

## 10. KERB AND CHANNEL RENEWAL PRIORITISATION PROCESS COMMUNITY BOARD CONSULTATION

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The purpose of this report is to provide background information and material as the basis of the consultation with the Community Boards on the policy framework for prioritising kerb and channel renewals.

That the budget provision for Kerb and Channel Renewal programme be increased by \$2 million per annum from 2005/06 for ten years. That, following consultation with the Community Boards, the Sustainable Transport and Utilities Committee develop a policy framework for prioritising kerb and channel renewals for the Council's approval.

That Community Boards be provided with the Kerb and Channel Renewal programme to enable them to prioritise this work. That the City Streets Manager be authorised to fund a component of the Living Streets Programme from the City Streets Kerb and Channel Renewal Output.

### PROCESS AND TIMING

- Present background information and current process to Community Boards – Sept/Oct.
- Obtain feedback and suggestions from Community Boards on weaknesses and strengths of the current process and where they think improvements and additions to the current process can be made – October.
- Collate the Boards feedback and report to the Sustainable Transport and Utilities Committee to develop the policy – November.
- Obtain Council approval for Policy – December.
- Apply new policy to develop a draft programme for the additional \$2m from 2005/06 to 2006/07, ie the new years 3 and 4, and the new year 5 – November to February.
- Report draft programme to Sustainable Transport and Utilities Committee budget meeting in February 2003.
- Provide draft programme to Community Boards to enable them to prioritise this work in February.
- Community Boards report proposed changes to Budget Sub Committee in March.
- Programme included in Draft Plan for public submissions in April.

### PURPOSE OF KERBS AND CHANNELS

The purpose of kerbs and channels, as quoted in the Asset Management Plan, is:

To provide sufficient carrying capacity for normal storm-water runoff from the carriageway, footpaths, berms and adjacent properties to an outfall point; and to delineate the road edge for road users.

The purpose is, also, to protect the road pavement from water infiltration. One of the prime requirements of good road pavement management is to provide good drainage control. Poor drainage control can lead to high maintenance costs and early failure.

### ASSET MANAGEMENT PLAN REQUIREMENTS

The Council's Asset Management Plan contains a Kerb and Channel Renewal Plan. This plan states that the renewal activity is focused on upgrading the remaining sections of kerb and dished channel in the city in response to community concerns. It also states that upgrading kerb and dished channel allows the opportunity to carry out streetscape improvements. Contained in the Kerb and Channel Renewal Plan is a Renewal Strategy.

This strategy states that kerb and channel renewal works are identified by assessment of outputs from RAMM inspection data collected during annual street surveys. RAMM outputs highlight the worst condition channels in terms of length broken and uphill grade, ie ponding water. Specific inspections are undertaken of the worst channels identified by RAMM. The renewal programme is prioritised on the basis of overall condition, road hierarchy, proximity of street trees, extent of adjacent carriageway failure, specific traffic issues, existing cross-falls, and the needs of cyclists, pedestrians, and bus users, as appropriate.

The current target is to replace 20km of kerb and dished channel each year, which means all kerb and dished channel will be replaced within about 21 years. The Asset Management Plan has a target of 25km but this was reduced when capital programme smoothing was done about five years ago. The extra \$2 million from 2005/06 will go some way to restoring the original target.

## ASSET ACCOUNTING ISSUES

The economic life used for depreciation of asset value for kerbs and channels is 80 years.

There is a requirement to account for loss of life when assets are replaced before the end of their depreciated life. This means the remaining value is essentially an additional cost to the project. If assets have to be replaced early because of poor condition, obsolescence, user issues, or safety-related factors, then this extra cost may be less than the costs of maintaining the asset, in which case the lowest lifecycle cost option is to replace early.

The City Streets annual budget amount for 'Loss of Life' for all assets is \$2.6m.

## EXISTING COSTS

The total cost of kerb and channel renewal including street enhancement features averages at about \$480,000/km of kerb and channel length or \$960,000/km of road length when both sides are replaced. For the 20km the budget is around \$10 million.

## TRANSFUND FINANCIAL ASSISTANCE ISSUES

The Council currently receives revenue from Transfund for the kerb and channel renewal programme. The revenue is about \$2.5 million. The Transfund category is called 'Major Drainage Control' and effectively it is justified on the basis that drainage control is an essential element in the maintenance of the road carriageway. If channels are in poor condition they let water into the road pavement and accelerate deterioration and increase maintenance costs. The higher the traffic volumes the more rapid the deterioration.

