Port of London Authority &

London Borough of Richmond upon Thames

Wooded Towpath Plan 2022-2036

Tree Survey and Tree Management with Ecological Considerations

Towpath between Ferry Road Kew and Beverley Brook

Rootcause Ltd & Wild Future Outdoors Ltd

Contents

Towpath east of Kew Pier

1. Overview

The Port of London Authority (PLA) and Richmond Council (LBRuT) have owner and manager responsibilities over a large proportion of the towpath on the Surrey bank of the River Thames between Kew and the downstream borough boundary at the Beverley Brook.

This management plan seeks to unify the approach taken by both organisations to managing and maintaining the bank and towpath environment for the future, focusing in particular on tree and woodland management but also considering wider ecology, heritage and user matters.

The towpath environment

This section of the Surrey bank has become much more wooded in recent decades. The bank and riverside margin have a large number of mature trees, but these areas appear dense and overgrown due the density of natural regeneration of young and semi-mature trees and shrubs. This increase is generally welcome and brings many benefits, but it has been at the expense of more open space, other habitats and important views along the bank.

The consequence of no proactive woodland management will be a ribbon of mature trees along the river's edge obscuring views of the river. Densely grown mature trees have a propensity to collapse damaging the bank and affecting access along the towpath and navigation.

The towpath is very popular with residents and visitors for walking, cycling, and running. It is a route to work and school as well as a place for leisure and a National Trail. The towpath's natural surroundings appear to be an important element of this popularity, as well as the views across the river and the walking and cycling link it provides between the 'village' centres along the river.

The need for a management plan

Although audits, location-specific plans and management have been undertaken in the last two decades – including a comprehensive survey and associated plan by the PLA in 2008, when the trees were first tagged – a single, joined-up and up-to-date plan is essential for delivering a complete and unified vision for this part of the Thames towpath. The Thames Strategy – Kew to Chelsea strategy document (2002) summarises the need for a management plan in its "The Wooded Tow Path" section which concludes with policy recommendation LOS6:

"When used by barges the Tow Path would have been clear of riverbank vegetation...The vegetation that has grown up along the riverbank is mainly self-seeded, with sycamore and ash prevalent. Horse Chestnut, London Plane and various species of Poplar are also present. Many of these are now reaching maturity. Lombardy poplar was commonly planted as a screen or windbreak around sports fields and public utilities. The rare native Black Poplar, which is the subject of a species action plan in the London Biodiversity Action Plan is also present…The planted and self-seeded trees along the Tow Path have grown up to the point that the path is now for the most part enclosed within a shaded corridor. There may be an opportunity in places to cut back the understorey growth along the riverbank to reveal important local views to the historical waterfronts and landmarks on the opposite bank. In considering

the potential benefits to be achieved from cutting back understorey growth in appropriate locations, it will, however, be necessary to take into account issues of nature conservation importance. This is particularly the case along the Tow Path opposite Old Chiswick and Hammersmith Mall. This must, of course, be done in an ecologically sensitive way, taking account of the bird nesting season and bats…The wooded Tow Path is one of the most important landscape features along the river between Kew and Putney. Despite its narrow width it acts as an effective screen to adjoining built development. Where the planting is more fragmented, for example at Barnes Waterside, the neighbouring development is much more visible."

"There is a lack of clarity over the roles and responsibilities for managing the Tow Path. The London Borough of Richmond-upon-Thames document "Riverguide" establishes the local authority's understanding. The riverbank (including the maintenance of trees and vegetation) is the responsibility of the PLA; the path is the joint responsibility of the PLA and the local authority. The London Borough of Richmond-upon-Thames is also the Highway Authority. The entire path is a Public Right of Way."

"Policy Recommendation LOS6: A management plan for the wooded Tow Path should be prepared to provide a diversity of age and structure which will ensure its long-term protection as a landscape and heritage feature and enhancement of its nature conservation interest. This should clarify ownership of the path and roles and responsibilities for landscape management and maintenance."

2. The 2022 management plan

The aim of the plan process is to refresh the data held about the towpath trees and environment, and to recommend a management system that improves and safely maintains the landscape character of mature trees and woodland, whilst informing cyclical bank repairs and maintenance and ensuring river navigation is unaffected. It also incorporates the conservation or creation of other wildlife habitats and the improvement and maintenance of open space and views for users. It identifies some options for larger projects but focuses on establishing a basic management regime for the future.

The plan should be clear and enable practical delivery through in-house staff, contractors, partners and volunteers. It works alongside the Thames Strategy – Kew to Chelsea document, the Richmond Biodiversity Action Plan and other local policies.

Recording the towpath

The PLA breaks the towpath into short, numbered sections for the purposes of positioning and work programming. Generally, the start of each section is denoted by a set of stone steps built into the revetment; each is numbered through a metal label on one of the upper steps. The number applies to the section downstream of the steps. Starting at Ferry Lane, Kew, the steps are numbered 1, and this applies to the section downstream to Kew Marine; section 2 begins here and runs to the steps just east of Kew Pier; and so on. The final section of the survey is number 45, up to the Beverley Brook on Putney Embankment. There is a short section 0 upstream of section 1 which marks the end of the PLA's ownership.

The towpath diameter has been divided into four zones: Landside Margin (LSM), Towpath, Riverside Margin (RSM) and the Bank and the position a tree or group of trees was growing was recorded. The Riverside groups usually include both bank and riverside zone.

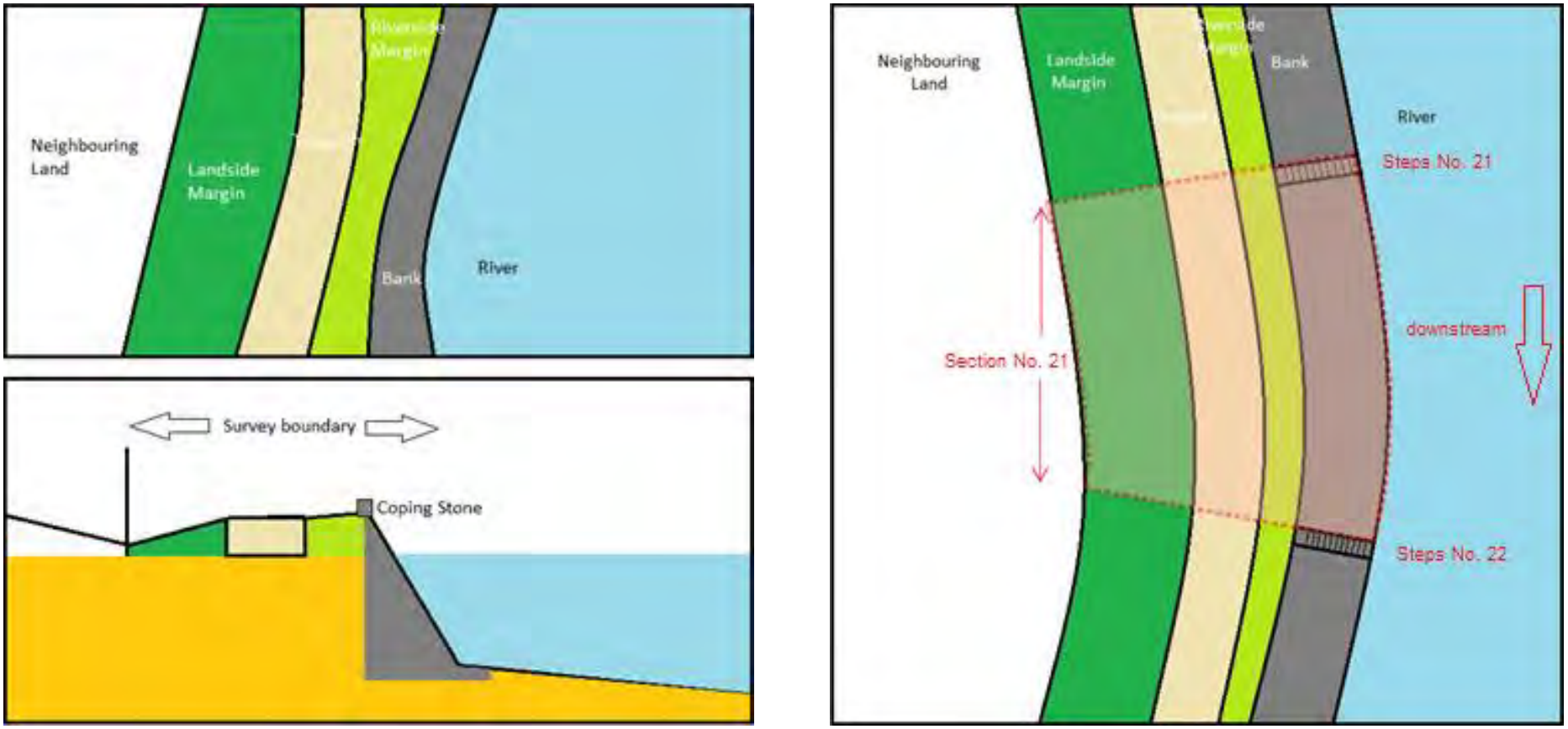


Diagram of the survey area and section numbering system

Towpath Tree Survey

The aims of the survey were to survey all mature trees along the towpath sections on the bank or in the riverside margins.

All mature trees on the bank or riverside margin were recorded. Trees were recorded on the landside margin when this was in the management of the PLA. Younger trees were recorded in groups.

The aim of the survey was: -

- to provide tree details to inform bank repair and maintenance programmes.
- to provide details of tree location to inform a tree management strategy.
- to identify important trees.
- to identify any trees on PLA owned landside sections of the towpath (Occasionally potentially hazardous trees on adjacent land were recorded when the hazard was apparent).
- to identify trees or parts of trees that could be hazardous to river users, towpath users or to neighbours.
- to identify where trees could affect navigation because their foliage is low.
- to identify trees that negatively affect the use of the towpath by pedestrians and cyclists.
- to highlight where the bank has been damaged by trees which may help prioritise bank repairs.

Open space and ecological management

Wild Future Outdoors Ltd. undertook desktop and site surveys to inform recommendations on integrating the tree survey with woodland and other land management along the towpath, to benefit wildlife and people.

The proposal was:

- To briefly survey and assess the woodland structure and ground vegetation.
- To identify key areas of ecology or amenity interest.
- To develop a set of generic management principles to enable sustainable management of the wooded landscape along the towpath and allow revetment inspection access.
- To suggest specific management proposals for key areas of interest.
- To assign a management priority level to each section / key area.
- To work in concert with the tree survey to ensure that objectives and reporting are aligned and develop an approach to work programming that can be integrated into PLA and LBRuT scheduling.
- To suggest training applicable to the new in-house maintenance team to enable effective delivery of the management plan.

Towpath Ownership

Not all sections of the towpath are owned or managed by the PLA. The total length of the towpath from Kew to Putney is Approximately 8400m (5.2 Miles). Approximately 1169m of this length is managed by other parties. The towpath is a Public Right of Way and so certain aspects of its management are the responsibility of the Local Highway Authority.

Some sections of the towpath were surveyed even though they are not owned or managed by the PLA/LBRuT sections because the PLA/LBRuT may wish to instruct the owners to take action to manage the trees and bank or in the interest of safety or agree action to manage the trees themselves.

Some sections may be the responsibility of LBRuT as they may be the adjacent Landowner. This would need to be investigated and recorded in this document.

Towpath Section	**Approximate Length (m)**
1B	31
2	102
3A	100
5B	151
7B	162
8A	62
19B	126
20	104
21A	360
38B	52
39	45
40A	133
Total	**1428**

Towpath Sections that are the responsibility of third parties.

Responsibilities to Manage Public Rights of Way

The owner or occupier of land with a public right of way must:

- avoid putting obstructions on or across the route, such as permanent or temporary fences, walls, hedgerows, padlocked gates, or barbed wire.
- make sure vegetation does not encroach onto the route from the sides or above, bearing in mind the different clearances needed for users of different types of route, for example by horse riders.
- Obstructing a public right of way is a criminal offence. The highway authority has the right to demand you remove any obstruction you cause. If you do not, the highway authority can remove the obstruction and recover the cost from you.
- not disturb the surface of byways, restricted byways, and unsurfaced public roads, e.g., by cultivating.

The highway authority must:

- keep the surface of public rights of way which are maintained at public expense in a fit state for public use.
- make sure obstructions are removed.
- maintain some bridges over natural watercourses, including farm ditches.
- provide at least a 25% contribution to landowners' costs for replacing and maintaining structures for the control of animals, e.g., gates or stiles, on completion of the work to a standard the highway authority is satisfied with.
- make sure there are no notices that prevent or discourage the use of a public right of way.
- add signs where a public right of way leaves metalled roads.
- make sure the public's rights to use a public right of way are protected.
- make sure landowners carry out their duties and take action if they do not.

The Law does not say who is responsible for dangerous trees on Public Rights of Way. Highway authorities will not normally be responsible for the management of trees either side of a Public right of way. However, Highway Authorities often take the view that a dangerous tree is a risk to the safety of the public using a right of way and will take action themselves to prevent the hazard. Highway Authorities could serve a notice on the landowner of the towpath or adjacent land to take action to eliminate hazards to the public, on public rights of way.

3. Tree Species on the towpath

The tree species on the towpath including bank, riverside margin and landside margin are described in the graph below. This is based on the number of stems which may include multi-stemmed individual trees.

The species list is dominated by Norway Maple (*Acer platanoides*, 513 stems), Sycamore (*Acer pseudoplatanus,* 1621), Common Ash (*Fraxinus excelsior,* 1253), Elm (*Ulmus* species, 561) and Common Elder (*Sambucus nigra*, 433). Norway Maple and Sycamore are non-native and Grey Poplar (Populus x canescens) is a hybrid of white poplar which is introduced and naturalised in the UK and Aspen which is a native. Norway Maple and Sycamore are introduced and naturalised in the UK.

Common Ash and Common Elder are native species.

The species origins in the UK are summarised in the table below. The discussion of whether some species like Large Leaved Lime are native or introduced has been debated for a long time.

Native Species	**Naturalised/Introduced**	**Cultivated**
Silver Birch (*Betula pendula*)	Tree of Heaven (*Ailanthus altissima*)	Sweetbay (*Laurus nobilis*)
Common Hawthorn (*Crataegus monogyna*)	Common Laburnum (*Laburnum anagyroides*)	Oriental Plane (*Platanus orientalis*)
Common Ash (*Fraxinus excelsior*)	Apple (*Malus* sp.)	London Plane (*Platanus* x *hispanica*)
Common Holly (*Ilex aquifolium*)	Western Balsam Poplar (*Populus trichocarpa*)	Lombardy Poplar (*Populus nigra* 'Italica')
Black Poplar (*Populus nigra subsp. betulifolia*)	Canadian Poplar (*Populus* x *canadensis*)	Cherry Species (*Prunus* species)
Bird Cherry (*Prunus padus*)	Grey Poplar (*Populus* x *canescens*)	Pear Species (*Pyrus* species)
Common Oak (*Quercus robur*)	Common Gean or Wild Cherry (*Prunus avium*)	Dragons Claw Willow (*Salix matsudana* 'Tortuosa')
Goat Willow (*Salix caprea*)	Myrobalan Plum (*Prunus cerasifera*)	
Black Elder (*Sambucus nigra*)	Common Pear (*Pyrus communis*)	
Small Leaved Lime (*Tilia cordata*)	Turkey Oak (*Quercus cerris*)	
Large Leaved Lime (*Tilia platyphyllos*)	Holm Oak (*Quercus ilex*)	
Wych Elm (*Ulmus glabra*)	False Acacia (*Robinia pseudoacacia*)	
Elm (*Ulmus* species)	White Willow (*Salix alba*)	
	Weeping Willow (*Salix* x *chrysocoma*)	
	Crack Willow (*Salix fragilis*)	

Important Native Species

The table above lists eleven native species on the towpath. The most important are included in the table below because they are less common than they once were or because they provide ecological benefits in an urban environment between land and water.

Native Species	**Examples of Benefits (extracts from Woodland Trust.org)**
Hawthorn (*Crataegus monogyna*)	The native hawthorn hosts or provides food for more than 300 insects. Hawthorn flowers provide nectar and pollen for bees and other insects. The berries are eaten by migrating birds and small mammals. The dense, thorny foliage makes good nesting shelter for many species of bird.
Elm (*Ulmus* sp.)	The leaves provide food for the caterpillars of the white-letter hairstreak butterfly, which is endangered in the UK having declined alongside its foodplant due to the impacts of Dutch elm disease.
Apple (*Malus* sp.)	Crab apple is the only native species but other varieties are now commonly naturalised. All species provide an important host and food source for wildlife due to their flowers, fruit and bushy nature.
Silver Birch (*Betula pendula*)	Silver birch provides food and habitat for more than 300 insect species. The light foliage means an open canopy for plants growing on the ground and the leaves are an important host for moth larvae, aphids and their predators. The catkins are eaten by small birds and, when mature, woodpeckers and other hole-nesting birds often use the trunk.
Willow (*Salix* sp.)	The catkins of all willows provide an important source of early nectar and pollen for bees. The leaves are eaten by the caterpillars of several moths.
Black poplar (*Populus nigra*)	Black poplar is the food plant for caterpillars of many moths, including the hornet moth whose boreholes are seen on trees along the towpath. The catkins provide an early source of pollen and nectar for bees and other insects, and the seeds are eaten by birds.

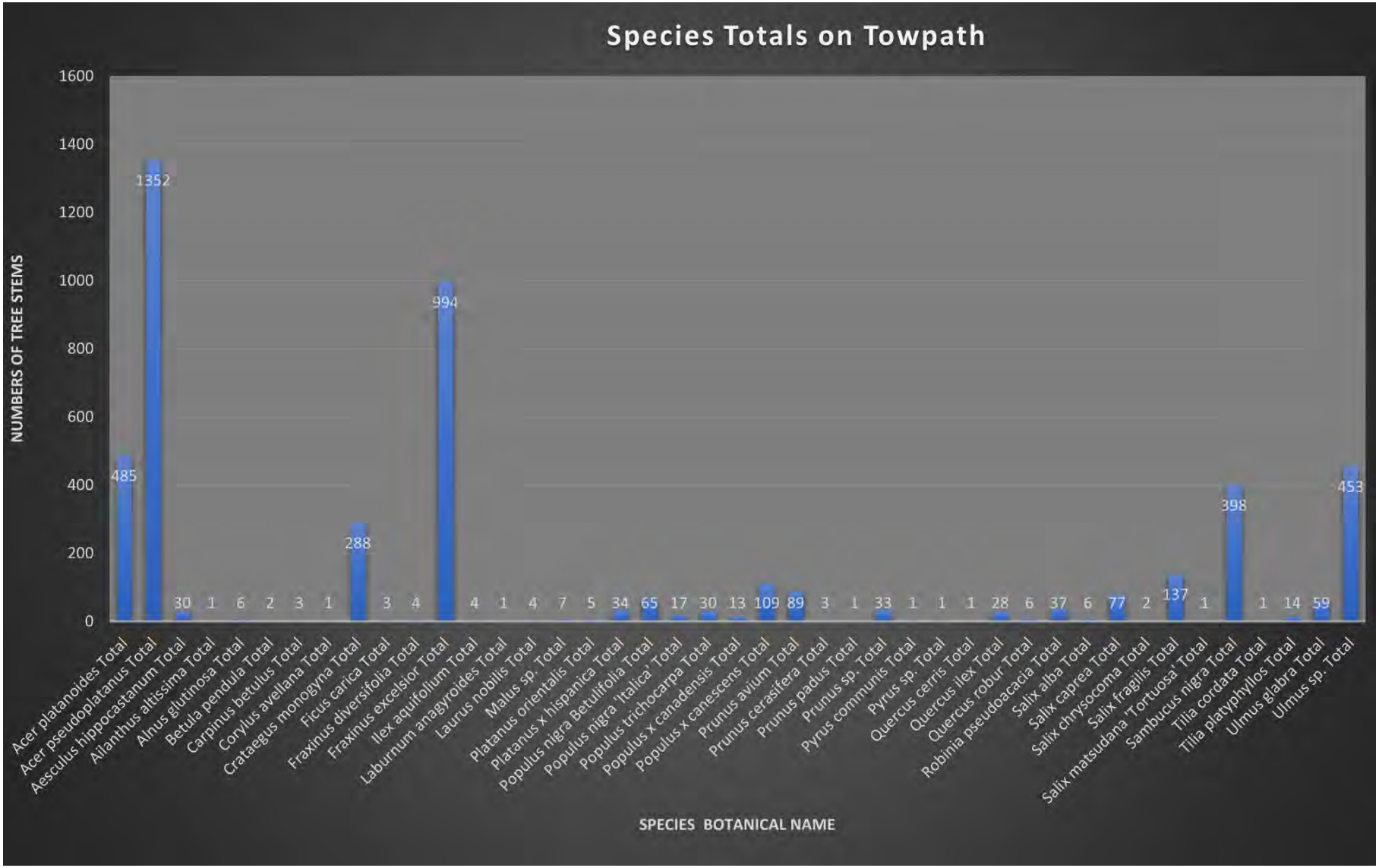


Figure 1A: Species Stem Numbers Summary for all areas of the Towpath (Bank, Riverside and Landside)

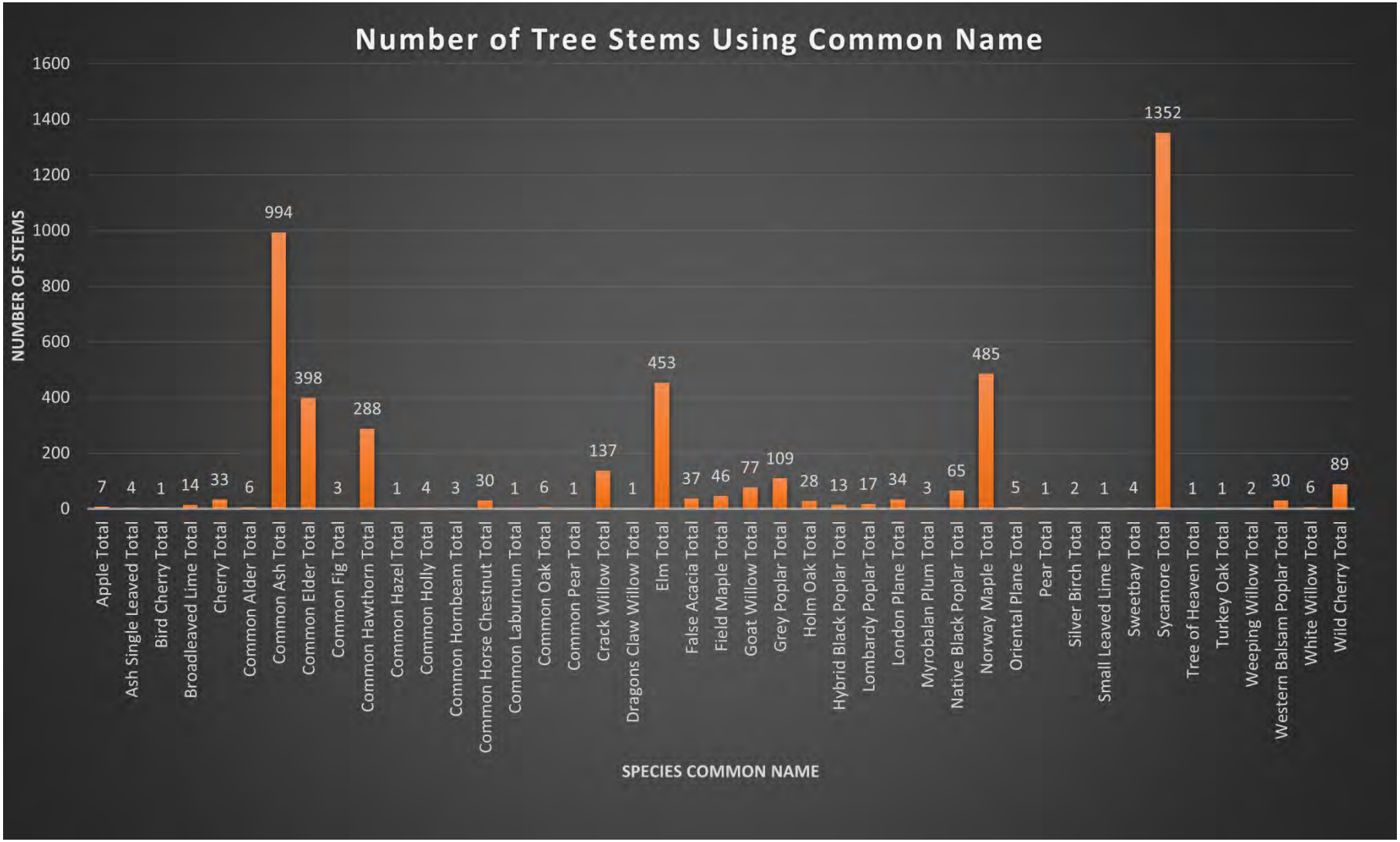


Figure 1B: Species (Common Name) Stem Numbers Summary for all areas of the Towpath (Bank, Riverside and Landside)

The towpath sections in PLA control are bank, riverside margin and in some cases the landside margin. Some of these sections were surveyed even though they are not in PLA control where the ownership is known or unknown. The landside margins of sections 25 and 26 are referred to as Leg o' Mutton Woodland which has a different character to the other towpath margins, and a separate management plan following a similar approach is to be undertaken for this area in 2022.

The total number of tree stems recorded in the survey is 5882 (including multi-stemmed individual trees). 1172 of these are growing within the Leg o' Mutton Woodland (Landside of sections 25 and 26) emphasising the importance of this woodland habitat.

The species distribution for the Leg o' Mutton Woodland is shown in Figure 2. The Total towpath data without the landside sections is shown in Figure 3.

The most significant difference is the proportion of Norway Maple (*Acer platanoides*) within the Leg o' Mutton Woodland. This is because this section contains a row of mature Norway Maple adjacent the Swedish School which will be producing seeds.

Native Black Poplar

An important species for conservation is the Native Black Poplar in the Barnes area. These trees have a lot of valuable genetic diversity for this species and are nationally important. These trees are sometimes growing below Mean High Water coming out of the bank but more often are growing at the top of the bank on the river side of the coping stones. The trees seem to subside as they grow larger, possibly growing towards the available light and also the crown develops asymmetrically over the river and the mass of branches causes the trees to subside towards the water. The removal of trees adjacent to younger Native Black Poplar trees – haloing – may reduce the competition for light and space and reduce the degree of this problem in future. Sometimes these trees, especially mature trees, are growing at extreme angles, including horizontal, and they can collapse in these circumstances. When the trees are growing at extreme angles it may be useful (to protect the bank) to coppice or pollard these trees. The species should be able to tolerate this kind of management but experts in conservation of native black poplar will need to be consulted on the most appropriate management. If they reach the point of collapse the trees are likely to be lost to the gene pool but the issue is too complex to decide without consultation at this stage. The Richmond Biodiversity Action Plan has a Species Action Plan for Native Black Poplar.

Elm

The Bank, Riverside and Landside margins contain a lot of young Elm shoots in patches. English Elm does not grow from seed but regenerates from roots of existing trees, including dead trees; Wych Elm does produce viable seed. Elm has been decimated by Dutch Elm Disease since the 1960's and 1970's (in London). The young Elm shoots regrow but when they reach a stem diameter of 150mm diameter or more they are often attacked by the Elm Bark Beetle and consequently the associated fungus causing Dutch Elm Disease and the Cycle starts again. There are some locations where Elms of 30-40cm diameter are growing but some trees in the group have succumbed to the disease and it is likely they will all be affected eventually. Dead Elm, especially the larger

ones can be a hazard for towpath users as they can fall unpredictably across paths. Elm will need to be periodically checked and removed as and when they start to succumb to disease. This can be elicited in a late summer survey each year. Elm is usually coppiced, as the fungus does not kill the roots, the new shoots provide a unique food source for certain species of insect. A recently arrived non-native species, Elm Zig-Zag sawfly, has been seen on Elm in some parts of the towpath and is another pest for elm trees to cope with. The larvae can cause severe defoliation of elm trees, creating a distinct zig-zag feeding pattern across leaves, but the impact this will have on native elm feeders – including the rare White-letter Hairstreak butterfly which is also present here – is not known.

Implication of Tree Species Numbers.

The dominance of some non-native species particularly Norway Maple and Sycamore can have implications for the natural flora and fauna. Carpets of young Norway Maple and Sycamore will prevent natural regeneration of native species of trees, plants, and ground flora.

Therefore, in general where management allows these species will be removed in favour of native species to encourage natural regeneration of native species. Sometimes native species may need to be planted where desirable species cannot spread naturally.

Ash regenerates freely and, although native, it can dominate inhibiting diversity. The potential impact of Ash dieback (*Chalara*) on this species could have a significant impact on the appearance of the towpath but fortunately there is no obvious sign of ash dieback currently.

Figure2: Species Stem Numbers Summary for Leg o' Mutton Woodland

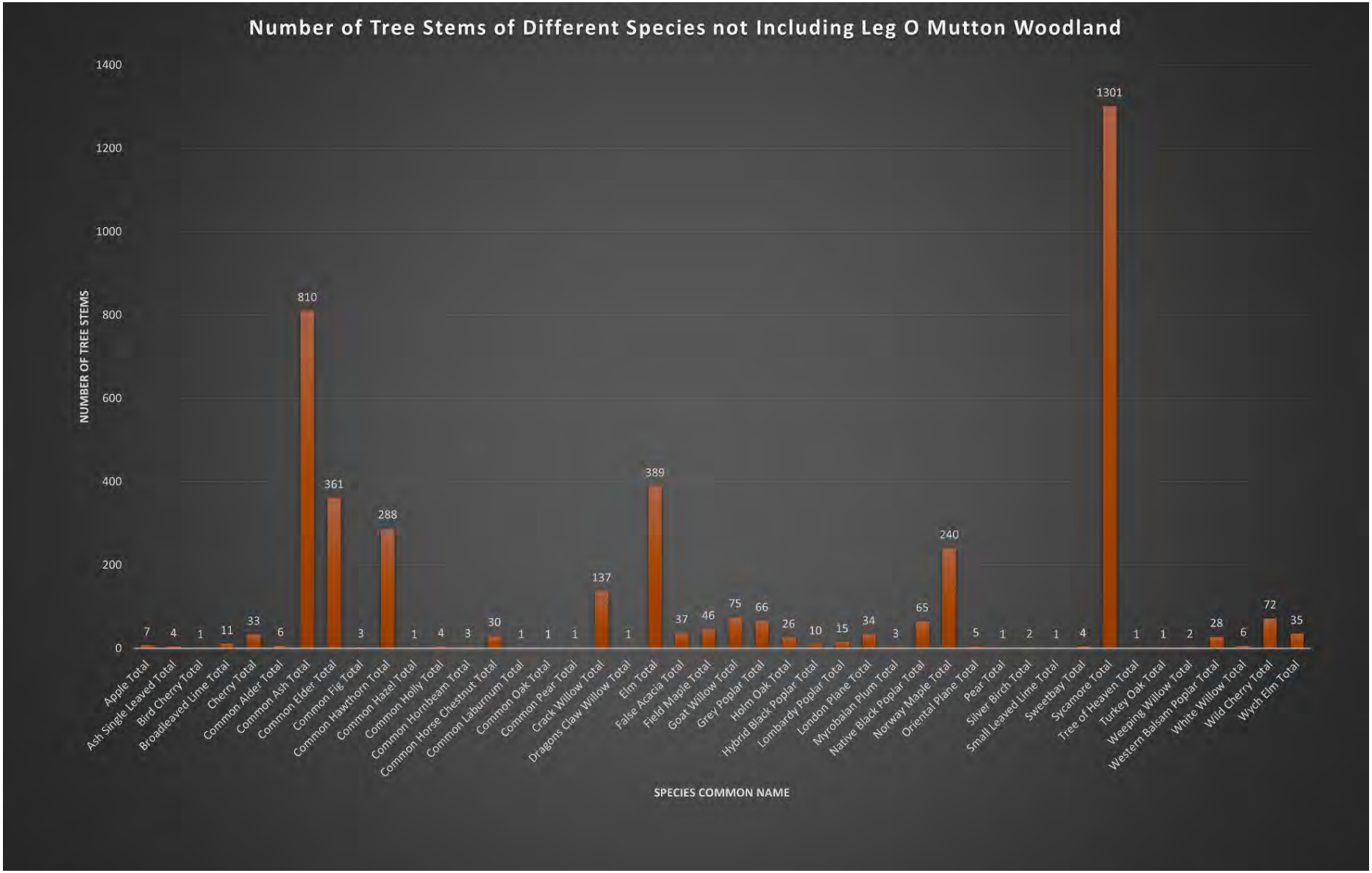


Figure 3: Species Stem Numbers Summary for all areas of the Towpath (Bank, Riverside and Landside) without Leg o' Mutton Woodland

Observations on the Data

A summary of the tree data (counted in terms of numbers of tree stems) is included in Appendix 2.

Number of Tree Stems

The number of tree stems in each section in Appendix 2.1 is related to the size of the section. Clearly the largest numbers of trees are in the section with the largest areas because they include Leg o' Mutton Woodland, section numbers 25 and 26.

The density of trees is lowest in the Barn Elms to Putney stretch (sections 43, 44 and 45), and in Mortlake (sections 18, 19A, 19B, 20 and 21A).

The parts of the towpath where the trees are growing is revealed in Appendix 2.2.

The tree stem numbers in the different parts of the towpath are as follows.

Numbers of Tree Stems in Different Towpath Margins					
Bank	Riverside Margin	Bank/Riverside Margin	Landside Margin	Offsite	Total
1071	611	2120	2079	1	5882

There are more tree stems on the bank than the riverside margin because often the riverside margin is narrow compared to the bank.

There are a large number of trees listed as bank/riverside margin. These are the large groups of younger trees. Generally, trees were more common on the riverside margin and the upper parts of the bank between the concrete coping and the setts in the bank. The formation of the space between the setts and the concrete coping stone likely left larger gaps where seeds could germinate and because it is at the top of the bank the seeds are less likely to be washed away by the tides (at high tides the water movement is slower). The bank repairs should try to prevent any ridges or gaps where seeds could germinate at the top of the bank on the riverside of the coping stone. Once trees germinate here, they appear to produce lateral roots that grow between the upper row of setts and the coping stone pushing them apart and exacerbating the problem. Once trees germinate and produce larger roots it will be difficult for the structure to resist damage. As a rule of thumb, tree roots can exert a pressure of 1 tonne per square centimetre, usually this pressure will deform the weaker part of the system (the soil) but between hard structures the force will affect the weaker structure first (the setts) and later the coping stones. Sometimes a tree on the riverside margin has grown under the coping stone and disturbed its position but more commonly the damage is caused on the riverside of the coping stone.

Often the Landside margin is not part of the PLA's demise, so the 1173 landside stems is a large number but almost 700 of these trees are on the landside margin of section 25 and 26, the Leg o' Mutton Woodland (See the graph Appendix 2.2b)

Tree Maturity

Mature woodland in Britain consists of large proportions of mature trees with few young and semi-mature trees. The woodland on the towpath is relatively young; there are many more young and semi-mature trees in most sections than mature trees.

