

Tree Risk Management Strategy

Hart District Council

Issued	2 nd August 2018
Last reviewed	n/a
Next review	1 st August 2019
Author	Adam Maskill
Version	V1.0

Contents

1.0	Policy Statement.....	3
2.0	The Risk.....	4
3.0	Service Scope and Standards – Objectives.....	4
4.0	Site Zoning – risk zoning and mapping.....	5
5.0	Level of Inspection	5
5.1	Personnel	5
5.2	Training.....	6
5.3	Summary of Risk Zones and Responsibilities.....	7
5.4	Recording.....	7
5.5	Basic Survey Template - example.....	9
6.0	Failure Log	10
7.0	Remedial Works.....	10
8.0	Responding to enquiries	11
8.1	Traffic Light Trees.....	11
8.2	Enquiry Logging.....	12
9.0	Review	12
10.0	Bibliography	14

I.0 Policy Statement

- I.1 Hart District Council manages approximately 550 hectares of public open space including nature reserves, commons, car parks and amenity spaces. All is freely accessible by the public and is often in close proximity to major roads and property boundaries.
- I.2 The Council has a common duty of care under Occupiers Liability Act 1957 and 1984 to ensure that they act as a reasonable and prudent landowner. This means that they must ensure that they avoid acts or omissions that could cause a foreseeable risk of harm to persons or property. This is reinforced in criminal law within s3 of Health and Safety at Work Act 1974. Section 3 of the Management of Health and Safety at Work Regulations 1999 states that employers are responsible for making suitable and sufficient assessment of the risks posed to their employees and persons not in their employment.
- I.3 The Council recognises that the risk from falling trees is low however as a large, public landowner, it has specific legal and moral responsibilities to visitors to its land and members of the public in general.
- I.4 The Council has implemented a Tree Risk Management Policy since 2009 and has subjected this to review. This document has been revised in accordance with current industry best practice, court precedent and statute. This document should be read in conjunction “*Development of the Tree Risk Management Strategy*” which provides an overview of key legal decision, national policy and industry best practice.
- I.5 The Council will continue to proactively manage its tree resource while balancing this against the benefits that they provide:

Aesthetic

- A sense of place
- Green space accessible to all
- Reduced levels of stress
- Inspires and encourages recreation
- Improved physical and mental wellbeing

Ecosystem services

- Green infrastructure
- Carbon sequestration
- Wildlife habitat
- Cooling and shading
- Flood alleviation
- Reduction of air pollution
- Climate change mitigation

Cultural

- A link to the past
- Historic landscapes

Prosperity

- Increased property values
- A pleasant and inspiring place to work
- Encouraging investment

2.0 The Risk

Risk of death caused by falling trees: 1 in 10 million per annum¹

Average number of Accident and Emergency admissions per annum: 55

- 2.1 The risk of death or injury attributable to trees is low. The HSE² describe the general level of risk as “*broadly acceptable*” within the Tolerability of Risk Framework. Despite the low risk to society in general, it is necessary for the duty-holder to ensure that the level of risk is *as low as reasonably practicable* (ALARP³). This principle implies that a balance must be made between the cost and benefits of risk reduction.
- 2.2 Despite the low level of risk, tree failures resulting in death or serious injury are likely to make headline news. As such, the public perception of risk is that it is high. The cost of defending against claims can be high and there may be pressure to carry out unnecessary tree-works. It is important for the duty holder to ensure that they do not carry out unnecessary works which will reduce tree-related benefits and put pressure on the limited tree management budget.
- 2.3 Overall, this justifies the need to carry out routine, proactive safety surveys of trees on land owned or maintained by the Council.

3.0 Service Scope and Standards – Objectives

- 3.1 This strategy covers the management of risk from falling trees only on land owned or otherwise under the responsibility of Hart District Council. It does not provide guidance on the management of privately-owned trees.
- 3.2 The management of trees in relation to subsidence is not covered within this document.
- 3.3 Pruning trees to reduce shading, improve satellite reception or views is not related to risk and is beyond the scope of a tree risk strategy. However, guidance will be provided as to how to respond to customer enquiries on such matters.
- 3.4 The objectives for tree risk management must strike a balance between the level of risk, the benefits and the resources available to the duty-holder. For a tree risk strategy to be effective, the following objectives⁴ must be applied:

¹ Centre for Decision Analysis and Risk Management Middlesex University (2009). Report for the National Tree Safety Group - Trees and the Risk of Harm.

