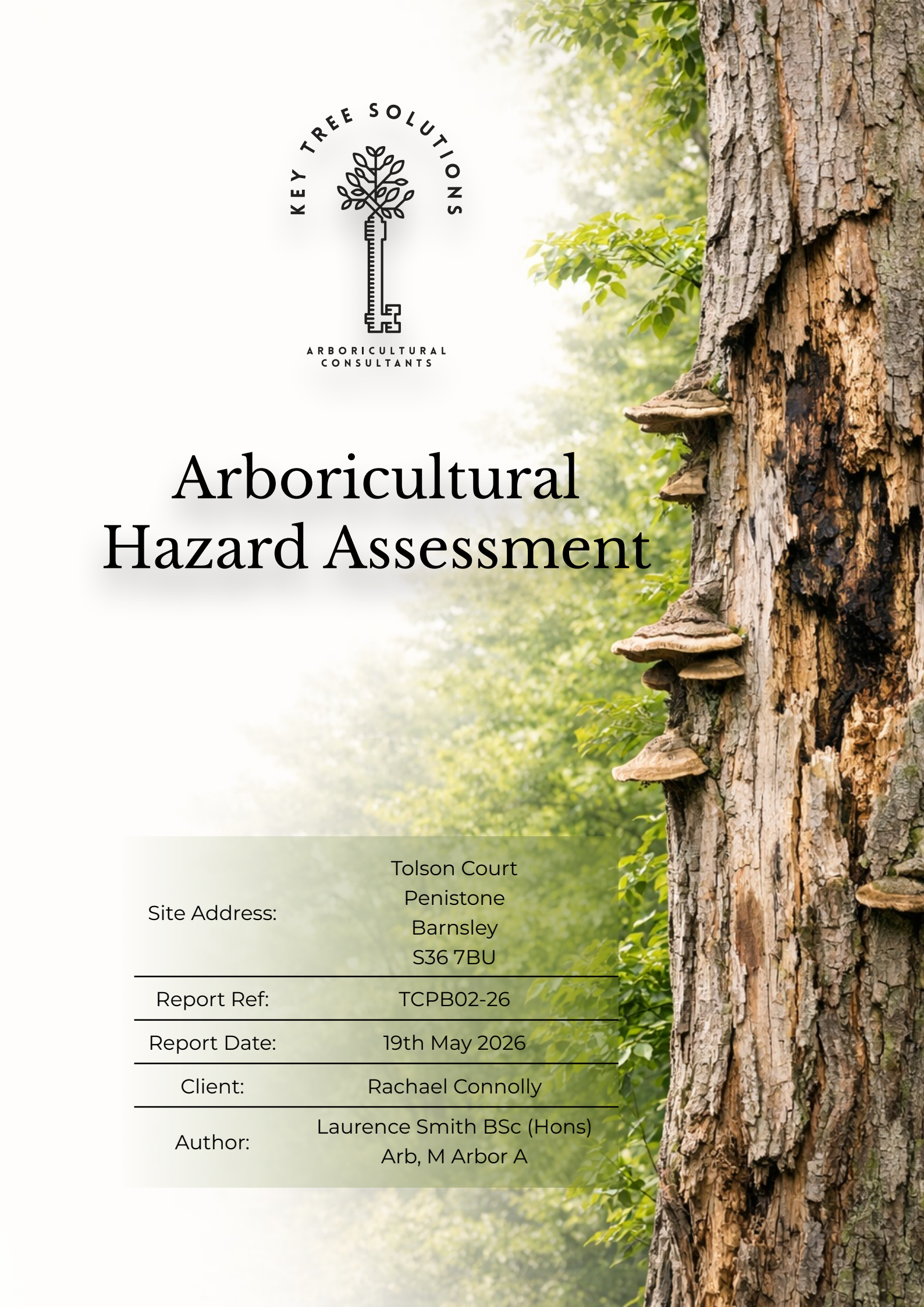
KEY TREE SOLUTIONS

ARBORICULTURAL CONSULTANTS

Arboricultural Hazard Assessment



Site Address:	Tolson Court Penistone Barnsley S36 7BU
Report Ref:	TCPB02-26
Report Date:	19th May 2026
Client:	Rachael Connolly
Author:	Laurence Smith BSc (Hons) Arb, M Arbor A

1. Introduction

1.1 About the Author

This report and tree survey were conducted by Mr Laurence Smith BSc (Hons), M Arbor A, an experienced arboricultural consultant. Mr Smith holds a BSc (Hons) in Arboriculture and a BTEC National Diploma in Forestry and Arboriculture. He is a professional member of the Arboricultural Association and a registered Quantified Tree Risk Assessment (QTRA) user.

