

SUPPLEMENTARY PLANNING GUIDANCE



Trees, Hedgerows and Woodlands on Development Sites



**CONSULTATION
DRAFT
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Preface

Comments are invited on this consultation draft Supplementary Planning Guidance (SPG). Details on how your comments can be submitted are available on the Council's website at www.swansea.gov.uk/spg

The SPG provides information and guidance notes to complement Swansea Local Development Plan (LDP) Policy

ER 11: Trees, Hedgerows and Development



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1.0 Introduction

SPG Aims and Purpose

- 1.1 This *Supplementary Planning Guidance (SPG)* will be taken into account as a *material consideration* in the determination of planning applications. It has been produced to give basic information on how trees hedgerows and woodlands are dealt with in the planning system. The document provides clear and consistent guidance to applicants on the requirements of the Local Planning Authority (LPA) with respect to trees and development. For the avoidance of doubt, the guidance set out in this document relates to all trees, hedgerows and woodland, not just those which are protected.
- 1.2 The SPG sets out the steps that need to be considered at various planning and design stages, as well as during construction, to ensure that all significant existing and proposed trees are kept healthy and become an asset to a new development.
- 1.3 The **references to ‘trees’ hereafter in the document should be considered an overarching term**, which generally encompasses the following:
- **trees**
 - **woodlands**
 - **hedges and hedgerows**

The Importance of Trees in the Development Process

- 1.4 Trees provide habitat for protected species such as birds and bats that require consideration in the planning process and are protected by other legislation.
- 1.5 Trees are of vital importance to the landscape. It is now widely accepted that trees in and around towns and cities have a vital role to play in promoting sustainable communities and make a significant contribution to the cultural and heritage value in the context of an historic park, garden or designed landscape. Trees make a positive contribution to the scenic character, local distinctiveness and diversity of the landscape and are important in the creation of ‘place’, provide vital habitat for wildlife populations and substantial environmental benefits such as improving quality of life, attenuation of noise, flood alleviation and improving the climate and air quality.
- 1.6 Trees can also help protect buildings from the elements, provide shade and assist in energy conservation. Trees can enhance the setting of new development, its character, sense of maturity and overall quality thus helping with the saleability and profitability of properties. Their positive effect on the environment also helps to attract businesses and visitors to an area, thereby boosting the economy.

- 1.7 In addition to legislative protection of trees and wildlife, the public's awareness of environmental issues and the health benefits of being near or seeing trees is also increasing. Developers are therefore under increasing pressure to focus attention on trees and their role in providing a more pleasant and healthier environment.



Example of the retention of existing and the planting of new trees © getmapping.com



Retention of existing trees and new planting in the creation of 'Place'.

- 1.8 A tree may take a century to reach maturity but it can be damaged or felled in a few minutes. Such damage is frequently caused unwittingly because of a failure to appreciate the value and vulnerability of trees, particularly the root system, and how easily they can be damaged. Where trees are damaged during development of a site and subsequently decline and die, or where inappropriate or poor design leads to conflict, trees become a constant source of complaint and ultimately, any positive benefits are lost. **Early erection of tree and landscape protection measures to form construction exclusion zones before work commences on site is essential (see Chapter 6).**

2.0 Legislation and Policy Context

- 2.1 **Section 197 of the Town and Country Planning Act 1990** places a duty on local planning authorities to ensure, wherever it is appropriate, that **in granting planning permission for a development, adequate provision is made by the imposition of conditions, for the preservation or planting of trees.** If it appears to a local planning authority that it is expedient in the interests of amenity to make provision for the preservation of trees or woodlands, **Section 198 of the Act provides the power to make a Tree Preservation Order (TPO) for that purpose.** Under Section 211 of the Act, trees in conservation areas are subject to similar controls as trees to which a TPO applies.
- 2.2 This guide has been prepared in accordance with guidance contained in Planning Policy Wales (PPW)¹, Technical Advice Notes issued by Welsh Government and the Swansea Local Development Plan².
- 2.3 PPW sets out the ecological value of trees and their importance for biodiversity, ecological connectivity and climate change adaptation.

“Trees, woodlands, copses and hedgerows are of great importance for biodiversity. They are important connecting habitats for resilient ecological networks and make a valuable wider contribution to landscape character, sense of

place, air quality, recreation and local climate moderation. They also play a vital role in tackling climate change by locking up carbon, and can provide shade and shelter, a sustainable energy source and building materials. The particular role, siting and design requirements of urban trees in providing health and well-being benefits to communities, now and in the future should be promoted as part of plan making and decision taking.” (para 6.4.24).

Planning authorities should protect trees, hedgerows or groups of trees or areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial and identified green infrastructure function. Planning authorities should consider the importance of native woodland and valued trees, and should have regard, where appropriate, to local authority tree strategies or relevant SPG. Permanent removal of woodland should only be permitted where it would achieve significant and clearly defined public benefits. Development will not normally be permitted which would result in the loss of Ancient woodland, Ancient woodland sites or Veteran trees which are an irreplaceable resource. Where woodland or

¹ <https://gov.wales/planning-policy-wales>

² www.swansea.gov.uk/ldp

trees are removed as part of a proposed scheme, developers will be expected to provide compensatory planting. (Para 6.4.25)

- 2.4 The protection and planting of trees and hedgerows should be delivered where appropriate, through locally-specific strategies and policies, through imposing conditions when granting planning permission, and/or by making Tree Preservation Orders (TPOs). They should also be incorporated in GI Assessments/Plans, and where appropriate in Preliminary Ecological Appraisals (PEA)..
- 2.5 **Technical Advice Note (TAN) 10: Tree Preservation Orders**³. TAN 10 supplements PPW and states that under the Town and Country Planning Act 1990 (section 198) LPA's are empowered, in the interests of amenity, to protect trees and woodlands by making TPOs. As such, any tree or woodland that has a TPO attached to it is legally protected from cutting down, uprooting, topping, lopping, willful damage or destruction without consent from the LPA.
- 2.6 **TPOs** should be considered where provision should be made for the preservation of trees or woodlands in the interest of amenity (TAN10; para 14). TPOs should be made where the removal of trees and woodlands would have a significant impact on the environment and its enjoyment by the public. TPOs cannot be made on bushes, shrubs or hedgerows (however they can be made on trees within hedgerows).