² SIM 01/2007/05

³ Edwards v National Coal Board, advises HDC of standard to which they would be held to account and reminds that they must strike a balance between resources and tree benefits.

⁴ NTSG, 2011

1. To enable corporate objectives to be achieved.
 2. To identify and control the risk
 3. To comply with relevant legal and regulatory requirements
 4. To assure the public that trees on public land are appropriately managed.
- 3.5 It is necessary to set key performance indicators so the Council can confirm whether objectives are being met. This will highlight any weaknesses in the delivery of the Strategy and will inform where additional resources are necessary. Key performance indicators should include, but not be limited to:
- Risk zone maps to be reviewed for all HDC land within 6 months of implementation
 - 100% of trees within high and medium risk zones will be inspected within their designated timescales
 - 100% of remedial works within high and medium risk zones will be carried out within their designated timescales

4.0 Site Zoning – risk zoning and mapping

- 4.1 Hart District Council shall divide its landholding into three risk zones dependent on certain site characteristics which reflect how an area is used, how frequently it is occupied and the nature of the tree population. The Tree Officer or other member of staff with a working knowledge of site usage shall be responsible for reviewing each site and plotting risk zones onto maps of a suitable scale.
- 4.2 It is unrealistic to assess each tree in every risk zone on an annual basis. The benefits of doing so would be outweighed by the financial costs. Resources must be allocated so that high risk zones are prioritised.
- 4.3 A practical approach to tree inspection would be to view trees with leaves on and leaves off in alternate surveys. This enables the inspector to note physiological issues with the tree e.g. sparse or chlorotic (yellowing) foliage in summer while allowing clear view of crown architecture and fungal fruiting bodies in autumn/winter.

5.0 Level of Inspection

5.1 Personnel

Level I – Informal inspection: Carried out by a member of staff or contractor with a basic understanding of trees. Because of their training, experience and site knowledge, they will be able to notice common defects and abnormal growth in trees and will understand how to pass on their concerns to more experienced

personnel. Inspection will be aided by using a probe, nylon-faced mallet and binoculars.

Level 2 - Formal inspection: The inspector will visit the tree(s) for the specific purposes of performing an inspection. The inspector will be a competent arboriculturist with training and experience of managing trees for safety balanced with other site-specific requirements. Inspection will be aided by using a probe, nylon-faced mallet and binoculars. Resulting recommendations may include the use of 'Detailed Inspection' e.g. where the extent of decay may require assessment.

Level 3 - Detailed inspection: May be required to provide assessment of decay or tree stability by using specialist equipment e.g. Resistograph or tomography. This level of inspection will usually be reserved for high value trees within high risk areas; it would be grossly disproportionate to apply it beyond this due to the lack of benefit in overall risk reduction. Experts should be selected from the Arboricultural Association's list of Registered Consultants: www.trees.org.uk 'find a professional' > 'Registered Consultant'.

5.2 Training

Those carrying out formal, recorded inspection of trees will be required to demonstrate competence appropriate to the level of inspection. As a minimum, staff and contractors with this responsibility will hold the following certificates and/or qualifications as appropriate to the level of inspection:

Level 1 - Informal inspection: LANTRA Basic Tree Inspection certificate, although LANTRA Intermediate Tree Inspection certificate is desirable.

Level 2 – Formal inspection: Minimum RCF Level 3 Arboriculture with modules covering tree inspection and the recognition and treatment of defects, LANTRA Professional Tree Inspection.

Level 3 - Detailed inspection: Minimum RCF Level 6 Arboriculture e.g. BSc or Professional Diploma, LANTRA Professional Tree Inspection.

