TRAFFIC AND PARKING IMPACT ASSESSMENT

PROPOSED BOARDING HOUSE

76 Hobart street, St. Marys

Prepared for: GPS Constructions Pty Ltd

N206413A (Version 1a)

March 2021

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Contents

1. INTRODUCTION

Motion Traffic Engineers was commissioned by GPS Constructions Pty Ltd to undertake a traffic and parking impact assessment of a proposed boarding house development at 76 Hobart Street in St. Marys. The proposal includes the demolition of existing structures and construction of a two storey Boarding House comprising of 17 boarding rooms.

The existing site is occupied by a single residential dwelling. Proposed on-site parking is provided on the ground floor within the site boundary. Access to the proposed parking area is via Hobart Street.

This traffic report focuses on the proposed development and changes in car usage and car park utilisation and additional trips from the proposed development.

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

2. BACKGROUND AND EXISTING CONDITIONS OF THE SUBJECT SITE

2.1 Location and Land Use

The subject site is located at 76 Hobart Street in St. Marys

The site is located within a *Medium Density Residential Zone (R3)* to the east of St. Mary's train station. The immediate surroundings of the site are predominantly residential with some retail business located further away to the west on Phillip Street and industrial buildings located to the north of the railway on Glossop Street.

Figures 1 and 2 show the location of the subject site from aerial and street map perspective respectively.

Figure 3 shows a photograph of the site taken from Hobart Street.

Figure 1: Location of the Subject Site on Aerial

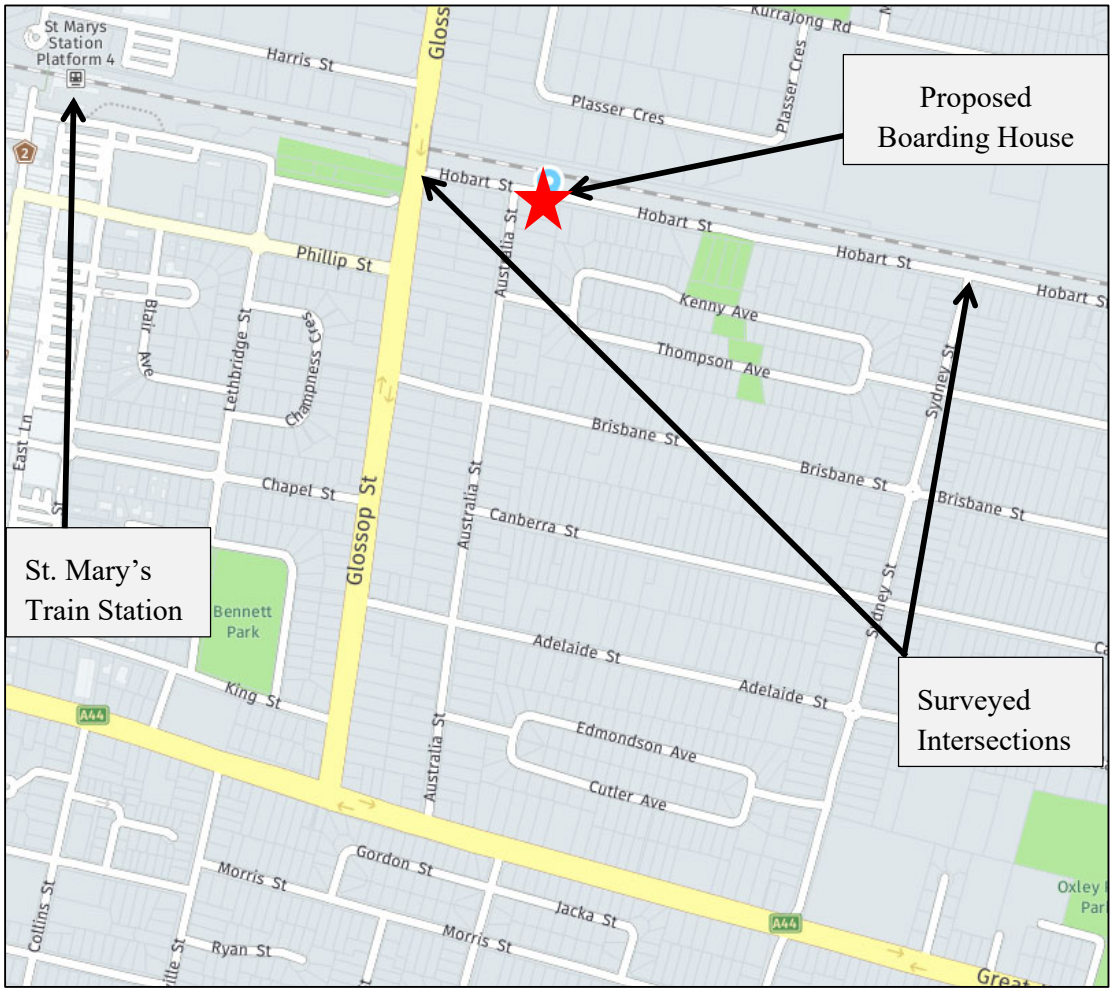

Figure 2: Street Map of the Location of the Proposed Boarding House

Figure 3: Photograph of 76 Hobart Street

2.2 Road Network

This section discusses the road network adjacent to the site.

Hobart Street is a collector with one lane of traffic lane each way and a default speed limit of 50km/hr. Time-unrestricted kerbside parking is permitted on both sides of the road. Figure 4a shows a photograph of Hobart Street near the subject site.

Glossop Street is a major collector road with two lanes of traffic each way and a sign-posted speed limit of 60km/hr. The northbound and southbound traffic are separated by road median. On-street parking is not available on Glossop Street near the subject site. Figure 4b shows a photograph of Glossop Street.

