



City of Port Phillip
Advertised Document
No. of Pages: 22

Tel: 03 9038 8280
www.auswideconsulting.com.au
info@auswideconsulting.com.au
ABN 18 162 361 042

PARKING DEMAND ASSESSMENT

5 PRENTICE ST, ST KILDA EAST VIC 3183

Proposed Dwelling Development (2 Units)

Prepared for:	Simon Kaufman
Date Prepared:	December 2019
Revision:	1.1
City of Port Phillip Council Development Application #:	TBA

PORT PHILLIP PLANNING DEPARTMENT
Date Received: 19/12/2019

INDEX

INTRODUCTION	3
BACKGROUND AND EXISTING CONDITIONS	3
Figure 1: Location of the subject site, source: Google Maps.....	4
Figure 2: Aerial view of subject site, source: Google Maps.....	4
PUBLIC TRANSPORT	5
Figure 3: Site PTV Map,	5
Table 1: Public Transport - bus service details	6
WALKABILITY	7
Figure 4: 15 Minute walking catchment area,.....	7
PROPOSED DEVELOPMENT	8
PRINCIPAL PUBLIC TRANSPORT NETWORK	9
Figure 5: VIC PPTN Map,	9
NUMBER OF CAR PARKING SPACES REQUIRED FOR THE DEVELOPMENTS.....	10
Table 2: Proposed Development Car Parking Requirement Summary	10
BICYCLE PARKING REQUIREMENTS	11
TRAFFIC IMPACT ASSESSMENT.....	12
CROSS UTILISATION TRIPS.....	13
CAR PARKING DEMAND SURVEY	14
ON - STREET PUBLIC PARKING	14
THE PORT PHILLIP COUNCIL PLANNING SCHEME CLAUSE 52.06 – 7 PERMIT REQUIREMENTS.....	15
CONCLUSIONS	17
APPENDIX A: PARKING INVENTORY AND DEMAND SURVEY, ON/OFF - STREET PUBLIC PARKING – SURVEY AREA.....	18
APPENDIX B: ON - STREET PUBLIC PARKING, INVENTORY AND DEMAND, WEDNESDAY 4th DECEMBER ..	19
APPENDIX C: ON - STREET PUBLIC PARKING, INVENTORY AND DEMAND, THURSDAY 5th DECEMBER.....	20
APPENDIX D: ON - STREET PUBLIC PARKING, INVENTORY AND DEMAND, FRIDAY 6th DECEMBER	21

INTRODUCTION

AusWide Consulting was engaged by Simon Kaufman to prepare a Parking Demand Assessment at 5 Prentice St, St Kilda East 3183. This report will assess the implications of the proposed development on existing traffic, parking and transport conditions surrounding the site. The following items have been included in the subsequent sections of this report:

- ✦ public and active transport accessibility at the site,
- ✦ number of car parking and bicycle spaces required for the development,
- ✦ expected traffic generation rates and their impact on the surrounding road network,
- ✦ car parking inventory and demand survey to determine the impacts of the existing development on the on/off-street public parking spaces provided within the vicinity,
- ✦ Conclusions of the above findings.

During the course of preparing this assessment, the subject site and its environment have been inspected, and all relevant traffic and parking data collected and analysed.

BACKGROUND AND EXISTING CONDITIONS

The subject site is located on Prentice St in the suburb of St Kilda East which is approximately 6km south-east of Melbourne's CBD and is located within the City of Port Phillip. The use of the land immediately surrounding the subject site is primarily residential and commercial in nature, which mainly comprises of dwellings. Development in the area is typically characterised by low density-built forms that are generally housing developments. The subject property is bounded by Prentice St to the east and Leslie St to the west with existing developments in the northern and southern directions. The site is currently occupied by a single storey dwelling.

Prentice St is a local road under the Council jurisdiction. The road cross-section at the site includes an unmarked lane with public car parking and pedestrian footpaths on both sides. The subject site is in a low pedestrian activity zone with a speed limit of 40km/hr. The City of Port Phillip Scheme Plan identifies the subject area within the General Residential Zone 1 (GRZ1).

Figure 1: presents an aerial view of the subject site showing surrounding suburbs

Figure 2: presents an aerial view of the subject site showing surrounding roads and businesses

