

## **WAVERLEY BOROUGH COUNCIL**

### **TREE RISK MANAGEMENT GUIDE (TRMG)**

**(update 2016)**

#### **Introduction**

Waverley Borough Council has responsibility for land that is accessible to the public or which in many areas is adjacent to public rights of way. The Council manages parks and common land for recreation, amenity and conservation. It also manages land for Social Housing purposes and a range of other sites containing trees and woodlands. While trees have many values:- social, environmental and economic, they may, if suffering from decay, disease or mechanical defects, represent a hazard in areas where people and property are present. It is therefore important for relevant site managers to be aware of tree-related hazards.

This Tree Risk Management Guide sets out the responsibilities of Sections and managers for identifying ownership of land with trees and zoning sites in respect of different levels of access and risk and also identifies those responsible for assessing the risk of hazards from trees. In addition, the guide explains the risk zoning methodology, the inspection and recording system and sets out an inspection frequency. The guide deals with risks associated with tree failure only and attempts to clarify to which land these responsibilities apply.

The approach set out follows the principle of the Council's established guidance on general risk assessment and management and takes account of the Health and Safety at Work etc Act 1974 – Management of Health and Safety at Work Regulations 1999 – Occupier Liability Acts (1957 and 1984) and relevant case law.

Further guidance for the original document was found in a range of publications and sources amongst which are:-

- *English Nature 2000 : Veteran Trees, A Guide to Risk and Responsibility.*
- *Lonsdale, D. 1999. Principles of Tree Hazard Assessment and Management (Research for Amenity Trees No. 7).*

- *Forestry Commission 2000 : Hazards from Trees, A General Guide.*
- *Mynors, C. 2002 : The Law of Trees, Forests and Hedgerows.*
- *National Trust 2001 : Inspection of Trees; Trees and Woodlands Instruction 1.*
- *Advice from Treework Environmental Practice (Specialists in Tree Hazard Assessment) May 2004.*

The current update also draws on the following sources of information;

- Department of Transport 2005 (updated 2012): *Well-maintained Highways: Code of Practice for Highway Maintenance Management.*
- Mynors, C.2011 (second edition); *The Law of Trees, Forests and Hedgerows.*
- Health and Safety Executive 2007 (reviewed 2011): *Management of the Risk from falling trees (SIM)*
- National Tree Safety Group (NTSG) 2011; *Common sense risk management of trees*

This document is mainly for internal purposes; for Members' information and endorsement, for officer guidance and execution and for tenants and lessees' information and clarification, as it may be for other interested parties.

In the unfortunate situation of a claim or case being made against the Council as a result of tree failure, this document, together with survey records, should assist in defending the Authority's position and approach in respect of management of hazards posed by its tree stock.

The feasibility and reasonableness of various aspects of this Tree Risk Management Guide and its workings will need review and adjustment as and when required. It is intended to carry out a biennial review for that purpose.

### **Background and Objectives**

The Waverley landscape is highly valued and is characterised by extensive tree cover. Much of the land controlled by Waverley Borough Council (WBC) contains many trees in the form of more ornamental plantings in parks and other amenity areas, old wood-banks and copses, more extensive woodlands, both naturally generated over time and planted ones, semi-wooded heath areas, shelter-belts adjacent to sports grounds etc, often densely

wooded roadside strips of common land and individual trees within grounds of properties including Social housing. The nature of land use is such that access by people is locally high. The management of trees should therefore embrace a number of objectives which, for example, may relate to amenity, wildlife conservation, heathland restoration, shelter and the control of hazards. In the case of risk management, it is necessary to take steps to identify trees which represent a significant risk to people or property and to deal with them accordingly. This should, however, be done in a way which minimises the loss of value for people and wildlife.

To this end, a number of objectives relevant to risk management are listed as follows:-

- to manage and minimise risks to people or property;
- to avoid the unnecessary removal or disfigurement of amenity trees or of trees with high wildlife value;
- to conserve habitats that are provided by trees, including those that are old and decaying.

