

Arboricultural Appraisal

Smith End Farm, Smiths End Lane, Barley, SG8 8LL

Report Reference: 002231682_AA001



Client: Lee Harland

Report produced by: Paul Zepler, FdSc Arb, ND Arb, LANTRA PTI, VALIDATOR Arb

Date of inspection: 25-09-2026

Contact: evertreearbsolutions@gmail.com

Statutory Controls		Mitigation	
TPO	No	Owner	Smith End Farm
TPO potential	No	Domestic 3 rd Party	No
Cons. Area	Yes	Local Authority Intervention	Conservation area notification
SSSI	No	Other	No
Local Authority: North Herts			

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1.0 Executive summary

- 1.1** This arboricultural appraisal considers tree T001, a mature, three-stemmed ash (*Fraxinus* sp.) at Smith End Farm, inspected on 25 September 2026. The tree is approximately 11 m high and stands within falling distance of a building and a frequently occupied dwelling. Its physiological, structural and overall conditions are assessed as poor. Reduced bud production, stunted growth, bark delamination, black seepage, bacterial canker, ash dieback and fruiting bodies of *Perenniporia fraxinea* indicate significant decline. Visual and tactile inspection, supported by IML resistance drilling, identified extensive decay, cavities and loss of structural resistance around the lower stem and buttress region on all cardinal aspects. The likelihood of failure is assessed as possible, the likelihood of impact as high and the potential consequences as significant, producing an overall moderate risk rating. Retention in the present full-crown form is therefore not considered appropriate. Tree T001 should be reduced to a standing monolith of approximately 5 m, with proportionate target management, by 25 December 2026. The work should be undertaken by a suitably qualified and insured arboricultural contractor in accordance with BS 3998:2010, *Tree work – Recommendations*, following appropriate checks for protected wildlife. The tree is not subject to a Tree Preservation Order but is situated within Barley Conservation Area; six weeks' written notice should normally be given to the Local Planning Authority under section 211 of the Town and Country Planning Act 1990 before work begins unless a relevant exemption applies. The retained monolith should be inspected after completion and formally reassessed no later than 25 September 2029 or sooner following severe weather or any material change in condition or site use.

2.0 Limitations of inspection

2.1 This report is limited to the tree identified in Appendix A and to the consideration of impacts, risks, and mitigation associated with that tree. It does not provide recommendations beyond that scope and should not be regarded as a BS 5837:2012 planning compliance report for any wider development proposals. It may, however, support an application, notification, or exemption assessment for tree works where required under the Town and Country Planning Act 1990. This report is definitive for the inspected tree, the stated survey date, the evidence available at the time of inspection, and the scope set out within this document. The findings relate to the physiological and structural condition of the inspected tree at the time of survey and are valid only for the inspection period stated within Appendix A, subject to all recommended actions and monitoring being conducted. All comments made about adjacent built structures are based upon lay observations only and do not constitute a qualified structural or engineering opinion. Such observations are included only to record whether any visible cracking or obvious external defects were apparent at the time of inspection. This report does not extend to property-damage assessment or structural diagnosis of buildings, except where such matters arise directly from a foreseeable failure associated with an identified defect in the inspected tree structure.

This report includes the site context, inspection observations, survey data, analysis, discussion, conclusions, and recommendations.

Tree survey data were obtained during a site inspection undertaken on 25 September 2026.

2.2 Conclusions are based on analysis of data obtained during the site inspection, including external visual and tactile observations, relevant measurements and calibrations, and the use of an IML resistance drill to assess the internal wood structure and inform an opinion on the structural integrity of the tree. The findings are referenced, where appropriate, against recognised arboricultural good practice standards.

The inspection comprised ground-level visual and tactile assessment of external features, supported by resistance-drill testing where required. The principal objective of the survey was to identify foreseeable issues arising from the tree's current condition and

relationship with adjacent targets, and to provide proportionate management recommendations.

Visual assessment, in accordance with accepted arboricultural practice, was based on apparent vitality (leaf cover and extension growth), bud production, the presence of deadwood and dieback, fractured or detached limbs, evidence of excessive basal movement, bacterial and/or fungal infection, and external indications of stem and basal decay likely to affect the structural condition of the tree. A full tree survey was undertaken to inform this report:

Full Tree Survey:

The objective of the full tree survey was to inspect the ash identified in Appendix A using a combination of Visual Tree Assessment and invasive structural testing where necessary. The tree was assessed where it is within falling distance of foreseeable targets, including roads, paths, boundary structures, buildings, and areas of regular use or occupation. Due to the presence of visible decay indicators, including fungal fruiting bodies and basal/stem defects, a more detailed structural assessment was undertaken using an IML RESI PD400 resistance drill to evaluate the internal wood structure and help determine the extent and distribution of sound residual wood.

The IML RESI PD400 investigation was undertaken to provide additional evidence of internal resistance loss and to inform the structural appraisal of the lower stem/root-buttress area. The results of resistance drilling should be read alongside the visual symptoms, species characteristics, site context, target assessment, and professional judgement. The drill testing provides localised information along the drilling paths only and does not represent a complete three-dimensional mapping of the whole stem or root system.

Although the structural investigation was more detailed than a ground-level visual inspection, it remains an arboricultural assessment and not a guarantee of future tree stability. Trees are dynamic living organisms, and their condition can change as a result of decay progression, weather events, ground disturbance, pruning, loading, drought stress, or other site changes. The conclusions and recommendations should therefore be reviewed if conditions alter or if further defects become apparent.

Survey Validity Period and Limitations:

Unless otherwise stated within section 9, the survey of each tree is valid for a maximum period of three years. Where section 9 specifies a more frequent inspection regime, that interval should be taken as the period of report validity. Validity is conditional upon the recommended actions and/or works being undertaken.

Inspections will become invalid following unforeseeable events, including extreme weather, construction, development, tree works, or disturbance to the soil volume used by the tree. However, a walk-by survey undertaken after such an event can be arranged to validate the remaining inspection period, as advised within the recommended inspection frequency.

Inspections will become invalid if physical changes are made to the site after the survey that alter potential target locations. This includes alterations to the location of paths and areas of congregation, or the removal of vegetation management features such as scrub, bramble, dead hedges, or temporary fencing that were restricting access to the proximity of trees at the time of survey.

***Visual Tree Assessment (VTA) Method:**

All trees were inspected using the Visual Tree Assessment method expounded by Mattheck and Breloer (1994), with hazard assessment informed by Lonsdale (1999).

3.0 Introduction

3.1 This report has been prepared by Paul Zepler.

Paul Zepler is an experienced arboricultural practitioner with professional qualifications including FdSc Arb, ND Arb, LANTRA Professional Tree Inspection, and VALIDATOR Arb. His experience includes eighteen years in local authority arboriculture, nine years in consultancy, and a further four years in practical arboricultural work.

Contact details: 07435 251887.

4.0 Site description and local authority constraints

4.1 Smith End Farm is situated on Smiths End Lane at the southern side of Barley, within a predominantly rural part of North Hertfordshire. The property occupies a low-density village-edge setting characterised by detached dwellings, former agricultural buildings and

established plots, with the built form interspersed by gardens, paddocks and other open land.

