

# **A STUDY OF AVAILABLE PARKING BAYS**

In support of  
**AN APPLICATION FOR APPROVAL TO  
COMMENCE DEVELOPMENT**

2 OCTOBER 2018

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**NEW TWO STOREY GROUPED RESIDENCE AND MINOR WORK TO EXISTING  
DENTAL SURGERY**

Lot 22, # 21, Vincent Street, MT. LAWLEY

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BRUCE ARNOLD ARCHITECT  
Level 4, 181 Adelaide terrace, East Perth

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## 1.0 INTRODUCTION

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Bruce Arnold Architect act for Jeff Bennett on this report and lodge this report as support for the current DA application being handled by Clair Morrison requesting an updated Parking Management Plan which to reflect-

1. Parking Survey:
  - a. A parking assessment which involves counting the number of car parking bays which are occupied (or available) at regular intervals during high demand periods over a period of time. The parking assessment will need to identify the car parking bays in questions and note the time and date of the parking survey. From there a conclusion can be reached which summarises the occupancy rate of the surrounding on street car parking bays. and
2. Written justification based on the result of the survey, and request (if desired), to waive the cash-in-lieu amount of \$27,000.00.

Item 1 and 2 above has been covered in this report. As previously mentioned via email, we will be seeking to waive the cash-in-lieu.

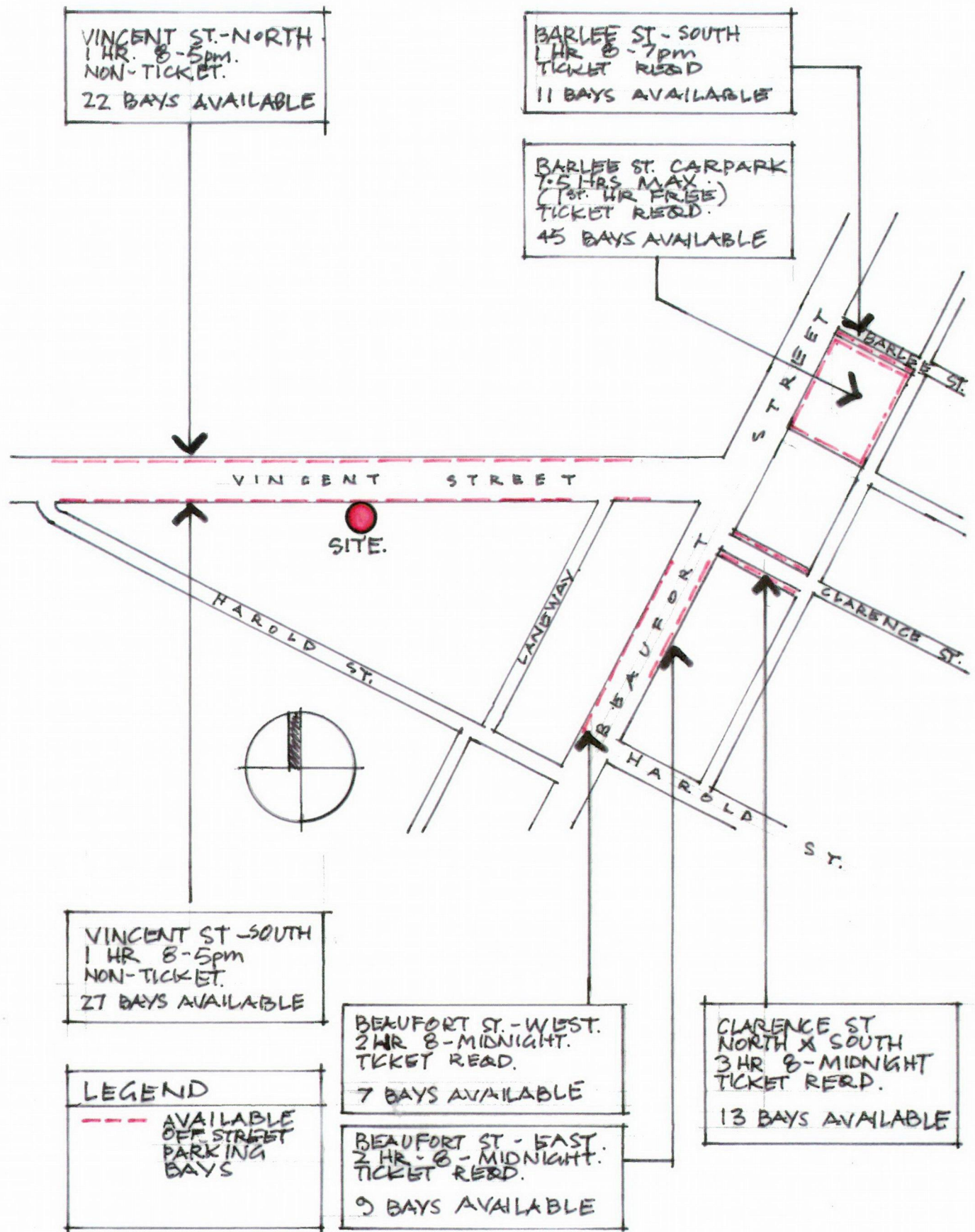
Based on the current Policy 7.7.1, the assessment of the current DA application carried out by the City was done under the - Non-Residential Development Parking Requirements. This policy indicates that a total of eight car parking bays is required- four for each consultant. Therefore, the shortfall indicated by the City proposed is five bays, with the relevant cash-in-lieu amount being \$27,000.

## 2.0 METHODOLOGY

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After discussions with Clair it was agreed to approach the study as follows-

