



Arboricultural Report

52 SOUTHLEIGH ROAD
HAVANT
HAMPSHIRE
PO9 2QH

REVISION 2 JULY 2016
Revised in response to changed site layout

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1.0 INTRODUCTION

- 1.1 This report was instructed by Mr Cook with regard to the proposed development at 52 Southleigh Road, Havant, Hampshire. The report details all trees over 75mm at 1.5m above ground level that are relevant to the siting of the proposed development. The position of the trees on the site is illustrated at **Appendix 1** on the plan.
- 1.2 The existing tree stock has been identified and graded in line with the current British Standard BS 5837 2012: Trees in relation to design, demolition and construction - Recommendations to enable informed decisions to be made regarding tree retention. The report also details methods of construction to be implemented to safeguard the retained trees.
- 1.3 This report details the constraints placed on the proposed development from the rooting area of the trees below ground and above ground by their size and position.
- 1.4 This report will therefore inform the planning process for the proposed development to minimise any negative impact on the existing tree stock and ensure that retained trees shall be in harmony with the proposed development enabling their long-term retention.

2.0 SITE VISIT

- 2.1 The site visit was undertaken on 10th December 2015. The trees were surveyed visually, externally and from ground level only. No samples or internal decay detection readings were taken for further analysis. All dimensions have been measured unless stated otherwise. Weather conditions at the time of the survey were dry, still and overcast.

3.0 SITE DESCRIPTION

- 3.1 The site is located in the Denvilles locale of Havant, lying between the cities of Portsmouth and Chichester. The property is located within a residential area and currently comprises a detached house, with detached garage and a shed. The majority of the garden is laid to lawn with mature trees, shrubs and hedges.

4.0 TREE SURVEY DATA

In accordance with BS 5837 2012: Trees in relation to design, demolition and construction – Recommendations, the characteristics of single-stemmed trees over 75mm stem diameter measured at 1.5m above ground level have been recorded and they have been categorised in accordance with Table 1 of BS5837: 2012. The following tree data tables should be read in conjunction with the annotated site plan shown at **Appendix 1** and the legend on the page following the tables.

Tree Number and Species	Height (m)	DBH (mm)	Branch Spread (m)				Existing Height Above Ground Level of Canopy and 1 st Significant Branch (m)	Age Class	Estimated Remaining Contribution (Years) & Physiological Condition	Comments	BS Category & Tree Work Necessary for Development	RPA (m ²)	RPA (m)
			N	S	E	W							
T1 Oak <i>Quercus</i> sp.	10	500	5	5.5	4.5	5*	2 2 Northwest	SM	40 + Good	Dense Ivy from ground level into crown limited inspection. Minor past management, old pruning stubs. Form typical of species. Good vigour. No immediate work required. Advisory: Sever and remove Ivy. Re-inspect.	A1 Retain and protect	113	6
T2 Silver Birch <i>Betula pendula</i>	15	390	4	3.5	4.5	3	2 3 North	EM	20 Good	Sound base and lower stem with no obvious signs of defects. Ivy on stem to 2m. Minor past management. Form typical of species. Good vigour. No immediate work required.	A1 Retain and protect	72	4.8
T3 Common Beech <i>Fagus sylvatica</i>	7.5	240	4	4.5	5	6	0.5 2 West	SM	40 + Good	Sound base and lower stem with no obvious signs of defects. Ivy on lower stem. Minor past management. Minor Squirrel damage. Form typical of species. Good vigour. Washing line and bird feeder attached. No immediate work required.	A1 Retain and protect Crown reduce by 1m south and east. Crown raise to 2.5m	150	6.9

Tree Number and Species	Height (m)	DBH (mm)	Branch Spread (m)				Existing Height Above Ground Level of Canopy and 1 st Significant Branch (m)	Age Class	Estimated Remaining Contribution (Years) & Physiological Condition	Comments	BS Category & Tree Work Necessary for Development	RPA (m ²)	RPA (m)
			N	S	E	W							
T4 Robinia <i>Robinia pseudoacacia</i>	9	380 @ 0.3	3	5*	4	4.5	2 2.5 East	SM	20 Good	Sound base. Stem bifurcates at 0.4m, union currently sound. Form typical of species. Good vigour. No immediate work required.	B1 Retain and protect	64	4.5