2.7 **The Draft City and County of Swansea Protected Tree Policy**⁴ details the approach of the Council in protecting trees and how the guidance in TAN 10 is interpreted.

2.8 **Swansea Local Development Plan (LDP) Policy ER 11** states:

“Development that would adversely affect trees, woodlands and hedgerows of public amenity or natural/cultural heritage value, or that provide important ecosystem services, will not normally be permitted.

Ancient Woodland, Ancient Woodland Sites, Ancient and Veteran Trees merit specific protection and development will not normally be permitted that would result in:

- i. Fragmentation or loss of Ancient Woodland;
- ii. The loss of an Ancient or Veteran Tree;
- iii. Ground damage, loss of understorey or ground disturbance to an area of Ancient Woodland or Ancient or Veteran Tree's root protection area;
- iv. A reduction in the area of other semi natural habitats adjoining Ancient Woodland;
- v. Significant alteration to the land use adjoining the Ancient Woodland;
- vi. An increase in the likely exposure of Ancient

³ <https://gov.wales/technical-advice-note-tan-10-tree-preservation-orders>

⁴ Emerging – to be published on www.swansea.gov.uk

- Woodland, Ancient or Veteran Tree to air, water or light pollution from the surrounding area;
- vii. Alteration of the hydrology in a way that might impact on Ancient Woodland, Ancient and Veteran Trees;
 - viii. Destruction of important connecting habitats relating to Ancient Woodland;
 - ix. Destruction of Plantations on Ancient Woodland Sites (PAWS); and/or
 - x. Development in close proximity to Ancient Woodland and Ancient and Veteran Trees.

Where necessary, planning applications for development proposals on sites containing, or adjacent to, trees will be required to provide: a tree survey; an arboricultural impact assessment; an arboricultural method statement; and/or a tree protection plan. Where trees are to be replaced a scheme for tree replacement must be agreed prior to the commencement of development, including detail of planting and aftercare.”

Other legislation

- 2.9 Trees may provide important habitat for protected species, particularly bats and birds. Applicants should refer to the guidance in the Biodiversity SPG to establish the impact that development affecting trees

will have on protected species and any relevant surveys, assessments or associated licences or permits may be required before commencing any works to trees. Particular regard should be had to the presence of **Bats**, which are a European Protected Species under Schedule 2 of the Habitats Regulations and all wild birds, their nests and eggs which are protected under Schedule 1 of Wildlife and Countryside Act (1981) (as amended) by CROW Act 2000.

- 2.10 An ecological survey for protected species may be required where development:

- Is residential development within 200m of a woodland, or listed buildings within 50m of woodland, field hedgerows or lines of trees with connectivity to woodland or involves the **felling, removal or** lopping of:
 - woodland;
 - hedgerows and/or lines of trees with connectivity to woodland or water bodies ;
 - old and veteran trees that are older than 100 years;
 - mature trees with obvious holes, cracks or cavities (and also large dead trees).

3.0 Preventing Damage during Construction

- 3.1 In addition to the obvious parts of the tree (canopy, branches and stem), the hidden roots can also be damaged during construction. In general terms tree roots are found in the upper 600mm of soil, although root distribution can be deeper dependent on site conditions and tree species. They consist of structural roots which anchor the tree and a network of smaller roots that uptake water and nutrients.
- 3.2 **Maintaining soil structure.** An ideal soil for root growth and development contains about 50 percent pore space for water and air movement. Heavy construction equipment and/or repeated pedestrian movements can compact topsoil and subsoil dramatically reducing pore space. Compaction inhibits root growth, limits water penetration, and decreases oxygen needed for root survival (see Chapter 4).
- 3.3 **Maintaining a healthy root structure.** Digging, grading, and trenching associated with construction and underground utility installation can be very damaging to roots. A tree's root system can extend horizontally a distance one to three times greater than the height of a tree. Excavation in a tree's root protection area (RPA) can reduce tree vitality leading to premature death of the tree(s). Cutting roots close to the trunk can severely damage a tree and cause it to fail in high winds (see Chapter 4).
- 3.4 **Maintaining original soil levels.** The majority of fine water-and- mineral-absorbing roots are in the upper 15 to 30 cm of soil where oxygen and moisture levels tend to be best suited for growth. Even a few centimeters of soil piled over the root system to change the grade can smother fine roots and eventually lead to larger root death and the loss of trees.
- 3.5 **Avoiding root / soil contamination.** Spillages of fuels, construction chemicals or uncontrolled cement run off can change soil pH or poison tree roots.
- 3.6 **Avoiding physical impact.** Construction equipment can injure the above-ground portion of a tree by breaking branches, tearing the bark, and wounding the trunk. These injuries are permanent and, if extensive, can be fatal.
- 3.7 **Avoiding exposure.** Trees in a group grow as a community, protecting each other from the elements. Trees can grow tall with long, straight trunks and high canopies; removing neighbouring trees during construction exposes the remaining trees to increased sunlight and wind which may lead to sunscald or breakage of limbs and stems and potentially windthrow of remaining trees.

4.0 Incorporating Trees into Developments

- 4.1 **British Standard 5837:2012 - Trees in relation to design, demolition and construction⁵ – Recommendations**, will be regarded as the overriding document detailing the standard and guidance for a balanced approach on deciding:
- Which trees are appropriate for retention;
 - The effect of trees on design considerations; and
 - The means of protecting these trees during development.
- 4.2 Variation from the guidance in BS5837:2012, will require justification on a site specific basis. If BS 5837 is updated during the life of this SPG, the new guidance will be adopted.
- 4.3 **Design Stage:** A tree survey in accordance with BS5837:2012, provides important information to enable decisions to be made about which trees should remain and consequently the location of development on a site. For this reason **a tree survey should be commissioned as early as possible in the process to inform the design.** Early arboricultural advice in some cases will also highlight if a scheme is viable or not.
- 4.4 When identifying trees for retention regard should be taken of their quality and condition, their potential for future growth, longevity and where applicable, their value as a group.



