Hoarticulture
Arboricultural Consultancy

A Tree Condition Report carried out at:

53 Wensleydale Road
Hampton
TW12 2LP

Prepared for Simon Kippin

Report prepared by Mr Sam Hoar (Tech Arbor A),
ABC Level 4 Diploma in Arboriculture
Lantra PTI, Certificate No: 921795
Arboricultural Association Membership Number
TE8090 (Technician Membership)

Arboricultural
ASSOCIATION
Technician Member

20/07/2024

Table of Contents

1.0 Introduction

1.1 An instruction was received on 30/06/24 by Simon Kippin to carry out a tree condition survey on 1x beech tree at 53 Wensleydale Road, Hampton TW12 2LP to identify defects and recommend mitigating works based on risk.

1.2 This survey is the first initial full survey to my knowledge with no other previous survey data provided from Mr Willis

1.3 The tree was inspected by Mr Sam Hoar (Tech.Arbor A)
The monitoring and maintenance of the clients tree stock shows a commitment from the client to maintain their duty of care and to keep their trees in a safe condition and in line with the occupiers liabilities act 1957.

1.4 Sam Hoar holds the ABC Level 4 Diploma in Arboriculture and the Lantra, Professional Tree Inspection certificate. He is a technician member of the Arboricultural Association. He has been conducting tree condition surveys as a full time occupation since 04/10/19.

Report Limitations

1.5 The report highlights defects on trees identified in the survey, recommended works to mitigate risk and appropriate timescales within which recommended works should be carried out based on target area, likelihood of causing harm and extent of harm. This was assessed using the T.H.R.E.A.T.S (Tree Hazard Rating, Evaluation and Treatment System. The main body of the report is contained in the tree survey data spreadsheet (6.0 Tree Survey Data Report) A selection of maps relevant to identified trees is recorded in (5.0 Site Plan).

1.6 Only 1 tree on the site was to be inspected which was requested by Mr Kippin. Any other trees on the site were not inspected. Mr Kippin also requested an internal investigation of the tree using the IML Resistograph to aid the assessment of structural integrity of the tree

1.7 All measurements, proportions and assessments of age are approximated. Except for the diameter of where the internal investigations took place on the main stem which was measured using a DBH tape and the measurements of the resistograph.

1.8 All tree works recommendations will comply with the British Standard BS3998 Tree Work - recommendations (2010) unless otherwise stated in the notes of the tree survey data spreadsheet.

1.9 Trees are dynamic, living organisms, and are as such susceptible to climatic conditions and changes to the environment surrounding them. Every property owner/Manager has a duty of care to maintain their trees in a safe condition in order to protect their liabilities.

2.0 Hoarticulture has not been in contact with nor confirmed with Richmond Borough Council for whether the tree identified in this survey is included within any Tree Preservation Orders or whether they are situated within a Conservation Area. However It has been informed by Mr Kippin that this tree is covered by a TPO.

2.0 The Survey

2.1 The first survey took place on the 10/07/24. The weather conditions were dry, calm and light. The internal investigations took place on 16/07/24

2.2 A total of 1 inspection was recorded for trees on site Consisting of 1 single tree, 0 groups of trees

2.3 Trees were inspected utilising the Visual Tree Assessment (VTA) method devised by Claus Mattheck, an internationally recognised system for identifying tree defects (Mattheck, Breloar 1994).

2.4 The tree was inspected from ground level only using acoustic mallet testing, a 30cm probe and visual tree assessment. A further assessment was carried out using the

Resistograph on 16/10/24. The tree is located at the front of the property and is situated in tall maintained shrub bed to the left of the entrance to the property.

2.5 Survey data is valid for one year from the date of inspection, after which time the trees should be reassessed. The trees should also be visually assessed if subjected to storm-force winds in between subsequent surveys. **All the trees recorded on the survey should be re-inspected every 2 years as a minimum.**

2.6 All recommended works should be carried out following BS3998: 2010 Recommendations for Tree Work.

2.7 The following data were recorded for each tree:

Ref:	Individual tree identification number
Species:	Botanical and common names.
Structure:	Singletree, Multi-stem, Group
Num. Stems:	Measured in single units
Height Class:	Measured in 1 metre (m) increments.
Stem Diameter:	Measured at breast height (DBH) in centimetre (cm) increments.
Life Stage:	Newly planted, Young, Semi Mature, Early Mature, Mature, Over Mature, Veteran, Ancient, Dead
General Observations:	Good overall Physiological and Structural condition. Fair overall Physiological and Structural condition.
Identified Defects:	A record of identified features that may pose a risk.
Recommended Works:	Works that are required to mitigate risks posed by identified defects.
Timescale:	The timescale within which recommended works should be carried out to ensure mitigation of risks.
Notes:	Detailed descriptions of trees, defects, site conditions etc.
Physiological Cond:	Good, Fair, Poor, Dead
Structural Cond:	Good, Collapsing, Decaying, Physical Defect, Fair, Poor

