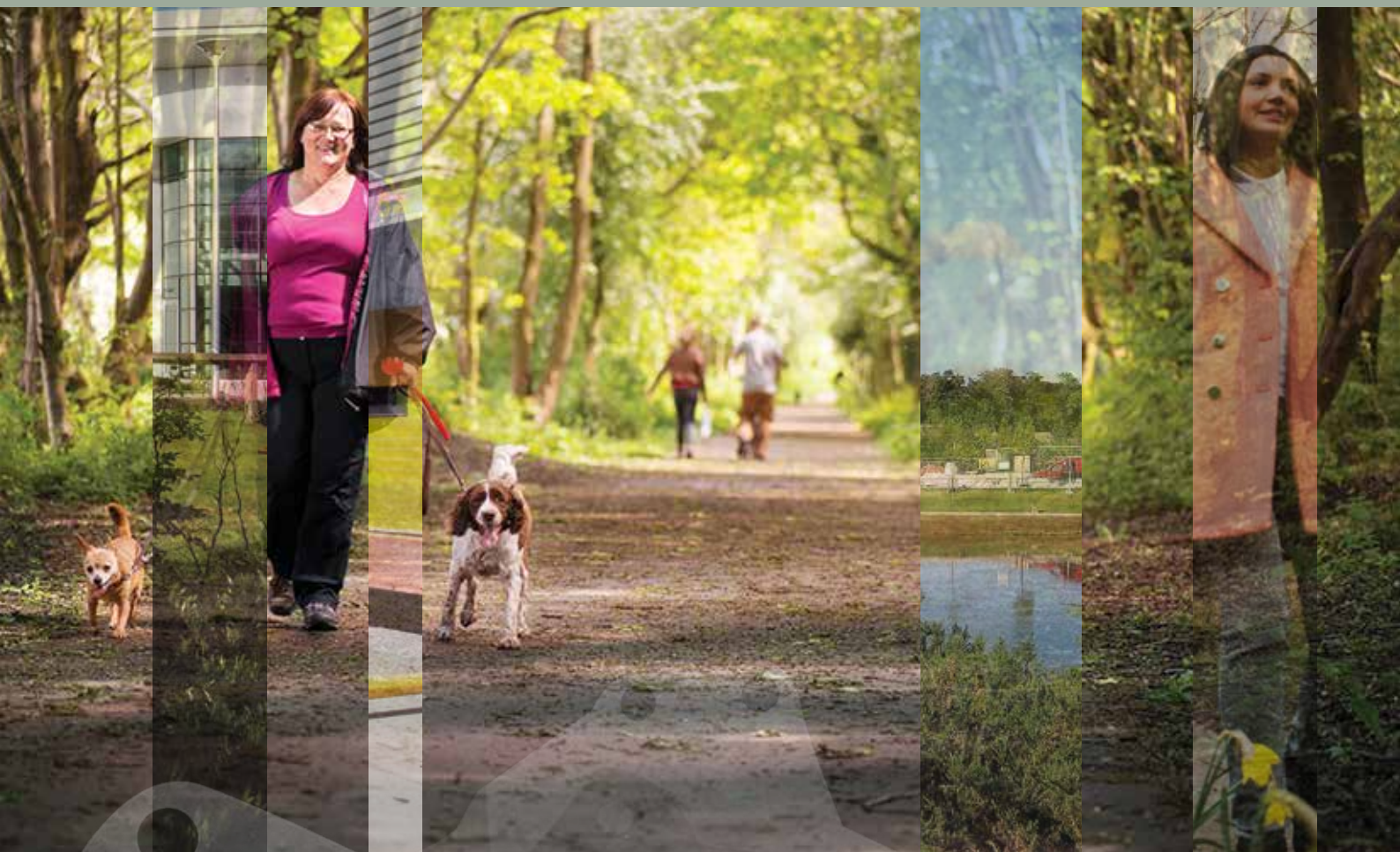


KNOWSLEY

Trees and Development
Supplementary Planning Document
June 2016



Chapter 1: Introduction

The role of this SPD	3
The role of trees and landscaping in sustainable development	3
Structure of the SPD	5

Chapter 2: Policy Context

National Planning Policy	7
Local Policy	7

Chapter 3: Existing Trees

Existing Trees on Development Sites	9
Tree Survey and Tree Schedule	10
Topographical Survey	11
Tree Categorisation: Identifying trees for retention and removal	11
Tree Constraints Plan	12
Tree Protection Plan	12
Permitted Development	12

Chapter 4: New Trees

New Landscaping	14
Street Tree Planting	14
New Tree Planting	14
Replacement Tree Planting	15

Chapter 5: Tree Protection on Development Sites

Methods how trees and hedges can be damaged during construction	16
Tree Protection Methods during Construction	17

Chapter 6: Landscaping Schemes

Importance of landscape design	19
Considering Development in Wider Landscape	19
Considering Public Greenspace within Development Site	20
Landscape Design & Planning Process	20

Chapter 7: Consultancy Services 22

Appendix 1: Glossary	23
Appendix 2: British Standard	25
Appendix 3: Documents required at Planning stage	26
Appendix 4: Tree Survey Schedule Example	27
Appendix 5: Street Tree Planting	28

1. Introduction

1.1 This document has been prepared by Knowsley Council as a Supplementary Planning Document (SPD). It aims to assist in fully considering and justifying development proposals with regard to trees. The document is intended to provide additional guidance in respect of existing policies within Knowsley Council's adopted Local Plan: Core Strategy. This SPD has been produced in accordance with the requirements of the Town and Country Planning (Local Planning) (England) Regulations 2012, and the guidance set out in the National Planning Policy Framework (2012). The full range of documents comprising the Local Plan is available online at www.knowsley.gov.uk/localplan.

1.2 The Town and Country Planning (Local Planning) (England) Regulations 2012 do not require a Sustainability Appraisal (SA) to be carried out on SPDs. However the potential requirement for a Habitats Regulations Assessment (HRA) and / or Strategic Environmental Assessment (SEA) based upon any environmental concerns introduced or influenced by the SPD must be considered. In response, SA (incorporating) SEA and HRA screening documents have been prepared to accompany this SPD, and conclude that a full HRA and / or SEA assessment is not required.

1.3 Public consultation on a draft version of this SPD was completed in February and March 2016. The results of this process are set out within the Report of Consultation which accompanies this SPD.

The role of this SPD

1.4 This SPD explains the Council's approach in relation to Trees and Development setting out guidance relating to:

- Promoting best practice for proposals incorporating trees and landscaping within new developments;
- Development proposals affecting existing trees, woodlands and other vegetation;
- Requirements for detailed survey of all existing trees; and
- Requirements for provision of replacement trees

1.5 This SPD will be a material consideration in the determination of planning applications. Officers and Elected Members of Knowsley Council will use this document as part of their assessment of all relevant planning applications.

The role of trees and landscaping in sustainable development

1.6 Trees are amongst the most important features in the landscape, both in the countryside and within our towns. For hundreds of years trees have been cultivated not just for timber, food, shelter and medicine but simply for their intrinsic beauty. They are part of our history, culture and more importantly, if cared for correctly, our future.