Age Distribution of All Trees Along the Towpath					
Young	Semi Mature	Mature	Over Mature	Dead	Total
3324 (57%)	1778 (30%)	756 (13%)	11 (<1%)	13 (<1%)	5882

The high proportion of young trees is probably because the group of trees on the towpath have a large perimeter for their areas and so there is more light available under the mature trees than there would be in the inner parts of a woodland. The high proportion of young and semi mature trees indicate a lot of natural regeneration in the riverside and landside margins in the last 25 years, perhaps reflecting a change in management; whether a change in grass management on the edges of the towpath so that seedlings can become established, or mature trees have been removed creating space and for younger trees.

Species distribution

The most species diversity is in sections 25-32. Section 25,26 and part of 27 form the Leg o' Mutton Woodland so it has a larger area, and it contains more mature trees than many other areas. Sections 27 to 32 are all adjacent St Pauls School and in this section of the towpath the PLA own the landside margin of the towpath which were surveyed. There are also trees in adjacent land within the school, so the trees here are part of a larger community of trees than many other sections so there are more species here to set seed or grow by vegetative means.

Potential for tree use by Bats

The potential of trees in different sections to support bats has been analysed in Appendix 2.5. The presence of potential roosting sites in trees is normally greater in mature trees as they have more decay, cracks, loose bark, and other defects. Equally bats do not occupy every tree with potential as it is rare to find bats during tree work. The figures for bat potential are difficult to interpret but generally the potential for bat roosting sites is low and could be improved. The towpath is a woodland habitat adjacent to river and so it is likely to be a valuable resource for several species of bat. The creation of roosting habitat, perhaps veteranisation of some young mature trees may be a useful project. This has been carried out to a number of early mature Ash trees in the towpath area adjacent Kew Gardens, but this is an observation, the reasoning behind it is not known.

4. River Navigation

The River Thames in this area is the focus of recreational and sporting activity on the tideway and the management of the towpath's trees has implications for safe navigation of the river, especially for small recreational vessels including human and wind-powered boats.

The PLA's Tideway Code is a special navigational concession which applies to these boats and allows them to use the faster flowing water around the outside of the river's bend and the slack water on the inside, swapping over at designated Crossing Zones, to provide the easiest and safest navigational option.

This practice brings boats into the Inshore Zone of the southern bank for a large proportion of the Kew to Putney reach at, especially at high water. Trees with a low canopy over the water and trees in poor condition with the potential to collapse can become a hazard to boats and users, particularly those navigating backwards and for novice or occasional users.

The key areas for management of trees for navigation have been identified as sections 6-7B; 7B-13; 23-27; 30-33; and 33-39. In these areas, tree management needs to take account of navigational safety ahead of other management aims. This is discussed in more detail in section 6.

5. Ecology and Open Space considerations

The Surrey bank of the towpath between Kew and Putney is a rich area for history, biodiversity and public amenity. The management of individual trees, woodlands, other wildlife habitats and the towpath itself is interwoven with these factors. Priorities will differ from section to section, according to the local environment.

Designations

In Richmond, the river and the towpath fall within the River Thames and tidal tributaries Site of Metropolitan Importance for Nature Conservation. This designation - the highest grade of SINC (a non-statutory designation) in Greater London - may be driven by the inter-tidal habitats, but the citation notes that in places the towpath supports a diverse flora.

Adjacent to the towpath between Kew and Putney are other important sites for nature which management of the towpath can potentially impact, positively or negatively. From west to east these include: Occupation Lane and Snail Reserve, Kew Riverside; Leg o' Mutton Local Nature Reserve, Barnes; London Wetland Centre, Barnes; Beverley Brook, Barnes. The managers of these sites should be consulted about changes to management along their boundaries.

The towpath itself is a public right of way for its entire length through this section as well as a National Trail.

Features of interest

Habitats

Veteran trees and deadwood

Large, mature and over-mature trees are found along the towpath. As well as being notable landscape and historical features, these veterans support a wide-range of wildlife – especially bats, invertebrates and fungi – through their crevices and deadwood. Younger trees with decay features may also provide the same benefits.

Broad-leaved secondary woodland

Historically there was little woodland cover between the river and the towpath and what is developing - in the natural course of succession - is secondary woodland on what was once open ground. Secondary woodland is denser, darker and species-poor compared to older woodland and needs both time and management to reach its best potential. On the towpath, ash, sycamore and Norway maple dominate the natural regeneration; in places, the woodland is

developing at the expense of richer open habitats. The wooded towpath does still provide food, shelter and a link for wildlife, however, and natural regeneration is generally better for biodiversity than tree planting. The wooded areas also provide a screen against light pollution and visual intrusion.

Ivy is an important attribute in these areas, helping to replicate some of the niches that are found in more mature woodlands.

Parkland

Where tree cover is below 30%, and open habitats persist, the character of the towpath would be better described as parkland. These areas have a better mosaic of habitats – retaining some open areas as grasslands, woodland clearings and riverside vegetation – but enjoying some of the benefits of tree cover. These areas are likely to be richer in wildlife and are less enclosed for users.

Riverbank

There are no natural bankside areas within the Kew to Putney part of the Surrey bank; all the revetment is either cobbled or concrete. This restricts the development of high-quality riparian vegetation, which is further constrained by the increasing tree cover developing on the bankside. Some interesting areas of vegetation do persist in more open areas, however, with occasional stands of tall marginals or reed and club-rush present.

Key species

Plants

Native black poplars are a nationally important feature of this part of the Thames; rare in the UK, the borough's trees of this species have a unique genetic identity which will play a role in conserving it for the future.

Bats

At least eight species of bat are known within 750m of this reach of the river. The Thames is known to be a vital dark corridor for the movement of bats and the towpath is excellent feeding habitat. The adjacent London Wetland Centre in Barnes is of major importance for bats.

Other mammals

Hedgehogs have been recorded close to the towpath in Barnes and Kew and these areas are known to have good local populations; it is likely therefore that hedgehogs make use of the towpath for foraging and hibernation.

Birds

More mature trees, or wider sections with younger but ivy-clad stems, provide roost and nest sites for great spotted woodpecker and tawny owl. One of the hybrid poplars along the Leg o' Mutton boundary hosts a heronry.

Invertebrates

Stag beetles have been recorded from areas close to the towpath; appropriate deadwood habitats occur in places. Two snail species with limited UK distributions that depend on shady riparian woodland are likely to be present: the two-lipped door snail is historically known from Kew Riverside and the German hairy snail occurs further west, along Old Deer Park, and may possibly be found here.

The white-letter hairstreak butterfly is endangered and Red Listed in the UK, and a priority for action under the UK, London and Richmond Biodiversity Action Plans. It depends entirely on elm trees and thus its conservation is inextricably linked with elm and Dutch Elm Disease. The butterfly is present on elm along the towpath and there are recent records from Small Profits Dock, Leg o' Mutton and the towpath near St Paul's School.

Invasive species

The history of land-uses along and adjacent to the towpath, as well as tidal inundations bringing ashore detritus from elsewhere, mean there are populations of particular non-native species which have been introduced and become established along the banks. Some of these are interesting features and have little long-term impact, but others are invasive and can have lasting impacts on habitat and water quality. Some have legal requirements for control, but all should be assessed and appropriate action taken to reduce or remove them from the local environment.

Public amenity

The importance of this section of the towpath to its users cannot be overstated. It offers a green route and access to nature for pedestrians and cyclists using it for leisure, commuting to work or school and other local travel. It frames the south bank of the Thames with its woods, open spaces and viewpoints. History is visible along the river and behind the towpath through significant buildings, industrial and marine heritage, and views across the city. Commercial use continues through ferries and marinas, and increasingly as a sustainable delivery local route.

It is important that the user route is of high quality with appropriate signage, information and seating, whilst retaining its present character.

Important Local Views and Prospects

There are several Important Local Views – from specific viewpoints to specific landmarks – and Important Local Prospects – less specific in terms of the viewpoint and landmark but often with 180° or wider views. Those impacted by this section of the towpath which are detailed in the Thames Strategy Kew to Chelsea and Richmond's Local Plan have been included within the scope of this plan.

6. Management of the towpath

Future vision

- The towpath should a habitat mosaic corridor punctuated with mature trees, with areas of open and riverside habitats, scrub and woodland managed in appropriate parcel sizes to for their location achieve the benefits associated with each element, for wildlife, towpath users and river users.
- Where adjacent to developed areas, the landside margin should be open woodland with high canopy above a patchwork of understorey and coppice of different height and ages, as well as small clearings where light is not an issue, with vegetated boundary features where possible. This will provide a screen against visual impact and light pollution. Where the landside margin is not wide enough to achieve this, it should be achieved using the riverside margin or a combination of both. Away from developed areas, there is more flexibility for the landside margin to be managed in accordance with prevailing habitats on the towpath and adjacent land, especially where that is managed for conservation.
- The riverside margin and the bank should be managed together, instituting a coppice with standards approach that protects the revetment from significant damage and restores a mosaic of open riverside habitats as well as views that have been lost. This would be achieved by retaining important individual trees of all species but otherwise making a slow reduction in the cover of high forest tree species – especially ash, sycamore and Norway maple – in favour of wet woodland and riverside species.
- The towpath and inshore 'user corridor' must be of a quality and design that reflects both its amenity use and its value as a wildlife corridor. Entrances should be visible and welcoming; the surface must be sufficient to cope with its use but in-keeping with the location; directional signage should clear and at useful frequencies; information signage should interpret the surroundings and the towpath's management; the Inshore Zone must be managed to be provide safe river navigation, unaffected by bank activities and trees.
- Urbanisation of the bank should be resisted unless there is no alternative. Where it is seen necessary that public access or safety of towpath users override conflicting wildlife or landscape aims, all assessment appropriate to existing processes will be undertaken to inform the decision and ensure any legal environmental protection is considered.

Tree Management on the Towpath

The bank and riverside margin have a large number of mature trees, but these areas appear dense and overgrown due the density of natural regeneration of young and semi-mature trees and shrubs. The consequence of no management will be a ribbon of mature trees along the river's edge obscuring views of the river and densely grown mature trees have a propensity to collapse damaging the bank and affecting access along the towpath and navigation.

It is suggested that a management system akin to coppice with standards is applied, whereby mature trees in suitable riverside locations are retained at appropriate spacings and the other trees coppiced at ground level (if they are desirable natives or removed if they are invasive or damaging conservation). The coppice rotations and standard density will vary according to location. Coppicing would not be carried out all at once or in adjacent locations but spread along the river. This will develop a range of habitats and amenity throughout the plan area at all times. If approximately 3000m requires coppicing and, if a 7-year rotation is selected, approximately 430m would need to be maintained/managed in this way each year.

Tree-related damage to the bank

When trees damage or contribute to damage to the bank it exposes the soil in the bank to erosion during tides and can lead to collapse of the bank, breaching of the bank by river water and in extreme circumstances it could contribute to a flood risk.

Most of the bank is granite setts or Kentish Ragstone embedded in mortar down to the riverbank level with a concrete coping stone along the top of the bank. The sloping cobbled revetment is an important feature and its conservation and restoration is an aim within the TSKC strategy (policy recommendation RC4).

The bank side trees often are responsible for damage to the setts and historical cement repairs. In some cases, trees have collapsed pulling away sections of the bank. The amount of damage is proportional to the age of the tree responsible but certain species are associated with damage more often. These are Willow (*Salix* species), Poplar (*Populus* species), and Sycamore (*Acer pseudoplatanus*). Sycamore probably because it is so common. Another common species, Ash (*Fraxinus excelsior*), is also associated with bank damage, but it seems to be less severe than Sycamore.

In some cases, concrete repairs to the banks are less flexible to root growth than the mortar bedded setts and the concrete is girdling the stem preventing stem growth and causing dieback or death of mature trees.

The trees in the riverside margin are rarely associated with bank damage but occasionally the concrete coping stones are displaced by riverside trees.

The repair of the bank near retained trees should as flexible as possible to prevent the retained trees from being damaged by hard surfaces girdling the stem.

Ideally the bank should not have trees growing within it and management and maintenance should try to remove young trees from the bank and remove and repair the bank when mature trees are removed or die, to prevent new trees being established. In contrast the Native Black Poplar should be retained wherever possible, but they should be encouraged to propagate on the riverside of the tow path and not the bank in the long term. There is an argument that tree roots stabilise riverbanks but my observation in this tidal river is that the scale of erosion is probably too great as, once exposed, the tree's root system is undercut by tidal scouring leading to collapse of the bank and the tree. Collapsed trees can be a hazard for navigation.

Management of trees for safe navigation

In the key areas identified for navigation, the tree canopy height over the water and the risk of trees in poor condition collapsing into the water must be managed to reduce the potential hazards to boats and users.

Management guide

Five elements are proposed to guide management decisions for this reach of the river; this plan brings them together into a unified approach:

1. Management policies: the policies which deliver the future vision set out at the beginning of this chapter
2. Tree Survey: recommendations specific to individual trees or group of trees
3. Biodiversity Opportunity Areas (BOA) and Visitor Opportunity Areas (VOA): recommendations specific to areas with value for wildlife and amenity
4. Practical Principles for Woodland Management: to be applied in the delivery of general work, outside the Tree Survey and BOA/VOAs.
5. Section-by-section summary for trees, ecology and open space: the target notes give further details of specific management in each section.

Management policies

The table below highlights the key management policies proposed for the towpath.

1. General tree management and monitoring	The tree survey has looked at individual and groups of trees along the corridor, recording them and recommending a course of management where needed – according to tree species, age, condition, anticipated future health problems, amenity and river navigation as appropriate. Timelines for carrying out the prescribed works are indicated. It is anticipated that the majority of these works will need to be undertaken by qualified tree surgeons, though some ground works may be possible by staff, other contractors or volunteers. All works to numbered trees should be recorded to ensure the register is kept up to date. An update check of tree condition should be carried out at an interval according to the relevant tree policy, but no longer than 3 years.
2. Maintain veteran and specimen trees and increase their number	Existing veterans should be managed to extend their lifespan and their wildlife and landscape value, as far as public safety allows. The loss of these irreplaceable assets must be planned for and their successors either selected from existing trees or, where necessary, planted. • Monitor existing veterans on a regular basis. Maintenance should be carried out by experts in the field and use techniques to mimic natural decline where possible.

	• Identify and map future potential veteran trees; monitor and manage their development. • In gaps in distribution, or where specific species are desired, tree planting should be planned. Where possible, longer-lived native species or species already present on the towpath should be selected. Non-native species should not be preferred where conservation is the aim, only where of historical relevance.
3. Tree management in Navigation Priority Areas	Navigation takes priority over other tree management policies within the following sections: 6-7B; 7B-13; 23-27; 30-33; & 33-39. Within these areas, the tree canopy will be raised to and maintained at 3m above high water level, to ensure there is safe navigational access for human-powered boats beneath the trees on all stages of the tide. Trees within these areas identified through ongoing tree surveys as being in poor condition will be prioritised for removal to reduce the risk of their collapse into the water.
4. Create open woodland structure on Landside Margin	Manage the Landside Margin as open woodland: a mosaic of mature trees, coppiced understorey, open habitats and a vegetated boundary with viewpoints. Balance these different elements as required in different locations. • Generally, retain all significant trees on the LSM, with exceptions for safety, high density, impacting on other important habitats or where a significant seed source of an undesirable species. Where needed, plan for replacement and monitor. • Apply a coppice rotation of 14 years for unwanted stems of all ages including retained stands of natural regeneration, except for elm which should all be managed on a 7-year rotation. • Ensuring that the height and density of the vegetation is greater where adjacent areas are more developed / emit more light, so as to act as a screen. • Where adjacent areas are managed for conservation, adjust management to suit in liaison with partners.
5. Create coppice with standards on Riverside Margin and Bank	Identify and retain the best standards along the Riverside Margin at appropriate spacings; remove all but native black poplar and important examples of other riverside trees from the Bank. Institute a mixed coppice regime for all other tree growth to increase open space and habitats, open up views and protect the Bank. • Aim to remove large trees from the bank or growing through the bank structure except for native Black Poplar and other key riverside species over the period of this plan. Where there is a wooded riverside margin, favour retaining good specimens of alder, willow, poplar, hawthorn and elm as mature or future mature trees over ash, sycamore or Norway maple. Where the RSM is absent or cannot be wooded and very good specimens of the species listed above are present in the Bank, retain these in the upper bank unless there is danger of significant damage.

	• Normally approximately 12 standards are retained per hectare which is a spacing of approximately 30m but for linear features like the riverside and landside margin we will be considering linear distances rather than areas. Canopy spread should also be taken into account. • Apply a coppice rotation of 7 years for retained stands of natural regeneration on the RSM and Bank, with occasional areas on the RSM left on a 14-year rotation where appropriate, to add habitat diversity. • In developed areas, where the Landside Margin's vegetation is insufficient to protect against light or views that detract from the river's character, amend the management of the Riverside Margin to compensate.
6. Natural regeneration and tree planting	Manage natural regeneration to reduce its density, select future mature trees and alter the species making up the future towpath woodland away from ash, sycamore and Norway maple. • Natural regeneration is preferred to tree planting where possible as it is better adapted to the prevalent local environmental conditions, surviving better and more beneficial for wildlife. • In areas where tree cover is being expanded, select the best regenerating stems of the preferred species and at 2-3m spacings and remove all others. Generally, a mix of native species should be preferred over ash, sycamore and Norway maple. Other stems should be removed where possible, preventing future re-growth. • Where tree cover is desired and there is no natural regeneration, or where a particular species is required, tree planting should be considered. Trees to be planted should ideally be grown from seed of local provenance. Key tree planting programmes will be created for locally sourced native black poplars and varieties of elm that are more resistant to Dutch Elm Disease, including more Wych Elm and European white elm.
7. Management of invasive species	Many non-native trees and plants can be found along the towpath. It is recognised that this is not an entirely natural environment and the area's rich cultural heritage means that some have historical relevance; others have biodiversity benefits or may be suited to a warming climate. Those that are particularly invasive and which threaten to unnaturally dominate should be removed or at least heavily controlled, including mature trees where necessary. Trees in this category include Norway maple, false acacia, tree of heaven and holm oak; other flora includes Himalayan balsam, three-cornered leek and green alkanet.
8. Biodiversity Opportunity Areas	These areas identify opportunities for both open habitats to be enhanced or restored and key woodland areas to be improved. Each has specific recommendations within the section-by-section summary.
9. Visitor Opportunity Areas	These areas identify opportunities for public amenity to be improved through enhancement of the user environment or recreation of important views.

Practical Principles for Woodland Management

These principles are to be applied when delivering all work not covered under the tree survey or outside the Opportunity Areas; they must be read in conjunction with the target notes for each individual section (in the Section-by-Section Summary, Appendix 1) and the work programme.

Work planning

- Areas to be worked / coppiced should be examined on a joint visit before starting and the stems to be cut marked up.
- The size of individual areas to be worked each year should be kept in-keeping with the location / species and proportionate to the other parcels worked on that section of the towpath.
- The majority of the work is riverside and so risk assessments will need to include this element. This may reduce the contribution that volunteers can make to the task.
- Vegetation and coppice should be cut between October and March to minimise disturbance to wildlife. Where cutting outside this season, checks for nesting birds must be undertaken by a trained surveyor prior to work starting.
- Check the bat potential rating for any tree having significant work. For trees with a rating of low or negligible potential, works may proceed; others will need an ecologist's opinion and possibly survey work, depending on the nature of the tree works proposed.

Small trees and natural regeneration, including groups

- Up to 150mm diameter at breast height (dbh), remove all sycamore, Norway maple, holm oak and false acacia and coppice any other species where the tree is of poor form
- Where the PLA Upriver Maintenance Team requires a revetment inspection route or access to revetment sections for repair and maintenance or following previous work to improve conditions for recreational uses on the river, all stems up to 150mm dbh can be removed except for oak, black poplar, alder, hawthorn, hazel, dogwood, field maple or fruit trees
- If elm stems or standards are beginning to die off due to Dutch elm disease, coppice back to a low stump to allow regrowth
- Halo around better specimens to assist their development.

Tree management

- Ivy should generally be left in canopies of trees to provide food and nesting sites; it must not be routinely removed. If it needs to be controlled this will usually be specified by the tree surveyor and is only when: the ivy is invading the upper crown, causing excessive shade; when it is girdling young trees affecting stem growth; or to allow an inspection of the tree stem or main branches.

Coppice

- Unless otherwise agreed, coppice a section no more than 20m in length in any location, to preserve habitat connectivity.
- Stumps should be cut with a slight sloping surface, preferably facing south or to the lightest side.
- Generally, small sections should be coppiced, rather than long ones – a mix of different ages and heights should be maintained in relatively close proximity, to maintain light attenuation and habitat connectivity. Exceptions are for important viewpoints and open habitats.

Elm species

- Elm is the foodplant of the endangered white-letter hairstreak butterfly; thus management of elm is extremely important. No changes should be made to the plan without consulting an ecologist.
- Stands of suckering elm should be coppiced on a 7-year rotation, ensuring good regrowth and that stems are too small for the beetle which spreads Dutch Elm Disease.

Invasive species

- Invasive tree species, such as sycamore, Norway Maple, Grey Poplar and False Acacia, will be controlled to allow other species to establish and flourish.
- False Acacia stumps should be treated with suitable herbicide where safe to do so.

Standing deadwood

- Leave standing deadwood and dead branches in trees when safe to do so.
- If it is not possible to retain the deadwood without intervention but the hazard zone is low occupation, reduce the hazard by an appropriate amount (in terms of stem height or branch removal) whilst retaining the tree
- Where dead trees or dead branches are close to paths and branch dropping is likely, then tree surgery or tree removal may be necessary to reduce risk.

Visitor access and viewpoints

- At viewpoints, the clear zone should be between 90 and 135° but should be appropriate to the individual circumstances; within the clear zone, remove any individual tree not recorded in the tree survey and remove / coppice any group present, up to 200mm dbh
- Along the towpath, remove all stems within 0.5m of the edge of the path, up to 200mm dbh
- Remove or lift any branches intruding into the path below a height of 2.5m by cutting them back to the parent branch or stem

Log & brash piles from small trees

- All dead wood that falls where it is not an obstruction or damaging another habitat should be retained where it falls to provide valuable habitats for invertebrates.
- Log piles should be created only in shaded or semi-shaded locations, not in open, grassy areas; trees removed in open areas will need to be moved to the nearest appropriate location for stacking; often piles will need to be on the landside margin, due to slope and high water level
- Cut the logs to the largest size manageable for carrying and suitable to the stacking location, to dissuade users from moving or using them inappropriately; sned off any branch stubs
- Stack the cordwood safely in the same alignment
- In wider parts of the towpath, logs should be used to create stag beetle loggeries. Logs to be used must be 10cm diameter or more; varying lengths should be cut to create a pyramid of vertical logs dug 50cm into the soil. If woodchip is available, some should be placed around the base of the pyramid before the soil is backfilled.
- If brash is being chipped, it can be chipped around or over the log pile to add to the habitat; woodchip must not be left in open, grassy areas
- If not being chipped, brash pieces should be trimmed down, cutting off any spreading branches so that the pieces will stack together in a dense fashion; stack the brash in a separate pile adjacent to the logs or over the logs, dependent on height

Ground vegetation

- Dense, woody ground vegetation, e.g., bramble, that is intruding into paths or access areas can be cut back from September until mid-March. Where hedgehogs may be present, it is preferable to do this in September and October before they hibernate; after this date, a hand search should be undertaken before cutting. During the rest of the year, vegetation can be trimmed by hand but work must stop if any birds are disturbed or distressed.

Training for staff

- Coppice with standards management relies on workers identifying opportunities to increase the structural diversity and native species diversity of wooded landscape. A guide can be produced and updated for the towpath when there is more experience of applying it. A short training session will benefit professionals or volunteers undertaking this work (within the limits of their training with tools).
- Workers must be able to identify all of the different trees on the towpath, both in summer and winter.
- Identification of key marginal and grassland plants, to inform tree management choices.
- Tree cutting and pruning requires the right techniques to be used to achieve good tree shape and a healthy pruning cut, both for hand tools and chainsaws.
- Pesticide qualifications are required for professionals, if being used: Handling and Application of Pesticides (PA1), Safe Use of Pesticides To or Near Water (PA6aw), Safe Use of Ecoplugs (PA6pp)

7. Work programme

Responsibilities

Where the PLA is the landowner, the in-principle split of responsibilities will be:

PLA

- maintaining the revetment, through the existing Upriver Maintenance Team
- maintaining the trees and woodland within the Riverside Margin and Bank.

Richmond Council:

- maintaining the towpath surface and pathside ground vegetation
- maintaining the trees and woodlands on the Landside Margin
- carrying out specialist tree programmes, such as native black poplar conservation.

To be agreed:

- carrying responsibility for any Biodiversity or Visitor Opportunity Areas adopted.

Work programme

An outline 15-year work programme is set out to illustrate how the policies may be delivered on the ground. Over such a time period, it is inevitable that intentions and timings will change. Therefore, a rolling two-year implementation plan covering all delivery will be programmed in detail and both it and the outline programme should be updated annually alongside relevant policies and any changes to the section-by-section summaries.

It is proposed that responsibility for work planning is given to two people, one from each organisation – a civil engineer from PLA and a land manager from Richmond Council. Following liaison over priority areas and a survey of relevant sections, the Council officer would update the programme and assist the PLA's team and Council contractors with any environmental aspects of their work or further training required. PLA and Council ecologists must be involved in work within Biodiversity Opportunity Areas, to maximise their potential value.

Resources

The following resources will be involved in plan delivery:

- PLA's Upriver Maintenance Team: undertaking revetment repairs and maintenance, including coppicing and ground-level tree works for access
- LBRuT's Tree team and contractors: oversight of tree surveys and works requiring arboricultural contractors
- LBRuT's Parks and Ecology team and contractors: oversight of amenity landscape maintenance and management for wildlife

Work prioritisation

At least initially, work planning will be influenced by the priority level of the tree works being recommended, the priority for each section of woodland to be managed, Navigation Priority Areas and the priority for maintaining any revetment sections with structural defects. Beyond that, the rotation lengths for coppicing and pollarding will need to be appropriately programmed. The Biodiversity or Visitor Opportunity Areas will also be prioritised; most have need for management annually or every two years.

Tree work priority is set by the time period within which the works are required, usually: 1 month, 6 months, 1 year, 2 years, 3 years, 4 years and 5 years.

Management actions will be on the following scale:

1 - very important for the maintenance of key habitats, species, heritage interest or amenity; reflects the essential tasks for the year

2 - of secondary importance to the key tasks, to be done of sufficient time / resources available; priority 2 tasks may become priority 1 if not completed within a reasonable timeframe

3 - of lower importance at present; may become priority 2 if not completed within a reasonable timeframe, and subsequently priority 1 if still not completed.

Indicative volumes of work

Trees

1-6 months	163 actions
12 months	453 actions
2 years	24 actions
3-5 years	15 actions

Coppicing (general PLA sections, outside of BOA/VOA)

Bank and RSM, 7-year rotation	3030m total	433m per year
Bank and RSM, 14-year rotation	339m total	24m per year
LSM, 7-year rotation	282m total	40m per year
LSM, 14-year rotation	1590m total	114m per year

Other recommendations

Alongside planning and delivering the work programme, a number of other year 1 recommendations are made to further refine the plan:

- Spring 2022: Update the mapping and tree survey to take account of recent native black poplar conservation works and PLA management undertaken.
- Spring 2022: Digitally map the grass cutting and vertical edging along the towpath; consider use of the Council's improved cut and collect equipment to improve the quality of grass sward where appropriate.
- Spring 2022: Undertake more detailed ecology survey and plan for Leg o' Mutton woodland
- Summer 2022: Undertake vegetation survey of bank and foreshore at key locations: Mortlake Terrace (sections 19B, 20) and Barnes Waterside (section 42, 43)

Appendix 1: Section by Section Summary

Each section is generally described from west to east (upstream to downstream) and from the Landside Margin out to the Bank.

Section No.	**0**	Ownership	PLA
Bank description:	Concrete Bank, no trees on riverside.		

Tree Species			
Bank	Riverside	Landside	Offsite
Nil	Nil	Sycamore, Tree of Heaven, Elder	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low canopy over the footpath and remove deadwood from Tree of Heaven and one Elder. One Elder has Clematis

Tree Management Recommended 0-10 years
The trees are growing in the landside margin against the retaining wall adjacent the access roadway to Kew Gardens Car Park. The retaining wall is likely to be acting as flood protection. The structure could be damaged by large trees growing adjacent to it. It may be prudent to remove the two larger trees (or even all four trees growing adjacent the wall). This can be determined by a structural engineer. If the trees are retained, then they will need to be maintained to keep the Highway and footpath clear when necessary.

Section 0 open space and ecology summary	**Length**: 33m • **Total area**: 269m^2
Description: A short section along Ferry Lane. The path is 2.3m wide, comprised of gravel but wearing and undulating, with puddling in the depressions. The LSM boundary has railings and a low wall, with a narrow 1m grassy strip – with cow parsley and black horehound – and four trees at short intervals; one, a mature elder, is topped with wild clematis which is also scrambling over the railings. Buddleia is getting established in two places. The RSM has a 0.5m grassy margin, with false oat grass, cow parsley, and common mugwort. The Bank is composed of concrete, mossy towards upper levels, with other bankside vegetation occurring sparsely in cracks. A series of baskets are fixed to the concrete in an attempt to introduce riparian vegetation but are in need of some attention.	
Target notes (in addition to generic guidance)	
Landside margin	• Remove smaller buddleia plants. • Control old man's beard.
Bank	• Remove scrub and other undesirable plants from baskets • Complement the existing marginal vegetation via plug plants of water figwort and yellow loosestrife.

Section No.	1A	Ownership	PLA
Description:	Concrete Coping stone, Stone setts in Mortar with an upper bank level formed of soil.		

Tree Species			
Bank	Riverside	Landside	Offsite
Sycamore Common Ash Horse Chestnut	Nil	Not owned by PLA 1 Dead Elder recorded	Landside margin is offsite

Tree Maintenance identified in Survey 0-3 years
Raise Low canopy to clear navigation

Tree Management Recommended 0-10 years
No mature trees. Include this section in coppice rotation, except any trees within riverside margin (a soil part of the bank at this location) at suitable spacings.

Section 1A open space and ecology summary	**Length**: 127m • **Total area**: 1409m^2
Description: A relatively open section of path, with several large trees on neighbouring land making it feel more wooded. The path is 2.75m wide; it appears to be comprised of road planings or possibly a tarmac surface that has broken up. The LSM is up 1.5m wide at the west end, with a fringe of semi-mature trees and regeneration – a mix of elder, sycamore and yew; the boundary is wall with railings, some fence, with climbing ivy. At the east end, the path widens and there is no LSM; the wall here has some interesting plants. The RSM has a low retaining wall with a narrow intermittent strip of vegetation. The Bank is concrete with scattered groups of young ash and sycamore; a section at the east end has been coppiced in the past, most recently in winter 2019-20. *Rorippa* sp. and purple loosestrife are present in more open areas of the Bank but limited vegetation under canopy.	

Target notes (in addition to generic guidance)	
Landside margin	• Prioritise removal of holm oak. • Small amounts of Italian arum and three-cornered leek are present; removal should be considered. • Re-paint roadside posts and repair or remove barrier rail.
Bank	• Lift and coppice the group of sycamore next to steps #1 to increase light to the bank. • Prioritise removal of holm oak and cabbage palm. • A small amount of Himalayan Balsam is present and should be removed.

Areas of interest	
V1.1: view to Kew Bridge *Frequency: every 2 years*	• Re-coppice sycamore to create window with view to Kew Bridge. V1 can be ended at the 1A/1B boundary if preferred due to ownership change.

Section No.	1B	Ownership	Unknown
Description:	Concrete and masonry		

Tree Species			
Bank	Riverside	Landside	Offsite
Sycamore Common Ash	Nil	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low canopy of a group of Sycamore for navigation

Tree Management Recommended 0-10 years
Not PLA Responsibility No mature trees. Owner may wish to include section in coppice rotation, except any trees within riverside margin (a soil part of the bank at this location) at suitable spacings. No tree work required at present in terms of Public Right of Way.

Section 1B open space and ecology Summary	**Length**: 31m • **Total area**: 347m^2
Description: A short section parallel with the western part of Kew Marine. The towpath is tarmac, possibly overlaid with tar spray and chip, which is breaking up in places; it widens to 3m wide up to the steps. The LSM boundary has railings and a low wall, with vegetated strip up to 0.5m wide. The RSM has a narrow strip of vegetation along the retaining wall. At the west end of the Bank, the sycamore coppice continues from 1A and gives way to bramble and marginal vegetation including common reed, purple loosestrife and great willowherb up to the steps.	

Target notes (in addition to generic guidance)	
Bank	• Continue coppice from 1A if desired.

Section No.	**2**	Ownership	Unknown
Description:	Concrete and masonry bank adjacent Kew Pier		

Tree Species			
Bank	Riverside	Landside	Offsite
Sycamore Common Ash Horse Chestnut Common Elder Western Balsam Poplar	Wild Cherry Apple Common Ash Norway Maple Holm Oak	Western Balsam Poplar Common Elder	Nil

Tree Maintenance identified in Survey 0-3 years

Not PLA Responsibility
Raise Low canopy for navigation and access to pier.
Remove deadwood on one mature ash.
Remove dead maple.
Reduce crown of Apple (Decay and overhangs accessway)
NB: Deadwood and dead tree could be included in Public Right of Way management or owner instructed.

Tree Management Recommended 0-10 years

Not PLA Responsibility
Owner may wish to include bank and riverside part of this section in coppice rotation, except mature trees within riverside margin.
Bankside trees could be removed, and bank repaired.

Section 2 open space and ecology summary	**Length**: 150m • **Total area**: 2239m^2

Description: This section straddles Kew Bridge. West of the bridge, the character of 1A continues: the LSM boundary comprises wall and railings with a 1m vegetated strip up to Bush Road, past which the towpath borders a small green space with four mature trees and a bench on the boundary. The path varies between 2.5m and 5.8m wide – widest opposite the green space – with a wearing tarmac surface. The RSM has a walled boundary and is unvegetated. The Bank has moss and *Sedum* above and a band of vegetation including purple loosestrife lower down. There is a small group of sycamore adjacent to the bridge.
East of the bridge, there is an intersection with a well-used path from Kew Green past Westerley Ware park. On the LSM, there is a 4m-wide open area of tall herb vegetation – including green alkanet, black horehound and nettle, with old man's beard invading – along the park play area. The LSM narrows opposite Kew Pier as the path surface widens to include benches and the *Cayho* sculpture. The RSM has a low retaining wall; beyond this is up to 4m of vegetation to the top the Bank, either side of the Pier itself, along which grows semi-mature sycamore plus cherry, holm oak, elder and other natural regeneration.

Target notes (in addition to generic guidance)	
Landside margin	• West of bridge: prune or coppice Norway maple and cherry trees near fingerpost, to increase visibility.

