Site, there are no formal parking facilities at this stage.

### 3 Proposed Traffic and Access Arrangements

#### 3.1 The Proposed Development

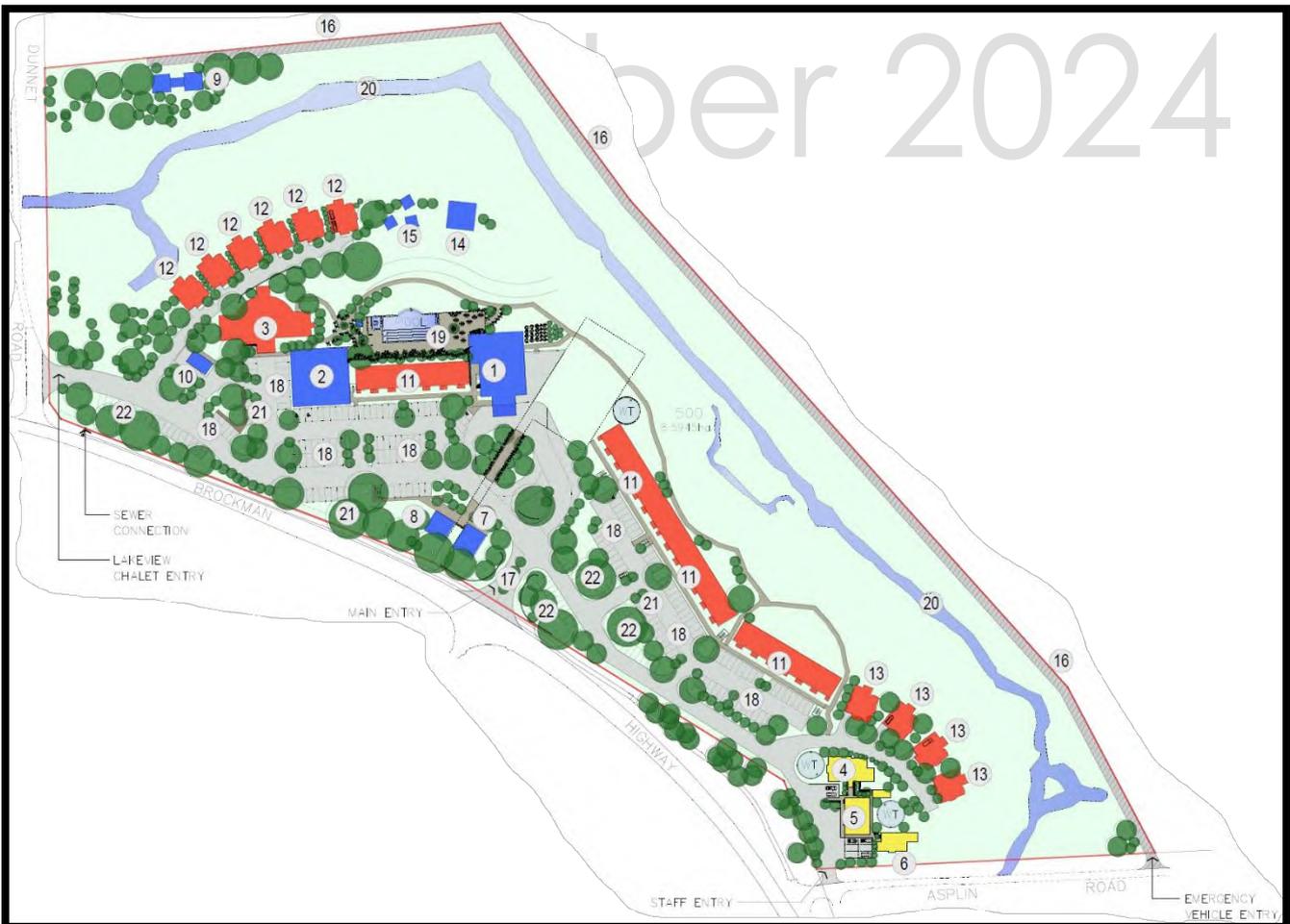
The proposed development seeks to transform the Site into a resort-style hotel, offering a comprehensive range of accommodation and amenities designed to attract both tourists and local visitors. The development will include a main reception area, a full-service restaurant, and a dedicated reception centre for events and gatherings. The resort will be complete with tourist shops, a café, and accommodation for managers and staff.

The facility will also offer a range of leisure and recreational options, including a gymnasium and a swimming pool, aimed at enhancing the guest experience. The development will cater to various visitor needs, with a motel block consisting of 25 rooms spread across four buildings, a 40-bed lodge and two separate chalet areas.

In terms of infrastructure, the development will provide bus parking specifically for the lodge, along with electric vehicle charging stations to support sustainable transport options. Additionally, a children's nature playground will be included, further enhancing the resort's appeal to family visitors.

This development represents a significant addition to the region, offering high-quality accommodation and amenities while contributing to local tourism and economic growth. The proposed layout of the development is shown in Figure 3.1.

Figure 3.1 Proposed Development Layout



Source: Paul Meschiati and Associates Planners

## 3.2 Proposed access arrangements

The proposed development incorporates a vehicle access strategy designed to optimize traffic flow and promote the safety of all users. Access to the development is provided through three separate entry points, with an additional access point reserved for emergency vehicles. Each of these access points is detailed below:

### Dunnet Road (Lake View Chalet Access)

Access via Dunnet Road will be restricted for the exclusive use of the 6 LakeView Chalets, with signage and road management strategies in place to direct all other traffic to the main entry off Brockman Highway. A total of 12 car bays (with tandem parking) are allocated for the chalets, which equates to 12 vehicles using this access point under full occupancy. Dunnet Road will also function as an emergency exit in the event of fire or other emergency evacuation scenarios, promoting safe and controlled egress from the site.

