# 6. HORSESHOE LAKE ROAD TRAFFIC MANAGEMENT (BROOMFIELD TERRACE TO LAKE TERRACE ROAD)

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The purpose of this report is to inform the Board of the progress made in response to the Board's request for an investigation into Horseshoe Lake Road. The Board expressed concerns around vehicle speeds and cyclist and pedestrian safety in using Horseshoe Lake Road and its roadside.

### BACKGROUND

The Board requested that a report be provided in response to concerns expressed over the safety of pedestrians and cyclists using this road primarily due to speeding vehicles and lack of any lighting. These concerns are accentuated by the existing conditions on most of Horseshoe Lake Drive, which is narrow and undulating in an open rural like setting.

The draft proposal being presented to the Board is at an early stage of development. This report's primary purpose is to identify solutions and reasonably accurate costings for the project. The project will then be prioritised towards inclusion in the City Street Unit's capital works programme.

The Parks and Waterways Unit's revised Horseshoe Lake Reserve Master Plan was presented to the Board in November 2002. It included a 20 to 30 year development plan. This plan shows the repositioning of the dog park and the development of an off road car park. The accompanying report advised that these are the priorities for the Parks and Waterways Unit. These changes will affect the function of the road in the immediate area, adding to the desirability of undertaking some form of vehicle calming near the car park access area. It is therefore proposed to coordinate the timing of possible funding for calming initiatives with the Parks and Waterways Unit's existing programme for these changes.

The Horseshoe Lake Reserve Master Plan also showed angle parking being created along a section of Broomfield Terrace. Currently the layout shown in the Master Plan is unworkable primarily due to lack of carriageway width. The Parks and Waterways Unit advises that there is no budget within its five year capital schedule for this work. It is not expected that this section of Broomfield Terrace will have any significant impacts on the concerns the Board has expressed for Horseshoe Lake Road. However it does hold interest in regard to issues of strategically providing adequate car parking for the demand generated by the two major Parks and Waterways facilities - Horseshoe Lake Reserve and Burwood Park. These issues will need to be explored when the Parks and Waterways Unit undertakes detailed planning and assessment on parking demand in conjunction with the City Streets Unit.

A new residential subdivision is being developed on the south side of the Horseshoe Lake Road and Broomfield Terrace intersection. This subdivision was part of the land used by the Kingslea School. This will contribute to reducing the concerns held by the Board over lighting and pedestrian and cycle safety. As part of the residential subdivision the intersection referred to above will be realigned to slow traffic and some street lighting and shared pathways are being installed in a section of the road. A report is being prepared for the Board from the City Streets Unit detailing the changes; it will be presented within the next few months.

### **CURRENT SITUATION**

Horseshoe Lake Road runs for approximately 1.25 kilometres from New Brighton Road to Lake Terrace Road. It has a comparatively narrow carriageway width of 6.4 to 6.9 metres and is undulating. For the majority of its length the road is in a rural like setting, with a golf course on one side and a wetland reserve on the other, and with no immediate footpath. There is an unsealed pathway on the east side that meanders through the reserve and is some distance from the road.

Horseshoe Lake Road has a low volume of vehicles that averages 2,000 per 24 hours. The two cycle and pedestrian counts on weekdays in September (over a period of one and a half hours) showed that 83 cyclists used the road and 21 pedestrians were in the area. Eighty percent of the cyclists counted during the peak cycle counts were school aged. The numbers of pedestrians and cyclists would be higher if counted in the summer months.

The posted speed limit for the area is 50 km/h. The percentage of vehicles exceeding the speed limit is 91, the mean speed is 61.4 km/h and the 85th percentile speed is 70 km/h.

The accidents registered over the past five years on Horseshoe Lake Road total seven. All relate to vehicles only, with five involving loss of control, four of these being resulting from speeds too fast for the conditions.

### TRAFFIC MANAGEMENT DRAFT PROPOSAL

Whilst the volume of traffic is relatively low the period when the majority of cyclists are using the road coincides with the peak vehicle volumes. The mean speed of vehicles is considerably higher than that which is posted and given the widths of the road seal along with the undulating nature of the road the proposal features strong road calming measures.

The proposal presented focuses on the 750 metre section of Horseshoe Lake Road between the intersection with Broomfield Terrace through to the northern intersection with Lake Terrace Road. The remainder of Horseshoe Lake Road will benefit from the calming features proposed, particularly with regard to the intersection realignment at Broomfield Terrace. There may need to be some pathway additions to the project in the southern section. This will be known once the details of the residential subdivision developments are finalised.

