

# TREE SURVEY

&

# ARBORICULTURAL ASSESSMENT REPORT

Trees At: 1 Barbon Close, Heatherside, Camberley

**Prepared for: PBS Holdings** 

February 2022

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# 1.0 INTRODUCTION

We are instructed by our client, Ms T Herd on behalf of PBS Holdings, to inspect significant trees within and adjacent the boundaries of 1 Barbon Close, Camberley. To provide an initial Arboricultural report in relation to the current, appearance, health and safety of any trees present together with their suitability for long-term retention. Additionally, we are to provide specifications relating to any remedial or management surgery works, as required.

We are advised that the property is currently a residential dwelling and is currently rented and our report is therefore to assess the potential influence of adjacent vegetation on the structure and fabric of the dwelling and to meet the conditions of mortgage lender and/or insurers as appropriate. Our advice has not been sought with regards to the Arboricultural issues relating to the requirements of British Standard 5837:2012 – **Trees in relation to design, demolition and construction – Recommendations.** The advice, guidance and recommendations contained within this report should not be used in support of any future development application to the Local Planning Authority. and we are not aware of any current or past claims for vegetation related damage to the property.

# 1.1 Clients Brief and Scope of Report

- 1.1.1 Our instruction has come from Ms T Herd on behalf of PBS Holdings.
- 1.1.2 This report will assess Arboricultural issues and will be measured by the current guidance and best industry practice.
- 1.1.3 We have not been supplied with accurate plans of the location of the property. Ordnance Survey plans have been used to provide the basis for our own data collection and reporting.
- 1.1.4 The likely tree constraints of this site have been assessed from the data collected during the site inspection and survey.

# 1.2 Documents

The following documents have been provided to assist the collection of site date and Arboricultural Impact Assessment:

#### None

# 1.3 Site Description

- 1.3.1 The survey site is located within the centre of the Heatherside residential estate and 1.93 miles due south-east of the main town of Camberley. The property comprises a two-storey detached residential dwelling, constructed circa 1970's and a large Common Oak [recently reduced and top a high standard] to the front and three Scots Pine within the enclosed rear garden.
- 1.3.2 The rear garden is small and consistent with adjacent properties, facing south-west and with a small level paved patio. Access to the rear garden area is available through a gated path to the left of the property.

- 1.3.3 At the time of survey, the rear garden was noted to contain no small/medium shrubs and three significant trees, all of which are mature Scots Pine which dominate the limited area.
- 1.3.4 The site and surrounding area were photographed to provide a visual record of the existing vegetation, and their contribution to the broader landscape of the area and can be found within Appendix B.

# 1.4 Tree Survey and Assessment

- 1.4.1 The tree survey was carried out in accordance with current industry best practice. Survey data is recorded and shown in Table 2.2 and relates solely to the three Scots Pines to the rear and not Oak T1 located to the front of the property.
- 1.4.2 We note 2 Oak trees within the rear garden of the property to the east and a small 3m Yew tree immediately outside the southern boundary fence. We do not include these within this report.

## 1.5 Constraints

- 1.5.1 Investigation with Surrey Heath Borough Council revealed an extant Statutory Control in the form of a Tree Preservation Order TPO 31/68. This is an Area Order and accordingly, any trees present over 75mm in diameter in 1968 would be subject to constraint. This applies therefore to both the Oak to the front garden and the three Scots Pines to the rear. Any remedial or management work to these trees other than the removal of dead wood only would require a formal application for the consent of the Local Planning Authority.
- 1.5.2 We are not aware of any other Statutory or legally binding constraints, such as covenants or Planning Conditions, in relation to vegetation within or adjacent the property boundaries.
- 1.5.3 All vegetation detailed within the report is within the client's ownership.

# 2.0 TABLES

#### 2.1 Table Notes and Table Captions

- 2.1.1 Table Notes: In accordance with best industry practice, the following is provided. Note: All height and crown spread measurements are digitally captured and recorded unless site location difficulty factors precluded access. All estimated measurements are marked as E. All measurements are made from ground level.
  - Reference number each tree or group of trees will be accorded a reference number which will be recorded on the site plan. A plastic or metal numbered tag with corresponding number may be used on occasions and recorded as having been used.
  - **Species** Common plant names will be used and scientific nomenclature used where possible.
  - Height will be recorded in metres.

