**Central Somers Town CIP**

# Arboricultural Impact Assessment

DECEMBER 2015

Somers Town Community Investment Programme

Camden

ARBORICULTURAL CONSULTANTS

# ARBORICULTURAL IMPACT ASSESSMENT

# AT

# CENTRAL SOMERS TOWN

# LONDON

**NOVEMBER 2015**

## SUMMARY

I have inspected all the trees on and near the site that could be affected by any proposed development and list their details in Appendix A. The proposal is the comprehensive redevelopment of Central Somers Town, including the construction of new residential blocks and the demolition of Edith Neville School and Plot 10 and construction of new facilities.

The design layout is constrained by various factors with trees only one aspect. Whilst the design has tried to retain as many trees as possible, restricted space requires that 45 trees and 5 groups are removed to facilitate the development (including 6 recommended for removal on arboricultural reasons). A comprehensive landscape proposal is included in the Planning Submission that includes the planting of 88 new trees.

The retained trees will require robust protection measures and construction must be carried out with care to ensure the long-term potential of the trees. Extensive changes in both hard and soft landscaping has the potential to cause damage and will require careful construction and supervision.

# 1. Introduction

## 1.1. Instructions

1.1.1. We are instructed by DSDHA Architects, on behalf of their client the London Borough of Camden, to inspect and report on a number of trees at the existing Central Somers Town site (see fig 1 below for survey extents). We are to report on the tree stock, their current condition, amenity value, and suitability for retention.

**Fig 1: Extent of survey**

## 1.2. Drawings and Documents

1.2.1. We confirm sight of the following documents and drawings:

- Existing Site Plans.
- Topographic plan.
- Tree Removal & Retention.
- Proposed tree Planting & Mitigation.
- Tree Impacts.
- Proposed Site Surface Plan.

# 2. Report on site visit

## 2.1. General

2.1.1. The site was inspected on 15th July 2015 by F Critchley and G. Causey of Arboricultural Solutions LLP. All arboricultural data contained in this report was recorded at that time. Weather conditions were overcast with occasional bright intervals; visibility was satisfactory.

## 3. Tree inspection and methodology

### 3.1. Inspection

3.1.1. Trees likely to be affected by any developments were identified and inspected from ground level only and were not climbed. No invasive examination technique (such as increment boring, or internal decay detection) was carried out. As the inspection was visual only, no guarantee, either expressed or implied, of the internal condition of the wood of these trees can be given.

### 3.2. Marking

3.2.1. The provided site plan was converted for use in Arbortrail tree data software. Where a tree is missing from the supplied topographic survey, it is plotted by eye or triangulation from set points (using a laser rangefinder) and a note made on the comments section of the tree schedule (Appendix A).

3.2.2. Each reference number on the plan refers to a survey sheet entry completed on site to show the following data:

- Sequential tree reference number (recorded on tree survey plan)
- Species - Common name followed by the Latin name for the first entry of each different species
- Height in metres
- Trunk diameter in millimetres, measured in accordance with Annex C of BS 5837:2012
- Crown radius measured at the four cardinal points – where only one measurement is given, the crown is symmetrical
- First significant branch height and direction of growth
- Crown clearance above ground level
- Life stage (young, semi-mature, early mature, mature, over-mature, veteran)
- General observations, particularly of structural and/or physiological condition, and/or preliminary management recommendations
- Estimated remaining contribution in years (less than 10, 10+, 20+, more than 40)

3.2.3. Survey sheet entries are shown at Appendix A of this report.

### 3.3. Tree categorisation

3.3.1. Trees vary in, size, age, and landscape importance. All trees were categorised in accordance with the British Standard Trees in relation to design, demolition and construction - recommendations BS 5837: 2012. BS Categories have been entered in the tree schedule and are as follows:

**U – Trees unsuitable for retention**. Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

**A - High Category.** Trees of high quality with an estimated remaining life expectancy of at least 40 years.

**B - Moderate Category.** Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

**C - Low Category.** Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

3.3.2. The site plans were edited to show the above and belowground constraints relative to the existing site, and to inform the developer of the potential conflicts with the tree population (refer to drawing TCP_CNSOMERSTWN_1). The root protection areas (RPAs) have been calculated using Trees in Relation to Design, Demolition and Construction - recommendations BS 5837: 2012. The RPAs of trees implicated in the design proposal have not been adjusted in shape to take into account the existing or past site conditions such as the presence of roads, structures and underground services. Whilst the presence of roads and building foundations may restrict root spread, hard surfaces such as tarmac footpaths are likely to have roots present beneath them. Where foundations or other major structures are planned within the theoretical RPAs of retained trees it is recommended that, a test trench is excavated by Air Spade to assess the actual presence of roots.

3.3.3. The trunk diameter circle and crown outline shows the BS Category in the following colours:

| | |
|---|---|
| **Category U** | **Dark red** |
| **High Quality (A)** | **Light green** |
| **Moderate Quality (B)** | **Mid-blue** |
| **Low Quality (C)** | **Grey** |

3.3.3. Trees in Relation to Design, Demolition and Construction - Recommendations BS 5837: 2012 do not include arguments for or against development, or for the removal or retention of trees. Where development is likely to occur the standard provides guidance on how to decide which trees are appropriate for retention.

## 4. Brief Site Description

### 4.1. General

4.1.1. The proposed development area is bounded by Coopers Lane flats to the east, Chalton Street to the west and includes the open spaces at Brill Place, Polygon Road and the Edith Neville School.

4.1.2. Despite the location of the site close to Kings Cross and St Pancras rail stations the area is relatively quiet with a lack of heavy traffic. The area benefits from a good population of early-mature and mature trees with two distinct open spaces and associated green infrastructure. The current layout provides an almost 'wooded' feel to the open spaces and helps soften the built environment.

### 4.2. Tree Preservation Orders

4.2.1. The Town and Country Planning (Tree Preservation) (England) Regulations 2012 allows for trees either as groups, or individuals, or as woodlands, to be protected by Tree Preservation Orders (TPO). These have the effect of preventing the cutting down, topping, lopping, uprooting, wilful damage or wilful destruction of trees except in certain circumstances, other than with the consent of the local planning authority.

4.2.2. A Conservation Area (CA) is an area designated by the Local Planning Authority as one of "special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance". Special controls exist with regard to demolition and alteration of buildings; Listed Building Consent must also be obtained for any demolition, even if the building is not itself listed. Similarly, trees are given some protection with the requirement for the local authority to be given six weeks written notice before carrying out any work on trees; this gives the authority time to decide if a TPO is necessary.

4.2.3. We are unaware if any of the trees are covered by a TPO but it is unlikely given that they are the responsibility of the London Borough of Camden; it is advised that this is confirmed prior to any works.

### 4.3. Development Proposal

4.3.1 The proposed development includes the demolition of the Edith Neville School and construction of a new school on the existing site. To the south of Brill Place will be a 25 storey residential block and to the north new residential properties and community garden and hall.

4.3.2. The Edith Neville School will be demolished and a 2-storey building constructed creating new public space to the south to link with the existing amenity areas and residential space to the west of the site. There will be a new community hub to the north of the public open space in Polygon Road (Plot 10), including a play project, sports pitch and residential

properties. Refer to the Masterplan by DSDHA for detailed information of development layout and drawing TCP_ CNSOMERSTWN_2 for the relationship between the trees and the proposed layout.

## 5. Tree Population

### 5.1. Tree schedule

5.1.1. Refer to appendix A for detailed records of individual trees and drawing Tree Constraints Plan (drawing number TCP_CNSOMERSTWN_1) for the locations of trees and groups. The tables below refer only to individual trees and not groups or individual trees within groups.

### 5.2. Species diversity

| Species | Number |
|---|---|
| Cherry spp. | 3 |
| Apple | 1 |
| Ash spp. | 16 |
| Birch spp. | 7 |
| Maple spp. | 44 |
| Pear | 2 |
| Hawthorn | 1 |
| Willow | 1 |
| Hornbeam | 1 |
| Alder | 5 |
| Lime | 1 |
| Black locust | 14 |
| London plane | 36 |
| Rowan spp. | 9 |
| Sweet chestnut | 1 |
| Sweet gum | 4 |
| Tulip tree | 3 |
| **Total:** | **149** |

5.2.1. The tree population has a reasonable number of species present for the size of the area implicated in the development proposal although some species are represented by a single specimen; there are no rare or unusual species present.

### 5.3. Age distribution

| Age class | Number |
|---|---|
| Semi-mature | 11 |
| Early-mature | 76 |
| Mature | 48 |
| Young | 13 |
| Over-mature | 1 |
| Dead | 0 |
| **Total:** | **149** |

5.3.1. Whilst the number of young trees would not be expected to sustain the local tree population, this is a managed site and trees are likely to be replaced as they reach the end of their safe remaining life

### 5.4. Grade classification

| Tree grade | BS5837:2012 Definition | Number |
|---|---|---|
| A | High | 5 |
| B | Moderate | 97 |
| C | Low | 41 |
| U | Remove | 6 |
| | **Total:** | **149** |

5.4.1. The tree categories are weighted to the moderate category and reflects the importance of the trees in an urban environment. There are five trees of high landscape value reflecting their prominent location and visibility in the street scene. Six trees are recommended for removal on arboriculture grounds.

# 6. Arboricultural Impact Assessment

## 6.1. Summary of impact

| Impact | Reason | Low value (Cat C & U) trees | Moderate value (Cat B) trees | High value (Cat A) trees | Potential design & mitigation techniques |
|---|---|---|---|---|---|
| **Trees to be removed** | Building construction and/or surfacing | Trees 113, 114, 128, 173, 174, 176, 181, 205, 206, 207, 241, 255, 256, 257, 258, 263, 266 Groups G1, G2, G3, G4 | Trees 122, 123, 126, 127, 129, 130, 132, 133, 164, 165, 180, 207, 215, 220, 221, 222, 225, 226, 262 Group G5 | Trees 108, 159, 178 | Replacement trees can be planted following completion of the development to compensate for any necessary removals |
| | Arboricultural reasons | Trees 204, 227, 182, 242, 155, 246 | | | Replacement trees as part of a proposed landscape scheme. |
| **Retained trees to be managed** | Enabling works/space for development | Trees 125, 208 | Trees 105, 106, 107, 131, 136, 137, 138, 167, 224 | | Crown reduction and lifting required to clear the required construction access. It is recommended that the pruning specification is finalised once the site is pegged out to avoid discrepancies between the plot positions on the plans and on site. |
| **Retained trees that may be damaged** | Removal of existing structures | | Trees 171, 172, 264, 265, | | Robust protection measures required adjacent to areas of demolition, particularly Edith Neville School. Ground protection required. |
| | Removal of existing surfacing | All retained trees | All retained trees | All retained trees | Use of hand tools only within the RPAs of retained trees. Ground protection required and no-dig techniques when working in RPAs. |
| | Material storage/washing areas/welfare areas | All retained trees | All retained trees | All retained trees | All material storage/washing areas/welfare areas to be located away from RPAs of retained trees. |
| | Temporary access to construction areas | All retained trees | All retained trees | All retained trees | All construction access will be routed outside RPAs of retained trees or will be restricted to areas of ground protection and existing access/hard surfacing. |
| | Installation of new structures | All retained trees | All retained trees | All retained trees | New buildings/structures encroach into the RPAs of retained trees and special precautions are required to prevent long-term damage. |
| | Installation of new surfacing | All retained trees | All retained trees | All retained trees | Construction of any new paths/parking within RPAs to be undertaken using hand tools only and all roots over 25mm protected & retained. |
| | Excavations or ground level changes | All retained trees | All retained trees | All retained trees | No changes in levels within the RPAs of retained trees unless using a cellular confinement system or carrying out a trial exploration using an Air Spade. |
| | Installation of services* | All retained trees | All retained trees | All retained trees | New services should be routed outside the RPAs of retained trees. If this is not practicable, trenchless techniques should be adopted where possible or hand excavation carried out. |
| | Landscaping works | All retained trees | All retained trees | All retained trees | All landscaping works with RPAs of retained trees to be undertaken using hand tools only |

### 6.2. Arboricultural Impact Assessment

6.2.1. The root protection areas (RPAs) have been calculated using Trees in Relation to Design, Demolition and Construction - recommendations BS 5837: 2012. The British Standard provides a way of determining the volume of soli required to maintain healthy growth and ensure the long-term potential of a tree. However, in our experience, the actual root spread may exceed or be considerably less than the calculated volume predicts. It is for this reason that we recommend the use of trial excavation by Air Spade when constructing near or within the RPA. In addition, certain species are tolerant of root severance e.g. London plane and lime can quickly regenerate new roots when severed.

