



WARRNAMBOOL
CITY COUNCIL

BOTANIC LOCAL AREA TRAFFIC MANAGEMENT PLAN (LATM) SUMMARY

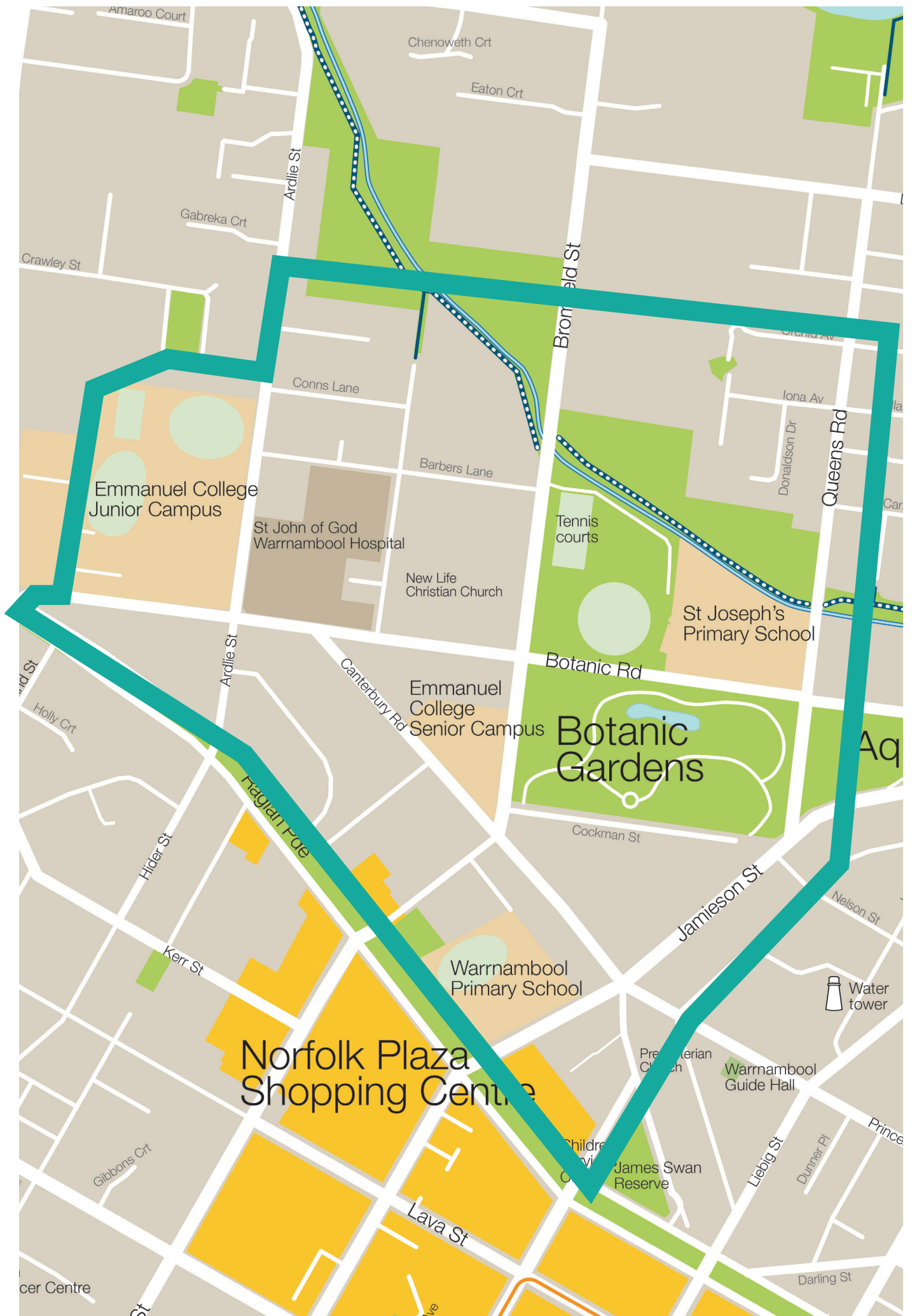


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OUR PLAN - OUR FUTURE
Small actions. Big difference.