⁵ **BS 5837:2012** Trees in relation to design, demolition & construction Recommendations

- 4.5 **Category A and B (BS5837:2012) – high and moderate quality trees will usually be expected to be incorporated into a layout.** Category C trees should be retained where the proposals do not require their removal.
- 4.6 Category C and U trees should be retained where they have significant biodiversity features and their retention will not be hazardous.
- 4.7 A **Tree Constraints Plan** should be prepared to show the root protection areas (RPAs) and canopy spreads of the trees. The RPA is the **minimum** area that a tree requires to ensure that it can continue to survive. **For a single stem tree this area is a circle with a radius of 12 x the stem diameter, measured 1.5m above ground level.** The RPA should be modified from a circle if the topography dictates or if there is an obstruction preventing root growth in a particular direction. Tree roots can extend further than this area and at times should be protected beyond it (See 4.9).
- 4.8 Any development, excavation or access within a RPA will not usually be permitted unless measures are taken to prevent damage to the tree(s) and agreed in writing by the LPA prior to commencement of the development.
- 4.9 During the design and planning stages various factors must be taken into account. This should include, but is not limited to, the following:
- i. Tree Preservation Orders (TPOs) / conservation area protection,
 - ii. Their biodiversity value including protected species. (See PPW and Biodiversity SPG)
 - iii. The effects of development proposals on the amenity value of trees (post design).
 - iv. Below ground constraints: root distribution, suitable RPAs taking into account root morphology.
 - v. Above ground constraints: overbearing and large trees close to buildings/proposed development, shading to rooms and gardens, positions of infrastructural provisions that could impact upon, and be impacted by trees. Future growth of existing and proposed trees should also be taken into account. Design guidance to reduce solar shading can be sought from BRE “*Site layout planning for daylight and sunlight: a guide to good practice (BR 209)*”⁶
 - vi. Change in hydrology – decreasing available water or waterlogging
 - vii. Design should minimise conflicts between highways, streetlights, advertisement and signage, kerbs/haunching, hard surfacing, soft landscaping treatments and existing trees.
 - viii. Secured by design requirements and CCTV provision
 - ix. Mitigating conflicts between finished levels and existing trees.
 - x. Where the site is affected by shrinkable/expandable clay soils, attention shall be given

⁶ Site layout planning for daylight and sunlight: a guide to good practice (BR 209)
BRE. P. Littlefair

to the design of building foundations, walls and pavements such that they are sufficient to avoid future problems of movement exacerbated by tree roots of existing trees and new tree planting.

- xi. Routing of any underground services. It is unacceptable for underground services to be routed through the RPAs of existing trees.
- xii. Soakaways should not be installed close to trees as tree roots may exploit such areas and feeder drains may become blocked.
- xiii. The principle of balancing tree, shrub and hedge removal with the quality of the proposed landscaping requires careful consideration at the outset and should not be considered as an afterthought. There is likely to be ongoing protection of any proposed tree planting by TPO to mitigate the loss of trees that may have been removed as part of the development process and in the creation of place. (See 8.6)
- xiv. Wherever possible retained trees should be included in public areas rather than private gardens.
- xv. Trees and hedgerows should not be landlocked between residential properties and fenced off into unmanaged areas.

Ancient and Veteran Trees

- 4.10 Ancient trees are trees in their third or final stages of life for the given species and are 'old' in comparison to trees of the same species.
- 4.11 A Veteran Tree may not be old but because of its environment or life experiences has developed the valuable features of an ancient tree.
- 4.12 Both classifications of trees are less capable of surviving tree surgery or root disturbance. Ancient trees are of historic interest and a valuable part of our cultural heritage. Each individual tree is a survivor from the past and a relic of a former landscape. They are a living document of past management practices and ways of life, provide important ecosystem services and support important lichens, mosses, fungi and invertebrates, bats, dormice and nesting birds. Britain has some 80% of Europe's 'ancient' trees. If veteran or ancient trees / woodland are identified on site they must be considered carefully in relation to a development proposal and every attempt must be made to integrate the tree into a development proposal from an early stage to secure its long-term survival and retention. Ideally ancient trees would be retained within public open space to minimise future pressure from residents requiring the removal of the tree from within their curtilage. Veteran and ancient trees are given special consideration in the LDP⁴.



- 4.13 The RPA for ancient trees will be considered in favourable site conditions to be a circle with a radius 15 x the diameter of the stem at 1.5m from ground level (*Veteran Trees: A guide to good management*⁷). This is to take into account their intolerance of root disturbance.
- 4.14 Whilst the tree survey shall inform the design process and ultimately the site layout, the LPA recognises the competing needs of development and that trees are only one factor requiring consideration. However, certain trees, woodlands and hedgerows are of such importance and sensitivity as to prevent development

⁷ Veteran Trees: A guide to good management'. Helen Read. (2000). All ancient / veteran tree books are available from www.woodlandtrust.org.uk as a free download.

occurring or substantially modify its design and layout.

- 4.15 Care shall also be taken to avoid misplaced tree retention; attempting to retain too many low quality trees, unsuitable trees or trees that are unlikely to survive the development process on a site may result in excessive pressure during and after the development work and subsequent demands for their removal. The end result may be a poor design with fewer trees or less suitable and sustainable tree cover than would be the case if careful planning and expert arboricultural and/or landscape advice had been employed from the outset.

- 4.16 Trees can impinge on many aspects of site development. Throughout the development process all members of the applicant's design team should give adequate consideration to the requirements of trees.

Even if trees are not present within the site, off site trees and areas for planting trees, where potentially affected, should be identified and plotted on the Tree Constraints Plan and protected from damage or compaction.^{8 9}



Hedgerows

- 4.17 Hedgerows on site should be assessed for their contribution to current and future amenity as well as 'historic importance', connectivity, biodiversity and contribution to navigation for protected species.
- 4.18 Hedgerows should undergo an assessment using the criteria set out in the Hedgerow Regulations 1997 to see if the hedgerow is 'important'.
- 4.19 The biodiversity that a hedgerow provides is also a key consideration. Further detail on how these matters should be considered is provided in separate SPG on **Biodiversity and Development** (available at www.swansea.gov.uk/spg).

