

Appendix 1

Managing PCC Tree Stock – Establishing an Updated and Robust Decision Taking Process for Tree Related subsidence Claims

Context

The risks posed by PCC trees have been well known for many years and is clearly identified as a risk within the current Trees and Woodland Strategy. It is, however, considered that we are fast approaching a critical point at which the insured risk from trees needs to be more widely communicated and understood along with a review of governance processes to ensure that future cases are managed in a consistent manner and decisions taken which are understood and accepted corporately and by the community.

It is accepted that this is not an easy matter to deal with. There will be many cases where, unfortunately, the most appropriate solution is the one which has the least worst outcome.

When considering the issues raised in this report, it is of critical importance to have in mind that the vast majority of PCC owned trees are only semi-mature, having been planted in the 1970-1990s during development corporation days. This means that the majority of trees are only circa half their mature size, meaning they will steadily continue to grow to maturity over the coming decades. To compound problems, the trees planted by the development corporation are widely accepted as being, in many instances, 'the wrong tree, in the wrong location' i.e. either too close to properties or of a species inappropriate for the location or (and quite often) both.

In addition to the development corporation related issues, there are also instances of development approved in the last 40 years that perhaps, under today's knowledge and guidelines, would not have been permitted because of its location, design or form of construction close to PCC owned trees or woodlands.

What are the critical items/issues for focus?

Background

Trees should not, of course, be solely considered as a 'problem' in need of management. Trees offer considerable value to the community and should be regarded as a capital asset. A recent i-tree evaluation of our tree stock aimed to quantify and value our tree stock's role in air pollution removal, carbon storage, carbon sequestration and reductions in surface water runoff. In addition, the amenity value of the tree stock was calculated using what is known as the Capital Asset Value for Amenity Trees (CAVAT) 'quick method' (NB: the 'quick method' is largely a desktop based exercise; a more detailed assessment can be done on a tree by tree basis, involving a site visit, but the sheer volume of trees means the 'quick method' is the only realistic option other than for exceptional cases). Amenity value alone provides benefits, with a total value of £5.4 billion, compared to a present value of £36.12 million over 80 years for all other benefits combined, plus total carbon storage value of £10.3 million. A full copy of the i-tree evaluation of PCC owned trees can be found within the Council's Trees and Woodland Strategy using the following [link](#).

It is however becoming increasingly evident that trees currently pose the **single most significant insurance liability to Peterborough City Council (i.e. a greater risk, for example, than that posed by our highways)**. This risk is posed through range of circumstances, as described below.

Direct Root Damage

This results from the pressure that may be exerted by a tree's roots or trunk (Macleod and Cram 1996). This pressure can affect lightly loaded structures such as garden walls, driveways and paved surfaces but rarely affects heavily loaded structures such as houses.

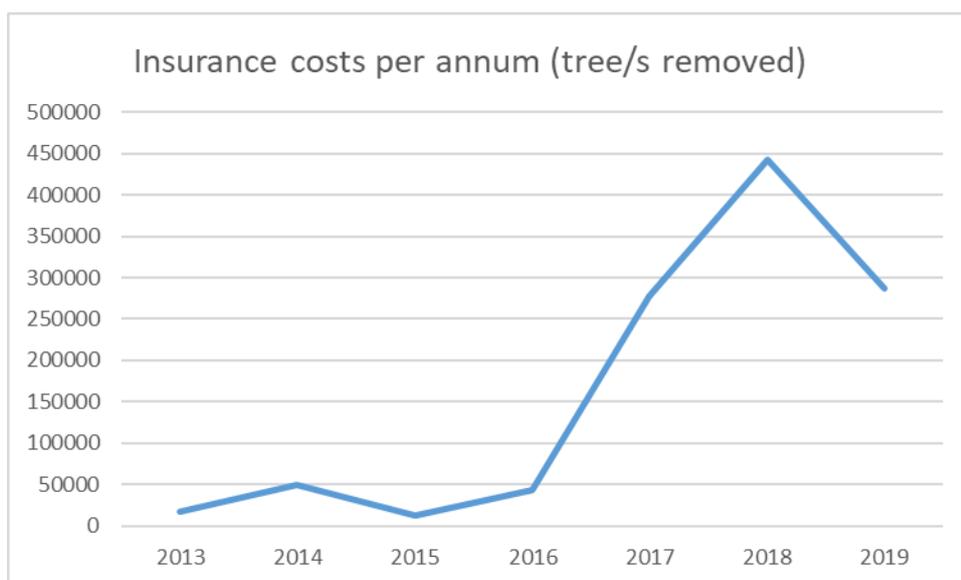
Claims are received by the council by the property owners who have suffered damage, or by members of the public that have suffered injury as a result of trip hazards created. Typically, this damage can be repaired at minimal cost (normally a few £100 per case) however these repairs are short lived and thus impose increasing financial pressures on highway budgets and insurance claims. The nature of the Council's relatively young tree stock is that these damages/claims will significantly increase with time and pose greater financial pressure on the council.

