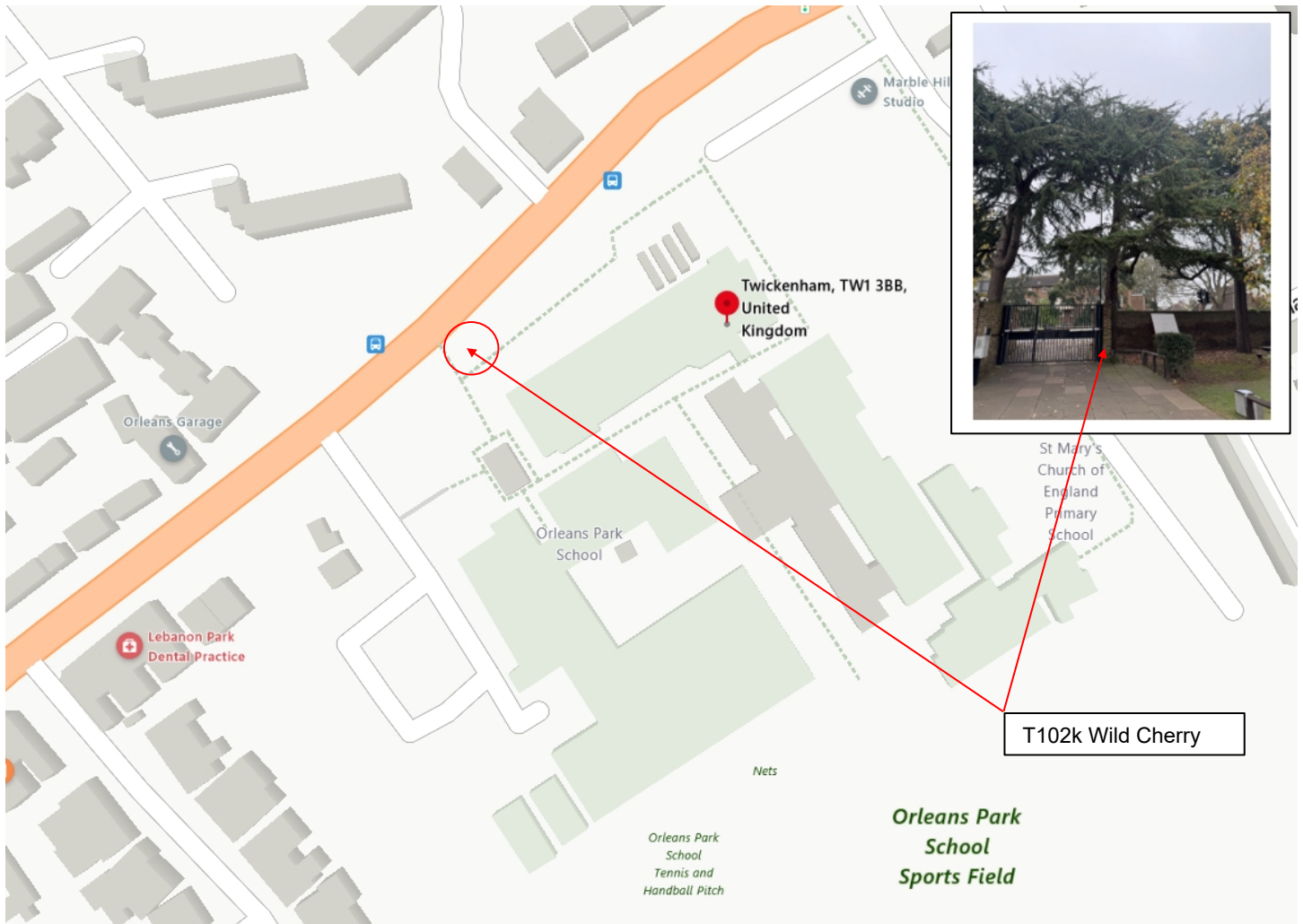


TreelineTM

Services Limited

Resistograph Test of T02 Cedar of Lebanon (Cedrus Libani).



