



TREE HEALTH & SAFETY AUDIT

The Parchments, South Street, Havant

on behalf of **Michael Reed & Co. Ltd.**

10 Southleigh Grove, Hayling Island, Hampshire - mob: 07875 520881 - email: <u>bernieharverson@gmail.com</u> -



Section No.	Subject		
1	INTRODUCTION & CLIENTS BRIEF		
2	VISUAL TREE ASSESSMENT EXERCISE		
3	RISK ASSESSMENT		
4	4 TREE MANAGEMENT STRATEGY RECOMMENDATIONS		

Appendix	Subject
BH1	Tree Location Plan
BH2	Photographic Record
BH3	Qualifications & Experience

1.0 Introduction & Clients Brief

- 1.1 I am instructed by Wade Fazackarley of Michael Reed & Co Ltd. who acts for the residents of The Parchments, Havant.
- 1.2 Given the presence of two very large persistent fungal brackets on the trunk of this tree the residents have decided to instigate a Tree Safety Audit for the mature TPO'd **Beech** to determine the species of fungal pathogen involved and what impact this will be having on the tree.

2.0 Visual Tree Assessment Exercise

- 2.1 I carried out a visual tree assessment exercise on the **Beech** at this site on **Monday 29th January 2024.**
- 2.2 The trees was inspected 'by eye' from ground level and was not climbed.
- 2.3 The tools used for the purposes of this inspection were a rubber headed 'sounding hammer' and a metal 500mm long auger probe.
- 2.4 In addition to this the trees crown was inspected in some detail using high powered binoculars.
- 2.5 A series of digital photographs were taken at the time to record the findings of the inspection and some have been used in this report to identify and illustrate key points see at Appendix BH2.
- 2.6 The tree that was surveyed has been shown on the Tree Location Plan included with this report at Appendix BH1.
- 2.7 I have been advised that there is a Tree Preservation Order in place to protect this tree.

2.8 Tree Safety Audit Schedule

TREE SAFETY AUDIT NOTES

N.B. - Tree Safety Audits will comprise all of the following items :-

These Tree Safety Audit Notes have been prepared in accordance with current industry guidelines; utilising my fifty (50) years of experience in the arboricultural industry and applying common sense and a pragmatic approach, whilst at the same time recognising that safety is the paramount consideration.

- Each tree or group has been allocated a unique number <u>but no tags have been applied</u> the numbering system is repeated on the site sketch plan which accompanies the safety audit schedule and the colour coding system applied to each grade will be repeated on the plans for ease of management. The sketch plan which normally accompanies a Tree Safety Audit Schedule will indicate the approximate location of each surveyed tree/group on site and also have the trunk circle colour coded, with a unique number positioned beside each one.
- Tree species are identified in both English Common Name and Latin Botanical Name.
- An assessment of a tree or groups age is made in terms of its site specific maturity as part of the surrounding landscape, taking into account its overall shape and form in that setting, and is recorded thus :-
 - Y Young tree or group
 - **SM** Semi Mature tree or group
 - **EM** Early Mature tree or group
 - M Mature tree or group
 - $\mathbf{O}\mathbf{M}$ Over mature tree or group
 - V Veteran tree or group
- Height assessments are estimated and dimensions are provided in metres.
- The trunk diameter is recorded in millimetres.
- The average crown spread is recorded in metres.
- Condition comments are included to describe the key features of a tree and any noted defects and health and safety issues divided into distinct areas of the tree i.e. base; trunk and crown.
- The anticipated life expectancy of each tree is recorded in bands as follows :- <10; 10-20; 20-30; 30-40 and >40.
- The category grading for each tree/group is assessed according to a simple A, B, C, D and V grading system.
 - A (Green) Trees of high amenity value of good shape and form and in a sound and healthy condition with a long life expectancy.
 - The only exceptions to this might be rare tree species or historical value which might also merit an A grade.
 - \mathbf{B} (Blue) Trees of high amenity value but which are slightly misshapen or suppressed or have some other minor defect which prevents it being categorized as an A.
 - C (Brown) Trees which are in good overall order but have limited amenity value with no special or outstanding features.
 - \mathbf{D} (Red) Trees which are dead, dying, diseased, dysfunctional or dangerous and will require urgent attention.
- Advice on the most appropriate course of management to render the tree(s) safe is given under the heading of Management Recommendations.