Sydney Street is a local road with one lane of traffic each way and a default speed limit of 50km/hr. Time-unrestricted kerbside parking is permitted on both sides of the road within designated parking lanes. Figure 4c shows a photograph of Sydney Street near the subject site.

Figure 4a: Hobart Street Looking East from the Subject Site

Figure 4b: Glossop Street Looking South from Hobart Street

Figure 4c: Sydney Street Looking South from Hobart Street

2.3 Public Transport

The subject site is located at 550 metres (walking distance) to the east of St Marys Interchange and St Marys Station.

Train Service

This station is serviced by the T1 with trains running every 7 minutes during peak hours. This lane offers transportation to Sydney CBD, Central Station, Penrith, Gordon and all stations in between.

Bus Service

The St Marys Interchange is serviced by more than 18 bus routes, providing convenient transportation for this area.

Overall, the site has excellent access to public transport, with St Marys Interchange and St Marys Station located at approximately 550 metres to the west of the site.

Figure 5 below presents the bus route map near the subject site.

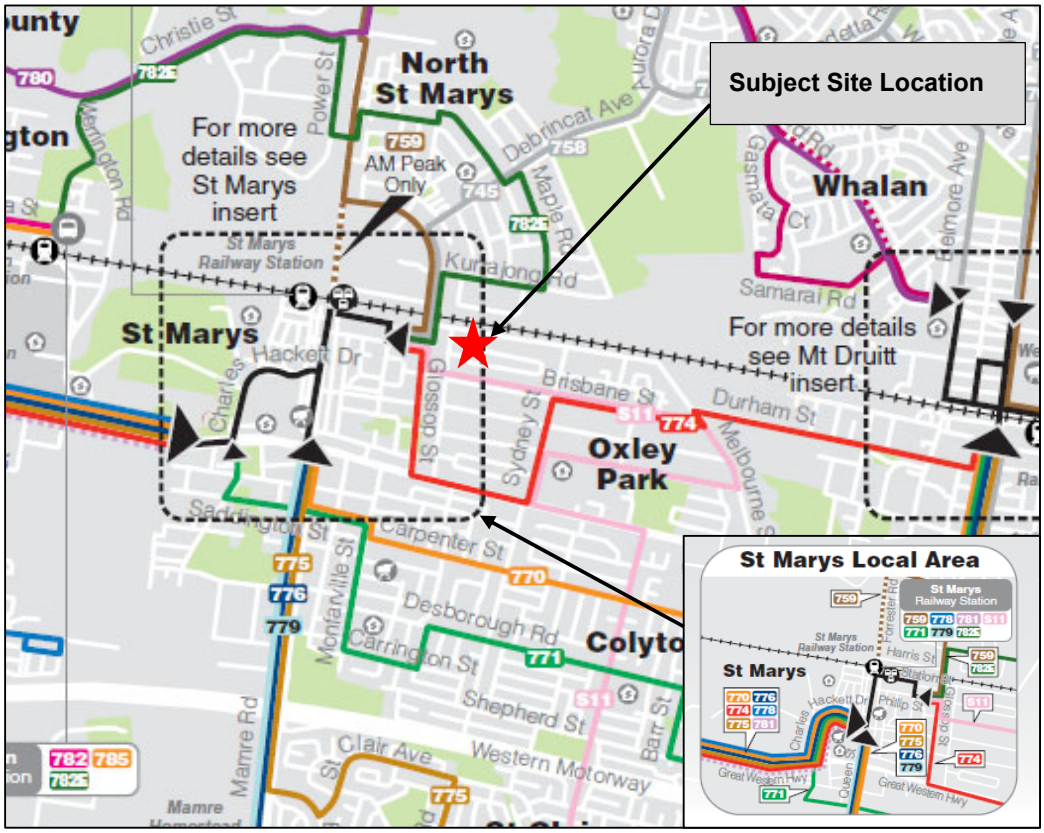

Figure 5: Bus Route Map Near the Subject Site

2.4 Intersection Description

As part of this traffic impact assessment three intersections are assessed for the traffic generation and impacts

- The Stop intersection of Glossop Street with Hobart Street
- The Priority intersection of Hobart Street with Sydney Street

External traffic to and from the proposed boarding house will need to travel through at least one of the above intersections

The Stop intersection of Glossop Street with Hobart Street is a three-leg intersection. Drivers on Hobart Street must stop and give way to through vehicles on Glossop Street. Right turn from Hobart Street to Glossop Street is prohibited by road median. Figure 6

shows a layout of the intersection using SIDRA (9)- an industry standard intersection assessment software.

The priority intersection of Hobart Street with Sydney Street is a three-leg intersection with all turn movements permitted. Drivers on Sydney Street must give way to through vehicles travelling on Hobart Street. Figure 7 shows a layout of the intersection using SIDRA (9). The numbers on the lanes refer to the length of short lanes in metres.

