

Discharge of Condition U0146087 NS48 Black Poplar

Twickenham Riverside



Twickenham Poplar

Planning Condition report

For London Borough of Richmond Upon Thames

Project No.: LBR001-002-001

March 2023

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1. Summary

- 1.1.1 The London Borough of Richmond Upon Thames have commissioned Thomson Environmental Consultants to provide the information for the discharge of condition 'U0146087 NS48 Black poplar' of the approved application 21/2758/FUL.
- 1.1.2 The location of the site is 1-1C King Street, 2-4 Water Lane, The Embankment and River Wall, Water Lane, Wharf Lane and The Diamond Jubilee Gardens, Twickenham.
- 1.1.3 The planning application was for the demolition of existing buildings and structures and redevelopment of the site comprising 45 residential units (Use Class C3), ground floor commercial/retail/cafe (Use Class E), public house (Sui Generis), boathouse locker storage, floating pontoon and floating ecosystems with associated landscaping, reprovision of Diamond Jubilee Gardens, alterations to highway layout and parking provision and other relevant works.
- 1.1.4 The arboricultural information provided below is considered acceptable to comply with the requirements as set out in planning condition 'U0146087 NS48 Black poplar' and the condition should be formally discharged.

2. Introduction

Brief and Objectives

- 2.1.1** The London Borough of Richmond Upon Thames have commissioned Thomson Environmental Consultants to provide the level of information to comply with the formal discharge of the planning condition 'U0146087 NS48 Black poplar' and how these works will be completed to ensure the cuttings taken from the Black poplar were given the best opportunity to survive.
- 2.1.2** The information as listed below sets out the key elements required. to discharge the condition, in accordance with specific condition requirements:

Planning condition U0146087 NS48 Black poplar

1. Prior to the felling of the Black poplar (T34) a nursery propagation scheme shall be submitted to and approved in writing by the Local Planning Authority. This scheme shall:

- a. Detail genetic tests of the tree.*
- b. Detail the cuttings of the Black poplar - methodology including, time of year, number (no less than 10), size, storage.*
- c. Provide details of the nursery where the cuttings will be propagated, including management and maintenance of such.*

2. Prior to the replanting of the cuttings, a scheme shall be submitted to and approved in writing detailing the location and future management and maintenance of such, which should include at least 5 years aftercare.

3. The development shall not be implemented other than in accordance with (1) and (2), unless previously agreed in writing with the Local Planning Authority.

REASON: As part of the mitigation for the loss of the Black poplar tree.

- 2.1.3** Below is set out how the planning condition will be discharged.

3. Discharge of Condition U0146087 NS48 Black poplar

Section 1a Detail genetic tests of the tree

- 3.1.1** Genetic testing will be undertaken at Alice Holt via the Forest Research Commission, a DNA fingerprinting service for the Poplar species via Forest Research and send off two viable live samples for testing.
- 3.1.2** Collect and send 2 x small cuttings (10-20cm) with some green healthy leaves or leaf bud cuttings from the one Black poplar to Forest Research to be analysed via the extraction of DNA from these cuttings and then they will carry out two molecular tests. Firstly, a test is carried out to see whether the tree is a first-generation hybrid poplar. Secondly, a DNA fingerprint is generated for the tree using a suite of DNA microsatellite markers.
- 3.1.3** This will enable Forest Research to check the DNA fingerprint of the samples against their database of poplars they have previously tested (over 1000 trees over the last decade or so) and see whether the tree sampled is a common clone (notably, a very small number of clones makes up a large proportion of the samples they have analysed - the Manchester poplar being a prime example) - or a rarer one.

Section 1b Detail the cuttings of the Black poplar - methodology including, time of year, number (no less than 10), size, storage.

