Introduction

Solihull has a leafy character providing a pleasant environment in which to live, work and visit. The Council will safeguard this character, retaining and enhancing the local distinctiveness and landscape quality of the Borough.



Trees contribute visually to the built environment and have an important role to play in achieving sustainable development. Existing and newly planted trees can help define the character of new development and create a 'sense of place'.

Trees provide important habitats for wildlife, improve air quality, reduce storm water runoff, provide shelter and reduce energy use in buildings. The value of trees is recognised in Government publications such as *A Better Quality of Life - A Strategy for Sustainable Development for the United Kingdom* and the *England Forestry Strategy.*

Many of the Borough's trees are remnants of the 'Ancient Arden Landscape', an area of former woodland pasture and heath, characterised by a dispersed settlement pattern, ancient woodlands and mature hedgerow oaks.

The Warwickshire landscape guidelines: Arden

as prepared by Warwickshire County Council and The Countryside Commission, have been adopted by this Council. They provide a detailed landscape assessment, dividing Arden into seven distinct landscape types. They set out a series of management strategies to guide new development and land management practices..

Guidance aims

The purpose of this document is to give specific advice on trees, landscape and development, and by doing so, to support the policies of the Council's *Unitary Development Plan 2006*. This aims to safeguard important trees, woodland and hedgerows, and encourage new planting and regeneration.

The term 'tree' is used throughout this document, however much of the guidance given is also applicable to areas of woodland, hedgerows and shrubs.

Guidance is given on:

- Preparing proposals and submitting planning applications (*page 2*).
- Assessing the appropriateness of a site that contains trees for development (page 2).
- Preparation of a tree constraints plan to inform site design and layout (*page 3*).
- Tree root systems, trees and protected species, and veteran trees (*page 4*).
- Site design (page 4 and page 5)
- Working with trees on site (page 6).
- Tree protection measures (page 7).
- Trees and the law trees in conservation areas, tree preservation orders, planning conditions, hedgerow regulations, high hedges, trees and common law (page 8), trees and the highway, subsidance damage, felling licences, wildlife and habitat considerations, and enforcement of tree protection (page 9).
- Useful links to organisations for advice (page 10).
- Appendix 1, Trees in conservation areas (page 11).



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Preparing proposals and submitting planning applications.

The Town and Country Planning Act 1990 (as amended) sets out how a local authority considers planning applications. In particular, Section 70(2) requires that: "in dealing with such an application the authority shall have regard to the provisions of the Unitary Development Plan, so far as material to the application, and to any other material considerations."

The Council will support good quality, sustainable development that respects, protects and, where possible enhances natural, man-made and historic features. In this respect, it is Council policy to safeguard important trees and hedgerows. An analysis of a development site and its surroundings should include landscape structure, biodiversity and the presence of mature trees.

Local policy

Applicants should consider Solihull Metropolitan Borough Council's *Unitary Development Plan* adopted in 2006, which contains a number of policies relating to the landscape and nature conservation/biodiversity, trees, woodlands and hedgerows. Additional Council strategies which should be considered before developing proposals are *The Urban Forestry Strategy*, *Woodland Strategy*, *Nature Conservation Strategy* and *Climate Change Strategy*.

National policy

This guidance note also builds upon national Planning Policy Statement (PPS) *1 Delivering Sustainable Development, PPS9 Biodiversity and Geological Conservation*, and *PPS15 Planning and the Historic Environment*. These policies promote conservation and enhancement of biodiversity and landscape quality. Their key aims are to deliver sustainable and well designed green spaces for wildlife and people, contributing to a high quality natural and built environment, ensuring a better quality of life.

Pre-application advice

Consultation with Council officers prior to the submission of a planning application is encouraged, to enable advice and guidance to be considered at an early stage of development proposals.

Assessing a development site

Appropriate surveys must be undertaken to ensure that development proposals take account of trees, areas of woodland and hedgerows on and immediately adjacent to the site. The proposals must take into account arboricultural implications, as described in *BS5837:2005 Trees in relation to construction – Recommendations*. Note: Solihull MBC library card holders can view online copies of BS5837:2005 via the following link – *www.solihull.gov.uk/BritishStandard/index. asp.*

Topographical survey (land survey)

An accurately measured survey should be undertaken showing all existing site features, including trees, hedges, stumps, areas of vegetation and levels. Where trees are present, clearance of vegetation to facilitate the survey should be undertaken only if strictly necessary and with care using hand tools.