### **General management of tree populations**

#### **Routine management and safety inspections**

If sensible management of tree populations is being undertaken, there will be less need to carry out frequent inspections to assess the safety of trees and there will be fewer trees to inspect. Conversely, if there is little or no routine management it might be impossible to carry out a tree survey that makes much sense. Routine tree/woodland management and tree safety should be inextricably linked. If there is no routine management it may be impossible to achieve adequate levels of safety.

So, for example, in a dense, “natural” woodland adjacent to a road, the individual trees may technically be healthy but it is not satisfactory to leave tall, closely spaced trees to sort themselves out, as there is a higher than average risk of such trees falling regardless. When carrying out tree safety inspections in these circumstances, it is almost impossible to decide which trees are safe and which are not. There are at present (2013) still many examples of such situations on Waverley land. Similarly, even-aged groups of trees or Avenues often contain several trees of poor form or structure which can only be retained in relative safety by carrying out potentially extensive (and expensive!) pruning works which are likely to need repeating on a regular basis. In these circumstances, although potentially controversial, gradual removal and replacement is often likely to be the more sensible approach.

Practical management will therefore almost always involve the removal of some trees from time to time and this should not be prevented by public attitude/reluctance, insufficient funding or inertia. All tree populations are dynamic rather than static and removal of trees, as necessary, is an essential part of management. Failure to manage trees in this way will not only shift the cost from routine management to tree risk management, in the long term it will also result in increased costs (larger trees in unsuitable locations and/or of poor form having to be dealt with instead of when they were still small). In addition, such approach will increase the risks associated with trees and also result in lower amenity values in the long term.

Staff responsible for management of Waverley land including its tree populations (whether individual trees or woodlands) should in the first instance concentrate on general tree management principles. This should take account of the main purpose and priorities of those sites and managers should develop a purpose statement for those populations which needs to include proposals for routine management. Such proposals or principles will then form the basis of work specifications and –planning which in turn, will assist those Officers in bidding for or planning of budgets.

Tree safety inspections (and resultant works) will be done in tandem with routine management but will, over time, become more straightforward, less time consuming and likely to cost less.

The above approach is based on established principles within the Arboricultural and Forestry professions and on advice from Government (see Helliwell,R. (2012) *Management of tree populations*. Arboricultural Journal, Vol. 34, p160-168.; The National Tree Safety Group (NTSG 2011) *Common sense risk management of trees* ,Ch 4 , page 42 and The Health and Safety Executive (2007, rev 2011) *Management of the risk from falling trees*, para 8.

## **Principles of Tree Risk Assessment**

### **Nothing is without risk**

We are at risk every day in our own homes, travelling to work and in the workplace. We expect to take risks, and the law requires only that we should be guarded from risks that are unreasonable. Absolute safety or the eradication of all risk is not expected and arguably is neither possible nor desirable. In the context of tree management, such an approach could result in the loss of all tree-associated amenities. By controlling risks from tree hazards, owners are meeting natural and ethical duties for the safety of others. They are also meeting the requirements of insurers and of the law.

### **The importance of assessing risks**

Whether trees are managed for landscape, habitat, commercial or multi-purpose objectives, the legal obligation to ensure the reasonable safety of others remains the same. The law recognises that there is a balance to be struck between the risks and benefits of trees. WBC, as owner and occupier of land, is required to consider the level of risk associated with a tree and whether it is reasonable to protect against that risk. The duty is to identify apparent sources of danger and to make land safe, so far as is reasonably practicable. Liability is determined on the basis of whether a danger posed by a tree could have been foreseen and whether reasonable remedies could have been undertaken, which would have reduced the risks to an acceptable level.

To meet legal requirements, it is crucial that WBC manages risks and can be seen to do so and is able to provide evidence that this has been done. To manage risk effectively, the hazard must first be identified and ranked according to severity, then prioritised for action.