3.0 Glossary of Terms

Branch Union:	Region formed where branches are attached to the main stem or other branches.
Cavity:	A hole in a woody part of the tree caused by pathogenic decay, damage or boring birds and insects.
Co-Dominant stems:	Multiple vertical stems or branches that arise from a tree's main trunk or central leader and compete for dominance within the tree's canopy.
Compression Fork:	A structural feature found in trees. It occurs when two or more branches grow closely together and compete for space and resources, resulting in compression between them. As the branches grow, the pressure they exert on each other can cause the wood tissue to become compacted and flattened at the junction point, creating a distinctive bulge or swelling.
Crown Reduction:	A tree pruning technique aimed at reducing the overall size and volume of a tree's canopy while maintaining its natural shape and structure. This method involves selectively removing specific branches and foliage from the outer edges of the tree's canopy. By doing so, crown reduction helps to alleviate stress on the tree, improve its overall health, and minimize the risk of branches breaking or falling.
Deadwood:	Dead branches within the crown that pose an overhead falling risk.
Extension Growth:	The process by which the tree adds new length or height to its branches, shoots, or main stem.
Historical Failure:	A structural failure or damage that has occurred in the past. This could include events such as large branches breaking off, the trunk splitting, or the tree uprooting due to environmental factors, disease, or other stressors.
Internal Investigation:	In addition to visual inspection, various diagnostic tools may be used to assess the tree's internal health. This can include tools such as a resistograph, which measures the density of wood and can detect decay or cavities within the tree trunk.

Fell:	The controlled cutting of a tree to bring it safely down to ground level.
Fungi on roots/stem:	Unidentified fungi that could be significant in the decay process of a tree, found on the stem or within rpa of tree stem.
***Cerioporous squamosus*:**	Associated with a selective white rot of the wood. Causes cavity formation. When found locally, decay is more likely restricted to this area. Multiple brackets over larger areas suggests widespread dysfunction. Associated with the decline of trees, when found in abundance. Associated with stem and limb failure – notably in species with weaker wood qualities (horse chestnut, poplar)
Stem/trunk:	The major above ground woody structure of the tree that supports the crown.
Stem/Limb Decay:	The breakdown of lignin or cellulose (or both) within the wood, resulting in weaknesses or cavities. Predominantly caused by pathogenic fungi.
Structural Condition:	The physical integrity or health of a tree's structure, encompassing various factors related to its overall form, strength, and stability. Assessing the structural condition of a tree involves evaluating its branches, trunk, roots, and overall architecture for any signs of damage, weakness, or decay that could compromise its stability or pose a safety risk.
Vitality:	A tree’s overall health, vigor, and ability to sustain growth and reproduction.

