

Trees and Development Supplementary Planning Document

Adopted April 2022



The Trees and Development Supplementary Planning Document provides technical guidance for policy DM1 in the Eastleigh Borough Local Plan.

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PART 1 – Introduction and Background

1. Purpose

- 1.1. This Supplementary Planning Document (SPD) has been developed to outline Eastleigh Borough Council's (the Council) approach to trees in relation to development.
- 1.2. This SPD will be used as a material consideration in the determination of planning applications and, therefore, will be considered by Council Officers and Elected Members as part of their assessment of planning applications. It will be considered alongside other design guidance such as Design Codes for development areas.
- 1.3. The aim of this SPD is to ensure that trees are fully considered as part of the planning process, so that the multiple benefits of trees can be experienced by the Borough of Eastleigh, and by existing and future residents.

2. Structure of This SPD

- 2.1. This SPD is divided into three parts: Part 1 introduces the SPD and sets it in context; Part 2 details the benefits of trees to the Borough of Eastleigh; and Part 3 provides outline guidance, specific considerations, and expectations, to be used by applicants during the planning process.

3. How to Use This document

- 3.1. This SPD provides additional detail to applicants on relevant planning policies contained within the Local Plan.
- 3.2. It is beyond the remit of this SPD to provide a complete, tailored guidance document – it functions to provide supplementary guidance, specific to the Borough of Eastleigh, to established industry guidance and recommendations commonly used when considering trees and development.
- 3.3. Prospective applicants should consider this SPD at the earliest possible point in the design stages. Particular attention should be given to the blue 'KEY POINTS' that highlight expectations and important specific considerations.

4. Legal and Policy Context

- 4.1. The Town and Country Planning Act 1990 (TCPA) recognises the importance of trees to the environment, public amenity, and the planning process. Specifically, section 197 places a duty on the Council, during the planning process, to consider the preservation and planting of trees with regards to development.
- 4.2. Further, the Natural Environment and Rural Communities Act 2006 (NERCA) places a duty on the Council to consider the conservation of biodiversity whilst exercising its functions.
- 4.3. The National Planning Policy Framework (NPPF) contains a number of policies where trees are relevant. Of particular importance is paragraph 131, which provides justification for this SPD. In addition, paragraphs 174, 175 and 180 relate to trees. On a broader note, trees also have potential to be relevant with regards to paragraphs 8, 20, 28, 180 and 181.
- 4.4. The Planning Practice Guidance (PPG) provides more details to support the NPPF. The guidance specifically related to trees is set out in sections on the 'Natural Environment' with covers ancient woodland and ancient or veteran trees; 'Tree Preservation Orders and trees in conservation areas'; and 'Air Quality'.
- 4.5. The principal Development Management policy, DM1 in the Local Plan, states that:

All new development should (as relevant):

a. not have an unacceptable impact on, and where possible should enhance:

- i. residential amenities of both new and existing residents; the character and appearance of urban areas, the



countryside and the coast;

ii. **biodiversity** (avoiding significant adverse impacts); and

iii. the significance of heritage assets;

b. make efficient use of the site, optimise opportunities to increase density and have regard to potential development opportunities on adjoining land;

c. take full and proper account of the context of the site including the character, appearance and land uses of the locality or neighbourhood, and be compatible with adjoining uses and be well integrated with these in terms of mass, scale, materials, layout, density, design and siting, both in itself and in relation to adjoining buildings, spaces and views. Where adjoining development is poor in urban design terms, new development should contribute to improving the character of the area;

d. not involve the loss of or damage to trees, woodlands, hedgerows, ponds, priority habitats or other landscape features of value to the character of the area, for appearance or biodiversity unless they can be replaced with features of equivalent or enhanced value (recognising that some species and habitats may be irreplaceable);

e. include a landscape scheme covering the design and layout of external space;

f. protect and enhance public rights of way and National Trails and **provide fully connected green infrastructure that interlaces the development and connects into the wider network;**

g. provide satisfactory management arrangements for all landscape, green infrastructure and biodiversity enhancement;

h. incorporate provision for people with disabilities and create accessible communities that cater for all;

i. incorporate design measures to inhibit criminal and anti-social behaviour;

j. incorporate provision for on-site waste management; and

k. include provision for public art associated with new large scale development in accordance with the Council's adopted Public Art Strategy.



PART 2 – The Benefit of Trees and the Urban Forest

5. The Benefits of Trees to Eastleigh

- 5.1. Eastleigh's urban forest – all public and privately-owned trees within the Borough of Eastleigh – delivers multiple benefits. Traditionally, trees are seen as having a role in the aesthetic of place, helping new developments blend into existing areas. While this function is important, trees provide numerous other benefits contributing to the quality of life of Eastleigh's residents, and to the Borough of Eastleigh as a whole.
- 5.2. Trees provide local ecosystem services, such as microclimate regulation, air filtration and water management, which equate to quantifiable natural capital (financial value). These services not only improve the lives of residents but are a strategic element in mitigating the effects of climate change. The emerging Sustainable Drainage Systems (SuDS) SPD provides further guidance on the implementation of SuDS in the borough.
- 5.3. Trees provide habitat and biodiversity, and increased contact between residents and wildlife. Health benefits, such as stress relief and mental wellbeing, are provided by the urban forest and an active lifestyle associated with recreation amongst trees.
- 5.4. Finally, trees increase social activity, improve community cohesion, and create a sense of place. The visual nature of trees, through their structure and design, generates positive emotional responses and provides aesthetically pleasing urban environments.
- 5.5. In July 2019, the Council declared a Climate Change and Environmental Emergency. This recognised the impact of climate crisis on nature and that nature must be a key part of climate mitigation and adaptation strategies. One of the actions identified to support this is strengthening the Council's position on tree replacement planting. As part of the Climate and Environmental Emergency programme, the Council has also committed to planting 160,000 trees in the borough by 2030 and has created a tree nursery to supply locally grown trees.

6. Eastleigh's Urban Forest within the Context of Green Infrastructure

- 6.1. Where Eastleigh's urban forest interconnects, forming a multifunctional greenspace network, it becomes an intrinsic element of the region's green infrastructure. Planning for green infrastructure within cities, districts and regions is increasingly viewed as a requirement within strategic urban development, providing sustainable, resilient, and liveable urban areas.
- 6.2. Trees have the ability to provide a significant proportion of benefits derived from green infrastructure and, thus, the development and maintenance of a healthy urban forest is critical to the sustainability of a region's green infrastructure.

7. The Role of Trees and the Urban Forest in Sustainable Development

- 7.1. High quality, well designed landscape, which includes existing tree retention and additional new tree planting, is fundamental to ensuring that development in the Borough of Eastleigh accesses the multiple benefits of trees. Therefore, it is critical that the design of soft landscape elements of new development is given the same level of consideration as the design of the structures themselves.
- 7.2. Economic, social, and environmental sustainability of a development can be aided by the retention of existing trees and the addition of new ones. Trees, along with the benefits discussed above, can make an area more attractive to new residents and businesses and increase the appeal of a property to prospective buyers. Trees create a positive perception of a place. Trees can improve the environmental performance of buildings by reducing heating and cooling costs.



PART 3 – Guidance and Support for Applicants

Pre-Application Advice, Guidance and Information Requirements

High quality, sustainable development is best achieved when attention to detail is given high priority from the feasibility stages, through design and implementation, all the way through to the end of construction and beyond. Quality advice and guidance is important for facilitating the application process and avoiding unnecessary delays.

8. Pre-application Advice

- 8.1. Pre-application discussion is helpful for identifying planning issues relevant to a specific site and it is more likely that existing trees can be successfully incorporated into the design if considered early in the planning process.
- 8.2. The Council considers it beneficial to all parties to enter formal pre-application discussions. An indication of the nature of the development is useful to assess the possible impact on trees at this stage, but the proposals for the site do not have to be fully developed and some flexibility of the layout design is expected.
- 8.3. At the pre-application stage it will be beneficial to applicants to have completed a Topographical Survey, a Tree Survey, and produced a Tree Constraints Plan. It will also be useful to have ecological and landscape information available. This will enable the Council to provide more accurate advice and guidance regarding development constraints and landscape opportunities.

9. Specialist Advice

- 9.1. Good planning and design are essential in order to achieve high quality, sustainable development. The involvement of suitably qualified and experienced expert arboricultural, ecological and landscape design specialists will facilitate the planning process for applicants.
- 9.2. The Council consider it prudent to engage with suitable specialists as early as possible in the feasibility and design stages. This will help to ensure that a development achieves the highest level visual and environmental quality.

