

BS 5837

Arboricultural Report

(Pre-Planning)



at
Land at Marl Road
Knowsley
L33 7UH



Dated
2nd December 2025

Contents

1.	Introduction	3
1.1.	Instruction	3
1.2.	Purpose of this Report	3
1.3.	Author	3
2.	The Survey	4
2.2.	Methodology	4
2.3.	Survey Extent	5
2.4.	Summary of Observations	5
3.	Vegetation Overview (independent of proposals)	6
3.1.	Preliminary Management Recommendations	6
3.2.	Work Priority and Future Inspections	6
3.3.	Species Present – Additional Information	7
4.	Statutory Protection – TPOs and Conservation Area Status	8
4.1.	Desktop Research	8
4.2.	Felling Licences	8
5.	Local Geology and Soils	9
5.1.	Desktop Research	9
5.2.	Site Investigations	9
5.3.	Conclusion and Relevance	9
6.	Implications for Development	10
6.2.	Retention Categories	10
6.3.	Root Protection Areas	10
6.4.	Tree Canopies	11
6.5.	Arboricultural Impact Assessment	11
6.6.	Tree Protection During Construction	11
Appendix 1: BS 5837: 2012 – Interpretation Guide		12
Appendix 2: Glossary		13
Appendix 3: Arborist's Qualifications		14
Appendix 4: Tree Data Schedule and Drawings		15

1. Introduction

1.1. Instruction

1.1.1. We are instructed by Cuboid Self Storage Ltd to:

- Undertake a Tree Survey to BS 5837 at Land at Marl Road and assess all trees potentially within influencing distance of proposed development within the site.
- Plot the trees on a Tree Constraints Plan and record the data in a Tree Data Schedule.
- Provide preliminary management recommendations for the tree stock (independent of development proposals).

1.2. Purpose of this Report

- 1.2.1. This report is produced according to the guidance and recommendations within *BS 5837: 2012 - Trees in Relation to Design, Demolition, and Construction*. It is tailored to inform the reader of the trees and how they might constrain any potential development of the site. It does not consider specific design proposals, so will not validate a full planning application.
- 1.2.2. This document should not be used to inform management decisions relating to liability or risk management. Such decisions should be based on a more detailed inspection of the trees than was carried out for this report.

1.3. Author

- 1.3.1. This report was compiled by Emma Hoyle FDS (Arboriculture), ED (Forestry & Arboriculture), M. Arbor. A. Emma's resumé can be found in Appendix 3.

2. The Survey

- 2.1.1. A visual ground-level assessment of all trees was undertaken on the 25th of November 2025 by Emma Hoyle. No climbed inspections or specialist decay detection were undertaken.

2.2. Methodology

- 2.2.1. Structural condition was assessed by inspecting the stem and scaffold branches, looking for weak branch junctions, symptoms of decay, or other structural defects. Any recommended works were made to ensure the trees are in acceptable structural condition. The position of the tree and its potential targets were considered.
- 2.2.2. Physiological condition was assessed by inspecting the stem, branches, and foliage for symptoms of disease. The vigour of the tree was also considered.
- 2.2.3. Key measurements were obtained using a diameter tape, clinometer, distometer and logger's tape. Where this was not practical, measurements were estimated.
- 2.2.4. Some trees may be surveyed as groups, though this is usually avoided close to areas likely to be developed.
- 2.2.5. The locations of all key trees have been plotted according to measurements taken on-site.
- 2.2.6. Finally, a *Retention Category* was allocated. The relevant BS5837 2012 cascade chart is duplicated below.

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
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 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2

- 2.2.7. Further guidance on interpreting BS 5837 and our survey methodology is given in Appendix 1.

2.3. Survey Extent

- 2.3.1. The area indicated below¹ shows the extent of the site. Our survey included all trees within the curtilage of the property and any adjacent to it.



2.4. Summary of Observations

- 2.4.1. The site comprises a rectangular plot of land, located on the corner of Marl Road. Vehicular access leads into the site in the southwestern corner. Marl Road runs parallel to the western boundary.
- 2.4.2. Within the curtilage of the site, we identified a mixture of Retention Category B and Retention Category C trees, along with a group of three Retention Category U trees (G006).
- 2.4.3. The Tree Constraints Plan and Tree Data Schedule (see Appendix 4) should be referred to for descriptions and locations of all trees.

¹ Image taken from Google Earth and may not be current

3. Vegetation Overview (independent of proposals)

This section summarises all the recommendations within the Tree Data Schedule regardless of whether trees are to be retained, felled or pruned to facilitate the proposed development. It does not specify works that may be required to facilitate the development proposals.

3.1. Preliminary Management Recommendations

3.1.1. The following recommendations are made in order to maintain the trees in an acceptable condition:

- It is recommended that the deadwood branch removed from the canopies of T004, T012 and T016.
- G006 contains a group of three dead trees, which we recommend are removed.

3.1.2. All other trees were deemed to be in satisfactory condition.

3.2. Work Priority and Future Inspections

3.2.1. The table below suggests a schedule for completing the works recommended in the Tree Data Schedule based on the perceived risk. **Where funds permit, works should be undertaken sooner, though it is not recommended that the timescales below are extended.**

Work Priority	Definition	Tree Number
Urgent	As soon as possible	None
Very High	Within 1 Month	None
High	Within 3 Months	None
Moderate	Within 1 year	G006 and T012
Low	Within 3 years	T004 and T016

3.2.2. The table below suggests a schedule of future inspections based on the condition and location of each tree:

Inspection Frequency (years)	Tree Number
0.5	None
1	None
1.5	T001, T004, T012, T016, T017
3	All other retained trees.