### Asplin Road (Staff Access)

The Asplin Road entry point is designated for the exclusive use of staff, management, and service/waste vehicles. Based on the number of staff members and service vehicles it is forecast that a maximum of 20 vehicles daily will access the site through this entry. This separation of staff and service vehicles from visitor traffic helps minimize congestion and streamline internal traffic operations. Asplin Road will also house a dedicated emergency vehicle access point, further enhancing the development's readiness to manage critical situations without impacting general traffic flow.

### Brockman Highway (Main Entry)

The main entry and exit point for the development will accommodate approximately 83% of the total generated trips. This distribution is based on the previously outlined restrictions of the other access points. Positioned directly opposite Hitchcock Drive, the primary access will feature a newly constructed slip lane for right-turning vehicles, utilising the existing roadway width to replicate the current slip lane at Hitchcock Drive. This design will help improve traffic flow and minimize potential delays for vehicles entering the resort from Brockman Highway.

A risk assessment and sightline analysis for this intersection are provided in Section 7 of this report.

### General Access Considerations

All vehicle crossovers will be upgraded in line with local authority requirements and in accordance with agreed provisions between IDG Resorts Pty Ltd and the Shire of Nannup. This includes that the new slip lane at the Brockman Highway main entry is constructed to facilitate smoother traffic movements and reduce queuing for vehicles turning into the development.

By separating access points based on user type, the vehicle access plan for the development promotes safe and efficient traffic circulation, with minimal disruption to regular operations.

## 3.3 Traffic Generation of the Proposed Development

The trip generation for the proposed development has been calculated using rates derived from the Institute of Transportation Engineers (ITE) Trip Generation Manual (11th Edition). This manual is an industry-standard reference that provides empirically validated data for various land uses, including resort hotel developments.

The proposed development closely aligns with the ITE's technical description of a resort hotel: "a place of lodging that offers sleeping accommodations and complementary facilities such as a full-service restaurant, cocktail lounge, retail shops, and guest services like swimming pool, and other recreational amenities like a fitness room."

The Institution of Transportation Engineers (ITE) conducted investigations of nine Resort Hotels in the United States from the 1980s to the 2010s.

Given the comprehensive nature of the development, the ITE's trip generation rates are particularly applicable, as they account for similar hotel uses with a wide range of services. The trip generation rates used in the analysis are presented in Table 3.1.

Table 3.1 Published Trip Generation Rates

Land Use	Source	AM Peak	IN	OUT	PM Peak	IN	OUT
Resort Hotel	ITE 11 <sup>th</sup> Edition	0.32 Trips per Room	72%	28%	0.41 Trips per Room	43%	57%

These traffic generation rates have been used to calculate estimates of proposed weekday peak hour traffic numbers.

The forecast trip generation for the Site is presented in Table 3.2.

Table 3.2 Estimated Trip Generation Rates for the Site

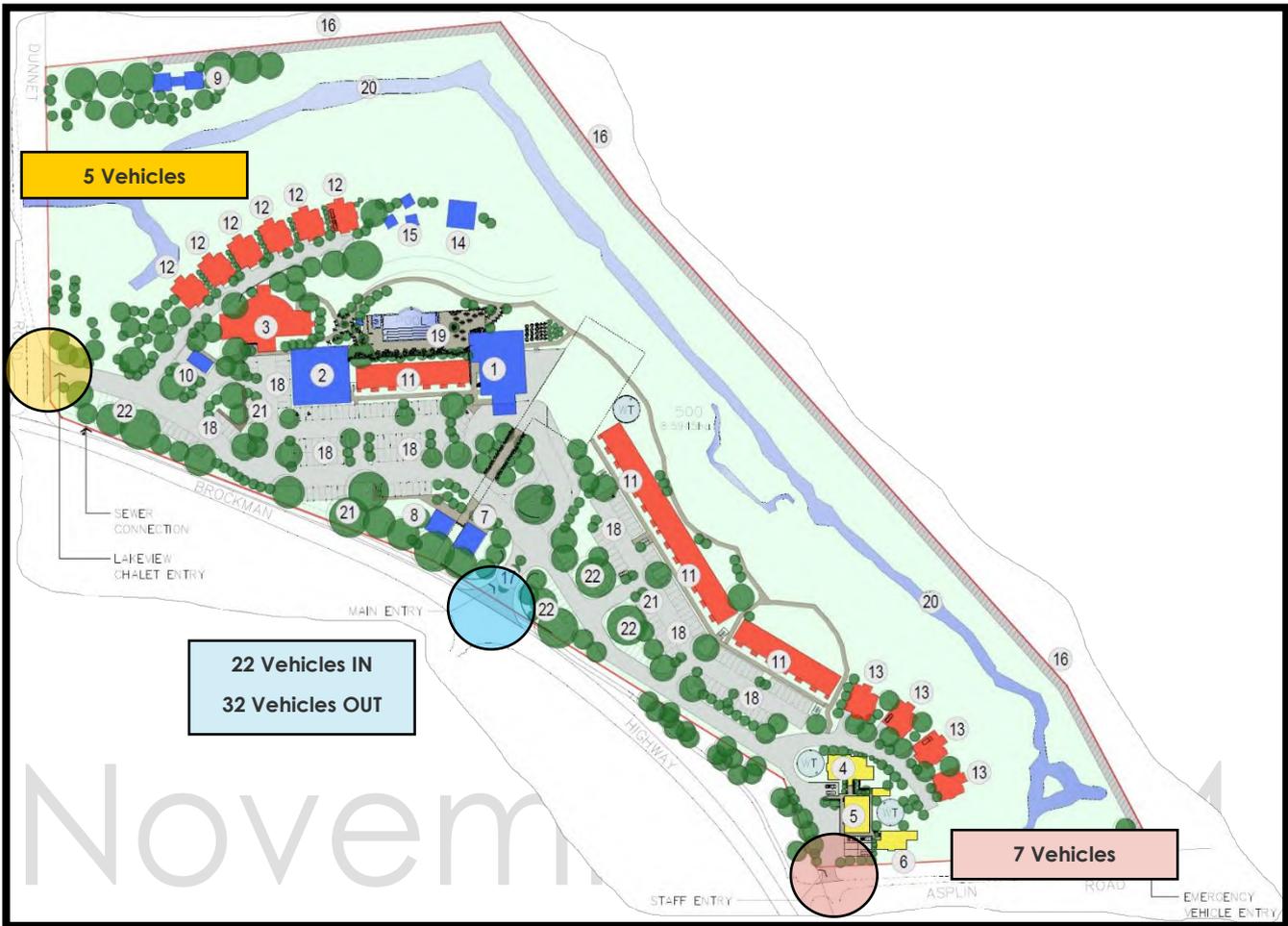
Land Use	Variable	AM Peak	IN	OUT	PM Peak	IN	OUT
Resort Hotel	160 Rooms	51	37	14	66	28	38