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WHY A LATM?

Everyone wants to get where they need to in a safe and timely way. As Warrnambool grows and gets busier, the challenge will be how to do this. Warrnambool is piloting the Local Area Traffic Management Plan (LATM) approach where Council works with the community to develop cost effective solutions to complex traffic challenges.



WHAT DO WE WANT IN WARRNAMBOOL?

Great Streets- which consider and balance the needs of people walking, cycling, driving and taking the bus. Streets which are designed to benefit everyone; older and younger people, people with limited mobility. Getting this right creates opportunities for social interaction, enabling the wider community to foster independence, social connection, safety and comfort for all.

The Botanic LATM aligns with the W2040 Community Plan:



People- Warrnambool has a safe and connected community



Place- Warrnambool prioritises and encourages sustainable transport



Environment- Zero Warrnambool- a “20 minute city”



WHAT ARE THE CHALLENGES?

WHAT CHALLENGES ARE WE FACING?

- Space is limited in our streets and for parking
- More people want to go to the same places at the same time
- People are time-poor
- Our reliance on cars
- Some people don't feel safe walking or cycling
- Access to public transport

WHAT DOES THE BOTANIC LATM AIM TO DO?

- Address the travel challenges in collaboration with the people who work, live and go to school in the area:
 1. Improving safety of the road crossings
 2. Reducing speeds of traffic
 3. Improving congestion by dispersing traffic during peak times (Drop Off points, safe crossing to these locations)
 4. Filling gaps in the footpath network
- Be ready to take advantages of external funding opportunities
- Have solutions which are cost effective so can be implemented in a timely manner
- Create safer streets for all road users; especially those walking and cycling

WHO DID WE WORK WITH?

- DOT- Regional Roads Victoria
- Victoria Police
- Moyne Warrnambool Road Share
- Warrnambool Cycling Reference Group
- Emmanuel College
- Warrnambool PS-
- St Josephs PS-
- Aquazone-
- Friends of the Warrnambool Botanic Gardens-
- Residents 2 Pop-Up sessions Botanic Gardens- 32 residents attended
- St John of God Hospital-
- Discussion with the Buslines-
- Discussion with Emergency Services- Ambulance and Fire
- Discussion with Local Laws





OUR APPROACH

Local Area Traffic Management Plan (LATM) approach has provided a suite of solutions which are cost effective to address the complex traffic challenges. These solutions will be supported by behaviour change programs, which will assist people to use the new infrastructure.

To ensure works are within the capacity of Council to achieve they have been weighted against the following criteria to focus our resources in the best way:

NETWORK AND ROAD SAFETY (40%)

How does the location fit into the road and footpath network. What are the real and perceived risks- including crash data, anecdotal evidence, and current infrastructure assessments.

LINKS TO EDUCATION FACILITIES (20%)

The distance from the location to the nearest education facility which is a driver of movement during peak times in the precinct.

LINKS TO SHOPS OR OTHER COMMUNITY FACILITIES (20%)

The distance from the location to the nearest shop or community facility- this includes open space, sporting facilities, off road trails and the Botanic Gardens.

COMMUNITY FEEDBACK (20%)

How the infrastructure issues were identified- by the community, by the consultant, from observations.

KEEP UP TO DATE

<https://www.warrnambool.vic.gov.au/keeping-every-one-moving-inner-north>

BEHAVIOUR CHANGE

The LATM considers how people move through our streets, whether they walk, cycle or drive a car, we all want to get where we want to go safely.







The following behaviour change programs provide education and skills for everyone to share our streets.