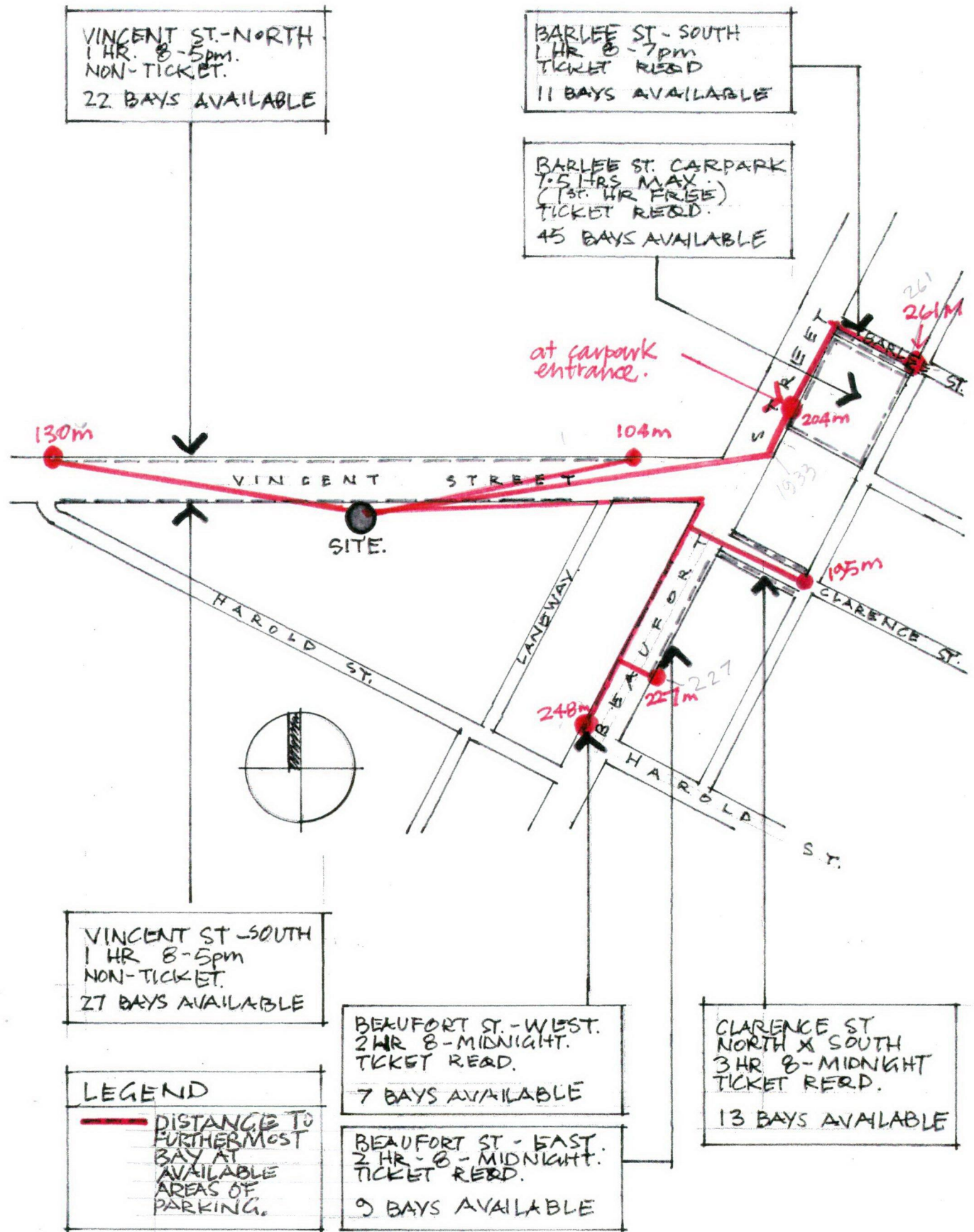
1. Count the available car bays within a reasonable proximately to the site. It was therefore based a walking distance of approximately 260m which is the furthest bay in the study area.  
NOTE -the average human walking speed on flat terrain is about 5.0 kilometres per hour (km/h), it would therefore take just over 3 minutes to walk 260m.
2. The study area adopted was along part of Vincent Street; along part of Beaufort Street; the Barlee Street carpark; off street parking at the intersection of Barlee Street and Beaufort and the off street parking at the intersection of Clarence Street and Beaufort Street as detailed on Figures 1 and 2.
3. The position of available bays; the number of available bays and the permitted maximum parking times are detailed on Figure 1.



COUNTING OF OFF STREET PARKING BAYS

## LOCATION MAP OF STUDY AREA

Figure 1



DISTANCE TO FURTHERMOST BAY AT AVAILABLE AREAS OF IN THE STUDY AREA

## LOCATION MAP OF STUDY AREA

Figure 2

4. Counting times were to be done during standard business hours and it was agreed to be counted in 2 hour intervals commencing at 9am for one continuous week. In total there were 5 counts per day (9am, 11am, 1pm, 3pm and 5pm).
5. Only bays which allowed a maximum time for 1 hour or greater was counted.
6. Bays along Beaufort Street which were affected by the "Clearway" requirements at the stipulated time of the count were not included as vacant bays.
7. Table 1 indicates the number of parking bays counted and photographs were taken at each count time. All data and photographs were certified by a Justice of the Peace.

### **3.0 STAFF NUMBERS AND CONSULTATION TIMES**

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A practice of this nature would have one Dentist; one Hygienist, one nurse for the Dentist and one receptionist- four in total, therefore allow for 4 cars maximum..

For the Hygienist, the time required for each patient consultation is one hour, which allows for 45 minutes in the chair, preparation and any time over run.

For the dentist, the patient consultation times range from 20 minutes up to a maximum of two hours. The longer time frames are far more infrequent, however on average, the time spent in the surgery is also one hour which is approximately 45 minutes in the chair, preparation and any time overrun as per the hygienist.

It is highly unlikely that there would ever be a continuously full schedule of booked patients between 9am and 5pm every day of the week. However for this exercise, if we consider it to be fully booked, it would equate to two patients per hour plus an allowance of two patients waiting, therefore four patients per hour, hence allow for 4 cars maximum.

### **4.0 FINDINGS FROM SURVEY**

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There was an excessive amount of bays available each day during standard working hours within close proximity to the site within the study area. There is also a wide range of maximum parking times available which ranges from 1 hour along Vincent Street; 3 hours along Beaufort Street and up to 7.5hrs maximum in the Barlee Street carpark.

In the study area there is a total of 134 potential parking bays available.

Based on Table 1 the actual parking bays available to staff and patients of the surgery.at the count is as follows overleaf;

DAY	TIME	Car Bays Available in study area	Bay available at count in study area
Mon 17 Sept	9am	134 bays total available	105 (78%)
	11am		91 (68%)
	1pm		90 (67%)
	3pm		85 (63%)
	5pm		72 (54%)
Tue 18 Sept	9am		94 (70%)
	11am		87 (65%)
	1pm		79 (59%)
	3pm		90 (67%)
	5pm		75 (56%)
Wed 19 Sept	9am		97 (57%)
	11am		92 (68%)
	1pm		78 (58%)
	3pm		96 (71%)
	5pm		77 (57%)
Thur 20 Sept	9am		89 (66%)
	11am		95 (70%)
	1pm		71 (52%)
	3pm		76 (56%)
	5pm		59 (44%)
Fri 21 Sept	9am		88 (66%)
	11am		82 (61%)
	1pm		62 (46%)
	3pm		87 (64%)
	5pm		59 (44%)

- 4.1 On average, there were 82 bays (61%) of the total 134 bays available at each count time.
- 4.2 The highest number of bays available was 105 (78%), and the lowest was 59 bays (44%).
- 4.3 The northern and southern sides of Vincent Street had an average of 9 bays (18%) bays unoccupied of the total 49 bays available, at the count times during the day.
- 4.4 The eastern and western sides of Beaufort Street had an average of 7 (44%) bays unoccupied, of the total 16 bays available, at the count times during the day.
- 4.5 The parking area at the intersection of Clarence Street and Beaufort Street had an average of 7 bays (54%) of the total 11 bays unoccupied, at the count times during the day.

- 4.6 The parking area at the intersection of Barlee Street and Beaufort Street had an average of 8 bays (54%) unoccupied, of the 11 bays available, at the count times during the day.
- 4.7 The Barlee Street Carpark had an average of 34 bays (76%) of the total 45 bays unoccupied, at the count times during the day. This carpark is currently highly underutilised, and has been so since constructed. It can accommodate a parking period up to 7.5 hrs maximum.
- 4.8 Of the 25 counting times over the 5 day period, the available parking bays at a count times only dropped below 50%- 59 bays (of the total 134 available bays), on two occasions. This was 5pm Thursday 20<sup>th</sup> and 5pm on Friday 21<sup>st</sup> September.

## **5.0 PARKING MANAGEMENT STRATEGY**

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With the amount of parking offered and with the range of parking times available, the management of the practice will implement a parking strategy for both staff and patients. Discussions with the client, Mr. Bennett, indicated that the following strategies could easily be put in place to manage parking for the practice. This would also take into consideration the three on site bays.