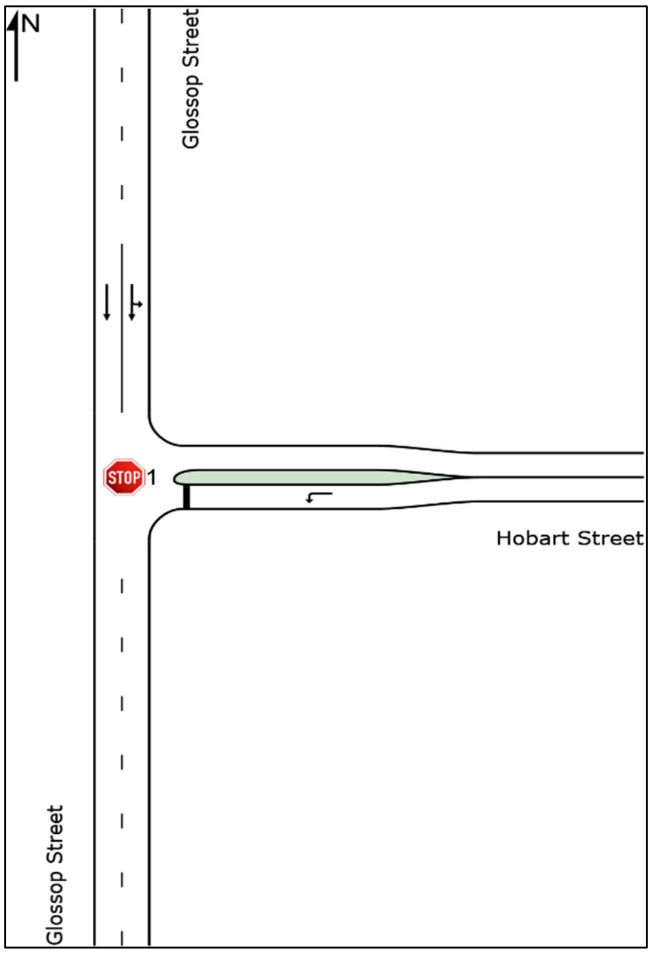

Figure 6: Roundabout Intersection Layout of Glossop Street with Hobart Street (SIDRA)

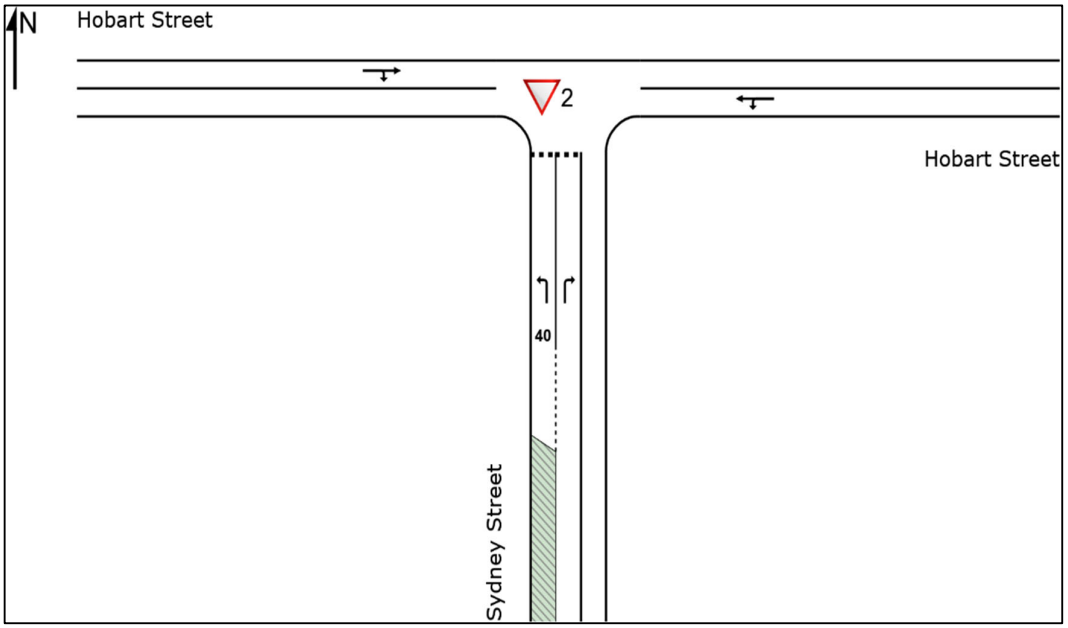

Figure 7: Priority Intersection Layout of Hobart Street with Sydney Street (SIDRA

2.5 Existing Traffic Volumes

As part of the traffic assessment, traffic counts have been undertaken at the two intersections for the weekday AM and PM peak period. The peak hours were 7:45am to 8:45am and 5pm to 6pm for the weekday AM and PM peak hours respectively. The traffic surveys were undertaken on March 2021

The following Figures present the traffic volumes in vehicles for the weekday peak hours.