6.2.2. The proposed layout requires the removal of 45 trees and 5 groups to achieve the desired design (refer to drawing TCP_CNSOMERSTWN_2); 6 trees are recommended for removal on arboricultural grounds; table 6.1 above summarises those losses and the trees that may be implicated in the proposal. In addition to the constraints imposed on the site from the existing tree population there are a number of additional constraints that dictate the final layout of the site and are outside the scope of this report.

6.2.3. To the south boundary of Brill Place, the construction of a 25 storey residential block necessitates the removal of trees T108, T205, 206 and 207. The crowns of trees T105 and T107 will require some minor pruning on the west side to ensure clearance for construction access. The crowns of the trees are currently unbalanced and therefore the pruning may benefit the overall crown shape for future growth. The construction includes a basement level extending beyond the footprint of the main build. There is a minor encroachment into the RPA of tree T105, however, the excavation will require care to ensure damage to the roots is minimised by exposing the roots and carefully pruning them back beyond the outer face of the proposed basement excavation.

6.2.4. Trees T113, T114, T122, T123 and potentially T215 (subject to Air Spade investigation) are to be removed to allow re-profiling of the open space to improve access and visibility. The retention of surrounding trees to the outside of the open space will help mask these losses. The changes in levels may impact on tree T124 and to a lesser extent T125 and preliminary excavation by Air Spade may be required to determine the extent of any root pruning required. Tree T125 is of drawn form with a small crown originating at height and consideration should be given to allowing its removal and replacement with a tree of long-term potential.

6.2.5. The construction of a residential block to the north of Brill Place will require the removal of trees T126 – 130 inclusive and 220 – 222 inclusive. Trees retained to the west of the build will provide some screening. At the junction of Purchese Street and Hampden Close a new residential block will be constructed requiring the removal of trees T132, T225, T226, T133 and group G1 (within the existing community garden). The existing tree in the community garden (T131) is to be retained and this will require careful construction as there is an encroachment into the RPA of the tree from the footprint of the new build. The crown of the tree will also require pruning to provide the necessary clearance for construction access. The tree has recently been heavily reduced in the past and will require ongoing maintenance to maintain

clearance to the east elevation of the new block. Tree group G1consists of young birch trees some of which are in raised planters. There may be potential to transplant some of these trees to other areas on site or used elsewhere in the Borough. A limiting factor may be the close planting leading to roots being intertwined. Trees T136 – T138 will require crown reduction on the south side to provide construction clearance. The trees have unbalanced crowns with growth to the south as a result of suppression from adjacent trees and the pruning will help 'balance' the crowns. It is likely that long-term management will be required to maintain a satisfactory clearance to the north elevation of the new block.

6.2.6. The demolition of the existing Edith Neville School and construction of the new facility requires that robust protection measures are in place for retained trees but also requires the removal of trees T176, T178, T180, T181, T256 – T258, T262, T263, T266, and groups G4 and G5. Trees T173 and T174 require removal as they obstruct the proposed footpath, the trees are low value and generally of poor form. The loss of the majority of these trees is not significant in terms of the effect on the overall amenity value, however, the loss of trees T178 and T262 (grade A and B) is significant and will have an impact on the street scene. There is little suitable space on the east elevation of the proposed new school for replacement planting and consideration should be given to extending the planting of new trees on the west side of Purchese Street. This will require approval from the Council and other constraints may be in force, but additional planting would help mitigate the loss of two mature trees.

6.2.7. The redevelopment of Plot 10 will require the removal of trees T159, T164, T165, T246, T255 and group G3. In general, the loss of the majority of these trees will have a minor impact on the overall amenity of the area due to the presence of other trees, however, T159 is of high value and prominent in the street scene.

6.2.8. The redevelopment of the existing open spaces will include an additional area gained from a change in the south boundary of the Edith Neville School which will provide a continuous landscaped area from Chalton Street the junction of Brill Place and Midland Road.

6.2.9. The construction of a new residential block at the south end of Charrington Street requires the removal of trees T256, T257 and T258. There is a minor encroachment into the RPA of tree T167 that will require a hand excavated trench to sever any roots crossing into the area of excavation for the foundations. The crown of the tree will require some reduction to clear the construction access.

6.2.10. The development proposal will have a broad impact on the majority of retained trees as a result of extensive planned changes in hard and soft landscaping throughout the site. The removal of hard surfacing within the RPAs of retained trees can be very damaging as roots may be shallow and tracking beneath the hard surfaces. The use of mechanical plant to break up and scrape off the old surface can lead to roots being ripped out the ground and therefore this work requires care, and should be restricted to hand tools. It is common for roots to be found at the soil/grass surface in soft landscaped areas, particularly if the trees are located on made-up ground. The design and implementation of any development must therefore take into account that there should be no level changes within the RPAs unless trial excavation by Air Spade confirms that significant roots are not present.

### 6.3. Mitigation

6.3.1. With reference to Section 6.2.1., the current proposal requires the removal of 17 C grade trees and 4 groups, 19 B grade trees and 1 group and 3 A grade trees. Whilst this represents a significant number, many of the losses are in areas where retained trees will help mask those losses. A comprehensive landscape proposal is included as part of the Planning Submission and is summarised in the Design & Access Statement (DSDHA).

6.3.2. The new school site will benefit from the provision of 24 replacement trees that will provide screening to the playground and additional groups of trees in the habitat areas.

6.3.3. The new Community Hub will require the removal of 1 tree on the existing site and 2 trees (including a Category A tree) and 1 group adjacent to facilitate the development; the new Hub will include 4 replacement trees.

6.3.4. The redevelopment of the existing park will include 46 new trees including multi-stemmed specimens and fruit trees in the community garden. The proposed trees are a mix of semi-mature, feathered, multi-stem and pleached including a variety of species to improve biodiversity. The use of mixed clear stem and multi-stemmed specimens will improve the canopy structure of the tree population providing a grading in tree heights; the choice of species will provide improved year-round interest both in flowering, autumn colour and form.

6.3.4. It is currently proposed to plant 4 trees in Purchese Street to help mitigate the loss of a Category A tree (T178) and a Category B tree (T262) within the existing school. Purchese Street has had 4 trial pits excavated by Street Tree Care Ltd to determine if it is feasible to plant within the street. The results of the excavations indicated that three of the sites were clear of utilities whilst a fourth was aborted due to the presence of gas and water at 500mm depth. However, Street Tree Care Ltd are confident that a fourth site close to the 3 successful pits would prove viable (between pits 1 and 2). Fig 1 below shows the location of the trial pits with pit 4 adjacent to the existing pedestrian crossing.

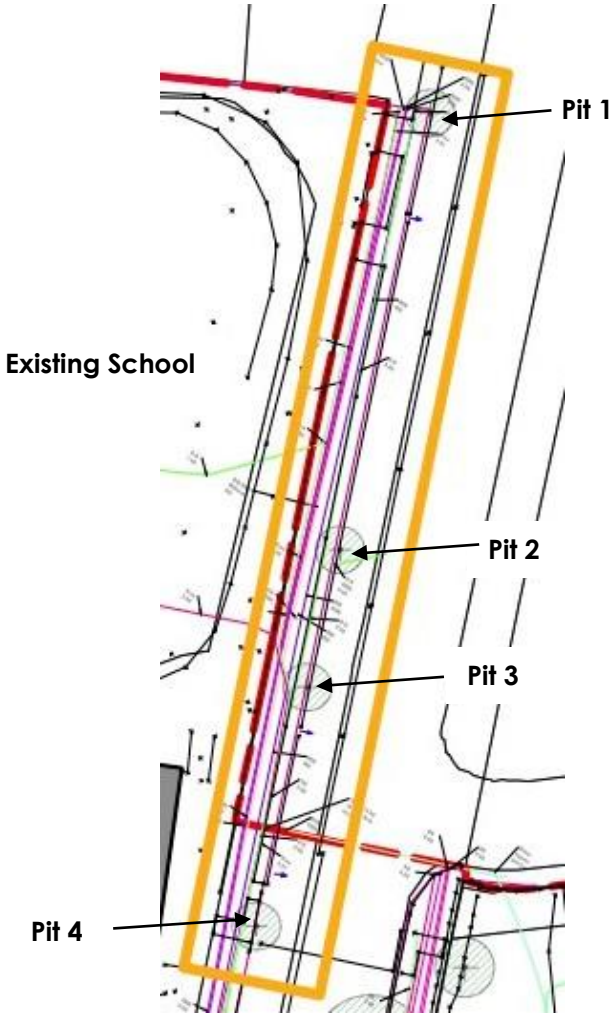


**Fig 1. Location of trial pits (courtesy Street Tree Care Ltd)**

6.3.5. Chalton Street has also been scanned for utilities to determine if it is feasible to plant trees within the carriageway on build-outs. The information provided by Street Tree Care Ltd indicates that water services run in the centre of the road with some spurs running across the carriageway on the south side toward Aldenham Street. It is therefore considered that there is scope for additional planting in Chalfont Street. However, it should be noted that the Highway Authority reserves the right to construct the adjoining Public Highway (carriageway, footway and/or verge) as considered appropriate. Proposals on the Public Highway are indicative only and it is highlighted that any planning permission does not guarantee that

highways works will be implemented as it is always subject to further detailed design, consultation and approval by the Highway Authority

6.3.6. The use of structural soils or a proprietary system such as Silva Cells for planting in hard surface areas will ensure suitable soil volume for the future development of the trees and help prevent long-term damage to wearing surfaces. Such systems can also be designed with integrated SUDS for a sustainable drainage solution.

6.3.7. The retained trees will require robust protection measures to ensure their long-term potential and it is recommended that an Arboricultural method Statement is prepared as part of Conditions following Planning Approval.