- 5.1 One of the bays at the rear of the practice would be set aside for the residence.
- 5.2 The Dentist and hygienist and the remaining staff would park in the Barlee Street carpark.
- 5.3 The UAT bay at the rear is to be left free for people with disabilities.
- 5.4 The bay at the front is to be available for patients.
- 5.5 The remaining patients are able to park in the available off street bays located at a maximum of three minutes from the site with available parking times ranging from 1 hr up to 7.5 hours.
- 5.6 The receptionist will be able to advise patients on where to park based on the scheduled dental work to be carried out when an appointment is being made.

## **6.0 CONCLUSION**

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The count and associated findings indicate unequivocally, that there is an abundance of parking available within three minutes maximum walking distance to the proposed practice. Points for conclusion are as follows;

- 6.1. The proposed development is situated in an area with a high abundance of parking nearby. Although the development is deemed to fall short of the current COV parking requirements by five bays, the area easily contains sufficient parking which also has flexible parking times.

6.2 On average, there were 82 bays (61%) of the total 134 bays available at count times. Only at two of the counting times did the study area contain unoccupied bays which fell below 50% of available bays. This still represents 59 bays still available.

6.3 Based on parking demand of the practice, all staff are able to park at Barlee Street carpark leaving a parking requirement of four bays for patients per hour. With one bay available on site the requirement would therefore be only three bays per hour on the average.

Based on this requirement, the averages stated in point 6.2 above, the area easily caters for the required 3 bays per hour.

6.4. The Barlee Street Parking Station is highly underutilised having an average of 34 bay available at count times, of the total 45 bays available.

On its own, this carpark is sufficient to cater for all the parking needs of the site and even then, the carpark would still not be used to its full capacity. At 204m to the entrance of the carpark, the walking distance for an average person to the site is 2.5 minutes.

6.5. The level of parking generated is considered to have no material impact on the surrounding neighbourhood.

6.6. Access to all available parking is off main arterial roads with easy access points.

6.7. Appropriate access to the on street parking is provided in accordance with AS2890.1.

6.8. All of the above does not even take into consideration that the site is also located close to Beaufort Street and therefore has extremely good access public transport travelling to and from the city for both Staff and patients. Provisions of bicycle and end-of-trip facilities have also been provided.

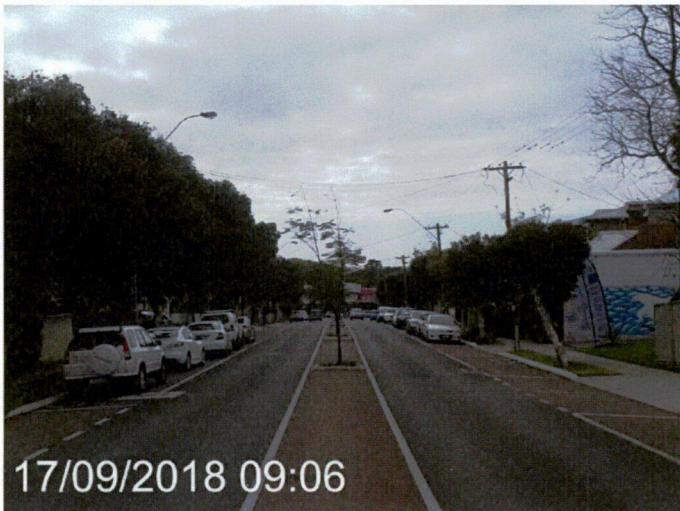
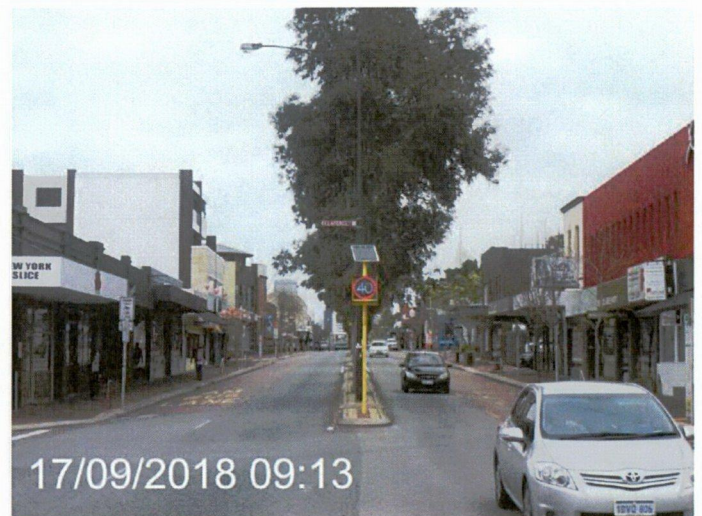
Without a shadow of a doubt, this site is extremely well serviced by off street parking.

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End

PHOTOGRAPHS AT COUNT TIMES

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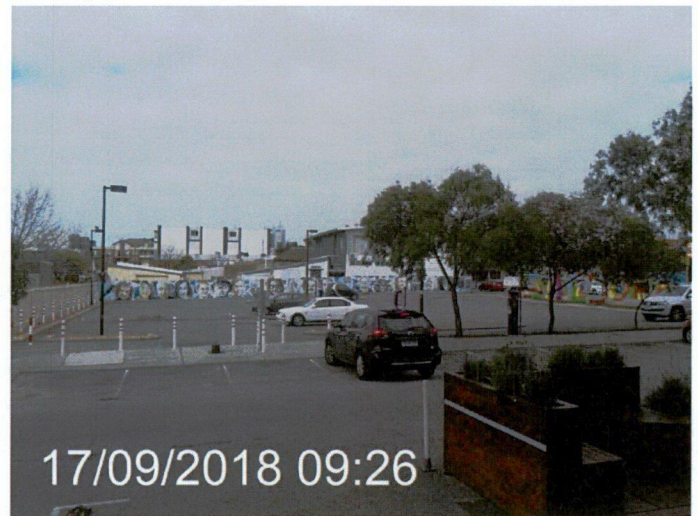
I, Portia Heathcote, hereby certify that I was the person conducting the count and certify that the information provided is true and accurate.

Signature:

Date:

Witness:

IAIN GEORGE MARTIN No. 29464  
JUSTICE OF THE PEACE  
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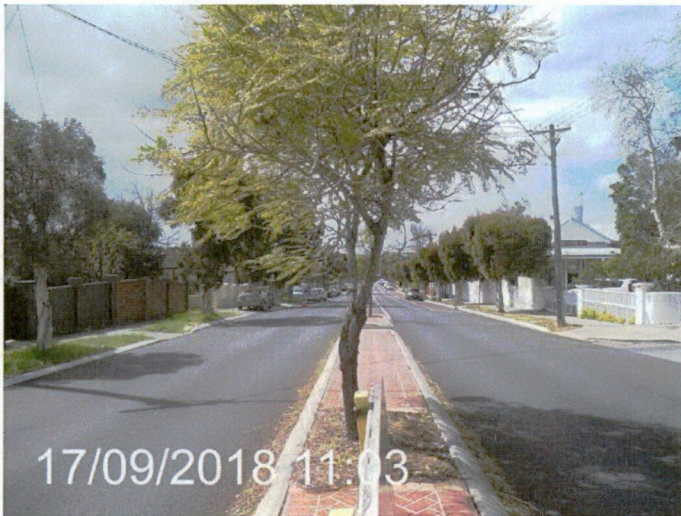
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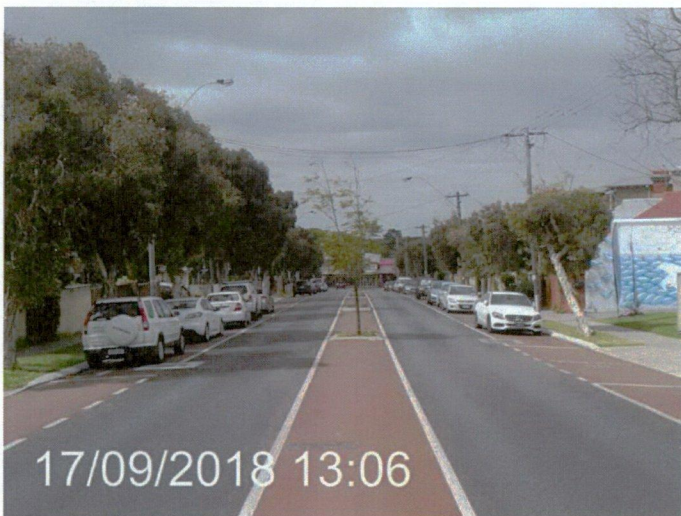
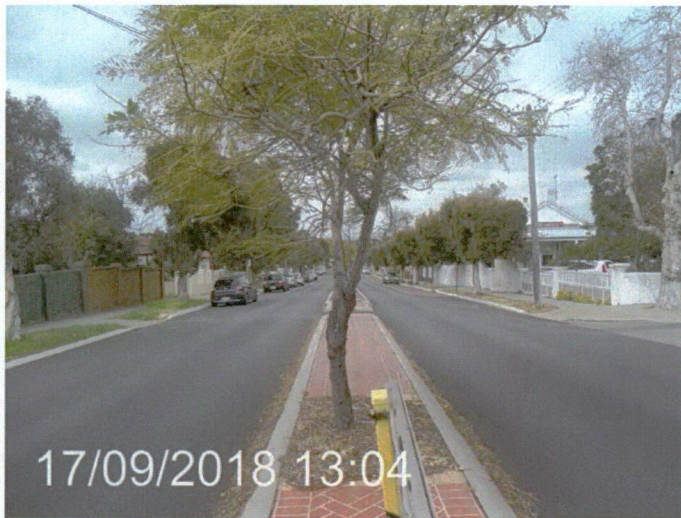
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Iain George Martin No. 29464  
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 presented this date and is identical  
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 10 SEP 2018