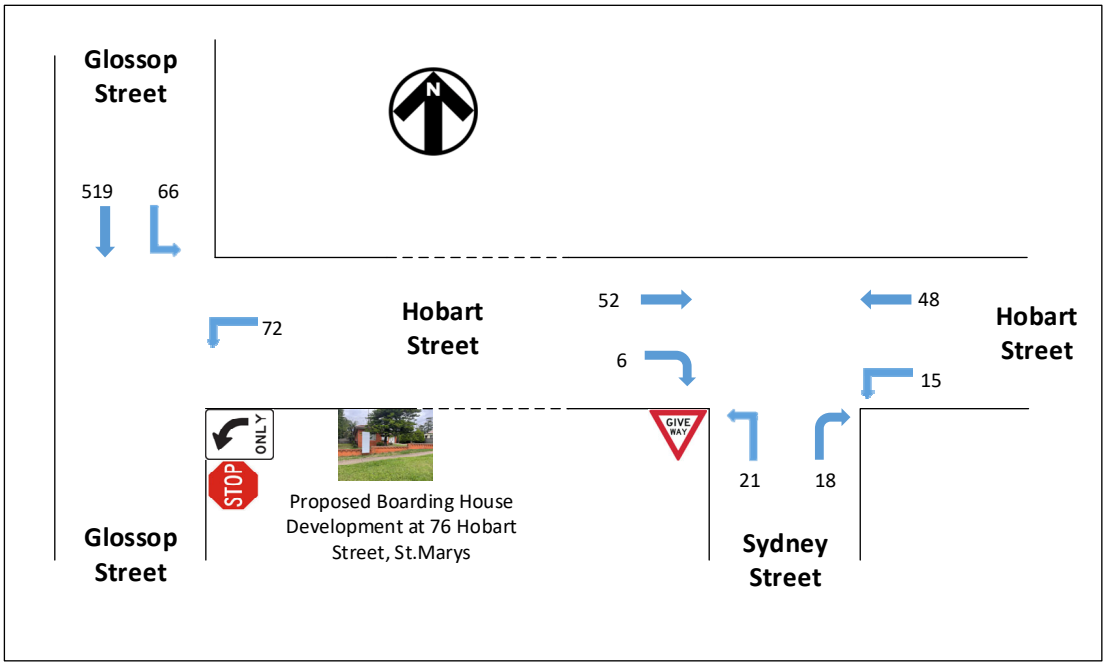

Figure 8: Existing Weekday Traffic Volumes AM Peak Hour

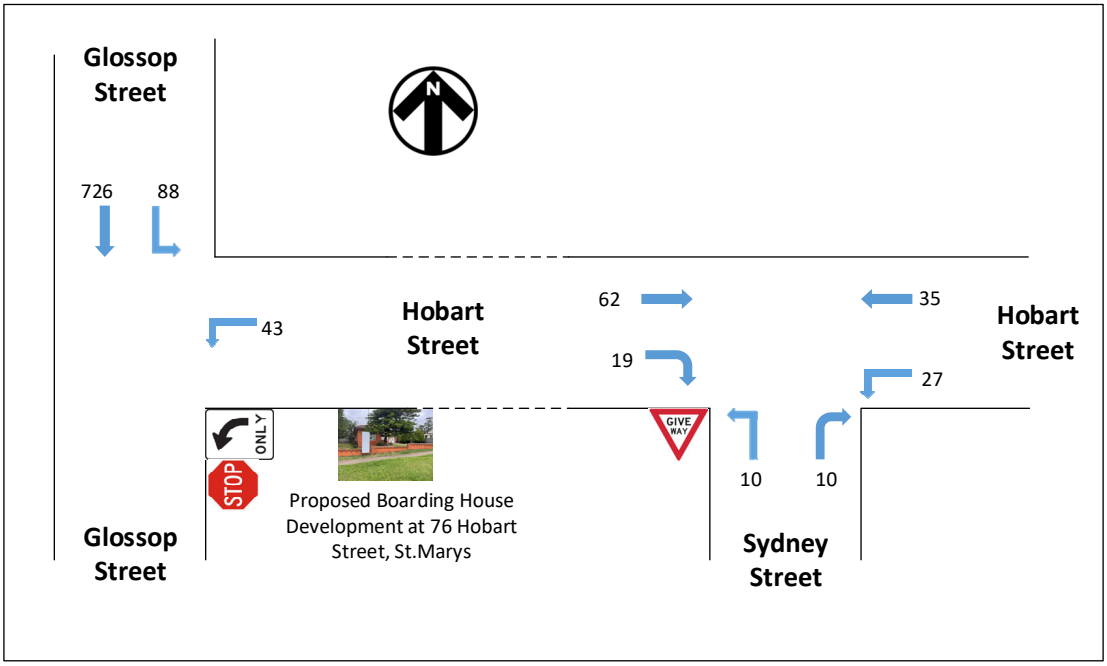

Figure 9: Existing Weekday Traffic Volumes PM Peak Hour

2.6 Intersection Assessment

An intersection assessment has been undertaken for the two surveyed intersections.

The existing intersection operating performance was assessed using the SIDRA software package (version 9) to determine the Degree of Saturation (DS), Average Delay (AVD in seconds) and Level of Service (LoS) at each intersection. The SIDRA program provides Level of Service Criteria Tables for various intersection types. The key indicator of intersection performance is Level of Service, where results are placed on a continuum from 'A' to 'F', as shown in Table 1.

LoS	**Traffic Signal / Roundabout**	**Give Way / Stop Sign / T-Junction control**
A	Good operation	Good operation
B	Good with acceptable delays and spare capacity	Acceptable delays and spare capacity
C	Satisfactory	Satisfactory, but accident study required
D	Operating near capacity	Near capacity & accident study required
E	At capacity, at signals incidents will cause excessive delays.	At capacity, requires other control mode
F	Unsatisfactory and requires additional capacity, Roundabouts require other control mode	At capacity, requires other control mode

Table 1: Intersection Level of Service

The Average Vehicle Delay (AVD) provides a measure of the operational performance of an intersection as indicated below, which relates AVD to LOS. The AVD's should be taken as a guide only as longer delays could be tolerated in some locations (i.e., inner-city conditions) and on some roads (i.e., minor side street intersecting with a major arterial route). For traffic signals, the average delay over all movements should be taken.

For roundabouts and priority control intersections (sign control) the critical movement for level of service assessment should be that movement with the highest average delay.

LoS	Average Delay per Vehicles (seconds/vehicle)
A	Less than 14
B	15 to 28
C	29 to 42
D	43 to 56
E	57 to 70
F	>70

Table 2: Intersection Average Delay (AVD)

The degree of saturation (DS) is another measure of the operational performance of individual intersections. For intersections controlled by traffic signals both queue length and delay increase rapidly as DS approaches 1. It is usual to attempt to keep DS to less than 0.9. Degrees of Saturation in the order of 0.7 generally represent satisfactory intersection operation. When DS exceed 0.9 queues can be anticipated.

