

Hartlepool Local Development Framework

Trees and Development Guidelines

Supplementary Planning Document



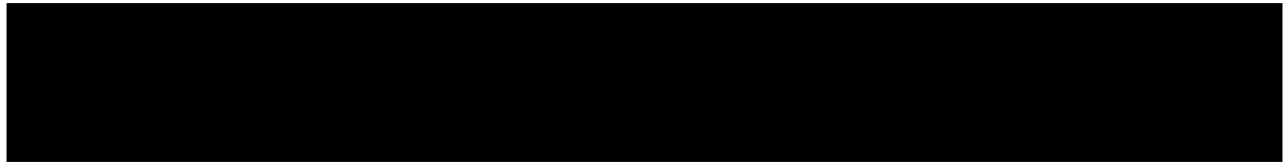
2013



Summary

The National Planning Policy Framework (NPPF) sets out the Government's planning policies and how these are expected to be applied. It identifies trees and seeks to prevent their loss; acknowledging their biodiversity, landscape and cultural contribution.

Furthermore, the NPPF identifies supplementary planning documents as a useful mechanism to guide development with regard to a specific issue such as trees and development. The NPPF reinforces that the planning system is plan-led and that planning permissions must be determined in accordance with the development plan.



This supplementary planning document, which was formally adopted by Hartlepool Borough Council on 6th June 2013, is intended to provide an outline of the procedures and design criteria necessary to achieve the successful integration of existing and new trees, shrubs, hedges and hedgerows into new developments. It is not intended as an undue burden on development. It will be a material consideration in the determination of planning applications, and compliance with its contents will ensure that sufficient information is submitted to enable the Council to determine in advance the full long-term effects of any new development as it relates to trees. Failure to comply with the guidelines may result in delays in determining planning applications, or in some cases permission being withheld.

The key reference document in connection with this guide is British Standard 5837: 2012 'Trees in relation to design, demolition and construction – Recommendations'.

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1. Introduction

This document has been produced by Hartlepool Borough Council with the purpose of providing a comprehensive guide to those involved in development on the standards that the Council will expect from new development proposals as they relate to trees. Adherence to the guidance contained in this document should ensure that trees are afforded due consideration in the planning process so that they can be successfully integrated into new developments.

Trees are of vital importance to the landscape and are widely appreciated for enhancing the rural and urban environment. They make a positive contribution to the scenic character and diversity of the landscape, and provide vital habitat for dependant wildlife populations. Trees also have an important role in helping society adapt to climate change particularly in the urban environment. They provide shelter, cooling shade and can help slow rainwater runoff.

Whilst trees may affect the development potential of some sites, in many cases they can be successfully integrated into new development schemes. Socially and environmentally responsible built environment professionals understand that the retention of trees within new developments provides an immediate sense of maturity, to the benefit of a site and its surroundings, raising the overall quality of schemes and enhancing property values.

Trees on development sites are however vulnerable to damage, both above and below ground. Failure to fully assess the potential impact of proposed development upon trees within and adjacent to development sites, and to plan for and implement effective physical protection during development works, can lead to the loss of tree cover and the many associated benefits.

Along with the retention of existing trees, many of the opportunities for new tree planting arise through the development of land and therefore it is important, if overall tree cover is to be enhanced, that new trees form a significant element of the landscaping of new developments.

Current Government guidance specifically encourages pre-application discussion with the Local Planning Authority. Timely and full cooperation between the Council and the developer will serve to resolve any potential conflicts. It should however be noted that Council officers cannot provide a survey or design service for applicants. Their role is to interpret and assess applicants' proposals in relation to tree and landscape matters and to make recommendations accordingly.

Hartlepool Borough Council recommends that developers engage the services of a suitably qualified and experienced arboricultural consultant at the outset of a project in order to ensure that the needs of existing trees are accounted for and realistic opportunities for additional planting are identified.

British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures. Hartlepool Borough Council would advise developers, their design teams and construction contractors to familiarize themselves with this British Standard.

