

21 December 2011

Botanic Ridge PSP

Submission for the GAA draft Precinct Structure Plans open for public comment

Bicycle Network Victoria support the provision of cycling networks in new suburban developments and welcomes the opportunity to make a submission to the draft Precinct Structure Plan process.

Bicycle Network Victoria is currently working on a three year project funded by VicHealth investigating how to overcome the low cycling rates in outer suburbs.

A key aspect of this, and a focus of the project, is the lack of consistent and appropriate planning and provision for cyclists of all ages and abilities. This has led to poor provision for potential cyclists who do not have the basic infrastructure to use their bikes for the many transport and recreational journeys/trips that can easily be done by bike. People are dependent on the car rather than having it as one of the travel options available to them. Travel and activity data from existing suburbs show that most trips to schools, friends and shops are within 1-6km – an easy distance to cycle. Trips to work and tertiary education tend to be much longer and rely upon good connections to public transport and places to leave a bicycle securely for the day.

Key deficiencies we have observed in existing suburbs are:

- Schools are not well connected to the wider path network with children expected to ride on busy connector streets with motor vehicles;
- train stations and other public transport hubs not connected to the cycle network;
- arterial roads above 60k/h with on-road bike lanes that only suit a small percentage of the population;
- lack of bicycle paths along rail reserves which would provide connections to stations for many people;
- widely spaced crossings of major barriers such as freeways and railways that mean long detours for bicycle trips; and
- a general deficiency of cycling infrastructure leading to a piecemeal, unconnected series of lane and paths that are not used (a bit like an incomplete water supply network made of a series of unconnected pipes that is expected to provide people with drinking water).

The project has developed a draft Planning Checklist for Cycling that aims to prevent these deficiencies and allow a quick assessment of whether the basic requirements for cycling have been met in development proposals. The Checklist covers the three basic criteria of:

- **Connectivity** (is it physically possible to ride to key destinations?);
- **Permeability** (encompassing directness and choice of routes –is cycling an attractive choice); and
- **Quality/Appropriateness** (does the cycling facility suit the people using it and the trip purpose?).

At **Precinct Structure Plan** level the checklist seeks to establish a finer grained network that allows access to local destinations as well as connections to surrounding areas. At PSP level there is an increased focus on the permeability and appropriateness of the bicycle network routes. Connector streets are usually shown at this level and many key destinations such as schools, community centres and Local Town Centres will be located on these streets.

Using the Planning Checklist for Cycling as an evaluation tool, Bicycle Network Victoria offers the following suggestions for the draft Botanic Ridge Precinct Structure Plan (see attached annotated plan and table):

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Connectivity –

Network of bicycle routes - bicycle routes (on-road lanes and/or off-road paths) are provided along connector and arterial streets and local access streets are configured to limit speeds and volumes. This provides connectivity to most destinations, including school, parks and Local Town Centres and all residences will be within 400m of a marked bicycle route.

Connections to destinations - The south eastern Local Town Centre (LTC) is well connected via off-road paths and on-road lanes though an off-road bike path on the central connector street should be provided. The smaller south western local activity centre is also well connected via a shared path on the east-west connector street.

Permeability –

Access into Town Centres – Access into and through the SE LTC and SW LTC is well provided by an off-road path and on-road lanes.

Access to Schools, Parks Community Centres – All the schools, community centres and active open spaces proposed have off-road path connections to the wider off road path network including paths along fire buffers and bio-links. Off-road paths on connector streets help enhance access to schools and community centres. There is a short section of path missing at the heritage site in the SE section of the plan area. This would prevent access to and from the Craig Road shared path.

Crossing of barriers – Craig Road to the east is a potential significant barrier for permeability to the east. It lacks a crossing for the Metro Trail Network path between the SE LTC and the intersection of Casey Blvd. An underpass or signalised at grade crossing should be provided at the point where the MTN path intersects with Craig Rd to allow access to and from the east – a signalised crossing or underpass is preferred rather than an overpass.