With over a decade of experience in the arboricultural industry, Mr Smith initially worked as an arborist, gaining extensive hands-on experience in climbing, dismantling, and pruning. This practical background has provided in-depth knowledge of tree biomechanics, wood structure, load-bearing capacity, and the limitations of pruning techniques. For the past eight years, he has worked as a consultant, specialising in tree risk assessment and development-related arboriculture.

1.2 Intention of the Report

The client, Rachael Connolly, has commissioned Key Tree Solutions to conduct an independent arboricultural survey of the trees located within the boundaries of Tolson Court, as shown in the site plan (Appendix D).

This report identifies potential tree-related risks and assigns a Risk of Harm (RoH) rating ranging from 1/4 to <1/1M (one in a million). The RoH is calculated based on:

- The size of the tree component most likely to fail
- The presence and value of potential targets
- The Probability of Failure (PoF) within the next 12 months

Where appropriate, tree work recommendations are provided to mitigate risk to a tolerable or broadly acceptable level, prioritising tree retention wherever feasible. This risk-based approach ensures that tree management decisions are proportionate and evidence-based. Further details on the QTRA methodology used in this assessment can be found in Appendix F.

All survey data, along with management recommendations, are compiled in the Arboricultural Schedule of Works (Appendix B). This should be referenced alongside the site plan (Appendix D) and relevant images (Appendix C) for a complete understanding of the findings.

1.3 Scope of the Report

This report is based on a ground-level walkover survey of the site, assessing all relevant trees. However, detailed risk assessments have only been conducted on:

- Noteworthy specimens within the site, or
- Trees with significant observed defects

Trees within the site boundary that are not included in the Arboricultural Schedule of Works (Appendix B) are generally considered to be in good health with a broadly acceptable Risk of Harm (RoH).

While the focus is on trees within the site, general observations may have been made about off-site trees that could impact the area if they were to fail. However, the client is responsible for informing third parties about any concerns that are recorded. Key Tree Solutions does not assume responsibility for managing or assessing trees beyond the site boundary.

Where trees are assessed as groups, risk assessment is prioritised toward those individuals exhibiting the most significant defects or indicators of elevated risk. If the highest-risk tree within a group is assessed as falling within a broadly acceptable level of risk, the remaining trees in that group are reasonably assumed to present an equal or lower level of risk, and further individual risk assessments are not undertaken. In some instances, groups may comprise trees with no observable defects that would elevate the level of risk above a broadly acceptable threshold, in which case individual risk assessment is not considered necessary.

To assess the Probability of Failure (PoF), this survey follows the Visual Tree Assessment (VTA) methodology (Mattheck, 1991). VTA is a ground-level visual inspection that identifies:

- Mechanical defects
- Signs of ill health
- Potential structural failures
- The tree's suitability for its location

In some cases, further investigation may be necessary, such as:

- Removing ivy to inspect hidden defects
- Using ladders or climbing techniques to assess cavities not visible from the ground
- The use of decay detection equipment

Any requirement for additional investigation and the justification for it will be clearly identified within the arboricultural schedule of works.

1.4 Limitations to the survey

Tree assessments are inherently influenced by seasonal variations, which can affect both visibility and the accuracy of observations. For instance, during periods when trees are in full leaf, assessors are better able to evaluate canopy health. However, the dense foliage typical of these conditions can also obscure critical structural elements such as branches and stems. Additionally, some indicators of internal decay, such as fungal fruiting bodies, are only present

during specific times of the year. As a result, their absence at the time of inspection does not necessarily indicate the absence of decay.

The survey was conducted from ground level and remained within the defined site boundary. In certain instances, full access around individual trees may have been restricted. These are both factors which can limit the ability to observe them from all angles.

1.5 Tree Condition & Environmental Factors

Trees are dynamic, living organisms that continuously respond to changes in their surrounding environment. Their condition may be affected by a variety of external influences beyond human control. Severe weather events such as storms, high winds, or snow accumulation can place sudden stress on trees, while shifts in groundwater levels or inadvertent root damage caused by nearby construction can also have significant effects.