The results of the intersection analysis are as follows:

Stop intersection of Glossop Street with Hobart Street

- The turn movements have a LoS A or B for both peak hours
- There is spare capacity at this intersection

Priority intersection of Hobart Street with Sydney Street

- All turn movements have a LoS A or B for both AM and PM peak hours
- There is spare capacity at this intersection

The full Sidra results are presented in Appendix A of this report

2.7 Public Parking

There are ample time-unrestricted on-street parking spaces located on the residential streets in the vicinity of the site. Site visit shows that a vacant car space can be easily found during the AM and PM peak hours. Many of the nearby residential dwellings have on site parking and do not necessarily need to park on street.

3. PROPOSED DEVELOPMENT

The land-uses for the proposed boarding house are as follows:

Boarding House

- Seventeen boarding rooms with 4 rooms on the ground floor and 13 rooms on the first floor
- One communal room

Parking

The development proposes the following:

- Nine car parking spaces (including two accessible parking spaces)
- Ten bicycle spaces
- Four motorcycle spaces

The car parking is provided at the ground floor level with vehicle access and egress via Hobart Street

A full scaled plan of the proposed boarding house is provided as part of the Development Application.

4. CAR PARKING CONSIDERATIONS

4.1 State Environmental Planning Policy (Affordable Rental Housing) 2009

The car, bicycle and motorcycle parking requirements for affordable rental housing are presented in State Environmental Planning Policy (Affordable Rental Housing) 2009 and State Environmental Planning Policy (Affordable Rental Housing) Amendment (Parking for Boarding Houses) 2018 with the car parking rates as follows as it applies to the proposed development:

Boarding house

- 0.5 parking spaces for each boarding room
- Not more than 1 parking space provided for each person employed in connection with the development
- At least one parking space to be provided for a bicycle, and one to be provided for a motorcycle, for every 5 boarding rooms.

Table 3 summarises the car parking requirements for the boarding house development.

Land Use	Number of Rooms	Car Parking Rate	Car Spaces Required	Car Spaces Provided
Boarding Room	16	0.5 spaces per boarding room	8	9
Manager's Room	1	1 space per manager's room	1	
Total			9	9

Table 3: Car Parking Requirements and Provisions

Table 4 summarises the bicycle and motorcycle parking requirements for the proposed boarding house.

Vehicle	Number of Rooms	Parking Rate	Spaces Required	Spaces Provided
Bicycle	16	1 space per 5 boarding rooms	3	10
Motorcycle			3	2

Table 4: Bicycle and Motorcycle Parking Requirements and Provisions

4.2 Adequacy of Car Parking Provision

The proposed boarding house development provides 9 on-site parking spaces versus 9 car spaces required by SEPP (Affordable Rental Housing) 2009. Thus, the proposed boarding housing complies with the State Environmental Planning Policy in terms of parking provisions.

There is discrepancy between the number of motorcycle spaces in the plan and the Calculation table. Only two motorcycle spaces are shown on ground floor in the plan.

Three motorcycle spaces are required for the proposed boarding house as per table 4 in the previous section. Current arrangement shows that the proposed development is short of 1 motorcycle space.

The proposed development complies with SEPP (Affordable Rental Housing) 2009 for bicycle parking requirements.

The proposed boarding house is not required to provide parking for visitors. Additional visitor parking spaces can be found on Hobart Street and other nearby residential roads.

5. VEHICLE TRAFFIC IMPACT CONSIDERATIONS

5.1 Traffic Generation

The RTA Guide to Traffic Generating Developments 2002 and the *Updated Traffic Surveys August 2013* do not publish trip generation rates for a boarding house but it does for motel rooms as follows:

- 0.4 trips per unit for the weekday AM and PM peak hour

For the purposes of the traffic assessment **only**, the above trip rate is used for the boarding house traffic assessment. The rate above coincides with the rate used for the parking provision calculation.

Table 5 summarises the estimated trip generation for the proposed boarding house.

Proposed				
Peak Hour	**Use**	**Number of Rooms**	**Trip Generation Rate**	**Trips Generated**
AM	Boarding Room	17	0.4 trips per room	7
PM			0.4 trips per room	7

Table 5: Estimated Trip Generation for the Proposed Boarding House

The distribution of trips for a boarding house can be assumed to be 90% in and 10% out for in the AM peak hour and 90% out and 10% in for the PM peak hour. Table 6 presents the net trip distribution. Overall, the proposed office development is a low trip generator.

Peak Hour	Origin	Destination	Total
AM	6	1	7
PM	1	6	7

Table 6: Net Trip Calculation and Distribution.

5.2 Forecast Traffic Volumes

The following figures present the existing and with boarding house traffic volumes for the two peak hours distributed onto the two surveyed intersections

The additional boarding house traffic is in red for origin trips and blue for destination trips. The additional boarding house traffic represents a small proportion of the existing traffic.

