

Most people like trees. The retention of existing healthy trees on a new development will greatly improve its appearance, giving it instant maturity, enhancing property values and providing wildlife benefit. They can make a positive contribution to the design of a development and should be regarded as an asset, not a constraint.

However, if the trees which are to be kept are damaged during the construction process, they may die slowly over the next few years. Their eventual removal may be difficult and costly.

Similarly, if new buildings are constructed too close to mature trees, or the trees are of an inappropriate size or species for their surroundings, they will become a constant source of complaint, leading to demands for their removal. In either case the good intentions of the developer will have been lost, along with the loss of a local amenity.

The purpose of this note is to explain the steps you will need to take at the planning and design stages, and during construction, to ensure that the appropriate trees are kept in a healthy state to enhance a new development.

This note expands on the measures set out for tree retention and protection in the South Hams Local Plan Policy and forms Supplementary Planning Guidance. The Council will bear the guidance in mind when considering planning applications. It reflects information contained in the government guidance "Tree Preservation Orders: A guide to the law and good practice" and British Standard 5837 "Trees in Relation to Construction".

LEGAL ISSUES

Many trees in the South Hams are protected by Tree Preservation Orders (TPOs). You must obtain the Council's consent before carrying out any work on them. Trees in Conservation Areas are also protected.

Trees on development sites may also be protected by conditions attached to planning consents.

You may also require a felling licence from the Forestry Commission if you propose to fell a certain volume of timber.

Contravention of any of these forms of legal protection can lead to substantial penalties of up to £20000 per tree. Always check whether you need consent for your proposals. Advice and application forms are available from the Coast and Countryside Service.

TREE ROOTS

Damage to trees is not usually deliberate but is due to a lack of understanding of how easily they can be harmed by nearby activities.

Damage to the root system is potentially serious and will affect the health and safety of the whole tree, which may die slowly over the next few years. Because the roots are out of sight, their needs are frequently ignored.

Some important facts:

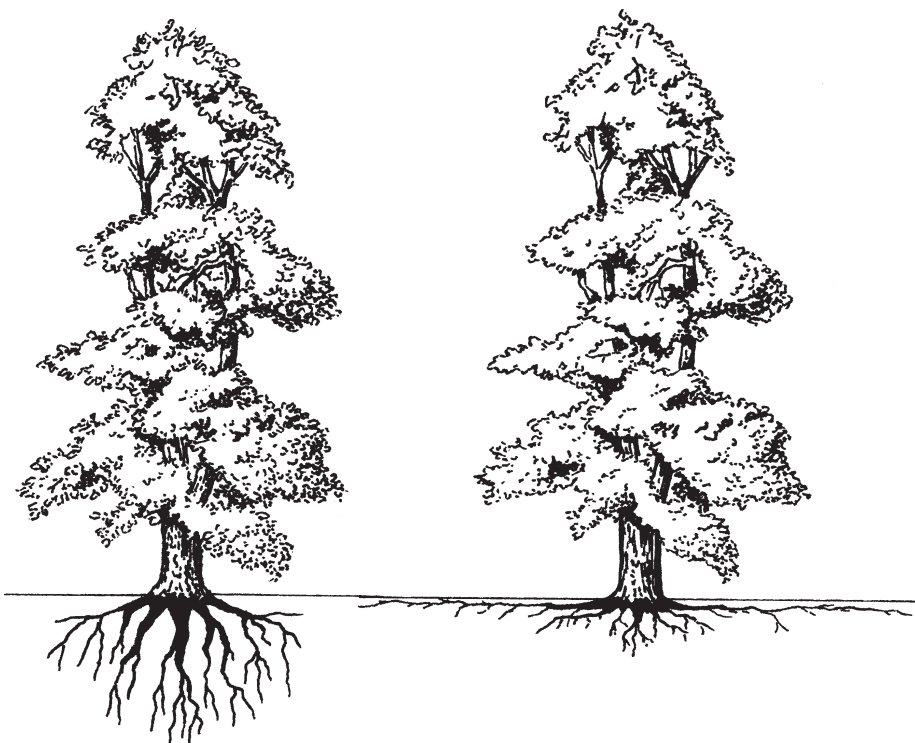
The health of tree roots is vital to the health of a tree.