TARGET AUDIENCE	PROGRAM	PARTNERS
Students- Primary School	HEALTHY MOVES program (Sustainable transport promotion, Road Safety)- current	WCC Warrnambool PS St Josephs PS Victoria Police VicHealth
Families-Schools	Change to Walking program (Safe Routes to School, Drop Off Points)- current	WCC Warrnambool PS St Josephs PS Emmanuel College Victoria Police Victoria Walks
Students- Secondary School	Ride2School (Bike Ed, Road Safety, Sustainable Transport, Routes to School)- current	WCC Emmanuel College Victoria Police Ride2School
Children travelling to sport	Bus Buddies- develop	Warrnambool PS St Josephs PS Warrnambool Buslines Warrnambool Stadium
Community Wide	It's a Two Way Street- ("walk, cycle and drive with respect and courtesy")- current	WCC Warrnambool Road Share Victoria Police Everyone



A PRECINCT APPROACH-

Rather than addressing each challenge individually the LATM approach takes a precinct approach. Balancing the travel needs of people who walk, cycling and drive. The following table reviews various infrastructure options which are cost effective.

	ADVANTAGES	DISADVANTAGES	SAFETY BENEFIT	COST
<p>Wombat Crossing</p> <p>Consists of a raised platform to the same level as the adjacent pedestrian footpaths, with Pedestrian Crossing (Zebra) pavement markings on top. Requires speed hump warning sign and 20km/h advisory speed sign. May include flashing lights and other warning signs such as children crossing if warranted</p> <p>This treatment gives priority to pedestrians at all times.</p>	<ul style="list-style-type: none"> • Effective at reducing vehicle speeds at crossing point • Considered a Safe System treatment as it reduces crash severity • Can be perceived as providing route continuity and coherence • Enhances visibility of the pedestrian crossing • Deterrent to through traffic 	<ul style="list-style-type: none"> • More expensive than standard Pedestrian Crossing (Zebra) (construction, drainage etc.) • May increase traffic noise • May need modifications if on bus or freight routes • Can be uncomfortable for cyclists to negotiate 		
<p>Raised School Crossing- current school crossings in the precinct.</p> <p>Consists of a platform raised to the same level as the adjacent pedestrian footpaths. Requires speed hump warning, 20km/h advisory speed sign and red and white striped posts for children crossing flags. May include other warning signs, if warranted such as children crossing. Also includes stop lines for vehicles in advance of the crossing. Depending on location, this is usually accompanied by 40km/h school speed zones.</p> <p>This treatment give priority to pedestrians only when flags are displayed.</p>	<ul style="list-style-type: none"> • Considered a Safe System treatment as it reduces crash severity • Effective at reducing vehicle speeds at crossing point • Outside of school times this operates as a speed hump • Positively perceived by parents • May have better visibility than standard children's crossing • Can be perceived as providing route continuity and coherence • Deterrent to through traffic 	<ul style="list-style-type: none"> • Does not give priority outside of school times • May increase traffic noise • May need modifications if on bus or freight routes • Can be uncomfortable for cyclists to negotiate • More expensive than standard children's crossing (construction, drainage etc.) • Requires recruitment process for supervisors (and funding) 		
<p>Raised Intersection</p> <p>Consists of a raised platform on the intersection and short length of approach roads. Requires speed hump warning, advisory speed sign and may include other warning signs, if warranted such as children crossing. May also need to be lit, depending on location.</p>	<ul style="list-style-type: none"> • Effective at reducing vehicle speeds at crossing point • Considered a Safe System treatment as it reduces crash severity • Raises awareness levels of drivers 	<ul style="list-style-type: none"> • Can be expensive (construction, drainage etc.) • Comfort level for commercial and heavy vehicles can be compromised • Does not provide priority for pedestrians 		



Raised Threshold

Consists of a platform raised to the same level as the adjacent pedestrian footpaths. Requires speed hump warning sign, 20km/h advisory speed sign and may include other warning signs, if warranted, such as children crossing.

This treatment does not give priority to pedestrians or cyclists.