- 4.2 The immediate surroundings have a strong green and well-vegetated character. Mature trees, established hedgerows, garden planting and grassed areas provide enclosure and visual screening along Smiths End Lane and around nearby properties. These features soften the relationship between buildings and the countryside and contribute to the verdant character of the site and its approaches.
- 4.3 At a local level, Barley retains the character of a compact historic village surrounded by agricultural land. Smith's End forms part of the settlement's southern approach, where development becomes more dispersed and views open towards adjoining fields. The pattern of buildings, lanes, boundary vegetation and open spaces creates a gradual and recognisably rural transition from the village to the surrounding countryside.
- 4.4 In the wider context, the village lies within an undulating farmed landscape of large arable fields, with hedgerows, field-edge trees, small woodland groups and garden vegetation forming the principal green infrastructure. This network of vegetation provides visual continuity between the site, the village and the open countryside, contributes to local landscape character and wildlife connectivity, and gives prominent mature trees an appreciable role in views and the rural setting.
- 4.5 This site is situated within Barley Conservation Area. The Conservation Area was designated in 1969, with subsequent boundary amendments, and extends south from the historic village core to include Smith's End. The adopted character statement identifies Smith's End as a distinct part of the designated area, where a looser pattern of development, established boundary vegetation and the transition to surrounding agricultural land contribute to its special architectural and historic interest. Mature trees and hedgerows are important components of this verdant setting, helping to frame views, soften the built form and maintain the rural character of the southern approach to the village. The subject tree should therefore be considered not only in terms of its condition and safety, but also for its contribution to the character and appearance of the Conservation Area. Any proposed works must follow the applicable statutory procedure: where a Tree Preservation Order applies, written consent from the Local Planning Authority is required unless an exemption is available; for a qualifying tree in a conservation area that is not protected by an Order, six weeks' written notice must normally be given under section 211

of the Town and Country Planning Act 1990. The proposed management should consequently be proportionate to the identified defects and should retain appropriate habitat and visual value where this can be achieved without compromising safety.

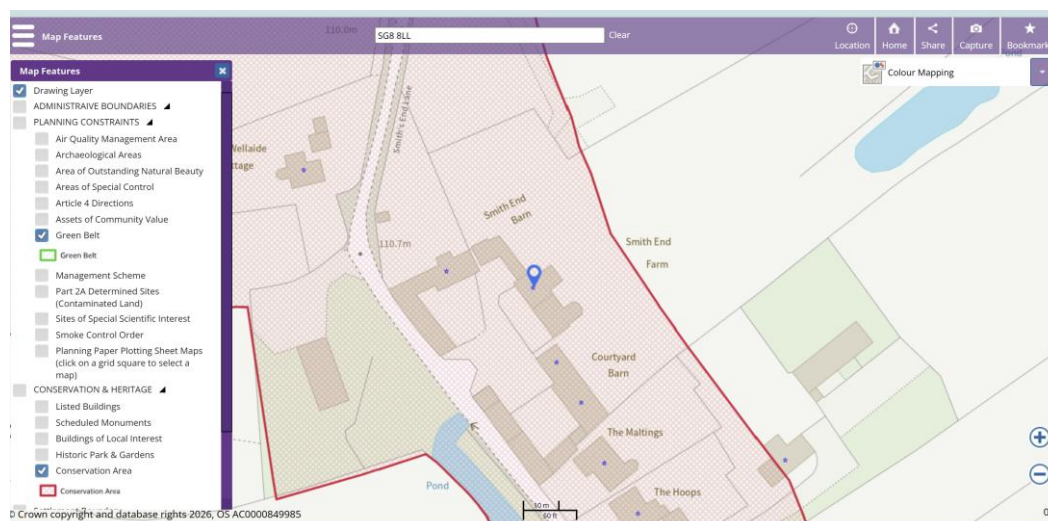


Fig. 1: North Herts [Planning Constraints Map](#) Conservation Area and Preservation Order filter

5.0 Tree observations and findings

- 5.1 Tree T001 is a mature, three-stemmed ash (*Fraxinus* sp.) measuring approximately 11 m in height, with a recorded stem diameter of 160 cm and an approximately symmetrical crown radius of 4 m to the north, east, south and west.
- 5.2 The crown displays uneven vitality between the three stems. One stem was recorded as retaining vitality, whereas stems two and three exhibited low bud production. Stunted growth was also noted. Taken together, these symptoms indicate reduced physiological performance, and the tree's physiological condition was assessed as poor.
- 5.3 External inspection identified bark [delamination](#) and black seepage associated with bacterial infection. Audible hollow pockets were detected around the full circumference of the buttress area, indicating that the basal defect is not confined to a single aspect.
- 5.4 Four principal fungal brackets, identified in Appendix A as [Perenniporia fraxinea](#), were present around the cardinal points of the lower stem. [Ash dieback](#) and [bacterial canker](#) were also recorded. The combination of fungal fruiting, bacterial symptoms and reduced crown vitality is consistent with a tree experiencing both physiological decline and significant structural deterioration.

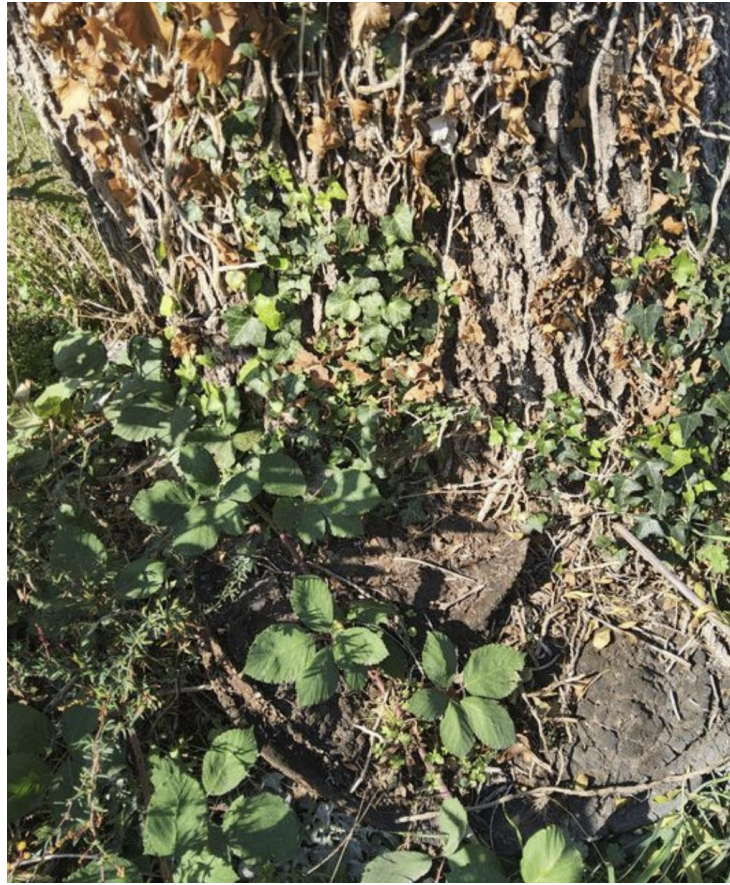


Fig. 2: T001 Perenniporia bracket at the buttress.