Iain George Martin Justice of the Peace No. 29464

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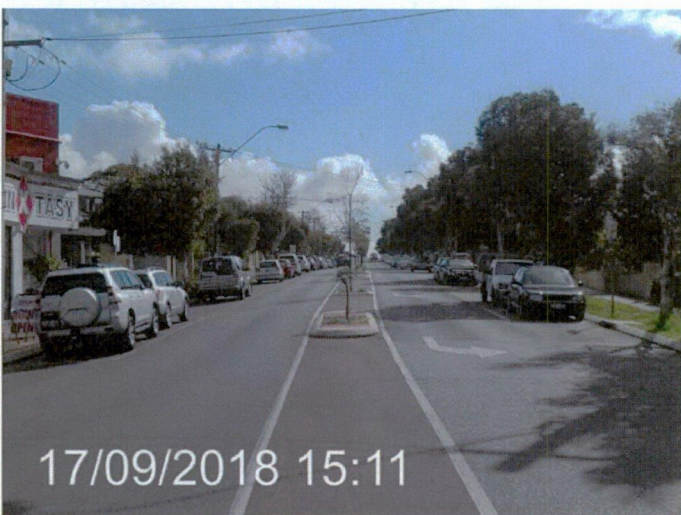
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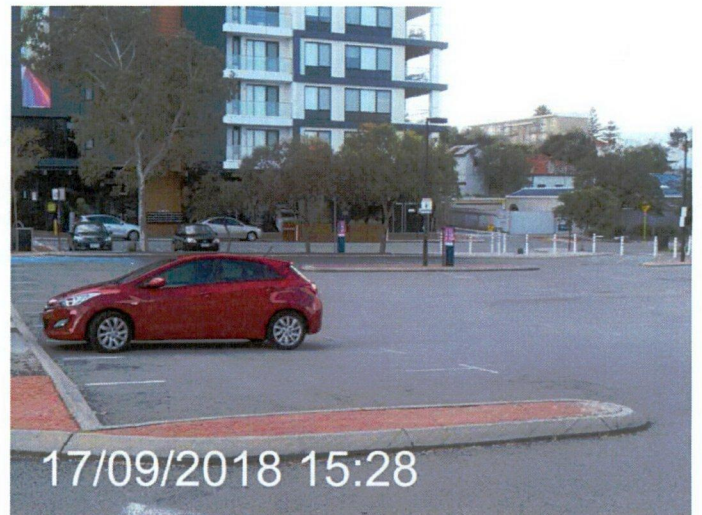
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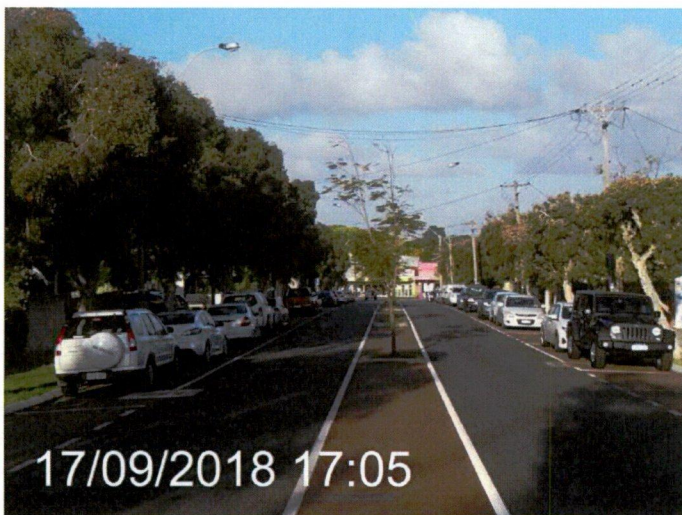
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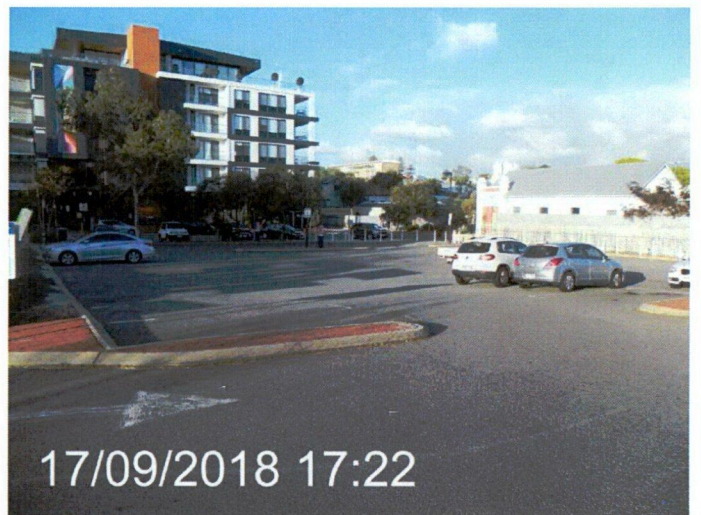
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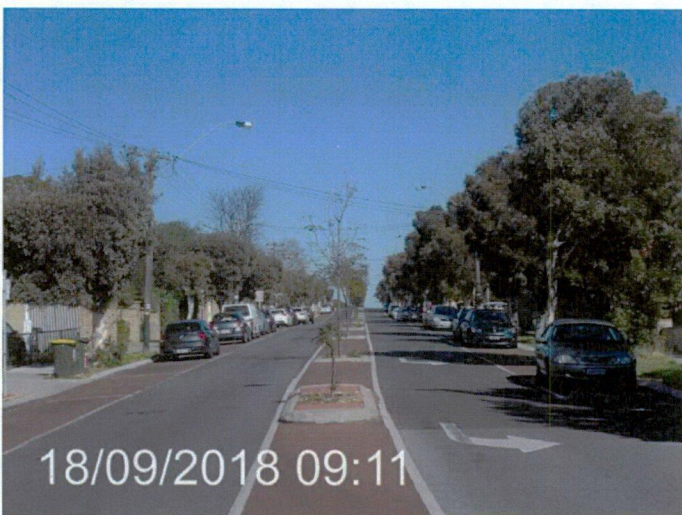
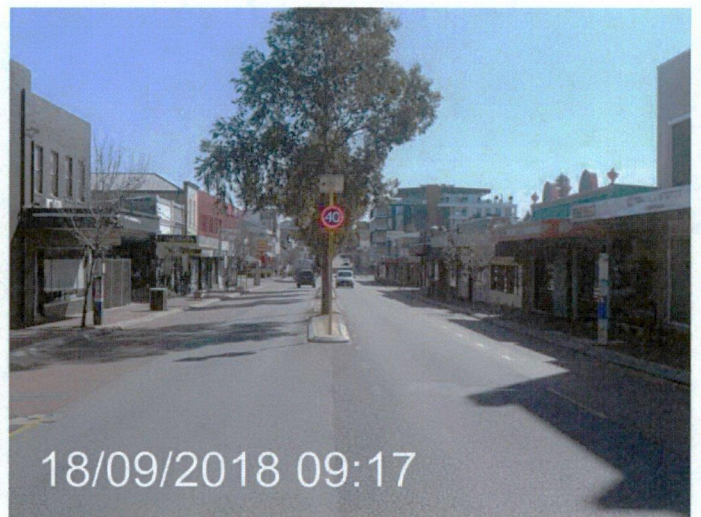
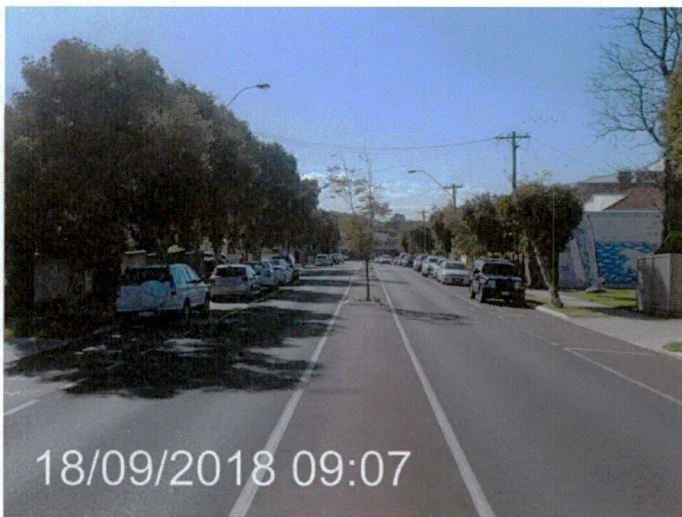
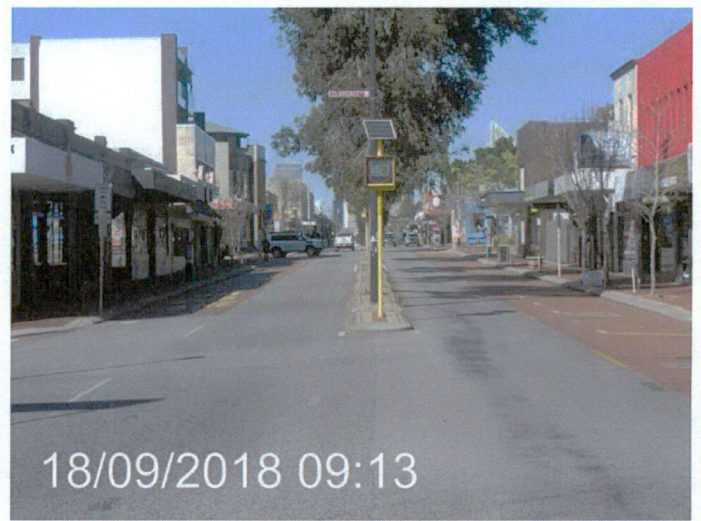
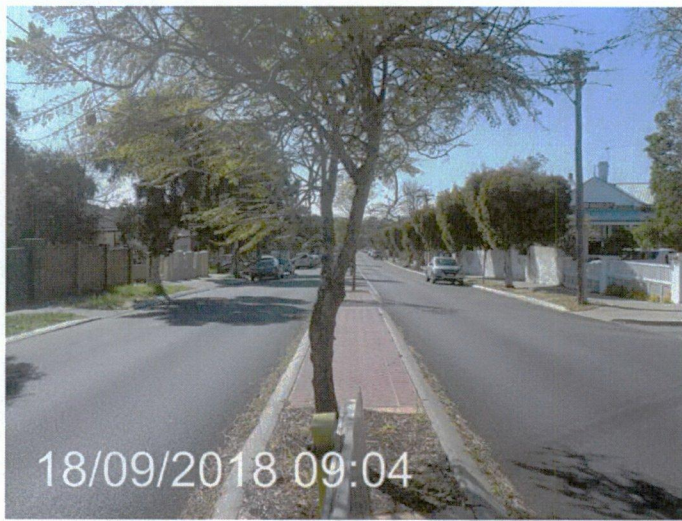
