

# BS 5837

# Arboricultural Report

(Pre-Planning)



at  
Salamander Quay  
Harefield  
UB9 6NZ



Dated  
18<sup>th</sup> August 2025

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# 1. Introduction

## 1.1. Instruction

1.1.1. We are instructed by JDW Architects to:

- Undertake a Tree Survey to BS 5837 at Salamander Quays 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 5<sup>th</sup> of August 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.

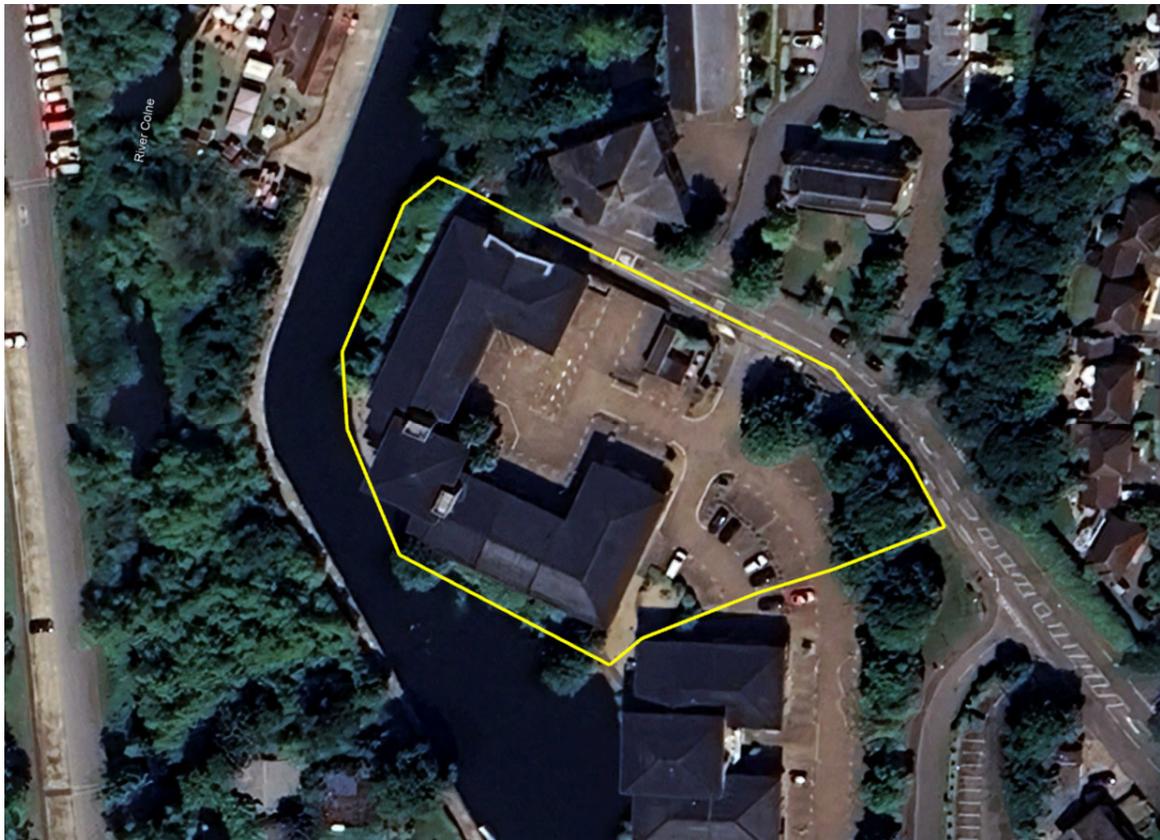
Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
<b>Trees unsuitable for retention (see Note)</b>		
<b>Category U</b> 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	<ul style="list-style-type: none"> <li>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)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>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</li> </ul> <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>	See Table 2
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>
		<b>3 Mainly cultural values, including conservation</b>
<b>Trees to be considered for retention</b>		
<b>Category A</b> <b>Trees of high quality</b> 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)	See Table 2
<b>Category B</b> <b>Trees of moderate quality</b> 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	See Table 2
<b>Category C</b> <b>Trees of low quality</b> 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	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 below<sup>1</sup> shows the extent of the survey. Our survey included all trees within the curtilage of the property and those adjacent to it.



