



LOCAL AREA PLACE MAKING STUDY

BENDIGO LOCAL AREA PLACE MAKING STUDY

BENDIGO PRECINCT, RICHMOND

19 NOVEMBER 2018

BENDIGO PRECINCT, RICHMOND

CLIENT: Yarra City Council

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1 INTRODUCTION

O'Brien Traffic has been engaged by Yarra City Council to undertake a Local Area Place Making Study in the Bendigo Precinct, Richmond.

The Study has been undertaken in accordance with Council's Local Area Place Making Policy 2017.

Local Area Place Making (LAPM) is primarily focussed on the planning and management of Council roads. It aims to improve places for people by managing vehicle traffic and improving conditions for pedestrians and cyclists.

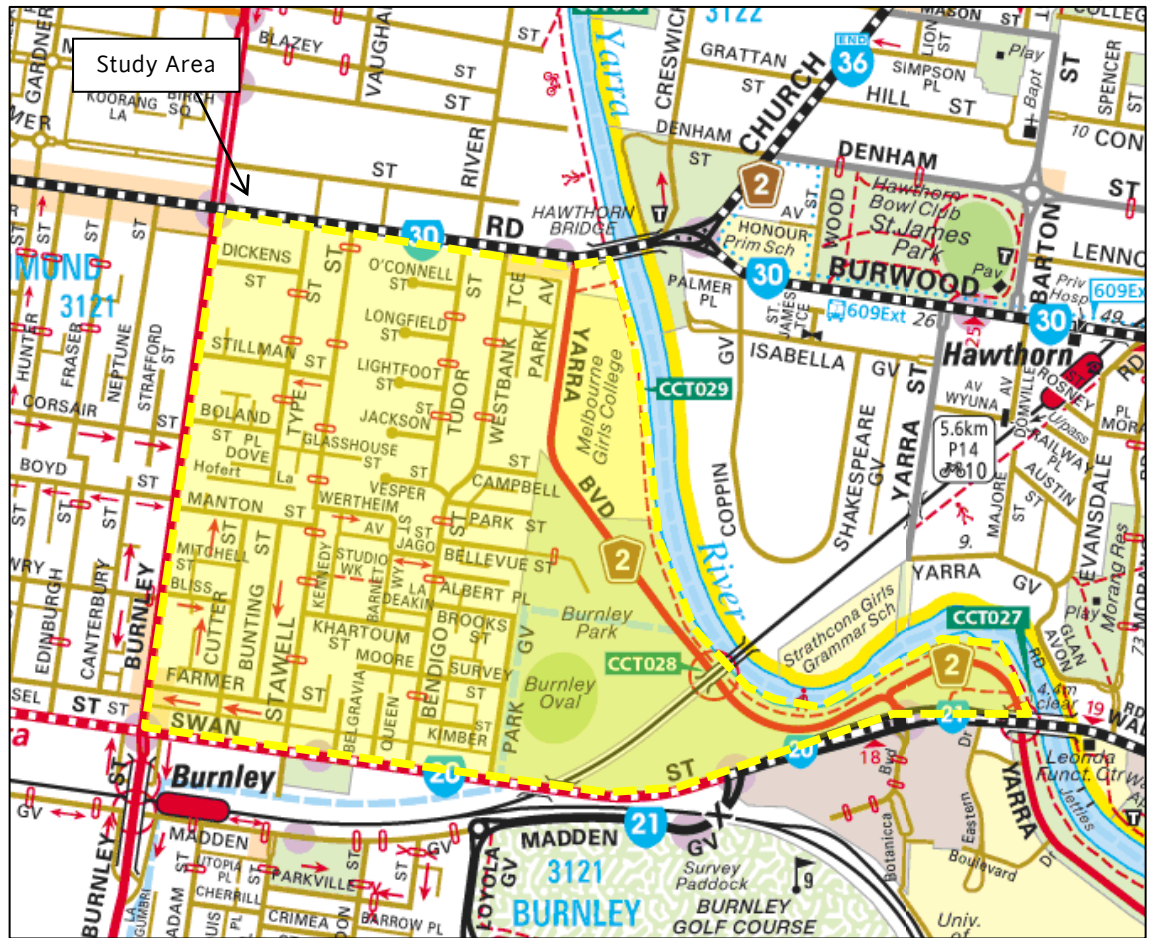
Engagement with the community is a key component of the LAPM process. The input of the community in identifying the issues and needs in their neighbourhood, together with analysis of traffic data and crash data, forms the basis for the development of the LAPM scheme.

2 STUDY AREA

The study area is bounded by Bridge Road, Swan Street, Burnley Street, and the Yarra River in Richmond, as shown in **Figure 1**.

The study area is predominantly residential, with the exception of:

- Melbourne Girls College, located on the eastern side of Yarra Boulevard;
- the Main Yarra Trail, Burnley Oval and Burnley Park; and
- retail/commercial uses fronting Bridge Road, Swan Street and Burnley Street.



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FIGURE 1: LOCATION OF SUBJECT AREA

3 EXISTING CONDITIONS

3.1 STREET NETWORK

3.1.1 Arterial Roads

The study area is bounded by the arterial roads of Bridge Road, Swan Street and Burnley Street to the north, south and west respectively, with Yarra Boulevard located near the eastern boundary.

Arterial roads are under the control and management of VicRoads. Council typically do not undertake works on VicRoads' roads, however can advocate to VicRoads for works to be undertaken.

Bridge Road is a Primary Arterial Road. It provides two traffic lanes and marked kerbside parking bays in each direction, separated by central tram tracks located within a segregated carriageway. A bicycle lane is provided on the southern side. Kerbside parking is permitted outside of clearway times (which obstructs the bicycle lane).

Swan Street is a Secondary Arterial Road providing two traffic lanes in each direction

with a shared central tram lane. Kerbside parking is permitted outside of clearway times.

Burnley Street is a Secondary Arterial Road providing one traffic lane, a bicycle lane and parking lane in each direction.

Yarra Boulevard is a Secondary Arterial Road providing one traffic lane in each direction with kerbside parking permitted.

3.1.2 Local streets

All other streets within the study area are local streets. These are typically orientated approximately east-west or north-south.

Most streets provide for two-way traffic movements, although some streets are one-way only – Cutter Street, Wertheim Street, Farmer Street, Bunting Street and Stillman Street (eastern section).

Speed humps have been implemented in numerous streets – Westbank Terrace, Tudor Street, Bendigo Street, Stawell Street, and Type Street.

Kerbside parking is typically permitted in most streets. Parking in Tudor Street is permitted on the eastern side only and parking in Stawell Street is permitted on the western side only.

3.2 PUBLIC TRANSPORT ROUTES

Public transport routes are shown in **Figure 2**.

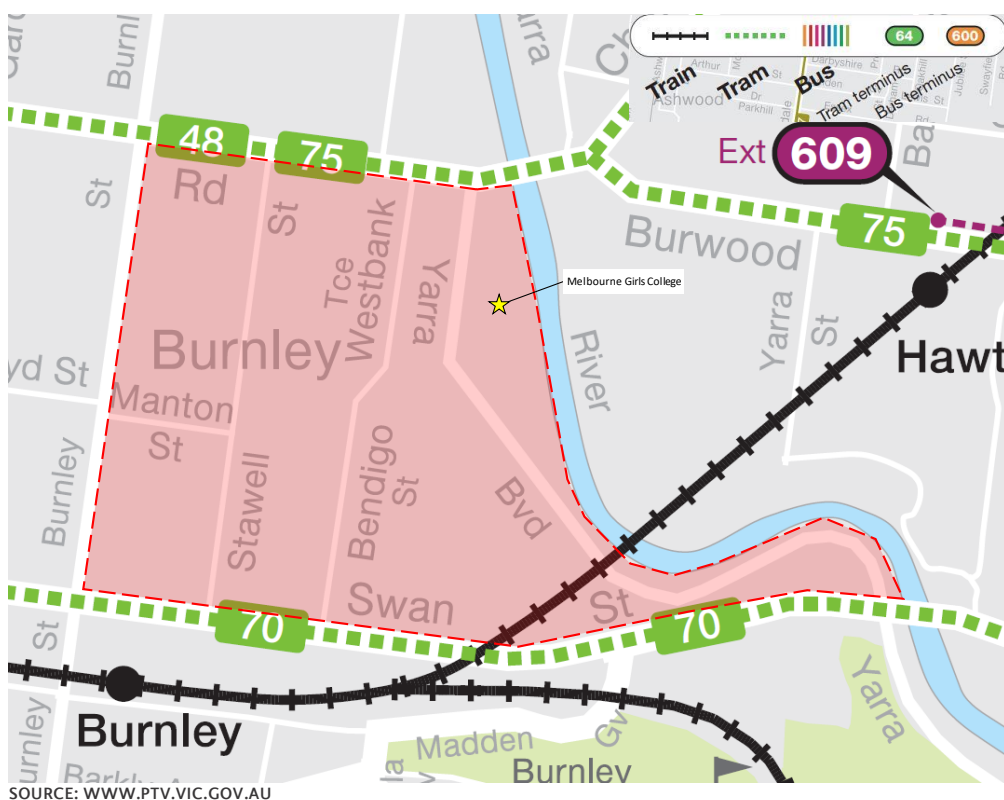


FIGURE 2: PUBLIC TRANSPORT ROUTES

Bridge Road and Swan Street are tram routes.

The Lilydale/Alamein train line traverses the study area. The closest station is Burnley Station, south of Swan Street.