- An important element for providing continuity of pedestrian/cycle paths
- Effective at reducing vehicle speeds at crossing point
- Considered a Safe System treatment as it reduces crash severity
- Deterrent to through traffic
- Pedestrians are more visible to drivers

- Does not give priority outside of school times
- May appear to paths users that they have priority
- May increase traffic noise
- Can be unpopular with local residents
- May need modifications if on bus or freight routes
- Can be uncomfortable for cyclists to negotiate



Drop Off Points

Parking restrictions that allow a two-minute (or similarly short time) stop to drop off children. Driver remains with the car. Must be accompanied by a standard no parking sign to give it legal force. May include indented parking.

- Requires indiscriminate parking and stopping to create a more orderly traffic environment
- Easy to install and low cost

- Encourages driving over active transport
- Relies on enforcement to be effective



Roundabout Upgrades

Raised platforms or speed cushions on approaches, central island enlargement and kerb realignment to reduce the speed of traffic approaching and travelling through roundabouts.

- Reduce vehicle speeds and therefore the likelihood and severity of crashes within roundabouts
- Improve safety for pedestrians using pedestrian crossing points
- Improve safety for cyclists riding through roundabouts
- Deterrent to through traffic

- Can be expensive (construction, drainage etc.)
- May need modifications if on bus or freight routes
- Reduced comfort level for motorists
- Can be uncomfortable for cyclists to negotiate (raised platforms)
- Noise

Site-specific



Shared Path

Wide paths shared by pedestrians and cyclists, separated from vehicular traffic.

- Improve Safety by separating vulnerable road users from vehicle traffic Can influence desire lines (ie. preferred routes), keeping pedestrians and cycling on safer routes and crossings
- Usually provides a more pleasant walking/riding experience, particularly through parks and other vegetated areas

- Can lead to conflict between cyclists and pedestrians
- Off-road sections could be perceived as less safe (eg. Stranger Danger)
- Very High Cost



On Road Bicycle Lane

Dedicated space for cyclists to the left of the traffic lanes, marked by signs and pavement markings.

- Provide space for cyclists to ride clear of moving traffic
- Easy to install and low cost

- Significant safety risk remain including car-dooring and vehicles encroaching the bicycle lane.



Separated Bicycle Lane (FUTURE PROJECTS)

Protect cyclists by positioning them between the parking or traffic lane and the footpath, with physical separation for through traffic and/or parked vehicles.

- Improve safety by preventing vehicular access to the bicycle lane and providing clearances of the opening of car doors.
- Generally provide a high level of service for cyclists and promote increased patronage on cycling routes (compare to unprotected on-road bicycle lanes)
- Maintain directness of travel and priority at intersections
- May be applied in urban areas where parking is prevalent or where there is insufficient space for an off-road path.

- Can be expensive (construction, drainage etc.)
- Frequent maintenance is required to ensure that they do not accumulate debris and litter
- Difficult to apply where there are frequent driveways or intersections
- Require more space than unprotected on-road bicycle lanes



Map 1.

Possible infrastructure changes to the local streets

The following map identifies opportunities to create Safer Streets for all road users.