3.2.3. The trees should be inspected sooner if there is a noticeable decline in their condition or following extreme weather events.

3.3. Species Present – Additional Information

- 3.3.1. The table below contains general information about the tree *species* (rather than the actual tree *specimens*) included in the survey. Its purpose is to assist readers who are unfamiliar with the characteristics of the various species.

Species	Typical Height at Maturity (m)	Typical Canopy Spread at Maturity (m)	General Notes
Goat Willow	10	8	Also called Pussy Willow or Great/Common Sallow. Native and abundant in Britain except on the lightest soils. One of the first pioneer species to colonise an abandoned site due to its light far-blown seeds. Traditionally coppiced and used for basket making. rarely planted as an ornamental due to its untidy habit. Visit http://www.pfaf.org/user/Plant.aspx?LatinName=Salix+caprea for more info.
Silver Birch	16	10	Deciduous native tree. A pioneer species requiring good lighting levels that will readily colonise open ground. Relatively short lived and surpassed in woodland by dominant species such as oak and beech. Attractive white bark and graceful, delicate form make this a popular garden tree. Visit http://www.pfaf.org/user/Plant.aspx?LatinName=Betula+pendula for more info.
Sycamore	25	16	Deciduous tree native to S. Europe, widely naturalised in the UK. Often regarded as a weed species due to its invasive nature and ability to tolerate most conditions. Responds well to pruning. Not a good tree to park beneath in summer due to the sticky sap secreted by aphids. Visit http://www.pfaf.org/user/Plant.aspx?LatinName=Acer+pseudoplatanus for more info.

The figures quoted regarding typical height and canopy spread should be treated as approximate. Actual heights and spreads vary according to several environmental factors such as soil conditions, climate, and the presence of competing vegetation. The figures quoted are not the maximum dimensions that the species may attain.

3.3.2.

4. Statutory Protection – TPOs and Conservation Area Status

Before undertaking most works on trees protected by a tree preservation order², consent needs to be formally obtained from the local authority. Where trees are in a conservation area (but not protected by a TPO), works are generally not permitted without first giving the local authority six weeks' notice of intention³. Unauthorised works to protected trees, or trees in a conservation area, may result in criminal prosecution and a fine. Where works are required to implement a fully approved development, no such consent or notice is required.

4.1. Desktop Research

4.1.1. We were informed by Alexander Sullivan from Knowsley Council, via email on the 2nd of December 2025, that:

- The site is not within a conservation area.
- There are no tree preservation orders affecting trees within the site.

4.2. Felling Licences

4.2.1. Felling licences issued by the Forestry Commission are sometimes required before removing trees. However, these licenses are aimed toward woodland and forestry management. Felling licences are NOT required for any of the following:

- Lopping, topping or pollarding.
- Removal of small trees (stem diameter less than 8cm) or fruit trees.
- Works to any trees growing within domestic gardens, orchards, or the Inner London boroughs.
- Operations involving less than five cubic meters of timber in any quarter year.
- Thinning and understorey clearing operations.
- Dangerous trees, nuisance trees, some diseased trees.
- Where removal is required to enable a fully approved development.

4.2.2. More detailed guidance can be found at <https://www.gov.uk/government/publications/tree-felling-getting-permission>

4.2.3. Hence, a felling licence will be required for the removal of more than five cubic metres of timber, unless any of the above exemptions apply.

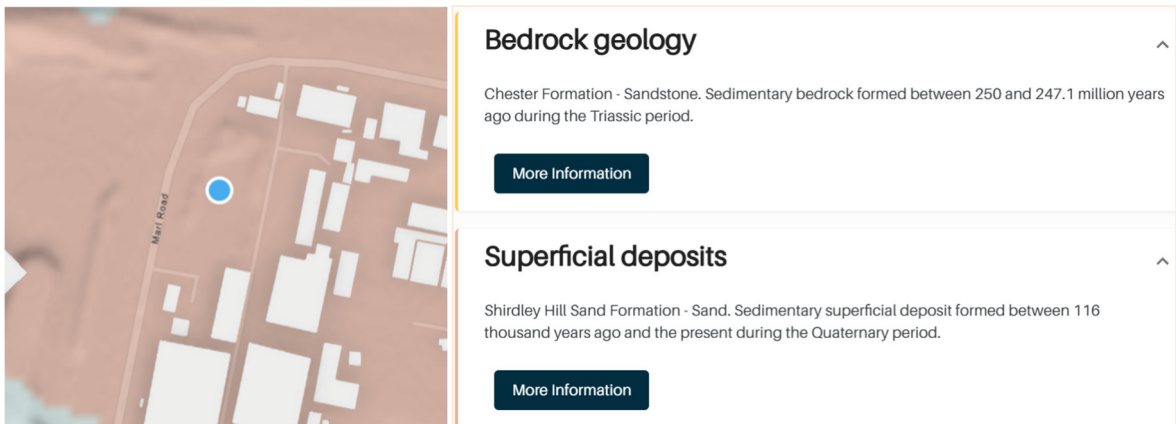
² <https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas>

³ During this time, the local authority may elect to create a tree preservation order or to inform the applicant that they have no objection to the proposed works. If the local authority does not respond within six weeks, then the intended work may be undertaken. Note: the local authority cannot refuse consent for works to trees within a conservation area; they may only create a tree preservation order if they wish to have further control over what works are undertaken.

