

QuantumTraffic

Quantum Traffic Pty Ltd

ABN 54617474370

ACN 617474370

T (03) 9879 4250

E admin@quantumtraffic.com.au

A 5 Murray Place
RINGWOOD VIC 3134

W www.quantumtraffic.com.au

Traffic Impact Assessment Report

Our Lady of Immaculate Conception
Parish Primary School – 32 Station Place,
Sunshine

Proposed Campus Expansion

18/03/2021



Traffic Impact Assessment Report

Our Lady of Immaculate Conception Parish Primary School – 32 Station Place, Sunshine

Proposed Campus Expansion

Document Control

Revision	Date	Reference	Prepared By	Approved By
A (Draft)	09/03/2021	21-0020	BH	DB
B (Final)	18/03/2021	21-0020	BH	DB

QuantumTraffic

T
(03) 9879 4250

E
admin@quantumtraffic.com.au

A
5 Murray Place
RINGWOOD VIC 3134

W
www.quantumtraffic.com.au

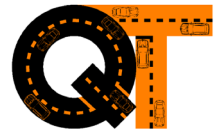
Quantum Traffic Pty Ltd

ABN: 54617474370

ACN: 617474370

Copyright © 2017- by Quantum Traffic Pty Ltd

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, Quantum Traffic.



Executive Summary

This report assesses the Proposed Campus Expansion at Our Lady of Immaculate Conception Parish Primary School – 32 Station Place, Sunshine. The following provides an executive summary of the report.

Car Parking

The proposal is for an expansion of the existing school campus with 6 additional staff and 117 additional students.

The statutory car parking requirement for the expanded school campus is 6 spaces under Clause 52.06-5 of the Planning Scheme.

As no car parking spaces are proposed on-site, the application seeks a waiver of the statutory car parking requirement (6 spaces).

A car parking demand assessment has identified the following:

- a. 2016 ABS census data indicates mode of travel to work for the Sunshine suburb to be 89.4% 'car as driver'. When only primary school staff are considered for the Sunshine suburb, the level of 'car as driver' rises to 93.9%.
- b. Adopting the higher 'car as driver' rate from the ABS data (0.939 spaces per staff member) results in a likely car parking demand of 6 space. This is consistent with the statutory parking rate in Clause 52.06.
- c. Given the position of the school on the periphery of the Sunshine Activity Centre with excellent access to public transport, the likelihood of public transport and active travel trips to the school is better than the majority of other school locations in Sunshine. On this basis, the adopted car parking rate / demands are considered conservative.

It is considered acceptable to provide a waiver of the statutory carparking requirement as follows:

- a. A total of 23 unrestricted parking spaces were identified on-street surrounding the school site based on the spot parking occupancy survey undertaken. Whilst the majority of these spaces are located on residential frontages, they have been historically managed to allow staff parking (not subject to time based parking restrictions that apply to other streets in the local area).
- b. The parking waiver is unlikely to impact on the future growth and development of the nearby activity centre, as on-street parking can be managed by Council into the future as required, which has a direct influence on mode choice for all staff (including school staff).
- c. The existing school has historically operated without on-site parking and therefore there is an expectation that parking demands associated with the school will occur in the public on-street parking resources. We do not expect significant changes to existing amenity.
- d. The school is well positioned for access via public transport and active travel.

The short term pick-up / drop-off parking demands are expected to increase with the Stage 1 expansion. Based on a ratio of existing to proposed student number we would expect approximately 35% additional activity during the peak times. Observations of the existing school pick up indicate that the existing conditions operate well with a short peak for 10 minutes between 3pm and 3:10pm. The additional demands are expected to lengthen the peak period, however, the pick-up arrangements are still expected to operate in line with other schools in the area and within metropolitan Melbourne.



Bicycle Parking

The statutory bicycle requirement is 23 spaces associated with students. A bicycle parking area is shown on the Master Plan that could accommodate 9 rails (18 spaces). It is recommended that the area is expanded to accommodate 12 rails (24 spaces) in accordance with AS2890.3-2015.

Traffic Impacts

The proposed Stage 1 expansion of the school campus (+117 students) is likely to generate an additional 78 vehicle trips in the AM school peak and 62 vehicle trips in the PM school peak.

Whilst the additional traffic volumes are distributed across multiple approach and departure routes, they are likely to result in increased delays and queue lengths at key intersections. However, given the short peak period nature of school activity, the traffic impacts are considered minor in the context of daily activity.

Service Vehicles

Waste collection will continue to occur outside of peak hours via Victoria Street. If required by Council, a Waste Management Plan could be prepared to formalise this activity.

Loading will continue to be serviced by the loading zones (2 spaces) located on the north-east side of Station Place. These spaces are located directly adjacent to the school site and provide for proximate and convenient loading access.

Summary of Opinions

Having undertaken all tasks necessary to adequately assess the traffic engineering impacts of the proposed campus expansion at Our Lady of Immaculate Conception Parish Primary School – 32 Station Place, Sunshine, we are satisfied that the proposed development is satisfactory.

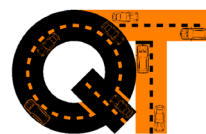


Table of Contents

Executive Summary	iii
1 Introduction	3
2 Proposal	3
3 Existing Conditions	4
3.1 Subject Site	4
3.2 Road Network	6
3.3 Sustainable Transport Infrastructure	8
3.3.1 Public Transport	8
3.4 Existing Car Parking	9
3.4.1 Car Parking Supply & Spot Demands	9
3.5 Existing School Pick Up Conditions	10
4 Car Parking Assessment	11
4.1 Statutory Car Parking	11
4.2 Car Parking Reduction Sought	11
4.2.1 Carparking Demand Assessment	12
4.2.1 Appropriateness of Reduced Carparking Provision	14
4.3 Student Pick Up / Drop Off	16
5 Bicycle Parking Assessment	16
5.1 Statutory Bicycle Parking	16
6 Pedestrian Connectivity	17
7 Traffic Impacts	18
7.1 Traffic Generation	18
8 Service Vehicles	19
8.1 Waste Collection	19
8.2 Loading	20
9 Conclusions	20