No tree is entirely safe, given the possibility that an exceptionally strong wind could damage or uproot even a mechanically 'perfect' specimen. It is therefore usually accepted that hazards are only recognisable from distinct defects or from other failure-prone characteristics of the tree or of the site. The assessment of risk is based on:

- the value of whatever is judged to be at risk, and the likelihood of its being harmed in the event of mechanical failure in the tree, as estimated by:
  - what is at risk – people, buildings, vehicles etc. (i.e. Target);

- the probability of impact, based on duration of occupation – for example, in relation to a permanent structure or a given number of people using a path during a given period of time;

(these considerations are clearly linked to the location of the tree, which is a key factor in deciding whether inspection is required in the first place);

- target characteristics: e.g. high speed traffic – elderly or very young people frequently present etc;
- the magnitude of the hazard, as estimated from the size (diameter) and height of the part of the tree most likely to fail;
- the probability of failure, based on the type, position and severity of the defect concerned, the species or cultivar of tree and the nature of the site.

A practical five-step procedure for risk assessment works as follows:-

1. Inspect.
2. Decide who/what may be harmed and how.
3. Evaluate risk and decide whether works are required – action recommendations and check completion.
4. Record findings.
5. Review assessment and revise if necessary.

## **Definitions**

Hazard:	The potential to cause harm to people or property.
Risk:	The likelihood/probability that actual harm will be caused by a tree (whole or in part) and the severity thereof.
Harm:	Refers to personal injury or damage to property.
Target:	Is that which may be harmed.
Target Zone:	Zone or area identified and classified according to target value and/or frequency of use to give a notional range of risk from high to low.
Tree risk assessment:	Method to establish the probability that harm or damage might result from a particular tree hazard within a stated period. It considers the likelihood of tree failure occurring when a target is present within the falling distance of the tree. The assessment can be ranked as a level of likelihood and provides the means to prioritise action to manage risk.
Tree Survey:	Ground level inspections of trees to allow assessment of risk posed and, where relevant, recommending works to address risk – recording information. Depending on circumstances, a single survey record could relate to a single tree or to a larger number of similar trees within a group/area.
Tree:	For the purpose of WBC tree inspections, a tree is a large woody plant which has the potential to cause harm.
Defect:	Defects which justify recording a tree are those items or symptoms which result in that tree or its parts to pose a higher than average risk to cause harm or damage to people or property. Items that do not justify trees to be recorded are for example; pruning wounds without any active or significant decay – ordinary growth deformations not normally associated

with defects likely to result in increased risk – small dead wood which is not related to apparent and significant overall decline – leaning or one sided trees without evidence of compromised (root) stability and minor defects which, due to their location, are very unlikely to cause harm or damage, such as a dead or broken branch in the crown area which is away from public access (i.e. over dense woodland), or smaller trees showing signs of sparseness or decline in areas of infrequent pedestrian access.

In addition, the assessment of any decay or defect needs to be put into the context of the tree species affected ie; a sparse Oak is less likely to suddenly die or become unstable whereas a Birch in the same condition is much more likely to be dead or falling over within a short period. In the same way, trees of modest size with tight forked branches or trunks, although strictly a potential defect, need not always be recorded if the limb or trunk is either very upright and unlikely to collapse or the suspected mode of failure would not affect areas with frequent public access nor immediately impact on the stability or the remaining tree.

Finally, if a relatively small tree has defects which warrant that tree's removal and the planned tree work in the inspection area is going to be carried out within a relatively short period (say three months) and the defect is unlikely to result in failure in the mean time, then simply marking the tree with spray paint for felling as part of the overall safety works, will be sufficient

### **Responsibilities – Levels of Expertise and Lines of Communication**

The ongoing responsibility for Tree Risk Management in Waverley is a corporate one. For practical reasons, however, the Community Services Section has been given the task to take the lead and supply a service to other landholding departments. The Tree and Woodland Officer (Community Services) is the lead Officer who is directly assisted by two Assistant Tree Officers.

The approach set out in the original document was the subject of extensive consultation and was ratified by Councillors in 2004.

All staff with responsibility for WBC owned property will be responsible for identifying their sites and with the help of the Tree and Woodlands Officer ( hereinafter called the Tree Officer) decide which areas will or will not require formal tree inspections.