Typically, at present, the Council undertakes around 20 such relatively low cost works per annum, but, as stated, this is expected to grow exponentially in the coming years.

Tree related subsidence

This is caused when clay soils shrink when they dry. The most common cause of drying below building foundations is moisture extraction by the roots of vegetation. If the soil below the foundation shrinks as a result of drying, then the building will move downwards (subside). When the extent of movement is great the building is unable to absorb the movement and then the building will crack (damage occur). Typically, over winter when the soils are wetted again, the cracks will close a little, but over time the cracks generally get bigger and more widespread, and climate change is expected to accelerate this problem (hotter summers cause the greatest subsidence events).

The damage (and subsequent claims) is becoming a significant financial burden on the council. The number of claims will vary dependent of the rain fall (or rather lack of rain) within any given year, however there is a clear trend shown within the analysis of claims data that this issue is becoming more significant, predominantly due to the tree stock maturing annually. Proven claims totalling £1.13million have been received by the Council over the last 7 years. A summary of the last 7 years is detailed below which shows an increasing trend on the value of claims per annum. There is no doubt the trend will continue unless appropriate action is taken.



Note: It is generally accepted that the hot/dry weather conditions experienced in parts of the UK, including the southeast of England, during the summer of 2018 is considered to have been an exceptional 1 in 42 year event. Unfortunately, this year

(2022), just four years later, will likely be deemed an even more exceptional event, and some are questioning whether hot and dry years of 2018 and 2022 will actually become regarded as unexceptional and, if so, will rapidly accelerate insurance claims arising from subsidence. Note: The costs detailed do not include the mitigation pruning works.

Over the past few years, responding to the above cases has almost entirely been on the basis of felling trees where a proven case of damage exists. Felling is the simplest, cheapest and proven way of dealing with the 'nuisance' (defined in a legal sense). Costs would be substantially more if alternative (non-felling) options were taken (estimated to be within the range of 5-10 million).

However, the recent Bretton oak high profile media case involving the proposed felling to mitigate a proven subsidence case highlighted the sensitivity of such cases and pointed to the need for a greater corporate/community understanding of such cases going forward.

Typically, where alleged property damage has occurred, PCC will investigate the matter thoroughly by requesting evidence to investigate the claim objectively: measuring the cause against the 'balance of probabilities'. A Court Appeal in 1981 *Solloway v Hampshire County Council* sets out the criteria for liability to engage:

1. Encroachment of tree roots on to neighbouring land.
2. Damage to the Claimant's property as a result of encroachment.
3. That the defendant knew or ought to have known of the encroachment and the damage caused by it if it is a foreseeable risk that the encroachment will cause damage.
4. Whether there were any reasonable steps that could have been taken by the Defendant to minimise and prevent the risk.

Where possible, PCC's position is that claims are defended on the basis that damage was not foreseeable. Typically, the Claimant and PCC would then agree jointly a level of mitigation that keeps the claim value to a minimum. That is usually felling, or sometimes pruning.

The problem arises, however, when the level of mitigation (felling/pruning) results in a conflict with maintaining the visual amenity of the area e.g large scale mature tree loss has a high visual amenity loss (as well as wider loss, such as biodiversity, carbon, flood risk, air quality, though typically these, rightly or wrongly, tend to be secondary matters in the public/political eye, compared with the visual loss).

Often a compromise is reached, however this exposes the council to greater future liability as it is now a "foreseeable risk". This also goes for the many areas throughout the city where we have now gathered historic data that clearly defines the "foreseeability". The *Berent v Family Mosaic* and *Islington 2012* case highlighted that it is unreasonable to take action to fell all trees in an area due to a speculative risk of subsidence. It does however reinforce the requirement to create a reasonable course of preventative action before an incident occurs in locations that a 'real' risk of subsidence will occur.