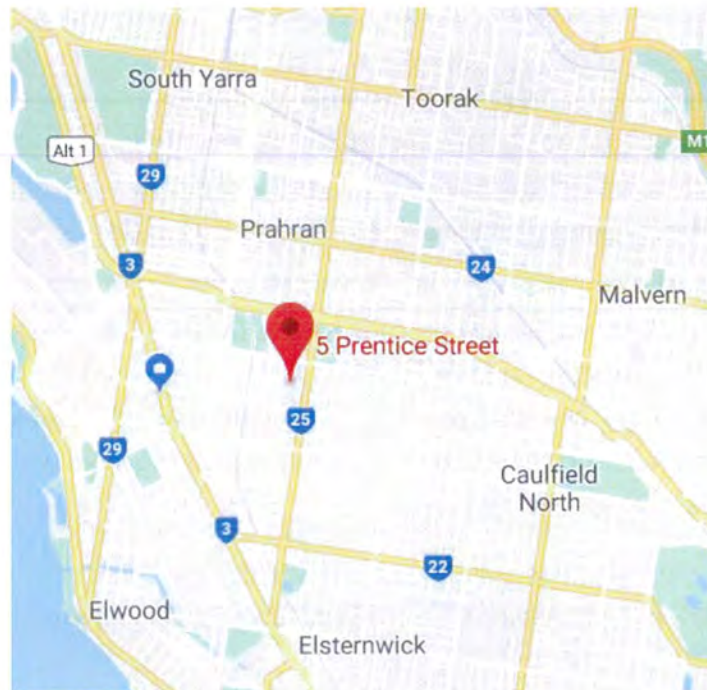


Figure 1: Location of the subject site, source: Google Maps

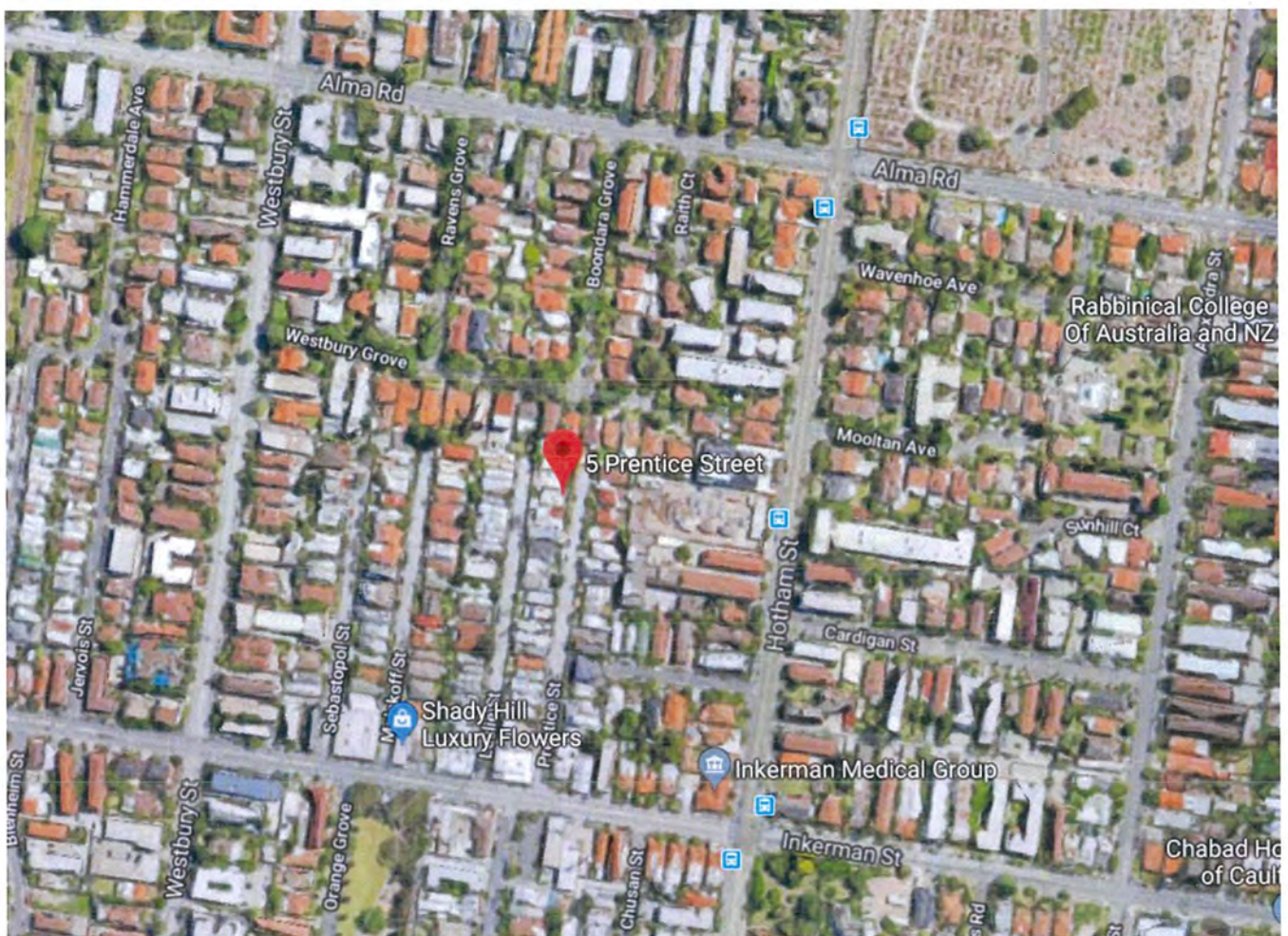


Figure 2: Aerial view of subject site, source: Google Maps

PUBLIC TRANSPORT

The subject site is in an area that has reasonable access to train, tram and bus services that is within walking distance of the site. The closest bus stop to the site, Inkerman St bus stop, is 350m away which is an approx. 4-minute walk. This bus stop only provides 1 route with frequent services throughout the day. Figure 3 below displays the public transport map around the site and the following table will summarise the services.