	• West of bridge: consider renewal of lower finger on fingerpost
Riverside margin	• Remove all holm oak; consider removal of three-cornered leek; thin ash regen at eastern end
Bank	• Remove at least the four young sycamore nearest the east side of the bridge to create a viewpoint. Check and re-coppice as required in future.
Areas of interest	
V2.1: visitor experience of Kew Pier *Frequency: one-off*	• Deep clean and tidy of the area around the pier, including benches and sculpture. • Remove / coppice invading scrub in the boundary strip, including area around interpretation board; retain those along the boundary, control bramble. • Plant low-growing shrubs with perennial pollinators in boundary strip, including area behind bin store. • Consider moving towpath bin closer to benches. • Consider replacement of benches; one leg of each in deteriorating condition. • Tidy up around bin store and consider improvements– doors no longer attached.
B2.1: open area adjacent to play area *Frequency: initially three times annually, in April, June and September*	• Cut back the old man's beard that is scrambling over the area. • Tidy existing pile of arisings so that more can be added in future when needed. • Consider removal of green alkanet in early spring. • Gap up hedge on park side of the boundary. • Plug plant a selection of native pollinators, including late-flowering species.

Section No.	3A	Ownership	Unknown
Description:	Concrete and masonry.		

Tree Species			
Bank	Riverside	Landside	Offsite
Sycamore Common Ash	Wild Cherry	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Not PLA Responsibility Raise low canopy for navigation

Tree Management Recommended 0-10 years
Not PLA Responsibility Owner may wish to include bank and riverside part of this section in coppice rotation, except mature trees within riverside margin. Bankside trees could be removed, and bank repaired.

Section 3A open space and ecology summary	Section 3A
Description: A short section along the eastern side of Westerly Ware park. The LSM is up to 4m wide, changing from west to east through elder scrub, an open area of tall herb vegetation dominated by nettle, stinking iris and cow parsley to an area of formal shrubbery; snowberry is invading in a couple of places. The path narrows from 2.8m to 2.0m towards the east end. The RSM has a low retaining wall with no vegetation. The Bank has a row of scrub and trees along its upper edge: ash (including dense regeneration at west end), sycamore and two cabbage palms.	

Target notes (in addition to generic guidance)	
Landside margin	• Consider improvements to shrub bed adjacent to Thetis Terrace, including removal of snowberry.
Bank	• Remove small ash regeneration from the bank. • Cautiously open up area around #3 steps.

Areas of interest	
B3.1: open area adj to Westerly Ware *Frequency: one-off / watching brief*	• Keep area open; remove dead planted trees and do not replant. • Eradicate snowberry from the strip to prevent it spreading. • Plant hedge on park side of boundary. • Consider cut / collect of nettle areas monthly for one growing season to reduce dominance.

Section No.	**3B**	Ownership	PLA
Description:	Concrete and Masonry		

Tree Species			
Bank	Riverside	Landside	Offsite
Sycamore Ash	Nil	Elder	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low canopy for navigation. Clear one tree from Public lighting (Might be included under PROW)

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except mature Ash and Sycamore at suitable spacings.

Section 3B open space and ecology summary	**Length**: 54m • **Total area**: 511m^2
Description: A short and narrow section past Thetis Terrace and Cambridge Cottages. The RSM is the boundary of adjacent gardens, primarily hedge. Due to the width of the boundary vegetation, the path is less than 2m wide. The LSM has a low retaining wall with a narrow strip of vegetation at the base. The Bank has a row of scrub and trees along its upper edge, including a stretch of buddleia.	

Target notes (in addition to generic guidance)	
Bank	• Prune the buddleia by hand, rather than flail; keep a 1m strip alongside the path cut every year by pruning back to knee height after last frost.

Section No.	4	Ownership	PLA
Description:	Concrete and Masonry with a broad riverside margin containing some mature trees.		

Tree Species			
Bank	Riverside	Landside	Offsite
Sycamore Ash	Field Maple Norway Maple Silver Birch Common Ash Common Elder Broadleaved Lime		Nil

Tree Maintenance identified in Survey 0-3 years

Remove stake and tie from Young Field Maple.
Raise crown of one tree for navigation.
Remove deadwood from two mature Lime trees (Might be included under PROW)
Raise low crown of Elder over footpath (Might be included under PROW)

Tree Management Recommended 0-10 years

This Sycamore and Ash on the bank could be included in the coppice rotation. The Riverside margin is not appropriate for coppice as it contains no young trees (other than planted trees), and the ground cover is managed.

Section 4 open space and ecology summary	**Length**: 121m • **Total area**: 1992m^2

Description: A section that is generally narrow, but which opens up in the south-east by Watcombe Cottages. At the north-west end, the LSM continues to border the adjacent residences; whilst there is generally a 1m wide margin of vegetation, in places this may belong to the adjacent properties rather than the PLA. At this end, there is no vegetation on the RSM except for a group of trees opposite Toll House. Along the Bank are sections of bramble and low coppice along with ash and sycamore trees.
At Watcombe Cottages, on the LSM a low hedge separates the path from a green space in front of the cottages; on the RSM is a 4m wide area of low vegetation beneath mature trees – the ground flora includes green alkanet, bramble, black horehound, cow parsley and old man's beard. Historically, a small inlet with a dock was present immediately west of the cottages and the railings visible date to this period. The Bank is approximately 60% vegetated with a variety of plants including purple loosestrife.

Target notes (in addition to generic guidance)	
Landside margin	• Consider cutting hedges back slightly harder, where maintained by the authorities, to increase width of the path. Instruction should be given to contractors which areas are maintained.

Bank	• North-west end: maintain low coppice and cut bramble to preserve the open character of the riverside here, cutting more frequently than at present. • Remove young Norway maple and sycamore throughout.
Areas of interest	
B4.1: open area at Watcombe Cottages *Frequency: annual*	• The trees here are to be lifted, which should increase light to the ground flora. • Continue collecting larger tree debris into the existing piles for habitat continuity. • Consider removal of green alkanet or keep its extent as at present; remove any invading three-cornered leek from 5A. • Prevent bramble and old man's beard from spreading beyond current extent.

Section No.	**5A**	Ownership	PLA
Description:	Concrete and Masonry with a broad riverside margin containing some mature trees.		

Tree Species			
Bank	Riverside	Landside	Offsite
Nil	Norway Maple Broadleaved Lime	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
None

Tree Management Recommended 0-10 years
The Riverside margin is not appropriate for coppice as it contains no young trees, and the ground cover is managed.

Section 5A open space and ecology summary	**Length**: 22m • **Total area**: 535m^2
Description: A very short section in front of the south-western end of Watcombe Cottages; for general description see section 4. The RSM's vegetation shows more influence of nearby cultivation, with redcurrant, garden angelica, and at least two *Rosa* species.	
Target notes (in addition to generic guidance)	
Bank	• Prioritise removal of holm oak and cabbage palm
Areas of interest	
V4.1 (continuation): open area at Watcombe Cottages	• See section 4 above for general maintenance. • Consider removal of three-cornered leek, which is only present in this section.

Section No.	5B	Ownership	PLA
Description:	Concrete and Masonry with a broad riverside margin containing some mature trees.		

Tree Species			
Bank	Riverside	Landside	Offsite
Nil	Broadleaved Lime	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
None

Tree Management Recommended 0-10 years
The Riverside margin is not appropriate for coppice as it contains no young trees, and the ground cover is managed.

Section 5B open space and ecology summary	**Length**: 152m • **Total area**: 1660m^2
Description: A section of open riverside with a boundary of maturing trees along the LSM. In the north-west lies the end of the cottage and riverside open spaces (see section 4 for full description); three-cornered leek and teasel are present in the latter. However, the majority of the section lies alongside Short Lots allotments. This LSM is up to 6m wide; beneath a fringe of mature and semi-mature trees, including London Planes, is a hedgebank and ground vegetation including three-cornered leek, nettle, green alkanet, hogweed and cow parsley, plus several young apple trees have been planted. At the northern end is timber infrastructure for managing access to the towpath when needed; two benches are located nearby. The path is 3.3m wide and of worn, large gravel. The RSM is absent and the concrete Bank has limited vegetation, with some purple loosestrife growing, grey willow and alder becoming established in places.	

Target notes (in addition to generic guidance)	
Landside margin	• In scrubbier sections, thin out stems to create a more open structure. • Clear an area around PLA marker to increase its visibility. • Once landside tree survey recommendations are known, consider whether there is space for planting an intermittent hedge or more understorey trees – thorns, fruits and nuts – but retain some open areas for ground flora. • Remind allotment holders not to put waste into the LSM.
Bank	• Where manageable, coppice existing scrub to prevent damage to embankment; remove any new tree seedlings.

Areas of interest	
V4.1 (continuation): open area at Watcombe Cottages	• See section 4 above for general maintenance. • Consider removal of three-cornered leek, which is only present in this section.

Section No.	**6**	Ownership	PLA
Description:	Concrete and Masonry		

Tree Species			
Bank	Riverside	Landside	Offsite
Norway Maple Sycamore Common Ash Holm Oak Common Elder	Nil	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Four trees were recommended for coppicing because of a long-term risk to the bank or stem being girdled by the bank material. This could wait for section coppice rotation.
Tree Management Recommended 0-10 years
Include this section in coppice rotation, except any suitable species or mature trees at suitable spacings.

Section 6 open space and ecology summary	**Length**: 143m • **Total area**: 1817 m^2
Description: A narrow section of the towpath alongside Priory Park Club. The LSM is up to 1.5m wide with a chain link fence boundary; a low hedge runs along a portion of the off-site side. Inside the fence, there are mature trees at short intervals, interspersed with natural regeneration, scrub and semi-mature trees. The gravel path is 3.4m wide. On the RSM, there is only a low retaining wall with an intermittent narrow strip of vegetation at the base. The Bank is concrete on the upper section with setts below. Groups of young and semi-mature sycamore and ash have become established in the bank with small amounts of elder and holm oak. Two semi-mature cabbage palm and at least one young tree are present.	
Target notes (in addition to generic guidance)	
Landside margin	• Stems of any species that are of poor form should be removed or coppiced.
Bank	• Prioritise removal of holm oak and cabbage palm

Areas of interest	
V6.1 & V6.2: views to Kew Railway Bridge, Oliver's Island and Strand-on-the-Green *Frequency: every 2 years*	• Two viewpoints proposed, affording views of the bridge and Oliver's Island. • V6.1 – lift larger trees (not proposed in tree survey); coppice smaller trees. • V6.2 including bench – already very open; clear views at NW end by coppicing sycamore G067 and at SE end by coppicing the Common Ash and Sycamore in the bank; lift the overhanging branches of the Horse Chestnuts either side of the bench.

V6.3: bench adj to Kew Railway Bridge *Frequency: every 2 years*	• Open view up by coppicing shrubs and by selective pruning of larger trees; consider removing or coppicing any trees poorly located or of poor form.
B6.1: open area adjacent to Kew Railway Bridge *Frequency: annual*	• Naturalised winter aconite present here; retain by keeping bramble and ivy from invading and by maintaining an open, woodland edge-type habitat. • Cut bramble back from towpath and from around bridge arch, maintain as a smaller patch; prevent it from expanding. • Retain shrubs and scrub along rear boundary fence but remove any invading into the open area / coppice any getting too large.

Section No.	**7A**	Ownership	PLA
Description:	Concrete and Masonry. Small section by railway bridge		

Tree Species			
Bank	Riverside	Landside	Offsite
Sycamore Common Ash	Nil	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. The trees within the groups that are adjacent and touching the railway bridge were recommended for coppicing.

Tree Management Recommended 0-10 years
Include this section in coppice rotation.

Section 7A open space and ecology summary	**Length**: 21m • **Total area**: 323m^2
Description: A very short section from Kew Railway Bridge to the junction with Occupation Lane. The LSM is a 10m deep corner of tall herb vegetation – nettle, hogweed, cow parsley – by the bridge and includes a bench, bins and multi-aspect interpretation post; to the rear is the Occupation Lane nature reserve for the rare two-lipped door snail. The path is 4m wide. The Bank has groups of young ash and sycamore.	

Areas of interest	
V7.1: path junction and view to Kew Railway Bridge *Frequency: annual initially, then every two years*	• NW corner: keep on top of any bramble and scrub. • N corner: coppice ash and sycamore south of the bridge and opposite junction, to open view to the bridge; re-coppice every 2 years maximum. • Treat bench with a preservative.

Section No.	7B	Ownership	Unknown
Description:	Concrete and Masonry.		

Tree Species			
Bank	Bank/Riverside	Landside	Offsite
Field Maple Sycamore Common Ash	Field Maple Sycamore Common Ash Horse Chestnut Hawthorn Wild Cherry Cherry Holm Oak Elm	Nil	Common Ash

Tree Maintenance identified in Survey 0-3 years

Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.
Remove dead tree offsite (Might be included in PROW)
Remove subsiding or weakly attached branches over path (Might be included in PROW)
Remove broken branches (Might be included in PROW)
Remove major deadwood (Might be included in PROW)

Tree Management Recommended 0-10 years

Include this section in coppice rotation except for desirable species or mature trees at suitable spacings.

Section 7B open space and ecology summary	**Length**: 141m • **Total area**: 2155m^2

Description: A well-wooded section alongside the north end of Kew Riverside Park, including the junction with the path from Mortlake Road. The LSM is up to 7m wide, narrowing to 1m in the south, and is a mix of open areas beneath mature trees and young scrub. The path is generally 3m wide; at the south end a low flood wall divides the path into 2.5m wide lower and 1m upper paths. On the riverside the path directly abuts the Bank, which has a mixture of elm, horse chestnut and cherry scrub beneath semi-mature ash and sycamore.

Target notes (in addition to generic guidance)	
Landside margin	• Prevent bramble spreading; remove holm oak. • Retain existing open areas: keep open structure to encourage ground flora.
Bank	• Remove holm oak. • Open up an short area either side of ash T094 by coppicing and maintain

Areas of interest	
V7.1 (continuation): path junction *Frequency: annual initially, then every 2 years*	• S corner of LSM: keep on top of any bramble and scrub. • S corner of LSM: liaise with Kew Riverside over removing the faded snail reserve interpretation panel and moving the still-legible panel to an improved position for users. • Bank: coppice ash and sycamore to clear view to Kew Railway Bridge, to a point just south of T089; re-coppice every 2 years maximum.

Section No.	**8A**	Ownership	Unknown
Description:	Concrete and Masonry with raised soil bank above concrete coping.		

Tree Species			
Bank	Bank/Riverside	Landside	Offsite
Sycamore Common Ash	Sycamore Common Ash Hawthorn Holm Oak Common Elder	Nil	Common Ash

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove broken branches (Might be included in PROW) Remove major deadwood (Might be included in PROW) Coppice Ash with Decay fungi (Might be included in PROW)

Tree Management Recommended 0-10 years
Include this section in coppice rotation except for desirable species or mature trees at suitable spacings.

Section 8A open space and ecology summary	**Length**: 62m • **Total area**: 749m^2
Description: A short, well-wooded section alongside Kew Riverside Park. The LSM is up to 2.5m wide with low railings on the boundary and intermittent mature trees with an open field layer below; cow parsley dominates. Two benches located near the steps face the river. The path is 2.75m wide and on the river side directly abuts the Bank, which has hawthorn scrub with regeneration and taller stems of ash and sycamore.	

Target notes (in addition to generic guidance)	
Landside margin	• Prioritise removal of holm oak. • Retain existing open areas: keep open structure to encourage ground flora.
Bank	• Clear #8 steps, cutting bramble on north side back hard. • Prioritise removal of holm oak. • Coppice scrub in front of first bench near steps #8; regular attention shouldn't be needed.

Areas of interest	
V8.1: bench viewpoint (2 benches) *Frequency: as needed*	• Keep area between T117 and T125 open for views from these two benches. • Coppice young trees and remove holm oak; control bramble. • Lift lower branches as prescribed in tree survey.

Section No.	**8B**	Ownership	PLA
Description:	Concrete and Masonry with soil bank above coping stone		

Tree Species			
Bank	Bank/Riverside	Landside	Offsite
Sycamore Common Ash Grey Poplar	Sycamore Common Ash Hawthorn Wild Cherry Common Elder	Nil	Common Ash

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove two dead/dying trees

Tree Management Recommended 0-10 years
Include this section in coppice rotation except for desirable species or mature trees at suitable spacings.

Section 8B open space and ecology summary	**Length**: 120m • **Total area**: 1456m^2
Description: A well-wooded and scrubby section alongside Kew Riverside Park. The LSM is up to 2.5m wide, scrubby and overgrown; the boundary is low railings for the full length. Cow parsley dominates in the field layer. The path is 2.75m wide but narrows to 2.5m where a flood wall is adjacent to the path on the LSM at the south end. On the river side the path directly abuts the Bank, which has a mixture of hawthorn and sycamore scrub with taller stems of ash and sycamore.	
Target notes (in addition to generic guidance)	
Landside margin	• Prioritise removal of holm oak. • Thin / coppice selected semi-mature trees to allow others to spread, but maintain a high screen, for light attenuation. • Retain existing open areas: keep clear of new scrub to encourage ground flora.
Bank	• Prioritise removal of holm oak.

Section No.	9	Ownership	PLA
Description:	Concrete and Masonry with soil bank above coping stone		

Tree Species			
Bank	Bank/Riverside	Landside	Offsite
Sycamore Common Ash Grey Poplar	Sycamore Horse Chestnut Common Ash Grey Poplar Holm Oak Common Elder	Sycamore	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove three dead/dying trees. Remove deadwood from one tree

Tree Management Recommended 0-10 years
Include this section in coppice rotation except for desirable species or mature trees at suitable spacings.

Section 9 open space and ecology summary	**Length**: 178m • **Total area**: 2492m^2
Description: A long, scrubby section of the towpath along Kew Riverside. The LSM is up to 4m wide and on balance the vegetation is slightly more mature and open than the Bank. The gravel towpath is 2.6m wide, a membrane is wearing through in places. On the river side, the path directly abuts the Bank, which has a mixture of ash and sycamore scrub with taller stems of ash, sycamore and grey poplar.	

Target notes (in addition to generic guidance)	
Landside margin	• Thin / coppice selected semi-mature trees to allow others to spread, but maintain a high screen, for light attenuation. • Keep open areas clear of new scrub, especially around the two entrances to Kew Riverside.
Bank	• Clear regen around steps #9. • Select two or three semi-open areas and keep them open as windows for views. Suggestions include the area between the Kew Riverside entrances (centred on T161) and around the two outfalls.

Areas of interest	
V9.1: long bench, viewpoint *Frequency: annually initially*	• Replace existing bench – poor condition and leaning. • Remove holm oak and coppice scrub in front of bench.

Section No.	**10**	Ownership	PLA
Description:	Concrete and Masonry with soil bank above coping stone		

Tree Species			
Bank	Bank/Riverside	Landside	Offsite
Sycamore Common Ash London Plane Grey Poplar Bird Cherry	Field Maple Sycamore Hawthorn Common Ash Holm Oak Common Elder	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove one dead/dying trees. Remove one tree with a progressive lean Remove deadwood from one tree

Tree Management Recommended 0-10 years
Include this section in coppice rotation except for desirable species or mature trees at suitable spacings.

Section 10 open space and ecology summary	**Length**: 184m • **Total area**: 2353m^2
Description: A long section along Kew Riverside that continues the young woodland character of section 9. The LSM widens up to 9m, with a shallow ditch along the centre, with semi-mature ash and sycamore. The towpath is 2.5m wide and on the river side directly abuts the Bank, which has a mixture of ash and sycamore. In the centre of the section, both sides of the path form into a dense corridor of holly, holm oak, elder and bramble for 20m.	

Target notes (in addition to generic guidance)	
Landside margin	• Prioritise holm oak removal. • Keep open the areas either side of the Kew Riverside entrance.
Bank	• Clear around steps #10. • The trees around the Kew Riverside entrance are to be raised; in addition, open up the scrub layer below between T186 (421) and T189.

Section No.	11	Ownership	PLA
Description:	Concrete and Masonry with soil bank above coping stone		

Tree Species			
Bank	Bank/Riverside	Landside	Offsite
Sycamore Common Ash Elm	Sycamore Norway Maple Horse Chestnut Hawthorn Common Ash Common Elder	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove two dead/dying trees. Remove one tree with a progressive lean. Remove deadwood from one tree

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 11 open space and ecology summary	**Length**: 269m • **Total area**: 3148m^2
Description: A very long section along the southern part of Kew Riverside, the woodland is slightly more mature than the sections immediately to the north. Cow parsley generally dominates the field layer, with ivy in shadier parts. The LSM is up to 5m wide; the shallow ditch continues from section 11 as far as the entrance from Kew entrance. At the south end, at the rear of Townmead Recycling Centre, the LSM widens to 40m and encompasses a mound with trees and scrub behind the main enclosure; the lower bank towards the path is open. The towpath is 2.5m wide and on the river side directly abuts the Bank, which has a mixture of ash and sycamore.	
Target notes (in addition to generic guidance)	
Landside margin	• Keep open the areas either side of the Kew Riverside entrance.
Bank	• Select two semi-open areas south of the Kew Riverside entrance and keep them open as windows for views through regular coppicing. • Consider strategy for dealing with the extensive areas of three-cornered leek.
Areas of interest	

V11.1: views and vistas from Kew Riverside entrance / towpath bench *Frequency: annual initially*	• Coppice regen and scrub understorey through this 40m stretch to create views. • Clear bramble opposite bench and keep bank above metal railings open.
B11.1: bank behind Townmead RC *Frequency: as required*	• Keep current extent of open bank clear of bramble encroachment. • Possible opportunity for some pollinator plug planting; undertake spring/summer site check

Section No.	12	Ownership	PLA
Description:	Concrete and Masonry with soil bank above coping stone		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Crack Willow	Field Maple Sycamore Common Alder Hawthorn Common Ash Cherry Crack Willow Common Elder	Elm	Sycamore Grey Poplar	Nil

Tree Maintenance identified in Survey 0-3 years

Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.
Remove two dead/dying trees.
Remove three unstable trees.
Remove two decayed trees.
Remove deadwood from five trees.
Pollard/prune two trees

Tree Management Recommended 0-10 years

Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings. Some Riverside Crack Willow have already been coppiced.

Section 12 open space and ecology summary	**Length**: 356m • **Total area**: 4149m^2

Description: A very long section with very different characters either side of the slip at Putney Town Rowing Club. To the north, the environment continues from section 11: on the LSM in the north is the southern part of the 40m deep wooded mound behind Townmead Recycling Centre, giving way to an open area of scrub 16m wide alongside Townmead allotments. On the riverside, the Bank abuts the 2.5m wide path and consists of field maple scrub with semi-mature ash and sycamore.
South of the Rowing Club, the remainder of the section backs on to the grounds of Mortlake Crematorium. The LSM here is a 20m width of parkland with footpaths, known as Mortlake Meadow towpath; the grassland includes cow parsley, nettle, crow garlic, white dead-nettle, hedge mustard and green alkanet. A line of young elms have been planted along the boundary at the south end. The towpath is up to 4m wide. The RSM is 1-2m of low vegetation;

the Bank is a generally dense mix of crack willow, ash, sycamore and grey poplar of varying ages, recently thinned out by the PLA. Some large crack willows are to be pollarded.	
Target notes (in addition to generic guidance)	
Riverside margin	• Lift trees in the Bank to increase light to the RSM.
Bank	• Select several less dense areas and open these up through a combination of lifting and coppicing. • Consider removing / coppicing / lifting trees a few metres either side of steps #13 for views of Chiswick Bridge.
Areas of interest	
B12.1: Kew Meadow Towpath *Frequency: annual*	• Undertake hay cuts in early April and August/September, to reduce soil fertility and impact competitive species. • Undertake weed control: remove some green alkanet in early spring and other undesirable species at any time. • Consider allowing / creating taller vegetation along the Crematorium boundary – a mixture of hedgerow plants plus and low scrub to be coppiced on a 3-yr rotation. • Undertake summer survey of vegetation and amend hay cut regime to suit. • Based on summer survey, plan further weed control and plug planting in main meadow.
V12.1: bench overlooking steps *Frequency: annual initially*	• Keep the trees at either end of the steps lifted for views and marginal vegetation; tidy some 2021 pruning along the remainder of the section.

Section No.	**13**	Ownership	PLA
Description:	Concrete and Masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash	Sycamore Common Ash Wild Cherry Crack Willow Common Elder	Nil	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Raise low canopy over towpath. Cut back branches from bridge. Remove/cut ivy on one tree

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 13 open space and ecology summary	**Length**: 73m • **Total area**: 598m^2
Description: A short section around Chiswick Bridge. The north side's LSM is the end of Mortlake Meadow Towpath; the Bank has a group of ash. Around and beneath the bridge, connecting the steps to the paths, is a paved and gravel area, partly overgrown with grass and with depressions that puddle. South of the bridge, the towpath runs through Thames Bank open space, managed by the Council, described in section 14. The RSM is 1m wide, dominated by three-cornered leek. Elder and sycamore run along the bank up to the steps.	

Target notes (in addition to generic guidance)	
Riverside margin	• Consider strategy for dealing with the extensive areas of three-cornered leek.

Areas of interest	
V13.1: Around Chiswick Bridge *Frequency: at least annual*	• Improve maintenance of hard and gravel surfaces. • Clean graffiti.
V13.2: Viewpoint, south-east side of Chiswick Bridge *Frequency: annually*	• Coppice smaller shrubs adjacent between bridge and T268 to enhance the view.

Section No.	**14**	Ownership	PLA
Description:	Concrete and Masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash False Acacia	Sycamore Common Ash False Acacia Common Elder Elm	Nil	Crack Willow	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low crown for navigation. Remove dead/dying Elm trees. Pollard one tree Remove dead wood from one tree.

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 14 open space and ecology summary	**Length**: 194m • **Total area**: 1540m^2 (excludes Thames Bank open space)
Description: An open section along Thames Bank. The Council green space at the north end narrows from back to bank from 15m to 6m, including the 3m wide towpath, comprising amenity grass, two benches, bins and several mature trees. The Bank along the park has some dead elm stems plus ash and sycamore. The majority of the section is a 6m wide strip of grassy vegetation between the road and the vertical bank, narrowing to 2m at the east end. A timber knee rail borders the roadside. There are occasional marginal plants along the bank top; coverage appears to have reduced over recent years. A stone bollard set in cobbles marks the finishing line for the Boat Race.	
Target notes (in addition to generic guidance)	
Riverside margin	• Explore planting structural wetland plants plugs – sedges, rushes – along the edge.
Areas of interest	
V14.1: Viewpoint *Frequency: as needed*	• Once the dead elms have been removed, assess and open / lift as needed to create viewpoints; keep open as needed; manage remainder as coppice on a 14-year rotation. • Consider potential for marginal plug plants.

V14.2: Thames Bank grassland *Frequency: as needed*	• Consider planting a margin of robust wetland plants – rushes, sedges – along the railings so as not to affect Boat Race viewers. • Consider reducing cutting frequency of grass. • Consider whether access improvement is necessary. • Consider whether drainage / SUDS improvements might ease help flooding.

Section No.	**15**	Ownership	PLA
Description:	Masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Goat Willow	Sycamore Hawthorn Common Ash Wild Cherry Crack Willow Common Elder Elm	Sycamore Hornbeam Common Ash Weeping Willow	Crack Willow	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low crown for navigation. Remove one unstable and one weak forked tree. Cut trees back from bridge structure. Pollard one tree Coppice one tree Remove dead Elm trees

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 15 open space and ecology summary	**Length**: 450m • **Total area**: 4106m^2

Description: A very long section that runs from Thames Bank along the entire riverside of the former Stag Brewery site and the buildings on Mortlake High Street between Bulls Alley and the entrance from Tapestry Court open space.

At the west end on Thames Bank, a vegetated area on the riverside is separated from the road by a timber knee-rail.

The Stag Brewery segment is likely to be re-developed in some way when new proposals for the site come forward. The LSM here is a narrow, informal strip of vegetation running along the boundary wall. The path is wide and formed of granite setts at either end, but the majority is narrower, muddy and undulating hardcore. The RSM is a vegetated strip varyingly 1-4m wide, muddy from inundation and trampling, but with frequent pendulous sedge, cow parsley, three-cornered leek and broad-leaved dock. There are also semi-mature ash and sycamore fringing the river as well as a goat willow and stands of living and dead elm. The Bank is vertical, approximately 1m high. At the east end of the segment lies Brewery Wharf; the LSM widens to 11m. The vegetation is grassy with nettle and mallow; the riverside corner has granite setts but these may be present beneath the vegetation throughout this area. Two wooden benches are angled to provide views up and down the river.

Beyond Bulls Alley, the character is generally similar. The LSM widens up to 1.5m at Capatus House and Dukes Court before narrowing again; one mature crack willow grows here and bramble is getting established in the grassy vegetation. The RSM is generally narrower. At the widest point, behind Boat Race House and Capatus House, is a small group of ash trees with sycamore scrub with the remainder open with nettle-dominated vegetation. A large weeping willow stands at the end of the section.	
Target notes (in addition to generic guidance)	
Landside margin	• East of Bulls Alley, do not allow bramble to become established in the narrower parts of the strip.
Riverside margin	• Raise the lower branch height of trees throughout the section; prevent scrub encroaching into open areas. At Brewery Wharf: keep this area open and do not allow trees or scrub to become established.
Bank	• At the west end, consider planting marginal wetland plants into the RSM and Bank.
Areas of interest	
V14.2 (continuation): Thames Bank grassland *Frequency: annually*	• Consider planting a margin of robust wetland plants – rushes, sedges – along the railings so as not to affect Boat Race viewers. • Consider reducing cutting frequency of grass.

Section No.	**16**	Ownership	PLA
Description:	Masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Goat Willow	Sycamore Hawthorn Common Ash Wild Cherry Crack Willow Common Elder Elm	Sycamore Hornbeam Common Ash Weeping Willow	Crack Willow	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low crown for navigation. Remove one unstable tree.

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 16 open space and ecology summary	**Length**: 135m • **Total area**: 857m^2
Description: A narrow section between the entrances with Tapestry Court and Jubilee Gardens open spaces. The LSM is a narrow vegetated strip along the rear walls of the adjacent gardens, widening to 1m behind Afon and Suthrey Houses where a mature and several semi-mature sycamore are growing from the margin above cow parsley and foxglove. This east end of the wall also sees some interesting flora on the wall, including hart's-tongue fern. A bench stands in the RSM at the west end; moving east, the RSM is a 1m wide grassy strip with broad-leaved dock, purple loosestrife and clump of dogwood scrub. In the centre of the riverside is a viewing area with another bench; east of this, the RSM is narrow and then absent, as the path abuts the top of the Bank. Semi-mature ash and a cherry as well as a mature London plane grow from the top of the Bank. At the west end, the path is of granite setts, changing to gravel where the RTSM narrows.	
Target notes (in addition to generic guidance)	
Landside margin	• Remove all natural regeneration east of the bench.
Riverside margin	• Coppice dogwood on a regular basis, in February / March, to retain it as a compact shrub.

Section No.	**17**	Ownership	PLA
Description:	Masonry and some masonry and concrete		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash White Willow Goat Willow	NA	Sycamore Common Ash Elm	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low crown for navigation. Remove two unstable trees. Inspect dead Elm stump and remove if unstable.

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 17 open space and ecology summary	**Length**: 192m • **Total area**: 1159m^2

Description: This section runs behind Jubilee Gardens, the Old Power Station and The Limes. The LSM is up to 2m wide and has a 1.5m high concrete wall on the boundary; a path from Jubilee Gardens joins the towpath at the western end. Along the park, there are several semi-mature sycamores growing along the wall, with a ground flora of Lords-and-Ladies, cow parsley and ivy. The path is of granite setts and 1.5m wide. The RSM is up to 1m wide, grassy with broad-leaved dock, Canadian fleabane and the scarce white horehound.

East of the park, the LSM is 1m wide, with cow parsley and garlic mustard; one bench sits against the wall, which has a low set of railings along the top on this segment. Most of the trees here are behind the wall but occasional maples are growing in the margin. The RSM is 0.5m wide and bordered by metal railings; cow parsley, alexanders and dock are present with occasional semi-mature trees including white willow, goat willow, sycamore and ash.

Target notes (in addition to generic guidance)	
Landside margin	• Jubilee Gardens: lift lower branches of sycamores and coppice younger growth to open views from the benches on the raised part of the park. Start this on a 7-year rotation and monitor if views need re-opening sooner. • Eastern half: consider removing young trees growing in the margin due to insufficient space for larger trees.
Riverside margin	• Consider opportunities for wetland marginal planting.
Bank	• Prioritise removal of cabbage palm.

Section No.	**18**	Ownership	PLA
Description:	Masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Common Ash	NA	Common Ash White Willow Common Elder	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Fell one tree with decay.

Tree Management Recommended 0-10 years
Potentially include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 18 open space and ecology summary	**Length**: 123m • **Total area**: 1079m^2
Description: This section from the rear of The Limes past Tideway Yard and Wharf to the White Hart public house and continues the character of section 17. The LSM is a tall herb strip, maximum of 1m wide and narrowing from west to east, and runs along the rear boundary wall of the adjacent properties; no trees are present. The path is of granite setts and 1.5m wide. The RSM is up to 1.5m wide; trees – white willow, ash and elder – are sparse. The lack of shade has led to the creation of more interesting riparian vegetation, with purple loosestrife, pendulous sedge and dock.	
Target notes (in addition to generic guidance)	
Landside margin	• Coppice or remove young scrub at rear of The Limes.

Section No.	**19A**	Ownership	PLA
Description:	Masonry and concrete		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Nil	NA	Nil	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
No trees

Tree Management Recommended 0-10 years
No Trees

Section 19A open space and ecology summary	**Length**: 22m • **Total area**: 208m^2
Description: A short section adjacent to the White Hart public house. A narrow strip of vegetation runs along the pub on the LSM between benches, bins and cycle racks. The path is of granite setts and 1.5m wide. The RSM is 1.5m wide amenity grassland, frequently mown to accommodate several picnic benches; broad-leaved dock is also present. The cobbled bank is lightly vegetated with some large clumps of pendulous sedge at the top.	

Target notes (in addition to generic guidance)	
Riverside margin	• Monitor marginal vegetation.

Section No.	**19B**	Ownership	Unknown
Description:	Masonry and concrete		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Common Ash Goat Willow	NA	Nil	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Not PLA owned. Coppice mature Goat Willow.

Tree Management Recommended 0-10 years
Not appropriate to include this section in Coppice Management but the trees could be removed, bank repaired, and appropriate species planted in a few groups on the riverside and landside margins maintaining viewpoints from seating.

Section 19B open space and ecology summary	**Length**: 126m • **Total area**: 1599m^2

Description: This section of the towpath runs along The Terrace north of the White Hart public house. The LSM is up to 2m wide and separated from the road by a 1.5m high concrete wall; several benches are located back against the wall with a view of the river beneath spaced out mature limes which have been pollarded and, in one case, coppiced. The strip is grass-dominated with alexanders, mallow, white dead-nettle and stinging nettle present. The path is 1.5m wide and of granite setts. The RSM is 1.5m wide and the Bank slopes down to the river below; due to frequent inundation and more limited shading than elsewhere, the riverside margin has developed into good quality tall-herb and riparian vegetation. It is nettle-dominated in parts, but with cow parsley, pendulous sedge, purple loosestrife, broad-leaved dock, yellow flag and hemlock water-dropwort. Goat willow scrub has gotten a foothold in a couple of locations.

