



Gaywood Parkway

Arboricultural Report

13 September 2019

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Gaywood Parkway

Arboricultural Report

13 September 2019

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Executive summary

Mott MacDonald has been commissioned by Lovells to undertake an arboricultural survey to support the proposed development of Gaywood Parkway. The development includes a proposed housing development to the immediate south of Parkway, in Gaywood, King's Lynn. It includes a spine road from the Parkway in the north through the areas of housing and the existing site to the south of the railway line, where it will join the existing road network. The road will include a bridge over the railway line at the eastern end of the development. Housing is proposed in two main areas within the site, which will be accessed from the spine road. The two areas are separated by an existing school, with the spine road passing to the south and by existing community recreational facilities including a park, play area, skate park and areas of grassland.

The survey and associated report have been undertaken in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations*, which is intended to assist decision making with regard to the existing trees in the context of proposed development.

This survey is not, nor should be taken to be, a full or thorough assessment of the health and safety of trees on or adjacent to the site. Therefore, it is recommended that detailed tree inspections are undertaken on a regular basis with the express purpose of complying with the land owner's duty of care and satisfying health and safety requirements.

There were 168 trees, 25 tree groups, 1 woodland and 1 hedgerow surveyed in relation to this proposed Scheme.

The following tree retention categories were assigned to the trees surveyed:

- Category A i.e. trees of high quality, 72 trees, 5 tree groups and 1 woodland;
- Category B i.e. trees of moderate quality, 83 trees and 4 tree groups;
- Category C i.e. trees of low quality, 13 trees, 17 tree groups and 1 hedgerow;
- Category U i.e. trees to be removed for arboricultural reasons, 0 trees

A study of Kings Lynn and West Norfolk (KL & WN) Borough Council's online maps has confirmed that the survey area for this Scheme has no Tree Preservation Orders (TPOs) within it, nor is it affected by Conservation Area (CA) status.

As part of the final design process for this Scheme an Arboricultural Impact Assessment (AIA) and an Arboricultural Method Statement (AMS) will be required. It is recommended that during this process the design team liaise closely with the Scheme arboriculturalist, local residents and stakeholders in order to maximise tree retention.

The importance of maintaining the Swaffham Belt and the corridor of trees leading to the Gaywood Plantation and the trees within the Gaywood Plantation itself, should be highlighted to designers. As should the linear belt of mature oak trees in G12 that connects to the Swaffham Belt. These groups contain an abundance of trees of significant form and age and collectively serve as an excellent example of green infrastructure.

The presence of Trees 61, 62 and 64 located within the western field within the Scheme boundary, should also be highlighted to designers. These trees are estimated to be around 150 years old,

add significant arboricultural and landscape value to the site, and must be prioritised for retention as part of the proposed development for this site.

The site also contains the Gaywood Plantation and The Rookery, consisting of a small woodland next to a residential area. These areas include large mature and over mature oaks with hazel coppice and two ponds in the north western corner. The scheme should remain 15m from this woodland.

1 Introduction

1.1 Scheme Background

- 1.1.1 Mott MacDonald has been commissioned by Lovells to undertake an arboricultural survey to support the proposed Gaywood Parkway housing development.

1.2 Purpose of Arboricultural Report

- 1.2.1 This report records the physical attributes of the trees on site and categorises the trees with a retention value. This information must be used during the design process to achieve a harmonious and sustainable relationship between the trees and any potential redevelopment on site. A considered approach to tree retention and protection has the potential to add significant value to the Scheme.

1.3 Tree Assessment Methodology

- 1.3.1 The tree survey was carried out by a qualified Mott MacDonald arboriculturalist on 6th, 7th and 8th August 2019 to assess the quality and value of the principal trees within or adjacent to the Scheme footprint. A follow up survey was carried out on the 4th and 5th September to address a new area added to the scope following the initial survey.
- 1.3.2 The survey was undertaken in accordance with the guidelines set out in *BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations*.
- 1.3.3 The tree data contained within the Tree Survey Schedule (Appendix C) was recorded by visual survey from ground level and no invasive tree inspection measures were employed.
- 1.3.4 The full tree survey schedule and categorisation of the trees in their existing context is stated in Appendix C (to be read in conjunction with the *Key to Tree Survey Schedule*, Appendix B).
- 1.3.5 The RPA calculations are provided in Appendix C.
- 1.3.6 In accordance with BS 5837:2012, the following information was recorded for each tree:
- Sequential reference number (to be recorded on the tree constraints plan);
 - Species listed by common name, with key provided to scientific name;
 - Height (metres);
 - Life stage recorded as:

Table 1.1 Life Stage Categories

Abbreviation	Life Stage	Description
Y	Young	Trees aged less than 1st quarter of their life expectancy
SM	Semi Mature	Trees within 2nd quarter of their life expectancy
EM	Early mature	Trees within 3rd quarter of their life expectancy
M	Mature	Trees aged within final quarter of their life expectancy
OM	Over Mature	Over-mature - declining or moribund trees of low vigour
V	Veteran	Specimens exhibiting features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned

- Crown spread (metres), taken as a minimum at the four cardinal points, to derive an accurate representation of the crown (plotted on the tree constraints plans);
- Existing height (metres) above ground level of:
 - First significant branch; and,
 - Canopy.
- Stem diameter (millimetres) in accordance with Annex C of BS 5837:2012. The stem diameters of single stemmed trees were measured at 1.5 metres above ground level and multi-stemmed trees measured in accordance with Annex C;
- The RPA calculated in accordance with Section 4.6 of BS 5837:2012. The two measurements provided are a 'Root Protection Radius (m)' (circle centred on the base of the stem) and an overall 'root protection area (m²)';
- General observations, particularly of structural and/or physiological condition (e.g. the presence of any decay and physical defect), and/or preliminary management recommendations;
- Estimated remaining contribution, in years (<10, 10+, 20+, 40+);
- Retention category recorded as A, B, C or U in accordance with BS 5837:2012 (see Table 1.2 below) to be recorded on the tree survey plan (Appendix A). This gives an indication as to each tree's arboricultural, landscape and cultural value and significance as well as its suitability for retention in the context of the proposed redevelopment of the site. The sub-categories [1 - Arboricultural values; 2 - Landscape values and 3 - Cultural values, including conservation] are included where considered necessary to clarify why a tree has been assigned to a retention category. These categorisation criteria are summarised below:

Table 1.2: Retention Categories

Category	Description
Category A	Trees of high quality and value whose retention is most desirable (suggested minimum contribution 40 years)
Category B	Trees of moderate quality and value whose retention is desirable if practicable (suggested minimum contribution 20 years)
Category C	Trees of low quality and value or limited long-term potential, which could be retained if not in conflict with development proposals or young trees with a stem diameter of less than 150mm (suggested minimum contribution 10 years)
Category U	Trees requiring removal irrespective of any development proposals due to significant structural defects, irreversible decline or with a very short-term life expectancy of less than 10 years

1.4 Limitations of Survey

- 1.4.1 A red line boundary was not available at the time of this survey therefore the assessment focused on the trees identified on the topographical layer provided for the Scheme - refer to the Tree Constraints Plans referenced 407004-MMD-00-00-DR-EN-0001 to 04 (Appendix A).
- 1.4.2 This report provides comment on the general quality of the trees on site but is not, nor should be taken to be, a full or thorough assessment of the health and safety of trees on or adjacent to the site. It is recommended that a full tree survey should be undertaken on a regular basis to satisfy health and safety requirements.
- 1.4.3 Previous management and/or surveys in relation to the health and safety of trees on this site have not been considered as part of this report.

- 1.4.4 Distances were recorded using a standard metric tape measure where appropriate and stem diameter was recorded using a diameter tape. Tree height was estimated to the nearest metre.
- 1.4.5 Some trees were missing from the topographical survey supplied. As such the position of these trees was plotted by hand whilst on site using a handheld tablet with GPS. A note of which trees which were hand plotted is included in the comments of the Tree Survey Schedule (See Appendix C). Although their positioning should be reasonably accurate the locations of these trees cannot be guaranteed to within less than 3m.

2 Tree Summary

2.1 Summary of existing tree coverage

- 2.1.1 The Scheme is bordered in the north by Parkway Road and a residential area, to the north east by the Gaywood Plantation and to the east by further residential area. The southern extent is bordered by a tree lined public footpath named the Swaffham Belt, with a railway line further south, retail development in the south east and further residential area in the south west. There are two schools that also abut the site boundary; the Kings Lynn Academy to the west and the Howard Junior School, which is centrally located and splits the Scheme into two large rectangular areas of tree lined open grassland adjoined to the south by the Swaffham Belt. In general, the site has very good tree coverage and the current tree stock adds significant arboricultural value and landscape character to the site.
- 2.1.2 The site boundary extends to the south east, south of the railway line and into an agricultural field containing sporadic groups of young to semi mature self-seeded trees that are easily replicable with mitigation planting if necessary.
- 2.1.3 The majority of trees on site are early mature to mature and as most trees on site have been open grown within a generous amount of space, they have achieved large sizes and have become a significant presence in the landscape. These trees have the greatest visual amenity value and lend the site its distinct character. There are also a smaller number of young to semi mature amenity trees in patches across the Scheme, which as individual trees would be of lower arboricultural and landscape value, when considered collectively also have a significant presence within the landscape.
- 2.1.4 The trees add a number of major benefits to the site. Firstly, enclosing the regularly frequented public footpath along the Swaffham Belt and the Rookery, serving as an excellent example of green infrastructure and making up a significant section of the Fairsted/Gaywood Coast Alive recommended long-distance trail (Norfolk Country Council 2010), a recreational circuit that runs through Kings Lynn and is regularly used by members of the public.
- 2.1.5 Similarly, the trees provide a significant screen of the railway, retail and residential development to the south from The Kings Lynn Academy and Howard Junior School, as well as from the Parkway Skate park, playground and the open fields to the west, all of which are used for recreation by the general public. The trees on site also offer screening functions to the north, from the Parkway Road and residential development.
- 2.1.6 Additionally, the playground and skate park are bordered to the west by a unique track weaving through a linear strip of approximately 75 common oak trees which on the whole are of significant form, size and age, offering the users of the park, largely younger people, an exceptional chance to connect to nature and integrate with some excellent examples of a species that has been central to English history and culture for centuries.
- 2.1.7 The Scheme also contains the Gaywood Plantation and The Rookery, consisting of a small woodland next to a residential area. These areas include large mature and over mature oaks with hazel coppice and two ponds in the north western corner. There is a main ride running east – west through the wood and many other paths that cross it. It is well used by dog walkers and young people for access to the nearby houses and provides an opportunity for escapism for the residents to experience woodland, of which is ever shrinking with the development pressures in the modern day. The scheme should remain 15m from this woodland.

- 2.1.8 The sites position on the border of the Gaywood Plantation and the Rookery is a major asset and the open grass areas and associated trees add significant value to the site by making it feel like an extension of the woodland, rather than a separate recreational area. Furthermore, the trees along Swaffham Belt and the Rookery provide a corridor connecting the Gaywood Plantation and the Rookery to the trees in the Kings Lynn conservation area to the west of the site.
- 2.1.9 The dominant tree species surveyed on site were common oaks (*Quercus robur*), with occasional turkey oak (*Quercus cerris*), sycamore (*Acer pseudoplatanus*), European beech (*Fagus sylvatica*), common ash (*Fraxinus excelsior*), and an understory of primarily common hawthorn (*Crataegus monogyna*) and hazel (*Corylus avellana*). Other less frequent tree species surveyed on site included sweet chestnut (*Castanea sativa*), Scots pine (*Pinus sylvestris*), European yew (*Taxus baccata*), leylandii (*Cupressus x leylandii*), common holly (*Ilex aquifolium*), buckthorn (*Rhamnus cathartica*), silver birch (*Betula pendula*), and rowan (*Sorbus aucuparia*).
- 2.1.10 Eighty-three trees and four tree groups on site have been assessed as Category B trees, i.e. trees of moderate quality. Where a tree has been categorised as moderate retention value it is generally the case that the tree is larger, well established and already providing a function within the landscape which could not immediately be replaced with mitigation planting.
- 2.1.11 Thirteen trees and sixteen tree groups and one hedgerow have been assessed as Category C trees i.e. trees of low quality. Where a tree has been categorised as low retention value it is generally due to its low landscape and arboricultural value in relation to the site and also references ease of replacement with mitigation plant.
- 2.1.12 Seventy-two trees were assessed as Category A i.e. trees of high quality. These trees have primarily been assessed as Category A due to their large size, arboricultural value and prominence in the landscape.
- 2.1.13 Five groups have been assessed as Category A. Groups 3, 6 and 7 are located on the southern border of the site, north of the railway, leading up north through the centre of the site, following the public footpath, and make up most of the Swaffham Belt and the Rookery. These groups consist of a number of Category A and B trees, many of which were individually plotted. These trees are individually and collectively prominent features within the site. These groups also consist of young and semi mature trees providing an understory and lower canopy layer that were not individually plotted. These trees enclose the regularly frequented public footpath along the Swaffham Belt and the Rookery, serving as an excellent example of green infrastructure and making up a significant section of the Fairsted/Gaywood Coast Alive recommended long-distance trail. Group 7 has a stream on the south east side of the group, on the site side, which is approximately 3 ft deep, this however, should not encourage the assumption that their root systems will not have grown underneath the river, as this is still very probable.
- 2.1.14 Category B Groups 4 and 5 are also located within the Swaffham Belt. These trees have less arboricultural value than Groups 3 and 6, which they border, due to their young to semi mature ages and the tree species present being generally exotic. These groups however were still assigned Category B status due to the landscape values they provide enclosing the regularly frequented public footpath along the Swaffham Belt. This feature would not be easily replaceable with mitigation planting with immediate effect.
- 2.1.15 Category A Group 12 makes up the unique track weaving through the linear strip of approximately 75 common oak trees. This group has high landscape value due to the size and excellent form/structure of the individual trees that make up this group. This group also has very infrequent early mature, to mature sycamore and scots pine trees within it as well as an amenity grassland and bramble understory.