The analysis anticipates a moderate increase in traffic volumes, with up to 51 additional two-way vehicle trips during the AM peak hour and up to 66 additional two-way vehicle trips during the PM peak hour.

With the new access arrangements, where 83% of generated trips are projected to use the primary access point off Brockman Highway, a moderate increase in traffic along this route is expected as vehicles access the facility.

Figure 3.2 illustrates the forecast trip distribution for traffic entering and exiting the Site.

Figure 3.2 Generated Trip Distribution for PM Scenario



Source: Paul Meschiati and Associates Planners

### 3.3.1 Traffic Impact to Brockman Hwy

When assessed against the existing road network, future traffic volumes are anticipated to show a marginal increase over current levels (refer to Table 3.3). The additional trips generated by the proposed development are expected to be evenly distributed across both directions, with traffic flowing westbound (WB) and eastbound (EB).

While the percentage increase in projected traffic may appear notable, it is important to recognize that both Brockman Highway and Dunnet Road currently operate well below their maximum traffic capacity. For context, a single lane carriageway can typically accommodate up to 800 – 1,000 vehicles/hr without experiencing low levels of service. Even with the anticipated increase due to the development, peak-hour traffic volumes are projected to remain well below this amount, i.e., <200 vehicles per hour per lane.

Based on these projections, the existing road network has sufficient environmental traffic capacity to support the proposed change in land use without introducing any significant traffic-related issues.

Table 3.3 Estimated Future Traffic Peak Hour Volumes on Brockman Hwy

Road Network	Weekday AM peak (vph)	% change in AM peak hour	Weekday PM peak (vph)	% change in PM peak hour
Brockman Hwy	111	85%	125	111%

### 3.3.2 Impact to Local Streets

The acceptable threshold for traffic volume changes on local access roads is generally considered to be up to 50% of the existing volume, provided the total traffic remains within the road's operational capacity, as outlined in Main Roads guidelines.

The projected traffic increase for Dunnet Street and Asplin Road is minimal, as these are local access roads with limited connectivity to the surrounding network. The slight increase in traffic due to vehicle access (<50%) remains well within the environmental capacity of these roads, given their current low traffic volumes.

### 3.3.3 Intersection Operations

Given the low traffic volumes generated by the proposed development, it has been determined that the peak-hour traffic increase on the road network is unlikely to produce any material impacts on the following intersections:

- Brockman Highway / Hitchcock Drive
- Brockman Highway / Dunnet Road
- Brockman Highway / Asplin Road

Additionally, the driveway accesses from both Brockman Highway and Dunnet Road have sufficient capacity to accommodate well over 100 vehicles per hour, which comfortably meets the projected peak-hour traffic volumes associated with site ingress and egress.

Consequently, the existing access points are adequately designed to handle the anticipated traffic demand without affecting the operational performance of the surrounding road network.

## 3.4 Provision for Service Delivery and Waste Collection

The proposed Waste Management Plan for the development includes waste services provided through a private contractor, utilising a combination of bin types - primarily large 1,100-litre wheeled bins with rear-loading waste collection vehicles.

Waste collection vehicles will access the site exclusively via Asplin Road and Brockman Highway, with entry and exit from Dunnet Road strictly prohibited. During the resort's operational phase, delivery vehicles will be restricted to a maximum size of a six-wheeled Pantech.

Site access for waste collection has been assessed using a rear-loading 6x4 waste collection vehicle, with a maximum length of 8.013 meters. Swept path diagrams demonstrating this vehicle's manoeuvrability are included in Appendix B of this report.

## 4 Parking Assessment

### 4.1 Proposed Car Parking Supply

The proposed development includes a total of 207 car parking bays for customers and visitors, of which 12 are designated for Electric Vehicle Charging Stations. This total also includes 4 accessible/ACROD bays to accommodate individuals with disabilities, satisfying the BCA requirements, and 6 bays designated for staff parking.

Additionally, 4 coach bus parking bays are provided on-site, along with designated areas for pick-ups and drop-offs.

Furthermore, 44 overflow car bays have been included to cater for any special events that the development may host.

Comprehensive assessments of turning radii and travel paths have been conducted for cars, buses, and service vehicles within the proposed layout. Figures illustrating swept path simulations can be found in Appendix B of this report.