All members of staff and contractors with responsibility for surveying trees must undertake refresher training and/or continuing professional development in the field of arboriculture.

Copies of certificates of competency and records of attendance at training courses must be retained with survey documents.

Note: All external contractors and consultants must hold Professional Indemnity Insurance.

5.3 Summary of Risk Zones and Responsibilities

Risk Zone	Site Characteristics	Frequency of Inspection	Level of Inspection
High	Frequently occupied. Within falling distance of property. Beside trunk roads, railways adjacent to play areas/sports facilities, property or car parks. Mature or over-mature population tree population Species of tree with a higher risk of failure e.g. poplar or willow.	Every 18 months ⁵ and after F8 or above winds and/or heavy snow.	Routine Level 2 inspection ⁶ . Walkover Level 1 inspection after bad weather.
Medium	Adjacent to footpaths in parks or cemetery, within falling distance of gardens. Occupation may be influenced by weather. Early-mature to mature tree population.	Every 2.5 years.	Level 1 – Informal inspection. Level 2 – Competent inspection once every 5 years.
Low	Infrequent public access and no property of value. Early-mature tree population	Every 5 years ⁷	Level 1 – Informal inspection

5.4 Recording

All inspection records must be retained to evidence that trees have been subject to systematic inspection. Should an accident occur, the burden of proof to provide this information is on the duty-holder. As a local authority, this should be recorded on a GIS-based computer management system, with records captured electronically on site⁸.

Records must be stored in a central location. Paper records may be scanned onto a computer system and then recycled however must be backed up in a suitably secure location. Records must be kept for at least 7 years.

All recorded trees must be plotted on a map of a suitable scale and with a north arrow. 1:500 will usually suffice. The map must be annotated with the date of inspection.

It is only necessary to make a formal record of every tree subject to Detailed inspection. It is not necessary to plot every tree as part of other levels of inspection⁹. It is acceptable to record groups of trees with no significant defects, making reference to their general characteristics as per the example “G1”, overleaf. Where it is decided to retain a tree with structural defects, an individual record must be made with reference to remedial action taken and any deviation from the standard inspection interval.

⁵ Steer taken from Cavanagh v Witley Parish Council allowing for 1.5 year cycles to allow trees to be inspected in and out of leaf at consecutive inspections.

⁶ Poll v Bartholomew and Government Circular 52/75

⁷ Although not presenting significant risk while early-mature, periodic inspection will allow formative pruning to be specified thereby reducing risk in longer term.

⁸ NTSG ‘Reasonable, Balanced Tree Safety Management’ table for rural local authority

⁹ SIM 01/2007/05 Appendix 1

Where remedial work is recommended, this must be recorded on the tree survey sheet. The work may be to fell the tree, crown reduce all or part of the tree, exclude the public or specify a higher level of inspection.

The following record sheet shows the minimal amount of information that must be recorded during formal, detailed and expert-level inspection:

5.5 Basic Survey Template - example

Hart District Council Basic Tree Survey data sheet					Inspection date	01 Jan 2018		Location	Anypark			Page	1
					Name of surveyor	A Surveyor		Viewing conditions	Clear, dry, sunny				
Ref No.	Species	Age	Ht m	Dia cm	Crown Spread N E S W	Target	Physiological Condition	Structural Condition	Condition Comments	Is Risk ALARP?	Management	Time scale	Review
T1	Lime	M	19	70	5 4 4 4	Road Footpath	Good	Fair	Fungus at base	N	Crown reduce by 3m in all directions	3 mths	1.5
T2	Oak	M	16	65	6 7 7 7	Play area	Good	Good	Est.25cm diameter x 8m long hanging failed limb to south	N	Remove hanging limb	3 mths	1.5
G1	Oak and sweet chestnut	M	# 16	40- 65		Internal footpath	Good	Good	n/a	Y			1.5
A1	Oak, sweet chestnut, birch and pine	EM-M	7 - 18	10- 80		Internal footpath	Fair - Good	Good	n/a	Y			2.5

HEADINGS & ABBREVIATIONS

REF -Reference for **T**ree, **G**roup or **A**rea

SPECIES - Common names of species

AGE: EM – Early mature – Not yet grown to full height or spread **M** – Mature – At, or close to full height of species and growing environment **OM** – Over-mature - Beyond normal lifespan for species, reduced/declining growth

HT - Height: estimated height in metres (# = average in group or area)

DIA – Stem diameter in cm, measured at 1.5m above ground level. May be shown as range.