3.3 BICYCLE ROUTES

Bicycle routes are shown in Figure 3.

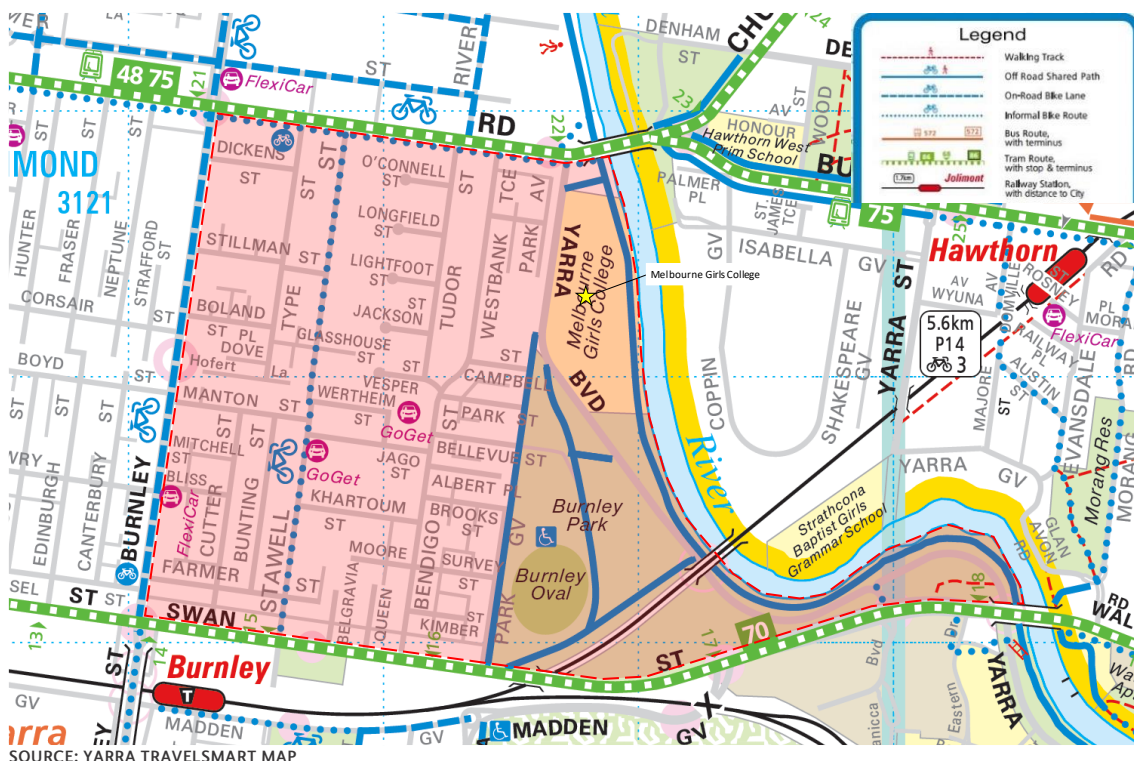


FIGURE 3: BICYCLE ROUTES

3.3.1 Off-road bike paths

The Main Yarra Trail runs along the Yarra River. This is a shared path that is popular with recreational users and commuters. There are also various off-road paths through Burnley Park.

3.3.2 On-road bicycle routes

On-road bicycle lanes are provided on Burnley Street.

Bridge Road and Stawell Street are informal bicycle routes.

3.4 TRAFFIC VOLUMES AND SPEED DATA

Traffic volume and speed data was provided by Council and is presented diagrammatically in **Appendix A**. This includes:

- Weekday traffic volumes;
- AM and PM peak hour volumes; and
- 85th percentile speed¹ data.

1. The speed at which 85% of all vehicles travel under.

3.4.1 Traffic volumes

Most local streets within the study area have traffic volumes less than 1,000 vpd. The streets with higher traffic volumes are:

- Bendigo Street (3,946 vpd);
- Westbank Terrace (3,381 – 3,617 vpd); and
- Stawell Street (1,406 – 1,665 vpd).

3.4.2 Vehicle speeds

A 40 km/h speed limit applies to the study area, excluding the arterial roads. Most of the local streets have 85th percentile speeds less than 40 km/h. Westbank Terrace and Khartoum Street have 85th percentile speeds greater than 40 km/h, as follows:

- Westbank Terrace, north of Vesper Street - 45.6 km/h; and
- Khartoum Street - 42.1km/h

The northern end of Yarra Boulevard, in the vicinity of Melbourne Girl's College has a permanent 40km/h speed zone. The 85th percentile speeds recorded in this section of Yarra Boulevard are 47.8 km/h (south of Bridge Road) and 49.4 km/h (near the bend).

3.5 CRASH DATA

VicRoads casualty crash data for the period from 1 July 2012 to 30 June 2017 was provided by Council. The crash data is presented diagrammatically in **Appendix B**.

Figure 4 shows the location of each vehicle, bicycle and pedestrian casualty crash in the area over the five-year period. (Note Figure 5 does not include crashes on Bridge Road, Burnley Street or Swan Street).

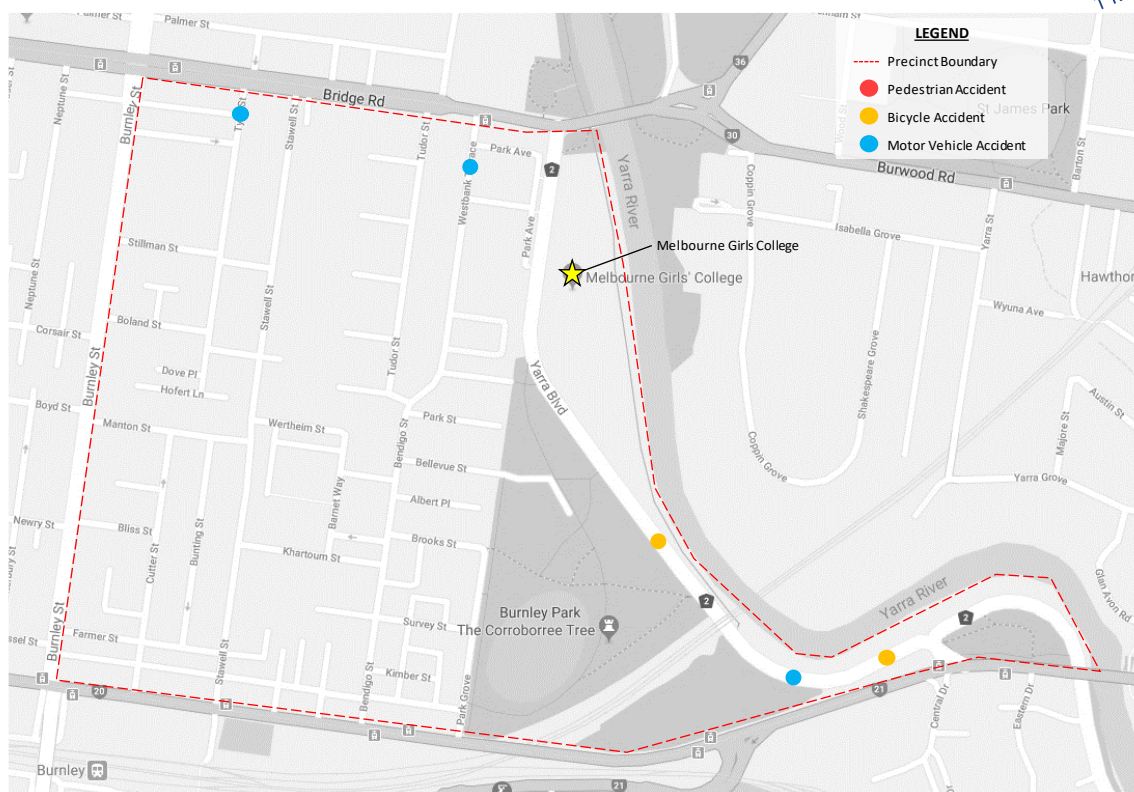


FIGURE 4: CASUALTY CRASHES – JANUARY 2012 TO JUNE 2017

Figure 4 shows there have been 3 vehicle crashes, 2 bicycle crashes and no pedestrian crashes in the study area in the five-year period.

3.6 PEDESTRIAN COUNTS

Pedestrian count data was provided by Council and is presented diagrammatically in **Appendix C**. The data includes pedestrian counts at various points along Bendigo Street between Bellevue Street and Khartoum Street.

4 IDENTIFICATION OF ISSUES AND PRIORITIES

4.1 TRAFFIC VOLUME AND SPEED DATA

The traffic data for the local streets has been analysed against a set of criteria to identify streets where traffic volume, rat-running, vehicle speeds or heavy vehicles may be an issue of concern. The criteria are listed below:

- Traffic volume - weekday traffic volume greater than 1,000 vpd;
- Through traffic (rat-running) - AM or PM peak hour volumes greater than 14% of the daily volume; and
- Vehicle speeds - 85th percentile speed greater than 40 km/h; and
- Heavy vehicles – proportion of heavy vehicles in excess of 5% of total traffic.

The traffic analysis is summarised in **Figure 5** and discussed further in Sections 4.1.1 to 4.1.4.