### 4.2 Car Parking Requirements

The proposed vehicular parking for the resort has been supplied in accordance with the provisions outlined in Local Planning Scheme No. 4 (LPS4). Given the variety of buildings on the site, the parking requirements have been determined based on the specific needs of each building type (e.g., restaurant, lodge, shop, chalet) rather than applying the generic "Tourist Development" parking requirements.

Table 4.1 below provides a detailed summary of the parking requirements for each building type.

Table 4.1 Parking requirements

Building Type	Requirements / Units	Number of Required Car Parking Bays
Building 1 - Restaurant	1 bay per 40 m <sup>2</sup> NLA. 457 m <sup>2</sup> = 12 bays	12
Building 1 - Reception	1 bay per 40 m <sup>2</sup> NLA. 100 m <sup>2</sup> = 3 bays	3
Building 1 - Reception Centre	1 bay per 4 seats. 44 seats = 11 bays	11
Building 2 - Shops	1 bay per 40 m <sup>2</sup> NLA (min. 3 bays per tenancy). 5 tenancies shown = 15 bays	15
Building 2 - Reception Centre	1 bay per 4 seats. 28 seats = 7 bays	7
Building 3 - Lodge	1 bay per bedroom + 1 x visitors bay per 4 bedrooms (based on email from Shire of Nannup Planner – see attached). 12 bedrooms = 12 bays + 3 visitors bays	15
Building 4 – Managers Residence	As per R-Codes – 2 bays for 2+ bedroom dwelling. 4 bedrooms = 2 bays	2

Building Type	Requirements / Units	Number of Required Car Parking Bays
Building 5 – Workshop / Storage	1 bay per 100 m <sup>2</sup> NLA or 1 bay per employee. 2 employees = 2 bays	2
Building 6 – Staff Accommodation	As per R-Codes – 2 bays for 2+ bedroom dwelling. 2 X 3 bedroom dwellings = 4 bays	4
Building 7 - Gymnasium	1 bay per 40 m <sup>2</sup> NLA 100 m <sup>2</sup> = 3 bays	3
Building 9 – Exercise Gazebo	1 bay per 40 m <sup>2</sup> NLA 152 m <sup>2</sup> = 4 bays	4
Building 11 - Motel	1 bay per bedroom + 1 x bay per 40 m <sup>2</sup> NLA for floor space other than used for accommodation purposes 100 bedrooms + 272 m <sup>2</sup> NLA = 100 + 7 = 107 bays	107
Building 12 & 13 - Chalets	1 bay per accommodation unit + 1 x visitors bay for every 4 accommodation units. 10 units + 3 visitors bays = 13 bays	13
<b>TOTAL NUMBER OF BAYS REQUIRED</b>		<b>198</b>

Source: Local Planning Scheme 4, Shire of Nannup

Based on the analysis, 198 parking bays are required to accommodate the proposed development at 100% capacity. It is important to note that these parking requirements are calculated under the assumption that the development is fully occupied, which, in practice, is unlikely to occur very regularly. Typically, occupancy rates would average around 60%.

Additionally, it is expected that many of the facilities within the development, such as the exercise gazebo, gymnasium, restaurant, and shops, will primarily serve resort guests. As such, the parking demand for these facilities would typically be absorbed within the overall accommodation parking provision. However, we have presented the parking requirements separately as a worst-case scenario, assuming these amenities may be open to the general public.

Table 4.3 offers a clear comparison between the provided parking bays, and the regulatory parking requirements, further illustrating the rationale behind the proposed parking provisions.

Table 4.3 Parking requirements vs Parking Provided

	Number of Car Parking Bays
On-Site Car Parking Bays Provided	207/(251)
On-Site Car Parking Bays Required	198

The plans provided by the Applicant (refer Figure 3.1), indicate the provision of 251 car parking bays, 50+ bays in excess of the minimum 198 car parking bays required. The development therefore fully complies in relation to car parking supply.

#### **4.2.1 Accessible parking requirements**

To determine the number of accessible parking or ACROD bays required, reference has been made to the standards set by the Building Code of Australia (BCA). For a mixed used development, the BCA specifies a requirement of 1 accessible parking space for every 50 car parking spaces or part thereof.

Based on these regulations, with a total of 198 car parking bays, the proposed development is required to provide at least 4 ACROD bay to provide compliance with accessibility standards. This requirement has been satisfied.

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## 5 Public Transport Facilities

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### 5.1 Existing Public Transport Facilities

The Shire of Nannup is serviced by TransWA with a long-distance bus route that connects Perth with several regional towns. This coach service operates from East Perth Terminal and stops at multiple key locations on its route to Nannup, including Cockburn Central, Mandurah, Bunbury, and Busselton, among others. The bus service stops at Adam Street, opposite the Shire offices in Nannup, providing visitors with a public transport option to and from Perth.

The bus operates on several days of the week, with services available from both Perth and Pemberton. The return service departs from Nannup to Perth early in the morning on scheduled days.

### 5.2 Future Public Transport Facilities

At this time, there are no publicly announced plans to introduce additional public transport services in the Shire of Nannup. The current focus remains on maintaining and enhancing road infrastructure to support private vehicle use. However, the existing coach service provides an important connection for residents and visitors traveling between Nannup and other regional centres, as well as Perth.

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## 6 Pedestrian / Cycle Networks and Facilities

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### 6.1 Existing Pedestrian / Cycle Network

The Site is served by a pedestrian and cycling path, as illustrated in Figure 6.1. The current infrastructure provides convenient and direct connections to the Nannup Town Centre and surrounding areas. The existing paths allow safe and efficient travel for pedestrians and cyclists, contributing to the overall accessibility of the Site.