4.0 Photos

Photo 1

Photo 2

Cavity Face

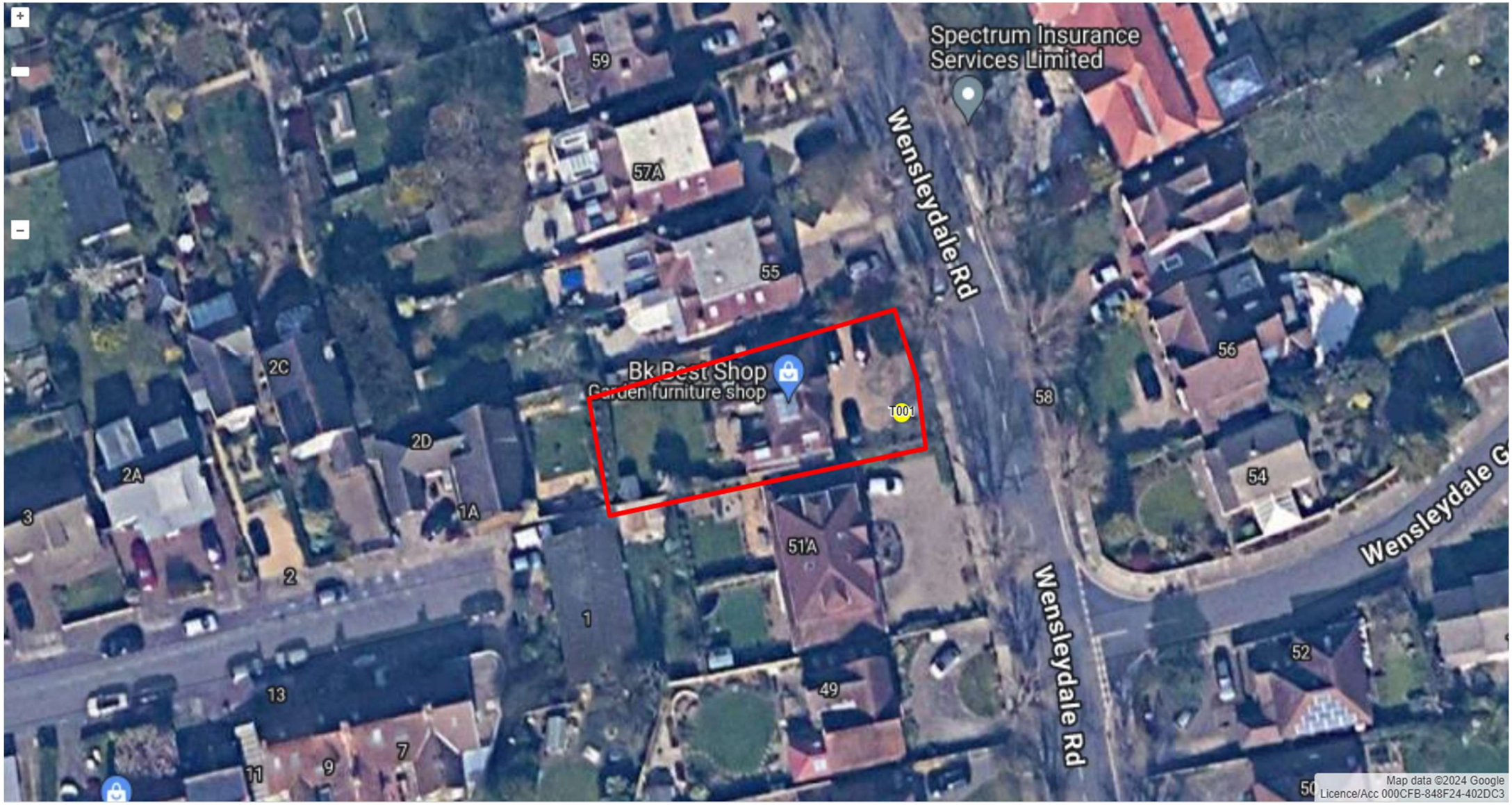
Photo 3

Photo 4 (Fungi in tree from Mr Kippin)

Photo 5 (Fungi in tree from Mr Kippin)

Photo 6

5.0 Site Plan and Tree Locations


Spectrum Insurance Services Limited
Wensleydale Rd
Bk Best Shop
Garden furniture shop
T001
59
57A
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56
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2C
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2A
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51A
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1
49
13
7
9
11
52
Wensleydale Rd
Wensleydale G
Map data ©2024 Google
Licence/Acc 000CFB-848F24-402DC3