- Stem diameter will be recorded in millimetres and measured at 1.5m above ground level adjacent to the tree or immediately above the root flare where trees are multi-stemmed.
- **Branch spread** measured and recorded in metres at the four compass points to provide a true representation of the crown profile.
- Crown clearance height measured and recorded in metres of crown clearance to adjacent ground level. Recorded as CC by way of report.
- Age class young, middle aged, mature, over mature, veteran.
- Physiological condition good, fair, poor, dead, and recorded as Form by way of report.
- **Structural condition** data collected and detailed to indicate the physical appearance and issues relating to health and safety such as decay.
- Life expectancy estimated in years [less than 10, 10 20 etc.]
- Category grading for each tree or group of trees U or A to C grading. Grading of trees is assessed by their current condition and environment and the suitability for long term retention within a property.

No	Species	<b>Ht</b> m	Stem diam mm	Branch Spread m	CC m	Age	Form	Preliminary management recs.	Est. rem. years	Cat
T1	Scots Pine	15.0	570	8.50 - <mark>E</mark>	2.25	М	Average	Remove all dead wood and stubs. Reduce upper canopy lateral spread by a max. 1m pruning branch tips back to suitable growing points within 1-2 years.	<20	С
T2	Scots Pine	20.0	750	8.00- E	5.50	М	Fair	Light thin by a maximum of 10% removing secondary growth only. Remove dead wood. Inspect large legion on north side of main stem from past fire damage. Within 2-3 years	<10	С
Т3	Scots Pine	15.5	510	6.00- <mark>E</mark>	10.0	М	Fair	Remove all dead wood and stubs. Inspect stem lesion on south side of main stem from past damage every 1- 2 years	<20	С

# 2.2 Tree Survey Tables

#### 3.0 ARBORICULTURAL IMPLICATIONS

#### 3.1 Arboricultural Implication Assessment

#### 3.1.1 Existing trees.

**Scots Pine T1.** Located within the rear garden of the property and close to the common boundary with the adjacent road, this is a mature tree with a generally spreading upper canopy form and typical of the species which often spreads either naturally or occasionally from storm or pest damage to the leading shoot. Inspection of this tree was open, and all observations and measurements were made from the subject property.

The crown profile of Scot Pine T1 is entire and balanced. The canopy has the greatest density of foliage of the three trees present. There is no evidence of current or past ivy infestation noted on other Pines within the general area. The main stem shows no signs of damage or structural compromise at this time. The use of a sounding mallet failed to indicate the presence of any advanced decay or cavity and there was no evidence of "stem fluting". The basal area is sparse grass and also shows no signs of past movement.

Pine T1 appears to be outwardly sound and healthy, with good foliar cover and annual extension growth consistent with a tree of this age and maturity.

Management works are currently required and detailed in the survey notes at 2.2 above. Long term management works would be of benefit to maintain the tree at current dimensions to limit its spread especially in relation to its future demands and potential physical influence on the property.

**Scots Pine T2**. Located within the rear garden of the property and within 7.64m of the rear elevation of the dwelling, this is a mature tree with a bifurcated [twin stem] form at 3m from ground level. Inspection of this tree was open, and all observations and measurements were made from the subject property.

The crown profile of Scot Pine T1 is entire and balanced albeit on two main stems. The canopy has below average density of foliage perhaps indicative of poor vigour and progressive decline. There is no evidence of current or past ivy infestation noted on other Pines within the general area.

The main stem shows no immediate signs of damage or structural compromise at this time. The use of a sounding mallet failed to indicate the presence of any advanced decay or cavity although there was evidence of "stem fluting". The basal area is sparse grass and also shows no signs of past movement.

The one potential area of concern would be the co-dominant form of the tree which bifurcates at approximately 3m above ground level. The tendency for the wood in a co-dominant union to split apart can be considered to be increased if there is a "bark inclusion" between the stems. As a result, the strength of the structure can become increasingly compromised. A high proportion of structural compromise and resultant tree failure is associated with unions featuring included bark.

Pine T1 appears to present some concerns for long term retention.

Management works are currently required and detailed in the survey notes at 2.2 above. Long term management options are included in the Conclusion below.