10. Guidance

- 10.1. The Council promote the guidance outlined in British Standard 5837:2012 "Trees in Relation to Design, Demolition and Construction – Recommendations" (BS 5837). For any aspect not covered within this SPD, the Council suggests applicants refer to BS 5837 in the first instance. In addition, there are many other sources available that can help to inform and guide potential applicants during the planning process, including, but not limited to, guidance from Trees & Design Action Group, the Woodland Trust, the Forestry Commission, Natural England, National Joint Utilities Group (NJUG), DEFRA and RIBA (Appendix 5).
- 10.2. Because of the nature of the sources, set out above, it is expected that updates will become available over the lifetime of this SPD. Applicants are expected to be aware of, and work to, any updates of relevant guidance and scientific evidence.

11. Local Validation Lists and Information Requirements

- 11.1. Applicants must submit the necessary arboricultural and landscape documents with an application. Failure to do so may result in non-validation of an application or delays in determination. For further advice regarding the information applicants should submit with a planning application please refer to the Landscape Checklist for New Development in Hampshire and the Isle of Wight (Appendix 5) and British Standard 5837:2012, Annex B. Eastleigh Borough Council's Local List for Validation should also be consulted.

- 11.2. For applications where there will be a visual impact on the landscape, where landscape is proposed (either in replacement or additional tree planting), or where trees could be impacted by the development, applicants must supply, as part of the application, a Tree Survey, an Arboricultural Impact Assessment, an Arboricultural Method Statement, and landscape design, specification, management and maintenance plans. In addition, there may be tree-related ecological documents that are required (please see Biodiversity SPD).

12. KEY POINT 1

The Council expects that applicants have considered all relevant, up-to-date advice and guidance, and sought the service of relevant specialists. In order to facilitate the planning process, the Council expects that applicants supply all of the necessary information required to determine an application and provide additional information in a timely manner when requested to do so.

Incorporating Existing Trees into Development

In order for relevant policies to be met, careful consideration must be given to trees that are present on a development site. Existing trees are valuable assets to an applicant: they provide instant landscape benefits and are already contributing to ecosystem services provision and biodiversity.

13. Existing Trees

- 13.1. The benefits derived from a tree are generally proportionate to its canopy size and leaf area. Thus, the larger the tree, the more effective it is in providing the potential aesthetic, biodiversity value and environmental benefits. Retaining and incorporating existing trees within a development will result in greater benefits.
- 13.2. In addition, retaining and incorporating existing trees within a development means that they are already established. This results in a lower mortality rate than is typical for designs relying exclusively on new trees and does not require intense and costly post-development management.
- 13.3. Existing trees have spent their lifetime storing carbon within their biomass, removing it from the atmosphere. If retained and incorporated within a development, they will continue to keep this carbon “locked-up” for the duration of their lifetime and sequester further carbon dioxide as they grow. Removing trees and providing tree replacements has a negative effect on carbon stored and the ability to sequester carbon dioxide, even where significant new tree replacements are proposed. The greater the level of tree removal, the greater the impact on the environment.
- 13.4. The Council expects that existing trees are retained. Applicants must consider tree retention as a high priority and at the earliest point in the design stages. It will be necessary to demonstrate that tree retention has been fully considered as part of the planning process.

14. Pre-emptive Felling

- 14.1. Tree removal and site clearance prior to the planning process can have significant consequences to the ability to deliver sustainable development.
- 14.2. Pre-emptive site clearance works are strongly discouraged and early dialogue with the Council through the pre-application advice process is recommended. This dialogue can help to ensure that important trees of mixed age class are retained within a well-designed layout thereby resolving potential conflicts between trees and development at the earliest design stage.
- 14.3. If the Council considers it is clear that pre-emptive tree removal has occurred, the Council will seek suitable replacement trees as part of any planning process, thereafter, as per Appendix 1 – Tree Replacement Policy.





15. Space for Existing Trees

- 15.1. Retaining and incorporating existing trees into a development requires attention to detail at the design stages to ensure that future problems with the spatial and structural relationships between trees and development are avoided, and that the full benefits of all trees are accrued over their lifetime.
- 15.2. Where development occurs too close to trees, problems can occur as the tree grows, increasing the likelihood that heavy pruning will be required, or that the tree will need to be removed; both of which outcomes can result in a detrimental impact on amenity and the environment.
- 15.3. Development layouts must be designed to ensure that retained trees are able to grow and mature in the space provided, both above and below ground, taking into account utilities, sightlines, lighting, structures and all other elements of the scheme. The Council will consider space and post-development pressure when considering applications (see also sections 18 and 42).

16. Seasonal Nuisance and Light

- 16.1. When planted strategically, trees can reduce the demand for heating and cooling buildings and thus can reduce their impact on the climate emergency. However, shading and seasonal changes, such as leaf and fruit fall, may affect the use of the spaces immediately around the tree and result in post-development pressure to prune or remove trees.
- 16.2. Tree position in relation to buildings, private gardens and other development must be carefully considered by applicants as part of the design stages. A balance must be struck between usable, liveable environment and the benefits that trees provide.

17. Buildings and Hard Surfacing within Root Protection Areas

- 17.1. Buildings and hard surfacing within the Root Protection Areas (RPA) of trees – the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree’s viability – can damage roots, by severance and physical damage or by inhibiting water infiltration and gaseous exchange.
- 17.2. The Council recommend that all buildings and hard surfacing are located outside of RPAs. Where hard surfacing is to be installed within an RPA, applicants will need to demonstrate that this is unavoidable and show how adverse effects will be minimised. All areas of hard surfacing within the RPA should be permeable to air and water and utilise “no-dig” construction methods.

18. Underground Services

- 18.1. Installation and maintenance of underground services, such as power cables, pipelines, drains, soakaways and certain types of Sustainable Drainage Systems (SuDS), can result in root severance if located near trees. This can cause a deterioration in tree health or even structural instability.
- 18.2. Applicants should locate all services outside of RPAs to prevent root damage. Dedicated service runs should be incorporated within the design and detailed within submitted arboricultural documents. Early engagement with service providers is, therefore, essential. Where it has been demonstrated that there is no alternative to services within RPAs, any work must be undertaken in accordance with the National Joint Utilities Group recommendations and be supervised by a suitably qualified person.

19. Highways and Sightlines

- 19.1. Trees in, or adjacent to, the highway are highly visible and contribute a proportionally greater level of visual amenity to the local area, as well as being better located to provide maximum ecosystem service provision.
- 19.2. The provision of site access, roads and driveways should be placed to minimise the need to remove trees and hedges for sightlines. Applicants should not seek the removal of trees as a first step to achieve sightlines. Collaborative working with suitable highway specialists, the Local Highways Authority and the Council is recommended to avoid unnecessary tree loss.

20. KEY POINT 2

The Council will assess planning applications that impact trees from the context of the existing site. Within applications, there must be a presumption in favour of retaining existing trees. Any impact on existing trees will be considered not just from an amenity point-of-view, but also with regards to the environmental and climate emergency.

21. KEY POINT 3

The Council expects applicants to demonstrate that tree retention has been fully considered as part of the planning process. Only where there is exceptional justification, as clearly evidenced by applicants, will tree removals be considered. In cases where tree removals are unavoidable and considered justified, the Council will expect applicants to submit proposals for the addition of new trees, as per the Tree Replacement Policy contained in Appendix 1, and a ten-year maintenance plan for their establishment period.



Ancient and Veteran Trees, and Other Ecological Designations

Ancient and veteran trees are irreplaceable. In addition, there may be other ecological designations that affect either individual trees or woodlands. In these instances, it is especially important for the applicant's arboricultural and ecological specialists to work closely to provide the best possible outcome for these unique habitats.

22. Ancient and Veteran Trees

- 22.1. Ancient and veteran trees are highly valued ecologically and socially. They are, because of their features and/or age, rare. Establishing whether a tree is ancient or veteran may involve the assessment of the following characteristics: age, size, biodiversity value and historical context. Ancient and veteran trees are considered irreplaceable and are especially important from an ecological perspective due to the range of rare and niche habitats a single tree may provide.
- 22.2. Ancient and Veteran trees are afforded high levels of protection within planning policy and standing advice. NPPF paragraph 180c states that: "development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused...".
- 22.3. Whilst Governmental standing advice states: "a buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter."
- 22.4. Applicants should recognize that ancient and veteran trees require special consideration at the design stages and post-development. They must be provided with greater levels of protection during construction. Specialist design features to protect the trees and the public may be required and management plans should be specific to the trees on that site.

