



Horse Chestnut
Visual Tree & Climbing Inspection

For

Mr & Mrs Stowell

Site: Mulberry House, 20A Church Road, Caversham, RG4 7AD

Produced by Neil Wilson
Beechwood Tree Care Ltd

Inspected on 18th September 2019





1 Client brief

I received your instruction requesting me to carry out a climbing inspection of the larger of your two Horse Chestnuts.

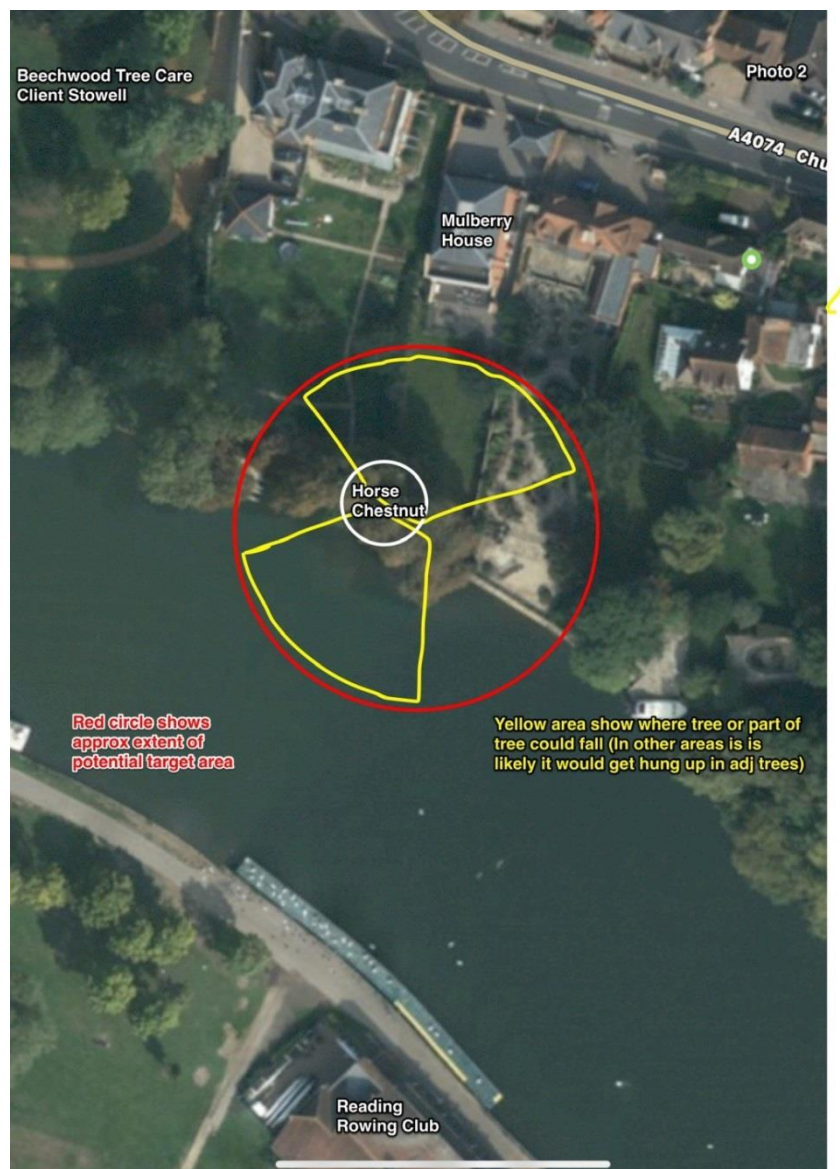
The reason for your instruction is that whilst quoting for the initial recommended works I noted defects within the canopy of tree that were not highlighted/commented on in the 'Inspection of two Horse Chestnut Trees' report of April 2019.

I deemed it to be prudent to climb the tree and investigate these defects prior to carrying out any works.



- 2 Target Area should the tree or portion of tree fail
Garden, neighbouring gardens to East and West, the river.

Photo 2 (picture of target area)





- The whole garden of Mulberry House is within the target area should the tree or a portion of it fail.
- Mr and Mrs Stowell has young children who frequently use the garden in all weathers.
- It is noted the river is effectively a public highway and boats frequently pass within falling distance of the tree.
- On the day of inspection it became clear that the rowers from Reading Rowing Club use the target area as a start point for rowing up the river. I observed rowers stopping in the target area and composing themselves before starting their row up river.
- Basically this area of the river is heavily used and a failure could lead to significant injury and/or damage to property.