**Scots Pine T3.** Located within the rear garden of the property and within 10.78m of the rear elevation of the dwelling, this is a mature tree with a single stem. Inspection of this tree was open, and all observations and measurements were made from the subject property.

The crown profile of Scot Pine T1 is entire and balanced. The canopy has below average density of foliage perhaps indicative of poor vigour and progressive decline. There is no evidence of current or past ivy infestation noted on other Pines within the general area.

The main stem shows signs of damage with a 1m long lesion noted on the south side, possibly caused through past construction or fencing works. This is currently localised and of little significance. The use of a sounding mallet failed to indicate the presence of any advanced decay or cavity although there was evidence of "stem fluting". The basal area is used as the location of a trampoline.

Management works are minimal at this stage and detailed in the survey notes at 2.2 above. Regular inspection would be of benefit to maintain the tree at current dimensions to limit its spread especially in relation to its future demands and potential physical influence on the property.

#### 3.1.2 Trees in relation to structure of the dwelling

With regards to any possible influence of the listed vegetation on the structure and fabric of the dwelling or those adjacent, through desiccation of soils beneath foundations. Close inspection of the dwelling revealed no evidence of current or past damage to the structure which could be associated with drying of soils beneath foundations or physical damage from roots of the Pines or the adjacent third-party Oak trees.

Reference to the British Geological survey drift maps indicates the following data for this area of Blackwater:

**Bedrock geology description**: Camberley Sand Formation - Sand. Sedimentary Bedrock formed approximately 34 to 56 million years ago in the Palaeogene Period. Local environment previously dominated by shallow seas.

These rocks were formed in shallow seas with mainly siliciclastic sediments (comprising of fragments or clasts of silicate minerals) deposited as mud, silt, sand and gravel.

Vegetation related clay shrinkage subsidence has not been reported as an issue within this general area in the past and it is unlikely therefore that subsoils would be prone to volumetric change in the presence of significant vegetation such as the Oak to the front or the third-party Oak trees.

Drainage inspection covers were not opened or inspected and we have not been advised of any current or past drainage issues. Tree roots themselves rarely damage drains but will however exploit the breakdown of an aging system [clay pipes] and can result in the washing out of fines beneath foundations and subsequent damage. This is not a material consideration in this instance. All tree management works as recommended above are to be carried out by a qualified specialist contractor and in accordance with **BS3998: 2010 – Recommendation for Tree Work**. The contractor should also have a minimum of £5m of Public Liability insurance cover.

**N.B.** The recommended works may require a formal application to the local planning authority for consent if any future Statutory Control is put in place by the local Council.

#### 4.0 CONCLUSION

With regards to any perceived influence on the structure of the dwelling through vegetation related subsidence, Scots Pine has a low species potential range of influence. *"The Kew Tree Root Survey"* [Cutler and Richardson - 1981] notes that in cases where Scots Pine are the substantive cause of tree related subsidence, the tree was within a maximum of 8m. This is in stark contrast to other tree species such as Oak and Poplar [30m] and Willow [40m]. In the paper **"The relationship between trees, distance to buildings and subsidence events on shrinkable clay soil"** [Mercer, Reeves & O'Callaghan – 2011], Scots Pine account for a mere 0.95% of cases of damage on clay soils.

However, vegetation related subsidence only occurs on clay soils which are subject to volumetric change and soils in your immediate area are classified as being *"Camberley Sands"* and desiccation of soils by tree roots is not a consideration in this instance.

The following tree management recommendations are made:

#### Pine T1.

Remove all dead wood and stubs. Reduce upper canopy lateral spread by a maximum of 1m, pruning branch tips back to suitable growing points within 1-2 years. Inspect on a 12–24-month cycle.

#### Pine T2.

**Option 1:** Remove all dead wood and stubs. Lift lower "dropper" branches to provide a 5m ground clearance Inspect on a 12–24-month cycle.

**Option 2:** Remove all dead wood and stubs. Install Cobra dynamic tree support system [or similar] and reduce upper crown by a maximum of 1.5 - 2.0m to reduce stress on co-dominant stems. Inspect on a 12-month cycle. **See Note below**.

