FPCR | environment & design






ARBORICULTURAL ASSESSMENT

Client

Stephenson Halliday

Project

Haverhill Recycling Centre

Date

November 2025

CONTENTS

1.0 INTRODUCTION 1

2.0 PLANNING POLICY 2

3.0 SURVEY METHODOLOGY 3

4.0 RESULTS 7

5.0 ARBORICULTURAL IMPACT ASSESSMENT 9

6.0 NEW TREE AND HEDGEROW PLANTING 9

7.0 TREE PROTECTION MEASURES 11

TABLES

Table 1: Summary of Trees by Retention Category

Table 2: Summary of Impact on Tree Stock

FIGURES

Figure 1: The chart of girth in relation to age and development classification of trees

PLANS

Tree Survey Plan (12168-T-01)

Tree Retention Plan (12168-T-02)

APPENDICES

Appendix A: Tree Schedule

Appendix B: Protective Fencing Specifications

Rev	Issue Status	Prepared/Date	Approved/Date
-	Final	AW / 04.11.25	TCB / 07.11.25

1.0 INTRODUCTION

1.1 This report has been prepared by FPCR Environment and Design Limited on behalf of Stephenson Halliday to present the findings of an Arboricultural Assessment and survey of trees located at Haverhill Recycling Centre (hereafter referred to as the site), OS Grid TL 664 443.

Site Description

1.2 The site is located to the north of Haverhill Recycling Centre and comprised of a small area of trees situated to the south of Homefield Road. Tree cover consisted primarily of planted landscaping that formed a buffer between the recycling centre and the industrial estate to the north.

Scope of Assessment

1.3 A tree survey and assessment of existing trees was carried out by FPCR Environment and Design on **Friday 24th October 2025** in accordance with guidance contained within British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendations' (hereafter referred to as BS5837).

1.4 This report has been produced to accompany a section 73 planning application to amend an approved layout to allow for the installation of a fire suppression system.

1.5 The purpose of this report is therefore to firstly, present the results of this assessment of the existing trees' arboricultural value, based on their current condition and quality and to secondly, provide an assessment of impact arising from the proposed development of the site.

2.0 PLANNING POLICY

National Planning Policy Framework December 2024

2.1 National Planning Policy is defined by the National Planning Policy Framework (NPPF). This sets out the Government's most current and up to date planning policies for England and how these should be applied. The current NPPF is dated December 2024.

2.2 In relation to arboriculture, the NPPF states that:

- 136 '*Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined (footnote 52), that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users'. (footnote 52: unless, in specific cases, there are clear, justifiable and compelling reasons why this would be inappropriate)*
- *193 (c) 'development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons (footnote 70) and a suitable compensation strategy exists*'.
- and provides specific guidance that:
- *193 (d) 'development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate'.*

2.3 With reference to paragraph 193 (c), examples of what is deemed to be 'wholly exceptional' are included within Footnote 70 and provides the examples of 'infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat'.

3.0 SURVEY METHODOLOGY

3.1 The survey of trees has been carried out in accordance with the criteria set out in Chapter 4 of BS5837. The survey has been undertaken by a suitably qualified and experienced arboriculturist and has recorded information relating to all those trees within the site and those adjacent to the site which may be of influence on any proposals. Trees were assessed for their arboricultural quality and benefits within the context of the proposed development in a transparent, understandable, and systematic way.

3.2 Trees have been assessed as groups, hedgerows or woodland where it has been determined appropriate.

- The term group has been applied where trees form cohesive arboricultural features either aerodynamically, visually or culturally including biodiversity or habitat potential for example parkland or wood pasture.
- For the purposes of this assessment, a hedgerow is described as any boundary line of trees or shrubs less than 5m wide at the base and are managed under a regular pruning regime.
- For the purposes of this assessment woodland is described as a habitat where 'trees are the dominant plant form. The individual tree canopies generally overlap and interlink, often forming a more or less continuous canopy'[1]. Woodlands, however, are not just formed of trees and generally include a great variety of other plants. These will include 'mosses, ferns and lichens, as well as small flowering herbs, grasses and shrubs'[2].

3.3 An assessment of individual trees within groups, hedgerows and woodland has been made where a clear need to differentiate between them, for example, to highlight significant variation between attributes including physiological or structural condition or where a potential conflict may arise.

BS5837 Categories

3.4 Trees, groups, hedgerows, and woodland have been divided into one of four categories based on Table 1 of BS5837, 'Cascade chart for tree quality assessment'. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below).

3.5 Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds.

3.6 Categories A, B and C are applied to trees that should be of material consideration in the development process. Each category also having one of three further sub-categories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.

3.7 **Category (U) – (Red):** Trees which are unsuitable for retention and are in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Trees within this category are:

1 Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)
2 http://www.countrysideinfo.co.uk/woodland_manage/whatis.htm

- Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.
- Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.
- Trees that are infected with pathogens of significance to the health and/ or safety of other nearby trees or are very low quality trees suppressing adjacent trees of better quality.
- Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.

3.8 **Category (A) – (Green):** Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years with potential to make a lasting contribution. Such trees may comprise:

- Subcategory (i) trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.
- Subcategory (ii) trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.
- Subcategory (iii) trees, groups or woodlands of significant conservation, historical, commemorative or other value for example veteran or wood pasture.