In view of the extent of tree cover on WBC land, it is not feasible for the Tree and Woodlands Officer to inspect all WBC trees on a regular basis. Other staff exist, in particular Countryside Rangers, who have sufficient knowledge, competence and training to carry out inspections on their own sites. The Tree Officer and Assistant Tree Officers will be able to concentrate on inspecting trees on all other sites which have no active management/manager at all. The Tree Officer is also available to assist other staff in situations requiring a higher level of specialist input and can be asked for second opinions.

In order to promote modern tree hazard assessment practice and also to achieve a greater level of consistency between inspectors, all relevant officers have received training to Lantra standards (minimally one day basic tree inspection course topped up with three to four days from our regular Arboricultural training provider. The Tree Officer has the highest level of experience and training which is equal or above the level of the Lantra Professional Tree Inspection Certificate. Both Assistant Tree Officers have also obtained the Lantra Professional Tree Inspection Certificate. Competence (a legal requirement under H & S legislation) and consistency are under constant review and the Tree Officer carries out regular spot checks and organises refresher days, both on an individual basis as well as group training sessions.

Where the responsibility for land lies with other sections as in the case of Housing or Corporate Property, but management is taken care of under the Grounds Maintenance Contract, then the tree hazard management will be dealt with by the Tree Officer and his assistants. Other WBC sites which are not managed by Countryside Rangers and are not subject to the Grounds Maintenance Contract, will be inspected by the Tree Officer and assistant Tree Officers.

Notwithstanding the above, responsibilities will remain with all relevant site managers, including Housing through the Tenancy and Estates Manager, Home Ownership Officer and Corporate Property through the Property Management Officer to inform the Tree Officer where circumstances have changed (or are about to change) through sales, leases or

change in occupancy due to alteration of use or access. In addition, there is a need for assistance after severe weather events (see section on Timing of Tree Inspections) and awareness and vigilance in hazard prevention (see relevant section).

### **Which Trees to Inspect**

Subject to specific exceptions, the Council will only take responsibility for trees on land where it has a strict occupier's liability. There are a few minor exceptions to that approach, the details of which are set out in the 2004 Committee Report which introduced the original TRM guide.

The need for a particular tree or group of trees to be inspected depends on the usage of the area within their potential falling distance. Inspection is unquestionably necessary within areas where people, or high-value items of property, are continuously or frequently present close to trees which are capable of being hazardous. Clearly, however, there are remote areas where tree failures are very unlikely to cause injury or damage, even though the risk of such an outcome cannot be entirely disregarded. Even at a more heavily used site, it could be that the risk is currently very low by virtue of the size and species of the trees present. There cannot, therefore, be a hard and fast distinction between sites or part of sites where inspection is essential and where it is entirely unnecessary. The key consideration is foreseeability; if it can be reasonably foreseen that anyone could be at risk, the occupier has a duty of care to reduce that risk within reason.

### **Zoning**

Zoning helps to identify areas according to levels and intensity of occupancy and provides a notional range of risk from high to low. If a site has a significant number of trees and has differing levels of occupancy, the use of zoning can aid decisions on the nature and priority of inspections. Zone classifications are not absolute values that can be compared from one site to another, but provide information to help determine the need for, and priority of, inspection relevant to a particular site. As the nature of site usage may change, it will be necessary to review these zones periodically. In line with guidance given in the H&SE SIM (reviewed 2011) and the NTSG document (2011), Waverley has divided all its landholding into two zones, one where there is frequent public access near trees and where all trees will be formally inspected and a second zone, where trees are not within falling distance of areas with frequent public access and where trees will only be inspected informally during routine site visits for general management purposes.

## **Frequency of Inspection**

A general principle to be observed is that, in areas where people or property could be at risk from tree failure, formal inspections should be carried out frequently enough to detect any hazards that may have recently developed. Hazards from short lived species which also tend to have poor resistance to decay and disease, generally develop quite rapidly, for which reason an inspection is generally advisable where such trees occur on high-usage sites. The same may apply to large old trees with substantial lateral limbs. Basic inspections, by way of a “drive by” or “walkover” exercise particularly in areas with high levels of occupancy, should also be made as soon as practicable after any exceptionally severe weather event that might have caused damage to trees (see also “Timing of Inspections”).