6.0 Tree Survey Data Report

Tree Survey Report

Client: Simon Kippin

Site: 53 Wensleydale road

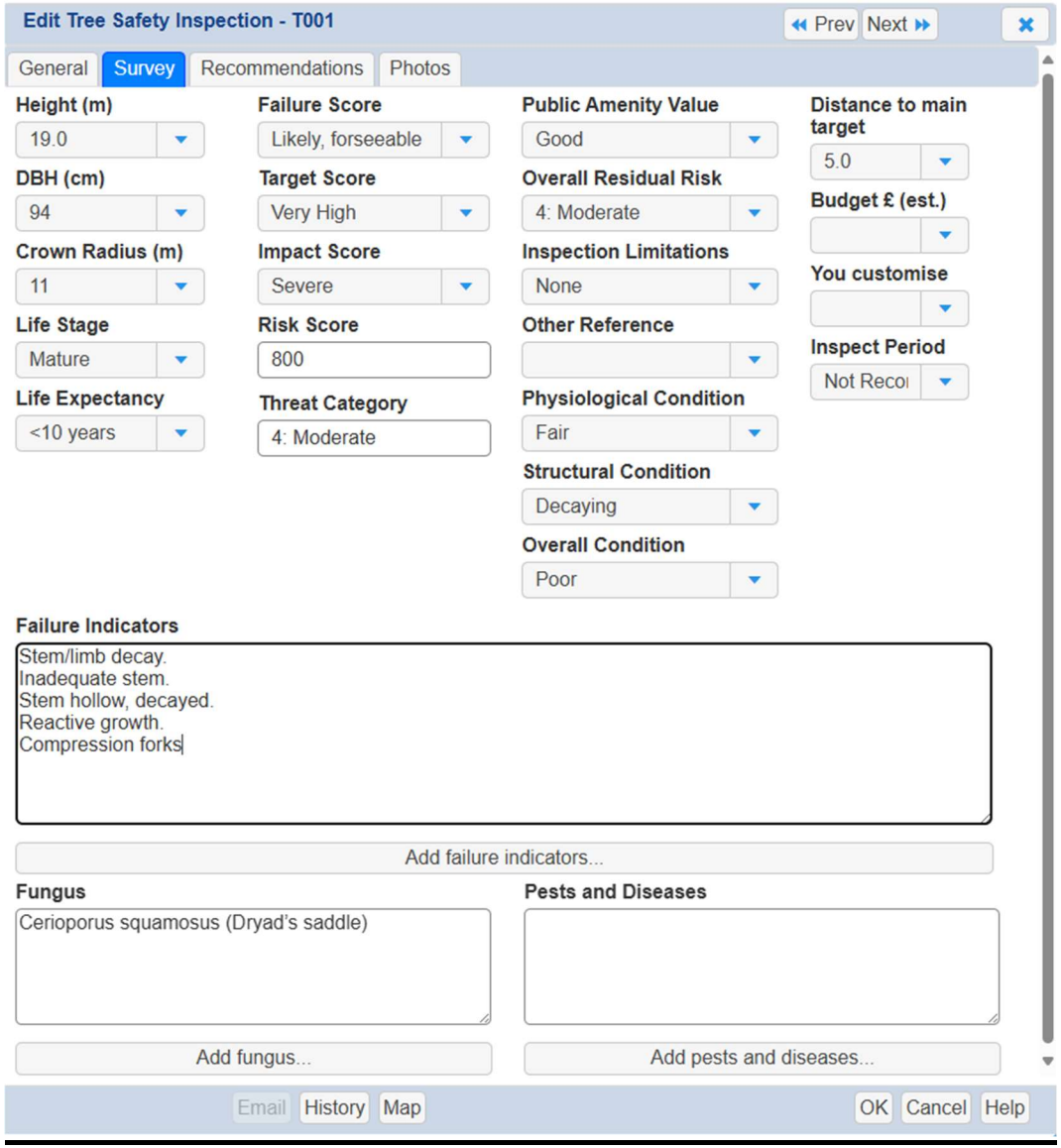
Date: 10/07/24

Hoarticulture
Arboricultural Consultancy

Overall Condition	No. trees
Poor	1
Total	1

Ref.	Species	Description	Measurements	Survey Notes	Overall Condition	Threat Category	Recommendations
T001	Copper beech *(Fagus sylvatica purpurea)*	Owned by the estate. Tree in hedge. Target # - building Target # - dwelling. Target # - footpath. Target # - road.	Height (m): 19 Crown Radius (m): 11 DBH (cm): 94 Life Stage: Mature Life Exp.: <10 years	Stem/limb decay. Inadequate stem. Stem hollow, decayed, cracked (inc. shear cracks). Reactive growth. Fungus: Cerioporus squamosus (Dryad's saddle)	Poor	4: Moderate	Control Measures 1: Further investigation of decay at 3m resi drill x4 Work completed on 16-Jul-2024 Control Measures 2: Fell tree. Timescale: 3 Months