### 6.2 Future Pedestrian / Cycle Facilities

At present, there are no planned projects for additional pedestrian or cycling infrastructure in the immediate vicinity of the development.

### 6.3 Pedestrian Access within the Site

Pedestrian access throughout the development has been designed to meet the needs of all users, including those with mobility aids. Pathways from car parks to building entrances are a minimum of 1.5 meters in width, providing sufficient space for comfortable and safe pedestrian movement.

The development features a continuous accessible path of travel, promoting seamless internal connectivity and compliance with relevant accessibility standards.

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## 7 Site Specific Issues

### 7.1 Crash Assessment

A review of the Main Roads WA Reporting Centre was conducted to obtain traffic crash data for the section of Brockman Hwy between Dunnet Rd and Asplin Rd, covering the period from 1 January 2019 to 31 December 2023. The search revealed that no crashes were reported within this section during the specified timeframe.

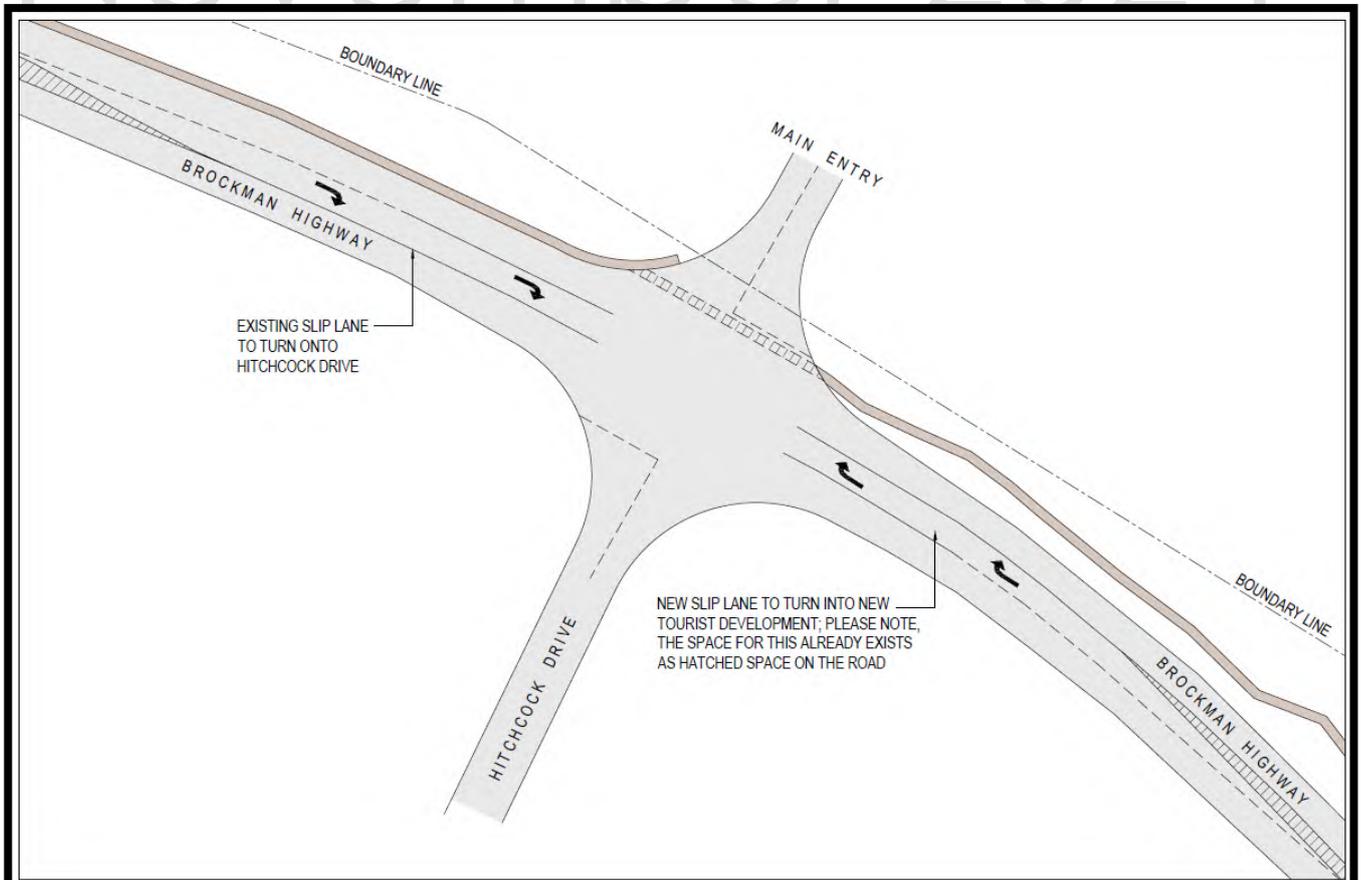
### 7.2 Access Risk Assessment

The access points from both Asplin Road and Dunnet Road experience relatively low traffic volumes, and as such, no significant issues are anticipated for vehicles entering or exiting the development from these roads. The low traffic intensity and existing road geometry indicate that these access points will function efficiently without posing any significant risks to traffic flow or safety.

The primary access point will be from Brockman Highway. This entrance intersects with Brockman Highway, Hitchcock Drive, and the entrance to the development, forming a four-way intersection. Given the clear visibility at this intersection, it will be controlled by a give-way sign rather than signalization, which is appropriate for the expected traffic volumes, the regional location, and the available sight distances at this location.

