

Futureye

Department of Environment, Land, Water and Planning Victoria:

*Walmer Street
Bridge
Engagement
Report*

October 2016

Futureye Pty Ltd

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Futureye is a consultancy which facilitates real solutions to real dilemmas around the world. We build highly innovative leaders, organisations and societies so they may identify, manage and resolve issues collaboratively for sustainable outcomes.

We offer a set of services which enable our clients earn and maintain a social licence to operate. To do this we: track the issues that might undermine or enhance the tacit approval for an industry; assess the changing values of society; develop strategy, plans and deliver sustainable outcomes through engagement.

Our methodology for understanding dilemmas and building real solutions is unique and highly effective. We employ a diverse team of experts including management consultants, risk communicators, sustainability strategists, public policymakers, foresight practitioners, community engagement specialists and anthropologists. We strive to create enduring relationships with our clients, stakeholders and community.

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1. Event Summary

Event Purpose: Engage the community to evaluate the two options presented by the Developer

Event Name: Walmer Street Plaza/Bridge Engagement

Minister: Minister Richard Wynne

Event Date: Saturday 15 October 11.00am – 1.30pm

Event Location: Richmond Town Hall, 333 Bridge Road, Richmond

Audience: 60 participants from within the Yarra and Boroondara Councils

2. Purpose of the engagement

The Walmer Street Bridge Engagement at Richmond Town Hall was undertaken to address community concerns surrounding the design of the Walmer Street Plaza and Bridge. Previous designs have not adequately addressed the communities concerns regarding the unimpeded access that currently exists from the bridge to the Yarra Main Trail and Victoria Street. The applicant, the Department and Yarra City Council have been discussing alternative designs for Walmer Street Plaza and Bridge since the July consultative meetings. This consultation aimed to capture views to be presented to the Minister for Planning to aid in considering the Development Plan application for the proposal at 607-627 Victoria Street, Abbotsford.

3. Recommendation

While the community recognized improvements in the options put forward, the recommendation from the participants for the meeting was for neither option to be approved (70%). The participants voted unanimously¹ to form a Working Group prior to approval to deal with all their concerns. Of the options, Option B was the most popular with 28% of the vote. Some of the participants who recommended neither option put forward a secondary preference for Option B. Including those participants who considered it a second preference, the total support for Option B was 46%.

Due to the limitations placed on the Minister due to it being a Priority Development Zone, Futureye recommends:

- I. that Minister approves Option B subject to an appropriately widened bike ramp that will help protect the community and enable bicycle users to use the thoroughfare
- II. the Minister support the formulation of a Working Group with both Yarra and Boroondara Councils, the community, to engage on how to best enable bicycle-riders and the community to enjoy the area as well as the activation of a public culture that would be suitable for the community within the environment.

4. Background to the Walmer Plaza/Bridge development

Walmer Street is an existing road reserve that is Crown Land. A motion was passed by Council in 2008 to declassify Walmer Street as a road and revert it to a public reserve at the completion of this project in order to align with the Priority Development Zone. At project completion, all land within Walmer Street and the future plaza will remain as Crown Land managed by Council - Salta will only be purchasing rights to access the basements beneath the plaza. Appendix 2 depicts all the land currently owned by Salta (12,837 sqm), which does not include Walmer Street Plaza. At project completion:

- all the land (6,255 sqm) shown orange and blue will be publicly accessible;
- all land (3,132 sqm) shown in the two orange shades will be gifted back to the State at no cost once complete;
- the additional dark orange land (778 sqm) will be gifted back to Crown land with Salta owning the basements under that land; and
- all land (2,732 sqm) shown blue is to be publicly accessible, including a new Davidson Plaza which will remain owned and managed by the body corporate of each building.

¹ Motion was tabled by Trevor Flett and seconded by Dr Tom Mole and carried unanimously by the meeting.

The development of the site will unlock this entire corner of the river and give it back to public ownership through the development. New paths and riparian riverbank back in public ownership represents a significant net community benefit along with a new public plaza to Walmer Street and also the creation of Davison Plaza with direct access provided to the Yarra River.

The Priority Development Zone requires the applicant to submit an application for a Development Plan. The Development Plan must be to the satisfaction of the Minister for Planning, be generally in accordance with the Incorporated Plan and include a number of other reports and details on plans. The Development Plan is required to provide:

- A Transport Plan to appropriately locate vehicle entry/exit to the site, pedestrian and bicycle access, including their connection to the existing network and to consult with VicRoads and Public Transport Victoria.
- A Landscape Plan that identifies the existing and proposed planting, paths, paving, fencing, park furniture, public lighting and embellishments to the satisfaction of Parks Victoria and Melbourne Water.
- A Construction Management Plan prior to the commencement of any works, which must provide for:
 - o an outline of requests to occupy public footpaths or roads, or anticipated disruptions to local services;
 - o an emergency contact that is available 24 hours per day for residents and the Responsible Authority in the event of relevant queries or problems experienced;

This process is very different to the normal Planning Permit Application process. Specifically with the Priority Development Zone, there are no third party appeal rights. It is acknowledged that the applicant was required to display the proposed plans and this occurred in April 2016. The Priority Development Zone also includes a requirement that the Minister for Planning must make a decision on any application 42 days following the completion of display of plans. This application has far exceeded this timeframe and the applicant is agreeable to refine the design of the Walmer Street Plaza and Bridge.

The Priority Development Zone requires the applicant to enter into an agreement with the Minister for Planning under Section 173 of the *Planning and Environment Act 1987* for the construction of the Walmer Street Plaza in accordance with a design endorsed by the City of Yarra. The Walmer Street Bridge is managed by Council and any modifications to the Bridge itself will require approval from Council. The applicant is seeking to use Walmer Street for vehicle access to basement car parking for site's either side of Walmer Street and seeking to purchase the subterranean sections of Crown Land (Walmer Street) to allow for this access.

This concept design was agreed when the Priority Development Zone was included in the Planning Scheme and the Incorporated Document referenced in the Planning Scheme. The title for the subject land currently extends to the Yarra River. The Priority Development Zone and the Public Acquisition Overlay requires the development of the land to include a significant contribution of the river interface to be legally given to the public. As explained above, the applicant is providing land in addition to this requirement along the river interface, extending the public accessible space into their current land ownership.

The applicant advises that access to the bridge and main Yarra Trail will be maintained as much as practically possible during the construction process. Clearly, there will be a requirement to restrict access to the bridge whilst the new sections of the bridge are being constructed. A Construction Management Plan will be approved by the Minister for Planning in consultation with Council. As with any works to a bridge, there may be times when access may be reduced or prohibited in order to safely conduct works. Disruptions will be minimised and considerable notice given to users of the Bridge and Plaza.

3. Consultation Summary

Participants were provided with two designs to evaluate, which will be referred to as Option A and Option B. Option A was decisively rejected and the majority of people - 32 of 46 - were unhappy with both options (see Figure 1 below).

