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Holgate and Kingstone, Barnsley

Tree Survey Report

Report for Barnsley Partnership for Learning
(Laing O'Rourke)

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Institute of Chartered Foresters
Registered Consultant

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SUMMARY

Greengage Arboriculture & Ecology was commissioned to carry out a tree survey on Holgate School and adjacent brownfield land in Barnsley. The site is proposed for construction of a new school building and associated facilities as part of the Building Schools for the Future programme. The site was visited during June 2010 and the trees assessed in accordance with BSS5837:2005 *'Trees in relation to construction – Recommendations'.*

There are currently no trees on the site protected by Tree Preservation Orders and the site is not located in a Conservation Area.

The large site has a relatively low tree density. The majority of the trees are middle-age and early-mature trees growing in belts close to the boundaries. The most common trees are black poplar, sycamore, silver birch and hawthorn. The survey assessed 216 individual trees and shrubs, 31 groups of trees and 15 hedges.

Eight trees of high quality and value (A category) have been identified on the site. These are early-mature sessile oak, red oak, sycamore, ash and sweet chestnut. The majority of these trees are growing on a bank to the west of the existing playground.

Seventy-two individually surveyed trees of moderate quality and value (B category). have been identified. Trees in this category are scattered across the site, but there are particular concentrations in the band of trees on the north-west boundary, amongst groups of trees on the northern boundary and in a row of block poplar trees in the south-west of the site.

One hundred and twelve individually surveyed trees have been assigned to the low quality and value (C category). These include younger and smaller trees that are easily replaced, trees of poor form and trees with significant structural defects and wounding (which nevertheless have a safe useful life expectancy of more than ten years).

Twenty four trees are in a poor condition and require felling because of their condition, irrespective of any development proposal (R category).

Two groups of trees and shrubs have been assigned to the moderate quality and value category. These are a band of mixed broadleaved trees located beyond the site's southern boundary and a group of early-mature crack willow trees. The remaining groups and all the hedges surveyed have been assigned to the low quality and value.

Trees on the site represent a constraint that should be taken into account when designing future development. It is recommended that significant consideration is given to the retention of all the high and moderate quality and value trees. Where retained, these should be provided with sufficient space to protect their root protection areas and provide sufficient space for future development without causing a nuisance. Where possible, low quality and value trees should be retained, but their presence should not represent a significant constraint on the design.

1. INTRODUCTION

1.1 Scope and brief

This arboricultural report was commissioned by Laing O'Rourke on behalf of Barnsley Partnership for Learning. Laing O'Rourke have been appointed by Barnsley Metropolitan Borough Council (Barnsley MBC) to design and construct new school buildings and facilities under Phase 3 of the Barnsley Building Schools for the Future (BSF) programme.

The report was prepared by Guy Morrison, Principal Arboriculturist and Partner of Greengage Arboriculture & Ecology. He is a Chartered Forester and Registered Consultant with the Institute of Chartered Foresters. He is also a Professional Member of the Arboricultural Association and holds the Royal Forestry Society Professional Diploma in Arboriculture.

The scope of the report was to prepare a tree survey report for the site in accordance with BSS5837:2005 '*Trees in relation to construction – Recommendations*' (BSi, 2005). This would determine the size, condition and value of trees and provide recommendations for remedial work and root protective distances to ensure the future health and stability of retained trees.

Tree survey reports have been commissioned for two of the three sites that form Phase 3 of the Barnsley BSF programme. These are Holgate and Kingstone, and Wombwell. The former is the site of an existing school and adjacent brownfield land, whilst the latter site is public open space and woodland. This report relates to the Holgate and Kingstone site.

1.2 Proposed development

A landscape strategy (Plinke drawing) for the site's redevelopment has been developed. This shows the construction of a new school building on brownfield land at the north-western end of the site, with associated car-parking and other facilities. The main access to the site will be from Dodworth Road to the north, with pedestrian access from Broadway to the south-west. The existing school buildings in the east of the site will be demolished and replaced with a grass sports pitch and a car park. The existing sports pitches and tennis courts in the centre of the site will be retained with construction of a link road along the southern boundary of the site.

The tree survey and assessment that forms this report was based on arboricultural characteristics alone, without reference to any specific development proposal.

2. SITE DESCRIPTION

2.1 Location and boundaries

Holgate School is a secondary school located on Shaw Lane, Barnsley. The proposed development site (hereafter referred as 'the site') also includes brownfield land and a small area of informal public open space. The red line boundary plan in Appendix D shows the extent of the site.

The proposed development site has an area of approximately 16.5ha. The existing school buildings and associated parking, access and tarmac playground all lie at the eastern end of the site and are accessed from Shaw Lane. The centre site comprises a large area with several grass playing fields.

The brownfield land is located in the north-western corner of the site. This includes the former site of a demolished factory and a petrol station on Dodworth Road which is currently being demolished. The site includes a small area of informal public open space located adjacent to public footpaths and a non-statutory footpath which cross the site from Broadway to Branksome Avenue and Beaumont Avenue.

The site is bounded to the north by Dodworth Road, houses and allotments. It is bounded to the east by Shaw Lane and to the south by sports pitches. To the west of the site is a factory and more houses.

2.2 Topography and soils

The highest point on the site is the sports pitch on the southern boundary of the site, which is located at 149m above sea level (asl). From here the land slopes down in all directions, with minimum levels of 137m asl and 120m asl on the site of the former factory and access from Shaw Lane respectively.

The site has been subject to extensive levelling in the past and there are a series of short steep banks associated with terracing of the sports fields. The former factory site has also been levelled and there are a steep banks and low rock cuttings on the north-eastern, south-eastern and southern boundaries of the former factory site.

The rock cuttings on the factory site show that the underlying geology on the site is Coal Measures sandstone and shale.

A ground investigation report was not available and soil investigations were not carried out as part of the tree survey. However, vegetation growth showed that the site is apparently well-drained and reasonably fertile. It is assumed that the ground conditions present do not represent a significant constraint on the root development and healthy growth of the tree and shrub species present.

2.3 Vegetation

The large site has a low overall tree density and the trees present are concentrated in small areas of the site, generally close to the boundaries.

Within Holgate School, most of the trees are growing on a bank located to the west of the playground. Trees growing here include middle-age and early-mature sycamore, sessile oak, red oak, common lime, hornbeam and silver birch. A smaller number of trees are located on the bank to the west of the existing tennis courts and these include middle-age and early-mature sycamore, common lime and ash. A single mature purple crab apple and two mature holly trees are located to the east of the existing school buildings.

The boundary with the allotment to the north of the school includes an informal hedge and scrub of privet and elder, with hawthorn, field maple and goat willow, all growing beyond the site boundary. In a corner on the northern boundary is a small group of early-mature Norway maple growing on the site, as well as early-mature sycamore on the allotment site close to the boundary.

The southern boundary of the school site includes a band of middle-age mixed broadleaves, planted on a steep bank within the adjacent sports club. Species here include Italian alder, sycamore, hawthorn, hazel, grey willow and elder.

A band of middle-age and early mature trees have been planted along part of the western boundary of the former factory site. Species here include false acacia, purple Norway maple, wild cherry, silver birch, Scots pine, silver maple, Italian alder and sweet chestnut.

Two mature weeping willow and a middle-age sweet chestnut have been planted on the northern boundary of the site adjacent to Dodworth Road. There is also a small group of trees with a mature weeping willow and other ornamental trees to the south of this. Elsewhere on the northern boundary, bands of cherry laurel and Leyland cypress have been planted, both on the site and on adjoining land. There is also a small group of false acacia, silver birch and whitebeam located at the base of a rock cutting on the northern boundary.

The banks and rock cuttings on the edge of the former factory site include patches of scrub and naturally regenerated trees including hawthorn, blackthorn, elder, sycamore, goat willow and crack willow.

To the east of the former factory site is an area on unmown grassland used as informal public open space. At the northern end of this area are patches of dense tree middle-age and early planting including sycamore, silver birch, rowan, wild cherry and Norway maple. To the south of this is a band of planted scrub comprising hazel, hawthorn, blackthorn and elder.

The survey area included a narrow strip of land with a footpath accessing the site from Broadway. This has been planted with a long row of early-mature black poplars, as well as a smaller number of Japanese cherry and sycamore trees.

The surrounding land is predominantly residential with terraced and semi-detached housing, sports fields and allotments. Street trees are present on Shaw Lane and Broadway and there is a band of trees on the edge of public open space on the opposite on Dodworth Road to the north of the site. The housing is relatively high density and there are relatively few trees in the surrounding area other than scattered small ornamental garden trees.

2.4 Site access and visibility

There is currently restricted access to the school grounds and no formal access to the former factory site. Public access to the site is currently limited to the public footpaths crossing the site and the adjoining informal public open space. The internal footpaths and views of the site from roads on the site boundaries provide relatively high public visibility of many of the trees on the site. Many trees are also be seen from the houses and allotments bordering the site.

Given the relatively high public visibility of the site, many of the trees on the site have the potential for significant public amenity value.

3. STATUTORY CONTROLS

3.1 Tree Preservation Orders and Conservation Areas

The Local Planning Authority (LPA) has confirmed (e-mail dated 29/06/10) that *there are currently no trees on or immediately adjacent to the site protected by* tree preservation order (TPO) and the *site is not* located in a Conservation Area.

3.2 Felling Licences

Tree felling on non-residential land is also controlled by the need to obtain a Felling License from the Forestry Commission before felling more than $2m^2$ of timber (or $5m^2$ if timber is not sold) per three month period, subject to various exemptions (FC, 2005).

There is an exemption from the above statutory controls on tree felling and pruning for works strictly necessary to implement development that has received full planning permission. It is recommended that no tree felling is carried out until full planning permission has been gained and that trees to be felled are clearly shown on a plan (see section 6.4) that is submitted and approved by the LPA.

3.3 Protected species

Trees provide habitat for a wide range of species, some of which are protected. Most nesting birds and their nests and all roosting bats and their roosts are protected by the Wildlife and Countryside Act 1981 (as amended) and bats gain additional protection as under the Conservation (Natural Habitats, &c.) Regulations 1994.

4. METHODOLOGY

4.1 Survey methodology

The site was visited over several days during June 2010 to carry out a survey and assessment in accordance with BS5837:2005.

A topographical survey was supplied (Malcolm Hughes Land Surveyors - drawing number: 9861/1-11) identifying the position of the trees and this formed the basis of the Tree Constraints Plan (Appendix E).

The following information was collected for each tree: species, age class (see Table 1), height, stem diameter at 1.5m above ground level, crown spread in the four cardinal directions and crown clearance height above the ground (excluding basal sprouts and epicormic branches).