Tree survey

If there are trees on a development site then a tree survey may be required. A tree survey must be undertaken by an arboricultural consultant who should record information about the trees independently of and prior to a site design. The survey must be undertaken in accordance with BS5837:2005 Trees in relation to construction – Recommendations. Registered consultants can be found on the *Arboricultural Association website*. The tree survey must include all trees included in the land survey, categorising trees/ groups of trees, including woodlands for their quality and value within the existing context. Over-mature and *veteran trees* have the highest value for wildlife and should be retained.



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BS5837:2005 Trees in relation to construction - Recommendations, states that the following information must be provided within the tree survey:

- 1. Reference number (to be recorded on the tree survey plan).
- 2. Species (common and scientific names).
- 3. Height in metres.
- Dimensions of trees:

 stem diameter in millimetres at 1.5m, branch spread in metres at the 4 cardinal points, height of first branches/crown.
- Age class

 young, middle aged, mature, over-mature or veteran.
- Physiological condition:
 good, fair, poor or dead.
- 7. Structural condition e.g. presence of any decay and physical defect.
- 8. Preliminary management recommendations, including further investigation of suspected defects that require more detailed assessment and potential for wildlife habitat.
- Estimated remaining contribution in years

 less than 10, 10–20, 20–40, more than 40.
- 10. Category grading to identify the quality and value of the tree stock.

There are four categories R (remove) A (high quality and value), B (moderate quality and value) and C (low quality and value). A - C have further subcategories describing their arboricultural, landscape and cultural value.

Calculating root protection areas (RPAs m²) where roots are evenly distributed:

 $\frac{\text{Single stem trees RPA } m^2}{\frac{\text{Stem diameter (mm) } @1.5m \times 12}{1000}}^2 \times 3.142$

Radius (m) of the RPA = stem diameter x 12

 Multi-stem trees RPA m²

 Basal diameter (measured immediately above the root flare) x10

 1000

Radius (m) of the RPA = stem diameter x 10

There is a maximum RPA of 707m², equivalent to a radius of 15m or a square with approx. 26m sides.

Taken from BS5837:2005 Trees in relation to construction -Recommendations.

Tree Constraints Plan



The tree survey information should be plotted onto a tree constraints plan. This should show the below ground constraints — the root protection area (RPA) and above ground constraints such as ultimate size and shading pattern through the main part of the day.

Category A and B trees should be retained, and where possible category C trees, where they do not impose a significant constraint on development.



Trees can occupy a substantial part of a development site and can have a major influence on the site layout. Existing trees of good quality and value will greatly enhance new development, by providing an immediate appearance of maturity. They may also be habitats for protected species such as bats.

Tree root systems

Generally, if free from physical barriers, tree roots grow radially in every direction to a distance at least equal to the height of the tree. The majority of the roots (90%) are within the upper 60cm of the soil, including the large structural roots. Some tree species, such as cherry, thorn and some pines have roots which tend to grow within the upper 10cm of the soil. The roots grow almost parallel with the soil surface; this is also the case with trees on slopes. Disturbance within this rooting area could seriously affect the tree's health and stability.



Trees and protected species

If a tree survey recommends that work to trees is necessary, then a bat survey may be required to determine the presence of bats. An activity survey should be undertaken in Summer. *Visit The Bat Conservation Trust website for further information* and *Find an ecologist to undertake a survey.*

You will be committing a criminal offence if you:

- Deliberately capture, injure or kill a bat.
- Intentionally or recklessly disturb a bat in its roost or deliberately disturb a group of bats.
- Damage or destroy a bat roosting place (even if bats are not occupying the roost at the time).
- Possess or advertise/sell/exchange a bat (dead or alive) or any part of a bat.
- Intentionally or recklessly obstruct access to a bat roost.