Appendices

Appendix A: Proposed Stage 1 Site Plan



Figures

Figure 1: Stage 1 – Site Plan.....	3
Figure 2: Location Map (Source: Melway Online).....	5
Figure 3: Aerial Photograph (source: Nearmap)	5
Figure 4: Monash Street – View East	7
Figure 5: Monash Street – View West.....	7
Figure 6: Station Place – View North-West.....	7
Figure 7: Station Place – View South-East.....	7
Figure 8: Victoria Street – View North-West.....	7
Figure 9: Ryder Place – View North	7
Figure 10: Public Transport Local Area Map (Source: www.ptv.com.au).....	8
Figure 11: Pedestrian Connectivity / Desire Lines (Source: Nearmap)	18

Tables

Table 1: OLIC Parish Primary School – Staff / Student Numbers.....	4
Table 2: Existing Features of Subject Site	4
Table 3: Existing Public Car Parking Supply.....	9
Table 4: Statutory Car Parking Assessment.....	11
Table 5: Mode of Travel to Work (2016 Census) – Critical Statistics.....	12
Table 6: Car Parking Demand Assessment Factors	13
Table 7: Reduced Car Parking Provision – Relevant Factors	15
Table 8: Statutory Bicycle Parking Assessment.....	17
Table 9: Traffic Generation Rates for Metropolitan Primary Schools.....	18
Table 10: Additional Overall Traffic Generation of Master Plan	19
Table 11: Traffic Directional Bias.....	19



1 Introduction

The following Traffic Impact Assessment Report, reviews the critical matters pertaining to traffic engineering associated with the proposed expansion of Our Lady of Immaculate Conception (OLIC) Parish Primary School at 32 Station Place, Sunshine.

2 Proposal

It is proposed to redevelop and expand the existing OLIC Parish Primary School at 32 Station Place, Sunshine.

This assessment considers Stage 1 of the redevelopment, which includes the following key components:

- Construction of a new 'Learning Building' (1,160m²) located centrally along the Station Place frontage.
- Modified playing field (astroturf).
- Expansion of the bitumen play area (line marked oval).
- New 'sand play' area.

The Stage 1 Site Plan is shown in Figure 1, with a copy provided in Appendix A.

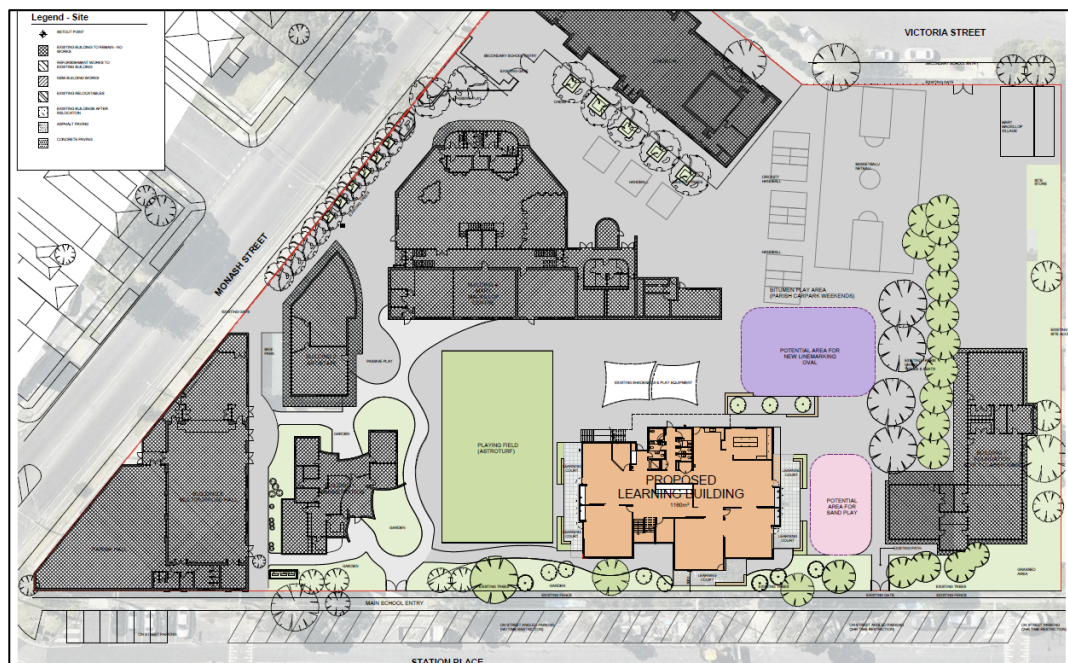
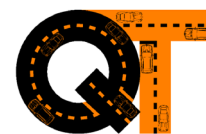


Figure 1: Stage 1 – Site Plan

The key aspects of the Stage 1 proposal from a traffic engineering perspective include:

- **Carparking**
 - Retention of the existing conditions, whereby all carparking demands are accommodating in the surrounding on-street parking resources (i.e. no on-site carparking is proposed).
- **Vehicle Access**



- Retention of the single maintenance access point on Victoria Street.
- **Pedestrian Access**
 - Retention of the existing pedestrian access arrangements to Victoria Street.
 - Retention of the existing pedestrian access arrangements to Monash Street.
 - Removal of the southern pedestrian access on Station Place, with all future pedestrian access to occur via the existing northern gate (adjacent to the administration building).

The staff and student number are expected to increase as a result of the Stage 1 work, with a summary of the proposed Stage 1 future students and staff numbers are provided in Table 1 below.

Table 1: OLIC Parish Primary School – Staff / Student Numbers

Attribute	Existing 2021	Proposed Future (Stage 1)	Change
Students	322 students	439 students	+117 students
Staff	40 staff	46 staff	+6 staff

3 Existing Conditions

3.1 Subject Site

OLIC Parish Primary School is bounded by Monash Street (north), Ryder Place / Victoria Street (north-east), residential properties (east) and Station Place (south-west) in Sunshine.

Table 2 outlines the key existing features of the development site.

Table 2: Existing Features of Subject Site

Site Feature	Detail
Municipality & Referral Authorities	
Municipality	Brimbank City Council
DOT Referral	No
Existing Use	
OLIC Parish	Parish Church and Hall Primary School
Zoning & Overlays	
Zoning	Neighbourhood Residential Zone 1 (NRZ1)
Overlays	Development Contribution Plan Overlay (DCP02)
PPTN Area	Yes
Existing On-Site Car Parking	
OLIC Parish	No on-site car parking
On-Street Car Parking	
Monash Street	'No Stopping' and 'No Parking' restrictions



Site Feature	Detail
Ryder Place / Victoria Street	Kerbside parallel parking on both sides.
Station Place	Angle parking on the north side along the school frontage, parallel kerbside parking at all other locations.
Nearby Land Use	
Within 100m	Residential properties broadly surrounding the subject site. Sunshine Railway Station carpark to the north-west on Monash Street.