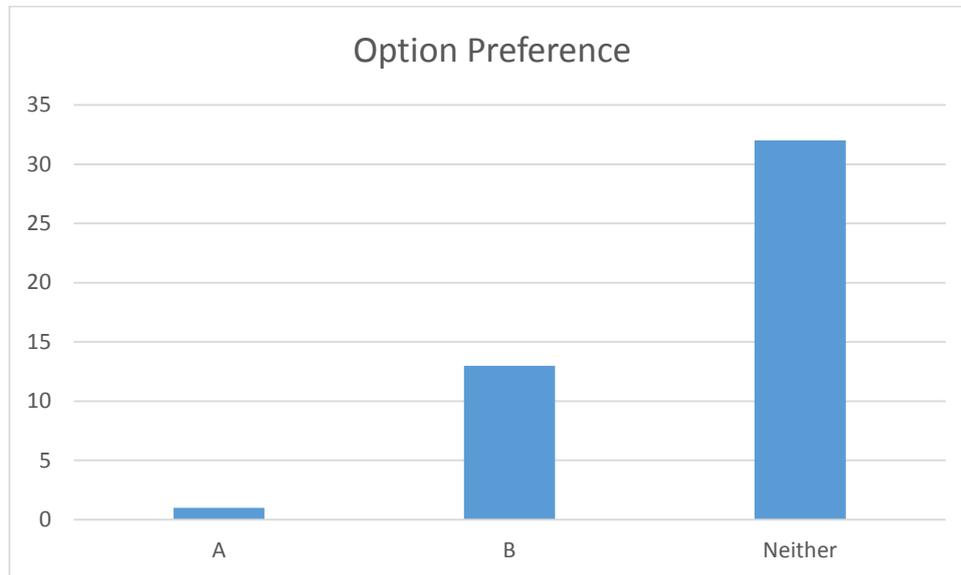


Figure 1: 46 participants filled out the option evaluation form (see Appendix 1)

Whilst many believe that the new options are a significant step forward, the consensus was that these are still insufficient. There were a number of concerns raised outside the initial scope of this consultation. Some members felt misled as the plans were hard to understand and were considered favourable for the developer as the gradients and overhang were understated. These are summarised below.