Veteran trees

Veteran trees are defined as the oldest examples of given species in an area. They can be within areas of ancient woodland, or as individuals, are links to former parklands or deer parks. They are valuable for biodiversity, providing microhabitats for many internationally rare species of



Decaying wood, holes and fungi provide habitats for insects.

flora and fauna, such as lichens and beetles. Locally these may be 300 year old oaks, sweet chestnuts, beech and horse chestnuts.

If veteran trees are identified on site they must be considered carefully in relation to new development. They should be located within open space. Their influence on the site design must be considered at the earliest stage of the planning process. Veteran trees are the subject of a *Warwickshire Local Biodiveristy Plan*, which describes the objectives for retaining and caring for Britain's oldest trees. National Planning Policy Statement 9: Biodiversity and Geological Conservation also recognises the importance of veteran trees.

Site design

Certain trees are of such importance and sensitivity as to prevent development occurring or to substantially modify its design and layout. However, care should be taken to avoid inappropriate tree retention as it could result in resentment by future occupiers and demands for their removal.

If any trees on site are subject to *Tree Preservation Orders* (TPO) or are within a *Conservation Area*, consent by the local planning authority must be given prior to any work being undertaken. (*Note: Trees are material considerations in the formal planning system*, whether or not they are statutorily protected.) The following should be considered during site planning:

- The integration of existing trees into a development, seeing them as a positive element which can add value.
- Design a layout where buildings are not located too close to trees, thereby avoiding unreasonable reduction in light to habitable rooms and shading of gardens. Leaves of some species may cause problems by blocking gullies and guttering, fruit can be slippery and honey-dew (from aphids) may damage surfaces and vehicles. Consider what the tree's ultimate size may be.
- Avoid changes in ground level near trees. If essential, construct a retaining wall at the boundary of the root protection area (allow for future growth if a young tree).



Excavations will damage roots, whilst increasing levels will exclude air vital for healthy roots.

- Is the soil/subsoil clay or sandy? Shrinkable • soils and trees/hedgerows/shrubs can be a hazard to structures. Trees and shrubs take moisture from the ground and in shrinkable soils, such as clay, this can cause changes within the soil resulting in ground movement. The rate that moisture is taken varies with tree species and size. To reduce this risk, foundations must be designed to accommodate movement or laid at a depth where the effects of movement are minimal. Foundation design should be undertaken by a structural engineer. Further advice is available at the National House-Building Council (NHBC) and NHBC Standards Chapter 4.2 Building near trees.
- Foundations should be designed to avoid damaging retained trees and located outside the root protection area. The insertion of a structure within the root protection area (RPA) may be acceptable if this allows the retention of a good quality tree. Use piles or radial strip footings, and beams, slabs, suspended floors

laid above ground level and cantilevered to avoid tree roots.

Root damage may be minimised by the use of no-dig or a cellular confinement system. This can enable paths, drives and parking areas to be located within tree root protection areas, enabling development that may not otherwise be approved by the local planning authority.



Cellular confinement system allowing a driveway over tree roots.

A cellular matrix is laid over tree roots then infilled with porous granular material to permit the flow of water and air. This surface is then finished with a permeable wearing course such as gravel, porous tarmac or block pavers (of a sustainable urban drainage type). This system can also be used as a temporary surface for site traffic during construction, enabling greater access around the site, whilst protecting trees. Further advice can be obtained from Arboriculture Practice Note 12: *'Through the trees to development'*, available from www.treehelp.info.

- Generally it is unacceptable for underground services to be routed through root protection areas, or for overhead services to be routed where they will interfere with the growth of trees to be retained or planted. See the National Joint Utilities Group (NJUG) publication Volume 4: NJUG Guidelines For The Planning, Installation And Maintenance Of Utility Apparatus In Proximity To Trees (Issue 2) – Operatives Handbook for further advice on site design.
- Layout should be designed to consider infrastructure requirements, such as easements. Ensure that existing trees do not block essential lighting or CCTV coverage. Take into account the future growth of trees.

- Avoid conflict between trees and the highway, signage and infrastructure. Sight lines and forward visibility should remain in place.
- Soakaways should not be sited where they are liable to become blocked by tree roots.
- A landscape scheme including tree planting should be prepared at this time. Consider species to suit the site in terms of character, aspect and soil conditions/foundations.
- Consider the long term management of the retained trees or woodland. A management plan may be needed to inform maintenance and care.