23. Other Ecological Designations

- 23.1. Along with individual ancient and veteran trees, trees may occur as a part of larger habitats, such as woodland or wood pasture, that may carry other ecological designations or protections. Designations such as Sites of Importance for Nature Conservation (SINCs), Priority Habitats and ancient and semi-natural woodland (ASNW) will require additional protection.

24. KEY POINT 4

Proposals which would have adverse impacts or result in the loss of ancient or veteran trees, or trees within other ecological designated areas, will not be permitted. The Council consider that tree replacement planting to mitigate for proposed tree loss in this instance is not acceptable.

25. KEY POINT 5

The Council expects that buffer zones and extended RPAs for ancient and veteran trees, as set out above, and for other ecological designations, are a minimum requirement. Applicants will be expected to justify the reasons for applying minimum buffers only.

Pre-commencement, Construction and Tree Protection

During the construction phase of any development, retained trees are susceptible to being damaged. It is, therefore, important to ensure they are efficiently managed and protected during the construction of a development to preserve the valuable green assets of the site.

26. Discharging Pre-commencement Conditions

- 26.1. Planning conditions may be used when additional information must be provided after determination. Commonly this would be in connection with an Arboricultural Method Statement and final landscape details, where heads of terms may have been submitted and agreed, but further detail is then required pre-commencement.
- 26.2. It is imperative that applicants discharge all pre-commencement planning conditions including tree related conditions prior to construction commencing. Failure to do so may result in enforcement action.

27. Other Arboricultural Conditions

- 27.1. Conditions may be attached to planning permission where it would otherwise have been necessary to refuse planning permission. Commonly applied conditions can include adherence to specific documents and the necessity to supervise dictated, arboriculturally sensitive elements of the construction.
- 27.2. Applicants should consider retaining the services of suitably qualified and experienced specialists in order to oversee sensitive arboricultural elements of construction.

28. Tree Protection Measures

- 28.1. The early provision of robust physical protection of trees during construction is critical to ensuring their successful retention. This protection will be conditioned as part of planning consent. Where considered expedient to do so, the Council will serve Tree Preservation Orders to give retained trees a level of statutory protection during construction, and beyond.



- 28.2. Applicants should be aware that the Council will rigorously enforce such Tree Preservation Orders and compliance to conditioned documents.

29. Supervision, Monitoring and Reporting

- 29.1. In circumstances where the approved Arboricultural Method Statement and Tree Protection Plan specifies a need, or where specific planning conditions have been imposed, an auditable system of site monitoring and/or supervision of works within RPAs must be undertaken by a retained arboricultural specialist.
- 29.2. Such monitoring and supervision will usually involve evidencing that compliance is ongoing or prescribed procedures have been followed. Because some conditions of planning cannot be discharged without this evidence, it is important for applicants to discuss such conditions, and what is expected of them with the Council prior to construction commencing.

30. Changes to Approved Plans

- 30.1. Trees are living organisms, and it may become necessary to assess the risk of retained trees on site because of a change in their condition.
- 30.2. No deviation from the approved plans can be made without the written agreement of the Council. Engagement with the Council is essential so as to determine the most suitable process. This may be through formal amendment of the permission by variation of condition or a non-material minor amendment. Where the tree is additionally protected by a Tree Preservation Order (TPO), a TPO application may be required.

31. KEY POINT 6

The Council expects applicants to be conscious and proactive regarding their responsibility in discharging pre-commencement conditions and compliance with all other conditions and statutory protection. Where non-compliance is reported, the Council will not hesitate to robustly investigate and take the necessary action in order to protect Eastleigh's urban forest.

Incorporating New Trees into Development

Soft landscape provision is integral to planning. Where early consideration is given to landscape matters, developments tend to have a stronger sense of place and character as well as a feeling of higher quality.

32. Replacement Tree Planting

- 32.1. There is a strong presumption in favour of retaining existing trees. Existing trees are already established on site, providing ecosystem services, carbon storage and amenity. However, in exceptional circumstances where tree removal has been suitably justified and agreed, appropriate replacement tree planting must be provided in order to maintain and expand the urban forest.
- 32.2. Applicants must provide suitable replacement tree planting for all trees removed in line with the Tree Replacement Policy (Appendix 1), regardless of categorisation. Where replacement trees have been agreed, these will be in direct compensation for trees removed and will not be double counted for other purposes.

33. KEY POINT 7

There is a strong presumption in favour of retaining existing trees. In cases where tree removals are unavoidable and considered justified, the Council will expect applicants to submit proposals for the addition of new trees, as per the Tree Replacement Policy contained in Appendix 1, and a ten-year maintenance plan for their establishment period.

34. Landscape Design

- 34.1. High quality landscape design must not be solely focused on tree replacement planting, it must include additional trees, other plantings, recreational spaces and public art. In order to give developments a sense of place and character, and to provide high quality environments, landscape design must be integral to the planning process.
- 34.2. Applicants must submit a high-quality landscape scheme, including both trees in replacement for ones lost (where applicable) and additional trees, along with other aspects of high-quality landscape design. Refer to Section 11, above, for submission details.

35. KEY POINT 8

Applicants must demonstrate they have developed a high-quality landscape scheme as an integral part of the development proposal.

36. Roads and Streets

- 36.1. Trees have an important, multi-faceted role to play in the design of streetscapes. They help to reduce and slow surface water run-off, thus helping to mitigate against localised flooding; they provide shade, which is important in large areas of hard surfaces such as streets; and they create habitats and corridors for biodiversity. Trees also have an important role to play in slowing vehicle speed by visually narrowing the width of the carriageway. Where developments involve new roads, streets, pedestrian or cycle links, tree provision should reflect the street and space hierarchy and deliver streets that are tree-lined. In Eastleigh Borough there are five levels of streets and spaces as set out below.

NOTE: The accompanying diagrams set out acceptable street layouts in terms of street trees: all other design aspects shown are illustrative. Current design advice from HCC should always be sought on land to be adopted as highway. Whilst tree cover should be maximised, tree and soft landscape planting should be designed with due consideration to visibility splays and general highway safety.

- 36.2. Level 1: Strategic Routes. These are strategic links with a high movement function carrying high volumes of vehicles including through traffic. However, they also provide important connections for motor traffic between local centres and other important nodes and focal points giving them an important place function. Strategic Routes often pass through residential and other sensitive areas and also need to cater for cyclists, pedestrians and equestrians. Strategic Routes should:
 - 36.2.1. Be designed as boulevards able to accommodate large species of trees on both sides of the highway at a maximum of 10 metre spacing, preferably utilising semi-mature stock; and
 - 36.2.2. Where the route passes through existing or proposed development or significant areas of hard standing be flanked on both sides of the highway by a minimum of 3 metre soft landscape zone incorporating trees and SuDS features – techniques for holistically managing water runoff onsite to reduce the quantity, and increase the quality, of surface water that drains into sewers from a development (e.g. rain gardens).



