Our Ref: 22024 - 20190927 - TIS - QA: HD



17 January 2020

City of Belmont 215 Wright Street **CLOVERDALE WA 6105**

To whom it may concern,

TRAFFIC IMPACT ASSESSMENT FOR CHILD CARE CENTRE LOT 290 (NO. 94) KOOYONG ROAD, RIVERVALE

INTRODUCTION 1.0

This Traffic Impact Statement (TIS) has been prepared by Harley Dykstra on behalf of JDH & JHM Investments, in support of a Development Application for a Child Care Centre on Lot 290 (No. 94) Kooyong Road, Rivervale ('the subject land'). The site is located on the north-western edge of the Kooyong Road Local Centre, with frontage to Kooyong Road, Francisco Street and Jupp Lane. 'Residential' zoned land exists to the north-west, north and north-east of the site; while the local centre comprises various cafes, fast food stores and an IGA. A vacant lot, also zoned 'Commercial', is situated to the south-west of the site. Figure 1 (below) has been included providing Aerial imagery of the subject site.



FIGURE 1 – AERIAL PHOTOGRAPH

PERTH & FORRESTDALE

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This Traffic Impact Statement assesses the operation of the Child Care Centre and estimates the increase to traffic volumes that would be generated by the proposed facility, as well as assessing the impact of the proposed parking shortfall. This TIS was prepared in accordance with the Western Australian Planning Commission's '*Transport Assessment Guidelines for Developments*'.

2.0 PROPOSED DEVELOPMENT

The Development Application for a Child Care Centre at No. 94 Kooyong Road, Rivervale, seeks to develop a child care centre which would accommodate a maximum of 76 children and 13 staff members on weekdays, between 6.00am and 6.30pm.

The proposed child care facility comprises areas of approximately 325m² for designated indoor play (in addition to facility amenities), approximately 542m² of designated outdoor play area, and associated areas of landscaping, parking and amenities. The proposed building is two storeys, presenting to the Kooyong Road-Francisco Street intersection. An excerpt of the Site Plan is included at **Figure 2** (*below*), and a full copy of the plans are attached at **Appendix A**.



FIGURE 2 – SITE PLAN EXCERPT

3.0 HOURS OF OPERATION

The proposed Child Care Centre will operate on weekdays (Monday to Friday), from 6.00am to 6.30pm. Peak usage times generally relate to the parent pick-up and drop off times; occurring being between 7am – 9am and 3.30pm – 6.30pm (as defined in the RTA Guide to Traffic Generating Developments NSW).

4.0 DAILY TRAFFIC VOLUMES AND VEHICLE TYPES

The facility will employ 13 staff members at full capacity and has been designed to accommodate a maximum of 76 children. The age groups that this facility intends to accommodate are:

- 16 children younger than 24 months;
- 30 children between 24 and 36 months; and
- 30 children older than 36 months.



The RTA Guide to Traffic Generating Developments (NSW) concludes that the trip rates generated for child care centres generally occur over three peak periods, and are as shown in **Table 1**:

DEMOGRAPHIC GROUP		PEAK VEHICLE TRIPS	
	7AM – 9AM	2:30PM – 4PM	4PM – 6PM
Pre-School (0 – 2 years old)	1.4	0.8	-
Long Day Care (Children older than 2)	0.8	0.3	0.7
Before/After School	0.5	0.2	0.7

TABLE 1 – RTA CHILD CARE CENTRE TRIP RATES Image: Contract of the second se

Based on **Table 1**, the proposed child care centre would generate the following:

		143.2 peak time movements
4pm – 6pm	(16 children x 0 trips) + (60 children x 0.7 trips)	42 vehicle movements
2.30pm – 4pm	(16 children x 0.8 trips) + (60 children x 0.3 trips)	30.8 vehicle movements
7am – 9am	(16 children x 1.4 trips) + (60 children x 0.8 trips)	70.4 vehicle movements

It is assumed that each of the 13 staff members employed would generate 2 trips daily (morning and afternoon), while each of the children accommodated could be expected to generate 4 trips per day. Therefore, the *maximum* daily demand for the facility would be 330 movements per day.

The Western Australian Planning Commission's Transport Assessment Guidelines for Developments (Vol. 4) states that:

"Where a traffic increase as a result of a proposed development is less than 10% of current road capacity, it would not normally have a material impact".

Both Kooyong Road and Francisco Street are designated "Local Distributor" roads in accordance with the Main Roads WA Road Hierarchy. Local Distributors are generally designed to accommodate a capacity of 6,000 vehicles per day in built up areas. It is therefore considered that this proposal and the associated traffic generated from the child care facility at maximum capacity would have no material impact on the surrounding road network.