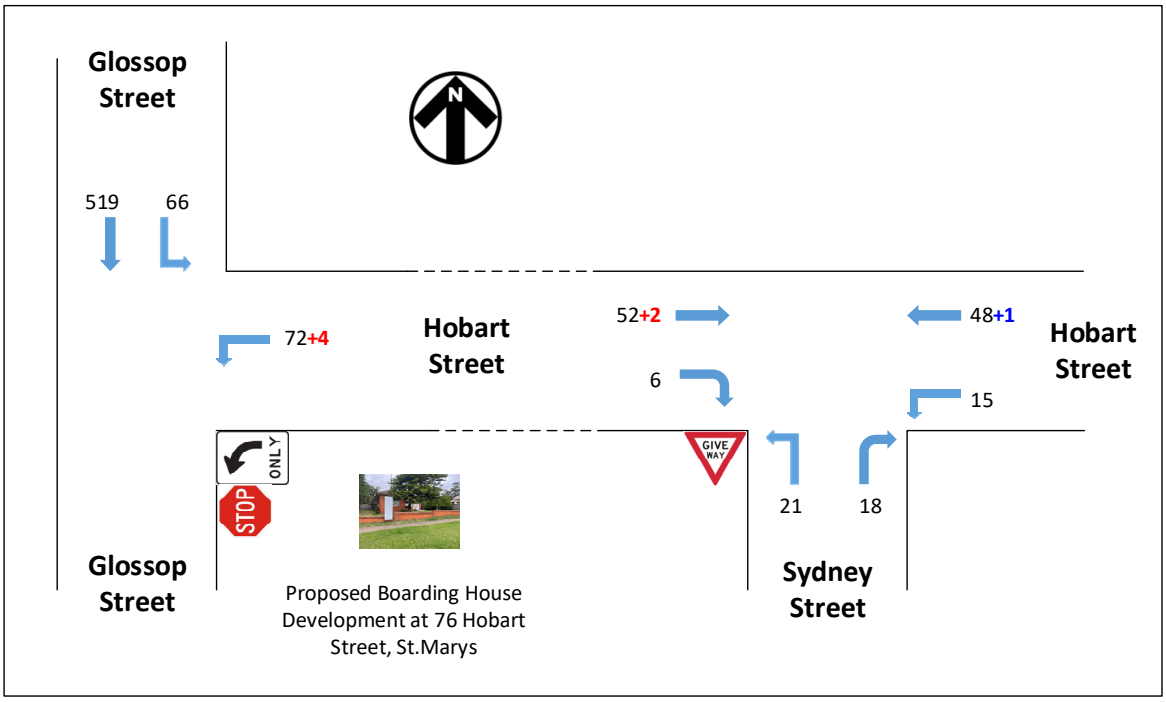

Figure 10: Existing Weekday AM Peak Hour Traffic Volumes with Boarding house traffic

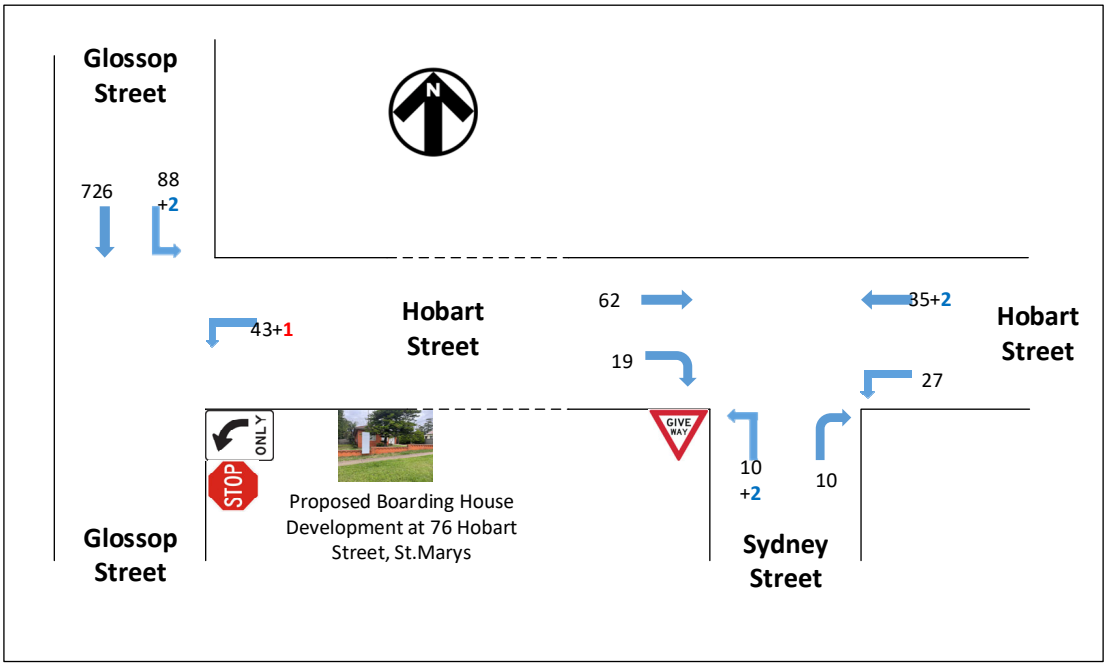

Figure 11: Existing Weekday PM Peak Hour Traffic Volumes with Boarding house traffic

5.3 Intersection Assessment

This section assesses the following intersections for the existing traffic with the boarding house traffic. The results of the intersection assessment are as follows:

Stop intersection of Glossop Street with Hobart Street

- The turn movements have a LoS A or B for both peak hours
- The additional boarding house traffic does not change the LoS for the turn movements for both peak hours

Priority intersection of Hobart Street with Sydney Street

- All turn movements have a LoS A or B for both AM and PM peak hours
- The additional boarding house traffic does not change the LoS for the turn movements for both peak hours

The intersection performance will not change with the additional trips generated.

The full SIDRA results are presented in Appendix B for the existing conditions with the boarding house traffic. The full SIDRA results are presented in Appendix A for the existing conditions.