Stem diameter was measured with a diameter tape, whilst other dimensions were measured with an MDL LaserAce laser hypsometer. In a number of locations it was not possible to get close access to the trees due to their location on adjacent land or at the top of a rock cutting. Under these circumstances stem diameter was estimated using the laser hypsometer.

Table 1. Age class categories

Age class	Proportion of life expectancy
Young (Y)	< 1/3
Middle-age (MA)	1/3 – 1/2
Early-mature (EM)	1/2 - 2/3
Mature (Mat)	>2/3
Over-mature (OM)	>2/3 (and crown retracting as a result of age)

Where multi-stemmed trees and shrubs were identified, the stem diameter was measured close to ground level, immediately above the root buttress flare. Where clusters of stems joining below ground level prevented the measure of a single basal stem diameter, the single stem equivalent diameter was calculated, based on the total basal area:

$$d_{BA} = \sqrt{\sum d^2}$$

d_{BA} is the single stem equivalent diameter (at 1.5m)
d is the measured diameter of each stem (at 1.5m)

An assessment was made of the trees' physiological and structural condition, noting any disorders or biomechanical features that present an obvious hazard to present or future users of the site or affect the trees' life expectancy.

Preliminary management works are proposed in order to either remove/reduce hazards or promote good future growth of the tree. These recommendations do not take account of any development proposals at this stage.

4.2 Quality and value categories

The trees' overall quality and value for retention was assessed in accordance with BS5837:2005 Table 1 (Appendix C). This was dependent on the trees' physiological and structural condition, safe useful life expectancy and arboricultural, landscape, cultural and ecological value. Arboricultural and landscape value takes account of the trees' amenity value, which was determined by tree size, prominence, visibility, appropriateness, attractiveness and screening value.

4.3 Root protection area

The root protection area (RPA) radius and area for each tree was calculated in accordance with BS5837:2005. The RPA is an area of ground that provides sufficient soil rooting volume to ensure the survival of the tree.

Where there are no likely impediments to rooting, a circular RPA is shown on the Tree Constraints Plan. Where restrictions on rooting are likely, a non-circular shape with an identical area has been plotted. RPA has not been plotted extending beneath buildings or beyond tall retaining walls or rock cuttings. The RPA has not been offset from hard surfaces, such as tarmac roads and pathways. Although they do not offer an ideal rooting environment this is set against inter-tree root competition in the site where most trees and shrubs are growing at a reasonably high density.

4.4 Survey limitations

Trees were assessed visually from ground level. No climbed inspection or detailed investigation of decay was made. These are identified within the schedule where further action is necessary to fully assess the tree.

In a number of locations dense bramble and other vegetation prevented a full and thorough assessment of all aspects of the tree. It is recommended that scrub vegetation is cleared from the base of all trees during the construction period and trees to be retained are subject to additional inspection by an arboriculturist before the new school facilities are open.

Tree condition can change significantly over a relatively short period of time, and therefore the results and recommendations of this survey can only be held to be valid for a period of 12 months following the survey date. The trees should be re-inspected at this time by a competent person.

5. SURVEY RESULTS

5.1 Survey summary

The full survey results are shown in the survey schedule in Appendix A.

The survey assessed 216 individual trees and shrubs, 31 groups of trees and 15 hedges.

The composition and distribution of species, age classes, size (height and stem diameter) and quality and value categories for individually surveyed trees and shrubs are summarised in Figures 1-5 below.

Fig. 1. Species distribution of individually surveyed trees and shrubs

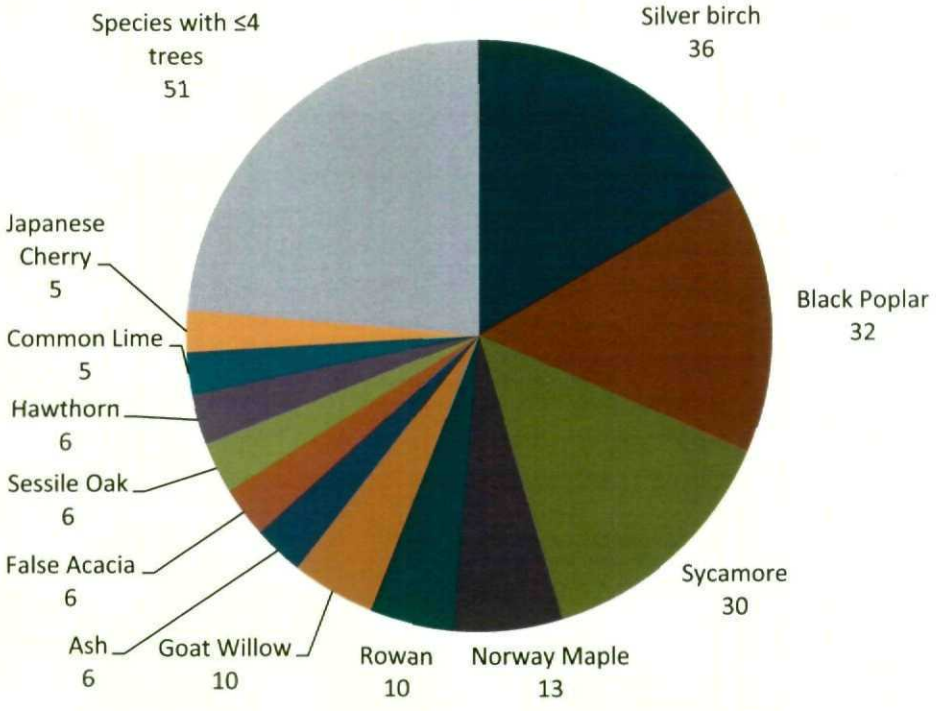


Fig. 2. Age-class of distribution of individually surveyed trees and shrubs

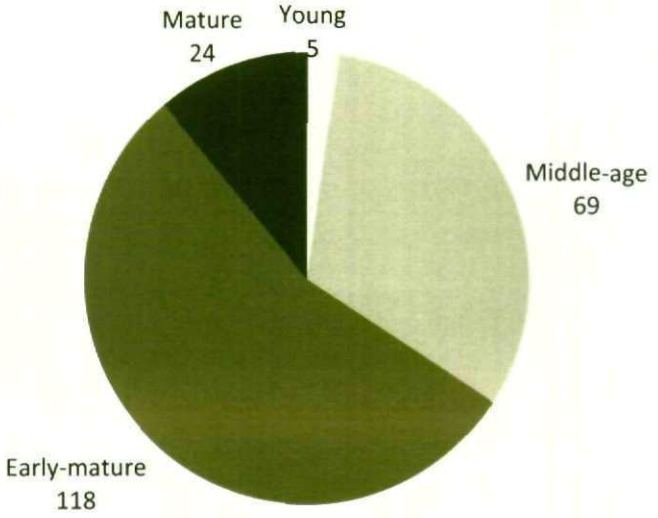


Fig. 3. Height distribution of individually surveyed trees and shrubs

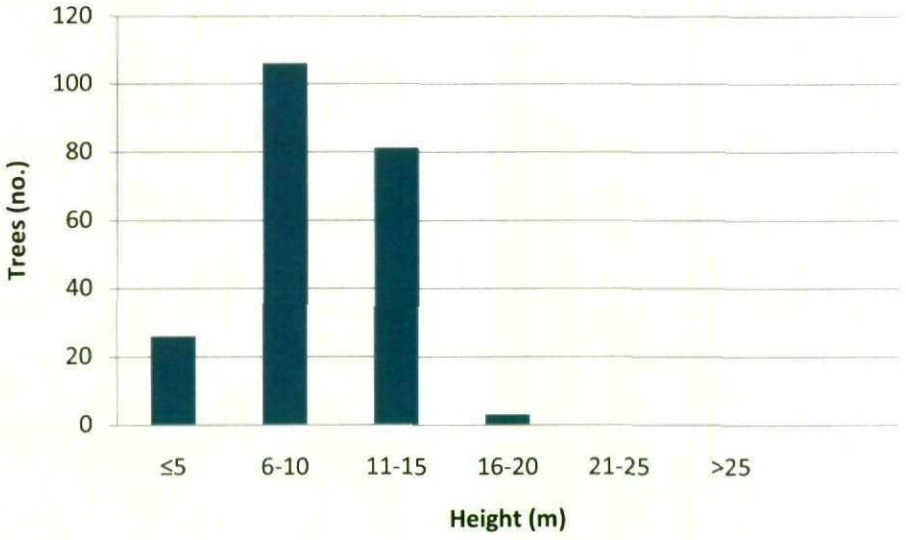


Fig. 4. Stem diameter distribution of individually surveyed trees and shrubs (includes basal diameter for multi-stemmed trees and shrubs)

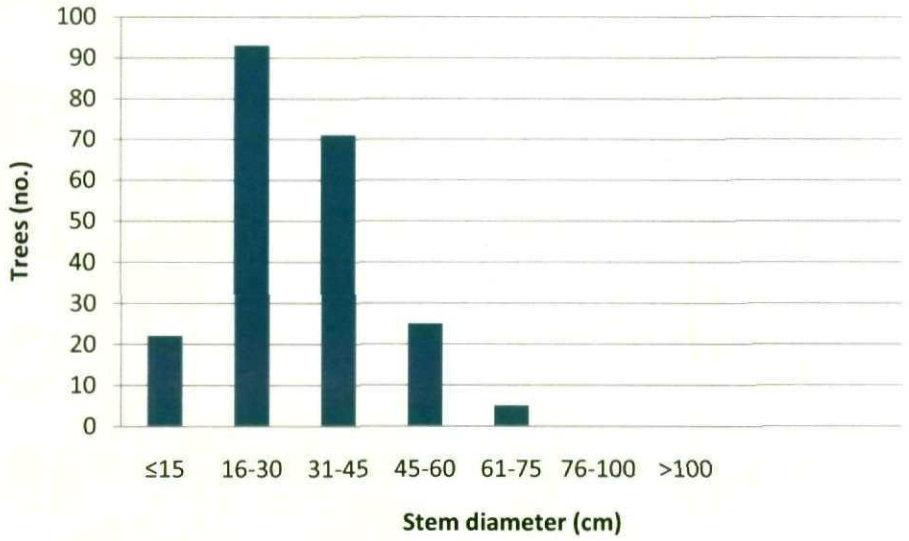
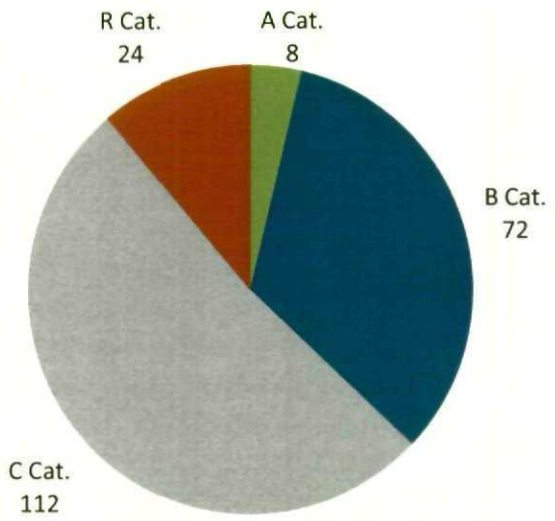


Fig. 5. Quality and value category representation of individually surveyed trees and shrubs



5.2 Quality and value

Eight trees of high quality and value (A category) have been identified on the site. All these are early-mature trees of large-growing species, such as sessile oak, red oak, sycamore, ash and sweet chestnut. The majority of these trees are growing on a bank to the west of the existing playground, with two additional

trees located close to the northern boundary. None of these trees has yet reached their full potential but all are relatively long-lived trees without significant defects and all are likely to make a substantial contribution for a period of at least forty years.

