Appendix 4

Tree Risk Management Plan

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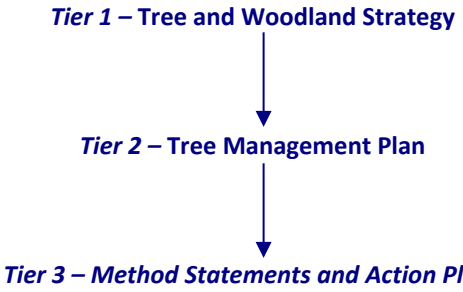
1. Introduction

1. This ***Tree Risk Management Plan*** (the Plan) supports Peterborough City Council's (PCC) adopted ***Tree and Woodland Strategy*** (TWS) and is integral to the sustainable management of the wide range of trees and woods managed by Amey in Peterborough (AP). In hierarchical terms the relationship between the documents is as follows:



2. This document has been revised to include updated strategies and method statements.

2. There was no credible historic data available for the vast majority of the tree stock that is managed by AMEY. That knowledge gap means that:

- there is no understanding of the risks to citizens or visitors posed by the tree stock
- there is no understanding of the risks to property posed by the tree stock
- it is not possible to limit the Council's tree-related liabilities
- it is not possible to accurately budget for the provision of tree services
- there is no programme of tree works
- there are limited records of works that may have been carried out

3. The Plan has been developed to address the knowledge gap in a considered and systematic way and to allow for realistic and rational plans to be made for the provision of a sustainable tree service, and for accurate records to be made that relate to the existing tree stock, and any works that may be carried out to those trees and the reasons for those works.

1. The abridged legal background

1. The TWS refers to the comprehensive and dynamic legislative framework under which tree management in the pubic realm must be delivered.

2. This Plan is AMEY's statement of their duty of care under the broad range of legislation and case law affecting trees, people and property, and in particular a response to the publication in 2007 of the **Health and Safety Executive's** (HSE) Sector Information Minute ***Management of the risk from falling trees*** (***SIM 01/2007/05***).

3. When an occupier fails to meet the requirements of their duty of care, which subsequently results in reasonably foreseeable harm or damage to persons, animals, or property, it is likely to be construed that the occupier has been negligent. This may be either by their action (for example using a person without sufficient skill to survey trees, by undertaking incompetent pruning, or by destabilising a tree by root severance) or by their omission (for example by a failure to inspect trees on a reasonable cycle or the failure to carry out prescribed remedial actions).

> *The person responsible for a tree is expected to take reasonable care to avoid acts or omissions, which could reasonably be foreseen to be likely to cause harm. This person is deemed to be*

whomever has sufficient control over the land to appreciate the extent of any dangers and to take any actions.

(Mynors, 2002:25)

4. As part of their carrying out of undertakings, or control of premises, including public spaces, employers have a duty of care under the ***Health and Safety at Work etc. Act 1974*** (HSW Act). In particular there is a duty to do what is reasonably practicable to ensure that they and other people are not exposed to risk. Section 3 of the Act confirms that an employer cannot pass on their legal duty by way of a contract to third parties.

5. The ***Management of Health and Safety at Work Regulations 1999*** (MHSWR) require a risk assessment to be carried out to identify the nature and level of the risks associated with the works and associated operations. Regulation 3.1 states:

   1. Every employer shall make a suitable and sufficient assessment of:

      a. the risks to the health and safety of his employees to which they are exposed whilst they are at work; and

      b. the risks to the health and safety of persons not in his employment arising out or in connection with the conduct by him of his undertakings.

   (Cited in Health and Safety Executive 2000:4)

6. The MHSWR affect all parts of the tree management process, though in the context of this Plan they apply most particularly to the undertaking of tree inspection on a reasonable cycle and the completion of the necessary remediation work.

7. Under ***The Occupiers Liability Act 1957*** AMEY, as the occupier, owes a duty of care to all visitors to ensure that their visit is reasonably safe. Trespassers are protected under ***The Occupiers Liability Act 1984*** from the risks that the occupier is aware of. Consideration, therefore, is needed to be given to any known tree-related risks and the actions necessary to reduce or remove them.