CROWN SPREAD - estimated distance to edge of crown from tree stem in metres. May be range.

PHYSIOLOGICAL CONDITION: Normal: Outwardly healthy; **Reduced:** Minor dieback, thin crown, reduced growth rate; **Poor:** Extensive dieback, chlorotic or small leaves; **Dead:** no signs of life.

STRUCTURAL CONDITION - GOOD – No significant structural issues **FAIR** – Minor

structural issues that may be remedied by tree surgery but may reduce safe useful life expectancy **POOR** – Significant structural issued, may be irremediable and will drastically reduce its safe useful life expectancy – **DEAD** – Dead tree.

CONDITION COMMENTS - Note of physical aspects of tree that may present a hazard

IS RISK ALARP? - In its current state is the risk of harm from the trees defects or hazards *as low as reasonably practicable?* If yes no further action required; if no then remedial action must be specified to reduce the risk to the lowest practicable level.

MANAGEMENT - Works proposed to reduce risk

TIMESCALE - Suggested timeframe for remedial work

REVIEW - Period (years) to next inspection

6.0 Failure Log

- 6.1 A record shall be kept of all tree failures, regardless of whether they resulted in harm or damage where they occur in High or Medium Risk Zones. This log will help inform duty holders of patterns which may influence resource expenditure and future management. This will also establish the ‘real’ risk that trees pose, as well as allowing trends and patterns to be noticed.

Table 2: Example Failure Log

Date	Species	Age class	Location	Weather conditions	Type of failure	Type of loss	Cost	Contributing factors	Foreseeability	Action
1.2.17	Oak	M	HW Common	Stormy, F8 SW	30cm diameter branch shed at collar	Fence panel	£30	Heartwood decay, likely caused by <i>Laetiporus sulphureus</i>	Not foreseeable, no outward signs of decay.	Climbing inspection to probe point of failure and establish extent of decay.
2.9.17	Raywood ash	M	Du Maurier Close	Still, clear	Bark inclusion failure, 30cm diameter branch shed onto footpath	None	Nil	Inherent structural weakness, exasperated by tree being in full leaf with heavy seed crop.	Foreseeable, bark inclusion readily viewable from ground inspection.	Discuss with surveyor at next meeting.

7.0 Remedial Works

- 7.1 Where a tree poses an unacceptable level of risk, it will be necessary to carry out remedial works to reduce the risk to an acceptable level. The timescale for implementing such works will be identified by the inspecting officer.
- 7.2 Remedial works should not be confined to tree surgery; it may be acceptable to modify how the public uses a site perhaps by relocating benches or fencing off ‘target’ areas with shrub planting or dead hedges. Similarly, there may be circumstances where the growing environment may be improved through the use of soil aeration or mulching. This may be effective where a significant tree has been assessed to be in declining health and likely to pose an increasing risk in the near future.
- 7.3 The Council should prepare a list of reputable tree surgeons who will be on hand to carry out routine and emergency works. The Council must be assured that the contractors they use are competent to carry out the work i.e. they are fully trained and experienced in the work that they are undertaking. The work must be carried out in accordance with current arboricultural best practice and with the safety of staff and the public in mind. They must hold Public Liability Insurance to at least £10m and Employers Liability Insurance commensurate with the size of their

business. It is strongly recommended to obtain copies of this information before appointing a contractor.