All Waverley trees in the “formal” zones need to be inspected on a cycle of 3 to 5 years. It will be the responsibility of the relevant site manager ( Tree Officer in case of “managerless” sites) to decide, following inspection, whether the site or part of site ought to be inspected on a three, four or five year rotation and this decision will be recorded within the database (currently Woodplan) for that entire location or zone. In addition, these sites should receive minimally a visit every two years for general site management purposes at which point any obvious tree problems should be noted and dealt with.

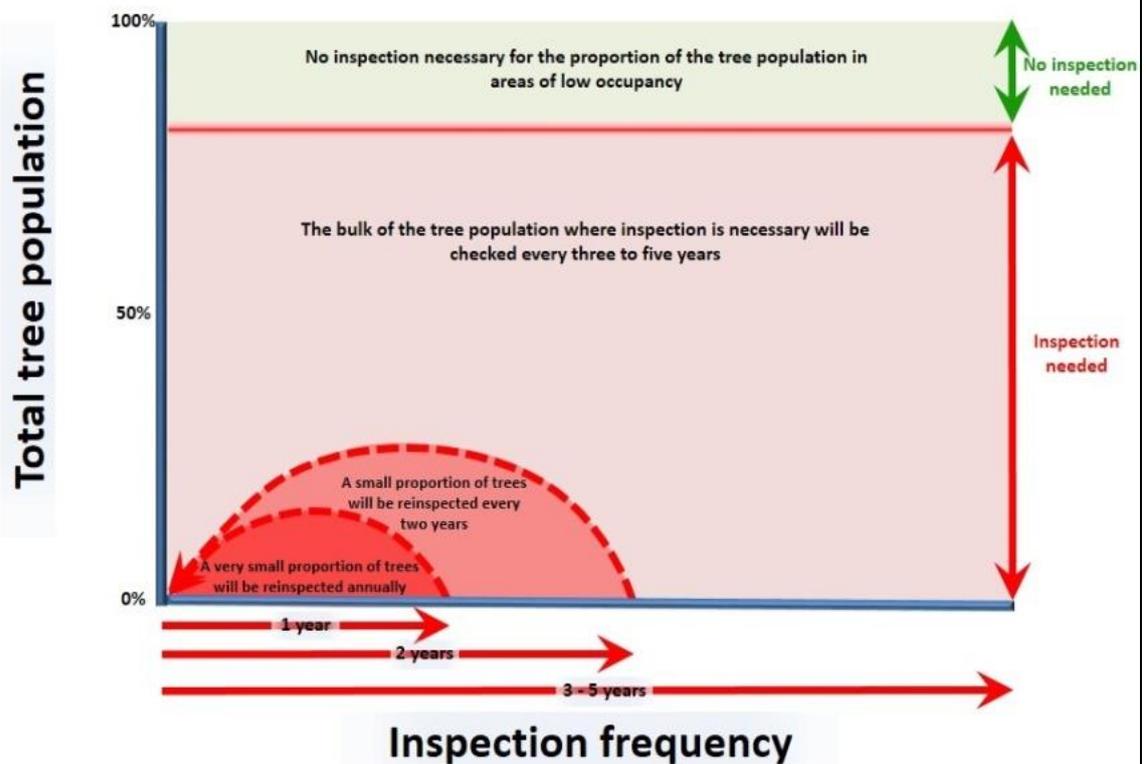
Only on those sites where occupancy rates are high on or adjacent to the site and some significant trees (possibly with defects and retained) are within falling distance of vulnerable “targets”, there is the opportunity for the inspector to decide that a particular tree (or trees) require more frequent inspection ie possibly every one (exceptional) or two years. This decision will also be recorded on the database but will be against the individual tree. The database will in all circumstances alert the relevant inspector in advance that a re-inspection is due.