Given these variables, it is recommended that trees undergo periodic reassessment to ensure their ongoing safety and health. The frequency of these follow-up inspections should reflect the specific context and usage of the site. For example, trees located in high-priority areas, such as schools or public spaces, are generally best served by annual inspections. In contrast, trees in lower-priority settings like private gardens or parklands may only require reassessment every one to three years.

It is important to understand that this report reflects the condition of the trees at the time of inspection and remains valid for 12 months. However, due to the unpredictable nature of biological and environmental change, the report cannot provide any long-term guarantee of safety. Unexpected factors, such as pest or disease outbreaks or sudden structural failure, may still arise. Should any significant changes become evident, such as visible decline or storm damage, an additional inspection is advised.

1.6 Survey Details

The arboricultural survey was carried out on the 6th of May 2026, with the primary aim of recording data on the existing tree stock within the site. The survey took place during the spring season, as most trees were going through bud break. Weather conditions on the day were overcast, accompanied by a moderate breeze. While such conditions may have influenced visibility and measurement accuracy to a limited extent, they were considered suitable for the purposes of this assessment.

Measurements were taken using a combination of tools selected for precision and practicality. An electronic distometer was employed to record accurate distances where possible, while a specialist measuring tape was used in situations that allowed for manual measurement. In instances where direct measurement proved impractical, such as where access was restricted, dense ivy obscured the trunk, or multiple trees formed a cluster, estimates were made instead. These estimated values are clearly marked in the report using the following notations:

- (est.) denotes an estimated measurement, such as where high Ivy cover is in situ.
- (ave.) indicates an average where multiple trees are included within groups.
- (MAB.) signifies that the measurement was taken at the base of the tree.

This approach ensured that even under challenging conditions, meaningful and representative data could be recorded for all trees surveyed.

2. Site Targets

The site comprises a residential building subdivided into multiple flats, with associated private parking and access routes. The majority of the surrounding tree population is located along the southern and western boundaries of the property, although most of these trees are assumed to be under the management responsibility of neighbouring landowners. Trees T1–T4 represent the principal trees located within the property boundary and therefore form the primary focus of this assessment.

Tree T1 is positioned adjacent to the site entrance and extends over both Huddersfield Road and the main access point into the private car park. Huddersfield Road is considered to experience moderate vehicle usage throughout the day, while the access route beneath the canopy is used regularly by residents and visitors entering and leaving the site. Consequently, both vehicular traffic and pedestrian movements represent significant targets beneath this tree.

Tree T2 is situated between the private car park and the residential building. In the event of significant branch or whole-tree failure, the principal targets would include parked vehicles, pedestrians using the parking area, and sections of the adjacent dwelling and garden.

Tree T3 is positioned immediately west of the parking area, with the most likely targets comprising parked vehicles and individuals accessing or using the car park. Occupancy beneath the canopy is therefore considered intermittent but reasonably frequent throughout the day.

Tree T4 is located approximately 5 m west of the residential building, with sections of the canopy extending over both the dwelling and associated garden areas. The principal targets associated with this tree are therefore the building itself, alongside residents using the surrounding gardens and amenity spaces.

Overall, the site presents a moderate level of target occupancy typical of a residential apartment setting, with the highest target values associated with the highway frontage, parking areas, pedestrian access routes, and the residential structure itself.

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3. Legal Requirements

3.1 Statutory Protection

Local Planning Authorities (LPAs) have the authority to protect certain trees and woodlands through the issuance of Tree Preservation Orders (TPOs). Additionally, trees located within a Conservation Area (CA) that are not subject to a TPO are also afforded special protection. The LPAs derive these powers from the following legislation:

- Town and Country Planning Act 1990
- Town and Country Planning (Determination of Appeals by Appointed Persons) (Prescribed Classes) (Amendment) (England) Regulations 2008
- Town and Country Planning (Trees) (Amendment) (England) Regulations 2012

The primary purpose of a TPO is to prevent the cutting down, uprooting, topping, lopping, wilful damage, or destruction of protected trees without obtaining prior consent from the relevant LPA. Similarly, for any tree work within a Conservation Area, a six-week notification period must be observed before commencing any work. Unauthorised works on trees protected by a TPO or those within a Conservation Area may result in an unlimited fine.