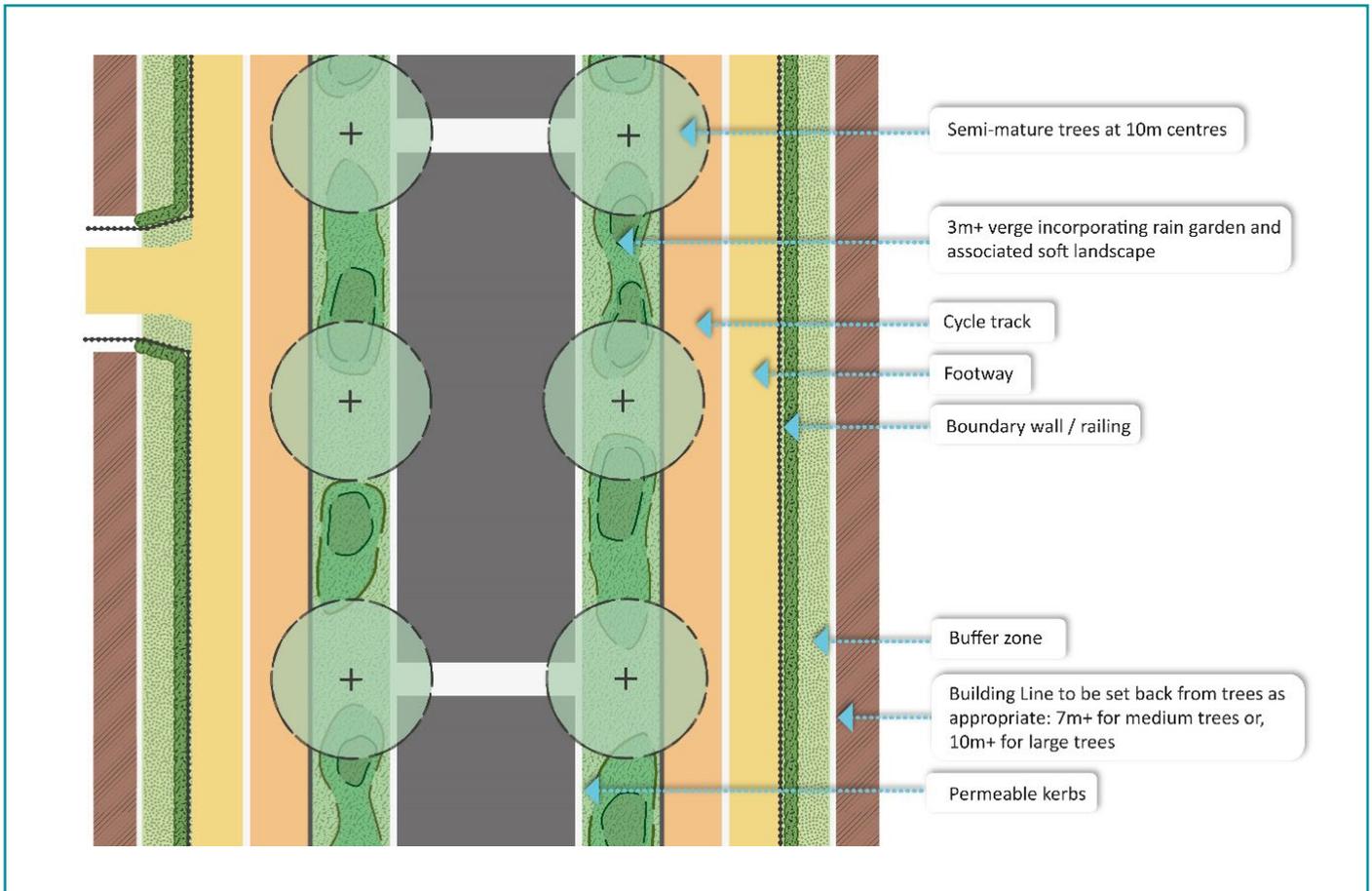


Figure 1: Illustration of an acceptable street tree layout on a Strategic Route.

36.3. Level 2: Access Streets. Access Streets provide the transitional space between Strategic Routes and slower Neighbourhood Streets offering access to homes and shops, through family-orientated design, sometimes with bus routes. Access Streets should:

- 36.3.1. Incorporate large trees species (medium sized may be acceptable, depending on the species and the context) on either one side of the street, or, on alternate sides at maximum 10 metre spacing, using preferably semi-mature stock, Bus routes and access roads with several side streets are, for example, significant enough to require large trees; and
- 36.3.2. Be flanked on both sides of the highway by a minimum of 3 metre soft landscape zone incorporating trees and SuDS features, (e.g. rain gardens).

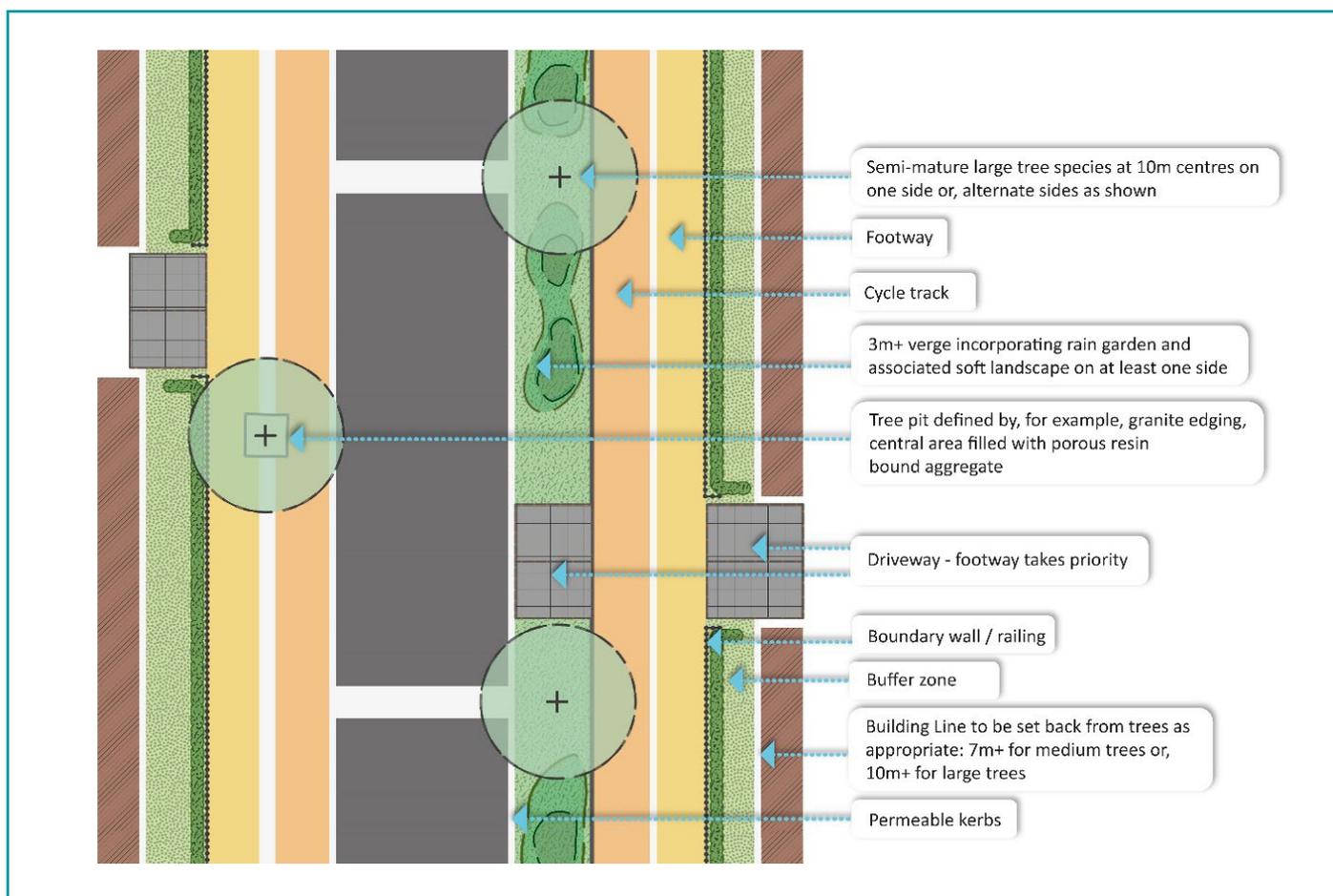


Figure 2: Illustration of an acceptable street tree layout on an Access Street.

36.4. Level 3: Neighbourhood Streets. These can include Low Traffic Neighbourhoods (LTNs), School Streets and Home Zones but must be pedestrian and cycle friendly and family-orientated in design. These streets extend the Access Street into the heart of the development parcel and enable direct access to homes and, in some cases, schools and other community facilities. Neighbourhood Streets should:

- 36.4.1. Include one medium sized tree species, every 20 metres within build outs, verges or other communal planting areas using preferably 18-20 cm girth or greater stock. In addition, there should also be at least one small tree every 10 metres;
- 36.4.2. Should aspire to delivering a 3 metre plus soft landscape zone incorporating trees and SuDS features, (e.g. rain gardens); and
- 36.4.3. Incorporate medium and large trees and other soft landscape within play areas (LAPs), sitting areas, modal filters and other features and points of interest throughout the neighbourhood.