# 7. Development

## 7.1. Threats to trees during development

7.1.1. The following information is provided to highlight to the developers the ways in which trees may be damaged. These may be listed, in general terms as:

- Compaction of ground
- Covering rooting areas with impervious surfaces
- Excavations for foundations
- Excavation for service runs
- Alterations in ground level
- Access and movement of machinery
- Need for temporary site storage
- Crown damage by passage of high-sided vehicles

7.1.2. British Standard 5837 (1991) 'Trees in relation to construction' provided useful guidance for the assessment and formulation of measures for the mitigation of such threats. Using the experience gained from this Standard, it was revised and upgraded to 'Recommendation' status as British Standard 5837 'Trees In Relation To Construction' (2005). This British Standard was withdrawn on 30th April 2012 and replaced with Trees in Relation to Design, Demolition and Construction - Recommendations BS 5837: 2012. To assist in the prediction of the likely impact of development on retained trees, a model is used. This model is based on the age, vitality and size of individual specimens.

7.1.3. The British Standard relies heavily on the creation of a protected zone (RPA) around each tree. This area should be protected from disturbance "in order to avoid unacceptable damage to the tree as a result of severance or asphyxiation of the root system." The recommended minimum area ($m^2$) for each tree to avoid potentially harmful disturbance have been calculated for all the trees surveyed and entered into the tree schedule (appendix A).

7.1.4. BS 5837: (2012) acknowledges that the shape of the tree root system may be affected by several factors and that the shape of the RPA should reflect this. Any deviation in the RPA from the original circular plot should take account of the following factors whilst still providing adequate protection for the root system:

**a)** the morphology and disposition of the roots, when influenced by past or present existing site conditions (e.g. the presence of roads, structures and underground apparatus);

**b)** topography and drainage;

**c)** likely tolerance of the tree to root disturbance or damage based on factors such as species, age, condition and past management.

## 7.2. Root Damage

7.2.1. Trees that are growing satisfactorily have achieved equilibrium with their surroundings. Any construction work that affects this equilibrium could be detrimental to health, future growth and the safety of the tree.

7.2.2. The part of the tree most susceptible to damage is the root system, which, because it is not immediately visible, is frequently ignored. Damage or death of the root system will affect the health, growth, life expectancy and safety of the rest of the tree. The effects of such damage may only become evident several years later.

7.2.3. The majority of a tree's root system is generally considered to be in the top 600mm of the soil, extending radially in any direction for distances frequently in excess of the tree's height. However, roots are adventitious and if conditions suitable for root development exist to a greater depth, the roots may extend to depths of three metres or more. Works within the root spread may damage the root system.

7.2.4. Close to the trunk are the main structural roots that develop in response to the tree's need for structural stability. Beyond these major roots, the root system rapidly subdivides into smaller diameter roots; off this main system a mass of fine roots develop.

7.2.5. Tree root systems can be damaged in a number of ways during construction works. Root severance. Severing of a root will destroy all parts of the root beyond that point. Even roots less than 10mm diameter may be serving a mass of fine roots over a large area. The larger the root severed, the greater the impact on the tree.

- Damage to root bark. The bark protects the root and is essential for further root growth; it is loosely attached and easily damaged. If damage extends around the whole circumference, the root beyond that point will be killed.

- Compaction of the soil. Compaction of the ground reduces the space between soil particles, particularly in clay soils. A single passage of heavy equipment or the storage of materials can cause significant damage. Compaction can restrict or even prevent gaseous diffusion through the soil and thereby asphyxiate the roots. The roots must have oxygen for survival, growth and effective functioning.

- Alterations in ground levels. Lowering the level will strip out the mass of roots near to the surface. Raising the ground levels will have the same effect as compaction.

- Covering the rooting area with impervious surfaces. This prevents natural diffusion of gases between the soil and the atmosphere and can lead to oxygen depletion in the soil.

- Direct toxicity of some materials. For instance, petrol or diesel spillage or lime in cement can kill underlying roots.

- Wounding. Minor wounds to root bark can allow pathogens into the tree root system that can lead to a further impairment of water absorption. The general debilitation of trees due to root severance can make them more susceptible to invasion by some decay fungi such as Armillaria spp.

- Damage to the fine roots by severance of a main root, or by compaction, or by alteration of levels, will prevent the fine roots absorbing the water and nutrients essential for tree growth. The effects of damage from different causes will be cumulative.

7.2.6. The effects of tree root damage may not be immediately apparent. If the root system is capable of rapid regeneration, the tree may recover without noticeable ill effects, though usually symptoms take several years to develop. The range of symptoms varies from minor branch dieback, to deterioration and ultimate tree death depending on the severity of the damage and the ability of the roots to regenerate.

7.2.7. The default position should be that structures are **located outside the RPAs of trees that are to be retained**. The cumulative effects of incursions into the RPA e.g. from excavations for utility apparatus are damaging and should be avoided. Where there is evidence that a tree has been previously subjected to damage by construction activity this should be taken into account when considering the acceptability of further activity within the RPA.

## 8. General

8.1.1. Limitations of report: This report is intended to highlight the impact on the existing tree population of the final design layout. It is expected that a tree protection method statement will be required as part of Conditions of Planning Consent.

8.1.2. Arboricultural Standards: Any tree works should be done in accordance with the British Standard Recommendations for Tree work, BS 3998 as modified by later research. Works should be undertaken by properly qualified and experienced tree contracting company as recommended by a local authority or one approved by the Arboricultural Association. A Register of Contractors is available from The Arboricultural Association The Malthouse, Stroud Green, Standish, Stonehouse, Gloucestershire GL10 3DL, UKTel +44 (0) 1242 522152 Fax +44 (0) 1242 577766 Email: admin@trees.org.uk.

8.1.3. Statutory wildlife implications: Wildlife in this country is afforded protection under the Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000. Statutory protection is given to birds, bats and other species that inhabit trees. Tree work is governed by these statutes and advice should be sought from an ecologist before undertaking any works that may constitute an offence.