The survey identified 72 individually surveyed trees of moderate quality and value (B category). These include a significant number of birch trees and other small and medium-growing species, such as whitebeam, rowan, hornbeam and false acacia. Other trees in this category included younger examples of large-growing species such as oak, lime and sycamore, and those which were down-graded from the high quality and value category because of the presence of minor defects. Trees in this category are scattered across the site, but there are particular concentrations in the band of trees on the north-west boundary and amongst the groups of trees on the northern boundary. The row of black poplar trees in the south-west of the site also includes a number of trees in this category. All of the trees in this category are likely to make a significant contribution over a period of at least twenty years.

One hundred and twelve individually surveyed trees have been assigned to the low quality and value (C category). These include younger and smaller trees that are easily replaced. Other trees in this category include those with significant structural defects and wounding (which nevertheless have a safe useful life expectancy of more than ten years) and trees of poor form, such as multi-stemmed trees or those with strongly leaning stems and very irregular crowns.

Twenty four trees are in a poor condition and require felling because of their condition, irrespective of any development proposal (R category). Many of these are early-mature black poplar trees in the south-west of the site. These trees had a number of serious defects included large cavities at the stem bases and split main forks. Elsewhere on the site, trees require felling include trees with significant bark wounds and associated decay, trees with very weak and split main forks and dead trees.

Of the 31 groups of trees and shrubs surveyed, two have been assigned to the moderate quality and value category (B category). These are a band of mixed broadleaved trees planted beyond the site boundary (G58) and a group of early-mature crack willow trees (G 194). The majority of the remaining groups have been assigned to the low quality and value (C category). Groups in this category include small patches of young naturally regenerated trees and scrub, planting of mixed ornamental shrubs and planted rows of Leyland cypress, which are of limited amenity value.

All of the 15 hedges surveyed have been assigned to the low quality and value (C category). These hedges were generally located on or close to the site boundary. Some have a function in screening gardens from the site, but all are easily replaced by planting and none make a significant contribution to public amenity.

6. RECOMMENDATIONS

6.1 *Preliminary work recommendations*

The survey schedule (Appendix A) contains preliminary work recommendations. These recommendations do not take account of development proposals and it is likely additional felling and pruning would be necessary to accommodate any development proposals (see section 6.4).

The majority of the preliminary work recommendations are not urgent and could be postponed for up to 12 months until a development proposal is finalised and receives planning permission. The exception to this is the following where it is recommended that the proposed works are carried out as soon as possible (within one month):

- 51 – Norway maple – Fell
- 227 – Black poplar – Fell
- 228 – Black poplar – Fell
- 229 – Black poplar – Fell
- 239 – Black poplar – Fell

All works carried out should comply with BS3998:1989 *'British Standard Recommendations for Tree Work'* (BSi, 1989), or its replacement standard.

6.2 *Tree retention*

Trees on the site represent a constraint that should be taken into account when designing future development. Of these, the greatest constraint is represented by the eight high quality and value (A category) trees and the 72 moderate quality and value (B category) trees and it is recommended that significant consideration is given to retaining these within the development. All retained trees should be retained with sufficient space to avoid construction damage and allow their future development.

Where possible, low quality and value (C category) trees should be retained, but their presence should not represent a significant constraint on the design. It should be noted that although the individual loss of low value trees will not have an impact, the cumulative loss of a large number of low value trees could produce a local landscape and ecological impact due to a loss of overall tree cover. Under these circumstances, consideration should be given to providing space for mitigation planting as part of the landscaping of the development scheme.

The 24 poor quality and value (R category) trees of trees requiring removal irrespective of the development proposal should obviously not represent a constraint.

6.3 Sustainable tree retention

In order to allow for the long-term sustainable retention of trees, two requirements need to be met. The first is that there is no adverse physical impact on the trees. This can be met by ensuring that no adverse construction takes place within the RPA given in the survey schedule (Appendix A) and shown on the Tree Constraints Plan (Appendix E). Where construction or demolition works are required to take place in the RPA, special care and design will be required to reduce the impact on the trees and it is recommended that additional advice is sought from an arboriculturist.

In addition to reducing the physical impact on the tree, it is also important to allow the space for trees to grow and develop without causing significant nuisances such as severe loss of light to adjacent properties that will lead to pressure for their future felling or severe pruning. Very few of the trees on the site are mature trees that have grown to their maximum height and account should be taken of potential future growth. Provisional maximum heights are given in Appendix B and it is recommended that this information is taken account of during the design process.

6.4 Construction phase tree protection

It is recommended that all retained trees on or immediately adjacent to the site should be protected by protective fencing during the site demolition and construction phases. This construction exclusion zone should protect the RPA and ensure that trees to be retained and their essential rooting zone is not damaged during the works. All potentially damaging operations should be excluded from within the construction exclusion zone, including: excavation, changes to levels, temporary access, vehicle parking or movements, fires and the storage, disposal or mixing of materials and chemicals.

It is recommended that a tree protection plan is produced once the design is finalised. The plan should show the location and detailing of the protective fencing and other tree protection measures, such as ground protection, both in relation to the existing and proposed layout. It should also show trees to be retained and removed.

Where it is necessary to carry out construction works within the RPA of retained trees, it is recommended that an arboricultural method statement is produced. The method statement should detail procedures and methods to be adopted to protect trees and their rooting environment during the construction and demolition works.

6.5 Statutory controls

Trees on the site may be used for nesting by birds during the spring and summer. Nesting birds and their nests are legally protected and wherever possible the

felling or pruning trees should be avoided between 1 March to 30 August to avoid an impact on nesting birds. Where it was necessary to carry out the work during this period then advice should be sought from an ecologist.

Some of the trees surveyed have features that could potentially be used by roosting bats, including cavities, cracks and dense ivy cover. It is recommended that a bat roost scoping study (BCT, 2007) is carried out by an ecologist of any trees due to be felled or where pruning might affect potential roosting features.

6.6 Replacement planting

It is understood that a landscape planting plan will be produced as part of the detailed design of the scheme. This will include proposals for tree planting.

If trees are felled to accommodate the proposed development it is recommended that they are replaced in order to maintain the tree cover of the area. Generally it is recommended that each tree to be felled is replaced by at least two trees in order to allow for mortality before maturity.

It is noted that the site has a relatively low tree density and there is an opportunity for significant tree planting on the site, particularly on the boundaries, banks and alongside the proposed roads and paths. This would have significant benefits for the surrounding area.

Large-growing tree species generally have higher amenity value on maturity and often provide the greatest environmental benefits in urban planting. It is recommended that opportunities are taken to plant a significant number of large-growing species within the landscaping scheme, where space allows. Suitable species include sessile oak, common ash, beech, small and large-leaved lime, sycamore and Scots pine. Where space is more constrained, suitable medium-growing species include: Norway maple, hornbeam, wild cherry, wild pear and silver birch.

7. REFERENCES

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APPENDIX A – TREE SURVEY SCHEDULE

Appendix A - Tree Survey Schedule

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
1	London Plane	EM	36	1	9	5	2	3	3	3.5	P	F	Pollarded street tree. Dieback of foliage part of crown.	Monitor. Continue pollarding on a 5 year cycle.	10-20	C_2	4.32	59
2	London Plane	EM	36	1	9	4.5	2.5	2.5	3.5	4	G	F	Pollarded street tree	Continue pollarding on a 5 year cycle.	>40	B_2	4.32	59
3	London Plane	EM	34	1	9	3.5	2	2	3	3.5	G	F	Pollarded street tree	Continue pollarding on a 5 year cycle.	>40	B_2	4.08	52
4	London Plane	EM	36	1	9	3	2.5	3	2.5	3.5	G	F	Pollarded street tree	Continue pollarding on a 5 year cycle.	>40	B_2	4.32	59
H5	Oval-leaved Privet	NA	NA	MS	3	0	≤0.5				G	G	Trimmed hedge.	Continue trimming hedge.	20-40	C_2	CS	CS
6	Purple Crab Apple	Mat	29	1	7	1.8	4.5	4	3	3	G	G	Soil compaction at stem base.	No action	20-40	C_1	3.48	38
7	Holly var	Mat	33	1	6.5	1.8	3	2.5	2	2	F	F	Crown density slightly low. Stem bark wounds.	No action	10-20	C_1	3.96	49
8	Holly var	Mat	37	1	6	1.6	2	3.5	2.5	2	P	F	Crown density slightly low. Stem bark wounds.	No action	10-20	C_1	4.44	62
9	Sycamore	MA	31	1	8.5	2	3.5	4.5	3.5	1.5	G	F	Growing at base of wall. Future growth will damage wall.	Fell tree	<10	R	3.72	43
10	Sycamore	MA	21	1	9	2.5	2.5	3	3.5	2	G	F	Growing at base of wall. Future growth will damage wall.	Fell tree	<10	R	2.52	20