- 2.1.16 Category B Group 8 borders the north eastern extent of the Scheme and consists of a mixed broken hedgerow with sporadic individually plotted semi to early mature species of common oak, common ash, turkey oak and robinia. These trees provide a good screen and enclose the public footpath from the site. Similarly to group 7 this group also has a stream on the south side of the group, on the site side, which is approximately 3 ft deep, again, however, this should not encourage the assumption that their root systems will not have grown underneath the river as this is still very probable.
- 2.1.17 Similarly, Category A Group 11 and the Woodland Group (W1) are located further north east from G8, north of the public footpath. The trees in these groups are approximately 8m from the boundary of the Scheme. Furthermore, G8, and the river to the south will be providing a further buffer, reducing the likelihood that the roots from these groups will extend over the Scheme boundary, although the possibility still exists.
- 2.1.18 Category C Groups G9 and G10, south of G8 and the river are within the eastern Scheme boundary and consist of primarily young to semi mature trees species that are easily replicable with mitigation planting if necessary. Four common oak trees were individually surveyed within this area, this was due to them being of semi to early mature ages, reducing the ease of replacement with mitigation planting.
- 2.1.19 Category B Group 2 consists of approximately 35 individual trees and provides a significant screen from the field and proposed site from Parkway Road. This group consists of a number of early mature trees species as well as some younger semi mature trees.
- 2.1.20 Three individual trees, Trees 61, 62 and 64 are located within the western field, within the Scheme boundary. These three trees are open grown achieving a significant form and size with no evidence of any significant defects, with the exception of a number of naturally self-pruned stubs on the branches. These trees are estimated to be around 150 years old and could be made into an impressive feature and should be considered for retention in the final design.
- 2.1.21 The majority of trees have been assessed with a sub-category of '2' to identify that they have landscape or amenity value within their current setting. No trees have been assessed with a predominant sub-category of '1' to identify that they have arboricultural value (e.g. trees notable for their species, size, form, age), however, many of the trees assigned with a sub-category of 2 on site, fall under category 1 as well, particularly the mature common oaks. No trees have been assessed with a sub-category of 3 for cultural value.
- 2.1.22 No trees on site have been assessed as Category U i.e. tree for removal on arboricultural grounds (regardless of works and development).
- 2.1.23 The overall quality, form, health and abundance of trees on site at Gaywood Parkway is excellent and creates an open, green and pleasant living environment for residents in the surrounding properties and schools to enjoy. These characteristics are compounded by the site's position on the edge of the Gaywood Pantation and adjoined Swaffham Belt, both of which are regularly frequented by the general public. Any redevelopment would benefit from significant added value by putting tree protection and retention at the heart of its strategy. Protection and retention of Category A and B trees should be a priority.
- 2.1.24 The following provides a summary of the quality and value of the trees present on site, as assessed in accordance with *BS 5837:2012* (Table 2.1 - Cascade chart for tree quality assessment).

2.1.25 **Table 2.1: Summary of BS 5837:2012 tree categories assigned to the surveyed trees**

Tree Category	Description	Total Number surveyed
Category A	Trees or groups of high quality and value	72 trees and 5 tree groups and 1 woodland
Category B	Trees or groups of moderate quality	83 trees and 4 tree groups
Category C	Trees or groups of low quality	13 trees, 17 tree groups and 1 hedgerow
Category U	Trees or groups for removal	0 trees

2.2 Tree Preservation Orders (TPOs) and Conservation Areas (CAs)

2.2.1 A study of Kings Lynn and West Norfolk (KL & WN) Borough Council's online maps has confirmed that the survey area for this Scheme has no Tree Preservation Orders (TPOs) within it, nor is it affected by Conservation Area (CA) status.

3 General Recommendations

3.1 Risk to Trees from Construction Activity

Trees can be easily damaged by construction processes, with both the tree roots and the main structure of a tree susceptible to a range of impacts. Root damage can affect the anchorage and stability of the tree, as well as preventing or inhibiting the absorption of water and nutrients. Damage to the trunk and branches leaves the tree more exposed to disease and decay.

Activities that can cause damage to tree roots include:

- Trenches;
- Alterations in soil level;
- Non-porous surfaces;
- Compaction of soil;
- Changes in soil hydrology;
- Root exposure;
- Soil pollution (i.e. oil spill, incorrect application of herbicide and/or other chemicals); and,
- Fires.

Activities that can cause damage to tree trunks and branches include:

- Pressure from materials stored against trunks;
- Physical impact from plant and equipment;
- Incorrect pruning;
- Exposure of bark or leaves to chemicals; and,
- Damage to bark from mowers and strimmers.

Any works associated with this Scheme that could affect the existing trees as described above must be discussed and approved by a qualified Arboriculturalist prior to commencement.

3.2 Risk to Trees from Demolition of Existing Buildings

Trees can also be damaged during the demolition process of existing buildings and the removal of hard surfacing and other structures. It is important that protective barriers stay in place around trees during demolition. The removal of hard standings and other structures within the Root Protection Area (RPA) should be carried out in accordance with an Arboricultural Method Statement (AMS).

3.3 Root Protection Area (RPA)

- 3.3.1 Working anywhere in the vicinity of trees is likely to cause some root damage due to the fact that in the order of 80% of the roots of any tree will occur within the upper 600mm of the soil. Roots will spread out for a considerable distance from a tree and may be encountered at a distance beyond the canopy spread of a tree. Where construction activities are proposed within the rooting zone of trees, the potential for significant damage exists.
- 3.3.2 Section 4.6 of *BS 5837:2012* prescribes a methodology for the calculation of a RPA. The RPA represents the minimum area that should be retained undisturbed around a tree or trees for the avoidance of an unacceptable degree of root disturbance (*BS5837* states the RPA should be

capped at 707m² or 15m nominal radius). The required RPA of a tree is calculated, and typically plotted as a circle (or where appropriate as a polygon of equivalent area) to determine constraints or the location of protective fencing. In certain circumstances the actual shape of this area may then be adjusted to take account of local topography or any existing site features that may serve as restrictions to 'normal' root development.

- 3.3.3 The final design for the Scheme should avoid excavation within the RPA of all retained trees. Any deviation in the RPA from the original circular plot should take into account the morphology and disposition of the roots when influenced by past or existing site conditions and the tolerance of the tree to root disturbance. The RPA calculations are stated within Appendix C.
- 3.3.4 For each instance where avoidance of the RPA is not possible, details of an appropriate works methodology and the protection measures necessary must be addressed within the Arboricultural Method Statement (see section 3.6). This could involve the use of temporary ground protection for the erection of scaffolding within the RPA.
- 3.3.5 All tree works must be undertaken in strict accordance with *BS3998 Tree work – recommendations*, by an appropriately qualified and experienced contractor.

3.4 Trees and Wildlife

- 3.4.1 European protected species such as bats, dormice and great crested newts are protected under the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. Other species that may be affected by tree works include breeding birds, badgers and reptiles which are protected under the Wildlife and Countryside Act 1981 (as amended). The design process should ensure protected species are considered during any redevelopment work. Tree work and the timing of tree work should be carefully considered.

3.5 Arboricultural Impact Assessment (AIA) and Arboricultural Method Statement (AMS)

- 3.5.1 As part of the final design process for this Scheme it will be necessary for a qualified arboriculturalist to undertake.
- An AIA to identify, evaluate and possibly mitigate the extent of direct and indirect impacts on existing trees. This will include identifying the requirements for tree works (either felling or pruning) to facilitate construction of the Scheme and temporary protective fencing to protect all trees to be retained during the construction works; and,
 - An AMS to provide a methodology for implementation of any site layout that has the potential to result in loss or damage to a tree.

4 Conclusions

- 4.1.1 There were 168 trees, 25 tree groups, 1 woodland and 1 hedgerow surveyed in relation to this proposed Scheme.
- 4.1.2 The following categories were assigned to these trees:
- Category A i.e. trees of high quality, 72 trees, 5 tree groups and 1 woodland;
 - Category B i.e. trees of moderate quality, 83 trees and 4 tree groups;
 - Category C i.e. trees of low quality, 13 trees, 17 tree groups and 1 hedgerow; and,
 - Category U i.e. trees to be removed for arboricultural reasons, 0 trees.
- 4.1.3 Gaywood Parkway currently benefits from an abundance of trees which are well established and increase the environmental, amenity, and ecological value of the site.
- 4.1.4 The overall quality, form, health of trees on site is excellent and creates an open, green and pleasant living environment for residents in the surrounding properties and schools to enjoy. These characteristics are compounded by the site's position on the edge of the Gaywood Plantation and adjoined Swaffham Belt, both of which are regularly frequented by the general public.
- 4.1.5 Any redevelopment would benefit from significant added value by putting tree protection and retention at the heart of its strategy.
- 4.1.6 Protection and retention of Category A and B trees should be a priority.
- 4.1.7 Whilst the abundance of well-established Category C trees adds significant landscape value when considered on mass, individual Category C trees could easily be replaced with mitigation planting on completion of the project, if required.
- 4.1.8 The importance of maintaining the Swaffham Belt and the corridor of trees leading to the Gaywood Plantation (Trees 34, 35, 37, 38, 40, 48, 49, 50, 54, 55, 56, 57, 60, 65, 66, 71, 77, 79, 82, 85, 90, 91, 93, 95, 99, 108, 109, 110, 116, 117, 118, 127, 128, 129, 130, 131, 132, 148, 162 and 163) and the trees within the Gaywood Plantation itself, should be highlighted to designers. As should the linear strip of mature oak trees in G12 and Trees 3, 4, 5, 6, 9, 10, 11, 16, 17, 20, 21, 22, 23, 25, 28, 32, 33, 122, 150, 151, 152, 153, 155, 157, 158, 160 and 161, that connects to the Swaffham belt. These groups contain an abundance of trees of significant form and age and collectively serve as an excellent example of green infrastructure.
- 4.1.9 The presence of Trees 61, 62 and 64 located within the western field, within the Scheme boundary should also be highlighted to designers. These trees are estimated to be around 150 years old, add significant arboricultural and landscape value to the site and must be prioritised for retention as part of the proposed development for this site. A study of Kings Lynn and West Norfolk's (KL & WN) online maps has confirmed that the survey area for this Scheme has no Tree Preservation Orders (TPOs) within it, nor is it affected by Conservation Area (CA) status.
- As part of the final design process for this Scheme, an Arboricultural Implications Assessment (AIA) and an Arboricultural Method Statement (AMS) will be required. It is recommended that during this process the design team liaise closely with the Scheme arboriculturalist, local residents and stakeholders in order to maximise tree retention on the site

Appendices

A. Drawings

[Tree Constraints Plans \(407004-MMD-00-00-DR-EN-0001 to 0003\)](#)



King's Lynn Academy

Thoresby A

Parkway

Raynham

Dawber

CUTLINE

- Notes
1. All dimensions are in millimetres unless otherwise stated.
 2. Do not scale any items or information from this drawing.
 3. To be read in accordance with Gaywood Parkway Arboricultural Report (September 2019) ref. 407004-MMD-00-00-PR-EN-0001.