Target notes (in addition to generic guidance)	
Landside margin	• Leave a 1m strip along the wall that goes unmown between mid-April and early September. Arisings should be removed when cut.
Bank	• Coppice scrub on long rotation and do not allow more to become established.

Areas of interest	
B19.1: Mortlake Terrace marginal vegetation *Frequency: annually*	• Keep a pathside strip up to 1m wide cut and collected on an annual basis. • Vary vegetation structure by cutting and removing arisings from short sections between September and November. Select two areas where vegetation is finer and cut 2-3m windows annually to maintain a wider range of plants and keep open views. Cut similar sized sections on a 2-3 year rotation elsewhere. Monitor and adjust as needed.

Section No.	**20**	Ownership	Unknown
Description:	Masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Common Ash Goat Willow	NA	Elm	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low crown of Ash tree for navigation and removed dead branches.

Tree Management Recommended 0-10 years
Not appropriate for Coppice management. The Ash and Goat Willow on the bank could be removed and replaced in groups on the riverside and landward margins maintaining strategic views from seating.

Section 20 open space and ecology summary	**Length**: 104m • **Total area**: 1076m^2

Description: This section continues the character of section 19B along The Terrace before passing under Barnes Bridge. The LSM narrows from 1.2m to 0.5m but widens to 4m at the bridge where the path turns to pass under the bridge on a boardwalk. This vegetated strip is separated from the road by a 1.5m high concrete wall. There are no benches or trees in the LSM except for a coppiced sycamore adjacent to a historic metal lamp post. The path is 1.5m wide and of granite setts. The RSM is 1.5m wide and the Bank slopes down to the river below; due to frequent inundation and lack of shading, good quality tall-herb and riparian vegetation has developed, including purple loosestrife and hemlock water-dropwort. One ash tree and occasional scrub is growing from the top of the bank. Towards the bridge, metal railings run along the bank top and then become the handrails for the timber boardwalk which runs under the bridge, mounted over the bank, and joins the raised concrete walkway on the north side.

Target notes (in addition to generic guidance)	
Landside margin	• Consider leaving a strip along the wall that goes unmown between mid-April and early September. Arisings should be removed when cut.

Areas of interest	
B19.1 (continuation): Mortlake Terrace marginal vegetation *Frequency: annually*	• Keep a pathside strip up to 1m wide cut and collected on an annual basis. • Vary vegetation structure by cutting and removing arisings from short sections between September and November. Select two areas where vegetation is finer and cut 2-3m windows annually to maintain a wider range of plants and keep open views. Cut similar sized sections on a 2-3 year rotation elsewhere. Monitor and adjust as needed.

Section No.	21A	Ownership	Unknown Probably LBRuT (Highways)
Description:	Concrete and masonry and concrete. Crack Willow growing on riverbed T335		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Crack Willow	Common Alder Goat Willow	Nil	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
None

Tree Management Recommended 0-10 years
This section is not appropriate for Coppice management. Prudent to remove Crack Willow on Riverbed (PLA or bank owner). Goat Willow and Common Alder growing though bank silt might need to be removed at some point. Bank not visible for vegetation and silt.

Section 21A open space and ecology summary	**Length**: 486m • **Total area**: 1593m^2

Description: This long section of the 'towpath' follows the raised footway along The Terrace and Lonsdale Road, from Barnes Bridge to Small Profits Dock. There is no LSM; the path is immediately adjacent to the carriageway, bordered by a metal barrier with occasional gaps for access. The path is 1.8m wide concrete, with wider areas at two points where access ramps slope down the Bank. The river side of the path is a 1m high concrete wall; the RSM is also absent apart from a vegetated strip in the last few metres at the north end. Beyond the wall, a fringe of riparian vegetation is present on the Bank and in the intertidal zone in the section along Lonsdale Road. A clump of alder and scrub is present near the southern access ramp and crack willows adjacent to the northern ramp.

Section No.	21B	Ownership	PLA
Description:	Concrete and masonry and concrete.		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Norway Maple Sycamore Horse Chestnut Hawthorn Common Ash Wild Cherry Common Elder	Norway Maple Sycamore Hawthorn Common Ash Wild Cherry Common Elder Elm	Field Maple Sycamore Hawthorn Common Ash Common Laburnum Grey Poplar Common Elder	Common Ash	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low foliage for navigation. One Elder to coppice Remove Dead Elm trees

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 21B open space and ecology summary	**Length**: 217m • **Total area**: 1771m^2
Description: An initially narrow section of the towpath alongside the Council's Small Profits Dock open space, widening towards section 22. The LSM is absent at the south end, the 3m-wide hardcore path abuts the open space with a low wall forming the boundary; in the northern half, a wooded strip of dense, young trees begins as the path kinks towards the river and widening from 1m to 5m at the north end. The RSM has a 1-3m vegetated strip of tall herbs and the Bank vegetation is generally limited. Across both areas are groups of elm, ash, sycamore, hawthorn and wild cherry scrub along with semi-mature and mature standards of the same species with the exception of elm. One open area of the RSM and Bank has more interesting bankside vegetation, including purple loosestrife and pendulous sedge.	

Target notes (in addition to generic guidance)	
Landside margin	• Stems of any species that are of poor form should be removed or coppiced. • Keep the woodland structure open through thinning and coppicing in small patches; keep some short windows open onto Small Profits Dock.
Riverside margin	• Stems of any species that are of poor form should be removed or coppiced. • Re-coppice any windows on 2-year rotation.

Bank	• As RSM • Maintain open window opposite bench 21.1 at south end. • Opportunity for windows at north end, south of B21.1, for view and vegetation: remove any invading scrub. • Outside the windows, generally reduce shade / overhanging branches, focusing on areas of best vegetation / expansion potential.
Areas of interest	
V21.1: bench adjacent to towpath *Frequency: annual initially*	• Maintain open window opposite southern bench (21.1).
B21.1: open area of bank *Frequency: annually initially*	• Keep bank clear of invading scrub.

Section No.	**22**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Native Black Poplar Crack Willow	NA	Sycamore Hawthorn Common Ash Native Black Poplar Western Balsam Poplar Goat Willow Crack Willow Common Elder	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low foliage for navigation. Two trees to re-coppice One tree to remove dead wood.

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 22 open space and ecology summary	**Length**: 178m • **Total area**: 1408m^2
Description: This section runs along the north end of Small Profits Dock open space and the south end of Leg o' Mutton Local Nature Reserve; it continues the character of section 21B. The LSM is a wooded strip up to 14m wide, bramble and cow parsley dominating the ground flora beneath young ash and sycamore and hawthorn scrub. The low concrete wall continues along the open space boundary and ends where footpaths link the reserve's south-western entrance to the towpath and Small Profits Dock; the reserve boundary is a mixture of low metal railings and post and rail fencing. At the north end are two large hybrid black poplars along the boundary, both with significant log piles beneath, before another entrance into the reserve. The hardcore towpath is 2m wide, muddy in winter. The RSM is up to 2m wide, with nettles and cow parsley, and occasional trees including a mature crack willow and younger sycamore. The Bank has a mixture of mature and semi-mature crack willow, ash and native black poplar over younger hawthorn, western balsam poplar, elder, ash and sycamore.	

Target notes (in addition to generic guidance)	
Landside margin	• Cautiously open the structure of the woodland; liaise with partners on tawny owl useage of this area before beginning. • Tree planting: consider planting native black poplar as future replacement planting for the failing hybrids – two locations noted.

Bank	• Open out denser areas of understorey.
Areas of interest	
V22.1: interface between towpath, Leg o' Mutton and Small Profits Dock	• Open woodland through thinning and coppicing, favouring stems of good form and preferred species • Coppice bankside, to highlight important willow. • Consider improving paths in this area. • Improve signage: install badging sign at reserve entrance; reduce signage clutter; consider fingerpost.

Section No.	**23**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Crack Willow	Sycamore Hawthorn Common Ash Common Elder	Common Ash	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Two trees to re-coppice Eight trees to remove dead wood. One dying tree and one unstable tree to remove.
Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 23 open space and ecology summary	**Length**: 184m • **Total area**: 1435m^2
Description: This section lies alongside part of the south end of Leg o' Mutton Local Nature Reserve, continuing the character of section 22. The LSM is a wooded fringe of the reservoir's flank, up to 6m wide. Areas of young scrub alternate with more open areas beneath the large mature hybrid black poplars. The 2.8m-wide path is of hardcore. The RSM is up to 2m wide; most trees are in the Bank, with ash and sycamore dominating over hawthorn scrub and occasional narrow windows offering views of the river.	

Target notes (in addition to generic guidance)	
Landside margin	• Cautiously open the structure of the woodland; liaise with partners on tawny owl useage of this area before beginning. • Push areas of scrub back from the path where appropriate. • Consider planting of native black poplar as future replacement planting for the failing hybrids. • Keep bramble climbing over wall from Small Profits Dock under control. • Tree planting: consider planting native black poplar as future replacement planting for the failing hybrids.
Riverside margin	• Coppice / remove young scrub at window between T378 and T379; maintain free of trees / scrub.
Bank	• Prioritise coppicing in denser areas of understorey. • Keep windows clear of scrub.

Section No.	**24**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Hawthorn Common Ash London Plane Elm	NA	Sycamore Hawthorn Common Ash London Plane Crack Willow Common Elder Elm	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. One tree to pollard Four trees to remove dead wood. One dead tree to remove. Remove dead Elm trees.
Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 24 open space and ecology summary	**Length**: 160m • **Total area**: 1377m^2
Description: A similar section to those to the south lying along the centre of Leg o' Mutton Local Nature Reserve. The LSM is a wooded fringe of the reservoir's flank, up to 6m wide but narrowing to the north. Some areas are shaded by the canopy, others are of dense young scrub and the hybrid poplars continue to line the boundary, with open areas around them where fallen. The 2.6m-wide path is of hardcore. The RSM is up to 2m wide with hawthorn, elm and elder scrub. and occasional narrow windows offering views of the river. In the Bank, the usual ash and sycamore are complemented by London plane and wych elm.	
Target notes (in addition to generic guidance)	
Landside margin	• Liaise with partners on tawny owl use of this area before considering any work. • Push areas of scrub back from the path where appropriate. • Consider planting of native black poplar as future replacement planting for the failing hybrids.
Bank	• Prioritise coppicing in denser areas of understorey.

Section No.	25	Ownership	PLA
Description:	Concrete and masonry with some raised soil. Landside Margin includes part of Leg o' Mutton Woodland.		

Bank trees	Bank/Riverside trees	Riverside trees	Landside trees	Offsite trees
Sycamore Common Ash London Plane	Norway Maple Sycamore Common Alder Hawthorn Common Ash Wild Cherry Myrobalan Plum Common Elder Elm	Wych Elm	Norway Maple Sycamore Common Ash Grey Poplar Lombardy Poplar Wild Cherry Holm Oak Goat Willow Common Elder Wych Elm Elm	Nil

Tree Maintenance identified in Survey 0-3 years

Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.
Coppice two trees
Remove dead wood from ten trees.
Remove nine trees (Dead, Dying, Unstable).
Remove dead and dying Elm.
Selectively feel Young Norway Maple to leave 5-6m spacing.

Tree Management Recommended 0-10 years

Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings. Landside (Leg o' Mutton Woodland) to be done at a different time to the Riverside/Bank part. Leg o' Mutton Woodland consist of two Compartments G784 and G799 (G799 include G787). These two compartments should not be coppiced in the same year. They should be coppiced at least 5 years apart.

Section 25 open space and ecology summary	**Length**: 201m • **Total area**: 5758m^2 (includes Leg o' Mutton woodland)

Description: A section which at the south end is similar to those lying immediately south, but which broadens to become the start of the Leg o' Mutton woodland. The LSM begins as a wooded fringe of the reservoir's flank, up to 10m wide but widening to 40m at the north end. This area was formerly open with trees just bordering the reservoir, but which has become wooded over the last 70 years. It is dominated by large Norway maples, two grey poplars and a wild cherry over an understorey of Norway maple and *Prunus* regeneration, elder, hawthorn, elm and holm oak. The 2.6m-wide towpath is of hardcore. The RSM is up to 2m wide with hawthorn, elm and elder scrub and one clump of wild privet. In the Bank are mature and semi-mature ash and sycamore.

Target notes (in addition to generic guidance)	
Landside margin	• Coppice the pathside strip on a 14-year rotation.
Riverside margin	• Maintain the wild privet.
Bank	• Maintain the attractive mature trees and coppice around them.
Areas of interest	
B25.1: Leg o' Mutton woodland	• Carry out separate, more detailed survey of the entire woodland before confirming approach. • Two approaches to be considered: create an oak / ash standards over coppice structure, or favour wet woodland species in an area that is likely to become wetter over time. The latter is preferred at present. • In either case, the amount of Norway maple should be very significantly reduced over time, as the new structure becomes established, assisted by tree planting.

Section No.	26	Ownership	PLA		
Description:	Concrete and masonry with some raised soil. Landside Margin includes part of Leg o' Mutton Woodland.				
Bank trees	Bank/Riverside trees	Riverside trees	Landside trees		Offsite trees
Sycamore Common Ash	Norway Maple Sycamore Hawthorn Common Ash Wild Cherry Myrobalan Plum Holm Oak Common Elder	Norway Maple Sycamore Common Ash Apple	Norway Maple Sycamore Common Ash Grey Poplar Lombardy Poplar Western Balsam Poplar Hybrid Black Poplar Wild Cherry	Holm Oak Common Oak Goat Willow Common Elder Broadleaved Lime Wych Elm Elm	Nil

Tree Maintenance identified in Survey 0-3 years

Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.
Coppice six unstable Grey Poplar trees in Leg o' Mutton Woodland, one additional multi-stemmed group has one unstable stem to remove.
Fell five trees in Leg o' Mutton Woodland because of instability or decay.
One tree needs further inspection of Internal trunk decay to assess safety.
One tree needs ivy removed/ girdled in the riverside margin.
Three trees to Pollard on the Bank.
Remove dead wood from six trees.
Remove broken/damaged limb from one tree

Tree Management Recommended 0-10 years

Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings. Landside (Leg o' Mutton Woodland) to be done at a different time to the Riverside/Bank part. Leg o' Mutton Woodland consist of three Compartments G812 and G836 and G846. These three compartments should not be coppiced in the same year. They should be coppiced 3-4 years apart but not adjacent compartments.

Section 26 open space and ecology summary	**Length**: 251m • **Total area**: 12200m^2 (includes Leg o' Mutton woodland)

Description: Similar in character to the northern part of section 25, this section is dominated by the Leg o' Mutton woodland on the LSM. Just over 40m wide for 150m, narrowing gradually to 13m wide north of Ferry Lane, the wood is again dominated by Norway maple and grey poplar with ash, wild cherry and at least one native black poplar; beneath is dense Norway maple regeneration, elder and elm. The 2.6m-wide towpath and Ferry Lane footpath are made from hardcore. The RSM is up to 2m wide with young hawthorn, ash, sycamore, *Prunus* and elder scrub. In the Bank are mature and semi-mature ash and sycamore.

Target notes (in addition to generic guidance)	
Landside margin	• Coppice the pathside strip on a 14-year rotation. • Keep an avenue-like appearance to Ferry Lane.
Riverside margin	• Widen and maintain the window at the end of Ferry Lane.

Areas of interest	
B25.1: Leg o' Mutton woodland	• Carry out separate, more detailed survey of the entire woodland before confirming approach. • Two approaches to be considered: create an oak / ash standards over coppice structure, or favour wet woodland species in an area that is likely to become wetter over time. The latter is preferred at present. • In either case, the amount of Norway maple should be very significantly reduced over time, as the new structure becomes established, assisted by tree planting.
V26.1: views to Chiswick Eyot, Chiswick Mall and St Nicholas Church *Frequency: as needed*	• Open up one window towards the north end of the section.

Section No.	**27**	Ownership	PLA
Description:	Concrete and masonry with some raised soil. A small section includes the northern tip of Leg o' Mutton Woodland.		

Tree Species

Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Goat Willow	Field Maple Norway Maple Sycamore Horse Chestnut Hawthorn Common Ash Wild Cherry Goat Willow Common Elder Elm	Sycamore	Norway Maple Sycamore Common Ash Grey Poplar Wild Cherry Common Elder Broadleaved Lime Elm	Nil

Tree Maintenance identified in Survey 0-3 years

Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.
Coppice one Goat Willow on the bank
Fell one unstable Ash on the bank.
Remove dead wood from one tree.
Remove broken/damaged limb from one tree

Tree Management Recommended 0-10 years

Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings. Landside (Leg o' Mutton Woodland) to be done at a different time to the Riverside/Bank part. Leg o' Mutton Woodland consists of one compartments G849. This compartment should not be coppiced as part of a rotation within Leg o' Mutton Woodland.

Section 27 open space and ecology summary	**Length**: 179m • **Total area**: 3061m^2

Description: A wooded section which includes the northern tip of the Leg o' Mutton woodland and runs alongside St Paul's School playing fields. At the southern end, the section includes a triangle of woodland on the landside that narrows towards the north and which is bordered on the landside boundary by the diagonal path that links to Ferry Lane and low metal railings. Three-cornered leek is present here. The woodland is dominated by Norway Maple and sycamore. The towpath is 3m wide, of worn stone with bare edges that are especially wide towards the north. The RSM is a 1.5-3.5m wide densely wooded edge of Norway maple regeneration and sycamore with smaller amounts of ash, hawthorn, elm and cherry. Where the canopy is more open towards the north, the edge becomes grassy.

Target notes (in addition to generic guidance)

Landside margin	• Remove and treat Norway maple regeneration. • Favour species change towards that decided for Leg o' Mutton woodland.
Riverside margin	• Remove and treat Norway maple regeneration.
Areas of interest	
V27.1: views to Chiswick Eyot *Frequency: as needed*	• Open up one window towards the north end of the section.

Section No.	**28**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Common Ash London Plane	Norway Maple Sycamore Horse Chestnut Hawthorn Common Ash Grey Poplar White Willow	Hazel Sweetbay Wych Elm Elm	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low foliage for navigation. Fell one dead Elm.

Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 28 open space and ecology summary	**Length**: 36m • **Total area**: 517m^2
Description: A short section alongside St Paul's School which continues the character of the northern part of section 27. The LSM is a 2m wide wooded strip along the playing fields; the boundary itself is of low metal railings. The path is 3m wide worn stone with wide bare edges. On the river side, directly adjacent to the steps at the beginning of the section is an outfall with a railing, creating a natural open viewpoint. The remainder of the RSM is 1m wide. Regeneration of sycamore dominates the margin and the Bank.	
Target notes (in addition to generic guidance)	
Bank	• Extend the window around the outfall.

Section No.	**29**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Crack Willow	Norway Maple Sycamore Horse Chestnut Hawthorn Common Ash Grey Poplar Goat Willow Common Elder Elm	Norway Maple Sycamore	Norway Maple Sycamore Horse Chestnut Common Ash Grey Poplar Common Elder Small Leaved Lime Wych Elm Elm	Nil

Tree Maintenance identified in Survey 0-3 years

Raise low foliage for navigation.
Fell one dead Elm.
Fell unstable Sycamore.
Remove dead wood from three trees.
Remove dead Elm trees.
Reduce one Grey Poplar and Pollard one Grey Poplar on landward side.
Coppice a crack willow which has collapsed

Tree Management Recommended 0-10 years

Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 29 open space and ecology summary	**Length**: 221m • **Total area**: 2603m^2
Description: Initially similar to sections 27-28, this long section alongside St Paul's School opens out more towards its north end, offering more opportunities for windows and viewpoints. The LSM is a 2m wide wooded strip which includes some mature Norway maple and regenerating elm backed by low metal railings. The path is 3m wide and of worn stone with large bare patches. The RSM is a vegetated strip up to 2m wide; the Bank is densely vegetated with scrub of Norway maple and sycamore with elm beneath, though in a few places the tree line crosses on to the RSM.	

Target notes (in addition to generic guidance)	
Landside margin	• Create two short openings, around Norway maple at south end and where ground vegetation is retained near north end. • Tree planting: potential location for native black poplar.

Bank	• Remove and treat Norway maple and sycamore regeneration. • Keep windows either side of T515 open towards the north end.
Areas of interest	
V29.1: views to Chiswick Mall and Hammersmith Terrace *Frequency: as needed*	• Open out window across the river by removing regen and lifting lower branches of larger trees, as well as removing any smaller trees of poor form.

Section No.	**30**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Apple Grey Poplar Goat Willow Crack Willow	Sycamore Hawthorn Common Ash Grey Poplar Holm Oak Goat Willow Common Elder Elm	Holly Grey Poplar	Sycamore Horse Chestnut Hawthorn Common Ash Grey Poplar Lombardy Poplar False Acacia Common Elder Small Leaved Lime Elm	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove ivy and carry out further inspection on internal decay on three trees. Remove broken branches, two trees. Coppice leaning apple, one Goat Willow and three Crack Willow. Remove dead Elm trees
Tree Management Recommended 0-10 years
Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 30 open space and ecology summary	**Length**: 170m • **Total area**: 2112m^2
Description: A more open and mature wooded section with less dense regeneration, alongside the St Paul's School's buildings. The 1-1.5m wide LSM is a narrow wooded edge backed by railings, in part set on a low wall. Mature Lombardy and grey poplar and horse chestnut stand over an understorey of semi-mature ash, elm and shrubs. The 2.5m wide path is of worn gravel. The RSM is mainly a 0.5m grassy strip with occasional semi-mature ash and grey poplar. The revetment contains a wide range of mature and semi-mature ash, sycamore, crack willow, goat willow, grey poplar and apple.	
Target notes (in addition to generic guidance)	
Bank	• Consider removing ash and sycamore to promote other species, whilst creating windows to view Hammersmith Upper Mall

Section No.	**31**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species

Bank	Bank/Riverside	Riverside	Landside		Offsite
Sycamore Common Ash Holly Goat Willow Elm	Sycamore Hawthorn Common Ash Goat Willow Common Elder	Sycamore Common Ash	Field Maple Norway Maple Sycamore Horse Chestnut Hawthorn Common Ash Holly	Sweetbay London Plane Common Elder Broadleaved Lime Wych Elm Elm	Nil

Tree Maintenance identified in Survey 0-3 years

Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.
Carry out further inspection on internal decay on one tree.
Remove dead Elm trees.
Remove deadwood from three trees.
Coppice one tree
Fell seven trees (two unstable ash and five unstable Goat Willow)
Pollard one London Plane with decay

Tree Management Recommended 0-10 years

Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 31 open space and ecology summary	**Length**: 196m • **Total area**: 2513m^2

Description: Initially more wooded and shaded than section 30 but opening out towards the east end either side of the boat house and slipway. The LSM is up to 3m wide, with a low railing boundary and occasional mature trees – London planes, wych elm and Norway maples – over an understorey of elm and elder in the west and open ground in the east. The gravel path is up to 4m wide. The RSM varies between absent and narrow in the west, turning into a grassy strip east of the slipway. All riverside trees are in the revetment; to the west, a mixture of ash, goat willow and sycamore are mixed with an understorey of elm but this opens out towards the slipway and to the east are just two ash trees over low vegetation.

Areas of interest

V31.1: views Upper and Lower Mall and Dove Pier, Hammersmith	• The tree programme recommends lifting the two revetment ash trees to 3m for the benefit of rowers; this lift should also be carried out (to a slightly increased height if need be) and maintained for the view from

Frequency: as needed	the bench to Hammersmith. This will give the additional benefit of allowing light into the ground vegetation and perhaps allowing marginal vegetation to develop; occasional cutting may be required.

Section No.	**32**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species					
Bank	Bank/Riverside	Riverside	Landside		Offsite
Common Ash Crack Willow	Sycamore Hawthorn Common Ash Sweetbay Wild Cherry Goat Willow Common Elder Elm	Sycamore Common Ash Common Elder	Sycamore Hawthorn Common Ash Holly Sweetbay London Plane Lombardy Poplar	Hybrid Black Poplar Pear Crack Willow Common Elder Broadleaved Lime Elm	Nil

Tree Maintenance identified in Survey 0-3 years

Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.
Remove ivy and carry out further inspection on internal decay on one tree.
Remove dead wood from five trees.
Pollard one Lombard Poplar with decay and re-pollard two hybrid Poplar.
Remove broken branch from a Crack Willow.
Coppice two Crack Willow.
Fell one Crack Willow
Remove dead Elm trees

Tree Management Recommended 0-10 years

Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 32 open space and ecology summary	**Length**: 186m • **Total area**: 2360m^2

Description: This section generally continues the open character of section 31, with a short dense portion west of centre. The LSM is up to 3m wide, alongside St Paul's School playing fields with a low railing boundary. In the east, a mature plane, hybrid black poplar and crack willow stand over an understorey of elm with some ash and hawthorn, but the eastern half of the boundary strip is much more open. The path is gravel and 4m wide. In the west, the RSM is a 2m strip of vegetation and the occasional ash and elder and the Bank is open. In the denser section, elm, ash and sycamore are dense on the Bank, with a narrow strip of trees along the RSM edge. The eastern riverside is more open again, with a grassy 1m RSM and occasional semi-mature ash in the Bank.

Target notes (in addition to generic guidance).

Landside margin	• Coppice elm within the margin on a 7-year rotation, other species on a 14-year rotation. • Consider planting resistant species of elm. • Tree planting: potential location for native black poplar.
Riverside margin	• Coppice on 7-year rotation.
Bank	• The dense regen and semi-mature trees immediately west of steps 33 should be thinned, with preference for species and form. • Coppice around T602.
Areas of interest	
V32.1: views across river and to Hammersmith Bridge *Frequency: as needed*	• The open area between ash trees T601 and T602 should be maintained clear; combined with the tree lift prescribed by the tree survey will produce good views to the bridge and across the river.

Section No.	33	Ownership	PLA
Description:	Concrete and masonry		

Tree Species

Bank	Bank/Riverside	Riverside	Landside		Offsite
Nil	Nil	Sycamore Hawthorn Common Ash Hybrid Black Poplar Common Elder Elm	Norway Maple Sycamore Horse Chestnut Hawthorn Common Ash Lombardy Poplar	Hybrid Black Poplar Turkey Oak Common Elder Elm	Nil

Tree Maintenance identified in Survey 0-3 years

Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.
Remove dead wood from an Ash.
Reduce crown of Lombardy Poplar to previous pruning position.
Fell one unstable Hybrid Black Poplar on Riverside margin and re-pollard another Hybrid Black Poplar with suspected ground heave on Landside margin.
Remove dead Elm trees.
Remove dead Common Elder

Tree Management Recommended 0-10 years

Include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 33 open space and ecology summary	**Length**: 101m • **Total area**: 1362m^2

Description: A shorter section than those to the west, running up to Hammersmith Bridge. On the landside this section borders the eastern-most part of St Paul's School playing fields, separated by a low railing. The LSM is 1.5-2m wide, lightly wooded with poplar and ash – plus horse chestnuts at the east end - over elm and elder as well as open areas and the log pile of a felled poplar. The gravel path is 3m wide. The riverside is generally open; there is a lightly wooded section with elder, ash and a mature hybrid black poplar at the west end with most trees are in the Bank. The RSM is generally a 2m vegetated strip and, with no trees, the eastern half has tall herb vegetation – broad-leaved dock, hemlock water-dropwort, mugwort, nettle, lesser burdock, false-brome – with some shading from the canopy of the trees in the LSM.

Target notes (in addition to generic guidance)

Bank	• Keep view to Hammersmith Bridge at east end of the section clear.

Section No.	**34**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Nil	Nil	Nil	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area – keep clear No trees – small section at Hammersmith Bridge

Tree Management Recommended 0-10 years
No Action

Section 34 open space and ecology summary	**Length**: 22m • **Total area**: 273m^2
Description: A very short section which is mostly beneath the Hammersmith Bridge but includes the western access to the bridge. On the landside, a ramp slopes up south to Castelnau. The path is gravel and 4m wide. Beside the bridge, the RSM and bank is of tall-herb vegetation with some shrubs creeping in. Beneath the bridge, the bank and revetment are bare.	
Target notes (in addition to generic guidance)	
Riverside margin	• Prevent shrub species becoming established to maintain open view of the bridge.

Section No.	**35**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Hybrid Black Poplar	Common Ash Common Elder	Nil	Norway Maple Common Ash Lombardy Poplar Common Elder	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove ivy and carry out further inspection one tree. Remove one unstable Hybrid Poplar
Tree Management Recommended 0-10 years
Too few trees to include in coppice rotation but selective removal of trees in undesirable locations and replacement planting would be prudent.

Section 35 open space and ecology summary	**Length**: 40m • **Total area**: 493m^2
Description: Another short section to the immediate east of Hammersmith Bridge. On the landside, at the north end a ramp leads down to the towpath from Castelnau; from there the LSM is 1.5m wide, bordered by the rear gardens of residences on Riverview Gardens with a mixture of timber fencing and low metal railings. The LSM has a semi-mature Lombardy poplar and a small group of young shrubs but is otherwise open with a grassy edge. The gravel path is 3m wide; a vehicle barrier and pedestrian chicane is situated at the west end of the section. The RSM is a 1-1.5m wide grassy strip. The Bank has only a hybrid black poplar and clump of elder at the west end and has a mixture of tall-herb vegetation.	

Target notes (in addition to generic guidance)	
Landside margin	• Manage as hedge rather than coppice, for light attenuation. • Maintain the shrubs and bramble as a hedge with a max height of c.1.8m.
Bank	• Remove ash from group at west end.

Section No.	**36**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
London Plane	Hawthorn Common Elder	Nil	Norway Maple Sycamore Common Ash	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove deadwood from three trees. Reduce crown of London Plane. Remove dead Common Elder trees
Tree Management Recommended 0-10 years
Too few trees to include in coppice rotation but selective removal of trees in undesirable locations and replacement planting would be prudent.

Section 36 open space and ecology summary	**Length**: 62m • **Total area**: 782m^2
Description: A short section alongside the north end of Riverview Gardens. The LSM is 3m wide and has scattered semi-mature trees – including ash and Norway maple – over a low informal hedge of mixed shrubs and bramble with a grassy edge, backed by low railings. The gravel path is 3m wide. The RSM is a 1-1.5m wide vegetated strip. A small number of young or semi-mature shrubs are growing from the top edge of the Bank which otherwise is lightly vegetated.	
Target notes (in addition to generic guidance)	
Landside margin	• Manage as hedge rather than coppice, for light attenuation. • Maintain the shrubs and bramble as a hedge with a max height of c.1.8m.
Bank	• Maintain existing scrub cover for light attenuation.

Section No.	37	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
London Plane	Hawthorn Common Ash Common Elder	Common Ash	Sycamore Common Ash Crack Willow Common Elder Elm	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Remove dead wood from two trees.

Tree Management Recommended 0-10 years
Potentially include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 37 open space and ecology summary	**Length**: 107m • **Total area**: 1326m^2

Description: A section of the towpath alongside Riverview Gardens with an open structure at both ends but more densely vegetated in the centre. The LSM is 3m wide with a boundary of low railings and at either end has scattered semi-mature trees (some beyond the boundary) over an informal hedge with climbers (including Russian vine at the south end) and grassy strip. In the centre is a short section of elm, ash and *Prunus*. The gravel path is 3m wide. The RSM is a 1-1.5m wide vegetated strip with a small number of young or semi-mature shrubs are growing from the riverside edge. The Bank is dominated by a range of tall herbs including purple loosestrife, broad-leaved dock, nettle and narrow-leaved Michelmas daisy.

Target notes (in addition to generic guidance)	
Landside margin	• Generally maintain as existing. • Ideally, consideration would be given to planting two or three trees in the gap at the north end, due to light from adjacent buildings and for habitat connectivity. • Ensure that Russian vine does not spread to adjacent areas.
Riverside margin	• Generally maintain as existing. • Coppice scrub only when necessary for bank protection and not all at once – maintain some at full height at all times if possible, for light attenuation and habitat connectivity.
Bank	• Clear vegetation from 37 steps.

Section No.	**38A**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Nil	NA	Sycamore Western Balsam Poplar Common Elder	Norway Maple Sycamore Common Elder	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Fell unstable Western Balsam Poplar. Coppice one leaning Elder
Tree Management Recommended 0-10 years
Potentially include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 38A open space and ecology summary	**Length**: 52m • **Total area**: 603m^2
Description: A short section of the towpath alongside the south end of Riverview Gardens and has a more wooded structure but with open areas. The LSM is 3m wide with a boundary of low railings with scattered semi-mature trees (one beyond the boundary) over an informal intermittent hedge dominated by elder and laurel and a grassy strip; a mature Norway maple stands at the south end. The gravel path is 3m wide. The RSM is a 1m wide vegetated strip with a small number of young or semi-mature shrubs are growing from the riverside edge or the top of the Bank. At the south end, an open section of riverside has narrow-leaved Michelmas daisy, false-brome and nettle in the strip with purple loosestrife and broad-leaved dock on the revetment.	

Target notes (in addition to generic guidance)	
Landside margin	• Generally maintain as existing.
Riverside margin	• Coppice scrub only when necessary for bank protection and not all at once – maintain some at full height at all times if possible.
Bank	• Coppice scrub only when necessary for bank protection and not all at once – maintain some at full height at all times if possible.

Section No.	**38B**	Ownership	Unknown
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Nil	NA	Wild Cherry	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern.

Tree Management Recommended 0-10 years
No action

Section 38B open space and ecology summary	**Length**: 45m • **Total area**: 365m^2
Description: A short section along the north of the private open space at Harrod's Village. The LSM widens to 4m here and includes mature and semi-mature trees including sycamore and cherry, ash and alder scrub. The gravel path is 3m wide. The RSM narrows to a 0.5m vegetated strip and the Bank is also well-vegetated, including purple loosestrife; a small amount of *prunus* scrub is present in the top of the bank.	

Target notes (in addition to generic guidance)	
Landside margin	• Generally maintain as existing.
Riverside margin	• Generally maintain as existing.
Bank	• Generally maintain as existing.

Section No.	**39**	Ownership	Unknown
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
London Plane	Common Ash Grey Poplar Goat Willow Common Elder	Nil	Some mature Grey Poplar on Landside margin but not recorded.	Nil

Tree Maintenance identified in Survey 0-3 years
Navigation Priority Area: lift trees overhanging river to 3m above high water and manage all trees where collapse is a concern. Same tree has low foliage over footpath – Maybe included in PROW.
Tree Management Recommended 0-10 years
No action

Section 39 open space and ecology summary	**Length**: 37m • **Total area**: 277m^2
Description: A very short section along the south of the private open space at Harrods Village. The LSM widens to 3.5m here and includes mature and semi-mature hybrid poplars and low scrub as well as a bench and two stepped entrances to the open space behind. The gravel path is 2.5m wide. The RSM is a 1m vegetated strip and the Bank is also well-vegetated, including purple loosestrife. The south end of the RSM and bank contains a clump of elder, goat willow and a mature London plane.	

Target notes (in addition to generic guidance)	
Landside margin	• Generally maintain as existing.
Riverside margin	• Generally maintain as existing.
Bank	• Generally maintain as existing.