I would classify the target area as medium use.



3 Ground level assessment

- The tree is approx. 20-22m tall (this is an estimated height).
- The tree shares a co dominant crown with the adj. Chestnut
- The tree is not in a great condition, the leaf size is small and yellowish in colour.
- The tree is heavily infested with leaf minor.
- There is significant amount of large diameter deadwood within the canopy over the decking.
- The main trunk forks into two at approx. 2m, forming a Southern stem (Stem 1) and a Northern stem (Stem 2).
- The Northern stem forks into two again with stems to South East (Stem 3) and South West (Stem 4)

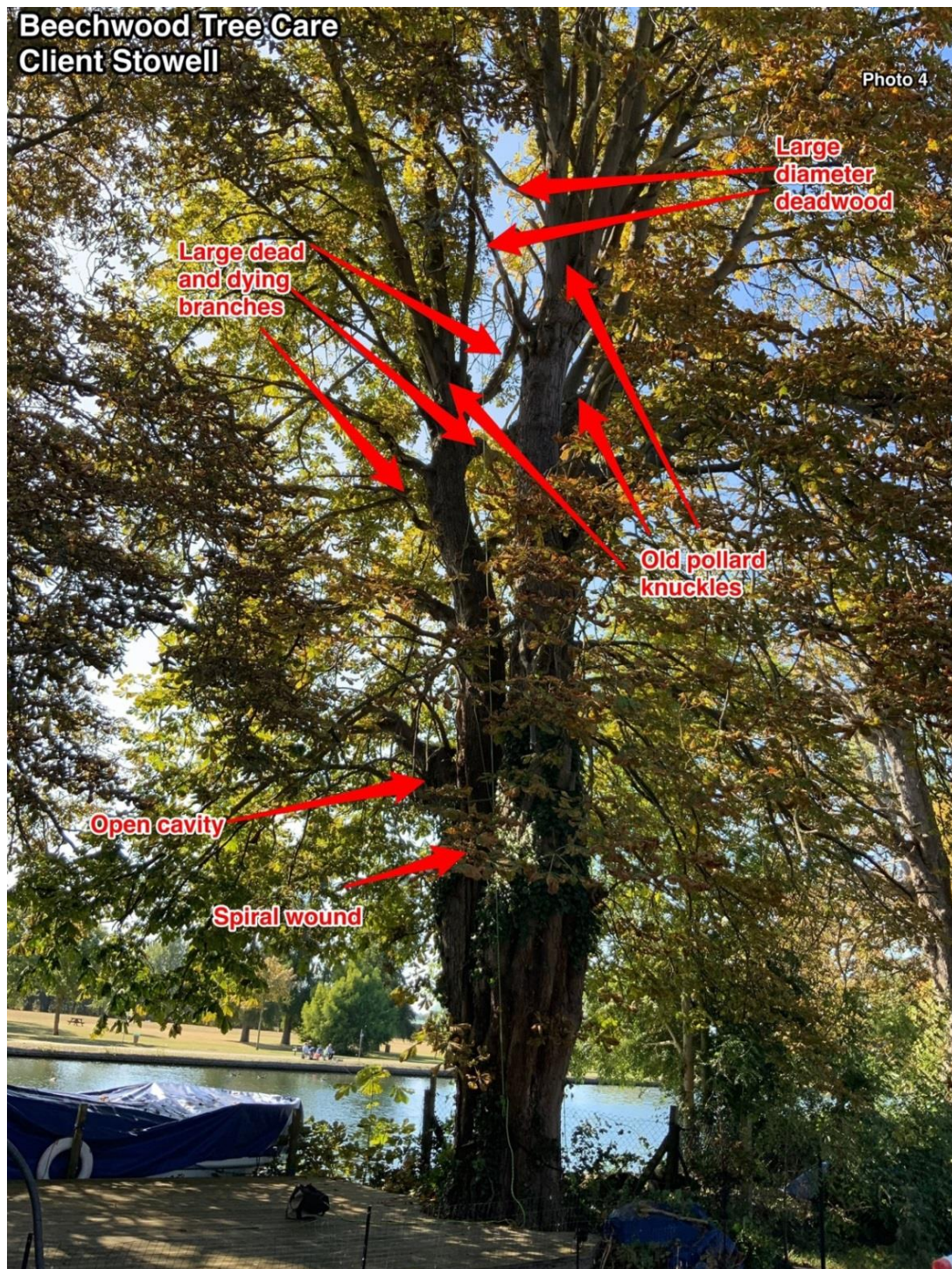
Photo 13 (picture of stems)