8. Other legislation requiring positive action in response to health and safety concerns includes the ***Highways Act 1980***. The Government has, for at least three decades, published advice on the inspection and care of trees:

   *The Secretaries of State wish to draw . . . attention **once again** to the need for regular inspection of roadside trees in order that any considered to be a danger to road users can be made safe or felled.*

   (DOE, 1973:2)

9. Collectively, street trees and trees within falling distance of the highway (including those outside the ownership and direct control of the highway authority and so potentially some AMEY-managed trees) are classed as highway trees. The highway authority is responsible for ensuring that highway trees do not endanger the highway and its users. Recommendations in ***Well-maintained Highways, Code of Practice for Highway Maintenance Management*** include R9.3:

   Highway safety inspections should include highway trees . . . . Inspectors should take note of any encroachment or visible obstruction and any obvious damage, . . . a sAmeyarate programme of tree inspections should be undertaken by arboricultural advisors

   (Roads Liaison Group, 2005:119)

10. Statute law has been reinforced, clarified and extended through legal precedent in common law. Precedents from neighbour conflicts dating back to the 1790's are still relevant, however it is some more recent cases which are particularly germane to the management of trees in the public realm. In **Chapman – v – Barking and Dagenham LBC** (1997) there was a clear failure to inspect. Judge Viscount Colville of Culross QC stated:

> *I am satisfied that, despite all encouragement and advice both from external sources and to some extent from their own officers, the defendant Council did not at any relevant time appreciate the distinction between making lists of trees and routine maintenance, as opposed to systematic expert inspection as often as would be reasonably required. I find that no such inspections were ever made, that it was a clear duty on the defendants to make them, and that they have failed in that duty.*
>
> *(cited in Mynors, 2002:150)*

11. The need to use a suitably trained, experienced and/or qualified tree inspector was at the core of **Poll – v – Bartholomew and Bartholomew** (2006) when the claimant successfully sued the landowners for negligence. The judgement also recognised that there are varying levels of skill in inspectors and it is the employers' duty to ensure that they employ a competent person at the appropriate skill level, re-asserted in **Atkin – v – Scott** (2008).

12. **Edwards – v – National Coal Board** (1949) provided a general precedence of what is reasonably practicable. Lord Justice Asquith in his summing up narrowed the interpretation of this to:

> *'Reasonably practicable' is a narrower term than 'physically possible' . . . a computation must be made by the owner in which the quantum of risk is placed on one scale and the sacrifice involved in the measures necessary for averting the risk (whether in money, time or trouble) is placed in the other, and that, if it be shown that there is a gross disproportion between them – the risk being insignificant in relation to the sacrifice – the defendants discharge the onus on them.*
>
> *(LJ Asquith, cited on hse.gov.uk)*

13. In 1999, a tree failed in Birmingham, killing three people; the City Council was successfully prosecuted for their failure to comply with the HSW Act, Section 3, Sub Section 1 (**Crown – v – Birmingham City Council**, 2002). An Improvement Notice was served as part of the proceedings, requiring the council to;

    1. improve its systems to provide suitable and sufficient routine inspection, including identifying all trees and woodland, and

    2. procure competent advisors as necessary, and

    3. carry out and record necessary remedial actions.

    Other incidents have resulted in similar Improvement Notices and requirements.

14. In December 2011 the **National Tree Safety Group** published ***Common sense risk management of trees*** which in Chapter 3 ***What the law says*** provides a summary of covers the law in respect of an owner's liabilities for injury to others caused by the fall of a tree or branch.

15. On 30 June 2011 a branch failed in a recreation ground in Yaxley killing a teenager sitting on a bench: in November 2012 the family reached an out-of-court settlement with Yaxley Parish Council which was responsible for the tree.

2. Tree Risk Management Plan structure

1. The Plan is presented in three sections, dealing with:

    - data capture
    - the tree service
    - the range of actions that will be followed

2. Data capture

1. The scope of the survey

1. As has been stated in **1.2** above there was no credible historical data available for the vast majority of the tree stock that is managed by AMEY.