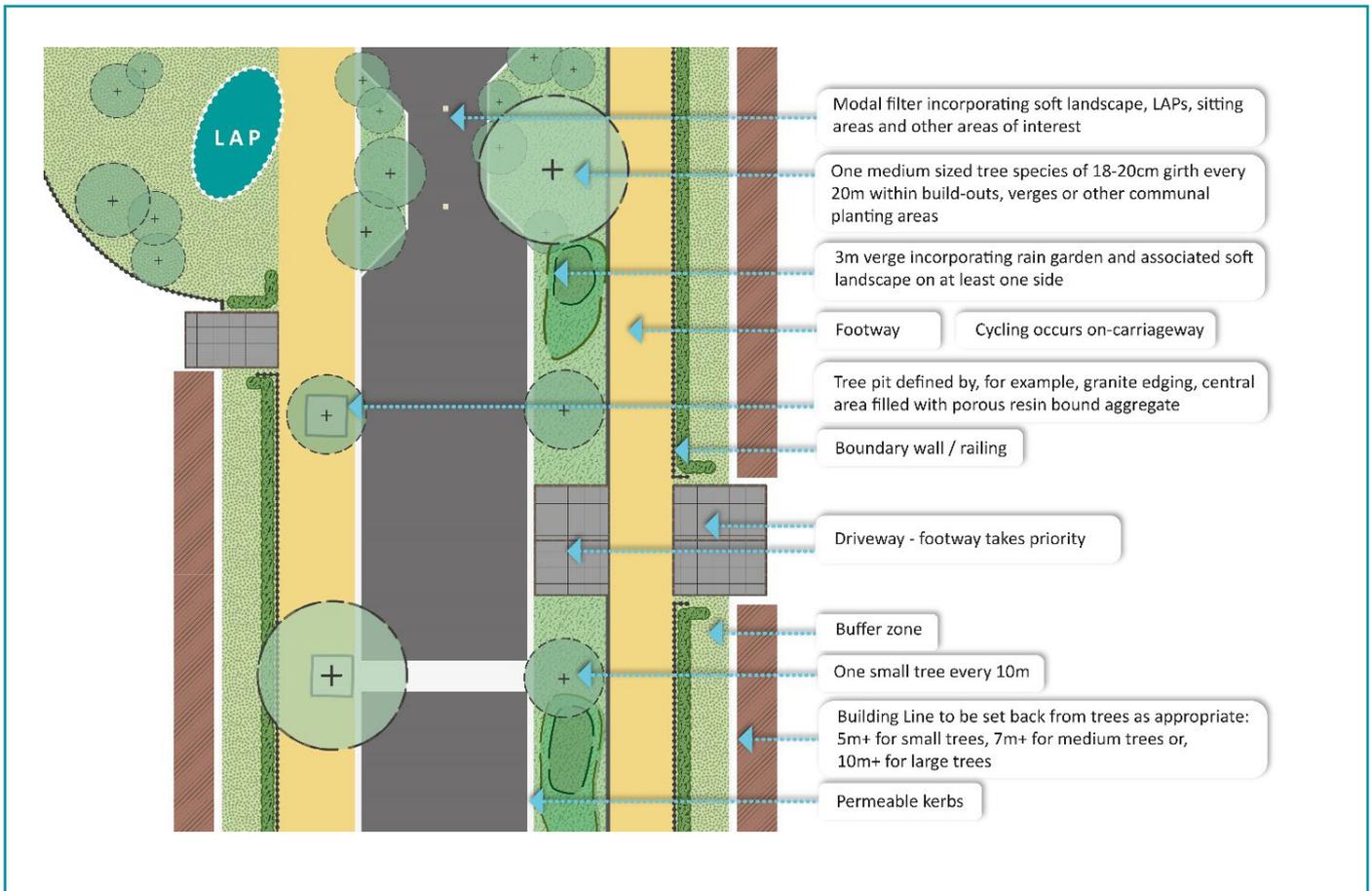


Figure 3: Illustration of an acceptable street tree layout on a Neighbourhood Street.

36.5. Level 4: Active Travel Corridors. These are fully segregated pedestrian and cycle links or, where space is heavily constrained, shared use routes incorporating significant Green and Blue Infrastructure. They provide attractive and direct motor-vehicle-free pedestrian and cycle links between and through, neighbourhoods. They should also be extended to link neighbourhoods to local centres, schools, community facilities, open spaces and other key destinations. Active Travel Corridors should:

- 36.5.1. Include trees and soft landscape to form an integral part of the corridor, with planting designed to emphasise the route, supporting legibility and providing shade;
- 36.5.2. Incorporate SuDS features within the soft landscape design (e.g. rain gardens) as part of the landscape and water management strategy; and
- 36.5.3. Incorporate trees within play areas, sitting areas and other features along the route that encourage sociability and exploration.

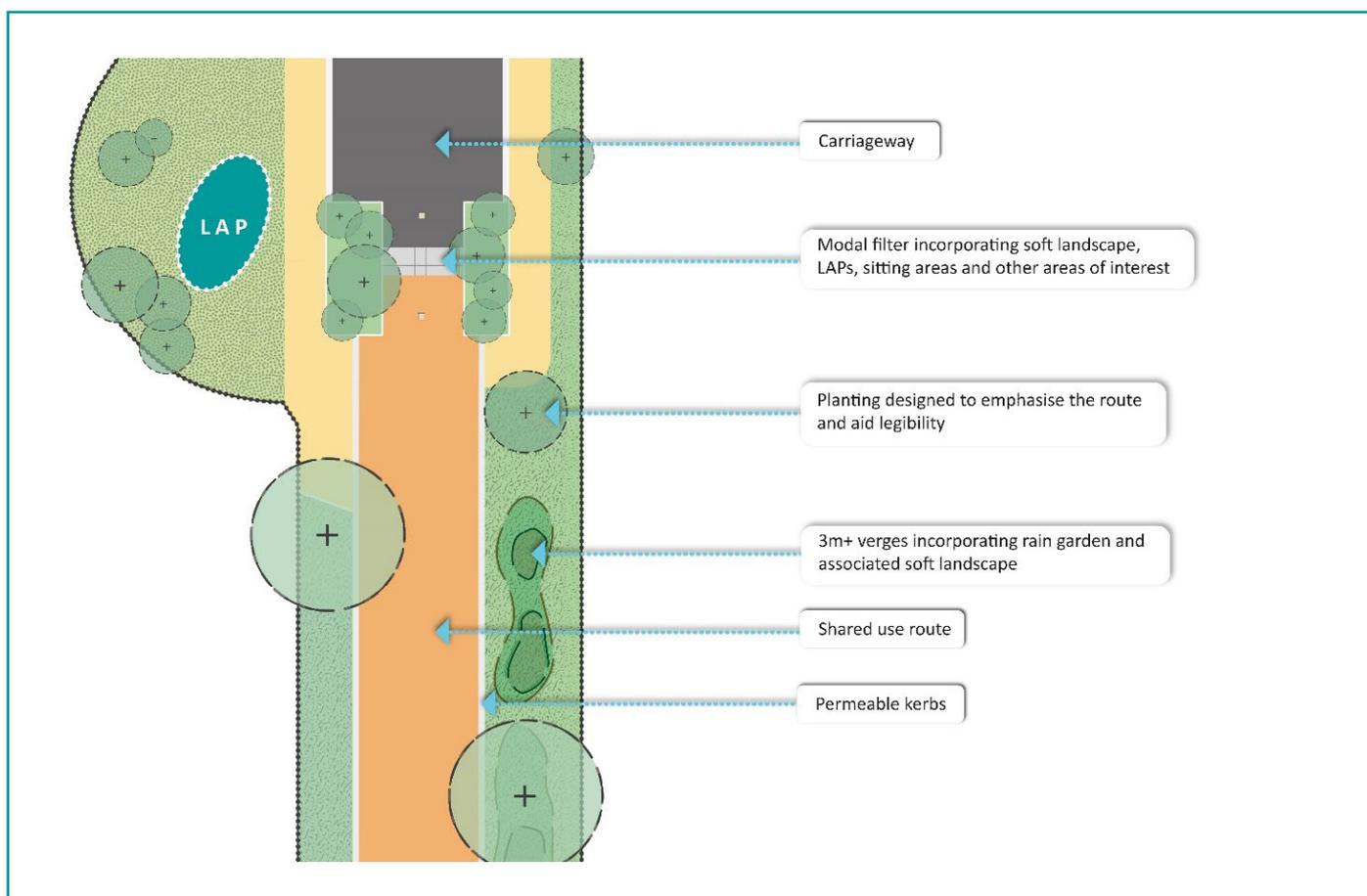


Figure 4: Illustration of an acceptable street tree layout on an Active Travel Corridor.

- 36.6. Level 5: Focal Spaces, Nodes and Public open space.** These are features of interest within Neighbourhoods, Active Travel Corridors, nodes or more formal squares within local centres and the wider public greenspace network. These are places where people can gather, rest, enjoy the view. Trees and soft landscape are critical in helping to create a sense of place or drama within these areas, as well as provide shade, places to sit and opportunities for socialising. All structural trees are recommended to be planted at semi-mature size.
- 36.7.** The Highways Authority in Eastleigh Borough is Hampshire County Council. Further information on the Highway Authority's position in connection with new and existing street tree provision can be found their Technical Guidance Note 15 'Trees, Landscape and Ecology'(TG15) and should be considered by applicants.