All staff can and should refer to the Tree Officer for advice or second opinions on tree defect issues which are beyond their level of training and experience. Similarly, decisions on frequency of inspection in certain areas or in respect of specific trees, which are out of the ordinary, should be approved by the Tree Officer.

**ZONE AND INSPECTION LEVEL CHART**

<u>TARGET ZONE</u>	<u>COLOURING ON MAP/INFO</u>	<u>EXAMPLES OF TARGET AREA</u>	<u>LEVEL OF INSPECTION</u>	<u>FREQUENCY OF ASSESSMENT</u>
		Trees in or adjacent to:		
Negligible Risk (Zone2)	Unmarked	Remote or inaccessible areas with no or minimal public use and no high value targets	<b>None</b>	Occasional review of status /requirement
Low risk (Zone2)	Unmarked	Woodland: - Open parkland, heathland, fields, minor paths and desire lines with occasional use and no other high value or vulnerable targets	<b>No formal inspection:</b> observation and awareness of the general condition of trees during normal visits by site managers	During normal routine visits by site managers.
Other (Zone1)	Green, Pink/Red and Blue	All other areas (Higher usage)	<b>Formal</b>	Every three, four and five years respectively (and informally after severe weather and annually as part of a general site management inspection)

# Strategic tree inspection framework



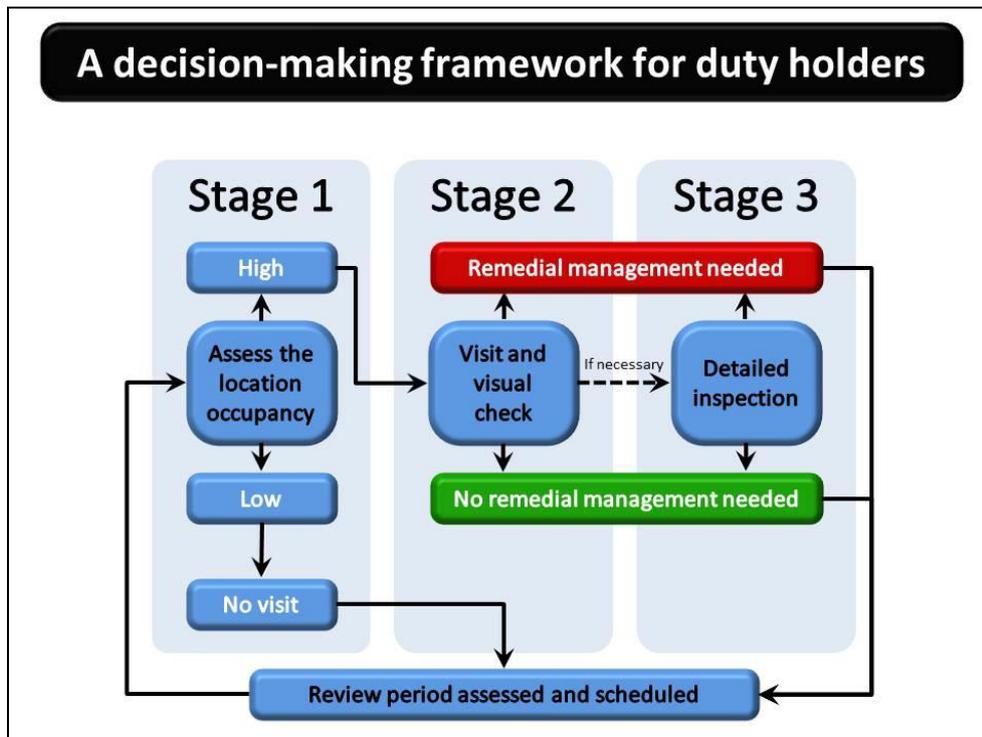
## Inspection Type

### **Informal Inspections**

Record date, site and areas/trees inspected and works carried out. The same approach will be taken after severe weather events (see timing of inspections) and the biennial general inspection of those sites which receive formal inspections (at longer intervals)

### **Formal Inspections**

Inspecting all trees within falling distance of adjacent target zones, using the Councils standard digital system, plot and/or tag and record only trees with defects (see definition) whether works are deemed necessary or not (with justification why not by way of allocating a risk level). Details of work instruction and date of works completed.