Type of cuttings to be taken

- 3.1.4** The methodology for collection of the Black poplar cuttings (a minimum of 10 to be collected), timing of year, size and storage will be as follows:
- 3.1.5** The cuttings will be broken down into respective samples/cuttings to include tip and shoot cuttings where accessible, branch cuttings and stem cuttings to maximise the success rate and make full use of the material available to develop as many viable cuttings as possible for future planting.
- 3.1.6** They will vary in size and diameter from 10cm through to 100cm in length and diameters ranging from 0.5cm through to 30cm aiming to achieve a minimum of 10 of each size and diameter taken. Each cutting will have at least 1 viable dormant bud within 1cm of the cut top which is cut at a slight angle while the bottom is cut straight across under a node.

Equipment to be used.

- 3.1.7** The equipment will consist of clean sharp Okatsune secateurs, branch cutters and Silky saws. In addition to bundling twine, plastic bags, tape and damp paper cloth will also be used.

Processing on site

- 3.1.8** Once collected and transported to the site for processing they will be placed in water to hydrate for a minimum of 24hrs with a root rhizotonic water-based solution prior to potting up and the cuttings will be soaked vertically submerging between 50 - 80% of the stems. This will reduce the number of air bubbles in the cambium and provide additional nutrients to encourage active growth.

Initial processing and transportation:

- 3.1.9** The cuttings will be processed in part on site to allow for ease of transport. Each branch will be cut up into a range of sizes in addition to the main stem. The branch and shoot cuttings will be bundled and wrapped in plastic to reduce the potential for desiccation until they arrive at the site for processing. For larger cuttings the tops will be sealed with putty or sealant to reduce desiccation.

Section 1c Provide details of the nursery where the cuttings will be propagated, including management and maintenance of such.

- 3.1.10** The nursery location where the cuttings will be propagated including management and maintenance of the cuttings is as follows:

Location of the propagation site

- 3.1.11** The cuttings will be transported on the same day as collected to the site in Wiltshire under the control of The Arboricultural Company Ltd for processing. Amelia Williams of The Arboricultural Company Ltd has over 15 years' experience in growing trees from seeds, cuttings, air layers and nursery stock with bonsai.

Processing at the nursery site

- 3.1.12** The cuttings, after being soaked for a minimum of 24hrs, will be then moved into various containers and propagation pots including deep cell pots, propagators and planters. The soil will be predominately a soil-based mix with pumice to allow for drainage and aeration within the soil.

Protection of the cuttings

- 3.1.13** The cuttings will be able to be protected from frosts and winds and extremes of temperature throughout the year as there are covered areas on site to move the potted cuttings into if the weather is adverse. The cuttings will be checked daily and will be watered, fed, and monitored as they develop. They will remain on the site until they are established sufficiently to be ready to transport out to future planting sites and this is envisaged to be for a minimum of 2 years to be of a suitable size for planting out.

2. Prior to the replanting of the cuttings, a scheme shall be submitted to and approved in writing detailing the location and future management and maintenance of such, which should include at least 5 years aftercare

- 3.1.14** Prior to the replanting of the cuttings, details of the locations and future management and maintenance of the cuttings, including 5 years aftercare, will be undertaken as follows.
- 3.1.15** Thomson Environmental Consultants will review sites put forward for the replanting of the 10 rooted Black poplar cuttings, the details of which will be captured in the document found at appendix 1.
- 3.1.16** To work with Twickenham municipal to coordinate suitable planting sites within the borough for a minimum of 10 rooted whips from the Black poplar and organize the aftercare and maintenance of these for 5 years.

-
- 3.1.17** The proposed planting and maintenance of the poplar cuttings will follow the principles contained within the Arboricultural Association an Introductory Guide to Young Tree Establishment, a copy of which can be found at Appendix 2
- 3.1.18** Thomson will liaise with existing black poplar projects to offer any remaining whips and rooted cuttings to increase the area of distribution as a wider project for the native black poplar and the historic value this particular tree represents.
- 3.1.19** The groups will include, but not be limited to, the following: black poplar project of Barnes Common Limited, Farming and Wildlife Advisory Group Southwest black poplar project, UK black poplar clone bank based on Aylesbury Vale District Council and the UK black poplar conservation group and the otter trust black poplar project.
- 3.1.20** We will also offer Black poplar whips and rooted cuttings to organisation including the following: Schools and Colleges within the Twickenham Area, Hampton Court Palace, Kew Gardens, Richmond Park, Bushy Park, the old Deer Park, WWT London Wetlands Centre London Borough of Richmond including Barnes, East Sheen, Mortlake, Kew, Richmond, Twickenham, Teddington and Hampton.