⁸ Planner's manual for ancient woodland and veteran trees: <https://www.woodlandtrust.org.uk/publications/2019/06/planners-manual-for-ancient-woodland/>

⁹ Natural England standing advice: <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>

5.0 Application Requirements

- 5.1 Whilst building works carried out as **permitted development** do not require any documentation to be submitted to the LPA, it will be generally in the best interests of a householder to consider trees using the guidance in this document. Permitted development rights do not allow damage to protected trees (including qualifying trees within a Conservation Area¹⁰) and a tree works application will be required if work is likely to affect protected trees. Construction will need to comply with building regulations and foundation design should follow guidance in NHBC Standards, Building near trees, (See 4.2)¹¹
- 5.2 Trees on neighbouring land potentially affected by permitted development should also be considered as action can be taken under common law if damage causes the death of the tree or harm to the neighbouring people or property. (See also 4.11)
- 5.3 **For householder applications** (e.g. all works to a single dwelling, except house construction) all trees (stems and canopy spreads) and hedges on site or within influencing distance (i.e. off-site) should be accurately plotted on a block plan. Details of which trees are to be retained, removed and pruned should be shown.

- 5.4 The illustration in Figure 5.1 provides an example of a Householder Constraints Plan that highlights how the potential 'development zone' should be informed by an accurate appraisal of the constraints associated with trees and any other relevant issues on the site.

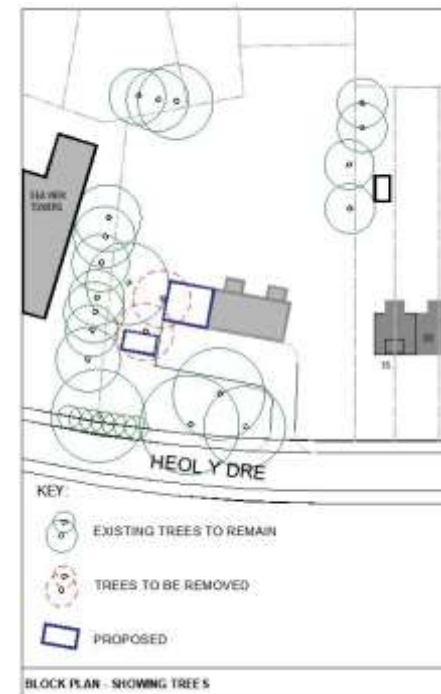


Figure 5.1 Example of Householder Constraints Plan

¹⁰City and County of Swansea Draft Protected Tree Policy

¹¹ <https://nhbc-standards.co.uk/4-foundations/4-2-building-near-trees/>

- 5.5 Where the block plan shows a conflict between the proposals and trees then a more detailed Arboricultural Impact Assessment and or ecological assessment may be required after consultation with the Councils Arboriculturalist /Tree Officer and/or Ecologist. Submitting this at the outset may reduce delays in processing the application.
- 5.6 **For larger scale development** (e.g. new build, mineral workings and waste development proposals) where trees are on or within influencing distance (i.e. off-site) of the proposed development site, a land survey, a BS 5837 tree survey and an Arboricultural Impact Assessment is likely to be required.
- 5.7 A Tree Protection Plan, an Arboricultural Method Statement and/or a Landscape Plan may be required to demonstrate that development is feasible prior to approval.
- 5.8 An application for **outline permission** will normally only require a tree survey, however if the indicative layout or density shows development close to trees then an Arboricultural Impact Assessment is likely to be required / should also be submitted. This will evaluate future potential conflicts between the development and the final size of adjacent trees and hedgerows that are to remain. If the impacts are considered a threat to the trees then a Tree Protection Plan and an Arboricultural Method Statement, may also be required.



	Householder Applications		Outline Applications		Full Applications
Trees & Hedges Plotted on Block and Site Layout Plans	✓		✓		✓
Indication of Services and Drainage	* (maybe required)		* (maybe required)		✓
Land Survey	X		✓		✓
BS 5837 Tree Survey	* (maybe required)		✓		✓
Arboricultural Impact Assessment (AIA)	* (maybe required)		✓ (if impacts to trees are foreseeable)		✓
Tree Protection Plan (TPP)	* (maybe required)		✓ (maybe required to show development is feasible or will be a reserved matter)		✓ (can be conditioned)
Arboricultural Method Statement (AMS)	* (maybe required)		✓ (maybe required to show development is feasible or will be a reserved matter)		✓ (can be conditioned)
Preliminary Ecological Appraisal	✓		✓		✓
<i>Where a PEA is required consult Ecologist</i>	(maybe required)		(maybe required)		(maybe required)

Figure 5.2: Documentation required with different types of application.

6.0 Planning Conditions

- 6.1 A tree protection scheme is more likely to be successfully implemented if submitted and approved as part of the planning application.
- 6.2 Conditions will be attached to a planning permission to ensure that that the Root Protection Areas (RPAs) of retained trees are adequately fenced off for the duration of the demolition/construction phase of the development.
- 6.3 Developers will be required to notify the LPA prior to commencement of any works on site, including demolition or vegetation clearance. At this stage the Council Officers may inspect the measures that have been put in place to protect trees during construction. Ad-hoc visits will be made throughout the construction phase to check that tree protection measures are still in place. The LPA will exercise its powers of enforcement, where necessary, to ensure compliance.
- 6.4 The LPA will not only expect developers to obtain the appropriate professional advice during the application stage but may also attach a condition to ensure adequate supervision of the construction phase by the developer's own Arboriculturist.
- 6.5 If difficulties are experienced at any time during the construction process in complying with conditions relating to trees (e.g. in maintaining the distances of protective fencing in accordance with the Tree Protection Plan) and it is desired that the terms of any conditions be modified, it will be necessary to consult with and get written approval of the LPA prior to carrying out any changes.
- 6.6 **Failure to comply with Planning Conditions:** Where a breach of any tree protection related planning condition is identified, the LPA will take appropriate enforcement action. This may include serving a 'Stop Work Notice' on a construction site where a contravention has occurred, or the instigation of legal proceedings under Section 210 of The Town & Country Planning Act 1990.