**Graham M Causey B.Sc.(Hons), F. Arbor. A, R.F.S Cert Arb.**

## APPENDIX A TREE SCHEDULE

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T101 | Pear Calleryana | 5 | 70(1) | 1 | 1 | 1 | 1 | 2.5(S) | 2.5 | Y | Not found on plan<br>Plotted by eye on plan<br>In neighbouring property<br>Long-term potential<br>Full healthy crown | | 40+ | **C2** |
| T102 | Ash | 18 | 470(1) | 4 | 6 | 9.5 | 6 | 3(S) | 7 | EM | Drawn form<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Unbalanced crown shape | | 20+ | **B2** |
| T103 | Ash | 19 | 320(1) | 4 | 6 | 5.5 | 4 | 7(S) | 9 | EM | Drawn form<br>Decay pocket<br>Stem divides above 1.5m<br>Light deadwood<br>Crown distorted due to group pressure<br>Nott particularly visible | | 10+ | **C2** |
| T104 | London Plane | 18 | 490(1) | 8 | 6 | 4 | 6 | 4(E) | 4 | EM | Light deadwood<br>Full healthy crown<br>Long-term potential | | 40+ | **B2** |
| T105 | London Plane | 17 | 530(1) | 9 | 6 | 5 | 10 | 2.3(E) | 2.5 | EM | Decay pocket<br>Stem divides above 1.5m<br>Multiple stems above 1.5m<br>Light deadwood<br>Crown distorted due to group pressure<br>Long-term potential | | 40+ | **B2** |
| T106 | London Plane | 18 | 450(1) | 4.5 | 5.5 | 9 | 10 | 2(W) | 4 | EM | Decay pocket<br>Stem divides above 1.5m<br>Multiple stems above 1.5m<br>Light deadwood<br>Crown distorted due to group pressure<br>Long-term potential | | 40+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T107 | Ash | 18 | 390(1) | 3 | 2 | 9 | 8 | 3(W) | 6 | EM | Drawn form<br>Decay present on stem<br>Decay pocket<br>Major bark wounding on stem<br>Stem divides above 1.5m<br>Multiple stems above 1.5m<br>Light deadwood<br>Unbalanced crown shape<br>Crown distorted due to group pressure | | 20+ | **B2** |
| T108 | London Plane | 16 | 590(1) | 8 | 10 | 10 | 8 | 2.5(W) | 1.5 | EM | Stem divides above 1.5m<br>Multiple stems above 1.5m<br>Light deadwood<br>Long-term potential<br>Prominent | | 40+ | **A2** |
| T109 | Ash 'Raywood' | 14 | 340(1) | 6 | 5.5 | 6 | 8 | 3(S) | 1.5 | EM | Surface roots sustained bark damage<br>Stem divides above 1.5m<br>Multiple stems above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Raywood<br>Minor bark wounds<br>Surface root action to 3m from trunk | | 20+ | **B2** |
| T110 | Norway Maple | 13 | 280(1) | 3 | 4.5 | 5 | 2 | 3(W) | 3 | EM | Decay present on stem<br>Decay pocket<br>Major bark wounding on stem<br>Decay pockets present in crown<br>Light deadwood<br>Crown distorted due to group pressure<br>Surface root action | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T111 | Ash | 12 | 250(1) | 8 | 6 | 2 | 4 | 3(E) | 4.5 | EM | Poor shape & form<br>Surface roots sustained bark damage<br>Decay present on stem<br>Decay pocket<br>Major bark wounding on stem<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Crown distorted due to group pressure | | 20+ | **B2** |
| T112 | Ash | 14 | 310(1) | 6 | 2 | 5 | 6 | 3(W) | 2.5 | EM | Surface roots sustained bark damage<br>Stem divides above 1.5m<br>Multiple stems above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Crown distorted due to group pressure<br>Raywood and previous | | 20+ | **B2** |
| T113 | Swedish Whitebeam | 7 | 210(1) | 3 | 1 | 3 | 3 | 2.5(W) | 3 | EM | Decay present on stem<br>Major bark wounding on stem<br>Stem divides above 1.5m<br>Multiple stems above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Crown distorted due to group pressure<br>Large occluding trunk wound - heartwood exposed and decayed | | 20+ | **C2** |
| T114 | Swedish Whitebeam | 9 | 280(1) | 3 | 2 | 3.5 | 4 | 3(S) | 2.5 | EM | Decay present on stem<br>Stem divides above 1.5m<br>Light deadwood<br>Unbalanced crown shape<br>Constriction base of trunk<br>Minor bark wounds | | 20+ | **C2** |
| T115 | Norway Maple | 15 | 360(1) | 4 | 7 | 8 | 3 | 3(E) | 4 | EM | Surface roots sustained bark damage<br>Stem divides above 1.5m<br>Light deadwood<br>Crown distorted due to group pressure<br>Occluded trunk wound | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T116 | Norway Maple | 14 | 350(1) | 5 | 1 | 6 | 8 | 2.5(W) | 4 | EM | Leaning West<br>Surface roots sustained bark damage<br>Stem divides above 1.5m<br>Light deadwood<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Occluded trunk wound. | | 20+ | **B2** |
| T117 | Norway Maple | 13 | 270(1) | 5 | 6 | 3 | 4 | 4(E) | 4 | EM | Decay present on stem<br>Major bark wounding on stem<br>Light deadwood<br>Unbalanced crown shape<br>Trunk wound ground level - 2m occluding | | 20+ | **C2** |
| T118 | Ash | 15 | 400(1) | 6 | 6 | 4.5 | 6 | 4(S) | 5 | EM | Leaning North-West<br>Surface roots sustained bark damage<br>Major bark wounding on stem<br>Light deadwood<br>Unbalanced crown shape | | 20+ | **B2** |
| T119 | Locust Tree | 16 | 430(1) | 4 | 6 | 5 | 5 | 4.5(E) | 2 | M | Part of linear group<br>Light deadwood<br>Full healthy crown | | 20+ | **B2** |
| T120 | Locust Tree | 17 | 400(1) | 5 | 6.5 | 5 | 5.5 | 5.5(S) | 5 | M | Part of linear group<br>Light deadwood<br>Full healthy crown | | 20+ | **B2** |
| T121 | Locust Tree | 14 | 400(1) | 5 | 5 | 2 | 4 | 1.5(N) | 2 | M | Diameter estimated<br>Part of linear group<br>Epicormics on stem<br>Light deadwood<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Full healthy crown | | 20+ | **B2** |
| T122 | Norway Maple | 15 | 330(1) | 4 | 5.5 | 5 | 7 | 2.5(SW) | 3 | EM | Light deadwood<br>Unbalanced crown shape<br>Minor bark wounds | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T123 | Norway Maple | 16 | 340(1) | 6 | 4 | 4.5 | 6 | 3.5(SW) | 2.5 | EM | Light deadwood<br>Crown distorted due to group pressure<br>Occluded trunk wound | | 20+ | **B2** |
| T124 | London Plane | 18 | 340(1) | 4 | 4.5 | 5.5 | 4 | 3(W) | 1.5 | EM | Drawn form<br>Stem divides above 1.5m<br>Light deadwood<br>Crown distorted due to group pressure | | 10+ | **B2** |
| T125 | Locust Tree | 19 | 390(1) | 5 | 4 | 3.5 | 5 | 8(S) | 7 | EM | Drawn form<br>Decay present on stem<br>Major bark wounding on stem<br>Large wound ground level - 2m | | 10+ | **C2** |
| T126 | London Plane | 20 | 360(1) | 3 | 5 | 6 | 2 | 5.5(E) | 6 | EM | Leaning East<br>Decay pocket<br>Full healthy crown | | 40+ | **B2** |
| T127 | London Plane | 20 | 320(1) | 4 | 4 | 5 | 5 | 4(NE) | 5 | EM | Drawn form<br>Full healthy crown | | 40+ | **B2** |
| T128 | Silver Birch | 8 | 120(1) | 3 | 1 | 0.5 | 3 | 3.5(W) | 1.2 | SM | Poor shape & form<br>Drawn form<br>Decay present on stem<br>Cavity on stem<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Suppressed | | 10+ | **C2** |
| T129 | London Plane | 15 | 390(1) | 9 | 8 | 5 | 3 | 4.5(S) | 2 | EM | Surface roots sustained bark damage<br>Multiple stems above 1.5m<br>Light deadwood<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Full healthy crown<br>Surface root action to 3m north | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T130 | London Plane | 16 | 330(1) | 7 | 6 | 4 | 4.5 | 4(E) | 2.5 | EM | Drawn form<br>Light deadwood<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Full healthy crown | | 20+ | **B2** |
| T131 | London Plane | 17 | 800(1) | 8 | 8 | 8 | 8 | 4.5(S) | | M | Not found on plan<br>Plotted by eye on plan<br>Diameter estimated<br>Canopy estimated<br>In neighbouring property<br>Decay pocket<br>Recently heavily reduced | | 40+ | **B2** |
| T132 | London Plane | 16 | 350(1) | 5 | 7 | 4 | 4 | 3(E) | | EM | Surface roots sustained bark damage<br>Full healthy crown | | 40+ | **B2** |
| T133 | London Plane | 17 | 470(1) | 5 | 6 | 5 | 6 | 3.5(S) | 4.5 | EM | Full healthy crown<br>Streetlight | | 40+ | **B2** |
| T134 | Locust Tree | 20 | 420(1) | 5 | 6 | 4 | 1 | 10(S) | 11 | M | Not found on plan<br>Plotted by eye on plan<br>Drawn form<br>Leaning East<br>Tree located within raised bed<br>Decay pocket<br>Decay pockets in pruning wounds | | 10+ | **B2** |
| T135 | London Plane | 19 | 580(1) | 7 | 5 | 5 | 8 | 4(S) | 5 | M | Not found on plan<br>Plotted by eye on plan<br>Tree located within raised bed<br>Decay pocket<br>Stem divides above 1.5m<br>Full healthy crown<br>Cut back from flats | | 10+ | **B2** |
| T136 | London Plane | 19 | 490(1) | 0 | 6 | 10 | 3 | 9(SE) | 8 | EM | Not found on plan<br>Plotted by eye on plan<br>Leaning South<br>Tree located within raised bed<br>Stem divides above 1.5m<br>Unbalanced crown shape<br>Crown distorted due to group pressure | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T137 | London Plane | 20 | 370(1) | 1.5 | 4 | 9 | 4 | 4(E) | 5 | EM | Not found on plan<br>Plotted by eye on plan<br>Leaning South<br>Surface roots sustained bark damage<br>Tree located within raised bed<br>Unbalanced crown shape<br>Crown distorted due to group pressure | | 20+ | **B2** |
| T138 | London Plane | 18 | 500(1) | 4.5 | 3 | 9 | 9 | 3(NW) | 5.5 | EM | Not found on plan<br>Plotted by eye on plan<br>Surface roots sustained bark damage<br>Tree located within raised bed<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Unbalanced crown shape<br>Crown distorted due to group pressure | | 40+ | **B2** |
| T139 | London Plane | 19 | 330(1) | 2 | 3 | 4 | 7 | 3(W) | 5.5 | EM | Not found on plan<br>Plotted by eye on plan<br>Drawn form<br>Surface roots sustained bark damage<br>Tree located within raised bed<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Unbalanced crown shape<br>Crown distorted due to group pressure | | 40+ | **B2** |
| T140 | London Plane | 19 | 450(1) | 4 | 5.5 | 3 | 9 | 3(SW) | 5 | EM | Not found on plan<br>Plotted by eye on plan<br>Drawn form<br>Surface roots sustained bark damage<br>Tree located within raised bed<br>Decay pockets present in crown<br>Unbalanced crown shape<br>Crown distorted due to group pressure | | 40+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T141 | Himalayan Birch | 7 | 170(1) | 2.5 | 2.5 | 2.5 | 2.5 | 2.5(SW) | 2.5 | SM | Not found on plan<br>Plotted by eye on plan<br>Part of linear group<br>Tree located within hard surface area<br>Full healthy crown<br>Long-term potential | | 40+ | **C2** |
| T142 | Ash 'Raywood' | 11 | 310(1) | 4.5 | 3 | 4 | 5.5 | 2.5(E) | 5 | EM | Not found on plan<br>Plotted by eye on plan<br>Part of linear group<br>Tree located within hard surface area<br>Decay pocket<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Storm damage with shed limbs<br>Light deadwood<br>Minor bark wounds | | 20+ | **B2** |
| T143 | Sweet Gum | 4.5 | 70(1) | 1 | 1 | 1 | 1 | 2.2(E) | 2 | Y | Part of linear group<br>Tree located within hard surface area<br>Young staked tree<br>Long-term potential | | 40+ | **C2** |
| T144 | Sweet Gum | 4.5 | 70(1) | 1 | 1 | 1 | 1 | 2.2(E) | 2 | Y | Part of linear group<br>Tree located within hard surface area<br>Young staked tree<br>Long-term potential<br>Robinia suckers in pit | | 40+ | **C2** |
| T145 | Sweet Gum | 4.5 | 70(1) | 1 | 1 | 1 | 1 | 2.2(E) | 2 | Y | Part of linear group<br>Tree located within hard surface area<br>Young staked tree<br>Long-term potential | | 40+ | **C2** |
| T146 | Sweet Gum | 4.5 | 70(1) | 1 | 1 | 1 | 1 | 2.2(E) | 2 | Y | Not found on plan<br>Plotted by eye on plan<br>Part of linear group<br>Tree located within hard surface area<br>Young staked tree<br>Long-term potential | | 40+ | **C2** |
| T147 | Tulip Tree | 4 | 70(1) | 1.5 | 1.5 | 1.5 | 1.5 | 2(S) | 1.5 | Y | Tree located within hard surface area<br>Low branches over road footpath<br>Long-term potential | | 40+ | **C2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T148 | Tulip Tree | 5 | 70(1) | 1.5 | 1.5 | 1.5 | 1.5 | 2(S) | 1.5 | Y | Tree located within hard surface area<br>Long-term potential | | 40+ | **C2** |
| T149 | Tulip Tree | 5 | 70(1) | 1.5 | 1.5 | 1.5 | 1.5 | 2(S) | 1.5 | Y | Tree located within hard surface area<br>Long-term potential | | 40+ | **C2** |
| T150 | Silver Birch | 4 | 40(1) | 1 | 1 | 1 | 1 | 2 | 1.5 | Y | Tree located within hard surface area<br>Long-term potential | | 40+ | **C2** |
| T151 | Silver Birch | 10 | 90(1) | 1.5 | 1.5 | 1.5 | 1.5 | 2 | 1.7 | Y | Part of linear group<br>Tree located within hard surface area<br>Low bud<br>leaf density<br>Long-term potential | | 40+ | **C2** |
| T152 | Italian Alder | 28 | 600(1) | 6 | 5 | 4 | 6.5 | 5(W) | 8 | M | Drawn form<br>Leaning North-West<br>Tree located within hard surface area<br>Decay present on stem<br>Cavity on stem<br>Stem divides above 1.5m<br>Decay pockets in pruning wounds<br>Cut back from flats | | 10+ | **B2** |
| T153 | Whitebeam | 11 | 650(1) | 8 | 8.5 | 2 | 6 | 3(NW) | 4 | M | Not found on plan<br>Plotted by eye on plan<br>Part of linear group<br>Leaning North<br>Tree located within hard surface area<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Decay pockets present in crown<br>Unbalanced crown shape<br>Cut back heavily from flats | | 10+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T154 | Whitebeam | 12 | 600(1) | 9 | 6.5 | 3 | 7 | 3(S) | 4.5 | M | Not found on plan<br>Plotted by eye on plan<br>Part of linear group<br>Leaning North<br>Tree located within hard surface area<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Decay pockets present in crown<br>Light deadwood<br>Unbalanced crown shape<br>Cut back heavily from flats | | 10+ | **B2** |
| T155 | Whitebeam | 10 | 600(1) | 7 | 6 | 3 | 7 | | | OM | Plotted by eye on plan<br>Tree considered dangerous<br>Dead<br>Labelled for removal by Council | | <10 | **U** |
| T156 | Hawthorn 'Prunifolia' | 5 | 270(1) | 4 | 4.5 | 2 | 3 | 2(SW) | 2.5 | M | Not found on plan<br>Plotted by eye on plan<br>Part of linear group<br>Leaning North<br>Tree located within hard surface area<br>Decay pocket<br>Epicormics on stem | | 20+ | **C2** |
| T157 | Norway Maple | 16 | 430(1) | 8 | 9 | 4 | 3.5 | 3(W) | 5 | M | Part of linear group<br>Leaning North<br>Tree located within hard surface area<br>Cavity on stem<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Unbalanced crown shape<br>Cut back from flats | | 20+ | **B2** |
