

#### 4. CROSBIE PARK - TREE REMOVAL AND REPLACEMENT PLANTING PROGRAMME

<b>General Manager responsible:</b>	General Manager of City Environment
<b>Officer responsible:</b>	Greenspace Unit Manager
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##### PURPOSE OF REPORT

1. The purpose of this report is to present a summary of a tree survey carried out by a consultant arborist in Crosbie Park. The report contains a recommendation seeking approval to carry out a major tree removal and replacement planting programme on Crosbie Park, which will be staged over the next 5 years.

##### EXECUTIVE SUMMARY

2. Board members will recall a recent site visit to Crosbie Park on Monday 17 October 2005 to look at a number of tree related issues on the park. The park has a very high number of Poplar Species and the key issues on the park are generally related to this one particular species and it's hybrids.
3. A consultant arborist recently carried out a tree survey of all the trees on Crosbie Park on behalf of the Greenspace Unit. The survey identified a number of trees that are recommended for removal or replacement. Design work on a replanting plan for the park will be commenced in the near future if the staff recommendations are adopted.
4. Crosbie Park is medium sized sports park with a total area of approximately 7.2 hectares. Russley Kindergarten, Avonhead Tennis Club and Riccarton Leagues Club all have facilities based on the park. The park has road frontages onto Apsley Drive, Woodbury Street, Withells Road and a pedestrian accessway onto Berkshire Drive. Other facilities include a children's play area, full sized basketball court, public toilets, water pumping station, and a pathway network providing linkages to the surrounding streets. An extensive swale area meanders through the park. This is the headwaters of Ilam Stream (tributary of the Avon River ) and last remaining open remnants of that waterway.
5. The layout of the major tree population is essentially concentrated in the following three areas.
  1. Perimeter planting around the boundaries.
  2. Informal groups generally located in the vicinity of the playground and pumping station.
  3. Groups of trees that generally follow the alignment of the stream swale.

10. When the increasing weight of the canopy is combined with additional forces such as high wind or storm events, the incidence of large branch and major stem failure increases in both frequency and magnitude. This is particularly relevant in Canterbury where we are regularly subjected to high winds or storm events from the north-west or southerly direction.
11. Essentially these trees have been a misused "Landscape Tool" and were never intended to be a mature climax species for the park. Their primary use in a landscape function is to provide a fast established look to an area in a short space of time while the more desirable and long term species are establishing. Unfortunately they were not removed at the appropriate time.
12. General maintenance (pruning and removal) needs to be undertaken, as well as on going monitoring and assessment of the existing trees. The majority of this work is on the poplars apart from one or two miscellaneous trees throughout the park. The poplars will be progressively replaced as they over mature, sustain or develop irreversible defects. In the longer term, all of the poplar trees will be removed in favour of more desirable sub-canopy or newly planted trees.
13. The need for major maintenance is widespread as there are many trees which are problematic, namely the majority of the poplars. Long term management options for these trees are both limited and very costly. Remedial pruning is not considered practical or financially sustainable due to the frequency that would be required to maintain these trees in a healthy and safe condition.
14. These trees are likely to continue to be a potential liability with ongoing maintenance still carrying a degree of risk and no guarantee that future failures would be eliminated. Therefore a comprehensive and staged tree removal programme is considered the best and financially sustainable asset management option in the long term. This will initially have a high impact on the visual appearance of the park, therefore the landscape plan that provides for the replacement planting is seen as an important and integral component of the tree removal programme.
15. While some establishment planting of more desirable long term species has occurred, unfortunately it has not been undertaken to a sufficient level that would simply allow for the removal of the poplars without the need for replanting.
16. The replanting programme will involve additional trees as well as transplanting some existing trees. Fortunately there are a number of opportunities to relocate some of the more desirable species to other locations within the park. There are a number of developing trees that will ultimately be too close to a neighbouring tree. The full potential of both specimens can be achieved through the timely transplanting of the adjoining tree. This is a cost effective use of resources in terms of time and mitigating the impact of the tree removals.

#### **FINANCIAL AND LEGAL CONSIDERATIONS**

17. Funding for the removal and replanting of the trees will be accommodated within the current 5 year (2005/06 – 2010/11) Capex and Opex programme for the Greenspace Unit. The vast majority of tree removals will be completed within the 2005/06 and 2006/07 financial years. Replanting will commence in the current financial year and be progressively implemented as trees are removed. All tree removal and replanting will be completed within 5 years.
18. The staged tree removal programme is primarily an operational matter for the Greenspace Unit to undertake being a combination of good arboricultural management practices, liability and risk management considerations as well as the Council's wider Health and Safety obligations. Many of the trees are located near "high target" zones such as play areas, sports facilities and pedestrian pathways.
19. The Council would be exposed to a high risk from future liability/negligence and insurance claims for any personal or property damage if we took no action in regard to managing the issues around these trees, especially given our knowledge of their condition. There will be no consultation regarding the tree removals as Council does not consult around issues of health and safety, however as a matter of courtesy the local community will be informed of any tree removals and the reasons why.

20. It is important to remember that we are dealing with living organisms which are subject to a wide variety of threats, such as pests, disease, drought, storms and vandalism etc, that can compromise a trees structural strength at any time. While we may be undertaking a programme to actively manage our way through this situation, ultimately we can not guarantee that this will totally eliminate **all** risks, and potential failure in any of the trees may still occur. However, we are confident that the current proposal is a proactive asset management response that significantly reduces any potential risks to acceptable and justifiable level to the best of our professional ability .
21. The trees are not listed as protected under the City Plan and no resource consents are required for this work.
22. All work will be carried out by a Council approved contractor with the appropriate health and safety and work site management controls in place.

#### **OPTIONS**

23. There are three possible options:

- (a) Do nothing or status quo.

This is not considered a viable option, as it would leave the Council highly exposed to a negligence claim in relation to any subsequent damage to persons or property given Councils awareness of the condition of a number of the trees.

- (b) Increase level of regular maintenance and implement a regular safety monitoring programme.

This option will not address the key issues in the long term and has the effect of simply deferring the cost of the ultimate action to some point in the future. The overall maintenance cost would be significantly increased and ongoing with this option due to frequent and extensive pruning operations. The risk of potential failure of some of these trees would still be present given their size, location and the susceptibility characteristics of this particular species.

- (c) Undertake a staged tree removal and replacement planting programme.

This option will address the immediate risk management/health and safety issues on a priority basis over a 5 year period. Appropriate species selection and site placement will reduce the overall tree maintenance costs for the park in the longer term by ensuring that these issues do not recur in the future.

#### **PREFERRED OPTION**

24. The preferred option is option (c).

#### **STAFF RECOMMENDATION**

It is recommended that the Board approve option (c) as outlined in the section headed "Preferred Option".