2. In order to meet their duty of care under the tree-related legislation and case law, and especially the guidance on the standard of risk management of trees as rehearsed in SIM 01/2007/05, AMEY will carry out a systematic and thorough inventory survey of all the trees under their control.

3. During that survey and in the course of their normal activity, AMEY will record any obvious defects of those trees that are within falling distance of the highway.

4. The survey will be cyclical: the first cycle will create a complete inventory of all trees over 75 mm diameter at 1.5m above ground level and all planted trees:

    1. free-standing individuals will be plotted as individual data points,

    2. the extent of groups will be plotted by reference to the group's drip-line,

    3. in groups, there may be individual trees that stand out for whatever reason (e.g. age, species, condition etc.) and they may be plotted within the outline of the group as an individual data point.

5. The first cycle of the survey will be carried out according to geography: the surveyors will move systematically from ward to ward this program of wards has been selected based on historical records of public and Councillor enquiries

6. The timing of the second survey will be evidence lead and will depend upon the particular information about each individual tree that the surveyors capture during the first cycle of the survey.

7. The timing of subsequent surveys will continue to be evidence lead and will depend upon the particular information about each individual tree that the surveyors capture during their assessments.

8. The surveyors will develop a number of survey cycles depending upon, for example, tree health and condition, or the proximity of targets. Those cycles will be determined by the parameter that the surveyor has identified as requiring to be re-surveyed and might take seasonality into account (when looking at the quality of the crown or the tree's architecture or the presence of fungal fruiting bodies for example) or might simply be an annual re-survey to record any changes to the tree or its surroundings.

9. The period between surveys of individual trees will be determined by the surveyors: the maximum period between re-surveys will not exceed 60 months.

2. The extent of the survey

1. The inventory will include following, as defined in the TWS:

    - street trees
    - trees in parks and open spaces
    - trees in some, but not all, schools
    - trees in woodlands
    - trees in the urban woods
    - village and rural trees
    - trees on other sites
    - Landmark Trees

2. Trees on housing land previously owned by PCC are typically the responsibility of Cross Keys Homes and so are outside the scope of The Plan.

3. The survey software

1. There are a number of computerised tree management database tools available from UK software houses: all are equally worthy and all are capable of providing an organised means of capturing tree-related data and geo-spatial references, plotting the point data upon a map and allowing that data to be sorted, organised and manipulated in a variety of ways.

2. E***zytreev*** from RA Information Systems (www.ezytreev.com) was selected to manage the tree data which will be stored, updated within 5 working days and available for Peterborough City Council client access via a web portal.

4. The data to be captured

1. Two sorts of data will be captured and recorded for subsequent manipulation:

    1. **quantitative** data such as species, stem diameter, crown spread, height, date of inspection, date of re-inspection, the frequency of use of the target influenced by the tree, and

    2. **qualitative** data including an assessment of the tree's health, it's condition, the hazard it may pose, the target exposed to that hazard.

2. The data to be recorded may include numerical, textual, spatial or pictorial information: the data may be recorded in full or in abbreviated form as an agreed code.

3. One key piece of data that will be recorded for each and every tree will be the date of the next inspection: completion of this field will provide AMEY with the management information required to develop the programme for the second and subsequent surveys, see **2.2** above.

5. Tree risk assessment

1. There are a number of generally accepted protocols for assessing the risk that a tree may pose to adjacent targets, including but not limited to:

    - ***Evaluation of Hazard Trees in Urban Areas***, Matheny and Clark 1994
    - ***Hazards from Trees – A General Guide***, Forestry Commission, 2000
    - ***Quantified Tree Risk Assessment***, Ellison, 1998
    - ***Professional Tree Inspection***, Lantra, 2006
    - ***Tree Hazard: Risk Evaluation and Treatment System***, Forbes-Laird, 2010

- ***Visual Tree Assessment***, Mattheck and Breloer, 1994

2. Of the protocols listed above some are in the public domain as published papers or works of reference, others can only be accessed and used following attendance at a recognised training event.