3.9 **Category (B) – (Blue):** Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years with potential to make a significant contribution. Such trees may comprise:

- Subcategory (i) trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.
- Subcategory (ii) trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.
- Subcategory (iii) trees with material conservation or other cultural value.

3.10 **Category (C) – (Grey):** Trees that are considered for retention and are of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Such trees may comprise:

- Subcategory (i) unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
- Subcategory (ii) trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value or trees offering low or only temporary / transient screening benefits.
- Subcategory (iii) trees with no material conservation or other cultural value.

Ancient and Veteran Trees

3.11 Various published methodologies are currently available for the identification of Ancient and Veteran trees which, due to the complexity and subjectivity of the process of defining and assessing these trees, often have conflicting definitions.

3.12 BS:5837 defines veteran trees as.

"Tree that, by recognized criteria, shows 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".

NOTE These characteristics might typically include a large girth, signs of crown retrenchment and hollowing of the stem.

3.13 BS:5837 does not provide a definition for ancient trees and therefore the assessment and the criterion being used for identifying ancient tree is based upon government guidance on, Ancient woodland, ancient trees and veteran trees: advice for making planning decisions[3] which states.

"All ancient trees are veteran trees, but not all veteran trees are ancient. The age at which a tree becomes ancient, or veteran will vary by species because each species ages at a different rate."

3.14 Ancient and veteran trees are also material considerations within the planning process, and their importance is specifically recognised within the National Planning Policy Framework (NPPF) 2023, which includes its own definition of ancient and veteran trees:

'A tree which, because of its age, size, and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage.'[4]

3.15 Stem girth is the most reliable guide when determining the age of trees and in normal growing conditions, ancient and veteran trees are those which have a large girth by comparison with other trees of the same species. To inform the assessment of chronological age reference has been made to the chart provided within Lonsdale (2013) (shown below in Figure 1).

3 Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)
4 Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)

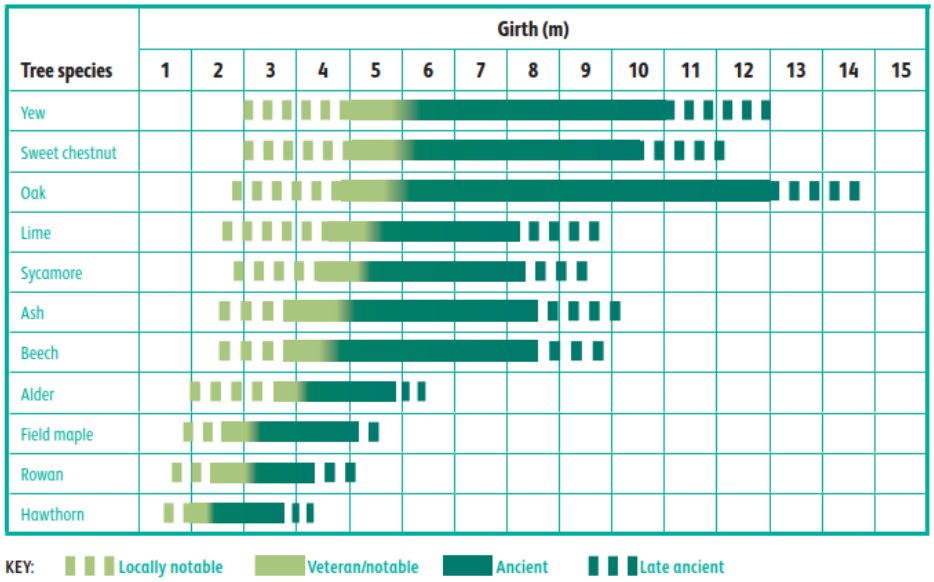


Figure 1: The chart of girth in relation to age and development classification of trees, as shown in Lonsdale (2013)[5].

3.16 RAVEN 2 (Recognition of Ancient, Veteran & Notable trees) Julian Forbes-Laird (2023)[6] has been adopted for gathering survey information as this provides a standardised framework for recording characteristic ancient/veteran features and this Arboricultural Assessment has also considered any potential candidates against this framework.

Considerations and Limitations of the Tree Survey

3.17 The survey was completed from ground level only and from within the boundary of the site. Aerial tree inspections or an assessment of the internal condition of the stem/s or branches were not undertaken at this stage as this level of survey is beyond the scope of the initial assessment.

3.18 The statements made in this report regarding the assessed trees applies to the date of survey and cannot be assumed to remain unchanged. It will be necessary to review all comments and observations made within this report, in accordance with sound arboricultural practice, within two years of the date of survey (unless explicitly stated elsewhere within this report). Further review may also be necessary where site conditions change or works to trees are carried out which have not been specified in detail within this report.

3.19 Hedgerows are identified as a Habitat of Principal Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The tree survey conducted, in accordance with BS5837, does not assess hedgerows against the Hedgerow Regulations 1997 or specifically from an ecological perspective, and is outside the scope of this assessment.

3.20 It may be necessary during detailed design to undertake further assessment and accurate positioning of woody species within tree groups and hedgerows to assist structural calculations for foundation design of structures in accordance with NHBC Chapter 4.2 Building near Trees.

[5] Lonsdale, D. (Ed.). 2013). Ancient and other veteran trees: further guidance on management. London: The Tree Council.
[6] Recognition of Ancient, Veteran & Notable Trees – RAVEN 2 (2023) – Julian Forbes-Laird Consultancy.