- 5.5 Resistance drilling on the north aspect recorded moderate structure between approximately 2 cm and 6 cm, followed by a marked reduction in integrity and pulpy wood leading to a central heartwood void. The principal cavity was recorded between approximately 18 cm and 32 cm. A second north-aspect calibration test similarly identified decayed wood from approximately 1 cm to 19 cm, a crack within the decayed zone and a cavity between approximately 18 cm and 32 cm.
- 5.6 Testing on the east aspect recorded decayed wood between approximately 1 cm and 14 cm, with a heartwood cavity extending from approximately 14 cm to the full 40 cm drilling depth. On the south aspect, severely decayed wood was recorded between approximately 1 cm and 28 cm, beyond which a heartwood void extended to the 40 cm drilling depth.
- 5.7 The west aspect produced the most extensive loss of resistance: severely decayed wood was recorded between approximately 1 cm and 5 cm, followed by a void affecting both live wood and heartwood from approximately 9 cm to the full 40 cm drilling depth. Considered collectively, the four drilling positions demonstrate extensive and

circumferentially distributed decay and voiding within the lower stem and buttress region. The tree's structural condition and overall condition were therefore both assessed as poor.

- 5.8 The tree is within falling distance of a building and dwelling with frequent occupancy. Appendix A records the likelihood of failure as possible and the likelihood of impact as high. The combined likelihood is described as somewhat likely, with significant potential consequences, producing an overall risk rating of moderate.
- 5.9 The findings show that retention of the tree in its present full-crown form is not appropriate in relation to the recorded defects and nearby targets. Appendix A specifies reduction to a 5 m monolith, together with target management, within three months by 25 December 2026. Long-term retention is proposed as a standing monolith for habitat value, subject to ongoing management and review, with the next recorded timescale being 25 September 2029.

6.0 Professional standards, references and inspection framework

- 6.1 [Claus Mattheck: *The Body Language of Trees*](#)
- 6.2 [NHBC 4.2:2020 \(Buildings near trees\)](#)
- 6.3 [Applied Tree Biology](#)

7.0 Statutory obligations

7.1 [Duty of Care:](#)

Under British common law, the owner of the land on which a tree stands, together with any party who has control over the tree's management, owes a duty of care to persons who may foreseeably be injured by that tree. The duty of care is to take reasonable steps to avoid acts or omissions that present a foreseeable risk of injury to persons or damage to property.

- 7.2 The Occupiers' Liability Acts 1957 and 1984, together with the Health and Safety at Work etc. Act 1974 where relevant, form part of the wider legislative framework relating to duty of care.

In England and Wales, occupiers' liability is governed by the [Occupiers' Liability Act 1957](#) and [Occupiers' Liability Act 1984](#). The occupier is defined as the person occupying or

having control of the premises. Where a property is rented or leased, the person having control may be the owner, agent, or tenant, depending on the terms of the tenancy agreement.

The law outlines an occupier's responsibility, known in law as the duty of care, to take reasonable care to avoid acts or omissions that they could foresee may result in harm or injury. When an occupier fails to exercise that responsibility, the result may be a claim for negligence.

Where A has a 'duty of care' towards B and fails to take any necessary action, resulting in harm or injury to people, animals, or property, and if that harm or injury is foreseeable, then it is likely to be categorised as negligence.

7.3 [Town and Country Planning Act \(1990\) \(TCPA\)](#)

Under the Town and Country Planning Act 1990 and associated regulations, any tree subject to a Tree Preservation Order may not be cut down, topped, lopped, uprooted, wilfully damaged, or wilfully destroyed without the written consent of the Local Planning Authority. Conducting such works without consent is an offence unless a specific exemption applies.

Where within a conservation area, trees above the relevant size threshold are also protected by section 211 of the Town and Country Planning Act 1990. In such cases, the Local Planning Authority must generally be given six weeks' written notice before works are undertaken, unless an exemption applies. This enables the authority to consider whether a Tree Preservation Order should be made.

7.4 [Wildlife and Countryside Act \(1981\)](#)

An active bird's nest is protected while it is in use or being built.

As it is an offence to intentionally damage or destroy an active bird's nest, tree works should be programmed to avoid the nesting season where possible or otherwise preceded by an appropriate check where works are proposed during the main bird nesting period, generally taken to run from 1 March to 31 August.

8.0 Conclusions

- 8.1 Tree T001 is a mature, three-stemmed ash whose physiological, structural and overall conditions are poor. Reduced bud production on two stems, stunted growth, bark delamination, black seepage, bacterial infection, ash dieback and the presence of *Perenniporia fraxinea* fruiting bodies demonstrate a tree in significant decline.
- 8.2 Visual, tactile and resistance-drill evidence confirms extensive decay and voiding throughout the lower stem and buttress region. The defects are distributed around the tree rather than confined to one aspect, with severe resistance loss and cavities recorded on the north, east, south and west drilling paths. The remaining structural wood cannot therefore be regarded as sufficient to support continued retention of the tree in its present full-crown form.
- 8.3 The tree is within falling distance of a building and a frequently occupied dwelling. Although the likelihood of failure is assessed as possible, the likelihood of impact is high and the foreseeable consequences are significant, resulting in an overall moderate risk rating. In view of the extent and distribution of decay, this risk requires timely and proportionate mitigation.
- 8.4 Reduction to a 5 m monolith, together with the specified target management, represents an appropriate balance between reducing foreseeable risk and retaining standing deadwood habitat value. The tree is not subject to a Tree Preservation Order; however, because it is situated within Barley Conservation Area, the applicable conservation-area notification procedure must be followed before work begins, unless a relevant exemption applies. The works should be completed within the stated three-month period, by 25 December 2026, subject also to checks for protected wildlife. Thereafter, the monolith should remain under review in accordance with the stated inspection timescale.

9.0 Recommendations

- 9.1 Tree T001 should be reduced to a standing monolith of approximately 5 m in height within three months of the inspection, and no later than 25 December 2026. The reduction should remove the full crown and unstable upper stem sections while retaining the lower

stem for habitat value, as far as this can be achieved without compromising the safety of operatives or foreseeable targets.