Most trees do not have a "tap root" but a mass of rapidly subdivided fibrous roots (the root plate) extending at least to the edge of the outermost branches (the crown spread), and frequently well beyond the crown spread.

Most of the tree's roots are within 600mm of the surface and the fine roots, important for obtaining nutrients, moisture and oxygen, may be just below the surface some distance from the crown spread.

Any works (such as compaction or cutting) that damage or kill a significant number of fine roots will affect the health of the whole tree. Although the damage may not be immediately obvious, by the time the tree starts to look unhealthy, it may be too late to save it.

Damage or severance of a sufficient number of the main structural roots will not only kill the feeding roots, but may affect the tree's stability and render it dangerous. Again, this damage may not be immediately obvious, but an unsafe tree could blow down at any time.



THE DESIGN PROCESS

THE TREE SURVEY

For sites containing trees, the Council will require a tree survey. It is important that this is done as part of the initial site assessment, in order to decide which trees are to be retained and to help you plan the site layout. Remember to include hedgerows and significant areas of shrubs in the survey. The survey should be undertaken by someone experienced in tree assessment and include a schedule and plan.

The Council will be seeking the retention of quality trees in adequate space, and not necessarily a blanket retention of all trees.

A tree survey should provide the following information:-

A scaled location plan showing trees, shrubs and hedgerows.

Species.

Trunk diameter, height and canopy spread (accurately measured) for any trees with a diameter of at least 75mm at 1.5m or any other trees considered to be rare or unusual.

Vigour, condition and any proposed works.

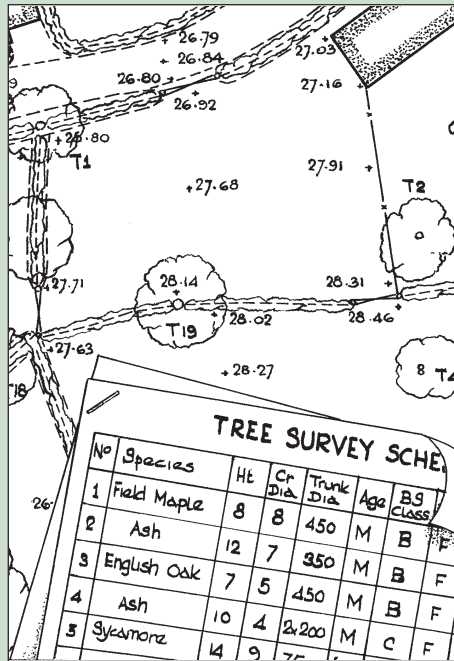
Age and life expectancy; young (less than 1/3 life expectancy); middle age (1/3 - 2/3); mature.

Public Amenity value.

Contours or ground levels.

Trees on neighbouring sites.

Recommended distance for protective fences around trees.



The survey will allow you to divide the trees into four categories (British Standard Classification):-

- Healthy trees, of good form, with a relatively long life expectancy whose retention is most desirable.
- Healthy trees (with perhaps minor defects that can be remedied) and immature trees with high potential whose retention is desirable.
- Trees with defects or deformities; trees with a short life expectancy and immature trees with low potential which could be retained.
- Dead, dying or dangerous trees for removal.

South Hams District Council will be guided by the recommendations contained within British Standard 5837 "Trees in Relation to Construction" which forms the basis for the survey technique detailed above. This standard gives essential advice. The Council will only consider proposals for other survey and protection methods where these can be demonstrated to improve the likelihood of tree retention on the site.

DESIGNING AROUND THE TREES

The tree survey will be an important factor helping the designer decide which trees can be retained in the new development.

Preference should be given to retaining trees in categories A and B. Trees in category D will need to be removed, and the Council will seek appropriate replacement planting in a landscape scheme. The trees most suitable for retention will not necessarily be the largest or oldest on the site. Younger, healthier trees are much more likely to withstand some disturbance and will remain for many more years.

Existing trees can be used in a positive way in the site layout. There may be opportunities to create focal points or landmarks, break up the roofscape, and punctuate or frame views.

Where trees are identified for retention the Council will make them subject to Tree Preservation Orders.

POSITION OF BUILDINGS

Government guidance requires that retained trees are in harmony with proposed development and that they do not interfere with incoming occupiers prospects of reasonably enjoying their property. In order to achieve this the Council considers that buildings should be at least 5 metres outside the mature crown spread of a retained tree (and in certain circumstances at distances well in excess of 5 metres).