A location map and aerial photograph are provided at Figure 3 to Figure 2.

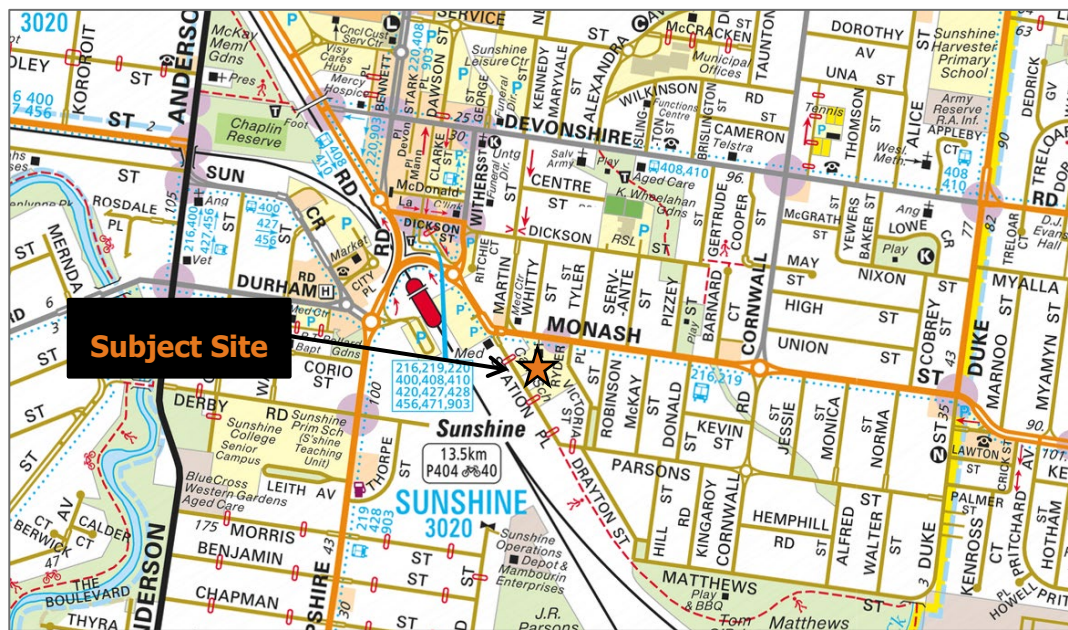


Figure 2: Location Map (Source: Melway Online)



Figure 3: Aerial Photograph (source: Nearmap)



3.2 Road Network

Monash Street

Monash Street is classified as a 'local access' road managed by Council, generally extending in an east-west direction between Station Place in the west and Duke Street in the east.

Adjacent to the subject site, Monash Street includes a 12m carriageway with a single wide traffic lane and bicycle lane in each direction.

Parallel parking is generally restricted to 'No Stopping', with a section of 'No Parking' along the school frontage to the east of Station Place.

Pedestrian operated signals are provided across Monash Street between Whitty Street and Ryder Place. The crossing is supervised at school pick-up and drop-off times.

A sign posted speed limit of 60km/h applies in the subject section of Monash Street, with reductions to 40km/h at school times.

Station Place

Station Place is classified as a 'local access' road that generally extends in a north-west to south-east direction between Monash Street in the north-west and Victoria Street in the east.

Station Place has a carriageway width of approximately 13.7m, which Station Place includes a single traffic lane in each direction. Road humps are provided at approximately 100m intervals, with 3 sets of humps in the subject section adjacent to the school.

On-street parking has varying configurations as follows:

North-East Side:

- 90 degree angle – Monash Street to the first road hump
- 60 degree angle – First road hump to the second road hump
- Parallel – Second road hump to bend.

South-West Side:

- Parallel – Monash Street to bend

A sign posted speed limit of 40km/h applies to Station Place in the vicinity of the subject site.

Ryder Place / Victoria Street:

Ryder Place / Victoria Street extends along the eastern boundary of the school site and are classified as 'local access' streets.

The road provides for a carriageway width of approximately 9m. This allows for a single traffic lane in each direction, with kerbside parallel parking on both sides of the road.

Ryder Place / Victoria Street is subject to a posted 40km/h speed limit.

Photographs of the road network adjacent to the subject site are provided in Figure 4 to Figure 9 below.



Figure 4: Monash Street – View East



Figure 5: Monash Street – View West



Figure 6: Station Place – View North-West



Figure 7: Station Place – View South-East



Figure 8: Victoria Street – View North-West



Figure 9: Ryder Place – View North



3.3 Sustainable Transport Infrastructure

3.3.1 Public Transport

The school site is serviced by extensive public transport services, given the proximity to Sunshine Railway Station (approximately 250m walking distance).

Sunshine Railway Station is serviced by the Sunbury metro line and the Bendigo, Ballarat and Geelong V-Line lines. The railway station is also serviced by extensive bus services, with 15 route services operating from the station.

Bus Route 216 (Sunshine to City via Dynon Road) operates along Monash Street past the school site. Bus stops for this service are located adjacent to the school site in the vicinity of Whitty Street.

Figure 10 outline the nearby public transport services.