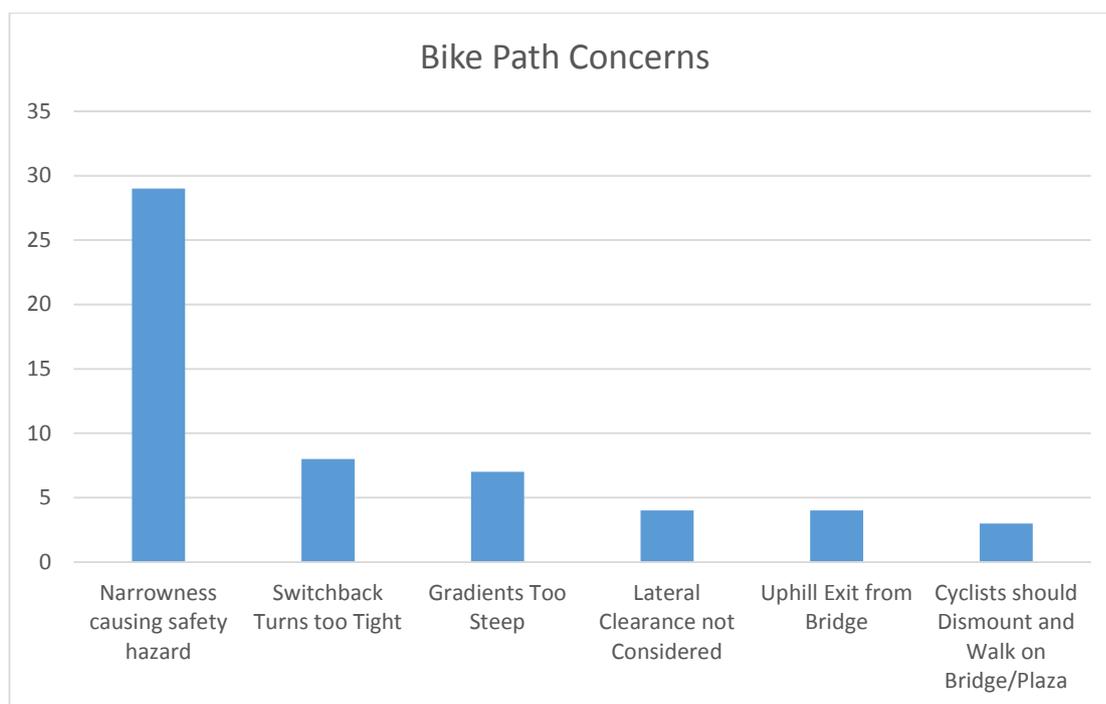


Figure 2: Bike Path Concerns obtained from Option Evaluation comments

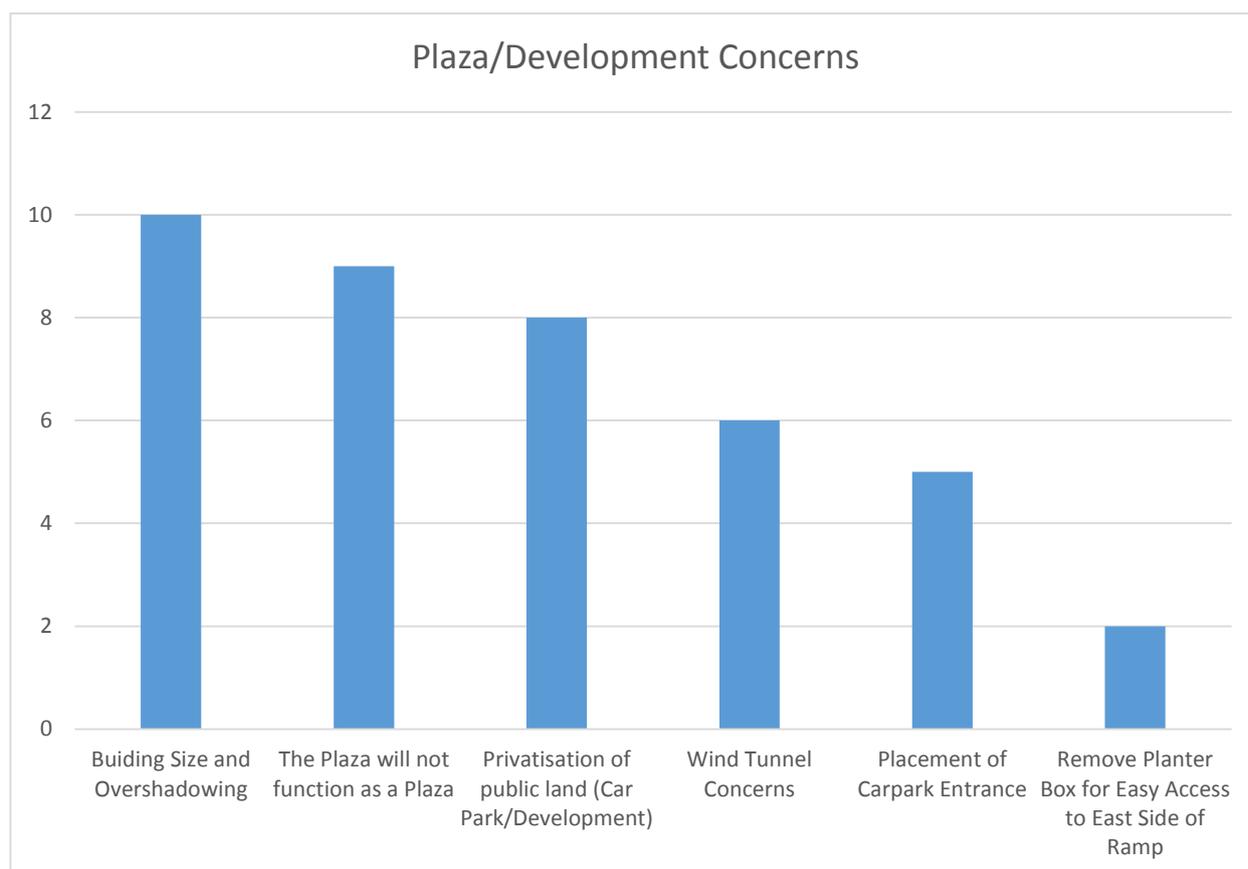


Figure 3: Plaza/Development Concerns obtained from Option Evaluation comments

Issue 1: Cyclist-Pedestrian Co-Habitation

The Walmer Street bridge is a major cyclist thoroughfare carrying as many as 1000 cyclists a day according to the community. This is a 'mixed' zone where cyclists and pedestrians co-habit and given the speed of the cyclists there was a concern about the safety of the pedestrians. Many believe this is an 'accident waiting to happen' due to many factors, including:

- the high volume of cyclists;
- the expected growth in number of pedestrians/cyclists in the future;
- the narrowness of the bridge/paths;
- the lack of signage/path markings; and
- the speed of cyclists as they come off the bridge and into the plaza.

Bicycle Network is supportive of the ramp configuration for Option B, including the width and grade, and the plaza design (see Appendix 3). Whilst the proposed path width is an appropriate outcome given current demand (see Appendix 4), the community's beliefs and Futureye's analysis suggests that it does not appropriately consider future growth. Extrapolating from the diagram in Figure 2 of Appendix 4, the path width of three metres allows for approximately a 25% increase in pedestrians and 36% growth in cyclists. The following statistics suggest that the growth of population and cyclists will create demand for a wider path within 20 years:

- Expected population growth (2016-2036)
 - o Greater Melbourne: 40%²
 - o City of Melbourne: 96%³
 - o City of Yarra: 32.81%⁴
- Cycling statistics

² <http://infrastructureaustralia.gov.au/policy-publications/publications/files/Background-paper-on-demographic-projections.pdf>

³ <http://melbournepopulation.geografia.com.au/areas>

⁴ <http://forecast.id.com.au/yarra>

- Between 2001 and 2011, the number of cycling trips originating in the City of Yarra increased by almost 130%⁵
- The population growth in the City of Yarra between 2001 and 2011 was 7.297%⁶
- Therefore, the growth in cyclists may be quicker than the growth of population.

VicRoads is supportive of the location of the combined car ramps and a straight thoroughfare (see Appendix 5). However, the community had concerns due to their perceived flow of traffic being towards the east of the car park ramps, and many questioned why the car park ramps were allowed to take away from public space.

Some citizens believe this issue could be solved by having the cyclists dismount over the bridge, others believe that actions should be taken include separate cyclist traffic from pedestrian traffic on the bridge and through the integration into the plaza. Due to the development bringing more people to the area and increasing the risk of a safety incident, the community would like to see a traffic management plan for the area that solves the problem. There was also frustration due to the lack of clarity around who was responsible for which pieces of planning permission and a lack of a holistic planning approach to the area. The developer has a Traffic Management plan written by Urbis which could be reviewed by the Working Group, if they were interested, to see how they recommended to resolve these concerns.

Recommendation:

Futureye agrees with the community in recommending that all shared paths are widened to four metres and/or are separated to account for future growth and alleviate concerns of traffic safety, with particular concern surrounding the y-intersection on the bridge. This widening issue extends to the bridge itself. This highlights an opportunity for the creation of a Working Group comprising of local residents, cyclists, City of Yarra and City of Boroondara to look at widening the entire bridge or creating an additional bridge and help offset these risks.

Issue 2: Environmental Concerns

There were a number of environmental concerns raised due to the proximity of the development to the river, which has been acknowledged as a fragile ecosystem. Community participants feel that the environment has not been given due consideration. Participants questioned whether an environmental impact study and a storm water management plan had been undertaken.

The key concerns that were raised were:

- proactively protecting quiet, unlit areas which are unpaved and have minimum foot traffic
- Minimising lighting at night to protect nocturnal wildlife and comply with best practice (Greenstar)
- The river staircase to the river from Davidson Plaza was considered unnecessary and environmentally unfriendly

Recommendation:

Futureye recommends that the developer shows their environmental plan, such as the stormwater management plan, to the interested community members in order to clarify the proactive steps that have been made and alleviate concerns.

Issue 3: Public Space

The plaza was a point of confusion and contention with regard to its privatization, its structure and use. Participants believe the car park access takes away from public space, and raised concerns about the plaza's use by the residential buildings. In particular, participants believed that the plaza should not be used as a thoroughfare for residential rubbish collection, deliveries and other similar uses.

Some participants viewed the space more as a thoroughfare rather than a plaza, expressing skepticism of the size of the plaza and the effect of the building overhangs. Some viewed the plaza as a 'canyon' due to a perceived risk of a wind-tunnel effect, the size of the buildings, and the inability to view the river

⁵

https://www.bicyclenetwork.com.au/media/vanilla_content/files/Cycling%20to%20work_in_Melbourne%201976%20to%202011.pdf

⁶ <http://profile.id.com.au/yarra/population?EndYear=2001>

from the plaza. There is a fear that the plaza will attract undesirable drunks and drug addicts to the area. There isn't a shared vision with the developer about what the activation of the site will be and what kind of community will evolve and how. This fear can be turned into an opportunity to work together.

Recommendation

Futureye recommends that Walmer Street Plaza is renamed to reflect its status as more of a thoroughfare. Whilst out of the scope of this engagement, we recommend that the Working Group also addresses the implications of traffic flow from the bridge.

Walmer Street Bridge Option Evaluation

Name:

Engagement attended: Walmer Street Bridge Engagement, Richmond Town Hall, 333 Bridge Road, Richmond, Saturday 15 October 2016, 11.00am – 1:30pm

1. Which Option do you think is best? (Please Circle)

A

B

Neither

2. Why have you chosen this option?

3. Are there any changes that you would make to this chosen option?

If you would like to make any additional comments, please flip the page.

This feedback will be summarised for use by DELWP and the Minister for Planning. Please tick here if you would like to remain anonymous.



4. Is there anything else you would like to say?

Department of Environment,
Land, Water & Planning

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Architectural Response

Recommendation 2h

A greater level of activation and public realm amenity to the Yarra River interface.

Response 2h

The pedestrian experience moving from Victoria Street, against the buildings, and down to the river has been refined. The experience is one of moving down into the site, led by a rhythm and interaction of building structure and casual seating. Ramps, stairs and landscaping engage the building perimeter, creating discrete level changes at each point to the River.

