

Technical Memorandum



Subject	Parking Management Plan – 13 Beenyup Road Childcare, Byford		
Client	Keyline Nominees Pty Ltd	Project No.	CW1174100
Date	21/10/2021	Revision	B
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Reviewed by	Scott Lambie	Office	Perth

1 Introduction

1.1 Background

Cardno was commissioned by Keyline Nominees Pty Ltd to prepare a Parking Management Plan for the proposed childcare development located at 13 Beenyup Road Childcare, Byford.

This Parking Management Plan aims to document the parking bay allocation, and inform the parking operation and management within the proposed car park of the Site.

2 Site Context

2.1 Site Location

The proposed childcare is located at 13 Beenyup Road, Byford within the *Shire of Serpentine Jarrahdale*, at the corner of Beenyup Road and Dundatha Drive intersection as shown in **Figure 2-1**.

Figure 2-1 Site Location



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2.2 Operation Overview

The childcare is proposed to accommodate up to:

- > 100 children; and
- > 20 Staff

The hours of operation are expected to be between 06:30 AM to 6:30PM, Monday to Friday.

3 Car Parking Management

3.1 Parking Requirements and Provision

The statutory car parking requirements for the proposed development has been calculated as per the *Shire of Serpentine-Jarrahdale Town Planning Scheme No.2*. Based on the car parking requirements, the proposed childcare is required to provide 20 car parking bays (including staff and visitor parking bays).

Requirements and Provision	No. of Parking Bays
Statutory Car Parking Required (LPP 13)	20 bays
Total Car Parking Provision	On Site – 23 bays (including 1 ACROD bay, 1 shared bay and 1 drop off / loading bay) Off Site – 6 bays

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3.2 Car Parking Allocations within Site

The proposed car parking allocation within the Site is summarised in **Table 3-1** and illustrated in **Figure 3-1**. All visitor parking bays shall be clearly marked with "Visitor Parking" pavement marking and/or signs to remind patrons of the allocated parking bays.

Table 3-1 Car Parking Allocations

Allocations	No. of Parking Bays
Staff Car Parking Allocation	15 bays
Visitors Car Parking Allocation	On Site – 8 bays (including 1 ACROD bay) Off Site – 6 bays

Figure 3-1 Car Parking Allocations



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3.3 Staff Parking – On Site

It is intended that the child care centre is to house up to 20 staff members, with only 15 parking bays potentially allocated to staff. However, due to the strategic location of the Site, the limit on staff parking allocation is expected to be sufficient for the needs of the centre.

It is anticipated that the child care will aim to employ a larger proportion of employees who live within the nearby Byford locality, which may allow staff members in close proximity to the Site to be encouraged to take alternative mode of transport to work (cycling/walking).

Furthermore, staff members may be dropped-off and picked-up by their family members, which will not require a long term parking spot. Staff members could also car pool to and from the Site, which would reduce the car parking demand and the centre management would be encouraged to support these measures.

In addition, it is understood that the number of staff members required on any given day is largely dependent on the number children accommodated by the child care centre. It is anticipated that there could be part time care spots, where children only attend the childcare a few days a week. Therefore, part-time staff may be rostered to accommodate the part-time children demand, which would further reduce the daily staff parking demand. Potential day-shift (short-shift) staff who would likely arrive after the AM peak and leave before the PM peak periods can utilise the visitors/parents parking as these bays are expected to be vacant during most of the day. This car park use would need to be monitored to ensure that these bays are cleared before the parent peak activity occurs.

3.4 Visitors/Parents Parking (On Site & Off Site)

The *NSW RTA Guide to Traffic Generating Development* specifies 6.8 minutes as an average childcare drop off period associated with parking bays occupancy. However, it is noted that the younger children (0-2 of age) may require longer handover time, while parents of older children (3+ age) who are already accustomed to the child care may require less time for handover.

For robust assessment, the average drop-off / pick-up time is assumed to be 7 minutes. Hence, the 11 parking bays allocated to visitors/parents on site could accommodate up to **94 vehicles within an hour**. In addition to that, the 6 reciprocal visitor parking bays off-site could accommodate an additional **51 vehicles in an hour**.

The traffic generation rates suggested within the RTA guide for Long-day care is 0.8 trip / child during the AM peak, and 0.7 trip / child during the PM peak. As noted within the guideline, the peak period of a childcare often occurs within a 2 hours period, instead of typical one-hour peak. This is acceptable as a childcare does not have a specific start time (like a school), so some parents may drop-off or pick-up their children outside of a typical peak hour.

Based on the trip generation calculation, the childcare is expected to accommodate **approximately 40 vehicles within an hour**, which is well within the capacity of the visitor car parking allocation suggested above.

Additionally, the average operating capacity of a typical child care is approximately 85% of maximum capacity due to the following:

- > Children attending childcare part-time (certain days of the week);
- > Children being absent from childcare due to sickness and family commitments

This is expected to further reduce the car parking demand for visitors/parents during the pick-up and drop-off periods.