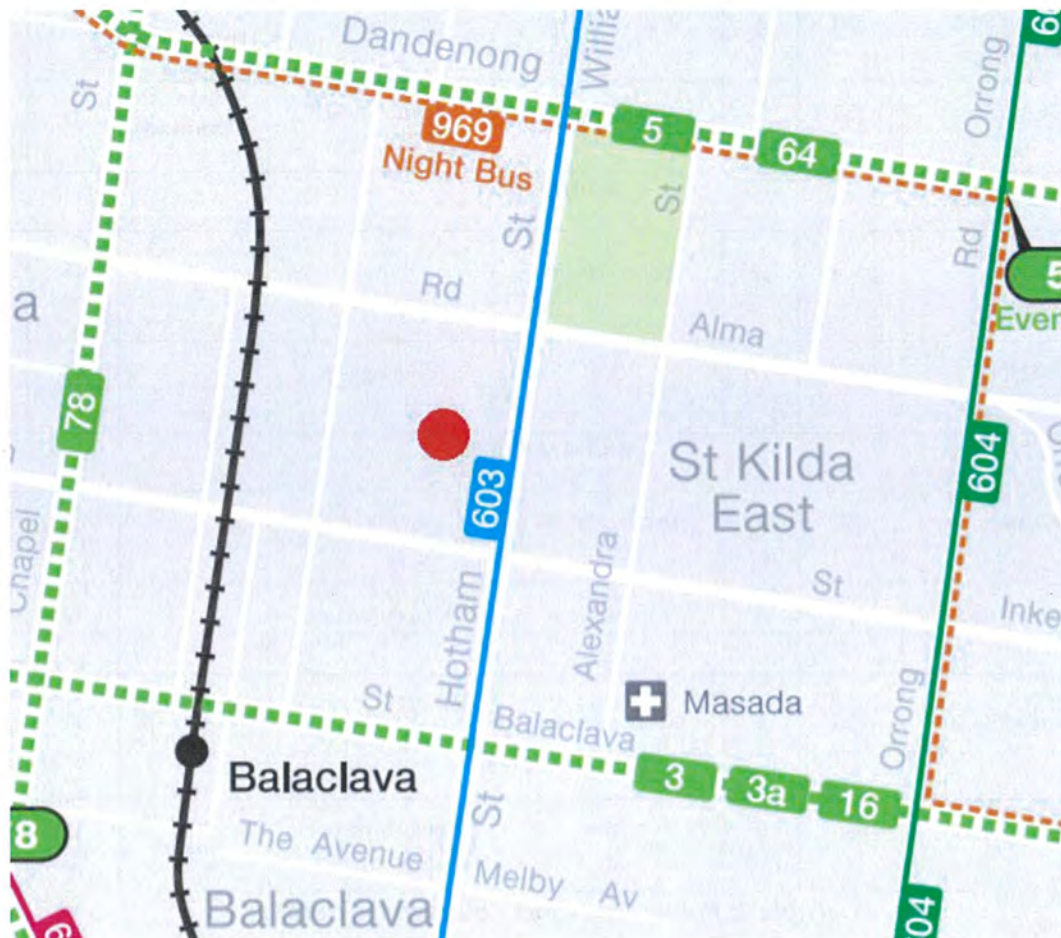


Figure 3: Site PTV Map, source: ptv.vic.gov.au

Service	Location	Distance from subject site [m]	Walking time [min]	Origin	Destination	Route Description	Number of Service		
							AM Peak (7-9 am)	PM Peak (4-6 pm)	Off peak
BUS SERVICES									
603	Inkerman St Bus Stop	350	4	Brighton Beach	Alfred Hospital	Via Elsternwick	6	6	3 services per hour
	Inkerman St Bus Stop	350	4	Alfred Hospital	Brighton Beach	Via Elsternwick	6	6	3 services per hour
TRAIN SERVICES									
Sandringham Line	Balaclava Station	950m	12	Sandringham	City	-	15	14	4 services per hour
	Balaclava Station	950m	12	City	Sandringham	-	15	16	4 services per hour
TRAM SERVICES									
3/3a	Carlisle Ave/Carlisle St	650	8	Melbourne Uni	East Malvern	-	11	10	5 services per hour
	Carlisle Ave/Carlisle St	650	8	East Malvern	Melbourne Uni	-	12	10	5 services per hour
16	Carlisle Ave/Carlisle St	650	8	Melbourne Uni	Kew	Via St Kilda Beach	11	12	5-6 services per hour
	Carlisle Ave/Carlisle St	650	8	Kew	Melbourne Uni	Via St Kilda Beach	12	11	5 services per hour

Table 1: Public Transport - bus service details

The above tram, train and bus service details show that the proposed development site has good access to public transport options with frequent services from each. The closest public transport service to the site, bus route 603 at Inkerman St, is only a 350m or 4-minute walk to the site that provides high frequency services during peak hours.