7.0 Tree Protection Plan and Arboricultural Method Statement

7.1 **Tree protective fencing must be in place before any aspect of development starts** and maintained in this position throughout the lifetime of the development. The fencing must be in position prior to demolition, commencement of ground works, materials being brought onto site etc. The majority of damage to soil and trees on development sites occurs during these activities. If alternative fencing layouts are needed for the various stages of demolition and construction these must be detailed on the Tree Protection Plan with a clear definition between layouts and 'phases'. See figure 7.1

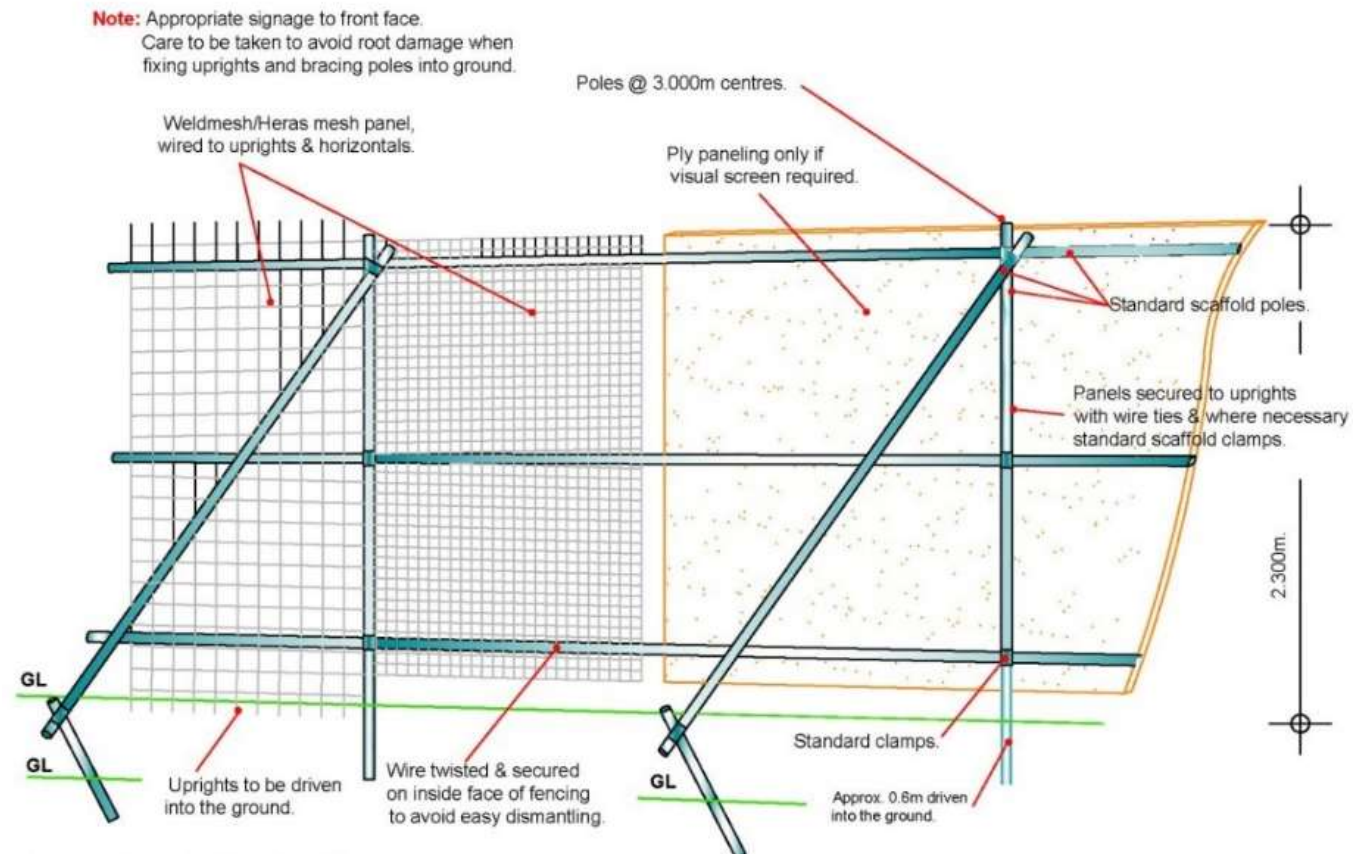


Figure 7.1 – Typical Detail: Tree Protection Fence to BS5837.

7.2 All operatives should be aware of all tree protection measures and a copy of the approved Tree Protection Plan, any Arboricultural Method Statements and a copy of the planning consent with conditions **should be available for inspection on the site**. The following simple rules **MUST** be adhered to throughout the demolition and construction phases of the development:

- Do not remove the protective fencing around a RPA for any reason without prior approval.
- Repair any damage to the protective fencing around a RPA immediately.
- Do not park or operate machinery and equipment near trees.
- Do not store materials within the RPA. Contaminants (fuel, oil and chemicals) must be stored at least 10m away from the protected area.
- Do not mix cement near trees (See also 7.6)
- Do not light fires within 10m of any tree and beware of flames drifting towards branches.
- Do not secure temporary overhead cables or floodlights to trees.
- Do not change the ground level or excavate within the branch spread of existing trees.

7.3 The purpose of the Tree Protection Plan is to provide the precise location and physical protection measures, including ground protection, for trees woodlands or hedges present on or immediately adjacent to the development site that are identified for retention and are likely to be affected either directly or indirectly by the development. The plan must be fit for purpose and have enough detail so that a contractor can install the measures.

7.4 The Tree Protection Plan shall take account of the RPA, areas of proposed structural landscaping, trees to be retained and removed and the precise location of protective barriers and their signage. Barriers shall be fit for the purpose of excluding construction activity and appropriate to the intensity and proximity of work taking place around trees selected for retention. In certain circumstances standard Heras, chestnut pale or orange barrier mesh fencing may be appropriate. However, deviation from the default British Standard will require justification;

7.6 An **Arboricultural Method Statement** shall describe construction operations to be undertaken in proximity to trees as highlighted in the arboricultural impact assessment. The Arboricultural Method Statement shall make allowance for, and plan, all construction operations to be undertaken in proximity to trees. This shall include, but is not limited to, the following aspects;

- Site construction access;
- The intensity and nature of the construction activity;
- Special engineering solutions (foundations etc.) to protect trees;
- Specification of no-dig surfacing details within tree RPAs and method statement;
- Method for approved excavation in RPA's;
- Contractors car parking and phasing of construction works;
- Space required for foundation excavations and construction works;
- The location and space required for any service runs, both underground and overhead, including: foul and surface water drains, land drains, soakaways, gas, oil, water, ground source heat systems, electricity, telephone, television or other communication cables;
- All changes in ground levels including the

location of retaining walls and steps, making adequate allowance for the foundations of such structures, drainage and back filling;