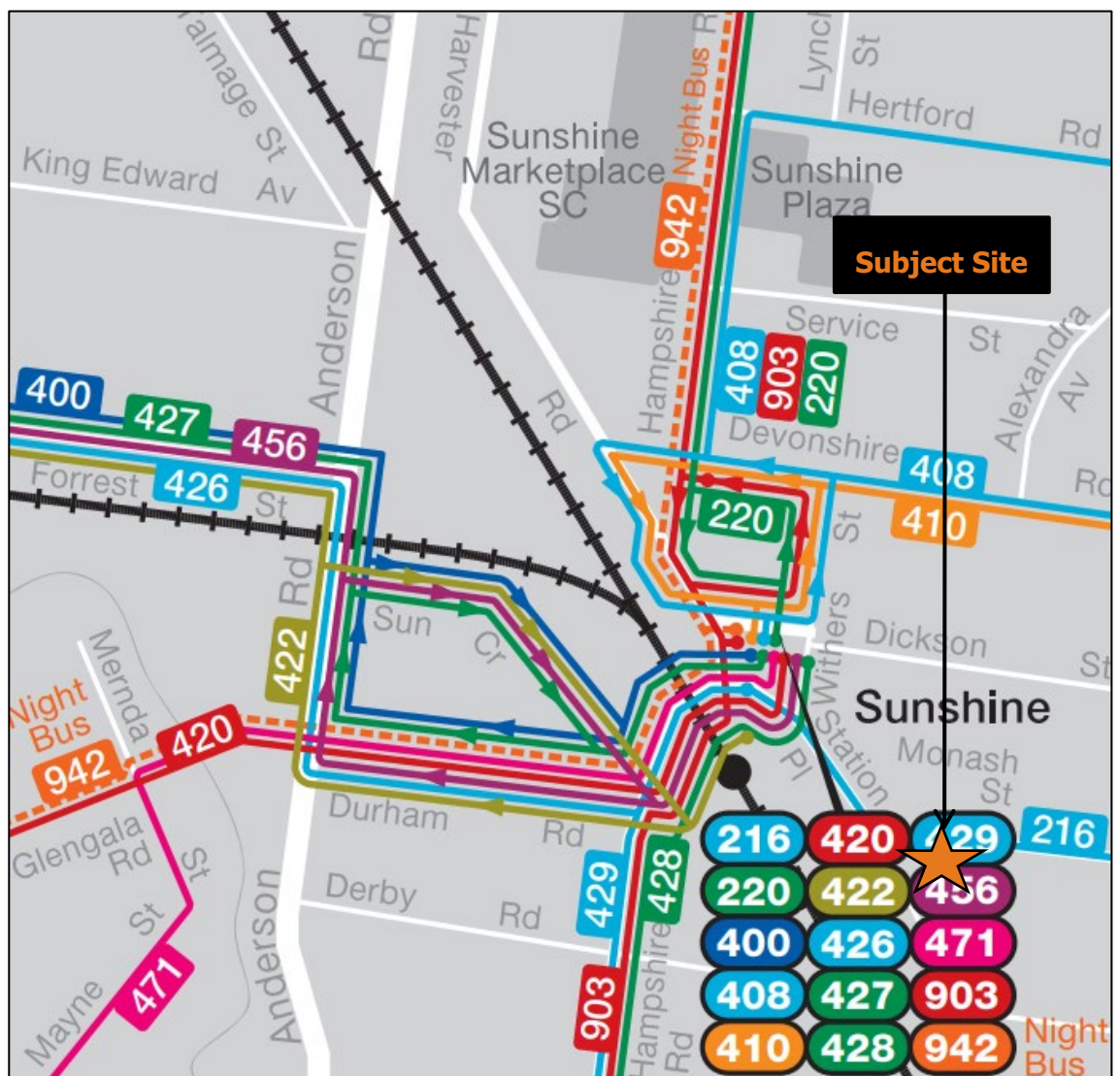
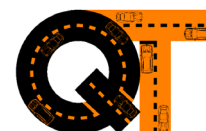


Figure 10: Public Transport Local Area Map (Source: www.ptv.com.au)



3.4 Existing Car Parking

3.4.1 Car Parking Supply & Spot Demands

On-Street parking is provided adjacent to OLIC Parish Primary School on Station Place, Ryder Place and Victoria Street.

A spot car parking occupancy survey was undertaken at 2pm on Wednesday 3rd March, 2021.

A summary of the existing car parking supply and spot survey occupancy is provided in Table 3 below.

Table 3: Existing Public Car Parking Supply

Section	Side	Restriction	Supply	Wednesday 3 rd March 2021 – 2pm		
				Demand	% Occupancy	Number of Spaces Available
Station Place						
Monash Street to First Road Hump	North	Loading Zone	1	0	0%	1
		Unrestricted	5	5	100%	0
		Loading Zone	1	0	0%	1
	South	2P 9am-6pm Mon-Fri	4	0	0%	4
First Road Hump to Second Road Hump	North	P Angle	19	16	84%	3
		2P 9am-6pm School Days	10	1	10%	9
	South	Unrestricted	16	10	63%	6
Second Road Hump to Bend	North	2P 9am-6pm Mon-Fri	12	4	33%	8
	South	Unrestricted	9	5	56%	4
Sub-Total: Station Place			77	41	53%	36
Ryder Place						
Monash Street to Victoria Street	East	Unrestricted	3	2	66%	1
	West	4P Disabled	1	0	0%	1
		2P 8am-6pm School Days	5	0	0%	5
Sub-Total: Ryder Place			9	2	22%	7
Victoria Street						
Ryder Place to Roundabout	North-East	Unrestricted	12	6	50%	6
	South-West	Unrestricted	6	3	50%	3
Sub-Total: Victoria Place			96	18	50%	9
Overall Total			273	104	50%	52



3.5 Existing School Pick Up Conditions

Observations of the existing school pick-up period were made on Wednesday, 3rd March 2021.

It is noted that the school bell rings for the OLIC Parish Primary School at 3pm.

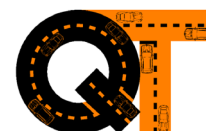
A summary of the general traffic and parking observations are provided below:

Station Place:

- Parents commenced arriving for the school pick-up period at approximately 2:30pm.
- Parents were observed to park on both the north and south sides of Station Place. Vehicles arrived from both the north-west and south-east.
- The majority of on-street parking spaces were occupied.
- Pedestrian access to the school site occurred via both the north (adjacent to administration) and south (in the vicinity of the south-east boundary).
- Children started exiting the site immediately after the 3pm bell time.
- Drivers exited to both the north and the south.
- A queue formed for exiting vehicles at the intersection of Station Place / Monash Street (approximately 6-7 vehicles). The queue was principally as a result of delays associated with right turning vehicles and queues extending back from the Hampshire Road / Withers Street / Station Place roundabout.
- All activity associated with the school dissipated by approximately 3:10pm

Ryder Place / Victoria Street:

- Parents arrived from approximately 2:30pm and parked within the 2P and unrestricted parking spaces on both sides of the road.
- The majority of on-street parking spaces were occupied during the school pick-up.
- From approximately 2:55pm, a queue formed on Victoria Street (north-westbound) whilst drivers waited to enter the P2min spaces.
- This queue occurred until approximately 3:05pm, once the vehicles could be serviced by the P2min parking spaces.
- A queue of approximately 3-4 vehicles formed at the Ryder Place / Monash Street intersection. The queue was principally due to delays associated with right turning vehicles. The capacity at the intersection was assisted by the adjacent pedestrian operated signals, which provided 'gaps' when operated.
- A number of pedestrians were observed exiting the school and walking south-east along the Victoria Street footpath.
- All activity associated with the school dissipated by approximately 3:10pm



4 Car Parking Assessment

4.1 Statutory Car Parking

Clause 52.06-5 prescribes the number of car spaces required to be provided for different land uses.

