



Tel: 02 8004 1050 solution1traffic.com.au info@solution1traffic.com.au ABN 13 143 437 432

Traffic & Parking Demand Assessment 17 Fenwick Crescent, Goulburn NSW 2580

Daycare Centre

Prepared for:	PURDON
Date Prepared:	September 2024
Revision:	2.0
LOCAL GOVERNMENT AREA Development Application:	Goulburn Mulwaree Council



Contents

INTRODUCTION5
BACKGROUND AND EXISTING CONDITIONS
PROPOSED DEVELOPMENT7
WALKABILITY AND CYCLE ACCESS7
PUBLIC TRANSPORT
ACTIVE AND PUBLIC TRANSPORT RATING10
PARKING DEMAND ASSESSMENT10
CARPARK COMPLIANCE
PARKING DEMAND SURVEY12
Observations
Fenwick Crescent, Duck Avenue and Bruce Street Parking Survey – Thursday 8 August 29024
TRAFFIC GENERATION
PROPERTY ACCESS
PROPERTY ACCESS 15 Property Access Performance 16 Sight Distance 16 TRAFFIC IMPACT 17 CONCLUSIONS 18
PROPERTY ACCESS 15 Property Access Performance 16 Sight Distance 16 TRAFFIC IMPACT 17 CONCLUSIONS 18 Appendix A – Parking Demand Survey 19



Figures and Tables

FIGURE 1 - LAND ZONING MAP (SOURCE: HTTPS://WWW.PLANNINGPORTAL.NSW.GOV.AU/SPATIALVIEWER/#/FIND-	-
A-PROPERTY/ADDRESS)	. 5
Figure 2 - Aerial View (Source: Google Maps)	. 6
FIGURE 3 - TRAVEL TIME MAP (SOURCE: HTTPS://APP.TRAVELTIME.COM/)	. 7
FIGURE 4 - BUS SERVICE 821 A & B (SOURCE: HTTPS://WWW.PBCGOULBURN.COM.AU/INDEX.HTML)	. 8
FIGURE 5 - BUS SERVICE 823 (SOURCE: HTTPS://WWW.PBCGOULBURN.COM.AU/INDEX.HTML)	. 9
FIGURE 6 - BUS SERVICE 825 (SOURCE: HTTPS://WWW.PBCGOULBURN.COM.AU/INDEX.HTML)	. 9
FIGURE 7 - ON-STREET PARKING FORM APPROVED PLAN (SOURCE: CARDNO DRAWING NO. 50518037-C-4111	
Rev: H)	10
FIGURE 8 - GROUND FLOOR PLAN EAST SIDE (SOURCE: HUGH GORDON ARCHITECTS)	11
FIGURE 9 – FENWICK CRESCENT – THURSDAY 8 AUGUST 2024	12
FIGURE 10 – FENWICK CRESCENT – SATURDAY 10 AUGUST 2024	12
FIGURE 11 – DUCK AVENUE AND BRUCE STREET – THURSDAY 8 AUGUST 2024	13
FIGURE 12 – DUCK AVENUE AND BRUCE STREET – SATURDAY 10 AUGUST 2024	13
FIGURE 12 – DUCK AVENUE AND BRUCE STREET – SATURDAY 10 AUGUST 2024	13

TABLE 1 - TRAFFIC COUNT SUMMARY	6
TABLE 2 - AGE GROUPS AND STAFF RATIO (SOURCE: HTTPS://EDUCATION.NSW.GOV.AU/EARLY-CHILDHOOD-	
EDUCATION/REGULATION-AND-COMPLIANCE)	7
TABLE 3 - DROP/OFF/PICK-UP PARKING EFFICIENCY	11
TABLE 4 - PEAK VEHICLE TRIPS/CHILD (SOURCE: RTA GUIDE TO TRAFFIC GENERATING DEVELOPMENTS)	15
TABLE 5 - FENWICK CRESCENT TRAFFIC VOLUME (SOURCE: RTA GUIDE TO TRAFFIC GENERATING	
Developments)	15
TABLE 6 - PROPERTY ACCESS PERFORMANCE	16



Copyright

This report has been prepared by AusWide Consulting. Reproduction without written authority from AusWide Consulting is prohibited. Apart from any fair dealing for the purpose of private study, research, criticism, or review, as permitted under the Copyright Act 1968, no part of this report may be reproduced, transmitted, stored in a retrieval system, or adapted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without written permission.