## 2.4. Summary of Observations

- 2.4.1. Salamander Quay is a commercial property with associated car parking.
- 2.4.2. Within the survey area we identified a mixture of individual and groups of Retention Category B trees and five Retention Category C trees. Tree species present include Crab Apple, Field Maple, Norway Maple and Sycamore.
- 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.

<sup>1</sup> 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 trees were all deemed to be in an acceptable condition, and no significant defects were observed. Consequently, no remedial works have been recommended.

#### 3.2. Future Inspections

- 3.2.1. 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	T005, T006, T007, T008 and T009
3	All other surveyed trees.

- 3.2.2. 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
Crab Apple	10	10	Deciduous tree native across Europe and W. Asia. Many cultivars available bred for their attractive fruit or flowers. Flowers white, pink or red in spring. Some species will self-pollinate. Excellent habitat tree. Visit <a href="http://www.pfaf.org/user/Plant.aspx?LatinName=Malus+sylvestris">http://www.pfaf.org/user/Plant.aspx?LatinName=Malus+sylvestris</a> for more info.
Field Maple	12	10	Deciduous tree native to England & Wales, central and southern Europe, Turkey and west Asia to North Africa. Good hedging species as it has a habitat value and responds well to pruning. Visit <a href="http://www.pfaf.org/user/Plant.aspx?LatinName=Acer+campestre">http://www.pfaf.org/user/Plant.aspx?LatinName=Acer+campestre</a> for more info.
Norway Maple	25	16	Deciduous tree native to S. Norway, S. Sweden and across Europe. Red buds and light brown grooved bark distinguish it from sycamore in winter. Visit <a href="http://www.pfaf.org/user/Plant.aspx?LatinName=Acer+platanoides">http://www.pfaf.org/user/Plant.aspx?LatinName=Acer+platanoides</a> 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 <a href="http://www.pfaf.org/user/Plant.aspx?LatinName=Acer+pseudoplatanus">http://www.pfaf.org/user/Plant.aspx?LatinName=Acer+pseudoplatanus</a> for more info.

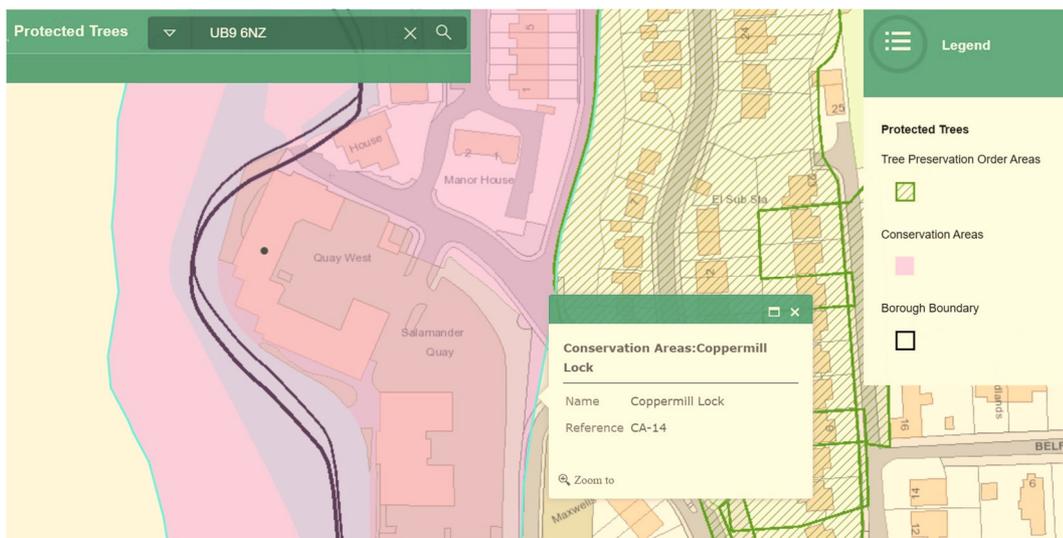
The figures quoted regarding typical height and canopy spread should be treated as approximate. Actual heights and spreads vary according to several environmental factors such as soil conditions, climate, and the presence of competing vegetation. The figures quoted are not the maximum dimensions that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

## 4. Statutory Protection – TPOs and Conservation Area Status

Before undertaking most works on trees protected by a tree preservation order<sup>2</sup>, 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 intention<sup>3</sup>. 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. On the 1<sup>st</sup> of August 2025, we accessed the local authority website. A screenshot is produced below:



This indicates that:

- The site lies within the **Coppermill Lock Conservation Area**.
- There are no tree preservation orders affecting trees within the site.
- There are no tree preservation orders on trees immediately adjacent to 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 license will not be required for any tree removal if the development receives approval.