Section No.	40A	Ownership	Unknown
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Grey Poplar Native Black Poplar False Acacia		False Acacia	Common Elder	Nil

Tree Maintenance identified in Survey 0-3 years

Raise low crown for navigation (three trees)
Remove one unstable Grey Poplar on Bank
Coppice unstable Native Black Poplar on bank
Remove dead wood from two False Acacia (Maybe included in PROW)
Remove dead Elm trees (Maybe included in PROW)

Tree Management Recommended 0-10 years

No action

Section 40A open space and ecology summary	**Length**: 133m • **Total area**: 1251m^2

Description: The majority of this section runs between Harrods Furniture Depository on the landside and Harrod's Wharf on the riverside; at the south end is a short, more typical section of bank. The LSM is 2.5m wide. In front of the Depository and its 2m high railings, the LSM is bramble scrub with two Lombardy poplar trees at the north end; it has a wide grassy margin. The hardcore path is 3.5m wide. On the RSM 2m high railings surround the wharf, which has no public access. A narrow strip of vegetation runs along the base of the railings. A 2020 ecological survey for development of the wharf recorded the protected – and critically endangered – Jersey cudweed growing from the brick-paved surface; this species is expanding in urban areas.
South of the wharf, the LSM's trees includes a mature poplar and false acacia as well as elder and stag's horn sumach; the ground flora is dominated by ivy. The RSM is a narrow strip of vegetation; the Bank has several young false acacia, elder and a native black poplar.

Target notes (in addition to generic guidance)	
Landside margin	• For connectivity, maintain some low bramble along the rear boundary.

Areas of interest	
B40.1: Holst woodland	• In 40A, remove and treat all false acacia stems on the Bank at the south end. • Tree planting: replacement planting could include native black poplar or alder.

Section No.	**40B**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Native Black Poplar Crack Willow	NA	Sycamore Common Ash False Acacia White Willow Weeping Willow Dragons Claw Willow Common Elder Elm	Nil	Nil

Tree Maintenance identified in Survey 0-3 years

Raise low foliage for navigation.
Raise Weeping Willow Foliage over footpath (every two years)
Coppice four unstable trees which includes two Native Black Poplar (Consult first).
NB: One other Native Black Poplar has dieback and base of stem appears to be constricted.
Remove dead wood from two trees.
Remove two dead Common Elder.

Tree Management Recommended 0-10 years

Potentially include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 40B open space and ecology summary	**Length**: 118m • **Total area**: 1214m^2

Description: This section runs in front of Holst Mansions of Barnes on Waterside Estate, with a boundary of low railings. At the north end, the LSM widens to 10m to the south of the Harrods Furniture Depository, where there is a small block of shady woodland dominated by young false acacia; there is a significant amount of large deadwood. The LSM narrows past three mature Lombardy poplars and some elder scrub and maintains a 3m boundary for the remainder, with low bramble scrub and a grassy margin. The gravel path is 3.5m wide. The RSM is a 1m grassy strip with a couple of young false acacias growing from the riverside edge. The Bank is dominated by young acacia and elder beneath crack willow, native black poplar and sycamore. Bamboo can be found growing at the south end adjacent to a large weeping willow.

Target notes (in addition to generic guidance)	
Landside margin	• Manage the LSM as 50% grass, 50% bramble.
Riverside margin	• Remove bamboo and Japanese spindle at the south end.

	• Maintain haloing around native black poplars and new planting. • Re-coppice other RSM stems on a mixed rotation – some (including elm) at 7 years, other clumps at 14 years; cut in small patches, retaining some stems at all ages at all times. Re-map this section following recent work and mark up coppice areas.
Areas of interest	
B40.1: Holst woodland	• In 40B, remove and treat the false acacia, possibly in stages; this is a possible replanting opportunity – native black poplar, silver birch, alder, poplar and willow are options. • Retain existing fallen timber

Section No.	41	Ownership	PLA
Description:	Concrete and masonry and a raised soil embankment at some points		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash Native Black Poplar	Sycamore Hawthorn Common Ash London Plane Native Black Poplar Common Oak Common Elder Wych Elm	Sycamore Single-Leaved Ash Common Ash Common Pear	Nil	Nil

Tree Maintenance identified in Survey 0-3 years

Raise low foliage for navigation.
Remove dead wood from one tree.
Remove dead Elm trees.
One Native Black Poplar has two stems over river that appear to be diverging but base obscured by concrete. This tree needs to be reinspected annually or coppiced if stems are likely to fail.

Tree Management Recommended 0-10 years

Potentially include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 41 open space and ecology summary	**Length**: 124m • **Total area**: 1435m^2

Description: This section runs in front of Handel Mansions of Barnes on Waterside Estate, with a boundary of low railings. At the north end, the LSM widens to 10m and two diagonal paved paths lead into the estate; in between is an area of amenity grassland which is mown reasonably frequently. Timber infrastructure is in place here to barrier the towpath if necessary. South of the entrance, the LSM narrows to 3m and comprises a mosaic of elm scrub, bramble and semi-improved neutral grassland; the elm is occasionally coppiced. The gravel path is 3.5m wide. The riverside has a fringe of trees with one or two small gaps. The RSM has a wide 3m strip with similar habitats to the LSM beneath semi-mature sycamore and ash. Three native black poplars plus an ash and sycamore are growing from the bank.

Target notes (in addition to generic guidance)	
Landside margin	• Maintain grassland with an environmental focus; undertake an early cut in late March / early April, leave until at least the end of June and then take further cuts in July and September. This will reduce nutrients and should naturally diversify the sward. Paths should be mown in as needed.

	• Keep elm coppiced on a short rotation up to 7 years long, with no more than 25% cut in any one year and some of all ages present at all times.
Riverside margin	• Maintain haloing around native black poplars and new planting. • Re-coppice other RSM stems on a mixed rotation – some (including elm) at 7 years, other clumps at 14 years; cut in small patches, retaining some stems at all ages at all times. Re-map this section following recent work and mark up coppice areas. • Consider opening a window in the riverside trees for views and marginal vegetation.

Section No.	**42**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species					
Bank	Bank/Riverside		Riverside	Landside	Offsite
Sycamore Common Ash Native Black Poplar Crack Willow Wych Elm	Sycamore Horse Chestnut Common Alder Hawthorn Fig Common Ash	Wild Cherry White Willow Goat Willow Crack Willow Common Elder Elm	Sycamore Single-Leaved Ash Common Ash Grey Poplar Native Black Poplar Crack Willow	Nil	Nil

Tree Maintenance identified in Survey 0-3 years
Raise low foliage for navigation. Coppice six unstable trees – includes Two Native Black Poplar (Consult first) Fell three trees on bank, two dying, one unstable. Remove dead wood from seven trees. Remove broken branch from one tree. Remove dead stem and deadwood from one tree. Remove dead Elm trees
Tree Management Recommended 0-10 years
Potentially include this section in coppice rotation, except for desirable species or mature trees at suitable spacings.

Section 42 open space and ecology summary	**Length**: 520m • **Total area**: 5421m^2
Description: A very long section of towpath, behind Garraway Court in the north but mainly running adjacent to almost all of the London Wetland Centre's boundary with the river. The LSM varies between 2 and 4m wide; it is a mosaic of low bramble, tall herbs, scrub dominated by elm and semi-improved neutral grassland. South of centre, a small area around the Steve Fairbairn memorial – the Mile Post – is more formally maintained. The gravel path is 3m wide. The RSM is 1-2m wide and is primarily grassland, with a mixture of young and semi-mature sycamore, crack willow and ash as well as mature ash and native black poplar, some of the latter with large diameters. Similar species are growing from the Bank; below this, in the intertidal zone, are areas of common reed and grey club-rush. Opposite the Mile Post, the riverside is maintained free of trees and tall-herb vegetation has developed.	

Target notes (in addition to generic guidance)	
Landside margin	• Maintain the mosaic by cutting areas of scrub and grassland on a varying rotation in small areas.
Riverside margin	• Maintain haloing around native black poplars and new planting.

	• Re-coppice other RSM stems on a mixed rotation – some (including elm) at 7 years, other clumps at 14 years; cut in small patches, retaining some stems at all ages at all times. Re-map this section following recent work and mark up coppice areas. • Consider keeping any existing open areas clear of scrub / regeneration.
Bank	• Maintain haloing around native black poplars. • Undertake survey of foreshore vegetation to inform future management.
Areas of interest	
V42.1: Steve Fairburn memorial *Frequency: as needed*	• Maintain grassland with an environmental focus; undertake an early cut in late March / early April, leave until at least the end of June and then take further cuts in July and September. This will reduce nutrients and should naturally diversify the sward. • Prevent bramble encroaching into the grassland. • Keep RSM and Bank reasonably open for view to and from the memorial.

Section No.	43	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Sycamore Common Ash London Plane Native Black Poplar Wych Elm	Sycamore Hawthorn Common Ash Grey Poplar Wild Cherry Crack Willow Common Elder Elm	Grey Poplar	Nil	Nil

Tree Maintenance identified in Survey 0-3 years

Raise low foliage for navigation.
Coppice three unstable trees, including one Native Black Poplar (Consult first).
Fell dying Sycamore.
Remove dead wood from two trees.
Remove dead Elm trees
Remove self-set saplings / young trees from RSM and Bank.

Tree Management Recommended 0-10 years

Remove self-set saplings / young trees from RSM and Bank.

Section 43 open space and ecology summary	**Length**: 411m • **Total area**: 4193m^2

Description: A very long section along the south end of the London Wetland Centre and the northern half of Barn Elms Sports Centre's playing fields to Barn Elms Boathouse. The LSM is a grassy woodland edge and varies between 2 and 4m wide; it is shaded by a line of mature horse chestnut and poplar trees, though most are growing outside the site; the understorey within the boundary is ash, elm, holm oak and poplar regrowth. Towards the north end, Queen Elizabeth Walk intersects with the towpath. In two sections of the LSM, either side of this junction, mature trees have been removed creating large piles of deadwood. The worn hardcore path is 4m wide; an open timber barrier is present just south of the path junction, with chicane for other users at the pathside. The riverside itself is very open. The RSM is 0.5-1.5m wide, mainly a grassy strip with a fringe of tall herbs. For 75m on both sides of Queen Elizabeth Walk, a number of mature and semi-mature ash, sycamore, grey poplar and native black poplar are growing from the Bank, but the remaining 250m of the section has few trees and one bench. Areas of vegetation are developing which include horseradish, Canadian fleabane, Michaelmas daisy, broad-leaved dock, mugwort, nettle and angelica. At the south end of the section, there is amenity grassland and hard surfacing in front of the Boathouse.

Target notes (in addition to generic guidance)	
Landside margin	• Open areas should be kept clear of encroaching scrub. The understorey should be thinned slightly to open the structure. All arisings should be placed on existing log piles. • Denser, younger sections of understorey should be coppiced on 14-year rotation.
Riverside margin	• The trees near the bench are programmed to be lifted; this should be maintained to keep the view open. • Tree planting: possible location for small riverside tree such as alder.

Section No.	**44**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Oriental Plane London Plane Crack Willow	NA	Nil	Lombardy Poplar Wych Elm	Nil

Tree Maintenance identified in Survey 0-3 years

Raise low foliage for navigation.
Remove dead wood from one tree.
Remove self-set saplings / young trees from RSM and Bank.

Tree Management Recommended 0-10 years

Too few trees to include in coppice rotation but selective removal of trees in undesirable locations and replacement planting would be prudent.
Remove self-sets saplings / young trees from RSM and Bank.

Section 44 open space and ecology summary	**Length**: 196m • **Total area**: 3059m^2

Description: This section runs along the compound south of the Barn Elms Boathouse and the southern half of Barn Elms Sports Centre's playing fields. At the north end, the section by the compound has amenity grass on both sides of the towpath; the LSM boundary is 1.8m chain link, mainly unvegetated. The path is of worn hardcore and 5m wide. At the south of this portion is timber infrastructure which can allow the path to be closed. On the riverside, some marginal vegetation including yellow flag and angelica is present.
South of the boathouse the bank is again natural. The LSM is a 2-3.5m grassy woodland edge, with a line of mature trees including horse chestnut fringing the boundary, most growing outside the site. Significant piles of deadwood from felled trees are present as well as areas of elm, elder, hawthorn and bramble scrub. The path remains at 5m wide. The RSM is a 1-2m rough vegetated strip of grasses, tall herbs and some scrub with occasional trees, mainly planes; the mature trees on the landside shade the riverside.

Target notes (in addition to generic guidance)	
Landside margin	• Open areas should be kept clear of encroaching scrub. The understorey should be thinned slightly to open the structure. All arisings should be placed on existing log piles.
Riverside margin	• Keep open areas clear of scrub. • Tree planting: consider if space for small riverside trees such as alder, subject to any planting not affecting amenity or conditions for sailing and other recreational river uses.

Section No.	**45**	Ownership	PLA
Description:	Concrete and masonry		

Tree Species				
Bank	Bank/Riverside	Riverside	Landside	Offsite
Nil	NA	Nil	Common Ash Common Elder	Nil

Tree Maintenance identified in Survey 0-3 years
Remove self-set saplings / young trees from RSM and Bank.

Tree Management Recommended 0-10 years
Remove self-set saplings / young trees from RSM and Bank. Too few trees to include in coppice rotation but selective removal of trees in undesirable locations and replacement planting would be prudent.

Section 45 open space and ecology summary	**Length**: 57m • **Total area**: 913m^2
Description: A short section with a bridge over the Beverley Brook at the south end, marking the Richmond borough boundary. The LSM is 2-3m wide with a grassy edge; it has a tall bramble layer at the north end and is shaded by off-site trees near the bridge; the boundary is 1.8m chain link. The worn hardcore path is 5m wide; an open timber barrier is present just north of the path junction, with chicane for other users at the pathside. The riverside is completely open with no trees. The RSM is 1.5-3.5m wide; at the north end the strip includes tall herbs, turning to amenity grass south of the path infrastructure, where two benches are located. The Bank is also well vegetated.	

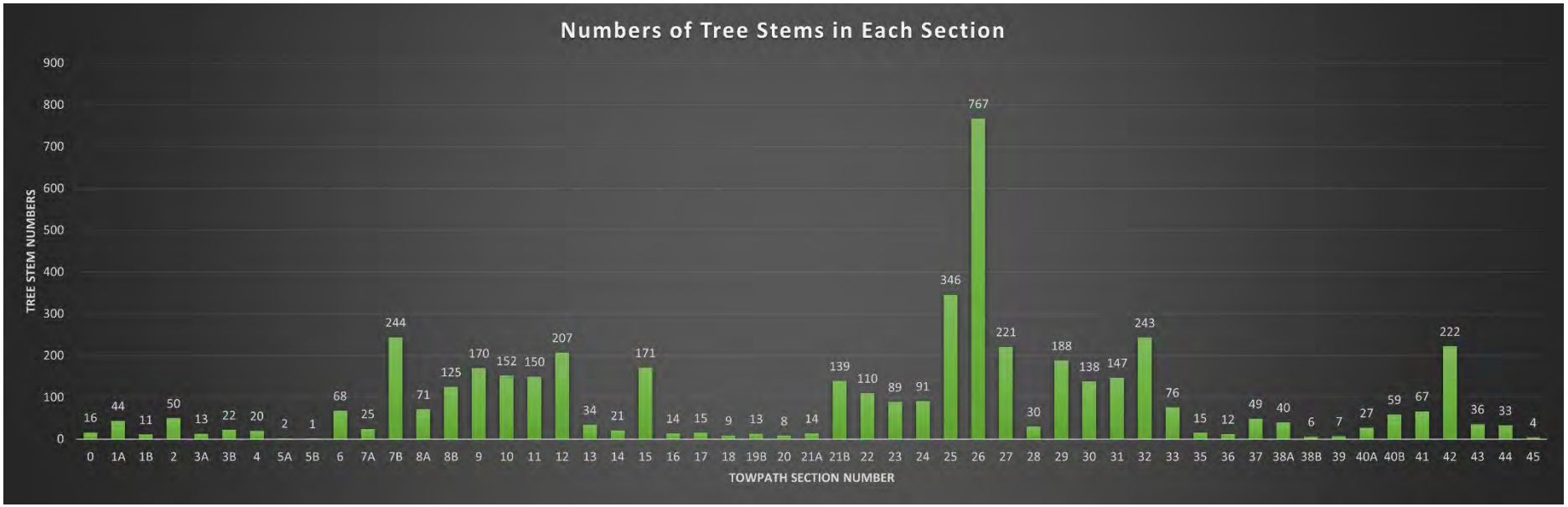
Target notes (in addition to generic guidance)	
Landside margin	• Maintain the bramble at a manageable height.

Appendix 2: Tree Data

Appendix 2.1.a

Table 1	Number of tree stems by section Number																	
Section Number	**0**	**1A**	**1B**	**2**	**3A**	**3B**	**4**	**5A**	**5B**	**6**	**7A**	**7B**	**8A**	**8B**	**9**	**10**	**11**	**12**	**13**
Sum of Stems	16	44	11	50	13	22	20	2	1	68	25	244	71	125	170	152	150	207	34
Section Number	**14**	**15**	**16**	**17**	**18**	**19 B**	**20**	**21 A**	**21 B**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**
Sum of Stems	21	171	14	15	9	13	8	14	139	110	89	91	346	767	221	30	188	138	147
Section Number	**32**	**33**	**35**	**36**	**37**	**38 A**	**38 B**	**39**	**40 A**	**40 B**	**41**	**42**	**43**	**44**	**45**				
Sum of Stems	243	76	15	12	49	40	6	7	27	59	67	222	36	33	4				

Appendix 2.1b

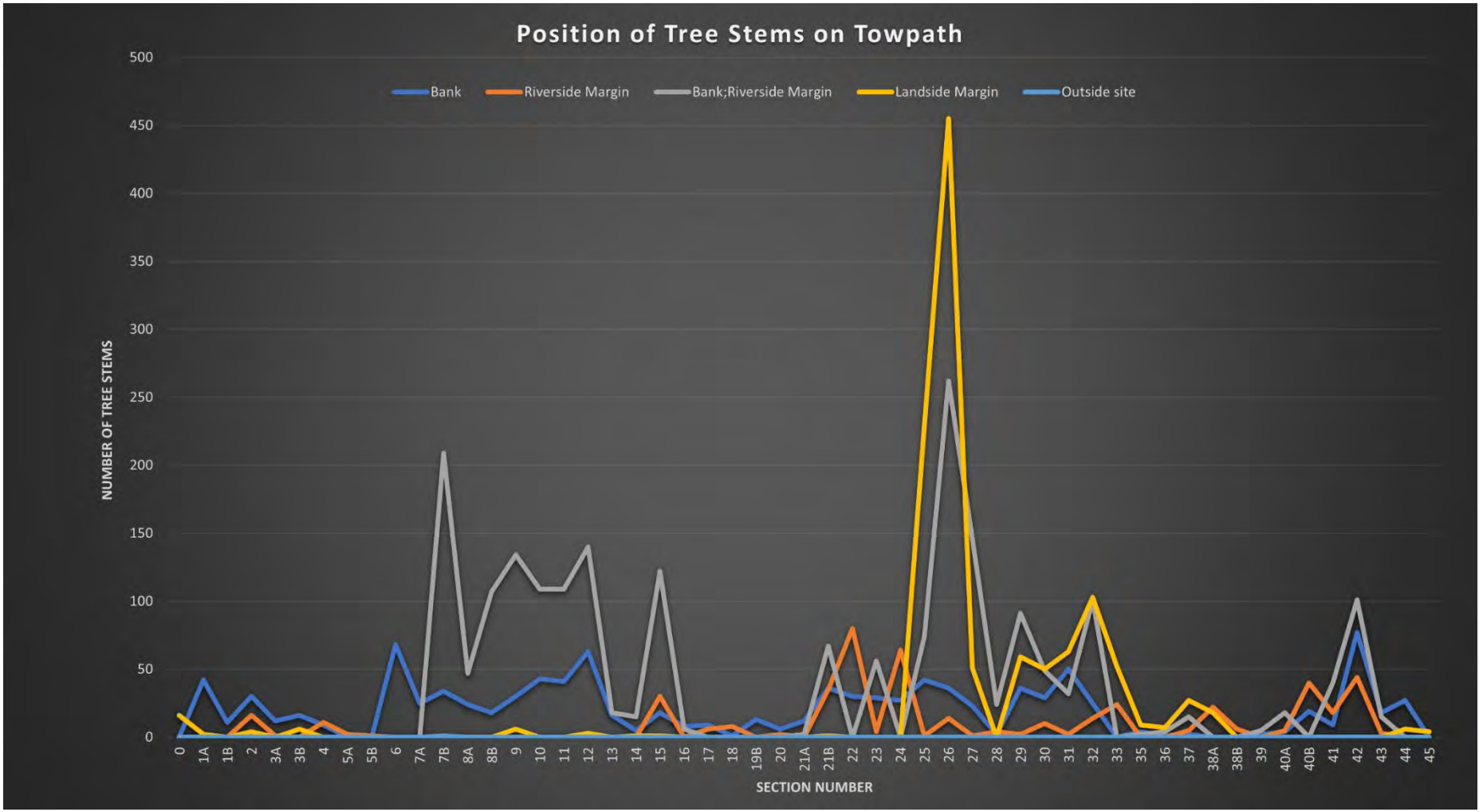


Appendix 2.2a (Table 2A & 2B)

Table 2A	Total Number of Stems					
Section	Bank	Riverside Margin	Bank; Riverside Margin	Landside Margin	Outside site	Grand Total
0	0	0	0	16	0	16
1A	42	0	0	2	0	44
1B	11	0	0	0	0	11
2	30	16	0	4	0	50
3A	12	1	0	0	0	13
3B	16	0	0	6	0	22
4	9	11	0	0	0	20
5A	0	2	0	0	0	2
5B	0	1	0	0	0	1
6	68	0	0	0	0	68
7A	25	0	0	0	0	25
7B	34	0	209	0	1	244
8A	24	0	47	0	0	71
8B	18	0	107	0	0	125
9	30	0	134	6	0	170
10	43	0	109	0	0	152
11	41	0	109	0	0	150
12	63	1	140	3	0	207
13	16	0	18	0	0	34
14	5	0	15	1	0	21
15	18	30	122	1	0	171
16	8	0	6	0	0	14
17	9	6	0	0	0	15
18	1	8	0	0	0	9
19B	13	0	0	0	0	13
20	6	2	0	0	0	8
21A	12	0	2	0	0	14
21B	36	35	67	1	0	139

Table 2B	Total Number of Stems					
Section	Bank	Riverside Margin	Bank; Riverside Margin	Landside Margin	Outside site	Grand Total
22	30	80	0	0	0	110
23	29	4	56	0	0	89
24	27	64	0	0	0	91
25	42	1	74	229	0	346
26	36	14	262	455	0	767
27	23	1	146	51	0	221
28	2	4	24	0	0	30
29	36	2	91	59	0	188
30	29	10	49	50	0	138
31	50	2	32	63	0	147
32	25	14	101	103	0	243
33	0	24	0	52	0	76
35	4	0	2	9	0	15
36	1	0	4	7	0	12
37	2	5	15	27	0	49
38A	0	22	0	18	0	40
38B	0	6	0	0	0	6
39	2	0	5	0	0	7
40A	4	5	18	0	0	27
40B	19	40	0	0	0	59
41	9	18	40	0	0	67
42	77	44	101	0	0	222
43	18	3	15	0	0	36
44	27	0	0	6	0	33
45	0	0	0	4	0	4
Grand Total	1082	476	2120	1173	1	4852

Appendix 2.2b

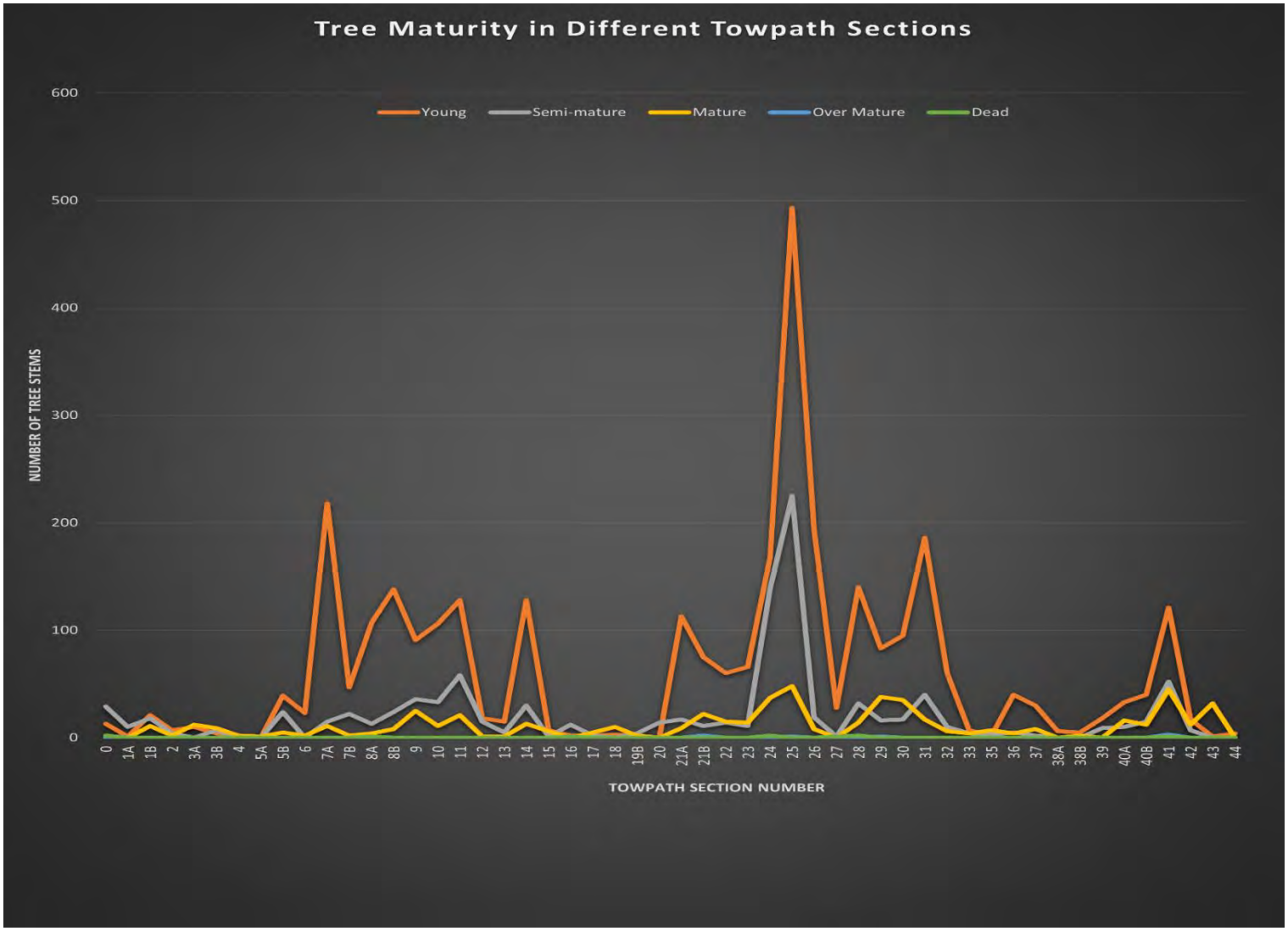


Appendix 2.3a (Table 3 A & Table 3B)

Table 3 A	Tree Maturity by Section					
Section Number	**Young**	**Semi-mature**	**Mature**	**Over Mature**	**Dead**	**Grand Total**
0	0	4	12	0	0	16
1A	13	29	0	0	2	44
1B	1	10	0	0	0	11
2	21	18	11	0	0	50
3A	7	4	2	0	0	13
3B	10	0	12	0	0	22
4	4	7	9	0	0	20
5A	0	0	2	0	0	2
5B	0	0	1	0	0	1
6	39	24	5	0	0	68
7A	23	0	2	0	0	25
7B	218	15	11	0	0	244
8A	47	22	2	0	0	71
8B	107	13	4	0	1	125
9	138	24	8	0	0	170
10	91	36	25	0	0	152
11	106	33	11	0	0	150
12	128	58	21	0	0	207
13	18	15	1	0	0	34
14	15	5	1	0	0	21
15	128	30	13	0	0	171
16	7	1	6	0	0	14
17	2	12	0	0	1	15
18	2	2	5	0	0	9
19B	3	0	10	0	0	13
20	2	4	2	0	0	8

Table 3 B	Tree Maturity by Section					
Section Number	**Young**	**Semi-mature**	**Mature**	**Over Mature**	**Dead**	**Grand Total**
21A	0	14	0	0	0	14
21B	113	17	9	0	0	139
22	75	11	22	2	0	110
23	60	14	15	0	0	89
24	66	11	14	0	0	91
25	168	139	37	0	2	346
26	493	225	48	1	0	767
27	194	19	8	0	0	221
28	28	1	0	0	1	30
29	140	32	14	0	2	188
30	83	16	38	1	0	138
31	95	17	35	0	0	147
32	186	40	17	0	0	243
33	60	10	6	0	0	76
35	7	4	4	0	0	15
36	2	3	7	0	0	12
37	40	5	4	0	0	49
38A	30	2	8	0	0	40
38B	6	0	0	0	0	6
39	5	0	2	0	0	7
40A	18	9	0	0	0	27
40B	33	10	16	0	0	59
41	40	15	12	0	0	67
42	121	52	45	3	1	222
43	17	7	12	0	0	36
44	1	0	32	0	0	33
45	4	0	0	0	0	4
Grand Total	**3215**	**1039**	**581**	**7**	**10**	**4852**

Appendix 2.3b



Appendix 2.4 (Table 4A -Table 4O)

Table 4 A		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
0	Acer pseudoplatanus	0	4	0	0	0	4
0	Ailanthus altissima	0	0	1	0	0	1
0	Sambucus nigra	0	0	11	0	0	11
1A	Acer pseudoplatanus	7	27	0	0	0	34
1A	Aesculus hippocastanum	0	1	0	0	0	1
1A	Fraxinus excelsior	6	1	0	0	0	7
1A	Sambucus nigra	0	0	0	0	2	2
1B	Acer pseudoplatanus	0	10	0	0	0	10
1B	Fraxinus excelsior	1	0	0	0	0	1
2	Acer platanoides	3	0	0	0	0	3
2	Acer pseudoplatanus	3	10	3	0	0	16
2	Aesculus hippocastanum	1	0	0	0	0	1
2	Fraxinus excelsior	8	7	3	0	0	18
2	Malus sp.	0	0	1	0	0	1
2	Populus trichocarpa	0	1	1	0	0	2
2	Prunus avium	1	0	0	0	0	1
2	Quercus ilex	2	0	0	0	0	2
2	Sambucus nigra	3	0	3	0	0	6
3A	Acer pseudoplatanus	2	4	1	0	0	7
3A	Fraxinus excelsior	4	0	1	0	0	5
3A	Prunus avium	1	0	0	0	0	1

Table 4 B		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
3B	Acer pseudoplatanus	10	0	4	0	0	14
3B	Fraxinus excelsior	0	0	2	0	0	2
3B	Sambucus nigra	0	0	6	0	0	6
3B	Populus x canescens	0	1	0	0	0	1
3B	Populus nigra Betulifolia	0	2	0	0	0	2
3B	Prunus cerasifera	1	0	0	0	0	1
3B	Robinia pseudoacacia	12	6	0	0	0	18
3B	Sambucus nigra	4	0	0	0	0	4
3B	Ulmus sp.	1	0	0	0	0	1
4	Acer campestre	1	0	0	0	0	1
4	Acer platanoides	0	0	1	0	0	1
4	Acer pseudoplatanus	3	4	1	0	0	8
4	Betula pendula	0	2	0	0	0	2
4	Fraxinus excelsior	0	1	1	0	0	2
4	Sambucus nigra	0	0	4	0	0	4
4	Tilia platyphyllos	0	0	2	0	0	2
5A	Acer platanoides	0	0	1	0	0	1
5A	Tilia platyphyllos	0	0	1	0	0	1
5B	Tilia platyphyllos	0	0	1	0	0	1
6	Acer platanoides	1	1	0	0	0	2
6	Acer pseudoplatanus	20	16	1	0	0	37
6	Fraxinus excelsior	14	2	4	0	0	20
6	Quercus ilex	4	0	0	0	0	4
6	Sambucus nigra	0	5	0	0	0	5

Table 4 C		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
7A	Acer pseudoplatanus	13	0	2	0	0	15
7A	Fraxinus excelsior	10	0	0	0	0	10
7B	Acer campestre	8	0	0	0	0	8
7B	Acer pseudoplatanus	65	10	5	0	0	80
7B	Aesculus hippocastanum	7	0	0	0	0	7
7B	Crataegus monogyna	19	0	0	0	0	19
7B	Fraxinus excelsior	32	5	6	0	0	43
7B	Prunus avium	10	0	0	0	0	10
7B	Prunus sp.	30	0	0	0	0	30
7B	Quercus ilex	7	0	0	0	0	7
7B	Tilia platyphyllos	0	0	2	0	0	2
7B	Acer platanoides	0	0	1	0	0	1
8A	Acer pseudoplatanus	18	13	1	0	0	32
8A	Crataegus monogyna	21	0	0	0	0	21
8A	Fraxinus excelsior	1	9	1	0	0	11
8A	Quercus ilex	4	0	0	0	0	4
8A	Sambucus nigra	3	0	0	0	0	3
8B	Acer pseudoplatanus	48	6	0	0	1	55
8B	Crataegus monogyna	23	0	0	0	0	23
8B	Fraxinus excelsior	15	6	4	0	0	25
8B	Populus x canescens	5	1	0	0	0	6
8B	Prunus avium	6	0	0	0	0	6
8B	Sambucus nigra	10	0	0	0	0	10

Table 4 D		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
9	Acer pseudoplatanus	72	19	3	0	0	94
9	Aesculus hippocastanum	2	0	0	0	0	2
9	Fraxinus excelsior	34	2	5	0	0	41
9	Fraxinus excelsior	13	0	0	0	0	13
9	Populus x canescens	5	3	0	0	0	8
9	Quercus ilex	3	0	0	0	0	3
9	Sambucus nigra	9	0	0	0	0	9
10	Acer campestre	1	0	0	0	0	1
10	Acer pseudoplatanus	61	7	0	0	0	68
10	Crataegus monogyna	14	0	0	0	0	14
10	Fraxinus excelsior	14	7	20	0	0	41
10	Platanus x hispanica	0	0	4	0	0	4
10	Populus x canescens	0	1	0	0	0	1
10	Prunus padus	0	0	1	0	0	1
10	Quercus ilex	1	0	0	0	0	1
10	Sambucus nigra	0	21	0	0	0	21
11	Acer platanoides	1	0	0	0	0	1
11	Acer pseudoplatanus	67	8	7	0	0	82
11	Aesculus hippocastanum	1	0	0	0	0	1
11	Crataegus monogyna	22	0	0	0	0	22
11	Fraxinus excelsior	12	14	4	0	0	30
12	Acer campestre	33	0	0	0	0	33
12	Acer pseudoplatanus	61	23	6	0	0	90
12	Alnus glutinosa	1	0	0	0	0	1
12	Crataegus monogyna	4	0	0	0	0	4
12	Fraxinus excelsior	12	19	10	0	0	41
12	Populus x canescens	0	2	0	0	0	2
12	Prunus sp.	3	0	0	0	0	3
12	Salix fragilis	5	0	5	0	0	10
12	Sambucus nigra	3	14	0	0	0	17
12	Ulmus glabra	1	0	0	0	0	1