According to information available on the Barnsley Metropolitan Borough Council website (accessed on 19th May 2026), all surveyed trees are subject to individual Tree Preservation Orders (TPOs).

Therefore, no arboricultural works should be undertaken to the surveyed trees without first obtaining formal consent from the Local Planning Authority. This includes pruning, crown reduction, removal, or any other works likely to affect the protected trees.

For further details, refer to the Planning Interactive Map query results provided within Appendix E: Statutory Protection.

3.2 Protected Species Considerations

Before any work is carried out, trees must be inspected for the presence of protected species. Although this tree survey does not assess the likelihood of protected animal species being present, it is important to note that it is illegal to disturb bats or their roosts under the Conservation of Habitat and Species Regulations (2010). Similarly, nesting birds are protected under the Wildlife and Countryside Act (1981) (as amended), particularly between March and July. Badgers are also protected under the Protection of Badgers Act (1992).

If any protected species are discovered during work, all activities should cease immediately, and advice should be sought from Natural England.

4. Tree Descriptions and Recommendations

If appropriate, risk-assessed trees have been tagged onsite with an ID number. This number has been suffixed within the report with the letter T to represent it as a Tree entity. In some instances, the element may not be tagged due to a lack of access, the size of a stem or ease of identification. Non-tagged trees are assigned sequential ID numbers (T1, T2, etc.) in the Arboricultural Schedule of Works. Other non-tagged entries could include (G)roup, (W)oodland or (H)edge.

For each entry, collected data, along with a narrative comment and any relevant management recommendations, have been given within the Arboricultural Schedule of Works found in Appendix B. This can be cross-referenced with any images (Appendix C), where applicable and the site plans found in Appendix D.

Trees posing an unacceptable level of risk should be prioritised for urgent management, while those with long-term issues are monitored as part of an ongoing risk strategy. An explanation for the arboricultural survey, including any shorthand or acronyms, can be found in Appendix A.

5. Conclusion

The surveyed trees comprise a small population of mature broadleaved specimens situated around the western and southern aspects of the residential property. Overall, the trees were found to be in generally good physiological and structural condition, with no defects identified that would place any of the surveyed trees within an unacceptable level of risk at the time of inspection.

Tree T1, a large mature Beech overhanging both the highway and site entrance, remains in particularly good condition for a specimen of its scale and age. While minor deadwood is now developing within the upper canopy, no evidence of significant structural dysfunction, basal decay, or progressive instability was identified. Routine crown cleaning is considered sufficient to maintain the tree within a broadly acceptable level of risk.

Trees T2 and T3 both exhibit historic structural features and pruning-related defects typical of mature Sycamore specimens, including compression unions, historic limb failures, and localised cavitation. However, current observations suggest these defects remain compartmentalised and are not presently progressing in a manner indicative of elevated failure potential. Continued cyclical monitoring is therefore considered appropriate.

Tree T4 displays evidence of historic root severance, localised cavitation, and adaptive epicormic development associated with previous pruning wounds. Despite these factors, the tree retains good vigour and acceptable structural form overall. The principal management considerations relate to building clearance and ongoing amenity management rather than immediate risk reduction.

At the time of inspection, all surveyed trees were assessed as falling within a broadly acceptable Risk of Harm threshold under QTRA methodology. Recommended works are therefore limited largely to routine maintenance, ongoing monitoring, and minor pruning to improve clearance, light penetration, and future inspection access while retaining the significant amenity and landscape value provided by the trees.

Signed:

Laurence Smith BSc (Hons) Arboriculture, M Arbor A

6. Caveats and Limitations

6.1
Climate conditions, such as storms, droughts, and temperature fluctuations, can cause damage and failure in trees that may appear healthy. The client needs to recognise that all trees potentially pose a hazard, and any action should be justified based on the associated risk level and the value of the target. While every effort has been made to identify significant defects during the tree inspection, it is not possible to provide a guarantee regarding the safety of any tree.

6.2
Comments on the tree conditions and associated risks are relevant to the date and time of the survey. Given the biological nature of trees and the potential for mechanical or physical changes in their surroundings, tree health and structure can evolve. Consequently, trees should be inspected at regular intervals in accordance with identified site risks and following relevant Health, Safety, and Environment (HSE) guidelines and government recommendations. Typically, this should occur between 1 and 3 years, depending on the level of risk.