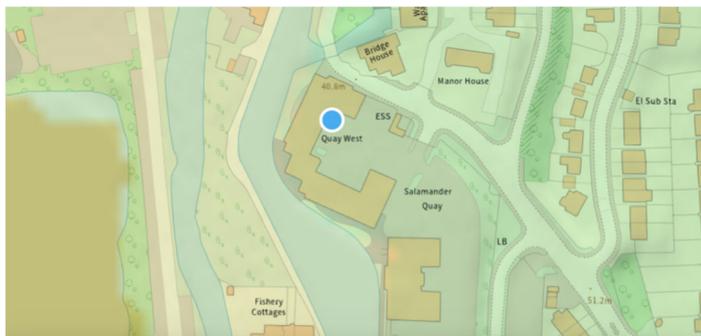
<sup>2</sup> <https://www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas>

<sup>3</sup> 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 **UB9 6NZ** obtained the following results:



Geology

#### Bedrock geology

Seaford Chalk Formation and Newhaven Chalk Formation - Chalk. Sedimentary bedrock formed between 89.8 and 72.1 million years ago during the Cretaceous period.

Source: [https://geologyviewer.bgs.ac.uk/?\\_ga=2.100849601.17774785.1660229567-1737936254.1660229567](https://geologyviewer.bgs.ac.uk/?_ga=2.100849601.17774785.1660229567-1737936254.1660229567)

**Soilscape 6:**  
Freely draining slightly acid loamy soils

**Texture:**  
Loamy

**Coverage:**  
England: 15.5%, Wales: 24.4%, England & Wales: 16.7%

**Drainage:**  
Freely draining

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

### 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 loamy texture.

5.3.2. 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.

## 7. Photographs

Refer also to the Tree Constraints Plan for photo locations

Photo 1.



Photo 2.



Photo 3.



Photo 4.



Photo 5.



Photo 6.



Photo 7.



Photo 8.



Photo 9.



Photo 10.



## 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

<b>Numbering System:</b>	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.
<b>Age Categories:</b>	
<b>Young</b>	Usually less than 10 years old.
<b>Semi-Mature</b>	Significant future growth to be expected, both in height and crown spread (typically below 30% of life expectancy).
<b>Early-Mature</b>	Full height almost attained. Significant growth may be expected in terms of crown spread (typically 30-60% of life expectancy).
<b>Mature</b>	Full height attained. Crown spread will increase but growth increments will be slight (typically 60% or more of life expectancy).
<b>Veteran</b>	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 <a href="https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions">https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions</a>
<b>Over Mature</b>	Tree with declining health but not worthy of veteran status.
<b>Species:</b>	Common names and Latin names are given.
<b>Height:</b>	Measured from ground level to the top of the crown.
<b>Stem Diameter:</b>	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.
<b>Crown Height:</b>	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.
<b>Tree Diagram:</b>	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.
<b>Crown Spread:</b>	Measured N, E, S & W, taken from the centre of the stem and usually rounded up to the nearest metre.
<b>Observations:</b>	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.
<b>Recommendations:</b>	Usually based on any defects observed and intended to ensure that the tree is in an acceptable condition.
<b>Priority Scale:</b>	Depending upon the threat posed by the tree, and the likelihood of failure, recommendations should be carried out according to the following priority scale:
<b>Urgent</b>	To be carried out as soon as possible.
<b>Very High</b>	To be carried out within 1 month.
<b>High</b>	To be carried out within 3 months.
<b>Moderate</b>	To be carried out within 1 year.
<b>Low</b>	To be carried out within 3 years.
	Where funds permit, works should be undertaken sooner, though <b>it is not recommended that the timescales above are extended.</b>
<b>Inspection Frequency:</b>	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.
<b>Vigour:</b>	An indication of growth rate and the tree's ability to cope with stresses:
<b>High</b>	Having above average vigour.
<b>Moderate</b>	Having average vigour.
<b>Low</b>	Having below average vigour.
<b>Very Low</b>	Tree is struggling to survive and may be dying.
<b>Physiological Condition:</b>	
<b>Good</b>	Healthy and with no symptoms of significant disease.
<b>Fair</b>	Disease present or vigour is impaired.
<b>Poor</b>	Significant disease present or vigour is extremely low.
<b>Very Poor</b>	Tree is dying.
<b>Structural Condition:</b>	
<b>Good</b>	Having no significant structural defects.
<b>Fair</b>	Some defects observed though no high priority works are required.
<b>Poor</b>	Significant defects found. Tree requires monitoring or remedial works.
<b>Very Poor</b>	Major defects which will usually require significant remedial works or tree removal.
<b>Amenity Value:</b>	
<b>Very High</b>	Exceptional specimen, observable by a large number of people.
<b>High</b>	Attractive specimen, observable by a significant number of people.
<b>Moderate</b>	One of the above factors is not applicable.
<b>Low</b>	Unattractive specimen or largely hidden from view.
<b>Life Expectancy:</b>	The estimated number of years before the tree may require removal. Classified as (<10), (10 – 20), (20 – 40), or (40+).
<b>Retention Category:</b>	These are explained in detail in Appendix 1.