- 9.2** All tree work should be specified, supervised and undertaken in accordance with BS 3998:2010, *Tree work – Recommendations*. Cuts should be planned to achieve the specified finished monolith height, avoid unnecessary damage to retained wood and bark, and minimise avoidable disturbance to cavities, fungal features and other habitat structures that can safely remain.
- 9.3** The tree is not subject to a Tree Preservation Order but is situated within Barley Conservation Area. Six weeks' written notice should therefore normally be given to the Local Planning Authority under section 211 of the Town and Country Planning Act 1990 before work begins unless a relevant exemption applies. No work should proceed until the applicable conservation-area procedure has been satisfied.
- 9.4** The work should be undertaken by a suitably qualified, experienced and insured arboricultural contractor using an appropriate site-specific risk assessment and method statement. Particular allowance should be made for the tree's extensive basal decay, cavities and multi-stemmed form when selecting access, rigging and dismantling methods.
- 9.5** Before work starts, the tree should be checked by a competent person for active bird nests, bats and other protected species or habitats. If evidence of protected wildlife is found, work should stop in the affected area, and appropriate ecological advice should be obtained before proceeding.
- 9.6** Pending completion of the recommended work, access and occupancy within the potential failure zone should be reduced as far as reasonably practicable. A suitable exclusion area should also be maintained throughout the works, with operations planned to protect the nearby building, dwelling, boundaries and any persons who may enter the site.
- 9.7** Following reduction, the retained monolith should be managed primarily as standing deadwood habitat. Existing cavities and fungal fruiting bodies should not be unnecessarily removed or treated, and suitable arisings may be retained on site as habitat where this is compatible with access, landscape management and safety.
- 9.8** The monolith should be inspected after the works to confirm the intended specification and then formally reassessed no later than 25 September 2029. Earlier inspection should be undertaken following severe weather, visible movement, further cracking or collapse,

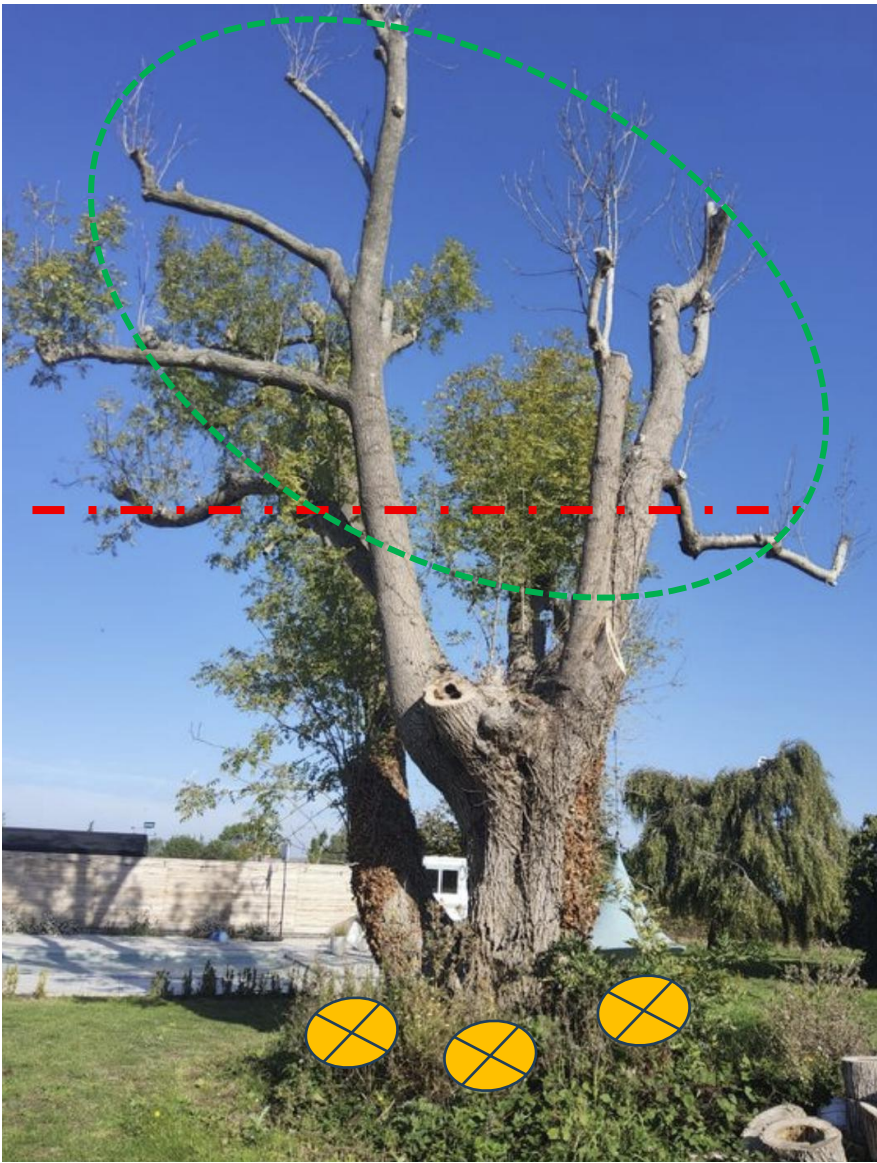
accelerated decay, altered site use, or any other material change affecting the tree or nearby targets.

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APPENDICES

Ref.	Species	Full Structure	Measurements	Spread	Description	Survey Notes	Fungus	Pests and Diseases	Physiological Condition	Structural Condition	Overall Condition	Risk Assessment	Risk Rating
T001	Ash (<i>Fraxinus sp.</i>)	Multi-Stemmed 3 stems	Height (m): 11 Crown Radius (m): 4 DBH (cm): 160 Stems: 3 Life Stage: Mature	N:4 E:4 S:4 W:4	Target # - building Target # - dwelling. - Occupancy - Frequent(3).	Three stems: stem 1 displays vitality, while stems 2 and 3 have low bud production. Bark delamination. Audible hollow pockets 360 degrees around buttress. Stunted growth. Black seepage and bacterial infection. Fungus: <i>Perenniporia fraxinea</i> – four main brackets at the cardinal points around the stem. Pests and diseases: Ash dieback Bacterial canker	<i>Perenniporia fraxinea</i>	Ash dieback Bacterial canker	Poor	Poor	Poor	Likelihood of Failure: Possible Likelihood of Impact: High Failure x Impact: Somewhat likely Consequences: Significant Risk Rating: Moderate	Moderate

Ref.	Recommendations	Mitigation Action 1	Timescale
T001	Mitigation Action 1: Reduce to a 5 m monolith. Target management – divert ... Timescale: 25-Dec-2026 (3 months) Long-term recommendation: Maintain as a monolith. Timescale: 25-Sep-2029 (3 years)	Maintain as monolith	25-Dec-2026 (3 Months)



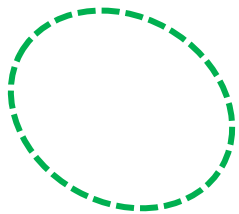
5m monolith line. Remove crown to below indicated level