Thus, it can be concluded that residents and visitors would have the choice to utilise public transport services to travel to and from the site, which would significantly reduce the parking demand on the subject site.

WALKABILITY

The locality was assessed for nearby features that would encourage visitors and staff to walk/cycle. Reference is made to the 15 minute walking catchment area outlined in **Figure 6**.

The 'walkability' of a site is a measure of its proximity to other facilities by walking and can be ascertained from www.walkscore.com. The subject site is rated as "Very Walkable" (meaning that most errands can be accomplished on foot) and with a score of 71 out of 100 (obtained from the 'Walk Score' web tool), it provides a higher ranking to the average Melbourne metropolitan score of 57 out of 100.

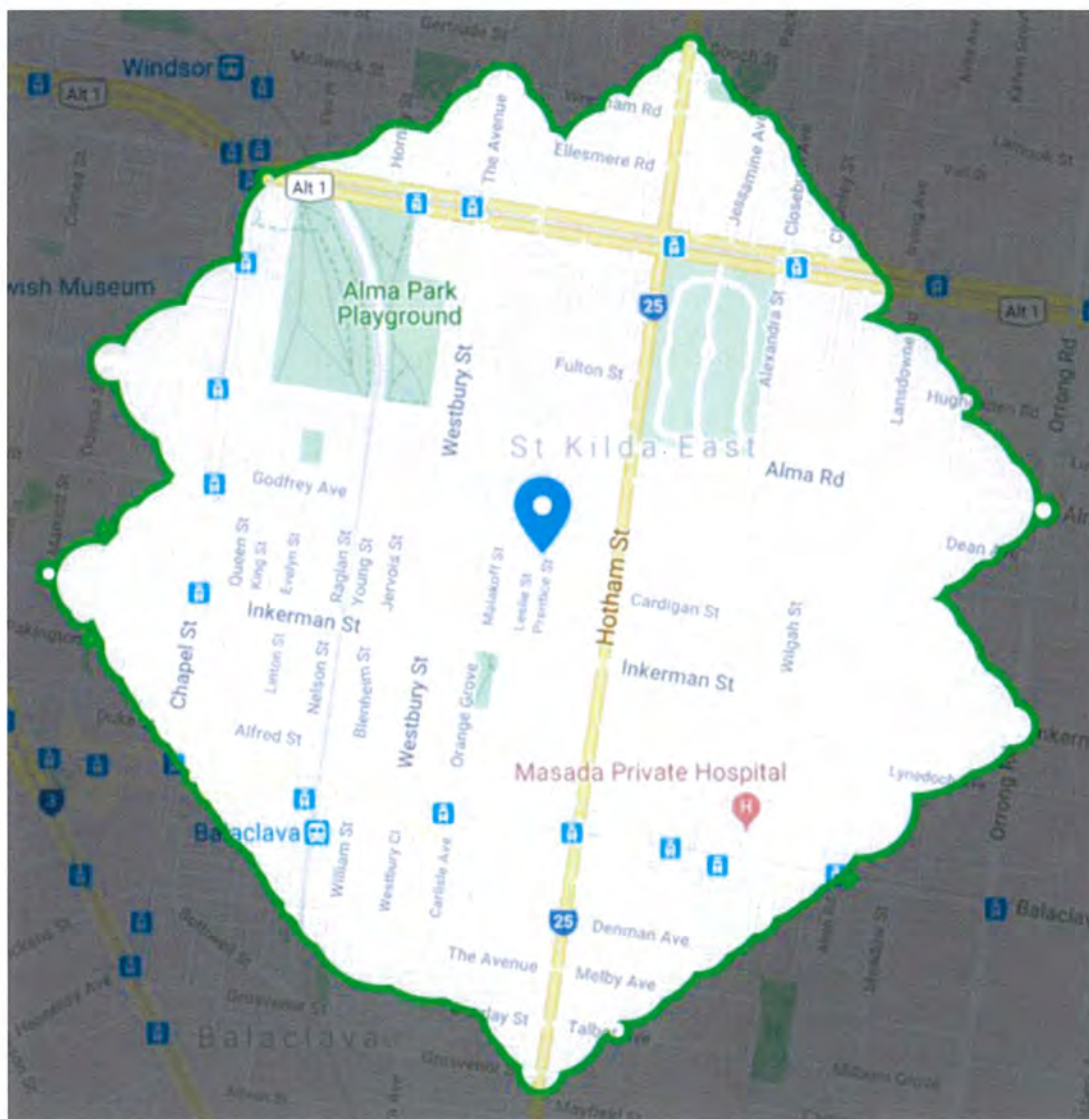


Figure 4: 15 Minute walking catchment area, source: www.walkscore.com

PROPOSED DEVELOPMENT

The proposed development for the site at 5 Prentice St, St Kilda East VIC 3183 is for 2 unit dwellings with each containing 3 bedrooms.