Working with trees on site

All works to trees should be informed by an arboriculturist and be in accordance with BS3998:1989 Recommendations for tree work (and any later amendments).

 Crown lifting removes lower branches to raise the canopy. This can be done to obtain clearance above highways and footpaths. Structural branches should generally not be removed.



Crown reduction (or thinning) reduces the overall canopy of the tree. A reduction of 10 – 20% of the tree may be acceptable if the tree is amenable to such works. Reducing the crown can increase the amount of sun to a site.



• Root barriers can be installed against underground objects such as building foundations, pavements or service ducts to prevent damage from growing roots.

A tree may take up to a century to reach maturity but it can be damaged in a few minutes. Such damage is frequently caused unwittingly because of failure to appreciate the vulnerability of trees, particularly the root system, and how easily and often insidiously they can be damaged. Irreparable damage is frequently done to existing trees in the first few days of a contractor's occupation of a site.



Don't use site vehicles within the root system, this will compact the soil and can lead to root suffocation.



Don't store poisons, chemicals, fuel, diesel,oil or cement beneath a tree. Don't light fires.



Don't store or deposit building materials against or beneath a tree.



Tree protection measures

All trees to be retained on a site should be protected by barriers and/or ground protection (as stated in Section 9 of BS5837:2005 Trees in relation to construction – Recommendations).

All barriers should be in place prior to any demolition or development work beginning and before any materials or machinery is brought on site. Protective fencing should be erected at the extent of the root protection area (RPA) and remain in place undisturbed for the entirety of the construction period, unless agreed with the planning authority. The protected area should be clearly marked with notices stating "Construction Exclusion Zone – Keep Out".

Protective fencing should be similar to the example below (taken from BS5837:2005).





Where it has been agreed with the planning authority, that pedestrian and/or vehicular access for the construction operations may take place within the RPA, ground protection will also be required to minimise the effects of the construction. If there is to be pedestrian movement within the RPA, then scaffold boards on top of a compressible layer laid onto a geotextile, or supported by a scaffold may be approriate.

For vehicular movement, ground protection should be designed by an engineer and an arboricultural consultant for likely loading. A cellular confinement system or similar could be used (see page 5).

Trees and the law

Trees in any location may be protected by legislation. Where development is proposed, additional legal protection may be appropriate and can be enforced by the local authority.

Trees in conservation areas

The Town and Country Planning Act 1990

(as amended) requires that, except in certain circumstances, "no work shall be carried out which will affect trees over a certain size which are situated in conservation areas". Six weeks notice of intent has to be given to the local authority before the work is carried out. This provides an opportunity for the local authority to make a tree preservation order (TPO) to protect the trees. *See Appendix 1 for further details.*

Tree Preservation Orders

These allow trees to be protected either as individuals, groups, areas or woodlands. The orders have the effect of preventing the cutting down, topping, lopping, uprooting, wilful damage or wilful destruction of trees, except in certain circumstances, other than with consent of the local authority. Solihull Council uses the TEMPO (Tree evaluation method for preservation orders by Julian Forbes-Laird) method for evaluating a tree's suitability for a TPO. It is a field guide considering relevant factors in the decisionmaking process, giving clear reasons why decisions have been made. Link to TEMPO quidance and TEMPO form. For further information, see TPOs and A Guide to the Law and Good Practice and the Addendum May 2009.

Planning conditions

When planning permission is granted, conditions may be imposed to provide for the erection of *protective fencing* and other measures for ensuring the well-being of trees during development. The applicant will need to satisfy the local authority that adequate protection measures will be in place before the condition can be discharged.

Where circumstances require it, local authorities can apply a planning condition requiring the developer to appoint an arboriculturist to oversee the project. This person has a duty to monitor and confirm the implementation and maintenance of tree protection measures, as agreed with the local authority.