It is the case that pressure on the available budget for management of the Council's tree stock, which has recently been reduced substantially, may hamper the council's ability to demonstrate it has taken reasonable steps to minimise or prevent risk. In recent years this work has been restricted to £10K per annum (undertaken from the insurance teams risk mitigation funds). Such small sums are being used to manage a risk of (theoretically) virtually unlimited liability, which is known to be at least in the order of millions of pounds.

Should we invest more in our tree stock?

Peterborough has a tree stock that is still relatively young and thus allows us the opportunity to address some of the issues prior to our trees reaching their full environmental & community benefits, where local controversy would be more likely, if trees are lost. Clear policies were introduced within the 2018 Trees and Woodland Strategy, in order to allow the delivery of this and opportunity to manage our tree stock, however budget pressure has meant that significant work, beyond basic H&S works have not been undertaken. Putting aside risks of claims, the maintenance costs are low compared to the £1,263,926 annual benefit these trees offer to the city. This demonstrates a cost-benefit ratio of 1:1.9 and can be credited with offsetting of 79.3% of the Council's own carbon emissions

Extra investment, or re-instatement of previously cut budgets could enable works to be undertaken to reduce the Council's insurance claims liability in respect to both direct damage and subsidence. It will allow PCC to create a reasonable course of preventative action before an incident occurs in locations that a 'real' risk of subsidence is likely. In short, it is 'invest to save'.

Provisioning of funds could also be used to protect more trees implicated in subsidence cases by seeking alternative mitigation methods that would allow for the retention of higher value trees. This would allow for an approach where the council make a financial balancing act between:

CAVAT Value –v- Cost of mitigation actions and reasonable repair work to the property

Lessons Learned and Actions from the Bretton Oak

Whilst it is clear that the correct decision making process was followed in the case of the Bretton tree, in accordance with existing policy and the constitution, there are some refinements that could be made. This part of the discussion paper is to consider these potential refinements and provide actions for future decision making in regard to trees at risk of being felled due to claims or damage.

Refinement 1

There was (and remains) some distrust among those who did not want the tree to be felled, of the evidence that informed the decision. Specifically, because the evidence included personal information, concerning individual people's human rights, that evidence was withheld when requested. While initially, the response was to challenge the evidence through the provision of alternative evidence to refute the need to fell the tree, over time there was a change to a suspicion that (for reasons that were never articulated) evidence was withheld because it was not conclusive.

Explanation

The case was unique in the sense that it was an application submitted to carry out work under a Tree Preservation Order and thus by default the supporting evidence goes into the public domain to support the application. Most typical claims against the Council are however in respect to non protected trees and thus the claimant's duty to place evidence within a public domain are negated.

It is not the case that the reports are deliberately kept secret - as soon as a claim is lodged, all documents which are provided by the claimant or their representatives relating to the claim are subject to the Data Protection Act 2018, which states data may only be used for specified, explicit and legitimate purposes. In the case of insurance claims, this means dealing with the claim itself and for no other purpose. Data breaches are dealt with by the Information Commissioners Office and could result in large fines being levied upon the Council by the ICO. During the recent Bretton Oak case an appeal to the ICO was made by protestors for the Council withholding information. The case

concluded the Council were entitled to withhold the requested information under regulation 12(5) (B) of the Environmental Information Regulation 2004 (EIR)

Action

The Council will request the consent of the claimant's insurers to publish in the public domain any evidence to support tree related claims against the Council. If withheld we must honour this decision in order to not breach the Data Protection Act.

Where consent to publish evidence is granted the Council's evaluation of this data will also be presented as part of the existing consultation protocol and viewable on the Council's website.

Refinement 2

There was disappointment that the decision to fell a Council owned TPO tree was not referred to the Planning Committee

Explanation

The current Council constitution does not require applications to fell Council owned trees, subject to a TPO, be referred to the Planning Committee, where required to mitigate subsidence damage.

Action

Refer any applications for Council owned TPO trees, proposed for felling to mitigate subsidence damage to Planning Committee; make changes to the constitution to reflect this proposal (but in the meantime these applications can be voluntarily referred to the committee by officers).

Refinement 3

The age of the tree was incorrectly communicated throughout the recent scrutiny and media coverage of the Bretton Oak Case.