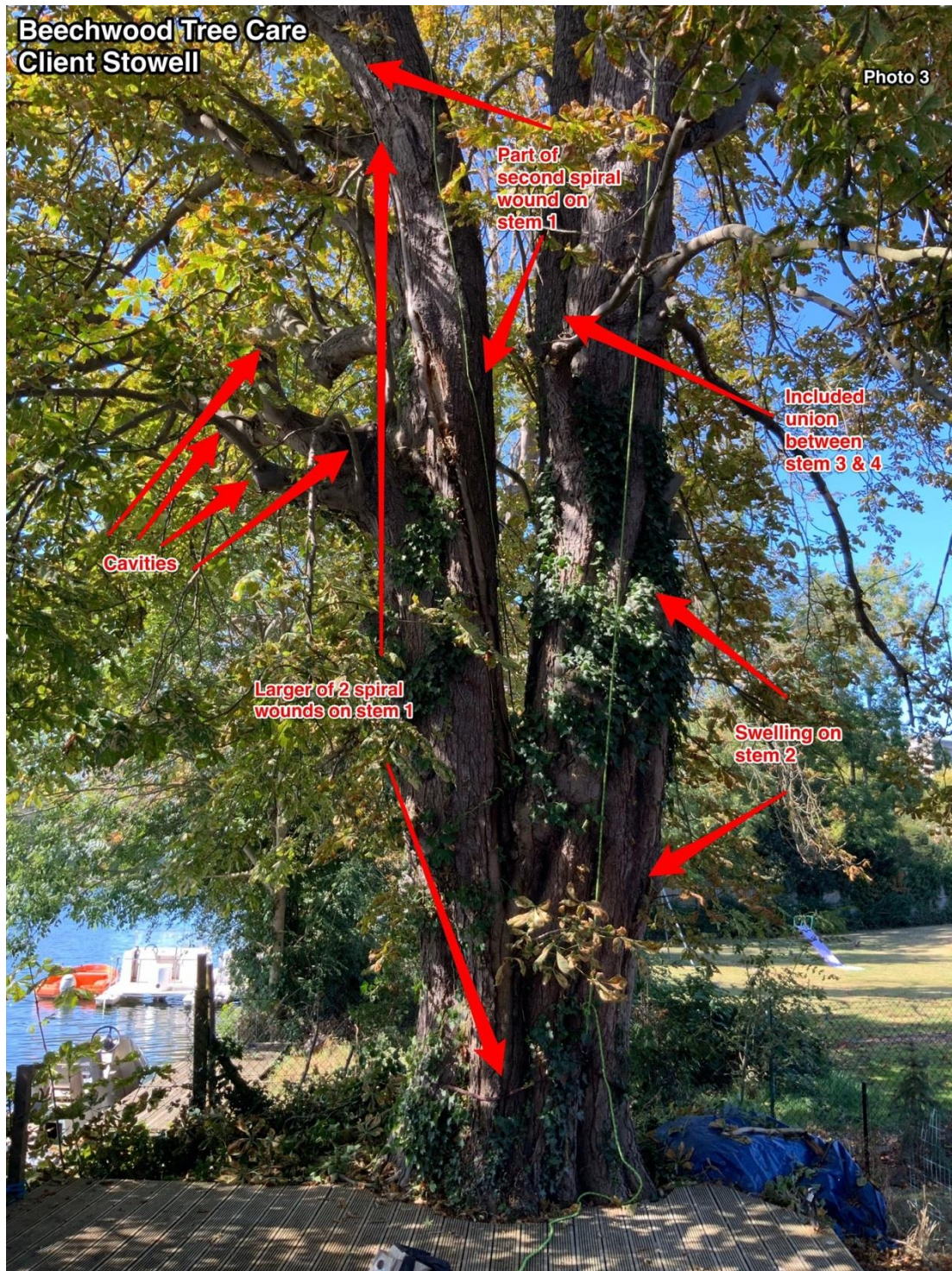
- Stems 1, 3 & 4 have all been historically pollarded/topped (photo 4) (These points are to be investigated for decay, dis-function and cavities).