Key to symbols

- 4 Tree Reference
- Approximate extent of canopy
- Tree Root Protection Area (RPA)
- Individual Trees
- No Category
 - Category A Trees
 - Category B Trees
 - Category C Trees
 - Category U Trees to be removed for reasons of sound arboricultural management
- Tree Groups
- Category A Trees
 - Category B Trees
 - Category C Trees

0 50m 100m

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Client

The Borough Council of King's Lynn,
West Norfolk (BCKLWN) and
Lovell Homes

Title

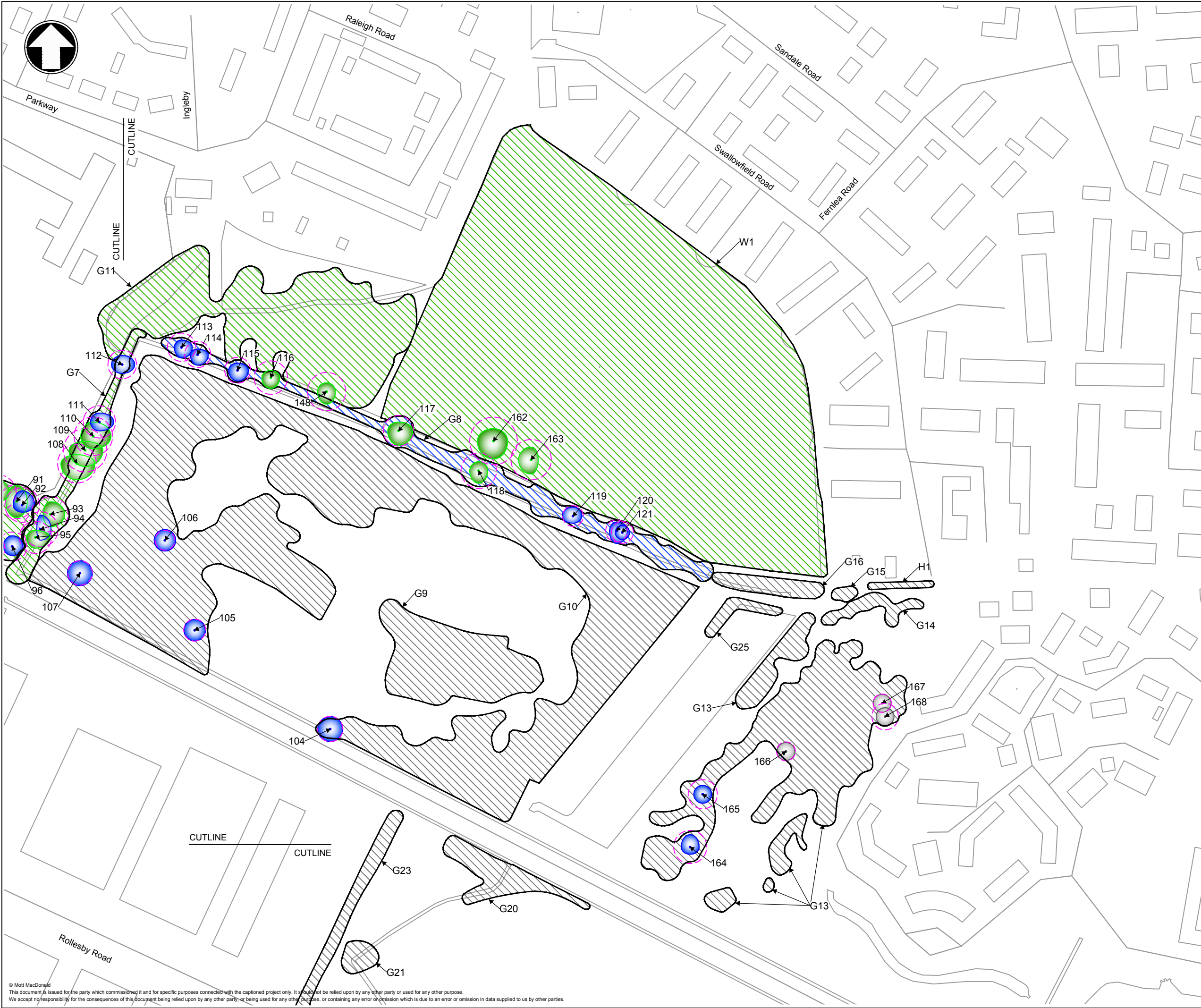
Gaywood Parkway

Tree Constraints Plan
Sheet 1 of 3

Designed	M Kingston	MK	Eng check	-	
Drawn	D Lee	DL	Coordination	M Kingston	MK
Dwg check	R Lennon	RL	Approved	C Uden	CU
Scale at A1	Status	Rev	Security		
1:1000	PRE	P1	STD		

Drawing Number

407004-MMD-00-00-DR-EN-0001



Notes

1.

All dimensions are in millimetres unless otherwise stated.

2.

Do not scale any items or information from this drawing.

3.

To be read in accordance with Gaywood Parkway Arboricultural Report (September 2019) ref. 407004-MMD-00-00-RP-EN-0001.

Key to symbols

4

Tree Reference

Approximate extent of canopy

Tree Root Protection Area (RPA)

Individual Trees

No Category

Category A Trees

Category B Trees

Category C Trees

Category U Trees to be removed for reasons of sound arboricultural management

Tree Groups

Category A Trees

Category B Trees

Category C Trees

1:1000

0

50m

100m

P1	12.09.2019	DL	First Issue	RL	CU
Rev	Date	Drawn	Description	Ch'k'd	App'd

M

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Client

The Borough Council of King's Lynn,
West Norfolk (BCKLWN) and
Lovell Homes

Title

Gaywood Parkway

Tree Constraints Plan
Sheet 2 of 3

Designed	M Kingston	MK	Eng check	-	
Drawn	D Lee	DL	Coordination	M Kingston	MK
Dwg check	R Lennon	RL	Approved	C Uden	CU

Scale at A1

1:1000

Status

PRE

Rev

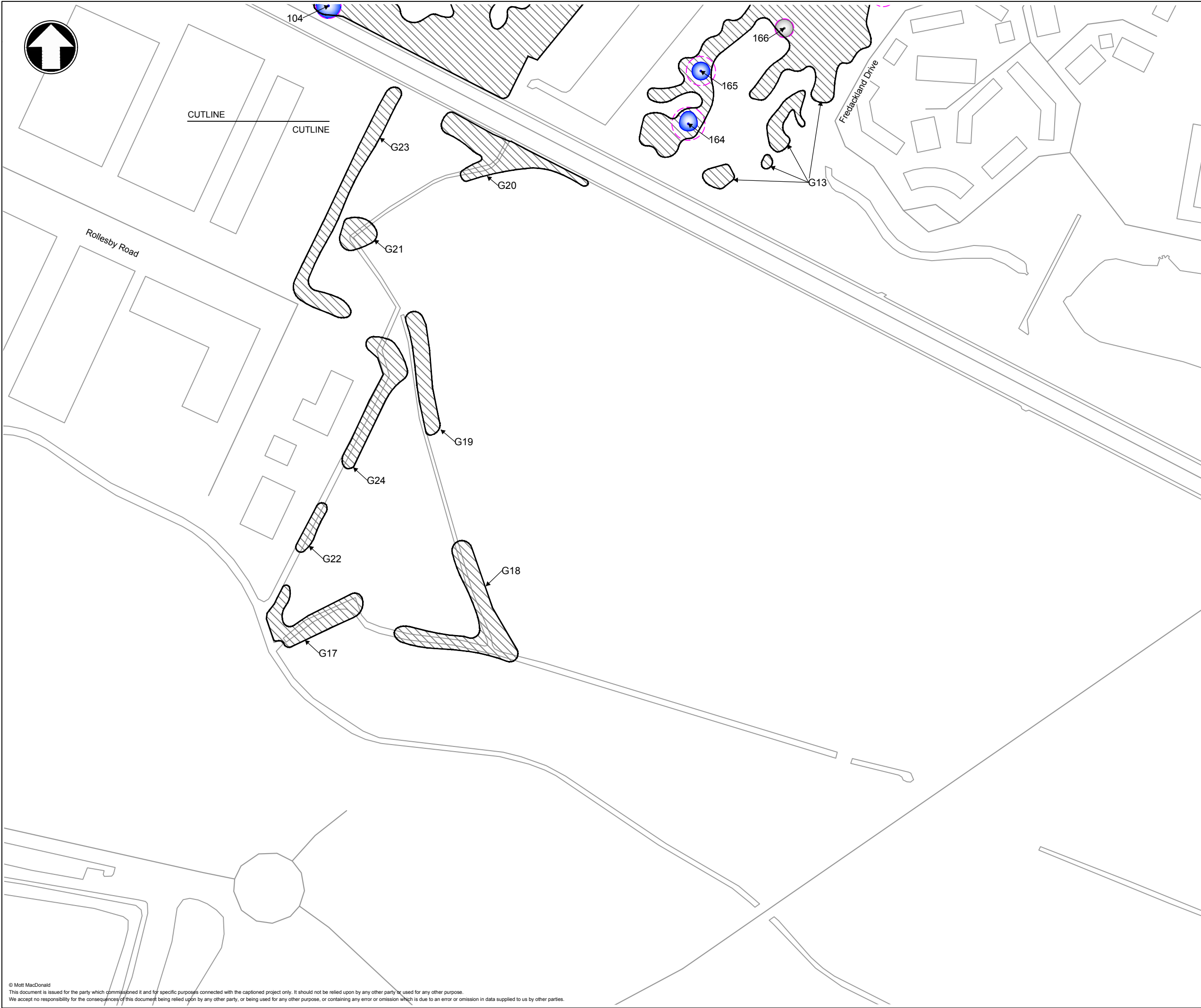
P1

Security

STD

Drawing Number

407004-MMD-00-00-DR-EN-0002



Notes

- All dimensions are in millimetres unless otherwise stated.
- Do not scale any items or information from this drawing.
- To be read in accordance with Gaywood Parkway Arboricultural Report (September 2019) ref. 407004-MMD-00-00-RP-EN-0001.

Key to symbols

4 Tree Reference

Approximate extent of canopy

Tree Root Protection Area (RPA)

Individual Trees

- No Category
- Category A Trees
- Category B Trees
- Category C Trees
- Category U Trees to be removed for reasons of sound arboricultural management

Tree Groups

- Category A Trees
- Category B Trees
- Category C Trees

0 50m 100m

1:1000

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Sheet 3 of 3

Designed	M Kingston	MK	Eng check	-	
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Scale at A1

1:1000

Status

PRE

Rev

P1

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407004-MMD-00-00-DR-EN-0003

B. Key to Tree Survey Schedule

Key to Tree Survey Schedule

Tree Reference	Unique reference or Tree Tag number, identifying each tree and/or tree group on the accompanying plan/s.	
Species	Tree species giving the vernacular and full botanic name.	
Height	Recorded in metres, measured in m from the base of the tree.	
Stem Diameter	Tree trunk diameter measured at 1.5m above ground level (on sloping ground above highest ground level) or immediately above root flare for multi-stemmed trees. Expressed in millimetres. (est) dimension estimated; (av) average or max maximum dimension used in groups.	
Branch Spread	Tree canopy extent taken from centre of tree trunk to edge of general canopy line along the four principal points of the compass (note this distance is to the general canopy line in certain cases and that an exceptional or etiolated branch may extend beyond stated figure).	
Crown Clearance	Existing height above ground level of 1) first significant branch and direction of growth (e.g. 2.4 N); and 2) canopy, to inform on ground clearance, crown/stem ratio and shading. Measured in m (rounded up to nearest half metre for dimensions up to 10m and up to nearest metre for dimensions over 10m).	
Life Stage	Estimated life expectancy assessed in accordance with figures provided in Arboricultural Association Leaflet No. 4 tree Management. Note: these age classes may be pre-fixed with 'Early' or 'Late' in the Tree Survey Schedule to provide a more accurate indication of age.	
	Y	Young: within first quarter of normal life expectancy.
	SM	Semi Mature: within second quarter of normal life expectancy.
	EM	Early Mature: within third quarter of normal life expectancy.
	M	Mature: within final quarter of normal life expectancy.
	OM	Over Mature: senescent trees nearing end of their anticipated life expectancy.
	V	Veteran: exhibiting features of biological, cultural or aesthetic value characteristic of individuals surviving beyond typical age range
	D	Dead.
General Observations	Observations particularly of structural and/or physiological condition (e.g. the presence of any decay and physical defect), and/or preliminary management recommendations.	
Estimated Remaining Contribution	Relates to the potential life expectancy of the tree in its current setting, shown in years as one of the following categories: <10; 10+; 20+; and, 40+.	
Category Grading in accordance with Table 1 (BS 5837:2012)	Tree categorisation as defined by Table 1 – Cascade chart for tree quality assessment of British Standard 5837:2005. Decisions regarding which trees are to be retained should be influenced by their retention categories as suggested below.	
	A	Trees of high quality and value; > 40 years contribution remaining; marked light green on plan. Category is sub-divided as follows: 1 particularly good example; essential component of group e.g. in avenues; 2 screening value, particular visual importance 3 significant conservation, historical, commemorative or other value (includes veteran or wood pasture trees). Tree retention is highly desirable: significant amendments to any proposed development should be considered before removing these trees
	B	Trees of moderate quality and value with a significant life expectancy; > 20 years contribution remaining; marked mid-blue on plan. Category sub-divided as follows: 1 Trees that may be of impaired condition in relation to trees in category above; 2 Trees present in numbers/groups attracting higher collective rating; internal to site, of limited visual impact to locality; 3 Trees with clear conservation or cultural benefits. Tree retention is desirable: amendments to any proposed development should be considered before removing these trees.
	C	Trees of low quality and value; >10 years contribution remaining; marked grey on plan. Includes young trees below 150mm diameter (to which consideration for transplanting should be given). Note that “C” trees will usually not be retained where they would impose a significant constraint on development. Category sub-divided as follows: 1 Trees not qualifying in higher categories; 2 Trees within groups of low landscape value, having limited screening value; 3 Trees with very limited conservation or other cultural benefits. Trees could be retained however the removal of some of these trees should be considered acceptable if required to facilitate any proposed development.
	U	Trees for removal; those in such a condition that are dead, dying, dangerous, severely suppressed or where any existing value would be lost within 10 years; marked dark red on plan. These trees should be removed or treated in such a way as to make them safe where they have high ecological value or benefits.