1.1 Current Status of Trees in Hartlepool

Hartlepool has one of the lowest percentage tree covers of any English Local Authority. The percentage of tree cover for the Borough is approximately 2.6% compared to the national average of 8.6%. (Trees in Towns II)

This sparse tree cover, particularly within the urban area, is due to a number of factors including land clearance for shipbuilding and agriculture, difficult climatic conditions, and the rapid expansion of the town since the early 1800's. There are, however, areas where trees have transformed the image of an area. Notable in this respect are the tree-lined verges along the A689, which provide an attractive introduction to the town.

In seeking to address the identified shortage of tree cover in the Borough, the Council undertakes an ongoing programme of new and replacement tree planting in appropriate locations as part of its overall tree management regime. The retention of existing trees and the provision of new trees within new developments however, also have a significant role to play in increasing tree cover and enhancing the green infrastructure of the Borough.

The Council, when considering any further planning applications, in particular the South West extension, aim to narrow the gap of tree coverage in Hartlepool from 2.6% to 8.6% which is the national average.

Much of Hartlepool's existing mature urban tree cover is located within private gardens, and these are particularly prevalent in the rural villages and the Park area of the town. The Council, through the planning process, has some influence over private trees through a combination of measures including Conservation Areas, Tree Preservation Orders, section 106 agreements and planning conditions. There are currently in excess of 180 individual or group Tree Preservation Orders in force in Hartlepool.

An outline of tree protection legislation is provided in a leaflet published by the Department for Communities and Local Government entitled 'Protected Trees, A Guide to Tree Preservation Procedures'. Copies of the leaflet are available from the Landscape Planning and Conservation section of the Council, free of charge.



2 Trees and Planning Applications

Under the UK planning system local authorities have a statutory duty to consider the protection and planting of trees when granting planning permission for proposed development.

The potential effect of development upon trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion in a conservation area) or not, is a material consideration that is taken into account in dealing with all planning applications whether a major proposal for a new housing estate, or minor householder developments such as extensions.

It is essential therefore, that all relevant information pertaining to the assessment of trees and landscaping on a site is submitted with a planning application.

Where a development is likely to affect existing trees on, or adjacent to, a site the applicant will be expected to give due regard to the full range of construction related activities with potential to cause damage to trees. All the relevant detail necessary for the Council to make an accurate assessment of the short and long term arboricultural implications of the proposals should be provided.

Engaging the services of a suitably qualified and experienced arboricultural consultant at the outset of a development project should serve to ensure that issues relating to trees are identified and given due consideration in the design process.

2.1 Arboricultural Impact Assessment

An Arboricultural Impact Assessment is the document that should accompany any development proposal which is likely to affect trees on or adjacent to a site and should include:

- An evaluation of the extent of the impact of the proposed development upon existing trees
- A tree survey
- A tree retention/removal plan
- A tree protection plan
- Where necessary, details of any pre-development tree pruning operations
- Where necessary, heads of terms for issues to be addressed by arboricultural method statements.
- Where applicable, landscaping details (see section 6 of this guide)

3 Surveying the Site

The basic starting point in producing a successful site layout design is the gathering of information, particularly data obtained from carrying out a thorough and comprehensive site survey. Where developments are likely to affect existing trees, the Council will normally require the submission of a detailed tree survey, drawn up in conjunction with the topographical survey.

3.1 Topographical Surveys

Topographical surveys should accurately show all existing features in and around the site, detailing the accurate locations of all structures, trees, hedges and other vegetation, watercourses, ponds, ditches, services, roads, driveways, walls and any areas of nature conservation interest. A detailed levels survey should also normally be incorporated showing existing contours or spot heights throughout the site.

3.2 Tree Surveys

Tree surveys should be undertaken by an arboriculturalist to record information about the trees on and /or adjacent to the site which may be affected by the development.

