

# SHOPPING CENTRE EXPANSION

# Lot 98, Edinburgh Road, Forrestfield

Car Parking Impact Assessment Report

Prepared for: Macri Investments

A1915813W Version 1.0

January 2020

IBM Building, Level 3, 1060 Hay Street, West Perth, WA 6005

Telephone: 0406 473 681 shayes@mltraffic.com.au Facsimile: 1300 739 523 www.mltraffic.com.au

ML Traffic Engineers Pty Ltd ABN 69 148 048 257



# 1. INTRODUCTION

ML Traffic Engineers was commissioned by Macri Investments to undertake a car parking impact assessment for a proposed expansion of the existing shopping centre at Lot 98, Edinburgh Road, Forrestfield. It can be demonstrated that the proposed development will provide sufficient on-site parking for the demand of the site.

In the course of preparing this report, the subject site and its environs have been inspected, plans of the development examined, and all relevant car parking data collected and analysed.

# 2. BACKGROUND AND EXISTING CONDITIONS

#### 2.1 Location and Land Use

The subject site is located between Edinburgh Road, Cumberland Road and north-west of Lincoln Road, Forrestfield. Contained within the site is an existing shopping centre with grocery store 'Farmer Jacks'. The site is located within a R25/60 (Urban Commercial) zoned area, with an Urban Commercial and Urban Residential zones surrounding the site. Refer Figures 1 to 3.



#### Figure 1: Location of the Subject Site

Forrestfield Shopping Centre A1915813W Car Parking Impact Assessment





Figure 2: Location of the Subject Site in the Context of the Surrounding Area



Figure 3: Location of the Subject Site and Surrounding Land Use Zones

Forrestfield Shopping Centre A1915813W Car Parking Impact Assessment



Edinburgh Road and Cumberland Road are both north-west to south-east orientated, with Lincoln Road north-east to south-west orientated.

All roads surrounding the subject site are default 50km/h speed zoned, with intersection traffic calming measures present on Lincoln Road, Cumberland Road at the intersection with Edinburgh Road.



Figure 4: View from Lincoln Road, looking north-east

Forrestfield Shopping Centre A1915813W Car Parking Impact Assessment





Figure 5: View from Cumberland Road, looking south-east

## 2.2 Public Transport Accessibility and Serviceability

There are bus stops located on Edinburgh Road, directly adjacent to the subject site. The stops service route 286, 287 and 288.

Route 286, 287 and 288 all travel between Kalamunda Bus Station and Elizabeth Quay Bus Station from Monday to Friday. A service travels past the site every 20 to 30 minutes. On Saturday service 288 travels between Forrestfield and Elizabeth Quay with hourly services, and on Sunday with 2 hourly services.

## 2.3 Existing Parking Conditions

Car parking occupancy surveys were carried out on Friday 13<sup>th</sup> and Saturday 14th December 2019 within the shopping centre car park area. Refer Figures 6 and Table 1.

Of the 156 on site car parking spaces there was a minimum of 115 car parking spaces unoccupied during the lunch time period on a weekday, the peak parking period for the centre.





Figure 6: Car Parking Area Surveyed

Forrestfield Shopping Centre A1915813W Car Parking Impact Assessment



			Occupancy					
			Friday 13 Dec		Saturday 14 Dec			
Area	Restriction	Supply	10am	12pm	2pm	10am	12pm	2pm
А		18	3	4	2	2	3	2
В	1 x disabled	7	3	4	1	2	1	1
С		29	7	11	9	8	8	6
D	2 x disabled	2	0	0	1	1	0	0
E		6	2	4	4	1	1	2
F		5	5	5	4	4	5	4
G		30	4	7	3	2	4	4
Н		50	5	6	1	0	4	3
I		8	0	0	1	0	2	0
J	1 x disabled	1	0	0	0	0	0	0
Total Supply		156						
Total Occupied Spaces			29	41	26	20	28	22
Total Unoccupied Spaces			127	115	130	136	128	134

Table 1: Car Parking Occupancy SurveyFriday 13th and Saturday 14th December 2019



Area A



Area D and F



Area D and F



Shop Entry

Figure 7: Car Parking Survey

Forrestfield Shopping Centre A1915813W Car Parking Impact Assessment



# 3. PROPOSAL

The subject site incorporates two lots, lot 98 and 110 (petrol station). Currently contained within the subject site is shopping centre with a grocery store, news agency, food and drink outlets, beauty salon and offices. There are currently two vacant shops on the eastern side of the centre. A self-serve petrol station and mechanics separate from the main building is located at the southern edge of the subject site.

It is proposed that modifications to the site be undertaken to the main building area, with the reconfiguration of the existing offices into commercial tenancies, development of a liquor store, chemist, and hair dresser in existing commercial areas. Additional changes include:

- An inward goods area is to be created on the western side of the building where there is currently an uncovered service area;
- An undercover area storage area created at the far northern end of the building, currently and continued to be used for storage;
- Extension of the south-eastern building entry area to accommodate a café; and



• Outdoor seating provided on the eastern side of the building.