1.7 The retention of existing trees and landscaping on a development site and the provision of new, well designed landscaping is desirable, contributes to design quality and setting of a residential environment. In particular, tree canopy cover can contribute to urban cooling and should be an important part of landscaping or green infrastructure element of any new development.

1.8 Trees can also contribute to the environment in less obvious ways:

- Improve air quality by acting as natural air filters; just 1 hectare of beech woodland can extract 4 tonnes of dust per year from the atmosphere;
- Reduce the 'Greenhouse Effect' and the impacts of climate change by removing carbon dioxide from the air and releasing oxygen;
- Play an integral part in the ecosystem providing benefits to wildlife;
- Increase house and property values, typically between 5-18%¹;
- Encourage walking and cycling; and
- Attract higher levels of inward investment for commercial and urban areas²

1.9 Any development proposal should therefore seek to maintain any existing trees and vegetation and where they are lost seek to replace with new tree planting and landscape design in order to protect or enhance visual and residential amenity, biodiversity and environmental benefits, historical and cultural benefits and recreational benefits (including linkages between adjoining greenspaces). Natural England's **Standing Advice** should be considered in any development proposals which may have an impact on Ancient Woodland or Veteran Trees.

1.10 The Council's Greenspace Strategy³ gives more information on the Borough's green infrastructure and should be read in conjunction with this SPD.

Structure of the SPD

1.11 The guidance within this SPD can assist in delivering positive outcomes from the existing and potential trees and landscaping on a development site, and providing new trees, vegetation and landscaping within a new development. The content of the SPD includes:

- Chapter 2 outlines the policy framework relating to and supporting the detail within the SPD.
- Chapter 3 of this SPD provides information regarding the Council's requirements related to the protection of existing trees and vegetation during planning new development and outlines the necessary steps required to ensure their protection.
- Chapter 4 of this SPD provide information regarding the Council's requirements related to new landscaping and tree planting within proposed development. The

¹ 'The Case for Trees: in Development & the Urban Environment' Forestry Commission 2010

² ibid

³ http://www.knowsley.gov.uk/pdf/3960.14_green_space_stratgy_PROOF_3_november14.pdf

guidance in this chapter encourages consideration at the earliest possible stage of the development process.

- Chapter 5 of this SPD provides information relating to the consideration of protecting trees during the construction phase of development.
- Chapter 6 provides guidance on the importance of landscaping within developments and the consideration which must be given when developing a site.
- Chapter 7 provides contact information for consultancies providing ecological and arboricultural services should they be required during the development process.

1.12 Appendix 1 of this document contains a glossary of technical terms used within the document. Appendices 2-5 provide supplementary technical information and methodological examples to support the document's contents.

2. Policy Context

National Planning Policy

2.1 The National Planning Policy Framework (NPPF) was published by Government 2012. At the heart of NPPF is a presumption in favour of sustainable development, which underpins three dimensions – economic, social and environmental. The social dimension includes supporting strong, vibrant and healthy communities, with accessible local services that reflect the community’s needs and support its health, social and cultural well-being.

2.2 The NPPF requires planning policies to enhancing the natural and local environment by⁴:

- Protecting and enhancing valued landscapes, geological conservation interests and soils;
- Recognising the wider benefits of ecosystem services;
- Minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures;
- Preventing both new and existing development from contributing to or being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil, air, water or noise pollution or land instability; and
- Remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate.

2.3 A core planning principle of the NPPF (Paragraph 114) is to “*set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure*”.

Local Planning Policy

Local Plan: Core Strategy

2.4 The Knowsley Local Plan Core Strategy sets out the Borough’s spatial policy framework for delivering development and change over the plan period (2010-2028).

2.5 This Supplementary Planning Document (SPD) is intended to complement the Local Plan and be consistent with policies set out in the Local Plan: Core Strategy.

2.6 Policy SD1: Sustainable Development is an important consideration in the preparation and determination of all planning applications, including for tree planting and landscaping on developments, as the policy provides the overall context for sustainable development within Knowsley, throughout the planning process, in-line with national guidance.

⁴ National Planning Policy Framework paragraph 109

2.7 Policy CS2: Development Principles sets out the local principles which will underpin any new development within Knowsley. For tree planting and landscape development, this policy should also be read with other relevant policies some of which are set out below.

2.8 Policy CS8: Green Infrastructure provides guidance for developers in cases where a proposal affects an existing green infrastructure asset or an ecological designation such as a Site of Scientific Interest, etc.

2.9 Policy CS19: Design Quality and Accessibility in New Development is of particular importance, with all proposed developments incorporating tree and landscape development being expected to demonstrate a high standard of sustainable design that can contribute towards and sustain the local distinctiveness of the Borough.

2.10 Policy CS21: Greenspaces and Trees sets out the local principles for appropriate types of greenspaces, encouragement of replacement tree planting and assisting the Council to provide and maintain quantitative, qualitative and accessibility standards for public open spaces.

2.11 Policy CS27: Planning for and Paying for New Infrastructure sets out the importance of existing infrastructure within Knowsley and the role developer contributions will play in supporting new infrastructure associated with new development.

Saved Unitary Development Plan Policies

2.12 This SPD also supports policies from the Knowsley Replacement Unitary Development Plan (UDP)⁵, including a saved policy DQ4: Trees and Development, incorporating requirements for Trees and Development and Protection of Species. Where appropriate, this SPD is intended to provide guidance to assist developers in the interpretation and practical implementation of these policy requirements when developing proposals.

Other SPDs

2.13 This SPD should be read in conjunction with the Council's adopted Developer Contributions SPD (2016) as this provides detailed guidance on how developer contributions will operate within Knowsley. The SPD will provide guidance for developers, planning officers, stakeholders and local residents to give greater certainty at the earliest stages of the planning process, before a planning application is submitted or a development site is purchased, so that the cost implications of developer contributions can be fully taken into account. Developer Contributions are often sought to provide new and enhance existing open space where new residential developments is provided.

⁵ The UDP can be accessed via: <http://www.knowsley.gov.uk/residents/building-and-planning/local-plan/adopted-documents.aspx>

3. Existing Trees

Existing Trees on Development Sites

3.1 Knowsley Council encourages consideration of existing trees and hedgerows at the earliest possible design stage to allow successful integration of any proposed development. Trees and their possible retention should always be a driving factor in influencing the layout of the development site. In order to positively integrate trees into a development, it is crucial to provide enough space in the design for trees to mature, and therefore protection measures during the whole construction phase would need to be implemented.

This is supported by Saved UDP Policy DQ4 and Local Plan: Core Strategy Policy CS8.

3.2 It is desirable for contact to be made with the Council at the earliest opportunity to discuss proposals regarding a development, and arrange a site meeting with one of the Council's tree officers to discuss the nature of the development and how it will affect any possible impact on trees. It should be advised that there is a modest charge for this service and more details can be found on the Council's website or by calling the Council's Arboriculture and Ecology team on 0151 489 6000:

<http://www.knowsley.gov.uk/residents/building-and-planning/work-on-protected-tree.aspx>

3.3 The Council promotes the recommendations outlined in the British Standard: 5837: 2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' (and future editions) (hereafter referred to as BS 5837:2012). This document gives recommendations and guidance in respect of how to achieve an acceptable connection of structures with trees, shrubs and hedgerows.