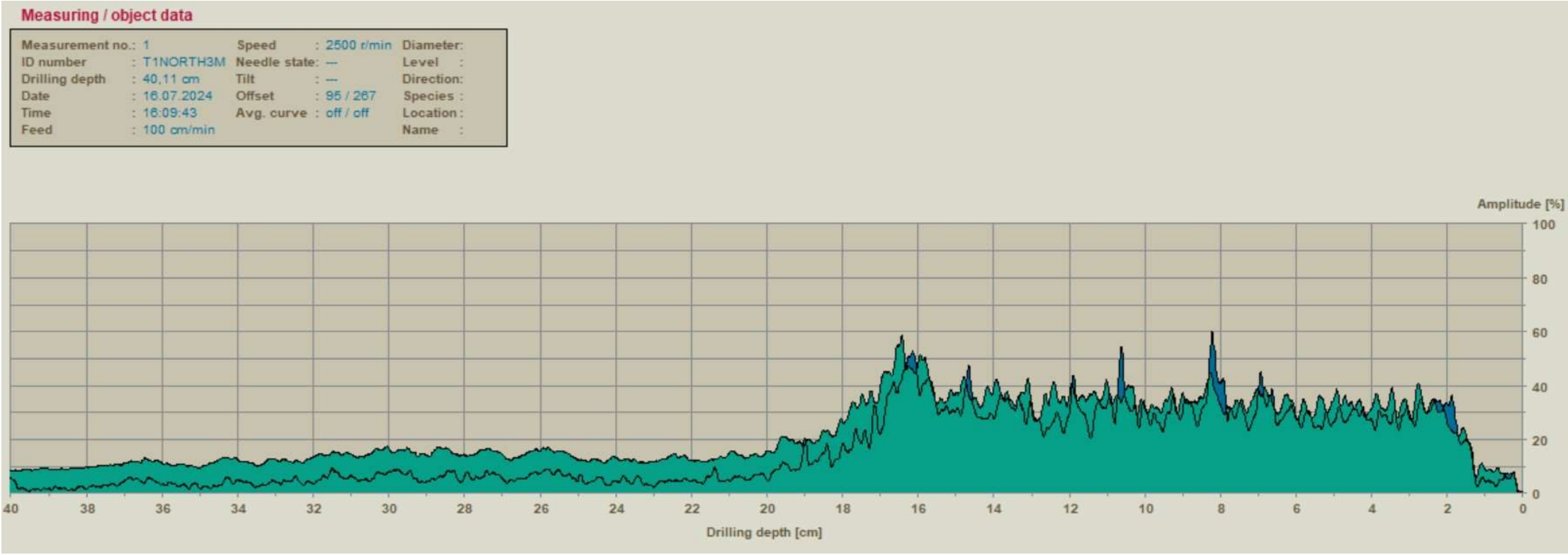
Threats Methodology



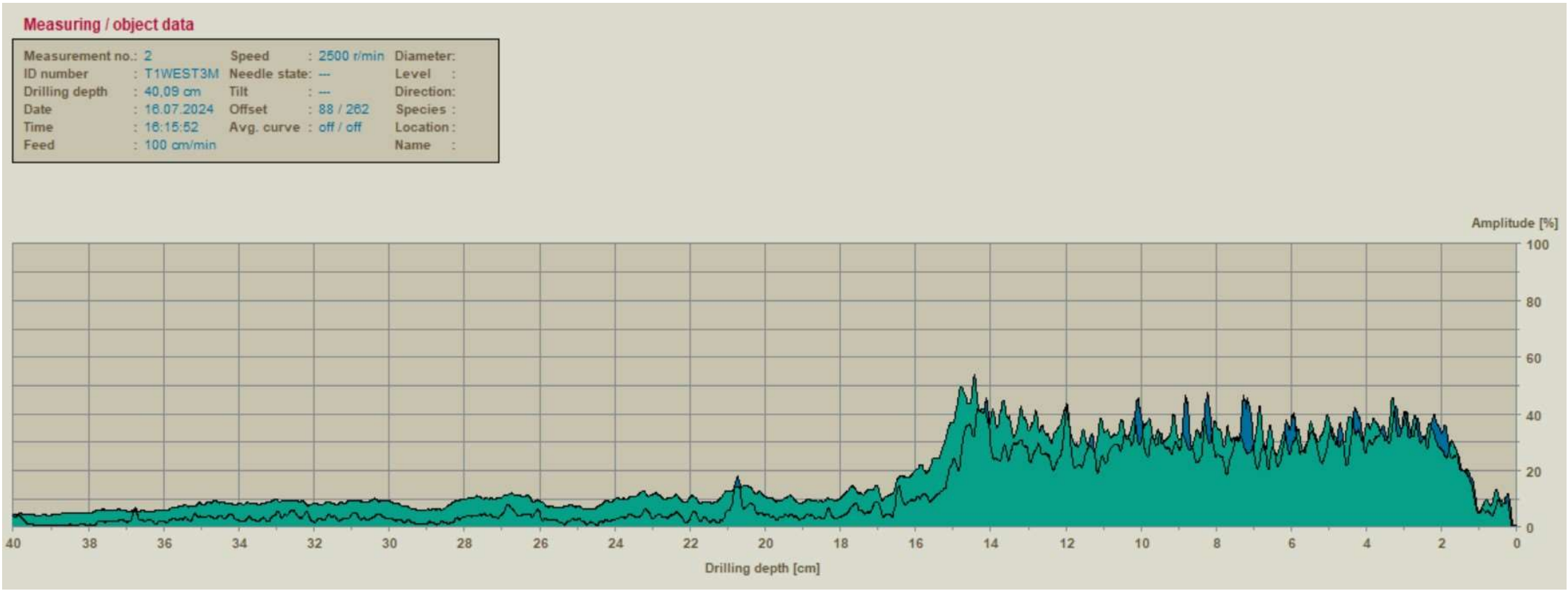
7.0 Internal Investigations

Resistograph Results

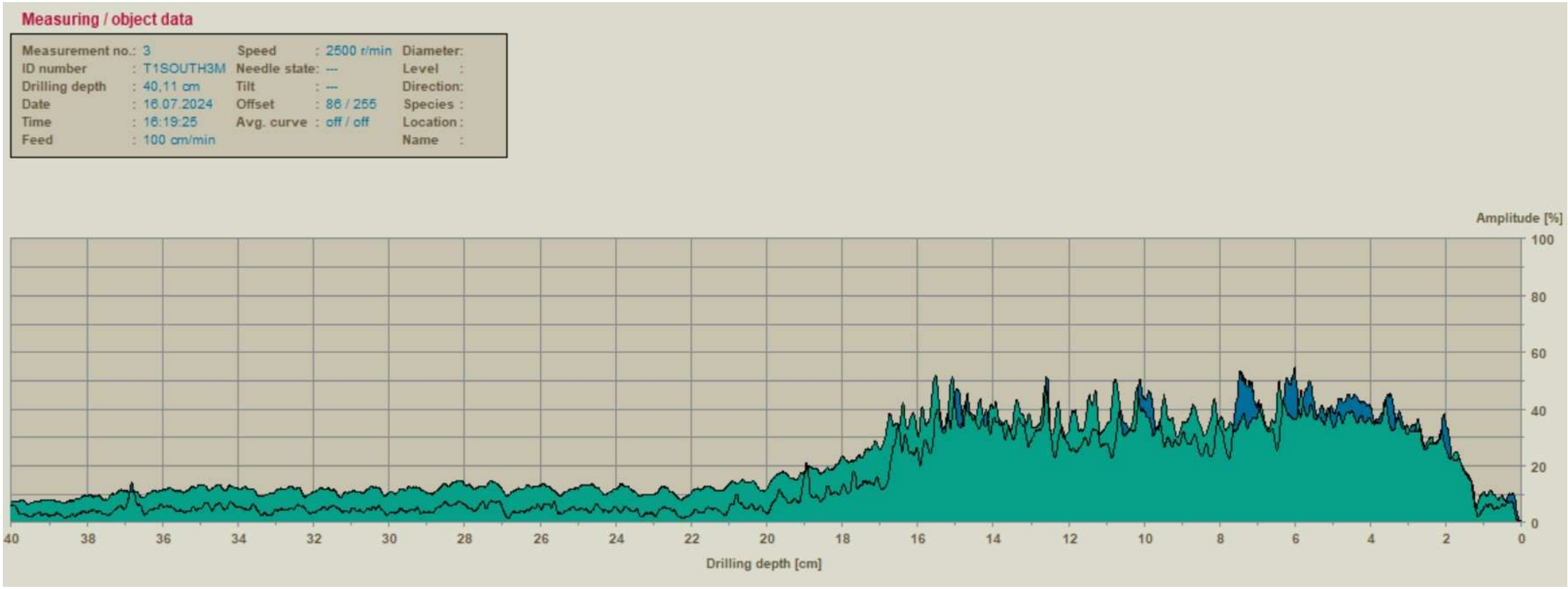
Drill Test 1 (North 3m)