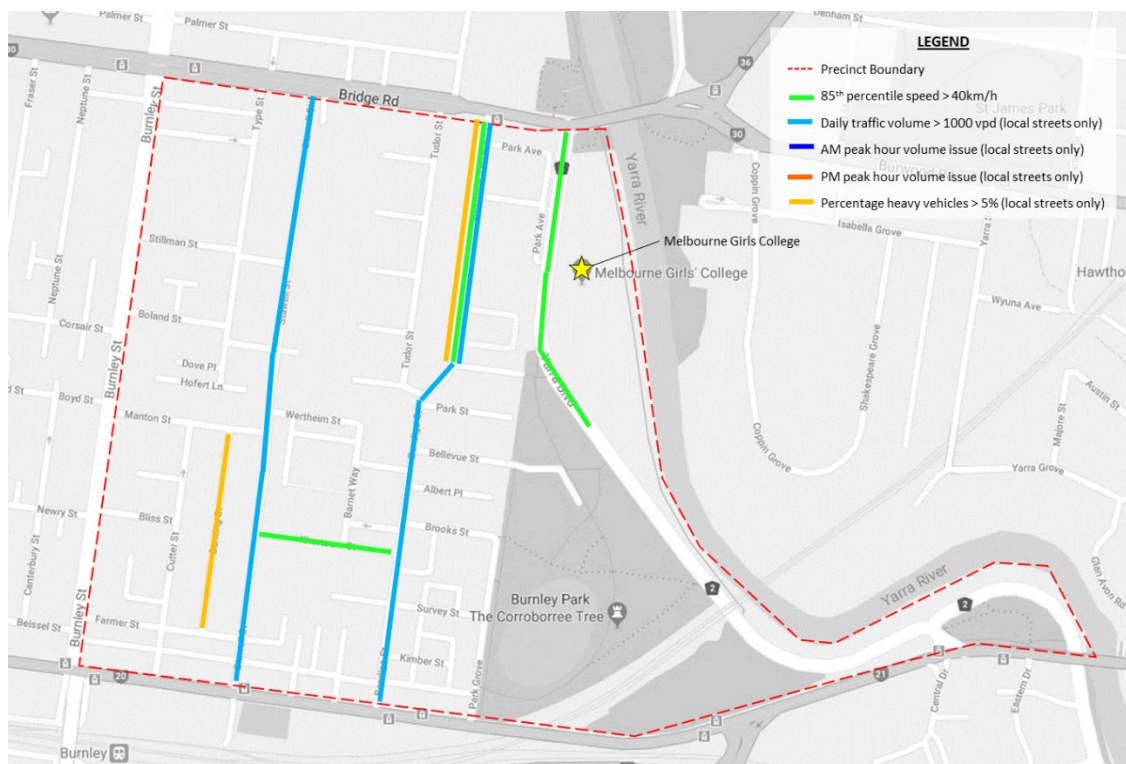


FIGURE 5: POTENTIAL ISSUES OF CONCERN – VEHICLE SPEEDS, TRAFFIC VOLUME, AM/PM PEAK PERIOD RAT-RUNNING, AND HEAVY VEHICLES

4.1.1 Daily Traffic Volumes

Typically, local streets with traffic volumes of 1,000 vehicles per day (vpd) or lower is considered acceptable. As discussed above, the streets with weekday traffic volumes greater than 1,000 vpd are:

- Bendigo Street;
- Westbank Terrace; and
- Stawell Street.

4.1.2 Peak Hour Traffic Volumes

Where the peak hour traffic volume is greater than 14% of the daily traffic volume, through traffic or ‘rat-running’ is identified as a potential issue. This does not occur for any streets within the study area.

4.1.3 Traffic Speeds

As discussed above, most of the local streets have 85th percentile speeds less than 40 km/h, with the exception of:

- Westbank Terrace; and
- Khartoum Street.

Whilst not a local street, vehicle speeds at the northern end of Yarra Boulevard are also identified as an issue, given the proximity of Melbourne Girl's College and the permanent 40km/h speed zone.

4.1.4 Heavy Vehicles

Local streets should typically have a low proportion of heavy vehicles – unless they serve industrial areas or are bus routes. In the study area, traffic volumes comprise more than 5% heavy vehicles on the following streets:

- Westbank Terrace (6.4% heavy vehicles); and
- Bunting Street (5.1% heavy vehicles) (however, given the daily traffic volume in Bunting Street is low, the actual number of trucks is very small).

4.2 CONSULTATION: STAGE ONE – ISSUES AND IDEAS

Council consulted with the community at the commencement of the project to inform the community of the project and invite their input.

The Stage One Consultation comprised:

- Postcards – delivered to residents and businesses;
- Information sessions; and
- On-line survey – inviting participants to identify issues of concern and offer suggestions.

The on-line survey identified a range of issues including traffic volumes, vehicle speeds, pedestrian and cyclist safety, pedestrian and cyclist infrastructure, and amenity.

4.3 OVERVIEW OF ISSUES

An overview of the issues identified from the traffic data, crash data and community consultation is presented in **Figure 6**.



FIGURE 6: OVERVIEW OF TRAFFIC ISSUES IN THE STUDY AREA

4.4 CONSULTATION: STAGE TWO - PRIORITIES

Following analysis of the traffic and crash data, and summation of the community input, Council undertook a second on-line survey to rank priorities. The results of the survey are provided in **Appendix D**.

The highest priority Council roads, and the issues of concern, were identified as follows:

- **Bendigo Street/Westbank Terrace** – traffic speed and volume, driver behaviour at the bend (in Westbank Terrace), and pedestrian safety/crossings;
- **Stawell Street** – width of street, cyclist safety, and traffic volume; and
- **Khartoum Street** – traffic speed and issues around the GTV Nine site.

Issues identified on the VicRoads managed roads ranked highly as follows:

- **Burnley Street** – bike lanes, pedestrian crossings at Swan Street and Bridge Road, trucks and speed limit;
- **Bridge Road** – pedestrian safety/crossings, bike lanes, right turns in/out of side streets, more trees (at Officeworks) and speed limit;
- **Swan Street** – pedestrian safety at Bendigo Street, bike lanes, pedestrian crossings, more trees and speed limit; and
- **Yarra Boulevard** – traffic speed, bike connections to shared paths, and pedestrian safety/infrastructure near Melbourne Girl's College.

While issues on the VicRoads managed roads are being considered as part of the LAPM study, any proposed treatments would be in the form of advocacy to VicRoads.

5 DEVELOPMENT OF POTENTIAL TREATMENTS

5.1 LOCAL AREA STUDY GROUP MEETING ONE

The first meeting of the Local Area Study Group was held on Tuesday 27th February 2018 at 345 Bridge Road, Richmond.

The aim of the meeting was primarily to develop a draft LAPM Scheme.

A summary of the results of the on-line survey was presented to the Study Group and was generally endorsed by the Group. The Study Group then discussed potential treatment options for the study area.

Minutes of the LASG Meeting are provided in **Appendix E**.

5.2 POTENTIAL TREATMENTS – LOCAL STREETS

Based on the discussions at the LASG Meeting, potential treatments were developed to address the identified issues. These are discussed below.

5.2.1 Westbank Terrace

Traffic volume and vehicle speeds were identified as issues in Westbank Terrace.

There was a suggestion from the LASG for a peak period right turn ban from Bridge Road. However, an alternative approach would be to remove the existing AM peak right turn ban into Yarra Boulevard and this may shift some right turners from Westbank Terrace to Yarra Boulevard. This is discussed further in Section 5.3.1.

It is proposed to replace the existing two speed humps in Westbank Terrace with up to three sinusoidal speed humps which would be more effective in reducing vehicle speeds while being bicycle friendly.

Suggestions from the LASG also included road narrowings and additional landscaping. Opportunities to provide additional street trees on the eastern side of the street without loss of parking is limited. However, kerb outstands and landscaping could be provided either side of Park Avenue and south of Campbell Street, and the kerb outstand on the northern side of Campbell Street enlarged.

5.2.2 Westbank Terrace/Bendigo Street

There were concerns about traffic at the bend travelling too fast and/or crossing the centreline. The LASG suggested a treatment be provided to control vehicle speed and lane discipline at the bend.

It is proposed that a median island be provided at the bend, between Campbell Street and Vesper Street. This would result in the loss of 5 car spaces.

There was also a suggestion to remove parking on the eastern side of Westbank Terrace north of Campbell Street as parked cars can block sightlines for drivers exiting Campbell Street. With the extension of the kerb outstand at this location (as discussed above) the Give Way line would be brought forward which would address this issue.

5.2.3 Bendigo Street

The LASG identified the need for a pedestrian crossing near Brooks Street and the connection to Burnley Park. The Bendigo Street Milk Bar is also located in close proximity.

There is opportunity to repurpose a small number of parking spaces and create a pedestrian friendly area with a raised zebra crossing, landscaping, seats and bike racks. An indicative layout is shown in **Figure 7**.



FIGURE 7: PROPOSED PEDESTRIAN CROSSING, KERB OUTSTANDS AND LANDSCAPING, BENDIGO STREET

5.2.4 Stawell Street

Traffic volumes and cyclist safety were identified as issues in Stawell Street.

The combination of street width, two-way traffic flow and kerbside parking results in poor conditions for cyclists. This is less than desirable given Stawell Street is identified as an informal bike route on the Yarra TravelSmart Map.

There were numerous suggestions from the LASG to reduce traffic volumes and improve conditions for cyclists. One option would be to convert Stawell Street to one-way (northbound) and provide a contraflow bike lane. However, it is acknowledged that this would have a significant impact on local accessibility.