Restrictions on Use

This report has been prepared specifically for owners of 17 Fenwick Crescent, Goulburn NSW 2580 as the client. No part of this report may be referred to or quoted in any way without the written approval of the author. No party other than the owners of 17 Fenwick Crescent, Goulburn NSW 2580 may rely upon representation in this report for any purpose whatsoever, and the author accepts no liability for any such party relying upon this report.

Limits of Report

This report considers the particular instructions and requirements of our client. AusWide Consulting has taken care in the preparation of this report. However, it neither accepts liability nor responsibility whatsoever in respect of:

- Any use of this report by a third party,
- Any third party whose interests may be affected by any decision made regarding the contents of this report, and/or
- Any conclusion drawn resulting from omission or lack of full disclosure by the client, or the clients' consultants.



INTRODUCTION

AusWide Consulting has been engaged by Purdon to prepare a Traffic and Parking Demand Assessment Report for the change in use of an existing approved plan, to replace 17 townhouses with a 112-place childcare centre.

The report will assess the implications of the proposed development, if any, on existing parking and transport conditions surrounding the site.

BACKGROUND AND EXISTING CONDITIONS

The subject site address is 17 Fenwick Avenue and is currently undeveloped land Zoned MU1 mixed use and is located with road frontage on Fenwick Crescent, between Duck Avenue and Bruce Street. **Figure 1** below shows the subject site and land use zoning.



Figure 1 - Land Zoning Map (Source: <u>https://www.planningportal.nsw.gov.au/spatialviewer/#/find-a-property/address</u>)

Access to the site is from Fenwick Crescent and is a minor local government road, with a one-way direction westbound from Bruce Street to Duck Avenue. This section of Fenwick Crescent is a School Zone and provides access to Tambelin Independent School, a small primary school with a maximum enrolment of 32 students, Prep to Year 6, and 5 staff. **Figure 2** on Page 6 provides aerial photography of the area.

A Traffic Count survey has been obtained for Fenwick Crescent, between Duck St and Bruce Street. The survey was performed from 8 August 2024 to 15 August 2024 and a summary of traffic count data is provided below. **Table 1** on page 6 provides details.

Fenwick Crescent, between Duck St and Bruce Street.

- Weekday ADT = 203 vpd
- 7-Day ADT = 177 vpd
- 8:00 am 9:00 am Peak Hr = 28 vph
- 3:00 pm 4:00 pm Peak Hr = 37 vph
- 85th Percentile Speed = 31.4 km/h

It is noted there is approximately 4% illegal movement of traffic travelling counter to the direction of the one-way section between Duck St and Bruce Street.



Table 1 - Traffic Count Summary



The direction of travel is determined by the orientation of the road where the traffic counter is installed. In Table 1 above, northbound equals eastbound and southbound equals westbound. Eastbound and westbound are determined through the east-west connection to the road network.



Figure 2 - Aerial View (Source: Google Maps)

PROPOSED DEVELOPMENT

The proposed development replaces 17 originally approved townhouses with a 112place childcare centre. Hours of operation will be 7:00 am to 6:00 pm Monday to Friday.

DA 0304 2324 Plan of Management provides the number of age grouping places. As such **Table 2** below details the calculated age distribution of child placements and the number of staff:

 Table 2 - Age Groups and Staff Ratio (Source: https://education.nsw.gov.au/early-childhoodeducation/regulation-and-compliance)

Child Placement Age Group	Number of Children	Staff Ratio	Number of Staff
Birth to 24 months	32	1 educator to 4 children	8.0
Over 24 months to less than 36 months	40	1 educator to 5 children	8.0
36 months to pre-school age	40	1 educator to 10 children	4.0
Total	112		20

WALKABILITY AND CYCLE ACCESS

The 'walkability' of a site is the measure of its proximity to other facilities by walking and can be obtained from <u>www.walkscore.com</u>. Reference is made to the 15-minute walking and cycling catchment area outlined in **Figure 3** below.

A search of the Walk Score for 17 Fenwick Crescent has been performed with the following results:

- Walk Score of 84 out of 100. The location is very walkable meaning most errands can be done on foot;
- Bike Score. No score is provided for cycling.



Figure 3 - Travel Time Map (Source: https://app.traveltime.com/)



methodology The bike calculated the was using score provided bv https://www.walkscore.com/methodology.shtml. Although a Bike Score of 44 out of 100 has been determined meaning that the location is 'Somewhat Bikeable' there is little or no bike infrastructure supporting cycling on-road or off-road. Hence, the relatively low Bike Score is consistent with Goulburn's average Walk score. However, destinations and connectivity are measured with a Walk Score and have little effect on the overall Bike Score.

Goulburn has an average walk score of 40 and is a car-dependent city. The locality surrounding 17 Fenwick Crescent has a significantly higher level of walkability due to its proximity to the city centre and good connectivity to destinations.