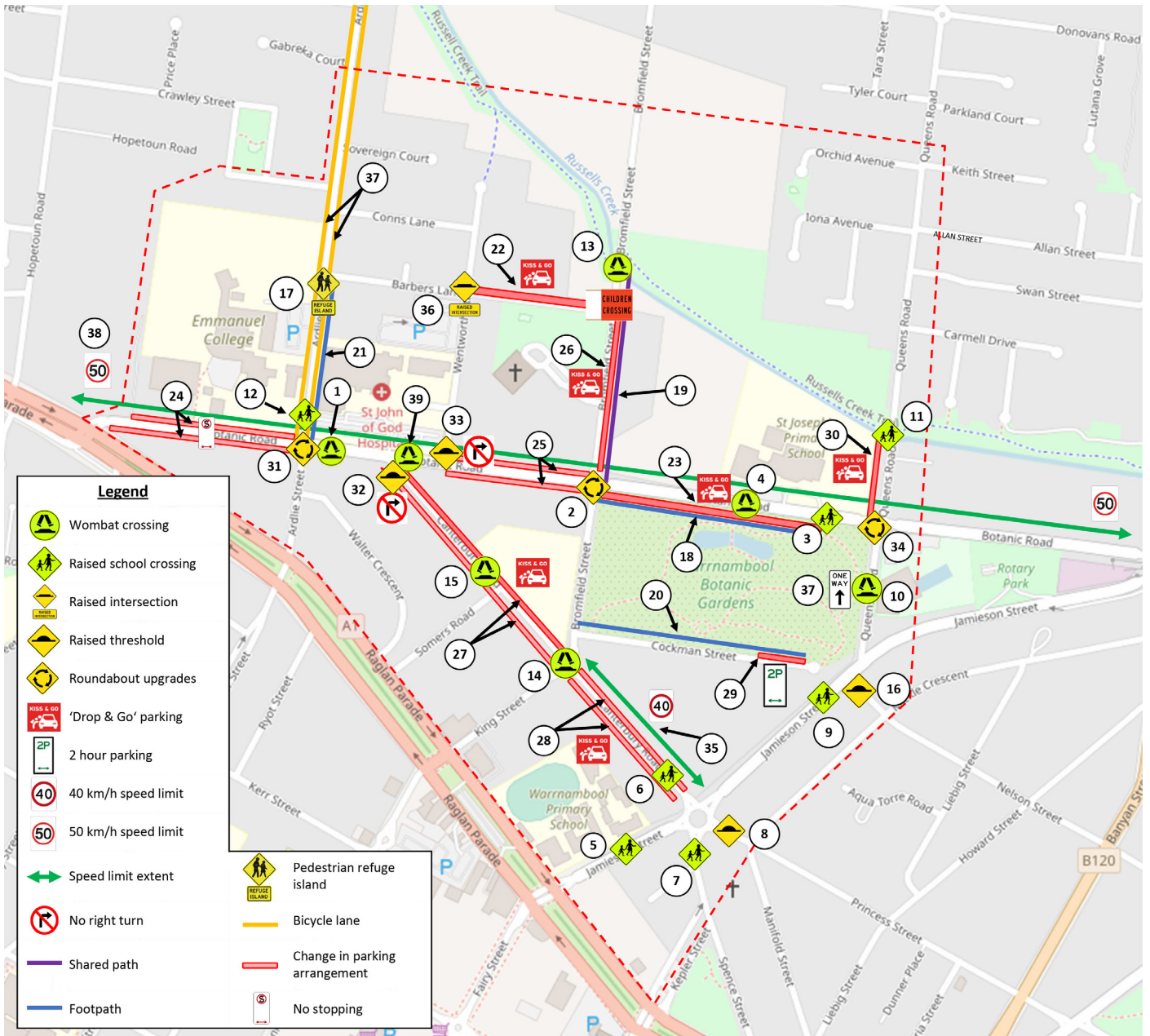
Map 2.

Satellite Image of proposed changes



Map 3.

