



## Arboricultural Report

3 OLD BARN GARDENS  
LOVEDEAN  
HAMPSHIRE  
PO8 9XL

MAY 2018

16 Manor Close, Wickham, Hampshire, PO17 5BZ  
07814 403146  
[johnstontreeconsultancy@gmail.com](mailto:johnstontreeconsultancy@gmail.com)

## C O N T E N T S

### Arboricultural Report

|     |                                               |    |
|-----|-----------------------------------------------|----|
| 1.0 | Introduction                                  | 3  |
| 2.0 | Site Visit                                    | 3  |
| 3.0 | Site Description                              | 3  |
| 4.0 | Tree Survey Data                              | 3  |
| 5.0 | Tree Quality Assessment                       | 7  |
| 6.0 | Root Protection Areas                         | 7  |
| 7.0 | Legal Constraints                             | 7  |
| 8.0 | Arboricultural Implications Assessment        | 8  |
| 9.0 | Conclusions                                   | 10 |
|     | <i>Important notes and Inspection caveats</i> | 11 |

### Arboricultural Method Statement

|     |                                       |    |
|-----|---------------------------------------|----|
| 1.0 | Contact details                       | 12 |
| 2.0 | Introduction                          | 13 |
| 3.0 | Phasing of Development                | 13 |
| 4.0 | General Arboricultural Considerations | 14 |
| 5.0 | Supervision and Monitoring            | 15 |
|     | <i>Authors Credentials</i>            | 15 |

|                   |                                                                                   |
|-------------------|-----------------------------------------------------------------------------------|
| <b>Appendix 1</b> | Tree Survey Plan showing Tree Quality Categories                                  |
| <b>Appendix 2</b> | Root Protection Area Plan                                                         |
| <b>Appendix 3</b> | Tree Protection Plan                                                              |
| <b>Appendix 4</b> | Extract from BS5837:2012 – Figure 2 Default Specification for Protective Fencing  |
| <b>Appendix 5</b> | Extract from BS5837:2012 – Figure 3 Examples of Above-Ground Stabilizing Systems. |

## **1.0 INTRODUCTION**

- 1.1 This report was instructed by Mr Green. The report details all trees over 75mm at 1.5m above ground level that are relevant to the siting of the proposed development at 3 Old Barn Gardens, Lovedean, Hampshire. The position of the trees on the site is illustrated at **Appendix 1** on the site 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 15th May 2018. 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 sunny and still.

## **3.0 SITE DESCRIPTION**

- 3.1 The site is located on the north side of the village of Lovedean, in a semi-rural residential area. Currently the site comprises a detached family home with a detached garage. The rear garden is laid to lawn with established shrubs and several mature trees.

## **4.0 TREE SURVEY DATA**

- 4.1 In accordance with British Standard BS 5837 2012: Trees in Relation to Design, Demolition and Construction - Recommendations, the characteristics of trees over 75mm stem diameter measured at 1.5m above ground level (or immediately above root flare if multi-stemmed) have been recorded. The following tree data tables should be read in conjunction with the annotated site plan shown at **Appendix 1** and the legend after the tables.

| Tree Number and Species                       | Height (m) | DBH (mm)   | Branch Spread (m) |   |   |   | Existing Height Above Ground Level of Canopy and 1 <sup>st</sup> Significant Branch (m) | Age Class | Estimated Remaining Contribution (Years) & Physiological Condition | Comments                                                                                                                                                                                                | BS Category & Tree Work Necessary for Development | RPA (m <sup>2</sup> ) | RPA (m) |
|-----------------------------------------------|------------|------------|-------------------|---|---|---|-----------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------|---------|
|                                               |            |            | N                 | S | E | W |                                                                                         |           |                                                                    |                                                                                                                                                                                                         |                                                   |                       |         |
| T1<br>Common Ash<br><i>Fraxinus excelsior</i> | 23         | 900        | 5                 | 6 | 5 | 5 | 4<br>6 East                                                                             | M         | 20-40<br>Good                                                      | Subject of TPO 1348. Ground around root plate historically lowered. Ivy on lower stem. Stem bifurcates at 2m; swollen branch union currently appears sound. Past management, good wound occlusion.      | B2<br>Retain and protect                          | 366                   | 10.8    |
| T2<br>Common Ash<br><i>Fraxinus excelsior</i> | 24         | 980        | 5                 | 5 | 5 | 5 | 4<br>5 East                                                                             | M         | 20-40<br>Good                                                      | Subject of TPO 1348. Ground around root plate historically lowered. Stem bifurcates at 2m; swollen branch union currently appears sound. Past management, good wound occlusion.                         | B2<br>Retain and protect                          | 430                   | 11.7    |
| T3<br>Common Ash<br><i>Fraxinus excelsior</i> | 12         | 520 @ 0.5m | 5                 | 5 | 5 | 4 | 2<br>3 East                                                                             | EM        | 20-40<br>Good                                                      | Limited inspection of base due to shrubs and Ivy. Stem bifurcates at 0.9m, north stem again at 2m. Unions currently appear sound. Minor past management. Wooden structure built between scaffold limbs. | B2<br>Retain and protect                          | 124                   | 6.3     |