Hedgerow Regulations 1997

Local planning authorities are to consider the effects of proposed development on hedges in determining planning applications. Hedges play an important role in the visual and wildlife quality of a site, and should be protected and used to shape the site design in the same way as trees. Where removal is proposed, the planning authority must be given prior notification setting out reasons for the removal. *Further information available at Defra.*

High Hedges

Part 8 of the Anti-social Behaviour Act 2003, gives local authorities powers to deal with complaints about high hedges. A High Hedge is defined as being wholly or predominantly: 2 or more evergreens; and is greater than 2metres from ground level. The role of the local authority is to adjudicate on whether the hedge is adversely affecting the complainant's reasonable enjoyment of their property. In doing so, the authority must take account of all relevant factors and must strike a balance between the competing interests of the complainant and hedge owner, as well as the interests of the wider community. *Link for further information*.

Trees and Common Law

Under English Common Law you may prune overhanging branches to your property boundary without the consent of the owner, but you must not trespass onto your neighbour's land to do so. You must offer to return branches and any fruit to your neighbour. It is always best to discuss proposed work with your neighbour first.

Cutting back any tree roots may make the tree unsafe and affect the stability of the tree. Notify the tree owner of any intention to cut roots and seek advice from an arboriculturalist prior to undertaking any work.

Before commencing any work to trees consider the following:

- Are the trees subject to a tree preservation order (TPO) or contained within a conservation area? If they are, then you will need prior consent from the local planning authority before undertaking the work.
- Will pruning the tree back to the boundary line result in a detrimental effect on future

tree health or result in an unsightly highly visible tree within the local landscape? It may be worth seeking advice from a qualified Arboriculturalist prior to undertaking the work as the tree owner may be in a position to pursue a claim if the tree dies as a result of the work.

Will the tree work impact upon local ecology?

Trees and the highway

One of the requirements of the Highways Act 1980 (the Act) is that a public highway should be kept clear of obstructions. Hedges and trees that grow on the boundary of the highway or on adjacent land but overhang the highway are generally the responsibility of the adjoining property or land owner. Section 154 of the Act gives the highway authority powers to require the removal or cutting back of trees, shrubs and hedges that obstruct or endanger highway users. The minimum clearance should be 2.4m over a footpath and 5.05m over a road (measured from the centre line).

Subsidence damage

If trees are suspected of causing or contributing to a structural problem, then early consultation with a *structural engineer* and *arboriculturalist* is recommended. The true effect of the trees must be determined before action is taken. *Information and common misconceptions about tree roots is available from Planning-online, Online Planning Aid website*.

Felling licences

Even if no specific legal protection exists, it may be necessary to obtain a felling licence. These apply if the volume of timber exceeds specified amounts. Site clearance, even of small areas, before detailed planning permission has been granted could exceed the felling licence quota. *The Forestry Commission, under the Forestry Act* 1967 (as amended) administers felling licences.

Wildlife and habitat considerations

Paragraph 47 of *Planning Policy Statement 9: Biodiversity and Geological Conservation* states that "the presence of a protected species is a material consideration when a local planning authority is considering a development proposal which, if carried out, would be likely to result in harm to the species or its habitat". *The Wildlife and Countryside Act 1981* (as amended), the *Conservation (Natural Habitats) Regulations 1994*, and the *Countryside and Rights of Way Act 2000* protect species of flora and fauna.

To avoid impacts on nesting birds (loss of nests, eggs and young), clearance works should be undertaken outside the bird nesting season (defined as the period between March and September) wherever possible. Where this is not possible, areas should be cleared of vegetation only if they have been surveyed by an experienced ecologist and confirmed to be clear of active nests immediately prior to the destructive works commencing. If an active nest is identified then the area will need to be retained until the young have been deemed, by a suitable qualified ecologist, to have fledged. Only once this has happened can the area be removed. *For information on bats and the law, see page 4.*

Enforcement of tree protection during development

The Council proactively monitors a proportion of approved new developments to ensure compliance with approved plans and conditions and will investigate alleged breaches of planning control.

Where trees are threatened by a breach of planning control, the Council will take appropriate action. There are several options open to the Council in this matter and enforcement action may take the form of:

- Enforcement notices;
- Stop notices;
- Breach of condition notices; and/or
- County or high court injunctions.

For further information see the Council's *Planning Enforcement Policy*.

Links

Below are links to organisations from which advice can be obtained.