4.0 RESULTS

4.1 A total of one individual tree and one group of trees were surveyed as part of the Arboricultural Assessment. Trees were surveyed as individual trees, groups, hedgerows and woodland as per the survey methodology.

4.2 Appendix A presents details of all individual trees, and groups recorded during the assessment including heights, diameters at 1.5m from ground level, crown spread (given as a radial measurement from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention and the root protection area (RPA), calculated in accordance with Annex C, D and Section 4.6 of BS5837:2012.

4.3 General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.

4.4 The individual positions of trees and groups have been shown on the Tree Survey Plan. The positions of trees are based on a topographical / land survey, as far as possible, supplied by the client. Where topographical information has not identified the position of trees these have been plotted using a global positioning system and aerial photography to provide approximate locations. The crown spread, root protection area and shade pattern (where appropriate) are also indicated on this plan.

Results Summary

4.5 Tree cover was confined to the verge that ran between the existing site and the pavement along the southern side of Homefield Road and ranged in quality from moderate (Category B) to low (Category C). Trees were native in origin and had been planted as part of a landscaping scheme. The species recorded during the survey included cotoneaster *Cotoneaster* spp., dogwood *Cornus sanguinea*, field maple *Acer campestre*, goat willow *Salix caprea*, hawthorn *Crataegus monogyna*, hazel *Corylus avellana*, laurel *Prunus laurocerasus*, rowan *Sorbus aucuparia*, Scots pine *Pinus sylvestris*, silver birch *Betula pendula*, wild cherry *Prunus avium*.

4.6 Table 1 below summarises the trees assessed and several of the trees have been discussed in more detail following the table, owing to their physical condition or arboricultural significance.

Table 1: Summary of Trees by Retention Category

	Individual Trees	Total	Groups of Trees	Total
Category U - Unsuitable		0		0
Category A (High Quality / Value)		0		0
Category B (Moderate Quality / Value	T1	1		0
Category C (Low Quality / Value)		0	G1	1

Individual Tree

4.7 A single tree was recorded individually due to it being distinct from the group of trees situated around it. T1 was an early mature Scots pine that had been planted and had established itself well. It showed no signs of any obvious major defects and was much more prominent than the other trees that made up G1.

Group of Trees

4.8 G1 was a linear group of planed specimens that ran along a small verge between the site to the south and Homefield Road. This group consisted of typical native tree planting. Trees were densely set which provided some screening of the site to the south. From an arboricultural perspective these trees were of a low quality.

Ancient and Veteran Trees

4.9 None of the assessed trees were considered as ancient or veteran trees in accordance with our veteran survey methodology.

Statutory Considerations

4.10 Local authorities have a Duty under the Town and Country Planning Act to create Tree Preservation Orders (TPO) to protect and preserve specific trees and woodlands that bring significant amenity benefit to a particular site or location.

4.11 Under a TPO it is a criminal offence to cut down, top, lop, uproot or wilfully destroy a tree protected by that Order, or to cause or permit such actions, if carried out without the prior written consent of the acting LPA.

4.12 No direct consultation with the Local Planning Authority has taken place, however, it is understood having used the online search facility on the website for the Local Planning Authority, West Suffolk Council that there are no Tree Preservation Orders and Conservation Areas that would apply to any trees present on, or in close proximity to the assessment site and therefore no statutory constraints would apply to the development in respect of trees. Before any tree works are undertaken confirmation of the online information should be sought from the Local Authority.

4.13 Information provided on Tree Preservation Orders and Conservation Areas is accurate to the date of this assessment and cannot be assumed to remain unchanged. The last check was carried out on the Tuesday 21st October 2025.

5.0 ARBORICULTURAL IMPACT ASSESSMENT

5.1 The following paragraphs present a summary of the tree survey and discussion of particular trees and groups recorded in the context of any proposed development in the form of an Arboricultural Impact Assessment in accordance with section 5.4 of BS5837. Any final tree retentions will need to be reconciled with the advice contained within this report.

5.2 The AIA has been based upon the Proposed Haverhill fire system layout (EC-25005-301-S01).

5.3 An overlay of the layout has been incorporated in the Tree Retention Plan to assist in identifying the relationship and any potential conflicts between the proposals and the existing trees and hedgerows. The plan also identifies which trees would be required to be removed or retained as part of the proposed development.

5.4 Table 2 below summarises the impact on tree stock and these impacts have been discussed in more detail following the table.

Table 2: Summary of Impact on Tree Stock

	Trees to be Removed	Reason for Removal
Category B (Moderate Quality / Value	T1	T1 – Removed to allow for water tank to be installed.
Category C (Low Quality / Value)	G1	G1 – Part removal to allow for water tank to be installed.

5.5 To facilitate the proposals, part of G1 and T1 will require removing to allow for the water tank to be positioned in place to create the proposed canon system fire tank and pump house. Due to the size of the tank, the nature of the development and the method of construction, the retention of these trees is unfeasible.

5.6 These trees were planted specimens and to mitigate for their loss, new trees will be replanted in the same position, and these will quickly and adequately compensate for the removals as a result of this development. It would be recommended that native specimens such as the ones found within G1 are specified for replanting.

5.7 Overall, whilst removals are required to facilitate development, the amount of trees to be removed is minimal and they can readily be replaced with new trees that will provide the same level or both arboricultural value and landscape screening.