Given that Stawell Street has had no reported casualty crashes in the five-year analysis period and that vehicle speeds are well controlled by existing speed humps, community expectations for additional treatments are probably lowered.

5.2.5 Yarra Boulevard

In order to address vehicle speeds and improve pedestrian safety on Yarra Boulevard, it is proposed to replace the existing school crossings with raised zebra crossings. It is noted that the southern crossing provides a connection to Burnley Park and is used by the wider community.

Given Yarra Boulevard is a VicRoads managed road, Council would advocate for VicRoads to approve and fund the crossing upgrades in the first instance.

It is also proposed to widen the footpath on the eastern side of Yarra Boulevard in the vicinity of Melbourne Girls College. This would not require VicRoads' approval.

5.3 POTENTIAL TREATMENTS - ADVOCACY TO VICROADS

Treatments have been considered on the arterial roads for advocacy to VicRoads as follows.

5.3.1 Bridge Road / Yarra Boulevard

Currently there is weekday AM peak period right turn ban from Bridge Road to Yarra Boulevard. Removal of the turn ban would take pressure off the right turn movement into Westbank Terrace, and possibly Stawell Street.

It is noted that many parents dropping students at Melbourne Girls College turn right from Bridge Road into Westbank Terrace and drop off in Park Avenue. If the right turn ban at Yarra Boulevard was removed, some of this traffic would likely re-route to Yarra Boulevard.

Provision of traffic signals at the intersection would improve safety for vehicles turning in and out of Yarra Boulevard and encourage the use of Yarra Boulevard in preference to Westbank Terrace and Stawell Street.

5.3.2 Bridge Road Tram Stop Near Yarra Boulevard

There is concern regarding the available storage area at the tram stop near Yarra Boulevard. At school start/finish times the tram stop is used by a high number of students and the storage area is insufficient. Consideration should be given to upgrading and/or relocating the tram stop.

5.4 CONSULTATION: STAGE THREE – DRAFT LAPM SCHEME

A draft LAPM Scheme comprising the treatments discussed above was put to the community to gauge the level of support for each proposed treatment.

The Stage Three Consultation comprised:

- Brochures - delivered to all residents and businesses in the area;
- Information session; and
- On-line survey.

The on-line survey was in the form of an interactive map and invited the community to “like” or “dislike” each treatment and provide a comment if desired.

A copy of the draft LAPM Scheme and the community response is provided in **Appendix F**.

A total of 98 responses were received. Overall there was good support for all the treatments with the exception of the proposed one-way in Stawell Street with contraflow bike lane.

5.5 LOCAL AREA STUDY GROUP MEETING 2

The second meeting of the LASG was held on Thursday 13th September 2018 at Burnley Backyard in Richmond.

The aim of the meeting was to consider the results of the community consultation and reach agreement on proposed treatments to form the draft LAPM Scheme.

The results of the community consultation were presented and generally resonated with the Group.

There were some concerns regarding the loss of parking in Westbank Terrace that would result from the proposed median treatment at the bend. However, the proposed treatment was generally supported on safety grounds. A proposal to reinstate parking on both sides of Tudor Street was suggested by Council officers to offset the loss of parking. Some residents of Tudor Street expressed concerns. However, the width and traffic volumes in Tudor Street are satisfactory to allow parking on both sides. Consultation on reinstating parking to both sides of Tudor Street was recommended.

Overall, the LASG supported all the proposed treatments with the exception of the proposed one-way and contraflow bike lane on Stawell Street.

Minutes of the LASG Meeting are provided in **Appendix G**.

6 DRAFT LAPM SCHEME

A draft LAPM Scheme has been developed based on the data and consultations and is presented diagrammatically in **Figure 8**.

Concept plans for the proposed treatments are provided in **Appendix H**.

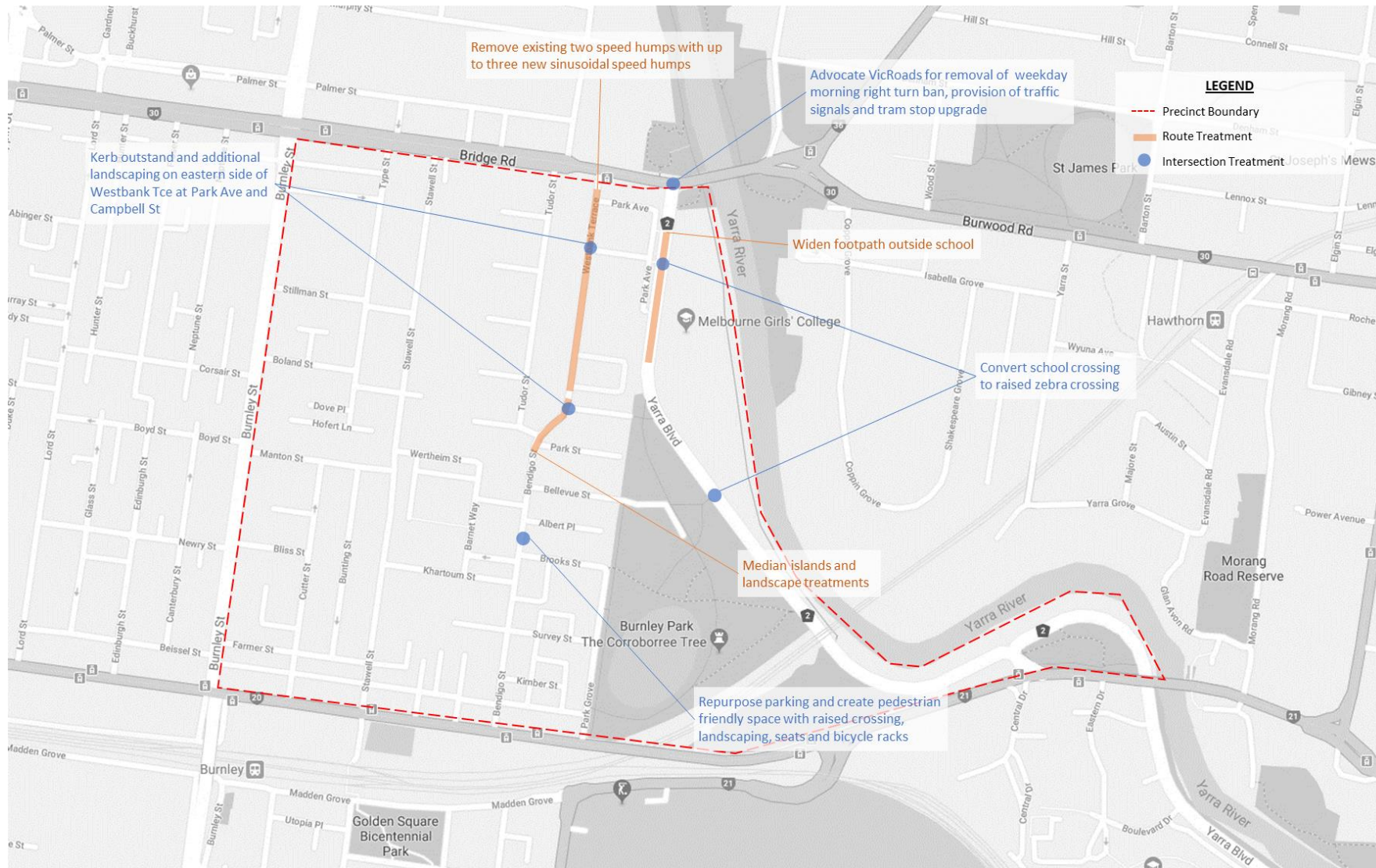


FIGURE 8: DRAFT LAPM SCHEME

7 INDICATIVE COST ESTIMATES

Indicative cost estimates are provided in Table 1. The indicative cost estimates do not include street lighting or drainage works.

#	LOCATION	PROPOSED TREATMENT	INDICATIVE COST ESTIMATE*
1	Bridge Road at Yarra Boulevard	Advocate VicRoads for removal of weekday morning right turn ban, provision of traffic signals and tram stop upgrade	Council Officer time
2	Westbank Terrace at Park Avenue	Kerb outstands and additional landscaping on eastern side of Westbank Terrace at Park Avenue	\$30,000
3	Yarra Boulevard	Convert northern school crossing on Yarra Blvd to raised zebra crossing (subject to VicRoads approval)	\$20,000
4	Westbank Terrace	Remove existing two speed humps and replace with up to three new sinusoidal (bike friendly) speed humps	\$50,000
5	Yarra Boulevard	Widen footpath outside Melbourne Girls' College	\$20,000
6	Westbank Terrace at Campbell Street	Kerb outstands and additional landscaping on eastern side of Westbank Terrace at Campbell Street	\$20,000
7	Westbank Tce/ Bendigo Street	Median island and landscape treatments at bend between Campbell Street and Vesper Street	\$40,000
8	Yarra Boulevard	Convert southern school crossing on Yarra Blvd to raised zebra crossing (subject to VicRoads approval)	\$20,000
9	Bendigo Street	Repurpose parking outside Bendigo St Milk Bar and create pedestrian friendly space with raised crossing, landscaping, seats, bike racks and outdoor dining opportunities	\$120,000

* Does not include street lighting or drainage works

TABLE 1: INDICATIVE COST ESTIMATES

8 VICROADS ADVOCACY PROJECTS

In addition to the proposed treatments shown on the draft LAPM Scheme, a list of priority projects on the arterial roads has been formulated throughout the study.

As discussed earlier, Council typically do not undertake works on the VicRoads managed arterial road network, however can advocate to VicRoads for implementation of treatments.