### Timing of Tree Inspections

The best time to find and identify fungal fruiting bodies which may affect trees is generally in early autumn. Summer inspections are considered better to assess leaf condition and density and winter is best to have a more unobstructed view of the higher trunk and branches and their connections.

It will be clear from this that, taking account of the numbers of trees requiring regular inspection on WBC land, it is impractical to carry out two or more inspections in a given year, nor is this common practice in similar situations elsewhere. It is therefore proposed to continue to carry out inspections on a year round basis and only, where an inspector is unsure about a tree's condition, to schedule only that tree for re-inspection in a particular season depending on the nature of concern.

If, between formal inspections, a "natural" event such as exceptionally severe weather (e.g. severe gales or heavy snow fall) or fire takes place with the potential to have caused trees to have become unsafe, then all relevant site managers, including Housing and others, will carry out a walk-over/drive-by inspection of affected sites, starting in the high-risk areas and working downwards. This should happen, within reason, as soon as practically possible and a record kept of date, site findings and actions. The Tree Officer will determine whether an event was severe enough to justify such inspection(s) and alert relevant staff.

In the case of sites without direct manager involvement, such as several of the larger Housing woodland sites and the Corporate Property sites and most of the non Countryside parks and amenity areas, this work will be shared between the Tree Officer and the Assistant Tree Officers and any available Parks Officers.

For Social Housing properties in these circumstances, reliance will be on Tenants to report concerns which will initially be checked by Tenancy and Estate Officers and actioned or subsequently dealt with by the Tree Officers.

In exceptional circumstances it may be necessary to call on Town and Parish Councils and possibly the County Council for assistance.

### **Recording and Marking**

Using the Council's tree inspection GIS (Woodplan), records of formal inspections should include inspection dates, name of inspector, weather conditions and presence of factors obscuring potential defects (such as ivy growth). It is important to record inspections, even if only briefly, to be able to demonstrate that this element of duty of care has been fulfilled. Instructions to carry out work to trees, dates of completion, together with any amendments to tree inspectors' recommendations, should also be recorded.

Records provide the basis for safety management reviews and can, over time, build a valuable historical record of site-specific tree failure or non-failure patterns. Once hazards have been assessed or work completed, re-inspection times should be assigned or reviewed and then recorded.

The tree inspection database (Woodplan) is maintained by the Tree Officer and the Assistant Tree Officer but data input and ordering of necessary works are the responsibility of the relevant inspecting Officer/Ranger.

The plotting and/or tagging of trees should be sufficient to find the tree(s) again for re-inspection or for a contractor to carry out works. The information gathered about the tree(s) and recommendations for works (if any) should be basic but sufficient for the purpose of the exercise. Where lesser trees are identified for removal as part of the inspection exercise, they may simply be marked by spray paint and no details entered on the database but an indication of numbers of trees thus marked given on the relevant works order.

## **Reducing the Risk**

The risk that a tree poses to people and property can sometimes be reduced by modifying the usage of the immediate surroundings, for example, by moving a path or car-parking spaces or altering a mowing regime. In other cases, the risk can be reduced by tree surgery. Branches weakened by decay or cracks may be pruned and trees with defective main stems or root systems may be made safer by crown reduction. Excessive movement in some types of weak structure can be restrained by bracing or propping. However, in severe cases on high-usage sites, felling may be the only reasonable option. In a woodland area, where the individual tree concerned is known to be of no special value for amenity or wildlife, felling will generally be regarded as a more realistic option than costly arboricultural procedures which are suited mainly to sites where trees are managed on a more individual basis or where scarcity of trees increases their value/importance (see also the paragraph on routine management).