Only where an applicant can satisfactorily demonstrate to the Council that development within 5 metres of the mature crown spread will not unreasonably interfere with incoming occupiers' reasonable enjoyment of the property will distances less than 5 metres be considered. In these cases careful consideration will be given to the long-term relationship between the tree and

development bearing in mind the proposed use of any building.

Careful consideration will need to be given to the impact of retained trees on gardens in order to ensure occupants reasonable use of their gardens.

Large plots are required if including large trees such as oak or beech in gardens. The Council would positively encourage you to locate important trees in open space or other public areas. At the very least the layout should ensure that such trees contribute to public viewpoints or street scenes.

When building near trees it is important to note that the size and depth of foundations will depend upon the type of trees, their position in relation to the proposed foundations and substructure, and the type of soil. Guidance can be found in NHBC Guidelines.

ACCESS

Roads and parking areas should normally be planned outside the canopy spread unless these are specially designed to take account of tree roots and avoid digging.

Paths and lightly trafficked areas may pass underneath but should be of permeable material. There should be no reduction in levels. Details are found in British Standard 5837 and further guidance notes.

SERVICES

Services should not normally be routed under tree canopies, but if a service run under the canopy is unavoidable, it must be thrust bored, or excavated by hand, leaving all roots greater than 25mm intact and bridging the trench. Full details are given in the Guidance Note "The Planning, Installation and Maintenance of Services in Proximity to Trees".

Where possible, keep all services together, and avoid surrounding a tree with trenches. Service runs and their relationship to trees must be shown on submitted plans.

GROUND LEVELS

Do not raise or lower ground levels (even by a few inches) within the canopy spread.

FINAL GROUND WORKS

All the effort to protect trees during the construction period can be undone if the final ground works for gardens involve excavation, ploughing or ground level changes around the trees. Details of final ground works should be included on submitted plans.

APPLYING FOR PLANNING PERMISSION

Once the design process is complete, you will be able to produce a plan and schedule listing those trees to be retained; those to be removed and those which require surgery. If any of the trees are covered by a TPO, highlight them on your plans and show the positions of replacements for any trees you propose to remove. The plan should also show the location of protective fencing

These, together with your landscaping scheme and tree survey, should accompany your application for planning permission.

BEFORE CONSTRUCTION STARTS

TREE REMOVAL AND SURGERY

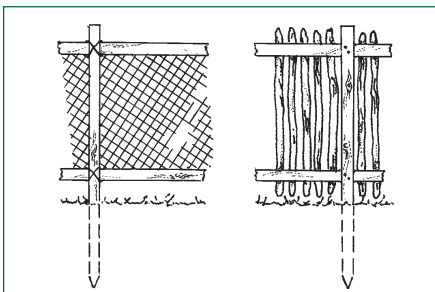
The best time to carry out this work is immediately before the contractor enters the site. However, avoid works on trees between March and July, when birds may be nesting. In addition, seek the advice of English Nature if you think bats may be using a tree as a roost.

Work must conform to British Standard 3998: 1989 "Recommendations for Tree Work" which sets out best practice for tree surgery. Where trees are subject to a Tree Preservation Order a separate TPO application will be necessary if the works are not immediately required to implement a planning consent.

PROTECTIVE FENCING

Fencing must be erected after any surgery has been carried out and before any materials or machinery are brought on site and before any demolition, earth moving or development (including the erection of site huts) commences.

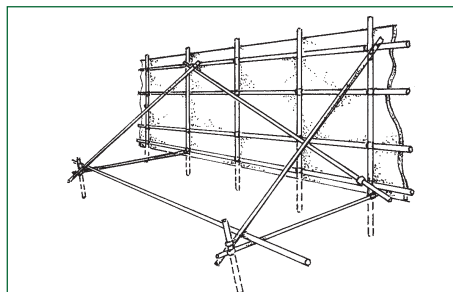
The position and type of protective fencing must be specified and shown on a plan. It should be located to conform to British Standard 5837: 1991 "Trees in Relation to Construction": in particular Table 1 and Figure 2.