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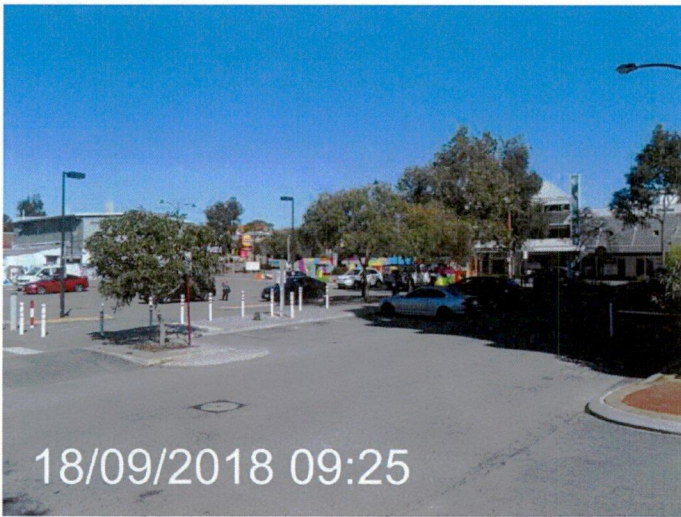
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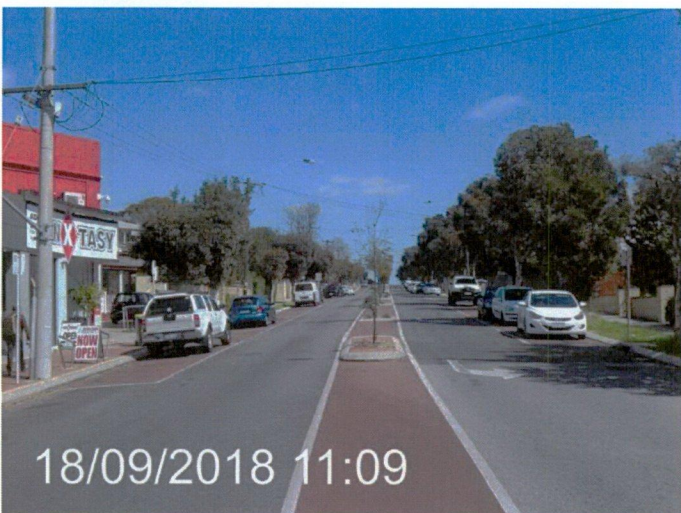
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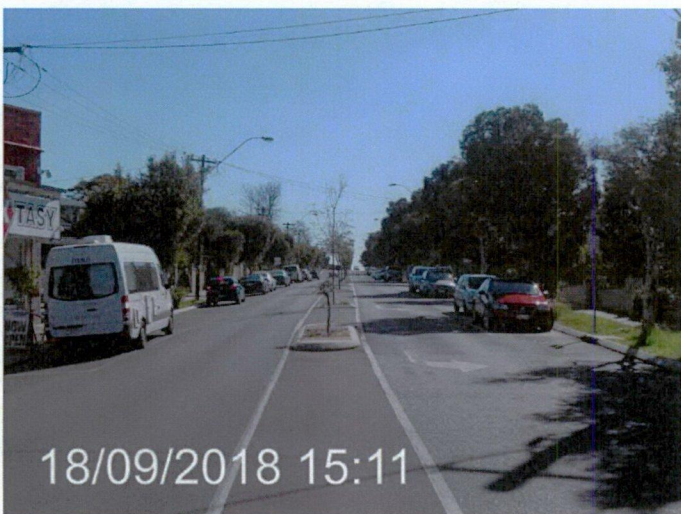
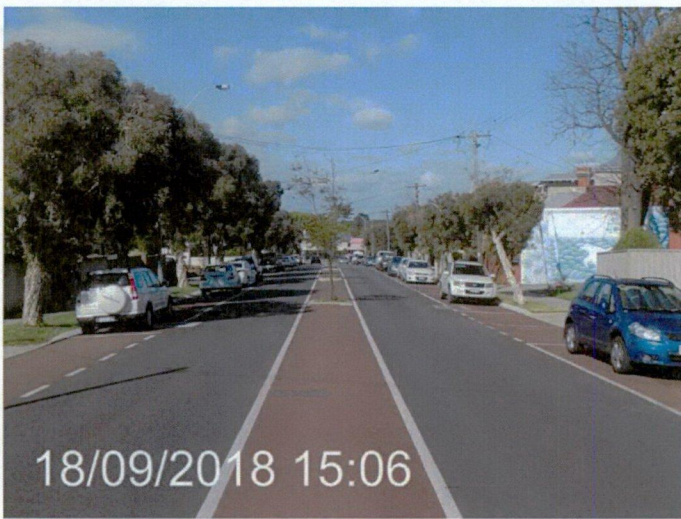
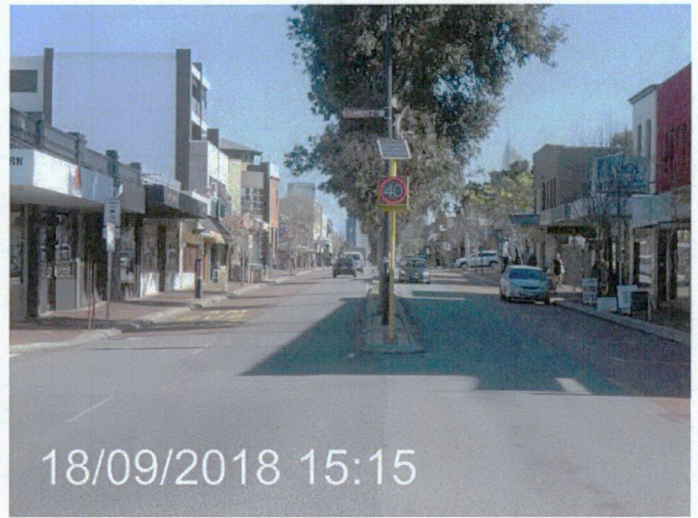
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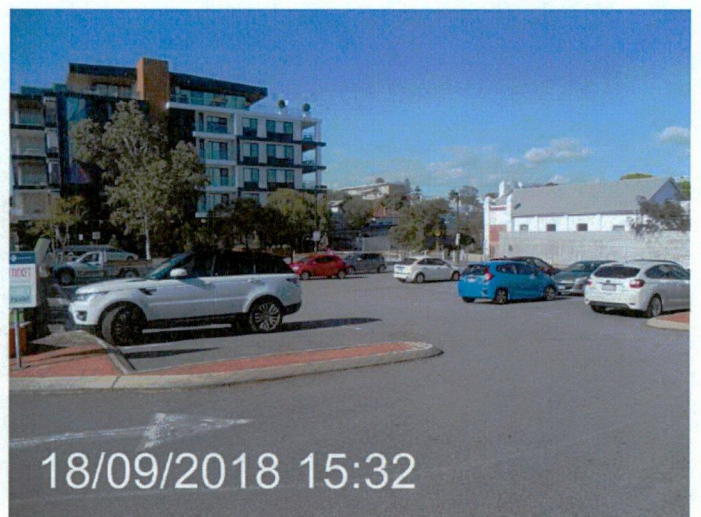
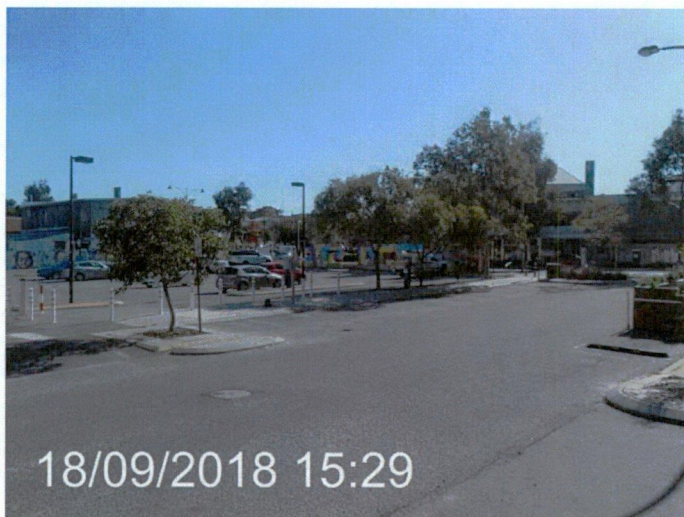
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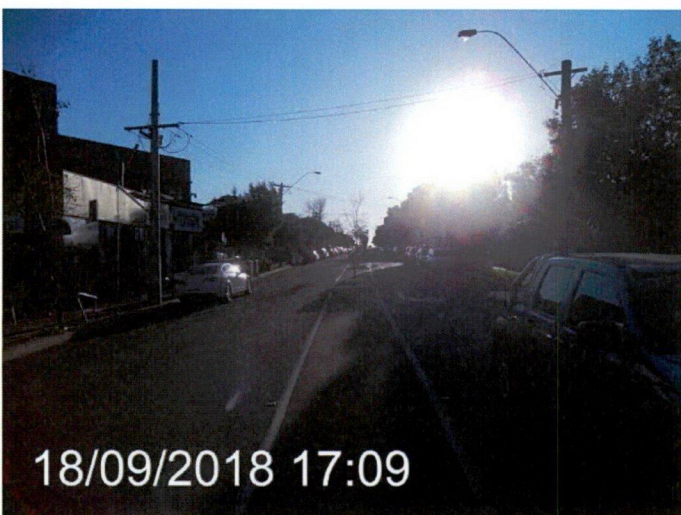
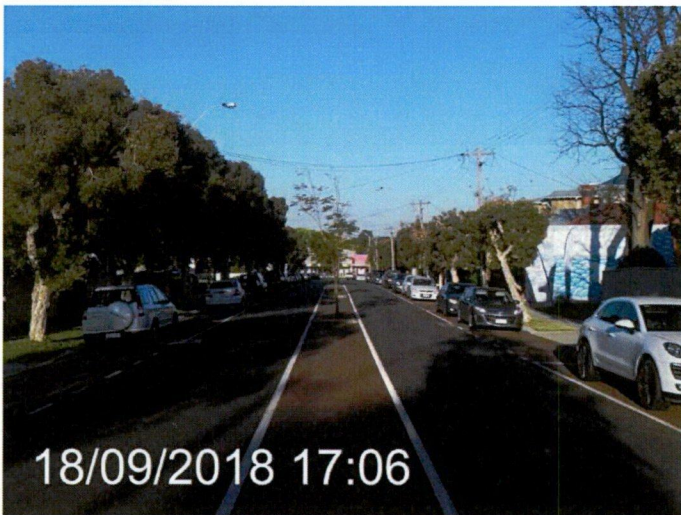