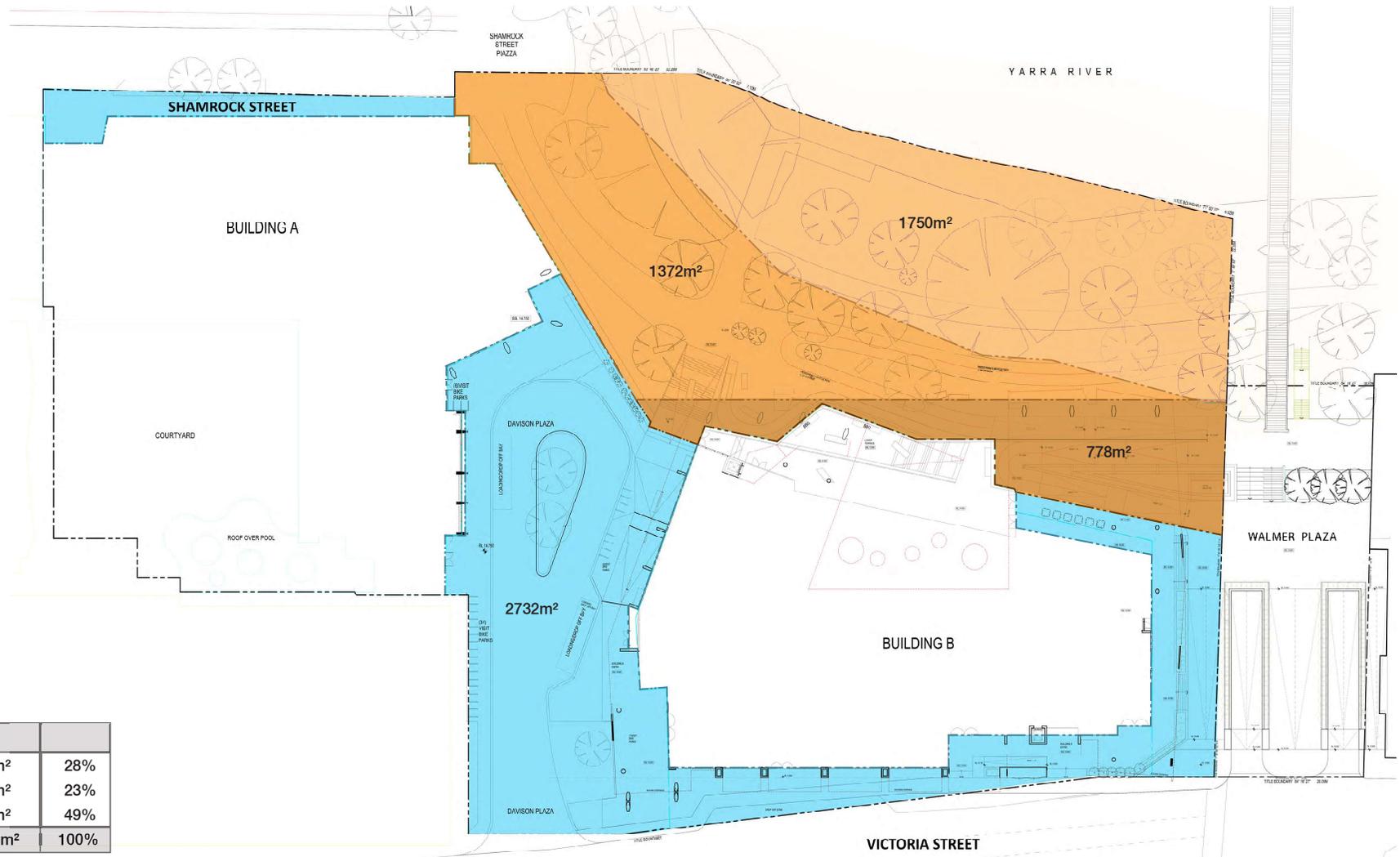
Public Acquisition Overlay
1750m²

Additional Public Contribution
1372m² (Part 1)

Additional Public Contribution
778m² (Part 2)

Publicly Accessible Area
2732m²

Area Summary		
Building A	3597m ²	28%
Building B	2985m ²	23%
Total Publicly Accessible	6255m ²	49%
Total Site Area	12837m ²	100%





Johan Moylan
Urbis
Level 12, 120 Collins Street
Melbourne VIC 3000

Walmer St bicycle connections update

Dear Johan

We have reviewed the latest iteration of the design of Walmer Plaza and the connections to the bridge and the Yarra Trail. (M1520 Concept Plan, 20 September 2016)

In our view this latest design further streamlines the connection to the Walmer Street Bridge with the introduction of longer sections on the link from the bridge to the Main Yarra Trail. The consequent removal of tight switchbacks, and gentler gradients, will improve amenity for riders, especially those accompanying children on bikes, and those towing small children in trailers.

These longer legs on the descent section do increase the length of the connection down to the river, but this is unlikely to be bothersome to path users because people walking and biking on the trail have already committed to travelling considerable distances to other access points.

It is also apparent that the experience of pedestrians should be improved as better sight lines will enable walkers to be forewarned of the approaching bike riders.

The plans show the provision of adequate space on the plaza area for the connection through to Victoria Street, providing that the plaza area is not in the future encroached upon by street furniture or other structures.

The directional split at the Y-junction may need way finding assistance for bridge users unfamiliar with the connections from the plaza to other routes.

Regards

Garry Brennan
Senior Policy Advisor
Bicycle Network

5 October 2016

More people cycling more often

Level 4, 246 Bourke Street Melbourne VIC 3000 Australia PO Box 24013, Melbourne, Victoria 3001
p. (03) 8376 8888 f. (03) 8376 8800 freecall: 1800 639 634 (country callers) bicyclenetwork.com.au
Bicycle Victoria Incorporated ABN 41 026 835 903 ARBN 054 009 871 Reg No A0008607J

Reference: #15M1983000

27 June 2016

Urbis
Level 12, 12 Collins Street
MELBOURNE VIC 3000

Attention: Mr. Johan Moylan

Dear Johan

**RE: 607-627 VICTORIA STREET, ABBOTSFORD (THE PARK HOUSE)
RESPONSE TO BICYCLE NETWORK**

I refer to the correspondence from Bicycle Network (12 May 2016) regarding the proposed development at 607-627 Victoria Street in Abbotsford. Specifically, the correspondence identified a number of concerns regarding the impact of the development on the surrounding bicycle network.

GTA Consultants acknowledges that bicycle movement figures were not included in the transport impact assessment report for the Park House development. However, the report does dedicate two sections (Section and part of Appendix A) to sustainable travel including the provision for and the movement of bicycles. GTA has over 25 years of working with the City of Yarra and has an intimate understanding of the importance of bicycle travel across the municipality.

Each of the Bicycle Network concerns are reproduced below (*in bold*) with a response provided thereafter. It is noted that the design of the proposed switchback design has been revised to address some of the Bicycle Network concerns.

“The riders from the Main Yarra Trail, Walmer bridge and the switchback ramp are all funnelled into a small area—this creates a worrying conflict zone given the volume of riders as well as pedestrians and the disabled passing through the area.”