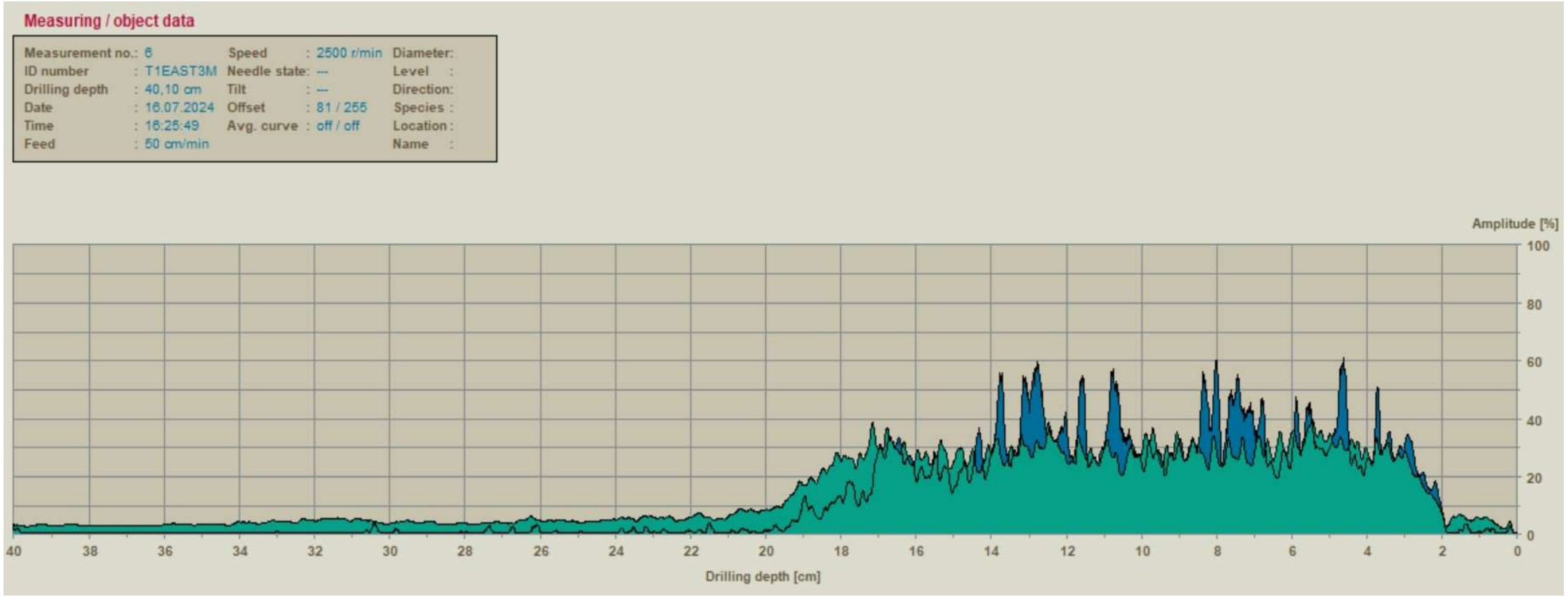
Drill Test 2 (West 3m)