In addition to the Give Way control, the intersection design is proposed to incorporate a right-turn slip lane for vehicles entering the resort from Brockman Highway. This slip lane is intended to streamline traffic flow and minimize the risk of queuing or delays on the main highway. A visual representation of the proposed right-turn slip lane is provided in Figure 7.1.

Figure 7.1 New right-turn slip lane



In terms of technical requirements, the design of the slip lane must meet specific criteria, including:

- A deceleration lane of sufficient length to allow vehicles to reduce speed safely without disrupting the flow of through traffic on the highway.
- Adequate lane width and shoulder clearance, for the safe manoeuvring of both turning and through vehicles.
- A turning radius designed to accommodate the largest vehicle anticipated to use the access point, in compliance with applicable rural and semi-rural intersection design standards.

The existing road width on Brockman Highway is sufficient to integrate the new slip lane, and the design will replicate the existing right-turn slip lane at Hitchcock Drive, promoting both consistency and compliance with established road layout standards.

### 7.3 Assessment of Safe Sightlines

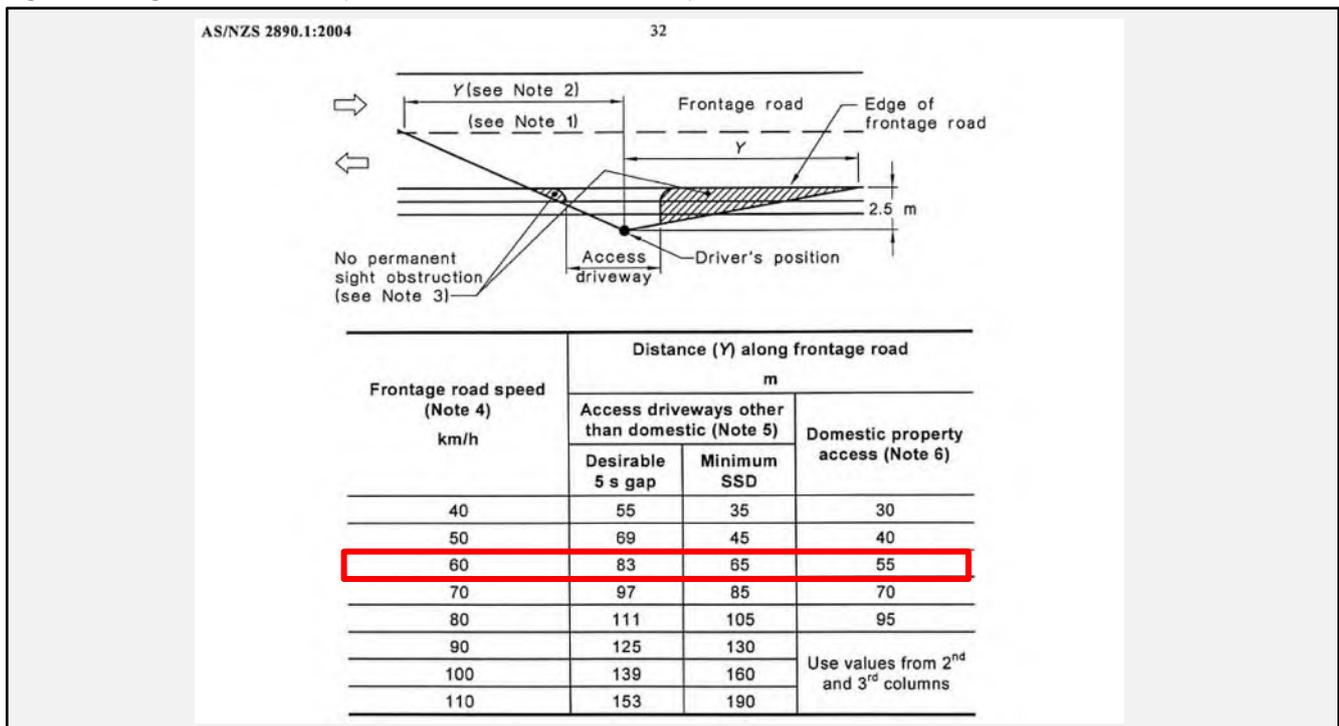
To further assess the safety and functionality of the Brockman Highway / Hitchcock Drive intersection, a sightline assessment was conducted.

The sight distance requirements for access driveways outlined in *Australian Standard AS2890.1-2004 Parking facilities Part 1: Off street car parking (AS2890.1)* are derived from Austroads Stopping Sight Distance criteria and are depicted in Figure 7.2.

#### 7.3.1 Stopping Sight Distance (SSD) assessment

The current posted speed limit on Brockman Hwy is 60 km/h. Rather than relying on the minimum required Stopping Sight Distance (SSD) of 65 meters, we have elected to assess the location using the desirable SSD of 83 meters. This decision accounts for additional factors such as the road curvature and other potential visual impediments.

Figure 7.2 Sight Distance Requirements at Access Driveways



Source: AS/NZS 2890.1

### 7.3.2 Safe Intersection Sight Distance

A vertical and horizontal SISD (Safe Intersection Sight Distance) analysis was conducted in accordance with *Austroads: A guide to Road Design 4A*.

$$SISD = \frac{D_t \times V}{3.6} + \frac{V^2}{254 \times (d + 0.01 \times a)}$$

- $D_t$  (Decision Time in seconds) = Observation Time (3 sec) + Reaction Time (AGRD Part 3)

$$D_t = 5 \text{ seconds}$$

- $V$  = Operating (85% percentile) Speed (km/h)

$$V = 60 \text{ km/h}$$

- $d$  = Coefficient of deceleration (AGRD Part 3)

$$d = 0.36$$

- $a$  = Longitudinal grade

$$a = +1\% \text{ average}$$

$$\mathbf{SISD = 135}$$

### 7.3.3 Findings of Assessments

Table 7.3 provides a summary of the sight distance assessments, with a visual representation available in Appendix C. Additional site visibility images, sourced from Google Street View, are also included in the Appendix A for further reference.