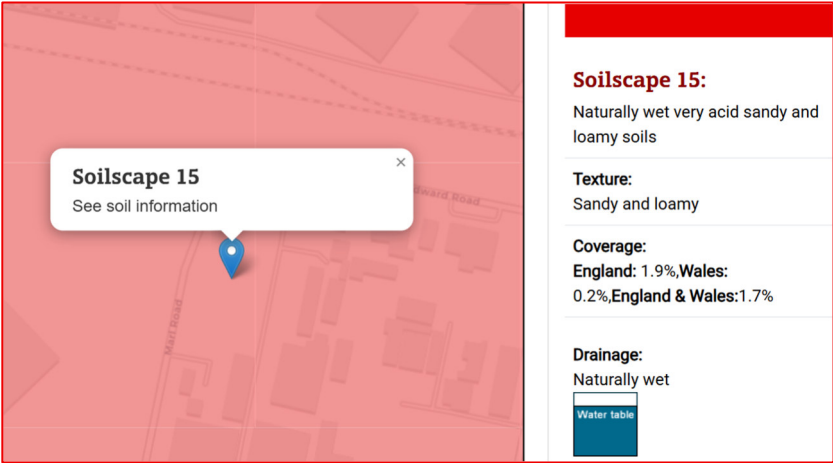
5. Local Geology and Soils

5.1. Desktop Research

5.1.1. Desktop research into local geology based on the postcode **L33 7UH** obtained the following results:



Source: https://geologyviewer.bgs.ac.uk/?_ga=2.100849601.17774785.1660229567-1737936254.1660229567



Source <http://www.landis.org.uk/soilscales/>

5.2. Site Investigations

5.2.1. We are unaware of any specific investigations into soil properties at the site.

5.3. Conclusion and Relevance

- 5.3.1. Based on the information reproduced above, local soils are assumed to have a sandy and loamy texture.
- 5.3.2. Sandy soils are less prone to compaction and may force trees to root deeper in search of water. However, soil conditions vary within neighbourhoods, and the BGS data is not specific to this site. Wherever construction activity occurs close to trees, measures should be put in place to guard against soil compaction. Most tree roots are still likely to be found at quite shallow depths.
- 5.3.3. Loamy soils contain a mixture of clay and sand. Soil compaction may occur due to vehicular activity on building sites, so ground protection is recommended wherever vehicles operate. Most tree species will grow well in loamy soils.

6. Implications for Development

- 6.1.1. This section of the report offers general advice on dealing with tree-related constraints. It is intended to assist designers working with the Tree Constraints Plan. Examples of mitigation strategies are included which may reduce potential impacts on trees. Persons familiar with BS 5837 Arboricultural Reports (e.g. tree officers) may wish to skip this section and go straight to the following Section.

6.2. Retention Categories

- 6.2.1. The Tree Constraints Plan indicates the BS 5837 Retention Categories for each tree. These should be taken into account during the design stage of any development proposals according to the following criteria:
- 6.2.2. Wherever possible, Category A trees should be retained. These are usually large trees with a relatively high amenity value. They are generally in good condition, well suited to their surroundings and with a significant life expectancy.
- 6.2.3. The retention of Category B trees is also desirable, though these trees are of lesser quality, or have a reduced life expectancy or are smaller than category A trees.
- 6.2.4. The retention of Category C trees should be seen as optional. These are usually small trees or trees of no particular merit and are not considered a material planning consideration.
- 6.2.5. Category U trees have been recommended for removal due to their poor condition and should be removed regardless of development proposals.

6.3. Root Protection Areas

- 6.3.1. The Tree Constraints Plan indicates the Root Protection Areas of each tree. This does not represent the maximum extent of rooting activity; instead, it defines the area within which the majority of roots are expected to be confined. Wherever possible, this should be left undisturbed for all trees to be retained. In which case, the trees shall be unharmed. Significant disturbances such as changes in ground level, soil compaction, excavation of trenches, or interference with oxygen and rainwater exchange may have a substantial impact on the health of the tree. (Soil compaction may be caused by vehicles, plant machinery, excessive pedestrian usage, storing of materials/spoil or by the installation of a new vehicular surface.)
- 6.3.2. Some disturbance of the Root Protection Area may be acceptable but must be kept to a minimum. Construction methods should be adopted that are sympathetic to root requirements. These are discussed below:
- 6.3.3. Concrete strip foundations should be avoided except at the very extremity of the Root Protection Area. Instead, pile/pier and beam foundations or raft foundations should be utilised. These will minimise root severance.
- 6.3.4. Hard surfaces should be installed with a minimum of excavation. The majority of roots lie within the upper soil horizons and are relatively fine. Roots do not need to be as thick as branches since they do not have to combat gravity and high winds etc. A root as thin as a finger is able to transport a lot of nutrients. Thus, excavation as shallow as 30cm can have a significant impact on the health of a tree even though large roots might not be severed. Cellular confinement systems help to reduce the amount of excavation required to give a driveway adequate strength.
- 6.3.5. Hard surfaces should ideally be porous to allow rainwater and oxygen to pass into the soil. Gravel is the ideal medium and can be retained in a cellular system to prevent rutting. Block paving and flagstones without mortar joints are good alternatives. Tarmac is not very porous; the use of a no-fines tarmac is preferable.
- 6.3.6. Trenches for underground services are commonly overlooked but can cause major damage to trees. Further arboricultural advice should be sought if underground services are to pass within Root Protection Areas. Trenchless techniques can sometimes be utilised but are not usually practical for installing drains.