5.0 VEHICLE ACCESS AND PARKING

As depicted in **Figure 2**, the proposed development derives access from Jupp Lane, via a new 6m wide crossover, providing direct access to the facility's parking area. The parking area provides standard car parking bays (2.5m x 5.5m) for 19 vehicles, including one universal bay and 6 dependent car stackers (providing 12 bays for staff only).

The proposed development has been designed to accommodate 76 children and 13 child educators (staff). Table 2 of the City of Belmont Local Planning Scheme No. 15 (LPS 15) sets out the car parking requirements for each land use within the municipality. **Table 2** (overleaf) represents the car parking calculation applicable to this application.



PROPOSED USE	CAR PARKING REQUIREMENT	PROPOSED CAPACITY	REQUIRED BAYS
Child Care Centre	1 : 1 employee, plus 1 : 8 children	13 employees 76 children	22.5 bays

TABLE 1 – CAR PARKING CALCULATION

The Development Site Plan included at **Figure 2**, reflects the staff car parking strategy; whereby twelve of the 19 vehicle parking bays, as being reserved for staff members. These will be allocated to senior staff members within the centre; with the remaining staff members encouraged to pursue other methods of transport including ride share, walking, bicycles or public transport. The seven remaining standard car parking bays will be for use exclusively by the centres customers, and will be time limited to a period of 10 minutes each.

The plans include six (6) dependent car stacking systems along the southern boundary within the car parking area. This system requires bottom parking space to be clear in order to access the top space (dependent system), and therefore act in the capacity of a tandem car parking bay. For this reason, these bays will be allocated to the centre staff only, which would be managed internally and ensuring no vehicles would be left inaccessible. A copy of the plans demonstrating the car stacking system has been included at **Appendix B**.

Based on LPS 15 requirements, this application seeks a car parking dispensation of four (4) car parking bays. However, given the site's location is within an established commercial area, with existing street parking embayment's, a desktop survey (depicted in **Figure 3** overleaf) has been completed to accurately assess the material shortfall that this development proposes.

Figure 3 demonstrates the large number (30) of existing street parking bays in the immediate vicinity of the development (within 100m of the subject site). It is likely that these bays will support a higher rate of child care centre visitors, as they are easily accessible and will accommodate easy access/egress from the centre, providing for quick and efficient drop offs to the centre. Given the nature of the existing land uses within the Kooyong Road commercial strip, it is not anticipated that any competition for parking would occur, as majority of uses have complementary peak operating times.

Further parking is located at the Rivervale Community Centre (14 bays) which, while unlikely to be required, is able to accommodate the parking demand due to the complementary peak operation hours of the centre. While not pictured above, it is noted that Gerring Court is also lined with street parking to support the adjacent sporting complex. Further unmarked parking embayment's are observed on the northern directions of both Kooyong Road and Francisco Street, although are unlikely to be used by patrons of the Child Care Centre.

Given the predicted traffic volumes, the nature of the vehicles utilising the facility (short stay of between 2 and 10 minutes) and the generous existing public parking in the area, it is not anticipated that any parking competition would occur as a result of this development.

It is likely that the City of Belmont will require a Parking Management Plan or similar as a condition of any approval, which would set out strategies to alleviate any potential parking issues that may occur. These strategies might include:

- Developing a local employment quota to encourage shorter travel distances;
- Encouraging alternative and active transport methods for staff, including carpooling;
- Designing staff rosters and shift changes to be efficient;
- Time limiting customer bays to 15 minutes each;
- Placing a limit on the number of staff parking bays included on the property lease, all located within the car stacking arrangement and clearly signalled and signed.





FIGURE 3 – PUBLIC PARKING & CONTEXT PLAN

6.0 PROVISION FOR SERVICE VEHICLES

It is not anticipated that any service vehicles will need to enter the site, however, there is adequate space for all necessary vehicles to manoeuvre within the car parking area. Further, the car parking area will accommodate all of the small deliveries (3 tonne vehicle at the largest) required by the tenant.

The site plan provides for an enclosed bin storage area on the eastern corner of the site with access to the car parking area, and Jupp Lane. It is proposed that street collection of waste will occur from either the Francisco Street or Jupp Lane road reserves.

7.0 TRAFFIC MANAGEMENT ON THE FRONTAGE STREETS

The subject site has primary frontage to Kooyong Road on its north-western boundary, and secondary frontage to both Francisco Street on its north-eastern boundary and Jupp Lane on its south-eastern boundary. The Kooyong Road-Francisco Street intersection is located directly to the front of the facility. Both Kooyong Road and Francisco Street are 50km/hr single lane roads.

When vehicles enter onto Jupp Lane from the proposed parking area, the sight lines extend more than 50m in each direction (given the short length of the road). Vehicles will be able to enter or exit in either direction on Jupp Lane and left only onto Francisco Street.