A daycare centre requires parents/carers to supervise and escort children into the centre, this makes travel to the centre car-dependent unless travel is within 15 minutes of the centre.

PUBLIC TRANSPORT

The transit score was calculated using the methodology provided bv https://www.walkscore.com/methodology.shtml. A Transit Score of 22 out of 100 has been calculated. The location is Minimal Transit, meaning getting on a bus is possible. On average there are 4 services per weekday and 3 on Saturdays. This level of service reduces its attractiveness as a commuting service and is consistent for relatively small, car-dependent cities. As such, bus services are focused on patrons who do not drive, the majority of these are school children and the result is a school services-orientated bus service. Figures 4 – 6 below and on page 9 show current bus services.



Figure 4 - Bus Service 821 A & B (Source: https://www.pbcgoulburn.com.au/index.html)





Figure 5 - Bus Service 823 (Source: https://www.pbcgoulburn.com.au/index.html)



Figure 6 - Bus Service 825 (Source: https://www.pbcgoulburn.com.au/index.html)



ACTIVE AND PUBLIC TRANSPORT RATING

Walkability: The location has a Walk Score of 84 out of 100, indicating a very walkable area where most errands can be accomplished on foot. This is significantly higher than Goulburn's average Walk Score of 40, highlighting the area's superior pedestrian infrastructure and connectivity.

Bikeability: The Bike Score is 44 out of 100, reflecting a possible bikeable area with minimal bike infrastructure. This low score is consistent with Goulburn's overall cardependent nature, indicating limited support for cycling both on-road and off-road.

Transit: The Transit Score is 22 out of 100, indicating minimal transit options. While bus services are available, they are limited to an average of 4 services per weekday and 3 on Saturdays. This low level of service reduces its attractiveness for commuting and is typical for relatively small, car-dependent cities. The bus services are focused on school schedules rather than general commuting needs.

Overall Rating: Considering the high walkability, moderate bikeability, and minimal transit options, the rating for active travel and public transport at 17 Fenwick Crescent is **moderate**. The area is well-suited for walking, and somewhat suitable for cycling, but has limited public transit options.

PARKING DEMAND ASSESSMENT

A review of Goulburn Mulwaree DCP 2009 – Effective 29th July 2022 has noted a requirement for 1 space per 2 employees plus a set down /drop off area is required for a childcare centre.

Required staff parking = 10 parking spaces plus a set down/drop off area.

There is no specific guidance or reference to determine the number of parking spaces for a set-down/drop-off area. The RTA Guide to Traffic Generating Developments 2002, provides a rate of 1 space for every 4 children in attendance. Applying this rate a total of 28 parking spaces is required and using this rate as guidance, the proposed development has provision for 19 on-site parking spaces for drop-off/pick-up, and another 5 on-street parking spaces adjacent to the property access from the existing approved plan. **Figure 7** below shows the location of on-street parking.



Figure 7 - On-Street Parking form Approved Plan (Source: Cardno Drawing No. 50518037-C-4111 Rev: H)



Assuming 2-min for parents/carers to secure/remove children from a vehicle and 5-min to sign/out children, a total of 7-min duration is used to determine the efficiency of the off-street parking for a drop-off/pick-up area.

A summary of the drop-off/pick-up calculation is provided in **Table 3** below.

Table 3 - Drop/off/pick-up Parking Efficiency

Drop/off/pick-up Parking Efficiency	
Parent/Carrer Escort children to centre (s)	120
Parent/Carer sign in and settle children and leave (s)	300
Total Time Drop-off/Pick-up (s)	420
Capacity per parking space per hour (Change over rate per hour capacity)	8.6
Number Drop-off Spaces	19
Capacity per hour Drop-off Spaces	162.9
Arrival Rate (Census data provides an average of 1.9 children in Goulburn)	59
Utilisation Factor	0.36
Average number waiting for a park	0.57
95th Percentile waiting for a park	2.0

Peak parking demand is considered to occur between 7:00 am and 9:00 am with a peak 1 hour demand between 7:30 am and 8:30 am. This has been calculated with a 1.9 children per family factor determined from 2021 Census data¹, revealing an arrival rate of 59 vehicles during peak demand. A summary of the result is as follows:

- On average less than 1 vehicle is waiting in line for a drop-off/pick-up parking space.
- Occasional peak demand may result in 2 vehicles waiting for a parking space, or parking on-street.

The proposed development provides appropriate and compliant levels of off-street parking for the proposed development.