Key to Terms

- Identification numbers have been used and correspond to the site plan shown at **Appendix 1**.
- Vegetation type has been categorized as one of the following: Tree (T), Hedge (H), Shrub (S), Group (G), Stump (ST)
- Species are listed by common and botanical name where appropriate.
- Where possible, measurements have been made in accordance with the conventions detailed below. Where this was not possible, due to site conditions or the vegetation being in third party ownership, dimensions have been estimated. * Indicates estimated measurement.
- Height has been recorded to the nearest half metre.
- Stem diameter has been measured at 1.5m and recorded in millimetres, except where forking or swelling has meant that this is not possible, stem diameter has then been recorded at the narrowest point below these features. Multi-stemmed trees have had individual stems measured at 1.5m. Where this was not possible the actual height where the diameter was measured is recorded. G.L. = Ground Level.
- Crown spread has been recorded to the nearest half metre. Rounded up for dimensions up to 10m and the nearest whole metre for dimensions over 10m.
- Age class has been recorded as follows:

Y	Young recently planted or establishing tree that could be transplanted without specialist equipment, i.e. up to 12-14cms-stem girth.
S/M	Semi mature. An established tree but one that has not reached its potential ultimate height and has significant growth potential.
E/M	Early mature. A tree reaching its ultimate potential height, whose growth rate is slowing down but will increase in stem diameter and crown spread, and has a safe life expectancy.
M	Mature. A mature specimen with limited potential for any significant increase in size but with a reasonable safe life expectancy.
O/M	Over mature. A senescent or moribund specimen with a limited safe life expectancy. Possibly also containing significant structural defects with attendant safety and/or duty of care implications.
- Physiological Condition has been recorded as Good, Fair or Poor.
- Recommendations for tree management have been based on current Arboricultural Best Practice as set out by the Arboricultural profession and all relevant publications.

5.0 TREE QUALITY ASSESSMENT

- 5.1 The trees have been categorized according to BS5837: 2012 as a guide to their condition and value in terms of visual amenity.
- 5.2 The trees are coloured on the plan attached at **Appendix 1** and the colours are explained in the key of the plan.

6.0 ROOT PROTECTION AREAS

- 6.1 In accordance with BS5837: 2012, the root protection area (RPA) of the trees has been calculated and shown in the following table and on the plan attached at **Appendix 2**.

Table 2 Root Protection Area

Tree No.	RPA in m ²	Recommended radial distances for RPAs (in metres from the centre of the tree to protective fencing)
T1	113	6
T2	72	4.8
T3	150	6.9
T4	64	4.5

7.0 LEGAL CONSTRAINTS

- 7.1 The site is subject to a Tree Preservation Order TPO 1026 served by Havant Borough Council 1979. The TPO shows three trees T1 Silver Birch, T2 Cupressus macrocarpa and T3 Cupressus macrocarpa. The Land Charges department and the Tree Officer of the Council have both confirmed that none of the trees are still present on the site. It is advised given this, that the owner should apply to the Council for the Tree Preservation Order to be removed.
- 7.2 Since the original arboricultural report the author has been advised that a new TPO has been served on the site covering the Oak at the front, the Common Beech along the Hallet Road side of the site and possibly on the Silver Birch to the north of the front of the existing dwelling at 52 Leigh Road. At the time of writing this has yet to be confirmed by Havant Borough Council but enquiries are on-going.

8.0 ARBORICULTURAL IMPLICATIONS ASSESSMENT

8.1 Description of Proposed Development

It is proposed to seek planning permission for the development of two detached properties within the grounds. One property will use the existing access from Southleigh Road and the other will require a new driveway from the adjacent Hallet Road.

8.2 Drawings Used

A plan showing the revised site layout has been used for this report drawing number 004 Rev. G Scale 1: 200 @ A3 was used to prepare the Tree Quality Assessment Plan **Appendix 1**, the Root Protection Area Plan **Appendix 2** and the Tree Protection Plan found at **Appendix 3**.

8.3 Direct Loss of Trees

The proposal will not require the removal of any of the trees. Minor remedial work to T3 Common Beech will be required.

8.4 Position of Trees in Relation to Proposed Development

It is not considered that the proposal will increase future pressure to fell any trees retained on the site.

8.5 Protective Barriers and Ground Protection

Protective Barriers

Protective barriers in accordance with Figure 2 of BS 5837: 2012 (**Appendix 4**) should be erected around the trees to be retained. The fencing is to be supported with an appropriate stabilizing system (**Appendix 5**). Where possible, the positions of these fences should be based on a distance equivalent to the radius of each tree's RPA. All site personnel shall be made aware of the importance of root protection areas and shall ensure that they are properly maintained at all times. Once established the fencing will define the boundary of the Construction Exclusion Zone (CEZ).

Once erected all weather signage should be displayed stating 'Construction Exclusion Zone'.

No development works shall commence within the CEZ until written confirmation has been obtained from the Local Planning Authority. The project Arboriculturalist shall supervise all work within the RPAs.

Ground Protection for Pedestrian Movement and Scaffolding Support

A layer of 100mm deep woodchip is to be placed onto a geotextile membrane and a single thickness layer of scaffold board or similar to be placed on top. The extent of this is shown at **Appendix 3** Tree Protection Plan.