It is necessary, therefore, to ensure that those channels that are in the worst condition are replaced first to ensure the Council continues to receive Transfund revenue.

## CURRENT PRIORITISATION PROCESS

The Council approved the current priority system in November 1998. At that time a factor for existing shoulder crossfalls was added to recognise the inconvenience factor to residents and others using the streets.

The current process prioritises streets on a city wide basis. This is necessary because of the city wide nature of the asset. Community Boards have had the option of reprioritising streets within their areas within the five year programme. This recognises the fact that programme changes of up to five years are relatively small compared with an 80 year life and deterioration of the asset is normally gradual. It also recognises the fact that Community Boards need to be able to look at local issues and have some flexibility to deal with them.

The following Assessment Form details the factors considered.

<b>KERB AND CHANNEL ASSESSMENT FORM</b>			
	<b>RATING</b>	<b>FACTOR</b>	<b>SCORE</b>
<b>KERB AND CHANNEL CONDITION</b>		<b>0.4</b>	
<b>CARRIAGEWAY CONDITION</b>		<b>0.1</b>	
<b>TRAFFIC HIERARCHY/VOLUMES</b>		<b>0.1</b>	
<b>EXISTING SHOULDER CROSSFALLS</b>		<b>0.05</b>	
<b>TRAFFIC RELATED ISSUES</b> - vehicle, cycle, pedestrian, and bus users.		<b>0.15</b>	
<b>MAINTENANCE COST SAVINGS</b>		<b>0.05</b>	
<b>PROXIMITY TO SCHOOLS</b>		<b>0.05</b>	
<b>PROXIMITY TO BUSINESSES</b>		<b>0.05</b>	
<b>UNDERGROUNDING ISSUES</b>		<b>0.05</b>	
		<b>TOTAL</b>	

## KEY:

1. Kerb and channel - Rate 0 (excellent condition) to 10 (extremely poor).
2. Carriageway - Rate 0 (excellent condition) to 10 (extremely poor).
3. Traffic hierarchy - Rate 3 for T1-T3, Rate 5 for T4-T5, Rate 10 for T6-T7.
4. Shoulder crossfalls - Rate 3 for <8% (fender to 2m) av, Rate 6 for 8-12%, Rate 10 for >12%
5. Traffic related - Rate 3 for low gains, Rate 6 for medium gains, Rate 10 for large gains.
6. Maintenance costs - Rate 3 for low savings, Rate 6 for medium savings, Rate 10 for large savings (eg street trees).
7. Proximity to schools - Rate 0 for no gains for school/pre-school children to 10 for a school/pre-school frontage.
8. Proximity to business - Rate 0 for no business gains to 10 for business frontages.
9. Undergrounding issues - Rate 0 for unlikely to 10 for road widening projects.

## COMMENTS

The prime reason for replacing kerb and channel is to replace an aging asset, and this can be for condition, safety and obsolescence reasons. Prudent asset management requires renewal and replacement of assets to minimise life cycle costs. Replacing too early means spending money when it shouldn't be spent and a 'loss of life' cost is incurred, ie the residual value is wasted. Replacing too late means unnecessary extra maintenance, safety and community costs are incurred. Because kerb and channel deteriorates gradually over a number of years there is usually some flexibility of a few years when renewal can be undertaken.

Because of the need to manage assets in a prudent manner, condition must be the prime criteria in any assessment and because of the effect on the road pavement the carriageway condition and traffic volumes are also main factors.

Safety and amenity issues are also important and need to be considered.

Other factors considered are coordinating kerb and channel renewal programmes with other development plans and programmes, benefits of clustering for 'living streets' benefits, and looking at area plans. Currently this is done as the second stage in the process, ie the streets are assessed and ranked, then the programme is adjusted to take into account other projects, the benefit of doing adjacent streets at the same time to minimise construction costs, other programmes etc.

## FEEDBACK FROM THE BOARD

The Board is invited to consider the following questions and to provide written feedback:

- Strengths of Current Process.
- Weaknesses in Current Process.
- What other factors does the Board think should be added?
- What factors does the Board think should be removed or changed?

## Staff

**Recommendation:** That the Board refer this item to the seminar meeting on 30 October 2002 to provide feedback on the kerb and channel prioritisation process.

## Chairperson's

**Recommendation:** That the abovementioned recommendation be adopted.