A schedule to the survey should list all the trees or groups of trees. The following information should be provided:

- a) Individual reference number (also to be recorded on the tree survey plan)
- b) Species listed by common name, with a key provided to scientific names
- c) Height in metres
- d) Stem diameter in millimetres (rounded to the nearest 10mm) measured at 1.5m above ground level, or immediately above the root flare on multi-stemmed trees
- e) Branch spread in metres taken at the four cardinal points. (also to be plotted on the tree survey plan)
- f) Height in metres of crown clearance above adjacent ground level
- g) Life stage (Young, Semi-mature, Mature, Over-mature)
- h) General observations (Structural and/or physiological condition. Preliminary management recommendations)
- i) Estimated remaining contribution in years (<10, 10 – 20, 20 – 40, 40+)
- j) Category U or A to C category grading (see section 4.5 and tables 1 and 2 of BS 5837:2012) (also to be recorded on the tree survey plan)

4 Development Layout

Developers should anticipate the need to accommodate trees within a development through a combination of the retention of existing trees, tree planting directly, and the provision of sufficient private space for future occupiers to carry out their own planting.

The Council encourages all applicants to produce draft layouts or development site master plans for discussion prior to the submission of details at the application stage. Such plans should be prepared with suitably qualified arboricultural and landscape design input.

An assessment of the constraints imposed by trees, in accordance with section 5 of BS 5837: 2012 'Trees in relation to design, demolition and construction – Recommendations', will serve to inform site layout design by illustrating the above and below ground constraints that trees pose by virtue of their size and position.

In general, site layouts will be expected to:

- Provide for the retention of as much of the existing tree cover as is practicable. The allocation of space for trees must be assessed in terms of the overall landscape of the area. Continuity and long-term sustainability of tree cover are important criteria to be considered.
- Provide for the retention of as much of the existing hedgerow cover as is practicable and ensure the long-term retention of all 'Important Hedgerows' (Hedgerow Regulations 1997).
- Allow sufficient space for new planting. Where possible and appropriate allowance should be made for the planting of large species trees as these provide greatest benefits.
- Ensure that where proposals include the felling of existing trees, landscaping schemes make provision for sufficient replacement planting to offset adequately any resulting loss of amenity.
- Include sufficient information to allow for a full, detailed assessment of the short and long-term arboricultural and landscape implications of the development proposals to be made.



4.1 Existing Trees: Avoiding Direct Damage

All detailed design work on site layout should take into consideration the results of the topographical survey and the tree survey.

Careful consideration should be given to ensuring that trees and hedges which have been identified for retention are not directly or indirectly damaged by the proposed works.

A tree protection plan, prepared in accordance with section 5.5 of BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' will identify the precise location for the erection of protective barriers to form construction exclusion zones. It should also show the extent and type of any necessary ground protection where construction activity cannot be fully or permanently excluded.

Construction exclusion zones should be considered sacrosanct and will be expected to remain undisturbed for the duration of the development. Site layouts should therefore be designed to avoid any construction works within the identified exclusion zones and should make adequate provision for sufficient working space.

4.2 Existing Trees: Avoiding Future Conflict

Site layouts which merely avoid construction exclusion zones may not necessarily be adequate. Other factors must be taken into account in ensuring that trees which are to remain can reasonably be retained to maturity, thereby providing maximum amenity benefits with minimum maintenance requirements. In considering the juxtaposition of trees and buildings, site layout designs will be expected to ensure that trees which are to remain are given adequate space, including sufficient allowance for future growth, without the need for excessive or unreasonable pruning.

The predicted mature height, branch spread and crown form of individual trees should be assessed in conjunction with site factors such as aspect, topography, soil conditions and exposure. (The ultimate mature size of any individual tree will be dependant upon site specifics and a qualified assessment should be sought).

Site layouts must ensure that trees will not cause unreasonable obstruction of direct sunlight or daylight to properties. Factors requiring detailed deliberation include: individual species characteristics; potential for future growth; garden size and layout; the aspect of the tree from the building; building to tree clearances; building orientation; and the positioning and size of windows, especially in habitable rooms. For further advice see the Building Research Establishment 'Site Layout Planning for Daylight and Sunlight; A Guide to Good Practice'.

