Agenda Item

CAMBRIDGE CITY COUNCIL

REPORT OF: Head of Streets and Open Space
TO: Planning Committee 2 October 2013
WARDS: Market

OBJECTION TO
TREE WORKS PROPOSED TO A HORSE CHESTNUT, GROWING ON CHRIST'S PIECES.

1.0 INTRODUCTION – DECISION MAKING

1.1 Members are invited to comment on proposed felling of a horse chestnut growing on Christ's Pieces. Objections have been received to the proposed works. Under the terms of the Tree Works Protocol the matter is referred to Members to make a recommendation on the proposed works.

1.2 After the matter has been considered by Members of the Planning Committee it will be referred to the Director of Environment for a decision using delegated powers. The Director is required to consult the relevant Executive Councillor and, if it is agreed that Planning Committee's recommendation shall be followed, the Director will make the decision.

1.3 If the Director, having consulted the relevant Executive Councillor, is of the opinion the decision may be contrary to the views of the Planning Committee, the formal decision shall be made by the appropriate Executive Councillor at a Scrutiny Committee meeting and subject to the pre-scrutiny process.

1.4 The tree grows within a conservation area. However, because the tree grows on land managed by the City Council, the Council is exempt from the statutory notification procedure.

1.5 A location plan and photograph of the tree is available at Appendix 1.

2.0 RECOMMENDATIONS

2.1 To advise the Executive Councillor for Public Places that the Committee supports the proposal to fell the horse chestnut and; that a replacement tree shall be planted in the same location.

3.0 BACKGROUND

The tree

3.1 Christ's Pieces was acquired by the Corporation of Cambridge in 1887. In the ten years after its purchase extensive tree planting was undertaken. It is likely that this tree was planted during this period making somewhere between 116 and 126 years old, since planting

3.2 The tree grows adjacent Pike's Walk and is the closest to the vehicular access to the park from King Street. It is in significant decline as a result of extensive bark necrosis caused the bacterium *Pseudomonas syringae* pv. *Aesculi*, more commonly referred to as bleeding canker of horse chestnut, hence the proposal to fell. Its loss will have a significant adverse impact on its immediate surroundings.

3.3 For the majority of its life it would appear that this tree has been grown to its natural form receiving with minimal interventional pruning, for example the removal deadwood and minor branches that may have obstructed access beneath the crown. This type of management is in line with good arboricultural practice

3.4 The tree has been infected with bleeding canker disease for 7 years and consequently monitored. The tree is also has an additional infection by two species of wood decay fungi. Following the emergence of their fruiting bodies on the trunk from an area of bark necrosis, a detailed assessment was taken to determine if any decay was present. No significant

decay was found at the sample point. A climbing inspection was undertaken this spring to report on the extent the bark death caused by the bleeding canker infection in the crown of the tree, deadwood was removed at the same time. Significant infection was found throughout the tree.

3.5 A follow-on inspection this early summer revealed the severity of the infection with the near death of the eastern primary limb. This limb carries around a quarter of the tree's total canopy. This limb and its sub-branches will be at increasing risk of failure the longer they remain in the tree - degradation of woody tissues has already been observed.

3.6 It is the significance of this failure that has prompted the recommendation to remove the tree.

Bleeding canker disease

3.7 This serious disease affects species of horse chestnut. Over the last decade, the incidence of bleeding cankers on stem and branches of horse chestnut has risen markedly in the UK, and is now very widespread. The Forestry Commission estimate that nearly half the UK's horse chestnut trees are now affected. The disease affects almost all ages of tree, from young trees to mature specimen trees, including many highly visible trees in parks, gardens and avenues. There is no chemical treatment available to control or stop development of the canker.

3.8 Horse chestnuts are prone to unpredictable and sudden limb failure when under stress or as the wood dries out, so removal of major dying branches and those trees with significant cankers is advised by the Forestry Commission.

3.6 Replanting with horse chestnut is not advised as they are likely to also become infected within a few years.

4.0 CONSIDERATIONS

Management of risk

4.1.0 The pedestrian and cycle traffic varies in the park depending on weather, time of day and year. The tree is growing in a busy well-used central city park. It grows adjacent a footpath which leads to a near-by gateway to the park. It is within falling distance of a number of private residences.

4.1.1 At this point in time the most likely part of the tree to fail would be the sub-branches of the dying limb and the limb itself; the lower the order of branching the greater the likelihood of failure. Should these branches fail consequence of an impact is likely to be very significant, severity would increase with the higher order of branches/ limb.

4.1.2 Due to the tree's condition the probability of branch failure is considered high.

4.1.3 The tree is in poor condition as such it is not considered reasonable to tolerate the risk posed. There is no chemical treatment available to control or stop development of the canker. Remedial tree works are considered proportionate response.

Tree work options

4.2 The following remedial tree work options have been considered:

4.2.1 **Option A The tree be removed and a replacement planted.**

Environmental implications:

- The tree is in significant decline as a result of extensive bark necrosis caused by bleeding canker of horse chestnuts. Its loss will have a significant adverse impact on its immediate surroundings. Replacement planting will allow for continuity of tree cover, an opportunity to diversify the species and age profile in Christ's Pieces.

Cost implications:

- The cost of tree works, approximately £2000 for felling.