Through observation of site plans and information from the client, the following information is provided;

- The development for the site is for 2 unit dwellings with each containing 3 bedrooms.
- Each unit will contain 1 dedicated car parking space.
- Unit 2 will have entry access through Leslie St whereas Unit 1 will have access via Prentice St.

PRINCIPAL PUBLIC TRANSPORT NETWORK

The Principal Public Transport Network (PPTN) is a collection of maps that highlights areas where a reduced parking rate will apply. If a site falls within the highlighted area, even if it covers part of the land, the reduced parking rates which are specified in Column B of Table 1 in Clause 52.06 of the respective Council Planning Scheme will be used to determine the parking space required for the development's land use. In the case where the site does not fall within the highlighted PPTN area, the rates under Column A of Table 1 in Clause 52.06 will be utilised.

As the site at 5 Prentice St, St Kilda East 3183 falls inside of Victoria's PPTN Map, the site is classified as a PPTN area. As a result of this, Column B in Clause 52.06 will be used to determine the number of parking spaces required for the development. In the case where the land-use is not specified within the Council's Planning Scheme, the rates found in the RTA Guide to Traffic Generating Development (2002) document will be utilised.

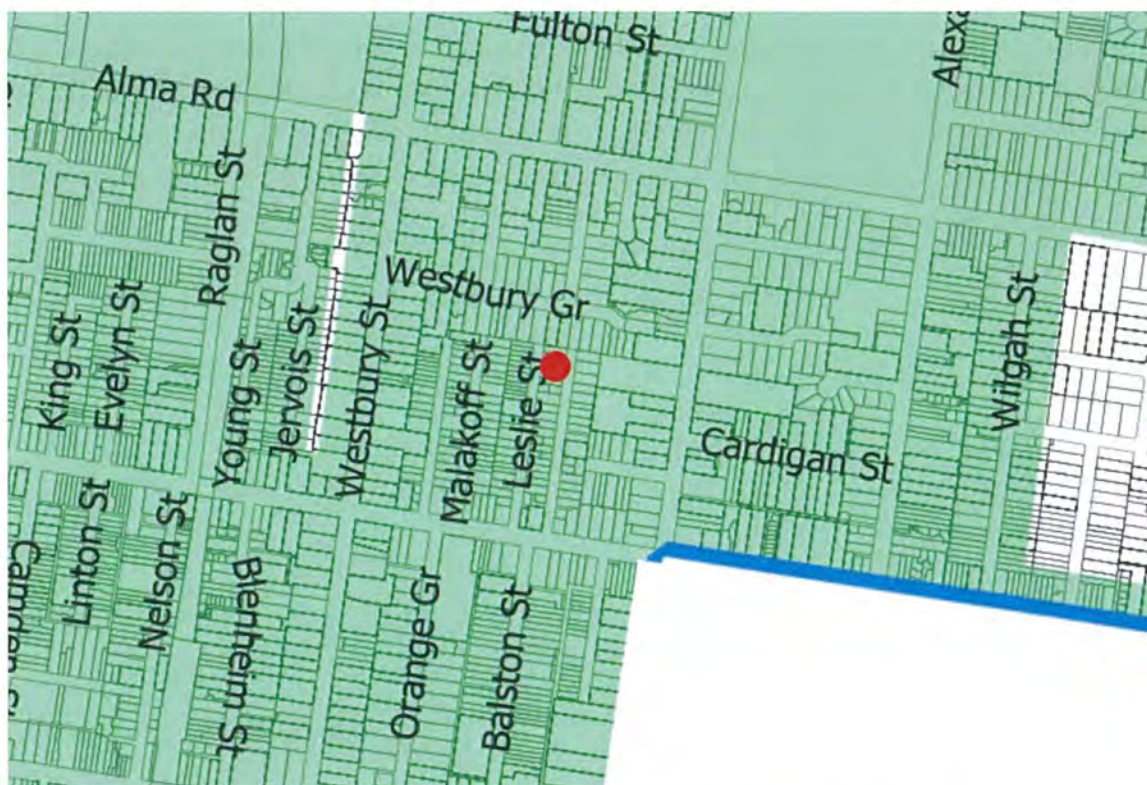


Figure 5: VIC PPTN Map, source: www.planning.vic.gov.au

NUMBER OF CAR PARKING SPACES REQUIRED FOR THE DEVELOPMENTS

Under Clause 52.06 – Car Parking in the City of Port Phillip Planning Scheme, the parking requirement for a “dwelling” is outlined. The table below summarises the rates obtained from the clause as well as the car parking requirement for the proposed land use.