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diameter (cm)	Stem no.	Height (m)	Crown clearance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Remaining contribution (yrs)	Category grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physiological	Structural						
11	Sycamore	MA	12	1	5.5	2	0.5	0.5	2.5	1.5	G	F	Growing at base of wall. Future growth will damage wall.	Fell tree	<10	R	1.44	7
G12	Leyland Cypress, Laburnum, Goat Willow, Ash, Oval-leaved Privet	EM/Mat	≤20	MS	4-9	≥0	2-5				G	G	Untrimmed hedge, trees and scrub on allotment boundary. Growing off-site.	No action	10-20	C_2	CS	CS
13	Hornbeam	EM	37	1	12	2.2	4	3.5	3	2.5	F	F	Stem bark wounds.	No action	10-20	C_1	4.44	62
14	Red Oak	EM	42	1	15	2.1	7	7.5	2	2.5	G	G	None	No action	>40	A_1	5.04	80
15	Red Oak	EM	30	1	13	2.2	3	2	1.5	4.5	G	G	Irregular shape due to suppression from adjacent trees.	No action	>40	B_1	3.60	41
16	Sycamore	EM	52	1	15	2.5	4	5.5	4.5	2.5	G	F	Stem bark wound. Mower damage of exposed surface roots.	No action	20-40	B_1	6.24	122
17	Sycamore	MA	27	1	13	8	2	1.5	1	2	G	G	Irregular shape due to suppression from adjacent trees	No action	>40	C_1	3.24	33
18	Common Lime	EM	36	1	13	2	2	3	3.5	4	F	P	Bark wound and decay. Exposed wood from base to 1.5m.	Monitor decay development	20-40	C_1	4.32	59
19	Goat Willow	EM	26	1	7	2	3.5	4.5	1	0.5	F	P	Suppressed crown of low vigour showing dieback. Dead branch and stem bark wounds.	Consider felling tree.	10-20	C_1	3.12	31

Age class: Y - young MA - middle-age EM - early mature Mat - mature OM - over-mature **Branch spread:** N - north E - east S - south W - west **Condition:** G - good F - fair P - poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
20	Sycamore	EM	38	1	13.5	2.5	3.5	6	3	3.5	G	G	None	No action	>40	B_1	4.56	65
21	Goat Willow	Mat	47	1	14	3	2	4.5	2.5	5	F	P	Leaning stem. Small cavities in stem. Low vigour.	Fell tree	<10	R	5.64	100
22	Downy Birch	EM	24	1	10	2.5	1	3	2.5	4.5	F	F	Mower damage to surface roots	No action	10-20	C_1	2.88	26
23	Sycamore	EM	46	1	14	5	3.5	4.5	4	2.5	G	G	None	No action	>40	A_1	5.52	96
24	Sycamore	EM	39	1	16	2	4	5.5	3	2	G	F	Mower damage to surface roots	No action	>40	B_1	4.68	69
25	Sessile Oak	EM	46	1	16	2	4	3	6	6	G	G	None	No action	>40	A_1	5.52	96
26	Sessile Oak	EM	40	1	14	2.5	5.5	6	4.5	1	G	G	Irregular shape due to suppression from adjacent trees	No action	>40	B_1	4.80	72
27	Sycamore	EM	42	1	14	2.5	2	3.5	4	3	G	G	Mower damage to surface roots	No action	>40	B_1	5.04	80
28	Silver Birch	EM	27	1	10	2	2.5	2.5	2.5	3	P	P	Low crown density. Large bark wound at 1.2m.	Fell tree	<10	R	3.24	33
29	Ash	EM	40	1	13.5	2	4.5	7	3.5	5.5	G	G	None	No action	>40	A_1	4.80	72
30	Sessile Oak	EM	37	1	14	2.5	2	3	3	2	G	G	None	No action	>40	A_1	4.44	62
31	Hornbeam	EM	36	1	12.5	2	2.5	4.5	3.5	4	G	F	Stem bark wounds	No action	20-40	B_1	4.32	59

Age class: Y - young MA - middle-age EM - early mature Mat - mature OM - over-mature **Branch spread:** N - north E - east S - south W - west **Condition:** G - good F - fair P - poor VP - very poor

No.	Species	Age class	Stem diameter (cm)	Stem no.	Height (m)	Crown clearance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Remaining contribution (yrs)	Category grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physiological	Structural						
32	Common Lime	EM	44	1	11	2	3.5	4.5	5	3.5	G	F	Large bark wounds at stem base. Twin-stemmed at 1.6m.	No action	20-40	C_1	5.28	88
33	Sycamore	EM	47	1	10.5	2.5	2	2.5	4.5	5	F	F	Multi-stemmed (3 no.) at 1.6m. Tight fork and moderate included bark.	No action	20-40	C_1	5.64	100
34	Hornbeam	EM	35	1	9	2	4	5	3	2.5	G	G	None	No action	20-40	B_1	4.20	55
35	Sessile Oak	EM	55	1	12.5	1.8	4.5	7	7	5.5	G	G	None	No action	>40	A_1	6.60	137
36	Silver Birch	MA	18	1	10.5	1.5	2	1	3	1.5	G	G	None	No action	20-40	C_1	2.16	15
37	Common Lime	MA	17+19+14+15+17+8	MS	8.5	1.5	4	5	4	4	G	F	Multi-stemmed at base, ground scraped at base	Cut stems to retain a single stem. Select a large upright stem for retention.	>40	C_1	2.88	26
38	Sycamore	MA	40+16+17+20+15	MS	9	1.2	3.5	5	4.5	4	G	F	Multi-stemmed at base	Remove 4 no. secondary stems at base.	>40	C_1	6.32	125
39	Ash	MA	21+17+17+17+18+10	MS	9	1.5	5	5	4	4.5	G	F	Multi-stemmed at base	Cut stems to retain a single stem. Select a large upright stem for retention.	>40	C_1	4.99	78
40	Common Lime	MA	17+17	MS	7.5	1.5	3	4.5	3	2	G	F	Multi-stemmed at base	Cut stems to retain a single stem. Select a large upright stem for retention.	>40	C_1	2.88	26

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
41	Norway Maple	MA	24 @base	MS	6.5	1.5	3.5	3.5	3	2.5	G	P	Twin-stemmed at base. Rubbing stems. Weak main fork with included bark.	Fell tree	<10	R	3.00	28
42	Common Lime	MA	17+17 +13+1 3+15	MS	7.5	1	4	4.5	4	3.5	G	F	Multi-stemmed at base	Cut stems to retain a single stem. Select a large upright stem for retention.	>40	C_1	4.05	52
43	Ash	MA	14+15	TS	7.5	1.2	2.5	1	4	2.5	G	F	Twin-stemmed at base. Bark wound on base of stem.	Cut stems to retain a single stem. Select a large upright stem for retention. Remove stem with bark wound.	>40	C_1	2.46	19
44	Sycamore	MA	17+11 +15	3	8	2	2.5	3	3	2	G	F	Multi-stemmed at base	Cut stems to retain a single stem. Select a large upright stem for retention.	>40	C_1	3.02	29
G45	Elder, Oval-leaved Privet, Hawthorn	Mat	NA	MS	4-6	≥0	≤3				G	G	Untrimmed hedge and scrub on allotment boundary. Growing off-site.	No action	20-40	C_2	CS	CS
G46	Sycamore	MA	≤30	1/MS	14	1.5	≤5				G	F	Small group of trees growing on allotment adjacent to site.	No action	>40	C_2	CS	CS
47	Ash	MA	31	1	13	2	4	3	5	1.5	G	G	None	No action	>40	B_1	3.72	43
48	Ash	MA	29	1	13	2	2.5	2.5	6	1.5	G	G	None	No action	>40	B_1	3.48	38

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
49	Norway Maple	MA	28	1	14	1.5	4	3	6	1.5	G	G	Weak forks with included bark. Previous failure of small fork in crown. Monitor future development of forks.	No action	20-40	C_1	3.36	35
50	Norway Maple	MA	33	1	12	2.5	4	4	1	2	G	G	None	No action	>40	B_1	3.96	49
51	Norway Maple	MA	38 @base	1	12	1.5	5	2	9	1.5	F	VP	Main fork split from 2m to 0.5m. Large stem overhanging garden. At immediate risk of collapse.	Fell tree as soon as possible	0	R	4.56	65
52	Norway Maple	MA	31	1	12	1.2	4	2.5	5	2.5	G	G	None	No action	>40	B_1	3.72	43
53	Norway Maple	MA	30 @base	2	10.5	0.5	2	2	4	1	G	F	Twin-stemmed at 1m. Tight fork with moderate included bark. Monitor future development of fork.	Monitor.	>40	B_1	3.60	41
54	Norway Maple	MA	15	1	10	3	2	1.5	4	2	G	F	Previously crown lifted.	No action	20-40	C_1	1.80	10
H55	Hawthorn, Golden Oval-leaved Privet	EM	NA	MS	6	0	≤3				G	G	Short length of hedge growing on site boundary.	No action	20-40	C_2	CS	CS
G56	Elder	Mat	≤35	MS	5-5.5	0	≤4.5				F	F	Line of shrubs on site boundary.	No action	10-20	C_2	CS	CS

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
H57	Elder	EM	NA	MS	2-4	≥0	≤2.5				G	G	Line of scrub forming a hedge on site boundary. Located off-site.	No action	20-40	C_2	CS	CS
G58	Italian Alder, Grey Willow, Elder, Sycamore	MA	≤15	1/MS	≤8	≥0	≤3				G/F	G	Band of mixed broadleaved planting off-site. Provides screening.	No action	>40	B_2	CS	CS
H59	Elder, Blackthorn, Grey Willow	NA	NA	MS	2-4	≥0	≤2				G	G	Line of scrub forming a hedge on site boundary.	No action	20-40	C_2	CS	CS
G60	Hawthorn, Elder	EM	NA	MS	6	0	≤3				G	G	Small patch of scrub	No action	>40	C_2	CS	CS
G61	Hazel, Elder, Blackthorn, Wych Elm	Mat	NA	MS	5-6	0	≤3				G	G	Band of scrub, apparently planted.	No action	20-40	C_2	CS	CS
62	Silver Birch	EM	28	1	6	0.5	2.5	3	3	2.5	G	G	None	No action	20-40	C_1	3.36	35
63	Hazel	EM	30 @base	MS	4.5	0.5	3	3	3	3	G	G	None	No action	>40	C_1	3.60	41
64	Hazel	MA	15 @base	MS	3	0	1.25	1.25	1.25	1.25	G	G	None	No action	>40	C_1	1.80	10
65	Rowan	MA	20 @base	MS	4	0	1	2	2	0.5	VP	P	90% dead. Tree in terminal decline.	Fell tree if site developed	<10	R	2.40	18