Quality/Appropriateness –

Connector streets with schools, parks, community facilities – most schools, parks and community facilities will be located on connector streets. These streets are likely to carry significant motor vehicle traffic volumes at moderate speeds (50-80km/h). On-road bike lanes on these roads are unlikely to be used by school children, family groups or novice riders and separated off-road paths,

with clear and unhindered crossing of minor streets, are more appropriate. They also serve to connect to the wider off road path network alongside parks and green corridors. Most connector streets in the plan area propose off-road paths along their length including the major east west connector street in the south.

Connector streets with buses and bikes - Some of the connector streets have marked on-road bike lanes on potential bus routes. This may lead to conflict between buses and bikes as buses must cross and recross the bike lane to load and unload passengers. Off-road bike paths are more appropriate on these routes as bicycles can run behind stops and high frequency bus services will not be hindered in their operation. Off –road bike paths also mean a narrower paved road width which is easier for pedestrians and potential bus passengers to cross. Shared off road paths are proposed along most connector streets expect a section of the north south connector street and a short section though the SE LTC (see annotated plan attached).

Bike lanes on high speed roads – Craig Rd, Browns Rd and Casey Blvd are higher speed arterial roads which propose on-road bike lanes alongside motor vehicles travelling above 70-80km/h. Austroads Guides to Road Design (2009, 2011) recommend separated bike paths for these traffic regimes and these are much more likely to be used by less confident and novice bike riders such as children and family groups who do the majority of riding in the community via short trips to school, shops and friend and for recreation. Separated, bike only paths are more appropriate for these roads but care needs to be taken to design intersections and cross overs (driveways etc.) to provide clear and unhindered passage for bike riders. A bike path that stops and gives way at minor intersections does not properly provide or encourage bike riding.

Separated bike paths from pedestrians – where high volumes of bikes riders and pedestrians are expected, especially at peak times such as before and after school, there is the potential for conflict on shared paths. This can be seen on some of the most popular existing shared paths in Melbourne such as the Main Yarra Trail and the Inner Circle Trail where high volumes of bike riders and walkers mean both are disadvantaged. This can discourage walking and cycling; especially by the more vulnerable who may be fearful of venturing onto a busy shared space. Widening of the path only works up to a certain point and then it makes more sense to provide separated bike and pedestrian paths. Experience and modelling has shown that where peak bicycle volumes exceed 200 bikes per hour with more than 100 pedestrians per hour then separate bike and pedestrian paths are appropriate. The links from the SE active open space past the school and community centre to the Local Town Centre would be candidates for separated bike paths rather than a shared path.

Undercover bicycle parking at public transport hubs – many local trips can be made by bike but longer trips using a bicycle, especially to distant workplaces and tertiary education, rely upon connections to public transport and leaving in a secure place for the day. The current Parkiteer cages at train stations are an example of secure, undercover bicycle parking that allows people to ride to the station and leave their bike. Similar facilities should be provided where public transport connections for bike riders are expected. Any bus interchanges at LTC should provide undercover, secure bike parking.

Comments on associated planning permit applications.

At the **Permit Planning** level the checklist seeks to ensure that the design of bicycle facilities is appropriate and of acceptable quality. The location, alignment and type of bicycle routes have mostly been decided at preceding levels of planning and, at this stage, statutory planners are checking that the application meet these requirements. This level of planning also focuses on ensuring bicycle facilities are designed and built to the established standard detailed in design guidelines, standards and planning schemes. The checklist items at this level allows for review of critical aspects of the design of bicycle facilities in the detailed engineering and landscape plans submitted as part of application for a planning permit or sign-off of development plan.

Planning Permit Application P2000/11 – Subdivision

Botanic Ridge Development

The plan does not show enough detail to comment on provision for bicycles. There is no indication of off road paths, alignment or paths, cross sections for roads or paths or crossing points. Critical will be the connections from the Active Open Space and school/community centre to the neighbourhood activity centre and provision for bicycles along the north south connector street.