Produced for:

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Tuesday 05th November 2024

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Appendix: 1 Tree Drilling Readings

INTRODUCTION

- 1.1 Treeline Services Limited were asked to investigate further T02 Cedar of Lebanon (*Cedrus Libani*) that was initially inspected by Julian To of Strictly Education Ltd using a Visual Tree Assessment "VTA" where there were concern for decay due to a section of loose split bark on the north side of the main stem, Upon further inspection was noted a hollowing sound from the acoustic test carried out using a nylon sounding mallet to listen out for any change in tone and note whilst gently tapping around the main stem. It was therefore recommended for a resistograph test and report to ascertain the levels of decay within the main stem.
- 1.2 The Resistograph was carried out to enable measurable data to provide accurate recommendations based on the results. Resistograph investigation was deemed necessary in light of Health and Safety as the Cedar of Lebanon overhangs the main pedestrian entrance as well as internal outdoor seating area for the students. We have also been asked to provide recommendations for work, dependant on the findings to bring the tree to a level considered to be an acceptable standard for health and safety given it location within the grounds and the target areas.
- 1.2 Report scope: The principal concern of this report is to identify as far as is reasonably possible the extent of decay present in the main stem T02 Cedar of Lebanon with the use of a Resistograph F400, Treeline Services Limited are to provide recommendations which will reduce the potential for harm or damage, which could result from failure attributed to decay. This report is only concerned with the Cedar of Lebanon located on the north boundary of the front garden/ Driveway.

2.0 SITE VISIT

- 2.1 Date of second visit: 05th November 2024.
- 2.2 Site Description: Orleans Park is a coeducational School property and contains a few species of trees within the property on the whole being mature in age class. The site is accessed via Devonshire Avenue.
- 2.3 Tree species: Cedar of Lebanon (*Cedrus Libani*).
- 2.4 Height: 15.6 metres
Stem size: 670cm at 0.5m from ground level.
- 2.5 The Cedar of Lebanon (*Cedrus Libani*) is located to the north boundary within the school site internal seating area adjacent to the school's main pedestrian entrance. Noted on the north side of the main stem can be found two sections of split loose bark, Also following this inspection was highlighted a 13-degree measured from 2m off the main stem a lean to the south towards the main school buildings.
- 2.6 To investigate the extent of decay further, drilling was carried out at the base of the main stem.

Drillings were carried out in the following location and height,

1. North at 200mm on the main stem from ground level.
2. East at 200mm on the main stem from ground level.
3. South at 200mm on the main stem from ground level.
4. West at 200mm on the main stem from ground level.

The readings do show a significant reduction in wood strength in the central main stem from the bark layer heading into the centre of the main stem of tree as shown in appendix 1.

3.0 METHOD OF INSPECTION

- 3.1 This tree was assessed from ground level in line with Visual Tree Assessment guidance (VTA) prior to resistograph being carried out. A nylon sounding mallet was used when decay was suspected combined with a metal probe to aid diagnosis. No samples of any kind were taken.
- 3.2 The tree is not tagged as it is easily identifiable within the grounds.
- 3.3 The height, stem diameter and crown spread of the trees were estimated as the accuracy of these measurements is generally not critical to the decision-making process when recommending necessary tree works.

4.0 RECOMMENDATIONS

Recommendations are based on findings from the drillings and observations on the day of the inspection. Using the data from the drilling investigation and Claus Mattheck mathematical approach to trees and decay, and under guidance of British Standards, the level of decay found within T02 Cedar is as shown in the below diagram. With evidence of heartwood decay computational assumption, it is deemed unacceptable to remain without any remedial safety works.

- 4.1 On forming an opinion in regard to this tree I have tried to balance the requirements of the client to retain the tree, Health, and Safety obligations and that of the Local Planning Authority. Knowledge of decay organisms as well as a balanced knowledge of the species.
- 4.2 There is extensive decay in the main stem of the tree as can be seen in Appendix 1 the Resistograph carried out in the main stem.
- 4.3 The crown has just had the low lateral branches lifted to give sufficient height clearance over the walkways. The smaller upper twigs do not show signs of clawing that would indicate root and or systemic problems attributed to the decay.
- 4.4 Following interpretation of the data from the test drillings I would and can only recommend. Carefully felling this tree to near ground level.

