

Memorandum

Project: Fern Street Children's Centre, Black Rock
Our Ref: G26436M-01A
Date: 7th March, 2019

**RE: Traffic Engineering Assessment
Fern Street Children's Centre, Black Rock**

1 Introduction

Please find below a preliminary assessment of the parking requirements for the proposed Fern Street Children's Centre in Black Rock. The assessment has been based on the initial scope of works developed as part of the fee proposal and the concept plan developed by Hede Architects.

2 Proposal

We understand that the preliminary uses of the Fern Street Children's Centre are as follows:

- 66 place kindergarten (across two rooms),
- 22 place occasional care room,
- 2 playgroup field officers,
- Toy library,
- Maternal Child Health, and
- Community room (proposed to have a maximum occupancy of 40 people).

All other uses such as kitchens, staff rooms, storerooms and meeting rooms are considered ancillary to the primary uses from a parking perspective.

Due to the limited amount of space on the subject site and the desire to provide a 'tranquillity garden', parking is likely to be provided via a single row of parking spaces accessed via a one way aisle off Fern Street.

3 Existing Conditions

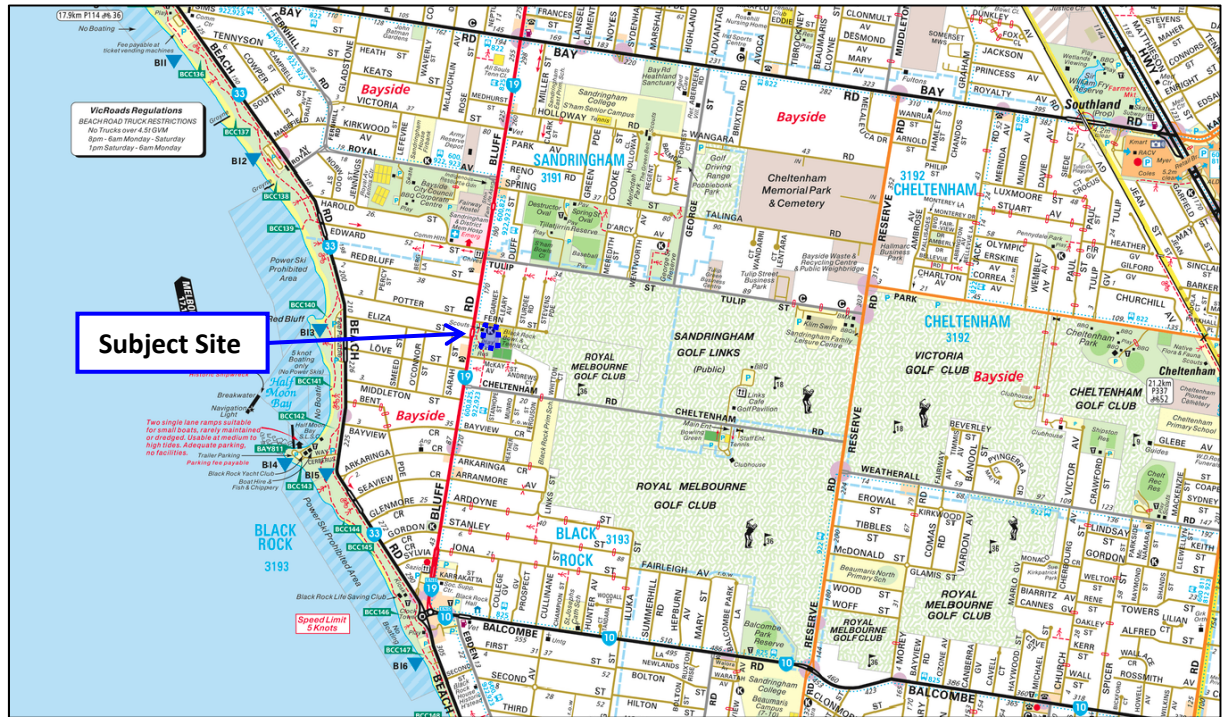
Subject Site

The Children's Centre is proposed to be located on the south-east corner of Fern Street and Bluff Road in Black Rock, as shown in Figure 1. The subject site is currently occupied by a vacant Scout Hall and Guide Hall which are due to be demolished, along with the recently demolished Janet Mundy Kindergarten.