6.3
No reports regarding underground utilities or past construction works have been provided to the author. The client should be aware that the existence of such documentation may influence the recommendations made in this report, particularly if the root systems of trees have been disturbed or damaged.

6.4
As an arboricultural report, the author is not qualified to assess damage to buildings or underground utilities potentially caused by tree roots. Any observations regarding the condition of such structures are made from a layperson's perspective and should not be considered as expert analysis of structural or utility-related damage.

6.5
All tree work should be conducted in accordance with the appropriate Duty of Care, following the standards outlined in the British Standard BS 3998:2010 Tree Work – Recommendations. It is essential that any contractor engaged in tree work includes site-specific risk assessments and performs due diligence inspections to identify the presence of protected species, such as nesting birds and bats, as part of their safety and legal obligations.

Appendix A: Survey Reference Information

A1. Survey Key

Column Heading	Description
Tree ID	Each risk asesed tree has been given a unique number. Where feasable these have been tagged to the stem at approximatly 2m from ground level.
Age Class	The tree is described as Young, Semi-Mature, Early-Mature, Mature, Over-Mature, Veteran or Dead.
Species	The English common name has been used along with the botanical name in brackets and italics.
Height (m)	An indication of the group or tree's height measured in metres.
Crown Spread (m)	An indication of the avarage crown spread of individual trees within the group.
Diameter (mm)	An indication of the avarage or range of stem diamiters at 1.5m from ground level.
Vitality	A single word evaluation regarding the tree health, structure and condition. Stated as Normal, Fair, Reduced or Poor
General Observations	Narrative comments which may include observations on the general condition including defects and overall appearance.
Assessed Part	The part of the tree most likely to fail after visual analysis.
Target	Set target ranges within QTRA for targets including vehicular, pedestrian and property. Target rage is a number allocation between 1-6 with 1 representing the highest target rating.
Size of Part	The size of the part with potential for failure. Size rage is a number allocation between 1-4 with 1 representing the largest size.
Probability of Failure (PoF)	The Probability of Failure (PoF) of the risk assessed part. PoF rage is a number allocation between 1-7 with 1 representing the highest risk.
Reduce Mass	Where deadwood is assessed, there is the potential for a reduction in mass due to the drying of the wood. This is accounted for within the assessment. Where applicable reduced mass is given as 25% or 50%.
Risk of Harm	QTRA calculated Risk of Harm (RoH) using the inputs generated by the surveyor. These are given as a fraction between 1 in 4 (1/4) and greater that 1 in 1 million (<1/1m). For risk thresholds see A2 below.
Management Recommendations	Any works recommended in order to minimise risk, improve form or maintain a high value.
Image Ref.	An image of the tree or defect if applicable.

A2. Risk Decision Informing Framework

Risk Thresholds	Description	Action
1/1,000	Unacceptable Risks will not ordinarily be tolerated	. Control the risk . Periodically review the risk
	Unacceptable (where imposed on others) Risks will not ordinarily be tolerated	. Control the risk . Periodically review the risk
1/10,000	**Tolerable** (by agreement) Risks may be tolerated if those exposed to the risk accept it, or the tree has exceptional value	. Control the risk unless there is broad stakeholder agreement to tolerate it, or the tree has exceptional value . Periodically review the risk
	Tolerable (where imposed on others) Risks are generally tolerable	. Assess costs and benefits of risk control . Control the risk only where a significant benefit might be achieved at a reasonable cost . Periodically review the risk
1/1,000,000	Broadly Acceptable	. No action currently required . Periodically review the risk