Photo 4 (picture of pollard points)



- Stem 1 has a large open cavity on the river side, 3 large dead branches over the river and 2 wounds extend up the stem in a helical pattern (photos 3&4).

Photo 3 (picture of defects in lower section of stems)



- Stem 2 has a similar wound which extends up stem 4 (photo 11)

Photo 8 (picture of spiral wound on house side)



4 Conclusions

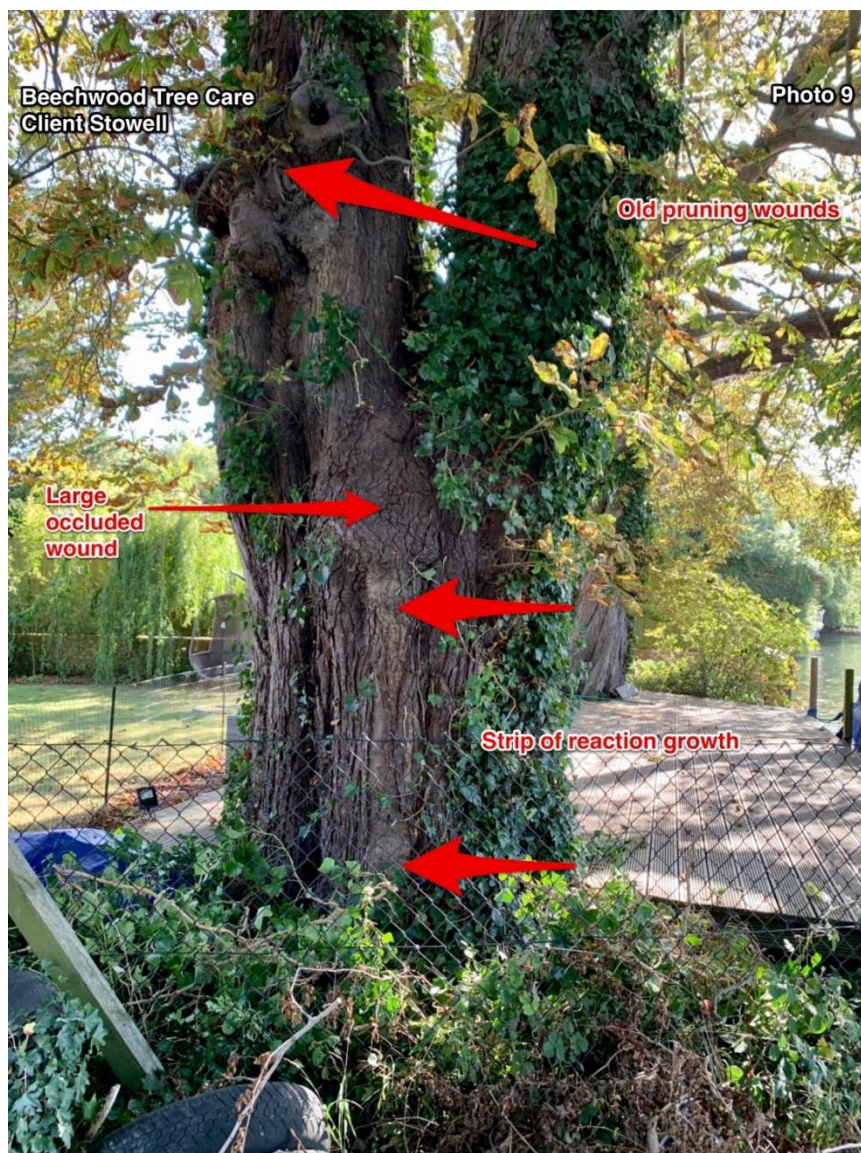
- The tree does not show any visible defects which would lead me to believe the tree is likely to fail as a whole at ground level.
- The defects noted in Stem 1 need to be further investigated during the climbing inspection.
- The defects noted in Stem 2/4 need to be further investigated during the climbing inspection.
- The pollard knuckles of Stems 1, 3 & 4 need to be investigated for decay, dis function and cavities, during the climbing inspection.

5 Defects within the structure of the tree

(I removed the majority of the Ivy from the main stem whilst inspecting it)

Main trunk

- On the east side of the main stem there is a large occluded wound and a strip of reaction growth (see photo 9)
- The lower section of the both stems 1 & 2 have numerous occluded wound from previously removed branches.