Age class: Y – young MA – middle-age EM - early mature Mat - mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diameter (cm)	Stem no.	Height (m)	Crown clearance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Remaining contribution (yrs)	Category grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physiological	Structural						
66	Goat Willow	Mat	25 @base	MS	3.5	0	3	2	1.5	2.5	G	G	None	No action	10-20	C_1	3.00	28
67	Goat Willow	NA	NA	MS	2	0	1	1	1	1	G	G	Coppice regrowth from recently felled tree.	No action	20-40	C_1	2.00	13
68	Sycamore	MA	18 @base	MS	6	3	2.5	1.5	3	2	G	F	Multi-stemmed at base	Cut stems to retain a single stem. Select a large upright stem for retention.	>40	C_1	2.16	15
69	Sycamore	EM	47	1	12	1.4	1	5.5	5.5	5.5	G	G	None	No action	>40	B_1	5.64	100
70	Sycamore	EM	37	1	12.5	1.2	3	6	2	6	G	G	None	No action	>40	B_1	4.44	62
71	Rowan	MA	9	1	9	0.5	1.5	3	1.5	2	P	P	Suppressed by adjacent trees. Major bark damage on stem.	Fell tree	<10	R	1.08	4
72	Norway Maple	EM	20	1	10	4	1.5	5	0	1.5	G	F	Suppressed to one side with leaning stem.	No action	20-40	C_1	2.40	18
73	Sycamore	MA	31 @base	1	10.5	1	4.5	2.5	1	5.5	G	F	Large bark wound. Decay will develop.	No action	20-40	C_1	3.72	43
H74	Hawthorn	MA	28	1	2.5	0.5	≤1				G	G	Short section of hedge on site boundary. Shaded by adjacent trees.	No action	20-40	C_2	3.36	35
75	Lawsons Cypress	MA	10	1	3.5	0.5	1	1	1	1	G	G	Trimmed hedge on site boundary	No action	20-40	C_1	1.20	5

Age class: Y - young MA - middle-age EM - early mature Mat - mature OM - over-mature **Branch spread:** N - north E - east S - south W - west **Condition:** G - good F - fair P - poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
H76	Pyracantha	NA	NA	MS	1.7	0	≤1				G	G	Trimmed hedge on site boundary	No action	20-40	C_2	CS	CS
77	Norway Maple	MA	21	1	9.5	2.2	0	5	4	0	G	F	Leaning stem and irregular crown	No action	20-40	C_1	2.52	20
78	Sycamore	EM	34	1	11	1.6	4.5	2.5	2.5	5.5	G	G	None	No action	>40	B_1	4.08	52
79	Rowan	EM	16	1	8	1.2	2	2	1.5	1.5	G	G	Suppressed by adjacent trees	No action	10-20	C_1	1.92	12
80	Sycamore	MA	15	1	10	1.5	1.5	0	0	3.5	G	F	Suppressed by adjacent trees	Consider removal to assist development of surrounding trees.	20-40	C_1	1.80	10
81	Rowan	EM	13	1	6	2	2.5	0.5	0.5	2.5	G	G	Suppressed by adjacent trees	No action	10-20	C_1	1.56	8
82	Wild Cherry	EM	28	1	10	2.5	4	3.5	4.5	1	G	G	Ivy clad stem	No action	20-40	B_1	3.36	35
83	Wild Cherry	EM	27	1	10	2.2	3	1	5	4.5	G	G	Ivy clad stem	No action	20-40	B_1	3.24	33
84	Elder	EM	24 @base	MS	5.5	1.5	2	3	3	3	G	G	None	No action	10-20	C_1	2.88	26
85	Elder	Mat	20 @base	MS	4	1	2	2	2	2	P	F	None	Remove shrub if site developed	<10	R	2.40	18
86	Elder	EM	20 @base	MS	3.5	0.5	2	2	2	2	G	G	None	No action	10-20	C_1	2.40	18

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
87	Silver Birch	MA	28 @base	4	7	1	5	1.5	4	2.5	F	G	None	No action	10-20	C_2	3.36	35
88	Silver Birch	MA	13+12 +8	3	9.5	2	3	2	2	3	G	G	None	No action	20-40	C_2	2.33	17
89	Silver Birch	EM	17	1	10	5	2	1.5	2.5	2	F	G	None	No action	10-20	C_2	2.04	13
90	Silver Birch	MA	13	1	8	2.5	1.5	2.5	2.5	2	G	G	None	No action	10-20	C_2	1.56	8
91	Silver Birch	EM	15	1	12	3.5	1.5	2	2	1	F	G	None	No action	20-40	C_2	1.80	10
92	Silver Birch	EM	16	1	12	4	0.5	1.5	1.5	3	G	G	None	No action	20-40	C_2	1.92	12
93	Goat Willow	MA	27 @base	MS	8	1.5	3.5	1.5	1.5	2.5	F	F	Some crown die-back	No action	10-20	C_2	3.24	33
H94	Hawthorn, Sycamore	EM	NA	1	5-7	0	≤2.5				G	G	Short section of untrimmed hedge on site boundary	No action	20-40	C_2	CS	CS
95	Silver Birch	MA	16	1	11	4	2	2	1.5	1	F	G	None	No action	10-20	C_2	1.92	12
96	Downy Birch	EM	20 @base	MS	8	1	1.5	1.5	5	2.5	G	F	Poor form	No action	20-40	C_2	2.40	18
97	Silver Birch	EM	16	1	12	3.5	1.5	2	2	0	G	G	None	No action	20-40	C_2	1.92	12

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
98	Silver Birch	EM	22	1	11	1	2	1.5	3.5	3.5	G	G	None	No action	20-40	C_2	2.64	22
99	Goat Willow	EM	20 @base	MS	6.5	1.2	3	3.5	2	2	F	G	None	No action	10-20	C_2	2.40	18
100	Silver Birch	EM	20*	2	11.5	5	4.5	2.5	2.5	2.5	F	G	Twin-stemmed at base	No action	10-20	C_2	2.40	18
G101	Silver Birch	MA	≤10	MS	≤6	≥1	≤2				F	F	Cluster of stems growing through brambles. Some die-back.	No action	10-20	C_2	CS	CS
102	Rowan	EM	21	1	10	10	2.5	3.5	1	0.5	G	G	None	Monitor.	10-20	B_1	2.52	20
103	Norway Maple	EM	36	1	12.5	12.5	1.5	5	5.5	2	G	F	Minor included bark in main fork at 2m. Monitor future fork development.	No action	20-40	B_1	4.32	59
104	Sycamore	EM	40	1	13	13	5.5	2	5	4	G	G	None	No action	>40	A_1	4.80	72
105	Sycamore	MA	26	1	12	12	0	0	3.5	3	G	G	Suppressed tree of irregular growth.	No action	20-40	C_1	3.12	31
106	Rowan	EM	25	1	8	8	3.5	1	4.5	4	G	G	None	No action	20-40	B_1	3.00	28
107	Silver Birch	Mat	31	1	10	10	1	4	4	2	G	G	None	No action	20-40	B_1	3.72	43
108	Norway Maple	EM	39	1	11	11	5	5	5	4	P	P	Major bark damage on stem. Associated decay.	Fell tree. Recommend that neighbour is consulted on felling	<10	R	4.68	69

Age class: *Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature* **Branch spread:** *N – north E - east S - south W – west* **Condition:** *G – good F – fair P – poor VP - very poor*

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
109	Rowan	MA	20 @base	MS	7	7	1	2.5	2	1	G	G	Multi-stemmed at base	No action	20-40	C_1	2.40	18
110	Sycamore	MA	31 @base	2	8.5	8.5	4	2.5	5	4.5	G	F	Twin-stemmed at base. Minor included bark in main fork. Monitor future fork development.	No action	20-40	C_1	3.72	43
111	Black Poplar	EM	35*	1	12.5	12.5	5	5	3	2	G	F	Growing at top of bank	No action	20-40	B_1	4.20	55
112	Black Poplar	MA	25*	1	11.5	11.5	0	0.5	4.5	2	G	F	Growing at top of bank. Suppressed tree with leaning stem.	No action	20-40	C_1	3.00	28
G113	Oval-leaved Privet	EM	NA	MS	2.5	0.5	≤2				G	G	Small patch of scrub	No action	20-40	C_2	CS	CS
114	Sycamore	MA	18	1	9.5	1.5	3	3	3	3	G	G	None	No action	>40	C_1	2.16	15
G115	Wild Cherry, Elder, Rose	Y/MA	NA	MS	1	0	≤3.5				G	F	Growing on steep bank above rock cutting	No action	20-40	C_2	CS	CS
116	Staghorn Sumach	MA	NA	MS	2.5	0	2	0.5	3	1.5	G	G	None	No action	20-40	C_1	CS	CS
G117	Blackthorn, Rose, Hawthorn, Elder	MA	NA	MS	2.5	0	≤2				G	F	Growing on steep bank above rock cutting	No action	20-40	C_2	CS	CS

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
118	Black Poplar	MA	35*	1	9	2	4	4	4	4	G	F	Growing off-site in garden above rock cutting. Limited visibility.	No action	20-40	B_1	4.20	55
119	Hawthorn	MA	15 @base	MS	3.5	0	1	2.5	2	2.5	G	F	Growing on steep bank above rock cutting	No action	20-40	C_1	1.80	10
G120	Cherry Laurel	EM	NA	MS	4-4.5	0	≤2				F	F	Growing on site boundary above rock cutting	No action	10-20	C_2	CS	CS
G121	Hawthorn, Elder	Mat	≤25	1/MS	6-10	0	≤4				G	F	Growing on rock cutting and slope below cutting	No action	20-40	C_2	CS	CS
G122	Leyland Cypress, Dwarf Mountain Pine	EM	≤25	1	9-11.5	0.5	≤2				G	F	Growing off-site in garden on site boundary above rock cutting. 11 no. cypress and 1 no. pine.	No action	20-40	C_2	CS	CS
123	Hawthorn	EM	20*	MS	4	0	0.5	2.5	1.5	2	F	F	Growing on rock cutting	Fell if site developed	10-20	C_1	2.40	18
G123 a	Dwarf Mountain Pine, Lawson Cypress, Leyland Cypress, Cherry Laurel	MA/EM	≤20*	1	3.5-7	0+	≤4				G	G	Growing on garden boundary at top of bank and cutting	No action	20-40	C_2	CS	CS