6. CONCLUSIONS

This traffic impact assessment reports relates to a proposed boarding house at 76 Hobart Street in St Marys. Based on the analysis and discussions presented in this report, the following conclusions are made:

- The proposed boarding house complies with SEPP (Affordable Rental Housing) 2009 and SEPP (Affordable Rental Housing) Amendment (Parking for Boarding Houses) 2018 car parking requirements.
- The proposed boarding house is a low trip generator for the weekday AM and PM peak hours.
- According to the intersection results, the additional trips from the proposed boarding house can be accommodated at the nearby intersections without noticeably affecting intersection performance, delays or queues.

There are no traffic engineering reasons why a development consent for the proposed boarding house at 76 Hobart Street in St Marys, should not be granted.

APPENDIX A

SIDRA Intersection Results for Existing Traffic Conditions

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hobart Street														
4	L2	72	0.0	76	0.0	0.066	8.4	LOS A	0.3	1.8	0.34	0.87	0.34	42.3
Approach		72	0.0	76	0.0	0.066	8.4	LOS A	0.3	1.8	0.34	0.87	0.34	42.3
North: Glossop Street														
7	L2	66	0.0	69	0.0	0.159	5.3	LOS A	0.0	0.0	0.00	0.13	0.00	54.5
8	T1	519	0.0	546	0.0	0.159	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	58.0
Approach		585	0.0	616	0.0	0.159	0.6	NA	0.0	0.0	0.00	0.07	0.00	57.3
All Vehicles		657	0.0	692	0.0	0.159	1.5	NA	0.3	1.8	0.04	0.15	0.04	54.5

Table A1: Intersection Performance of Glossop Street with Hobart Street Weekday AM Peak Hour Existing Conditions

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Sydney Street														
1	L2	21	0.0	22	0.0	0.014	5.7	LOS A	0.1	0.4	0.12	0.54	0.12	51.8
3	R2	18	0.0	19	0.0	0.016	5.8	LOS A	0.1	0.4	0.19	0.57	0.19	51.1
Approach		39	0.0	41	0.0	0.016	5.7	LOS A	0.1	0.4	0.15	0.55	0.15	51.5
East: Hobart Street														
4	L2	15	0.0	16	0.0	0.034	5.5	LOS A	0.0	0.0	0.00	0.14	0.00	56.5
5	T1	48	0.0	51	0.0	0.034	0.0	LOS A	0.0	0.0	0.00	0.14	0.00	58.7
Approach		63	0.0	66	0.0	0.034	1.3	NA	0.0	0.0	0.00	0.14	0.00	58.3
West: Hobart Street														
11	T1	52	0.0	55	0.0	0.032	0.0	LOS A	0.0	0.3	0.04	0.06	0.04	59.3
12	R2	6	0.0	6	0.0	0.032	5.7	LOS A	0.0	0.3	0.04	0.06	0.04	56.8
Approach		58	0.0	61	0.0	0.032	0.6	NA	0.0	0.3	0.04	0.06	0.04	59.1
All Vehicles		160	0.0	168	0.0	0.034	2.1	NA	0.1	0.4	0.05	0.21	0.05	57.0

Table A2: Intersection Performance of Hobart Street with Sydney Street Weekday AM Peak Hour Existing Conditions

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hobart Street														
4	L2	43	0.0	45	0.0	0.044	8.9	LOS A	0.2	1.2	0.40	0.87	0.40	42.0
Approach		43	0.0	45	0.0	0.044	8.9	LOS A	0.2	1.2	0.40	0.87	0.40	42.0
North: Glossop Street														
7	L2	88	0.0	93	0.0	0.221	5.3	LOS A	0.0	0.0	0.00	0.13	0.00	54.6
8	T1	726	0.0	764	0.0	0.221	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	58.0
Approach		814	0.0	857	0.0	0.221	0.6	NA	0.0	0.0	0.00	0.06	0.00	57.3
All Vehicles		857	0.0	902	0.0	0.221	1.0	NA	0.2	1.2	0.02	0.10	0.02	56.0

Table A3: Intersection Performance of Glossop Street with Hobart Street Weekday PM Peak Hour Existing Conditions

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Sydney Street														
1	L2	10	0.0	11	0.0	0.007	5.6	LOS A	0.0	0.2	0.10	0.54	0.10	51.9
3	R2	10	0.0	11	0.0	0.009	5.9	LOS A	0.0	0.2	0.20	0.56	0.20	51.0
Approach		20	0.0	21	0.0	0.009	5.8	LOS A	0.0	0.2	0.15	0.55	0.15	51.5
East: Hobart Street														
4	L2	27	0.0	28	0.0	0.034	5.5	LOS A	0.0	0.0	0.00	0.26	0.00	55.3
5	T1	35	0.0	37	0.0	0.034	0.0	LOS A	0.0	0.0	0.00	0.26	0.00	57.7
Approach		62	0.0	65	0.0	0.034	2.4	NA	0.0	0.0	0.00	0.26	0.00	56.8
West: Hobart Street														
11	T1	62	0.0	65	0.0	0.046	0.1	LOS A	0.1	0.8	0.08	0.14	0.08	58.4
12	R2	19	0.0	20	0.0	0.046	5.7	LOS A	0.1	0.8	0.08	0.14	0.08	55.8
Approach		81	0.0	85	0.0	0.046	1.4	NA	0.1	0.8	0.08	0.14	0.08	57.9
All Vehicles		163	0.0	172	0.0	0.046	2.3	NA	0.1	0.8	0.06	0.23	0.06	56.7

Table A4: Intersection Performance of Hobart Street with Sydney Street Weekday PM Peak Hour

APPENDIX B

SIDRA Intersection Results for Existing Traffic Conditions with Boarding house traffic