CARPARK COMPLIANCE

No design plans have been provided for the off-street parking area. **Figure 8** below shows a plan from Hugh Gordon Architects for the parking area.



Figure 8 - Ground Floor Plan East Side (Source: Hugh Gordon Architects)

¹ <u>https://www.abs.gov.au/census/find-census-data/quickstats/2021/LGA13310</u>



The off-street parking area is a typical layout for a development of its type and is compatible with standards. While confirmation of compliance cannot be provided from the sketch plan, the layout geometry will support compliant design.

The proposed off-street parking is compatible with standards and consistent with a compliant design.

PARKING DEMAND SURVEY

A parking demand survey was performed to determine the parking occupancy on:

- Thursday 8 August 2024;
- Saturday 10 August 2024.

The survey area was defined as all public parking within a 5-minute walk from the subject site. (See **Figures 9 - 12** below and page 13.) The results of the survey are presented in Appendix A.

The proposed development operating hours are 7:00 am to 6:00 pm Monday to Friday.



Figure 9 – Fenwick Crescent – Thursday 8 August 2024



Figure 10 – Fenwick Crescent – Saturday 10 August 2024





Figure 11 – Duck Avenue and Bruce Street – Thursday 8 August 2024



Figure 12 – Duck Avenue and Bruce Street – Saturday 10 August 2024

Observations

The effect of parking for the proposed development is relatively insignificant, with offstreet parking exceeding the required parking for the land use. It is noted that there will be the occasional peak parking demand where 2 vehicles will be waiting for a car park. During these peak periods, there may be an overflow of 2 vehicles parking on-street. The overflow parking will be contained within the 5 on-street parking bays adjacent to the proposed property access.

Fenwick Crescent, Duck Avenue and Bruce Street Parking Survey – Thursday 8 August 29024

- Current Parking Capacity and Occupancy:
 - **Total Capacity:** 47 spaces on Fenwick Crescent and 42 spaces on Duck Ave and Bruce St.
 - Peak Occupancy: 31% at 7:00 am and 11:00 am with 13 spaces occupied on Duck Avenue and Bruce Street. 17% at 8:30 am with 8 spaces occupied on Fenwick Crescent.



- Lowest Occupancy: 19% at 3:00 pm with 8 spaces occupied on Duck Avenue and Bruce Street. 0% at 7:00 am and 6:00 pm on Fenwick Crescent.
- Section-Specific Insights:
 - Fenwick Crescent:
 - Bradley Street to Bruce St Street (East Side): Varying capacities (2 to 12 spaces) with low to moderate occupancy.
 - Bruce Street to Duck Avenue (West Side): Minimal occupancy with capacities ranging from 1 to 7 spaces.
 - Duck Avenue to Bradley Street (West Side): No recorded occupancy despite a capacity of 24 spaces.
 - Duck Ave:
 - Fenwick Crescent to Grafton Street (South Side): Consistently low occupancy, ranging from 1 to 2 spaces.
 - Grafton Street to Fenwick Crescent (North Side): Low occupancy, with a peak of 2 spaces at 11:00 am and 1:00 pm.
 - Bruce St:
 - Grafton Street to Fenwick Crescent (North Side): Moderate occupancy, peaking at 7:00 am with 6 spaces.
 - Fenwick Crescent to Lagoon Street (North Side): Moderate occupancy, peaking at 11:00 am with 4 spaces.
 - Lagoon Street to Fenwick Crescent (South Side): Moderate occupancy, peaking at 1:00 pm with 4 spaces.
 - Fenwick Crescent to Grafton Street (South Side): No recorded occupancy.

Impact of Childcare Centre:

- Additional Demand: The childcare centre will generate an overflow of 2 vehicles needing on-street parking between 7:30 am and 8:30 am.
- **Current Availability:** During this peak period, the current occupancy on Fenwick Crescent is 11% at 7:30 am and 17% at 8:30 am, indicating 42 and 39 vacant spaces respectively. On Duck Ave and Bruce St, the occupancy is 31% at 7:00 am, indicating 29 vacant spaces. This suggests that the additional demand for 2 vehicles can be accommodated without exceeding capacity.



TRAFFIC GENERATION

A Traffic Count survey has been obtained for Fenwick Crescent, between Duck St and Bruce Street. The survey was performed from 8 August 2024 to 15 August 2024 and a summary of traffic count data is provided below. **Table 1** on page 6 provides details.

Fenwick Crescent, between Duck St and Bruce Street.