### A2.2 Evaluation of Defects

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

<b>Major</b>	Such that structural integrity is, or will become, compromised and the tree is, or will inevitably become, hazardous.
<b>Significant</b>	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.
<b>Minor</b>	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: Author'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.

## 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 E S	Scaled Tree Diagram (m) 	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 <b>Crab Apple</b> <i>Malus sylvestris.</i>	10	3	30	3 3.5 2.5		Form: Multiple stemmed with a compact crown. History: Crown lifted. Defects: <b>Minor Included bark at stem junctions.</b>	No action required.		Moderate	Moderate
								n/a	3	Good	40+
T002	Early-Mature <b>Crab Apple</b> <i>Malus sylvestris.</i>	10	3	27	2 3 2		Form: Multiple stemmed with a compact crown. History: Crown lifted. Defects: <b>Minor Included bark at stem junctions.</b>	No action required.		Moderate	Moderate
								n/a	3	Good	40+
T003	Early-Mature <b>Norway Maple</b> <i>Acer platanoides.</i>	13	3	48	5.5 4.5 5		Form: Multiple stemmed at 2m. History: No significant pruning. Defects: <b>No significant defects observed.</b> Other: Ivy prevented a detailed inspection.	No action required.		Moderate	Moderate
								n/a	3	Good	40+
T004	Semi-Mature <b>Field Maple</b> <i>Acer campestre.</i>	5.5	1.5	21	1.5 4 3		Form: Multiple stemmed at ground level. Defects: <b>Minor deadwood.</b> Other: Ivy prevented a detailed inspection.	No action required.		Moderate	Low
								n/a	3	Fair	20-40
T005	Semi-Mature <b>Norway Maple</b> <i>Acer platanoides.</i>	11	2	28	5 3.5 4		Form: Multiple stemmed at 1.5m. History: Crown lifted. Defects: <b>No significant defects observed.</b>	No action required.		Moderate	Moderate
								n/a	1.5	Good	40+
T006	Early-Mature <b>Norway Maple</b> <i>Acer platanoides.</i>	15	2.5	35	4.5 3.5 4.5		Form: Multiple stemmed at 2m. History: Crown lifted. Defects: <b>Minor cavities at old pruning wounds.</b>	No action required.		Moderate	Moderate
								n/a	1.5	Good	40+
T007	Semi-Mature <b>Norway Maple</b> <i>Acer platanoides.</i>	15	3.5	29	3.5 3.5 3.5		Form: Multiple stemmed at 1.5m. History: Crown lifted. Defects: <b>No significant defects observed.</b> Other: Ivy prevented a detailed inspection.	No action required.		Moderate	Moderate
								n/a	1.5	Good	40+