3.4 The British Standard contains a number of plans and documents relating to trees and development, some of which should be submitted in support of certain planning applications. Appendix 2 of this document reproduces the British Standard flowchart in relation to the stages of the design process and construction and identifies the step by step process of integrating trees successfully into a development. The list below identifies documents required to support an application for all sites that contain trees within 15m of the site boundary, all sites in Conservation Areas and where trees are protected by a Tree Preservation Order (see link below). Please note that your planning application may not be validated without them.

<http://www.knowsley.gov.uk/residents/building-and-planning/work-on-protected-tree/tree-faqs.aspx>

- Tree survey and tree schedule (mandatory) (paras 4.7-4.9)
- Topographical survey (para 4.10)
- Plan showing trees to be retained and those to be removed (Mandatory) (para 4.20-4.22)
- Tree constraints plan (para 4.13-4.15); and

- Tree protection plan (mandatory) (para 4.16-4.18)
- New landscaping provision (para 4.19-4.20)

3.5 Appendix 3 identifies the information needed to provide in relation to the type of planning application you are making. The remainder of this chapter will provide more information on each of the documents.

3.6 Trees may provide habitat for species, including bats and breeding birds, which are protected by European and domestic legislation and are a material consideration in the planning process. Before works are carried out to a tree you need to be certain that the trees do not contain bat roost potential i.e. features such as peeling bark, splits, cavities, holes, ivy clad, etc. prior to works being carried out. If they do then a bat roost potential survey is needed prior to determination to ensure compliance with the Habitats Regulations 2010 (as amended). Surveys should proceed in accordance with the best practice guidance (i.e. Collings, J. (2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines*, 3rd Edition). The presence of roosting bats would not necessarily preclude tree works from taking place. However, a mitigation scheme and a European Protected Species licence from Natural England would be required before any tree works could commence.

Tree Survey

3.7 A tree survey should be submitted alongside a planning application for all sites that contain trees within 15m of the site boundary, all sites in Conservation Areas and where trees are protected by a Tree Preservation Order and must be in accordance with the BS 5837: 2012 and undertaken by a qualified Arboriculturalist. The results of the tree survey should be used to inform feasibility studies and design options. An example of a tree survey can be found in Appendix 4.

3.8 The tree survey must include the following:

- All trees, hedgerows and shrub masses on the site whether or not you intend to remove them;
- All off-site trees and hedges within 15m of the site boundary, including street trees, as off-site trees may be affected by your proposal.

3.9 A tree survey is usually presented as a tree survey plan and an accompanying schedule. In order to allow for a full appraisal of the trees on and off the site by both the developer and the Council it must include the following information:

Tree Survey Schedule:

- Tree Reference Number
- Species
- Height
- Age Class (e.g. young, middle age, mature, over mature, veteran)
- Crown Spread (in relation to all four compass points)
- Height of Crown Clearance
- Assessment of the structural and physiological condition
- Tree management recommendations
- Trees to be felled as part of proposed development
- British Standard retention category grading
- Root protection area

Tree Survey Plan:

- The position of all trees accurately plotted and numbered
- The crown of each tree correctly plotted at the four cardinal points
- The extent of the root protection area of each tree
- The BS 5837: 2012 retention category
- North point and be to a recognised and workable scale

Topographical Survey

3.10 A topographical survey should be submitted alongside a tree survey. It should detail the physical features of the site. This survey is important as the results define tree retention and will be used to inform the design, layout and implementation of the development proposal.

Tree Categorisation: Identifying trees suitable for retention and removal

3.11 The Council requires each application to meet the specific validation requirements set for each type of planning application. In relation to tree retention or removal, the validation requirements are that they should be clearly shown on the plans submitted with a planning application. Failure to do so would result in the planning application not being made valid. The more detailed and comprehensive the supporting information is the less likely there will be delays to the consideration of an application.

3.12 All trees should be assessed for their suitability for retention and then categorised in accordance with BS 5837:2012. This categorisation should be completed prior to drawing up any plans for the proposed development as any trees suitable for retention should inform the final site layout. Trees which are protected by a Tree Preservation Order (TPO) or classified within retention category A or B in a BS 5837: 2012 survey shall be retained on the site. If it is proposed that one of these trees is to be removed then the Council will ask for the applicant to alter the site design, demonstrate how the removal is necessary to the proposal and outline any mitigation measures to be provided. The Council anticipates that any category C trees which

constrain development may be removed. Each site will be considered on its individual merits, giving consideration to the surrounding landscape and existing tree canopy cover.

Tree Constraints Plan

3.13 The Council recommends that a tree constraints plan is submitted alongside planning applications for any sites which contain, or are adjacent to, protected trees (i.e. trees covered by a TPO). This would assist in demonstrating that all impacts of the proposed development have fully considered the long-term retention of the trees. The Council may also require a tree constraints plan for sites where important category A or B trees identified within a tree survey may be impacted upon by the proposed development.

3.14 Any tree constraints plan submitted to the Council must show:

- The Root Protection Area (RPA) - this is the area around each retained tree that must be kept free of development in order to ensure that the tree's roots are not damaged.

3.15 The tree constraints plan will assist applicants by:

- Identifying where buildings, garages, roads and underground services can be accommodated.
- Positioning buildings and gardens in order to maximise daylight and sunlight, and can show where additional windows may need to be located.
- Showing where open spaces may be best located to incorporate trees as focal points and key features of the development.
- Identifying areas that can be used for site accommodation, storage, etc.

The Tree Protection Plan

3.16 Tree protection is essential during the period of construction and identifying construction exclusion zones for each tree will ensure that any construction activity, storage of materials or equipment does not damage the trees. The tree protection plan should be created at the time of application for all sites containing, or adjacent to, trees.

3.17 Without a tree protection plan, planning permission may be refused or planning conditions may not be discharged.

3.18 Any tree protection plan must be in accordance with BS 5837: 2012 showing the retained trees in relation to the final layout. It should identify the positions of all barriers, ground protection and any other methods to be used to protect the trees. Please see chapter XX for further information on this matter.

Permitted Development

3.19 There are some forms of development which do not require planning permission. However, if there are trees on or in close proximity of the site which is

protected by Tree Preservation Order then consent may be required from the Council. The consent would be for the works which will be undertaken near the trees and is required in order to protect the trees or their roots. For any development proposal which is classed as permitted development and has trees on the site, it would be recommended to contact the Council and discuss the proposal with the Arboricultural Officers before carrying out any works on site.

4: New Trees

New Landscaping

4.1 New landscaping is incorporated in most new developments and it is important that this is given consideration at an early stage of the development process.

4.2 With regard to future development opportunity sites which are of a scale that would require a master plan for the site, the Council may require a coherent and comprehensive landscape / green infrastructure strategy to accompany any planning application. This is in order to ensure that landscaping has been considered to form an integral part of the overall design and layout for the proposed scheme.

Street Tree Planting

4.3 In some circumstances it may be appropriate for street trees to be incorporated into a development. This can include new streets created within developments or where a development fronts or joins a highway. In such circumstances the incorporation of street trees must be considered at the design stage of the development to ensure that there is an adequate provision made for rooting areas to abate any future nuisance. Appendix 5 shows a methodical example for this. Please note that there will also be a need for the tree planting to be supported by a maintenance contribution, details of which can be provided by the Council's Arboriculture and Ecology team.