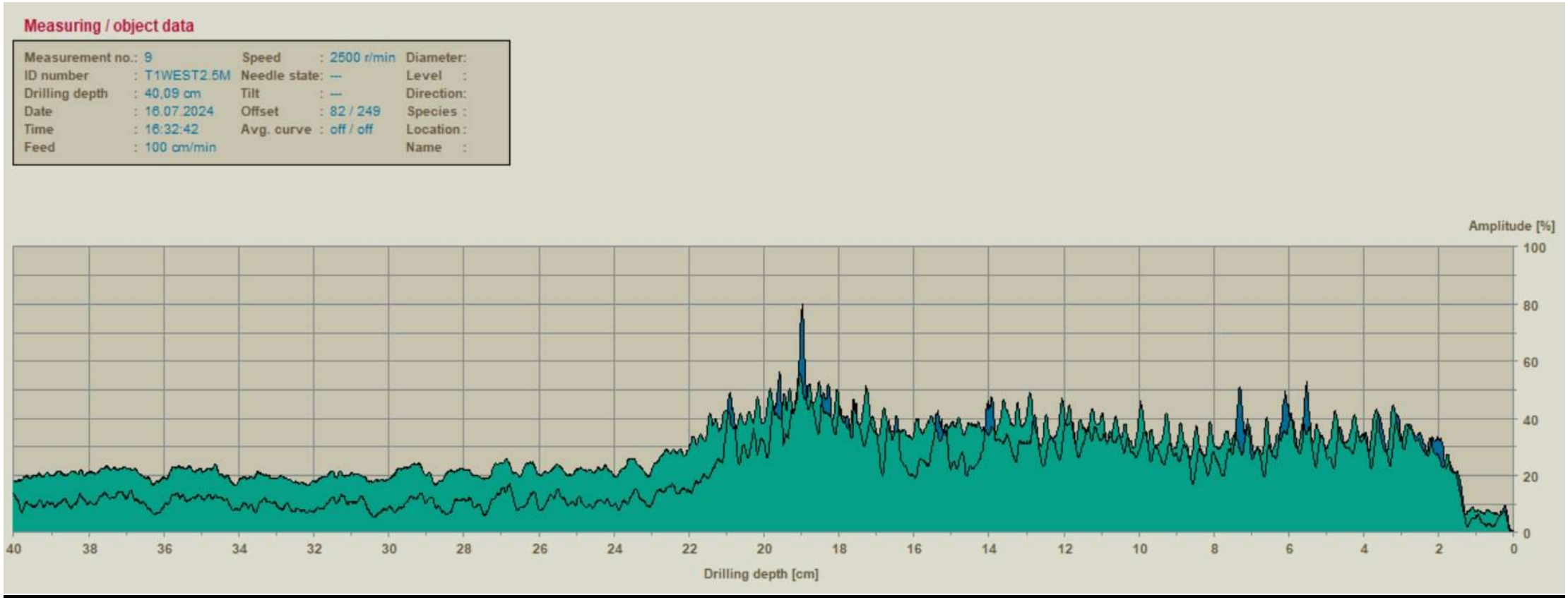
Drill Test 3 (South 3m)



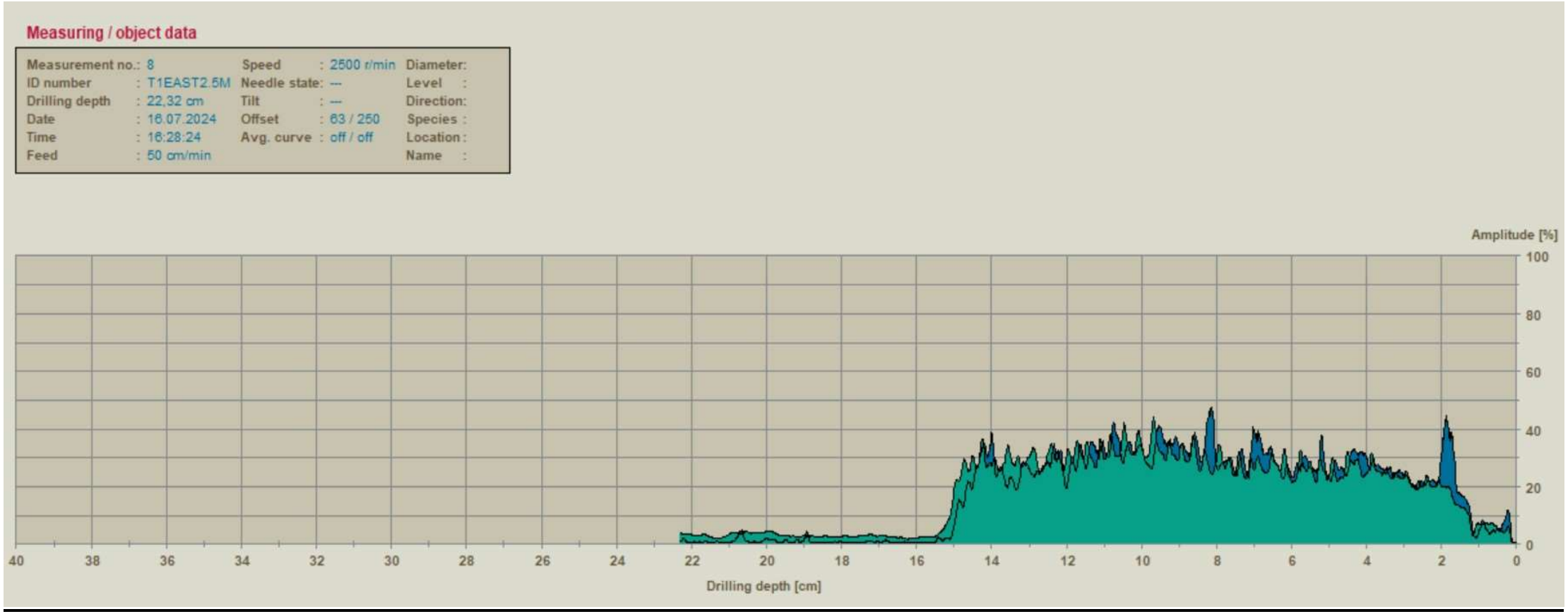
Drill Test 4 (East 3m)