8.0 PUBLIC TRANSPORT ACCESS

The subject site is located approximately 100m north-east of a Transperth bus stop on Kooyong Road (depicted in Figure 3), which is serviced by the 935 high frequency bus route, providing access to Belmont Forum and the Perth Airport, as well as Burswood, the CBD and Elizabeth Quay bus station.

9.0 PEDESTRIAN AND CYCLING ACCESS

There are pedestrian footpaths on both sides of Kooyong Road and Francisco Street. These paths provide pedestrian connectivity toward and throughout the Rivervale Local Centre as well as the surrounding residential areas and public open space. The Site Plan proposes to maintain and improve the existing pedestrian footpath from within the car parking area, providing direct pedestrian access to the facility.

The majority of these paths have been constructed to a standard which allows for reciprocal use by pedestrians and bicycles. Francisco Street also provides connection to Surrey Street, which is part of the Perth Bicycle Network Continuous Signed Route (SE21). The facility provides bicycle racks and showers and locker room facilities for staff and users in order to promote other active modes of transport.

10.0 SITE SPECIFIC ISSUES

No site specific issues have been identified.

11.0 SAFETY ISSUES

No safety issues have been identified as a result of this proposal.

12.0 CONCLUSION

The above information represents a comprehensive Traffic Impact Statement that adequately details the traffic characteristics of the subject site and the proposed development, in accordance with the WAPC Transport Assessment Guidelines for Developments publication. It further assesses the impact on the public parking within the locality that this development might generate, concluding that it will have no material impact on the overall locality.

Should the City of Belmont require any additional information to facilitate the assessment of this proposal, please do not hesitate to contact the undersigned.

Yours sincerely

Madison Mackenzie Planning Consultant HARLEY DYKSTRA PTY LTD

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APPENDIX A | DEVELOPMENT PLANS





DEVELOPMENT SUMMARY

TOTAL SITE AREA:	814m ²
TOTAL GF BUILDING FOOTPRINT	218m ²
RECEPTION/FOYER/CORRIDOR:	41m ²
LAUNDRY:	7m ²
STAFF ROOM:	12m ²
OFFICE:	12m ²
0-18 MONTHS:	31m ²
18-24 MONTHS:	34m ²
BABY CHANGE:	16m ²
COT ROOM:	9m ²
BOTTLE PREP:	7m ²
UAT:	6m²
STORE 1:	2m²
STORE 2:	5m²
gf outdoor play area	122m²
Timber Deck:	122m²
CAR PARK AREA	474m²
BITUMECAR PARK	384m²
LANDSCAPING	72m²
PAVING	18m²
TOTAL FF BUILDING FOOTPRINT	310m ²
LANDING(INC LIFT/STAIR):	25m ²
KITCHEN	14m ²
STAFF WC:	3m ²
STORE:	8m ²
24-36 MONTHS:	112m ² (+4m ² REDUN.)
+36 MONTHS:	107m ²
JUNIOR WC:	13m ²



420m²

FF OUTDOOR PLAY DECK

305m²

TOTAL ROOF BUILDING FOOTPRINT

IE GROUPS	NO. OF CHILDREN 8 CHILDREN	<u>REQ. AREA</u> 26m ^{2/} 56m ²	<u>PROV. AREA</u> 65m²/122m² comb. GF
4 MONTHS	8 CHILDREN	26m ² /56m ²	65m ² /122m ² comb. GF
3 MONTHS	30 CHILDREN	$97.5m^2/210m^2$	112m ² /420m ² comb. FF
NONTHS	30 CHILDREN	$97.5m^{2}/210m^{2}$	107m ² /420m ² comb. FF
. 14		247m ² /532m ²	284m ² /542m ²



TOTAL GF BUILDING FOOTPRINT	218m ²		
RECEPTION/FOYER/CORRIDOR:	41m ²		
LAUNDRY:	$7m^2$		
STAFF ROOM:	$12m^2$		
OFFICE:	12m ²		
0-18 MONTHS:	$31m^2$		
18-24 MONTHS:	$34m^2$		
BABY CHANGE:	16m ²		
COT ROOM:	$9m^2$		
BOTTLE PREP:	$7m^2$		
UAT:	6m ²		
STORE 1:	$2m^2$		
STORE 2:	$5m^2$		
OUTDOOR PLAY AREA	122m ²	CHILD CARE SUMMARY	
TIMBER DECK:	19m ²	AGE GROUPS	NO. OF CHILDREN
GRASSES AREA:	$103m^2$		
		0-18 MONTHS	8 CHILDREN
CAR PARK AREA	474m ²	18-24 MONTHS	8 CHILDREN
BITUMECAR PARK	384m ²	24-36 MONTHS	30 CHILDREN
	72m² 18m²	TOTAL:	76 CHILDREN



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24-36 MONTHS: +36 MONTHS: JUNIOR WC:	112m ² (+4m ² REDUN.) 107m ² 13m ²











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-300







APPENDIX B | CAR STACKER PLANS