Table 7.3 Safe Sight Distance

Safe Sight Distances	
<b>SISD</b>	135 m
<b>SSD</b>	83 m

The assessment revealed no issues regarding visibility, confirming that sightlines from both directions adequately achieve minimum requirements for safe ingress and egress.

## 8 Summary

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This Transport Impact Statement presents an assessment of the transport impacts of the proposed development focusing on traffic network conditions, operations, accessibility, and provision of car parking. Included are also discussions regarding pedestrian, cyclist, public transport and road safety considerations.

This Statement has been prepared in accordance with the WAPC Transport Assessment Guidelines for Developments: Volume 4 - Individual Developments (2016).

Findings and conclusions:

- The traffic generated by the development during peak hours will result in only a marginal increase in local road usage, well within the acceptable thresholds outlined by the Western Australian Planning Commission (WAPC) guidelines. The existing road network, including Brockman Highway, has sufficient capacity to accommodate this increase without compromising traffic flow or safety.
- The regional/rural context of the Site inherently limits reliance on public transport, which remains sparse and infrequent. However, the development demonstrates foresight by focusing on infrastructure that supports private vehicle use, including ample parking and electric vehicle charging stations. This approach acknowledges the local dependency on cars and aligns with the broader transition toward sustainable electric vehicles.
- The development's access strategy is designed to optimize traffic circulation and minimize congestion risks. The addition of a right-turn slip lane at the primary Brockman Highway access point will promote smooth and safe entry to the site, with sightline assessments confirming compliance with safety standards.
- With the supply of 251 parking bays, including dedicated electric vehicle charging stations and accessible bays, the development exceeds local parking requirements. This will promote adequate capacity for guests, staff, and event parking, effectively mitigating any potential parking shortfalls. Anticipating surges in demand, such as during high-traffic events, overflow parking has been built into the development plan. Flexible access strategies will be essential to maintaining operational fluidity and visitor satisfaction during these busy periods.

In conclusion, the proposed Nannup Alpine Resort development is forecast to generate moderate traffic increases that can be readily accommodated by the existing road network. The access and parking provisions have been assessed as being adequate, and the development is in line with local planning objectives. Overall, the transport impacts are manageable, and the resort will enhance the region's tourism infrastructure without causing significant disruption to the surrounding area.