New Tree Planting

4.4 New tree planting should be provided within a proposed and approved landscaping scheme – this should include any replacement trees for those removed due to the development. BS 8545 *Trees: from nursery to independence in the landscape – Recommendations* provides details on handling, transplanting and the planting of new tree stock.

4.5 The establishment of trees within a built environment to allow longevity without becoming a nuisance when they reach maturity should be considered within planting schemes. Adopting new industry practice and materials enable the establishment of trees within a built environment, the following factors should always be considered when planning a tree planting scheme:

- There should be adequate space allowed for newly planted trees to reach their full mature height and spread without causing nuisance to adjacent structures and occupants;
- Predicted mature height and canopy spread, canopy density, propensity to shed seeds, fruits and if the tree exudes honeydew, etc.;
- Suitability of trees within the built environment. Trees should always compliment the architecture, historic environment and the local landscape in the longer term. Colour of backdrop should also be taken into consideration, (for example a Birch will not be clearly visible against a light background);
- Suitability of species and planting positions adjacent structures such as walls and buildings to avoid the risk of structural damage as the tree grows and

matures, engineered solutions such as root directors can be used to minimise this;

- Suitability of species in relation to future changes in climate and predicted increase in temperature; and
- Sufficient soil volume should be afforded for the tree to reach its optimum size. The soil type, to include drainage should be such that tree roots are able to grow and function adequately.

Replacement Tree Planting

4.6 Where the Council accepts that tree loss is unavoidable the applicant will be required to comply with Saved UDP Policy DQ4 and Local Plan Core Strategy Policies CS8 and CS21, specifically in relation to tree replacement. Any replacement planting will have to take into account the number; sizes and species of the trees lost and should contribute to the extension of tree and woodland cover across the Borough.

4.7 Where it is not reasonably possible to achieve the tree replacement numbers within the development site the Council may require a financial contribution to achieve the planting and maintenance of the trees off site in line with Local Plan Core Strategy Policy CS21 and CS27. These costs in June 2016 are as follows (please note that these may be subject to change, please contact the Council for clarification):

- To supply, plant and maintain one tree within a public open space - £273.15.
- To supply, plant and maintain one tree within a highway - £570.56.
- To supply, plant and maintain one hectare of woodland - £23,429.66.

5 Tree Protection on Development Sites

5.1 During the construction phase of any development, trees are susceptible to being damaged. It is therefore important to ensure that any trees or hedgerows which have been earmarked for retention are efficiently managed and protected during the construction of a development to ensure the preservation of the valuable green assets of the site. The Council will encourage a detailed Tree Protection Plan and Construction Plan for the proposed development is submitted at planning application stage to ensure that the appropriate protection measures are employed and careful site management and arboriculture supervision will be in place during the construction phase. This may be further secured through the use of a planning condition.

Methods how trees and hedges can be damaged during construction

- **Soil Compaction:** When soil is compacted it prevents air, water and nutrients reaching the roots of the tree and causes the soil structure to be damaged. Soil compaction is mainly caused by vehicular movement and storage of materials, including bricks, soil, gravel and cement. In order to prevent soil compaction, the storage of materials outlined above and the movement of vehicles shall not be permitted within allocated RPAs of trees.
- **Excavations:** Any excavations on development sites which are within a Root Protection Area may cause the roots to break. This would hinder the tree's ability to take up water and nutrients, which would lead to decay and impact on the tree's stability. Any excavation work which is proposed within a Root Protection Area would have to be agreed with the Council prior to any work being undertaken.
- **Ground Level Changes:** Both a reduction and a rise in soil levels can be detrimental to the roots of a tree. The reduction of ground levels may cause the roots to break, whilst any rise in the levels of soil could impact on the compaction of the soil and lead to suffocating the roots. It is advised that any reduction or rise of soil levels within a Root Protection Area will not be permitted.
- **Impact Damage:** The use of machinery can cause damage to trees which can include, torn branches, damage to bark and trunk which can cause an easier access of diseases and parasites and lead to decay. Machinery should therefore not be permitted within a Root Protection Area.
- **Soil Contamination:** Construction materials such as concrete, fuel and oil can cause contamination if it comes into contact with soil. Secure storage can be used to avoid leakage of these materials and exposure to the soil. Any storage should ideally be located 15m from any tree.
- **Intense Heat and Fire:** Both roots and the bark of a tree can be damaged by exposure to intense heat and fire. Therefore any fires should be kept away from trees on site, preferably 5m distance from flames potential contact with a tree.

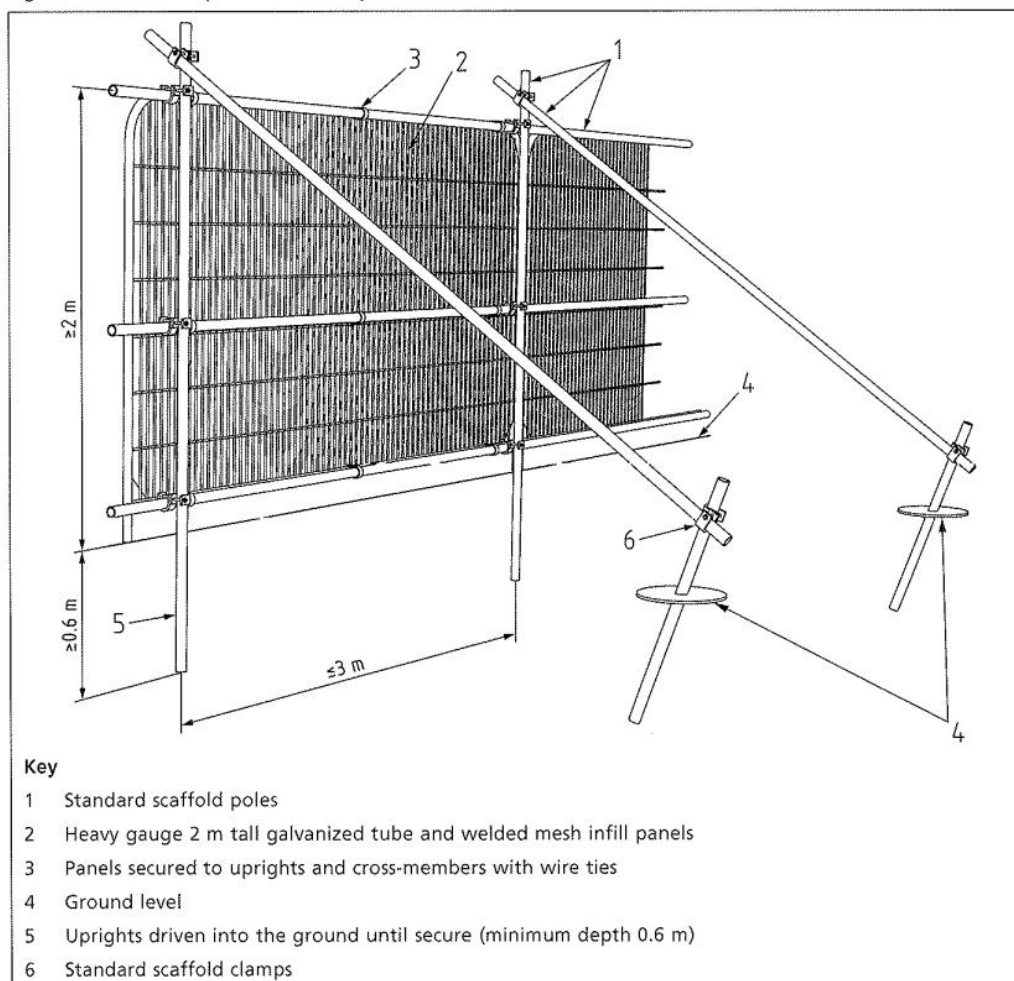
Tree Protection Methods during Construction

5.2 Tree Protection Plan: Planning applications submitted to Knowsley Council require a Tree Protection Plan to be submitted alongside them for sites which contain trees and hedgerows or where there are off-site trees within 15m of the site boundary including conservation areas and trees protecting by tree preservation orders.