3. The protocol that has been adopted for the Plan is the ***Tree Hazard: Risk Evaluation and Treatment System*** (THREATS) developed by an Arboricultural Association Registered Consultant, Julian Forbes-Laird, www.flac.uk.com

4. The THREATS ***Guidance Note*** is available at no direct cost as a download from the Forbes-Laird Arboricultural Consultancy web site, http://tinyurl.com/7pfwurm: AMEY will use the abridged version of THREATS that is embedded within ezytreev in what is described in the Guidance Note as "*a compressed form to evaluate risk as part of larger scale tree surveys*".

5. The first cycle of the survey regime will vary from the protocol established in THREATS in one significant detail: because there is no antecedent data from which to determine survey priorities the survey will proceed on a geographic basis, not on the perceived level of hazard (which will remain unknown until the survey has been undertaken).

6. During the first cycle of the survey regime each individual tree and certain individual trees in the woodlands and urban woodlands will be assessed according to THREATS and the ***Risk Evaluation Sum*** will be calculated and recorded.

7. The Risk Evaluation Sum will be used to determine the priority for second and subsequent survey regimes.

6. Tree value assessment

1. The **Forest Research** publication from April 2011 ***Research Note 008 Street tree valuation systems*** http://tinyurl.com/7j9hftu refers to three generally recognised methods for assessing the value that may be afforded to a tree:

   - ***Capital Asset Value for Amenity Trees*** (2007 Christopher Neilan, United Kingdom, http://tinyurl.com/82bamct)
   - ***Visual Amenity Valuation of Trees and Woodlands (The Helliwell System 2008)*** (2008 Rodney Helliwell, United Kingdom, http://tinyurl.com/84yexfz)
   - ***iTree*** (2006 USDA Forest Service, United States of America, www.itreetools.org)

2. In addition, over the last 50 years, the **Council of Tree and Landscape Appraisers** (CTLA) has developed an approach to tree valuation that is based on internationally recognised valuation principles.

3. ***Capital Asset Value for Amenity Trees*** (CAVAT) has been adopted as the preferred tree value assessment tool for The Plan; AMEY will use the abridged version of CAVAT that is embedded within ezytreev.

4. CAVAT is available as a download at no direct cost from the **London Tree Officers' Association** web site, http://tinyurl.com/82bamct

5. During the first cycle of the survey regime CAVAT *will not* be routinely applied: the imperative will be to generate the Risk Evaluation Sum under THREATS in order to determine the priority for tree works and future survey regimes.

6. During the first cycle of the survey regime CAVAT may be applied in certain situations, particularly where a tree that is intuitively considered to be of high value or benefit has been surveyed and found to be in need of removal or remedial works which might affect the tree's appearance or perceived value or benefit.

7. The tree surveyors

1. The tree survey will be undertaken by suitably trained, qualified and experienced AMEY staff. Typical minimum arboricultural qualifications awarded under the **National Qualifications Framework** would include the NVQ/SVQ Level 3 in Treework, the AA/ABC Awards Technician's Certificate in Arboriculture, the EAC European Tree Technician, or a National Award or Diploma (depending upon the syllabus), or their successors under the **Qualifications and Credit Framework**.

2. In addition, the AMEY tree surveyors would have completed the Lantra Awards Professional Tree Inspection course.

3. The requirement will be that a surveyor is are able to demonstrate their competence in the recognition of tree species, diseases, defects and signs of debility, and the consequences of those symptoms. On-going training will be made available as required in order to maintain the currency of the surveyors' arboricultural knowledge.

4. In addition, a surveyor will be able to demonstrate:

    1. understanding of and competence in the use of ezytreev in the field.

    2. understanding of and competence in the implementation of THREATS to a consistent standard in the field, and

    3. understanding of and consistent implementation of CAVAT in the field, and

5. It will be the surveyor's responsibility to acknowledge their own limitations in both knowledge and understanding to ensure that they do not attempt to sign off a survey for which they are not suitably and sufficiently qualified. The surveyor will be encouraged to refer those trees for a second opinion, including a recommendation for a more detailed inspection, including the use of decay detection devices such as the resistograph or sonic tomograph, should the surveyor determine that to be necessary.