2.9 Tree Assessment

1 Beech Fagus sylvatica Height - 22m Fagus sylvatica Age - Mature • The basal area was 'sounded' and revealed no irregular sound resonance that might indicate possible internal decay or hollowing of the trunk. Diameter - 1300mm • Roots exposed on surface around base of tree and some have been confined by the hard surfacing close up to the trunk. If Expectancy - ? • Open bark wound on north west side of the trunk some 60mm wide and 200 mm deep that extends from ground level up to 1.7m above ground. Grading - ? • The wound has significant callus folds at the east and west sides indicating that the wound has been present for some years and tried to heal over. The exposed surface of the wound. This is a heart rotting white rot form of fugus that has the ability to break down cell walls and invade the sapwood typically following rays towards the centre of the tree. In serious cases this causes the wood to lose all strengthening lignin and become a spongy mass of white cellulose thus compromising the integrity of the tree rendering it an unsafe structure. • There is a significant sap bleed from just below the lower bracket. • The trunk is bifurcated at around 2.2m from ground with a tight fork and included bark.	Tree No	Species	Tree Condition Comments
 Has a history of being reduced and reshaped – no doubt to counter the presence of the fungal bracket which will have been on the tree for many years. With the aid of high powered binoculars I scanned the crown for cracks and defects but none were noted and the tree appeared in full bud ready to flush again this Spring. 	Height – 22m Age – Mature Diameter – 1300mm Life Expectancy – ?		 The basal area was 'sounded' and revealed no irregular sound resonance that might indicate possible internal decay or hollowing of the trunk. Roots exposed on surface around base of tree and some have been confined by the hard surfacing close up to the trunk. No evidence of any fungal brackets or clumps arising from the roots or ground around base of tree. Using an auger to probe all points around basal area there was no opening /crack or weak point noted. Trunk: Open bark wound on north west side of the trunk some 60mm wide and 200 mm deep that extends from ground level up to 1.7m above ground. The wound has significant callus folds at the east and west sides indicating that the wound has been present for some years and tried to heal over. The exposed surface of the wound is solid with no soft points or decay noted. At 700mm from ground there is a large persistent fungal bracket of the species <i>Ganoderma australe</i> (Southern Bracket) attached directly to the inner surface of the wound. This is a heart rotting white rot form of fugus that has the ability to break down cell walls and invade the sapwood typically following rays towards the centre of the tree. In serious cases this causes the wood to lose all strengthening lignin and become a spongy mass of white cellulose thus compromising the integrity of the tree rendering it an unsafe structure. There is a significant sap bleed from just below the lower bracket. The trunk is bifurcated at around 2.2m from ground with a tight fork and included bark. Using the sounding hammer I noted that there was a hollowing sound arising to a distance of 300mm from all around both fungal brackets. Crowm: Has a history of being reduced and reshaped – no doubt to counter the presence of the fungal bracket which will have been on the tree for many years. With the aid of high powered binoculars I scann

3.0 Risk Assessment

- 3.1 From my detailed examination there is indication of extensive internal fungal decay in the main trunk associated with both fungal brackets one of which is just below the main fork in the trunk which gives rise to serious concern over the ongoing safety of this tree.
- 3.2 The crown shows healthy new growth and no dieback but there is almost 20m of growth and weight above the points of decay.
- 3.3 This tree is positioned in a high profile location at the rear of a busy residential car park where there are regularly cars parked within its fall zone.
- 3.4 Should this tree fail then there is also a high risk to life and property involved here.
- 3.5 Given the size of these brackets [that increase in diameter year on year] the decay process has been going on for many years and is likely to be extensive in nature.

4.0 Tree Management Strategy Advice:-

Given the high risk of structural failure at or around the points of attachment of the two persistent fungal brackets there is clearly a need for action. There are three options available to the owners :-

4.1 **Option 1 :**

PICUS Tomograph Test – this is a further level of testing to be carried out by a specialist company which may provide more information regarding the extent of internal decay and thus ultimately inform the management decision.

4.2 **Option 2 :**

Further Crown Reduction & Reshaping – this would involve significantly reducing the tree to around 50% of its present dimensions. Just resorting to the previous regime of in essence cosmetic pruning (maximum 30%) will not significantly reduce the risks here to acceptable levels. I have to say that this will seriously undermine the amenity value of this tree and will leave large open wounds in contradiction to BS3998 recommendations. However, with the level of fungal infection noted I believe this action to be fully justified.

4.3 **Option 3 :**

Complete Tree Removal & Replacement Planting - this would entail felling the tree to completely negate the risk and then plant a new tree in its place to comply with TPO requirements.

N.B. – Based on my experience of similar situations I feel that putting the client to the considerable cost of Option 1 further testing is not warranted in this instance and I would favour Option 3 as the most advisable course of action here for health and safety reasons.

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BH 1

Tree Location Plan

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BH 2

Photographic Record

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BH 3

Qualifications & Experience



<u>QUALIFICATIONS AND EXPERIENCE</u>

- My name is *Bernie Harverson* and I am a self employed independent arboricultural consultant in private practice. I take instructions primarily in the South of England but also on occasions work nationwide and abroad and have offices at : *10 Southleigh Grove, Hayling Island, Hampshire PO11 0SH*
- I hold the following arboricultural qualification **National Diploma in Arboriculture** (Royal Forestry Society 1976)
- I have fifty-three (53) years of practical and managerial experience in the arboricultural industry including periods in both the public and private sectors.
- My Local Government sector experience comprises one year as a tree surgeon with Brighton Parks and nine years spent in Arboricultural Officer posts with both Westminster City Council and Portsmouth City Council
- My past practical experience in the private sector includes two years at Tilhill Forest Nursery and over ten years for various companies as a Climbing Arborist/Tree Surgeon.
- Managerial work in the private sector includes two years as manager of Beechings Tree Surgery Company and twelve years with CBA Trees as Managing Director and Senior Arboricultural Consultant.
- As an independent self employed Arboricultural Consultant since 2006 I now provide a comprehensive range of services including :tree surveys, appraisals, assessments and inspections with particular reference to planning and development and tree safety audits with a service offered as a climber to undertake full climbing inspections to better understand the condition of a given tree before prescribing a management strategy.
- I also on occasion undertake litigation work appearing as an Expert Witness in Court Actions and at Planning Appeals, Hearings and Public Inquiries.

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