5.1 COMMENTS

- 5.1 Whilst the tree is important within the area and highly visual within its location, new planting is always a good idea and would go some way to mitigating the loss of this tree. I would recommend if planting were an option, a tree replacement minimum of 10 - 12cm heavy standard, 2.5 – 3m in height.
- 5.2 The above work has been issued a works priority 3 and should be carried out within 6 months of this report.

6.0 TREES SUBJECT TO STATUTORY CONTROLS

- 6.1 Prior to any tree work being undertaken, Treeline services ltd will verify whether there are any Tree Preservation orders, Conservation Area status or Planning Restrictions affecting the works. Should any or all of these be the case, formal Local Authority Planning Consent should be obtained in writing unless the works are deemed to be of an exempt nature.
- 6.2 It is recommended that the work is undertaken by an Arboricultural Association Approved Contractor, All works should conform to British Standards (BS) 3998.2010 Recommendations for Tree Work and to current Arboricultural best practice.

Timing of operations should be carried out to cause minimum disturbance to wildlife.

The Wildlife & Countryside Act 1981 (as amended by The Countryside & Rights of Way Act 2000) and The Habitat Regulations 1994 place a legal obligation on the owners and Arboricultural Contractors working on their behalf to protect wildlife species and their habitats.

In particular, care should be taken to avoid disturbing all wild birds, bats and badgers (including nests, roosting sites and setts). This normally dictates that pruning and felling should not be carried out during bird nesting season (from March to October) unless safety is an issue.

7.0 REPORT LIMITATIONS

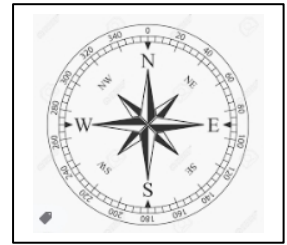
- 7.1 The assessments are based on professional experience and expert observation at the time of the inspection. No liability can be assumed to rest with Treeline Services limited should site conditions or features alter after our inspection.

This Report has been prepared for the sole use and benefit of the Client. Any liability of Treeline Services Limited shall not be extended to any third party.

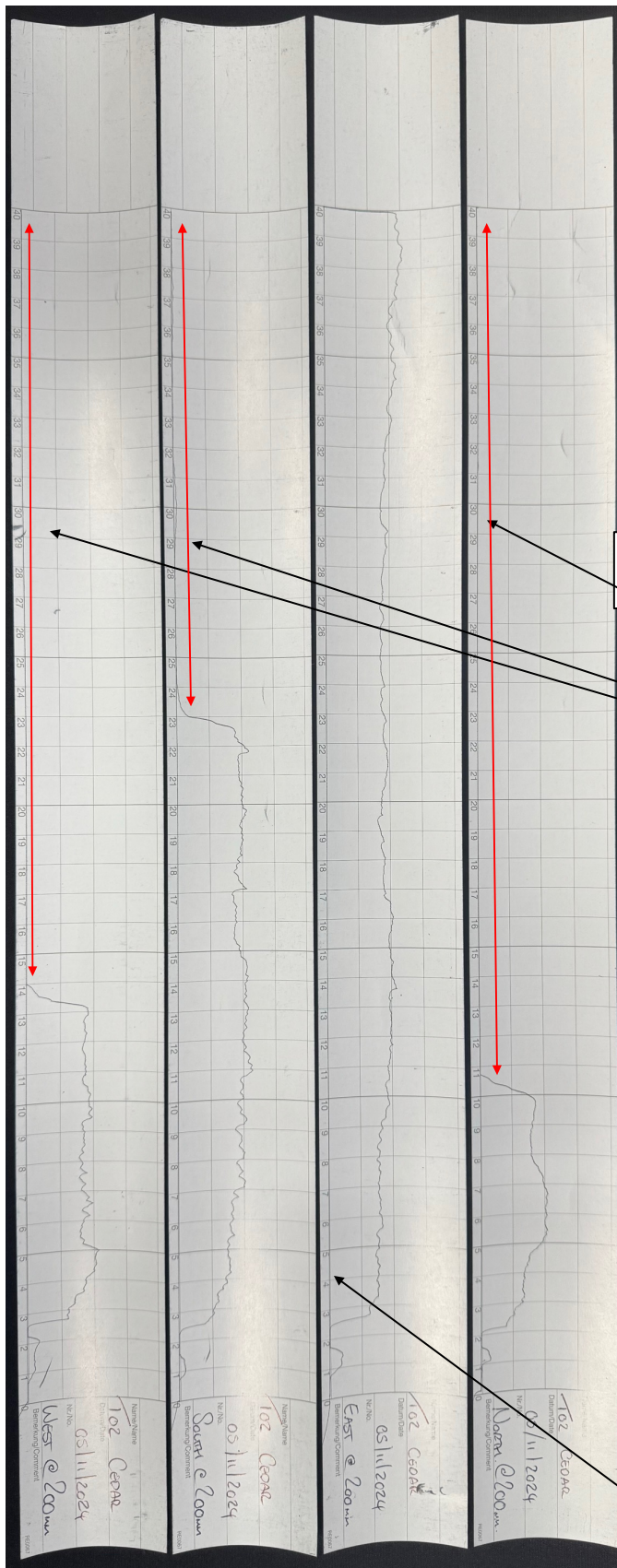
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Appendix 1