Table 4E		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
13	Acer pseudoplatanus	10	12	1	0	0	23
13	Fraxinus excelsior	2	3	0	0	0	5
13	Prunus avium	2	0	0	0	0	2
13	Salix fragilis	1	0	0	0	0	1
13	Sambucus nigra	3	0	0	0	0	3
14	Acer pseudoplatanus	5	2	0	0	0	7
14	Fraxinus excelsior	2	2	0	0	0	4
14	Robinia pseudoacacia	2	1	0	0	0	3
14	Salix fragilis	0	0	1	0	0	1
14	Sambucus nigra	2	0	0	0	0	2
14	Ulmus sp.	4	0	0	0	0	4
15	Acer pseudoplatanus	36	16	4	0	0	56
15	Carpinus betulus	0	3	0	0	0	3
15	Crataegus monogyna	3	0	0	0	0	3
15	Fraxinus excelsior	31	11	2	0	0	44
15	Prunus avium	2	0	0	0	0	2
15	Salix caprea	1	0	5	0	0	6
15	Salix chrysocoma	0	0	1	0	0	1
15	Salix fragilis	1	0	1	0	0	2
15	Sambucus nigra	4	0	0	0	0	4
15	Ulmus sp.	50	0	0	0	0	50
16	Acer pseudoplatanus	2	0	0	0	0	2
16	Fraxinus excelsior	3	0	0	0	0	3
16	Platanus x hispanica	0	0	6	0	0	6
16	Prunus avium	0	1	0	0	0	1
16	Salix caprea	1	0	0	0	0	1
16	Sambucus nigra	1	0	0	0	0	1

Table 4F		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
17	Acer pseudoplatanus	0	3	0	0	0	3
17	Fraxinus excelsior	2	2	0	0	0	4
17	Salix alba	0	1	0	0	0	1
17	Salix caprea	0	6	0	0	0	6
17	Ulmus glabra	0	0	0	0	1	1
18	Fraxinus excelsior	2	0	0	0	0	2
18	Salix alba	0	2	0	0	0	2
18	Sambucus nigra	0	0	5	0	0	5
19B	Fraxinus excelsior	3	0	0	0	0	3
19B	Salix caprea	0	0	10	0	0	10
20	Fraxinus excelsior	0	0	2	0	0	2
20	Salix caprea	0	4	0	0	0	4
20	Ulmus sp.	2	0	0	0	0	2
21A	Alnus glutinosa	0	1	0	0	0	1
21A	Salix caprea	0	1	0	0	0	1
21A	Salix fragilis	0	12	0	0	0	12
21B	Acer campestre	1	0	0	0	0	1
21B	Acer platanoides	2	0	0	0	0	2
21B	Acer pseudoplatanus	44	0	4	0	0	48
21B	Aesculus hippocastanum	1	0	0	0	0	1
21B	Crataegus monogyna	11	0	1	0	0	12
21B	Fraxinus excelsior	13	9	1	0	0	23
21B	Laburnum anagyroides	1	0	0	0	0	1
21B	Populus x canescens	2	4	0	0	0	6
21B	Prunus avium	13	1	0	0	0	14
21B	Sambucus nigra	5	3	3	0	0	11
21B	Ulmus sp.	20	0	0	0	0	20

Table 4G		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
22	Acer pseudoplatanus	30	3	0	0	0	33
22	Crataegus monogyna	19	0	0	0	0	19
22	Fraxinus excelsior	6	3	2	0	0	11
22	Populus nigra Betulifolia	2	5	1	0	0	8
22	Populus trichocarpa	8	0	0	0	0	8
22	Salix caprea	1	0	0	0	0	1
22	Salix fragilis	3	0	19	2	0	24
22	Sambucus nigra	6	0	0	0	0	6
23	Acer pseudoplatanus	17	5	6	0	0	28
23	Crataegus monogyna	32	0	0	0	0	32
23	Fraxinus excelsior	8	9	6	0	0	23
23	Salix fragilis	0	0	3	0	0	3
23	Sambucus nigra	3	0	0	0	0	3
24	Acer pseudoplatanus	20	4	2	0	0	26
24	Crataegus monogyna	23	0	1	0	0	24
24	Fraxinus excelsior	2	7	7	0	0	16
24	Platanus x hispanica	2	0	4	0	0	6
24	Salix fragilis	1	0	0	0	0	1
24	Sambucus nigra	8	0	0	0	0	8
24	Ulmus glabra	1	0	0	0	0	1
24	Ulmus sp.	9	0	0	0	0	9

Table 4H		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
25	Acer platanoides	49	47	15	0	0	111
25	Acer pseudoplatanus	37	54	11	0	0	102
25	Alnus glutinosa	3	0	0	0	0	3
25	Crataegus monogyna	7	0	0	0	0	7
25	Fraxinus excelsior	8	14	8	0	1	31
25	Platanus x hispanica	0	0	1	0	0	1
25	Populus x canescens	0	8	0	0	0	8
25	Populus nigra 'Italica'	0	0	1	0	0	1
25	Prunus avium	3	1	1	0	0	5
25	Prunus cerasifera	1	0	0	0	0	1
25	Quercus ilex	1	0	0	0	0	1
25	Salix caprea	0	1	0	0	0	1
25	Sambucus nigra	19	10	0	0	0	29
25	Tilia platyphyllos	1	0	0	0	0	1
25	Ulmus glabra	22	0	0	0	1	23
25	Ulmus sp.	17	4	0	0	0	21

Table 4I		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
26	Acer platanoides	225	36	11	0	0	272
26	Acer pseudoplatanus	58	14	4	0	0	76
26	Crataegus monogyna	12	0	0	0	0	12
26	Fraxinus excelsior	93	119	14	0	0	226
26	Malus sp.	0	0	2	0	0	2
26	Populus x canescens	2	22	11	0	0	35
26	Populus nigra 'Italica'	0	0	0	1	0	1
26	Populus trichocarpa	2	0	0	0	0	2
26	Populus x canadensis	0	0	3	0	0	3
26	Prunus avium	27	0	2	0	0	29
26	Prunus cerasifera	1	0	0	0	0	1
26	Quercus ilex	5	0	0	0	0	5
26	Quercus robur	2	2	1	0	0	5
26	Salix caprea	0	1	0	0	0	1
26	Sambucus nigra	44	2	0	0	0	46
26	Tilia platyphyllos	2	0	0	0	0	2
26	Ulmus glabra	1	1	0	0	0	2
26	Ulmus sp.	19	28	0	0	0	47

Table 4J		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
27	Acer campestre	1	0	0	0	0	1
27	Acer platanoides	79	0	0	0	0	79
27	Acer pseudoplatanus	6	5	1	0	0	12
27	Aesculus hippocastanum	1	0	0	0	0	1
27	Crataegus monogyna	8	0	0	0	0	8
27	Fraxinus excelsior	16	13	2	0	0	31
27	Populus x canescens	1	0	2	0	0	3
27	Prunus avium	7	1	0	0	0	8
27	Salix caprea	1	0	3	0	0	4
27	Sambucus nigra	18	0	0	0	0	18
27	Tilia platyphyllos	1	0	0	0	0	1
27	Ulmus sp.	55	0	0	0	0	55
28	Acer platanoides	8	0	0	0	0	8
28	Acer pseudoplatanus	6	0	0	0	0	6
28	Aesculus hippocastanum	1	0	0	0	0	1
28	Corylus avellana	1	0	0	0	0	1
28	Crataegus monogyna	2	0	0	0	0	2
28	Fraxinus excelsior	2	1	0	0	0	3
28	Laurus nobilis	1	0	0	0	0	1
28	Platanus x hispanica	1	0	0	0	0	1
28	Populus x canescens	4	0	0	0	0	4
28	Salix alba	1	0	0	0	0	1
28	Ulmus glabra	0	0	0	0	1	1
28	Ulmus sp.	1	0	0	0	0	1

Table 4J		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
29	Acer platanoides	14	1	1	0	0	16
29	Acer pseudoplatanus	34	21	3	0	0	58
29	Aesculus hippocastanum	2	0	0	0	0	2
29	Crataegus monogyna	15	0	0	0	0	15
29	Fraxinus excelsior	22	8	3	0	0	33
29	Populus x canescens	7	0	2	0	0	9
29	Salix caprea	3	0	0	0	0	3
29	Salix fragilis	0	0	5	0	0	5
29	Sambucus nigra	21	0	0	0	0	21
29	Tilia cordata	1	0	0	0	0	1
29	Ulmus glabra	0	2	0	0	2	4
29	Ulmus sp.	21	0	0	0	0	21
30	Acer pseudoplatanus	15	5	1	0	0	21
30	Aesculus hippocastanum	2	0	3	0	0	5
30	Crataegus monogyna	5	0	3	0	0	8
30	Fraxinus excelsior	29	3	5	0	0	37
30	Ilex aquifolium	1	0	0	0	0	1
30	Malus sp.	0	0	4	0	0	4
30	Populus x canescens	2	3	10	0	0	15
30	Populus nigra 'Italica'	0	0	2	0	0	2
30	Quercus ilex	1	0	0	0	0	1
30	Robinia pseudoacacia	2	0	0	0	0	2
30	Salix caprea	5	0	7	0	0	12
30	Salix fragilis	0	5	1	0	0	6
30	Sambucus nigra	14	0	0	0	0	14
30	Tilia platyphyllos	0	0	2	1	0	3
30	Ulmus sp.	7	0	0	0	0	7

Table 4K		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
31	Acer campestre	1	0	0	0	0	1
31	Acer platanoides	3	0	3	0	0	6
31	Acer pseudoplatanus	16	8	1	0	0	25
31	Aesculus hippocastanum	0	0	1	0	0	1
31	Crataegus monogyna	7	0	0	0	0	7
31	Fraxinus excelsior	9	3	5	0	0	17
31	Ilex aquifolium	2	0	0	0	0	2
31	Laurus nobilis	1	0	0	0	0	1
31	Platanus x hispanica	0	0	2	0	0	2
31	Salix caprea	5	0	19	0	0	24
31	Sambucus nigra	9	4	4	0	0	17
31	Tilia platyphyllos	2	0	0	0	0	2
31	Ulmus glabra	0	2	0	0	0	2
31	Ulmus sp.	40	0	0	0	0	40
32	Acer pseudoplatanus	29	2	0	0	0	31
32	Crataegus monogyna	18	0	0	0	0	18
32	Fraxinus excelsior	33	21	0	0	0	54
32	Ilex aquifolium	0	1	0	0	0	1
32	Laurus nobilis	2	0	0	0	0	2
32	Platanus x hispanica	0	0	1	0	0	1
32	Populus nigra 'Italica'	0	0	3	0	0	3
32	Populus x canadensis	0	0	2	0	0	2
32	Prunus avium	1	0	0	0	0	1
32	Pyrus sp.	1	0	0	0	0	1
32	Salix caprea	1	0	0	0	0	1
32	Salix fragilis	0	13	8	0	0	21
32	Sambucus nigra	5	3	3	0	0	11
32	Tilia platyphyllos	1	0	0	0	0	1
32	Ulmus	52	0	0	0	0	52
32	Ulmus sp.	43	0	0	0	0	43

Table 4L		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
33	Acer platanoides	1	0	0	0	0	1
33	Acer pseudoplatanus	3	4	0	0	0	7
33	Aesculus hippocastanum	5	0	1	0	0	6
33	Crataegus monogyna	7	0	0	0	0	7
33	Fraxinus excelsior	1	6	0	0	0	7
33	Populus nigra 'Italica'	0	0	1	0	0	1
33	Populus x canadensis	0	0	4	0	0	4
33	Quercus cerris	1	0	0	0	0	1
33	Sambucus nigra	10	0	0	0	0	10
33	Ulmus sp.	32	0	0	0	0	32
35	Acer platanoides	2	0	0	0	0	2
35	Fraxinus excelsior	2	0	0	0	0	2
35	Populus nigra 'Italica'	0	4	0	0	0	4
35	Populus x canadensis	0	0	4	0	0	4
35	Sambucus nigra	3	0	0	0	0	3
36	Acer platanoides	0	0	2	0	0	2
36	Acer pseudoplatanus	0	1	1	0	0	2
36	Crataegus monogyna	2	0	0	0	0	2
36	Fraxinus excelsior	0	2	1	0	0	3
36	Platanus x hispanica	0	0	1	0	0	1
36	Sambucus nigra	0	0	2	0	0	2
37	Acer pseudoplatanus	3	0	1	0	0	4
37	Crataegus monogyna	3	0	0	0	0	3
37	Fraxinus excelsior	15	0	1	0	0	16
37	Platanus x hispanica	0	0	2	0	0	2
37	Salix fragilis	0	5	0	0	0	5
37	Sambucus nigra	15	0	0	0	0	15
37	Ulmus sp.	4	0	0	0	0	4

Table 4M		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
38A	Acer platanoides	7	0	0	0	0	7
38A	Acer pseudoplatanus	2	2	1	0	0	5
38A	Populus trichocarpa	16	0	2	0	0	18
38A	Sambucus nigra	5	0	5	0	0	10
38B	Prunus avium	6	0	0	0	0	6
39	Fraxinus excelsior	1	0	0	0	0	1
39	Platanus x hispanica	0	0	2	0	0	2
39	Populus x canescens	1	0	0	0	0	1
39	Salix caprea	1	0	0	0	0	1
39	Sambucus nigra	2	0	0	0	0	2
40B	Acer pseudoplatanus	1	2	1	0	0	4
40B	Fraxinus excelsior	7	4	0	0	0	11
40B	Populus nigra Betulifolia	1	0	8	0	0	9
40B	Robinia pseudoacacia	10	4	0	0	0	14
40B	Salix alba	0	0	1	0	0	1
40B	Salix chrysocoma	0	0	1	0	0	1
40B	Salix fragilis	0	0	5	0	0	5
40B	Salix matsudana 'Tortuosa'	1	0	0	0	0	1
40B	Sambucus nigra	4	0	0	0	0	4
40B	Ulmus sp.	9	0	0	0	0	9
41	Acer pseudoplatanus	9	12	5	0	0	26
41	Crataegus monogyna	2	0	0	0	0	2
41	Fraxinus diversifolia	0	0	1	0	0	1
41	Fraxinus excelsior	3	3	0	0	0	6
41	Platanus x hispanica	1	0	0	0	0	1
41	Populus nigra Betulifolia	4	0	5	0	0	9
41	Pyrus communis	0	0	1	0	0	1
41	Quercus robur	1	0	0	0	0	1
41	Sambucus nigra	3	0	0	0	0	3
41	Ulmus glabra	17	0	0	0	0	17

Table 4N		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
42	Acer pseudoplatanus	46	22	0	0	0	68
42	Aesculus hippocastanum	1	0	0	0	0	1
42	Alnus glutinosa	1	0	0	0	0	1
42	Crataegus monogyna	3	0	0	0	0	3
42	Ficus carica	3	0	0	0	0	3
42	Fraxinus diversifolia	0	0	3	0	0	3
42	Fraxinus excelsior	35	19	0	0	1	55
42	Populus x canescens	0	5	0	0	0	5
42	Populus nigra Betulifolia	3	1	31	0	0	35
42	Prunus avium	1	0	0	0	0	1
42	Salix alba	1	0	0	0	0	1
42	Salix caprea	1	0	0	0	0	1
42	Salix fragilis	1	5	11	3	0	20
42	Sambucus nigra	7	0	0	0	0	7
42	Ulmus glabra	1	0	0	0	0	1
42	Ulmus sp.	17	0	0	0	0	17
43	Acer pseudoplatanus	2	0	2	0	0	4
43	Crataegus monogyna	1	0	0	0	0	1
43	Fraxinus excelsior	5	1	4	0	0	10
43	Platanus x hispanica	0	0	5	0	0	5
43	Populus x canescens	2	2	1	0	0	5
43	Populus nigra Betulifolia	0	2	0	0	0	2
43	Prunus avium	2	0	0	0	0	2
43	Salix fragilis	1	0	0	0	0	1
43	Sambucus nigra	4	0	0	0	0	4
43	Ulmus glabra	0	2	0	0	0	2

Table 4O		Species Totals by Section					
Section Number	Species	Young	Semi-mature	Mature	Over Mature	Dead	Grand Total
44	Platanus orientalis	0	0	5	0	0	5
44	Platanus x hispanica	0	0	2	0	0	2
44	Populus nigra 'Italica'	0	0	5	0	0	5
44	Salix fragilis	0	0	20	0	0	20
44	Ulmus glabra	1	0	0	0	0	1
45	Fraxinus excelsior	1	0	0	0	0	1
45	Sambucus nigra	3	0	0	0	0	3
	Grand Total	**3215**	**1039**	**581**	**7**	**10**	**4852**

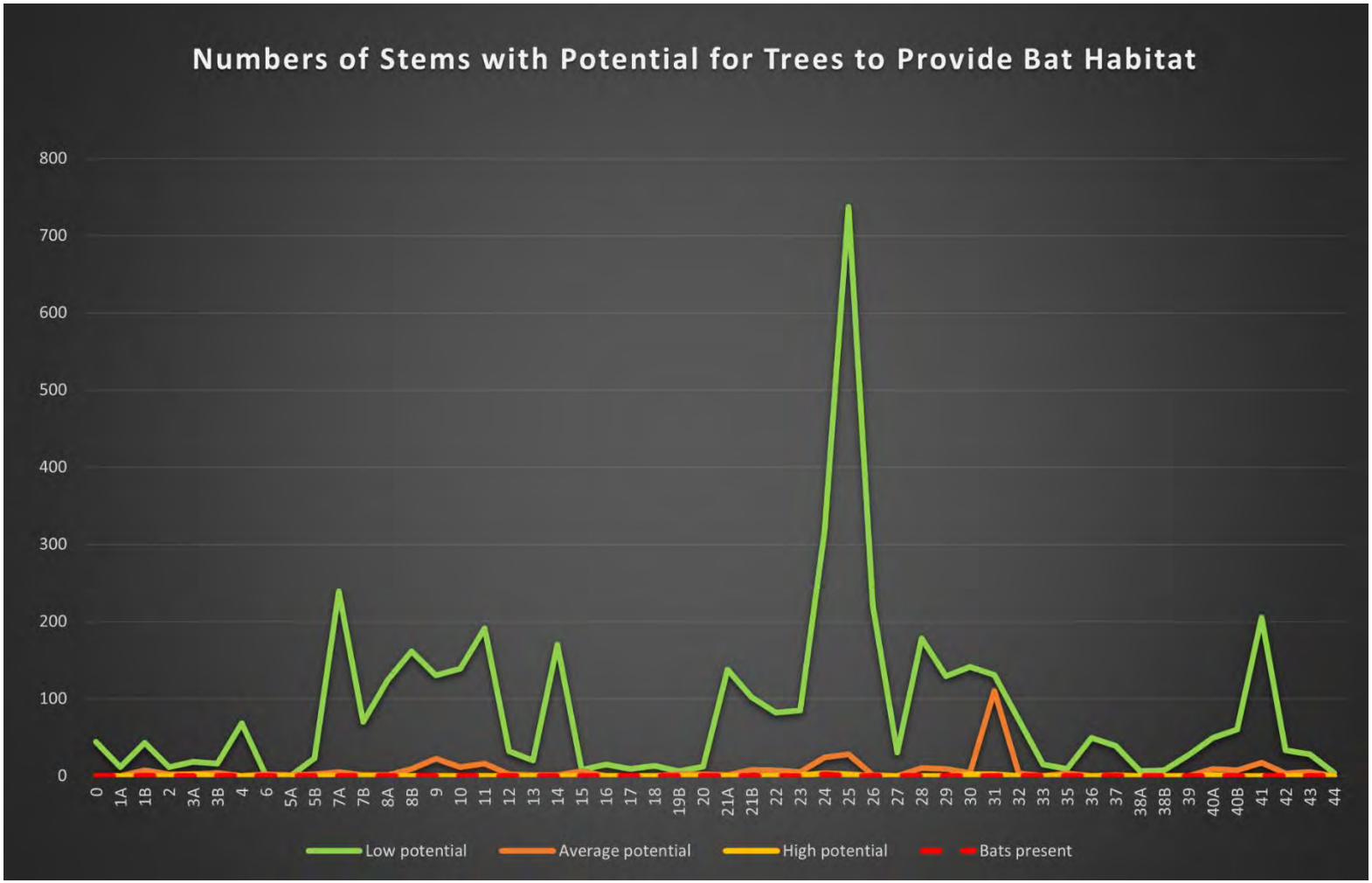
Appendix 2.5a (Table 5A-Table 5C)

Table 5A	Bat Potential by Section				
Section Number	Low potential	Average potential	High potential	Bats present	Grand Total
0	16	0	0	0	16
1A	44	0	0	0	44
1B	11	0	0	0	11
2	43	7	0	0	50
3A	11	2	0	0	13
3B	18	2	2	0	22
4	16	4	0	0	20
6	68	0	0	0	68
5A	0	2	0	0	2
5B	0	1	0	0	1
7A	23	2	0	0	25
7B	239	5	0	0	244
8A	70	1	0	0	71
8B	124	1	0	0	125
9	161	9	0	0	170
10	130	22	0	0	152
11	139	11	0	0	150
12	191	16	0	0	207
13	32	2	0	0	34
14	20	1	0	0	21
15	170	1	0	0	171
16	8	6	0	0	14
17	15	0	0	0	15
18	9	0	0	0	9
19B	13	0	0	0	13

Table 5B	Bat Potential by Section				
Section Number	Low potential	Average potential	High potential	Bats present	Grand Total
20	6	2	0	0	8
21A	12	2	0	0	14
21B	138	1	0	0	139
22	102	8	0	0	110
23	82	7	0	0	89
24	85	5	1	0	91
25	317	24	3	2	346
26	737	28	2	0	767
27	220	1	0	0	221
28	30	0	0	0	30
29	178	10	0	0	188
30	129	9	0	0	138
31	141	4	2	0	147
32	131	110	2	0	243
33	73	3	0	0	76
35	15	0	0	0	15
36	9	3	0	0	12
37	49	0	0	0	49
38A	39	1	0	0	40
38B	6	0	0	0	6
39	7	0	0	0	7
40A	27	0	0	0	27
40B	49	9	1	0	59
41	60	7	0	0	67
42	205	17	0	0	222

Table 5C	Bat Potential by Section				
Section Number	Low potential	Average potential	High potential	Bats present	Grand Total
43	33	3	0	0	36
44	28	5	0	0	33
45	4	0	0	0	4
Total	4483	354	13	2	4852

Appendix 2.5b



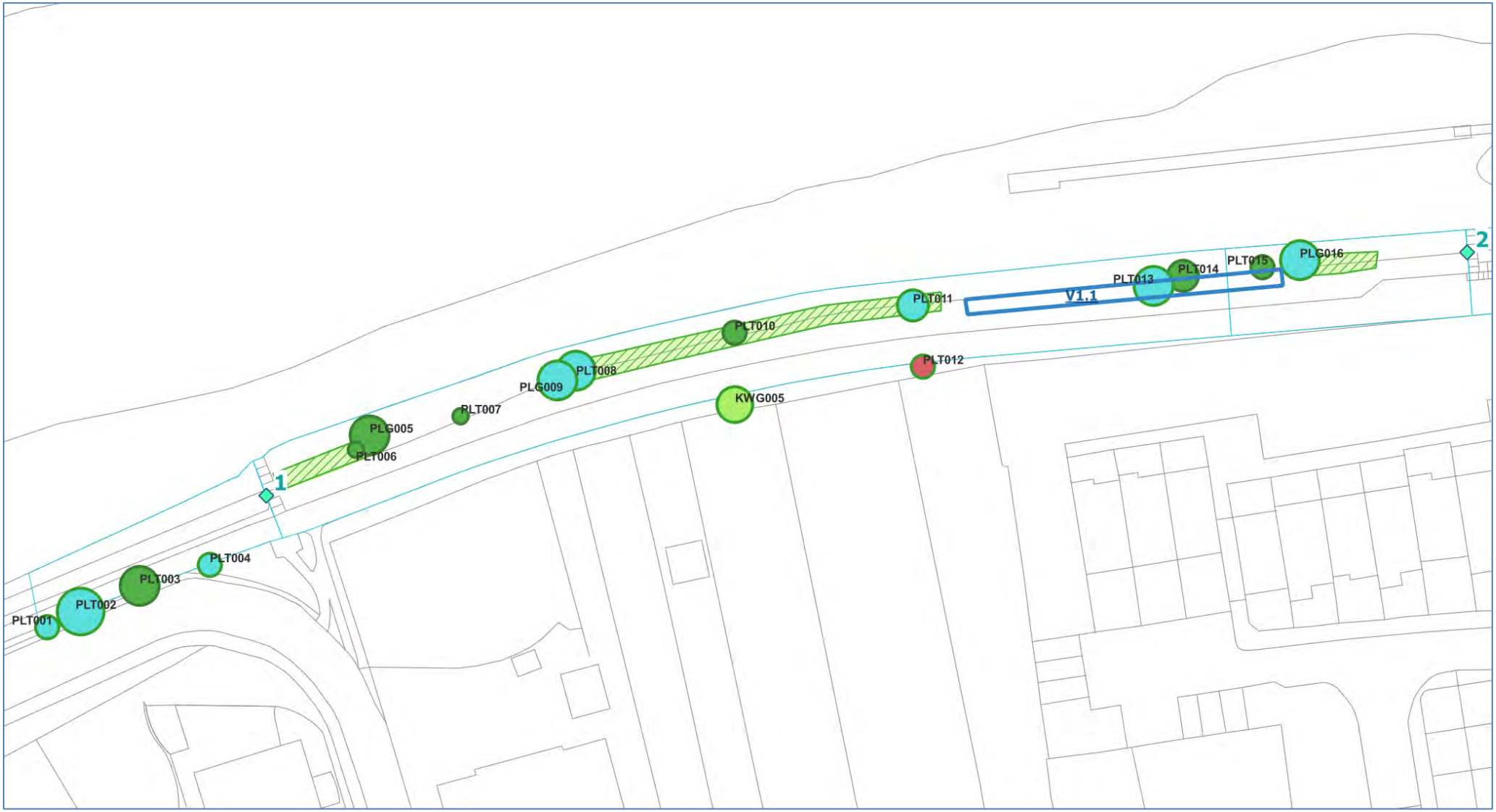
Appendix 3: Section maps

The following maps summarise the proposals made in the tree survey and management plan.

Riverbank Steps	Symbol denotes the location of steps in the riverbank, numbered
Benches	Location of bench
Biodiversity Opp Area	An area with proposals for biodiversity enhancement
Visitor Opp Area	An area with proposals for improvements aimed at user access and experience: views, signage and safety
Potential tree planting	Opportunities for tree planting
Tree - Pollard	Trees proposed for pollarding*
Tree - Fell	Trees proposed for felling / selective felling
Tree - Coppice	Trees proposed for coppicing*
Tree - Lift canopy	Trees proposed for lifting of low canopy*
Tree - Prune	Trees proposed for pruning: including crown, lateral limbs, branches, dead wood, epicormic growth, sucker growth and ivy removal*
Tree - No work	Trees with no work proposed at present
Tree group - Fell dead stems	Groups of smaller trees proposed for felling where stems are dead, typically elm
14-year Coppice	14-year coppice rotation recommended
7-year Coppice	7-year coppice rotation recommended
Tree group	Boundary of groups of smaller trees
PLA Riverbank Sections	Boundary of PLA riverbank sections; land may be present in the corridor outside this boundary and be included in the plan's scope

*the primary activity proposed for each tree is denoted; some trees may have secondary actions from other categories

Sections 0, 1A & 1B – Ferry Lane, Kew to Kew Marine



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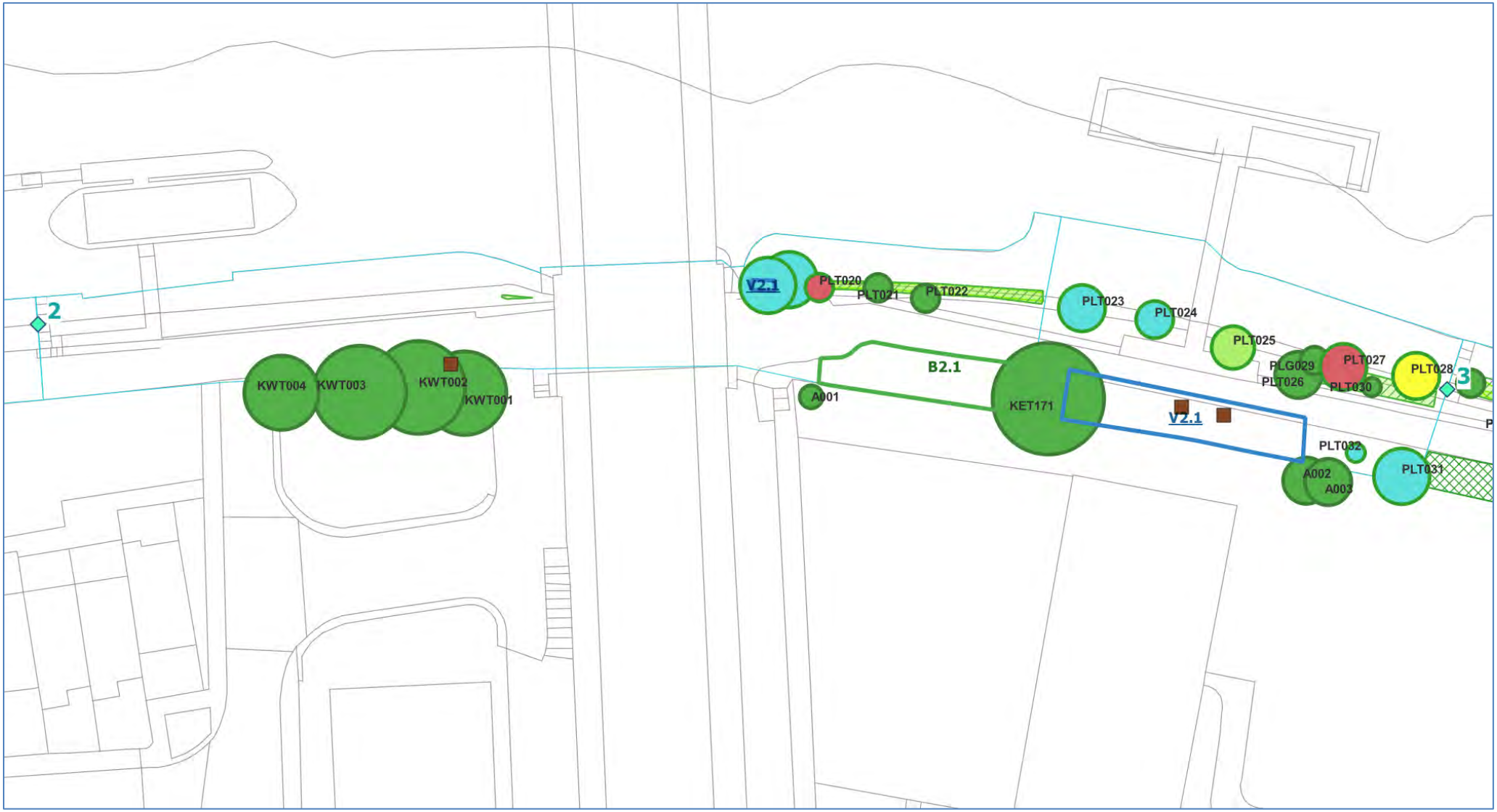
Section 2 – Kew Marine to Kew Pier



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Sections 3A, 3B & 4 – Kew Pier to Watcombe Cottages

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Sections 5A & 5B - Watcombe Cottages to Short Lots Allotments

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Section 6 – Short Lots Allotments to Kew Railway Bridge

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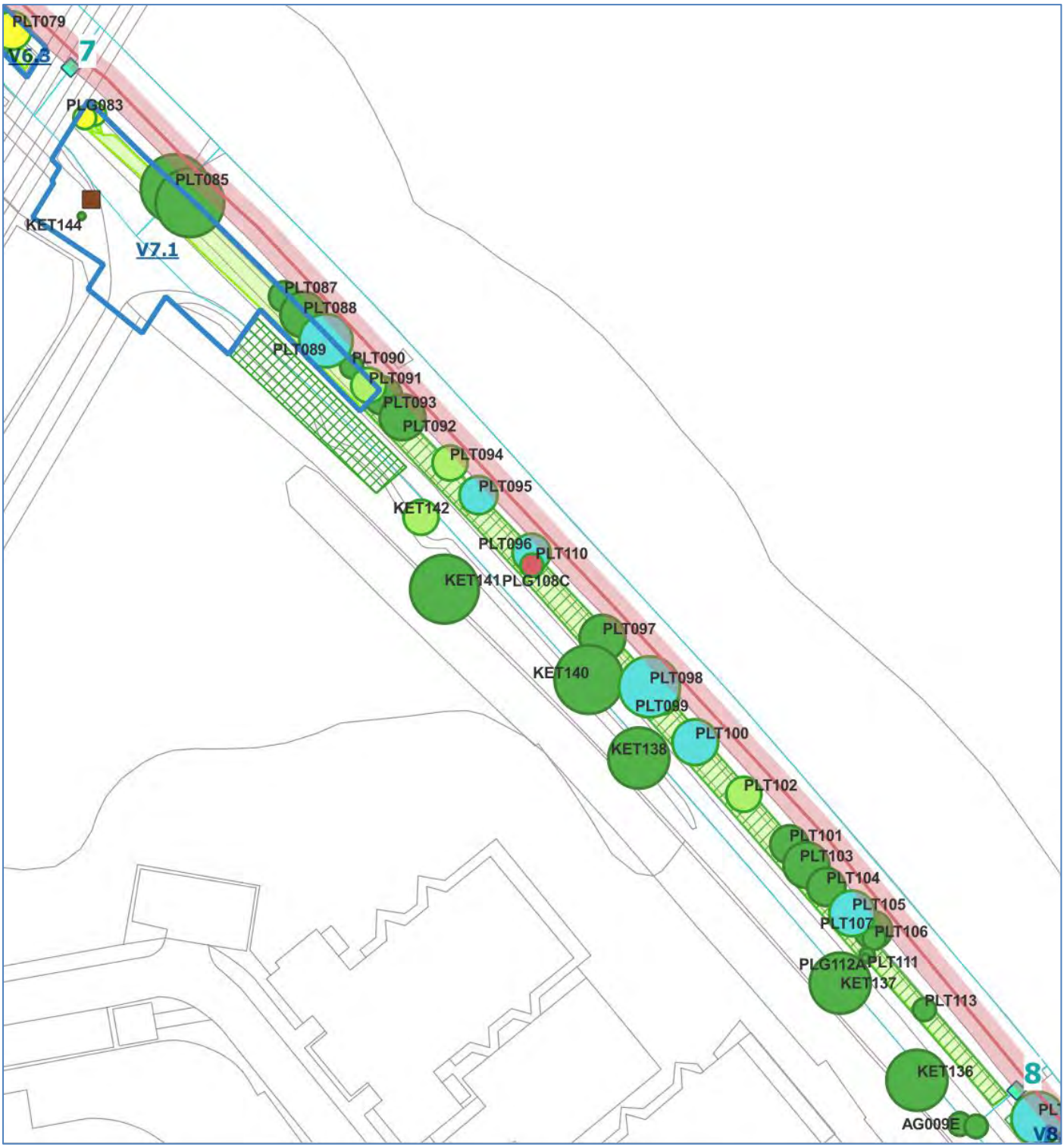
Sections 7A & 7B – Kew Railway Bridge to Earls House, Kew Riverside