The priority projects on the arterial roads for advocacy to VicRoads are listed below.

Burnley Street

- Reduce speed limit;
- Raised threshold treatments at side street intersections for improved pedestrian access;
- Continue bike lanes to intersections of Bridge Road and Swan Street.

Swan Street

- Reduce speed limit;
- Make pedestrian traffic lights at Stawell Street clear, away from power poles for citybound road users;
- Raised threshold treatments at side street intersections for improved pedestrian access;
- A new pedestrian signal when warranted near Bendigo Street.

Bridge Road

Completion of VicRoads' Bridge Road Safety Improvement Project to original specifications including raised threshold treatments at side street intersections for improved pedestrian access.

9 CONCLUSION

A draft LAPM Scheme has been developed in consultation with the community and based on analysis of traffic data and crash data. In addition, a priority list of traffic management treatments on the arterial roads has been formulated.

It is recommended that:

- Council adopt the LAPM Scheme; and
- Council advocate to VicRoads for implementation of the proposed treatments on the arterial roads.

APPENDIX A

TRAFFIC VOLUME AND SPEED DATA

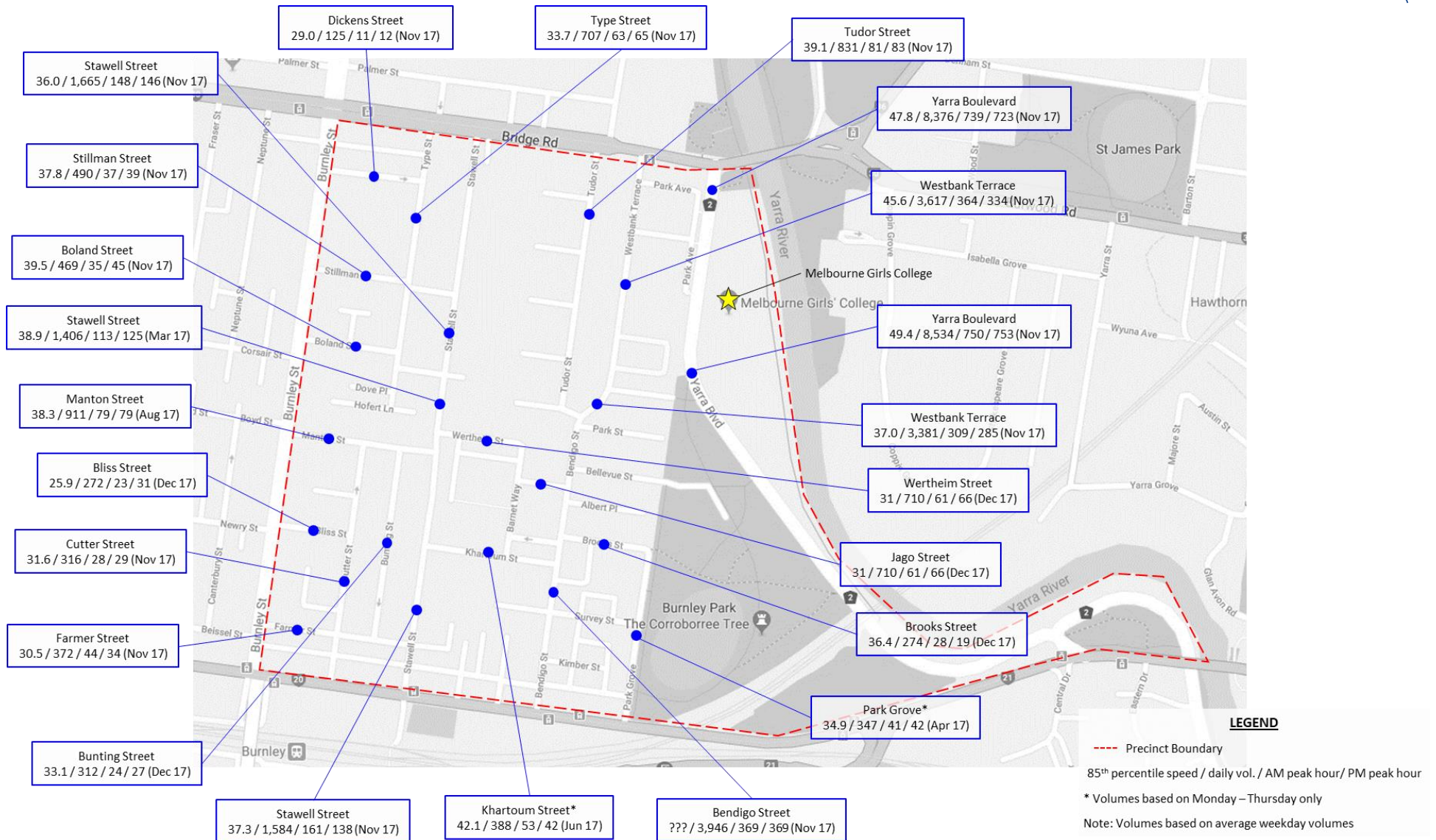


FIGURE A1: TRAFFIC VOLUME AND SPEED DATA

APPENDIX B

CRASH DATA

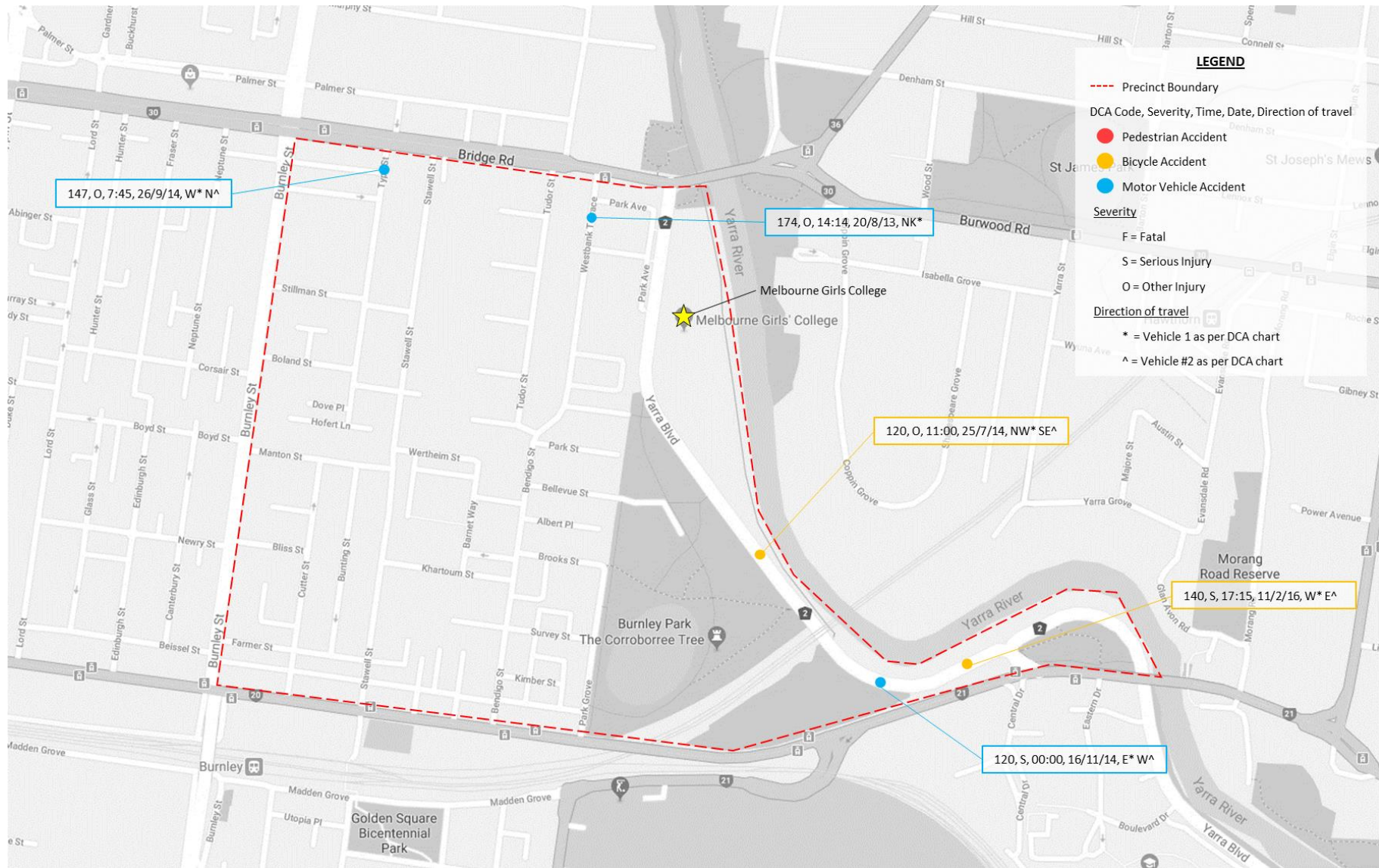


FIGURE B1: CASUALTY CRASH DATA – JULY 2012 TO JUNE 2017

APPENDIX C

PEDESTRIAN COUNT DATA

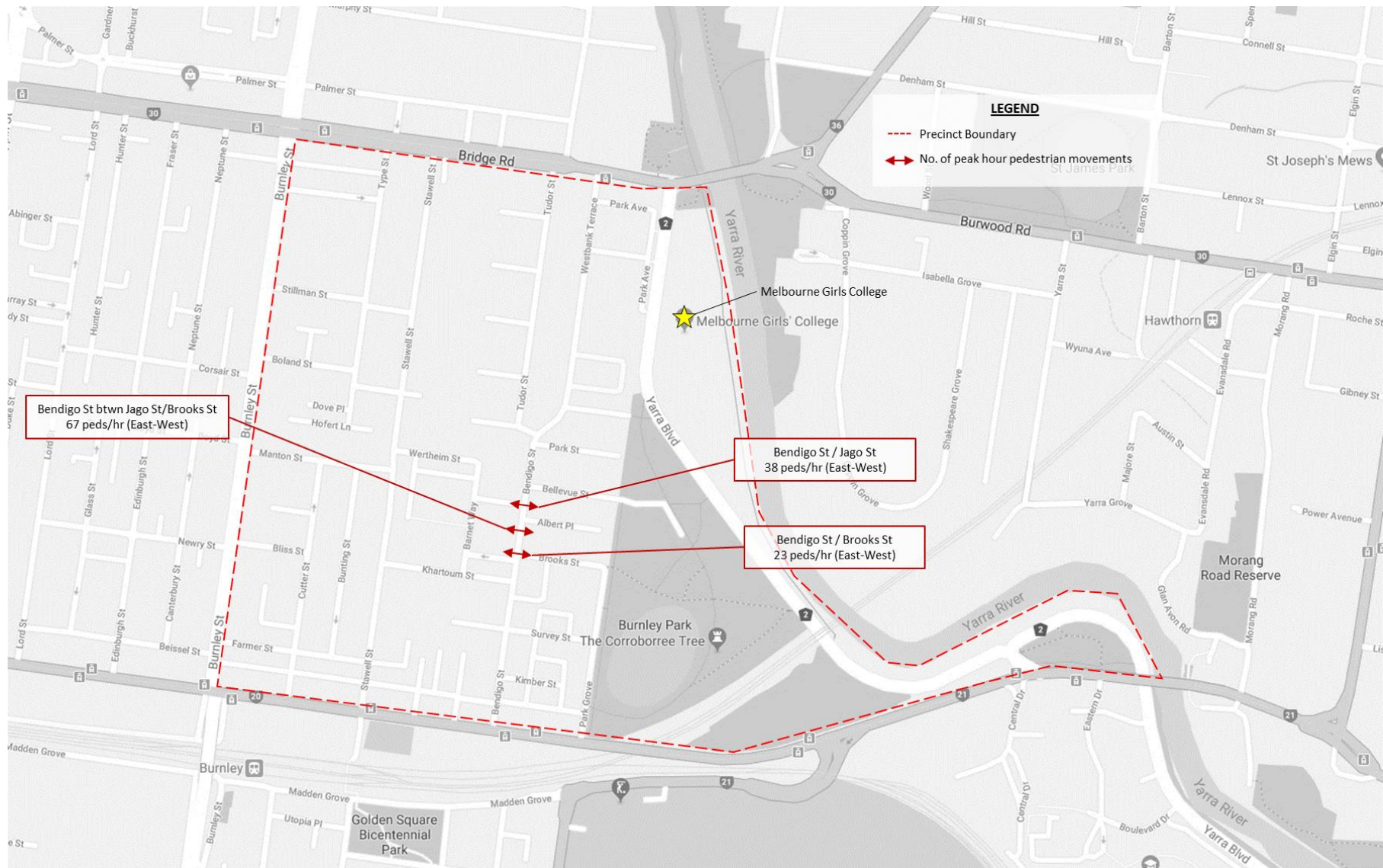


FIGURE C1: PEDESTRIAN COUNT DATA

COMMUNITY CONSULTATION – RANKING OF PRIORITY ISSUES

Please select the top issues/locations in your neighbourhood



FIGURE D1: RESULTS OF THE ON-LINE SURVEY – RANKING OF PRIORITY ISSUES

APPENDIX E

LOCAL AREA STUDY GROUP MEETING 1:

**TUESDAY 27TH FEBRUARY 2018
345 BRIDGE ROAD, RICHMOND**

MINUTES

LOCAL AREA PLACE MAKING STUDY: BENDIGO - RICHMOND

MINUTES OF LOCAL AREA STUDY GROUP MEETING 1

TUESDAY 27TH FEBRUARY 2018

345 BRIDGE ROAD, RICHMOND

1. ATTENDEES

Ted Teo, Transport Engineer	City of Yarra
Danny Millican, Senior Traffic Engineer	City of Yarra
Ross Evans, Coordinator Traffic	City of Yarra
Matt Harridge, Director	O'Brien Traffic
Jemima Macaulay, Associate	O'Brien Traffic
[REDACTED]	Lendlease Retirement, GTV Nine development
[REDACTED]	Bunting Street
[REDACTED]	Campbell Street
[REDACTED]	Stillman Street
[REDACTED]	Cutter Street
[REDACTED]	Westbank Terrace
[REDACTED]	Melbourne Girls' College

2. WELCOME AND INTRODUCTION

The meeting was opened by Ted Teo at 6:35pm.

Ted invited each person around the table to introduce themselves and briefly state their interest in the study.

Karen Armstrong from Lendlease Retirement provided a brief summary of the proposed aged care/retirement development on the GTV Nine site and noted that accessibility was a key issue.

Ted then handed over to Matt Harridge to chair the meeting.

3. BACKGROUND OF LAPMS AND ROLE OF LOCAL AREA STUDY GROUP

Matt referred to a handout provided to the Study Group outlining the discussion points for the meeting.

Matt provided an overview of the background of LAPM and the study process. The cost and timeframe to deliver the LAPM scheme was also discussed.

4. PRIORITISATION OF ISSUES

Matt described the process undertaken to identify the issues in the study area, including the community consultation and data analysis.

Ted noted that parking issues would not be dealt with through the LAPM study unless it was a No Stopping / access issue. All other parking issues, such as requests for time restrictions and Permit Zones, will be investigated through Parking Management Unit.