37. Trees and Car Parking

- 37.1.** Large areas of car parking severely undermine the quality of residential developments. High quality landscape design, utilising new tree planting to enhance areas of hardstanding along with lower level landscaping, can improve the visual aesthetics of a residential development, moderate the microclimate (e.g. reduce summer temperatures through shading) and provide many other environmental benefits.
- 37.2.** One medium or large sized tree must be planted for every four parking spaces. In car parks with multiple rows of cars, or where there is sufficient distance from the nearest buildings, large trees should be used, at a minimum of one tree for every six spaces. Runs of perpendicular or angled parking spaces within housing should be broken up by the inclusion of one medium tree every four spaces.



38. Garden Trees

- 38.1. Residential gardens provide a key space for trees to deliver local ecosystem services to Borough residents, especially habitat, visual, and well-being benefits. Garden trees should be in addition to and not instead of street and other public realm trees.
- 38.2. All residential developments are encouraged to have suitable garden trees, especially within larger gardens. All rear garden trees are advised be two metres high, containerised, feathered whips planted within the planting season.

39. KEY POINT 9

Landscape plans must illustrate how trees and soft landscape will enhance all public open space, streetscapes and public realm, parking areas and gardens. All streets should include tree planting. The scale of street tree planting should be in accord with the relative importance of each street in the movement network.

40. New Tree Species Selection

- 40.1. A changing climate and increases in novel pest and disease occurrences present a severe threat to Eastleigh's urban forest. In order to reduce the negative impact of these threats, it is important that tree species diversity is expanded in order to provide greater resilience. In addition, trees deliver ecosystem services in proportion to their size. It follows that large tree species are of great importance in new developments (e.g. oak and lime).
- 40.2. Applicants should consider a diverse range of native and appropriate non-native tree species, within their schemes. All major development must also include a least one large tree species. Major development applications must demonstrate how provenance and biosecurity have influenced the sourcing of proposed tree stock.
- 40.3. Given that there is considerable energy investment in growing, transporting and planting trees it is more sustainable in the long term to plant long-lived trees. When assessing landscape schemes, the Council will give weight to the use of longer-lived tree species. Pioneer species, which tend to be short lived, should not form a major part of the planting palette. Nevertheless, it is recognised that many small and medium sized species are intrinsically relatively short lived, so the Council will adopt a pragmatic approach.

41. New Tree Size Selection

- 41.1. Reference is made in this document to three general sizes of tree, small, medium and large. This is to give developers more guidance and certainty, for example in relation to which sizes of trees will be required in different types of street. To identify which category the developer's preferred tree species fall into, refer to the Trees and Design Action Group (TDAG) species guide database (Appendix 5). For the purpose of this SPD, the category of "large" equates to both the TDAG categories of "large" and "massive".
- 41.2. Where specified trees are not included in the TDAG list, their size category will be defined by the expected canopy volume of a mature specimen. Allowance must be made for trees not reaching their theoretical maximum dimensions in ideal conditions which will be the case in most circumstances.
- 41.3. Large trees must have a predicted canopy at maturity equal to, or in excess of 1100 m³; medium 250-1099 m³ and small below 250 m³. The table in Appendix 3 gives an indication of which category some commonly used trees fall into. For trees not on this table or in the TDAG species database it is intended that the Council and developer's landscape architects make approximate judgements as to size category. However, when requested, developers of major sites will be required to demonstrate proof of canopy volume using the calculation method set out in Appendix 2. In these circumstances all working must be provided. This will especially apply to trees that are specified in significant numbers in streets.

42. Future Conflicts with Utilities, Sightlines and Lighting

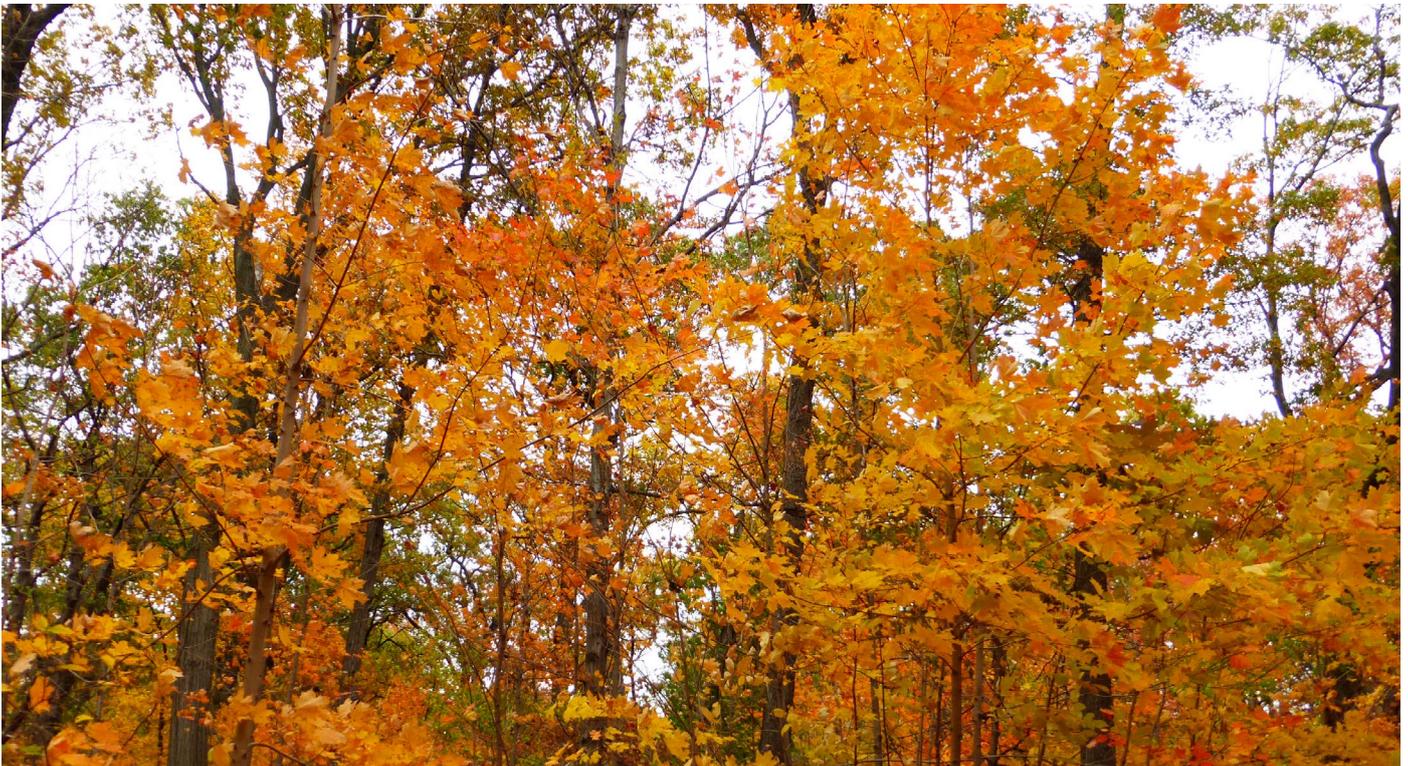
- 42.1. Conflicts with above and below ground utilities, sightlines and street lighting can result in pressure to prune or remove trees in the future, once they have become established and grow larger.
- 42.2. Landscapes should be designed to ensure that new tree planting has priority, with careful consideration given to predicted tree sizes and potential future conflicts. New tree planting will take priority and requests to amend the landscape scheme in order to accommodate services are unlikely to be granted.

43. Above Ground Space for New Trees

- 43.1. Planting new trees close to buildings, infrastructure and private gardens, may limit their future potential canopy size and leaf area either through physical barriers or through pruning requirements.
- 43.2. There should be adequate space allowed for newly planted trees to reach their full mature height and spread without causing nuisance to adjacent buildings and occupants.
- 43.3. Small trees should be at least five metres, medium sized trees at least seven metres and large trees at least ten metres away from main buildings. This excludes small structures such as garages and bin stores.
- 43.4. Trees with a fastigate habit will be considered in their own context and with potential variation from these distance requirements. A list of fastigate trees can be found in Appendix 4 – List of Fastigate Trees.

44. Tree Pit Design and Soil Volumes

- 44.1. Planting trees into hard landscapes, such as pavements or plazas will be required in some circumstances to break up large areas of hard surface. However, such planting can present unique challenges with regards to tree establishment and thus to maximizing future benefits. Factors relevant to hard landscapes can include soil volume, water infiltration, drainage, aeration and soil compaction, along with simultaneously providing structural support for hard surfaces.



- 44.2. Where additional new trees are to be planted within areas of hard landscape, applicants should use proven, up-to-date technical solutions to tree pit design in these areas. These solutions may also serve multiple purposes, such as storm water management. For additional new trees the amount of soil volume required for the trees to successfully establish and mature should be calculated and justified.