Points of Prenniporia fraxinea infections



Ash die back - Hymenoscyphus fraxineus



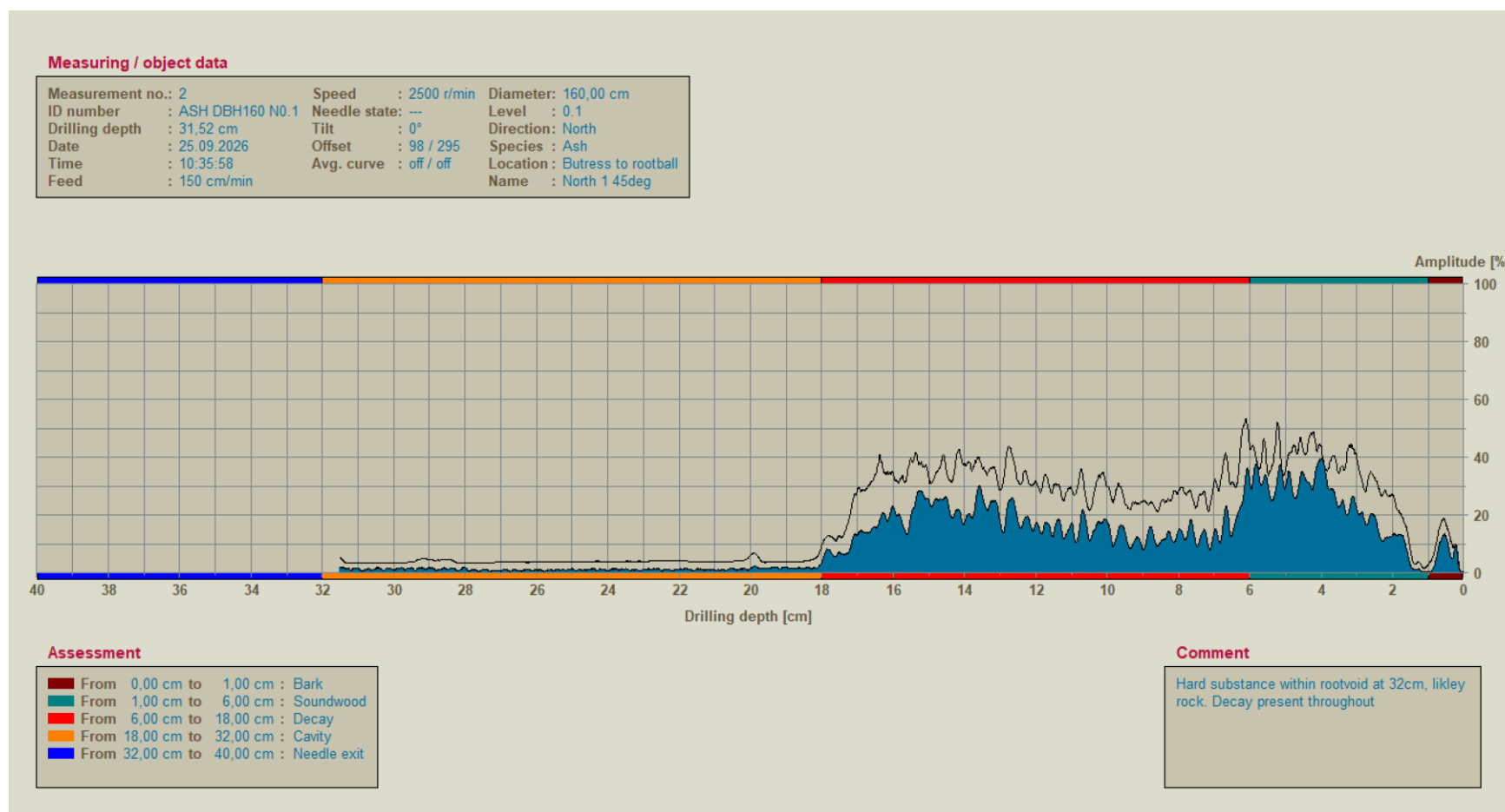


Fig. 3: North cardinal aspect drilled to a depth of 40 cm. Moderate structure between 2 cm and 6 cm, then integrity starts to diminish sharply. Structural wood becomes pulpy and lacks consistency up to the central heartwood void at 18 cm. Heartwood decay has resulted in a cavity between 18 cm and 32 cm where a hard, non-woody structure forced the drill to recede. Drilling was undertaken above the fruiting bodies of *Perenniporia fraxinea*.

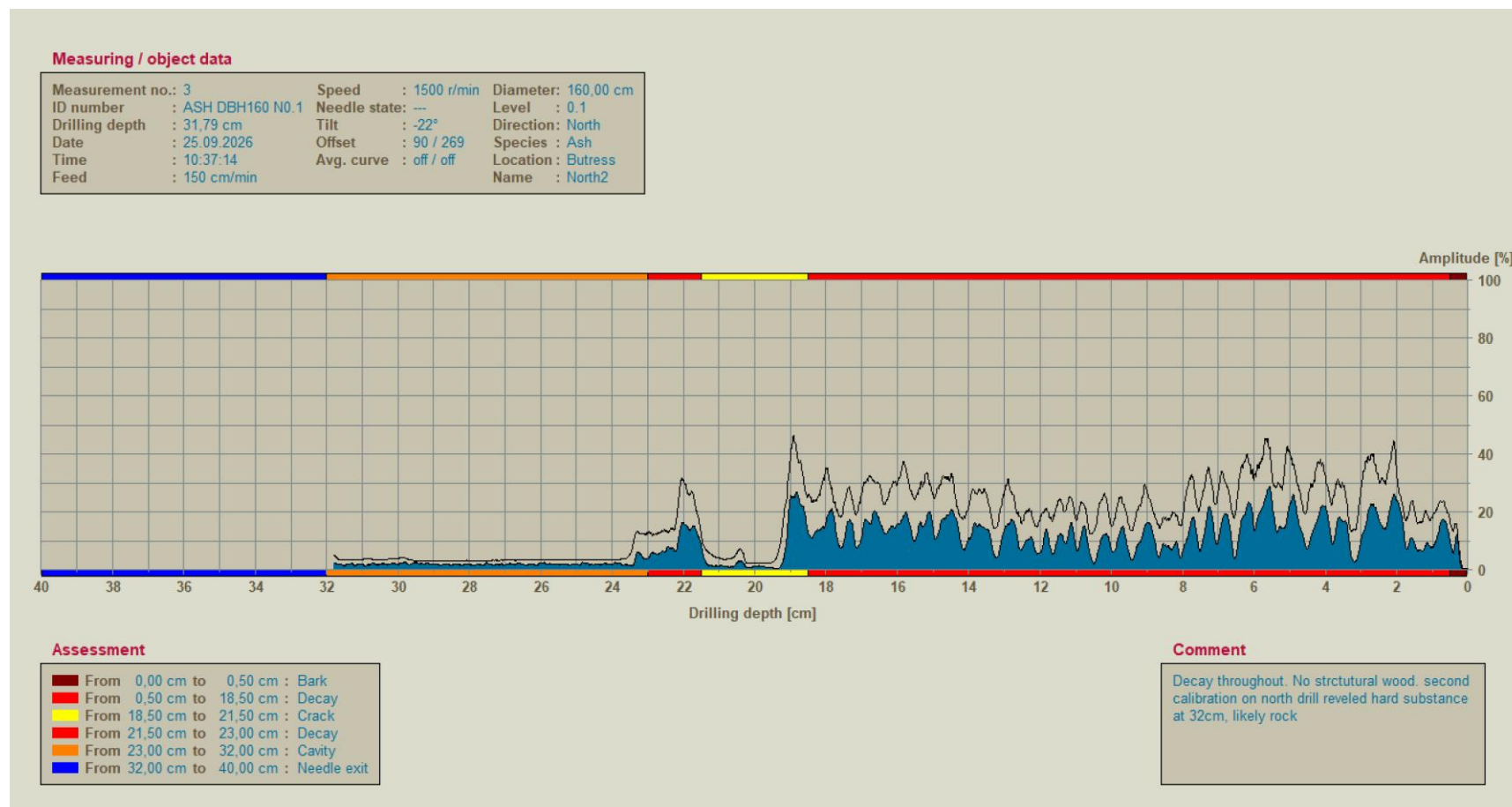


Fig. 4: North cardinal aspect drilled to a depth of 40 cm during the second calibration test. Decayed wood between 1 cm and 19 cm, after which integrity diminishes sharply, revealing a crack in the decayed wood. Heartwood decay has resulted in a cavity between 18 cm and 32 cm where a hard, non-woody structure again forced the drill to recede. Drilling was undertaken above the fruiting bodies of *Perenniporia fraxinea*.