8. The delivery of the survey

1. The survey delivery will conform to the ***Arboricultural Inspection Method Statement*** which is annexed to The Plan.

1. The cyclical survey regime

1. Currently there is no credible data available for the vast majority of the tree stock that is managed by AMEY. The first cycle of the survey regime will provide:

    1. a complete inventory of all the individual trees over 75 mm diameter at 1.5m above ground level and all planted trees, and

    2. an inventory of the woodlands and shelterbelts, in general by group or area rather than by individual tree, and

    3. an assessment of tree health and condition against the parameters of the abridged version of THREATS that is embedded within ezytreev, and

    4. an evidence-lead programme of re-surveys and more detailed tree inspections derived from the parameters recorded to generate the Risk Evaluation Sum using THREATS as embedded within ezytreev, and

    5. an evidence-lead programme of tree works by priority derived from the parameters recorded to generate that Risk Evaluation Sum.

2. The obligations and responsibilities of AMEY and PCC for the inspection of highway trees, as defined in **1.1.9** above, are set out in paragraph 22.12 of the **Notification of Change**.

3. The first cycle of the survey regime will be complete by no later than 31 July 2015.

4. Those outputs will generate the management information required by AMEY to:

    1. determine the appropriate resource profile for the tree service, and

    2. determine the appropriate budget for the tree service, and

    3. deliver sustainable tree management in an even and consistent way that can withstand scrutiny and audit, and

    4. create suitable reporting templates, and

    5. finesse the parameters of the data that is being captured.

5. It has been decided to base the first cycle of the survey regime upon geography, to start with Central Park and Itter Park and then adopt the following route across the electoral wards:

    1. Bretton North
    2. Orton Longueville
    3. Orton Waterville
    4. Central
    5. Ravensthorpe
    6. Dogsthorpe
    7. Werrington North
    8. West
    9. Werrington South
    10. East
    11. Bretton South
    12. Park
    13. Fletton and Woodston
    14. Stanground Central
    15. Paston
    16. Glinton and Wittering
    17. Walton
    18. Eye and Thorney
    19. Stanground East
    20. Barnack
    21. Newborough
    22. Orton with Hampton
    23. North
    24. Northborough

6. The proposed route does not follow a clear and ordered geographic route but is a response to the number of tree-related enquiries that have been received by AMEY.

7. This survey route has been amended based on further enquiries from residents, Councillors and from finding of those enquiries by Amey staff from the tree services team.

7. The progress of the survey will be publicised on both the PCC and AMEY web sites.

2. *Ad hoc* inspections outside the survey regime

1. In addition to the programmed first cycle of the survey regime there will be occasions when *ad hoc* inspections of specific trees or tree groups are required in response to an enquiry. During these inspections the surveyors will apply, in their abridged forms as embedded ion the ezytreev software,

    1. THREATS, and

    2. CAVAT

2. The outputs from the *ad hoc* surveys will therefore provide the opportunity to balance the need for work, as derived from the application of the embedded THREATS protocol, with an indication of the value of the tree, as derived from the application of the embedded CAVAT.

9. Monitoring the survey

1. For the monitoring of the implementation of the survey to be adequate then AMEY will need to put procedures in place to demonstrate that each of the following have been met and any agreed benchmarks and or milestones have been achieved, and if they have not then what control measures will be put in place:

    1. the scope of the survey has been met: either the following are true or they are not:

        - all free-standing individuals have been plotted as individual data points,
        - all groups will have been plotted by reference to their drip-line,
        - the noteworthy individuals in groups have been plotted within the outline of the group as an individual data point.