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Section 8A & 8B – Earls House to Birchgrove House, Kew Riverside

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Section 9 – Birchgrove House to Melliss Avenue, Kew Riverside

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Section 10 – Melliss Avenue to Woodman Mews, Kew Riverside

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Section 11 – Woodman Mews to Townmead Road, Kew Riverside

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Section 12 – Townmead Road to Chiswick Bridge

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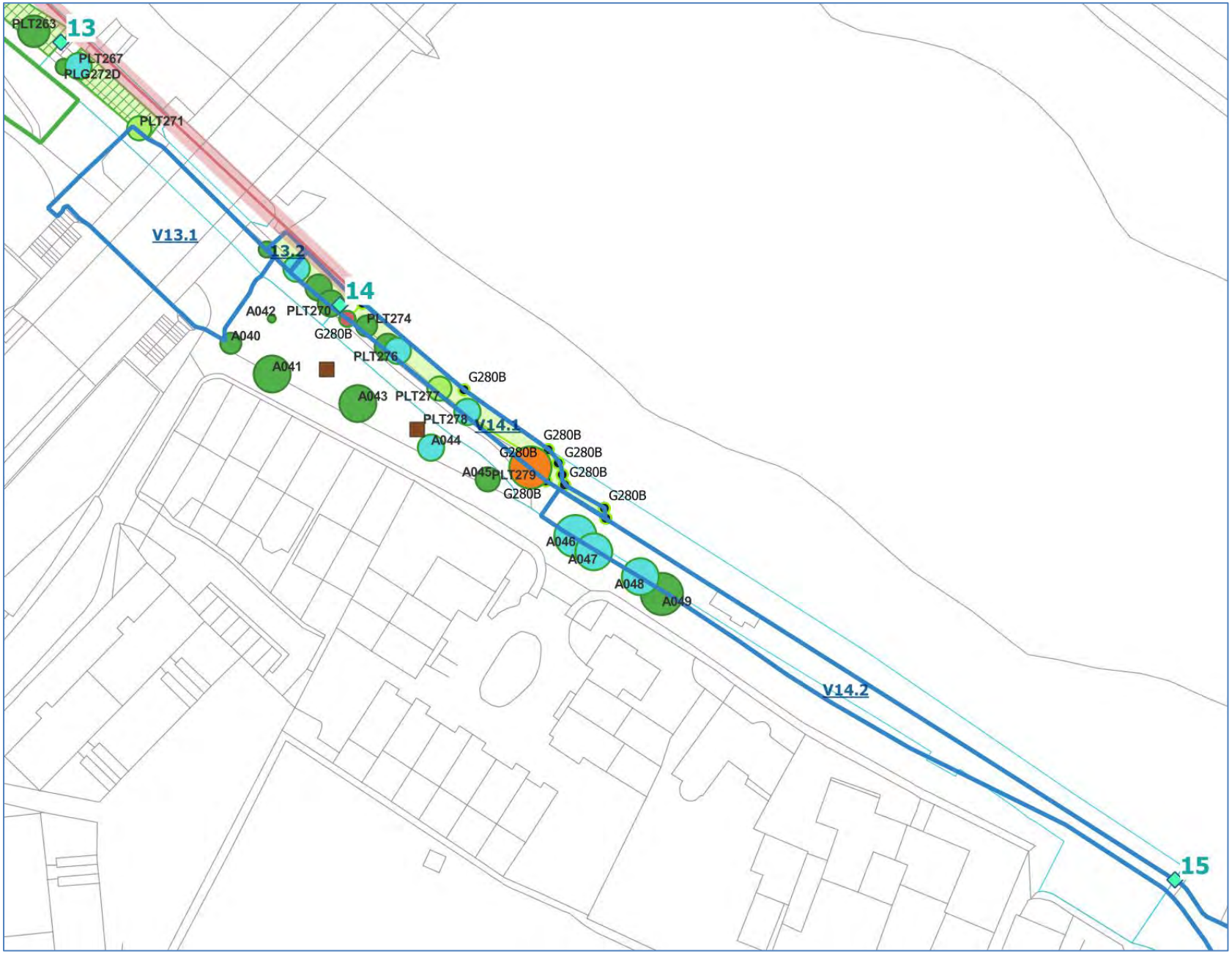
Sections 13 & 14 – Chiswick Bridge to Ship Lane, Mortlake



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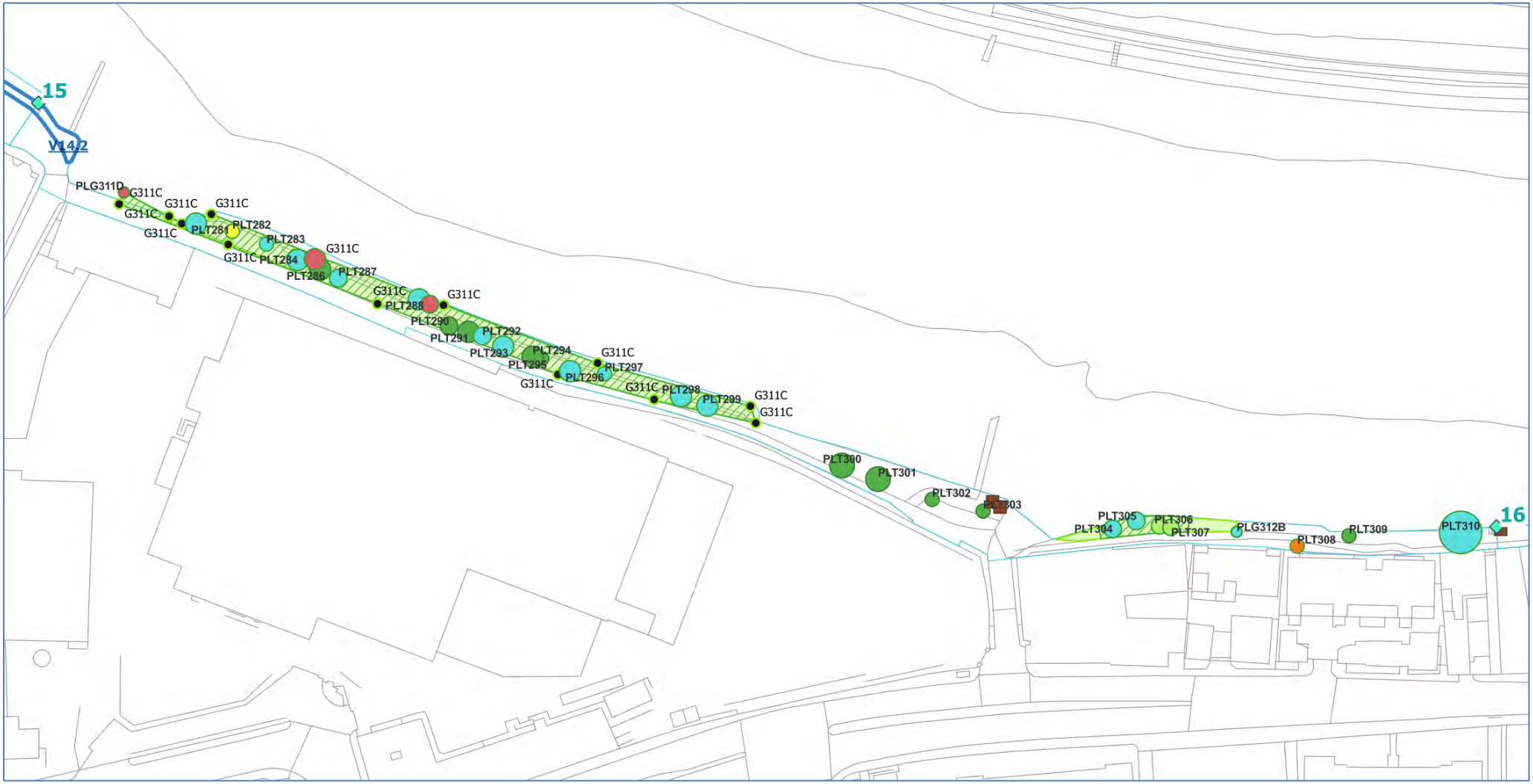
Section 15 – Ship Lane to Tapestry Court, Mortlake



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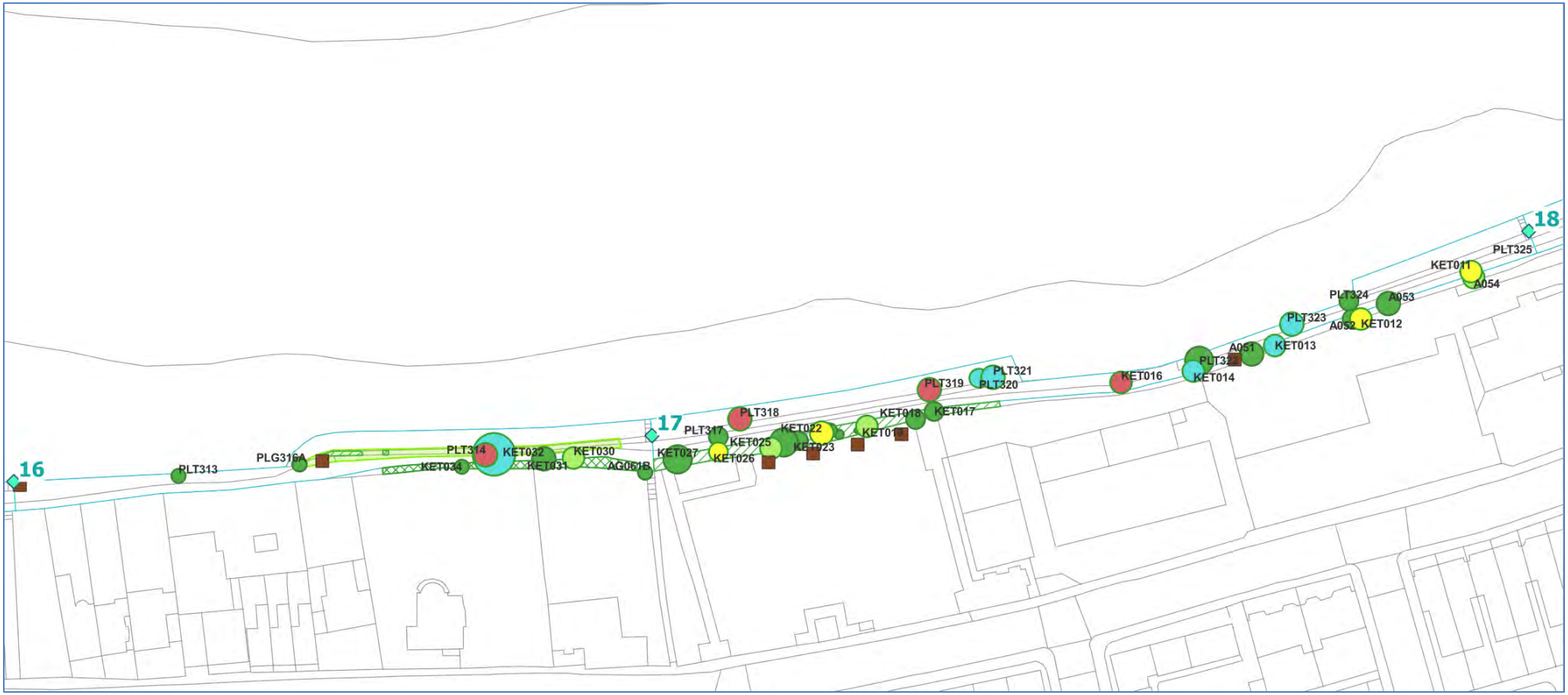
Sections 16 & 17 – Tapestry Court to The Limes, Mortlake



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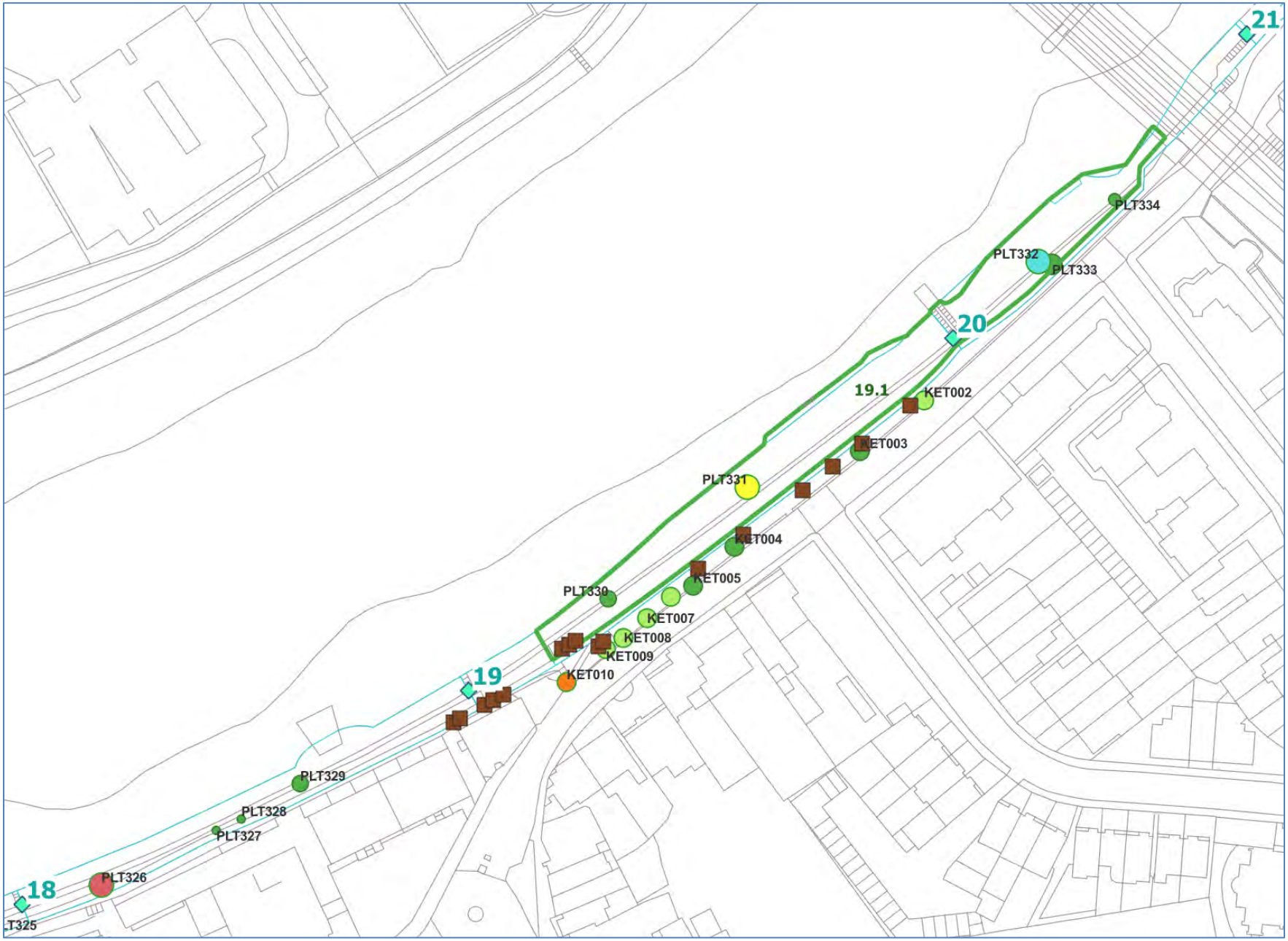
Sections 18, 19A, 19B & 20 – The Limes, Mortlake to Barnes Bridge



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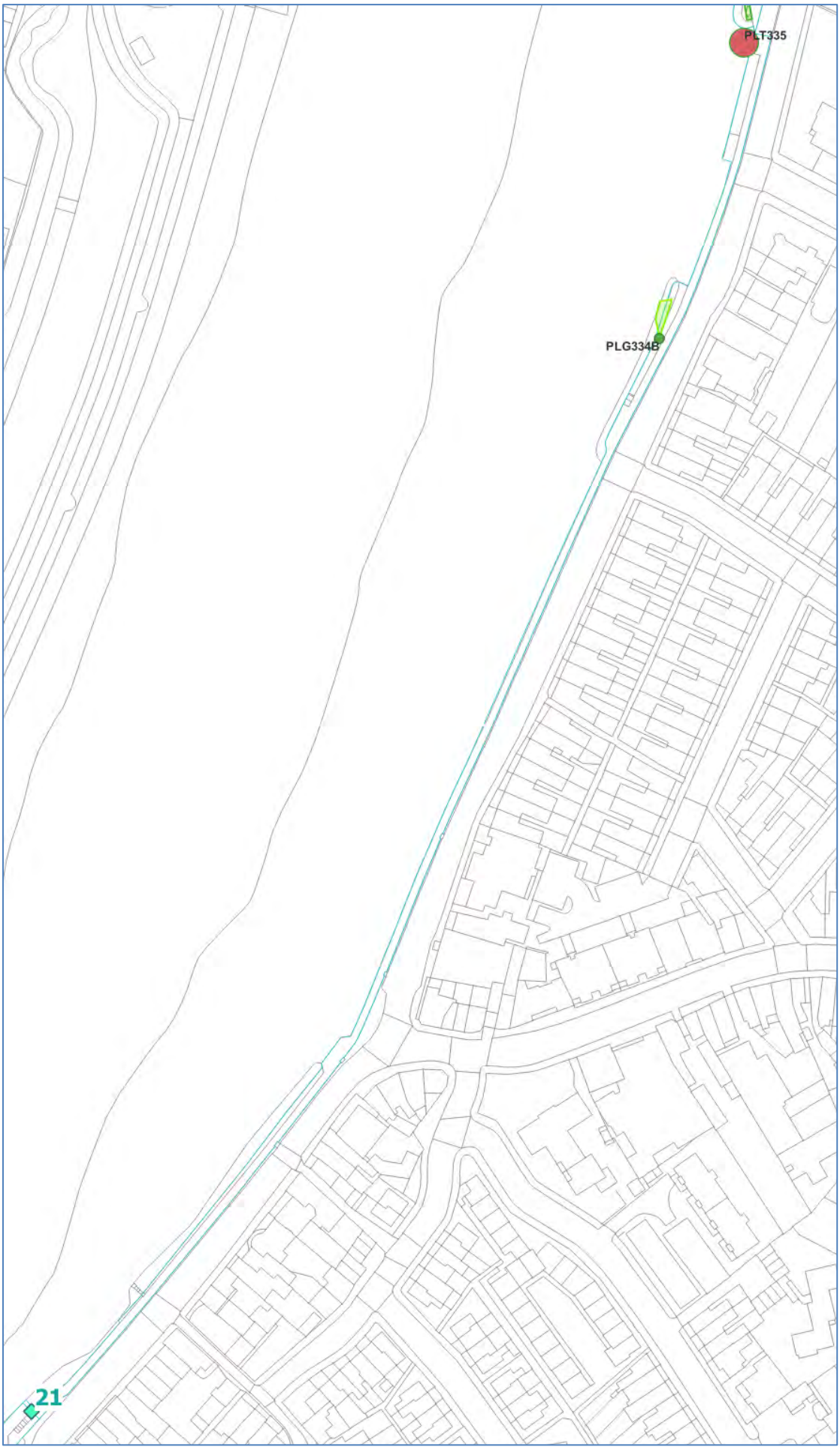
Section 21A – Barnes Bridge to Small Profits Dock



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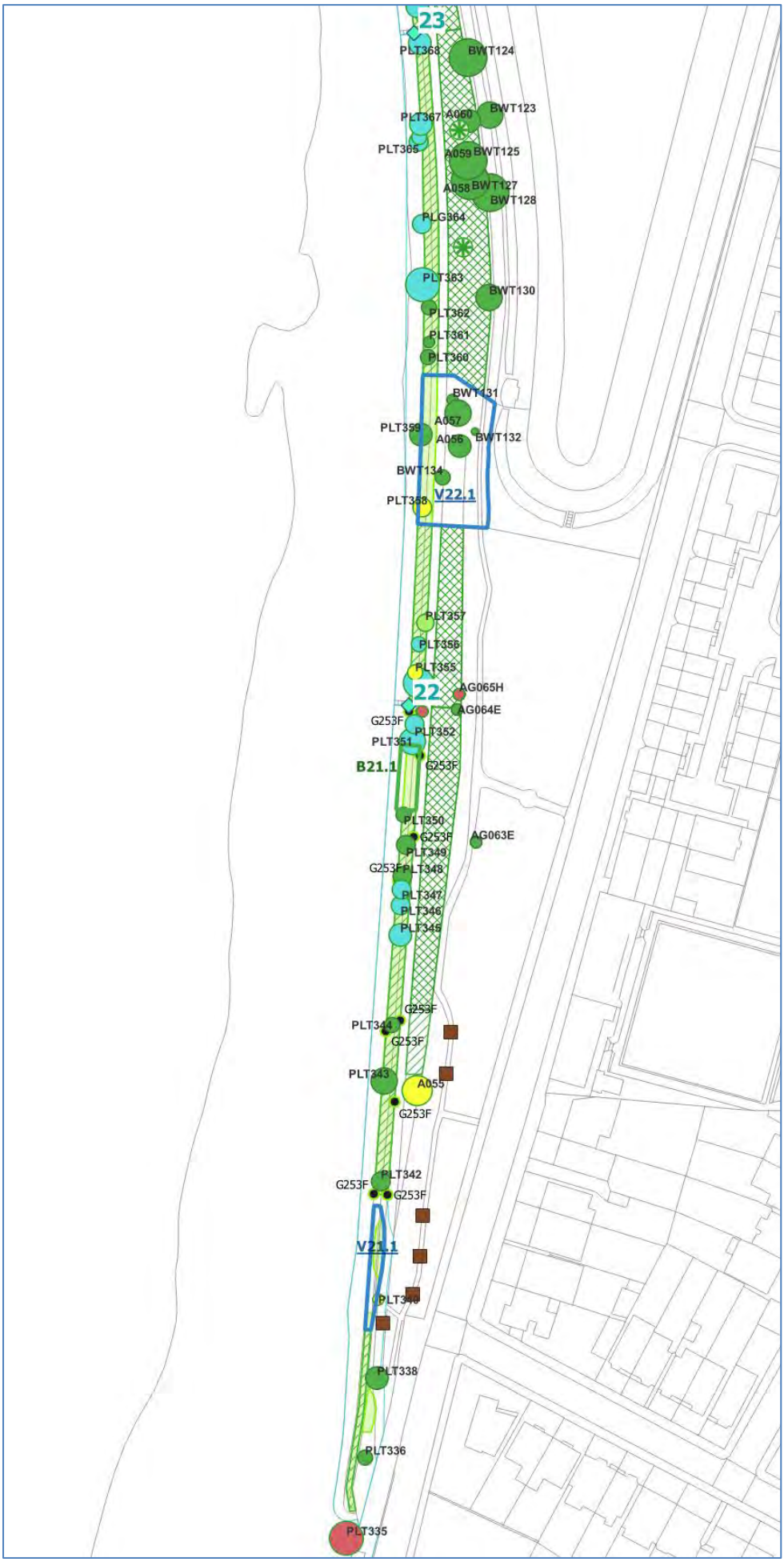
Sections 21B & 22 – Small Profits Dock to Leg o' Mutton Reservoir



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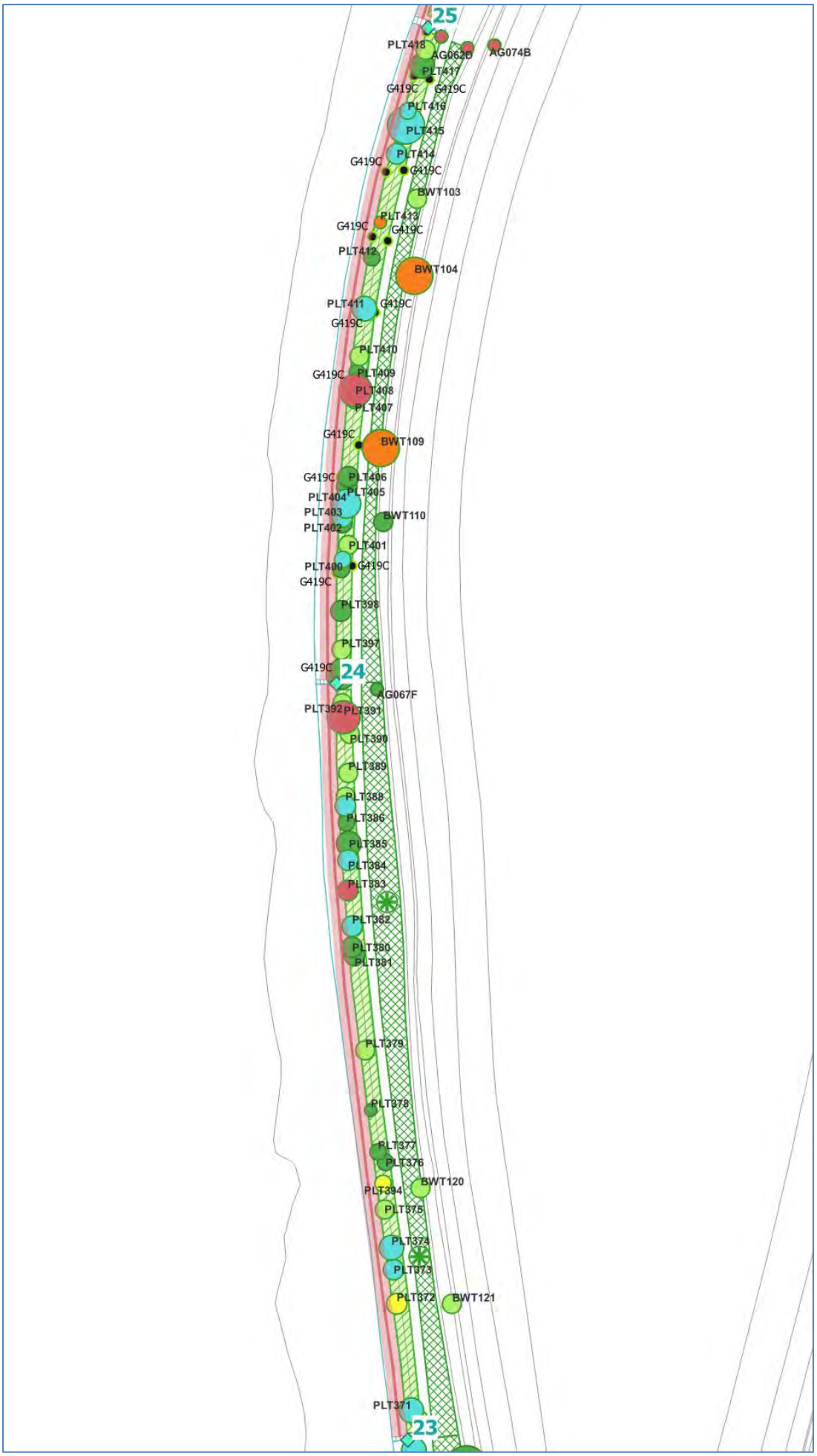
Sections 23 & 24 – Leg o' Mutton Reservoir



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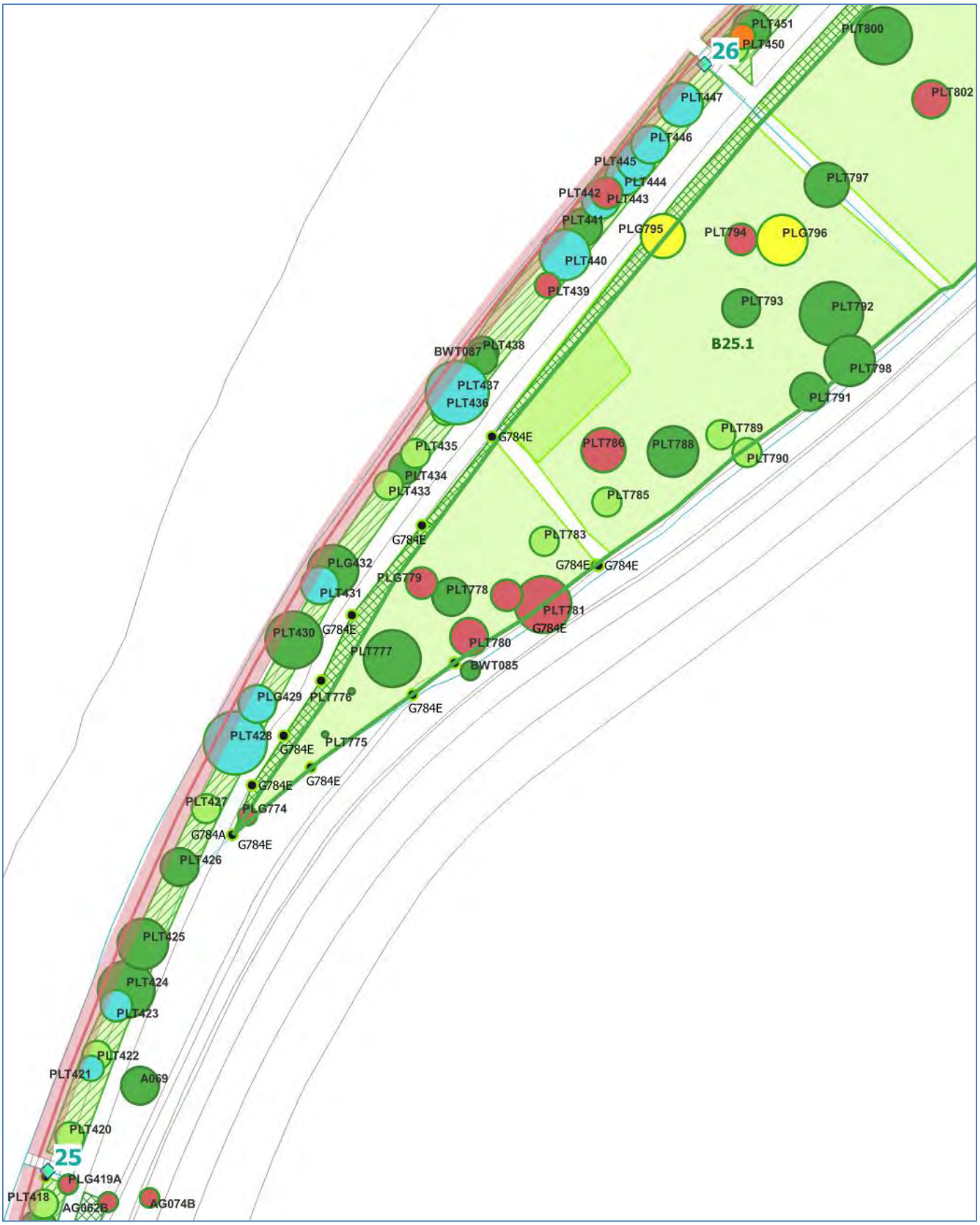
Section 25 – Leg o' Mutton Woodland (south)



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Section 26 – Leg o' Mutton Woodland (north)

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Sections 27 & 28 – St Paul's School Playing Fields (south)

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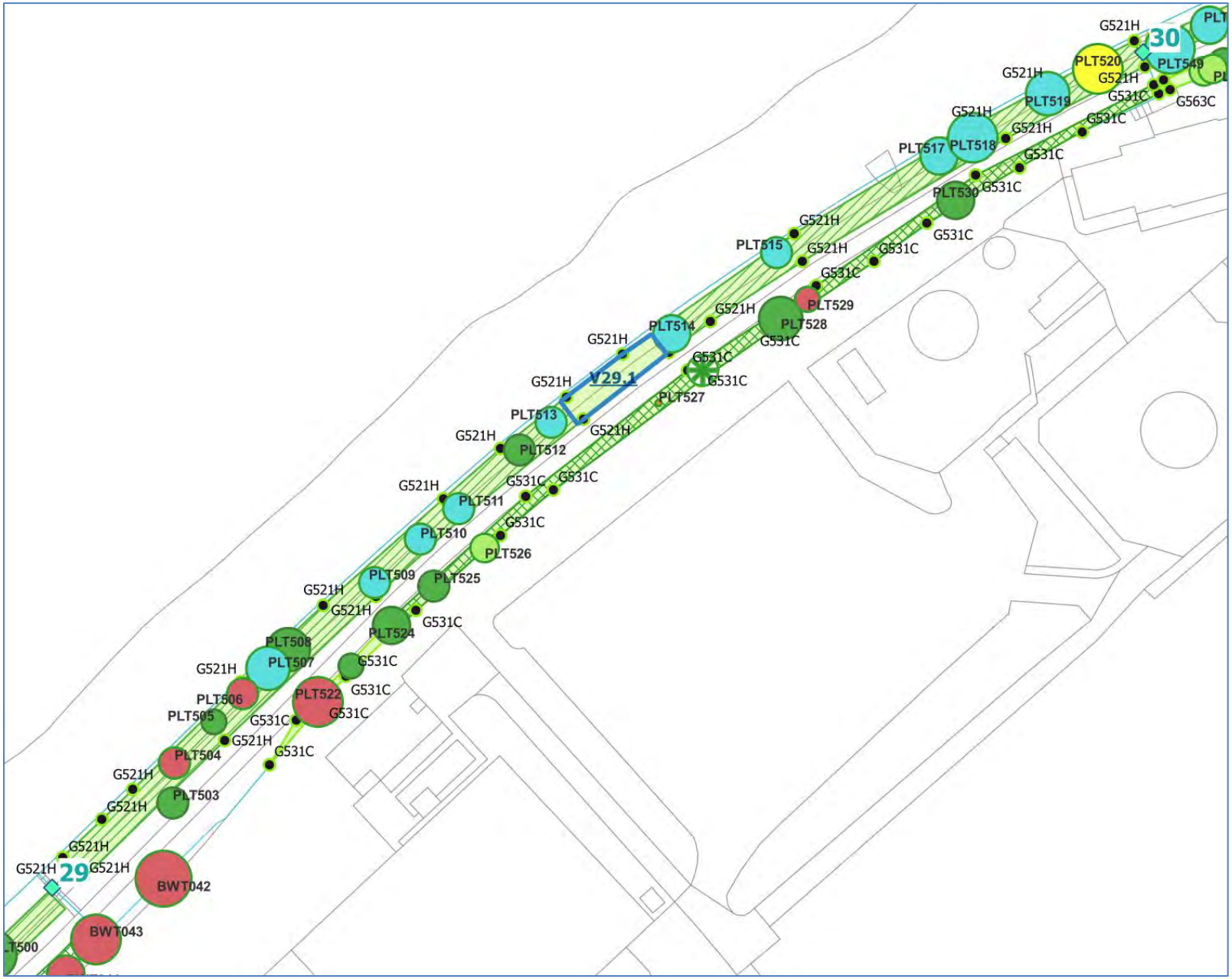
Section 29 – St Paul's School Playing Fields (south)