The proposal provides for three equally spaced chicanes located on Horseshoe Lake Road between the two intersections of Broomfield Terrace and Lake Terrace Road. Each chicane features a road platform to ensure reduced speeds. In addition continual street lighting is proposed for this complete section to link with the newly proposed lighting around the Broomfield Terrace intersection as a result of the residential subdivision plan. A shared pathway is also included running parallel to the road to link with the existing Horseshoe Lake Reserve pathway at the northern end and to the residential subdivision shared pathway planned to the south.

## FUNDING AND COORDINATION

Currently no funding is identified in the City Streets Unit's five-year capital budget for this draft proposal. Once the Board has had opportunity to comment on the draft proposal it will be prioritised by the City Streets Unit towards possible inclusion in the budget.

The Parks and Waterways Unit has capital for the off road car park located at the dog park within the financial years 2006/07 and 2007/08. The car park entrance/exit at Horseshoe Lake Road will produce a higher level of side friction, potentially reducing safety with the existing high speeds. Hence it would be prudent if the City Streets Unit proposal is to be funded to link it with the Parks and Waterways Unit's scheduled development.

The calming measures shown in the draft proposal are considered the highest priority features. To be safe they need to be well lit and hence are linked with the inclusion of continuous street lighting. It is therefore proposed to split the project up, in the interest of keeping costs down and thereby achieving more probability to substitute this proposal into the five-year plan. The addition of the shared pathway is therefore not recommended as part of this proposal but may be prioritised as a separate item for later consideration. Considerable improvements will be gained by cyclists and to a lesser degree pedestrians by the proposal as it stands without the shared pathway. To provide vehicle-calming measures and thus reduce vehicle speeds improves the safety of these vulnerable road users.

In addition to this proposal the City Streets Unit is planning to widen the road and minimise maintenance costs. This work is scheduled for 2005/06 or 2006/07. This will provide cyclists with some additional operational road space and allow vehicles to undertake safer passing manoeuvres. However, if it is done in isolation it may also increase traffic speed.

The estimated costs of providing traffic calming and lighting as presented in the proposal totals \$175,000. If the shared pathway shown is included an additional \$100,000 will be needed.

# CONSULTATION

The proposal presented is the result of a number of internal staff meetings, including staff from the Parks and Waterways Unit. No external consultation has been undertaken; consultation is proposed to be initiated if and when the proposal's capital funding is adopted by the Council. The proposal has been developed to be reflective of the concerns and suggested solutions expressed by the community through the Shirley East Local Area Traffic Management Scheme and from the local residents' association/student survey on concerns over Horseshoe Lake Road that was presented to the Board. This meeting provides the opportunity for input from the Board towards ensuring the proposal is addressing the concerns adequately.

## CONCLUSION

Horseshoe Lake Road has a low volume of vehicles and medium levels of cyclists. The majority of the adjacent land is unbuilt and is park-like with a number of recreational pedestrians present. The road is narrow but well within standard seal widths for rural roads. It is undulating and has no lighting and very little road shoulder.

It is apparent that there is an unacceptable level of speeding by drivers on Horseshoe Lake Road and that this is producing a potential lowering of safety for all road users.

As a priority it is proposed to introduce strong calming features in the form of three chicanes each with raised platforms, evenly located between the Lake Terrace Road and Broomfield Terrace intersections. It is also proposed to include continuous street lighting between the above intersections.

The proposal will link into the realignment works at the Broomfield Terrace intersection and its lighting and pathway works, all associated with the new Kingslea School residential subdivision development taking place south of the Broomfield intersection.

The shared pathway option is seen as a lower priority as the above works will reduce the need to provide an alternative facility for cyclists. It is therefore proposed to separate this from the remainder of the draft proposed works to reduce the overall costs and improve the likelihood of the draft proposal being added to the capital works programme.

If the draft proposal is considered for the five year programme, the City Streets Unit will endeavour to coordinate it with both the Parks and Waterways Unit's scheduled off road car park provision on Horseshoe Lake Road and the likely road shoulder widening planned.

The draft proposal is being presented to the Board in response to its request for the City Streets Unit to address concerns held by it and the community over Horseshoe Lake Road. The purpose of this presentation is to confirm that the proposal has the Board's general approval so that a reliable estimate can be prepared. A further report will be made to the Board advising on the item's progress or otherwise into the capital programme.

# Staff

Recommendations:	1.	That the draft proposal for Horseshoe Lake Road, from Lake Terrace Road to Broomfield Terrace as presented be supported for the
		purpose of identifying a financial estimate.
	2.	That the City Streets Unit report to the Board by October 2003 on the progress of prioritising the project within the Unit's capital works programme.
Chairperson's Recommendation:	That the abovementioned recommendations be adopted.	