    2. the extent of the survey has been met: either the complete set of data has been captured for each tree under AMEY's control, of these areas or it has not:

        - street trees (and highway trees, see **2.1.9**)
        - trees in parks and open spaces
        - trees in some, but not all, schools
        - trees in woodlands
        - trees in the urban woods
        - village and rural trees
        - trees on other sites
        - Landmark Trees

    3. all the required data fields have been completed:

        - quantitative data is likely to be recorded from a sequence of drop down menus and so should be consistently presented,
        - qualitative data may be recorded as free text that may require editing before it can be used, editing may give the opportunity to a suitably qualified and experienced arboriculturist to verify the data

    4. the embedded version of THREATS has been consistently applied, across time, geography and the team:

        - the use of a suitably qualified and experienced arboriculturist to lead the analysis and comparison of the data captured by the team will help the team move toward a common vocabulary of risk and a shared understanding of the interpretation of the THREATS protocol

    5. the embedded version of CAVAT has been consistently applied, across time, geography and the team:

- as for risk assessment, the leadership of a suitably qualified and experienced arboriculturist will help the team move toward a common vocabulary of value and a shared understanding of the interpretation of the CAVAT protocol

10. Discharging the duty of care

1. The SIM 01/2007/05 states, at paragraph 3:

> *Employers, persons carrying out undertakings or in control of premises all have duties under the HSW Act. In particular, there is the duty to do all that is reasonably practicable to ensure that people are not exposed to risk to their health and safety. Doing all that is reasonably practicable does **not** mean that all trees have to be individually examined on a regular basis. A decision has to be taken on what is reasonable in the circumstances and this will include consideration of the risks to which people may be exposed.*

2. The SIM 01/2007/05 continues, at paragraph 5:

> *In addition to duties under the HSW Act there are a number of reasons why . . . duty holders . . . may want to manage their tree stocks, for example responsibilities under other legislation and the risk of civil liabilities to:*
>
> - *reduce the risk of property damage from subsidence;*
> - *maintain stocks to preserve their amenity, conservation, and environmental value;*
> - *prevent personal injury through trips and falls on footways disturbed by tree roots; and*
> - *prevent vehicle damage and personal injury from obscured sightlines on the highway.*
>
> ***For these and other reasons, some duty holders may undertake inspection of trees in a manner well beyond the reasonably practicable requirements of the HSW Act.***

3. The SIM 01/2007/05 continues, at paragraph 7:

> *Individual tree inspection should only be necessary in specific circumstances, for example where a particular tree is in a place frequently visited by the public, has been identified as having structural faults that are likely to make it unstable, but a decision has been made to retain it with these faults.*

4. It is clear therefore that the knowledge gap dictates that the first cycle of the survey regime shall generate a complete inventory of tree-related data, something that SIM 01/2007/05 would describe as

> ***inspection of trees in a manner well beyond the reasonably practicable requirements of the HSW Act.***

5. It is also clear therefore that by adopting and fully implementing the stAmeys described in **2. Data capture** above AMEY will be able to discharge their duty of care under the broad range of legislation and case law affecting trees, people and property.

3. The tree service

1. The profile of the tree service

1. AMEY will determine the appropriate structure for of the tree service required to deliver the Plan, and the authority, competence and responsibilities of the individuals in that structure. The appropriate level of resource will be kept under constant review by AMEY.

2. Analysis of the survey data will lead to the development of a tree work programme; the most appropriate means to deliver the programme will be agreed between AMEY and PCC.

2. The budget

1. AMEY will deliver the tree service through existing budgets allocated to them via PCC. In addition to the resources allocated at the commencement of the contract extra budget was allocated in the ***Medium Term Financial Strategy*** for years 2012 to 2017.

2. The indicative costs of the common range of tree service tasks or services will be used to plot how to draw down the available budget.

3. For operational reasons it is likely that some of the works that are identified by the survey will be brought forward and completed in advance of the recommended date because of the need to use the overall budget wisely and to consolidate service delivery within particular areas at given times.

3. Sustainable tree management

1. The Plan seeks to help to deliver PCC's commitment to protect, plant and maintain the trees and woodland within its authority. Sustainable systems of management will be promoted that will aim to:

    - maintain or enhance the tree population
    - facilitate the removal of dangerous or potentially hazardous trees
    - promote biodiversity and conserve the tree/woodland eco-system
    - conserve veteran trees with significant ecological, historical and amenity value
    - establish a tree population with a balanced diversity of age class
    - optimize the use of timber and other products of tree management

2. Records of tree management decisions that were based on high quality management information will help to deliver tree care in an even and consistent way that can withstand public scrutiny and audit.