4.3 Tree Planting: General Principles

Tree planting should be recognised from the outset as an integral part of any development scheme and should be purposefully designed to complement the proposed features of the development, and those existing features intended for retention. On sites that have no trees whatsoever, or where it has been necessary to remove existing trees, it is especially important to plan for the planting of trees as part of the development.

Socially and environmentally responsible built environment professionals will recognise the functional role that tree planting can play in enhancing the physical characteristics of a development through providing shelter, screening, enclosure, softening the harsh outline of buildings, defining space or directing routes and views.

Particular attention should be given to the use of tree planting in enhancing public areas within developments and views into sites from surrounding public viewpoints.

All new tree planting should conform to, and be planted in accordance with, BS 3936 'Nursery stock', or BS 5236 'Cultivation and Planting of Trees in the Advanced Nursery Stock Category' or any subsequent update in the British Standard relating to tree planting.

4.4 Tree Planting: Avoiding Future Conflict

Tree planting should aim to make the optimum long-term use of allocated space without causing unreasonable future inconvenience to occupiers. In order to ensure that new trees do not interfere with buildings to such an extent that unsightly heavy pruning or removal becomes necessary the following factors will require attention:

- There should be careful choice of species and siting to ensure maximum long-term amenity benefits and minimum future conflict.
- Careful siting of new trees with reference to section 5.6 and Table A1 of BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations', will ensure that future root damage to structures, drains, services, walls, paths and drives is prevented, or at least kept within acceptable limits.
- The National House Building Council (NHBC) Standards Chapter 4.2 'Building Near Trees' offers recommendations on foundation depths in relation to the distance of trees from foundations. However, it is essential to temper the NHBC recommendations with sound professional judgment based upon the individual characteristics of each site.

4.5 Site Access

The provision of permanent and temporary site access is an important part of the site layout design, and full details will normally be required in support of any planning application.

Sites may require temporary access for long or wide loads and provision may be required for unusually high vehicles or plant. The need to provide adequate operational space within the site for heavy plant must also be considered. Any resulting short and long-term implications for trees and hedges which are to remain must be carefully assessed, and full details submitted as a part of any planning application.

In general, permanent and temporary site access designs will be expected to minimise tree and hedgerow removals, and ensure the long-term retention of all important trees and hedges.



4.6 Services and Utilities

Drainage and service layouts must be designed in such a way as to allow for installation and future maintenance without adversely affecting trees and their root systems. The provision of shared utility ducts should serve to minimise potential conflicts and should be considered a priority. Notwithstanding the benefits to trees, the use of shared ducts greatly eases future utilities servicing and minimizes the upheaval of roads.

Full details of service layouts should be submitted with any planning application. Service layout planning and installation in proximity to trees should be carried out in accordance with the requirements of the National Joint Utilities Group Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees (NJUG Vol. 4).

5 Implementation of Planning Permission

5.1 Pre-Development Tree Works

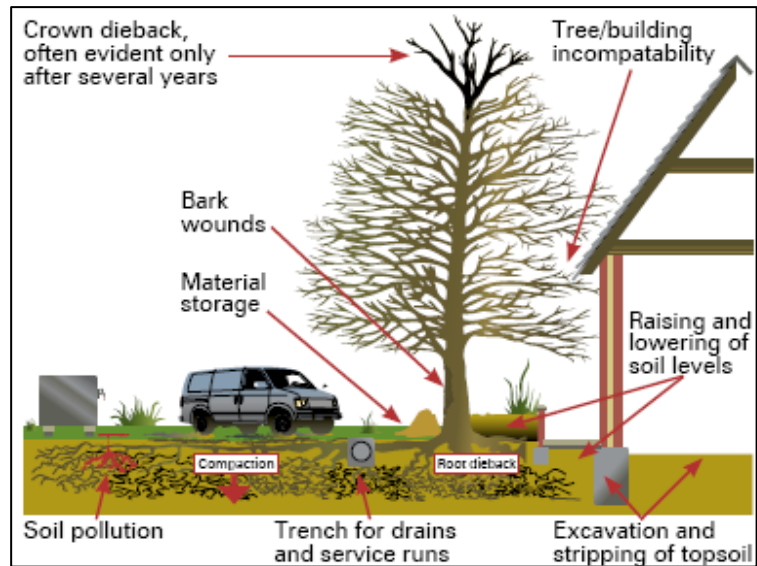
All approved pre-development tree works and development facilitation pruning should be carried out in accordance with current arboricultural best practice and with the requirements of British Standard 3998:2010 'Recommendations for tree work'.