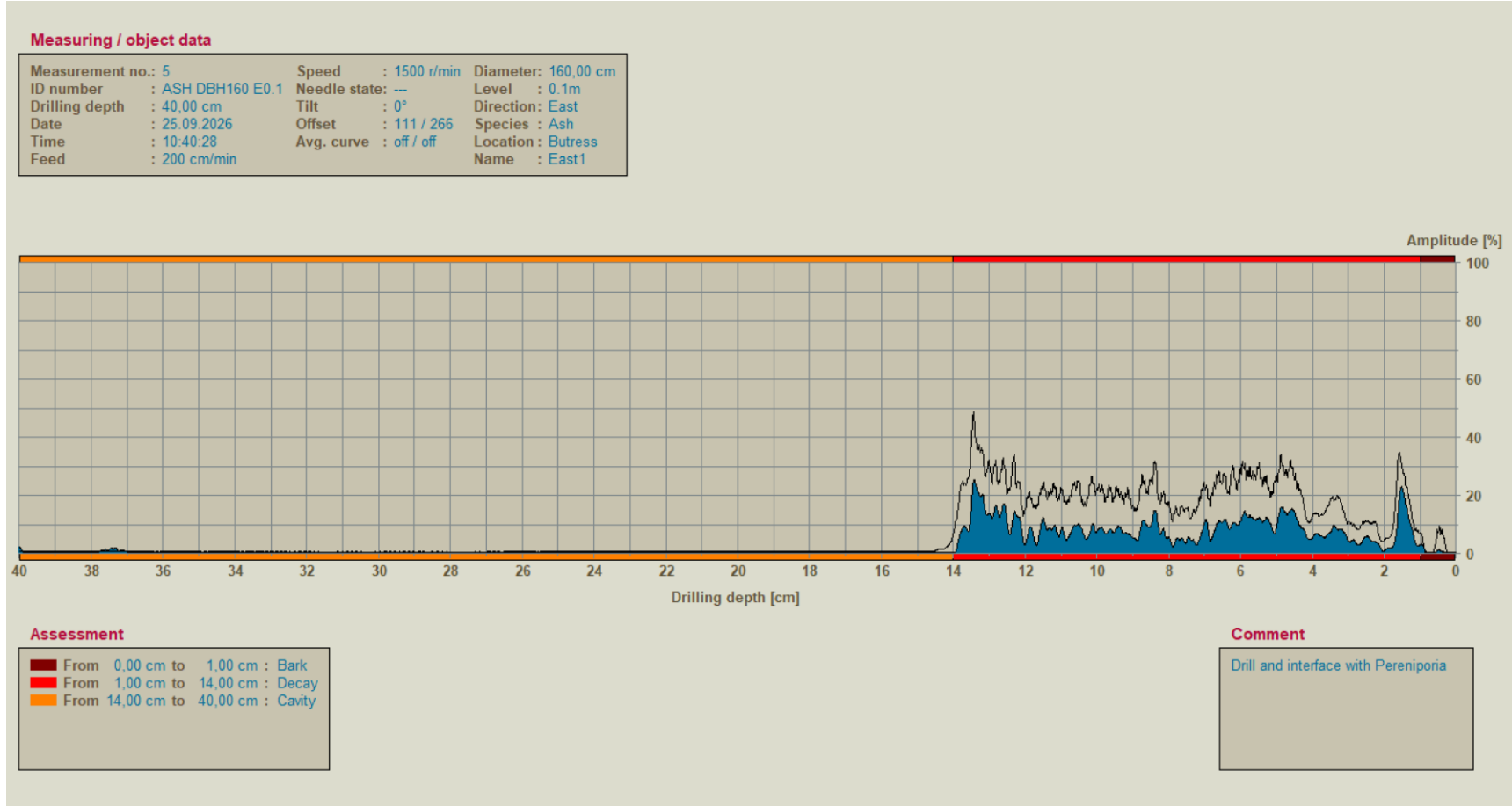


Fig. 5: East cardinal aspect drilled to a depth of 40 cm. Decayed wood between 1 cm and 14 cm, after which integrity diminishes sharply, revealing a void in heartwood. Heartwood decay has resulted in a cavity between 14 cm and 40 cm. Drilling was undertaken above the fruiting bodies of *Perenniporia fraxinea*.