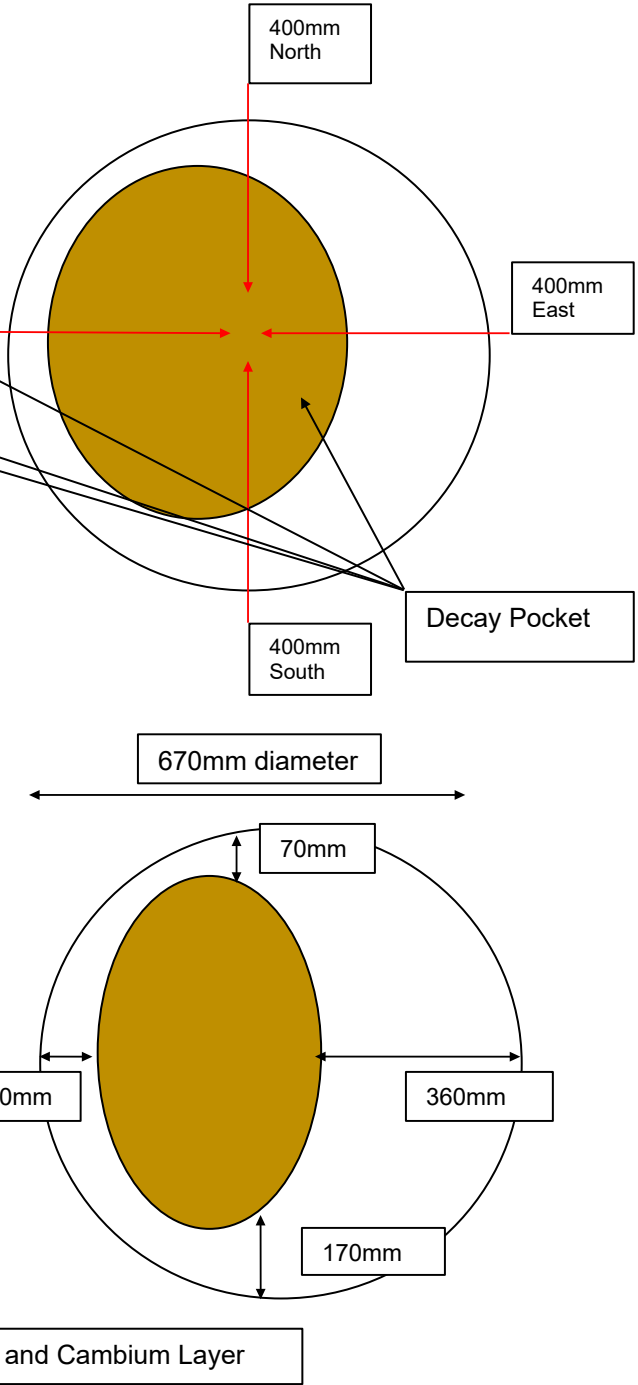
Illustration purposes only not to scale:



Drilling Around the main stem.



No:1 No:2 No:3 No:4



Photos taken from site visit:





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