The layout of the bicycle ramps and pedestrian steps/paths have been revised to reduce the potential for conflict between each of the users. Specifically, the changes include the following:

- Widening of the bicycle paths to 3.1m
- Realignment of the bicycle paths at the entrance to the Walmer Street bridge
- Increased turning radii at the switchbacks

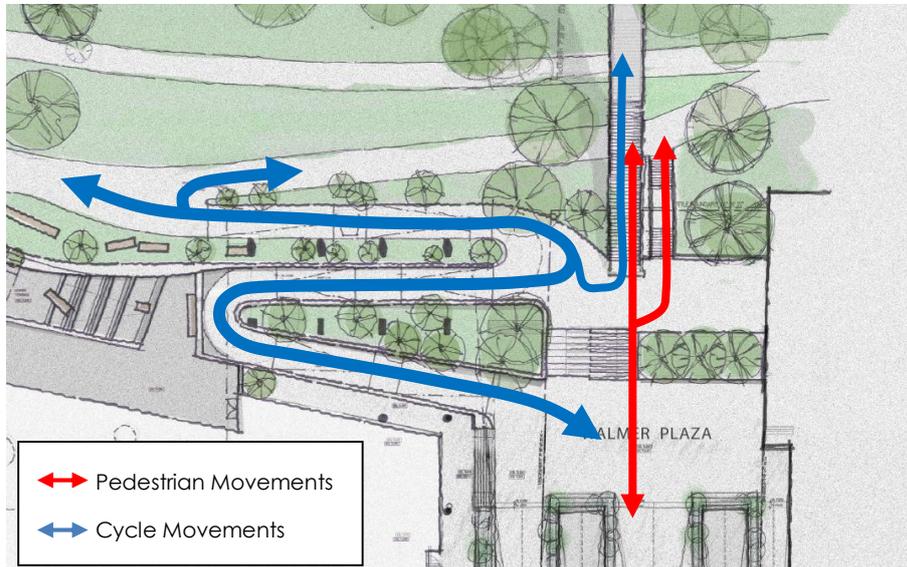
The revised layout which separates bicycles using the switchback ramp from pedestrians using the stairs is considered an appropriate design outcome.

The revised layout is provided in Figure 1 on the following page.

melbourne
sydney
brisbane
canberra
adelaide
gold coast
townsville
perth

Level 25, 55 Collins Street
MELBOURNE VIC 3000
PO Box 24055
MELBOURNE VIC 3000
t// +613 9851 9600

Figure 1: Pedestrian and Bicycle Links



The revised layout which separates bicycles using the switchback ramp from pedestrians using the stairs is considered an appropriate design outcome.

“The switchback ramp as a connection from the bridge level (Lower Plaza) to Walmer Plaza significantly reduces the level of service for riders as they will now have to navigate through a tight angled ramp. The switchback angles through this section will make it difficult for bike riders to pass each other coming in opposite directions and the Landscape plan even refers to it as a ‘pedestrian ramp’. There is currently a switchback ramp in place connecting the Main Yarra Trail to Walmer Street, however this was built a number of years ago to a now-outdated standard and is unacceptable in 2016.”

There is a significant RL difference between Walmer Plaza and the Main Yarra Trail (approximately 5m+). Due to the redesign of Walmer Plaza in accordance with the endorsed plan, a switchback ramp is required for bicycles to negotiate the RL change between Walmer Plaza and the Main Yarra Trail and between Walmer Plaza and the bridge. It is noted that a switchback ramp whilst not as convenient as a straight ramp is a recognised treatment for bicycles particularly where there is a significant RL change. In this regard there are a number of switchback treatments provided throughout the off-road cycle network in Melbourne, including at a number of connections to the Main Yarra Trail. An example at Federation Square is provided in Attachment 1.

Super Tuesday bicycle data provided by Bicycle Victoria indicates the following existing bicycle demands:

- The switchback to the Main Yarra Trail from Walmer Street carries 190 cyclists per hour (or 305 cyclists per peak 2 hour period).
- From Walmer Plaza to the bridge carries 290 cyclists per hour (or 467 cyclists per peak 2 hour period).

Whilst not surveyed, the switchbacks themselves are anticipated to carry low pedestrian volumes (approximately 20 per hour), noting that a more direct path is provided via the proposed stairs.

The VicRoads Cycle Notes (June 2010) document outlines the bike and pedestrian volume thresholds for various path types and widths. The specific requirements for a commuter trail are presented in Figure 3 of the document reproduced below.

Figure 2: Recommended Shared Path/Bike Path Width

Commuter Path – Directional Split – 90/10

Example – Main Yarra Trail (north bank) at Morell Bridge

This path is 3.0 metres wide. It carries 550 cyclists and 80 pedestrians during the AM peak period. The "directional split" is 90/10. As shown the intersection of the two lines is within the zone for a 3.0m shared path. As a result it could be concluded that the capacity of this path exceeds its demand.

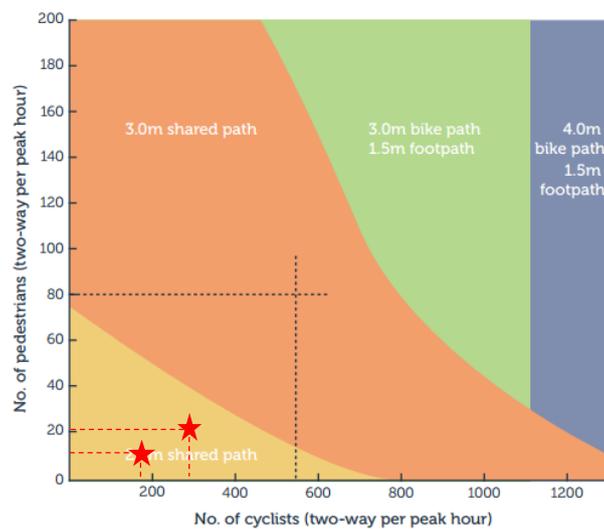


Figure 3 - Path capacity for paths with 90/10 directional split.

(Source: Figure 3 of VicRoads Cycle Notes (June 2010))

Applying the existing demands to Figure 2 (as shown by the stars) above indicates that a 2.5m shared path would be an appropriate width through each of the switchback designs. A 2.5m wide path could cater for significant growth in existing cycling demands at each of the switchbacks.

The proposed switchback is 3.1m wide or 2.5m effective width with 300mm widening to the adjacent garden beds/landscaping areas.

The switchback design includes a series of 1 in 14 ramps with landings provided at intermittent distances as per the relevant design standards.

The width of the switchbacks themselves has been assessed using AutoTURN (a computer package designed to simulate vehicle swept paths in a CAD environment). The swept path provided in Attachment 2 indicates that 2 cyclists are able to simultaneously pass each other around the switchback.

Based on the existing bicycle and pedestrian demands the proposed shared path width of 3.1m (2.5m effective width) is considered an appropriate design outcome and consistent with the relevant VicRoads design guidelines and other switchback designs in Melbourne.

“A better design outcome also needs to be considered for the connection of riders from Walmer Street Plaza to Victoria Street. This should include bike lanterns at the intersection.”

A functional layout plan and associated traffic signal layout plan (provided at Attachment 3) for the Victoria Street / Burnley Street / Walmer Street intersection has been approved by VicRoads.

The traffic signal layout plan indicates that bicycle specific lanterns are provided for bicycles approaching the intersection from Walmer Plaza and Burnley Street. Cyclist movements on the Victoria Street approaches would occur concurrently with vehicle movements, consistent with the current arrangements.

Given the volume of cyclists, the provision of bicycle lanterns on the north and south approaches to the intersection is considered an appropriate design outcome.

Naturally, should you have any questions or require any further information, please do not hesitate to contact Andrew Farran or myself in our Melbourne office on (03) 9851 9600.