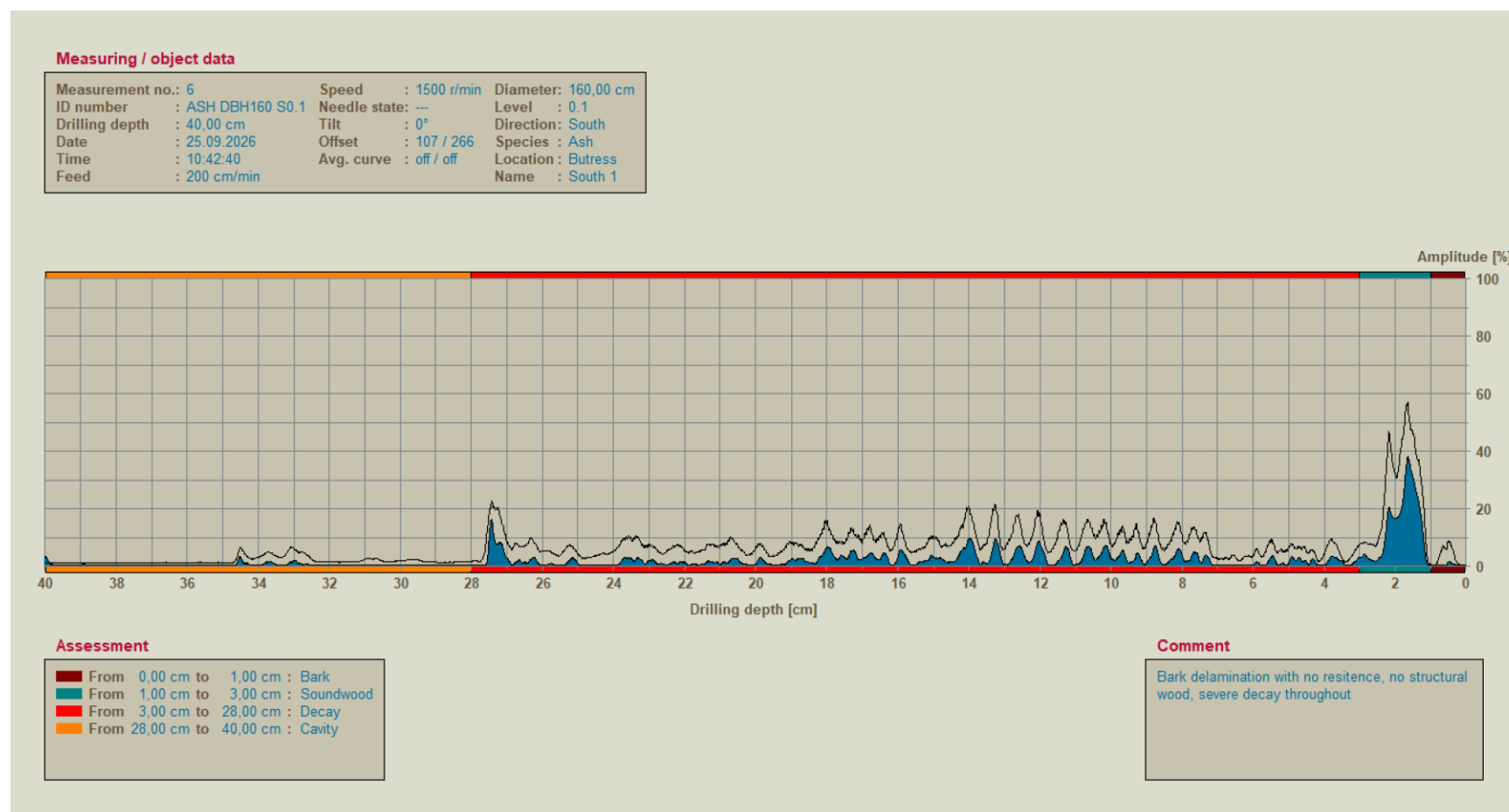


Fig. 6: South cardinal aspect drilled to a depth of 40 cm. Severely decayed wood between 1 cm and 28 cm, after which integrity diminishes sharply, revealing a void in heartwood. Heartwood decay has resulted in a cavity between 28 cm and 40 cm. Drilling was undertaken above the fruiting bodies of *Perenniporia fraxinea*.

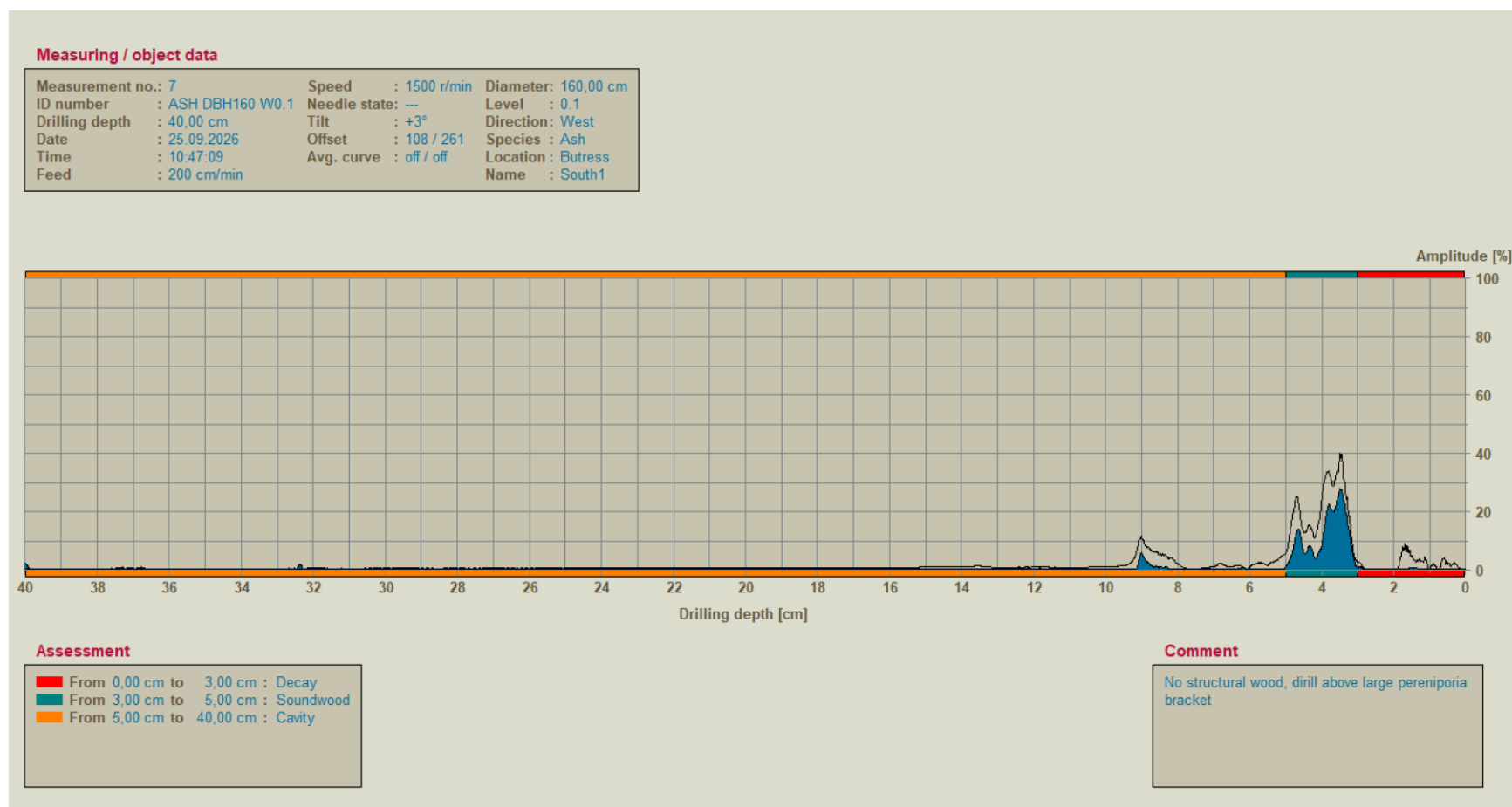
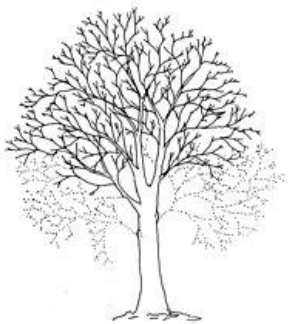


Fig. 7: West cardinal aspect drilled to a depth of 40 cm. Severely decayed wood between 1 cm and 5 cm, after which integrity diminishes sharply, revealing a void in the heartwood and live wood. Both live-wood and heartwood voids extended between 9 cm and 40 cm. Drilling was undertaken above the most significant fruiting bodies of *Perenniporia fraxinea*.