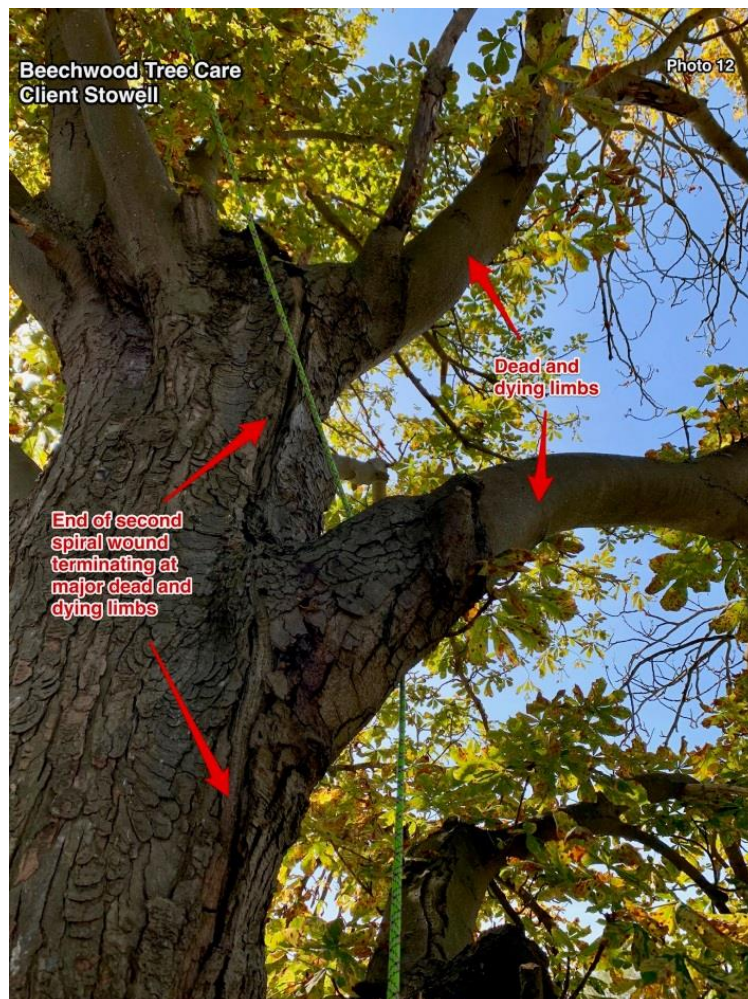
6 Conclusions

There are indications of a significant amount of dysfunctional and possibly decayed wood associated with previous damage and pruning.

7 Stem 1

- The lower section has numerous occluded wound from previously removed branches.
- The stem has two significant wounds which run up the stem in a spiral pattern (photo 3).
- The first of these wounds links up with a significant cavity on the river side where a large branch has been historically removed (photo 5) and ends just below the pollard knuckle at the point where a large dead limb extends over the river. This limb has an open wound running along it.
- The second wound is not as large as the first and spirals up the tree in a pattern parallel to that of the first wound and ends at the pollard knuckle at the point where 1 large dead limb extends over the river and large portion of a second large limb is dead (photo 12). These branches have open wounds running along them. These branches emanate from the pollard knuckle.

Photo 12 (picture of spiral wound connecting to large dead/dying limbs)



- There is a cavity on the south side at a point where a large low limb has been removed. Cavity extends inwards and downwards at least 900mm and meets up with the first of 2 spiral bark wounds. There are 3 sizeable branches emanating from this stub all contain decay (see photo 5).

Photo 5 (picture showing areas of decay and cavity on river side, showing approx. extent of cavity)