4. Conclusion

- 4.1.1 The London Borough of Richmond Upon Thames have commissioned Thomson Environmental Consultants to provide the information for the discard of condition 'U0146087 NS48 Black poplar' of the approved application 21/2758/FUL.
- 4.1.2 The arboricultural information provided within this report covers each part of that condition as listed in section 2.1.2, providing a detailed response to each section to ensure the best possible outcome for the tree's survival at each phase of the process, to ensure its legacy is maintained.
- 4.1.3 The information provide meets the requirements as set out in condition 'U0146087 NS48 Black poplar' and therefore the condition should be formally discharged.

5. Bibliography

- 5.1.1 British Standards Institution (2014) BS8545:2014 *Trees: from nursery to independence in the landscape - Recommendations*. BSI, London.
- 5.1.2 British Standards Institution (2010) BS3998:2010 *Recommendations for tree work*. BSI, London.
- 5.1.3 British Standards Institution (2005) *Publicly Available Specification 100 (PAS 100:2005)*. BSI, London.
- 5.1.4 Toogood A - (2019) Royal Horticultural Society Propagating Plants DK
- 5.1.5 RHS Handbook (2013) Propagation Techniques by The Royal Horticultural Society
- 5.1.6 Menhinick O, Brown P, Callf A (2004) Plant Propagation Horticultural Correspondence College publication
- 5.1.7 Hollobone J (2008) Propagation Techniques.
- 5.1.8 Johnson, O. & More, D. (2004) *Collins Tree Guide*. London: HarperCollins
- 5.1.9 National Joint Utilities Group (NJUG) (2007) *Guidelines for the planning, installation and maintenance of utility services in proximity to trees*. NJUG, London.
- 5.1.10 National Tree Safety Group (2011) *Common Sense Risk Management of Trees* Forestry Commission, Edinburgh
- 5.1.11 Robertson, J, Jackson, N & Smith, M (2006) *Tree Roots in the Built Environment*. The Stationery Office, London.
- 5.1.12 Parker, J. (2022) An Introductory Guide to Young Tree Establishment . The Arboricultural Association.

Appendix 1 - Schedule of planting locations

Tree Reference	Site type	Site address	Contact	Planting location - requirements	5 year management
1	School, parks, arboretum etc		Name; Email; Phone:	Soft landscape, hard landscape, irrigation (gator bags etc), stakes and ties/tubes	Watering, formative pruning, mulch, stakes and ties/tube maintenance etc Report tree size to Thomson annually
2					
3					
4					
5					
6					
7					
8					
9					
10					

Discharge of Condition U0146087 NS48 Black Poplar

Twickenham Riverside

Appendix 2 - Arboricultural Association: An Introductory Guide To Young Tree Establishment.

Free Download Edition

Arboricultural Association

AN INTRODUCTORY GUIDE TO YOUNG TREE ESTABLISHMENT



Arboricultural
ASSOCIATION

trees.org.uk



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ASSOCIATION
Tree Care Supporter



ation 2022

The home of tree care

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Scan this QR code to download
a copy of each young tree
establishment poster or visit
www.trees.org.uk/YoungTrees

INTRODUCTION

Arboriculture can be described as the science and practice of the cultivation, establishment and management of amenity trees for the benefit of society. In other words, arboriculture is tree care. The Arboricultural Association is the leading body for tree care professionals in the UK and beyond; it is a charity and a professional membership organisation which is committed to inspiring, supporting and promoting the tree care community for a society that better appreciates and cares for trees.

Tree planting is a popular activity, and never more so than in recent years. Many organisations, businesses and political parties in the UK and around the world have pledged to plant trees – tens of thousands, hundreds of thousands and even millions of trees. One of the drivers of this is the need to tackle climate change, with tree planting sometimes presented as the solution to the climate emergency in which we find ourselves.