6.0 NEW TREE AND HEDGEROW PLANTING

6.1 The success of any landscaping scheme relies on an adequate provision of a high-quality rooting environment within which trees can thrive and reach their full potential. Planting trees with due care and consideration can, in the long term, provide a greater return on a schemes green investment and ensure trees remain healthy and grow to mature proportions. Healthy mature trees integrate well into the built environment; increase the maturity of the landscape; help provide a natural green and leafy urban environment in which people would want to reside whilst also benefiting local wildlife.

6.2 The planting of trees within confined urban environments should consider the use of appropriately designed planting pits specifically engineered to promote tree health and

longevity. Crucially the aim will be to provide an adequate volume of quality soil for roots to suitably develop by calculating the amount of available soil volumes needed and selecting species whose mature size is compatible with the site. This is an integral component of the planning stage (Lindsey & Bassuk, 1991).

General Planting Recommendations

6.3 Wherever possible, following discussions with the developer and utility companies, common service trenches should be specified to minimise land take associated with underground service provision and facilitation access for future maintenance.

6.4 Tree planting should be avoided where they may obstruct overhead power lines or cables. Any underground apparatus should be ducted or otherwise protected at the time of construction to enable trees to be planted without resulting in future conflicts.

7.0 TREE PROTECTION MEASURES

7.1 Retained trees should be adequately protected during works through the erection of the requisite tree protection measures. These protection measures should be detailed as part of a site-specific Arboricultural Method Statement, which could be imposed as a condition of planning approval.

7.2 Measures to protect trees should follow the guidance in BS5837 and be applied where necessary for the purpose of protecting trees within the site whilst allowing sufficient access for the implementation of the proposed layout. These have been broadly summarised below.

General Information and Recommendations

7.3 All trees retained on site should be protected by suitable barriers or ground protection measures around the calculated RPA, crown spread of the tree or other defined constraints of this assessment as detailed by section 6 and 7 of BS5837.

7.4 Barriers should be erected prior to commencement of any construction work and once installed, the area protected by fencing or other barriers will be regarded as a construction exclusion zone.

7.5 Any trees that are not to be retained as part of the proposals should be felled prior to the erection of protective barriers. Particular attention needs to be given by site contractors to minimise damage or disturbance to retained specimens.

7.6 Construction access may take place within the root protection area if suitable ground protection measures are in place. This may comprise single scaffold boards over a compressible layer laid onto a geo-textile membrane for pedestrian movements. Vehicular movements over the root protection area will require the calculation of expected loading and the use of proprietary protection systems.

Tree Protection Barriers

7.7 Tree protection fencing should be fit for the purpose of excluding any type of construction activity and suitable for the degree and proximity of works to retained trees. Barriers must be maintained to ensure that they remain rigid and complete for the duration of construction activities on site.

7.8 In most situations, fencing should comprise typical construction fencing panels attached to scaffold poles driven vertically into the ground, as illustrated in Appendix B.

7.9 Where site circumstances and the risk to retained trees do not necessitate the default level of protection an alternative will be specified appropriate to the level / nature of anticipated construction activity.

Protection outside the exclusion zone

7.10 Once the areas around trees have been protected by the barriers, any works on the remaining site area may be commenced providing activities do not impinge on protected areas.

7.11 All weather notices should be attached to the protective fencing to indicate that construction activities are not permitted within the fenced area. The area within the protective barriers will

then remain a construction exclusion zone throughout the duration of the construction phase of the proposed development.

7.12 Wide or tall loads etc should not come into contact with retained trees. Banksman should supervise transit of vehicles where they are near retained trees.

7.13 Oil, bitumen, cement or other material that is potentially injurious to trees should not be stacked or discharged within 10m of a tree stem. No concrete should be mixed within 10m of a tree. Allowance should be made for the slope of ground to prevent materials running towards the tree.