5.3 The tree protection plan must be in accordance with BS 5837: 2012 showing the retained trees in relation to the final layout. It may include some or all of the following tree protection methods:

- **Temporary protecting fencing and ground protection:** This method of protection must be installed before any works including demolition commence on site. The fencing and ground protection shall remain intact for the period of the development and should only be removed once the construction of the development is complete. All temporary protecting fencing must meet the specification given in BS 5837: 2012 (and future amendments). The below diagram illustrates this.

Figure 2 Default specification for protective barrier



- **Arboricultural Method Statement:** Where it is deemed necessary that construction works are undertaken in close proximity to trees, the Tree Protection Plan should include an arboricultural method statement to demonstrate how impact to the trees will be kept to a minimum. An arboricultural method statement is a detailed description of work, timing and construction techniques which will be undertaken to minimise impact on the trees. The advice of an Arboricultural Consultant should be sought when preparing a method statement. The absence of an arboricultural method statement could lead to delays in planning consent and discharging of conditions.
- **Pre commencement Tree Work:** Prior to any works commencing on site pruning of trees for health and safety or to facilitate access should be undertaken by a qualified and insured Arborist. These pruning works must be agreed in writing with Knowsley Council and be in accordance with BS 3998:2010⁶.
- **Arboricultural Supervision:** Knowsley Council may set conditions on planning applications for arboricultural supervision on sites. The Council advises that prior to construction works being undertaken the services of an Arboricultural Consultant are sought to monitor the erection of any protective fencing and to ensure that all work undertaken in close proximity to tree's is compliant with the tree protection plan and method statements agreed with the Council.

5.4 The appointed Arboricultural Consultant should give a pre-commencement briefing on tree protection to site management and senior site staff in relation to the development site.

5.5 It is the responsibility of those undertaking site works to ensure that checks are undertaken for any protected species and the construction works timing is altered to reflect the statutory protection.

⁶ The British Standard **BS 5837 Trees in relation to design, demolition and construction – Recommendations 2012**

6 Landscaping Schemes

6.1 Landscaping schemes are those which include all visual features that make up the appearance and composition of the natural environment. From country parks and gardens, to woodlands and meadows, through to street planting all make up the landscape that surrounds us and contributes to the distinctive character of our Borough.

6.2 The maintenance and enhancement of existing green spaces within the landscape through development is key to the creation of high quality areas which are used and enjoyed by residents and visitors of the Borough. Quality landscape provision within new developments relies on good design and planning.

Importance of landscape design

6.3 Well designed, planned and maintained green spaces can be the making of a new development and can have a positive impact on the areas in which we live and work. The benefits of well-designed green spaces can range from increased economic investment through to cultural, social and environmental benefits. Well-designed green spaces can also:

- Reduce the predicted effects of a warming climate, particularly in urban areas.
- Improve the health and well-being of residents and visitors.
- Reduce crime and provide a “sense of place”.
- Significantly increase local biodiversity.
- Increase the value and attractiveness of an area.

6.4 Equally, green spaces which are poorly planned, have no clear use, and are inappropriately planted and maintained can become underused and run down, often leading to destinations for anti-social behaviour. Green space which results from over development can become a maintenance and financial burden, offering no real benefit to the surrounding area.

Considering development in wider landscape

6.5 It is important for a development have a strong design that maximises its existing landscape and/or creates landscape character of its own. This could include:-

- Setting developments in a positive landscape/public realm design that can, in turn, accommodate a treescape. This may create positive vistas or screen unsightly views within the development or from surrounding areas. Issues of tree shading, etc. need to be considered so that layout of trees/housing, etc. maximises sunlight.
- Maximising existing landscaping features such as existing trees specimens, woodland blocks or other features such as land formations,

ponds/watercourses, etc. Again these may be within the site or external to the site (e.g. vistas of surrounding landscape)

- Removing isolated/unmanageable areas: it is important conversely that designs remove the opportunity for isolated corners to be created that would generate fly-tipping or overgrown, unmanaged areas within a development. This can include making sure property boundaries are design 'back-to-back' to avoid exposed property boundary (within and at edge of development site) and the temptation for residents/occupiers to fly-tip over their boundary onto unused land. From a tree perspective, this also removes the issue of weed/nuisance trees appearing that go against wider landscape concepts.

Considering Public Green Space within Development Site

6.6 If public green space is part of the development, there will be a requirement for the extent and typology of green space required (e.g. park, play area, natural, allotment, etc.). It is vital that the public green space provision is maximised in terms of its design and contribution to the wider development. There is too often a temptation for public green space to occupy the problem areas or left over areas of a development site, which diminishes the amenity value of the space despite possibly meeting the area requirements. Public green space should be used as an asset in a development which would help to strengthen wider design of the development and even enhance the saleability of the property being developed. Key principles for this might include:-

- Making public green space a focal point within the design: bold green space creation for landscape features within the development will bring much wider visual and amenity benefits. Having an open and inviting aspect and strong landscape design would mean that surrounding property would be more attractive because of the views in front of them. Having space and impacts on the visual appeal from within the green space. It also places risk of fly-tipping onto the green space.
- Maximising existing assets: if you have existing landscape features such as woodland or other natural features (watercourse, pond, etc.), maximise these in design by making them features rather than screening them off or diminishing their amenity/visual value. It may also be that existing tree stock has been laid out with a landscape plan in mind, which needs to be conserved.

Landscape Design and Planning Process

6.7 Landscape provision and green spaces design is an integral part of the planning process. Where early consideration is given to landscape matters, new developments tend to have a stronger sense of place and character as well as a feeling of increased quality.

6.8 The Council will expect to see evidence that landscape provision and green space design have clearly been considered as part of any submitted planning application.

6.9 The value of retaining natural features is significant, and existing features such as areas of woodland, trees, hedgerows and watercourses can contribute to the

character of a new development and create a sense of early maturity. Where practical, existing features should be retained and incorporated into the layout of the site

6.10 If there is a requirement for the provision of more formal green space within the site, such as provision for children and young people, parks and gardens and sports provision, they should be of high quality design. Where these spaces cannot be provided on site then an off-site contribution may be required in line with the Council's Developer Contributions SPD (2016).