Matt reported the results of the on-line survey of top issues/locations. Burnley Street, Bridge Road, Swan Street and Yarra Boulevard were all ranked highly. Matt explained that these roads were managed by VicRoads and that Council would not implement treatments on them but could advocate to VicRoads.

Ted provided an overview of VicRoads road safety improvement works for Bridge Road, including at the intersections with Yarra Boulevard and Burnley Street.

Ted also noted that:

- Council doesn't have a position on signalling Yarra Boulevard/Bridge Road;
- Council had been in contact with Officeworks on Bridge Road in relation to pedestrian safety;
- Additional street trees are proposed/being considered for Swan Street and Bridge Road;
- Pedestrian signals on Burnley Street are working satisfactorily;
- Council would like to see bike lanes on Burnley Street continue to the intersections.

The Study Group commented that:

- The Bridge Road tram stop near Yarra Boulevard is a problem;
- There should be a pedestrian crossing on Bridge Road near the Child Care Centre (Ted responded that surveys would be required to see if warrants are met);
- Parking on Burnley Street near Swan Street restricts traffic to one lane;
- Traffic signals on Swan Street or Bridge Road near Bendigo Street/Westbank Terrace would attract additional traffic to those streets;
- The school crossings on Yarra Boulevard should be converted to zebra crossings (near the College) to give pedestrians priority at all times of day. The crossings could be raised to reduce vehicle speeds.

Ted advised the Study Group that Council will formally advocate to VicRoads for improvements on these roads as recommended by the LAPM study.

Matt reported the priority locations on Council roads from the on-line survey as follows (in order):

- Bendigo Street/Westbank Terrace
- Stawell street
- Khartoum Street

There was general agreement from the Study Group.

5. DRAFT LAPMS SCHEME DEVELOPMENT DISCUSSION

Matt invited the Study Group to break into two groups to discuss potential treatment options for the study area.

Potential treatments discussed were as follows.

Westbank Terrace

- Peak hour right turn ban from Bridge Road
- Additional landscaping/trees
- Road narrowings (e.g Kent Street)

Bendigo Street/Westbank Terrace

- Treatment around bend to control vehicle speeds/lane discipline
- Remove parking on east side immediately north of Campbell Street (blocks sightlines)

Bendigo Street

- Treatment around bend to control vehicle speeds/lane discipline
- Pedestrian crossing near Brooks Street (connection to parkland)
- Right turn ban from Swan Street

Stawell Street

- Potential one-way – possibly split northbound/southbound at Manton Street
- Closure at Manton Street
- Peak hour right turn ban from Bridge Road
- Treatments at Bridge Road and Swan Street to slow traffic
- Remove parking near Glasshouse Road (blocks sightlines)

Yarra Boulevard

- Replace school crossings with raised zebra crossings

Bridge Road

- No Right Turn at Stawell Street and Westbank Terrace (peak period)
- Tram stop near Yarra Boulevard has insufficient storage area (it is used by a high number of students) – consider relocating further west, near Jones Place

Bridge Road/Yarra Boulevard

- Consider traffic signals

Swan Street

- No Right Turn at Stawell Street (peak period)

Some additional issues were also identified that fall outside the scope of the LAPM study. These were:

- No through road sign on Bendigo Street at Campbell Street ineffective (Ted noted and will address by trialling a different yellow and black sign);
- Stawell St footpath has uneven vertical alignment (Ted noted and will refer to appropriate Council officer);
- Need for taxi zone/drop-off areas near Grand Hotel (Burnley Street) and Bridge Hotel (Bridge Street) (Ted noted and will refer to Parking Management Unit for consideration).