**Option 3:** Remove entirely to ground level and replace with a minimum large standard fastigiate form tree species. The removal of this one tree would have an insignificant impact on the landscape profile of the location and will allow for the start of a phased removal and replacement programme to ensure the maintenance of visual amenity for the long term. It is likely a Planning Inspector would concur with this view should an appeal be required.

**N.B.** Option 2 includes cable bracing. We rarely advocate the use of such systems for a number reasons unless the tree has a rarity or historic value. The main reasons are:

- It will render the tree cable-dependent
- It involves regular maintenance
- It increases the cost of removal
- Installing and modifying the cables is expensive
- It changes the tree's dynamics
- Cable systems are frequently installed poorly and ineffectively.

## Pine T3

Remove all dead wood and stubs. Reduce upper canopy lateral spread by a maximum of 1m, pruning branch tips back to suitable growing points within 1-2 years. Inspect on a 12–24-month cycle.

In conclusion, we consider the above management works to be consistent with maintaining the benefits the trees provide to the landscape profile of the property and the wider landscape character of the area. Watts Consultancy considers the listed vegetation to be generally in an acceptable condition and appearance at this stage, with reservation regarding Pine T2 and whilst not presenting an immediate or urgent current threat to the property, the trees should be managed to prevent a future risk and to prevent them from outgrowing the location in the long term.

#### 5.0 CLOSURE

This report has been prepared by Watts Consultancy with all reasonable skill, care and diligence and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of PBS Holdings and agents acting on their behalf. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from Watts Consultancy.

Watts Consultancy disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

# **APPENDIX A**



# APPENDIX B



**Photograph 1.** Oak T1 to the front of the property recently reduced.



Photograph 2. Two third party Oak and Pines T1-T3 from the north of the property.



Photograph 3. Pines T1, T2 and T3 from left to right respectively.



Photograph 4. Pine T1.



Photograph 5. Pine T2 showing tightly forked co-dominant stems.



Photograph 6. Pine T2 with included bark at the co-dominant union from the south side.



Photograph 7. Pine T3.



Photograph 7. Lesion to south side of Pine T3.

# **APPENDIX C**

#### Summary of Experience and Capability

Having entered Arboriculture in 1977, Paul trained with Portsmouth City Council before attending Merrist Wood Agricultural College to gain professional qualification and subsequently returning to Portsmouth as a Craftsman Arborist and foreman for 2 years.

Paul moved on to establish a contracting business in Hampshire in 1984 and operated within the South of England with prestige clients, such as the Ministry of Defence [PSA] and many Local Authorities. He also provided Consultancy services to Portsmouth City, East Hampshire District and Havant Borough Council's for many years. In 1993, he accepted an opportunity to join the Royal Borough of Windsor & Maidenhead as Senior Tree & Landscape Officer.



In October 1999 Paul was appointed as a Consulting Arboriculturist with OCA UK Limited operating throughout the United Kingdom, specialising in tree related subsidence of low-rise buildings, planning and development matters, and responsible for surveying services, arboricultural training and health and safety. A new office location was established within the Thames Valley in 2002 and Paul developed this business model as Regional Operations Manager with a staff of 25 and a turnover more than £750,000 p.a. until May 2007.

**Continuing professional development.** Paul has been actively involved in the formation and running of bodies such as the Thames Valley Tree Officers Forum, the National Association of Tree Officers [NATO] as an advisor and subsequently a Director. He also acted as the Press Officer and a Director of the UK & Ireland chapter of the International Society of Arboriculture [ISA] where he was also elected as Vice President of the Chapter.

Paul has also have been a keynote speaker at several seminars and conferences and written several papers, such as "A Critical Review of a Tree Preservation Order Best Practice System" for Planning Week and which has been subsequently reprinted in several other journals.

The publication of the Arboricultural Journal Vol. 33 contains a research paper entitled **"The Relationship between Trees, Distance to Buildings and Subsidence Events on Shrinkable Clay Soil"** by Mercer, Reeves & O'Callaghan. Paul was a member of the peer review group alongside Dr. Gary Watson, Dr. Glynn Percival and Dr. David Cutler.

Paul provides Arboricultural services to several Local Authorities and provided support to the Planning department of Surrey Heath Borough Council on all planning and statutory related matters from 2011 until 2020.