Planning Permit Application P2001/11 – Subdivision

Peet Botanic Village Syndicate Ltd

The plan does not show enough detail to comment on provision for bicycles. There is no indication of off road paths, alignment or paths, cross sections for roads or paths or crossing points. Critical will be the connection from the sporting grounds, school and community centre up to the Local Town Centre and provision for bicycles along the north south connector street.

Regards

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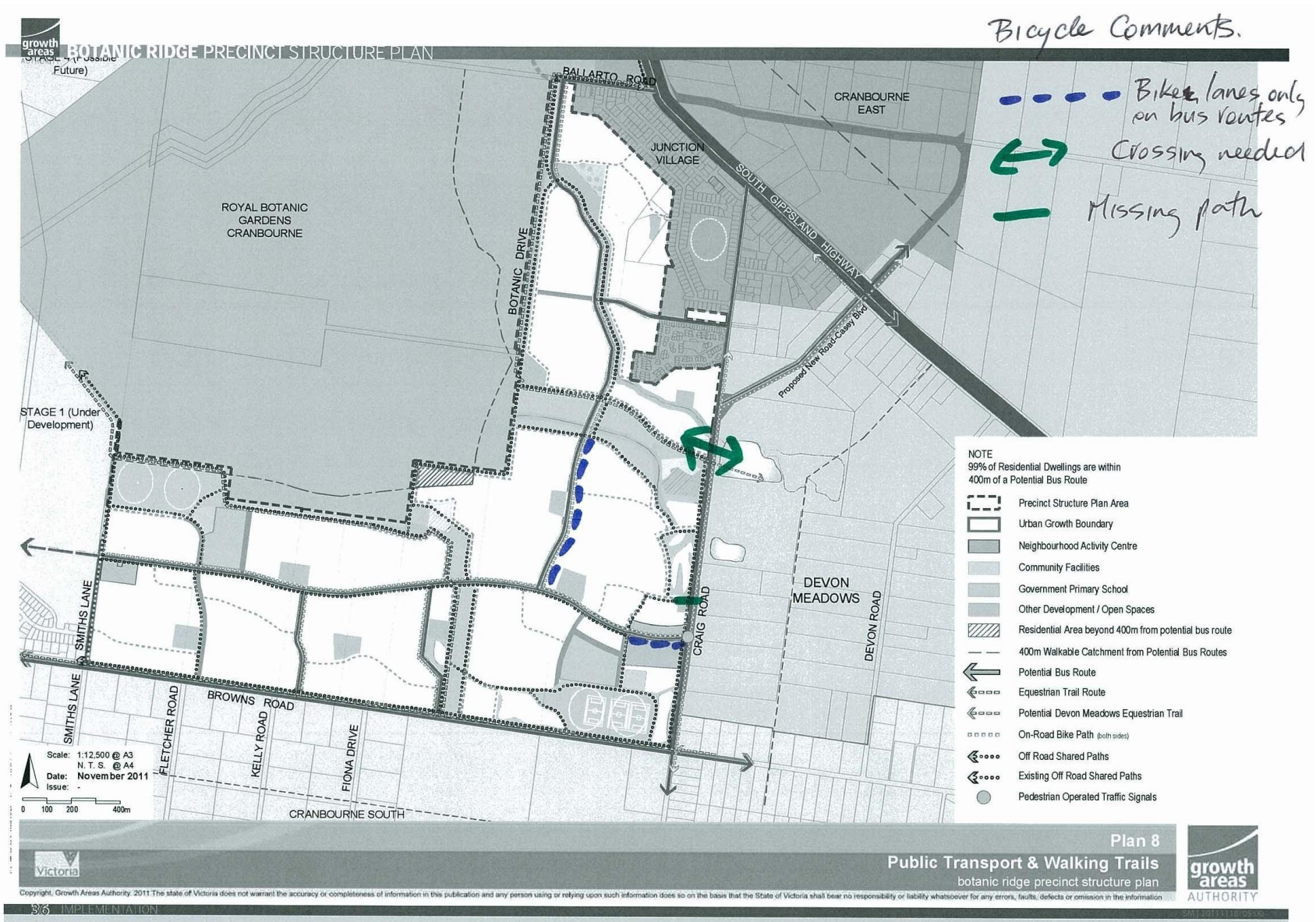


Figure 1: Annotated plan with bicycle comments.