Land use in the broader area is predominantly residential, with the exception of the Black Rock Tennis and Bowls Club immediately to the east of the subject site and a small amount of retail along Bluff Road to the west. A number of golf courses including Royal Melbourne Golf Club, Sandringham Golf Links and Victoria Golf Club are located further east of the site.

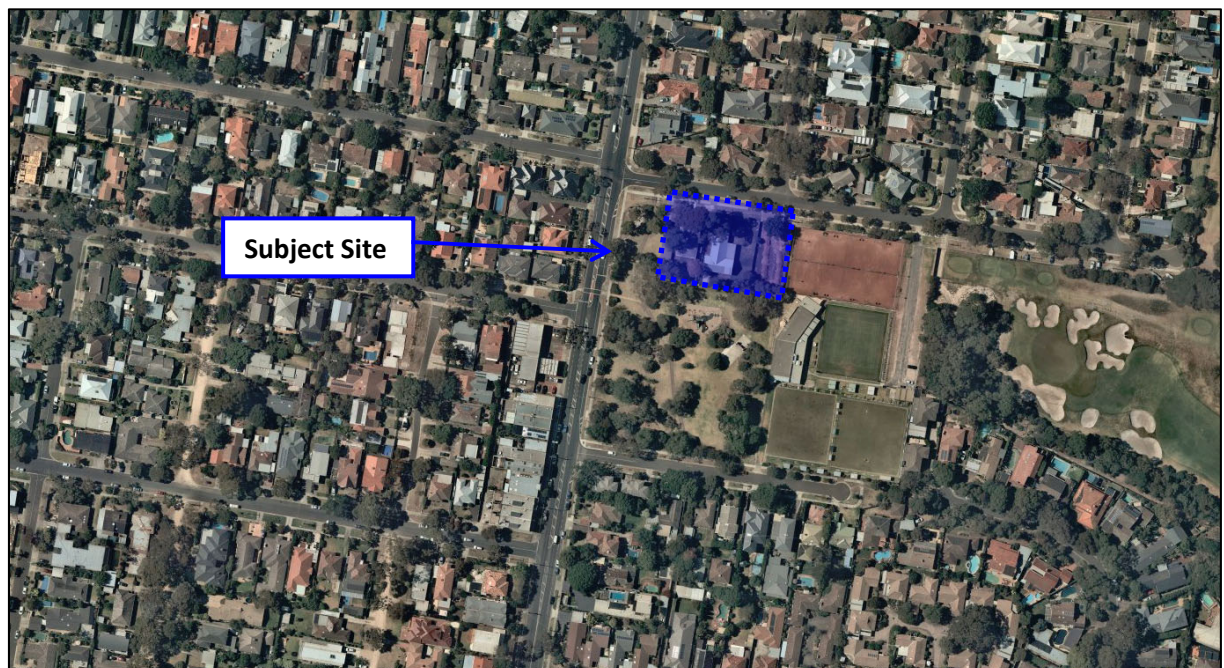
The subject site is zoned a combination of 'Public Park and Recreation' and 'Neighbourhood Residential – Schedule 3'. The surrounding area is also generally zoned 'Neighbourhood Residential – Schedule 3'.

A locality plan and aerial photograph showing the proposed location of the Children's Centre are provided in Figure 1 and Figure 2 below.



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Figure 1: Locality Map



Source: Nearthmap

Figure 2: Aerial Photograph

Road Network

Fern Street is classified as a local road under the Bayside City Council Register of Public Roads and is orientated in an east-west direction extending between Bluff Road in the west to a dead-end that terminates approximately 40m east of Stevens Parade.

Within the vicinity of the subject site, Fern Street is approximately 7.5m wide and permits a single lane of traffic in each direction with unrestricted parking permitted on the south side of the road and 'No Parking' restrictions on the north side. The default urban speed limit of 50km/h applies to Fern Street.

Bluff Road is classified as an arterial road and is orientated in a north-south direction between South Road in the north and Balcombe Road in the south. Bluff Road is approximately 13m wide and permits a single lane of traffic in each direction with a 2.3m wide painted central median. Indented parking lanes are provided on both sides of Bluff Road within the vicinity of the subject site. Bluff Road is subject to a posted speed limit of 60km/h.

Photographs of the surrounding road network are shown at Figure 3 to Figure 6 below.