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
124	Swedish *Birch*	MA	11	1	6.5	2.5	1	2.5	0.5	2	F	G	Kinked stem	No action	10-20	C_1	1.32	5
125	Swedish Birch	MAT	23	1	10	2.5	3	3	2.5	2	F	G	Crown vigour slightly low	No action	10-20	C_1	2.76	24
H126	Hawthorn	MA	NA	MS	2.5	0	≤1.5				G	G	Untrimmed hedge growing on boundary at top of rock cutting.	No action	20-40	C_2	CS	CS
127	Silver Birch	MAT	38	1	12.5	1.8	2	2	3.5	3.5	G	G	Growing at base of rock cutting.	No action	20-40	B_1	4.56	65
128	False Acacia	EM	32+27	2	12.5	0	4.5	6.5	2	4.5	G	F	Growing at base of rock cutting. Twin-stemmed at base.	No action	20-40	B_1	5.02	79
129	Silver Birch	EM	24	1	10	4.5	3.5	2.5	2	2	G	G	Growing at base of rock cutting.	No action	20-40	B_1	2.88	26
130	Whitebeam	EM	26	1	8.5	1.5	4	4	1.5	1.5	G	G	Growing at base of rock cutting. Suppressed by adjacent birch tree	No action	20-40	B_1	3.12	31
131	Whitebeam	MAT	38	1	9	1.2	5.5	5.5	4	4	G	G	Growing at base of rock cutting.	No action	20-40	B_1	4.56	65
H132	Rose var., *Blackthorn*, Hawthorn	MAT	NA	MS	4-4.5	0	≤2				G	G	Line of untrimmed shrubs *forming a hedge*	No action	10-20	C_2	CS	20-40
H133	Leyland Cypress	MA	10-15	1	6.5-7.5	0+	≤2.5				G	G	Line of trees planted between boundary wall and fence. Forms a screen.	No action	20-40	C_2	CS	20-40

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diameter (cm)	Stem no.	Height (m)	Crown clearance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Remaining contribution (yrs)	Category grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physiological	Structural						
H134	Cherry Laurel, Elder, Purple Crab Apple	EM	NA	MS	5-6	0+	≤3				G	G	Line of untrimmed shrubs forming a hedge	No action	20-40	C_2	CS	20-40
135	Wild Cherry	MA	15+12 +10	MS	6.5	0.5	2.5	3.5	2.5	2.5	F	20-40	Dieback on all branch ends. Multi-stemmed at base.	No action	20-40	C_1	2.60	21
G136	Italian Alder	Y	≤10	1	5.5	0	≤2				G	G	5 no. stems in a small group	No action	20-40	C_2	CS	20-40
G137	Cherry Laurel, Broad-leaved Cockspur Thorn, Spotted Laurel, Viburnum	EM	NA	MS	5	0	≤3				G	G	Line of shrubs	No action	20-40	C_2	CS	20-40
138	Weeping Willow	MAT	63	1	12.5	0	0.5	6	8.5	6	G	F (prov.)	Stem leaning. Potential previous root plate movement, possibly now stabilised.	If retained, investigate to determine whether root plate movement has occurred.	20-40 (prov.)	B_1 (prov.)	7.56	180
139	Weeping Willow	MAT	63	1	12	0	3	4	4	9	G	G	Previously crown-lifted on highway side.	No action	20-40	B_1	7.56	180
140	Sweet Chestnut	MA	45	1	11	1	4	4	6.5	4	G	G	None	No action	20-40	A_1	5.40	92

Age class: Y - young MA - middle-age EM - early mature Mat - mature OM - over-mature **Branch spread:** N - north E - east S - south W - west **Condition:** G - good F - fair P - poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
141	Weeping Willow	EM	54	1	9.5	0	8	4.5	6	8	G	F	Previously pollarded at 2m. Regenerating canopy and no obvious decay.	No action	20-40	B_1	6.48	132
G142	Purple Cherry Plum, Japanese Cherry, Silver Birch, Elder, Cotoneaster, Pyracantha	MA/MAT	≤25*	MS	2-7.5	0+	≤4				G/P	G/VP	Ornamental shrubs and young natural regeneration. Includes dead and fallen Japanese cherry.	Remove fallen Japanese cherry. Carry out thinning and pruning of plot if retained.	20-40	C_2	CS	20-40
143	Leyland Cypress	MA	34	1	11.5	0	2	1.5	1	2	G	G	Stem ivy cover	No action	20-40	C_1	4.08	52
144	Silver Birch	MAT	34+32	2	12	2.5	3.5	1.5	2.5	2.5	G	F	2 stems growing close together. Dense ivy obstructing inspection of stem.	Cut ivy if retained	20-40	B_1	5.60	99
145	Ash	MA	32	1	12	3	5.5	4.5	3	1.5	G	G	Stem ivy cover. Irregular crown and kinked stem.	Cut ivy if retained	20-40	B_1	3.84	46
146	Silver Birch	EM	20*	1	12.5	6	1	2	2.5	2	F	F	Relatively low crown vigour, kinked stem and dense stem ivy.	Cut ivy if retained	20-40	C_1	2.40	18
147	Purple Norway Maple	MA	29	1	10	1.8	4	4.5	4.5	2	G	G	None	No action	>40	B_2	3.48	38
148	Silver Birch	Mat	36	1	14	1.5	3.5	4	4	3.5	G	G	None	No action	20-40	B_2	4.32	59

Age class: Y – young MA - middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
149	Silver Birch	EM	22	1	12	2	2	1.5	1.5	3	F	G	None	No action	10-20	C_1	2.64	22
150	False Acacia	EM	31	1	13	6	1	6	4.5	5	G	F	Leaning stem	No action	20-40	B_2	3.72	43
151	False Acacia	EM	27	1	10.5	1.5	1.5	1.5	6	4.5	G	F	Large stub where branch removed. Poor form	No action	10-20	C_1	3.24	33
152	Italian Alder	EM	41	1	16	1	3	5.5	2.5	1	G	F	Leaning stem. Tree previously topped at 10m. Crown regrown.	No action	10-20	C_1	4.92	76
153	Apple	MA	18	1	6.5	1.8	3	2	1	2	G	G	None	No action	20-40	C_1	2.16	15
154	Elder	EM	20*	MS	5.5	0.5	2	3	2.5	0.5	G	G	None	No action	20-40	C_1	2.40	18
155	Silver Birch	EM	26	1	11	2	2	3.5	2	3	F	G	Crown density slightly low	No action	10-20	C_1	3.12	31
156	Silver Birch	MA	17	1	10	2	2.5	2.5	1	1.5	G	G	None	No action	20-40	C_1	2.04	13
157	Scots Pine	MA	20	1	10	2.5	1.5	2	1.5	1.5	G	G	None	No action	>40	B_2	2.40	18
158	Japanese Cherry	EM	25	1	8	0.5	4	4.5	3	3.5	G	G	None	No action	10-20	C_1	3.00	28
159	Silver Birch	EM	25	1	10.5	5	1	4	3.5	5	G	G	None	No action	>40	B_2	3.00	28
160	Rowan	EM	24	1	8.5	1	2	4	3.5	3.5	G	G	None	No action	20-40	B_2	2.88	26

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
161	Silver Birch	EM	25	1	10.5	2	3	3.5	2	3	G	G	None	No action	20-40	B_2	3.00	28
G162	Sycamore	MA	≤12	1/MS	10	0	≤3.5				G	F	Cluster of self-set stems close to footpath edge	Fell trees	<10	R	CS	CS
163	Silver Birch	Mat	29	1	13.5	1.2	4	4	2.5	2	G	G	None	No action	20-40	B_1	3.48	38
G164	Sycamore	MA	≤12	1/MS	9	0	≤3.5				G	F	Cluster of self-set stems close to footpath edge	Fell trees	<10	R	CS	CS
165	Silver Birch	Mat	39	1	12.5	1.5	2.5	4	4.5	5	F	G	Crown density slightly low	No action	10-20	C_1	4.68	69
166	Wild Cherry	Mat	46	1	10	1.2	5.5	4	6	5.5	G	G	Located close to low retaining wall	No action	20-40	B_1	5.52	96
167	False Acacia	Mat	26	1	5	2	2.5	2.5	2.5	2.5	P	VP	Dead tree	Fell tree	0	R	3.12	31
168	Whitebeam	EM	35 @base	MS	10	0.5	5	5	2.5	2.5	G	G	Multi-stemmed at base.	No action	20-40	B_1	4.20	55
169	Scots Pine	Y	13	1	5	2.2	0	0	1	1.5	G	F	Suppressed but form will improve as tree grows	No action	>40	C_1	1.56	8
170	Whitebeam	EM	36	1	10	0.5	6.5	6	4	2.5	G	F	Strongly leaning stem.	No action	20-40	B_1	4.32	59
171	Silver Maple	EM	54	1	13	1.2	6	5	6.5	5	G	G	None	No action	20-40	B_1	6.48	132

Age class: Y - young MA - middle-age EM - early mature Mat - mature OM - over-mature **Branch spread:** N - north E - east S - south W - west **Condition:** G - good F - fair P - poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
172	Silver Birch	Mat	35	1	12	1	4.5	2.5	4.5	4	G	G	None	No action	20-40	B_1	4.20	55
173	False Acacia	EM	28 @base	1	13	0	2	3.5	2.5	2.5	G	F	Irregular form with leaning stem.	No action	20-40	C_1	3.36	35
174	Scots Pine	MA	26	1	12	1.8	1	2	2	3.5	G	G	None	No action	>40	B_1	3.12	31
175	Silver Birch	Mat	27	1	12	0.5	2	3	2.5	1.5	G	G	None	No action	20-40	B_1	3.24	33
176	Silver Birch	MA	14	1	8	1	2.5	1.5	2.5	1.5	G	F	Kinked stem. Tree of poor form.	No action	20-40	C_1	1.68	9
177	Sweet Chestnut	MA	32	1	9.5	1.6	3	5	3	2	G	G	None	No action	>40	B_1	3.84	46
178	False Acacia	EM	39	1	11	0.5	2.5	7	5	4	G	G	Minor dead wood	No action	20-40	B_1	4.68	69
179	Silver Birch	MA	28	1	12.5	2.5	1	3	3	3	G	G	None	No action	20-40	B_1	3.36	35
180	Silver Birch	EM	23	1	6	0	2	2.5	3.5	3	G	G	None	No action	20-40	C_1	2.76	24
181	Italian Alder	Mat	61	1	15	1	6.5	5.5	6.5	5	G	G	Stem ivy cover	No action	20-40	B_1	7.32	168
G182	Italian Alder	Y	≤10	1/MS	5-6.5	0	≤2.5				G	G	4 no. trees	No action	>40	C_2	CS	CS