- 6.3.7. If ground levels are raised, this should always be done with a loose granular material such as gravel or coarse sand. Ground levels must never be raised against the trunks of trees as this may cause them to rot.
- 6.3.8. It is sometimes possible to mitigate against root disturbance, by above-ground pruning or by improving rooting conditions for existing roots. The introduction of mycorrhizal fungi and earthworms significantly improves rooting conditions, as does the removal of competing vegetation such as grass.
- 6.3.9. Soil compaction occurs when vehicles repeatedly pass over rooting areas without some kind of structure to disperse their weight. Healthy soils will contain approximately 25% airspace. When soils become compacted, these air spaces disappear, and roots are unable to respire. It is possible to de-compact soils, but this is an expensive operation. It is preferable to avoid compaction by spreading the load of traffic passing over Root Protection Areas with the use of metal road plates or suitable boards.

6.4. Tree Canopies

- 6.4.1. Where trees are to be retained, adequate space should be allowed between buildings and tree canopies. A minimum distance of 3m is recommended. For high-quality trees (Category A or B) which have not yet reached maturity, a further allowance should be made to allow the canopies to mature without the need for extensive pruning.
- 6.4.2. For residential dwellings, the shade cast by trees should also be considered, especially where buildings are located north or northeast of sizeable trees. Some species, e.g. birch, have light, airy canopies, so shade is less of an issue. Commonly occurring trees that cast dense shade include beech, oak, ash, chestnut, sycamore, lime and most evergreen species. Shade constraints are less of an issue for garages and other non-residential buildings.
- 6.4.3. Crown Tree Consultancy will gladly offer any further advice, and you are invited to contact the author of this report on 01422 316660.

6.5. Arboricultural Impact Assessment

- 6.5.1. When development proposals are available, we recommend carrying an Impact Assessment before submission to the Local Planning Authority. This will identify any potential issues so that they may be resolved or mitigated.

6.6. Tree Protection During Construction

- 6.6.1. A site-specific Arboricultural Method Statement will be required to ensure that trees are protected during the construction phase. This should specify tree protection barriers, ground protection boards, foundations and hard-surface design, services installation, materials storage, and plant machinery use.

Appendix 1: BS 5837: 2012 – Interpretation Guide

This Standard prescribes the principles to be applied to achieve a satisfactory juxtaposition of trees and structures. It sets out to assist those concerned with planning applications to form balanced judgments.

Stage 1: Survey Details and Notes

A ground-level visual survey is undertaken. Only trees with a stem diameter over 75mm, which lie within the site boundary or relatively close to it, are included.

Where applicable, trees with significant defects are highlighted and appropriate remedial works are recommended.

Wherever practicable dimensions are obtained using diameter tapes, logger's tapes, distometers and clinometers. Where obstacles prevent accurate measurement, dimensions are estimated. Trees on privately owned third-party land are surveyed from the best available vantage point and observations relating to the condition of these trees should be treated accordingly. All height measurements should be regarded as approximate.

Data is recorded for each tree and is presented in a Tree Data Schedule. Each tree is allocated a **Retention Category** according to its size, amenity value, condition, and safe useful life expectancy. The categories are allocated independently of development proposals. Our interpretation of the Retention Categories is explained below:

Retention Categories

A Category: Trees of high quality and amenity value. Usually, mature trees with a significant life expectancy which would enhance any development. Retention of these trees is strongly encouraged.

B Category: Trees of moderate quality and amenity value. Usually these are maturing trees or younger trees with exceptional form. Retention of these trees is desirable though the removal of occasional specimens may be acceptable.

C Category: Trees of low quality or small specimens with a relatively low amenity value. These trees are not considered to be a material planning constraint and their removal will generally be seen as acceptable in order to facilitate development.

U Category: Trees of such low quality that their removal is recommended regardless of development proposals.

Occasionally trees are borderline and do not fall neatly into one of these categories. In such cases we apply a superscript (+/-) such that:

C+ Indicates borderline C/B, though Category C is deemed to be most appropriate.

B- Indicates borderline C/B, though Category B is deemed to be most appropriate.

The British Standard suggests that each of the A, B and C categories may be further subdivided (A1, A2, A3, B1, B2, B3 etc) such that subcategory 1 denotes mainly arboricultural values, subcategory 2 denotes mainly landscape values and subcategory 3 denotes mainly cultural values (including conservation). Multiple subcategories may be used.

Our experience suggests that these subdivisions lack clarity and can be confusing. Within this report subcategories are **not** denoted. Where appropriate, the use of phrases such as '*Part of a formal group*', or '*Has a high ecological value*', or '*Offers good screening to the site*' are incorporated into the observation section of the Tree Data Schedule. We believe this conveys all relevant landscape and cultural information without any confusion.