Appendix B: Arboricultural Schedule of Works

ID	Age Class	Species	Height (m)	Crown Spread (m)	Diameter (mm)	Vitality	General Observations	Assessed Part	Target	Size of Part	PoF	Reduce Mass	Risk of Harm	Management Recommendations	Image Ref.
T1	Mature	Beech (*Fagus sylvatica*)	22	11, 13, 14.5, 12	1500	Normal	A significant mature Beech displaying extensive heavy scaffold branching with well-developed branch architecture throughout the crown. The primary unions appear structurally adequate, with multiple instances of natural bracing present between limbs, suggesting adaptive loading responses typical of mature Beech specimens of this scale. The canopy extends over the driveway and partially over the adjacent highway. The canopy displays strong physiological vigour with only very minor deadwood present during the original inspection. No visible fungal fruiting bodies or significant basal defects were observed, and buttress development appears good, indicating satisfactory adaptive growth around the root plate. **2026:** No visible fungal fruiting bodies, staining, or symptoms associated with basal dysfunction were identified during the reinspection. No evidence of branch failure, tear-out wounds, or progressive structural instability was observed. The canopy remains in good physiological condition, although several small instances of deadwood are now present throughout the upper canopy, typical of a mature Beech of this age and scale. The current Risk of Harm remains within a broadly acceptable threshold.	Falling deadwood	2	4	2	50%	1/100K	Undertake a crown clean to remove deadwood throughout the canopy to aid ongoing assessment.	Fig 1.

ID	Age Class	Species	Height (m)	Crown Spread (m)	Diameter (mm)	Vitality	General Observations	Assessed Part	Target	Size of Part	PoF	Reduce Mass	Risk of Harm	Management Recommendations	Image Ref.
T2	Mature	Sycamore (*Acer pseudoplantanus)*	20	4, 6, 6.5, 5	730	Normal	A mature Sycamore with bifurcation of the main stem occurring at approximately 2.5 m above ground level, forming a tight compression union. Despite the included bark characteristics, there are currently only minimal visible signs of stress or adaptive reaction growth around the union, suggesting a limited increase in failure potential. The primary scaffold branches are generally well developed with adequate attachment points and acceptable overall canopy architecture. **2026:** Young epicormic growth is beginning to redevelop around previous lower pruning points, although this remains of limited significance at present. No substantial adaptive growth or deformation has developed around the bifurcation union to indicate elevated loading stress. The canopy architecture remains generally adequate despite several minor rubbing branches. No fungal fruiting bodies or signs of basal dysfunction were observed around the root plate. At the time of inspection, no significant defects were identified which would justify remedial works on risk grounds alone. Potential management may instead focus on amenity considerations relating to shading and light obstruction.	Compression union failure	3	-	6	-	<1/1M	Potential to remove lower epicormic development as part of ongoing maintenance pruning for light.	Fig 2

ID	Age Class	Species	Height (m)	Crown Spread (m)	Diameter (mm)	Vitality	General Observations	Assessed Part	Target	Size of Part	PoF	Reduce Mass	Risk of Harm	Management Recommendations	Image Ref.
T3	Mature	Sycamore (*Acer pseudoplantanus*)	20	6, 6.5, 8, 7	690	Normal	A mature Sycamore displaying several historic pruning wounds throughout the main stem structure. A substantial historic limb removal at approximately 2.5 m has resulted in localised cavitation, with probing suggesting decay extends to approximately one-third of the stem diameter at this location. Two additional historic pruning wounds higher within the crown also exhibit minor cavitation. Historic limb failures are evident on the western aspect, including an older failure associated with cavity development at approximately 6 m and a more recent tear-out at approximately 8 m. Despite these historic defects, the canopy remains dense and vigorous with a slightly pendulous growth habit typical of mature Sycamore. Minor internal deadwood is present, and the lowest branch extends to approximately 3 m above the driveway. **2026:** Cavitation associated with the primary pruning wound and the additional wounds above appears to have progressed slightly; however, decay still appears largely compartmentalised within branch bark ridge tissues and does not currently suggest extensive stem dysfunction. The canopy continues to display very good physiological condition with only limited deadwood present. At present the tree appears structurally adequate and no works are recommended specifically for risk mitigation purposes.	Stem Failure due to decay progression	3	1	6	-	<1/1M	None.	Fig 3