Under Clause 74 the proposed land use is best defined as a 'Primary School'.

The subject site is located within the PPTN area and therefore Column B parking rates apply.

Clause 52.06 states the following in relation to the expansion of existing uses:

'Where an existing use is increased by the measure specified in Column C of Table 1 for that use, the car parking requirement only applies to the increase, provided the existing number of car parking spaces currently being provided in connection with the existing use is not reduced'

In view of the above, the statutory carpark requirements apply to the increase in use (i.e. 6 additional staff).

Table 4 outlines an assessment of the car parking provision against the statutory requirement prescribed under Clause 52.06-5 of the Brimbank Planning Scheme.

Table 4: Statutory Car Parking Assessment

Use	No.	Statutory Car Parking Rate	Requirement ⁽¹⁾	Provision
Primary School	6 staff	1 spaces to each employee	6	0
TOTAL			6	0

Note 1: Non-whole numbers rounded down to the nearest whole number as specified by Clause 52.06-5

Based on the above, the statutory car parking requirement for the proposed development is 6 car spaces.

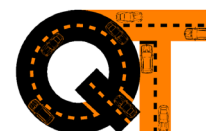
As no car spaces are proposed on the subject site, there is a statutory parking shortfall of 6 spaces.

Accordingly, the application seeks a permit for a waiver of the statutory car parking requirements.

4.2 Car Parking Reduction Sought

The Brimbank Planning Scheme allows for the car parking provision of a proposed development to be less than the statutory car parking requirement. Clause 52.06-3 states:

A permit is required to:



- Reduce (including reduce to zero) the number of car parking spaces required under Clause 52.06-5 or in a schedule to the Parking Overlay

A two-step assessment is required in order to justify the car parking reduction sought.

The first step is to assess the likely car parking requirement or demand generated by the proposed development, which is to undertake a Car Parking Demand Assessment (CPDA).

If the Car Parking Demand Assessment determines that the likely demand of the proposal will not be met on-site, the second step is to determine whether or not it is appropriate to reduce the number of car spaces provided than is generated.

4.2.1 Carparking Demand Assessment

The long stay carparking demands associated with a school are typically associated with staff. These staff arrive prior to the school period (typically before 8am) and depart after school concluded (after 4pm).

The rate prescribed in the Planning Scheme is 1 space per staff member, which assumes that all staff drive to work. School staff are potential able to arrive by multiple modes, particularly in this instance as the subject site is well positioned for alternative modes such as public transport.

We have reviewed the 2016 ABS Census data to establish mode choice to work for the Sunshine suburb. The data set has been reviewed for all workers as well as specifically for primary school staff. A summary of the mode choice from the 2016 Census is provided in Table 5 below.

Table 5: Mode of Travel to Work (2016 Census) – Critical Statistics

Mode	Sunshine – All Workers	Sunshine – Primary Education Employment
Mode of Travel to Work%		
Vehicle	89.4%	93.9%
Public Transport	8.2%	3.1%
Active Transport	2.0%	3.1%
Other	0.3%	0.0%
TOTAL	100%	100%

In view of the above, the level of vehicle travel to the sunshine suburb ranges between 89.4% when all workers are considered and 93.9% when only people employed in primary education are considered.

Conservatively adopting the upper rate (i.e. 0.939 spaces per staff member), would result in an expected parking demand of 6 spaces. This is consistent with the statutory parking requirement of 6 spaces.

Summary

An assessment of the relevant factors with respect to the Car Parking Demand Assessment is outlined in Table 6.

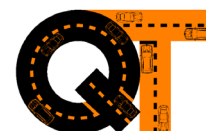
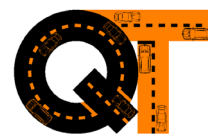


Table 6: Car Parking Demand Assessment Factors

Factor	Commentary
<i>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.</i>	The additional staff associated with the school may attend other businesses in the surrounding activity centre during their work day (i.e. retail / food outlets). However, the key purpose for their daily trip to the local area will be for work at the school.
<i>The variation of car parking demand likely to be generated by the proposed use over time.</i>	Staff parking demands are generally long term, with staff typically arriving at prior to 8am and departing after 4pm. No activity generally occurs during evenings or on weekends, when residential demands are likely to peak in the area.
<i>The short-stay and long-stay car parking demand likely to be generated by the proposed use.</i>	The majority of staff parking demands are long term, greater than 6 hours in duration.
<i>The availability of public transport in the locality of the land.</i>	The site has excellent access to public transport, with Sunshine Station within approximately 250m walking distance of the site. As discussed above, 3.1-8.2% of workers in the Sunshine suburb use public transport to work. In terms of schools in the local area, we would expect the subject site to have the highest likelihood for public transport trips given the excellent access to services.
<i>The convenience of pedestrian and cyclist access to the land.</i>	The site is located on the periphery of the Sunshine Activity Centre, with excellent access for pedestrians. For local trips, bicycle lanes are provided on Monash Street, with cycling access also available via the local road network. Regionally, a shared path is provided along the Railway Corridor which can be accessed via the Sunshine Railway Station carpark approximately 200m distance from the subject site.
<i>The provision of bicycle parking and end of trip facilities for cyclists in the locality of the land.</i>	A bicycle parking area is shown on the proposed Stage 1 site plan. This area could accommodate both student and staff parking demands in a secure arrangement.
<i>The anticipated car ownership rates of likely or proposed visitors to or occupants (residents or employees) of the land.</i>	As discussed above, car as driver accounts for 89.4%-93.9% of employee work trips in the Sunshine suburb. Adopting the upper end of this range results in a parking demand of 6 spaces.