5.2 Tree Protection Measures

A tree may take a century to reach maturity, but can be irreparably damaged in a few minutes. Such damage is frequently caused unwittingly because of a failure to appreciate the vulnerability of trees, particularly the root system.

Damage is often done to existing trees during the first few days of a contractor's occupation of a site. The early erection of tree protection barriers to form the construction exclusion zone before works commence on site is essential as the only way to prevent damage being caused to retained trees by operations in their vicinity.

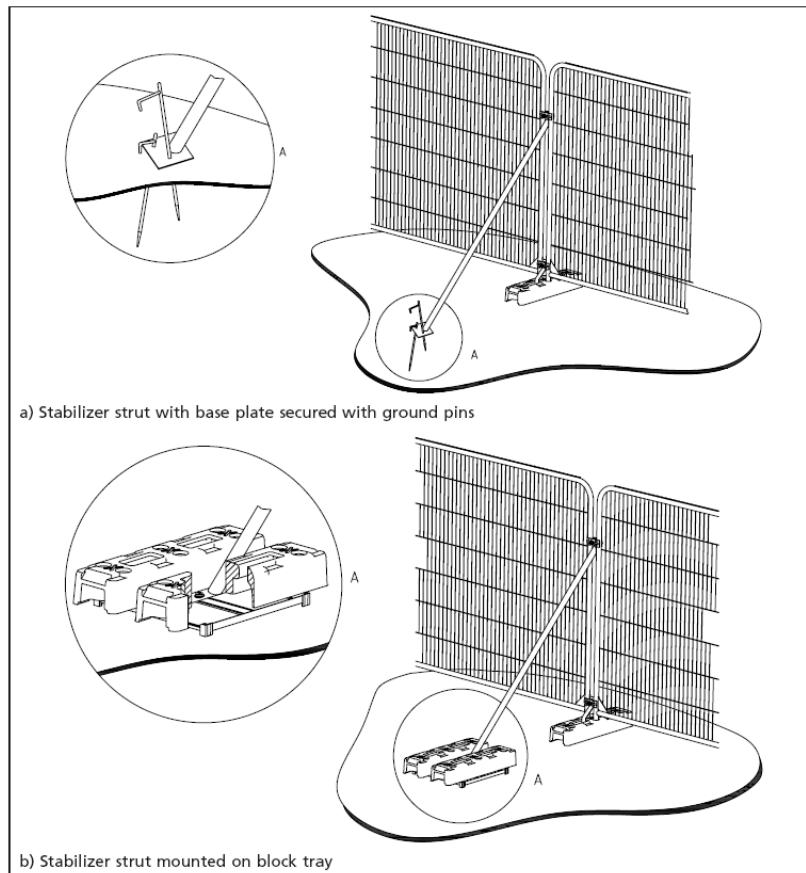
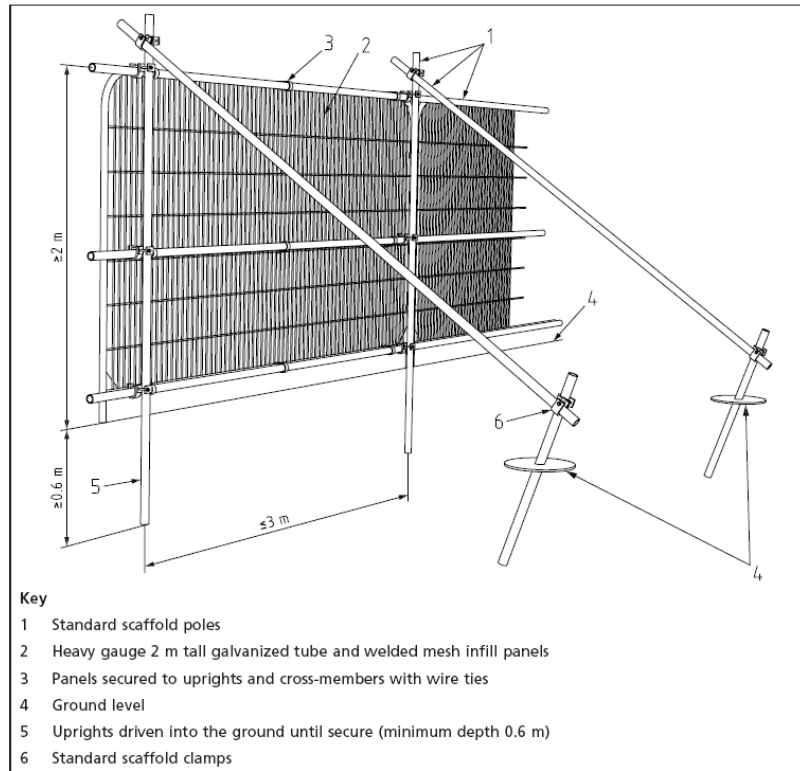
Planning conditions and/or legal agreements will normally be used to ensure that:



- protective barriers are erected prior to the commencement of any development works on site, (including demolition and preparatory site clearance).
- all subsequent development operations are carried out in accordance with the approved plan.
- no development operation or construction activity which could potentially cause damage to trees or hedges is permitted within any area designated in the approved plan as being protected, without the prior written approval of the Local Planning Authority.
- protective barriers are retained intact for the full duration of the development, and are not re-positioned or removed without the prior written approval of the Local Planning Authority.

Tree protection barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the protected tree(s). All site operatives should be made aware of all tree protection measures, and a copy of the tree protection plan and any arboricultural method statements should be available for inspection on site.

Figure 2 Default specification for protective barrier



Recommended protective barrier specifications are shown above. Section 6.2 of BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' provides clear guidance on the implementation of tree protective barriers and ground protection.

5.3 Hard Surfacing in Close Proximity to Trees

Wherever practicable, hard surfaces such as driveways and parking areas should be located outside the construction exclusion zones.

Where it is necessary to lay hard surfaces close to trees, a 'tree-friendly' method should be employed. Any excavation close to trees is likely to cause damage to the roots. Careful design is necessary to ensure that any proposed surfacing close to trees will sit on top of existing ground level, but still fit in with other surrounding surfaces and structures.

Any specification for a 'tree-friendly' driveway or parking area should include a method statement detailing how it will be constructed. The statement should include:

- details of all existing and proposed levels
- details of the cellular confinement system and edging restraints to be used
- details of the sub-base construction and how this will be built up without trafficking over unprotected ground.

The successful long-term retention of trees, even when adopting a 'tree-friendly' method of construction, depends upon the condition of the trees (which should be assessed by a qualified arboriculturalist) and on adherence to three simple rules:

- roots must not be severed
- soil must not be compacted
- oxygen must be able to diffuse into the soil beneath the engineered surface



6 Landscape Schemes

If trees are to continue to provide the many benefits they bring to the urban landscape in the long term, it is particularly important when designing new developments that allowance is made for the planting of new trees. The selection and positioning of trees should be carefully considered in order to make optimal use of the available space and on the basis of a sound appreciation of the context.