Land Use	Given Rate from Clause 52.06 Car Parking	Car Parking Required	Dedicated Parking Spaces Provided	Car Parking Short fall
Dwelling	2 parking spaces to each 3 or more bedroom dwelling.	With 2 dwellings containing 3 bedrooms each, require 4 parking spaces.	2	Shortfall of 2 spaces

Table 2: Proposed Development Car Parking Requirement Summary

As observed in the table above, the proposed development requires 4 car parking spaces to meet the requirements set by the City of Port Phillip. With only 2 dedicated parking spaces available for the site, there is a resulted shortfall of 2 parking spaces. To accommodate for this shortfall, the remaining car parking requirement will have to be met through on/off street parking that is within 250m of the local area. A car parking survey is to be conducted to determine available parking around the area.

BICYCLE PARKING REQUIREMENTS

The bicycle provision requirements are determined in accordance with the City of Port Phillip Planning Scheme. The table below summarises the bicycle parking requirement for each land use with the rates provided within Clause 52.34 of this document.

Land Use	Given Rate from Clause 52.34-5 (Table 1)		Bicycle Parking Required	Dedicated Parking Spaces Provided	Bicycle Parking Short fall
	Employee/Resident	Visitor/Shopper			
Dwelling	In developments of four or more storeys, 1 to each 5 dwellings	In developments of four or more storeys, 1 to each 10 dwellings	None as all dwellings are 2 storeys.	-	-

As seen in the table above, the proposed development does not need any bicycle parking spaces to be compliant with Council requirements.

TRAFFIC IMPACT ASSESSMENT

Through observation of the RTA Guide to Traffic Generating Development (2002), the development on the site is classified as a medium density residential flat building (larger units and townhouses that have 3 or more bedrooms). The traffic generation rates for the development is as follows;

- Daily Vehicle Trips = 5.0 – 6.5 per dwelling
- Weekday Peak Hour Vehicle Trips = 0.5 – 0.65 per dwelling

With 2 dwellings proposed to be developed, the maximum daily vehicle trip rate can be calculated to be 13 trips. The maximum weekday peak hour vehicle trip rate is also calculated to be 1.3 trips per hour.

When assessing these rates using the RTA Guide, it is evident that the vehicle traffic generation of the existing site is considerably low. Also given the location of the site and the available public transport close by, residents and visitors may choose this as their main form of transport.

It is expected that the vehicular traffic generated by the site will distribute across the road network in the vicinity. It was perceived that these rates are in fact negligible and are not anticipated to generate any significant adverse impacts on the local road network.

CROSS UTILISATION TRIPS

As the site is located within a mixed residential and commercial area, some of the residents and visitors will use these services and attractions available in the vicinity. Therefore, the trips generating to and from the site may be part of the trips towards the commercial attractions within the area. Cross-purposed trips are then expected from the proposed development.

CAR PARKING DEMAND SURVEY

As a part of this study, parking utilization surveys were undertaken to determine the public parking occupancy on:

- ◆ Wednesday 4th December (9:00am – 12:00pm)
- ◆ Thursday 5th December (1:00pm – 4:00pm)
- ◆ Friday 6th December (6:00pm – 9:00pm)

The survey area considered all the on/off-street parking spaces available within an approximately 250m radius of the site (generally regarded as the walking distance to the site). The survey area was carefully chosen to represent the areas where residents and visitors are most likely to park their vehicles. The survey area map and the full results of this survey are presented in Appendix: A – D. The following sections summarise and discuss these results.

ON - STREET PUBLIC PARKING

There are a total of 105 on-street public parking spaces within a 250m walking distance of the proposed development site.

The parking observations showed that generally, the occupancy is in between 48 – 60% on Wednesday, 59 - 64% on Thursday and 47 - 54% on Friday respectively. As such, this occupancy is considered as low-medium occupancy. The highest occupancy was recorded on Thursday at 4:00pm (64%). However, even at the peak time, there were a great number of vacant spaces within a 250m distance to the subject site. Generally, demand rarely exceeds 60%. Nevertheless, at most times, the average occupancy is around 55.5%; which indicates a significant volume of vacant car park spaces within walking distance to the subject site.

THE PORT PHILLIP COUNCIL PLANNING SCHEME CLAUSE 52.06 – 7 PERMIT REQUIREMENTS

A permit is required to reduce (including reduce to zero) the number of car parking spaces required under Clause 52.06-3 or in a schedule to the Parking Overlay. A permit is required for this site to reduce the number of parking spaces required from 4 to 2.

To support the application for a parking requirement reduction permit for the proposed development, the City of Port Phillip Council Planning Scheme Clause 52.06 – 7 requires that the Parking Demand Assessment address the following matters;

- ◆ **The likelihood of multi-purpose trips within the locality, which are likely to be combined with a trip to the land in connection with the proposed use.**

Situated along Inkerman St, approx. 200m southbound from the proposed development site, there are various commercial services available. There are retail stores, hotels, medical centres and learning centres that are within the vicinity which may generate multipurpose trips with the proposed site.