| T158 | London Plane | 15 | 580(1) | 6.5 | 5 | 3 | 6 | 5.5(E) | 5 | M | Part of linear group<br>Leaning North<br>Surface roots sustained bark damage<br>Tree located within hard surface area<br>Cut back from flats<br>Anthracnose present<br>Maintained by crown reduction | | 40+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T159 | Norway Maple | 17 | 580(1) | 5 | 5 | 4.5 | 6.5 | 2.5(E) | 2 | M | Surface roots sustained bark damage<br>Stem divides above 1.5m<br>Light deadwood<br>Full healthy crown | | 20+ | **A2** |
| T160 | Norway Maple | 15 | 400(1) | 4 | 5 | 4 | 4 | 3.5(NW) | 2.5 | EM | Tree located within hard surface area<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Light deadwood<br>Minor bark wounds<br>Surface root action | | 20+ | **B2** |
| T161 | Norway Maple | 17 | 540(1) | 7 | 8 | 8 | 7 | 3(W) | 3.5 | M | Light deadwood<br>Full healthy crown<br>prominent | | 20+ | **A2** |
| T162 | Norway Maple | 12 | 410(1) | 6 | 5 | 6.5 | 7 | 2.5(E) | 3 | EM | Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Minor bark wounds | | 20+ | **B2** |
| T163 | Norway Maple | 13 | 620(1) | 9 | 10 | 8 | 10 | 2.5(W) | 2.5 | M | Decay present on stem<br>Major bark wounding on stem<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Generally full healthy crown<br>Prominent | | 20+ | **A2** |
| T164 | Norway Maple | 14 | 590(1) | 9 | 8 | 7 | 9 | 2(SW) | 3 | M | Decay present on stem<br>Decay pocket<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Minor bark wounds<br>Girdling root | Remove major deadwood. | 20+ | **B2** |
| T165 | Norway Maple | 14 | 550(1) | 7 | 5 | 4.5 | 7 | 2.5(W) | 4 | M | Surface roots sustained bark damage<br>Decay present on stem<br>Major bark wounding on stem<br>Epicormics on stem<br>Multiple stems above 1.5m<br>Decay pockets present in crown<br>Storm damage with shed limbs<br>Light deadwood | Remove major deadwood. | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T166 | Field Maple | 11 | 330(1) | 4 | 2 | 4 | 4 | 2(SW) | 2 | EM | Surface roots sustained bark damage<br>Decay pocket<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Minor bark wounds | | 20+ | **B2** |
| T167 | Field Maple | 12 | 450(1) | 5 | 4.5 | 6 | 4.5 | 1.5(S) | 4.5 | M | Surface roots sustained bark damage<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood | | 20+ | **B2** |
| T168 | Field Maple | 13 | 400(1) | 5 | 4 | 4 | 3 | 2(N) | 5 | M | Surface roots sustained bark damage<br>Decay pocket<br>Major bark wounding on stem<br>Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Unbalanced crown shape | | 20+ | **B2** |
| T169 | Field Maple | 11 | 340(1) | 4.5 | 3 | 5 | 5 | 2(S) | 5 | M | Stem divides above 1.5m<br>Decay pockets present in crown<br>Unbalanced crown shape | | 20+ | **B2** |
| T170 | Field Maple | 14 | 410(1) | 5 | 4 | 3 | 5.5 | 3(W) | 5 | M | Stem divides above 1.5m<br>Unbalanced crown shape. | | 20+ | **B2** |
| T171 | Locust Tree | 16 | 720(1) | 6 | 5.5 | 7 | 7 | 3(N) | 2 | M | Suckers around stem base<br>Tree located within raised bed<br>Stem divides above 1.5m<br>Decay pockets in pruning wounds<br>Light deadwood<br>Crown reduced | | 20+ | **B2** |
| T172 | Locust Tree | 14 | 320(1) | 6 | 5 | 6 | 4 | 3(S) | 2.5 | EM | Surface roots sustained bark damage<br>Tree located within hard surface area<br>Light deadwood | | 20+ | **B2** |
| T173 | Locust Tree | 7 | 80<br>140(2) | 1 | 3 | 4 | 4.5 | 3.5(S) | 2 | SM | Poor shape & form<br>Decay present on stem<br>Stem divides below 1.5m<br>Unbalanced crown shape<br>Crown distorted due to group pressure | | 20+ | **C2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T174 | Locust Tree | 12 | 150<br>200(2) | 3 | 4 | 4.5 | 2 | 5(S) | 5 | SM | Poor shape & form<br>Drawn form<br>Suckers around stem base<br>Decay pocket<br>Stem divides below 1.5m<br>Included bark present in main fork<br>Crown distorted due to group pressure | | 20+ | **C2** |
| T175 | Locust Tree | 17 | 400(1) | 5 | 5 | 4.5 | 4.5 | 6(S) | 6 | EM | Drawn form<br>Tree located within hard surface area<br>Stem divides above 1.5m<br>Light deadwood<br>Crown distorted due to group pressure<br>Prominent | | 20+ | **B2** |
| T176 | Sycamore | 4.5 | 100(1) | 2.5 | 3 | 3 | 1.5 | 3(N) | 2 | Y | Poor shape & form<br>Stem divides above 1.5m<br>Unbalanced crown shape | | 40+ | **C2** |
| T177 | Locust Tree | 11 | 290(1) | 5 | 5.5 | 5 | 4.5 | 3.5(W) | 3 | EM | Full healthy crown<br>Screen value | | 40+ | **B2** |
| T178 | Ash | 16 | 780(1) | 10 | 12 | 11 | 10 | 2.5(W) | 4 | M | Stem divides above 1.5m<br>Decay pockets present in crown<br>Light deadwood<br>Full healthy crown<br>Screen value<br>Prominent<br>Soil compaction at base<br>Exposed roots<br>Girdling root | | 20+ | **A2** |
| T179 | Silver Maple | 15 | 600(1) | 5 | 5 | 9 | 7 | 4(SW) | 2 | M | Leaning South-East<br>Surface roots sustained bark damage<br>Epicormics on stem<br>Decay pockets present in crown<br>Crown reduced<br>Prominent<br>Screen value | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T180 | Silver Maple | 14 | 540(1) | 6 | 6 | 5 | 5.5 | 3(N) | 1.6 | M | Epicormics on stem<br>Decay pockets present in crown<br>Crown reduced<br>Prominent<br>Screen value | | 20+ | **B2** |
| T181 | Apple | 4 | 110(1) | 3 | 1 | 2 | 2 | 1(E) | 1 | EM | No particular landscape value | | 20+ | **C2** |
| T182 | Crack Willow | 7 | 170(1) | 4 | 2 | 1 | 2.5 | | 1 | SM | Not found on plan<br>Plotted by eye on plan<br>Unsuitable location | | 40+ | **U** |
| T183 | Ash Diversifolia | 13 | 360(1) | 5 | 6 | 7 | 5 | 4.5(E) | 4 | EM | Stem divides above 1.5m<br>Light deadwood<br>Prominent | | 40+ | **B2** |
| T201 | London Plane | 12 | 500(1) | 4 | 3 | 3 | 4 | 4(S) | 5 | EM | Diameter estimated<br>Normal vigour<br>Average condition<br>Pollard<br>Occluded wounds on trunk<br>Crown distorted due to group pressure<br>Screen value<br>Some landscape amenity value. | | 40+ | **B2** |
| T202 | London Plane | 18 | 470(1) | 5 | 8 | 7 | 3 | 3(S) | 8 | EM | Diameter estimated<br>Normal vigour<br>Average condition<br>Leaning East<br>Bark wounds on surface roots<br>Bark wounds present<br>Crown distorted due to group pressure<br>Branches restricting highway light<br>Appropriate to location<br>Screen value<br>Some landscape amenity value. | | 40+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T203 | London Plane | 16 | 450(1) | 4 | 6.5 | 8 | 5 | 3(SE) | 2 | EM | Diameter estimated<br>Normal vigour<br>Average condition<br>Bark wounds present<br>Stem divides above 1.5m<br>Crown distorted due to group pressure<br>Low branches over road/footpath<br>Branches restricting highway light<br>Light deadwood in crown<br>Appropriate to location<br>Screen value<br>Some landscape amenity value. | | 40+ | **B2** |
| T204 | Locust Tree | 20 | 580(1) | 9 | 7 | 7 | 6 | 4 | 5 | M | Average condition<br>Basal decay present<br>Suckers around stem base<br>Tree located within raised bed<br>Root spread restricted<br>Fungal brackets visible on stem<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Crown distorted due to group pressure<br>Branches encroaching upon building<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Appropriate to location<br>Ganoderma bracket at 0.5m on southwest side. | | <10 | **U** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T205 | Norway Maple | 9 | 250(1) | 4.5 | 4 | 5 | 3 | 3.5(N) | 3 | EM | Normal vigour<br>Average condition<br>Bark wounds on surface roots<br>Occluded wounds on trunk<br>Stem divides above 1.5m<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 20+ | **C2** |
| T206 | Norway Maple | 8 | 250(1) | 3 | 4 | 5 | 5 | 3(S) | 3 | EM | Normal vigour<br>Average condition<br>Stem divides above 1.5m<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 20+ | **C2** |
| T207 | Norway Maple | 9 | 310(1) | 4 | 5 | 5 | 3.5 | 3(N) | 3 | EM | Normal vigour<br>Average condition<br>Exposed roots<br>Bark wounds on surface roots<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 20+ | **B2** |
| T208 | Norway Maple | 9 | 280(1) | 4 | 2 | 4 | 5 | 2.5(NW) | 4 | EM | Normal vigour<br>Average condition<br>Bark wounds on surface roots<br>Occluded wounds on trunk<br>Stem divides above 1.5m<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Possible trunk constriction at 0.2m. | | 20+ | **C2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T209 | Bastard service tree | 6 | 250(1) | 3.5 | 3.5 | 2.5 | 2.5 | | 2.5 | EM | Normal vigour<br>Average condition<br>Part of linear group<br>Bark wounds on surface roots<br>Root spread restricted<br>Occluded wounds on trunk<br>Bark wounds present<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Contributes to low level screening | | 20+ | **C2** |
| T210 | Bastard service tree | 6 | 220(1) | 3.5 | 3.5 | 3 | 3 | | 2 | EM | Normal vigour<br>Average condition<br>Part of linear group<br>Bark wounds on surface roots<br>Root spread restricted<br>Occluded wounds on trunk<br>Bark wounds present<br>Crown distorted due to group pressure<br>Low branches over road/footpath<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Contributes to low level screening | | 20+ | **C2** |
| T211 | Bastard service tree | 5 | 270(1) | 3.5 | 3.5 | 3.5 | 3.5 | | 2 | EM | Normal vigour<br>Average condition<br>Part of linear group<br>Root spread restricted<br>Occluded wounds on trunk<br>Trunk decay present<br>Bark wounds present<br>Low branches over road/footpath<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Girdling roots. | | 20+ | **C2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T212 | London Plane | 15 | 510(1) | 5 | 7 | 8 | 7 | 2.5(S) | 1.7 | EM | Normal vigour<br>Average condition<br>Root spread restricted<br>Low branches over road/footpath<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Appropriate to location<br>Screen value. | | 40+ | **B2** |
| T213 | Norway Maple | 12 | 360(1) | 6 | 5 | 4 | 6 | 3(W) | 3 | EM | Normal vigour<br>Average condition<br>Bark wounds present<br>Stem divides above 1.5m<br>Crown distorted due to group pressure<br>Branches restricting highway light<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Extensive bark removal between 0.4 & 2.3m height on north side<br>Some wound-wood development around wound. | | 20+ | **C2** |
| T214 | Norway Maple | 12 | 420(1) | 5.5 | 7 | 6 | 6 | 3(NE) | 1.7 | EM | Normal vigour<br>Average condition<br>Occluded wounds on trunk<br>Bark wounds present<br>Stem divides above 1.5m<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 20+ | **B2** |
| T215 | London Plane | 17 | 480(1) | 8 | 7 | 8 | 7 | 2(W) | 2 | EM | Normal vigour<br>Average condition<br>Low branches over road/footpath<br>Light deadwood in crown<br>Some landscape amenity value. | | 40+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T216 | Ash | 17 | 480(1) | 6 | 7 | 7 | 6 | | 3.5 | M | Normal vigour<br>Average condition<br>Leaning North<br>Occluded wounds on trunk<br>Stem divides above 1.5m<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Girdling root. | | 20+ | **B2** |
| T217 | London Plane | 14 | 400(1) | 7 | 7 | 7 | 7 | 2(NW) | 4 | EM | Normal vigour<br>Average condition<br>Roots lifting surfacing<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Branches restricting highway light<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 40+ | **B2** |
| T218 | London Plane | 15 | 350(1) | 5.5 | 5 | 5 | 3 | | 4 | EM | Normal vigour<br>Average condition<br>Occluded wounds on trunk<br>Bark wounds present<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Crown distorted due to group pressure<br>Branches restricting highway light<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 20+ | **B2** |
| T219 | London Plane | 20 | 350(1) | 3 | 5 | 8 | 8 | 2(SW) | 1.6 | EM | Normal vigour<br>Average condition<br>Leaning South-West<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Low branches over road/footpath<br>Light deadwood in crown<br>Some landscape amenity value. | | 40+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T220 | Norway Maple | 14 | 320(1) | 4 | 6.5 | 8 | 8 | 2.5(E) | 2 | EM | Normal vigour<br>Average condition<br>Exposed roots<br>Bark wounds on surface roots<br>Occluded wounds on trunk<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 20+ | **B2** |
| T221 | London Plane | 18 | 500(1) | 6 | 8 | 4 | 7 | | 3.5 | EM | Normal vigour<br>Average condition<br>Roots lifting surfacing<br>Bark wounds present<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Screen value<br>Some landscape amenity value<br>Bowed trunk. | | 40+ | **B2** |
| T222 | London Plane | 17 | 440(1) | 8 | 6 | 7 | 7 | | 2.5 | EM | Normal vigour<br>Average condition<br>Soil levels raised around base<br>Bark wounds present<br>Crown distorted due to group pressure<br>Low branches over road/footpath<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 40+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T223 | London Plane | 17 | 440(1) | 8 | 9 | 4 | 6 | | 2 | EM | Normal vigour<br>Average condition<br>Soil levels raised around base<br>Bark wounds present<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Contributes to general amenity of area<br>Potential weak fork with included bark. | | 40+ | **B2** |
| T224 | London Plane | 20 | 620(1) | 8 | 8 | 6 | 8 | 2.5(N) | 3 | EM | Normal vigour<br>Average condition<br>Roots lifting surfacing<br>Bark wounds on surface roots<br>Stem divides above 1.5m<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Prominent tree<br>Screen value<br>Some landscape amenity value<br>Railings embedded in exposed surface roots. | | 40+ | **B2** |
| T225 | Sweet Chestnut | 7 | 290(1) | 4 | 4 | 3.5 | 4 | 2.5(W) | 1.5 | EM | Normal vigour<br>Average condition<br>Basal decay present<br>Suckers around stem base<br>Occluded wounds on trunk<br>Unbalanced crown shape<br>Low branches over road/footpath<br>Branches restricting highway light<br>Contributes to general amenity of area<br>Screen value<br>Bowed trunk. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T226 | London Plane | 11 | 350(1) | 3 | 6 | 4 | 6 | 2.5(W) | 1.5 | EM | Normal vigour<br>Average condition<br>Bark wounds present<br>Crown distorted due to group pressure<br>Low branches over road/footpath<br>Screen value<br>Some landscape amenity value<br>Bowed trunk. | | 40+ | **B2** |
| T227 | Hornbeam | 3 | 70(1) | 0.5 | 0.5 | 0.5 | 0.5 | | 1.6 | Y | Young staked tree<br>Low vitality<br>No particular landscape value. | | <10 | **U** |