When inspections are carried out and defects found, recommendations for works (or re-inspections) shall always follow and should take account of the above and modern arboricultural practice. Each Inspector should ensure that recommended works are actually carried out without unreasonable delay.

## **Budget Implications**

The budget set aside for Tree Risk Management is to be strictly used for just that and, in the main, should address the more immediate concerns. Tree work paid out of this budget will not cover works to address issues such as nuisance (leaf fall, overshadowing, pavement disruption, subsidence etc), clearance of sight-lines, crown-lifting for access, other pruning for amenity purposes or woodland management type operations. Such works should be paid for out of general revenue budgets (see also paragraph on routine management).

Considering the extent of WBC tree cover, it will be important to make the budget go as far as possible by prioritising and pacing the survey work. However, it is equally important to ensure that Inspector output, in terms of identification of hazards, is matched by actual treework to address those hazards. If identified hazards are not dealt with within a reasonable period due to the budget having run out, the Council would still be negligent if harm occurred as a consequence.

In the light of the above, it is crucial for the budget to be planned properly and monitored regularly as Tree Risk Management, particularly in the Waverley context, is very much analogous to “painting the Forth Bridge”. (see also paragraph on routine management).

### **Trees and Wildlife**

It is widely appreciated that trees are vital for many forms of wildlife, although the importance of habitats which develop in dead and decaying wood has only recently begun to come to public attention. The wildlife value of trees can often be identified only with difficulty, so that specialist help may be required, especially with invertebrates, fungi, mosses and lichens. It is important that trees, especially ‘veteran specimens’ should not be felled unnecessarily. This may happen if decisions are made on the basis only of initial observations, such as the presence of fungal fruit bodies, rather than a detailed risk assessment. If there is a need to carry out other kinds of remedial work on veteran trees or other individuals of acknowledged wildlife value, it should be done with great care. However, there is a need to emphasise that the wildlife value of a tree does not lessen the need for safety inspections and for remedial action if such action is found to be necessary. The choice of appropriate remedial action, such as judicious pruning, altering the mowing regime around trees or diversion of access routes can, however, often allow a tree to be retained with its associated habitats intact.

In the same way, the failure potential of deadwood varies according to the type of tree and fungal activity. For example, deadwood in oak may be less likely to break than end-loaded live branches and can remain stable for decades. Deadwood in beech, however, is more likely to fail than in oak; knowledge of the attributes of specific species is therefore important. Where deadwood is found in a tree and considered hazardous, treatment options may be similar to that for live wood. Its significance needs informed assessment.

### **Tree Hazard Prevention**

Tree loss can have detrimental impact on the environment in general and on landscape value and amenities. In addition, where trees have to be pruned or removed for safety reasons, there are financial costs.

These costs collectively can be very significant and it makes sense therefore that, where possible, damage inflicted on trees through people’s actions, is avoided or kept to a minimum.

Poor pruning practices, using trees as supporting structures for sheds, fences, washing-lines, tree-houses etc, buttress and root damage due to bonfires or activities such as construction of buildings, accesses, car parking, patios and walls, drain and services installation, landscaping (soil level changes) and compaction, can all have significant immediate or long-term implications in respect of tree health and stability, particularly where they affect older, larger trees.

In case of below ground activities, within a relatively short time after the event, it will be very difficult for anyone inspecting trees to be able to tell that anything has taken place and even more difficult to assess the impact on the tree's health and stability.

Although the responsibility for tree inspections may rest with a limited number of Council staff, avoidance of damage and thus hazard prevention remains the responsibility of all staff involved with site/asset management, those responsible for design and construction of new schemes and responsible for contractor appointment and supervision. Responsibilities lie in the same way with Housing Tenants and Housing Management and - Repair staff. Anyone responsible in this way should, where relevant, obtain specialist arboricultural advice. When time permits and, depending on circumstances, this may be sought from the Tree and Landscape Officer in the Planning Department or the Tree Officer in Community Services. In certain situations, it will only be possible to receive external advice and the officers mentioned above will be able to give relevant Consultant details but should still be informed of details of schemes where Council owned trees are involved.