- ◆ **The variation of car parking demand likely to be generated by the proposed use over time.**

The variation of car parking demand for the proposed site is not likely to change from the maximum demand of 4 car parking spaces due to the land use of the site. The parking assessment is based on the number of bedrooms proposed within each of the two units to be developed.

- ◆ **The short-stay and long-stay car parking demand likely to be generated by the proposed use.**

As the land use for the proposed development is for residential dwellings, it is expected that resident vehicles will be parked for a long period of time whilst visitors will be parking for approx. 1 to 2 hours. Nonetheless, of the streets surveyed within the car parking demand survey, all have no parking restriction which is adequate for the type of parking duration expected.

- ◆ **The availability of public transport in the locality of the land.**

On page 5 and 6 within this report, the Public Transport section outlines the frequency of the trams, train and bus services available within the area. These public transport options are less than 1km walk from the site and provide several services throughout the day. Thus, public transport is seen to be a viable form of travel for residents and visitors.

- ◆ **The convenience of pedestrian and cyclist access to the land**

Assessing the roads surrounding the site location, all main roads contain both dedicated cycling paths and footpaths on both sides of the road. These paths are accompanied with wide lanes for vehicles, allowing for easy cycling along these roads. As a result, cyclists and pedestrians are able to easily access the proposed site.

◆ **The provision of bicycle parking and end of trip facilities for cycles in the locality of the land**

Through assessing Clause 52.34 within the City of Port Phillip Council Planning Scheme, there is no resulted bicycle parking requirement for the proposed site. However, although there are no plans for bicycle racks to be implemented within the development, there is space for bicycle parking to be added if needed.

◆ **The anticipated car ownership rates of likely or proposed visitors to or occupants (employees) of the land.**

As the site is situated within an area with good access to public transport, the residents and visitors on-site may choose to share vehicles, carpool or use the surrounding public transport options. The closest bus stop to the site, Inkerman St bus stop, is only 350m away and provides frequent services throughout the day. Visitors that choose to drive will be able to park on-street nearby to the site which has 105 available spaces on both Prentice and Leslie St. Through the car parking demand survey, it is observed that throughout the day there are a great number of vacant spaces that visitors may utilise.

Any empirical assessment or case study

No empirical assessment of the car parking demand was required as the car parking rates for dwellings provided from the City of Port Phillip Planning Scheme is considered to be realistic. Using the rates within Clause 52.06, the parking demand for the proposed development is 4 spaces for both 3-bedroom unit dwellings. As each dwelling is to provide 1 parking space, there is then a parking shortfall of 2 spaces.