Figure 8: Proposed Shopping Centre Reconfiguration and Expansion

Forrestfield Shopping Centre A1915813W Car Parking Impact Assessment



SHOPPING CENTRE NLA CALCULATIONS				
TENACY / LOCATION NAME	AREA (m²)			
FARMER JACKS SUPERMARKET	2514,47			
BLOOMS THE CHEMIST	197,60			
NEWSAGENCY	110,40			
HAIR SALON	40.60			
BEAUTY SALON	62.80			
CAFE	27.74			
FISH & CHIPS	59.10			
FORRESTFIELD THAI	59.40			
SINGAPORE PREMIERE	70.50			
VACANT SHOP 1	213.20			
VACANT SHOP 2	97.00			
SERVICE STATION (SS)	436,72			
MECHANIC SHOP IN SS	44,04			
BOOK KEEPING IN SS	52.41			
PROPOSED TENACY AREA 1	260.0			
PROPOSED TENACY AREA 2	86.0			
PROPOSED TENACY AREA 3	97.0			
PROPOSED COVERED AREA	273.6			
PROPOSED BUILDING (NEW GOODS INWARDS)	310.0			
TOTAL TENACY NLA	5012.58			
TOLIETS / CLEANING STORE	70,20			
NEW ENTRY SPACE	273,73			
EXISTING CAR BAYS	120			
PROPOSED CAR BAYS	6			
TOTAL CAR BAYS	126			

The expansion tenancy breakdown can be seen in Table 2.

**Table 2: Proposed Shopping Centre Tenancies** 

There are currently 156 on site car parking spaces (22 allocated to lot 110 and 134 to lot 98). The expansion of the centre will see a reconfiguration of the car park layout in the area east of the building, with the loss of 7 spaces (12 spaces removed, 5 proposed). A total of 149 car parking spaces will be provided (22 allocated to lot 110 and 127 to lot 98).



# 4. CAR PARKING AND SITE SERVICING ASSESSMENT

#### 4.1 Car Parking Provision

The City of Kalamunda Local Planning Scheme 3 details car parking space requirements for different land uses. The car parking rates applicable to the subject site changes are:

- Office: 4 bays for 100m<sup>2</sup> NLA
- Shop: 5 bays per 100m<sup>2</sup> of net leasable area (NLA)
- Restaurant: 1 bay for every 4 persons to be accommodated;

The development includes a new inward goods area (currently uncovered loading area) and covered area for existing storage area. These areas are existing and therefore will not impact the car parking space requirements of the centre.

The change of the office area to commercial tenancies and development of a café will generate additional car parking requirements of 19 spaces. With the reduction in on site parking of 6 spaces, the additional parking requirement of the centre is 19 spaces.

		Car Parking Space			
	NLA (m <sup>2</sup> )	Requirement			
Existing Use					
Office	443	18			
Proposed Use					
Shop	443	23			
Restaurant (café)	27.74	8			
Existing Parking Requirem	18				
Proposed Parking Require	31				
Reduction in Parking Space	6				
Additional Shortfall	19				

#### Table 3: Parking Space Requirements of the Development

There are currently two vacant shops, as well as areas set aside for the tenancy of a proposed chemist, hairdressers and liquor store within existing commercial areas. The parking demand of these areas once tenanted will be in the order of 37 parking spaces.

Forrestfield Shopping Centre A1915813W Car Parking Impact Assessment



		Car Parking Space
	NLA (m <sup>2</sup> )	Requirement
Vacant Shops	310.2	16
Liquor Store	191	10
Chemist	197.6	10
Hair Dresser	40.6	2
Parking Demand Vacant Te	37	

**Table 4: Parking Space Demand of Vacant Tenancies** 

With 115 unoccupied spaces in the peak parking period (weekday lunch), only 27% of the existing car parking area is being utilised. With the loss of 7 spaces, this will reduce to 108 car parking spaces available for use.

Assuming all 37 spaces of the parking requirement of the vacant tenancies is occupied, there will still be in the order of 71 spaces available to accommodate the demand of an additional tenancies.

There are sufficient available car parking spaces on site to accommodate the development and additional car parking requirements.

## 4.2 Access and Car Parking Layout

The car park will remain as per the existing layout, with minor adjustments to the area on the eastern side of the building. 6.0m long x 2.7m wide parallel spaces are proposed, adhering to the requirements of AS2890.1:2004 Part 1: Off Street Car Parking for parallel car parking spaces. The additional angled space is at the same dimension as the existing; being 2.6m wide x 4.6m with vehicle overhang.

#### 4.2.1 Site Servicing

Swept path analysis has been undertaken for a medium rigid vehicle (MRV) and heavy rigid vehicle (HRV) accessing the inward goods area. Reverse entry and forward direction egress is achievable for both vehicles with access by the HRV limited to the northern most driveway. Refer Appendix A for swept path diagrams.



# 5. CONCLUSIONS

Based on the discussion presented in this report, it is considered that:

- There are a sufficient number of car parking spaces provided on site to accommodate the proposed site changes and additional tenancies;
- The amendments to the car parking layout are in accordance with the requirements of AS2890.1:2004 Part 1: Off Street Car Parking; and
- The inward goods area is accessible by an MRV and HRV with reverse entry and forward direction egress.
- There are no traffic engineering reasons why the proposal development should not be approved.

Forrestfield Shopping Centre A1915813W Car Parking Impact Assessment



# APPENDIX A