7.14 Notice boards, telephone cables or other services should not be attached to any part of a retained tree.

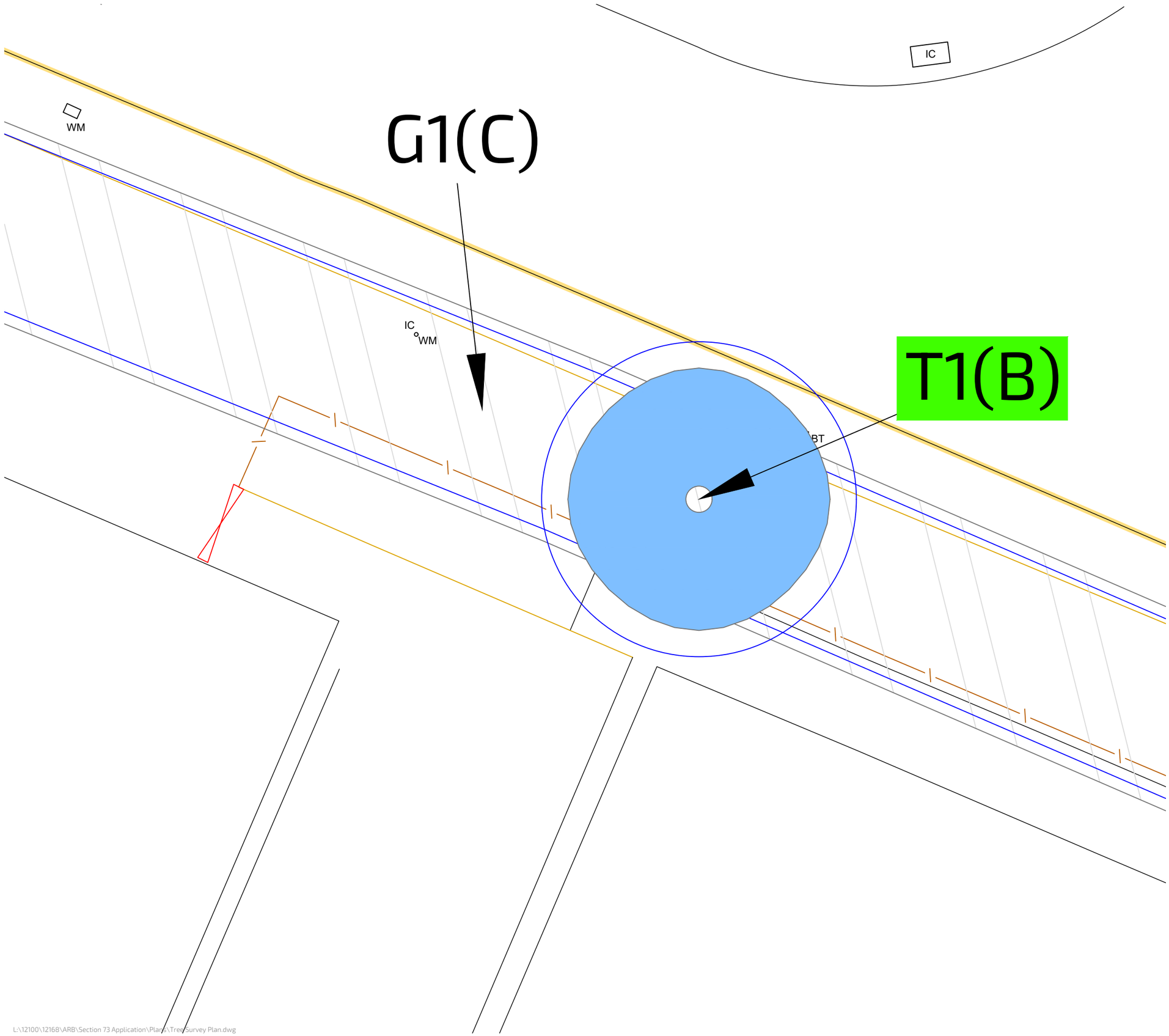
7.15 Any trees which need to be felled adjacent to or are present within a continuous canopy of retained trees, must be removed with due care (it may be necessary to remove such trees in sections).

FPCR Environment and Design Ltd
Registered Office: Lockington Hall, Lockington, Derby DE74 2RH
Company No. 07128076. [T] 01509 672772 [E] mail@fpcr.co.uk [W] www.fpcr.co.uk

This report is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without the written consent of FPCR Environment and Design Ltd. Ordnance Survey material is used with permission of The Controller of HMSO, Crown copyright 100019980.

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey Mastermap - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com).



N

0 1 2 3 4 5m

Notes:

All dimensions to be verified on site. Do not scale this drawing, use figure dimensions only. Drawing to be read in conjunction with Arboricultural Assessment and Appendix A - Tree Schedule.
The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified site prior to and decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculation foundation depths.

Category B - Tree Quality (BS5837:2012)

Category C - Group of Low Quality (BS5837:2012)