6. SUMMARY AND NEXT STEPS

Matt indicated that O'Brien Traffic would consider the outputs from the meeting and develop a draft LAPM scheme in consultation with Council.

Ted outlined the next round of community consultation that would take place to ascertain the community's views of the draft scheme. Following the community consultation, the Local Area Study Group will meet again to discuss the community response and amend the draft plan.

The next meeting of the Study Group will be in May 2018.

9. CLOSE OF MEETING

Matt thanked the Study Group for their participation and closed the meeting at 8:40pm.

**COMMUNITY CONSULTATION - ON-LINE SURVEY/INTERACTIVE MAP:
DRAFT LAPM SCHEME AND SURVEY RESPONSES**

YOUR SAY
YARRA

Taking it to the streets – Richmond Local Area Place Making

Visit www.yoursayyarra/improving-richmond
to add your feedback to an online, interactive map

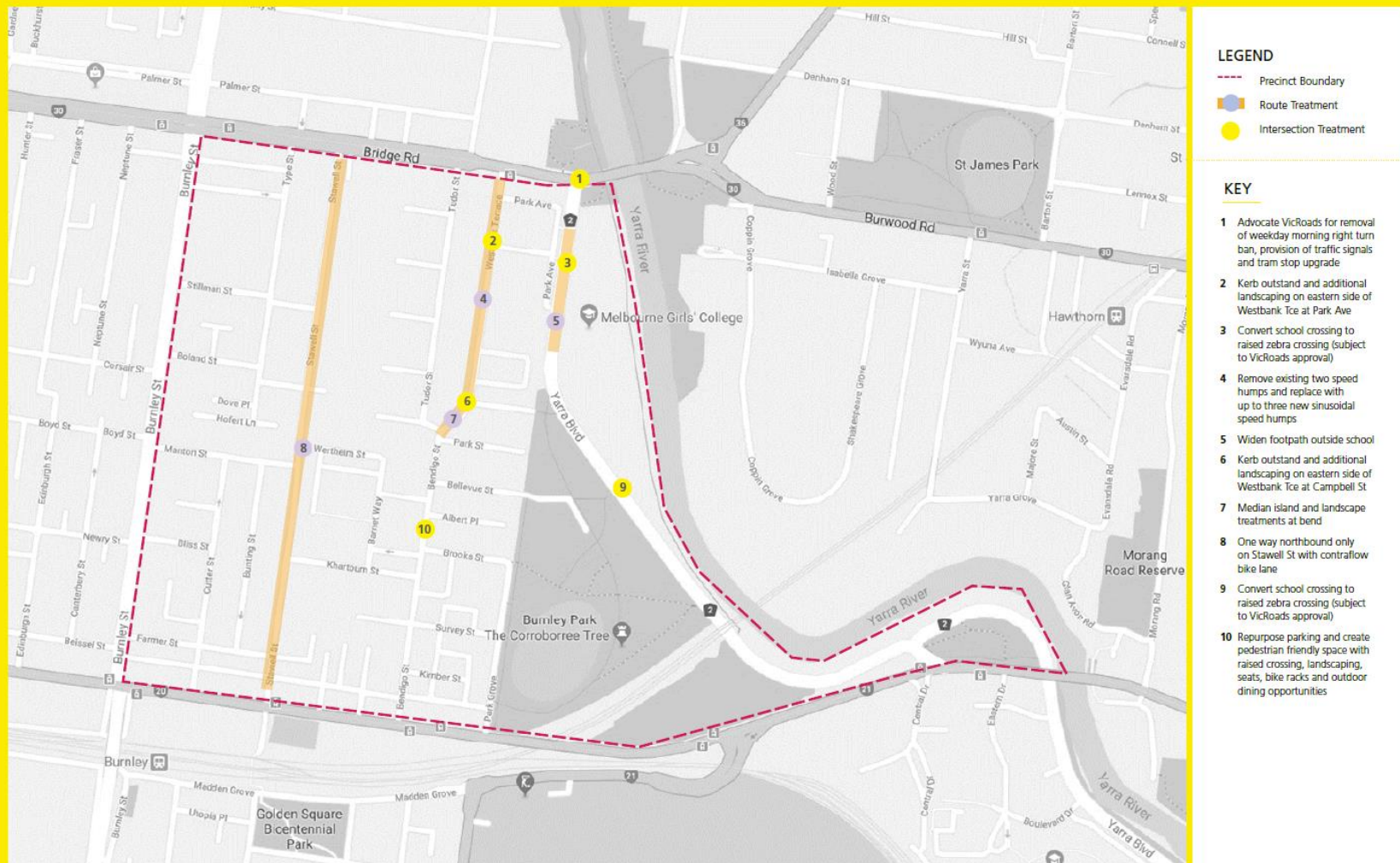


FIGURE F1: DRAFT LAPM SCHEME PRESENTED TO THE COMMUNITY

#	DESCRIPTION	RESPONSE	
		LIKE	DISLIKE
1	Advocate VicRoads for removal of weekday morning right turn ban, provision of traffic signals and tram stop upgrade at Bridge Road/Yarra Boulevard intersection	30	3
2	Kerb outstands and additional landscaping on eastern side of Westbank Terrace and Park Avenue	12	6
3	Convert northern school crossing on Yarra Boulevard to raised zebra crossing (subject to VicRoads approval)	20	2
4	Remove existing two speed humps on Westbank Terrace and replace with up to three new sinusoidal (bike friendly) speed humps	16	7
5	Widen footpath outside Melbourne Girls' College	20	1
6	Kerb outstands and additional landscaping on eastern side of Westbank Terrace and Campbell Street	12	6
7	Median island and landscape treatments at bend in Westbank Terrace	21	9
8	Restrict traffic on Stawell St to one way northbound only with contraflow bike lane to allow bike riders to travel in both directions	30	68
9	Convert southern school crossing on Yarra Boulevard to raised zebra crossing (subject to VicRoads approval)	19	3
10	Repurpose parking outside Bendigo St Milk Bar and create pedestrian friendly space with raised crossing, landscaping, seats, bike racks and outdoor dining opportunities	39	8

TABLE F1: ON-LINE SURVEY RESULTS - PROPOSED LAPM TREATMENTS

APPENDIX G

LOCAL AREA STUDY GROUP MEETING 2:

**THURSDAY 13TH SEPTEMBER 2018
BURNLEY BACKYARD, RICHMOND**

MINUTES

LOCAL AREA PLACE MAKING STUDY: RICHMOND

MINUTES OF LOCAL AREA STUDY GROUP MEETING 2 THURSDAY 13TH SEPTEMBER 2018, BURNLEY BACKYARD

1. ATTENDEES

Local Area Study Group

Ted Teo, Senior Transport Engineer	Yarra City Council
Danny Millican, Acting Manager Traffic and Civil Eng.	Yarra City Council
Karen Wong, Senior Traffic Engineer	Yarra City Council
Matt Harridge, Director	O'Brien Traffic
Jemima Macaulay, Senior Associate	O'Brien Traffic
██████████	Westbank Terrace

Other attendees

██████████	██████████
██████████	██████████
██████████	██████████
██████████	██████████
██████████	██████████
██████████	██████████

Apologies (Local Area Study Group)

██████████	, Lendlease Retirement Living
██████████	, Richmond Community Learning Centre

2. WELCOME AND INTRODUCTION

The meeting was opened by Ted Teo at 6:10pm.

Ted explained that the purpose of the meeting was for the Local Area Study Group to consider the outcomes of the community consultation and reach agreement on a draft LAPM Scheme to put to Council.

However, he noted that a number of residents had inadvertently been invited to the meeting. He welcomed the residents to stay to observe the proceedings and provide input.

Comments from absent volunteers of the LASG () were tabled, and are provided in Attachment A.

3. PREVIOUS MINUTES AND CHANGES

No changes to the Minutes of the Local Area Study Group Meeting 1 were recorded.

4. SUMMARY OF COMMUNITY CONSULTATION

Ted presented an overview of the community consultation and commented on the poor response rate. In particular:

- 2000 brochures were delivered and 337 brochures mailed out to non-resident owners;
- 20 people attended an information session;
- The response rate was 6.8% (including Social Pinpoint users, email responses and telephone calls).

5. LAPM PROPOSALS - RESPONSE TO COMMUNITY CONSULTATION

Jemima Macaulay presented the results of the consultation for each of the LAPM proposals.

For each proposal, the results of the consultation provided clear direction and O'Brien Traffic made a recommendation to *proceed* or *not proceed*.