Unsurprisingly, the Arboricultural Association believes that trees are good and that we need more of them. However, planting a tree is just one small part of the story. Arboriculturists work in tree time, not human lifespans or political cycles. If you consider the first 100 years of a tree's life, then the act of planting might make up half an hour or so, or 0.000058%. It is undoubtedly a very important part of the process – a critical one – but there is so much more to the story.

In the years before an amenity tree is available for planting in the landscape – perhaps a street, a park or a garden – a lot of work will have been done. Propagation and germination, selection and site assessment, tree pit design, consultation, nursery growing and care. After planting there are a few years of young tree maintenance, including watering, and then for decades or centuries to come the healthy survival of the tree is dependent on inspections, pruning, management and protection.

Arboriculture is the profession which spans the whole lifetime of an amenity tree. It includes all the nursery workers, tree officers, contractors, consultants, researchers, suppliers, policymakers and educators who make the whole process happen. Tree planting is important, but it is just one chapter in a long story. The purpose of this guide is to set out some of the factors to consider when seeking to establish, rather than just plant, a tree. Getting a tree in the ground is often the easy part – it is the work which goes on before and particularly afterwards which makes the difference.

This is an introductory guide to young tree establishment; it is not intended to be comprehensive, and it should in no way be seen as a replacement for specialist advice. Arboriculture is an extremely complex and specialist discipline which covers a wide range of very different careers and areas of expertise. This guide provides some ideas for a non-professional audience, as well as signposting the reader to other resources which might prove useful. If in doubt, contact the appropriate arboricultural professional.



WHY PLANT A TREE?

Planting a tree is one of the best things anyone can ever do. Trees do so much for us, bringing our communities environmental, social and economic benefits and generally helping society. They are multi-functional infrastructure, doing many different things at once. Some of these benefits can be quantified and valued; others are less tangible but no less important. Trees can...

- Cool our urban areas.
- Reduce flooding
- Improve air quality.
- Slow traffic speeds.
- Reduce certain types of crime.
- Improve physical health and mental wellbeing for people.
- Provide habitat for a wide range of insects, birds, mammals and fungi.
- Sequester carbon.
- Look beautiful.
- Screen views of undesirable buildings or infrastructure.
- Add cultural and heritage value to an area.
- Provide a sense of place.
- Help community cohesion and local pride.
- Boost commercial activity.
- Create employment and career opportunities.

Many of the benefits associated with trees increase as the tree grows, and it is often the case that the larger the canopy, the greater the benefit. One common metric by which to measure the success of our urban forests is canopy cover – assessing how much of a given area is taken up by tree canopy when looking down from above. However, these canopy cover targets will never be achieved through tree planting alone – we must retain and protect existing trees wherever possible and take appropriate steps to care for those that we do plant.

There are many reasons to plant a tree, and just as many reasons to make sure it is properly looked after.

Inside this guide you will find more information about these tree care posters, which you can also download from our website at www.trees.org.uk/YoungTrees. Watering tags are available in a range of languages and can also be downloaded from our website so they can be printed, laminated and attached to tree stakes to encourage people to water trees: www.trees.org.uk/watering

WHERE TO PLANT A TREE?

When planting a tree it is very important to consider where it is going to be located, taking into account the short, medium and particularly the long-term implications. Trees grow! And if you want your tree to mature into an established specimen which delivers all the wonderful benefits that trees deliver, then it needs to be positioned in the right place. Some of the considerations listed here apply more to planting in hard landscapes (such as streets) than soft landscapes (such as parks or gardens) but they all need to be thought through. This poster should be read in conjunction with the others in this series, especially 'What to Plant?'

Often, the decision about where to plant and what to plant will go hand in hand.

WHAT TO PLANT?

Selecting the right tree to plant is a big decision which could impact the local environment for decades to come. This poster is not intended to tell you the best tree to plant - simply considerations you should think about when making your decision. If we are to future-proof our urban forests against the twin threat of tree pests and diseases, then species diversity is essential. National Equally Important.