Root Protection Area

T1/G1 Tree / Group Positioned by Topographical Survey

T1/G1 Tree / Group Positioned by Aerial Imagery

rev	date	description	drwn/chkd
-	24.10.25	First Issue	AW / TCB

client

Stepheson Halliday

project

Haverhill Recycling Centre

title

TREE SURVEY PLAN

scale

1:100 @ A3

number

12168-T-01

status

-

rev

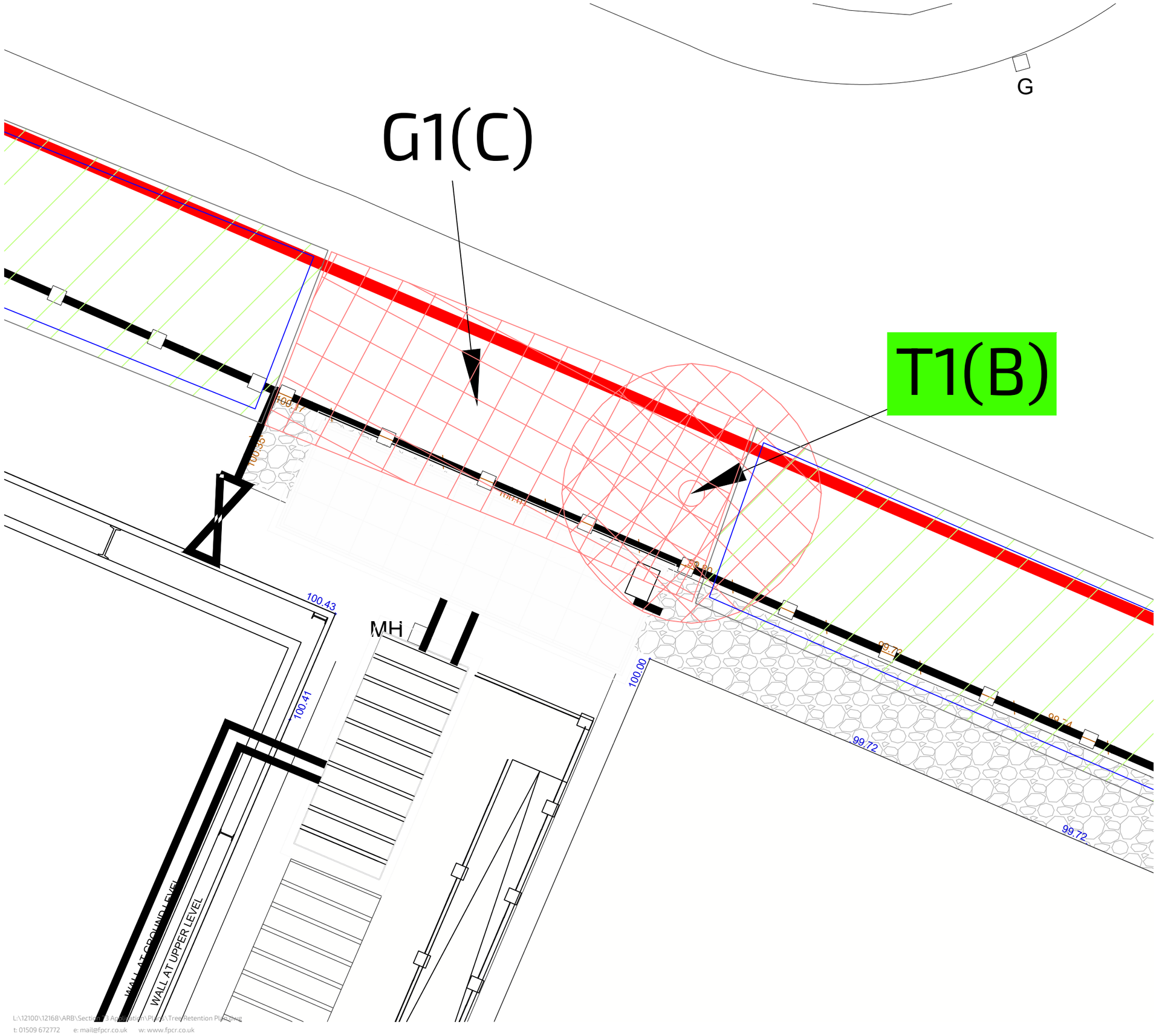
-

L:\12100\12168\ARB\Section 73 Application\Plans\Tree Survey Plan.dwg
t: 01509 672772 e: mail@fpcr.co.uk w: www.fpcr.co.uk

FPCR | environment & design

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey Mastermap - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com).



N

0 1 2 3 4 5m

Notes:

All dimensions to be verified on site. Do not scale this drawing, use figure dimensions only. Drawing to be read in conjunction with Arboricultural Assessment and Appendix A - Tree Schedule.
The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified site prior to and decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculation foundation depths.

- Group to be Retained
- Tree/Group proposed to be removed subject to relevant permissions
- Root Protection Area (Shown for retained trees only)
- T1/G1 — Tree / Group Positioned by Topographical Survey
- T1/G1 — Tree / Group Positioned by Aerial Imagery

rev	date	description	drwn/chkd
-	03.11.25	First Issue	AW / TCB

client
Stepheson Halliday

project
Haverhill Recycling Centre

title
TREE RETENTION PLAN

scale
1:100 @ A3

number
12168-T-02

status
-

rev
-

FPCR | environment & design

L:\12100\12168\ARB\Section 3 Application\Plans\Tree Retention Plan.dwg
t: 01509 672772 e: mail@fpcr.co.uk w: www.fpcr.co.uk

Appendix A - Tree Schedule

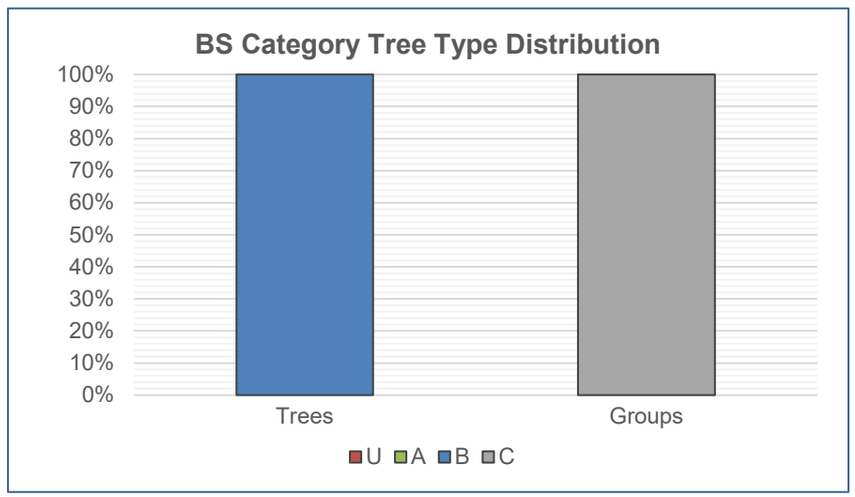
Measurements	Age Classes	Quality Assessment of BS Category	ULE (relates to BS Category)
Height - Measured using a digital laser clinometer (m)	**YNG**: Establishing, typically with good vigour and fast growth rates and strong apical dominance; c. less than 1/3 life expectancy	**Category U -** Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	<10 years
Stem Dia. - Diameter measured (mm) in accordance with Annex C of the BS5837	**SM:** Semi-mature trees less than 1/3 life expectancy	**Category A -** Trees of high quality with an estimated remaining life expectancy of at least 40 years.	40+ years
Crown Radius - Measured using a digital laser clinometer radially from the main stem (m)	**EM:** Established, typically vigorous and increasing in apical height and lateral spread; 1/3 - 2/3 life expectancy. Offers landscape significance	**Category B -** Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	20-40 years
Abbreviations est - Estimated stem diameter avg - Average stem diameter for multiple stems upto - Maximum stem diameter of a group	**M:** Fully established over 2/3 life expectancy, generally good vigour and achieving full height potential with crown still spreading	**Category C -** Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	10-20 years
	OM: Fully mature, at the extremes of expected life expectancy, vigour decreasing, declining or moribund	Sub-categories: (i) - Mainly arboricultural value (ii) - Mainly landscape value (iii) - Mainly cultural or conservation value	
	V: biological, cultural or aesthetic value comprising niche saproxylic habitat. Individuals of large proportions (stem girth) in comparison to trees of the same species/surviving beyond the typical age range for their species.	**The BS category particular consideration has been given to the following:** • The presence of any structural defects in each tree/group and its future life expectancy • The size and form of each tree/group and its suitability within the context of a proposed development • The location of each tree relative to existing site features e.g. its screening value or landscape features • Age class and life expectancy	