C. Tree Survey Schedule

Table C.1 Gaywood Sites Tree Survey Schedule.

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
1	Pedunculate oak	Mature	17	4	4	4	4	3nw	3	5	3	3	1	850	10.2	326.8	Good	Fair	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Minor die back in the crown from competing with adjacent trees.
2	Pedunculate oak	Mature	17	4	4	3	3	2e	3	2	2	6	1	1100	13.2	547.4	Good	Fair	Good	Good	B	2	40+	Tear out in the upper canopy on the west side creating a wound about 5m long and 30cm wide. Not showing good adaptive growth. Could be structurally weakening the upper canopy.
3	Pedunculate oak	Mature	23	10	8	10	4	5w	5	5	5	9	1	1160	13.9	608.8	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Significant size and form however the crown is distorted to the west by adjacent trees. Minor dead wood in the canopy.
4	Pedunculate oak	Mature	25	8	8	10	8	5s	12	12	5	12	1	940	11.2	399.7	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects despite being closely planted. Tree has grown tall and thin. Canopy has developed high in the tree due to competition for light. Minor dead wood in the canopy and self-pruning at the lower canopy.
5	Pedunculate oak	Mature	21	8	9	7	8	5n	5	6	6	11	1	1080	12.96	527.7	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects despite being closely planted. Tree has achieved significant form and size. Minor dead wood in the canopy.
6	Pedunculate oak	Mature	20	5	8	11	6	2s	5	3	2	5	1	1240	14.88	695.6	Good	Fair	Good	Good	A	2 and 1	40+	Tree has achieved a significant size. Distorted to the north and west by adjacent trees and growing significantly into a tree to the south obscuring the adjacent trees crown. Dead wood above 25cm girth within the lower canopy.
7	Pedunculate oak	Early Mature	13	2	6	7	2	3e	5	3	4	4	1	680	8.16	209.2	Good	Fair	Good	Fair	B	2	40+	Tree not on topo as it is under an adjacent tree canopy. Tree being out competed by adjacent tree to the north and has a distorted canopy as a result. Dead wood over 25cm girth in the canopy and one torn out leader creating a wound in the upper canopy that goes downwards. Tree putting on epicormic growth around the lower stem indicating stress.
8	Pedunculate oak	Mature	20	4	4	4	4	5n	5	5	5	5	1	765	9.18	264.7	Fair	Fair	Good	Fair	B	2	40+	Tree has a wound in the lower stem to the west 40cm high and 15 cm wide with dead wood indicated in the heart wood. However, showing good adaptive growth and appears to have over a 3rd of holding wood intact.

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								minor epicormic growth but other than that showing no other defects.
9	Pedunculate oak	Early Mature	18	10	10	7	7	8n	8	8	8	8	1	880	10.5	350.3	Good	Good	Good	Good	A	2 and 1	40+	Minor dead wood in the canopy and minor die back on the tips of the lower canopy, however this is most likely due to competition from being closely planted. Minor epicormic growth 2m from the ground.
10	Pedunculate oak	Mature	20	6	7	7	8	3n	3	5	4	5	1	840	10	319.2	Good	Good	Good	Good	A	2 and 1	40+	Tree showing good form and size with no evidence of any significant defects despite being closely planted together. Minor epicormic in the lower stem and two dead branches 3 and 4 metres high on the north side from self-pruning and poor tree surgery practice.
11	Pedunculate oak	Mature	20	10	10	6	7	3e	5	3	4	3	1	1020	12.2	470.7	Good	Good	Good	Good	A	2 and 1	40+	Tree showing significant form and size with a very symmetric canopy and no significant visible defects. One torn out limb facing west 7m high in the canopy, wounding the base of a limb 7m high facing south. However, the branch appears structurally sound and in good health.
12	Pedunculate oak	Early Mature	21	5	5	5	5	2s	5	5	2	3	1	745	8.9	251.1	Poor	Fair	Good	Fair	B	2	20+	Tree has significant wound on the northern side of the stem 2.5 m high by 40cm wide. Suspected lightning strike and struggling to put on adaptive growth. Appears to still have over 30% holding wood however also showing significant epicormic growth and die back in the canopy. Still has a significant foliage however.
13	Pedunculate oak	Early Mature	19	3	3	5	4	2s	4	3	2	8	1	700	8.4	221.6	Good	Fair	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Canopy however is distorted on all sides by adjacent trees so growing tall and thin.
14	Pedunculate oak	Mature	9	2	4	4	3	4e	4	4	4	4	1	920	11	382.9	Poor	Fair	Good	Poor	C	2	20+	Tree in poor health due to suspected lightning strike. Approximately 50% of the bark to the north; west and south is missing exposing the heart wood. The canopy has also been heavily reduced in an attempt to stabilise and contain the trees structure. Showing epicormic growth within the canopy.
15	Pedunculate oak	Over Mature	5.5	3	3	3	3	1n	1	1	1	1	1	1150	13.8	598.3	Poor	Poor	Fair	Poor	C	2	20+	Suspected lightning strike.. Significant girth in the stem however this formally tall tree has been reduced by damage to 5.5m. Significant linear crack down the centre of the stem and at least 50% of the bark has been exposed. However the epicormic growth it has put on has formed a

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
16	Pedunculate oak	Mature	18	10	9	9	9	3n	4	6	9	9	1	1210	14.5	662.4	Good	Good	Good	Good	A	2 and 1	40+	symmetrical form. This tree also has good habitat potential.
17	Pedunculate oak	Mature	18	3	6	7	6	2w	18	5	2	2	1	975	11.7	430.1	Good	Fair	Good	Good	A	2 and 1	40+	Tree has achieved significant form and size with no evidence of any ill health. Very symmetrical canopy and little competition. Minor dead wood in the canopy.
18	Pedunculate oak	Early Mature	20	5	6	6	4	3n	3	3	5	14	1	810	9.7	296.8	Fair	Fair	Good	Fair	B	2	40+	Tree appears healthy with no significant visible defects. The northern extent of the canopy has been distorted by adjacent tree. Tree also has minor dead wood within the canopy.
19	Goat willow	Semi Mature	6	3	3	3	3	1n	1	1	1	1	1	285	3.4	36.7	Good	Good	Good	Good	C	2	40+	Tree has grown tall and thin due to being planted closely to adjacent trees. Distorted upper canopy and putting epicormic growth around the lower stem indicating stress. Stem is heavily ivy covered however it is showing no significant visible defects structurally and only minor dead wood in the canopy.
20	Pedunculate oak	Mature	18	5	6	8	6	2n	2	2	2	2	1	864	10.3	337.7	Good	Fair	Good	Good	A	2 and 1	40+	Tree showing good size and form however one dead leader in the centre of the stem 11m high in the tree and measuring 3m long and 30cm approximately wide is visible. Tree is also putting on some epicormic growth.
21	Pedunculate oak	Mature	22	6	4	5	6	4w	6	7	8	4	1	900	10.8	366.4	Good	Fair	Good	Good	A	2 and 1	40+	Tree has grown tall and thin due to being planted closely to adjacent trees. Canopy has been distorted by adjacent trees and is showing minor die back on the tips of the northern facing canopy. No significant visible defects.
22	Pedunculate oak	Mature	19	9	9	9	9	5n	5	8	4	4	1	1095	13.1	542.4	Good	Good	Good	Good	A	2 and 1	40+	Tree has achieved significant form and size with no evidence of any significant defects. Tree has a very symmetrical canopy and is relatively open grown. Cavity visible 5m high on the north side which appears hollow however showing good adaptive growth. Dead wood in the canopy from previous self-pruning. Some dead wood is over 25cm in diameter.
23	Pedunculate oak	Mature	18	5	6	6	5	3w	4	4	3	3	1	820	9.8	304.2	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. relatively open grown achieving good form and size.
24	Pedunculate oak	Mature	13	5	5	5	5	3n	3	3	3	3	1	940	11.2	399.7	Fair	Fair	Good	Good	B	2	40+	Heavily reduced to about 6m however the resulting growth has formed a symmetrical shape.

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								Suspected lightning strike with significant damage to the western leader which has approximately 25% of its bark exposed, however there isn't significant weight on the stem, so it is structurally sound.
25	Pedunculate oak	Early Mature	20	5	6	4	3	2n	2	2	12	4	1	780	9.3	275.2	Good	Fair	Good	Good	B	2	40+	Tree has grown tall and thin due to being planted closely to adjacent trees. The western canopy is especially distorted. The tree however is showing no significant visible defects.
26	Pedunculate oak	Mature	14	6	5	6	4	3n	3	3	3	3	1	1080	12.9	527.7	Fair	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size but is slightly distorted to the west. Tree has dead wood in the canopy from self-pruning above 25cm. Wound surveyed on the south side of the lower stem 1m high and 40 cm wide, however the tree is putting on fair adaptive growth and has over 30% holding wood.
27	Pedunculate oak	Early Mature	12	3	3	5	4	3w	7	7	7	3	1	980	11.7	434.5	Fair	Poor	Good	Fair	C	2	20+	Tree has been significantly distorted by adjacent tree to the north and is heavily ivy covered, however is not showing signs of any significant defects.
28	Pedunculate oak	Mature	24	8	7	9	7	3s	9	3	3	3	1	1100	13.2	547.4	Good	Good	Good	Good	A	2 and 1	40+	Tree has achieved significant form and size with no evidence of any ill health.
29	Pedunculate oak	Early Mature	17	5	5	4	3	2w	5	5	5	2	1	780	9.3	275.2	Fair	Fair	Good	Fair	B	2	40+	Crown distorted to the south by adjacent trees and heavily ivy covered however not showing any significant visible defects.
30	Pedunculate oak	Early Mature	18	4	4	4	7	2s	5	5	2	5	1	810	9.7	296.8	Good	Fair	Good	Good	B	2	40+	Crown distorted by adjacent trees and the central leader has torn out. Minor bark damage on the underside of the lowest south facing branch and fire damage at the northern base.
31	Pedunculate oak	Mature	23	8	9	5	6	4n	4	6	6	6	1	1080	12.9	527.7	Good	Good	Good	Good	A	2 and 1	40+	Tree has achieved a significant size and form with no evidence of any ill health. Minor dead wood on the canopy.
32	Pedunculate oak	Mature	21	4	5	8	6	3w	5	4	3	3	1	970	11.6	425.7	Good	Good	Good	Good	A	2 and 1	40+	Canopy slightly distorted to the north by adjacent tree and has minor dead wood, however showing no significant visible defects.
33	Pedunculate oak	Mature	22	8	8	8	8	2s	5	4	2	4	1	1140	13.6	588	Good	Good	Good	Good	A	2 and 1	40+	Tree relatively open grown achieving good form and size with no evidence of any significant defects.
34	Pedunculate oak	Mature	22	8	8	4	5	3n	3	4	17	5	1	1010	12.1	461.5	Good	Good	Good	Good	A	2 and 1	40+	Tree has achieved a good size and is showing no significant defects. Lowest branch facing north has died, the canopy has minor dead wood and is also