Tree Constraints Plan (TCP). This indicates the position, crown spread, Retention Category and Root Protection Area of each tree. It is used to inform where development may proceed without causing damage to trees.

Root Protection Area (RPA). This is the area around each tree likely to contain the majority of roots. It should ideally remain undisturbed to avoid a detrimental impact on tree health. For single stemmed trees it is calculated according to the formula "radius of RPA" = "12 x stem diameter". Where a tree has more than one stem, the equivalent-single-stem diameter is usually recorded. This is calculated by adding the squares of the stems and then finding the square root of this total. The radius of the Root Protection Area is then calculated by multiplying the equivalent-stem-diameter by 12.

Stage 2: Arboricultural Impact Assessment

After the initial survey and the production of the Tree Constraints Plan, arborists and designers are encouraged to work together to establish a design proposal with minimal impact on the high-quality trees. An assessment should be made of all possible impacts including the impact that the trees may have on the proposal. The arborist may recommend mitigation strategies to minimise these impacts and help achieve a more harmonious juxtaposition between buildings and trees.

Stage 3: Arboricultural Method Statement

This type of report specifies the measures necessary to protect trees against damage from construction activity. The Method Statement should be written in a manner that it may be conditioned and enforced by the local authority upon granting of planning permission. The site manager should be familiar with all aspects of the Method Statement and should ensure that all persons working on the site are aware of those aspects which appertain to their work. This includes service installation engineers and operators of plant machinery.

Appendix 2: Glossary

This section explains the terms used in the **Tree Data Schedule** (see Section 3 and Appendix 4).

A2.1 General Observations

Numbering System:	Each item of vegetation has its own unique number prefixed by a letter such that T1=Tree 1, G2=Group 2, H3=Hedge 3 and W4=Woodland 4, S5=Shrub 5.
Age Categories:	
Young	Usually less than 10 years old.
Semi-Mature	Significant future growth to be expected, both in height and crown spread (typically below 30% of life expectancy).
Early-Mature	Full height almost attained. Significant growth may be expected in terms of crown spread (typically 30-60% of life expectancy).
Mature	Full height attained. Crown spread will increase but growth increments will be slight (typically 60% or more of life expectancy).
Veteran	Notable tree with features associated with atypically advanced age (such as unusually large girth, crown retrenchment or significant stem decay). Veteran trees have a high habitat value and require a Buffer Zone / RPA with a radius of at least 15x stem diameter and extending at least 5m beyond the dripline. Any natural or semi-natural habitats within the buffer zone should be well protected and retained (or improved) as part of the development. Lawns and cultivated gardens should be discouraged. See https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions
Over Mature	Tree with declining health but not worthy of veteran status.
Species:	Common names and Latin names are given.
Height:	Measured from ground level to the top of the crown.
Stem Diameter:	Taken at 1.5m above ground level where possible. On multi-stemmed trees this measurement may be taken at ground level, though usually an indication of the number of stems and average diameter is given, e.g. 3 x 30cm.
Crown Height:	Measured from ground level to the height at which the main crown begins. Where the crown is unbalanced, it is measured on the side deemed to be most relevant. This is usually the side facing the area of anticipated development.
Tree Diagram:	This scaled drawing is computer generated based on measurements taken for stem diameter, crown height and spread, and overall height. It is designed to help the reader rapidly assess the data. It is not an accurate representation of the form of the tree.
Crown Spread:	Measured N, E, S & W, taken from the centre of the stem and usually rounded up to the nearest metre.
Observations:	If a tree's position is considered to be relevant it will be commented upon (e.g. overhanging a children's play area). Tree form and pruning history are also recorded along with an account of any significant defects. Defects and descriptive terms are dealt with in more detail at the end of this section.
Recommendations:	Usually based on any defects observed and intended to ensure that the tree is in an acceptable condition.
Priority Scale:	Depending upon the threat posed by the tree, and the likelihood of failure, recommendations should be carried out according to the following priority scale:
Urgent	To be carried out as soon as possible.
Very High	To be carried out within 1 month.
High	To be carried out within 3 months.
Moderate	To be carried out within 1 year.
Low	To be carried out within 3 years.
	Where funds permit, works should be undertaken sooner, though it is not recommended that the timescales above are extended.
Inspection Frequency:	An interval of 6 months, 1 year, 1.5 years or 3 years is allocated before the next inspection is due. Wherever practical, consideration should be given to seasonal changes so that deciduous trees are not always surveyed in winter when they have no leaves, or in summer when leaves may obscure branches within the upper crown.
Vigour:	An indication of growth rate and the tree's ability to cope with stresses:
High	Having above average vigour.
Moderate	Having average vigour.
Low	Having below average vigour.
Very Low	Tree is struggling to survive and may be dying.
Physiological Condition:	
Good	Healthy and with no symptoms of significant disease.
Fair	Disease present or vigour is impaired.
Poor	Significant disease present or vigour is extremely low.
Very Poor	Tree is dying.
Structural Condition:	
Good	Having no significant structural defects.
Fair	Some defects observed though no high priority works are required.
Poor	Significant defects found. Tree requires monitoring or remedial works.
Very Poor	Major defects which will usually require significant remedial works or tree removal.
Amenity Value:	
Very High	Exceptional specimen, observable by a large number of people.
High	Attractive specimen, observable by a significant number of people.
Moderate	One of the above factors is not applicable.
Low	Unattractive specimen or largely hidden from view.
Life Expectancy:	The estimated number of years before the tree may require removal. Classified as (<10), (10 – 20), (20 – 40), or (40+).
Retention Category:	These are explained in detail in Appendix 1.