Table 1: Planning Checklist Assessment

Precinct Structure Plan		Botanic Ridge Precinct Structure Plan		
		Yes	No	Response
Item 1	Corridor routes			
Connectivity	Are separated, continuous paths provided alongside all freeways, railway reserves and other green corridors?	1		Alongside Botanic gardens and along waterways
	Are bicycle routes provided along major roads (Principal Bicycle Network routes and other major roads)?	1		Along Craig Rd, Browns Rd and Ballarto Rd
	Are paths provided along all Metropolitan Trail Network Paths (MTN)?	1		East west waterway into Botanic Gardens
Item 2	Local destinations			
Connectivity	Are bicycle routes provided along all connector streets?	1		Sections 6,7,8,9
	Are bicycle routes provided to parks, shops, schools and community services etc.?	1		Plan 8 and Figures 3&4 show provision
Item 3	Residence connections			
Connectivity	Are all residents within 400m of a marked bicycle route?	1		Combination of on-road lanes and off-road paths provide coverage
Item 4	Choice of routes - activity centres			
Permeability	Is there a choice of bicycle routes into and through activity centres to suit a range of trip types and purposes?	1		Off road and on road provision, local and arterial
	Are there connections to minor and major destinations within the activity centre?	1		Figures 1&2 show provision, depends upon local access streets for interior access
Item 5	Choice of route - separate paths			
Permeability	Have direct routes for transport cycling been provided that are not shared with other path users on foot?	1		Connector streets EW and NS provide alternatives though alternative to EW waterway circuitous via road
Item 6	Barriers and crossings			
Permeability	Are crossing points at barriers provided at least every 800m?		1	Middle section of Craig Rd does not have crossing for over 800m. Should have at MTN/waterway path. Eastern end of Browns Rd does not have crossing for over 800m

Precinct Structure Plan

Botanic Ridge Precinct Structure Plan

		Yes	No	Response
Item 7	Topography			
Permeability				
	Does the planned bicycle network take account of topography and avoid hills where possible?	1		Follows drainage and ridge lines.
Item 8	Separation and volumes			
Quality				
	Are separated cycling and walking facilities provided on off road paths where cycling numbers are expected to exceed 200 bikes per hour and pedestrian numbers 100 per hour in peak periods?		1	Only provision is for increased width in areas expecting high foot traffic
	Are local streets configured to allow shared use by bikes and motor vehicles (speeds <40km/h and volumes of <3-5000vpd)?	1		
	Are marked bicycle lanes or off –road paths provided for connector or arterial roads up to 60km/h and volumes < 5000vpd?	1		
	Are separated paths provided for arterial roads (speeds over 60km/h and volumes above 5000vpd) and on connector streets with schools?		1	Casey Fields Blvd/ Craigs Rd sections show bike lanes but also shared paths
Item 9	Off-road paths			
Quality				
	Are all off road paths at least 2.5m wide with 1m clearance each side?		1	Not specified except in some road cross sections
	Are all schools and sporting grounds connected directly to the off road path network via a cycling facility that provides separation from motor vehicle traffic (usually off-road path)?	1		Plan 8 and Figures 3&4 show provision
	Are off-road paths provided on the side of the road or barrier that provides the best connections to destinations?	1		Figures 3 & 4 show path alongside schools and parks
Item 10	Bikes and public transport			
Quality				
	Have interactions with the on road public transport network (buses and trams) been catered for?		1	On-road bike lanes on bus routes not appropriate.
	Is secure parking (undercover locked cage with multiple rails inside) provided at railway stations and major bus interchanges?		1	Section 3.4 only indicates "bicycle parking should be provided within the street network in highly visible locations and close to pedestrian desire lines and gathering places"