- Space for cranes, plant, scaffolding and access during works;
- Space for site huts, temporary toilets (including their drainage) and other temporary structures;
- The type and extent of landscape works which will be needed within the protected area, and the affect these will have on the root systems
- Space for storage (whether temporary or long-term) materials, spoil and fuel and the mixing of cement and concrete (including storage);
- The effect of slope on the movement of potential harmful liquid spillages towards or into protected areas.
- Particular attention, where applicable, to be given to the height of storage of topsoils and subsoils that is to be reused and should be dealt with as per BS 3882:2015¹² and BS 8601:2013¹³
- Measures for dealing with Japanese Knotweed / Himalayan Balsam etc.
- Any proposed arboricultural watching brief to monitor and confirm the implementation and maintenance of tree protection measures.
- Tree surgery specification (in accordance with BS3998:2010 Tree work¹⁴– Recommendations)

¹² BS 3882:2015 - TC. Tracked Changes. Specification for topsoil.

¹³ BS 8601:2013. Specification for subsoil and requirements for use.

¹⁴ BS 3998:2010. Tree work. Recommendations.

- Method for mitigating any accidents or contravention of the Tree Protection Plan.
- Method for avoiding negative impacts on biodiversity

7.7 Note that excavation within the RPA of tree(s) will need justification and the guidance contained in the National Joint Utilities Group Volume 4: Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Issue 2 (NJUG4) is not considered adequate where planning control applies.

7.8 On sites where site clearance prior to construction will be on a large scale the method for the protection of trees will be required to cover this phase of works.

8.0 Tree and Shrub Planting

- 8.1 Appropriate new tree, shrub and hedgerow planting, amongst other landscaping proposals, may be required on development sites to enhance amenity, mitigate for any loss of tree canopy cover and to provide a sense of 'place'. It may also be to mitigate for a loss of biodiversity due to tree felling.
- 8.2 Wherever possible large growing tree species should be planted in mitigation of loss of trees on site. The layout should consider replacement planting including large growing species as part of the design layout and not just an afterthought with trees chosen for any space left over.
- 8.3 Planting should be carried out in accordance with British Standard BS8545 *'Trees: from nursery to independence in the landscape – Recommendations'*¹⁵.
- 8.4 The choice of trees to be planted should consider the layout and design of the site, future use, soil and climatic conditions, biodiversity, local landscape character and contextual surroundings. Sufficient space must be planned within the layout to allow trees to reach their mature size.
- 8.5 Planted trees should be of a species that at maturity achieve a size and form compatible with the scale and structure of the development.
- 8.6 Where tree planting is proposed within hard surfaced areas (e.g. parking areas and footpaths) details of the drainage / irrigation (where necessary) and size of planting pits must be sufficient to provide an adequate volume of soil to support the eventual size of the planted tree(s). (Further advice on tree rooting volumes can be found in the titles marked *in the Reference section.)
- 8.7 Layouts should consider how trees can be integrated into the development taking into account other factors such as Sustainable Drainage Systems (SuDS) and Green Infrastructure (GI) requirements. Guidance on tree integration can be found in *"Trees in the Townscape: A Guide for Decision Makers"* and be delivered using guidance in *"Trees in Hard Landscapes: A Guide for Delivery"*¹⁶
- 8.8 Where urban trees are proposed as part of a SUDs scheme, the specification of the tree pit (i.e. crate system, Stockholm pit etc) must be provided in the landscape plan. It is intended that the emerging GI SPG will provide further details on the role of trees in reducing surface water run off as part of green infrastructure provision.

¹⁵ BS 8545:2014. Trees: from nursery to independence in the landscape. Recommendations.

¹⁶ "Trees in the Townscape: A Guide for Decision Makers". 2012. TDAG" and "Trees in Hard Landscapes: A Guide for Delivery". 2014. TDAG" Both TDAG books are available as a free download at <http://www.tdag.org.uk>

- 8.9 Further guidance on the role of Trees in relation to Green infrastructure and Biodiversity can be found in *Sustainable Drainage Systems - Maximising the Potential for people and wildlife. A Guide for Local Authorities and Developers. RSPB.*
- 8.10 **Protection of trees after the development is complete.** Both newly planted trees and existing ones retained within a development should be cared for after the development is complete. Conditions will normally be placed on planning consents to ensure that if any new tree included in a landscaping scheme of a development becomes unhealthy, or dies within 5 years of the completion of the development (or other conditioned period of time for the replacement of tree and shrub failures), it will be replaced by a new tree of like species, similar in age and size to the tree to be removed and at the same location. After 5 years (or other conditioned period of time for the replacement of tree and shrub failures) have elapsed following the completion of the development the LPA may consider making TPOs on the trees protected previously by condition.

9.0 Professional Advice

9.1 It is important to ensure that decision making in relation to trees, hedgerows and woodland on development sites is done having regard to full understanding of the legal and planning requirements that apply. In some instances seeking professional advice will be necessary to inform the process.

9.2 **Fundamentally it is important to establish who you need to employ.** For example, is it a **Tree Consultant, Landscape Architect or Tree Surgeon / Contractor?**

- **A Tree consultant** will give professional advice on the health and/or safety of a tree; relationships with proposed or existing buildings and development sites or any other tree issue requiring a report.
- **A suitably qualified, experienced and resourced Landscape Architect** will give comprehensive advice on working with and the protection of the existing landscape, will design and 'make' great places and may give advice on existing tree issues. See links to the Landscape Institute (LI) in the Contacts page to see what a Landscape Architect can offer, the categories of membership of the LI and find a Practice with the skills and expertise you need.
- **A qualified, competent and experienced tree surgeon / contractor** will give a professional service including pruning, and removal and may

give basic advice on tree condition and tree management operations as required.

- **A suitably qualified ecologist**- if advice is needed on protected species

Please note that the LPA is unable to recommend who to employ but further guidance is set out below to help inform the process of identifying a suitable candidate.