Explanation

The Oak tree has widely been communicated as being up to 600 years of age. The tree in question was however not assessed to be Ancient. It was however of a large size and thus may be referred to as 'notable'. With a girth (circumference) of 5.2 metres it has an estimated age of approximately 300 years.

<http://www.wbrc.org.uk/atp/Estimating%20Age%20of%20Oaks%20-%20Woodland%20Trust.pdf>

Irrespective of the age classification the City Council considered the tree is a significant landscape feature and every effort has been made to retain it. The use of CAVAT valuations were used internally however it is equally considered that these should be communicated more publicly from the onset.

Action

Endeavour to communicate more clearly the age of trees within felling proposal at the onset, along with the CAVAT value of the tree/s.

Refinement 4

Whilst the arboricultural industry and public accept that certain actions should be taken to mitigate risk of tree related damage, there is also a very clear requirement that the local authority must balance these actions against the benefits delivered by trees.

Explanation

Although the cost/benefit analysis, informed by a risk assessment were completed for the Bretton Oak tree internally within the Council and all tiers of management made fully aware from the onset, this process could potentially be communicated more clearly within fixed parameters. Currently the options of remediation and mitigation are confined solely to the existing trees and woodland budget. Actions which did not mitigate loss in the most cost-efficient manner would have to be covered within the Tree Budget 'Financial Envelope' which is disproportionately limiting.

Action

Develop a policy that more precisely recognises the value of the Council's tree stock in respect to claims and align remediation or mitigation accordingly. Provide a process that allows consideration of financial provisioning to mitigate loss other than felling for those tree assets of highest value. These cases being considered at Directorate/Corporate level and a balanced judgement being formed within a greater 'financial envelope'.

Proposed Policy

It is recommended by officers that a new approach to dealing with mitigation works for Council owned trees implicated in direct or indirect damage and broader subsidence risk as follows:

It is essential that we first assign a tree(s) a value banding of either high, medium and low.

Specimen Trees

Currently all of the Council's tree specimen tree stock are valued using CAVAT (quick method) which allows them to be split into the three groups with the following values

- **Low - less than £5161**
- **Medium - from £5161 to £14839**
- **High - greater than £14839**

For example: there are 100 trees in the city. The trees are all valued using CAVAT and sorted by value into one list with the cheapest at the top. I look at the 33rd tree in the list to establish the range of the low value group. I look at the 66th tree in the list to establish the top of the range of the medium value etc.

The unit value will be updated periodically and the bandings recalculated.

Woodlands

CAVAT cannot be used on woodlands and thus it is deemed appropriate that implicated trees are considered slightly differently. The following categories are thus proposed:

- **Low - Loss of less than 5 cubic metres of timber. Typically, this would be 1-5 trees, depending on their maturity, before such a volume trigger was reached.**

- **Medium – Proposals resulting in more than 5 cubic metres of timber being felled, but such felling in accordance with sound arboricultural /woodland management.**
- **High - As medium yet deemed not to be sound arboricultural/ woodland management**

Applying the above to cases:

Typically, mitigation works for tree related direct or indirect damage falls into two key areas.

1. Trees which have directly implicated in the damage and beyond reasonable doubt are the causation.

2. Trees on the balance of probabilities is likely to have caused damage now or in the future

The two categories (specimen / woodlands) will be treated the same as follows:

- **Low value trees - All trees identified for felling or to be pruned will be felled, after applying the standard tree works consultation protocol ([Link](#)). defined within the Trees and Woodland Strategy.**
- **Medium value trees - All trees identified for felling will be felled following standard tree works consultation protocols. Where pruning is supported by the claimant as an alternative to felling the Council will instigate those recommendation subject to the works being in accordance with sound arboricultural/ woodland management. Where such pruning works are deemed unsound management (e.g reducing individual trees in woodlands) the trees will be felled. Where cyclical pruning regimes are instigated this work will be costed and an annual capacity bid will be presented to finance.**
- **High value trees – Following the standard consultation protocol the relevant Head of Service will be issued with a recommendation, based on the evidence and consultation feedback, for approval. Where trees fall within the top 5% of CAVAT values (greater than £51989) the claimant insurers will be asked if alternative mitigation approaches would be accepted. Where alternative mitigation are offered this will be costed and presented within the recommendation for consideration. If alternative forms of mitigation are supported by all parties a bid for resources will made to the Executive Director: Place and Economy. If funds are not available or able to be made available, the trees will need to be felled.**

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