Weekday ADT = 203 vpd

7-Day ADT = 177 vpd

8:00 am - 9:00 am Peak Hr = 28 vph

3:00 pm - 4:00 pm Peak Hr = 37 vph

85th Percentile Speed = 31.4 km/h

Traffic generated by the proposed development has been calculated using rates derived from the RTA Guide to Traffic Generating Developments and summarised in **Table 4** below:

Table 4 - Peak Vehicle Trips/Child (Source: RTA Guide to Traffic Generating Developments)

	Peak Vehicle Trips/Child		
Centre Type	7:00 - 9:00 am	2:30 - 4:00 pm	4:00-6:00 pm
Long Day Care	0.8	0.3	0.7
Number Children	112	112	112
Peak Vehicle Trips	89.6	33.6	78.4

PROPERTY ACCESS

From peak traffic generation rates determined for the development, 90 vehicle trips occur between 7:00 am and 9:00 am. The traffic count data reveals that peak morning traffic occurs between 8:00 am and 9:00 am with 28 vehicles per hour. Peak morning traffic for the proposed development is considered to occur between 7:30 am and 8:30 am. Assuming a proportional distribution of traffic, a total of 45 vehicles per hour will occur between the 8:00 am and 9:00 am peak hour.

It is noted that the approved plan 50518037-C-4111 Rev: H, includes the opening of two-way traffic on Fenwick Street, between Duck Avenue and Bruce Street. Currently, 4% of traffic on Fenwick Street is illegally opposing, indicating a strong demand for two-way flow. A generalised estimate of traffic generation has been determined, calculating estimated increased traffic on Fenwick Crescent, between Duck Avenue and Bruce Street. **Table 5** below shows the estimated traffic volume.

Land Use	Number	Generation Rate (ADT)	Generation Rate (Peak Hr)	ADT	Peak Hr
Medium Density	28 Units	5/Unit	0.5/Unit	140	14
Commercial	2210 m ²	10/100m ²	2/100m ²	221	44.2
			Subtotal	361	58.2
			Subtotal 50/50 Fenwick Cres, Bradley St - Duck Ave	180.5	29.1
			Total 80/20 Fenwick Cres, Duck Ave - Bruce St	144.4	23.28



Traffic volume for Fenwick Crescent, between Duck Avenue and Bruce Street:

Eastbound

Weekday ADT = 166 vpd

8:00 am - 9:00 am Peak Hr = 23 vph

3:00 pm – 4:00 pm Peak Hr = 23 vph

7-Day ADT = 144 vpd

Westbound

Weekday ADT = 203 vpd

7-Day ADT = 177 vpd

8:00 am - 9:00 am Peak Hr = 28 vph

3:00 pm – 4:00 pm Peak Hr = 37 vph

Property Access Performance

A review of the proposed development access has revealed good performance with a Level of Service A and an average queue consistent with zero. The development traffic contribution to Fenwick Crescent is compatible with existing traffic volumes and performance analysis does not show performance issues. Table 6 below summarises the performance of the property access.

	17 Fenwi	ck Crescent	Fenwick C	crescent
	Left Turn	Right Turn	Right Turn	
Approach Flow	45	45	45	Veh/h
Opposing Flow	51	51	23	Veh/h
Stop Line Delay	0.18	0.18	0.08	S
Theoretical Capacity	1142	1142	1174	Veh/h
Practical Capacity	1028	1028	1056	Veh/h
Turning Proportions	0.5	0.5	1	
Approach Capacity	1	028	1056	Veh/h
In Queue Delay	0	.34	0.15	S
Average Queue Length	0	.10	0.04	Veh
95 th Percentile Queue	0	.23	-0.05	Veh
Total Delay	3	.84	3.56	S

Table 6 - Property Access Performance

Sight Distance

The proposed property access has a sight distance of 65m east and 45m west. AS2890.1 requires a minimum stopping sight distance of 35m and a desirable minimum gap sight distance of 55m. The access exceeds the desirable sight distance east and the minimum stopping sight distance west, making it compliant with AS2890.1 for offstreet parking.



TRAFFIC IMPACT

Traffic generated by the proposed development is a significant proportion of existing traffic on Fenwick Crescent, however, the relative overall traffic volume on Fenwick Street is considered low. Existing demand for on-street parking is low with significant existing capacity for any overflow of parking demand.

The calculated occasional overflow is the 95th-percentile demand for the drop-off/pickup area with a value of 2 vehicles waiting for a car park. This is considered the peak overflow for on-street parking demand for Fenwick Crescent. It is noted that the offstreet parking area will have sufficient storage capacity for vehicles to wait on-site for an available car park, and as such it is unlikely that any on-street parking will occur.

The performance of the proposed development property access does not indicate any congestion impact will occur on Fenwick Crescent.