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								distorted to the south by adjacent tree.
35	Pedunculate oak	Mature	21	7	7	8	8	2w	4	3	2	2	1	1020	12.2	470.7	Good	Good	Good	Good	A	2 and 1	40+	Tree has achieved significant form and size with no evidence of any significant defects. Minor dead wood from self-pruning in the lower canopy.
36	Pedunculate oak	Mature	22	7	6	5	5	2n	2	5	5	5	1	980	11.7	434.5	Fair	Fair	Good	Fair	B	2	40+	Heavily ivy covered however not showing any visible defects. Canopy distorted to the east by adjacent tree and minor dead wood in the canopy.
37	Pedunculate oak	Mature	23	9	5	3	7	2n	2	8	8	3	1	1070	12.8	518	Fair	Fair	Good	Fair	A	2 and 1	40+	Heavily ivy covered. Canopy distorted to the east and south. Wound at the base of the stem to the east 40cm high and 30cm wide however showing good adaptive growth.
38	Pedunculate oak	Mature	23	8	7	7	8	3s	12	3	3	11	1	1150	13.8	598.3	Good	Good	Good	Good	A	2 and 1	40+	Tree showing no significant visible defects and good form and size.
39	Pedunculate oak	Mature	21	6	4	2	4	n3	3	8	8	8	1	840	10	319.2	Good	Fair	Good	Good	B	2	40+	Distorted crown to the south and east due to competition. No significant visible defects.
40	Pedunculate oak	Mature	22	5	5	5	5	s3	8	7	3	7	1	1060	12.7	508.3	Good	Good	Good	Good	A	2 and 1	40+	Tree showing no significant visible defects and good form and size.
41	Pedunculate oak	Mature	22	8	3	3	6	5n	5	5	5	5	1	920	11	382.9	Fair	Fair	Good	Fair	B	2	40+	Heavily ivy covered with a distorted crown due to competition on the east and south side. Tree has grown tall with a thin canopy. No significant visible defects.
42	Pedunculate oak	Mature	22	8	7	4	5	3w	4	3	5	12	1	920	11	382.9	Fair	Fair	Good	Fair	B	2	40+	Tree heavily ivy covered with a distorted canopy to the west and south due to adjacent trees. Visibility is not good, but the tree appears healthy with no significant visible defects.
43	Pedunculate oak	Mature	24	8	5	4	4	8n	8	8	8	8	1	920	11	382.9	Fair	Fair	Good	Fair	B	2	40+	Tree heavily ivy covered with a distorted canopy to the west and south due to adjacent trees. Visibility is not good, but the tree appears healthy with no significant visible defects.
44	Pedunculate oak	Early Mature	22	8	5	3	6	3n	3	6	6	6	1	770	9.2	268.2	Good	Fair	Fair	Fair	B	2	40+	Heavily ivy-covered, canopy distorted by adjacent trees to the south and east. Visibility is not good however the tree appears healthy with no significant visible defects.
45	Pedunculate oak	Mature	24	9	9	3	5	3n	3	3	17	3	1	1120	13.4	567.5	Fair	Fair	Fair	Fair	B	2	40+	Heavily ivy covered and canopy distorted to the south and west by adjacent trees. Visibility is not good however the tree appears healthy with no significant visible.
46	Pedunculate oak	Mature	23	9	6	7	7	4n	4	6	6	6	1	1150	13.8	598.3	Fair	Good	Fair	Good	B	2	40+	Tree heavily ivy covered however canopy is in relatively good form.

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								Visibility is not good however the tree appears healthy with no significant visible.
47	Pedunculate oak	Early Mature	21	6	3	4	7	3n	3	15	4	3	1	780	9.3	275.2	Good	Good	Fair	Good	B	2	40+	Tree appears healthy with no significant visible defects. Minor ivy on the stem and a distorted canopy to the east.
48	Turkey oak	Mature	24	10	7	5	8	3s	4	7	3	5	1	103	1.2	4.8	Good	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of any significant defects. Crown distorted to the south slightly by adjacent trees.
49	Turkey oak	Mature	24	10	8	6	8	3s	6	6	3	3	1	910	10.9	374.6	Good	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of significant visible defects.
50	Turkey oak	Mature	23	11	8	8	6	4n	4	6	6	6	1	980	11.7	434.5	Good	Good	Fair	Good	A	2 and 1	40+	Tree has a 70 degree lean north east however overall it is a healthy tree with no significant visible defects. Minor ivy on the stem.
51	Turkey oak	Mature	18	8	6	6	6	5n	5	5	5	5	1	820	9.8	304.2	Good	Fair	Good	Fair	B	2	40+	Tree has good form and size however it is showing die back in the tips and is heavily ivy covered.
52	Turkey oak	Early Mature	21	8	5	5	7	4n	4	7	7	7	1	760	9.1	261.3	Good	Good	Good	Good	B	2	40+	Tree has an 80 degree lean to the north west and is slightly distorted to the south by adjacent trees however appears healthy with no significant visible defects.
53	Turkey oak	Mature	24	11	7	6	9	3n	3	17	17	14	1	940	11.2	399.7	Good	Good	Good	Good	B	2	40+	Tree has a good from and size however it has a small wound where bark has been removed on the south east side of the stem leaving it open to infection. Canopy not showing any visible defects or signs of ill health though.
54	Turkey oak	Mature	24	8	8	5	6	4n	4	4	8	8	1	880	10.5	350.3	Good	Good	Good	Good	A	2 and 1	40+	Tree has one dead branch on the west side 5m high however overall it is a healthy tree with no visible defects. It has a good form and size and an 80 degree lean north.
55	Turkey oak	Mature	23	9	5	3	5	3n	3	5	8	5	1	930	11.1	391.3	Good	Good	Good	Good	A	2 and 1	40+	Significant form and size with no evidence of any significant defects. 80 degree lean to the north.
56	Pedunculate oak	Mature	25	9	8	7	7	5n	5	5	6	6	1	1110	13.3	557.4	Good	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of any significant defects. 80 degree lean to the north.
57	Turkey oak	Mature	25	9	7	7	8	5w	6	14	5	5	1	1070	12.8	518	Good	Good	Good	Good	A	2 and 1	40+	Tree is of significant form and size with no evidence of any significant defects.
58	Pedunculate oak	Mature	23	8	6	4	6	5s	6	7	5	6	1	820	9.8	304.2	Good	Fair	Good	Good	B	2	40+	Tree has a distorted canopy to the south and the southern leader growing towards the footpath has significant die back. Tree has an 80 degree lean however showing no other significant defects.

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
59	Turkey oak	Mature	23	8	5	5	7	6n	6	7	7	7	1	830	9.9	311.6	Good	Fair	Good	Good	B	2	40+	Tree has slightly distorted canopy to the south and east and is showing minor dead wood and self-pruning to the east with minor die back. No other significant defects.
60	Pedunculate oak	Mature	24	5	6	6	6	5s	7	8	5	7	1	930	11.1	391.3	Good	Fair	Fair	Fair	A	2 and 1	40+	Tree planted within the middle of a public path showing no significant visible defects despite the roots restricted by paving. Canopy slightly distorted by adjacent trees.
61	Pedunculate oak	Mature	17	7	7	7	8	2n	2	2	2	2	1	1270	15.2	729.7	Good	Good	Good	Good	A	2 and 1	40+	Tree open grown achieving a significant form and size with no evidence of any significant defects with the exception of natural self-pruned stubs on the branches. Tree is estimated to be around 150 years old and could be made into an Impressive feature.
62	Pedunculate oak	Mature	17	9	8	8	8	3n	3	3	3	3	1	1300	15.6	764.6	Good	Good	Good	Good	A	2 and 1	40+	Tree open grown achieving a significant form and size with no evidence of any significant defects with the exception of natural self-pruned stubs on the branches. Tree is estimated to be around 150 years old and could be made into an Impressive feature. Dead wood above 25cm girth in the canopy from self-pruning. Requires a dead wood if retained.
63	Pedunculate oak	Early Mature	16	6	6	6	6	5n	5	5	5	5	1	850	10.2	326.8	Good	Good	Good	Good	B	2	40+	Tree not accessible due to being in the school property and not on topographic information so measurements estimated, and GPS will be less accurate. Trees root system will be underneath the school fence into the site boundary and could be affected by the development.
64	Pedunculate oak	Mature	22	8	10	9	9	3n	3	3	2	5	1	1260	15.1	718.3	Good	Good	Good	Good	A	2 and 1	40+	Tree open grown achieving a significant form and size with no evidence of any significant defects with the exception of natural self-pruned stubs on the branches. Tree is estimated to be around 150 years old and could be made into an Impressive feature. Requires a dead wood if retained and a crown lift. Wound to the lower stem 40cm high and 3cm wide on the South side. Showing good adaptive growth.
65	Hybrid Back poplar	Mature	19	6	3	6	7	5s	6	8	5	8	1	990	11.8	443.4	Good	Fair	Good	Good	A	2 and 1	40+	Tree has grown in a slightly distorted fashion in the competition for light and has an 80 degree lean south. Minor dead wood. No other significant visible defects.

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
66	Pedunculate oak	Mature	22	8	6	7	6	n2	2	3	2	6	1	970	11.6	425.7	Fair	Fair	Good	Good	A	2 and 1	40+	Tree has achieved significant form and size with no evidence of any significant defects however the tree is heavily ivy covered and visibility is not good.
67	Pedunculate oak	Mature	20	6	5	4	4	3n	3	4	4	4	1	690	8.2	215.4	Poor	Fair	Good	Fair	B	2	40+	Tree has grown tall and thin due to being planted closely to adjacent trees. Significant wound on the lower stem on the South east side but showing fair adaptive growth and appears to have over the 30% holding wood.
68	Pedunculate oak	Mature	23	5	5	5	5	7n	7	7	7	7	1	810	9.7	296.8	Fair	Fair	Good	Fair	B	2	40+	Tree has grown tall and thin due to being planted closely to adjacent trees however showing no significant visible defects. Tree is heavily ivy covered though so visibility is poor.
69	Pedunculate oak	Mature	19	6	6	5	7	2w	4	3	6	2	1	760	9.1	261.3	Good	Fair	Fair	Fair	B	2	40+	Heavily ivy covered so visibility is not good however the tree has a good form and size and is out competing adjacent trees. Appears healthy with no significant visible defects.
70	Pedunculate oak	Mature	16	12	12	1	5	2n	2	3	3	3	1	790	9.4	282.3	Good	Good	Fair	Fair	B	2	40+	Tree has significant lean of approximately 45 degrees due to the search for light and possible root plate lifting up on the South side. Tree however appears stable and has no significant visible defects.
71	Pedunculate oak	Mature	22	9	8	5	8	2n	2	2	3	2	1	780	9.3	275.2	Good	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of any significant defects. Minor dead wood in the canopy.
72	Pedunculate oak	Early Mature	19	5	5	5	5	2n	2	2	2	2	1	550	6.6	136.8	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Grown tall and thin due to being planted closely to adjacent trees.
73	Pedunculate oak	Early Mature	21	6	5	4	5	3ne	3	3	4	4	1	620	7.4	173.9	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Tree has grown tall and thin due to being planted closely to adjacent trees. Slightly distorted canopy to the south.
74	Pedunculate oak	Early Mature	21	7	6	7	5	1.5n	1.5	6	3	5	2	770 500 580	9.2	268.2	Good	Good	Good	Good	B	2	40+	Tree has a good form and size with no evidence of any significant defects. Minor dead wood in the canopy and minor epicormic growth around the lower stem.
75	Pedunculate oak	Early Mature	19	5	5	6	5	4s	5	4.5	4	4	2	770 500 590	9.2	268.2	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Grown tall and thin due to being planted closely to adjacent trees.
76	Pedunculate oak	Early Mature	19	6	5	4	5	3n	3	5	4	3	1	580	6.9	152.2	Good	Fair	Fair	Fair	B	2	40+	Tree heavily, ivy covered so visibility is not good. Growing tall and thin due to being planted closely to adjacent trees however