A2.2 Evaluation of Defects

Cavities, wounds, deadwood etc are all evaluated as follows:

Major	Such that structural integrity is, or will become, compromised and the tree is, or will inevitably become, hazardous.
Significant	A defect that may over time become a major defect, though not necessarily so. This will depend on the vigour of the tree and its ability to deal with decay etc.
Minor	A defect that is unlikely to develop into a major defect.

General Glossary

A general glossary of arboricultural terms may be found on our website at

<https://www.crowntrees.co.uk/crown-tree-consultancy/glossary-tree-terms/>

Appendix 3: Arborist's Qualifications

Qualifications & Experience of Emma Hoyle FDS (Arboriculture), ED (Forestry & Arboriculture), M. Arbor. A.

Emma is a qualified Arboricultural Consultant educated to Level 5 in Arboriculture at Askham Bryan College, is a professional member of the Arboricultural Association and is a LANTRA-accredited *Professional Tree Inspector*. She has worked for Crown Consultants since 2015 and has since written numerous reports relating to all aspects of arboriculture including; planning and development, vegetation-related subsidence, tree preservation orders and tree risk assessment. Emma regularly attends seminars and events in order to keep abreast with current knowledge and best practice in Arboriculture.

Prior to becoming an arboricultural consultant, Emma worked for two reputable tree surgery firms from 2008 and became an NPTC Qualified tree surgeon after completing a Level 3 Extended Diploma in Forestry and Arboriculture at Askham Bryan College. Emma also has experience in other areas of arboriculture such as forest clearance, tree planting, tree maintenance and landscaping.

Qualifications & Experience of Joe Taylor – M. Arbor. A, FdSc (Arboriculture)

Joe began his career in Arboriculture as a tree surgeon/climber. During his time as a tree surgeon, Joe has achieved City & Guilds NPTC qualifications in Chainsaw Maintenance and Cross Cutting, Tree Climbing and Rescue, Safe Use of Manually Fed Wood-chipper and Supporting Colleagues Undertaking Tree Related Operations.

Joe obtained a Foundation Degree in Arboriculture at Askham Bryan College in 2015 which he passed with merit. Joe is a professional member of the Arboricultural Association, the International Society of Arboriculture, and the Royal Forestry Society and regularly attends industry-related seminars in to keep abreast of industry best practices.

Studying at Askham Bryan College reinforced Joe's passion for trees and drove his enthusiasm to learn more. Learning how trees interact with their surrounding environment and their importance within our urban and rural landscapes highlighted an interest in pursuing a career in consultancy.

Since working for Crown Consultants Joe has undertaken numerous surveys and produced numerous reports for the purpose of planning (BS 5837), tree condition surveys, subsidence risk assessments, root surveys and decay detection investigations.

Qualifications & Experience of Sarah Alway – M. Arbor. A, FdSc (Arboriculture)

Sarah obtained an FdSc in Arboriculture and Tree Management at the University of Central Lancashire in 2021 which she passed with distinction. She is a member of the Arboricultural Association and regularly attends seminars and events to keep abreast of developments in industry knowledge and current best practice in Arboriculture.

Sarah has been working closely alongside the principal consultant and managing director of Crown Consultants since the company was established in 2008. During that time, she has gained experience in all aspects of the business such as reporting, CAD, administration, accounting, and business management. Additionally, she has assisted consultants with numerous reports relating to all aspects of arboriculture including BS:5837 planning and development, vegetation-related subsidence, tree preservation orders, and tree risk assessment. She has also assisted with tree surveys for several years and since qualifying has been undertaking her own surveys.

In addition to working for Crown Tree Consultants Ltd producing reports, Sarah also likes to expand her knowledge of the wider Arboricultural industry by training in other areas of tree services and management. She has recently completed a training programme in tree-planting and volunteer management, including education in tree planting and natural dam building to help mitigate against the risks of heavy flooding (Natural Flood Management). Sarah also regularly volunteers with two local climate action groups who plant trees and build leaky dams.

As Sarah's career develops, she intends on focusing her attention on sustainable innovation in arboriculture and how green urban spaces could pave the way for the forests of the future.

Qualifications & Experience of Carl Lothian – BSc (Hons) (Arboriculture)

Carl began his career undertaking a Level 3 extended diploma in arboriculture and forestry at Merrist Wood College in 2015. Upon completion of his diploma, Carl worked with several tree surgery firms completing a range of arboricultural works. In 2018 Carl began his BSc (Hons) in arboriculture and urban forestry, graduating with a first-class degree and attaining the Institute of Chartered Foresters student of the year award.

After graduating, Carl worked as a TreeRadar technician where he carried out tree root and decay surveys with specialist ground-penetrating radar equipment. During this time Carl was fortunate enough to work at prestigious sites, such as the Palace of Westminster and the National Maritime Museum.