Yours sincerely

GTA CONSULTANTS



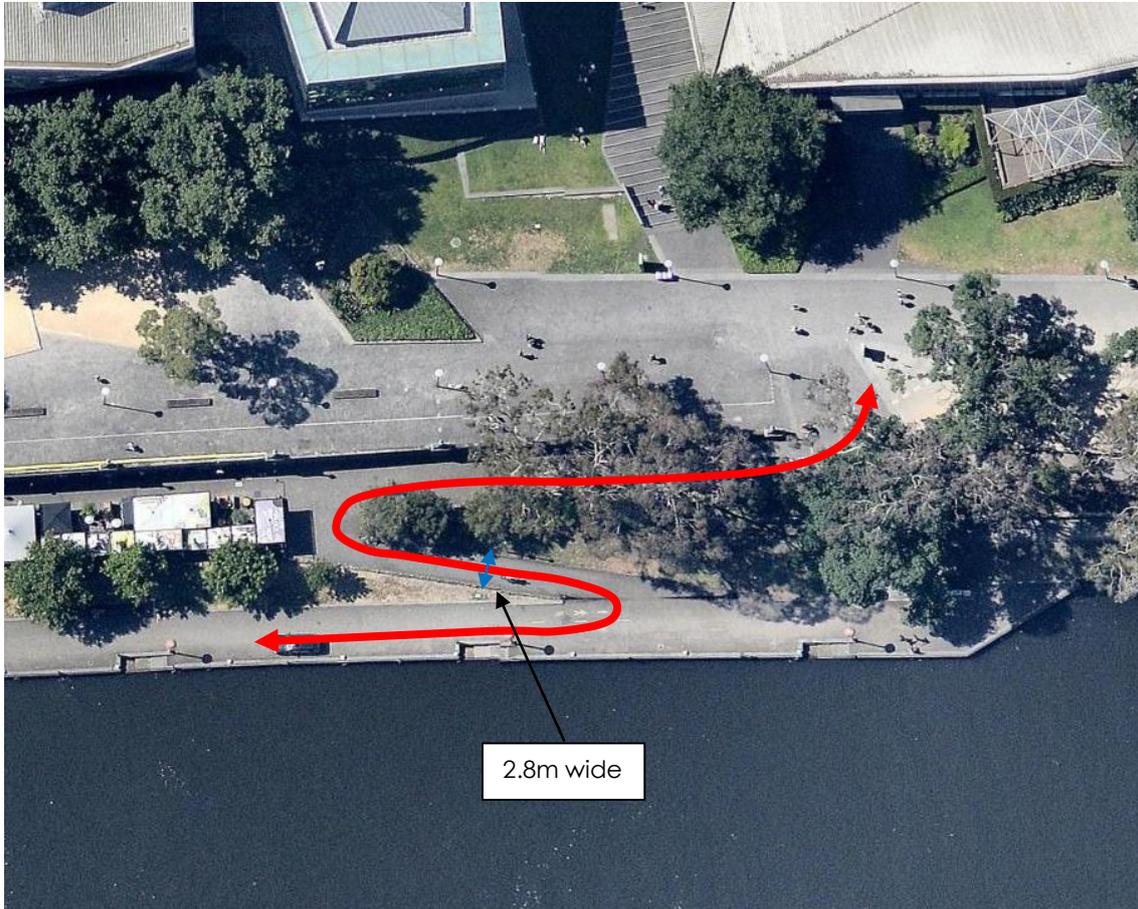
Peter Wills
Associate Director

encl.

Attachment 1

Precedence – Main Yarra Trail (south of Federation Square)

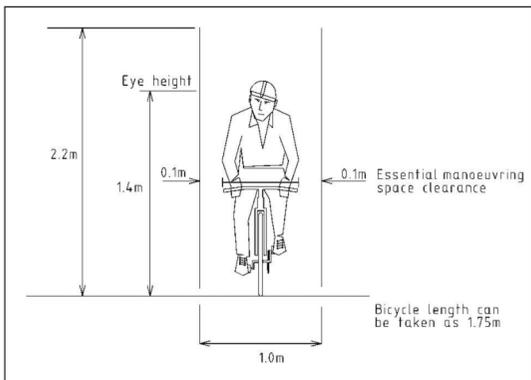
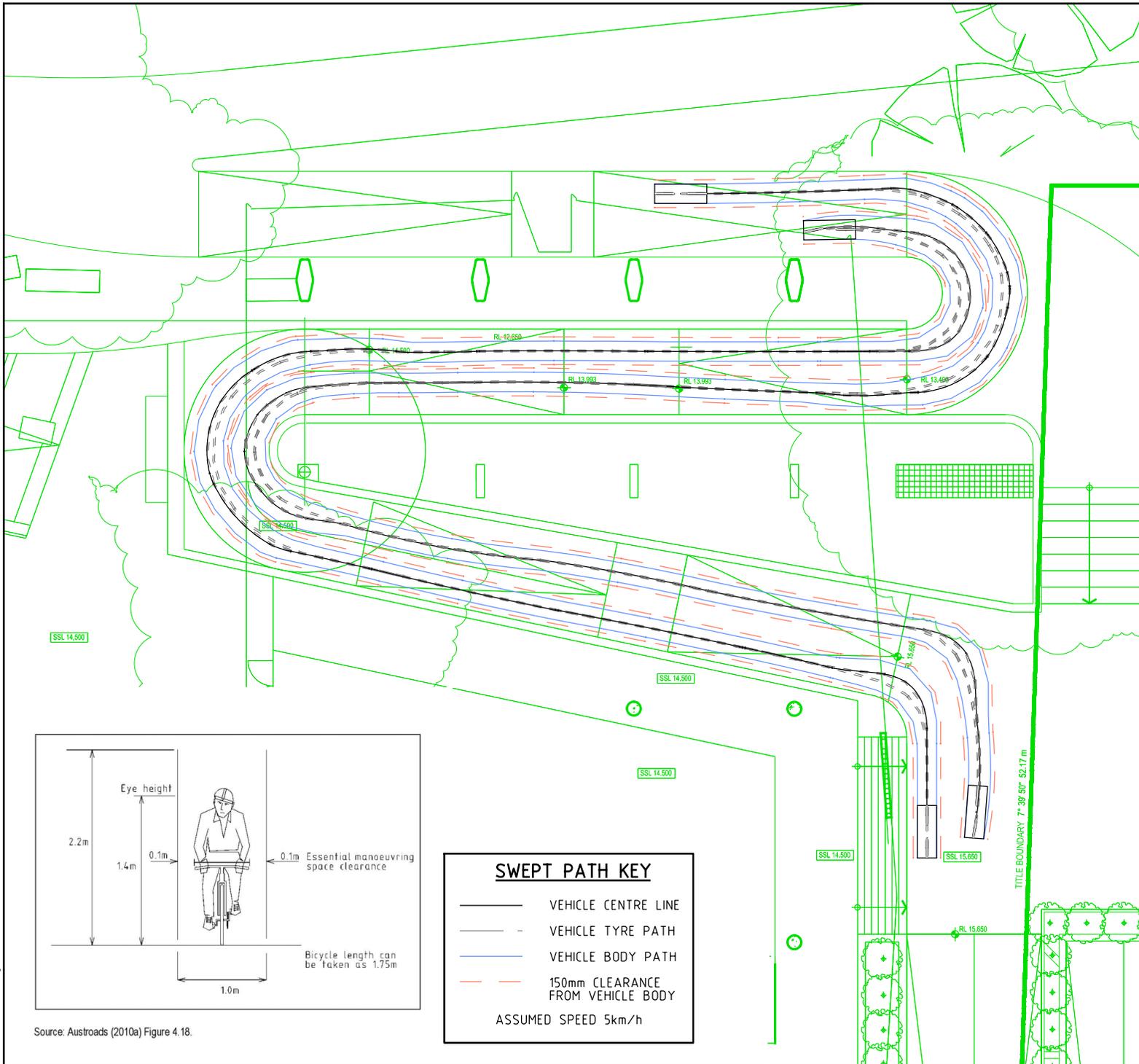
Figure 3: Main Yarra Trail (at Federation Square) – Precedence



Attachment 2

Swept Path Assessment

PLOTTED BY: Drafting hotdesk ON 23/06/2016 AT 4:14:46 PM



Source: Austroads (2010a) Figure 4.18.