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								showing no significant visible defects. Minor dead wood.
77	Pedunculate oak	Mature	24	7	8	8	6	3w	5	7	4	3	1	900	10.8	366.4	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects.
78	Pedunculate oak	Mature	19	2	5	6	5	8n	8	8	8	8	1	800	9.6	289.5	Fair	Fair	Good	Fair	B	2	40+	Tree is significantly distorted to the north by adjacent tree and is heavily ivy covered. Canopy appears healthy with no significant visible defects with minor dead wood. Visibility is not good.
79	Pedunculate oak	Mature	22	8	8	8	7	3e	6	3	6	7	1	1070	12.8	518	Good	Good	Good	Good	A	2 and 1	40+	Tree has achieved a significant size and form with no evidence of any significant defects. However, tree is heavily ivy covered and visibility is not good. Minor dead wood in the canopy.
80	Sycamore	Early Mature	22	5	3	5	5	5n	5	7	5	5	1	650	7.8	191.1	Good	Good	Fair	Good	B	2	40+	30cm from the path tree appears healthy with no significant visible defects and has grown tall and thin due to being planted closely to adjacent trees with a good form and size. Minor dead wood from poor tree surgery practice.
81	Pedunculate oak	Early Mature	16	5	5	5	4	4n	4	5	5	5	1	580	6.9	152.2	Good	Fair	Fair	Fair	B	2	40+	Tree has distorted canopy to the south and west due to adjacent tree however appears healthy with no significant visible defects. Minor dead.
82	Pedunculate oak	Mature	23	8	5	5	9	5e	7	5	5	8	1	950	11.4	408.3	Good	Good	Fair	Good	A	2 and 1	40+	Tree has achieved good form and size with no evidence of any significant defects. 1m from path, minor dead wood in the canopy.
83	Pedunculate oak	Early Mature	23	5	3	4	5	5n	5	12	12	12	1	670	8.04	203.1	Good	Good	Fair	Good	B	2	40+	Tree has grown tall and thin due to being planted closely to adjacent trees however showing no significant visible defects. Planted 30cm from the path.
84	Pedunculate oak	Early Mature	18	6	6	4	6	7n	7	7	7	7	1	730	8.7	241.1	Fair	Poor	Fair	Fair	B	2	40+	Tree heavily ivy covered with a distorted crown due to competition. Minor dead wood in the canopy and appears to have a snapped central leader but unconfirmed. Visibility is poor. Dead wood in crown.
85	Pedunculate oak	Mature	23	8	6	4	7	7n	7	7	7	7	1	900	10.8	366.4	Good	Good	Fair	Good	A	2 and 1	40+	Ivy covered visibly is poor. Canopy slightly distorted to the south. Showing no significant visible defects.
86	Pedunculate oak	Early Mature	22	5	5	5	5	4n	4	4	4	4	1	700	8.4	221.6	Good	Fair	Fair	Fair	B	2	40+	Planted within the public path either side. Tree has grown tall and thin due to being planted closely to adjacent trees. Minor dead wood in the canopy. No significant visible defects.
87	Pedunculate oak	Early Mature	22	5	4	3	4	4n	4	11	11	11	1	700	8.4	221.6	Good	Fair	Fair	Good	B	2	40+	Canopy slightly distorted by adjacent trees to the south with minor dead wood in the southern crown. 1m from the path. Tree

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
88	Pedunculate oak	Early Mature	22	4	4	4	4	5n	5	5	5	5	1	590	7	157.4	Good	Good	Fair	Good	B	2	40+	appears healthy with no significant visible defects.
89	Pedunculate oak	Early Mature	22	4	4	4	4	5s	10	5	5	5	1	690	8.2	215.4	Good	Fair	Fair	Good	B	2	40+	Tree has grown tall and thin due to being planted closely to adjacent trees however showing no significant visible defects. Planted with public path either side. Minor epicormic growth.
90	Pedunculate oak	Mature	22	7	6	5	5	2n	2	3	3	3	1	830	9.9	311.6	Good	Good	Fair	Good	A	2 and 1	40+	Planted 20cm from the path. Tree has grown tall and thin due to being planted closely to adjacent trees. No significant visible defects. Minor epicormic growth.
91	Pedunculate oak	Mature	23	9	6	9	6	4n	4	4	4	4	1	800	9.6	289.5	Good	Good	Fair	Good	A	2 and 1	40+	Tree has achieved a good form and size with no evidence of any significant defects. Minor epicormic growth.
92	Pedunculate oak	Mature	19	8	7	4	5	3n	3	5	5	5	1	810	9.7	296.8	Good	Fair	Fair	Fair	B	2	40+	Tree has achieved significant form and size with no evidence of any significant defects. Minor dead wood in the canopy.
93	Pedunculate oak	Mature	18	7	8	7	4	2n	2	2	2	2	1	820	9.8	304.2	Good	Good	Fair	Good	A	2 and 1	40+	Tree has significant die back in the upper canopy and epicormic growth around the lower stem indicating it is under stress. Planted 2m from path and bridge. Potential construction damage to the root system suspected. Tree still has over 75% of canopy intact.
94	Pedunculate oak	Mature	17	8	6	6	2	2e	4	2	8	4	1	820	9.8	304.2	Good	Fair	Fair	Fair	B	2	40+	Tree has distorted canopy to the west due to adjacent trees. On the river bank and 2 m from the bridge. Tree appears healthy with no significant visible defects. Dead wood due to poor tree surgery practice and self-pruning.
95	Pedunculate oak	Mature	17	4	8	6	5	2w	3	3	3	2	1	750	9	254.5	Good	Good	Good	Good	A	2 and 1	40+	Tree showing stress in the canopy from die back and poor tree surgery practice and epicormic growth. On the river bank and 2m from the bridge. Significant dead wood however over 60% of the canopy is still intact.
96	Pedunculate oak	Early Mature	18	6	6	5	5	4s	8	8	4	8	1	680	8.1	209.2	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects and has a good form and size. 2m from the bridge and on the river bank.
97	Pedunculate oak	Early Mature	23	2	3	7	3	3s	8	8	3	8	1	700	8.4	221.6	Good	Good	Good	Good	B	2	40+	Tree slightly distorted in the canopy due to being planted closely to adjacent trees to the west and has minor dead wood however showing no significant visible defects. 2m from the bridge.
97	Pedunculate oak	Early Mature	23	2	3	7	3	3s	8	8	3	8	1	700	8.4	221.6	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Canopy distorted to the north by adjacent trees.

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
98	Pedunculate oak	Mature	24	5	4	4	4	3s	8	3	3	3	1	840	10	319.2	Good	Fair	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Tree has been crown lifted on the south side significantly causing epicormic shoots from the wounds. Minor dead wood in the canopy.
99	Pedunculate oak	Mature	23	6	5	5	5	15n	15	15	15	15	1	880	10.5	350.3	Good	Good	Good	Good	A	2 and 1	40+	Tree has grown tall and thin due to being planted closely to adjacent trees and has minor dead wood in the canopy however showing no signs of significant visible defects.
100	Pedunculate oak	Early Mature	17	4	4	4	4	3n	3	3	3	3	1	680	8.1	209.2	Fair	Fair	Good	Fair	B	2	40+	Tree showing signs of stress due to die back in the canopy and epicormic growth. 70% of the canopy still intact.
101	Pedunculate oak	Early Mature	25	4	4	4	4	17n	17	17	17	17	1	640	7.6	185.3	Good	Good	Good	Good	B	2	40+	Tree has grown tall and thin due to being planted closely to adjacent trees almost in a lolly pop fashion. No significant visible defects. Minor dead wood in the canopy from poor tree surgery practice.
102	Pedunculate oak	Early Mature	18	3	5	7	6	7n	7	8	8	8	1	720	8.6	234.5	Good	Fair	Good	Good	B	2	40+	Tree has slightly distorted canopy to the north and minor die back to the north. No significant visible defects however ivy covered so poor visibility.
103	Pedunculate oak	Early Mature	17	2	2	4	3	4w	5	5	5	5	1	700	8.4	221.6	Fair	Poor	Good	Fair	B	2	40+	Tree heavily ivy covered so visibility is poor. Canopy is very sparse and distorted to the north and east.
104	Pedunculate oak	Early Mature	12	7	7	7	7	1n	1	1	1	1	1	590	7	157.4	Good	Good	Good	Good	B	2	40+	Tree open grown achieving good form and size with no evidence of any significant defects. One of 4 trees older than semi mature and verging on early mature found on this section of the Scheme. Could be retained as a feature with its aesthetic symmetry and good structure. On the north side of the river.
105	Pedunculate oak	Early Mature	12	6	6	6	6	1n	1	1	1	1	1	510	6.1	117.6	Good	Good	Good	Good	B	2	40+	Tree open grown achieving good form and size with no evidence of any significant defects. One of 4 trees older than semi mature and verging on early mature found on this section of the Scheme. Could be retained as a feature with its aesthetic symmetry and good structure. On the north side of the river.
106	Pedunculate oak	Early Mature	9	6	6	6	6	1n	1	1	1	1	1	460	5.5	95.7	Good	Good	Good	Good	B	2	40+	Tree open grown achieving good form and size with no evidence of any significant defects. One of 4 trees older than semi mature and verging on early mature found on this section of the Scheme. Could be retained as a feature with its

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								aesthetic symmetry and good structure. On the north side of the river.
107	Pedunculate oak	Early Mature	11	7	7	7	7	2n	2	2	2	2	2	570	6.8	147	Good	Good	Good	Good	B	2	40+	Tree open grown achieving good form and size with no evidence of any significant defects. One of 4 trees older than semi mature and verging on early mature found on this section of the Scheme. Could be retained as a feature with its aesthetic symmetry and good structure. On the north side of the river.
108	Pedunculate oak	Mature	19	5	10	9	9	3n	3	3	3	3	1	910	10.9	374.6	Good	Good	Fair	Good	A	2 and 1	40+	Stem diameter estimated due to close proximity to the river. Tree appears healthy with no significant visible defects. Tree has significant form and size. Roots could be in the adjacent land despite shallow river approximately 3m deep on the east side.
109	Pedunculate oak	Mature	19	5	10	9	9	2n	2	2	2	2	1	1010	12.1	461.5	Good	Good	Fair	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Tree is of significant form and size with only minor dead wood in the canopy. DBH estimated due to close proximity to the river. Roots could be in the adjacent land despite shallow river approximately 3m deep on the east side.
110	Pedunculate oak	Mature	18	8	10	7	7	1n	1	1	1	1	1	900	10.8	366.4	Good	Good	Fair	Good	A	2 and 1	40+	tree is of significant form and size with no evidence of any significant defects. DBH estimated due to close proximity to the river. minor dead wood in the canopy and ivy covered. roots could be in the adjacent land despite shallow river approximately 3m deep on the east side
111	Pedunculate oak	Mature	16	5	8	5	5	2n	2	2	2	2	1	750	9	254.5	Fair	Fair	Fair	Fair	B	2	40+	Tree is of significant form and size with no evidence of any significant defects. Dead wood over public footpath over 25 cm in girth. Heavily ivy covered with poor visibility. Roots could be in the adjacent land despite shallow river approximately 3m deep on the east side. No access to measure the stem due to close proximity to the river.
112	Pedunculate oak	Mature	16	5	7	5	6	2n	2	2	2	2	1	670	8	203.1	Good	Fair	Fair	Fair	B	2	40+	No access to the stem due to being planted closely to adjacent trees so measurements estimated. Heavily ivy covered visibly is poor. Dead wood in the canopy over 25cm in girth. However, the canopy appears healthy with no significant visible defects. Roots could be in the

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
113	Pedunculate oak	Early Mature	17	4	6	6	4	4n	4	4	4	4	1	660	7.9	197	Good	Good	Fair	Good	B	2	40+	adjacent land despite shallow river approximately 3m deep on the east side. Stem measurements estimated as no access due to close proximity to the river. Tree ivy covered visibly is not great. Tree appears healthy with no significant visible defects only minor dead wood. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side.
114	Pedunculate oak	Early Mature	14	3	6	6	4	3n	3	3	3	3	1	610	7.3	168.3	Good	Good	Fair	Good	B	2	40+	DBH estimated due to close proximity to the river and ivy covered so visibility is not good. Tree appears healthy with no significant visible defects only minor dead wood. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side.
115	Pedunculate oak	Early Mature	14	4	6	6	5	2n	2	2	2	2	1	600	7.2	162.8	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects only minor dead wood in the canopy. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side.
116	Pedunculate oak	Mature	19	4	5	6	5	3n	3	3	3	3	1	780	9.3	275.2	Good	Good	Fair	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects only minor dead wood in the canopy. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side.
117	Pedunculate oak	Mature	19	5	8	8	6	3s	5	3	3	4	1	710	8.5	228.0	Good	Good	Fair	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of any significant defects. Minor dead wood in the canopy. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side.
118	Pedunculate oak	Mature	17	5	5	7	5	3n	3	3	3	3	1	830	9.9	311.6	Fair	Fair	Fair	Fair	A	2 and 1	40+	Heavily ivy-covered poor visibility. Tree appears healthy with no significant visible defects. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side.
119	Turkey oak	Early Mature	20	5	5	4	6	7n	7	7	7	7	1	480	5.7	104.2	Good	Good	Fair	Good	B	2	40+	Semi to early mature species. Tree appears healthy with no significant visible defects. Grown tall and thin due to being planted closely to adjacent trees. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side.