| Tree Number and Species                       | Height (m) | DBH (mm) | Branch Spread (m) |     |     |     | Existing Height Above Ground Level of Canopy and 1 <sup>st</sup> Significant Branch (m) | Age Class | Estimated Remaining Contribution (Years) & Physiological Condition | Comments                                                                                                                                                                                      | BS Category & Tree Work Necessary for Development | RPA (m <sup>2</sup> ) | RPA (m) |
|-----------------------------------------------|------------|----------|-------------------|-----|-----|-----|-----------------------------------------------------------------------------------------|-----------|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------|---------|
|                                               |            |          | N                 | S   | E   | W   |                                                                                         |           |                                                                    |                                                                                                                                                                                               |                                                   |                       |         |
| T4<br>Norway Spruce<br><i>Picea abies</i>     | 18         | 620      | 3.5               | 3.5 | 3.5 | 3.5 | 2<br>6 North                                                                            | M         | 20-40<br>Good                                                      | Subject of TPO 1348. Adjacent to gravel path, historic soil compaction. Green house under crown on raised area. Ivy on stem extends to crown break. Very minor die back at a few branch tips. | B2<br>Retain and protect                          | 177                   | 7.5     |
| T5<br>Common Ash<br><i>Fraxinus excelsior</i> | 21         | 680 6    | 6                 | 6   | 6   | 6   | 3<br>4 South                                                                            | M         | 20<br>Fair                                                         | Dense Ivy extends up stem, scaffold limbs and into crown limiting inspection. Minor past management. Die back at some branch tips. Some buds have failed to burst at time of inspection.      | B2<br>Retain and protect                          | 206                   | 8.1     |
| T6<br>Common Ash<br><i>Fraxinus excelsior</i> | 20         | 780      | 5                 | 7   | 5   | 5   | 2<br>5 South                                                                            | M         | 20<br>Fair                                                         | Dense Ivy extends up stem and onto scaffold limbs limiting inspection. Minor past management. Die back at some branch tips. Some buds have failed to burst at time of inspection.             | B2<br>Retain and protect                          | 272                   | 9.3     |

### **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:
 

|            |                                                                                                                                                                                                    |
|------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Y</b>   | Young recently planted or establishing tree that could be transplanted without specialist equipment, i.e. up to 12-14cms-stem girth.                                                               |
| <b>S/M</b> | Semi mature. An established tree but one that has not reached its potential ultimate height and has significant growth potential.                                                                  |
| <b>E/M</b> | 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.                |
| <b>M</b>   | Mature. A mature specimen with limited potential for any significant increase in size but with a reasonable safe life expectancy.                                                                  |
| <b>O/M</b> | 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 <sup>2</sup> | Recommended radial distances for RPAs (in metres from the centre of the tree to protective fencing) |
|---------|-----------------------|-----------------------------------------------------------------------------------------------------|
| T1      | 366                   | 10.8                                                                                                |
| T2      | 430                   | 11.7                                                                                                |
| T3      | 124                   | 6.3                                                                                                 |
| T4      | 177                   | 7.5                                                                                                 |
| T5      | 206                   | 8.1                                                                                                 |
| T6      | 272                   | 9.3                                                                                                 |

## 7.0 LEGAL CONSTRAINTS

- 7.1 Havant Borough Council mapping system shows that trees T1, T2 and T4 are subjects of a Tree Preservation Order number TPO1348. The site does not fall within a Conservation Area. Prior to any tree work being undertaken this should be confirmed in writing. The status of the other trees on site should also be confirmed.

## **8.0 ARBORICULTURAL IMPLICATIONS ASSESSMENT**

### **8.1 Description of Proposed Development**

It is proposed to establish an outbuilding to the south of the property and an extension on the rear.

### **8.2 Drawings Used**

A site plan showing the existing and proposed site layouts was provided at the time of survey, scale 1: 500. It has been used to prepare the Tree Quality Assessment Plan (**Appendix 1**), the Root Protection Area Plan (**Appendix 2**) and the Tree Protection Plan (**Appendix 3**).