Structural Condition	Physiological Condition	Root Protection Area (RPA)
Good - No significant structural defects	**Good -** No significant health problems	• The RPA Radius column provides the extent of an equivalent circle from the centre of the stem (m). • The RPA is calculated using the formulae described in paragraph 4.6.1 of British Standard 5837: 2012 and is indicative of the rooting area required for a tree to be successfully retained. Tree roots extend beyond the calculated RPA in many cases and where possible a greater distance should be protected. • Where veteran trees have been identified the RPA has been calculated in accordance with Natural England guidance i.e. 15x the stem diameter, uncapped.
Fair - Structural defects that can be remediated	**Fair -** Symptoms of ill-health that can be remediated	
Poor - Significant defects beyond remediation, present a risk of failure in the foreseeable future	**Poor -** Significant ill-health. Unlikely the tree will recover in the long term	
Dead - Dead tree with structural integrity of tree severely compromised	**Advanced Decline / Dead -** Advanced state of decline and unlikely to recover or Dead	

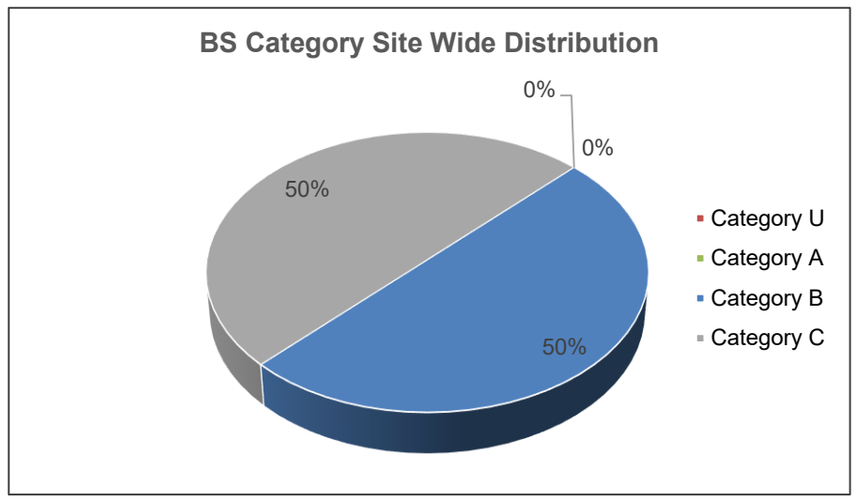
Appendix Summary

	Individual Trees	Totals	Tree Groups and Hedgerows	Totals
Category U		0		0
Category A		0		0
Category B	T1	1		0
Category C		0	G1	1
	Total	1	**Total**	1

BS Category Tree Type Distribution displays the proportion of trees assessed in each type to enable a better understanding of the category distribution.