There was discussion regarding some of the proposed treatments and the recommendations were endorsed as follows:

#	PROPOSED TREATMENT	DISCUSSION	LASG RECOMMENDATION
1	Advocate VicRoads for removal of weekday morning right turn ban, provision of traffic signals and tram stop upgrade	General agreement	Proceed
2	Kerb outstands and additional landscaping on eastern side of Westbank Tce and Park Av	There was some concern that this would result in loss of parking, however the proposed kerb outstands would be close to the intersection where parking is not permitted.	Proceed

#	PROPOSED TREATMENT	DISCUSSION	LASG RECOMMENDATION
3	Convert northern school crossing on Yarra Blvd to raised zebra crossing (subject to VicRoads approval)	General agreement	Proceed
4	Remove existing two speed humps and replace with up to three new sinusoidal (bike friendly) speed humps	General agreement	Proceed
5	Widen footpath outside Melbourne Girls' College	General agreement	Proceed
6	Kerb outstands and additional landscaping on eastern side of Westbank Tce and Campbell St	Again, there was some concern that this would result in loss of parking, however the proposed kerb outstands would be close to the intersection where parking is not permitted.	Proceed
7	Median island and landscape treatments at bend in Westbank Tce	There was concern regarding the loss of up to 6 car spaces in Westbank Terrace, noting in particular the considerable parking generated by Burnley Backyard on occasions. A proposal to reinstate parking on both sides of Tudor St was proffered however residents of Tudor St expressed their concerns. The proposed treatment was generally agreed to on safety grounds.	Proceed
8	Restrict traffic on Stawell St to one way northbound only with contraflow bike lane to allow bike riders to travel in both directions	The results of the community consultation indicated poor support for this proposal which was also the consensus of the group. There was concern expressed regarding trucks rat-running in Stawell St.	Do not proceed
9	Convert southern school crossing on Yarra Blvd to raised zebra crossing (subject to VicRoads approval)	General agreement	Proceed (subject to VicRoads approval)
10	Repurpose parking outside Bendigo St Milk Bar and create pedestrian friendly space with raised crossing, landscaping, seats, bike racks and outdoor dining opportunities	General agreement. The loss of up to 3 car spaces was noted.	Proceed

6. PROJECTS TO ADVOCATE TO VICROADS

Matt Harridge explained that an outcome of the study was to provide a priority list of projects on arterial roads for advocacy to VicRoads. He listed the following projects (in addition to those above):

Burnley Street

- Reduce speed limit
- Raised threshold treatments at side street intersections for improved pedestrian access
- Continue bike lanes to intersections of Bridge Road and Swan Street.Hoddle Street

Swan Street

- Reduce speed limit
- Make pedestrian traffic lights at Stawell Street clear, away from power poles for citybound road users
- Raised threshold treatments at side street intersections for improved pedestrian access
- A new pedestrian signal when warranted near Bendigo Street.

7. OTHER DISCUSSION

It was noted that cars parked on Tudor Street often park too close to the Bridge Road intersection creating a safety issue.

8. NEXT STEPS

Ted indicated that Council would notify the community of the final draft plan in October 2018.

O'Brien Traffic would develop cost estimates and priorities.

The draft LATM Scheme would go to Council at its meeting in November 2018.

9. CLOSE OF MEETING

Ted thanked the Study Group and the residents for their participation and closed the meeting at 7:30pm.

Attachment A

Comments from absent volunteers

██████████, *Lendlease Retirement Living*

- Request to be kept informed with proposals around the GTV Nine site, especially outside the Bendigo Street Milk Bar, or affecting Khartoum Street.

██████████, *Richmond Community Learning Centre*

- Request parking on both sides of Tudor Street to help offset concerns with parking removal for the Westbank Terrace median. Consider 2P restrictions. Currently parking is 1P 7am-11pm in Tudor Street and Westbank Terrace.

APPENDIX H

CONCEPT PLANS



POTENTIAL TRAFFIC SIGNALS

BRIDGE ROAD

INVESTIGATE UPGRADE OF TRAM STOPS
(BY OTHERS)

ADVOCATE REMOVAL OF EXISTING
WEEKDAY AM RIGHT TURN BAN

YARRA BOULEVARD



ISSUE	DATE	AMENDMENTS	BY

NOT FOR CONSTRUCTION

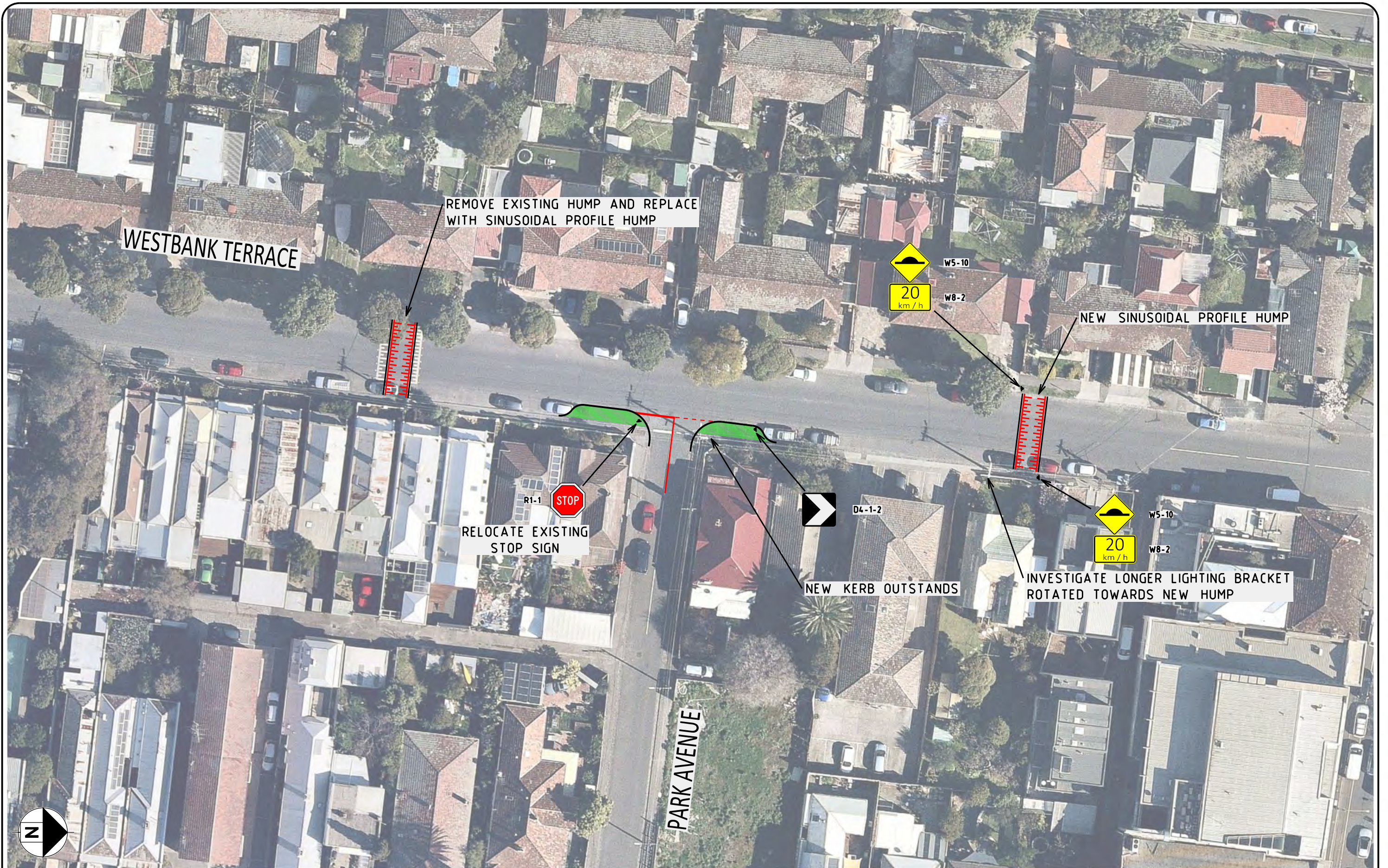
NOTES:



• Traffic Planning • Transport Planning
• Traffic Engineering • Road Safety
SUITE 2.03, 789 TOORAK ROAD
HAWTHORN EAST, VIC, 3123
P: +613 9804 3610
W: obrientraffic.com

ENGINEER:	J.MACAULAY	CAD FILE:	18138003.DGN
DESIGNED BY:	B.VANDERWERF	DRAWING NO:	18138003
SCALE:	1:500	ORIGINAL:	A3
DATE:	15/11/18	JOB NO:	18138
Hor. Scale Ver.	0 5 10	SHEET NO:	1 OF 6

RICHMOND LOCAL AREA PLACE MAKING
PROPOSED TREATMENTS



ISSUE	DATE	AMENDMENTS	BY

NOT FOR CONSTRUCTION

NOTES:



• Traffic Planning

• Traffic Engineering

• Transport Planning

• Road Safety

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DATE:	15/11/18	JOB NO:	18138
Hor. Scale Ver.	0 5 10	SHEET NO:	2 OF 6

RICHMOND LOCAL AREA PLACE MAKING
PROPOSED TREATMENTS



YARRA BOULEVARD

CONVERT EXISTING SCHOOL CROSSING
TO RAISED ZEBRA CROSSING

WIDEN EXISTING FOOTPATH TO 2.0m
FOR LENGTH SHOWN



ISSUE	DATE	AMENDMENTS	BY

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Hor. Scale Ver.	0 5 10	SHEET NO:	3 OF 6
		ISSUE:	

RICHMOND LOCAL AREA PLACE MAKING
PROPOSED TREATMENTS



ISSUE	DATE	AMENDMENTS	BY	
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SCALE: 1:500	ORIGINAL: A3	DATE: 15/11/18	JOB NO: 18138
Hor. Scale Ver.		0 5 10	SHEET NO: 4 OF 6

RICHMOND LOCAL AREA PLACE MAKING

PROPOSED TREATMENTS



ISSUE	DATE	AMENDMENTS	BY

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SCALE: 1:500	ORIGINAL: A3	DATE: 15/11/18	JOB NO: 18138
Hor. Scale Ver.	0 5 10		SHEET NO: 5 OF 6

RICHMOND LOCAL AREA PLACE MAKING
PROPOSED TREATMENTS