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No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
G183	Italian Alder	Y	≤8	1/MS	5-6	0	≤2				G	G	2 no. trees	No action	>40	C_2	CS	CS
G184	Wild Cherry	Y/MA	≤15	1/MS	2-6	≥0	≤2				G	G	Cluster of suckers from mature trees located off-site.	Thin if retained	>40	C_2	CS	CS
185	Goat Willow	EM	37 @base	MS	7	0.5	4	4	4	4	G	G	Multi-stemmed at 0.5m	No action	20-40	C_1	4.44	62
186	Sessile Oak	MA	17	1	6	0.5	3.5	2.5	3	3.5	G	G	None	No action	>40	B_1	2.04	13
187	Rowan	MA	20 @base	MS	5	0.5	2.5	3	2	0.5	G	G	Multi-stemmed at base	No action	>40	C_1	2.40	18
188	Rowan	MA	20 @base	MS	5.5	0.5	2.5	3	2	2	G	G	None	No action	>40	C_1	2.40	18
189	Sycamore	MA	22	1	6.5	0.5	3	3.5	3	3.5	G	G	None	No action	>40	B_1	2.64	22
190	Sycamore	MA	24 @base	1	6	1	2	2	3	3	F	G	Multi-stemmed at 1.2m. Low crown vigour and some crown dieback	No action	20-40	C_1	2.88	26
191	Sycamore	MA	22 @base	1	6.5	0.5	1	2	3	2	F	F	Twin-stemmed at 1.2m	Formative pruning if retained. Prune to retain single stem at 1.2m.	20-40	C_1	2.64	22
192	Sessile Oak	MA	16	1	7	2	3	1	0	1	G	G	None	No action	>40	C_1	1.92	12

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No.	Species	Age class	Stem diameter (cm)	Stem no.	Height (m)	Crown clearance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Remaining contribution (yrs)	Category grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physiological	Structural						
193	Norway Maple	MA	26	1	8	0.5	2	4.5	3.5	2.5	G	G	None	No action	>40	B_1	3.12	31
G194	Crack Willow	EM	≤30	MS	10-11	≥0	≤8				G	F	Cluster of stems growing on bank	Consider coppicing if retained close to development	20-40	B_2	CS	CS
195	Sycamore	MA	12	1	8	1	2.5	2	2	2	G	G	None	No action	>40	C_1	1.44	7
196	Hawthorn	EM	30 @base	MS	7	0	4	4	4	4	G	G	Multi-stemmed at base	No action	>40	C_1	2.40	18
197	Goat Willow	EM	30* @base	MS	9	1.5	4.5	6	4	6	G	G	Multi-stemmed at base	No action	20-40	C_1	3.60	41
198	Crack Willow	EM	36 @base	MS	10.5	0	6.5	4	4	3.5	G	F	Multi-stemmed at 0.5m	No action	20-40	C_1	4.32	59
G199	Hawthorn	MA	≤10	MS	6.5	0	≤2				G	G	Cluster of stems	No action	>40	C_2	CS	CS
200	Hawthorn	MA	18 @base	MS	5.5	0.5	2.5	2.5	1.5	2.5	G	G	Multi-stemmed at base	No action	20-40	C_1	2.16	15
201	Swedish Whitebeam	MA	10	1	3.5	0.5	1	1.5	1.5	1	G	G	None	No action	20-40	C_1	1.20	5
G202	Elder	Mat	NA	MS	4.5	0	≤3				F	G	Small patch of scrub	No action	10-20	C_2	CS	CS

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
203	Elder	Mat	9	1	3.5	1.8	1.5	2	1.5	2	F	G	None	No action	10-20	C_1	1.08	4
204	Hawthorn	EM	20 @base	MS	5	0	2.5	2.5	2.5	2.5	G	G	Growing on bank above rock cutting	No action	20-40	C_1	2.40	18
G205	Sycamore, Hawthorn, Rose	MA	≤11	MS	3-7.5	0	≤2.5				G/F	G	Small patch of scrub on bank	No action	20-40	C_2	CS	CS
205a	Sycamore	Y	13 @base	MS	8	0	2	0.5	2	2	G	G	None	No action	20-40	C_1	1.56	8
206	Goat Willow	EM	25 @base	MS	6.5	0	3	1	3	3.5	G	G	Multi-stemmed at base	No action	20-40	C_1	3.00	28
207	Hawthorn	MA	20 @base	MS	4	0	2	2	2	1	G	G	Growing on bank above rock cutting	No action	20-40	C_1	2.40	18
208	Elder	EM	15 @base	MS	3	0	1.5	1.5	1.5	1.5	G	G	Multi-stemmed at base	No action	20-40	C_1	1.80	10
208a	White Willow	EM	54	1	12	0.5	6.5	6	1	3.5	F	F	Dieback in part of upper crown. Previously twin-stemmed. Large wound at 1.4m from branch removal.	No action	10-20	C_1	6.48	132
209	Silver Birch	EM	17	1	9	1.2	1.5	5.5	2	0.5	G	F	Suppressed by 208. Irregular crown and poor form.	No action	10-20	C_1	2.04	13
210	Silver Birch	EM	18	1	7	1	1.5	4.5	1.5	0.5	G	F	Suppressed by 208. Irregular crown and poor form.	No action	10-20	C_1	2.16	15

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No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
G211	Hawthorn, Elder	Mat	NA	MS	4-7	≥0	≤4				G	G	Small patch of scrub	No action	20-40	C_2	CS	CS
G212	Silver Birch, Buddleia	Y/MA	≤8	1/MS	2-6.5	≥0	≤2.5				G	G	Line of trees and scrub along boundary. Trees/shrubs adjacent to house have been previously coppiced.	No action	>40	C_2	CS	CS
213	Silver Birch	Y	6	1	6	0.5	2	2	2.5	1	G	G	None	No action	>40	C_2	0.72	2
214	Sycamore	MA	31	1	9	3	4.5	4.5	4	3	P	P	Major stem bark wound from base to 1.5m. Half of the tree's circumference exposed.	Fell tree	<10	R	3.72	43
215	Sycamore	Y	9	1	5	1.4	2	2	2	2	G	G	None	Crown-lift 2m adjacent to path	>40	C_1	1.08	4
216	Black Poplar	EM	49 @base	3	10.5	2.5	3	6	5	3.5	G	F	Multi-stemmed at base	No action	20-40	B_2	5.88	109
217	Black Poplar	EM	63 @base	4	11.5	4	5	5	5	2.5	G	F	Multi-stemmed at base. Main fork with moderate included bark. Monitor future fork development. Bird box present	No action	20-40	B_2	7.56	180
218	Black Poplar	EM	30+27 +18+1 3	4	11	4	4	2.5	5	3.5	G	F	Multi-stemmed at base	No action	20-40	B_2	5.53	96

Age class: Y - young MA - middle-age EM - early mature Mat - mature OM - over-mature **Branch spread:** N - north E - east S - south W - west **Condition:** G - good F - fair P - poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
219	Black Poplar	EM	46 @base	3	10.5	3	4.5	5.5	3	1.5	G	F	Multi-stemmed at base. Main fork with moderate included bark. Monitor future fork development.	No action	20-40	B_2	5.52	96
220	Black Poplar	EM	23+20 +18	3	11.5	4	4	2	4	3	G	F	Multi-stemmed at base. Bird box present.	No action	20-40	B_2	4.25	57
221	Black Poplar	EM	42	1	10.5	3	4.5	4	3	1.5	G	F	Twin-stemmed at 1.6m	No action	20-40	B_2	5.04	80
222	Black Poplar	EM	41 @base	2	11.5	5	4	4	1.5	1.5	G	F	Twin-stemmed at 1m. Large wound at 1m from stem removal. Slow wound occlusion.	No action	20-40	B_2	4.92	76
223	Black Poplar	EM	38	1	11	3.5	5.5	3	6	0.5	F	F	Twin-stemmed at 1.5m. Suppressed by adjacent trees leading to irregular form. Dieback of fine branches in crown. Large pruning wound at 1.5m.	No action	10-20	C_2	4.56	65
224	Black Poplar	EM	37 @base	2	11	4	5.5	3	6	0.5	F	F	Twin-stemmed at 1.3m. Irregular swept form. Large bark wound at stem base and bark wound on stem at 1.4m.	No action	10-20	C_2	4.44	62
225	Black Poplar	EM	53	1	9	4	8	7	6	0.5	F	F	Twin-stemmed at 2m. Large wound at main fork from branch removal. Moderate included bark on main fork. Monitor future fork development.	No action	10-20	C_2	6.36	127

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
226	Black Poplar	EM	44	1	12.5	6	5	6	6	0.5	F	F	Suppressed by adjacent trees leading to irregular form. Large pruning wound on stem.	No action	10-20	C_2	5.28	88
227	Black Poplar	EM	54 @base	1	12.5	3	6	3	6	2	F	VP	Weak forks with severe included bark on main forks at 1.2m and 2m. Movement in crack. Tree at risk of immediate collapse.	Fell tree as soon as possible	0	R	6.48	132
228	Black Poplar	EM	54	1	11.5	3	8.5	4	1	0.5	F	VP	large cavity at stem base. t/R ratio <0.3. Tree at risk of immediate collapse.	Fell tree as soon as possible	0	R	6.48	132
229	Black Poplar	EM	54	1	13	3	3.5	6	6	0.5	F	VP	Twin-stemmed at 1.8m. Weak main fork with severe included bark. Large crack down to 1m. Previous collapse. Tree at risk of collapse.	Fell tree as soon as possible	0	R	6.48	132
230	Black Poplar	EM	38	1	13	5	5.5	6	6	0.5	F	P	Previously multi-stemmed at 1m. 3 stems removed creating very large wounds. Significant decay will establish.	Fell tree	<10	R	4.56	65
231	Black Poplar	EM	52	1	13.5	3	7	5	6	1.5	F	F	Multi-stemmed at 1.2m. Bird box present.	Re-attach bird box	20-40	B_2	6.24	122

Age class: Y - young MA - middle-age EM - early mature Mat - mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
232	Black Poplar	EM	37	1	12.5	5	8.5	1.5	1	0.5	F	P	Previously twin-stemmed at 2m, branch removed leading to large wound. Remaining branch has moderate included bark. Irregular poor form	Fell tree	<10	R	4.44	62
233	Black Poplar	EM	46	1	12	3	0.5	0.5	6	0.5	F	F	Previously twin-stemmed at 2m. Branch removed leading to large wound. Remaining branch has moderate included bark.	No action	10-20	C_2	5.52	96
234	Black Poplar	EM	44	1	9	3	5	8	2	0.5	P	P	Twin-stemmed at 2m. Weak main fork with significant included bark. Risk of collapse. Large bark wound at 1.5m.	Fell tree	<10	R	5.28	88
235	Black Poplar	EM	44	1	10	5	8	10	0.5	0.5	F	P	Multi-stemmed at 1.8m. Weak main fork with multiple attachment of 3 stem and significant included bark. Risk of collapse.	Fell tree	<10	R	5.28	88
236	Black Poplar	EM	41	1	10	4	7	6	2	0.5	F	F	Leaning stem	No action	20-40	C_2	4.92	76
237	Black Poplar	EM	40	1	10	6	8	6	0.5	0.5	F	F	Twin-stemmed at 1.7m. Branch tear-out wound in upper crown	Cut branch below tear-out wound if retained.	20-40	C_2	4.80	72
238	Black Poplar	EM	47	1	12	3	6	8	0.5	0.5	F	F	Leaning stem and irregular form	No action	10-20	C_2	5.64	100