SWEPT PATH KEY

- VEHICLE CENTRE LINE
- - - VEHICLE TYRE PATH
- VEHICLE BODY PATH
- - - 150mm CLEARANCE FROM VEHICLE BODY

ASSUMED SPEED 5km/h

PRELIMINARY PLAN
 FOR DISCUSSION PURPOSES
 ONLY SUBJECT TO CHANGE
 WITHOUT NOTIFICATION


 GTA consultants
www.gta.com.au

**SIMULTANEOUS BICYCLE MOVEMENT
 SWEPT PATH ASSESSMENT
 PARK HOUSE
 ABBOTSFORD**

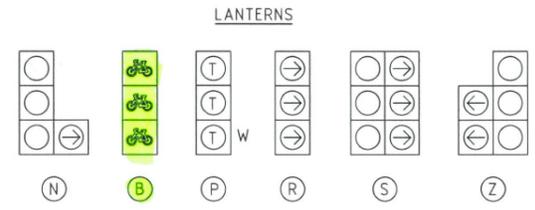
DATE	23 JUNE '16	SCALE	1:200 @ A4	MELWAY REF	L4/H7
DESIGNER	J. HAIGH	DRAWING NO.	15M1983000-AT08-01P1		

Attachment 3

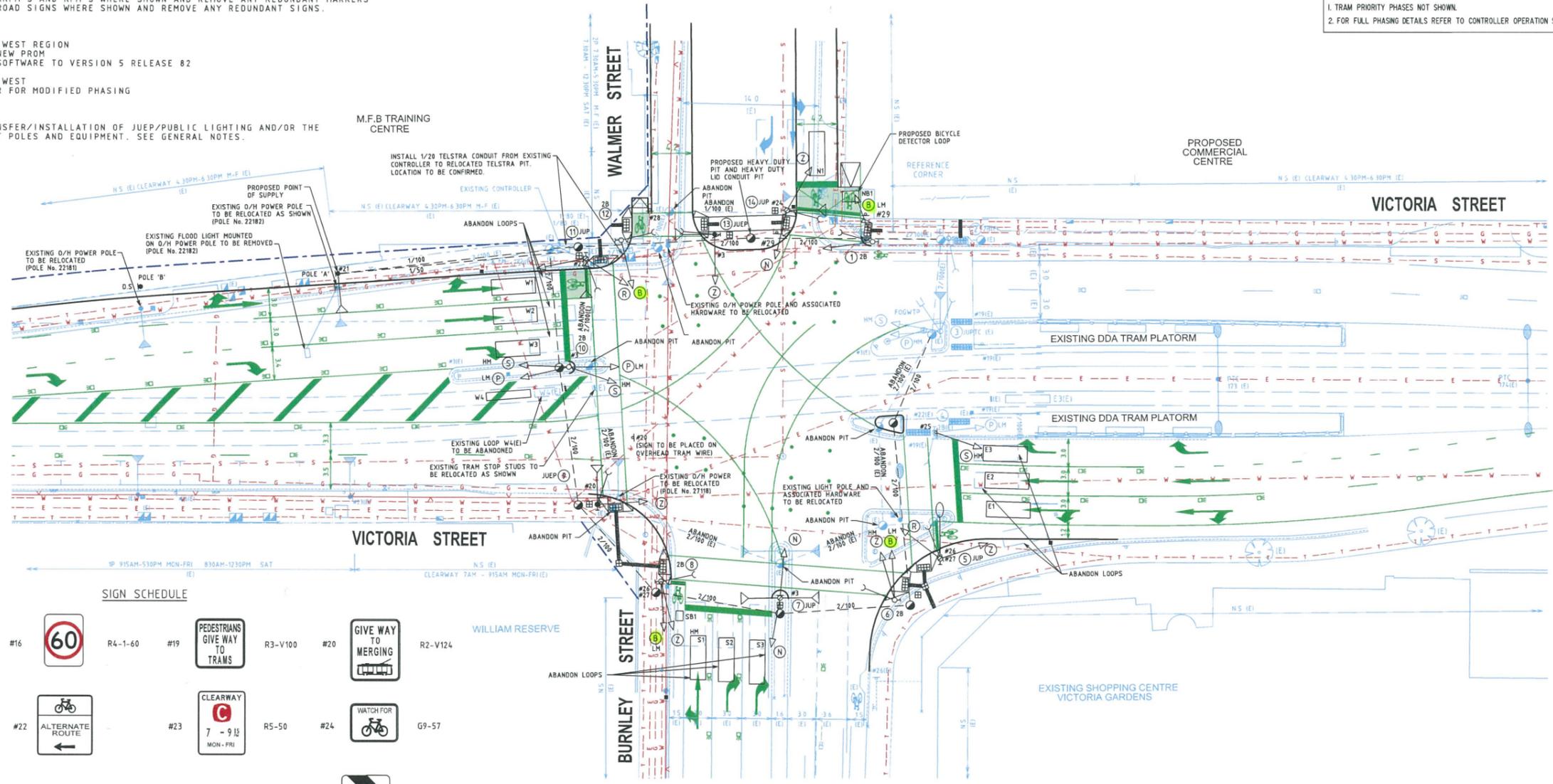
Traffic Signal Layout Plan

REMODEL NOTES

- A. SIGNAL CONTRACTOR**
- PEDESTAL 1, 6, 8, 10 & 12 - INSTALL NEW 2B PEDESTAL AND ASSOCIATED HARDWARE AS SHOWN (USING LED LANTERNS)
 - PEDESTAL 2 - RELOCATE WEST FACING 3 ASPECT LED LANTERN FROM PEDESTAL 2 TO PEDESTAL 1.
 - PEDESTAL 3 - ROTATE FOGWTP TO FACE MOTORISTS EXISTING THE NEW WALMER PLAZA EXIT RAMP.
 - PEDESTAL 4 - REPLACE EAST FACING 3 ASPECT LED WITH LED 'S' LANTERN AS SHOWN
 - PEDESTAL 5, 11 & 14 - INSTALL NEW JUP PEDESTAL AND ASSOCIATED HARDWARE AS SHOWN (USING LED LANTERNS).
 - PEDESTAL 7 - INSTALL NEW PEDESTRIAN DETECTOR AS SHOWN
 - PEDESTAL 9 - INSTALL NEW JUP PEDESTAL AND ASSOCIATED HARDWARE AS SHOWN (USING LED LANTERNS)
 - PEDESTAL 9 - INSTALL NEW SIGNAL HARDWARE (USING LED LANTERNS) AND PEDESTRIAN DETECTOR AS SHOWN
 - PEDESTAL 13 - INSTALL NEW SIGNAL HARDWARE (USING LED LANTERNS) AS SHOWN
 - PEDESTAL 13 - INSTALL NEW PEDESTRIAN DETECTOR AS SHOWN
- B. CIVIL CONTRACTOR**
- CONSTRUCT ROADWORKS AS SHOWN.
 - CONSTRUCT 9 DDA COMPLIANT PRAM CROSSINGS IN ACCORDANCE WITH AS1428.
 - CONSTRUCT PEDESTRIAN FOOTPATHS AS SHOWN.
 - LINEMARK AS SHOWN AND REMOVE ANY REDUNDANT LINEMARKING.
 - SUPPLY AND INSTALL RRP'S AND RPH'S WHERE SHOWN AND REMOVE ANY REDUNDANT MARKERS
 - SUPPLY AND INSTALL ROAD SIGNS WHERE SHOWN AND REMOVE ANY REDUNDANT SIGNS.
- C. VICROADS**
- (i) METROPOLITAN NORTH WEST REGION
- SUPPLY AND INSTALL NEW PROM
 - UPGRADE CONTROLLER SOFTWARE TO VERSION 5 RELEASE 82
- (ii) ROAD OPERATIONS - WEST
- REPROGRAM CONTROLLER FOR MODIFIED PHASING
- D. POWER AUTHORITY**
- ARRANGE FOR THE TRANSFER/INSTALLATION OF JUEP/PUBLIC LIGHTING AND/OR THE REMOVAL OF REDUNDANT POLES AND EQUIPMENT. SEE GENERAL NOTES.



1. TRAM PRIORITY PHASES NOT SHOWN.
2. FOR FULL PHASING DETAILS REFER TO CONTROLLER OPERATION SHEETS



SIGN SCHEDULE

#3	EEP LEFT	R2-3(L)	#16	60	R4-1-60	#19	PEDESTRIANS GIVE WAY TO TRAMS	R3-V100	#20	GIVE WAY TO MERGING	R2-V124
#21	END	R5-51	#22	ALTERNATE ROUTE	R5-50	#23	CLEARWAY 7-9.15 MON-FRI	R5-50	#24	WATCH FOR	G9-57
#25	U TURN MUST GIVE WAY	R2-V115	#26	LANE	R7-1-4	#27	END	R7-4	#28		D4-3(L)
									#29	NO ENTRY	R2-4

GENERAL NOTES

- BASE INFORMATION SUPPLIED BY BOSCO JONSON PTY LTD, REF No. 4706008B
- ALL DIMENSIONS TO FACE OF KERB AND CHANNEL UNLESS NOTED OTHERWISE.
- DECLARED ROAD - VICTORIA STREET (SPEED ZONE 60KM/H)
- ACCESS ROAD - WALMER PLAZA (SPEED ZONE 50KM/H)
- ADVANCE TRAM DETECTION
 - EAST APPROACH - USE TRAM LOOP ET1 AT THE INTERSECTION OF VICTORIA ST/RIVER BLVD (330m)