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Hobart Street														
4	L2	76	0.0	80	0.0	0.070	8.4	LOS A	0.3	2.0	0.34	0.87	0.34	42.3
Approach		76	0.0	80	0.0	0.070	8.4	LOS A	0.3	2.0	0.34	0.87	0.34	42.3
North: Glossop Street														
7	L2	66	0.0	69	0.0	0.159	5.3	LOS A	0.0	0.0	0.00	0.13	0.00	54.5
8	T1	519	0.0	546	0.0	0.159	0.0	LOS A	0.0	0.0	0.00	0.06	0.00	58.0
Approach		585	0.0	616	0.0	0.159	0.6	NA	0.0	0.0	0.00	0.07	0.00	57.3
All Vehicles		661	0.0	696	0.0	0.159	1.5	NA	0.3	2.0	0.04	0.16	0.04	54.4

Table B1: Intersection Performance of Glossop Street with Hobart Street Weekday AM Peak Hour Existing Conditions with Boarding house traffic

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Sydney Street														
1	L2	21	0.0	22	0.0	0.014	5.7	LOS A	0.1	0.4	0.13	0.54	0.13	51.8
3	R2	18	0.0	19	0.0	0.016	5.8	LOS A	0.1	0.4	0.19	0.57	0.19	51.1
Approach		39	0.0	41	0.0	0.016	5.7	LOS A	0.1	0.4	0.16	0.55	0.16	51.5
East: Hobart Street														
4	L2	15	0.0	16	0.0	0.035	5.5	LOS A	0.0	0.0	0.00	0.14	0.00	56.5
5	T1	49	0.0	52	0.0	0.035	0.0	LOS A	0.0	0.0	0.00	0.14	0.00	58.7
Approach		64	0.0	67	0.0	0.035	1.3	NA	0.0	0.0	0.00	0.14	0.00	58.3
West: Hobart Street														
11	T1	54	0.0	57	0.0	0.033	0.0	LOS A	0.0	0.3	0.04	0.06	0.04	59.3
12	R2	6	0.0	6	0.0	0.033	5.7	LOS A	0.0	0.3	0.04	0.06	0.04	56.8
Approach		60	0.0	63	0.0	0.033	0.6	NA	0.0	0.3	0.04	0.06	0.04	59.1
All Vehicles		163	0.0	172	0.0	0.035	2.1	NA	0.1	0.4	0.05	0.21	0.05	57.0

Table B2: Intersection Performance of Hobart Street with Sydney Street Weekday AM Peak Hour Existing Conditions with Boarding house traffic

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Sydney Street														
1	L2	21	0.0	22	0.0	0.014	5.7	LOS A	0.1	0.4	0.13	0.54	0.13	51.8
3	R2	18	0.0	19	0.0	0.016	5.8	LOS A	0.1	0.4	0.19	0.57	0.19	51.1
Approach		39	0.0	41	0.0	0.016	5.7	LOS A	0.1	0.4	0.16	0.55	0.16	51.5
East: Hobart Street														
4	L2	15	0.0	16	0.0	0.035	5.5	LOS A	0.0	0.0	0.00	0.14	0.00	56.5
5	T1	49	0.0	52	0.0	0.035	0.0	LOS A	0.0	0.0	0.00	0.14	0.00	58.7
Approach		64	0.0	67	0.0	0.035	1.3	NA	0.0	0.0	0.00	0.14	0.00	58.3
West: Hobart Street														
11	T1	54	0.0	57	0.0	0.033	0.0	LOS A	0.0	0.3	0.04	0.06	0.04	59.3
12	R2	6	0.0	6	0.0	0.033	5.7	LOS A	0.0	0.3	0.04	0.06	0.04	56.8
Approach		60	0.0	63	0.0	0.033	0.6	NA	0.0	0.3	0.04	0.06	0.04	59.1
All Vehicles		163	0.0	172	0.0	0.035	2.1	NA	0.1	0.4	0.05	0.21	0.05	57.0

Table B3: Intersection Performance of Glossop Street with Hobart Street Weekday PM Peak Hour Existing Conditions with Boarding house traffic

Vehicle Movement Performance														
Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] %	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Sydney Street														
1	L2	12	0.0	13	0.0	0.008	5.8	LOS A	0.0	0.2	0.18	0.53	0.18	51.6
3	R2	10	0.0	11	0.0	0.010	6.1	LOS A	0.0	0.2	0.25	0.57	0.25	50.9
Approach		22	0.0	23	0.0	0.010	5.9	LOS A	0.0	0.2	0.21	0.55	0.21	51.3
East: Hobart Street														
4	L2	27	0.0	28	0.0	0.062	5.6	LOS A	0.0	0.0	0.00	0.14	0.00	56.5
5	T1	87	0.0	92	0.0	0.062	0.0	LOS A	0.0	0.0	0.00	0.14	0.00	58.7
Approach		114	0.0	120	0.0	0.062	1.3	NA	0.0	0.0	0.00	0.14	0.00	58.3
West: Hobart Street														
11	T1	62	0.0	65	0.0	0.046	0.1	LOS A	0.1	0.8	0.11	0.14	0.11	58.3
12	R2	19	0.0	20	0.0	0.046	5.9	LOS A	0.1	0.8	0.11	0.14	0.11	55.7
Approach		81	0.0	85	0.0	0.046	1.5	NA	0.1	0.8	0.11	0.14	0.11	57.7
All Vehicles		217	0.0	228	0.0	0.062	1.8	NA	0.1	0.8	0.06	0.18	0.06	57.4

Table B4: Intersection Performance of Hobart Street with Sydney Street Weekday PM Peak Hour Existing Conditions with Boarding house traffic