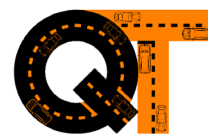
Factor	Commentary
<i>Any empirical assessment or case study.</i>	The adopted parking rate (0.939 spaces per staff member) is conservative and is based on 2016 ABS Census data for mode of travel to work.

4.2.1 Appropriateness of Reduced Carparking Provision

The second step is to assess the appropriateness of providing less car spaces on the land than is generated, as outlined under the Car Parking Demand Assessment.

The factors for consideration are outlined below with the factors critical to this development application highlighted:

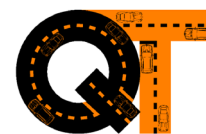
- *The Car Parking Demand Assessment.*
- *Any relevant local planning policy or incorporated plan.*
- *The availability of alternative car parking in the locality of the land, including:*
 - *Efficiencies gained from the consolidation of shared car parking spaces.*
 - *Public car parks intended to serve the land.*
 - ***On street parking in non residential zones.***
 - ***Streets in residential zones specifically managed for non-residential parking.***
- *On street parking in residential zones in the locality of the land that is intended to be for residential use.*
- *The practicality of providing car parking on the site, particularly for lots of less than 300 square metres.*
- *Any adverse economic impact a shortfall of parking may have on the economic viability of any nearby activity centre.*
- ***The future growth and development of any nearby activity centre.***
- ***Any car parking deficiency associated with the existing use of the land.***
- *Any credit that should be allowed for car parking spaces provided on common land or by a Special Charge Scheme or cash-in-lieu payment.*
- *Local traffic management in the locality of the land.*
- ***The impact of fewer car parking spaces on local amenity, including pedestrian amenity and the amenity of nearby residential areas.***
- *The need to create safe, functional and attractive parking areas.*
- *Access to or provision of alternative transport modes to and from the land.*
- *The equity of reducing the car parking requirement having regard to any historic contributions by existing businesses.*
- *The character of the surrounding area and whether reducing the car parking provision would result in a quality/positive urban design outcome.*
- *Any other matter specified in a schedule to the Parking Overlay.*
- *Any other relevant consideration.*



An assessment of the relevant factors in justifying the overflow demands generated by the proposed development is outlined in Table 7.

Table 7: Reduced Car Parking Provision – Relevant Factors

Factor	Discussion
<i>Car Parking Demand Assessment</i>	As outlined above, the car parking demand assessment outlines that the proposed school expansion is likely to result in an additional car parking demand of 6 spaces (consistent with the statutory car parking requirement of Clause 52.06).
<i>The availability of alternative car parking in the locality of the land</i>	<p>A significant amount of long term unrestricted parking is currently available around the school site. Based on the spot parking occupancy surveys undertaken at 2pm on Wednesday 3rd March, 2021 indicate that a total of 23 unrestricted parking spaces were available including:</p> <ul style="list-style-type: none"> • Station Place – 13 spaces available • Ryder Place – 1 space available • Victoria Street – 9 spaces available <p>The majority of the available unrestricted spaces are located on residential frontages. However, we note that there has been a historical decision to specifically exclude these areas from the general 2P parking scheme in the nearby streets. On this basis, we are of the view that these areas are appropriate for school staff parking having been specifically managed to cater for school parking demands.</p>
<i>The future growth and development of any nearby activity centre</i>	<p>The waiver of parking for the proposed development will have not have significant impact on the future growth or development of the Sunshine Activity Centre</p> <p>The site is located on the periphery of the activity centre, with limited existing parking restrictions. Under these conditions, school staff are able to utilise the available on-street parking.</p> <p>As activity grows and intensifies in the Activity Centre, we would expect parking demands to begin to extend into the peripheral areas around the Activity Centre (including in the vicinity of the subject site). In this situation, we would expect that Council would seek to manage on street parking demand through the introduction of on-street parking restrictions. This would result in reduced on-street car parking opportunities for all staff in the Activity Centre (including school teachers), which would lead to mode choice changes towards public transport, walking and cycling for all workers (including school teachers).</p>
<i>Any car parking deficiency associated with the existing use of the land.</i>	<p>The existing school operates with no on-site car parking provision and has done so for a long period of time.</p> <p>On this basis, there is a broad expectation that the parking demands associated with the school will occur in the surrounding on-street parking resources.</p>
<i>The impact of fewer car parking spaces on local amenity, including pedestrian amenity and</i>	<p>The additional car parking demand of 6 spaces is minor in the context of the existing school parking demands.</p> <p>We would not expect the additional car parking demands to result in a significant difference to existing amendment for the local area.</p>



Factor	Discussion
<i>the amenity of nearby residential areas.</i>	
<i>Access to or provision of alternative transport modes to and from the land</i>	The site has very good access to public transport given its position on the periphery of the Sunshine Activity Centre. Accordingly, this site can be accessed via alternative transport modes as required by staff and students.

Overall, we are satisfied that the proposed waiver of the statutory carparking requirements for the proposed expansion will not have a discernible impact on the local area.

Accordingly, the planning permit application is supported under the relevant factors specified under Clause 52.06-6 of the Brimbank Planning Scheme and there is no reason why this application should be refused on car parking grounds.

4.3 Student Pick Up / Drop Off

Given that the Stage 1 proposal includes an increase in student numbers (additional 117 students), there will be additional parking and traffic demands at school pick-up / drop-off times. Based on a ratio of existing student numbers to proposed student numbers, we expect the increase in activity to be approximately 36% more than the existing conditions.

As discussed in Section 3.5, observations of the existing school pick up period indicate that the existing arrangements work well, with the school peak activity limited to a 10 minute period between 3pm and 3:10pm. In the context of schools, this is a very short peak period, with typical schools generating peak periods for 15-25 minutes.

The additional pick-up / drop-off demands are expected to result in a lengthening of the pick-up period, with the following likely outcomes:

- Additional parking demands extending further on Station Place and Victoria Street.
- Increased queue lengths and delays at the key intersection of Monash Street / Station Place and Monash Street / Ryder Place.