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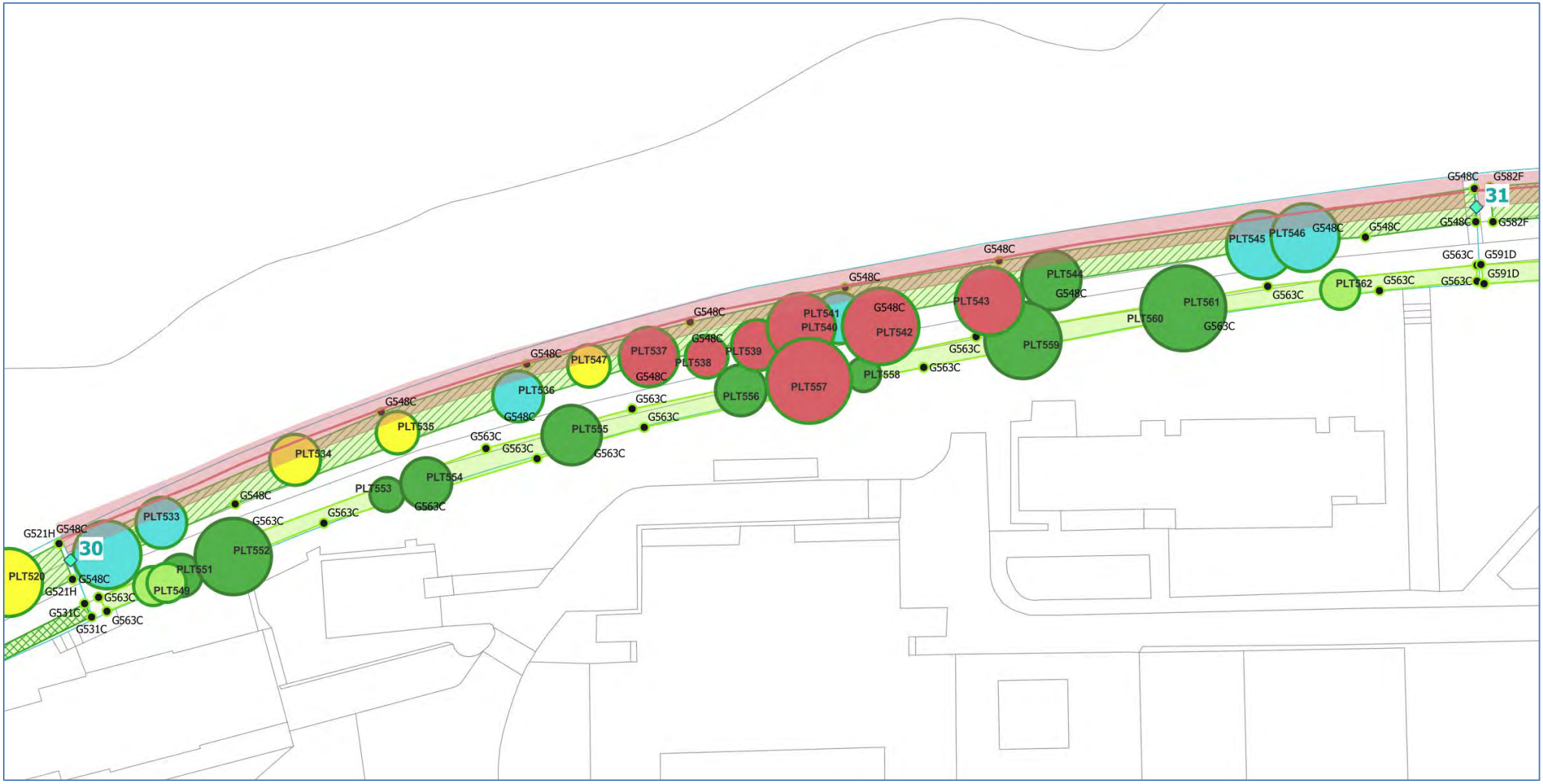
Section 30 – St Paul's Junior School



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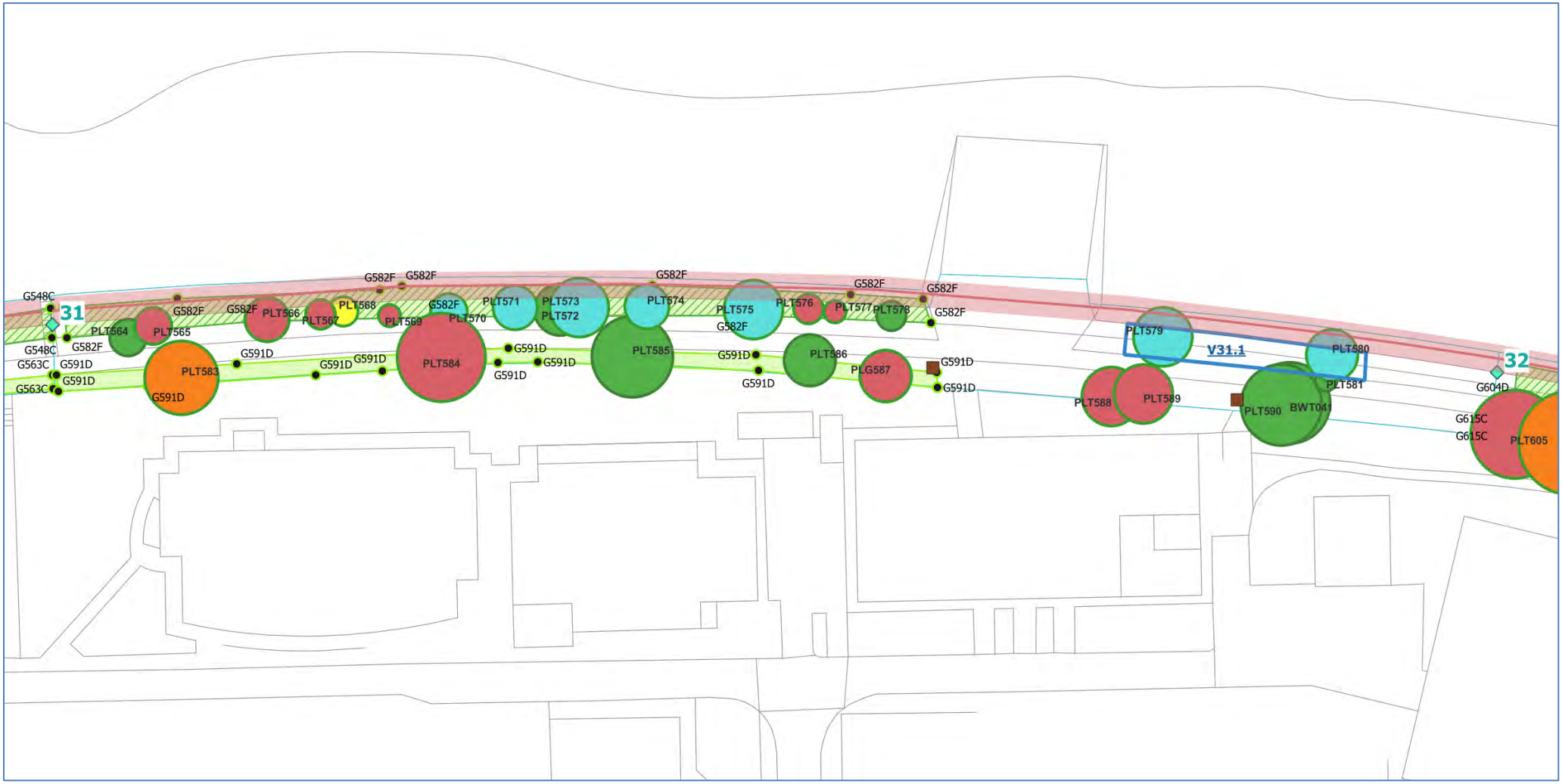
Section 31 – St Paul's School



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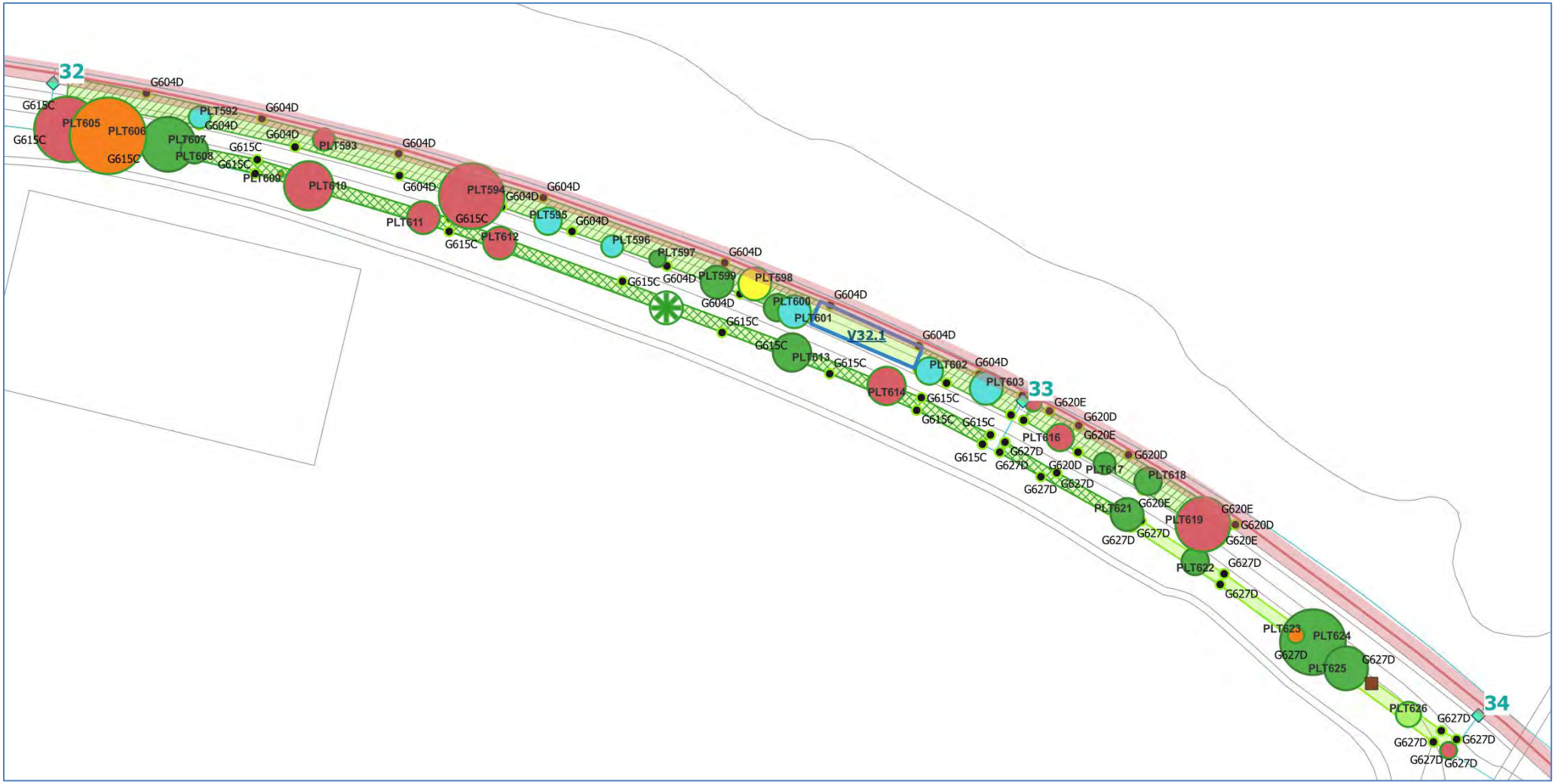
Sections 32 & 33 – St Paul's School Playing Fields (east) to Hammersmith Bridge



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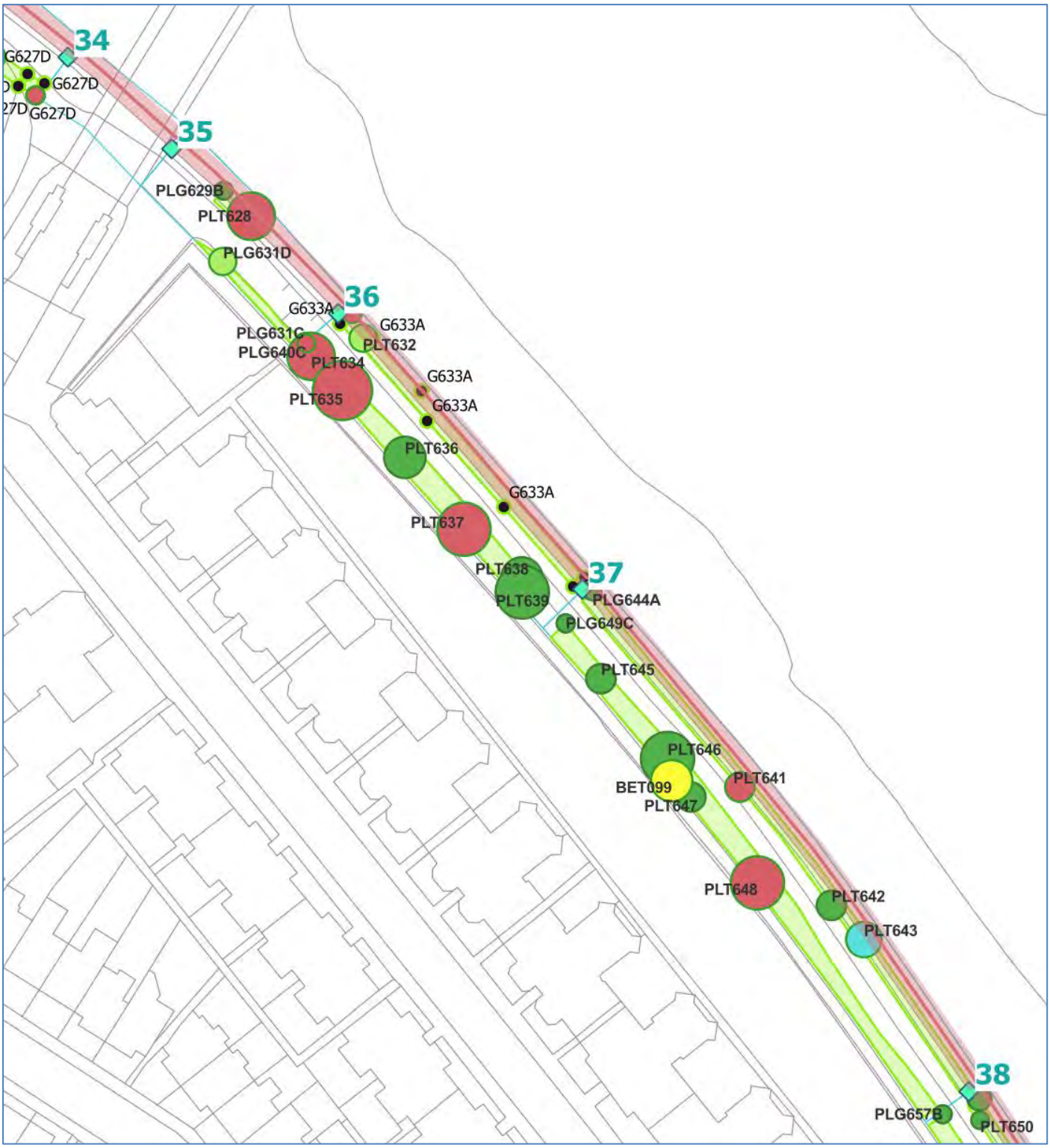
Sections 34, 35, 36 & 37 – Hammersmith Bridge to Riverview Gardens



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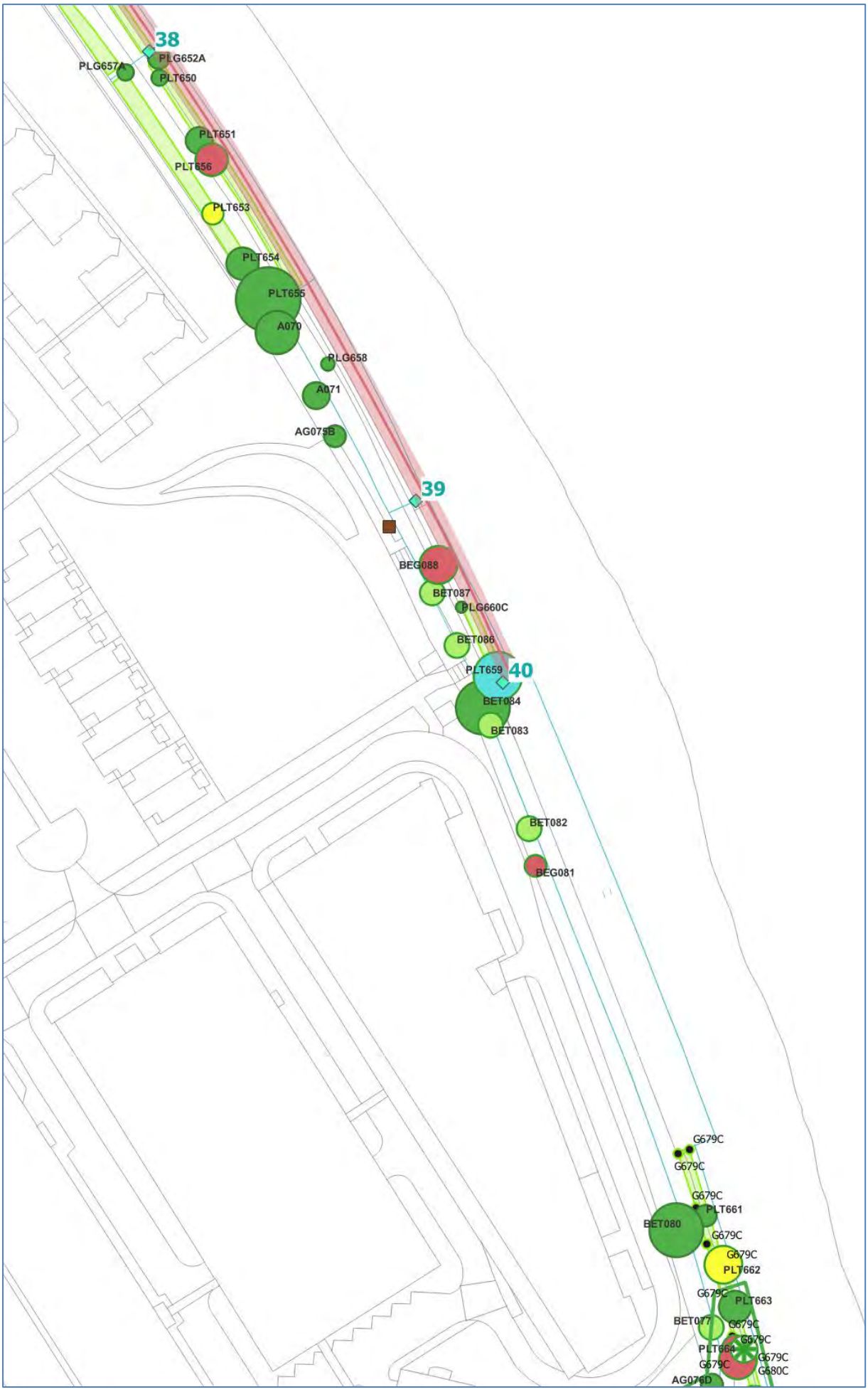
Sections 38A, 38B, 39 & 40A – Riverview Gardens to Harrod's Wharf



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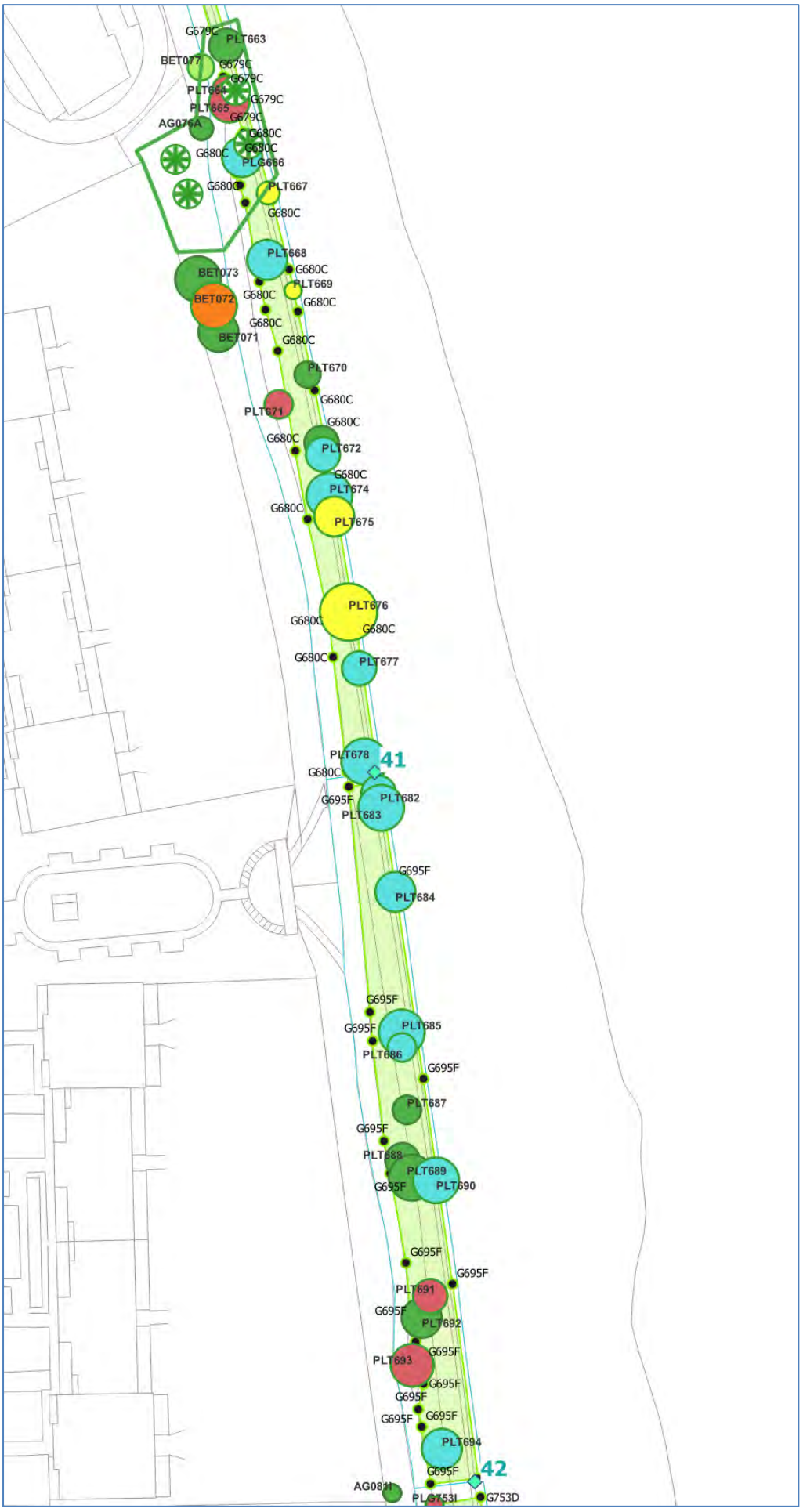
Sections 40B & 41 – Holst and Handel Mansions, Barnes Waterside



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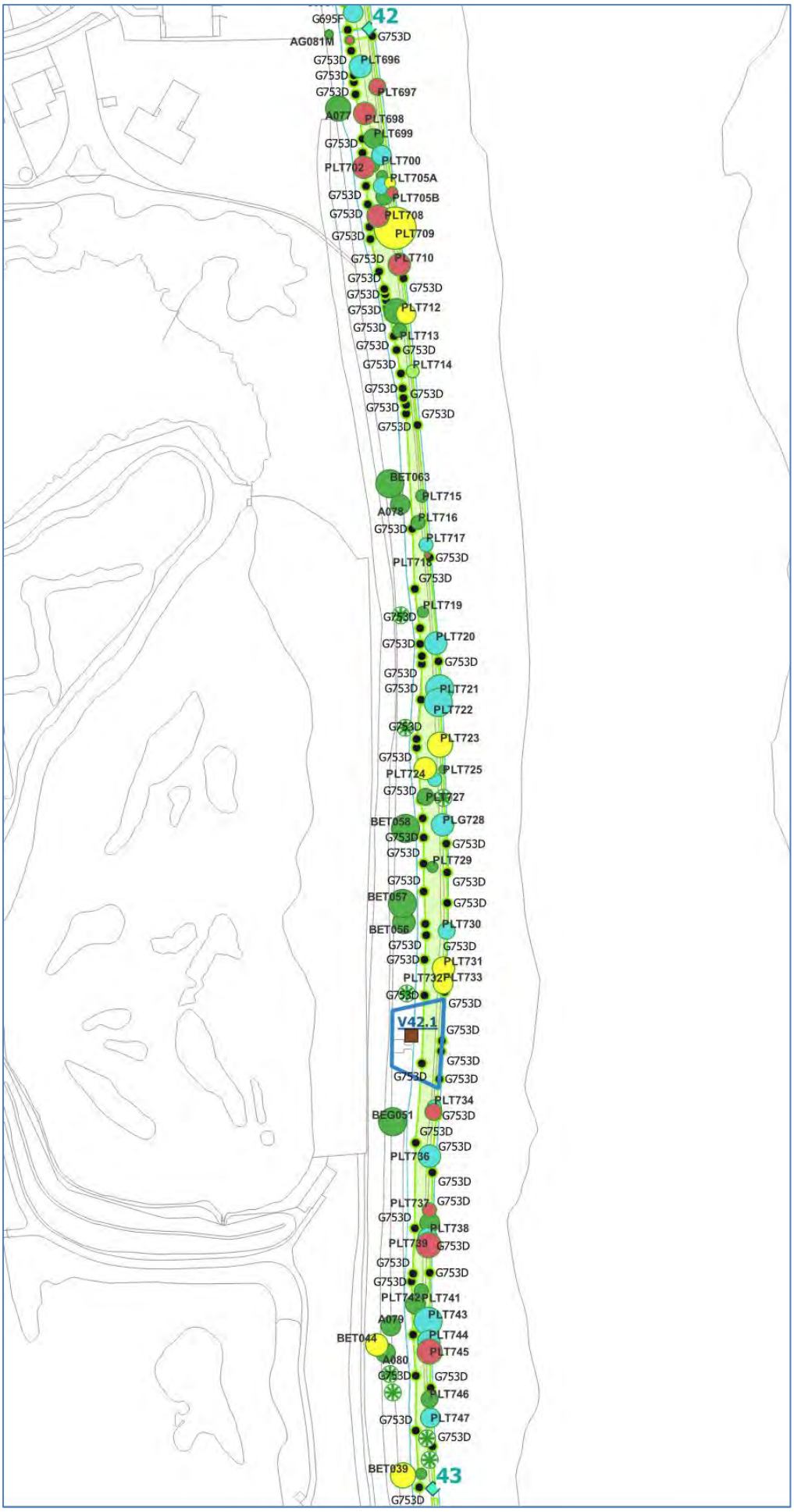
Section 42 – London Wetland Centre, Barnes



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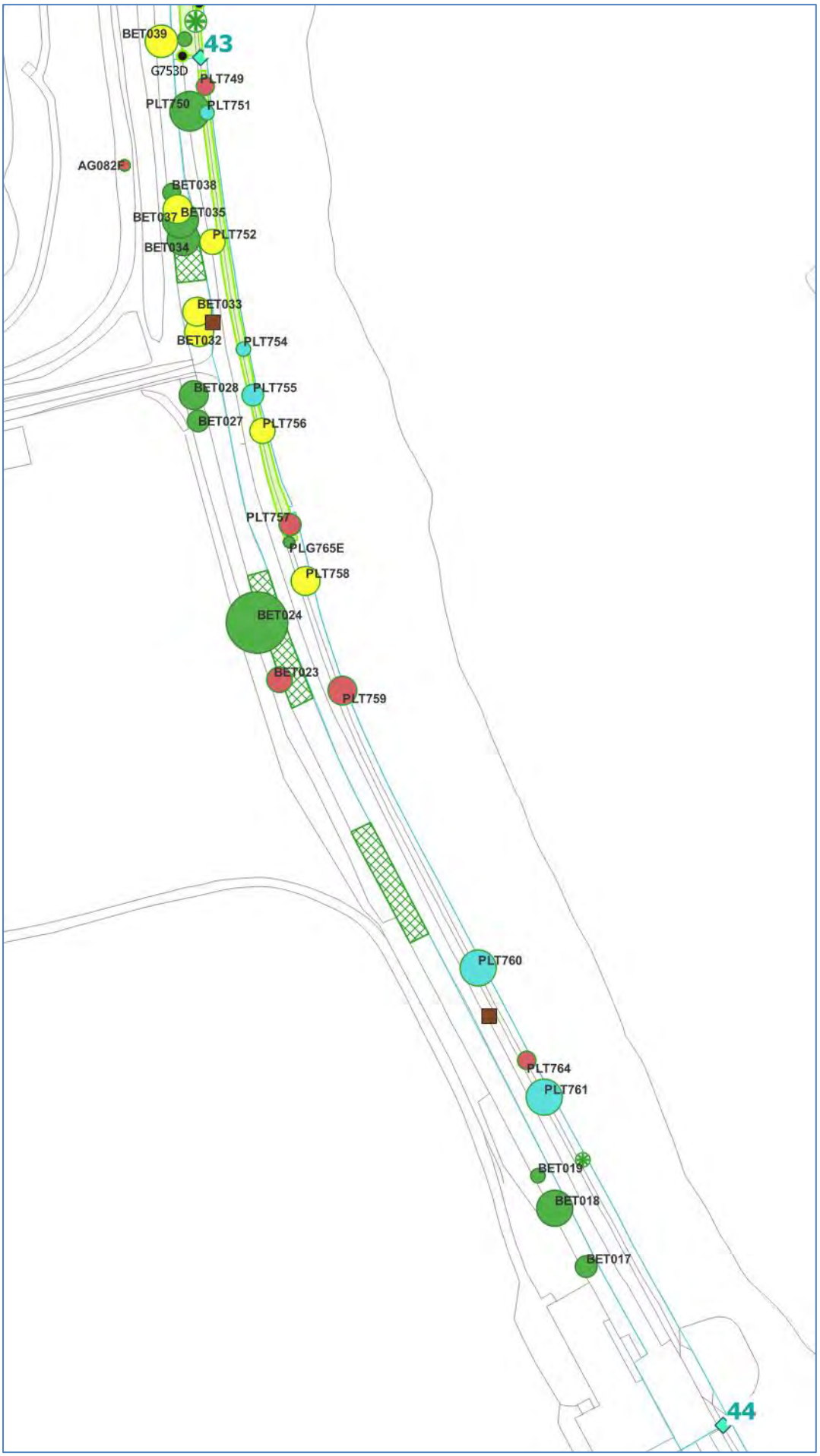
Section 43 – London Wetland Centre to Barnes Sports Centre



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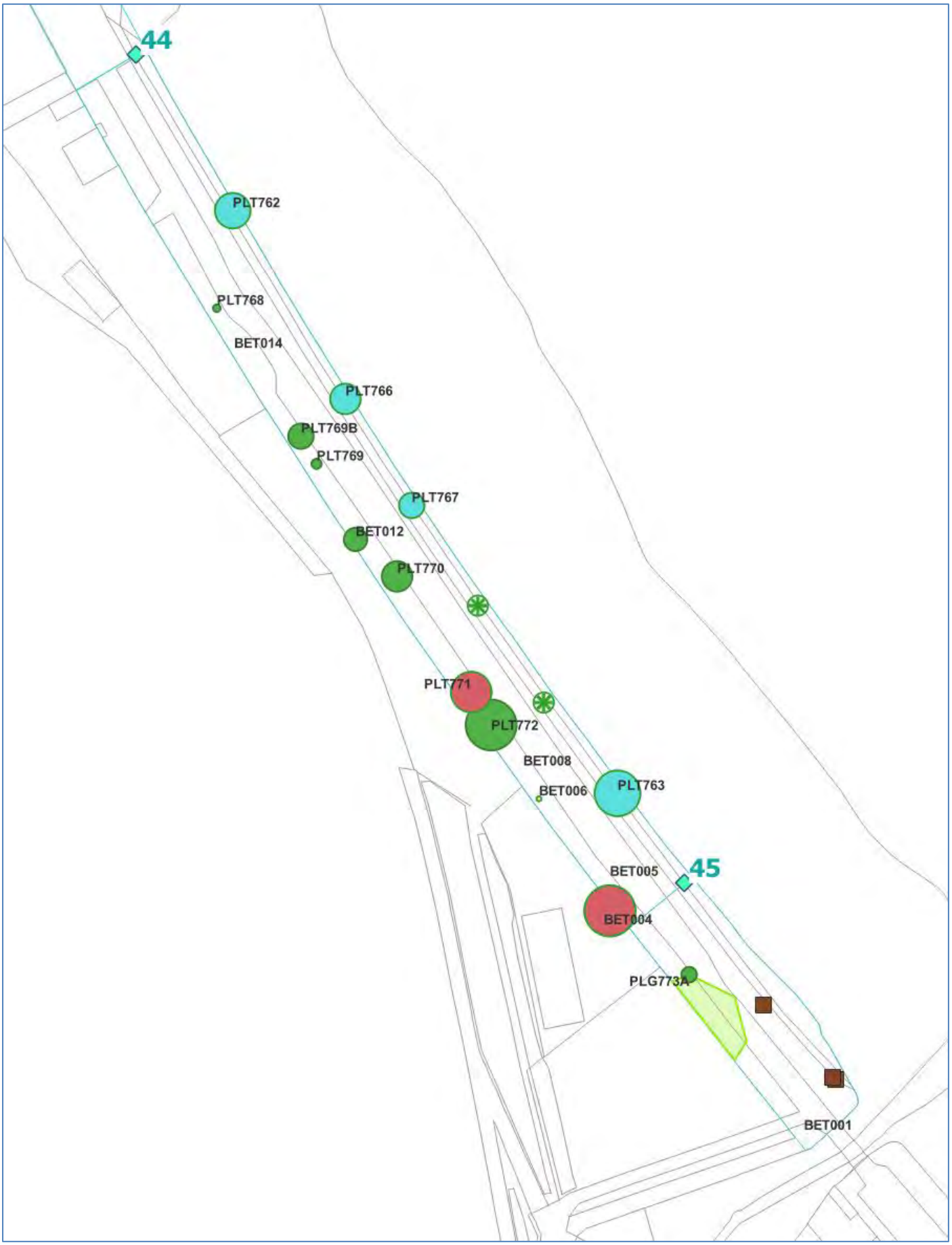
Sections 44 & 45 – Barnes Sports Centre to Beverley Brook



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