Whilst working at Crown, Carl has undertaken a range of tree surveys and written reports relating to development, safety, subsidence, and decay detection. Carl is a professional member of the Consulting Arborist Society and an associate member of the Institute of Chartered Foresters.

Appendix 4: Tree Data Schedule and Drawings

The Tree Data Schedule and any drawings accompanying this report follow this page. They are also provided as separate documents for ease of printing and screen viewing.

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W S E	Scaled Tree Diagram (m) 909	Notes	Recommendations (Independent of any development proposals)		Vigour	Amenity Value
								Priority	Inspect Freq (yrs)	Physiological Condition	Life Expectancy (yrs)
										Structural Condition	Retention Category
T001	Early-Mature Silver Birch Betula pendula.	14	3	32	4.5 4.5 4 4.5	250 	Position: Adjacent site entrance. Form: Single stemmed. Defects: No significant defects observed. Other: Ground levels raised over rooting area.	No action required.	Moderate Good Good	Moderate 40+ B-	
								n/a	1.5		
T002	Semi-Mature Goat Willow Salix caprea.	12	5	22	2 6 2 2	250 	Form: Twin stemmed at 2.5m. Defects: Minor cavity at circa.0.2m. Minor deadwood. Other: Small dead tree hung at stem junction.	No action required.	Moderate Fair Good	Low 20-40 C	
								n/a	3		
T003	Semi-Mature Sycamore Acer pseudoplatanus.	13	4	15.6	3 5 3 3	250 	Form: Twin stemmed at base. Defects: No significant defects observed.	No action required.	Moderate Good Good	Low 40+ C	
								n/a	3		
T004	Semi-Mature Goat Willow Salix caprea.	14	4.5	31	4 3 4.5 3	250 	Form: Single kinked stem. Defects: Significant dead branches to east and tear wound at 4m.	Remove deadwood.	Moderate Fair Good	Low 20-40 C	
								Low	1.5		
T005	Early-Mature Silver Birch Betula pendula.	16	5	26	5 5 5 5	250 	Form: Single stemmed with a slight lean. Defects: Minor deadwood to lower crown.	No action required.	Moderate Good Good	Moderate 40+ B-	
								n/a	3		
G006	Semi-Mature Goat Willow Salix caprea.	av 11	av 6	av 18	av 3 3 3 each	250 	Form: Three close growing specimens. Defects: Dead trees.	Remove.	Dead Dead	Dead Dead U	
								Moderate	n/a		
T007	Semi-Mature Sycamore Acer pseudoplatanus.	14	7	29	4 4 4 4	250 	Form: Single stemmed with a balanced crown. Defects: No significant defects observed.	No action required.	Moderate Good Good	Moderate 40+ B	
								n/a	3		

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W S E	Scaled Tree Diagram (m) 909	Notes	Recommendations (Independent of any development proposals)		Vigour	Amenity Value
								Priority	Inspect Freq (yrs)	Physiological Condition	Life Expectancy (yrs)
										Structural Condition	Retention Category
T008	Semi-Mature Sycamore Acer pseudoplatanus.	14	5	25.5	3.5 3.5 3	250 	Form: Twin stemmed at 0.5m. Defects: No significant defects observed.	No action required.	Moderate Good Good	Moderate 40+ C+	
								n/a	3		
T009	Early-Mature Silver Birch Betula pendula.	16	4.5	31	5 5 5	250 	Form: Single stemmed. Defects: No significant defects observed.	No action required.	Moderate Good Good	Moderate 40+ B	
								n/a	3		
T010	Semi-Mature Sycamore Acer pseudoplatanus.	15	4.5	30	3 4 3 4	250 	Form: Single stemmed. Defects: No significant defects observed.	No action required.	Moderate Good Good	Moderate 40+ B-	
								n/a	3		
T011	Semi-Mature Sycamore Acer pseudoplatanus.	15	4.5	38.2	3.5 3.5 3.5	250 	Form: Twin stemmed at ground level. Defects: Tight union at base.	No action required.	Moderate Good Fair	Moderate 40+ B-	
								n/a	3		
T012	Early-Mature Goat Willow Salix caprea.	10	2	42	4 5 4	250 	Form: Multiple stemmed. Defects: Significant deadwood throughout. Significant included bark and tear wound to north. Other: Limited inspection, some dimensions estimated.	Remove deadwood.	Moderate Fair Fair	Low 10-20 C	
								Moderate	1.5		
T013	Early-Mature Sycamore Acer pseudoplatanus.	14	3	40	5 5 5	250 	Form: Single stemmed with a balanced crown. Defects: No significant defects observed.	No action required.	Moderate Good Good	Moderate 40+ B	
								n/a	3		
T014	Early-Mature Sycamore Acer pseudoplatanus.	15	5	38	4 4 4	250 	Form: Single stemmed with a co-dominant stem at base. Defects: Tight union at base.	No action required.	Moderate Good Fair	Moderate 40+ C+	
								n/a	3		