Figure 3: Fern Street – View West



Figure 4: Fern Street – View East



Figure 5: Bluff Road – View North



Figure 6: Bluff Road – View South

4 Preliminary Car Parking Demands

The statutory car parking rate for the proposed uses has been calculated using Clause 52.06 and a first principles assessments.

Clause 52.06 outlines car parking rates for the following centre components:

- Child care centre (Occasional Care) – 0.22 spaces to each child,
- Medical centre – 5 spaces to the first practitioner plus 3 for every other practitioner, and
- Place of assembly – 0.3 spaces to each patron.

Given that the maternal health childcare centre will be operating without a receptionist, the adopted parking rate will be 3 per practitioner (representing 1 staff member, 1 patient being treated and 1 patient waiting).

The parking demands for the remaining uses have been adopted as follows:

- As kindergarten is not a use in the Planning Scheme, an empirical assessment must be made. In our experience, parking rates of approximately 0.4-0.8 spaces per child can be expected depending on the number of parents who walk or ride to the pre-school. The lower rate of 0.4 is based on the staggering of start/finish times of classes.
- The two (2) playgroup field officers will generally be out of the centre but will still need a car space to return to do office work. On this basis, one (1) space per officer has been adopted.
- Toy library will largely be seen as an ancillary use however will be likely run by a single staff member who can double as the general administrator for the centre.

Table 1 below details the overall car parking rates for the preliminary uses based on the above.

Table 1: Preliminary Car Parking Rates

Proposed Use	Size/No	Adopted Parking Rate	Peak Parking Demand		
			Staff	Patron / Visitor	Total
Kindergarten Room 1	33 children	0.4-0.8 spaces per child	2	11-24	13-26
Kindergarten Room 2	33 children		2	11-24	13-26
Occasional Care	22 children	0.22 spaces per child	2	3	5
Maternal Child Health	2 practitioners	3 spaces per practitioner	2	4	6
Activity Room	40 people	0.3 spaces per person	-	12	12
Field Officer	2 staff	1 space per staff	2	-	2
Toy Library (Admin)	1 staff	1 space per staff	1	-	1
TOTAL			11	41-67	52-78

Table 1 above shows that the overall long term staff demand is 11 spaces and the short term patron/visitor demand is between 41-67 spaces for an overall peak parking demand of between **52-78 spaces**.

5 Parking Mitigation Measures

The following mitigation measures can be adopted to reduce the overall peak parking demand:

- Kindergarten – Staggering the start/finish times of the various kindergarten classes will result in the lower parking rate of 0.4 spaces per child. This will result in a parking demand of 13 spaces per classroom.
- Activity Room – Limiting the use of the activity room to outside the operation of the kindergarten and occasional care will reduce the overall peak parking demand by 12 spaces.

Adopting the above mitigation measures will result in a peak parking demand as follows:

- Peak parking demand of 40 spaces comprising:
 - 11 long term spaces, and
 - 29 short term spaces.

6 Preferred Parking Distribution

A preliminary assessment of the concept plan has determined that approximately 12 spaces can be provided on-site accessed off Fern Street with a concept sketch shown below in Figure 7.