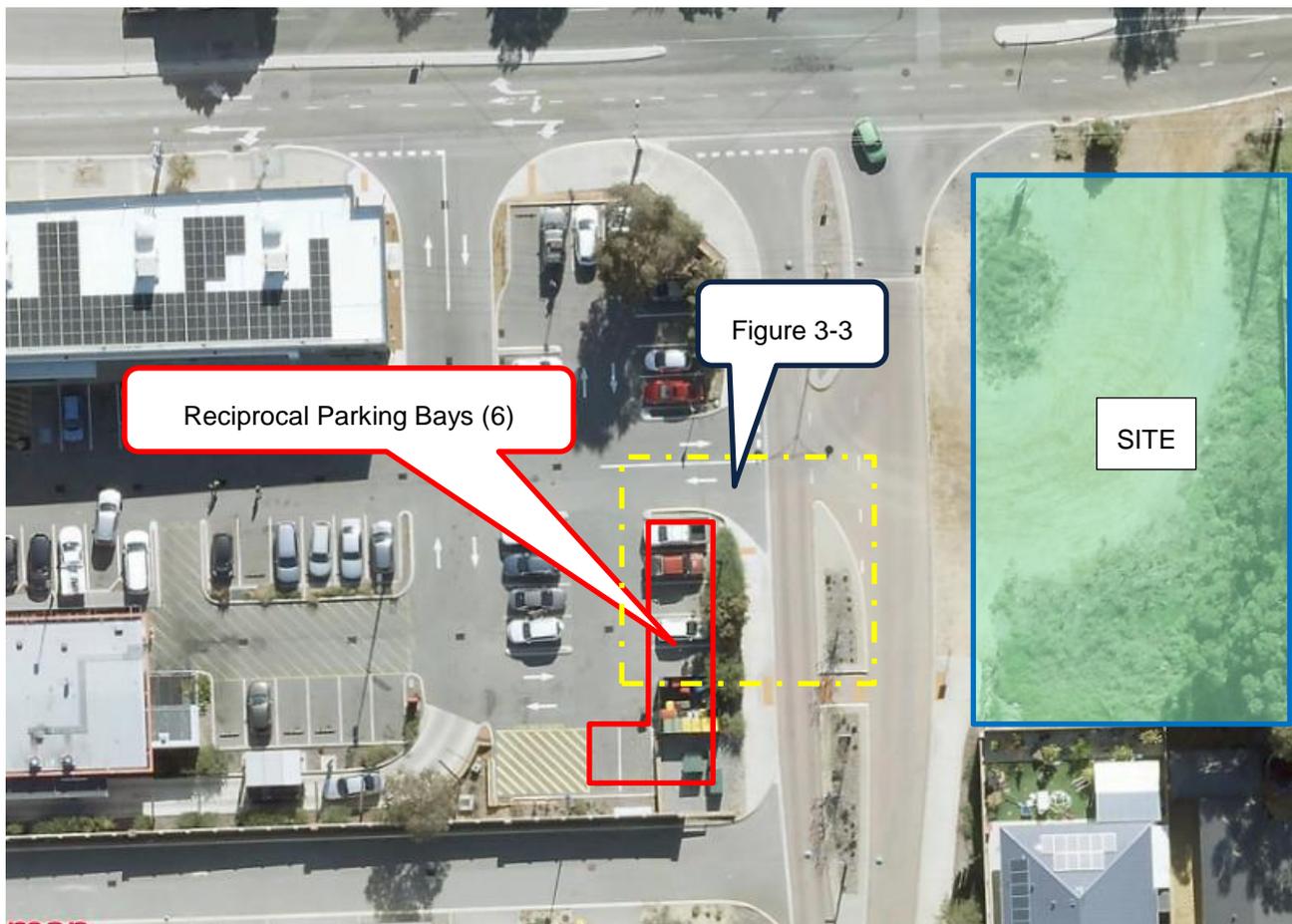
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3.5 Reciprocal Parking (Off-Site)

A reciprocal parking arrangement is proposed between the childcare sites and adjacent commercial site. It is intended that the existing 7 car parking bays located along the south eastern boundary of the adjacent lot would be shared by the proposed child care centre (allocated to the visitors/parents visiting the childcare) during peak periods as illustrated in **Figure 3-2**.

Figure 3-2 Shared Parking Bays (Adjacent Lot)



Allocating the reciprocal parking bays to the visitors and parents during the child care centre's peak periods will allow the shared parking bays to be used by the adjacent commercial development outside of childcare centre peak periods.

Additionally, these reciprocal bays provide an opportunity for users to turn left onto Dundathra Drive and head north onto Beenyup Road. This could encourage visitors/parents who would head north after picking up their children to park in the adjacent car park, avoiding the need to circulate around the block to head back onto Beenyup Road.

Appropriate signage shall be installed at the designated parking bays to inform carpark users of the reciprocity of these parking bays. It is recommended that these parking bays be limited to short-term parking only (15 minutes) to promote a higher turn-over rate and ensure parking bays are made available during the childcare's pick-up and drop-off time.

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3.6 Pedestrian Travel Line from Off Site Parking

A pedestrian crossing with median refuge is currently available on Dundatha Drive, to the south of the proposed crossover. To further improve the pedestrian amenity and provide a better connection between the two sites, it is suggested that the vegetation to the east of the reciprocal bays be maintained and kept low.

An illustration of the proposed pedestrian kerb ramp is shown in **Figure 3-3**.

Figure 3-3 Pedestrian Kerb Ramp



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The suggested pedestrian travel line between the two sites is illustrated in **Figure 3-4**.

Figure 3-4 Pedestrian Travel Line



3.7 Information Delivery

Parents / Guardians of children attending the childcare will be provided with instructions on the car park operation and management when the children are enrolled. Car parking bay allocation diagrams will be put up near the reception area to constantly remind parents of the car parking arrangements.

All staff members will be informed and educated to not park in visitor car parking bays. This will be managed by the centre administration by allocating parking bays to staff either through applications or requests. This will ensure that the staff members will not occupy the designated visitor bays.