4. Management information

1. The summary of the recommendations in SIM 01/2007/05 is that the tree manager in the public realm, as the duty holder, should have the following management information:

    1. an overall assessment of risks from trees to enable the risks associated with tree stocks to be prioritised, and to help identify any checks or inspections that may be needed,

    2. a system for periodic checks, to involve a quick visual check for obvious signs that a tree is likely to be unstable to be carried out by a person with a working knowledge of trees and their defects, but who need not be an arboriculturist,

    3. a record of when an individual tree has been checked or inspected with details of any defects found and action taken,

4. a procedure to obtain specialist assistance when a check reveals defects beyond the experience and knowledge of the person carrying out the check,

5. a system to enable people to report damage to trees and to trigger checks following potentially damaging activities, such as work by the utilities in the vicinity of trees or severe gales,

6. specific assessments for those trees that the duty holder wishes to retain, despite the presence of serious structural faults,

7. an action plan to manage the risk that has been identified by a check, without unnecessarily felling or pruning trees,

8. a register of individual trees that require more detailed inspection because, for example, they have structural faults that are likely to make them unstable and a decision has been made to retain the tree with these faults in close proximity to targets,

9. a monitoring regime to ensure that the arrangements are fully implemented.

2. As one of the leading tree management database systems the developers of ezytreev have ensured that the available fields and the software architecture have been designed to meet the recommendations of SIM 01/2007/05.

5. Reports

1. Data capture is predicated upon the available fields and the software architecture of ezytreev.

2. Once the data has been recorded ezytreev allows it to be interrogated in a variety of ways and for high quality management information to be generated in a number of formats that will be suitable for a wide variety of purposes.

3. Typical reports that will be generated will include:

    1. the progress of the survey, both within each electoral ward and also across Peterborough,

    2. an analysis of the enquiries that have been received, for example how many over what period, what type (emergency, 20 day etc), Location

    3. the prescriptions for work as generated by the survey,

    4. the delivery of the tree work programme generated by the survey,

    5. and so on.

4. The progress of the tree work programme will be publicised on both the PCC and AMEY web sites, updates may be shared using social media.

6. Finessing the survey

1. It is to be expected that as the survey proceeds the surveyors and the tree service will want to make changes to the data that is recorded, or the way in which it is recorded.

4. Tree management

1. AMEY will follow two broad principles when considering what tree management action is appropriate in each circumstance, be that as part of planned works or an emergency response:

    1. appropriate action will be taken to minimise a clear and foreseeable threat to the personal safety of residents or visitors, or of harm to property, which is directly related to the condition of, or presence of, an AMEY-managed tree, and

    2. early intervention will be preferred to prevent everyday arboricultural situations from developing into a hazard that is difficult or unreasonably expensive to control.

2. AMEY will not take action against normal, routine, seasonal household maintenance tasks which property owners are expected to carry out, for example

    1. the clearing of leaves from gutters and pathways, or

    2. the weeding of self-set seedlings from the property

3. The general presumption will be that tree pruning will provide the preferred option of a sustainable solution; however in some circumstances tree removal may be the only option.

4. The appropriate response in each circumstance will be determined by the particular facts, however an analysis of the previous decisions that have been taken, each one based on high quality management information, will help to deliver tree care in an even and consistent way that can withstand public scrutiny and audit.

1. The two broad principles

1. An obvious defect

1. For example, where there is a concern that at some time in the future large limb failure may occur

    1. pruning will be the preferred option to provide a sustainable solution to address an asymmetric or disfigured profile, a limb might be reduced or removed for example, or the complete crown managed, or the target moved away from the hazard; or,

    2. the premature removal of the tree may be the only realistic option in order to mitigate the risk.

2. A second example might be when there is a concern that root growth will cause a trip hazard to be created then:

    1. root pruning will the preferred option to reduce that risk; however,

    2 where there is a real risk that a trip hazard might develop because of tree roots underneath a footpath or car park surface then the intention will be to intervene early and take decisive action, for example to remove the tree that is giving rise to the concern.