Map Register



Map	Icon	Road	Location	Treatment	Safety Benefits	2022 Cost	Possible External Funding	Network and Road Safety	Links to Education Facility	Link to Community Facility	Community Feedback	PPN	Priority
37		Queens Rd	Jamieson to Botanic Road	Investigate One Way	2	\$200	None	-	-	-	-	-	-
2		Botanic Rd	Bromfield St	Raised Platform on approaches. Enlarged central island and instal kerb outstands	5	\$250,000	Medium	5	5	5	3	2	6.6
34		Botanic Rd	Queens Rd	Raised Platform on approaches. Enlarged central island and instal kerb outstands	5	\$250,000	High	5	5	5	3	2	6.6
38		Botanic Road	Length	Implement 50km/h speed limit	5	\$1,000	Apply to DOT	5	5	5	3	2	6.6
32		Botanic Rd	Canterbury Rd	Raised threshold on Canterbury, Ban right turn from Canterbury to Botanic	2	\$45,000	Low	5	5	5	3	2	6.6
9		Jamieson St	South-west of Nelson St	Raised school crossing	5	\$90,000	Medium	5	5	5	3	2	6.6
10		Queens Rd	Midway between Jamieson St and Botanic Road	Wombat crossing	5	\$90,000	Medium	5	5	5	3	2	6.6
39		Botanic Rd	East of Canterbury Rd	Wombat crossing	5	\$90,000	Low	5	5	5	3	2	6.6
1		Botanic Rd	East of Ardie St	Wombat Crossing to replace existing pedestrian refuge at Roundabout	5	\$100,000	Medium	5	5	5	3	2	6.6
1		Botanic Rd	Ardlie St	Wombat crossings on north/east leg of roundabout. Raised platform on approach, enlarged centre island.	5	\$250,000	Medium	5	5	5	3	2	6.6
-		-	Botanic Rd/Ardlie Street	Sharrows at roundabouts that do not have them	1	\$800	Low	5	5	5	2	2	6.4
			Botanic Road/Bromfield Street	Sharrows at roundabouts that do not have them	1	\$800	Low	5	5	5	2	2	6.4
			Canterbury Road/Bromfield Street	Sharrows at roundabouts that do not have them	1	\$800	Low	5	5	5	2	2	6.4
13		Bromfield St	Russell Creek Walking Trail	Wombat crossing	5	\$90,000	Medium	5	5	5	2	2	6.4
4		Botanic Rd	Between Bromfield St and Queens Rd	Wombat crossing	5	\$90,000	Medium	4	5	5	3	2	6.2
17		Ardlie St	South of Barbers Lane	Pedestriann Refuge. Wombat Crossing if Warrented	5	\$90,000	Medium	5	5	4	2	2	6.2
33		Botanic Rd	Wentworth St	Raised threshold on Wentworth St. Ban right turn from Wentworth to Botanic	2	\$45,000	Low	4	5	5	2	2	6
21		Ardlie St	Botanic Rd to Barbers Lane	New footpath on east side	5	\$90,000	None	4	5	4	2	2	5.8
18		Botanic Rd	Bromfield St to bus stop west of Queens Rd	New footpath on south side	5	\$90,000	None	3	5	5	3	2	5.8
3		Botanic Rd	West of Queens Rd	Raised school crossing	5	\$90,000	Low	3	5	5	2	2	5.6
12		Ardlie St	North of Botanic Rd	Raised school crossing	5	\$90,000	Low	3	5	5	2	2	5.6
11		Queens Rd	Russell Creek Walking Trail	Raised school crossing	5	\$90,000	Low	3	5	5	2	2	5.6