| T228 | London Plane | 18 | 470(1) | 8 | 8 | 5 | 8 | | 3 | EM | Normal vigour<br>Average condition<br>Leaning East<br>Bark wounds present<br>Stem divides above 1.5m<br>Crown distorted due to group pressure<br>Branches encroaching upon building<br>Screen value<br>Some landscape amenity value. | | 40+ | **B2** |
| T229 | London Plane | 18 | 380(1) | 3 | 5 | 5 | 8 | | 4 | EM | Normal vigour<br>Average condition<br>Bark wounds present<br>Stem divides above 1.5m<br>Possible Massaria present<br>Crown distorted due to group pressure<br>Branches encroaching upon building<br>Screen value<br>Some landscape amenity value. | | 40+ | **B2** |
| T230 | Locust Tree | 14 | 400(1) | 2.5 | 2.5 | 2.5 | 2.5 | 7 | | EM | Average condition<br>Basal decay present<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Crown becoming sparse<br>Previously crown reduced<br>Screen value. | | 10+ | **C2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T231 | Locust Tree | 18 | 500(1) | 3 | 3.5 | 3 | 5 | | 6 | EM | Normal vigour<br>Average condition<br>Suckers around stem base<br>Epicormics on stem<br>Previously crown reduced<br>Contributes to general amenity of area<br>Screen value. | | 10+ | **C2** |
| T232 | London Plane | 10 | 530(1) | 2 | 0 | 4 | 7 | | 3 | EM | Normal vigour<br>Average condition<br>Leaning South-West<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Decay pockets in pruning wounds<br>Previously crown reduced<br>Screen value. | | 40+ | **C2** |
| T233 | Cherry umineko | 4 | 100(1) | 1 | 1 | 1 | 1 | | 2 | SM | Normal vigour<br>Average condition<br>Young staked tree | | 20+ | **B2** |
| T234 | Cherry umineko | 4 | 90(1) | 1 | 1 | 1 | 1 | | 2 | SM | Normal vigour<br>Average condition<br>Young staked tree | | 20+ | **B2** |
| T235 | Himalayan birch | 7 | 100(1) | 1 | 1 | 1 | 1 | | 1.8 | SM | Normal vigour<br>Average condition<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Some landscape amenity value<br>Embedding cable ties around trunk. | | 20+ | **B2** |
| T236 | River birch | 6 | 100(1) | 1.5 | 1.5 | 1.5 | 1.5 | | 1.8 | SM | Normal vigour<br>Average condition<br>Some landscape amenity value<br>Betula utilis^. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T237 | Sycamore | 14 | 450(1) | 5 | 6 | 3 | 3 | 3(E) | 3.5 | M | Normal vigour<br>Average condition<br>Exposed roots<br>Suckers around stem base<br>Tree located within hard surface area<br>Previously crown reduced<br>Some landscape amenity value. | | 20+ | **B2** |
| T238 | Italian Alder | 7 | 140(1) | 2 | 2 | 2 | 2 | | 1.5 | SM | Normal vigour<br>Average condition<br>Tree located within hard surface area<br>Low branches over road/footpath<br>Well balanced full healthy crown<br>Some landscape amenity value. | | 40+ | **B2** |
| T239 | Italian Alder | 16 | 510(1) | 3 | 3 | 3 | 3 | | 6 | M | Normal vigour<br>Average condition<br>Leaning North-West<br>Roots lifting surfacing<br>Suckers around stem base<br>Tree located within hard surface area<br>Well balanced full healthy crown<br>Previously crown reduced<br>Some landscape amenity value<br>Bowed trunk. | | 20+ | **B2** |
| T240 | Italian Alder | 15 | 490(1) | 2.5 | 2.5 | 2.5 | 3 | | 6 | M | Normal vigour<br>Average condition<br>Leaning West<br>Tree located within hard surface area<br>Occluded wounds on trunk<br>Well balanced full healthy crown<br>Previously crown reduced<br>Some landscape amenity value<br>Bowed trunk. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T241 | Italian Alder | 9 | 220(1) | 2 | 2 | 2 | 2 | | 5 | EM | Normal vigour<br>Average condition<br>Tree located within hard surface area<br>Bark wounds present<br>Epicormics on stem<br>Well balanced full healthy crown<br>Previously crown reduced<br>Some landscape amenity value<br>Bowed trunk. | | 20+ | **C2** |
| T242 | London Plane | 3 | 40(1) | 0.5 | 0.5 | 0.5 | 0.5 | | | Y | Young staked tree<br>Dead. | | <10 | **U** |
| T243 | Norway Maple | 15 | 600(1) | 6.5 | 6.5 | 6.5 | 6.5 | 2 | 4 | M | Normal vigour<br>Average condition<br>Exposed roots<br>Tree located within hard surface area<br>Occluded wounds on trunk<br>Well balanced full healthy crown<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Appropriate to location<br>Prominent tree<br>Some landscape amenity value. | | 40+ | **B2** |
| T244 | Cappadocian Maple | 15 | 560(1) | 6 | 4 | 7 | 7 | 2 | 4 | M | Normal vigour<br>Average condition<br>Part of linear group<br>Leaning West<br>Exposed roots<br>Suckers around stem base<br>Root spread restricted<br>Bark wounds present<br>Unbalanced crown shape<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Previously crown reduced<br>Screen value<br>Some landscape amenity value<br>Girdling root. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T245 | River birch | 12 | 250(1) | 2.5 | 2.5 | 2.5 | 2.5 | | 5 | M | Normal vigour<br>Average condition<br>Tree located within hard surface area<br>Stem divides above 1.5m<br>Branches encroaching upon building<br>Appropriate to location. | | 10+ | **B2** |
| T246 | Willow-leaf Pear | 4 | 270(2) | 10 | 0 | 0 | 3 | | 0 | M | Normal vigour<br>Average condition<br>Ivy on stem<br>Major bark wounding on stem<br>Rubbing branches causing physical damage<br>Light deadwood in crown<br>Contributes to low level screening<br>Tree uprooted in past & includes adjacent fallen stem. | | <10 | **U** |
| T247 | Norway Maple | 11 | 480(1) | 6 | 5 | 5 | 6 | 1.8(W) | 1.8 | M | Normal vigour<br>Average condition<br>Tree located within hard surface area<br>Stem divides above 1.5m<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Contributes to general amenity of area<br>Appropriate to location. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T248 | Norway Maple | 13 | 410(1) | 7 | 4 | 7 | 6 | | 1.6 | M | Normal vigour<br>Average condition<br>Bark wounds on surface roots<br>Bacterial flux on trunk<br>Stem divides above 1.5m<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Contributes to general amenity of area<br>Screen value<br>Flux from occluded wound at 5m west side of crown | | 10+ | **C2** |
| T249 | Norway Maple | 13 | 550(1) | 8 | 8 | 6 | 5 | 1.5(SW) | 1 | M | Normal vigour<br>Average condition<br>Leaning North-West<br>Exposed roots<br>Canker on trunk<br>Stem divides above 1.5m<br>Broken branches in crown<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Contributes to general amenity of area<br>Screen value. | | 10+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T250 | Norway Maple | 13 | 470(1) | 4 | 7 | 7 | 7 | 1.7 | 2 | M | Normal vigour<br>Average condition<br>Basal decay present<br>Trunk decay present<br>Exudation on stem<br>Stem divides above 1.5m<br>Broken branches in crown<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Contributes to general amenity of area. | | 10+ | **C2** |
| T251 | Norway Maple | 14 | 540(1) | 6 | 4 | 8 | 4 | 2 | 5 | M | Normal vigour<br>Average condition<br>Roots lifting surfacing<br>Bark wounds present<br>Exudation on stem<br>Stem divides above 1.5m<br>Broken branches in crown<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Contributes to general amenity of area. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T252 | Norway Maple | 16 | 570(1) | 3 | 7 | 8 | 7 | 3(S) | 6 | M | Normal vigour<br>Average condition<br>Aerodynamically one crown<br>Leaning South<br>Tree located within raised bed<br>Occluded wounds on trunk<br>Bark wounds present<br>Exudation on stem<br>Stem divides above 1.5m<br>Crown becoming sparse<br>Broken branches in crown<br>Major deadwood in crown<br>Crown distorted due to group pressure<br>Decay pockets in pruning wounds<br>Contributes to general amenity of area. | | 20+ | **B2** |
| T253 | Norway Maple | 14 | 510(1) | 7 | 7 | 3 | 7 | 3(SE) | 4 | M | Normal vigour<br>Average condition<br>Aerodynamically one crown<br>Leaning East<br>Bark wounds on surface roots<br>Tree located within raised bed<br>Occluded wounds on trunk<br>Bark wounds present<br>Exudation on stem<br>Stem divides above 1.5m<br>Crown becoming sparse<br>Broken branches in crown<br>Crown distorted due to group pressure<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Contributes to general amenity of area. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T254 | Field Maple | 12 | 400(1) | 2 | 4 | 5 | 3 | | 5 | M | Normal vigour<br>Average condition<br>Aerodynamically one crown<br>Bark wounds on surface roots<br>Suckers around stem base<br>Occluded wounds on trunk<br>Bark wounds present<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Contributes to general amenity of area. | | 40+ | **B2** |
| T255 | Norway Maple | 9 | 250(2) | 5 | 5 | 5 | 5 | | 2 | EM | Normal vigour<br>Average condition<br>Ivy on stem<br>Stem divides below 1.5m<br>Low branches over road/footpath<br>Branches encroaching upon building<br>Rubbing branches causing physical damage<br>Light deadwood in crown<br>Contributes to general amenity of area. | | 20+ | **C2** |
| T256 | Large-leaved Lime | 5 | 130(2) | 1 | 4 | 1 | 0 | | 2 | SM | Normal vigour<br>Average condition<br>Suppressed tree<br>Tree located within hard surface area<br>Epicormics on stem<br>Stem divides at ground level<br>Unbalanced crown shape<br>Branches encroaching upon building<br>Contributes to low level screening. | | 20+ | **C2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T257 | Cappadocian Maple | 8 | 210(3) | 5 | 5 | 3 | 5 | | 2 | EM | Normal vigour<br>Average condition<br>Roots lifting surfacing<br>Tree located within hard surface area<br>Multiple stems at ground level<br>Included bark present in main fork<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Branches encroaching upon building<br>Screen value. | | 20+ | **C2** |
| T258 | Cappadocian Maple | 7 | 280(1) | 4 | 4 | 4 | 4 | | 2 | EM | Normal vigour<br>Average condition<br>Root spread restricted<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Branches restricting highway light<br>Branches encroaching upon building<br>Screen value. | | 20+ | **C2** |
| T259 | Ash | 20 | 500(1) | 7 | 7 | 7 | 4 | | 6 | M | Plotted by eye on plan<br>Diameter estimated<br>Normal vigour<br>Average condition<br>Unbalanced crown shape<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Screen value<br>Some landscape amenity value<br>Base not seen. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T260 | Ash | 14 | 470(1) | 5 | 5 | 6 | 5 | 2(E) | 4 | M | Plotted by eye on plan<br>Diameter estimated<br>Normal vigour<br>Average condition<br>Root spread restricted<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Unbalanced crown shape<br>Branches encroaching upon building<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Screen value<br>Some landscape amenity value<br>Base not seen. | | 20+ | **B2** |
| T261 | Sycamore | 17 | 500(1) | 5 | 5 | 6 | 5 | | 7 | M | Plotted by eye on plan<br>Diameter estimated<br>Normal vigour<br>Average condition<br>Root spread restricted<br>Stem divides above 1.5m<br>Included bark present in main fork<br>Branches encroaching upon building<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Screen value<br>Some landscape amenity value<br>Base not seen. | | 20+ | **B2** |
| T262 | Ash | 14 | 610(1) | 8 | 8 | 8 | 8 | | 4 | M | Normal vigour<br>Average condition<br>Soil levels raised around base<br>Occluded wounds on trunk<br>Stem divides above 1.5m<br>Branches restricting highway light<br>Branches encroaching upon building<br>Light deadwood in crown<br>Decay pockets in pruning wounds<br>Prominent tree<br>Some landscape amenity value. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T263 | Bastard service tree | 4 | 170(1) | 2 | 2 | 2 | 2 | | 2 | EM | Normal vigour<br>Average condition<br>Leaning North-West<br>Suckers around stem base<br>Included bark present in main fork<br>Branches encroaching upon building<br>Rubbing branches causing physical damage<br>No particular landscape value | | 20+ | **C2** |
| T264 | Ash | 15 | 580(1) | 7 | 7 | 9 | 7 | 2(S) | 3 | M | Normal vigour<br>Average condition<br>Soil levels raised around base<br>Occluded wounds on trunk<br>Bark wounds present<br>Stem divides above 1.5m<br>Crown becoming sparse<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Low branches over road/footpath<br>Light deadwood in crown<br>Screen value<br>Some landscape amenity value. | | 20+ | **B2** |
| T265 | Ash | 17 | 450(1) | 5 | 5 | 7 | 7 | 3(S) | 6 | M | Normal vigour<br>Average condition<br>Leaning South<br>Soil levels raised around base<br>Occluded wounds on trunk<br>Bark wounds present<br>Stem divides above 1.5m<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Low branches over road/footpath<br>Light deadwood in crown<br>Screen value<br>Some landscape amenity value. | | 20+ | **B2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| T266 | Tibetan cherry | 3 | 120(1) | 2 | 2 | 3 | 1 | 1.8(N) | 1.6 | EM | Normal vigour<br>Average condition<br>Unbalanced crown shape<br>Crown distorted due to group pressure<br>Rubbing branches causing physical damage<br>No particular landscape value<br>Contributes to low level screening | | 20+ | **C2** |
| G1 | Silver Birch | 8 | 80(MS) | 2 | 2 | 2 | 2 | | 2 | Y | Not found on plan<br>Plotted by eye on plan<br>Diameter estimated<br>Canopy estimated<br>In neighbouring property<br>Part of linear group<br>In community garden<br>close spacing<br>will become mutually suppressed<br>not particularly visible<br>Long-term potential | . | 40+ | **C2** |
| G2 | Willow<br>Hazel | 5 | 110(1) | 2 | 2 | 1.5 | 2 | | 1 | Y | Poor shape & form<br>Leaning North<br>Decay present on stem<br>Mutually suppressed group<br>Minor bark wounds<br>No particular landscape value<br>1 hazel | | 10+ | **C2** |
| G3 | Cappadocian Maple<br>Tree of Heaven<br>Elder | 6 | 180(3) | 3 | 3 | 3 | 3 | | 1 | EM | Normal vigour<br>Average condition<br>Roots lifting surfacing<br>Tree located within hard surface area<br>Crown distorted due to group pressure<br>Rubbing branches causing physical damage<br>Light deadwood in crown<br>Contributes to low level screening<br>Line of three trees self-set between fences<br>Multi-stemmed at ground level. | | 10+ | **C2** |