9.3 **Tree Consultant.** A tree survey should be undertaken by a suitably qualified and experienced arboriculturist (as required by BS5837). All reports must specify the qualifications held by the arboriculturist and all surveyors. A professional providing this type of service **should hold Professional Indemnity Insurance** and one of the following qualifications or industry recognised standards:

- Certificate in Arboriculture level 3/4 (Tech Arbor A).
- Diploma in Arboriculture level 6 Dip Arb (RFS)
- BSc or MSc (Degree or Masters) in arboriculture.
- Professional Member or Fellow of the Institute of Chartered Foresters] attained by an arboricultural route / Chartered Arboriculturist (MICFor / FICFor)
- Fellow of the Arboricultural Association
Arboricultural Association Registered Consultant

9.4 **Tree surgeon / contractor:** Picking the wrong contractor could lead to:

- Injury to people,
- Damage to property,
- Irrevocable damage to trees that have taken many years to grow.

Tree work operations (arboriculture) require a high degree of technical competence, supported by training and experience. For these reasons tree work should only be undertaken by well trained, suitably resourced, competent contractors who hold adequate insurance.

Look for:

- Employers Liability and Public Liability Insurance (recommended min £5 million)
- NPTC Certificates of Competence

- Written quotations
- Membership of a professional organisation. (Membership does not guarantee work standards but does show a degree of commitment)
- References for similar work

9.5 **An arboriculturist** (e.g. an arboricultural Consultant) can help you prepare the necessary documentation required by the LPA in support of a planning application.

9.6 **A suitably qualified ecologist:** who could advise on any potential impacts on biodiversity especially on protected species.

10.0 References

1. **Planning Policy Wales** (Edition 10)
2. **City and County of Swansea Local Development Plan**. Adopted February 2019.
3. **Technical Advice Note (TAN) 10: Tree Preservation Orders**(1997)
4. City and County of Swansea Draft Protected Tree Policy
5. British Standard BS5837:2012 Trees in relation to design, demolition and construction – Recommendations
6. Site layout planning for daylight and sunlight: a guide to good practice (BR 209)' BRE. P. Littlefair.
7. Veteran Trees: A guide to good management'. Helen Read. (2000). All ancient / veteran tree books are available from www.woodlandtrust.org.uk as a free download.
8. Planner's manual for ancient woodland and veteran trees:<https://www.woodlandtrust.org.uk/publications/2019/06/planners-manual-for-ancient-woodland/>
9. Natural England standing advice:
<https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>
10. - draft tree strategy
11. NHBC Standards, Chapter 4.2, Building Near Trees
<https://nhbc-standards.co.uk/4-foundations/4-2-building-near-trees/>
12. British Standard BS3882:2015 Specification for topsoil
13. British Standard BS8601:2013 Specification for subsoil and requirements for use
14. British Standard BS3998:2010 Tree Work – Recommendations
15. British Standard BS8545:2014 Trees: from nursery to independence in the landscape – Recommendations
16. Trees in the Townscape: A Guide for Decision Makers'. 2012. TDAG; Trees in Hard Landscapes: A Guide for Delivery'. 2014. TDAG. Both TDAG books are available as a free download at <http://www.tdag.org.uk>

Further references

- 'Tree Roots in the Built Environment'. (2006). Department for Communities and Local Government (DCLG)
- 'Up by Roots' - Healthy Soils and Trees in the Built Environment. James Urban. (ISA) (2008).
- 'Urban Trees: A Practical Management Guide'. Steve Cox. (2011)
- 'Ancient Tree Guides No. 3: Trees and Development.'
- 'Ancient and other veteran trees: further guidance on management'. Lonsdale (2013)
- Sustainable Drainage Systems - Maximising the Potential for people and wildlife. A Guide for Local Authorities and Developers. RSPB.

11.0 Appendices

Useful Contact Information

- **Arboricultural Association (AA)**
The Malthouse, Stroud Green, Standish, Stonehouse,
Gloucestershire, G40 3DL
Tel: 01242 522152
Email: admin@trees.org.uk
Web: www.trees.org.uk
*Advice on trees and produces an annual directory of
AA Registered Consultants*
- **Consulting Arborist Society (CAS)**
Email: chairman@consultingarboristsociety.co.uk
Web: www.consultingarboristsociety.co.uk
Provides a list of CAS approved arboriculturalists
- **British Standards Institute**
Customer Services, 389 Chiswick High Road, W4 4AL
Tel: 020 8996 9001
Email: cservices@bsigroup.com
Web: www.bsi-global.com
Provision of British Standards
- **Chartered Institute of Ecology and Environmental Management (CIEEM)**
43 Southgate Street, Winchester. SO23 9EH
Tel: +44 (0)1962 868626
Web: <https://cieem.net>
*Advice/guidance on ecological surveys and appt of
qualified ecologists/ecological consultants.*
- **Landscape Institute (LI)**
107 Grays Inn Road, London, WC1X 8TX
Tel: 020 7685 2640
Web: <http://www.landscapeinstitute.org>
*See what a Landscape Architect can offer and find a
practice with the skills and expertise you need*
- **Arboricultural Advisory & Information Service**
Alice Holt Lodge, Wrecclesham, Farnham, Surrey,
GU10 4LH
Tel: 09065 161147 (Premium Rate) or
Administration: 01420 22022
Email: admin@treehelp.info
Web: www.treehelp.info/
*Advice and guidance on tree care and issues related
to trees on development sites*
- **Planning and City Regeneration**
City and County of Swansea Council, Civic Centre,
Oystermouth Road, Swansea, SA1 3SN
Tel: 01792 636000
Email: planning@swansea.gov.uk or
protectedtrees@swansea.gov.uk
Web: www.swansea.gov.uk
- **Natural Resources Wales**
Tel: [0300 065 3000](tel:03000653000)
Email enquiries@naturalresourceswales.gov.uk

LDP Policy Extracts

ER 11: Trees, Hedgerows and Development

Development that would adversely affect trees, woodlands and hedgerows of public amenity or natural/cultural heritage value, or that provide important ecosystem services, will not normally be permitted.