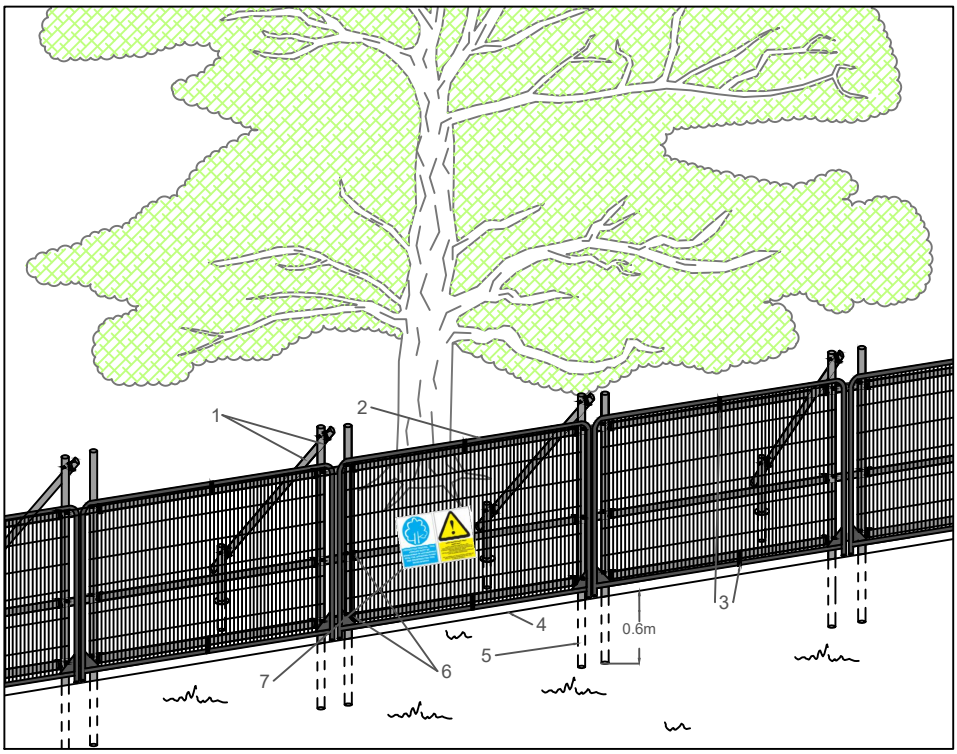


BS Category Site Wide Distribution shows the proportion of trees assessed in each category across the whole site which allows an interpretation of the site's overall quality.



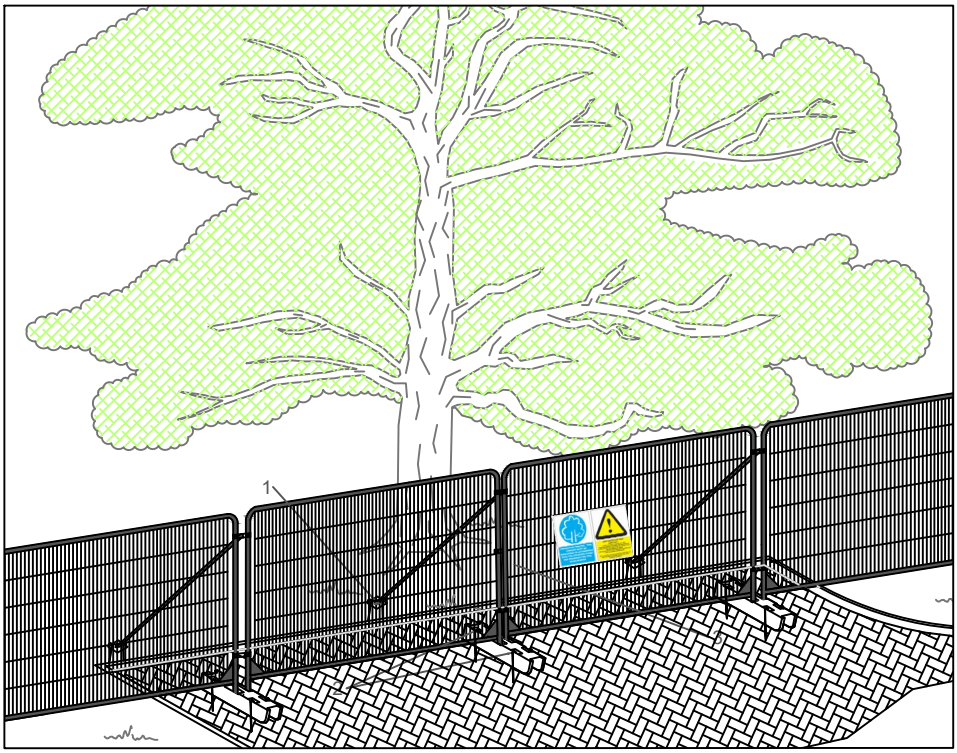
Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
INDIVIDUAL TREES										
T1	Scots Pine Pinus sylvestris	11	est 350	3.5	EM	F	Typical crown form with no obvious major defects Hard standing to the north and south of stem	55	4.2	B (i)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
GROUPS OF TREES										
G1	Field Maple Acer campestre Goat Willow Salix caprea Hawthorn Crataegus monogyna Silver Birch Betula pendula Wild Cherry Prunus avium Hazel Corylus avellana Rowan Sorbus aucuparia Dogwood Cornus sanguinea Cotoneaster Cotoneaster spp. Laurel Prunus laurocerasus	6	est 180	2.5	SM / EM	F	Linear planted group of trees Dense undergrowth Little signs of management Provides screening of development to the south Interlocking crowns due to planting density No obvious major defects	15	2.2	C (ii)



Specification for High Intensity Protection Barrier

1. Standard scaffold poles
2. Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3. Panels secured to scaffold frame with wire ties
4. Ground level
5. Uprights driven into the ground until secure (min depth of 0.6m)
6. Standard scaffold clamps
7. Construction Exclusion Zone signs



Specification for Low Intensity Protection Barrier

1. Stabiliser strut with base plate secured with ground pins
2. Feet blocks secured with ground pins
3. Construction Exclusion Zone signs

APPENDIX B
PROTECTIVE FENCING SPECIFICATIONS

This drawing is the property of FPCR Environment and Design Ltd and is issued on the condition it is not reproduced, retained or disclosed to any unauthorised person, either wholly or in part without written consent of FPCR Environment and Design Ltd.

Ordnance Survey Mastermap - Crown Copyright. All rights reserved. Licence Number: 100019980 (Centremapslive.com).

FPCR | environment & design