Overall, the impact of the proposed development on the existing amenity and performance of the surrounding road network is negligible.



CONCLUSIONS

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

- 1. The proposed development is consistent with land use zoning.
- 2. The Parking Patrol survey revealed a significant parking capacity, exceeding parking demand for the proposed development.
- 3. The proposed development is compliant with the provision of off-street parking.
- 4. With the nature of the land use, requiring parents/carers to escort children to the daycare centre, the use of active transport options and public transport is unlikely. This will require a high dependency on cars on the development site. This is mitigated by providing the required number of off-street parking plus 1.
- 5. Traffic generated by the development, while a significant proportion of existing traffic on Fenwick Crescent, is modest with a relatively unremarkable impact on the surrounding road network.

In conclusion, this report indicates the proposed development is not envisaged to impact the surrounding traffic or parking conditions. Therefore, the proposal should be supported on traffic and parking grounds.



Appendix A – Parking Demand Survey

					0	0	-	-	1	-	-	-	-	0	-	0	(1/0)	Public	er: ner:	Date: Location: GPS:	
	PUBLI	PUBLI	PUBLI	PUBLI													Ref	Мар	Fine	Thursday Ferbwick -34.7493	
	PUBLIC % OCCUPANCIES	PUBLIC VACANCIES	PUBLIC OCCUPANCIES	PUBLIC CAPACITY												Fenwick Cres	Super			Thursday, 8 August 2024 Ferbwick Crescent -34.749311, 149.726007	in the second se
					Duck Ave to Bradley St					Bruce St to Duck Ave						Bradley St to Bruce St	 → Securit 	9			
					w					×						m		?	-		
+					-					-							¥ ال		-		
					No Parking	No Parking	Unrestricted	Bus Zone 8:30am-9:30am, 3pm-4pm School Days	Disabled	Unrestricted	Unrestricted	Unrestricted	Unrestricted	No Parking	Unrestricted	No Parking	restriction				
												No Stopping School Times 8:30am-9:30am, 3pm-4pm School Days					Citeal Way	2			
					24	4	2	2	1	7	10	4	9	2	12	2	Capacity				
	%0	47	0	47	0	0	0	0	0	0	0	0	0	0	0	0	7:00				
	4%	45	2	47	0	0	0	0	0	0	0	2	0	0	0	0	₹7:30				
	11%	42	5	47	0	0	-	0	0	0	-	N	0	0	-	0	8:00				
-	17% 1	39	8	47	0	0	0	0	0	-	2	ω	-	0	-	0	₹8:30	_			
-	11% 🤅	42	5	47	0	0	0	0	0	0	-	-	-	0	2	0	9:00	_			
-	6 %6	43	4	47 4	0	0	-	0	0	0	0	0	-	0	2	0	9:30	Part			
+	9% 6	43 4	4	47 4	0	0	0	•	0	-	0	•	<u> </u>	0	N	0	10:00	Parking Occupancy			
+	6% 4%	44	3	47 4	0 0	0	0	•	0 0	0	0	0	-	0	2	0	12:00	Ccup			
	% 26%	45 35	2 1:	47 47	0 0	0 0	0	0	0 0	0	0 7	0 3	1	0 0	-	0 0	14:00 14:30	ancy			
	% 28%	5 34	12 13	7 47	0 0	0	0	0	0 0	0	7 6	ω 4	1 2	0		0	14:30	-			
	% 15%	4 40	13 7	7 47	0	0	0	0	0 0	1	2	¢ 2	1	0	_	0	15:30	-			
+	% 2%	0 46	1	7 47	0	0	0	0	0 0	-	0	0	-	0	_	0	16:00	-			
	6 2%	6 46	_	7 47	0	0	0	0	0	0	0	0	0	0		0	₄ 17:00	-			
-	6 0%	5 47	0	7 47	0	0	0	0	0	0	0	0	0	0	0	0	18:00	-			