ID	Age Class	Species	Height (m)	Crown Spread (m)	Diameter (mm)	Vitality	General Observations	Assessed Part	Target	Size of Part	PoF	Reduce Mass	Risk of Harm	Management Recommendations	Image Ref.
T4	Mature	Sycamore (*Acer pseudoplantanus*)	17	6.5, 6.5, 9, 10	1210	Normal	A significant mature Sycamore comprising three principal scaffold stems arising from approximately 3 m above ground level. The tree is positioned approximately 5 m from the adjacent property, with portions of the canopy in direct contact with the building. Much of this contact is derived from low epicormic shoots and secondary growth of relatively limited size. At the stem base there is evidence of historic root severance alongside minor cavitation on the western aspect. Visible decay penetration currently appears limited, although some degree of natural hollowing would be expected within a mature Sycamore of this size and age. Additional epicormic development is occurring around a historic large limb removal at approximately 6 m on the northern aspect, suggesting localised adaptive growth in response to dysfunction around the pruning wound and associated union. Despite these localised defects, the tree remains generally well structured and displays very good physiological condition overall. The assessed Risk of Harm currently remains broadly acceptable and no works are considered necessary specifically for risk mitigation.	Limb failure from pruning wounds	4	4	5		<1/1M	Potential management could include raising the canopy on the eastern aspect to approximately 7 m to improve clearance from the building and selective reduction or removal of developing epicormic stems associated with the historic northern limb removal. Where reasonably practicable, decaying sections should ideally be retained as ecological habitat.	Fig 4, 5 & 6

Appendix C: Images

Figure 1. Deadwood within the crown of T1.

Figure 2. Tight union formation between the two stems of T2, with young epicormic shoots developing from previous pruning points.

Figure 3. The most significant cavity on the stem of T3 with limited occlusion growth around the wound.

Figure 4. The canopy of T4 is in contact with the building. The red line denotes a potential canopy lift of the eastern aspect of the crown to create a 2m clearance from the building.

Figure 5. Branching is becoming significant at a historic large pruning point.

Figure 6. Minor cavitation at the base of T4.

KEY TREE SOLUTIONS
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Arboricultural Hazard Assessment site plan to be viewed in color alongside report reference no. TCPB02-26

Icon	Description	Action
	Unacceptable Risks will not ordinarily be tolerated	1. Control the risk 2. Periodically review the risk
	Unacceptable (where imposed on others) Risks will not ordinarily be tolerated	1. Control the risk 2. Periodically review the risk
	Tolerable (by agreement) Risks may be tolerated if those exposed to the risk accept it, or the tree has exceptional value	1. Control the risk unless there is broad stakeholder agreement to tolerate it, or the tree has exceptional value 2. Periodically review the risk
	Tolerable (where imposed on others) Risks are generally tolerable	1. Assess costs and benefits of risk control 2. Control the risk only where a significant benefit might be achieved at a reasonable cost 3. Periodically review the risk
	Broadly Acceptable	1. No action currently required 2. Periodically review the risk

Site Location

Tolson Court
Penistone
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S36 7BU