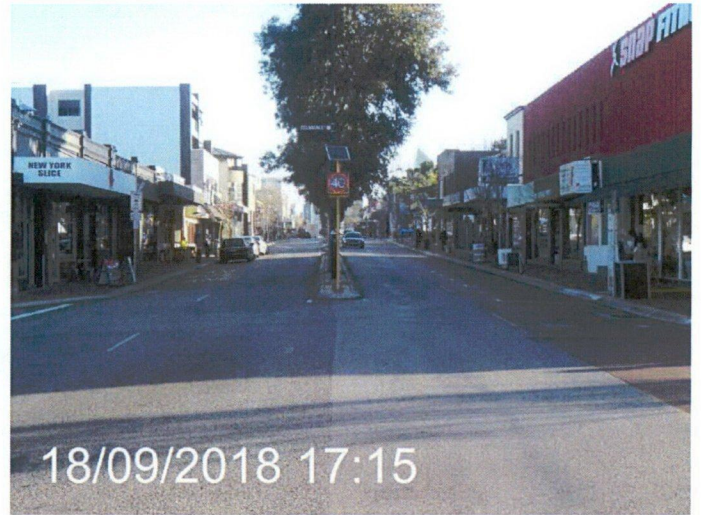
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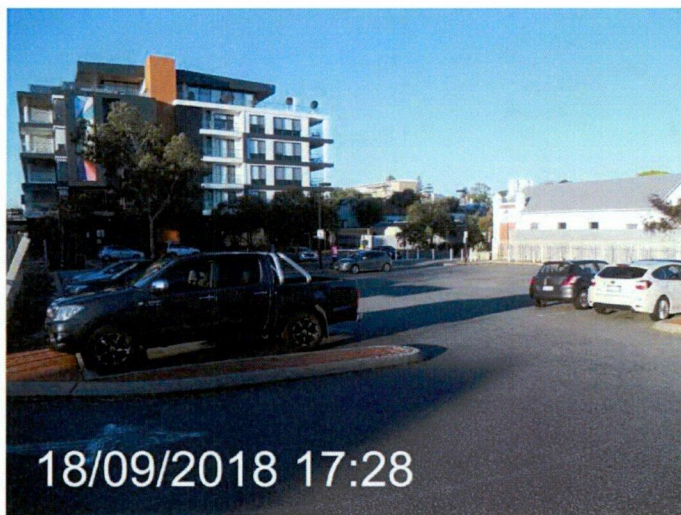
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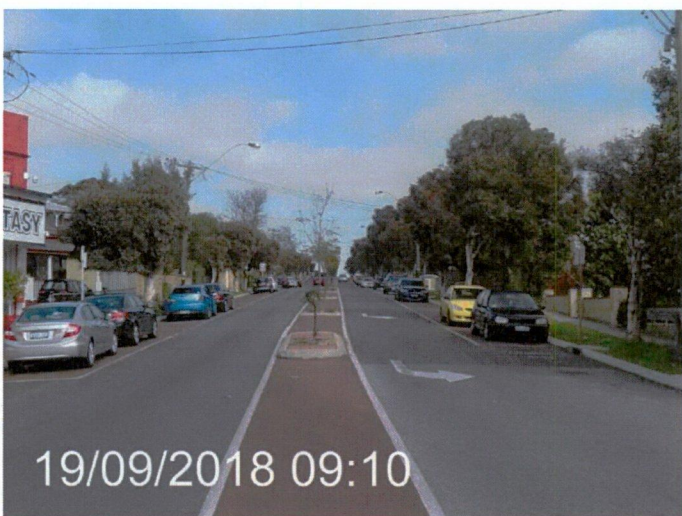
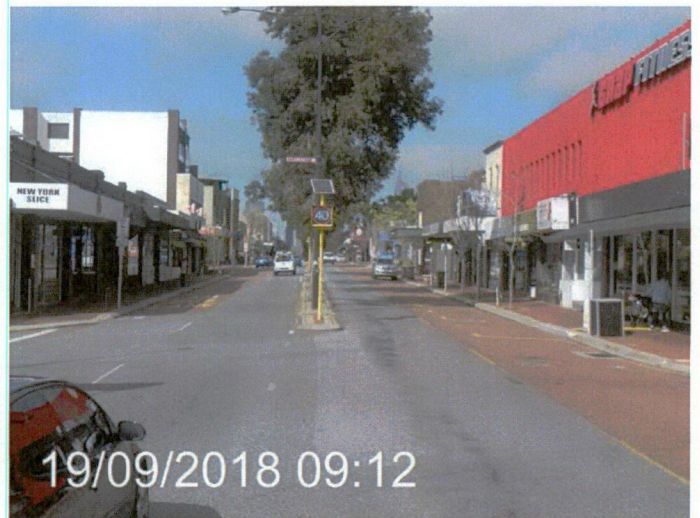
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IAIN GEORGE MARTIN No. 28463  
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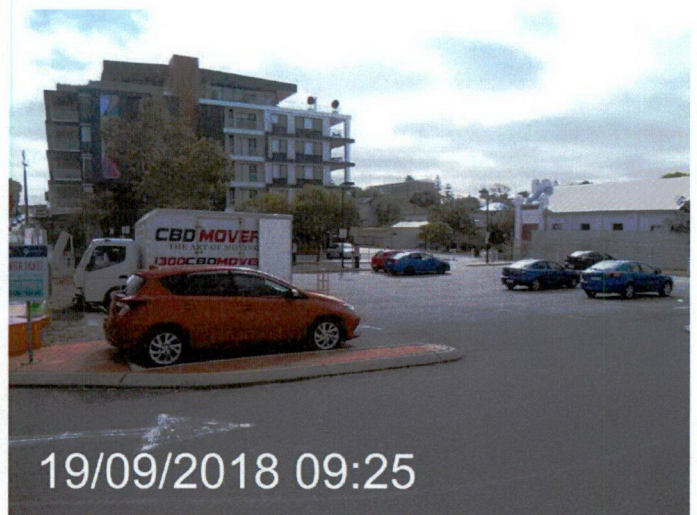
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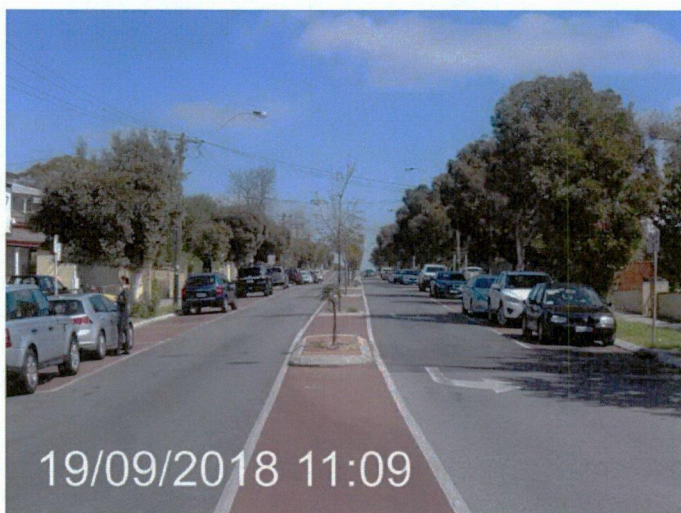
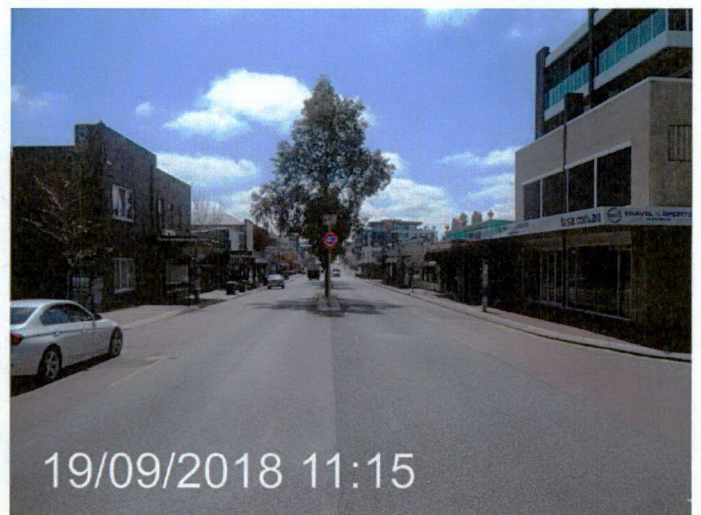
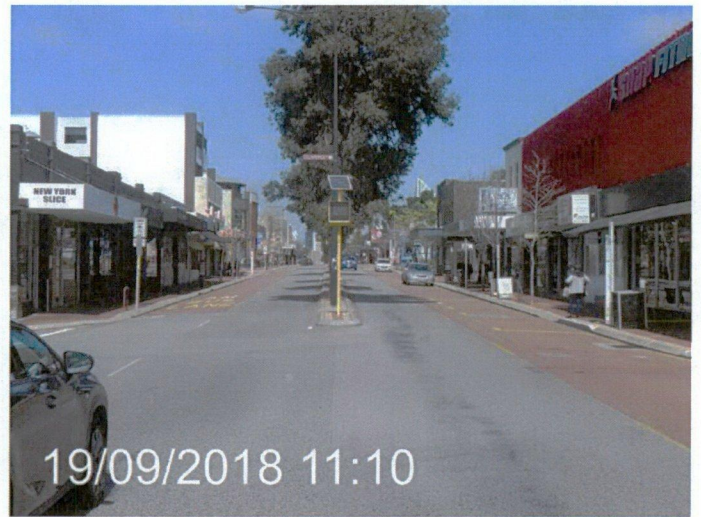
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Signature:


Date:

Witness:

IAIN GEORGE MARTIN No. 28484  
JUSTICE OF THE PEACE  
FOR WESTERN AUSTRALIA  
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## APPENDIX 2 – PARKING MANAGEMENT PLAN FRAMEWORK

<u>Owner/Applicant Details</u>	
Name:	BRUCE ARNOLD
Address:	LEVEL 4 181 ADELAIDE TERRACE E. PERTH
Phone:	0411 88 99 35
Email:	bruce@archba.com
Applicant Signature:	

<u>Property Details</u>	
Lot Number:	lot 22
Address:	21 Vincent St. Mt. Cawley

### Parking Allocation:

The following table should be prepared for inclusion in this Parking Management Plan to outline the parking available for the different users of this development application.

<u>Parking Allocation</u>	
Total Number Car Parking Spaces:	REQD - 7
Total Number Short Term Bicycle Parking Spaces:	3 (Coco Expo) POOL - single sided
Total Number Long Term Bicycle Parking Spaces:	part of above
Total Number Other Bays:	

Development Type	Development Users	Parking Allocation			
		Type / Duration	No. Car spaces	No. Bicycle Spaces	No. Other Spaces
E.g. Private Recreation Town Centre	Staff	Employee (> 3 hours)	2	1	-
	Customers	Visitor (< 3 hours)	7	2	-
	Other	Service (15 minute)	-	-	1
	Other	Disabled	-	-	1
	3 staff	> 3hrs	2	3	
	customers	< 1hr	—	part of above 3	—
	other	disabled	—	—	1

Note: In a mixed use development the parking allocation for residential and non-residential portions must be provided separately in the above table.

### Alternative Transport:

The following table should be prepared for inclusion in this Parking Management Plan to outline the alternative transport options available to users of this development application.

Transport Option	Type & Level of Service
Public Transport	
Train	N/A
Bus	Refer Item 6 of report.

Pedestrian	
Paths	<ul style="list-style-type: none"> <li>• Path on verge</li> <li>• Entry path on Part of Exist driveway</li> </ul>
Facilities	—
Cycling	
Paths	<ul style="list-style-type: none"> <li>• no designated cycle path on street</li> </ul>
Facilities	<ul style="list-style-type: none"> <li>• End of trip Facility provided</li> </ul>
Secure Bicycle Parking	<ul style="list-style-type: none"> <li>• Yes at Front.</li> </ul>
Lockers	<ul style="list-style-type: none"> <li>• 3 to go in shower room</li> </ul>
Showers/Change Room	<ul style="list-style-type: none"> <li>• yes 1 of</li> </ul>

#### Public Parking:

Identify the number of on street and off street public parking in the vicinity in the following table.

	No. Marked Spaces	Location	Parking Restrictions
On Street Parking	3	1 at front 2 at rear	as reqd.
Off Street Parking	46	Available on both sides of Vincent Street.	1 hr

#### Parking Management Strategies

Parking management strategies providing implementation details must be provided to ensure that the 'Parking Allocation' is used as demonstrated in this Parking Management Plan.

The allocation of bays as specified in the Parking Management Plan shall be included in the development application and planning approval.

The following information shall be provided, where applicable, within the Parking Management Plan:

1. Details of who will be responsible for management, operation and maintenance of parking (inclusive of car stackers); - *The owner*
2. Management of allocation of parking bays as specified in this Parking Management Plan including signage and enforcement; - *The owner*
3. Management of Tandem Parking for staff/tenants; - *N/A*
4. Way finding measures to ensure efficient use of parking facilities; and *Advise client when booking is made*
5. Promotion of alternative transport modes such as the provision of well-maintained bicycle and end of trip facilities, use of active transport initiatives or public transport *as above* promotion.