Roadside trees and trees in public spaces can make a considerable contribution to the character of new developments and are of increasing importance as green infrastructure elements in built-up areas. When designing schemes for roadside planting, careful attention should be paid to highway considerations such as sight line requirements, CCTV, street lighting, and above and below ground service routes. Where possible and appropriate, there should be a presumption in favour of large canopy trees as these have the greatest landscape value.

Planning conditions, and/or legal agreements, will normally be used to ensure that tree planting schemes are planned, implemented and maintained in order to minimise any potential negative effects and provide maximum long term environmental benefits.

Section 5.6 of BS5837:2012 'Trees in relation to design, demolition and construction – Recommendations' provides further guidance on new planting design.

The Council's Landscape Planning & Conservation section assesses the appropriateness of landscape proposals submitted with planning applications or to discharge landscape conditions.

The minimum levels of information required for new landscaping proposals are as follows:

- An accurate, detailed planting plan and schedule
- A comprehensive list of species and a stock specification
- Detail of planting densities and spacing
- Clear indication of existing trees specified for retention and those for removal
- A full planting specification
- A detailed maintenance schedule covering the establishment period

The long-term aims of a scheme can only be achieved if the landscaping succeeds. The Council will pay particular attention to the practical measures that are proposed as part of any scheme to ensure the successful establishment of new planting.

Tree planting schemes will be expected to include the following provisions:

- Preparation of the planting environment (including decompaction and drainage) should be at least to the standards set out in BS4428 (1989) Code of Practice for General Landscape Operations (excluding Hard Surfaces)
- All plant material provided will be expected to comply with and be planted in accordance with the requirements of:
 - BS3936 Specification for Nursery Stock
 - BS5236 Cultivation and Planting of Trees in the Advanced Nursery Stock Category
 - BS4043 (1989) Recommendation for Transplanting Rootballed Trees and,

- BS4428 (1989) Code of Practice for General Landscape Operations (excluding Hard Surfaces), as appropriate.
- Final planting positions for new trees will be expected to take account of the requirements of Table A.1 of BS5837: 2012 'Trees in relation to design, demolition and construction – Recommendations'.
- A detailed maintenance schedule in accordance with the requirements of BS4428 (1989) Code of Practice for General Landscape Operations (excluding Hard Surfaces).

Note: Much of the guidance and advice contained in the above British Standards is soon to be superseded following publication of BS5845 'Young trees – from the nursery to independence in the landscape'. Upon publication of the new standard, tree planting schemes should be carried out in accordance with its provisions.

6.1 Safety and Security

Careful selection of tree and shrub species is critical in order not to impede natural surveillance and to avoid the creation of potential hiding places. As a general rule of thumb where good visibility is needed, shrubs should be selected to have a mature height of no more than 1m and trees should be clear stem to at least 2m thereby allowing at least a 1m clear field of vision. Future maintenance requirements must be adequately considered at the design stage, and where necessary management programmes should be put in place to ensure that proper maintenance is carried out. Consideration should also be given to the use of spiny or thorny shrubs to enhance perimeter security where necessary.

6.2 Plant Selection

The origin of plants should be of particular concern to developers within Hartlepool. The area has a coastal environment including onshore salt laden sea fets, drying winds and frost pockets. Developers are therefore advised to obtain stock from within the region and from local seed stock where possible. Developers should also ensure that plants have been appropriately hardened off and prepared for transportation to site.

The planting of native species trees and shrubs is recommended where appropriate as these will be more adapted to the location and have greater wildlife value.

Whenever possible it is advisable to plant both trees and shrubs during the dormant winter season, which is generally late October to March, although this can vary from year to year. It is possible to plant containerized plants throughout the year provided that adequate provision for water can be made. Planting should never take place when soil is waterlogged, suffering from drought, or during frosty weather.

The Council is committed to biodiversity and sustainability; therefore developers are advised not to use peat as a soil ameliorant, but to consider instead the use of recycled composted products or well-rotted manures. Mulching will be required on all amenity planting schemes involving shrubs and ground cover plants. Mulch is also recommended in a 1m diameter around the base of newly planted trees.

Useful Contacts

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