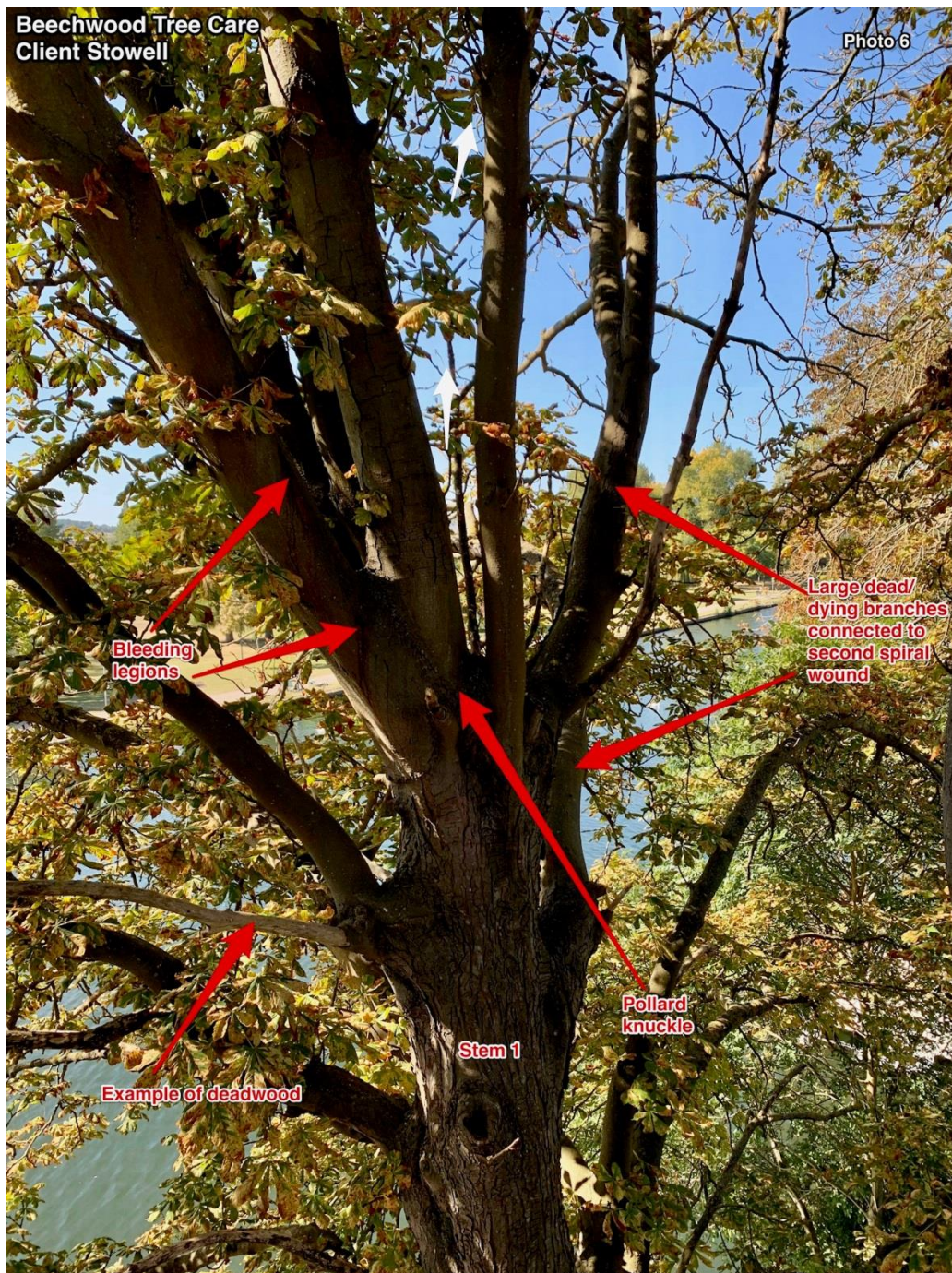
- The pollard knuckle has a large open cavity which extends down 400-500mm in cone like shape. This cavity was full of detritus, so it was hard to confirm the full size (photo 10).

Photo 10 (picture of top of pollard knuckle on stem 1)



- Several of the stems emanating from the pollard knuckle have bleeding lesions (photo 6&10)

Photo 6 (picture of pollard knuckle on stem 1)



- There are large dead branches and visible dieback in the upper canopy.



8 Conclusions

There is a significant amount of dysfunctional and decayed wood to warrant concern that this stem or a large section of it could fail.

The cavity on the south side undermines the structural integrity of the branches emanating from around it.

The cavity at the pollard knuckle undermines the structural integrity of the stems emanating from the pollard knuckle.

Given the high use of the target area radical pruning needs to take place to reduce this risk to reasonable level.

9 Recommendations

Remove all lower branches from around the lower cavity.