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
120	Robinia	Early Mature	18	5	6	7	4	2s	4	4	2	4	1	510	6.1	117.6	Good	Good	Fair	Good	B	2	40+	Tree appears healthy with no significant visible defects. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side. Robinia species.
121	Turkey oak	Early Mature	19	4	4	4	4	7n	7	7	7	7	1	510	6.1	117.6	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Minor dead wood in the canopy. Roots could be in the adjacent land despite shallow river approximately 3m deep on the south side.
122	Sycamore	Early Mature	21	5	5	5	5	3s	5	7	3	9	1	720	8.6	234.5	Good	Good	Good	Good	B	2	40+	Ivy covered. Tree appears healthy with no significant visible defects. Minor dead wood in the canopy.
123	Pedunculate oak	Early Mature	21	5	7	6	4	4s	5	5	4	5	1	650	7.8	191.1	Fair	Good	Good	Good	B	2	40+	Tree has a wound in the east side lower stem 30cm high and 20cm wide however showing good adaptive growth. Canopy appears healthy with no significant visible defects. Minor dead wood in the canopy.
124	Pedunculate oak	Mature	21	5	5	5	5	3n	3	3	3	3	1	770	9.2	268.2	Fair	Fair	Fair	Fair	B	2	40+	Tree appears healthy with no significant visible defects. Heavily ivy covered visibly is poor. Minor dead wood in the canopy.
125	Pedunculate oak	Early Mature	15	4	4	4	4	3n	3	3	3	3	1	570	6.8	147	Poor	Poor	Poor	Poor	C	2	<10	Tree almost dead. only about 4 remaining healthy branches south facing.
126	Pedunculate oak	Mature	22	3	6	6	5	3s	15	3	3	3	1	700	8.4	221.6	Fair	Fair	Fair	Fair	B	2	40+	Wound on the lower stem south facing 1m high and 15cm wide showing good adaptive growth. Ivy covered visibly is poor. Canopy distorted by adjacent trees to the north. Minor dead wood in the canopy.
127	Pedunculate oak	Mature	23	3	6	8	5	3s	5	3	3	4	1	830	9.9	311.6	Fair	Fair	Fair	Fair	A	2 and 1	40+	Paving on all sides. Minor wound to the lower stem south side showing good adaptive growth. Canopy distorted to the north by adjacent trees. Appears healthy with no significant visible defects.
128	Pedunculate oak	Mature	23	3	6	8	6	3s	5	3	3	3	1	710	8.5	228	Good	Fair	Fair	Fair	A	2 and 1	40+	Canopy distorted to the south. Tree appears healthy with no significant visible defects. Minor dead wood in the canopy.
129	Pedunculate oak	Mature	21	5	5	8	6	4n	4	4	4	4	1	850	10.2	326.8	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Minor die back of two northern facing limbs. Minor dead wood. Tree has a significant form and size with a symmetric canopy.
130	Pedunculate oak	Mature	22	2	6	7	4	4s	15	4	4	15	1	710	8.5	228.0	Good	Fair	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Canopy distorted to the north by adjacent trees.

Tag No.	Tree Type	Life Stage	Height (m)	Crown Spread (m)				Crown Height (m)				No of Stems	Stem Diameter (mm)	Root Protection Area (RPA)		Condition				BS5837 Category		Useful remaining contribution (years)	Comment	
				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
131	Pedunculate oak	Mature	25	7	6	7	5	7e	8	7	8	7	1	800	9.6	289.5	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Minor dead wood in the canopy.
132	Pedunculate oak	Mature	25	6	6	8	5	5s	7	5	5	7	1	900	10.8	366.4	Good	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of any significant defects. Minor dead wood in the canopy.
133	Pedunculate oak	Early Mature	8	4	7	6	4	1n	1	1	1	1	1	600	7.2	162.8	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Good form and symmetry. Providing a screen from the road and the field.
134	Wild cherry	Early Mature	7	6	6	6	6	1n	1	1	1	1	3	600 200 410 390	7.2	162.8	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Providing a screen from the road and field.
135	Wild cherry	Early Mature	8	4	5	5	4	1n	1	1	1	1	4	500 250 250 290 200	6	113.1	Fair	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Providing a screen from the road and the field.
136	Wild cherry	Mature	10	5	6	5	6	1n	1	1	1	1	1	720	8.6	234.5	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects and has a very symmetric canopy. Providing a screen from the road and the field.
137	Lombardy poplar	Early Mature	17	3	3	3	3	6n	6	6	6	6	1	730	8.7	241.1	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Providing a screen from the road and the field.
138	Common ash	Semi Mature	6	4	5	5	5	1n	1	1	1	1	2	630 490 390	7.5	179.5	Good	Good	Good	Good	C	2	40+	Tree appears healthy with no significant visible defects. Good symmetric canopy. Providing a screen from the road and the field.
139	Pedunculate oak	Mature	17	5	4	6	6	3n	3	2	2	3	1	840	10	319.2	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Good form and size. Could be incorporated as a feature.
140	Pedunculate oak	Early Mature	13	5	3	2	4	4n	4	4	4	4	1	600	7.2	162.8	Good	Fair	Good	Fair	B	2	40+	Minor dead wood. Tree appears healthy with no significant visible defects. Canopy distorted to the south by adjacent trees and evidence of die back in the southern canopy.
141	Pedunculate oak	Semi Mature	12	5	3	2	3	3n	3	4	4	4	1	490	5.8	108.6	Good	Fair	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. 80 degrees lean north. Canopy slightly distorted by adjacent trees to the south.
142	Pedunculate oak	Mature	16	6	6	6	4	4n	4	4	4	8	1	810	9.7	296.8	Poor	Good	Poor	Poor	C	2	20+	Evidence of fire damages. Tree is hollow at the base and infected with Ganoderma. Tree is suitable to be left standing in its current setting of low pedestrian activity however if pedestrian activity increased this tree would require removal. Less than 30% holding wood in the stem. Canopy has

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								been reduced to reduce the weight.
143	Pedunculate oak	Mature	15	5	6	4	3	3n	3	3	3	3	1	830	9.9	311.6	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Minor lawn mower damage to the east side. Minor epicormic growth.
144	Pedunculate oak	Mature	15	1	1	5	1	4s	14	14	5	14	1	900	10.8	366.4	Poor	Poor	Poor	Dying	C	2	40+	Tree appropriate in the current setting of low pedestrian activity however if pedestrian activity increased this tree would require removal. Evidence of fire damages and stripped bark south side 1.5m wide and 1.5 high. Tree appears to have less than 30 percent holding wood and the canopy is very sparse with significant dead wood indicating stress. Ganoderma surveyed in this group and is likely in this tree also.
145	Pedunculate oak	Mature	14	2	4	6	4	3n	3	3	3	3	1	930	11.1	391.3	Fair	Fair	Fair	Fair	B	2	20+	Tree is of significant age and has a healthy canopy however a large Ganoderma bracket measuring approximately 40cm wide and 25cm high on the South side is visible. In the current setting of low pedestrian activity this tree is suitable however in a setting of higher pedestrian activity this tree may require removal or a heavy reduction. 75 degrees lean south.
146	Pedunculate oak	Semi Mature	163	3	3	3	3	2n	2	2	2	2	1	490	5.8	108.6	Good	Good	Good	Good	B	2	40+	Semi to early mature tree appears healthy with no significant visible defects. Grown tall and thin due to being planted closely to adjacent trees however showing no significant visible defects despite Ganoderma being very active in the group.
147	Pedunculate oak	Semi Mature	15	2	2	2	2	2n	2	2	2	2	1	490	5.8	108.6	Poor	Fair	Fair	Fair	C	2	20+	Semi to early mature species. Fire damages and stripped bark south side 1m high and 30cm wide. Poor adaptive growth and indication of rot in the stem. Ganoderma surveyed in this group and is likely in this tree. Tall and thin form.
148	Pedunculate oak	Mature	17	5	5	7	5	5s	6	6	5	7	1	890	10.68	358.3	Good	Good	Good	Good	A	2 and 1	40+	Amenity planted species. Tree has no significant visible defects. minor dead wood in the canopy. Tree is north of the public path and 5m from the stream. If the buffer is applied to the group to the south this tree will not be impacted by the Scheme.
149	Sycamore	Early Mature	21	6	6	5	4	3n	3	3	3	3	1	700	8.4	221.6	Good	Good	Good	Good	B	2	40+	Tree appears healthy with no significant visible defects. Good form and size.
150	Pedunculate oak	Mature	17	5	7	7	6	2n	2	3	3	3	1	780	9.3	275.2	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Minor

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								dead wood. Partially ivy-covered and poor visibility. Crown distorted to the north by adjacent tree.
151	Pedunculate oak	Mature	20	8	7	10	8	4n	4	4	4	4	1	1200	14.4	651.5	Good	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of any significant defects. Very symmetric canopy.
152	Pedunculate oak	Mature	22	7	9	5	7	3n	3	3	3	3	1	1110	13.3	557.4	Good	Good	Good	Good	A	2 and 1	40+	Tree is of significant form and size with no evidence of any significant defects. Crown slightly distorted to the south by adjacent tree, minor dead wood in the canopy and minor die back in the tips potentially due to becoming over mature. Ivy covered visibly is poor.
153	Pedunculate oak	Mature	22	4	4	4	4	3n	3	3	3	3	1	770	9.2	268.2	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Tree has grown tall and thin due to being planted closely to adjacent trees.
154	Pedunculate oak	Mature	22	5	7	6	5	3e	3	3	3	5	1	730	8.7	241.1	Good	Good	Good	Good	B	2	40+	Tree has distorted canopy to the north west due to adjacent trees. Tree has minor dead wood however showing no significant visible defects.
155	Pedunculate oak	Mature	24	9	9	8	7	4s	6	5	4	6	1	950	11.4	408.3	Good	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of any significant defects. Minor dead wood in the canopy.
156	Sycamore	Mature	21	6	6	5	5	3n	3	3	3	3	1	830	9.9	311.6	Good	Good	Good	Good	B	2	40+	Tree has achieved good form and size with no evidence of any significant defects.
157	Pedunculate oak	Mature	23	7	8	8	7	3w	4	4	4	4	1	960	11.5	416.9	Good	Good	Good	Good	A	2 and 1	40+	Tree has significant form and size with no evidence of any significant defects. Minor dead wood in the canopy.
158	Pedunculate oak	Mature	22	5	9	8	5	4n	4	4	4	4	1	830	9.9	311.6	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Minor dead wood and slightly distorted to the north in the canopy from being planted closely to adjacent trees.
159	Scots pine	Semi Mature	19	3	2	2	2	3n	3	3	3	3	1	590	7	157.4	Fair	Fair	Fair	Fair	C	2	40+	Distorted canopy to the south due to adjacent trees. Small wound south side 30cm high 15cm wide on the lower stem but showing good adaptive growth.
160	Pedunculate oak	Mature	23	8	9	7	4	3n	3	4	3	19	1	840	10	319.2	Good	Good	Good	Good	A	2 and 1	40+	Tree appears healthy with no significant visible defects. Crown distorted to the west by adjacent trees.
161	Pedunculate oak	Mature	23	8	6	8	5	4n	4	4	4	4	1	860	10.3	334.6	Good	Good	Good	Good	A	2 and 1	40+	Tree has good form and size with no evidence of any significant defects.
162	Pedunculate oak	Mature	23	7	8	10	9	7e	8	7	7	8	1	1110	13.3	557.4	Good	Good	Good	Good	A	2 and 1	40+	Tree not tagged due to not having permission however location on topo is accurate. Tree is of

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
																								significant form and size with no evidence of any significant defects. Minor dead wood in the canopy.
163	Pedunculate oak	Mature	23	7	4	8	7	6n	6	6	6	7	1	940	11.2	399.7	Good	Good	Good	Good	A	2 and 1	40+	Ivy covered visibly is poor. Tree not tagged due to not having permission however location on topo is accurate. Tree has significant dead wood and appears to be reaching over maturity.
164	Crack willow	Early Mature	12	7	5	4	5	1n	1	1	1	1	1	770	9.2	268.2	Fair	Good	Good	Good	B	2	40+	Semi to early mature species showing good form and size with no evidence of any significant defects. One of few trees of any significant age within the group of predominantly young trees.
165	Goat willow	Early Mature	7	5	5	5	5	1n	1	1	1	1	2	680 510 450	8.1	209.2	Good	Good	Good	Good	B	2	40+	Self-seeded tree. Appears healthy with no significant visible defects. Good form and size. One of the few tree species of any significant age within this group. Semi to early mature.
166	Goat willow	Early Mature	7	5	5	5	5	1n	1	1	1	1	4	440 270 240 210 150	5.2	87.6	Fair	Good	Good	Good	C	2	40+	Multiple stemmed tree with a good form and size with no evidence of any significant defects. Semi to early mature species and one of the few trees in the group of any significant size and age.
167	Goat willow	Early Mature	6	5	5	5	5	1n	1	1	1	1	2	430 290 320	5.1	83.6	Fair	Fair	Fair	Fair	C	2	40+	Former coppiced tree. Tree has torn bark along the northern length of one its southern stems which is dying, however the rest of the tree appears healthy with no significant visible defects. One of the few trees in the group of any significant age.
168	Goat willow	Early Mature	6	5	5	5	5	1n	1	1	1	1	2	620 570 240	7.4	173.9	Fair	Fair	Fair	Fair	C	2	40+	Western leader is dead, and the canopy is distorted to the north by adjacent trees. One of the few semi-early mature species within the group.
G1	Sycamore	Young	5	2	2	2	2	1n	1	1	1	1	6 trees	170 av	2 av	13 av	Fair	Fair	Fair	Fair	C	2	40+	Young sycamore easily replaceable with mitigation planting if necessary.
G2	Native and naturalised trees	Early Mature	6 to 17	6	6	6	6	1n	1	1	1	1	10+ trees	410 av	4.9 av	76 av	Good	Good	Good	Good	B	2	40+	Amenity planted species within a field bordering the road and providing a significant screen from the road and the field. Approximately 35 trees counted ranging from young to early mature with one mature wild cherry surveyed. Trees appear healthy with no significant visible defects. Species including predominantly wild cherry; common ash and common oak with occasional Lombardy poplar.