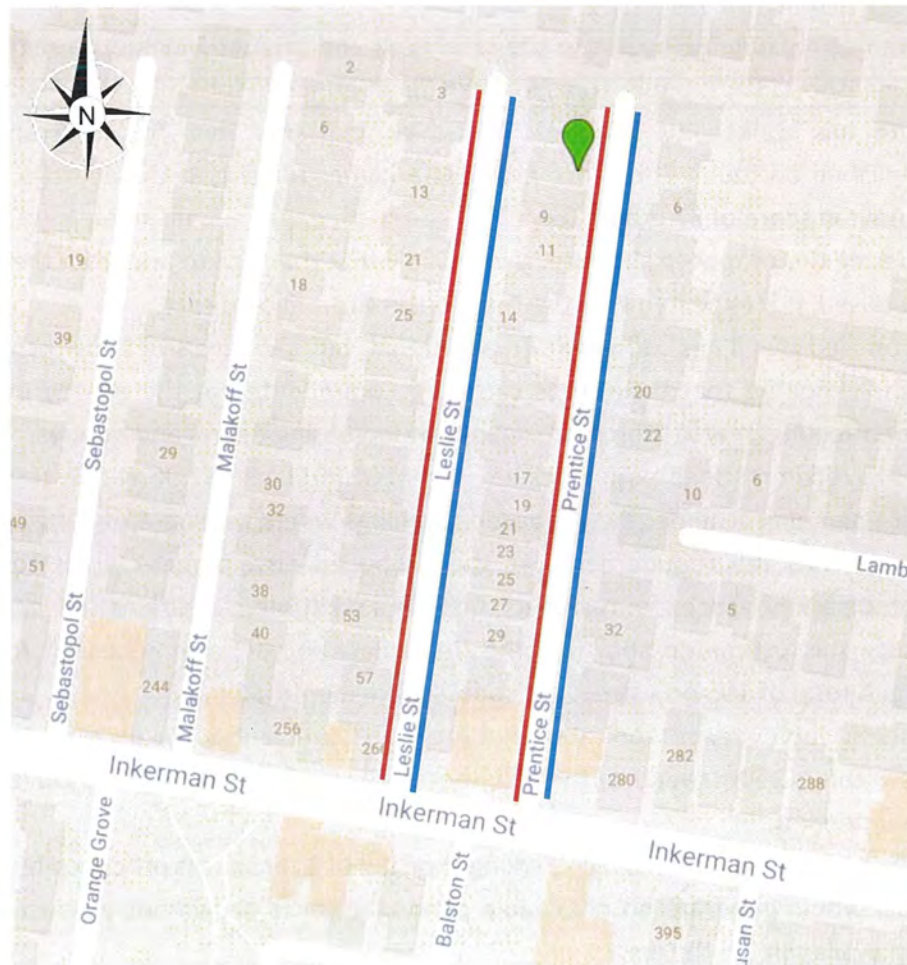
CONCLUSIONS

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

- ✦ The proposed development for the site at 5 Prentice St, St Kilda East VIC 3183 are for dwellings (2 units).
- ✦ The site has reasonable access to the local area and greater Melbourne region through public transport. Thus, public transport can be an effective form of travel residents.
- ✦ The site has walkability score of 71, which indicates that “most errands can be accomplished on foot”. This score provides a higher ranking to the average Melbourne metropolitan score of 57 out of 100.
- ✦ Considering the proposed land use, it is unlikely that the trips to and from the site will be cross-utilised. It is expected that the trips to the site will be direct.
- ✦ The proposed dwellings will generate additional, but low levels of trips throughout the day. It is expected that these trips can be accommodated at the nearby intersections without affecting intersection performance or increasing delays and queues.
- ✦ Using the recommended parking rates presented in Clause 52.06 within the respective council’s planning scheme, the proposed dwellings would require 4 parking spaces to be compliant with the requirement. As the proposed development plans to provide 2 dedicated parking spaces for residents, there is a shortfall of 2 parking spaces.
- ✦ To justify this estimated shortfall, the immediate locality was assessed for available parking. A total of 105 on - street car spaces were identified.
- ✦ The parking survey results indicated that there are sufficient public on/off– street parking spaces within a 250m radius of the site; therefore, residents and visitors can utilize these spaces if needed.
- ✦ As such, it was concluded that the parking shortfall of 2 car spaces produced by the subject proposal would generate no noticeable parking impacts or will not exhaust the overall parking availability in the area.

In conclusion, this study indicates that the proposed development is not envisaged to have adverse impacts on the surrounding traffic or parking conditions. Therefore, the development of dwellings should be supported on traffic and parking grounds.

APPENDIX A: PARKING INVENTORY AND DEMAND SURVEY, ON/OFF - STREET PUBLIC PARKING – SURVEY AREA



Legend:

- northbound
- southbound
- eastbound
- westbound

APPENDIX B: ON - STREET PUBLIC PARKING, INVENTORY AND DEMAND, WEDNESDAY 4th DECEMBER

LOCATION				Side	PARKING	DEMAND				
Street	Between				Restriction	Supply	9:00am	10:00am	11:00am	12:00pm
Prentice St	Inkerman St	-	210m northbound	N	No Restriction	29	15	16	14	18
	210m northbound	-	Inkerman St	S	No Restriction	28	14	15	15	19
Leslie St	Inkerman St	-	210m northbound	N	No Restriction	23	11	14	12	13
	210m northbound	-	Inkerman St	S	No Restriction	25	10	13	12	13
						105	50	58	53	63
						%	47.6	55.2	50.5	60

E - eastbound, N - northbound, S - southbound, W - westbound

APPENDIX C: ON - STREET PUBLIC PARKING, INVENTORY AND DEMAND, THURSDAY 5th DECEMBER

LOCATION				Side	PARKING	DEMAND				
Street	Between		Restriction		Supply	1:00pm	2:00pm	3:00pm	4:00pm	
Prentice St	Inkerman St	-	210m northbound	N	No Restriction	29	17	16	16	18
	210m northbound	-	Inkerman St	S	No Restriction	28	18	17	20	20
Leslie St	Inkerman St	-	210m northbound	N	No Restriction	23	14	15	15	14
	210m northbound	-	Inkerman St	S	No Restriction	25	14	14	14	15
						105	63	62	65	67
						%	60	59	61.9	63.8

E- eastbound, N – northbound, S – southbound, W - westbound

APPENDIX D: ON - STREET PUBLIC PARKING, INVENTORY AND DEMAND, FRIDAY 6th DECEMBER

LOCATION				Side	PARKING	DEMAND				
Street	Between		Restriction		Supply	6:00pm	7:00pm	8:00pm	9:00pm	
Prentice St	Inkerman St	-	210m northbound	N	No Restriction	29	16	16	15	17
	210m northbound	-	Inkerman St	S	No Restriction	28	14	13	11	12
Leslie St	Inkerman St	-	210m northbound	N	No Restriction	23	10	11	9	9
	210m northbound	-	Inkerman St	S	No Restriction	25	16	17	14	14
						105	56	57	49	52
						%	53.3	54.3	46.7	49.5

E- eastbound, N – northbound, S – southbound, W - westbound