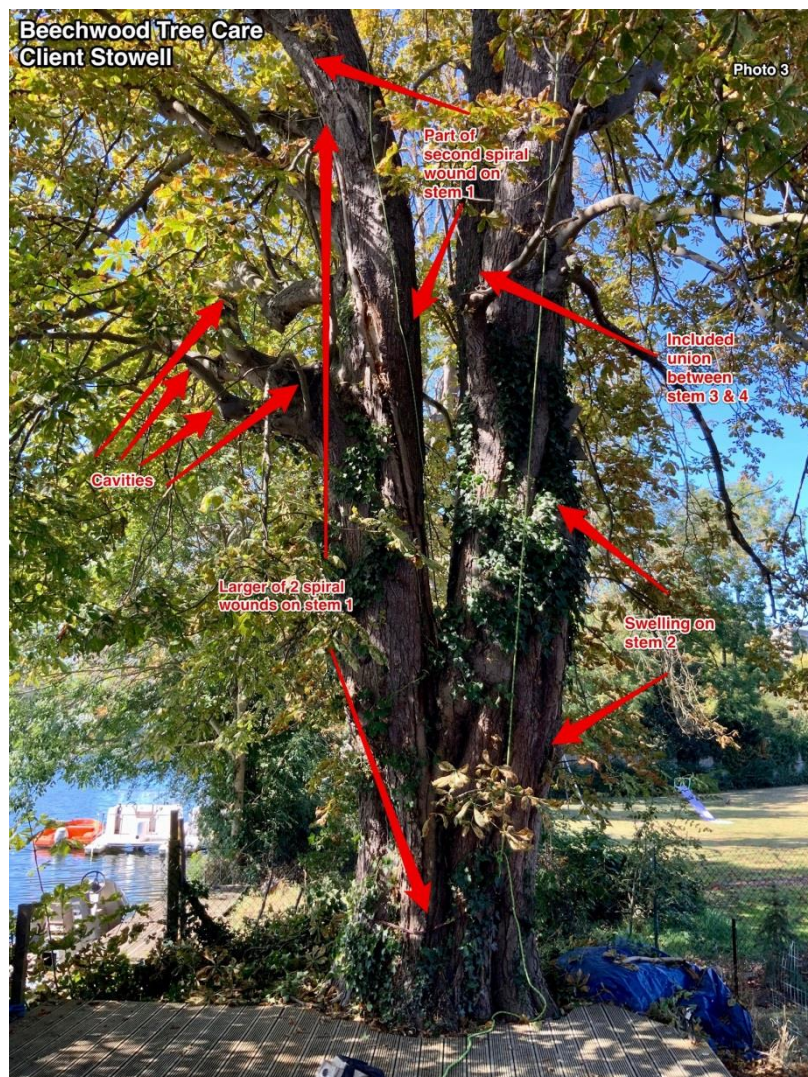
Re pollard at previous pollard knuckle, leaving 100-150mm stubs to aid regrowth.

Remove major deadwood, i.e. branches over 50mm at source and over 300mm in length

10 Stem 2

- The lower section has numerous occluded wound from previously removed branches.
- The stem swells significantly and contains lots of areas of reaction growth (photo 3).
- There is a spiral wound, similar to the two on stem 1 but not as bad, which continues up stem 4 (photo 11).

Photo 3 (picture of defects in lower stem)



11 Conclusions

There is an indication of a significant amount of dysfunctional and possibly decayed wood associated with previous damage and pruning.

12 Stem 3

- There is a included union between this stem and stem 4 (photo 3)
- There are significant dead branches within the canopy.
- There was no notable decay or cavity at the pollard point however it should be noted that this is still a potential weak point (photo 13)

Photo 13 (picture of top of pollard knuckle on stem 3)



13 Conclusions

Whilst there are defects associated with this stem nothing, other than the deadwood, to warrant concern that this stem or part of it could fail. It should be noted that proposed pruning of stems 1 & 4 will open up this stem to new and significant wind loading, meaning failure is far more likely.

14 Recommendations

Re pollard at previous pollard knuckle, leaving 100-150mm stubs to aid regrowth.

Remove major deadwood, i.e. branches over 50mm at source and over 300mm in length.

15 Stem 4

- There is a included union between this stem and stem 4 (photo 3)
- There is a similar spiral wound to the two found on stem 1, that leads to the pollard knuckle (photo 11)
- The pollard knuckle has a large open cavity which extends up the branches which emanate from the pollard knuckle. This cavity has a relatively small opening so it was hard to confirm the full size (photo 7).

Photo 7 (picture of pollard knuckle on stem 4, showing the approx. extent of the cavity)



16 Conclusions

The cavity undermines the structural integrity of the stems emanating from the pollard knuckle.

The significant extent of the cavity warrants concern that the stems above it could fail.