1 INTENTION What are you hoping to achieve from this plant? Trees and shrubs are diverse in general, and you can do a lot of planning with reference to species selection.

2 SPECIES SELECTION

COMMUNITY: What are the community preferences and social values of the people in the area?

DIVERSITY: Does the species diversity of the local area meet engineering?

DIVERSITY: Is there enough space for your tree to grow to its full mature size?

CHARACTERISTICS: Do you want fruit, interesting leaves or bark, important nitrogen fixation, or something else? (EVERGREEN OR DECIDUOUS, Year-round foliage or seasonal interest?)

SOIL CONDITIONS: Is the soil acidic or alkaline, sand, loam or clay? What is the drainage like?

MAINTENANCE: How much pruning and maintenance does your chosen species require? How much water?

LOCAL CHARACTER: What species would work best with the existing local heritage and landscape?

PESTS & DISEASES: Are any particular pests and diseases associated with your proposed species?

CLIMATE: How will the climate you choose cope with the likely climate in 50, 100 or 200 years?

3 ROOT How do you want to manage available water? How do you want to manage available nutrients? How do you want to manage available light?

4 ROOT How do you want to manage available water? How do you want to manage available nutrients? How do you want to manage available light?

5 More information about tree species selection: www.trees.org.uk/tree-species-selector

HOW TO PLANT A TREE

Always undertake work of this nature safely and responsibly, including taking all steps to ensure that you have permission from the landowner and are certain that no underground utilities are present. The hole for a new tree should be no deeper than the root ball/container, but approximately twice as wide. Measure the depth of the hole against the depth of the root ball. It is very important to ensure that the final ground level around the stem matches the soil mark, which is where you can see the soil mark. These principles apply whether planting bare-root, rootballed or container-grown trees.

YOUNG TREE AFTERCARE

Planting a tree is just the beginning... the hard part is making sure that it becomes established in the landscape. Practice to put newly-planted trees on a young tree aftercare programme for at least two or three years. This can be achieved without huge investment, in time and attention.

Check stakes, ties and girths. Do they need adjusting or releasing?

PLEASE WATER YOUR TREES!

Newly planted trees need regular watering to establish and thrive. Please water regularly during periods of dry weather. Bath, washing up or rain water is ideal. Watering in the early morning or evening is best.

Where possible, water should be consistently sourced. Harvested rainwater is ideal, but both water and water which has been used for washing up is also suitable.

POR FAVOR REGARME

Por favor, regar de forma regular durante periodos secos. El agua corriente o el agua de lluvia son idóneas. Es mejor regar a primera hora de la mañana o bien entrada la tarde.

Por favor, visita: www.trees.org.uk/watering

PROSZĘ PODLEJ MNIE

Proszę regularnie podlewać w okresach bezdeszczowych. Idealna jest woda z kąpieli, mycia naczyń i deszczówki. Najlepiej podlewać wczesnym rankiem lub wieczorem.

Wojdź na www.drzewa.org.pl www.trees.org.uk/watering

PLEASE WATER ME

Please water regularly during periods of dry weather. Bath, washing up or rain water is ideal. Watering in the early morning or evening is best.

Please visit: www.treecare.org.uk/watering

RHOWCH DDŴR I FI

Rhowch ddŵr i ff'n aml yn ystod cyfnodau sych. Mae ddŵr bath, golchi'r llestri, a glaw yn ddefnyddol. Mae'n well rhoi ddŵr yn gynnar yn y bore, neu gyda'r nos.

Ymwelwch â: www.trees.org.uk/watering

WHERE TO PLANT A TREE?

Planting a tree is a long-term investment, and it is unlikely that the person who is doing the planting will ever see the full benefit of their efforts. Tree planting is a gift for future, as well as current, generations, and we must consider the medium- and long-term implications of what we are doing. This is particularly true when selecting a location for a new tree. The question of where to plant a tree often goes hand in hand with the question of what tree to plant – a particular location might need to be found for a given species, or it might be necessary to select a species for a particular site.