The Ancient Tree Forum Telephone: 01476 581135 website: www.woodland-trust.org.uk/ancient-treeforum

Arboricultural Advisory and Information Service (AAIS) The Tree Advice Trust Telephone: 01420 22022 website: *www.treehelp.info*

Arboricultural Association Telephone: 01794 368717 website: www.trees.org.uk/index.php

Arboricultural Information Exchange website: www.aie.org.uk/index.html

British Association of Landscape Industries (BALI) Telephone: 02476 690333 website: *www.bali.co.uk*

Building Research Establishment (BRE) Telephone: 01923 664000 website: www.bre.co.uk

Commission for Architecture and the Built Environment (CABE) Telephone: 0207 070 6700 website: *www.cabe.org.uk*

Institute of Chartered Foresters Telephone: 0131 240 1425 website: www.charteredforesters.org

Institute of Civil Engineers Telephone: 2027 222 7722 website: www.ice.org.uk/homepage/index.asp

Institute of Ecology and Environmental Management (IEEM) Telephone: 01962 868626 website: *www.ieem.net*

Institute of Structural Engineers Telephone: 0207 235 4535 website: *www.istructe.org* Landscape Institute Telephone: 0207 299 4500 website: *www.landscapeinstitute.org*

National House-Building Council (NHBC) Telephone: 0844 633 1000 website: *www.nhbc.co.uk*

National Joint Utilities Group (NJUG) Telephone: 0207 340 8737 website: www.njug.org.uk

Royal Institute of British Architects (RIBA) Telephone: 0207 580 5533 website: *www.architecture.com*

Royal Town Planning Institute Telephone: 0207 929 9494 website: www.rtpi.org.uk

The Royal Forestry Society Telephone: 01442 822028 website: www.rfs.org.uk

Publications:

BRE Site layout – providing good daylight and sunlight.

CABE Trees and Design

Appendix 1

Trees in Conservation Areas

Buildings, landscape features and trees all contribute to the special character of a conservation area. The importance of trees in conservation areas is recognised in the Town and Country Planning Act (1990) which makes special provision for trees, which are not already protected by a tree preservation order.

Section 211 Notice

Under Section 211 of the Act anyone proposing to cut down or carry out work on a tree in a conservation area is required to give the local planning authority six weeks notice — a Section 211 Notice.

The Section 211 Notice must clearly set out proposed work. Any proposal to 'top' or 'lop' a tree is not acceptable because there are many different ways to 'top' or 'lop' a tree. If there are a number of trees on site, provide a sketch map showing the location of the affected tree(s). The local planning authority will give advice to anyone who has a tree in a conservation area or requires help in submitting a Section 211 Notice.

Exemptions

Certain works to trees are exempt from the requirement to submit a Section 211 Notice, these are:

- cutting down trees in accordance with a felling licence granted by the Forestry Commission;
- work which is exempt from the requirements to apply for consent under a TPO. A land owner would be prudent to contact the Council prior to trees being felled under this exemption as the onus is on the tree owner to prove the tree was exempt, and;
- work on a tree with a stem diameter not exceeding 75mm, measured at 1.5m on the main stem (or 100mm if the felling is to improve the growth of other trees i.e. thinning operations).

What the local planning authority will do

On receipt of a 211 Notice, the Authority has 6 weeks to consider whether to protect the tree(s) with a tree preservation order. The Authority will deal with the Notice in one of three ways:

- 1. make a TPO if it considers the tree to have amenity value;
- decide not to make a TPO and allow the 6 weeks period to expire, at which point the proposed works may go ahead as long as it is carried out within 2 years from the date the notice was received by the Authority;
- 3. decide not to make a TPO and inform the applicant that the work can go ahead prior to the end of the 6 week period.

The Authority cannot refuse consent nor can it grant consent subject to conditions.

Penalties

Anyone who cuts down, uproots, tops, lops, wilfully destroys or damages a tree in a conservation area may be guilty of an offence. The penalties for such an offence are the same as those for contravening a TPO. The maximum fines in a magistrates court are £20,000 for destroying a tree and £2,500 for works carried without consent, but which do not destroy the tree.

Ownership

Trees located on private land within a conservation area are not owned by the Authority, nor is the Authority responsible for their safety or cost of maintenance.

Follow this linkto the Planning Portal website for further information on how to Apply for Tree Works.