Reference G = Group H = Hedge	Age & Species	Height (m)	Crown Ht (m)	Diameter (cm)	Crown Spread (m) N W E S	Scaled Tree Diagram (m) 	Notes	Recommendations (Independent of any development proposals)		Vigour	Amenity Value
								Priority	Inspect Freq (yrs)	Physiological Condition	Life Expectancy (yrs)
										Structural Condition	Retention Category
G008	Early-Mature <b>Field Maple</b> Acer campestre.	av 15	av 4	av 30	av 5 5 5 each		Position: Top of embankment. Form: Group of similar specimens. History: No significant pruning. Defects: <b>No significant defects observed.</b> Other: Limited inspection, dimensions estimated. Ivy prevented a detailed inspection.	No action required.	1.5	Moderate  Good  Fair	Moderate  40+  <b>B -</b>
	G009	Early-Mature <b>Field Maple</b> Acer campestre.	av 16	av 4	av 35	av 4 4 5 each				Position: On top of embankment. Form: Group of four similar specimens. Defects: <b>Minor deadwood.</b>	No action required.
G010		Semi-Mature <b>Field Maple</b> Acer campestre.	av 16	av 1.5	av 18	av 4 4 5 each		Position: Situated on third party land. Form: Three close growing specimens, all twin stemmed. Defects: <b>No significant defects observed.</b>	No action required.	3	
	T011	Semi-Mature <b>Field Maple</b> Acer campestre.	6	1	15	2 2 2		Form: Balanced crown. Defects: <b>No significant defects observed.</b> Other: Vegetation prevented a detailed inspection.			No action required.
T012		Early-Mature <b>Sycamore</b> Acer pseudoplatanus.	10	2	40	4 5 5		Position: Ownership unclear. Form: Multiple stemmed. Defects: <b>No significant defects observed.</b> Other: Limited inspection, dimensions estimated. Vegetation prevented a detailed inspection.	No action required.	3	
	T013	Early-Mature <b>Sycamore</b> Acer pseudoplatanus.	8.5	0.5	35	3.5 4.5 5		Position: On canal embankment. Form: Multiple stemmed. Defects: <b>No significant defects observed.</b> Other: Access prevented a detailed inspection, some dimensions estimated.			No action required.
T014		Early-Mature <b>Sycamore</b> Acer pseudoplatanus.	8.5	1.5	22	4 2.5 4		Position: On canal embankment. Form: Multiple stemmed. Defects: <b>No significant defects observed.</b> Other: Access prevented a detailed inspection, some dimensions estimated.	No action required.	3	



Drawing No: CCL 12357 / TCP Rev: 1  
 Title: Tree Constraints Plan (Existing Layout)  
 Site: Salamander Quay UB9 6NZ  
 Scale: 1:300 Paper Size: A1



**Tree Retention Categories**  
 Stems & canopies shown

- Category A tree
- Category B tree
- Category C tree
- Category U tree

● 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.

● Trees of moderate quality with a life expectancy of 30+ years. Usually maturing trees or younger trees with good form. Retention of these trees is desirable though less than Category A trees.

● Unremarkable trees of low quality and merit. Individual specimens are not considered to be a material planning consideration.

● Trees unsuitable for retention due to their very poor condition.

## Tree Constraints Plan

Status: Final

  BS 5837 Root Protection Area (radius = 1x stem diameter)

  Root Protection Area needing amendment due to site conditions, e.g. presence of existing road or building.

  Root Protection Area having been amended to account for site conditions

T1 = Tree No 1    G2 = Group No 2    H3 = Hedge No 3

Photo 1

**MN = Measured North:**  
 Canopy spreads are sometimes measured to an approximate N defined by site features. Often more accurate, especially where rows of trees are not aligned N-S or E-W.

Tree Ref.	Species	Height (m)	Root Protection Area	
			Radius (m)	Square (m <sup>2</sup> )
T001	Crab Apple	10	3.5	41
T002	Crab Apple	10	3.2	33
T003	Norway Maple	13	5.8	104
T004	Field Maple	5.5	2.5	20
T005	Norway Maple	11	3.4	35
T006	Norway Maple	15	4.2	55
T007	Norway Maple	15	3.5	38
G008	Field Maple	15	3.6	41
G009	Field Maple	16	4.2	55
G010	Field Maple	16	2.1	14
T011	Field Maple	6	1.8	10
T012	Sycamore	10	4.8	72
T013	Sycamore	8.5	4.2	55
T014	Sycamore	8.5	2.7	23