This introductory guide is likely to be most relevant to people planting trees in soft landscapes (grass areas, gardens and parks) rather than hard landscapes (such as streets or plazas), but the considerations are equally relevant regardless of where the tree is being planted. When looking at a potential site it is important to consider the tree not as it is on the day of planting, but in the context of its likely final dimensions – as it should be in 10, 50 or 100 hundred years. Remember to always make sure you have the permission of the landowner before planting a tree.

Think about how close the tree will be planted to buildings, infrastructure or existing vegetation. A tree planted immediately adjacent to a building will grow outwards, seeking the light. A tree planted beneath the canopy of an existing tree is likely to struggle. Planting a tree too close to a lamp column or overhead utilities will mean that regular pruning is required in the future. The same goes for planting

trees which will ultimately obscure sightlines – of views or buildings, but even more importantly of traffic lights, signs and visibility for safety reasons. It is also worth considering how easy it will be to reach the tree in later years for watering and maintenance.

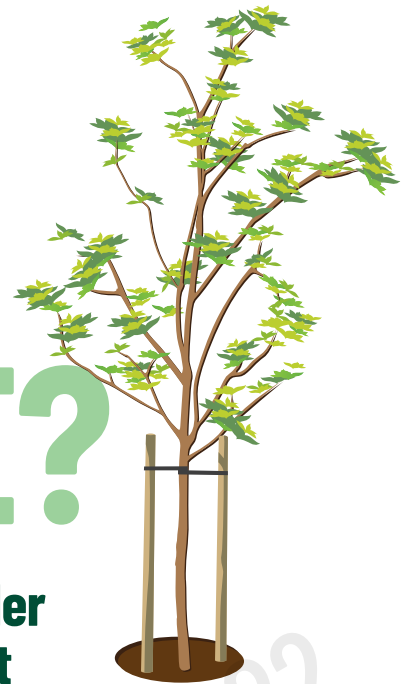
What is below the ground is just as important as what is above it. When matching a tree species with a location, consider the soil type. Is it sandy, loamy or clay? Is it free-draining, or prone to waterlogging? Is there any risk that it might be contaminated? Soil can be tested to find out more about its composition and condition. Underground utilities such as gas, electricity or water often mean that a site which looks suitable for planting proves unsuitable. Hand-dug trial holes may be required before the final pit is excavated – consider having the site scanned for underground utilities before starting. Underground utilities can kill, so if you are in any doubt, always consult an appropriate professional.



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trees.org.uk



WHERE TO PLANT A TREE?

When planting a tree it is very important to consider where it is going to be located, taking into account the short, medium and particularly the long-term implications.

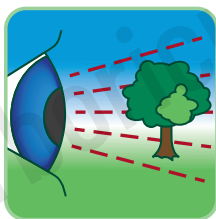
Trees grow! And if you want your tree to mature into an established specimen which delivers all of the wonderful benefits that trees deliver, then it needs to be **positioned in the right place**.

Some of the considerations listed here apply more to planting in hard landscapes (such as streets) than soft landscapes (such as parks or gardens) but they all need to be thought about. This poster should be read in conjunction with the others in this series, especially **What tree to plant?**

Often, the decision about **where** to plant and **what** to plant will go hand in hand.



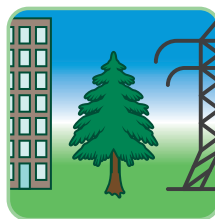
Above- and below-ground utilities



Safety sightlines



Potential obstruction of views



Proximity to structures and infrastructure



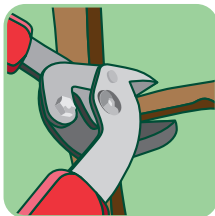
Proximity to existing trees or other vegetation



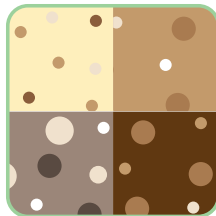
Proximity to roads, pavements and desire lines



Current land usage and local heritage



Access for maintenance



Underground conditions, including soil

IMPORTANT SAFETY NOTICE:
Underground utilities can kill.
Always make sure it is safe to dig before you start.