Whilst it is acknowledged that increased parking and traffic conditions will occur, they are for a very short period of time each day. There is an expectation that the road network operates at a peak for a short period of time around schools and drivers adjust their travel patterns to suit.

5 Bicycle Parking Assessment

5.1 Statutory Bicycle Parking

Clause 52.34 prescribes the number of bicycle spaces to be provided for new developments and changes in use.

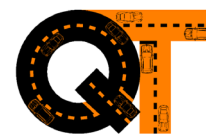


Table 8 outlines an assessment of the bicycle parking provision against the statutory requirement prescribed under Clause 52.34 of the Brimbank Planning Scheme.

Table 8: Statutory Bicycle Parking Assessment

Use	No.	Statutory Bicycle Parking Rate	Requirement (1)	Provision
Primary School				
Employees	6	1 to each 20 employees	0	16
Students	117	1 to each 5 pupils over 4 years	23	
TOTAL			23	16

Note 1: Non-whole numbers rounded mathematically to the nearest whole number as specified by Clause 52.34

Accordingly, the statutory bicycle parking requirement for the proposed development is 23 spaces, all associated with students.

A bicycle parking area with approximate dimensions of 3.3m wide x 9.6m long, which can generally accommodate 9 bicycle rails (18 spaces). It is recommended that this area is extended to accommodate 12 bicycle rails (24 spaces).

The design of the bicycle parking area should be in accordance with AS2890.3-2015.

6 Pedestrian Connectivity

The school is well positioned with respect to existing pedestrian facilities, with the following key facilities on the surrounding road network:

- Monash Street (between Ryder Place and Whitty Street) – Pedestrian Operated Signals.
- Station Place (at Monash Street) – Pedestrian Refuge Island.
- Victoria Street / Robinson Street (at Station Place / Parsons Street) – Pedestrian Refuge Island.

These facilities are generally located on the key pedestrian desire lines observed during the school pick up period. On this basis, the existing pedestrian facilities are well positioned to accommodate growth in pedestrian activity associated with the Stage 1 proposal.

A summary of the existing pedestrian facilities and the key pedestrian desire lines is shown in Figure 11 below.

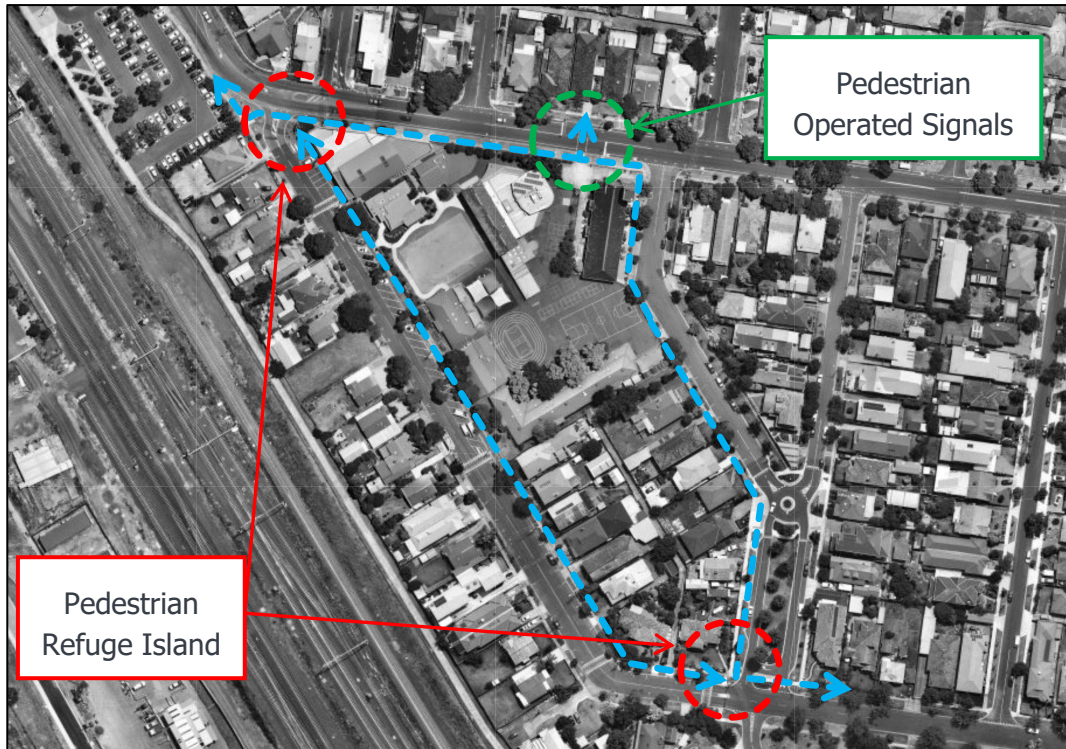


Figure 11: Pedestrian Connectivity / Desire Lines (Source: Nearmap)

7 Traffic Impacts

7.1 Traffic Generation

Primary schools have a large number of variabilities in terms of the number of vehicle trip ends generated per student.

Connectivity to public transport, metropolitan/rural location, socioeconomic of population, utilisation of busses (public and charter), size of catchment, location with respect to a primary school, among many more.

NSW RMS undertook a series of traffic generation surveys for schools in 2014 (Ref: 14S1263000), which included surveys of 22 schools across metropolitan and rural New South Wales. The report identified the following rates for primary schools in 'metropolitan' locations.

Table 9: Traffic Generation Rates for Metropolitan Primary Schools

Measure	Average	Range
Metropolitan Primary Schools		
AM School Peak	0.67 movements per student	0.43-0.92 movements per student
PM School Peak	0.53 movements per student	0.14-0.98 movements per student

For the purposes of this analysis, we have adopted the average values identified in Table 9. Table 10 below outlines the additional peak hour traffic generation of the proposed Master Plan.

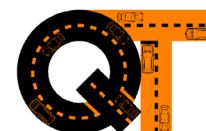


Table 10: Additional Overall Traffic Generation of Master Plan

Use	No.	Traffic Generation Rate ⁽¹⁾	Vehicle Trip Ends (VTE)
AM	117 additional students	0.67 vte per student	78
PM		0.53 vte per student	62

Based on the same RMS NSW report, the following overall traffic distribution was observed:

AM Peak Hour

- Entry Movements – 51%
- Exit Movements – 49%

PM Peak Hour

- Entry Movements – 49%
- Exit Movements – 51%

Accordingly, the following entry and exit movements are anticipated during each peak period.