- 7.4 The Arboricultural Association run the ARB-Approved Contractor scheme, providing a list of companies who have been assessed in terms of their understanding of current arboricultural practice, their compliance with legislation and health and safety requirements, and their business practices. This list provides a good foundation for contractor selection and may be found on their website: www.trees.org.uk > Find a Professional > Find a Tree Surgeon.
- 7.5 The inspecting officer and contractor must make consideration to the likely presence of protected species. Bats, birds and other species and their habitats are afforded statutory protection under the Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000 and the EU Habitats Directive 1992.
- 7.6 Where trees must be felled, the inspecting officer should consider whether it is necessary to carry out replacement planting. They should take particular note of location, number of trees, species, supplied size and any above or below-ground constraints. Note that the removal of dead or dangerous trees which are protected by Tree Preservation Order or Conservation Area may require replacement planting as a legal obligation.

8.0 Responding to enquiries

8.1 Traffic Light Trees

The Council has a finite resource for maintaining its trees. It has a legal and moral obligation to manage trees to prevent and reduce risk and so it follows that resources shall be targeted in this manner. In order to provide straight-forward advice as to what works may be carried out and under what timescales, “*Traffic Light Trees*” may be used;

Table 3: Traffic Light Trees summary

Traffic Light Trees Summary of categories		
Traffic Light Colour	Target date for tree works	Type of work likely to fall within category
Blue	24 hours - 1 week	Immediate safety issues e.g. windblown/storm-damaged trees by target in high or medium risk zone.
Red	12 weeks	Essential works such as: <ul style="list-style-type: none"> • Removing standing dead trees from public areas. • Removing fallen trees where they present an obstruction. • Removing significant deadwood. • Work for health and safety reasons.
Amber	6 months	Where resources allow, may include the following: <ul style="list-style-type: none"> • Removing less significant deadwood. • Tipping back branches in contact with property. • Formative pruning
Green	N/A	The Council will not fell or prune trees solely for the following reasons: <ul style="list-style-type: none"> • Disruption of light structures such as footpaths and fences. • Reduced light levels. • Interference with television and/or satellite reception. • To alleviate problems caused by seasonal and/or natural phenomena.

8.2 Enquiry Logging

A record must be made of all enquiries and action taken. However, the Council is advised to ensure that the level of information that they keep complies with the General Data Protection Regulation (GDPR). An example record sheet is provided here:

Table 4: Enquiry and Action Log

Date of enquiry	Location of tree (e.g. nearest address)	Enquiry	Action taken	Date closed
1.9.17	Calthorpe Park, adj. 25 Tavistock Road	Silver birch fallen on fence	Tree inspected and confirmed to have fallen; contractors removed tree and repaired fence.	9.9.17

9.0 Review

9.1 In order to monitor the effectiveness of the Strategy, it is necessary to subject it to periodic review. It is particularly important to ensure that the Council are meeting legally-required standards in ensuring public safety. The Strategy shall be reviewed on an annual basis to highlight any procedural issues and in response to any change in legislation, case law or best practice. The Senior Tree Officer shall be responsible for collating and reporting this information.

9.2 This policy must be subject to external review once every 5 years. This will ensure impartiality in terms of compliance and budget. This may be carried out by an Arboricultural Consultant qualified to RCF Level 6 Arboriculture e.g. BSc or Professional Diploma, or above.

- 9.3 Performance against KPI's and the Failure Log will be communicated to the Health and Safety Officer on a 6 monthly basis.
- 9.4 As site use may change over time, it is necessary to subject all Risk Zones to periodic review. This must be no less than once every 3 years. The Site Manager is advised to review specific areas if new play equipment or site furniture is installed or removed, new development occurs on adjacent land or there is a change of land use.

10.0 Bibliography

Cloud, K. 2017. *Hart District Council Tree Risk management Strategy*. Technical Arboriculture.

Ellison, M. *Quantified Tree Risk Assessment – licensed user manual*. QTRA limited.

Health and Safety Executive (HSE). 2007. *Management of the risk from falling trees*. Sector Information Minute 01/2007/05

Inspection of highway trees; Department of Environment Circular 52/75 (1975)

Lonsdale, D. 1999. *Principles of tree hazard assessment and management*. Department of Communities.

National Tree Safety Group, 2011. *Common sense risk management of trees*. Forestry Commission

Visitor Safety in the Countryside Group. *Managing Visitor Safety in the Countryside – principles and practice*.