3. Threats that arise that are an indirect consequence of the presence of the tree (including for example slippery leaves on the pavement in autumn, or seasonal fruit fall) will only be dealt with in extraordinary circumstances and when AMEY considers that no other option is available.

2. Early intervention

1. As a consequence of cyclical maintenance as part of planned works Amey will seek to ensure that:

1. adequate overhead clearance is maintained for an adopted highway: 2.4 m is generally considered adequate for pedestrians, 5.2 m may be required for double-decker buses for example,

2. forward visibility of the full face of road signs is maintained,

3. street furniture remains unobstructed by Amey-managed trees,

4. trees under their management do not prevent street lamps from illuminating the highway (the purpose of street lamps is to illuminate the public highway; where there is adequate illumination of the highway Amey **will not** normally take action to improve the levels of illumination for an adjacent property).

2. In general a pruning regime will be the preferred option to manage obstruction; however premature tree removal may be the only realistic option available to AMEY.

3. A range of circumstances

7. Wildlife

1. Trees have co-evolved and co-exist in the wild with a wide range of wildlife, including insects and birds: in general AMEY will take no action to try to resolve the possible conflicts that may arise because of wildlife as it is most likely that tree pruning or removal will simply displace the problem, it will not provide a sustainable solution. For example:

    1. trees provide a source of food, or shelter for birds to nest or roost; in consequence bird-droppings may become a local problem. However, pruning will be unlikely to provide a solution as the birds will continue to sit on the remaining branches of the tree,

    2. all trees change with the passing seasons and they will bear pollen, petals, fruit, seed, leaves or needles which will simply drop, uncontrolled, to the ground or be carried freely on the wind. AMEY will not consider action to alleviate the problems that may arise as the clearance of these arisings is considered to be part of the routine, seasonal property maintenance that householders are expected to carry out,

    3. honeydew is an excretion from aphids and other plant sucking insects, it is a sticky dAmeyosit, an almost pure sugar solution, similar to the plant sap from which it is derived. Honeydew can not readily controllable by pruning and the cleaning of affected surfaces should be considered to be routine maintenance

2. In contract, grey squirrels are considered to be destructive and opportunistic and are very well adapted to exploit both urban and suburban habitats. They strip the bark of thin barked trees, and bury fruits, nuts and seeds often destroying the seed's growth-point before it is buried. They can easily access buildings and they may take up residence: they may gnaw through electrical wiring, lead or plastic pipe, roof timbers or felt.

3. AMEY will be prAmeyared to consider pruning trees to provide a clearance of 2 to 3m from buildings to deter squirrels, but will not consider felling trees to displace squirrels as this will not provide a sustainable solution.

4. Trees and buildings

1. As a consequence of cyclical maintenance AMEY will seek to ensure that adequate clearance is maintained between an AMEY-managed tree and adjacent buildings, in order to prevent abrasion damage to either.

2. In certain areas of Peterborough there may be

    1. residents' requests for mitigation where tree-related damage to low-rise structures has been alleged, or

    2. insurance claims where subsidence has allegedly occurred as a consequence of an AMEY-managed tree.

The appropriate response in each circumstance will be determined by the particular facts,

Streets and public highways

Threats that arise that are an indirect consequence of the presence of the tree (including for example slippery leaves on the pavement in autumn, or seasonal fruit fall) will only be dealt with in extraordinary circumstances and when AMEY considers that no other option is available.

Review

This document will be reviewed every 2 years by the partner Amey and Peterborough City Council.

5. Abbreviations and references

1. Abbreviations

CAVAT	=	Capital Asset Value for Amenity Trees
AMEY	=	Enterprise Peterborough
HSE	=	Health and Safety Executive
HSW Act	=	Health and Safety at Work etc. Act 1974
MHSWR	=	Management of Health and Safety at Work Regulations 1999
PCC	=	Peterborough City Council
SIM 01/2007/05	=	Sector Information Minute Management of the risk from falling trees
The Plan	=	Tree Risk Management Plan
The TWS	=	Tree and Woodland Strategy
THREATS	=	Tree Hazard: Risk Evaluation and Treatment System

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