45. Inappropriate Planting Locations

- 45.1. Inappropriate planting locations can lead to lower growth rates, a higher risk of tree mortality, and potential uncontrolled removal or vandalism. In order to increase the chances of a landscape scheme reaching maturity and providing the promised benefits, new tree planting locations need to be appropriate.
- 45.2. Applicants should not plant new trees in locations where they may not reach maturity. Applicants must demonstrate that they have mitigated for any identified issues that may curtail the longevity of the trees.
- 45.3. The Council considers above ground containers generally inappropriate places to plant trees and will not consider these trees as replacements for removal of existing trees.

46. Planting Practice and Maintenance

- 46.1. Establishment – the period immediately post-planting – is a critical period for new trees. Low growth rates and high mortality rates are common within new developments. In order to increase establishment rates and the chances of the proposed landscape scheme reaching maturity – providing the promised benefits – post-planting maintenance, including watering, is essential.
- 46.2. Details of instructions for householders regarding their planning liability and maintenance of trees planted in private gardens for major developments must also be provided.

47. Tree Mortality

- 47.1. New tree mortality can result in the development failing to meet its envisioned sense of place and character. In addition, significant mortality can hinder the long-term benefits provided by trees because the canopy cover on a development site is not maintained.
- 47.2. Applicants are advised that planning conditions generally require replacement planting where trees have failed to become established within the first ten years. In addition, new tree planting may be subject to legal protection through the use of Tree Preservation Orders, where these are deemed appropriate. This places a statutory duty on the landowner to replace trees that die.
- 47.3. To show new tree planting has been undertaken in accordance with the approved details and plans the applicant must submit to the Council a verification document from the landscape consultant confirming the works are completed as approved. This shall include confirmation of tree pits, ground preparation and photographs of the trees after planting. Without such proof of planting, the developer will have a continued obligation to plant or replace any trees in the approved plans.

48. KEY POINT 10

Applicants must evidence that they have considered all relevant parameters for successful new tree establishment. All current and future conflicts should be taken into account in order for all new trees to reach maturity. Early consultation with the Council's Tree, Landscape, Ecology and Urban Design Officers will be essential in this regard.

Appendix 1 – Tree Replacement Policy

1. Background

- 1.1. There is a strong presumption in favour of retaining existing trees on development sites. Eastleigh Borough Council (the Council) expect applicants to demonstrate that tree retention has been fully considered as part of the planning process. Any impact on existing trees will be considered not just from an amenity point-of-view, but also with regards to the environmental and climate emergency. Only where there is exceptional justification, as evidenced by applicants, will tree removals be considered. In these cases, the Council expect applicants to submit proposals for the addition of new trees in replacement for those lost.

2. Tree Replacement Policy

- 2.1. The Council will use a fixed number system, as developed by Bristol City Council, to secure new trees in replacement for proposed tree removals. This will only be acceptable where the Council is satisfied that the applicant has demonstrated exception justification for their proposed removal(s). The number of replacement trees required will depend on the stem diameter of the tree proposed for removal. The requirement will apply to A and B category trees, category C trees will be replaced on a 1:1 basis. Please refer to Table 1 for requirements.

Stem Diameter of Tree Proposed for Removal*	Number of Replacement Trees Required
150 – 199 mm	1
200 – 299 mm	2
300 – 399 mm	3
400 – 499 mm	4
500 – 599 mm	5
600 – 699 mm	6
700 – 799 mm	7
800 mm +	8

Table 1 – A and B Category Tree Replacement Requirements.

*Measured at 1.5 metres above ground level, as per British Standard 5837:2012 "Trees in Relation to Design, Demolition and Construction – Recommendations" Annex C.

3. Size of Replacement Trees

- 3.1. The requirement set out in Table 1 will be delivered using 14-16 cm girth trees.

4. Notes

- 4.1. This policy does not apply to ancient or veteran trees (as defined in paragraph 22.1).
- 4.2. Where trees are proposed in unsuitable locations, and it is felt that their full potential is unlikely to be met, these trees will not be considered as replacements for trees lost. For example, trees proposed in unsuitable positions, rooting medium, in containers, or within inaccessible locations (such as enclosed rear gardens) will not be considered under this policy.
- 4.3. This policy will be reviewed annually.



Appendix 2 – Calculating Tree Canopy Volume

1. For trees not in the TDAG species database or listed in Appendix 3 of this SPD the Council may require developers of major sites to demonstrate the accuracy of their tree categorisation using the following the following method:

Step 1: Identifying typical canopy dimensions.

Research the predicted canopy dimensions in metres (height and spread) from a minimum of three authoritative sources, such as the Royal Horticultural Society, Barcham, Lappen and Lorenz von Ehren. Take a mean from these dimensions. Then subtract 3 from the height (to represent a typical clear trunk height); this figure will then be the height of the actual canopy, as opposed to the height of the top of the canopy from the ground. Refer to this as 'h'. Divide the spread of the tree by two to give the canopy radius. Refer to this as 'r'.

Step 2: Calculate predicted canopy volume.

Use the following equation:

$$\text{Volume} = \pi r^2 h$$

'r' and 'h' refer to radius and height as described in Step 1.

$$\pi = \text{'pi'} = 3.142$$

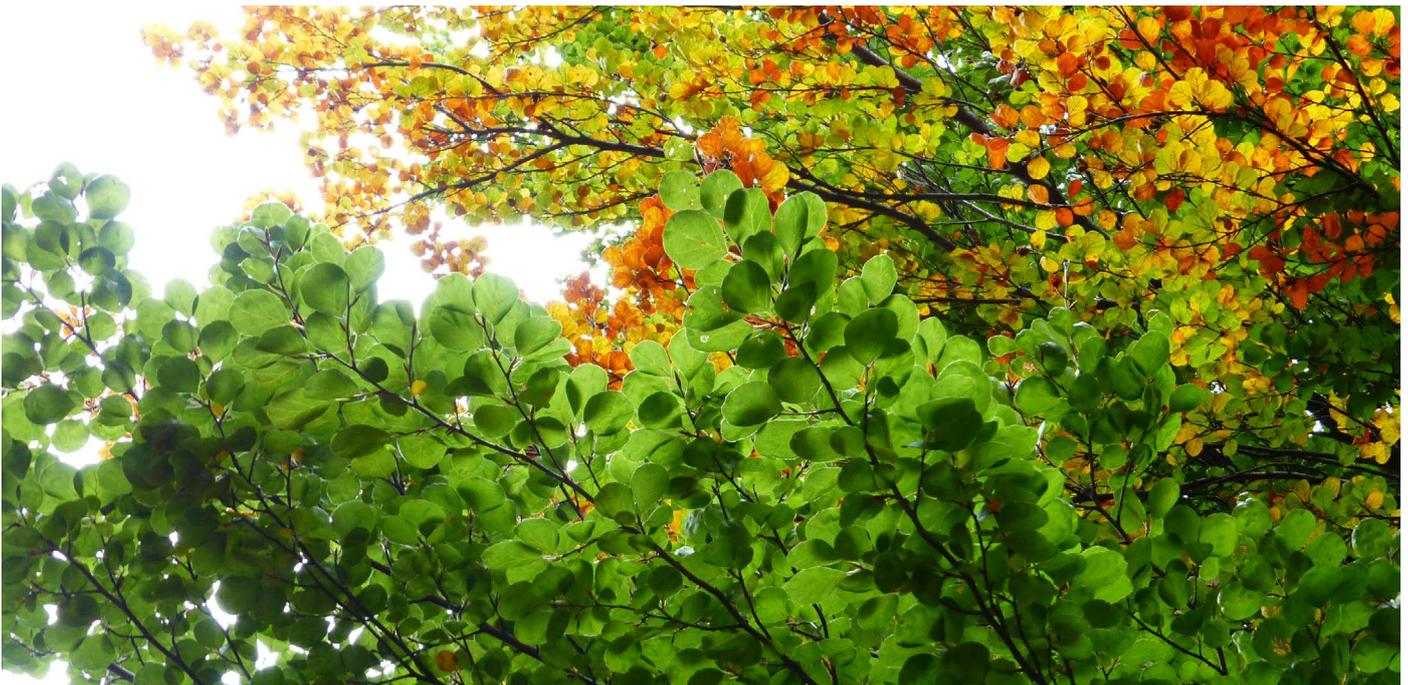
Worked example for *Acer campestre* (field maple):

Mean tree height at maturity = 12.5m. Canopy height after subtracting 3m to represent notional clear trunk height = 9.5m. Mean canopy spread at maturity = 8m. Canopy radius therefore = 4m.

$$\text{Acer campestre canopy volume therefore} = 3.142 \times 4^2 \times 9.5 = 478 \text{ m}^3$$

Step 3: Sense check and submit.