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W S E	Scaled Tree Diagram (m) 909	Notes	Recommendations (Independent of any development proposals)		Vigour	Amenity Value
								Priority	Inspect Freq (yrs)	Physiological Condition	Life Expectancy (yrs)
										Structural Condition	Retention Category
T015	Early-Mature Sycamore Acer pseudoplatanus.	14	3	36	3.5 2 3	250 	Form: Single stemmed. Defects: No significant defects observed.	No action required.		Moderate Good Good	Moderate 40+ C
								n/a	3		
T016	Semi-Mature Goat Willow Salix caprea.	12	5	19.8	5 3 4	250 	Form: Twin stemmed at 1m. Defects: Minor Included bark and deadwood to NE canopy.	Remove deadwood.		Moderate Fair Fair	Low 20-40 C
								Low	1.5		
T017	Semi-Mature Goat Willow Salix caprea.	13	3	35	3.5 4 3.5	250 	Form: Twin stemmed at base. Defects: Significant Included bark, but good upright form.	No action required.		Moderate Good Fair	Low 20-40 C
									1.5		
T018	Early-Mature Sycamore Acer pseudoplatanus.	15	4	42.4	6 5 5	250 	Form: Twin stemmed. Defects: No significant defects observed. Other: Ivy present on stems.	No action required.		Moderate Good Fair	Moderate 40+ B-
								n/a	3		
T019	Semi-Mature Sycamore Acer pseudoplatanus.	12	1.5	26	5 4 3	250 	Form: Single stemmed. Defects: No significant defects observed.	No action required.		Moderate Good Good	Moderate 40+ C+
								n/a	3		
T020	Early-Mature Goat Willow Salix caprea.	12	4	37	5.5 4.5 4.5	250 	Form: Triple stemmed at 2.5m. Defects: Minor deadwood.	No action required.		Moderate Good Good	Moderate 40+ C
								n/a	3		
T021	Semi-Mature Goat Willow Salix caprea.	12	2	27	4 3 4	250 	Defects: Minor deadwood to lower crown. Minor bark wound.	No action required.		Moderate Fair Good	Moderate 40+ C
								n/a	3		

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W S E	Scaled Tree Diagram (m) 909	Notes	Recommendations (Independent of any development proposals)		Vigour	Amenity Value
								Priority	Inspect Freq (yrs)	Physiological Condition	Life Expectancy (yrs)
										Structural Condition	Retention Category
G022	Semi-Mature Sycamore Acer pseudoplatanus.	av 11	av 1.5	av 14	av 3 3 each	250 	Form: Group of similar specimens. Defects: No significant defects observed.	No action required.	Moderate Good Good	Low 40+ C	
								n/a	3		
T023	Semi-Mature Sycamore Acer pseudoplatanus.	12	0.5	25	5 4 4	250 	Form: Single stemmed. Defects: No significant defects observed.	No action required.	Moderate Good Good	Moderate 40+ B-	
								n/a	3		
T024	Semi-Mature Silver Birch Betula pendula.	9	3	22	3 4 3	250 	Form: Twin stemmed at base. Defects: No significant defects observed.	No action required.	Moderate Good Good	Moderate 40+ B-	
								n/a	3		
G025	Semi-Mature Mixed Species Mixed species.	av 12	av 3	av 14	av 3 3 each	250 	Form: Predominantly spindly Goat Willow with occasional Sycamore scattered along the western boundary. Defects: Minor deadwood.	No action required.	Moderate Good Fair	Low 40+ C	
								n/a	3		

Drawing No:	CCL 12457	/TCP	Rev: 1	Tree Retention Categories Stems & canopies shown	
Title:	Tree Constraints Plan (Editing Layout)				Trees of high quality with an estimated life expectancy of 40+ years. Usually large trees with significant presence or smaller trees with excellent form. Retention of these trees is highly desirable.
Site:	Land off Murr Road 133 JWH				Trees of moderate quality with a life expectancy of 20+ years. Usually mature trees, or younger trees with good form. Retention of these trees is desirable though less than Category A trees.
Scale:	 0 5 10 15 20m 1:400 1:200 1:100 1:50				Unremarkable trees of low quality and merit. Individual specimens are not considered to be a material planning consideration.
Paper Size:	A4				Trees unsuitable for retention due to their very poor condition.
	CROWN Tree Consulting 080004 13 30				



Tree Ref.	Species	Height (m)	Root Protection Area	
			Radius (m)	Area (sq. m)
T001	Silver Birch	14	3.8	4.6
T002	Goat Willow	12	2.2	3.8
T003	Silver Birch	13	1.9	1.1
T004	Goat Willow	14	3.7	4.3
T005	Silver Birch	16	3.1	3.1
G006	Goat Willow	11	2.2	1.5
T007	Scyramore	14	3.5	3.8
T008	Silver Birch	13	2.2	2.9
T009	Silver Birch	16	3.7	4.3
T010	Scyramore	15	3.6	4.1
T011	Scyramore	15	4.6	6.6
T012	Goat Willow	10	5.0	8.9
T013	Scyramore	14	4.4	7.2
T014	Scyramore	15	4.6	6.5
T015	Scyramore	14	4.3	5.9
T016	Goat Willow	12	2.4	1.8
T017	Goat Willow	13	4.2	5.5
T018	Scyramore	15	4.6	8.0
T019	Scyramore	12	3.1	3.1
T020	Goat Willow	12	4.4	6.2
G021	Goat Willow	12	3.2	3.3
G022	Scyramore	11	1.7	0.9
G023	Scyramore	12	3.0	2.8
G024	Silver Birch	9	2.6	2.2
G025	Mixed Species	9	1.7	0.9