| Tree No. | Species | Height (m) | DBH mm (No. of stems) | Crown radius (m) | | | | FSB & direction | Lower crown height (m) | Life stage | General observations | Recommendations | Est. Rem'ing contrib'n | BS Cat |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | N | E | S | W | | | | | | | |
| G4 | Hawthorn<br>White Willow | 5 | 260(1) | 2 | 2 | 2 | 2 | | 0 | EM | Normal vigour<br>Average condition<br>Pollard<br>Bark wounds present<br>Stem divides below 1.5m<br>Crown distorted due to group pressure<br>Rubbing branches causing physical damage<br>Decay pockets in pruning wounds<br>Contributes to low level screening. | | 40+ | **C2** |
| G5 | Field Maple<br>Hazel<br>Hawthorn | 4 | 100(1) | 1 | 1 | 1 | 1 | | 0 | EM | Normal vigour<br>Average condition<br>Part of linear group<br>Aerodynamically one crown<br>Included bark present in main fork<br>Rubbing branches causing physical damage<br>Contributes to low level screening<br>Mixed native hedge. | | 40+ | **B2** |
| S1 | | | | | | | | | | | Stump | | | **U** |
| S2 | Norway Maple | 0.5 | 320(1) | | | | | | | | Stump | | | **U** |
| S3 | London Plane | 1 | 350(1) | | | | | | | | Stump | | | **U** |
| S4 | Locust Tree | 1 | 470(1) | | | | | | | | Stump | | | **U** |