6.11 Where developments require the provision of new landscaping, a maintenance plan should be submitted with the planting details, providing site specific details for each new planted area. The period of time to which any maintenance plan applies will depend on the site conditions and proposed planting, and will be set via the associated planning conditions for the development. Applicants are advised that planning conditions generally require replacement planting where plants have failed to become established within the first five years. The type and/or location of any deep root shrubs or trees should have consideration for their impact on underground utilities infrastructure assets; their on-going protection; operation and future maintenance.

7. Consultancy Services

7.1 The type of work described in this SPD will require specialist consultancy support. Whilst you are able to appoint any such independent consultant, we would like to draw your attention to the fact that the Council offers a complete ecological and arboricultural survey package. Should you wish to discuss your needs please contact the Arboriculture and Ecology Team for further information on 0151 443 2899 or www.weknowservices.co.uk

7.2 The Chartered Institute of Ecology and Environmental Management (CIEEM) produce a list of qualified consultants to undertake the work described in this SPD (Tel.01962 868626). Also the Arboricultural Association (AA) produces a list of consultants (Tel. 01242 522152) or view their website at the following link

<http://www.trees.org.uk/Directory-of-Arboricultural-Association-Registered-Consultants>

7.3 As not all are experienced in bat matters, you need to ask about the consultancies' past experience. Local bat groups may have knowledge of bat specialists who undertake consultancy in their area, as may the Bat Conservation Trust (BCT). The BCT (Tel. 0345 1300228) has a list of bat group contacts throughout the country, who may be able to assist with surveys.

Appendix 1 - Glossary

Density - a measurement of how intensively land is occupied by built development. For housing, this is measured in dwellings per hectare (dpa).

Design and Access Statement (DAS) - a short report accompanying and supporting a planning application. They provide a framework for applicants to explain how a proposed development is a suitable response to the site and its setting, and demonstrate that it can be adequately accessed by prospective users.

Green Belt - Designated land – primarily open land – around built-up areas designed to limit urban sprawl and to define town and country areas. It is generally protected land with a strong presumption against development.

Local Plan - the plan for the future development of the local area, drawn up by the local planning authority in consultation with the community. The Local Plan includes "Development Plan Documents" adopted under the Planning and Compulsory Purchase Act 2004. In Knowsley, this will include the Local Plan Core Strategy, Local Plan Site Allocations and Development Policies and Merseyside and Halton Joint Waste Local Plan, accompanied by a Local Plan Proposals Map Policies Map. While these documents are being finalised, the Local Plan also includes the Saved Policies of the Knowsley Replacement Unitary Development Plan (2006).

Local Plan: Core Strategy - a document which forms the central part of the Knowsley Local Plan and sets out the long term spatial vision, objectives and strategic policies for the Borough. The Local Plan Core Strategy has the formal status of a Development Plan Document, and will be joined by further Local Plan documents.

MEAS - Merseyside Environmental Advisory Service - This is a specialist unit which provides advice on specific environmental matters to the six District Councils making up the Liverpool City Region, delivering high quality environmental advice and sustainable solutions to our Local Authority customers for the benefit of the people and environment of the Liverpool City Region

National Planning Policy Framework (NPPF) - introduced by the Government in 2012, this replaced the majority of adopted national planning policy, including most Planning Policy Statements and Planning Policy Guidance notes. The NPPF is supplemented by remaining guidance, and a number of other policy statements. The NPPF sets out national priorities for delivering sustainable development and economic growth, including a very wide range of policies and guidance, relating to themes such as housing, environment and economy, and procedural matters (such as plan-making and decision-taking). The policies of the NPPF will be applied alongside those in Knowsley's Local Plan (and the supplementary guidance in this SPD).

National Planning Practice Guidance - online guidance which replaced the majority of pre-existing planning guidance and should be read alongside the NPPF. The

guidance is intended to be updated when the Government reviews its planning guidance.

Public Realm - the space between and surrounding buildings and open spaces that are accessible to the public and including streets, pedestrianised areas, squares and river frontages.

Strategic Environmental Assessment (SEA) - European Directive 2001/42/EC (the SEA Directive) requires a formal environmental assessment of certain plans and programmes which are likely to have significant effects on the environment, known as Strategic Environmental Assessment. To meet the requirements of the directive, a body must prepare an environmental report in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and geographical scope of the plan, are identified, described and evaluated. This is incorporated in the form of a Sustainability Appraisal for the Knowsley Local Plan, with a separate screening opinion accompanying this SPD to assess the need for an individual assessment relative to this document alone.

Supplementary Planning Document (SPD) - a planning policy document which provides supplementary information in respect of the policies contained in the Local Plan, and which focus on particular issues or places. They are subject to consultation, but are not subject to an independent examination.

Sustainability Appraisal (SA) - an assessment of the economic, environmental and social effects of a plan or programme from the outset of the preparation process to allow decisions to be made that accord with sustainable development. For the Knowsley Local Plan, this covers the requirements of Strategic Environmental Assessment (SEA). A screening opinion accompanying this SPD determined that an SEA assessment specific to the document was not required as the guidance only expands upon policies within the adopted Knowsley Local Plan: Core Strategy, Merseyside and Halton Joint Waste Local Plan and saved policies of the Knowsley Replacement Unitary Development Plan.

Sustainable Drainage Systems (SuDS) - these systems provide an alternative to the traditional methods of dealing with water drainage, aiming to mimic the natural movement of water from a development, slowing run-off, reducing flood risk, improving water quality and potentially providing attractive features.