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
G3	Native; naturalised and exotic trees	Mature	2 to 26	10	10	10	10	2n	2	2	2	2	100+ trees	1000 av	12 av	452.4 av	Good	Good	Good	Good	A	2 and 1	40+	Semi mature to mature common oak; turkey oak; European beech; occasional Scots pine; European yew; Lombardy poplar; understory of hawthorn; elder; holly; young sycamore and young common ash. The group provides a significant screen from the railway and development to the south from the field and the public path cycleway. Regularly used by the general public for recreational and commuting purposes.
G4	Native and naturalised trees	Semi Mature	2 to 16	5	5	5	5	1n	1	1	1	1	10+ trees	400 av	4.8 av	72.3 av	Fair	Fair	Fair	Fair	B	2	40+	Young to semi mature sweet chestnut and sycamore with an understory of holly; bramble and nettle. This has lower arboricultural value than the adjacent groups however it still provides a good screen from the field and the school to the north and the development to the south. Whilst also enclosing the footpath and cycleway regularly used by the general public for recreational and commuting purposes, so has good landscape value.
G5	Sycamore	Early Mature	12 to 22	6	6	6	6	2n	2	2	2	2	10+ trees	650 av	7.8 av	191.1 av	Fair	Fair	Fair	Fair	B	2	40+	Small cluster of young to early mature species of sycamore. Non-native therefore has less arboricultural value than the common oaks.
G6	Pedunculate oak	Mature	17 to 26	9	9	9	9	3n	3	3	3	3	100+ trees	850 av	10.2 av	326.8 av	Good	Good	Good	Good	A	2 and 1	40+	Group of approximately 125 trees - semi mature to mature oak with early mature and mature being the dominant ages. Trees are spaced every 2 to 10 metres so are very closely planted together. Stem diameters range from 350 to 900. Works in this area would require significant tree removal. Individually plotted trees were surveyed as the largest in this group however not all of the trees have been individually plotted due to time constraints. Trees enclosing the public path running through it and providing a screen from the railway and development to the south and school and field to the north.
G7	Mixed native trees	Mature	2 to 18	8	8	8	8	1n	1	1	1	1	100+ trees	950 av	11.4 av	408.3 av	Good	Good	Good	Good	A	2 and 1	40+	Common hawthorn; buckthorn and hazel hedge with 8 sporadically planted early mature and mature common oak trees. This group has grown on the west side of a stream that runs to the east which is approximately 3m deep. It is likely that the roots of these oak trees have grown under the stream and into the Scheme boundary. Providing amenity

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
G8	Native; naturalised and exotic trees	Early Mature to Mature	1 to 19	8	8	8	8	1n	1	1	1	1	10+ trees	830 av	9.9 av	311.6 av	Good	Good	Fair	Good	B	2	40+	value to the site by screening school and field from the site and enclosing the public path. Group of low-lying common hawthorn and hazel forming a broken hedge with sporadic semi to early mature species and occasional mature species of common oak ; turkey oak; common ash and robinia. Stream to the south approximately 3m deep however root systems could still be affected, and canopies still extend over the boundary. Providing amenity value to the site by screening the public path from the site.
G9	Native trees	Semi Mature	4 to 10	5	5	5	5	1n	1	1	1	1	10+ trees	230 av	2.7 av	23.9 av	Fair	Fair	Fair	Fair	C	2	40+	Young to semi mature crack willow and goat willow. Easily replicable with mitigation planting.
G10	Native trees	Semi Mature	2 to 15	4	4	4	4	1n	1	1	1	1	100+ trees	230 av	2.7 av	23.9 av	Fair	Fair	Fair	Fair	C	2	40+	Young to semi mature species of crack willow; goat willow; common ash and common oak with an understory of common hawthorn; blackthorn; nettle and long grass. This group is easily replaceable with mitigation planting if necessary. 5 common oak trees were individually plotted within this group as they were considered the oldest most significant trees on site aging on the border of semi to early mature.
G11	Pedunculate oak	Mature	18 to 27	8	8	8	8	3n	3	3	3	3	100+ trees	890 av	10.6 av	358.3 av	Good	Good	Good	Good	A	2 and 1	40+	Amenity planted species within a grassland patch with a network of public footpaths running through it. This group will not be affected by the Scheme if the correct buffer is applied to the groups to the south.
G12	Mixed native and naturalised trees	Mature	6 to 25	10	10	10	10	3n	3	3	3	3	70 trees	950 av	11.4 av	408.3 av	Good	Good	Good	Good	A	2 and 1	40+	Linear group of approximately 70 trees most of which are predominantly mature or early mature species of common oak with sporadic Scots pine; sycamore and goat willow. Group provides a significant screen from the field and play ground; encloses the public path and acts as an excellent feature for recreational use and commuting purposes by the public.
G13	Mixed native trees	Semi Mature	6	4	4	4	4	1n	1	1	1	1	6 trees	280 av	3.3 av	35.4 av	Fair	Fair	Fair	Fair	C	2	40+	Group partially within eastern field and partially within fishing land. Limited access surveyed from a distance. Small self-seeded group of goat willow and crack willow with young common ash; field maple and blackthorn.

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
G14	Common ash	Young	2 to 4m	1	1	1	1	1n	1	1	1	1	100+ trees	100 av	1.2 av	4.5 av	Fair	Fair	Fair	Fair	C	2	40+	providing amenity value to the site by screening the fishing lake.
G15	Mixed native trees	Young	2 to 4	3	3	3	3	1n	1	1	1	1	4 trees	150 av	1.8 av	10.1 av	Fair	Fair	Fair	Fair	C	2	40+	Self-seeded trees providing minor amenity value to the site by screening the public path from the adjacent land. Species including predominantly common oak; hazel and common ash. Easily replaceable with mitigation planting if necessary.
G16	Mixed native and naturalised trees	Semi Mature	10	4	4	4	4	3n	3	3	3	3	100 trees	250 av	3 av	28.2 av	Fair	Fair	Fair	Fair	C	2	40+	Young to semi mature species of field maple; common hawthorn; common ash and robinia. Not on the topo. providing a screen from the public path and the fishing lakes. Easily replaceable with mitigation planting if necessary.
G17	Mixed native trees	Young	2 to 8	2	2	2	2	1n	1	1	1	1	10 trees	150 av	1.8 av	10.1 av	Fair	Fair	Fair	Fair	C	2	40+	Not on topo. Limited access due to the river so surveyed from a distance. Young to semi mature group of self-seeded trees north of the river with species including sporadic dead elm trees that have succumbed to Dutch elm disease with and understory of common hawthorn.
G18	Mixed native trees	Young	2 to 8	2	2	2	2	1n	1	1	1	1	10 trees	150 av	1.8 av	10.1 av	Fair	Fair	Fair	Fair	C	2	40+	Not on the topo. Limited access due to the river so partiality surveyed from a distance. Young to semi mature group of self-seeded trees north of the river with species including sporadic dead elm trees that have succumbed to Dutch elm disease with and understory of common hawthorn.
G19	Mixed native trees	Young	4 to 10	4	4	4	4	1n	1	1	1	1	50 trees	280 av	3.3 av	35.4 av	Fair	Fair	Fair	Fair	C	2	40+	Not on topo. Self-seeded group consisting of young to semi mature species of common alder with goat willow; young ash and a blackthorn and bramble understory. Occasional dead English elm surveyed. Group runs either side of the river. Easily replaceable with mitigation planting.
G20	Mixed native trees	Young	2 to 6	4	4	4	4	1n	1	1	1	1	100+ trees	150 av	1.8 av	10.1 av	Fair	Fair	Fair	Fair	C	2	40+	Not on topo. Young self-seeded ash; common oak; blackthorn; common hawthorn; and a bramble and reed understory. Easily replaceable with mitigation planting if necessary. Providing a minor screen from the field and railway.

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				N	E	S	W	1st branch (m)	N	E	S			W	RPA Radius (m)	RPA (m2)	Stem	Crown	Basal Area	General Physical	Category			Sub Category
G21	Mixed native and naturalised trees	Young	6	2	2	2	2	1n	1	1	1	1	6 trees	240 av	2.8 av	26 av	Fair	Fair	Fair	Fair	C	2	40+	Young self-seeded tree species including common alder; turkey oak; sycamore; blackthorn and dead English elm. Easily replaceable with mitigation planting if necessary.
G22	Mixed native trees	Young	4	1	1	1	1	1n	1	1	1	1	50 trees	150 av	1.8 av	10.1 av	Poor	Poor	Fair	Poor	C	2	20+	Not on topo. Young dead elm with occasional common alder; common hawthorn and common blackthorn. Easily replaceable with mitigation planting if necessary.
G23	Mixed native and exotic trees	Young	1 to 5	1	1	1	1	1n	1	1	1	1	10+ trees	170 av	2 av	13 av	Fair	Fair	Fair	Fair	C	2	40+	Not on topo. Young sporadically self-seeded common hawthorn and one young leylandii. Within the retail development land. Easily replaceable with mitigation planting if necessary. Offers very minor screen.
G24	Mixed native trees	Semi Mature	2 to 9	3	3	3	3	1n	1	1	1	1	5 trees	280 av	3.3 av	35.4 av	Fair	Fair	Fair	Fair	C	2	40+	Not on topo. No access surveyed from a distance and measurements estimated. Sporadic self-seeded common hawthorn and one common ash. Providing minor screen. Easily replaceable with mitigation planting if necessary.
G25	Mixed native trees	Young	3 to 8	2	2	2	2	1n	1	1	1	1	10+ trees	180 av	2.1 av	14.6 av	Fair	Fair	Fair	Fair	C	2	40+	Easily replaceable with mitigation planting if necessary. No access as in the fishing lakes and surveyed from a distance so measurements estimated. Small group of young self-seeded ash and goat willow bordering the fishing lake.
W1	Mixed native woodland	Mature	15 to 30	14	14	14	14	2n	2	2	2	2	100+ trees	1110 av	13.3 av	557.4 av	Good	Good	Good	Good	A	2 and 1	40+	Oak and ash woodland with a number of significant mature and over mature common oak trees in. The woodland also has a hazel coppiced understory. The scheme should remain 15m from this woodland. The stream to the south may be acting as a barrier for the root systems so it is likely that the buffer applied to the southern group will be sufficient to ensure the trees within this woodland are not affected. Woodland is approximately 8m from the river which is about 3m deep. Typically, roots are on the top 600mm of soil however the roots of these trees may be encouraged by the extra water availability provided by the river.
H1	Blackthorn	Semi mature	3	3	34	3	34	0.1	0.1	0.1	0.1	0.1	10+ trees	150 av	1.8 av	10.1 av	Fair	Fair	Fair	Fair	C	2	40+	Blackthorn hedge. Approximately 34m east to west and 3m north to south. Easily replaceable with mitigation planting if necessary. Providing a minor screen from path and adjacent land.

D. References

British Standard BS 5837:2012 Trees in Relation to design, demolition and construction – Recommendations; April 2012; ISBN 978 0 580 69917 7

British Standard BS 3998:2010 Recommendations for Tree Work; Third (present) edition, December 2010; ISBN 978 0 580 53777 6

The National Joint Utilities Group, Issue 1 – 8th October 2007, Volume 4 - Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees

Arboricultural Association, 1991, Leaflet 4 - Tree Management

The Borough Council of Kings Lynn and West Norfolk's online maps, available at <https://www.west-norfolk.gov.uk/mynearest#map>

Norfolk Health, Heritage, and Biodiversity Walks, Coast Alive, Walk in and Around the Kings Lynn Area, Norfolk Country Council (2010)