## Appendix A: Street view of the Site

Brockman Hwy and Hitchcock Dr



Brockman Hwy and Hitchcock Dr



Brockman Hwy and Asplin Rd

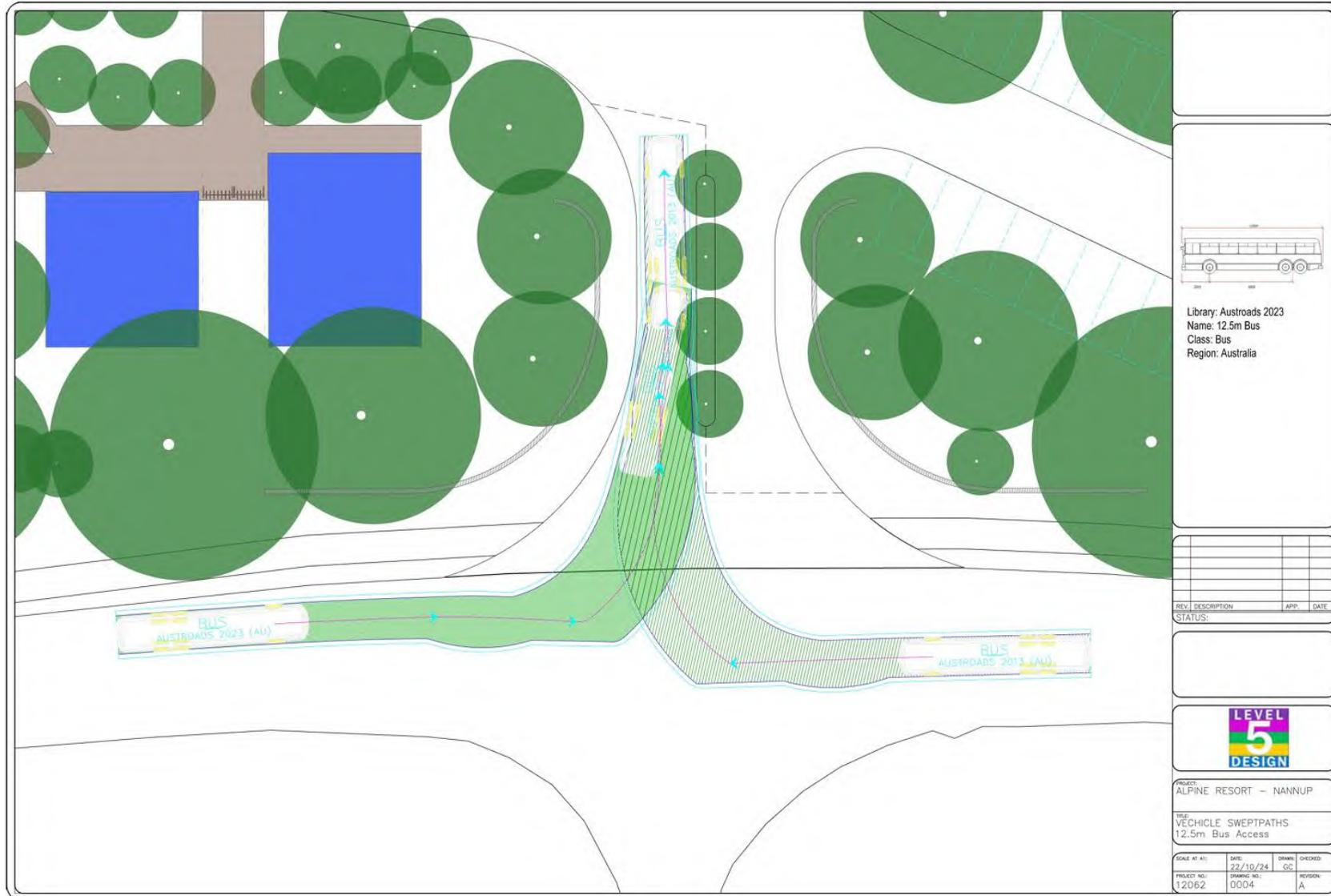


Brockman Hwy and Dunnet Rd

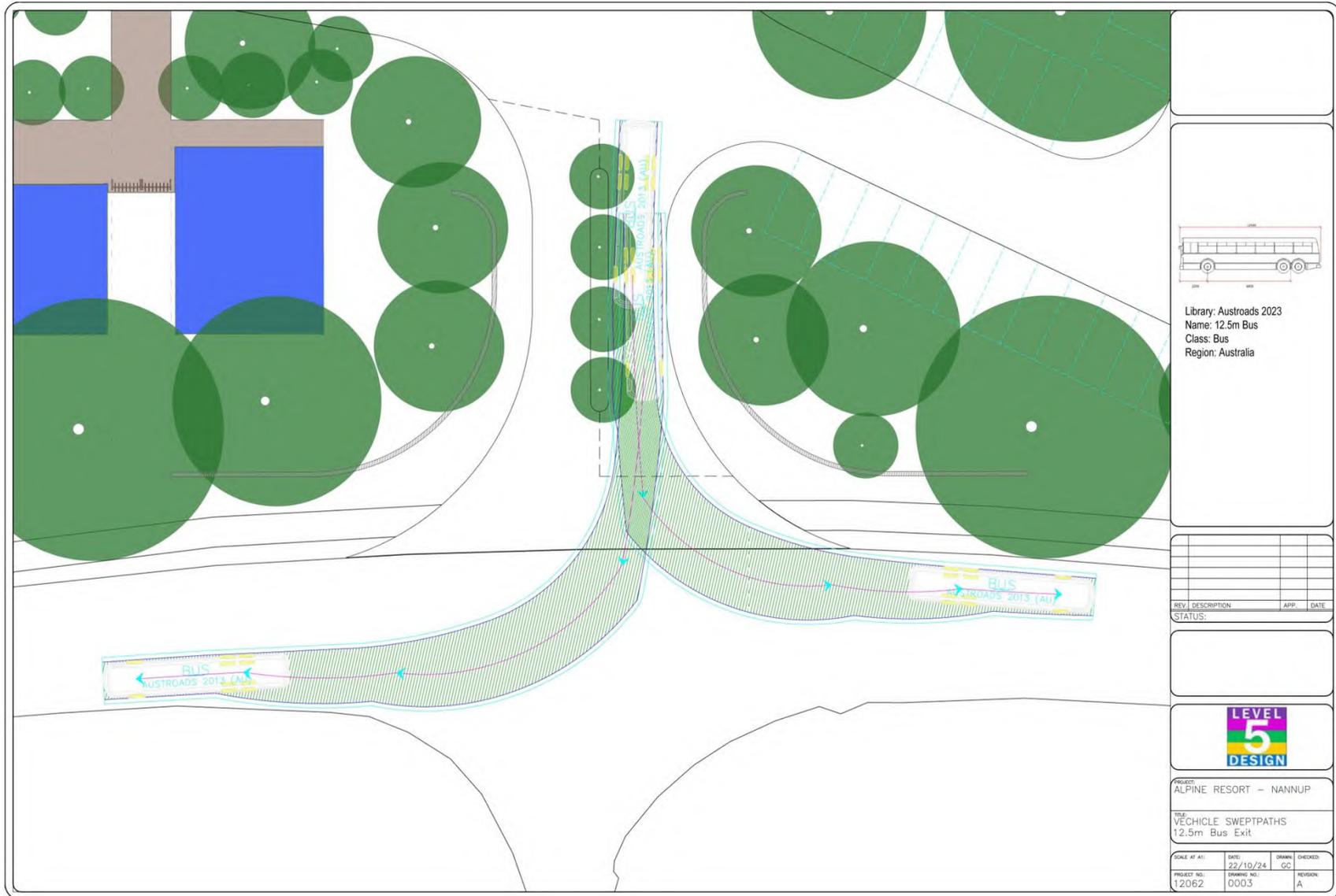


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### Appendix B: Vehicle Swept Paths



12.5m Bus Site Access



12.5m Bus Site Exit



12.5m Bus Internal Manoeuvring



B85 – Small Vehicle Parking



Passenger Shuttle service



Waste Vehicle Access

Library: Cleanaway  
 Name: 8.013m Iveco 6x4  
 Class: Waste Truck  
 Region: Australia

REV	DESCRIPTION	APP	DATE

STATUS:

**LEVEL 5 DESIGN**

PROJECT: ALPINE RESORT - NANNUP

TITLE: VEHICLE SWEEP PATHS  
 Waste Vehicle

SCALE AT A1:	DATE:	DRAWN:	CHECKED:
	22/10/24	GC	
PROJECT NO:	DRAWING NO:	REVISION:	
12062	0006	A	

## Appendix C: Sightlines Assessment



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