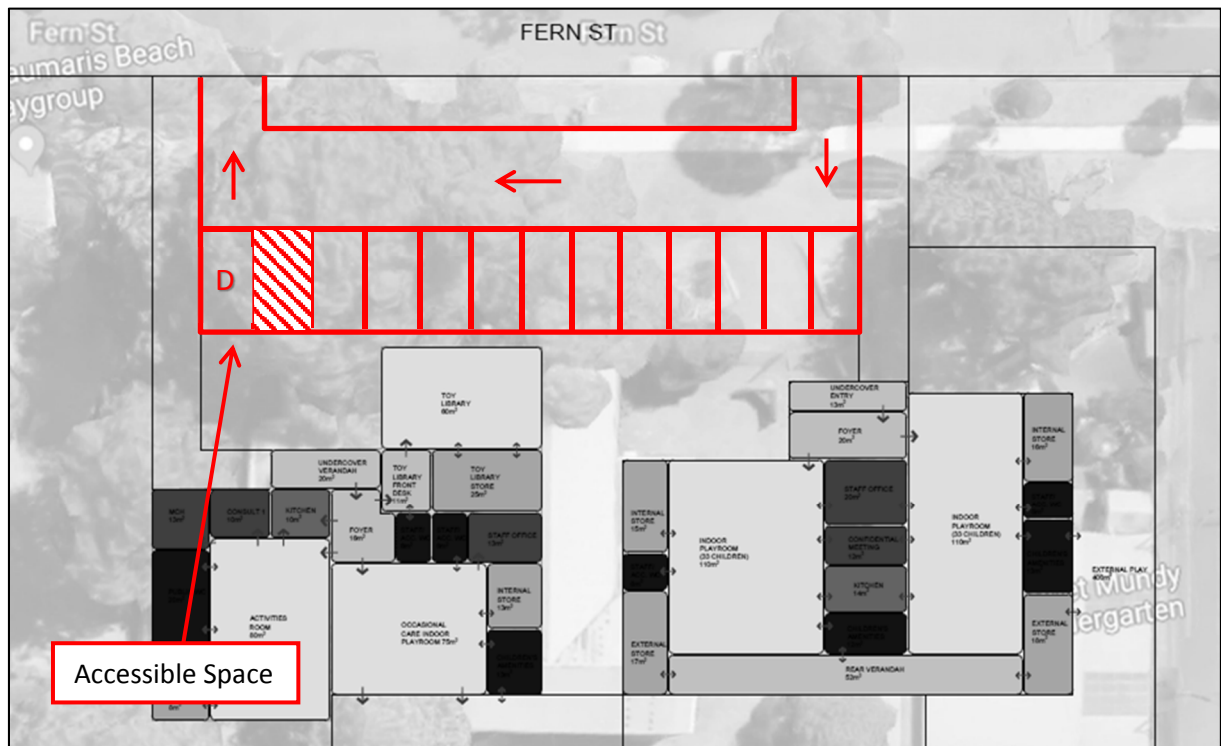


Figure 7: Concept Parking Layout

The maternal child health workers, the playgroup field officers and the general administration staff member may require designated spaces. On this basis, five (5) of the 12 spaces should be reserved for staff members only. The remaining seven (7) spaces should be provided for pick up / drop off relating to the kindergarten / occasional care uses.

The six (6) remaining long term spaces and the 22 remaining short term spaces can be accommodated on-street in the surrounding road network, as discussed below.

7 On-Street Parking Availabilities

A spot survey was undertaken at 10am on a weekday along the frontages to the subject site and the adjacent reserve with the following parking observed.



Source: Nearmap

Figure 8: Spot Survey Parking Occupancy

Based on the above, there were approximately 42 vacant on-street spaces which is adequate to accommodate for the remaining parking demands of the children's centre.

Aerial imagery has been used in addition to the spot parking surveys with the results summarised in Table 2 below.

Table 2: Observed Parking Availability

Parking Observations	Available Parking Spaces		
	Long Term	Short Term	Total
Thursday, 28 th February, 2019 (Spot Survey)	30	12	42
Friday, 22 nd February, 2019	31	10	41
Thursday, 22 nd March, 2018	33	11	44
Average	31	11	42

The following parking restrictions should be adopted in the surrounding road network to ensure that the most critical parking spaces are available closest to the subject site.



Source: Nearmap

Figure 9: Recommended Parking Restrictions

It is anticipated that the additional long term staff parking demands will be catered for to the east of the subject site along Fern Street with the 2P restrictions catering for the pick up / drop off and other short term parking demands.

The low levels of parking observed within the nearby parking resources (approximately 8 spaces) can comfortably be relocated.

8 Summary

Given the limited space on the subject site to accommodate a large car park as well as the quantum of on-street parking, the peak parking demand of 52-78 spaces cannot be accommodated on site.

Staggering the kindergarten classes will reduce the parking demand for this component to approximately 32 spaces per classroom. It is recommended that the activity centre does not operate at the same time as the kindergarten uses to reduce the parking demands.

If the activity room were to be run during the kindergarten times, there is no mechanism available to prevent the mix of short term parking demands. This may result in the kindergarten drop off / pick up vehicles having to park further away from the centre.

Adopting the kindergarten class staggering and ensuring the activity room is not run at the same time will result a peak parking demand of 40 spaces.

A combination of the concept carpark (with 12 off-street spaces) and the available parking spaces along the frontage streets should provide sufficient long term and short term parking spaces to accommodate the overflow demand of 28 parking spaces.

The recommended parking restrictions in Figure 9 would ensure that the on-street parking spaces closest to the proposed development are reserved for the short term users (such as pick up / drop off and the maternal child health) with the longer staff uses further away.