Given the high use of the target area radical pruning needs to take place to reduce this risk to reasonable level.

17 Recommendations

Re pollard at previous pollard knuckle, leaving 100-150mm stubs to aid regrowth.

Remove major deadwood, i.e. branches over 50mm at source and over 300mm in length.



18 Summary of Conclusions

- The tree in its current condition is unsafe and is highly likely to start to lose large sections in the near future.
- These sections are likely to fall into high use areas. Therefore damage to property and/or injury to persons is a distinct possibility.
- I believe the tree should be either felled to remove this danger completely or radically pruned to reduce the risk of failure to a reasonable level.
- I would recommend the pruning option.

19 Summary of Recommendations

- The tree should be reduced in height by removing all growth above the old pollard knuckles (photo 13)
- The branches emanating from the area with large cavity on stem 1 should be removed.
- Remove major deadwood, i.e. branches over 50mm at source and over 300mm in length.
- As much of the lower growth, as is practicably possible should be retained.

Photo 14 (picture of how tree will look after proposed pruning)





20 Limitations and Advisories

Please note

- That as a tree owner you should regularly carried out visual inspections of your trees. You should be looking for overall condition of canopy (does it look in good health). Look for splits, tears, ground lifting etc. and fungal brackets growing from tree or close/around base of stem (normally appear late summer to autumn).
- Particular attention should be paid to trees to after high winds.
- No decay detection, other than sounding and probing cavities, was undertaken.
- Trees are living organisms as well as self-supporting dynamic structures. Their physiological and structural condition can change rapidly in response to a wide range of biotic/abiotic factors.
- Trees have the potential to fail structurally, without prior manifestation of any reasonably observable symptoms. It is therefore not possible to categorically state that any tree is 'safe'.



Qualifications and Experience

My name is Neil Wilson and I am the managing director of Beechwood Tree Care Ltd.

I have worked within the Arboricultural industry for over 20 years, during which I have gained a wealth of practical and theoretical experience and knowledge.

I started at the practical end, felling and pruning trees which I still do to this day, all be it only 1 day a week. At present my time is generally split between specifying and quoting for work, consultancy (looking at and providing advice on clients tree issues), practical tree work (out on site) and the day to day running of Beechwood Tree Care.

My work life involves looking at and working on many different types of trees, in different locations and for a broad range of clients. I've experienced most tree issues in person from identification, creating solutions to rectify problems, dealing with clients, neighbours and local authorities and overseeing/carrying out necessary works.

I've watched and learnt the effects of pruning first hand, I have in some cases been pruning the same trees for the last 15 years. I've noted the external visual symptoms and then having cut the tree down I have been able to see how bad they actually were.

This experience has given me a unique perspective on how trees as living organisms react to pruning and defects within their structure.

I consider myself to be an expert in the specifying of practical application of

- A. Pruning trees.
- B. Cable bracing.
- C. Sectional dismantling of trees using cranes.
- D. Submission of TPO and CA applications.

Whilst I have a wealth of experience and knowledge, I always keep in mind that I don't know everything. With this in mind I make sure I attend courses and seminars to learn new things and take on board other people's opinions.

On certain projects I consult with my peers from within the industry and on occasion bring in a specialist help to assist, I try to work alongside these specialists to gain an in depth understanding of their area of expertise.

By taking this approach my knowledge and experience continues to expand and my clients receive the best possible service.



I hold the following Arboricultural qualifications

City and Guilds

'Tree Surgery for Craftsman'

Streetworks 'Signing, lighting and guarding'

Lantra Awards

'Professional Tree Inspection' (Refreshed June 2014)

'Arboriculture and Bats - a guide for practitioners'

'Risk Assessment for Commercial Arboriculture'

'Woodchippers'

'Stump grinders'

NPTC

Chainsaw and Tree Climbing Units 10, 11, 16, 30, 31B, 32B, 36, 38, 39, 40, 41

PA1 and PA6, PA6A Safe Use of Pesticides

A03 Bracing and Supporting

IPAF

1b, 3a, 3b,

I have attended the following courses as part of my continued professional development.

Arboricultural Association

'Arboricultural Consultancy'

'Arboricultural Business Management Basics'

'Training Seminar for BS 5837'

'Training Seminar for BS 3998'

'Pest and Diseases'

Tree life

'Fungi recognition and response'

Forestry Commission

'Oak Processionary Moth Surveys'