Drill Test 5 (West 2.5m)

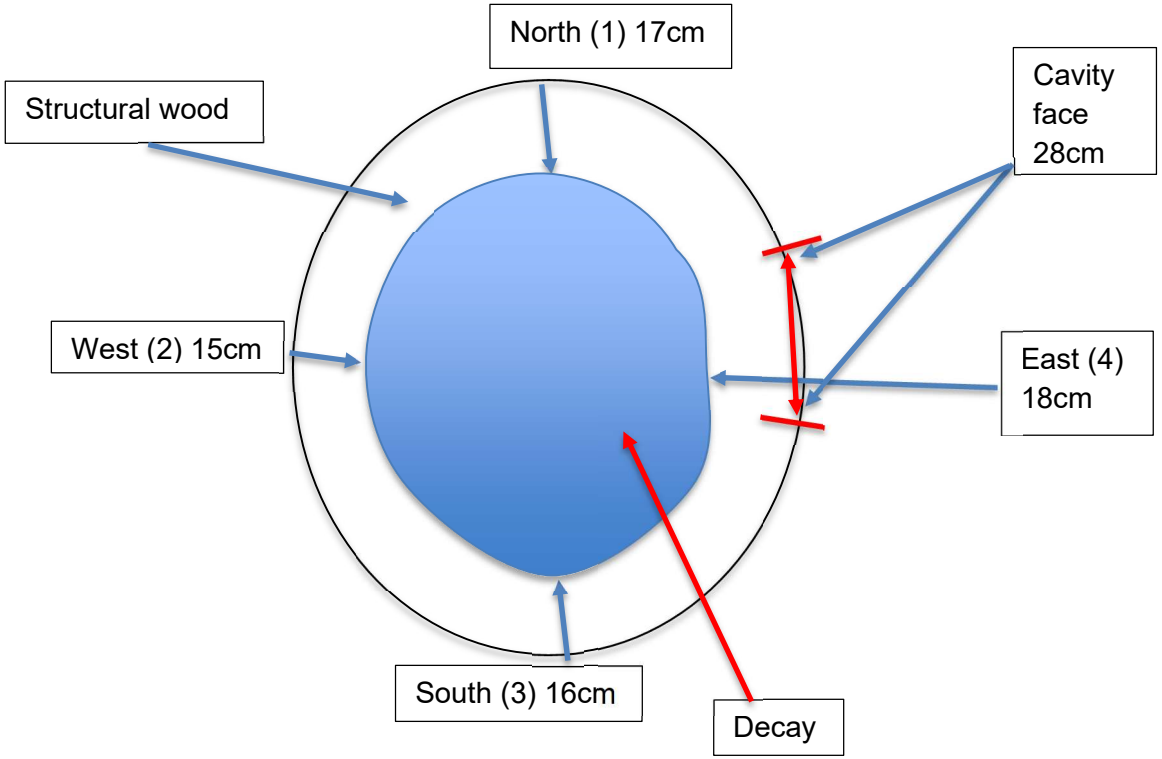


Drill Test 6 (East 2.5m)



Interpretation (estimated extent of decay based on results not to scale)

94cm Diameter at 3m



8.0 Recommendations:

T001- Fell to ground level

Timescale: Within 3 months of receiving report

Justification

1. Due to the extensive decay/cavity found at 3m, my recommendation is to fell the tree to ground level. It is likely that the tree will decline in vitality as a result of the fungal infection (*Cerioporous squamosus*) and therefore preventing the tree from producing sufficient reaction wood to support the crown.

2. A reduction of the crown of any amount is not suitable as it is likely and foreseeable that this would decrease the mortality expectancy of the tree significantly and will exacerbate the first point.

3. Mathecks theory on hollow trees as described in (The Body Language of Trees, 2015) is that hollow trees with full crowns and single enclosed hollows are increasingly likely to fail if the residual wall is less than 30%. Given this calculation, that would equate to a hollow stem with 94cm radius would ideally have a critical wall thickness of 94cm x 0.3 which equals 28.2cm. However, this theory of a 30% ratio does cannot be applied here due to the open cavity identified at 3m but is a good indicator that there is insufficient remaining functional wood to support the canopy. All drill tests performed on the stem of T1 are significantly less than the 28cm which is what I am basing my recommendation on.

4. It is not foreseeable in which direction the canopy is likely to fail so all targets within the falling distance of the tree have been considered. The targets include the occupied residence of Mr Kippins and his immediate neighbouring properties, the public footway and the public highway which often has cars parked outside of residences.

References

Mattheck, Breloar (1994). *The Body Language of Trees: A Handbook for Failure Analysis.* London, HMSO.
David Lonsdale 2009, Principles of Tree Hazard Assessment and Management
TMA Fungi TMA Fungi (tma-fungi.co.uk)
Fungi on Trees, An Arborists Field Guide 2020. Guy Watson and Ted Green (Arb Association Publication).
The THREATS method of hazard tree management (flac.uk.com)