Age class: *Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature* ***Branch spread:*** *N – north E - east S - south W – west* ***Condition:*** *G – good F – fair P – poor VP - very poor*

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
239	Black Poplar	EM	43	1	10.5	2.5	6	8	1.5	0.5	F	VP	large break-out wound at 1.5m. Very weak main fork at 1.7m with significant included bark and open crack. Risk of immediate collapse.	Fell tree as soon as possible	0	R	5.16	84
240	Black Poplar	EM	52	1	11	4	6.5	7	0.5	0.5	F	P	Significant decay at stem base associated with previous tear-out wound.	Fell tree	0	R	6.24	122
241	Black Poplar	EM	47	2	11	2.5	6	7	0.5	1.5	G	F	Twin-stemmed at 1.4m	No action	20-40	B_2	5.64	100
242	Black Poplar	EM	18	1	8	2	1	3	4	1	F	P	Previously multi-stemmed at 1.2m. Large wound from previous stem removal. Tree of poor form.	Fell tree	<10	R	2.16	15
243	Black Poplar	EM	54	1	13	6	6	6	1	2	F	P	Large recent break-out wound on stem at 2m. Significant decay with establish.	Fell tree	<10	R	6.48	132
244	Black Poplar	EM	65 @base	1	14	3	6	8	8	5	G	F	Multi-stemmed at 1.6m	No action	20-40	B_2	7.80	191
245	Japanese Cherry	EM	31 @base	1	7.5	2.5	3.5	3.5	3.5	5	G	G	Twin-stemmed at 1.5m	No action	10-20	C_2	3.72	43
246	Japanese Cherry	EM	31 @base	2	7	3	3.5	4.5	2	3.5	G	F	Twin-stemmed at 1.2m	No action	10-20	C_2	3.72	43
247	Sycamore	MA	28	1	12.5	2	5	5	2	5	G	G	Bird box present	No action	>40	B_1	3.36	35

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N - north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
248	Japanese Cherry	EM	23	1	6	2	3	4	3.5	3.5	G	F	Suppressed by adjacent trees. Small bark wound.	No action	10-20	C_2	2.76	24
249	Japanese Cherry	EM	25	1	7	2	5	5	3.5	3.5	G	F	Large wound from branch removal at 0.5m	No action	10-20	C_2	3.00	28
250	Scots Pine	MA	20*	1	8	1.2	2.5	2.5	2.5	2.5	G	G	Off-site garden tree	No action	>40	B_1	2.40	18
H251	Oval-leaved Privet, Hawthorn	NA	NA	MS	2.5	0	≤1				G	G	Short section of garden boundary hedge	No action	20-40	C_2	CS	CS
H252	Leyland Cypress	MA	≤20	1/MS	11	1.5	≤2				G	G	Row of off-site trees on garden boundary.	No action	20-40	C_2	CS	CS
H253	Lawsons Cypress	MA	≤35	1/MS	8-14	1	≤2				G	G	Row of off-site trees on garden boundary.	No action	20-40	C_2	CS	CS
G254	Italian Alder	MA	10-18	1	10-11	1.5	≤3				G	G	Line of off-site trees planted close to boundary. 16 no. stems.	No action	>40	C_2	CS	CS
H255	Oval-leaved Privet	NA	NA	MS	2	0	≤1				G	G	Trimmed garden boundary hedge	No action	20-40	C_2	CS	CS
256	Elder	EM	20 @base	MS	4	2	2	2	2	2	G	G	None	No action	20-40	C_1	2.40	18

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

No.	Species	Age class	Stem diam-eter (cm)	Stem no.	Height (m)	Crown clear-ance height (m)	Branch spread (m)				Condition		Comments	Preliminary management recommendations	Rema-ining contri-bution (yrs)	Categ-ory grade	RPA radius (m)	RPA area (m^2)
							N	E	S	W	Physi-olog-ical	Struc-tural						
G257	Cherry Laurel, Pyracantha	EM	NA	MS	3-4	≥0	≤3				G	G	Mixed shrubs growing off-site	No action	20-40	C_2	CS	CS
258	Goat Willow	Mat	28-30	2	8	1.8	4.5	4.5	5.5	4.5	G	F	Twin-stemmed at base	No action	10-20	C_1	4.92	76
259	Midland Hawthorn	Mat	31	1	8.5	1.8	3	3	3	3	G	F	Street tree growing in wide highway verge. Large wound from branch removal at 1.5m.	No action	20-40	B_1	3.72	43

Age class: Y – young MA – middle-age EM - early mature Mat – mature OM - over-mature **Branch spread:** N – north E - east S - south W – west **Condition:** G – good F – fair P – poor VP - very poor

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APPENDIX B – SPECIES LIST AND POTENTIAL TREE HEIGHT

Appendix B – Species List and Potential Tree Height

Species	Common name	Potential mature tree height (m)		
		Estimated for site*	UK (NHBC, 2006)**	UK (More & White, 2003)***
Acer campestre	Field maple	12		14
Acer platanoides	Norway maple	20	18	25
Acer pseudoplatanus	Sycamore	24	22	35
Acer saccharinum	Silver Maple	20		30
Alnus cordata	Italian alder	20	18	30
Alnus glutinosa	Alder	18	18	25
Aucuba japonica	Spotted Laurel	5		
Betula pendula	Silver birch	16	14	25
Betula pubescens	Downy Birch	14	14	20
Carpinus betulus	Hornbeam	18	17	20
Castanea sativa	Sweet Chestnut	20	24	30
X Cupressocyparis leylandii	Leyland cypress	25	20	40
Chamaecyparis lawsoniana	Lawson cypress	25	18	40
Corylus avellana	Hazel	12	8	15
Cotoneaster sp.	Cotoneaster	8		8
Crataegus monogyna	Hawthorn	12	10	15
Crataegus laevigata	Midland Hawthorn	10		12
Crataegus prunifolia	Broad-leaved Cockspur Thorn	6		6
Fraxinus excelsior	Ash	24	23	30
Ilex aquifolium	Holly	14	12	15
Laburnum anagyroides	Common laburnum	8	12	9
Ligustrum ovalifolium	Oval-leaved Privet	5		
Malus domestica	Apple	10	10	10
Malus x purpurea	Purple Crab Apple	7		7
Pinus mugo	Dwarf Mountain Pine	6		4
Pinus sylvestris	Scots Pine	20	20	36
Platanus x hispanica	London Plane	26	26	35
Populus nigra	Black Poplar	25	25	25
Prunus avium	Wild cherry	18	17	25
Prunus cerasifera 'Pissardii'	Purple Cherry Plum	10		10
Prunus laurocerasus	Cherry laurel	6	8	6
Prunus serrulata	Japanese Cherry	12	9	14
Prunus spinosa	Blackthorn	7	8	7
Quercus petraea	Sessile oak	24		30
Quercus rubra	Red Oak	24	24	25

Species	Common name	Potential mature tree height (m)		
		Estimated for site*	UK (NHBC, 2006)**	UK (More & White, 2003)***
Rhus typhina	Stag's-horn Sumach	4		4
Robinia pseudoacacia	False acacia	18	18	25
Rosa canina	Dog rose	6		
Salix alba	White Willow	22	24	25
Salix caprea	Goat willow	10		10
Salix cinerea	Grey Willow	7		7
Salix fragilis	Crack willow	22	24	25
Salix sepulcralis 'Chrysocoma'	Weeping willow	16	16	20
Sambucus nigra	Elder	6		
Sorbus aria	Whitebeam	12	12	15
Sorbus aucuparia	Rowan	12	11	15
Sorbus intermedia	Swedish whitebeam	12		15
Tilia x europaea	Common lime	26	22	40
Ulmus glabra	Wych elm	18	18	30
Viburnum rhytidophyllum	Leather-leaf Viburnum	5		

* - Maximum height of trees and shrubs growing under similar conditions in the local area. Estimate takes account of site exposure and ground conditions.
** - Average height attained by healthy trees growing in favourable ground and environmental conditions.
** - *Height generally attained by healthy open-grown trees growing in their appropriate conditions and climatic* range.

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APPENDIX C – TREE QUALITY AND VALUE CATEGORIES

Appendix C - Tree Quality and Value Categories

(from BS5837:2005, Table 1 – 'Cascade chart for tree quality assessment')

TREES FOR REMOVAL		
Category and definition	***Criteria***	***Plan colour***
Category R Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.	• Trees that have a serious, irreversible, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other R category tree (ie: where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees (eg: Dutch elm disease) or very low quality trees suppressing adjacent trees if better quality • NB: Habitat reinstatement may be appropriate (eg: R category tree used as a bat roost: installation of bat box in nearby tree).	Dark red

TREES TO BE CONSIDERED FOR RETENTION				
Category and definition	***Criteria - Subcategories***			***Plan colour***
	1. Mainly arboricultural values	**2. Mainly landscape values**	**3. Mainly cultural values, including conservation**	
Category A Those of high quality and value: in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (eg: the dominant and/or principal trees within an avenue).	*Trees, groups or* woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (eg: avenues or other arboricultural features assessed as groups).	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (eg: veteran trees or wood-pasture).	Light green
Category B Those of moderate quality and value: in such a condition as to make a significant contribution (a minimum of 20 years is suggested).	Trees that might be included in the high category, but are downgraded because of impaired condition (eg: presence of remedial defects including unsympathetic past management and minor storm damage).	Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboricultural features (eg: trees of moderate quality within an avenue that include better, A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality.	Trees with clearly identifiable conservation or other cultural benefits.	Mid blue
Category C Those of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm.	Trees not qualifying in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit.	Trees with very limited conservation or other cultural benefits.	Grey
	NB: Whilst C Category trees will usually not be retained where they impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation.			

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APPENDIX D – SITE BOUNDARY PLAN

(Barnsley Holgate and Kingston Site Area Plan)

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APPENDIX E – TREE CONSTRAINTS PLAN

(Greengage drawing no.s 011/07/1-5)