Do.6.	TRANS TRAF
LUUC FORMAN O TOPOTTO	FRANS TRAFFIC SURV
A	TR/
2	VFFI Irvey
	C SI
	DIVU CLA
	UNV GL

_											
				0	_					Parking (1/0)	Public
PUBLI	PUBLI	PUBLI	PUBLI							Ref	
PUBLIC % OCCUPANCIES	PUBLIC VACANCIES	PUBLIC OCCUPANCIES	PUBLIC CAPACITY				Bruce St		Duck Ave	Street	
				Fenwick Cres to Grafton St	Lagoon St to Fenwick Cres	Fenwick Cres to Lagoon St	Grafton St to Fenwick Cres	Grafton St to Fenwick Cres	Fenwick Cres to Grafton St	Section	
				S	S	z	z	z	S	Side	
				No Parking	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Restriction	
				11	8	6	11	8	9	Clear Way	
31%	29	13	42	0	2	ω	6	_	_	۲:00	
% 24%	32	3 10	2 42	0	N	N	4	0	2	9:00	Ŧ
6 31%	29	13	42	0	ω	4	ω	N	_ _	 11:00 	Parking Occupancy
31%	29	13	42	0	4	ω	2	2	2	13:00	g Occ
19%	34	8	42	0	2	2	ω	0	-	15:00	upan
21%	33	9	42	0	2	ω	ω	0	-	17:00	су
24%	32	10	42	0	2	2	4	-	1	18:00	

(1/0)	Ker	4	4	4	4	•	4	₹7:00	9:00	11:00	13:00	15:00	17:00	18:00
-		Duck Ave	Fenwick Cres to Grafton St	S	Unrestricted		9	-	2	-	2	-	-	-
1			Grafton St to Fenwick Cres	z	Unrestricted		8	-	0	2	2	0	0	-
1		Bruce St	Grafton St to Fenwick Cres	z	Unrestricted		11	6	4	з	2	3	з	4
-			Fenwick Cres to Lagoon St	z	Unrestricted		6	ω	2	4	ω	2	ω	2
1			Lagoon St to Fenwick Cres	S	Unrestricted		8	2	2	з	4	2	2	2
0			Fenwick Cres to Grafton St	S	No Parking		11	0	0	0	0	0	0	0
	PUBLIO	PUBLIC CAPACITY						42	42	42	42	42	42	42
	PUBLIO	PUBLIC OCCUPANCIES						13	10	13	13	8	9	10
	ривно	PUBLIC VACANCIES						29	32	29	29	34	33	32
	PUBLIO	PUBLIC % OCCUPANCIES					(2)	31% 2	24% 3	31% 3	31% 1	19%	21%	24%
		not available for public parking	arking											



TDA			Concerned Section	255
			DNVGL DNVGL DNVGL	Altare
Parking	Parking Occupancy Survey	1	Andrew Andrews	
Date:	Saturday, 10 August 2024			

Customer:

Ξ

Public									Parki	ng Oc	Parking Occupancy	ю	
Parking (1/0)	Ref	 ✓ Street 	Section	Side	Restriction	Clear Way Ca	Capacity 7:00	₹8:00	 ۹:00	10:00	۰ 11:00	 12:00	13:00
-		Duck Ave	Fenwick Cres to Grafton St	S	Unrestricted		9 2	2	4	2	ω	N	-
-			Grafton St to Fenwick Cres	z	Unrestricted		8		2	_	0		-
-		Bruce St	Grafton St to Fenwick Cres	z	Unrestricted		11 6	с; б	о, Б	ы	6	6	6
1			Fenwick Cres to Lagoon St	z	Unrestricted		6 4	4	5	4	2	4	3
-			Lagoon St to Fenwick Cres	S	Unrestricted		8 2	4	5	ы	ω	2	ω
0			Fenwick Cres to Grafton St	s	No Parking		11 0	0 0	0	0	0	0	0
	PUBL	PUBLIC CAPACITY					42	2 42	2 42	. 42	42	42	42
	PUBL	PUBLIC OCCUPANCIES					15	5 17	7 22	. 15	14	15	14
	PUBL	PUBLIC VACANCIES					27	7 25	5 20) 27	28	27	28
	PUBL	PUBLIC % OCCUPANCIES					36%	% 40%	% 52%	% 36%	6 33%	36%	33%
		not available for public parking	arking										