8.6 Changes in Ground Surface within RPAs

The access from Hallet Road will be within the RPA of T3 Common Beech. It is proposed to install a no-dig driveway under arboricultural supervision to keep root disturbance to a minimum. The details of its methodology are to be found in the arboricultural method statement section of this report. The extent of this is shown at **Appendix 3** Tree Protection Plan.

8.7 Changes in Ground Level within the RPA

There is no proposed change in ground level within the RPAs of any of the retained trees.

8.8 Foundations

The foundation within the RPA of T3 Beech is to be a pile and ground beam design. This will be installed under arboricultural supervision to ensure no damage to any significant roots in this area.

8.9 Access for Contractors and Storage of Materials.

There is ample space on the site outside of the RPAs of the trees.

8.10 Services

No overhead services are proposed.

No underground services are proposed within the RPAs of any of the retained trees.

9.0 CONCLUSIONS

9.1 The trees on the site are predominately of a high and moderate quality providing a screening/softening role.

9.2 No trees are to be removed to facilitate the proposal.

- 9.3 The establishment of the protective barriers and ground protection should be supervised by the Project Arboriculturalist and confirmation of adherence with the Arboricultural Method Statement and Tree Protection Plan should be made to the Local Authority Tree Officer before any development starts.
- 9.4 The proposed building in to the rear of the existing property marginally the breaches the RPA of T3 Common Beech, the use of supervised specialist construction techniques will ensure disruption is minimal and it is not considered it will be detrimental to the health or longevity of the tree.
- 9.5 The new access driveway from Hallet Road will breach the root protection area of T3 Common Beech, but the use of supervised specialist construction techniques will ensure disruption is minimal and it is not considered it will be detrimental to the health or longevity of the tree.
- 9.6 Given these conclusions the following section 'Arboricultural Method Statement' details the recommendations/methodology for the construction of the proposed works in terms of the effect on trees on the site.

Details within this AIA are considered correct at the time of writing but modifications may need to be made as more information becomes available.

Important Notes

The comments made with regard to the health and stability of the trees within this report were correct at the time of inspection. It should be recognized that trees are dynamic structures that can never be completely predictable and may become unstable or partially unstable even in average weather conditions. Changes can occur not only to environmental triggers but also in response to biological or mechanical events.

Inspection Caveats

The inspection was carried out from ground level. Binoculars were used to observe features higher in the canopies.

Foliage, extension growth and/or bud proliferation were assessed visually.

No soil or tissue samples were taken during this inspection.

No invasive diagnostic equipment was used to detect decay.

A nylon hammer was used to test for possible decay and dead or loose bark around the lower stems and bases of the trees.

Ivy has been removed during the inspection process only where reasonable and practicable. Where this has not been possible it has been noted as a recommendation to be removed to allow detailed re-inspection.

No tree is ever absolutely safe due to the unpredictable laws and forces of nature.

ARBORICULTURAL METHOD STATEMENT**1.0 CONTACT DETAILS**

Developer	Unknown at Present	
Planning Consultant	Chris Miell MRTI	Pure Town Planning Limited 1 Hill Rise, Twyford, Hampshire, SO21 1QH 01962 710317 chris@puretownplanning.co.uk
Arboricultural Consultant	Sarah Johnston M.Arbor.A. B.Sc. (Hons.) Arboriculture	Johnston Tree Consultancy 16 Manor Close, Wickham, Hampshire, PO17 5BZ 07814 403146 johnstontreeconsultancy@gmail.com
Local Authority Case Officer	Unknown at present	Havant Borough Council Public Service Plaza, Civic Centre Road, Havant, PO9 2AX 02392 44 60 19 planning.development@havant.gov.uk
Local Authority Tree Officer	Jamie Gargett	Havant Borough Council Public Service Plaza, Civic Centre Road, Havant, PO9 2AX 02392 44 60 19 jamie.gargett@havant.gov.uk

2.0 INTRODUCTION

- 2.1 This Arboricultural Method Statement (AMS) has been produced in line with BS 5837 2012: Trees in relation to design, demolition and construction-Recommendations to aid the successful retention of trees on and adjacent to the proposed development at 52 Southleigh Road, Havant, Hampshire. No development shall take place on the site until this document has been submitted to and approved in writing by Havant Borough Council.
- 2.2 This document sets out the methodology for all proposed works that affect trees on and adjacent to the site. Compliance with this method statement will be a requirement of all relevant contracts associated with the development proposals. Copies of this document will be available on site for inspection.
- 2.3 For details of trees to be retained and location and types of special protection methods, reference should be made to the Tree Protection Plan (TPP). A copy of which should be displayed prominently on site.