Crown Lift or Crown Raising

Crown lifting is the removal of the lowest branches and/or preparation of lower branches for future removal. Good practice dictates crown lifting should not normally include the removal of large branches growing directly from the trunk as this can cause large wounds which can become extensively decayed leading to further long-term problems or more short-term biomechanical instability. Crown lifting on older, mature trees should be avoided or restricted to secondary branches or shortening of primary branches rather than their complete removal wherever possible. Crown lifting is an effective method of increasing light transmission to areas closer to the tree or to enable access under the crown but should be restricted to less than 15% of the live crown height and leave the crown at least two thirds of the total height of the tree. Crown lifting should be specified with reference to a fixed point, e.g. 'crown lift to give 5.5m clearance above ground level.'



Crown Reduction

The reduction in height and/or spread of the crown (the foliage bearing portions) of a tree. Crown reduction may be used to reduce mechanical stress on individual branches or the whole tree, make the tree more suited to its immediate environment or to reduce the effects of shading and light loss, etc. The final result should retain the main framework of the crown, and

so a considerable proportion of the leaf bearing structure, and leave a similar, although smaller outline, and not necessarily achieve symmetry for its own sake. Crown reduction cuts should be as small as possible and in general not exceed 100mm diameter unless there is an overriding need to do so. Reductions should be specified by actual measurements, where possible, and reflect the finished result, but may also refer to lengths of parts to be removed to aid clarity, e.g. ‘crown reduce in height by 2.0m and lateral spread by 1.0m, all round to finished crown dimensions of 18m in height by 11m in spread (all measurements approximate.)’. Not all species are suitable for this treatment and crown reduction should not be confused with ‘topping,’ an indiscriminate and harmful treatment.

Illustrations courtesy of European Arboricultural Council.

The importance of correct pruning cuts

Every pruning cut inflicts a wound on the tree. The ability of a tree to withstand a wound and maintain healthy growth is affected by the pruning cut – its size, angle, and position relative to the retained parts of the tree. As a rule, branches should be removed at their point of attachment or shortened to a lateral which is at least one-third of the diameter of the removed portion of the branch, and all cuts should be kept as small as possible. Examples of correct pruning cuts are shown as follows.

Showing the sequence of removal to avoid damage to the retained parts.

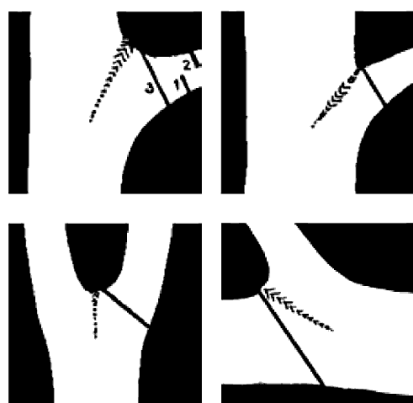


Diagram 2 – examples of correct pruning cuts. Drawings courtesy of European Arboricultural Council.

Other useful terms associated with tree work:

Adaptive growth

An increase in wood production in localised areas in response to a decrease in wood strength or external loading to maintain an even distribution of forces across the structure.

Adventitious/epicormic growth

New growth arising from dormant or new buds directly from main branches/stems or trunks.

Bracing

Bracing is a term used to describe the installation of cables, ropes, and/or belts to reduce the probability of failure of one or more parts of the tree structure due to weakened elements under excessive movement.

Branch bark ridge and collar

See Diagram 3, section 3. Natural features of a fork or union that may or may not be visually obvious. Neither the branch bark ridge nor collar should be cut.

Callus

Undifferentiated tissue initiated because of wounding, which becomes specialised tissue of the repair over time.

Cavity

A void within the solid structure of the tree, normally associated with decay or deterioration of the woody tissues. It may be dry or hold water; if the latter, it should not be drained. Only soft decomposing tissue should be removed, if necessary, to assess the extent. No attempt should be made to cut or expose living tissue.

Co-dominant stems

Two or more upright stems of equal size and vigour competing for dominance. Where these arise from a common union the structural integrity of that union should be assessed.

Coppicing

The cutting down of a tree within 300mm (12in) of the ground at regular intervals, traditionally applied to certain species such as Hazel and Sweet Chestnut to provide stakes etc.

Crown

The foliage bearing section of the tree formed by its branches and not including any clear stem/trunk.

Deadwood

Non-living branches or stems due to natural ageing or external influences. Deadwood provides essential habitats, and its management should aim to leave as much as possible, shortening or removing only those that pose a risk. Durability and retention of deadwood will vary by tree species.

Decline

When a tree exhibits signs of a lack of vitality such as reduced leaf size, colour, or density.

Dieback

Tips of branches exhibit no signs of life due to age or external influences. Decline may progress, stabilise, or reverse as the tree adapts to its new situation.

Dormant

The inactive condition of a tree, usually during the coldest months of the year when there is little, or no growth and leaves of deciduous trees have been shed.

Fertilising

The application of a substance, usually to the tree's rooting area (and occasionally to the tree), to promote tree growth or reverse or reduce decline. This will only be effective if nutrient deficiency is confirmed. If decline is the result of other factors such as compaction, physical damage, toxins etc., the application of fertiliser will not make any difference.

Formative pruning

Minor pruning during the early years of a tree's growth to establish the desired form and/or to correct defects or weaknesses that may affect structure in later life.

Fungi/Fruiting bodies

A member of the plant kingdom that may colonise living or dead tissues of a tree or form beneficial relationships with the roots. The fruiting body is the spore-bearing reproductive structure of that fungus. Removal of the fruiting body will not prevent further colonisation and will make diagnosis and prognosis harder to determine. Each colonisation must be considered in detail by a competent person to determine the long-term implications of tree health and structure when considered alongside the tree species, site usage etc.

Lopping and Topping

Generally regarded as outdated terminology but still included as part of Planning legislation. Lopping refers to the removal of large side branches (the making of vertical cuts), and topping refers to the removal of substantial portions of the crown of the tree (the making of horizontal cuts, generally through the main stems). Often used to describe crude, heavy-handed, or inappropriate pruning.

Monitor

A suggested period of time for any given specific tree to gauge a condition or infection that requires a more frequent analysis.

Monolith

The removal of the entire crown to a specified height in order to mitigate risk of failure, leaving the stem for habitat.

Painting or Sealing

Covering pruning cuts or other wounds with a paint, often bitumen based. Research has demonstrated that this is not beneficial and may in fact be harmful. On no account should timber treatments be used as these are harmful to living cells.

Pollard

The initial removal of the top of a young tree at a prescribed height to encourage multi-stem branching from that point, traditionally for fodder, firewood, or poles. Once started, it should be repeated on a cyclical basis, always retaining the initial pollard point, or bolling, as it becomes known.

Retrenchment pruning

A form of reduction intended to encourage development of lower shoots and emulate the natural process of tree ageing.

Root pruning

The pruning back of roots (like the pruning back of branches). This can affect tree stability, so it is advisable to seek professional advice prior to attempting root pruning.

Topping

See Lopping and Topping.

Vitality

The degree of physiological and biochemical processes (life functions) within an individual, group or population of trees.

APPENDIX C: Useful links, references, and information

Tree Preservation Orders and trees in conservation areas:

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

[Map of planning data for England](#)

Benefits of trees:

<https://canopy.org/tree-info/benefits-of-trees/>

<https://www.nparks.gov.sg/trees/learn/benefits-of-trees>