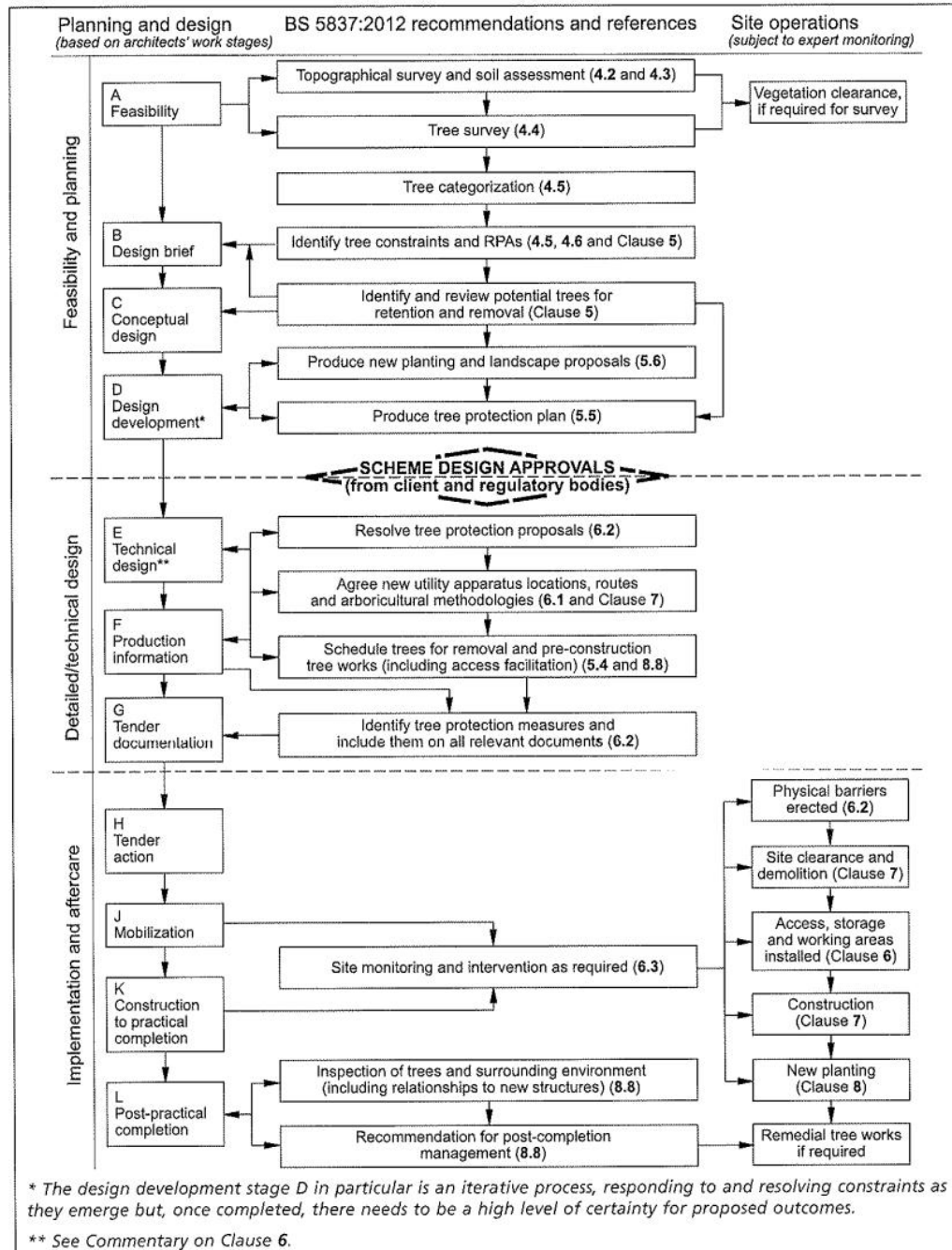
Tree Preservation Order (TPO) - An order made by a local planning authority in England to protect trees, groups of trees or woodlands in the interests of amenity.

Appendix 2: British Standard

BS 5837:2012

BRITISH STANDARD

Figure 1 The design and construction process and tree care



Appendix 3: Documents required at Planning Stage

Documents required with your planning application or for pre-application advice (additional documentation, such as a landscaping scheme, may be required following planning conditions attached to the consent).

Document Required	Pre-app. advice	Outline planning app.	Full planning app.	Strategic/Major planning app.
Tree survey (schedule and plan) to BS5837	Advised	Yes	Yes	Yes
Topographical survey	Advised	Yes	Yes	Yes
Plan showing trees to be removed and retained (may form part of the tree survey plan)		Yes	Yes	Yes
Tree Constraints Plan		Possible	Yes	Yes
Tree Protection Plan		Possible	Yes	Yes
Other explanatory documents or method statements			Possible	Possible
Landscape Strategy / Masterplan (To inform a later detailed landscape scheme)		Possible	Possible	Possible

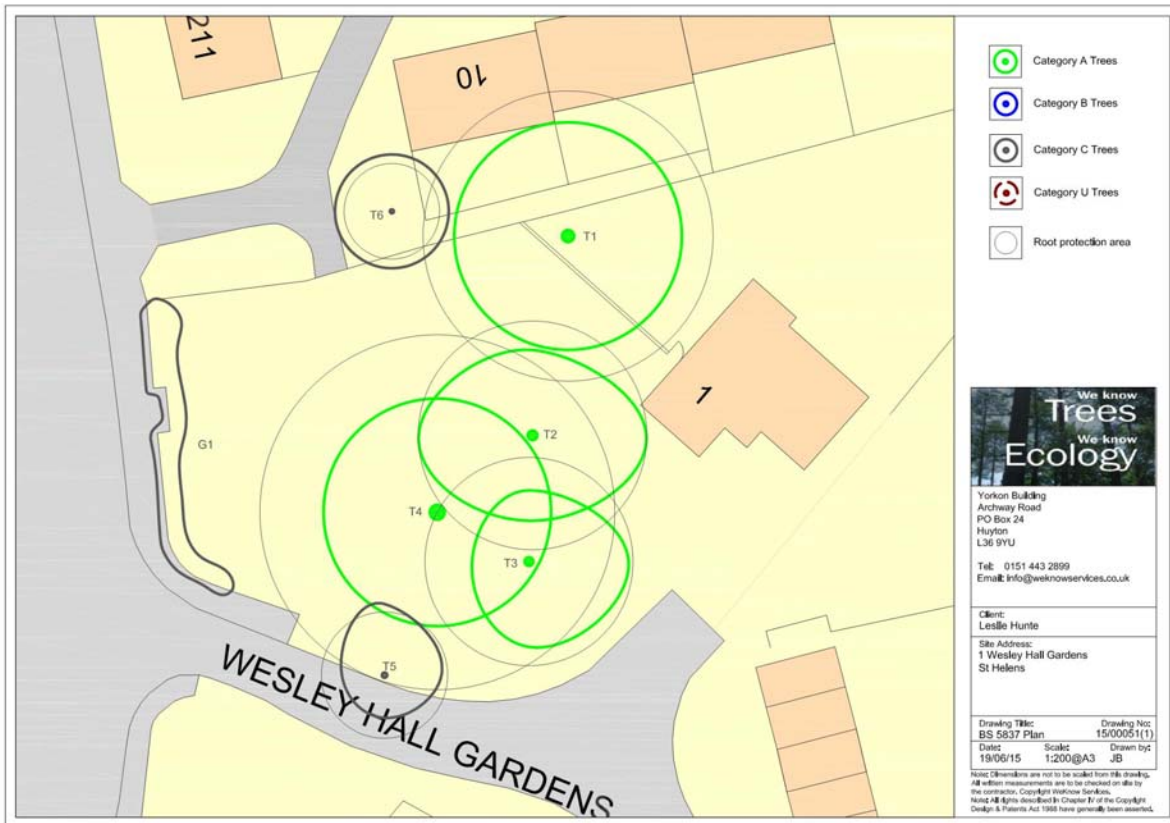
Appendix 4: Tree Survey Schedule Example