Appendix B – Classification Survey



Site

Direction	Both directions	▼
Day	7 Days	▼

Back to Site Summary Page

				Note: #N/A "N	lodal Speed"	means too te	w data points
Hour Start	Total	Avgerage	85th	Modal	Minimum	Maximum	Standard
	Vehicles	Speed	percentile	Speed	Speed	Speed	Deviation
00:00	0	N/A	N/A	N/A	N/A	N/A	N/A
01:00	0	N/A	N/A	N/A	N/A	N/A	N/A
02:00	0	N/A	N/A	N/A	N/A	N/A	N/A
03:00	0	N/A	N/A	N/A	N/A	N/A	N/A
04:00	0	N/A	N/A	N/A	N/A	N/A	N/A
05:00	1	27.7	31.4	29	13.0	46.2	3.6
06:00	4	29.6	33.6	32	16.5	40.5	4.1
07:00	6	26.6	30.8	25	10.4	37.4	4.6
08:00	23	22.2	25.7	23	4.8	37.1	4.1
09:00	14	25.5	30.4	27	11.7	37.8	5.0
10:00	11	27.6	32.8	30	16.0	42.3	5.1
11:00	10	28.3	33.8	30	16.3	43.2	5.1
12:00	10	27.9	32.5	29	15.3	41.4	4.6
13:00	11	27.2	29.6	28	11.4	40.0	2.7
14:00	9	24.3	30.1	25	5.5	42.6	6.2
15:00	29	26.8	30.7	25	8.4	43.4	4.2
16:00	14	27.6	30.1	28	16.9	45.6	3.0
17:00	13	29.2	31.6	30	11.3	48.3	2.6
18:00	7	28.3	30.8	30	8.8	43.7	2.6
19:00	5	26.6	30.9	30	9.3	43.6	5.0
20:00	4	29.2	32.6	30	18.5	40.2	4.5
21:00	2	34.3	36.7	35	19.5	40.3	3.1
22:00	0	N/A	N/A	N/A	N/A	N/A	N/A
23:00	1	29.4	30.4	33	11.8	37.7	1.5
Summary	174	27.7	31.4	29	4.8	48.3	4.0

WHEAVIN	Total	23:00	22:00	21:00	20:00	19:00	18:00	17:00	16:00	15:00	14:00	13:00	12:00	11:00	10:00	09:00	08:00	07:00	06:00	05:00	04:00	03:00	02:00	01:00	00:00	PM Peak	AM Peak	Date	Day	Direction	Site
0.52%	194	_	0	0	2	4	7	8	14	34	13	19	12	ω	12	19	27	6	4	ω	0	-	0	0	0	15:00	08:00	########	Monday	Both directions	Fenwick Cres
1.05%	190	0	0	2	з	4	6	12	17	34	10	9	10	13	14	14	28	6	6	1	0	0	0	0	1	15:00	00:80	########	Tuesday		es
1.93%	207		0	4	6	ъ	ъ	22	22	39	7	15	13	12	6	12	29	2	6	-	0	0	0	0	0	15:00	08:00	14/08/2024	Wednesday		
2.22%	225	2	1	2	9	13	8	14	19	41	13	თ	6	12	11	21	34	ნ	з	ω	0	0	0	0	0	15:00	08:00	8/08/2024	Thursday	Back to Sit	
2.44%	205	4	0	з	7	4	6	20	11	36	10	14	8	7	11	20	24	16	4	0	0	0	0	0	0	15:00	00:80	9/08/2024	Friday	Back to Site Summary Page	
0.84%	119	0	2	0	2	5	6	7	6	10	10	11	13	14	11	9	7	4	2	0	0	0	0	0	0	12:00	11:00	########	Saturday	Page	
0.00%	97	0	0	ы	0	4	6	8	ъ	10	6	8	11	8	7	8	9	2	-	0	-	0	0	0	0	12:00	08:00	########	Sunday		
1.4	1237	œ	З	14	29	39	44	91	94	204	69	81	76	74	72	103	158	41	26	8	-	1	0	0	-	NA	NA	Total	7 da		
46%	177	<u> </u>	0	2	4	6	6	13	13	29	10	12	11	1	10	15	23	6	4	-	0	0	0	0	0	15:00	08:00	Average	days		
1.67%	1021	8	1	11	27	30	32	76	83	184	53	62	52	52	54	86	142	35	23	8	0	1	0	0	1	NA	NA	Total	Weekday		
7%	204	2	0	2	ъ	6	6	15	17	37	11	12	10	10	11	17	28	7	თ	2	0	0	0	0	0	15:00	08:00	Average	kday		
0.46%	216	0	2	ω	2	9	12	15	11	20	16	19	24	22	18	17	16	6	ω	0		0	0	0	0	NA	N/A	Total	Weekend		
6%	108	0	1	2	-	ъ	6	8	6	10	8	10	12	11	6	9	8	ω	2	0	-	0	0	0	0	12:00	11:00	Average	kend		



17 Fenwick Crescent, Goulburn NSW 2580









Appendix C – Sketch Plans

























	REQUIRED	PROPOSED	COMPLIES
PLACES	28	29	YES
	784	789	YES
3.5m2 PER	SPACE		YES

Childcare Centre, Fenwick Crescent, Goulburn, NSW

DA01	Title
DA02	Site Plan & Development Summary
DA03	Floor Plan (East Side)
DA04	Floor Plan (West Side)
DA05	Elevations
DA06	Elevations
DA07	3D Views
DA08	3D Views













Appendix D – Street Signs – Stamped Plan 50518037-C-4111 Rev: H



