

Site Visit
Date:
22/08/2023

Resistograph Report

For

Vivid Housing Limited



At

**No.135,
Woodlands Way,
Bursledon,
Hampshire, SO31 8LG**



A trading name of RG Consultancy Limited

**Prepared by
Richard Daubeney
Our Ref 0823-RD
22nd of August 2023**

Scope of Works

The English Oak tree T1 is located within the boundaries of Vivid Housing Associations Residential Land have been inspected using industry recognised system of Visual Tree Assessment (VTA). The English Oak tree has been assessed for risk, taking into account features such as general health, vigour, condition of the trunk, branches and foliage, buttress roots, the presence of decay fungi and other indicators of health status and mechanical defects which may affect structural stability.

The English Oak within this report have been inspected from ground level. In addition, the tree T1 has been drilled using a Resistograph. This seeks to measure the internal wood properties around the area of drilling. All drilling was undertaken from ground level.

To carry out Resistograph tests on tree number T1 within the rear garden of 135, Woodlands Way. The English Oak tree have previously been identified for holding gross defects investigating for structural soundness and decay mapping.

Statutory Protection

Given our checks with the Local planning authority, we can confirm that the tree T1 within this site is subject to statutory protection by means of Tree Preservation Order and but is not located within a Conservation area for Eastleigh Borough Council.

Before any tree works are carried out the presence of Tree Preservation Orders (TPO) or Conservation Area status should be established with the Local Planning Authority and permission from neighbours if trees are outside the curtilage of the property obtained. All tree works should be carried out by qualified, trained and fully insured operators in accordance with BS 3998: 2010 'Recommendations to Tree Works'. In the event the trees are to be removed we can source suitably qualified contractors to quote for the works' .

Observations

The mature English Oak tree T1 located on the site has previously been subjected to tree inspection as part of a management program. At the time of inspection, gross defects were recorded, given the age of the tree present, this was expected. The residential site is a mixture of lawn and patio to the rear of the single storey property, with further lawn area and concrete based driveway to the front. The garden has one tree being the mature English Oak T1. The tree has been historically reduced in height. A fresh *Ganoderma australe* fungus bracket was noted at ground level to the North side.

The tree surveyed has a number of years of safe life remaining and problems of a physical nature are not anticipated within the foreseeable future (10- 20yrs). However, trees are dynamic structures and regular inspection to evaluate tree condition and structural stability is recommended, especially where poor or declining health is suspected. Signs of dieback or fungal fruiting bodies should be investigated by a qualified Arboriculturist. If the larger trees close to the property remain regular inspections are required.

Conclusion

T1 English Oak held no gross defect upon resistograph inspection with a T/R ratio of over the industry recommended 30% point. Based on the readings provided it would suggest that the likelihood of failure at test point is not significant. However, following the readings taken from the resistograph, it showed that there is a small column of decay within the stem to the North and the Southwest side, the decay to the North side would correlate with the fruiting body *Ganoderma australe* located in close proximity on the stem, but, there are good areas of reaction wood surrounding the sections of decay within the stem. *Ganoderma* spp. Fruiting bodies are known to cause hollowness within the stem, which in turn can lead to stem or whole tree failure.

Based on the above information. I would recommend a crown reduction in 3m in height and lateral spread to be reduced by 2m to be carried out, this would help to lessen the pressure to the lower section of the stem. I advise an inspection 3 years from the date of this report to ensure there are no further changes to the tree's health and condition.

Please see the article written by David Lonsdale (Principles of tree hazard Assessment and Management 1999) which highlights the decay within trees.

Chapter 3 Decay: its development in trees.

"Decay is one of the more important causes of hazards, as it commonly occurs in many tree species and can weaken wood enough to increase the chance of mechanical failure. Failure can occur even in the absence of decay and of other recognizable defects. Given extreme conditions. Equally, the mere presence of decay does not necessarily make failure more likely than it would be otherwise. In many instances, decay is not extensive enough to comprise the safety factor of the tree. Even if the mechanical characteristics of the tree have been affected, its safety factor may have been largely or wholly maintained by compensatory development of new wood around the affected zone"

Please see further details below:

- Tree table
- Tree pictures
- Resistograph data
- Trees location map

All works to date has be undertaken within the requirements of the tree table works schedule.



Richard Daubeney
Arboricultural Consultant
22nd of August 2023

Tree Table

Tree No.	Tree Species	Hgt (m)	Past Management	Age Class	Risk Target	TPO	Defects	Works	Work Priority
T1 Tag N/A	English Oak	19m	No significant recent management	Mature	High (Inspect again in 2026)	TPO 368A-E Eastleigh Borough Council. Botanical Name: <i>Quercus robur</i>	No gross defect noted. Ganoderma australe fruiting body located close to ground level to North side. Fresh in appearance. Hollow sounding when tapped to that area. Epicormic growth on stem including dense canopy. Historic reduction to crown.	Crown Reduce by 3m in height, Reduce back lateral spread by 2m only. Tree works to BS3998 (2010) No pruning wounds to exceed 50mm in dia. Remove epicormic growth to height of 4m above ground level only.	Urgent

Photographs



T1 North side of stem. *Ganoderma australe* (fruiting bracket)



T1 looking North.