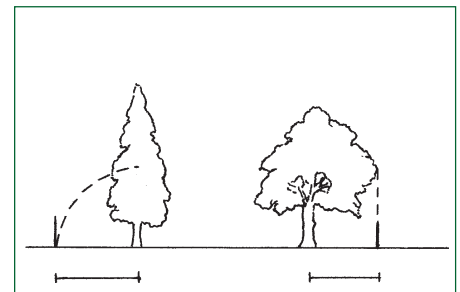
In most situations, the fencing should be at least 1.2m high, comprising a vertical and horizontal framework, well braced to resist impacts, supporting either cleft chestnut pale fencing or chain link fencing. Other materials may be considered where these can be shown to be equally effective.

The fencing must be maintained at all times whilst the contractor is on site.

When issuing any planning consent the Council will also provide site notices explaining the purpose of the fencing, which should be erected on the fence.



In circumstances where the concentration of construction activity is particularly intense, or the trees and shrubs to be retained are either particularly valuable or particularly vulnerable, fencing at least 2.4m high should be erected, comprising a scaffolding framework supporting a minimum 20mm exterior grade ply or other robust boards.



Unless otherwise agreed by the Council, the fencing should be erected at the canopy spread or a distance equal to half the tree's height, whichever is the greater. In certain cases the fencing may be required at a greater distance.

For hedges, the fence should be erected at the canopy spread or 1m from the base of the bank, whichever is the greater.

THE CONSTRUCTION PERIOD

Trees are at their most vulnerable at this time as many operations could damage their health. The erection, and maintenance, of the protective fence is of fundamental importance, but other operations can damage trees.

The following operations are potentially damaging:

Excavations or changes in ground levels – Should not take place within the protection zone without prior agreement. Even temporary changes can be damaging.

Compaction and storage of materials – The passage of vehicles or storage of materials can compact soil and do significant root damage. This should not take place in the protected zone.

Toxic materials and fires – Oil, bitumen, cement and other toxic materials should not be stored, or discharged, within 10m of a tree. Fires should not come within 5m of any part of a tree.

Fixing to the tree – Cables or other materials should not be fixed to a tree - nor should the tree be used as an anchor point for winching.



If the protective fence has been removed or damaged, or any unauthorised work has taken place within the protection zone, please contact the Council for advice. Tel: 01803 861382.

Where a development site contains retained trees, developers are strongly recommended to adopt a code of practice to ensure the protection of the trees. They should also consider retaining an arborist throughout the development period to ensure that tree protection is properly undertaken and damage avoided.

CHECKLIST: TREES ON DEVELOPMENT SITES

SUBMITTING THE APPLICATION

Does your scheme

- Include a detailed tree survey and plan?
- Show trees and hedges proposed for retention and removal?
- Establish a good relationship between trees and buildings?
- Include proposals for surgery to retained trees and a TPO application if necessary?
- Include a plan showing protective fencing location and details of its construction?
- Show the positions of existing and proposed underground service runs?
- Avoid locating any construction, works or storage in the protected zone?

CARRYING OUT THE DEVELOPMENT

You should

- Obtain consents and check any conditions
- Carry out any approved felling or surgery
- Erect the fences and notices prior to construction starting
- Maintain the fence during construction
- Seek approval for any works within the protective fence
- Implement the landscaping scheme
- Maintain the landscaping

FURTHER ADVICE

The Council produces a **Woodland and Countryside Services Directory** listing consultants and contractors who can carry out tree surveys, make recommendations and carry out surgery.

Tel: 01803 861140.

English Nature can provide advice on bats and other protected species.

Tel: 01392 889770.

The Council's **Tree Officer** can provide further advice on the contents of this Supplementary Planning Guidance note.

Tel: 01803 861382

The **Arboricultural Association** produce directories of approved consultants and contractors.

Tel: 01793 368717

The **International Society of Arboriculture** hold a list of certified Arborists.

Tel: 0181 8616852

This Supplementary Planning Guidance note has been subject to consultation between February and April 2000. The results of the consultation have been considered by the Local Planning Authority and where appropriate amendments to the note have been made. The document has been formally adopted at the Planning committee of December 2000. Full details of the public consultation and Council response are available on request.

This note is one of a series encouraging good practice in the design and layout of new development and has been produced by the Landscape and Leisure Service at South Hams District Council. For further information on this Guidance note, and the role of supplementary Planning Guidance, please contact:

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