Always consult an arboricultural professional if in any doubt about tree care.

For further information, including an introductory guide to young tree establishment, visit trees.org.uk.



WHAT TREE TO PLANT?

Trees are multi-functional infrastructure – they do lots of things at once, to different extents – and some species will be better or worse at certain things than others. When selecting a tree species for planting, it is therefore important to consider what the ultimate aims of the planting are. Once you know what you want to achieve through the planting, it becomes much easier to determine which species is most appropriate. In addition, the decision about what to plant will also be influenced by the location of the planting, particularly with regard to how much space is available.

Please remember when selecting a tree species that in order to mitigate the risks of climate change and tree pests and diseases, and to maximise the environmental, social and economic benefits our urban forests bring, diversity in tree species is critical. When considering amenity trees, ‘non-native’ species are just as important as ‘native’ species.

Tree species selection is a complex process. There are many factors to consider, and there is not enough space in this short guide to fully explore them all. There are some key questions to think about which, when combined with additional research and input from a professional arboriculturist where required, can help inform the decision-making process. These questions include:

- **How much space is available for the tree to grow to its final dimensions?**
- **What are the main characteristics you are looking for?**
These might include fruit, autumn colour, interesting leaves or bark, and many more.
- **What are the soil conditions of the proposed location?** Acidic or alkaline, free-draining or prone to waterlogging?
- **How much maintenance does the species you are considering require?**
- **Are there any particular pests and disease of concern locally, either present now or likely to arrive in the future?**
- **What are the preferences and social values of the local community?**
- **What trees are currently in and around the site, and would you prefer to complement or contrast with them?**

In addition to the species, you must also consider other factors, such as size and root stock. Trees are supplied in a variety of different sizes at the time of planting, from whips

(a very young tree, perhaps not more than 1m tall and with no side branches) up to semi-mature specimens. Many trees planted for amenity purposes have a girth size of between 10cm and 18cm. Large trees are often preferred because they create instant impact and are better able to withstand vandalism. However, they are also more expensive and can be more difficult to handle, plant and establish. Small trees are easy to handle and plant, can establish quickly and are often cheap. However, they may require substantial protection for the first few years after planting.

The main types of root stock available are bare root, rootballed and container grown. As with selecting a size, the advantages and disadvantages of each root stock type should be considered. Bare-root trees tend to be cheaper and easy to handle and plant, but the range of species available is often relatively limited and they must be planted within the standard October to March planting season. They will also have lost much of their fibrous root system in production. Rootballed trees come with their fibrous root system and more species are available, but they can require more specialist handling and planting. Containerised trees can be much easier to transport and plant, offer considerable species choice, preserve the fibrous root system and if necessary can be planted outside the standard planting season (with appropriate aftercare). However, they are considerably more expensive than bare-root trees.

One of the most important considerations when sourcing a tree is biosecurity – preventing the spread of tree pests and diseases. Oak processionary moth and ash dieback (to name just two) were both imported to the UK on trees sourced without proper biosecurity practices. You should only ever purchase a tree from a reputable nursery with strong biosecurity practices. Trees should be UK-grown or, if imported, should have been subjected to an appropriate quarantine period before planting out.