T1 Looking South

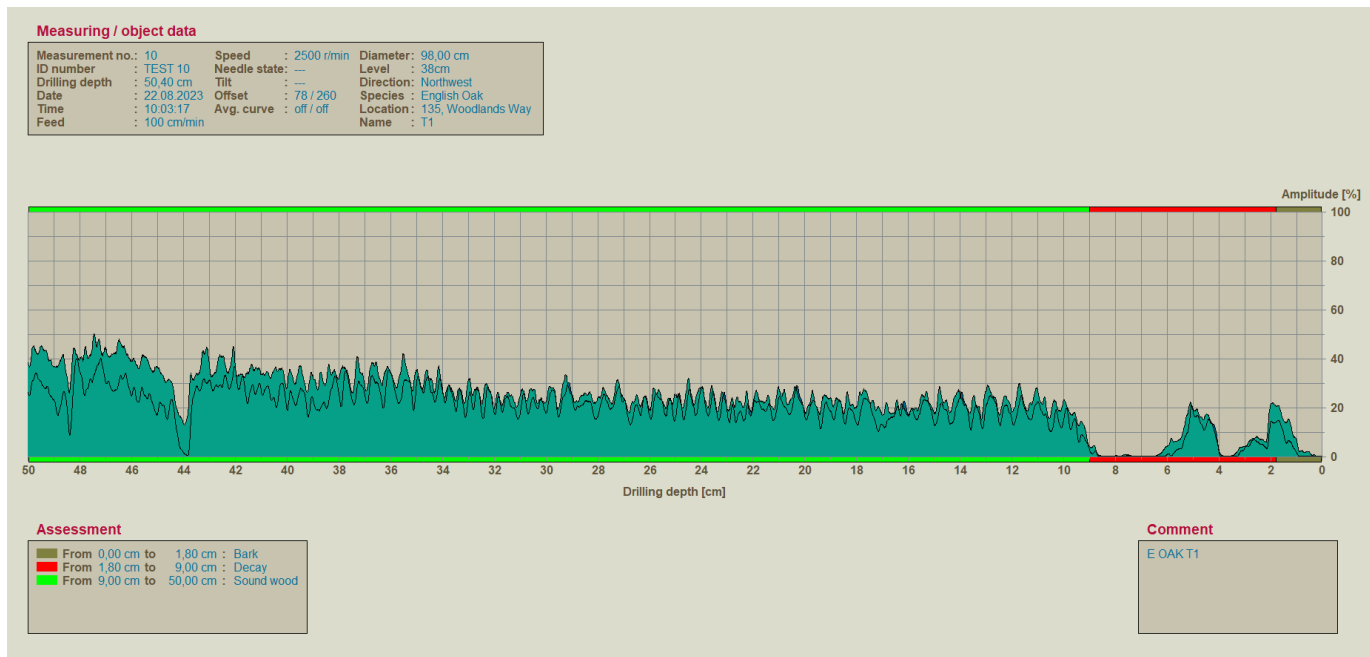


T1 stem Looking West.

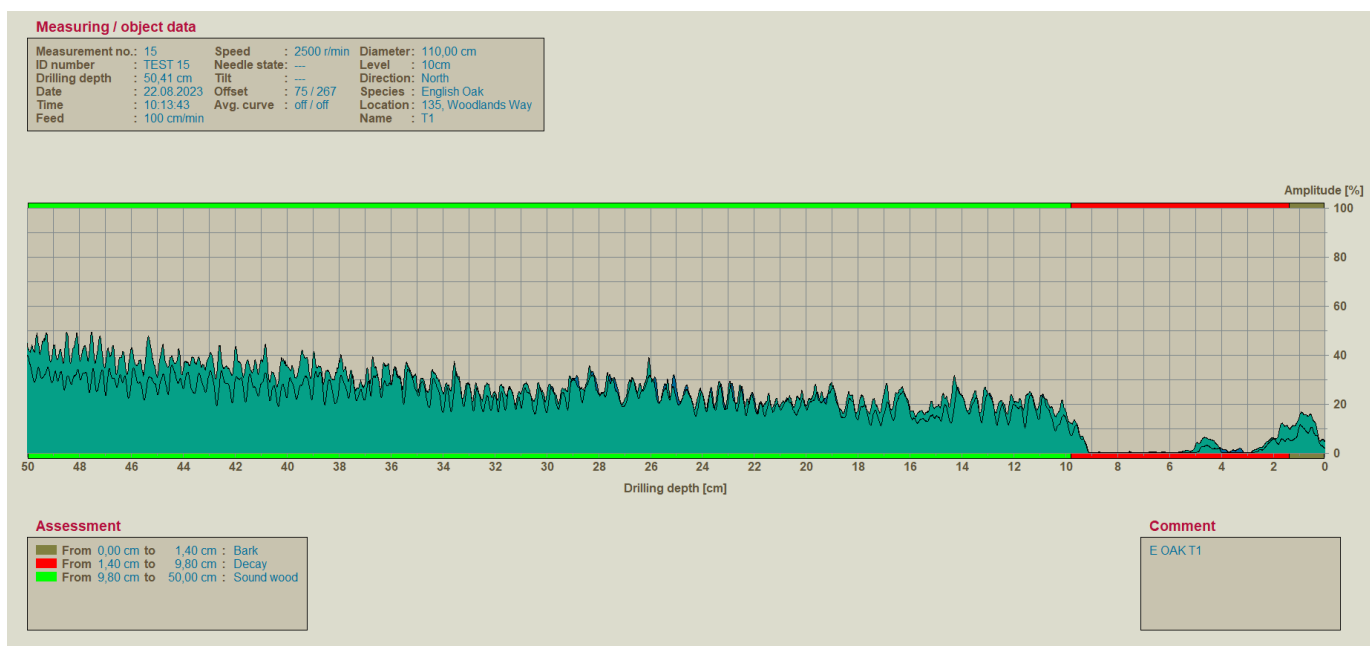
Resistograph Readings

The recommendations of the tree surveyed have been implicated due to the tree location and the significance of defects noted at the time of inspection. It is important that all recommendations are implemented within the time span specified within the tree table. Please note we have carried out multiple readings of the tree, these will be stored on our system, we have displayed three readings from the tree below.

T1, Measurement 1



T1, Measurement 2



T1, Measurement 3