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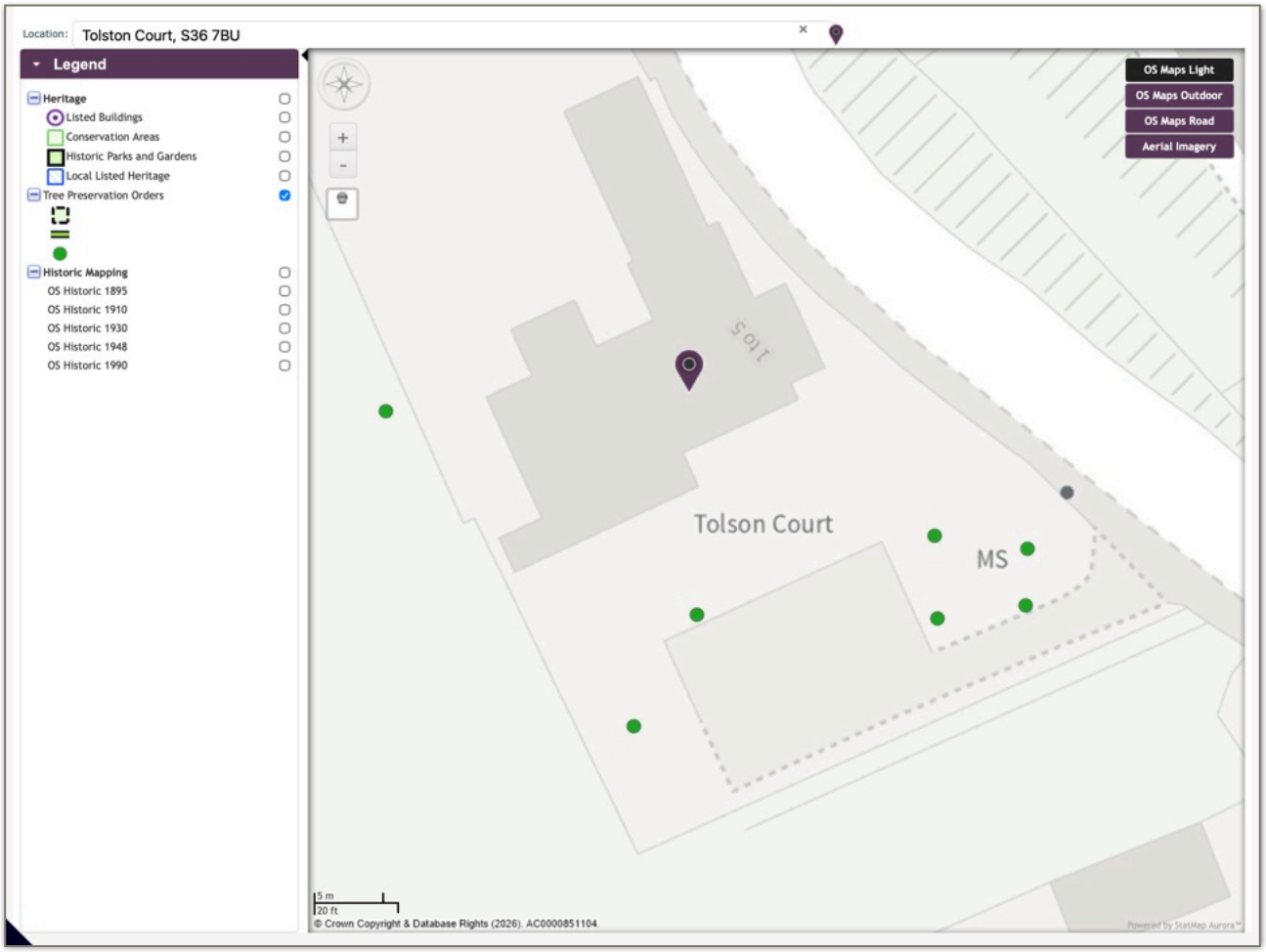
Job
Arboricultural Hazard Assessment

Title
Appendix D:
Arboricultural Locations Plan

Drawn by	Date	Scale @ A3	Drg. no.
L Smith	**May 2026**	**NTS**	**1/1**

Appendix E: Statutory Protection



Screenshot 1. Image taken from the Barnsley Metropolitan Borough Council online mapping service showing the location of Tree Preservation Order (TPO) designations affecting the surveyed trees within the site.

Appendix F: What is Quantified Tree Risk Assessment?

Tree safety management is a matter of balancing the Risk of Harm from falling trees with the benefits from trees. Although it may seem counterintuitive, the condition of trees should not be the first consideration. Instead, tree managers should first consider the usage of the land on which the trees stand, which in turn will inform the process of assessing the trees.

Quantified Tree Risk Assessment (QTRA) applies established and accepted risk management principles to tree safety management following ISO 31000:2009, Risk Management – Principles and guidelines, which are published by national standards agencies. By quantifying the Risk of Harm as a probability, QTRA enables the tree manager to manage the risk from tree failure to widely accepted risk thresholds.

Using the QTRA approach, the land use (people and property) upon which trees could fail is assessed and quantified first. This enables tree managers to determine whether or not, and to what degree of rigour, a survey or inspection of the trees is required. Where necessary, the tree or branch is then considered in terms of both size (potential impact) and probability of failure. Values derived from the assessment of these three components are combined to calculate the risk of harm as a probability, which can then be compared to advisory levels of risk acceptability.

The method moves the management of tree safety away from labelling trees as either ‘safe’ or ‘unsafe’, thereby requiring definitive statements of tree safety from either tree surveyors or tree managers. Instead, QTRA quantifies the risk of significant harm from tree failure in a way that enables tree managers to balance safety with tree value and operate to predetermined risk thresholds.

By taking a QTRA approach to tree risk, tree managers commonly find they spend fewer resources on assessing and managing tree risk whilst maximising the benefits their tree populations provide. Furthermore, in the event of a 'tolerable' or 'acceptable' tree risk being realised, they are in a robust position to demonstrate that they have acted reasonably and proportionately.