Table 11: Traffic Directional Bias

Use	In	Out	Total
AM	40	38	78
PM	30	32	62

In view of the above, the peak number of movements occurs during the AM peak 'entry' with 40 vehicle trips.

As discussed in Section 4.3, we expect the additional vehicle trips to extend the length of the pick-up / drop-off peak periods. However, the peak occurs over a short period of time with multiple approach and departure routes. On this basis, the traffic impacts are minor in the context of daily traffic activity and we would expect the peak school conditions to be similar to many other schools in the Brimbank municipality and metropolitan Melbourne.

8 Service Vehicles

8.1 Waste Collection

Waste storage is proposed to continue in the north-east corner of the site in Stage 1 site plan, with waste collection occurring via the Victoria Street carriageway outside of peak times.

In view of the above, waste collection will continue to occur in the same manner as the existing conditions.

Overall, we are satisfied that this approach is satisfactory from a traffic engineering perspective. If deemed necessary by Council, a Waste Management Plan (WMP) could be required as a condition of permit.



8.2 Loading

The site will continue to be serviced by the existing on-street loading zones on the north-east side of Station Place (2 spaces), directly adjacent to the school site.

These spaces provide for proximate opportunities for loading demands associated with the school site.

9 Conclusions

Having visited the site and undertaken a detailed traffic engineering assessment the following conclusions are reached in relation to the proposed Stage 1 expansion at Our Lady of Immaculate Conception Parish Primary School, Sunshine:

2. The proposal is for an expansion of the existing school campus with 6 additional staff and 117 additional students.
3. The statutory car parking requirement for the expanded school campus is 6 spaces under Clause 52.06-5 of the Planning Scheme.
4. As no car parking spaces are proposed on-site, the application seeks a waiver of the statutory car parking requirement (6 spaces).
5. A car parking demand assessment has identified the following:
 - a. 2016 ABS census data indicates mode of travel to work for the Sunshine suburb to be 89.4% 'car as driver'. When only primary school staff are considered for the Sunshine suburb, the level of 'car as driver' rises to 93.9%.
 - b. Adopting the higher 'car as driver' rate from the ABS data (0.939 spaces per staff member) results in a likely car parking demand of 6 space. This is consistent with the statutory parking rate in Clause 52.06.
 - c. Given the position of the school on the periphery of the Sunshine Activity Centre with excellent access to public transport, the likelihood of public transport and active travel trips to the school is better than the majority of other school locations in Sunshine. On this basis, the adopted car parking rate / demands are considered conservative.
6. It is considered acceptable to provide a waiver of the statutory carparking requirement as follows:
 - a. A total of 23 unrestricted parking spaces were identified on-street surrounding the school site based on the spot parking occupancy survey undertaken. Whilst the majority of these spaces are located on residential frontages, they have been historically managed to allow staff parking (not subject to time based parking restrictions that apply to other streets in the local area).
 - b. The parking waiver is unlikely to impact on the future growth and development of the nearby activity centre, as on-street parking can be managed by Council into the future as required, which has a direct influence on mode choice for all staff (including school staff).
 - c. The existing school has historically operated without on-site parking and therefore there is an expectation that parking demands associated with

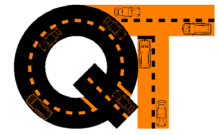


the school will occur in the public on-street parking resources. We do not expect significant changes to existing amenity.

- d. The school is well positioned for access via public transport and active travel.
7. The short term pick-up / drop-off parking demands are expected to increase with the Stage 1 expansion. Based on a ratio of existing to proposed student number we would expect approximately 35% additional activity during the peak times. Observations of the existing school pick up indicate that the existing conditions operate well with a short peak for 10 minutes between 3pm and 3:10pm. The additional demands are expected to lengthen the peak period, however, the pick up arrangements are still expected to operate in line with other schools in the area and within metropolitan Melbourne.
8. The statutory bicycle requirement is 23 spaces associated with students. A bicycle parking area is shown on the Master Plan that could accommodate 9 rails (18 spaces). It is recommended that the area is expanded to accommodate 12 rails (24 spaces) in accordance with AS2890.3-2015.
9. The proposed Stage 1 expansion of the school campus (+117 students) is likely to generate an additional 78 vehicle trips in the AM school peak and 62 vehicle trips in the PM school peak.
10. Whilst the additional traffic volumes are distributed across multiple approach and departure routes, they are likely to result in increased delays and queue lengths at key intersections. However, given the short peak period nature of school activity, the traffic impacts are considered minor in the context of daily activity.
11. Waste collection will continue to occur outside of peak hours via Victoria Street. If required by Council, a Waste Management Plan could be prepared to formalise this activity.
12. Loading will continue to be serviced by the loading zones (2 spaces) located on the north-east side of Station Place. These spaces are located directly adjacent to the school site and provide for proximate and convenient loading access.

Having undertaken all tasks necessary to adequately assess the traffic engineering impacts of the proposed expansion at Our Lady of Immaculate Conception Parish Primary School – 32 Station Place, Sunshine, we are satisfied that the proposed development is satisfactory.


There are no reasons why the permit for the proposed development should not be approved from a traffic engineering perspective, subject to appropriate conditions.



Appendix A

Proposed Stage 1 Site Plan

Legend - Site

-  SETOUT POINT
-  EXISTING BUILDING TO REMAIN - NO WORKS
-  REFURBISHMENT WORKS TO EXISTING BUILDING
-  NEW BUILDING WORKS
-  EXISTING RELOCATABLES
-  EXISTING BUILDINGS AFTER RELOCATION
-  ASPHALT PAVING
-  CONCRETE PAVING



Our Lady of The Immaculate Conception Parish Primary School
 32 Station Place, Sunshine



ClarkeHopkinsClarke
 115 Sackville Street
 Collingwood Victoria 3066
 Telephone (03) 9419 4340
 Facsimile (03) 9419 4345
 Email studio@chc.com.au
 www.chc.com.au

Stage 1 Learning Building
 Proposed Site Plan

Scale 1:200 @ A1

PRELIMINARY
 09.02.2021
 200174/SK002P1