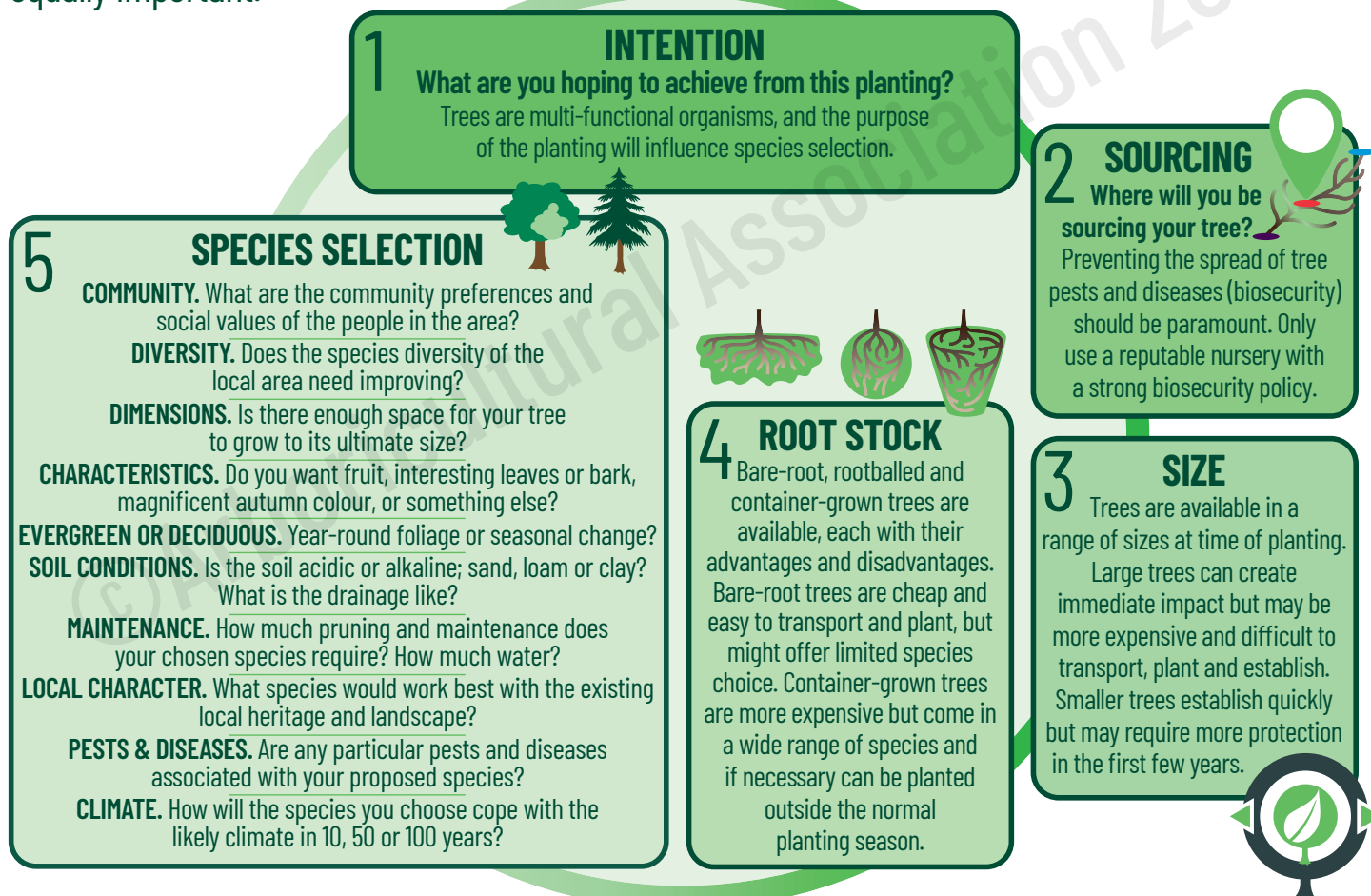


WHAT TO PLANT?

Selecting the right tree to plant is a big decision which could impact the local environment for decades to come.

This poster is not intended to tell you the best tree to plant – simply to set out some considerations you should think about when making your decision.

If we are to future-proof our urban forests against the twin threats of **climate change** and **tree pests and diseases**, then species diversity is essential. Native and non-native trees are equally important.



More information about tree species selection can be found in the Trees and Design Action Group publication *Tree species selection for green infrastructure*, available here:

www.tdag.org.uk/tree-species-selection-for-green-infrastructure.html

Always consult an arboricultural professional if in any doubt about tree care.

For further information, including an introductory guide to young tree establishment, visit trees.org.uk.