Ancient Woodland, Ancient Woodland Sites, Ancient and Veteran Trees merit specific protection and development will not normally be permitted that would result in:

- i. Fragmentation or loss of Ancient Woodland;
- ii. The loss of an Ancient or Veteran Tree;
- iii. Ground damage, loss of understorey or ground disturbance to an area of Ancient Woodland or Ancient or Veteran Tree's root protection area;
- iv. A reduction in the area of other semi natural habitats adjoining Ancient Woodland;
- v. Significant alteration to the land use adjoining the Ancient Woodland;
- vi. An increase in the likely exposure of Ancient Woodland, Ancient or Veteran Tree to air, water or light pollution from the surrounding area;
- vii. Alteration of the hydrology in a way that might impact on Ancient Woodland, Ancient or Veteran Trees;
- viii. Destruction of important connecting habitats relating to Ancient Woodland;
- ix. Destruction of Plantations on Ancient Woodland Sites (PAWS); and/or
- x. Development in close proximity to Ancient Woodland and Ancient and Veteran Trees.

Where necessary, planning applications for development proposals on sites containing, or adjacent to, trees will be required to provide: a tree survey; an arboricultural impact assessment; an arboricultural method statement; and/or a tree protection plan. Where trees are to be replaced a scheme for tree replacement must be agreed prior to the commencement of development, including details of planting and aftercare.

2.9.67 National Planning Policy and Guidance⁶¹ provides for the protection of trees and woodlands. Throughout the County it is estimated that over 50,000 trees are protected by individual/group orders, area orders or woodland orders. This is in addition to trees in conservation areas whilst hedgerows are protected by separate legislation.⁶²

2.9.68 In recognition of the importance of trees to the County, the Plan seeks to ensure that suitable trees, whether they are protected by legislation or not, are retained and protected on any development site. Further information relating to the protection of trees on development sites is provided in SPG. NRW i-tree Eco assessment* provides useful information on the ecosystem services provided by trees. Where appropriate planning conditions or Tree Preservation Orders will be used to protect important trees and woodlands. The LPA will pursue appropriate enforcement action against unauthorised works to protected trees.

⁶¹ Planning Policy Wales and TAN 10: Tree Preservation Orders

⁶² Town and Country Planning Act 1990 (as amended), Town and Country Planning (Trees) Regulations 1999, Forestry Act 1967, Hedgerow Regulations 1997.

* i-Tree Eco is a software application to quantify the structure and environmental effects of urban trees, and calculate their value to society.

Please see <https://www.forestresearch.gov.uk/research/i-tree-eco/> for further details.



- 2.9.69 The circumstances in which further information in support of a planning application will be required are outlined in the policy. This information must be in accordance with the current British Standard BS5837 and have regard to the long term impact of the proposed development on the trees as they grow and wherever possible seek to avoid future conflict, such as that caused by over-hanging branches, shading and dominance.
- 2.9.70 Planning Permission will normally only be granted where the trees on the site are fully protected in the long term, or appropriate replacement trees will be planted when the removal of a tree or trees is unavoidable. The removal of trees would only be acceptable where there is no other alternative location for the development; and the need for and benefits from the development outweighs the importance of the tree or trees.
- 2.9.71 Replacement trees will be planted in accordance with British Standard BS8545. Tree Preservation Orders (TPOs) will normally be placed on the replacement trees.
- 2.9.72 Planning Conditions, Article 4 Directions and/or *Planning Obligations* will be used to secure any necessary mitigation/compensation/enhancement measures in relation to trees and development proposals.
- 2.9.73 New tree or mitigation planting should be designed to achieve maturity and to ensure that there is an ongoing contribution to amenity with negligible negative impacts. New *landscape* schemes should follow the principles set out in "Trees in the Townscape: A Guide for Decision Makers"* and be delivered using guidance in "Trees in Hard Landscapes: A Guide for Delivery".*

* Trees in Hard Landscapes: A Guide for Delivery. Trees and Design Action Group (2014).

2.9.74 *Ancient woodland* is defined as land that has had a continuous woodland cover since accurate maps were first produced. It is a valuable and irreplaceable resource, having been present in the *landscape* over some time. *Ancient woodland* is rich in wildlife and more likely to support protected and priority species and to contain special features of importance for *biodiversity*. It is also more likely to contain features of historical and archaeological importance. Their rarity and importance means that these areas should be protected. Direct loss of *Ancient Woodland* must be avoided. A minimum buffer of 15 metres should be provided between *Ancient Woodland* and most forms of development.⁶³ This is necessary to provide essential root and understorey protection (as required in BS5837:2012) and to protect the important *Ancient Woodland* habitat from indirect damage, such as trampling, fly-tipping, encroachment of invasive features and vegetation clearance resulting from the new development. Ideally, the buffer should be planted with woodland edge species or left as natural grass to increase or maintain ecological connectivity and create a transitional habitat i.e. *ecotone*, providing resilience for this sensitive and highly valued habitat. Where possible, opportunities should be taken to restore plantations on *Ancient Woodland* sites to native tree cover. Plantations on *Ancient Woodlands* (PAWS) are sites believed to have been continuously wooded for over 400 years, but currently have a canopy cover of at least 50% non-native conifer tree species. Critically, such areas support *Ancient Woodland* soil systems and have the potential to be restored to an *Ancient Woodland* habitat.

2.9.75 All areas of *Ancient Woodland* known at the time of the Plan's preparation are shown on the Constraints and Issues Map. However this is only a provisional list and all development sites that support woodland will need to be assessed for *Ancient Woodland* status. NRW will be consulted on any proposals that may give rise to potentially damaging operations.



2.9.76 An *Ancient Tree* is one that has passed beyond maturity and is old or aged. A *Veteran Tree* may not be old but because of its environment or life experiences has developed the valuable features of an *Ancient Tree*. *Ancient* and *veteran trees* are of prime importance because of their rarity and function within an ecosystem. Individual *Ancient* and *veteran trees* often have local or national significance, due to their age, size or condition. They are also of importance to sustain a range of nationally and internationally *protected species*. In order to provide the necessary protection a buffer of 15x the diameter of the stem of *ancient* and *veteran trees* when measuring at 1.5m from ground level will be required for most forms of development, as endorsed by the Arboricultural Association.⁶⁴

2.9.77 There is currently no comprehensive inventory of *ancient* and *veteran trees* within Wales. The required tree survey in support of development proposals will detail whether a site contains or is adjacent to any trees which could be considered to be *Ancient* or *Veteran*.

⁶³ The Woodland Trust Planner's Manual for Ancient Woodland and Veteran Trees – Woodland Trust 2017.

⁶⁴ Ancient and other Veteran Trees: Further Guidance and management by D. Lonsdale (2013).