Sense check the result using Appendix 3 and then submit to the council as part of the tree planting schedule.



Appendix 3 – New Tree Size Exemplar

Tree species	Height (m)	Spread (m)	Approx. canopy volume (m ³)	Size category; large >1100m, medium 250-1099m ³ , small-below 250m ³
<i>Quercus robur</i>	30	20	10,054	Large
<i>Tilia cordata</i>	27	15	4242	Large
<i>Tilia europaea</i>	30	14	4157	Large
<i>Ginkgo biloba</i>	26	13	3053	Large
<i>Tilia x euchlora</i>	20	11	1616	Large
<i>Carpinus betulus</i>	18	12	1178	Large
<i>Tilia cordata</i> 'Greenspire'	17	10	1100	Large
<i>Corylus colurna</i>	18	8	754	Medium
<i>Alnus cordata</i>	17	8	703	Medium
<i>Quercus robur</i> 'fastigiata'	21	7	693	Medium
<i>Acer campestre</i>	12.5	8	478	Medium
<i>Liquidambar styraciflua</i>	15	7	462	Medium
<i>Pyrus chanticleer</i>	14	5.5	261	Medium
<i>Acer campestre</i> 'Elsrijk'	11	5.5	190	Small
<i>Magnolia kobus</i>	9.5	5.5	154	Small
<i>Acer griseum</i>	8	6	141	Small
<i>Crataegus lavalleyi</i> 'Carrierei'	6	8	113	Small
<i>Acer freemanii rubrum</i> 'Armstrong'	8	3	57	Small



Appendix 4 – List of Fastigate Trees

List of trees with small and medium sized volumes, with upright habit. Some large shrubs also included.

Genus	Species and cultivar	Notes
Acer	campestre 'Elsrijk'	
	capillopes	
	freemanii rubrum 'Armstrong'	
	griseum	
	japonicum 'Aconitifolium'	
	negundo 'Flamingo'	
	negundo 'Variegatum'	
	platanoides 'Cleveland'	
	platanoides 'Columnare'	
	platanoides 'Columnare Dila'	
	platanoides 'Crimson Sentry'	
	pseudoplatanus 'Erectum'	Wind resistant
	rubrum 'Columnare'	
	rubrum 'Scanlon'	Avoid alkaline soils for good autumn colour
	rubrum 'Schesingeri'	Avoid alkaline soils for a/c
	rubrum 'Sun Valley'	Avoid alkaline soils for a/c
	truncatum 'Pacific sunset'	Tol or heat and drought
Aesculus	pavia	
	pavia 'Atrosanguinea'	
Alnus	cordata	Tolerant of dry, poor and limy soil exposed sites
	glutinosa 'Laciniata'	
	incana 'Laciniata'	
Betula	pendula 'Fastigiata'	
	papyrifera	
	Pendula 'Darecarlica'	
	utilis	
	utilis 'Jacquemontii'	
Carpinus	betulus 'Fastigiata'	Not in very dry soil
Carpinus	betulus 'Fastigiata Monument'	Not in very dry soil

Genus	Species and cultivar	Notes
Carpinus	japonica	
Cornus	alternifolia	
	controversa	Drought sensitive
	kousa	
	kousa 'China Girl'	Larger flowers
	kousa 'Chinensis'	Late a/c until end October
	kousa 'satomi'	Pink
	kousa 'Schmetterling'	
	nuttallii 'Eddie's White Wonder'	Sensitive to heat
Cotoneaster	wateri 'Cornubia'	Semi-evergreen, heat tolerant
Corylus	columna	
Crataegus	lavalleyi 'Carrierei'	Tol of extreme heat and drought. V persistent lvs until Dec
Eucryphia	lucida	Evergreen
Fagus	sylvatica 'Dawyck'	green
	sylvatica 'Dawyck Gold'	
	sylvatica 'Dawyck Purple'	
	sylvatica 'Purple fountain'	
Garrya	elliptica	Evergreen
Ginkgo	biloba 'Fastigata Blagon'	
	biloba 'Princeton Sentry'	
Hippophae	rhamnoides	Tol poor and dry soil Heat tolerant
Hoheria	angustifolia	Evergreen
Ilex	aquifolium 'Pyramidalis'	Evergreen
	'J.C.Van Tol'	Evergreen
Juniperus	communis 'Hibernica', 'Meyer' of 'Suecica'	Variable habit, -can be spreading evergreen
Keolreuteria	paniculata	Heat tolerant
	paniculata 'Fastigiata'	
Laburnum	wateri 'Vossi'	
Liquidamber	styraciflua	
	styraciflua 'Lane Roberts'	
	styraciflua 'Paarl'	Lappen cultivar
Liriodendron	tulipifera 'Fastigiatum'	Calcifuge



Genus	Species and cultivar	Notes
Magnolia	'Galaxy'	
	kobus	
	loebneri 'Merrill'	
Malus	'Mokum'	
	'Profusion'	Red flowers
	'Professor Sprenger'	
	'Red Jewel'	
	'Red Sentinel'	
	'Rudolph'	Red flowers
	trilobata	White flowers
	tschonoskii	
	'White Star'	
	'van Eseltine'	Pink fl
Picea	omorika	Widely dist in Europe before ice age. Needs uncompacted light soil ph5.5 or less
Pinus	nigra pyramidata	Evergreen
	nigra pyramidalis	Evergreen
Pinus	parviflora	Evergreen
Photinia	dauriana	
Platanus	acerifolia 'Tremonia'	
Prunus	avium	
	avium 'Pena'	
	maackii 'Amber Beauty'	
	padus 'Tiefurt'	V few fruit
	sargentii 'Rancho'	
	serrulata 'Amanogawa'	
	serrulata 'Pink Perfection'	
	serrulata 'Royal Burgundy'	
	hilleri 'Spire' (Hillier's cultivar)	
	subhirtella 'Fukubane'	
	'umineko'	
Pyrus	calleryana 'Chanticleer'	

Genus	Species and cultivar	Notes
Pyrus	communis 'beech hill'	Calcicole, wind resistant
Quercus	palustris	
	robur 'Fastigiata'	
	robur 'Fastigiata Dila'	
	robur 'Fastigiata koster'	
Sophora	japonica 'Columnaris'	Heat tolerant
Sorbus	arnoldiana 'Red tip'	
	josikaea	
	aucuparia 'Sheerwater Seedling'	
	commixta	
	thuringiaca 'Fastigiata'	
Tamerix	parviflora	Tolerant of dry soil
Taxus	baccata 'Fastigiata'	Evergreen
Taxus	baccata 'Fastigiata Aureomarginata'	Evergreen
Taxus	baccata 'Fastigiata Robusta'	Evergreen
Taxus	media 'Hicksii'	Evergreen Profuse berries
Tillia	cordata 'Rancho'	Few aphids and drought tolerant
	cordata 'Greenspire'	
Ulmus	'Columella'	
	'Lobel'	
	'Regal'	
Viburnum	bodnantense 'Dawn'	
	lanata	Drought tol, but prefers calcareous soil
	opulus 'roseum'	
	rhytidophyllum	Evergreen, tolerates heat
Zelkova	serrata	



Appendix 5 – Further Guidance and References

Landscape Checklist for New Development in Hampshire and the Isle of Wight (2006)
<https://www.eastleigh.gov.uk/media/2441/landscape-checklist.pdf>

Trees & Design Action Group (TDAG)
<https://www.tdag.org.uk/resources.html>

Woodland Trust
<https://www.woodlandtrust.org.uk/>

Forestry Commission
<https://www.gov.uk/government/organisations/forestry-commission>

Natural England
<https://www.gov.uk/government/organisations/natural-england>

Streetworks (Formerly the National Joint Utilities Group, NJUG)
<http://streetworks.org.uk/resources/publications/>

DEFRA
<https://www.gov.uk/government/organisations/department-for-environment-food-rural-affairs>

RIBA
<https://www.architecture.com>

Government Standard Advice on ancient woodland, ancient trees and veteran trees
<https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>

National Planning Policy Framework (NPPF)
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

Planning Practice Guidance (PPG)
<https://www.gov.uk/government/collections/planning-practice-guidance>

BS5837:2012 Trees in relation to design, demolition and construction: Recommendations – ISBN 978 0 580 69917 7
Published by BSI Standards Limited 2012