**KEY**

**Y = Young**
**SM = Semi-mature**
**EM = Early-mature**
**M = Mature**
**OM = Over-mature**
**V = Veteran**

**H = Hedge**
**G = Group**
**B = Shrubs**
**K = Small tree**
**W = Woodland**
**MS = Multi-stemmed**

## TREE QUALITY ASSESSMENT CASCADE CHART

| Category and definition | Criteria (including subcategories where appropriate) | | |
|---|---|---|---|
| **Trees unsuitable for retention**<br>**Category U** | Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years | • Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)<br>• Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline<br>• Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality<br><br>*NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve* | |
| **Trees to be considered for retention** | **1 Mainly arboricultural qualities** | **2 Mainly landscape qualities** | **3 Mainly cultural values, including conservation** |
| **Category A**<br><br>Trees of high quality with an estimated remaining life expectancy of at least 40 years | Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue) | Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features | Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture) |
| **Category B**<br><br>Trees of moderate quality with an estimated remaining life expectancy of at least 20 years | Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation | Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality | Trees with material conservation or other cultural value |
| **Category C**<br><br>Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm | Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories | Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits | Trees with no material conservation or other cultural value |

## APPENDIX B TREE ROOT PROTECTION AREA

| Tree No | Species | RPA ($m^2$) | RPA as circle of radius (x)m | RPA as square of sides (x)m |
|---|---|---|---|---|
| T101 | Pear Calleryana | 2.2 | 0.84 | 1.5 |
| T102 | Ash | 99.9 | 5.64 | 10 |
| T103 | Ash | 46.3 | 3.84 | 6.8 |
| T104 | London Plane | 108.6 | 5.88 | 10.4 |
| T105 | London Plane | 127.1 | 6.36 | 11.3 |
| T106 | London Plane | 91.6 | 5.4 | 9.6 |
| T107 | Ash | 68.8 | 4.68 | 8.3 |
| T108 | London Plane | 157.5 | 7.08 | 12.5 |
| T109 | Ash 'Raywood' | 52.3 | 4.08 | 7.2 |
| T110 | Norway Maple | 35.5 | 3.36 | 6 |
| T111 | Ash | 28.3 | 3 | 5.3 |
| T112 | Ash | 43.5 | 3.72 | 6.6 |
| T113 | Swedish Whitebeam | 20 | 2.52 | 4.5 |
| T114 | Swedish Whitebeam | 35.5 | 3.36 | 6 |
| T115 | Norway Maple | 58.6 | 4.32 | 7.7 |
| T116 | Norway Maple | 55.4 | 4.2 | 7.4 |
| T117 | Norway Maple | 33 | 3.24 | 5.7 |
| T118 | Ash | 72.4 | 4.8 | 8.5 |
| T119 | Locust Tree | 83.6 | 5.16 | 9.1 |
| T120 | Locust Tree | 72.4 | 4.8 | 8.5 |
| T121 | Locust Tree | 72.4 | 4.8 | 8.5 |
| T122 | Norway Maple | 49.3 | 3.96 | 7 |
| T123 | Norway Maple | 52.3 | 4.08 | 7.2 |
| T124 | London Plane | 52.3 | 4.08 | 7.2 |
| T125 | Locust Tree | 68.8 | 4.68 | 8.3 |
| T126 | London Plane | 58.6 | 4.32 | 7.7 |
| T127 | London Plane | 46.3 | 3.84 | 6.8 |
| T128 | Silver Birch | 6.5 | 1.44 | 2.5 |
| T129 | London Plane | 68.8 | 4.68 | 8.3 |
| T130 | London Plane | 49.3 | 3.96 | 7 |
| T131 | London Plane | 289.5 | 9.6 | 17 |
| T132 | London Plane | 55.4 | 4.2 | 7.4 |
| T133 | London Plane | 99.9 | 5.64 | 10 |
| T134 | Locust Tree | 79.8 | 5.04 | 8.9 |
| T135 | London Plane | 152.2 | 6.96 | 12.3 |
| T136 | London Plane | 108.6 | 5.88 | 10.4 |
| T137 | London Plane | 61.9 | 4.44 | 7.9 |
| T138 | London Plane | 113.1 | 6 | 10.6 |
| T139 | London Plane | 49.3 | 3.96 | 7 |
| T140 | London Plane | 91.6 | 5.4 | 9.6 |

| Tree No | Species | RPA ($m^2$) | RPA as circle of radius (x)m | RPA as square of sides (x)m |
|---|---|---|---|---|
| T141 | Himalayan Birch | 13.1 | 2.04 | 3.6 |
| T142 | Fraxinus angustifolia Raywood | 43.5 | 3.72 | 6.6 |
| T143 | Sweet Gum | 2.2 | 0.84 | 1.5 |
| T144 | Sweet Gum | 2.2 | 0.84 | 1.5 |
| T145 | Sweet Gum | 2.2 | 0.84 | 1.5 |
| T146 | Sweet Gum | 2.2 | 0.84 | 1.5 |
| T147 | Tulip Tree | 2.2 | 0.84 | 1.5 |
| T148 | Tulip Tree | 2.2 | 0.84 | 1.5 |
| T149 | Tulip Tree | 2.2 | 0.84 | 1.5 |
| T150 | Silver Birch | 0.7 | 0.48 | 0.8 |
| T151 | Silver Birch | 3.7 | 1.08 | 1.9 |
| T152 | Italian Alder | 162.9 | 7.2 | 12.8 |
| T153 | Whitebeam | 191.1 | 7.8 | 13.8 |
| T154 | Whitebeam | 162.9 | 7.2 | 12.8 |
| T155 | Whitebeam | 162.9 | 7.2 | 12.8 |
| T156 | Hawthorn 'Prunifolia' | 33 | 3.24 | 5.7 |
| T157 | Norway Maple | 83.6 | 5.16 | 9.1 |
| T158 | London Plane | 152.2 | 6.96 | 12.3 |
| T159 | Norway Maple | 152.2 | 6.96 | 12.3 |
| T160 | Norway Maple | 72.4 | 4.8 | 8.5 |
| T161 | Norway Maple | 131.9 | 6.48 | 11.5 |
| T162 | Norway Maple | 76 | 4.92 | 8.7 |
| T163 | Norway Maple | 173.9 | 7.44 | 13.2 |
| T164 | Norway Maple | 157.5 | 7.08 | 12.5 |
| T165 | Norway Maple | 136.8 | 6.6 | 11.7 |
| T166 | Field Maple | 49.3 | 3.96 | 7 |
| T167 | Field Maple | 91.6 | 5.4 | 9.6 |
| T168 | Field Maple | 72.4 | 4.8 | 8.5 |
| T169 | Field Maple | 52.3 | 4.08 | 7.2 |
| T170 | Field Maple | 76 | 4.92 | 8.7 |
| T171 | Locust Tree | 234.5 | 8.64 | 15.3 |
| T172 | Locust Tree | 46.3 | 3.84 | 6.8 |
| T173 | Locust Tree | 11.7 | 1.93 | 3.4 |
| T174 | Locust Tree | 28.3 | 3 | 5.3 |
| T175 | Locust Tree | 72.4 | 4.8 | 8.5 |
| T176 | Sycamore | 4.5 | 1.2 | 2.1 |
| T177 | Locust Tree | 38 | 3.48 | 6.2 |
| T178 | Ash | 275.2 | 9.36 | 16.6 |
| T179 | Silver Maple | 162.9 | 7.2 | 12.8 |
| T180 | Silver Maple | 131.9 | 6.48 | 11.5 |
| T181 | Apple | 5.5 | 1.32 | 2.3 |

| Tree No | Species | RPA ($m^2$) | RPA as circle of radius (x)m | RPA as square of sides (x)m |
|---|---|---|---|---|
| T182 | Crack Willow | 13.1 | 2.04 | 3.6 |
| T183 | Ash Diversifolia | 58.6 | 4.32 | 7.7 |
| T201 | London Plane | 113.1 | 6 | 10.6 |
| T202 | London Plane | 99.9 | 5.64 | 10 |
| T203 | London Plane | 91.6 | 5.4 | 9.6 |
| T204 | Locust Tree | 152.2 | 6.96 | 12.3 |
| T205 | Norway Maple | 28.3 | 3 | 5.3 |
| T206 | Norway Maple | 28.3 | 3 | 5.3 |
| T207 | Norway Maple | 43.5 | 3.72 | 6.6 |
| T208 | Norway Maple | 35.5 | 3.36 | 6 |
| T209 | Bastard service tree | 28.3 | 3 | 5.3 |
| T210 | Bastard service tree | 21.9 | 2.64 | 4.7 |
| T211 | Bastard service tree | 33 | 3.24 | 5.7 |
| T212 | London Plane | 117.7 | 6.12 | 10.8 |
| T213 | Norway Maple | 58.6 | 4.32 | 7.7 |
| T214 | Norway Maple | 79.8 | 5.04 | 8.9 |
| T215 | London Plane | 104.2 | 5.76 | 10.2 |
| T216 | Ash | 104.2 | 5.76 | 10.2 |
| T217 | London Plane | 72.4 | 4.8 | 8.5 |
| T218 | London Plane | 55.4 | 4.2 | 7.4 |
| T219 | London Plane | 55.4 | 4.2 | 7.4 |
| T220 | Norway Maple | 46.3 | 3.84 | 6.8 |
| T221 | London Plane | 113.1 | 6 | 10.6 |
| T222 | London Plane | 87.6 | 5.28 | 9.4 |
| T223 | London Plane | 87.6 | 5.28 | 9.4 |
| T224 | London Plane | 173.9 | 7.44 | 13.2 |
| T225 | Sweet Chestnut | 38 | 3.48 | 6.2 |
| T226 | London Plane | 55.4 | 4.2 | 7.4 |
| T227 | Hornbeam | 2.2 | 0.84 | 1.5 |
| T228 | London Plane | 99.9 | 5.64 | 10 |
| T229 | London Plane | 65.3 | 4.56 | 8.1 |
| T230 | Locust Tree | 72.4 | 4.8 | 8.5 |
| T231 | Locust Tree | 113.1 | 6 | 10.6 |
| T232 | London Plane | 127.1 | 6.36 | 11.3 |
| T233 | Cherry umineko | 4.5 | 1.2 | 2.1 |
| T234 | Cherry umineko | 3.7 | 1.08 | 1.9 |
| T235 | Himalayan birch | 4.5 | 1.2 | 2.1 |
| T236 | River birch | 4.5 | 1.2 | 2.1 |
| T237 | Sycamore | 91.6 | 5.4 | 9.6 |
| T238 | Italian Alder | 8.9 | 1.68 | 3 |
| T239 | Italian Alder | 117.7 | 6.12 | 10.8 |
| T240 | Italian Alder | 108.6 | 5.88 | 10.4 |

| Tree No | Species | RPA ($m^2$) | RPA as circle of radius (x)m | RPA as square of sides (x)m |
|---|---|---|---|---|
| T241 | Italian Alder | 21.9 | 2.64 | 4.7 |
| T242 | London Plane | 0.7 | 0.48 | 0.8 |
| T243 | Norway Maple | 162.9 | 7.2 | 12.8 |
| T244 | Cappadocian Maple | 141.9 | 6.72 | 11.9 |
| T245 | River birch | 28.3 | 3 | 5.3 |
| T246 | Willow-leaf Pear | 33 | 3.24 | 5.7 |
| T247 | Norway Maple | 104.2 | 5.76 | 10.2 |
| T248 | Norway Maple | 76 | 4.92 | 8.7 |
| T249 | Norway Maple | 136.8 | 6.6 | 11.7 |
| T250 | Norway Maple | 99.9 | 5.64 | 10 |
| T251 | Norway Maple | 131.9 | 6.48 | 11.5 |
| T252 | Norway Maple | 147 | 6.84 | 12.1 |
| T253 | Norway Maple | 117.7 | 6.12 | 10.8 |
| T254 | Field Maple | 72.4 | 4.8 | 8.5 |
| T255 | Norway Maple | 28.3 | 3 | 5.3 |
| T256 | Large-leaved Lime | 7.6 | 1.56 | 2.8 |
| T257 | Cappadocian Maple | 20 | 2.52 | 4.5 |
| T258 | Cappadocian Maple | 35.5 | 3.36 | 6 |
| T259 | Ash | 113.1 | 6 | 10.6 |
| T260 | Ash | 99.9 | 5.64 | 10 |
| T261 | Sycamore | 113.1 | 6 | 10.6 |
| T262 | Ash | 168.3 | 7.32 | 13 |
| T263 | Bastard service tree | 13.1 | 2.04 | 3.6 |
| T264 | Ash | 152.2 | 6.96 | 12.3 |
| T265 | Ash | 91.6 | 5.4 | 9.6 |
| T266 | Tibetan cherry | 6.5 | 1.44 | 2.5 |

**Notes:**

1. **The above figures are an assessment of the minimum protection area required for the long-term survival of the trees present on site, and are calculated in accordance with BS 5837:2012).**

2. **The information provides guidance only as it assumes that all trees are to be retained with the exception of those graded R.**

3. **The calculated root protection area of a tree is capped at 707 $m^2$ as a maximum in accordance with BS 5837:2012.**

4. **Number in brackets after trunk diameter denotes number of stems below 1.5m above ground level. Ms = multi-stemmed tree.**

5. **Measurement for Dbh followed by 'e' denotes an estimated dimension due to access limitations.**

6. **Groups are not included in the above figures.**