4.2.2 **Option B The tree be retained but reduced in size.**

Environmental implications:

- The extent of reductions works needed to address safety issues would be significant – up to 50% of the branch length. If implemented it would mean the tree's visual amenity would be greatly diminished by removing fine branch work and reducing its stature to leave a decaying and declining monolith. It is considered that this would have a negative impact on the character of the park as a whole which is represented mainly by specimen trees grown out to their natural form. The tree is likely to respond by declining further and faster necessitating other inventions in the near future.

Cost implications:

- The cost of tree works, approximately £1000 for the initial reduction works.

5.0 CONSULTATIONS

5.1 In accordance with the Tree Works Protocol the following were consulted:

- City and County Ward Councillors for Market
- Christ's Pieces Residents Association.

5.2 A notice was placed on the tree, detailing the proposed works, inviting comment and the works posted on the Council tree works web site.

6.0 OBJECTIONS REPRESENTATIONS POINTS OF CONCERN

6.1 Objections were received from four people.

Objections with *Officer Comments*

- There must be alternatives to felling.

There are no chemical treatments to treat bleeding canker.

At a minimum to stabilize the tree it would be necessary to heavily reduce it. This would further seriously weaken the tree allowing the already established pathogens to spread faster and further eventually leading to its death and or further interventions - whilst horse chestnut has a good ability as a species to respond to pruning this individual does not as evidenced by the poor response to a previous minor reduction. In addition a heavy reduction would not be in keeping with the character of the space which is represented by trees grown out to their natural extent.

- Bleeding canker is an auto-correcting disease.

A quarter of the tree is as good as dead, the remaining tissues are heavily infected with bleeding canker and two identified wood decay pathogens. There is nothing that can be done to resurrect these dead tissues.

Horse chestnuts are generally produced from seed rather than cuttings as such each individual will have a unique genotype. Some individuals are thought to be more pre-disposed to infection than others. It is common to see groups of horse chestnuts with varying degrees of infection. As such the advice is not fell infected trees with the first signs of infection. In this case the infection is extensive and well beyond those I would classify as early stages. This tree is not pre-disposed to contain the spread of the disease. In addition to the declining vigour and limb death there is also a structural issue. The bark death has allowed the underlying tissues to dry out (which in itself will weaken wood tissue) allowing a suitable environment for wood decay fungi to flourish. Two decay fungi species have been observed on the tree. There is no treatment for these either and the eventual outcome will be partial or whole tree failure.

- The 10 consultation period is insufficient.

The timescales are set down in the Council's adopted policy on tree works consultations.

7.0 CONCLUSIONS

7.1 The tree is in significant decline as a result of bleeding canker disease. There is no chemical treatment available to control or stop development of the canker. The tree is also infected by two species of wood decay fungi.

7.2 There is a significant risk of harm posed by the increased potential for failure of the tree.

7.3 Remedial works are considered a proportionate response.

7.4 Felling or crown reductions works were the options considered.

7.5 Reduction works are not recommended for arboricultural and amenity reasons.

7.6 Felling and replacement planting is the recommended option.

8.0 RECOMMENDATIONS

8.1 To advise the Executive Councillor for Public Places that the Committee supports the proposal to fell the horse chestnut and that a replacement tree be planted in the same location.

9.0 IMPLICATIONS

(a)	**Financial Implications**	Revenue Spend
(b)	**Staffing Implications**	None
(c)	**Equal Opportunities Implications**	None
(d)	**Environmental Implications**	Loss of 1 mature tree and replacement of 1 tree
(e)	**Community Safety**	None

BACKGROUND PAPERS: The following are the background papers that were used in the preparation of this report:

- ARBORICULTURAL REPORT THE PROPOSED REMOVAL OF 1x HORSE CHESTNUT ON CHRIST'S PIECES. Available from:

https://www.cambridge.gov.uk/sites/www.cambridge.gov.uk/files/documents/christs-pieces-tree-works-july-2013.pdf

- Representations received.

The author and contact officer for queries on the report is contact Matthew Magrath on extension 8526

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Date of last revision:

Appendix 1

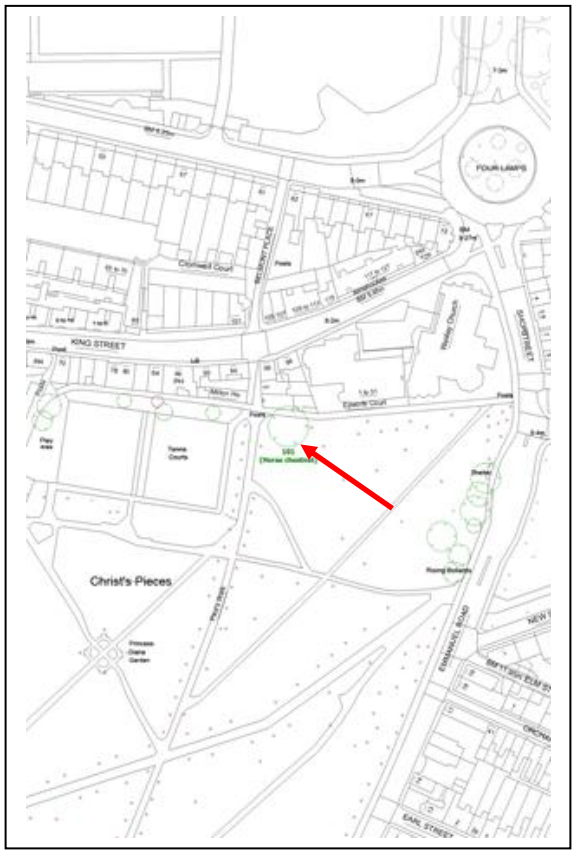

Photo – dated July 2013