 - WEST APPROACH - USE TRAM LOOP WT1 AT THE INTERSECTION OF VICTORIA ST/FLOCKHART ST (230m)
- LIGHTING DESIGN
 - PEDESTAL 5 TO BE 11.0m JUP, 12.5m MOUNTING HEIGHT, 1 x 250w HPS LUMINAIRE AS SHOWN
 - PEDESTAL 7 TO BE 11.0m JUP, 12.5m MOUNTING HEIGHT, 2 x 150w HPS LUMINAIRE AS SHOWN
 - PEDESTAL 11 & 14 TO BE 11.0m JUP, 12.5m MOUNTING HEIGHT, 1 x 150w HPS LUMINAIRE AS SHOWN
 - PEDESTAL 9 & 13 TO BE JUEP, 12.5m MOUNTING HEIGHT, 1 x 150w HPS LUMINAIRE AS SHOWN

Cardno
Shaping the Future

150 Oxford Street, Collingwood VIC Australia 3068
Phone (61) 31 8418 7777 Fax (61) 31 8418 7788
Email: info@cardno.com.au Web: www.cardno.com.au/victoria

DATE: 06.11.08
DRAWING NO: CG107403/T/11
DESIGNED BY: JCS
CHECKED BY: JPM
REVISION: P5

NOTE
PROPOSED SIGNAL HARDWARE LOCATIONS ARE INDICATIVE ONLY
The actual locations of proposed pedestals, conduit pits, conduits, etc. shall be determined on site at pre-installation meeting (Hold Point).

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATIONS OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL EXISTING SERVICES ARE SHOWN.

DESIGNED BY: CHRISTIAN SANSTOUPET (CARDNO)

APPROVED BY:

CAT: METRO NORTH WEST
PROJ: TRAFFIC
FILE: VICROADS DRAWING No.dgn

SCALE OF METRES
HOR 0 5 10

VICTORIA STREET / BURNLEY STREET / WALMER STREET
YARRA CITY
TRAFFIC SIGNAL PLAN

FILE NO. TM/YAR/010/25	SITE NO. 4821	SHEET NO.	DRAWING NO. 553912	ISSUE
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22/07/2015 8:46:26 AM G:\DRAT\TRAFF\2007\107403\Drawings\CG107403T11.dgn

22/07/2015 8:46:26 AM G:\DRAT\TRAFF\2007\107403\Drawings\CG107403T11.dgn

SUPERSEDES PLAN NO. 437440

Contact: Don Purdue
Telephone: 9313 1179
QD'S No: 3600041
Our Ref: 41XA0105
File No: SY 025 YRA 41XA0105

Metropolitan North West Region
499 Ballarat Road
Sunshine Victoria 3020
Telephone (03) 9313 1333

Send Correspondence to:
mnw.mail@roads.vic.gov.au
or Fax (03) 9313 1175

Parcels and Drawings to:
Private Bag 4000 Sunshine
Victoria 3020

vicroads.vic.gov.au

02 September 2016

Mr John-Paul Maina
Cardno
Level 4 / 501 Swanston Street
MELBOURNE VIC 3000

Dear Mr Maina

PROPOSED WORKS: TRAFFIC SIGNAL REMODEL
ADDRESS: VICTORIA STREET (647—649) / BURNLEY STREET / WALMER
PLAZA, RICHMOND

I refer to your letter dated 02 September 2016 and attached plans, regarding works at the above location.

VicRoads does not object in principle to the proposed modifications to Victoria Street / Burnley Street / Walmer Plaza intersection that show the consolidation of the Walmer Plaza ramps. This in principle approval is subject to detail design and the condition that the exit ramp from Walmer Plaza aligns with one of the lanes in Burnley Street south of Victoria Street. A lateral deflection for the north south movement through the intersection will not be accepted for this location.

Should you require further information on this matter please contact myself, on telephone 9313 1179.

Yours sincerely



DON PURDUE
TEAM LEADER
EXTERNAL PROJECTS