Arboricultural Implications Study- 1 Wesley Hall Gardens, St. Helens

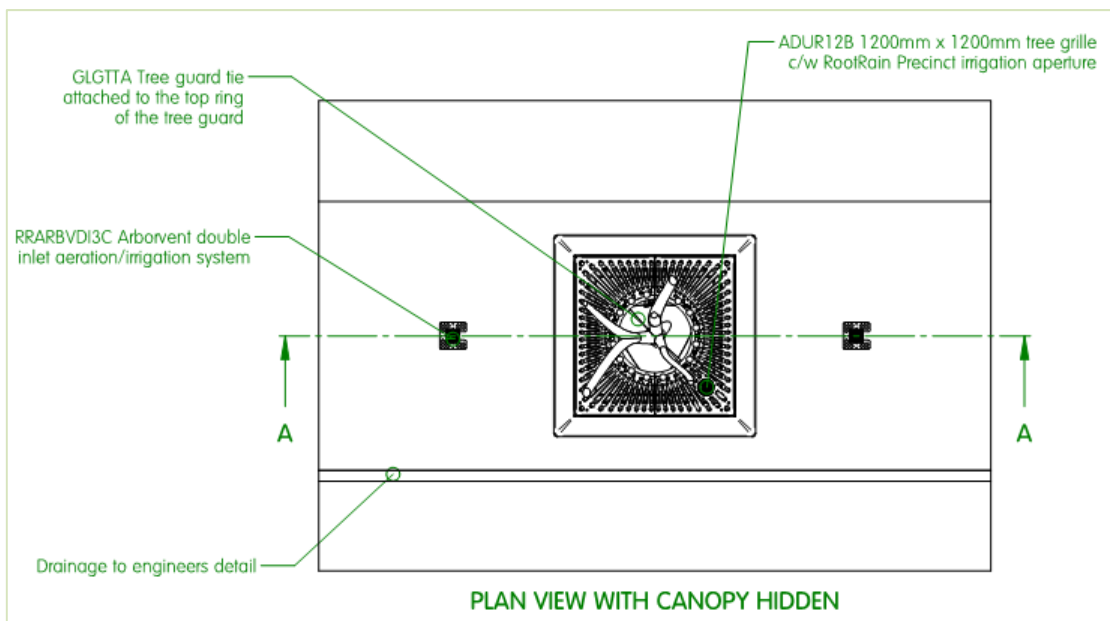
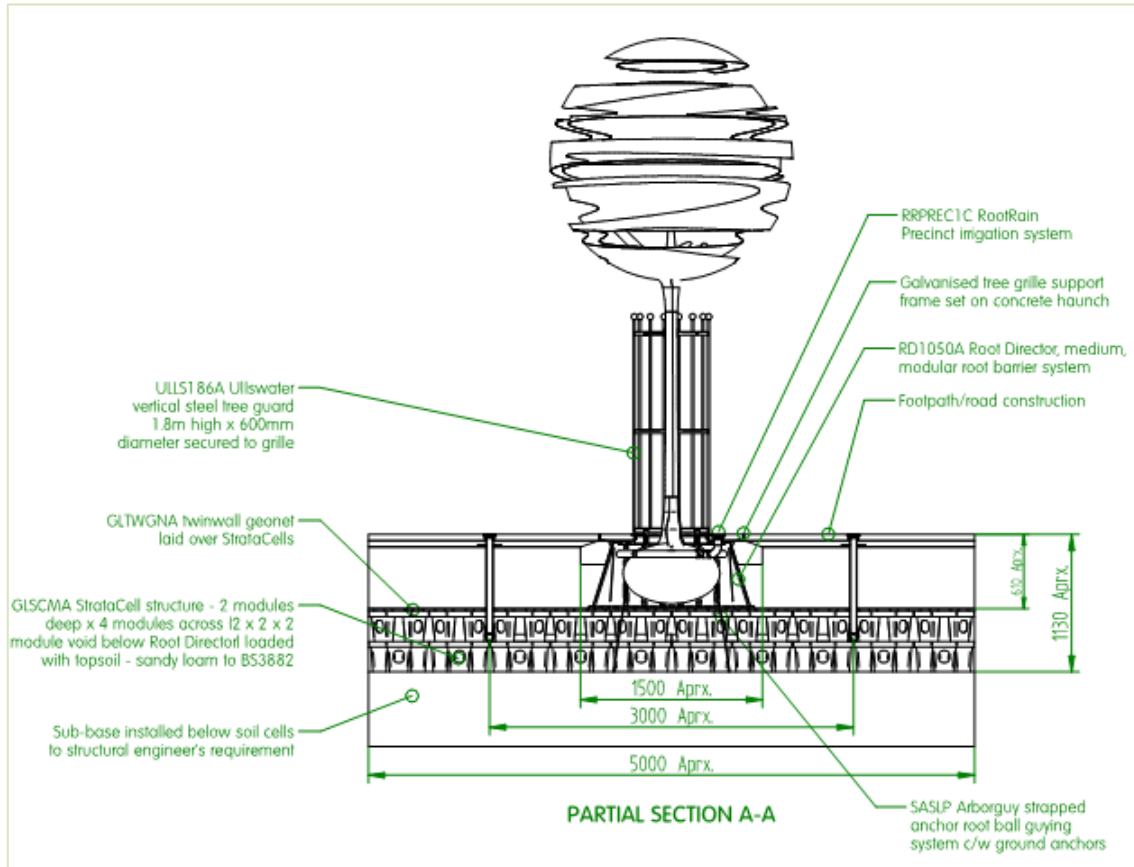
TREE SURVEY SCHEDULE

Arboricultural Data Sheet: Wesley Hall Gardens					Date of Survey: 19/06/15				Surveyor: Joe Barnes				
Tree No.	Species	DBH (mm)	Height (m)	Age	Crown Spread (m)				Crown clearance	Condition rating	Comments and preliminary management recommendations	Estimated remaining contribution	Tree quality category rating
					N	E	S	W					
T1	Beech	850	25	M	8	8	8	8	1.5	1	An individual specimen with good form situated in a raised shrub bed, with low branches. Crown lift to 5m	20-40	A1
T2	Sycamore	670	20	M	6	8	6	8	1.5	1	An individual specimen with good form situated in a grassed area, with low branches and epicormic growth. Crown lift to 5m and remove epicormic growth.	20-40	A1
T3	Sycamore	610	22	M	5	7	6	4	2	1	An individual specimen with good form situated in a grassed area, with low branches and epicormic growth. Crown lift to 5m and remove epicormic growth.	20-40	A1
T4	Beech	1040	25	M	8	8	8	8	2	1	An individual specimen with good form situated in a grassed area, with low branches and epicormic growth. Crown lift to 5m and remove epicormic growth.	20-40	A1
T5	Holly	370	10	M	5	4	3	3	1.5	1	An individual specimen with reasonable form situated in a grass verge adjacent to a highway, with low branches. Crown lift to 3m.	40+	C1
T6	Birch (off site)	280	14	EM	4	4	4	4	5	1	An individual specimen with reasonable form situated in a shrub bed with a 2m tarmac path between the tree and the boundary fence.	20-40	C1

Arboricultural Data Sheet: Wesley Hall Gardens					Date of Survey: 19/06/15				Surveyor: Joe Barnes				
Tree No.	Species	DBH (mm)	Height (m)	Age	Crown Spread (m)				Crown clearance	Condition rating	Comments and preliminary management recommendations	Estimated remaining contribution	Tree quality category rating
					N	E	S	W					
G1	Golden Castelwellan Leylandii x27 & Holly x1	100 Avg.	8 Avg.	SM	-	-	-	-	0	2	A mixed species group with reasonable form situated adjacent to a highway, overhanging the boundary wall into the highway by approx. 0.5m. Trim and reduce to suit	20-40	C2



Appendix 5: Street Tree Planting



For more information log on to
www.knowsley.gov.uk/LocalPlan

You can also get this information in other formats.
Please phone Customer Services on 0151 443 4031
or email customerservices@knowsley.gov.uk



Knowsley Council

Copyright © 2016 Metropolitan Borough of Knowsley