Map	Icon	Road	Location	Treatment	Safety Benefits	2022 Cost	Possible External Funding	Network and Road Safety	Links to Education Facility	Link to Community Facility	Community Feedback	PPN	Priority
37		Ardlie St	North of Botanic Rd	On-road cycle lanes on Ardlie St north of Botanic Rd	1	\$2,800	None	3	5	5	2	2	5.6
30		Queens Rd	Botanic Rd to Russell Creek Trail	Implement 'Drop Off Point' indented parking zone on west side	1	\$5000 per bay	None	3	5	5	1	2	5.4
23		Botanic Rd	Bromfield St to bus stop west of Queens Rd	Indented parking on south side with 'Drop Off Point' restrictions	1	\$5000 per bay	None	3	5	5	1	2	5.4
25		Botanic Rd	Wentworth St to Bromfield St	Indented parking on both sides to stop parked vehicles obstructing the bike lanes	1	\$5000 per bay	None	3	5	5	1	2	5.4
26		Bromfield St	Botanic Rd to tennis courts	Drop Off LOOP being implemented by School at the Tennis Courts	1	\$5,000 per Bay	None	3	5	5	1	2	5.4
19		Bromfield St	Botanic Rd to Russell Creek Walking Trail	New shared path on east side	5	\$90,000	None	3	5	4	2	2	5.4
5		Jamieson St	Between Raglan Pde and Canterbury Rd	Raised school crossing	5	\$90,000	Low	3	5	3	2	2	5.2
24		Botanic Rd	Raglan Pde to Ardlie St	Ban parking to stop parked vehicles obstructing the bike lanes	1	\$500	None	1	5	5	2	2	4.8
14		Canterbury Rd	Bromfield St/King St	Wombat crossings on all legs of roundabout	5	\$432,000	Medium	5	5	5	3	0	4.6
8		Princess St	South-east of Jamieson St	Raised Platform or speed cushions at near existing crossing location	5	\$90,000	Low	5	5	5	2	0	4.4
35		Canterbury Rd	Jamieson St to King St	Implement 40 km/h speed limit	5	\$1,000	Apply to DOT	5	4	5	2	0	4.2
-		Barbers Lane	West side of Bromfield St	Retain existing raised threshold treatment	2	\$0	None	4	5	5	2	0	4
6		Canterbury Rd	North-west of Jamieson St	Raised school crossing	5	\$90,000	None	3	5	4	2	0	3.4
15		Canterbury Rd	Near Somers Rd	Wombat crossing	5	\$90,000	None	3	4	5	2	0	3.4
29		Cockman St	North side- 4 parks closest to Jamieson St.	Implement restrictions (eg. 2P at the first 4 carparks closest to the garden gates – Jamieson st) to deter all day parking	1	\$200	None	2	5	5	3	0	3.4
7		Spence St	South of Jamieson St	Raised school crossing	5	\$90,000	None	3	5	4	2	0	3.4
28		Canterbury Rd	Jamieson St to King St	Implement 'Drop Off Point' restrictions on one or both sides	1	\$5,000 per Bay	None	3	4	5	1	0	3.2
22		Barbers Lane	Wentworth St to Bromfield St	Indented parking on north side with 'Drop Off Point' restrictions	1	\$5,000 per Bay	None	3	5	4	1	0	3.2
36		Wentworth St	Barbers Lane	Raised intersection	2	\$45,000	None	2	5	5	2	0	3.2
27		Canterbury Rd	Botanic Rd to Emmanuel College	Indented parking on one or both sides with 'Drop Off Point' restrictions	1	\$5,000 per Bay	None	3	4	4	1	0	3
16		Nelson St	Jamieson St	Raised threshold crossing	2	\$45,000	None	2	4	5	2	0	3
20		Cockman St	Full length	New footpath on north side	5	\$110,000	None	1	4	5	2	0	2.6



LOCATION	RATIONALE	FEEDBACK
Emmanuel Loop from Hopetoun Rd to Botanic Rd	Reduce cars in the precinct, alleviate the need for parents to park in bus stop area	Council to have discussion with Emmanuel about this access. Part of the Master Plan?
Raglan Pde and Botanic Road	Vehicle Access to the precinct- complex intersection, no access across Raglan Pde intersection for people walking. Link to Aitkins Rd precinct (car and walking and cycling)	Already in discussion with VicRoads
Raglan Pde and Ardlie St	Vehicle Access to the precinct- complex intersection, access across Raglan Pde intersection for people walking. Link to Kerr St precinct (car and walking and cycling)	Already in discussion with VicRoads
Raglan Pde and Jamieson St	Possible Drop off in median strip- needs footpath to link parks to the traffic lights.	
Crossing on Moore st near Kiama Av.	Mortlake Road Roundabout does not provide safe access for residents living in the Cramer St area to get to the Russells Creek path walking or cycling	
Possible future access Bromfield St from North		Not going to happen in the short term
Donovan Rd and Queens Rd intersection.	Identified by several residents as a challenge to cross due to traffic volume, speed and concerns for safety of children	Included South Merri precinct plan
Heavy Vehicle movement	Review impact of infrastructure on heavy vehicle movement.	More investigation required
Queens Road one way between Botanic and Jamieson St	To improve the access for people moving from the Botanic Gardens to Aquazone	Traffic Review required to determine the impact