3.0 PHASING OF DEVELOPMENT

3.1 Phase 1 – Pre Development Phase

Tree Work

T3 Common Beech should be crown raised to 2.5m and crown reduced by 1m on the south and east sides. The work is to be carried out by a qualified tree surgeon and in line with BS3998:2010 Tree Work – Recommendations.

Protective Barriers

Tree protection measures to be installed under the supervision of the retained Arboriculturalist for all the trees.

The protective barriers erected will be in accordance with Figures 2 and 3 of BS 5837:2012 (**Appendix 4 and 5**) and will form the boundary of the construction exclusion zone (CEZ). Where feasible, the positions of the fencing will be based on a distance equivalent to the radius of each tree's RPA. Once erected all weather signage should be displayed stating 'Tree Protection Area Keep Out'.

Ground Protection

A layer of 100mm deep woodchip is to be placed onto a geotextile membrane and a single thickness layer of scaffold board or similar to be placed on top.

Driveway Access within the RPA of T1 Oak and T3 Common Beech

This is to be constructed as follows ensuring a gap of 500mm from the stems to allow for future growth and movement:

Ground preparation will ensure surface is as level as possible using hand tools only. Sharp sand or no fines aggregate will be used where it is necessary to infill larger areas.

A geo-textile membrane such as Fibretex F4M is to be secured in place with pins.

Placement of the cellular confinement system **Cell Web 100mm** will be stretched into position and pinned into place by reinforced steel pins.

The web is to be filled with 20/40 clean angular granite based aggregate raked into place. Note; as soon as the Web has been filled it can be used without causing damage to the rooting area below.

Roll out techniques should be used to ensure machinery is above the sub-base layer at all times.

Edging is to be comprised of sleepers pinned in place or gabions or other non-invasive ground contact structures.

Final surface details have not yet been provided but could be block pavers or gravel.

Area for Mixing Materials and Storage

Materials and machinery are to be stored outside of the RPA of any retained tree as shown on the Tree Protection Plan @ **Appendix 3**.

3.2 Phase 2 – Construction Phase

Protective Barriers

Once established the protective barriers are not to be moved without written consent from Havant Borough Council.

Foundation Installation

A pile and ground beam foundation will be installed within the RPA of T3 Common Beech under arboricultural supervision to ensure minimal disruption to the rooting area of the tree.

4.0 GENERAL ARBORICULTURAL CONSIDERATIONS

- 4.1 Protective barriers must be regarded as sacrosanct, and must only be moved under direct supervision of the LPA or named Arboriculturalist to enable the undertaking of works within the RPAs of trees, as set out in this AMS, and approved in writing by the LPA. It is of paramount importance the fencing is repositioned correctly after any agreed operations.
- 4.2 No materials, chemicals, machinery or vehicles must be stored within the RPAs as defined on the TPP and identified on site by protective fencing and aboveground root protection.
- 4.3 Ground protection must not be lifted or removed without prior consultation with the LPA or named Arboriculturalist.
- 4.4 Damage caused to protective fencing or ground protection must be reported to the site supervisor and the named Arboriculturalist to ensure appropriate repair.
- 4.5 Any damage to retained trees must be reported without delay to the site supervisor, the LPA and the named Arboriculturalist so appropriate remedial work can take place without delay.
- 4.6 No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 5 metres of the trunk of the retained trees or any other trees on the site.
- 4.7 No fires will be lit on site.
- 4.8 Notice boards, telephone cables or any other signage or services are not to be attached to any part of the retained trees.

5.0 SUPERVISION AND MONITORING

- 5.1 The project Arboriculturalist shall be responsible for monitoring/supervising the following works.
 - Establishment of the access driveway within the RPAs of T1 Oak and T3 Common Beech
 - Establishment of protective barriers to form the CEZ.
 - Establishment of the ground protection.
 - Installation of the pile and ground beam foundation.
- 5.2 The project Arboricultural Consultant will be responsible for periodical monitoring and will inspect the protective fencing to ensure the CEZ is intact and monitor any works necessary within the exclusion zone. A record of site visits will be maintained for inspection on site and copies forwarded to the agent and planning authority when requested.

Please note this AMS is not a contract. The retention and services of a project Arboriculturist for supervision and monitoring must be agreed prior to commencement of construction operations.



CREDENTIALS OF THE AUTHOR

Sarah Johnston M. Arbor. A., B.Sc. Arboriculture has worked in the Arboricultural profession for thirteen years. Her experience has been gained from undertaking practical tree work as well as working as an Arboricultural Surveyor and Tree Officer for Eastleigh and Havant Borough Councils respectively. In addition Sarah worked as a consultant for Marishal Thompson for two years from 2005 when she became self-employed. Sarah is a Professional Member of the Arboricultural Association and holds Professional Indemnity.