### **8.3 Direct Loss of Trees**

No trees inspected are to be removed to facilitate this development.

### **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

Where machinery requires access within the RPAs the ground will be protected with a layer 150mm deep woodchip, placed upon a geotextile membrane, with proprietary inter-linked ground protection boards on top.

#### 8.6 Changes in Ground Surface within RPAs

There are no proposed changes of ground surface within the RPAs of any retained tree except where the rear extension slightly breaches the RPAs of T1 Ash and T2 Ash. Some of this is already laid to patio.

#### 8.7 Changes in Ground Level within the RPA

There are no proposed changes in the existing ground levels within the RPAs of any retained tree.

#### 8.8 Services

No overhead services are proposed.

Details of underground services have not been provided at the time of writing, it may be given the whole area is RPA necessary to run the power feed above ground.

#### 8.10 Foundations within RPAs

##### Rear Extension

The foundations of the rear extension will breach the RPAs of T1 Ash and T2 Ash. Exploratory excavations will determine rooting patterns and aid foundation design.

##### Outbuilding

The outbuilding will breach the RPAs of T1 Ash, T2 Ash, T3 Ash and T4 Norway Spruce. However it is proposed to establish this on the raised area on which the greenhouse currently stands. It is unclear at this stage if the foundations will extend beyond this area but it is not considered, if located where shown on the plans, that it will be detrimental to the trees.

If it transpires that it will breach the RPAs further than the already existing raised area exploratory excavations maybe needed to determine rooting pattern and foundation redesign.

#### 8.11 Access for Machinery and Site Storage

Machinery will require access within the RPAs of T1 Ash, T2 Ash, T3 Ash and T4 Norway Spruce. Ground protection will be placed upon the existing hard standing and gravel to ensure no additional compaction within the root plates of the retained trees materials will be stored outside of the Construction Exclusion Zone of the retained trees.

### 9.0 CONCLUSIONS

- 9.1 The trees are predominately of a good quality providing a screening/softening role.
- 9.2 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.
- 9.3 Exploratory excavations will be undertaken under arboricultural supervision. These will be hand dug the width of the proposed foundation to a depth of 600mm and the location of any significant roots noted if found.
- 9.3 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**

|                                     |                    |                                                                                                                                                                                                       |
|-------------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Developer</b>                    | Unknown at present |                                                                                                                                                                                                       |
| <b>Architect</b>                    | Chris Curnow       | Thorns Young Ltd<br>232 London Road, North End, Portsmouth,<br>Hampshire, PO2 9JQ<br>02392 672883<br><a href="mailto:c.curnow@thornsyoun.co.uk">c.curnow@thornsyoun.co.uk</a>                         |
| <b>Arboricultural Consultant</b>    | Sarah Johnston     | Johnston Tree Consultancy<br>16 Manor Close, Wickham, Hampshire, PO17 5BZ<br>07814 403146<br><a href="mailto:johnstontreeconsultancy@gmail.com">johnstontreeconsultancy@gmail.com</a>                 |
| <b>Local Authority Case Officer</b> | Unknown at present | Havant Borough Council<br>Public Service Plaza, Civic Centre Road,<br>Havant, PO9 2AX<br>02392 44 60 19<br><a href="mailto:planning.development@havant.gov.uk">planning.development@havant.gov.uk</a> |
| <b>Local Authority Tree Officer</b> | Jamie Gargett      | Havant Borough Council<br>Public Service Plaza, Civic Centre Road,<br>Havant, PO9 2AX<br>02392 44 60 19<br><a href="mailto:jamie.gargett@havant.gov.uk">jamie.gargett@havant.gov.uk</a>               |

## 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 3 Old Barn Gardens, Lovedean, 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

#### Protective Barriers

Tree protection measures to be installed under the supervision of the retained Arboriculturalist for all the trees in accordance with the Tree Protection Plan **Appendix 3**.

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

Ground protection will comprise of a geotextile membrane with 150mm depth of woodchip on top with inter-linked ground protection boards on top of the woodchip. See **Appendix 3**.

#### Exploratory Excavations for Rear Extension

These will be carried out to a depth of 600mm and the width of the proposed footing where it breaches the RPAs of T1 Ash and T2 Ash. Results of these excavations will be sent to the

Tree Officer. If any significant roots are located a foundation design will also be provided for approval.

#### Exploratory Excavations for the Games Room and Service Runs within RPAs (if required)

It is proposed to undertake site investigations under the supervision of the project Arboriculturalist to determine the appropriate location of any new service runs and inspection hatches. New inspection hatches will be established outside of the RPAs to minimise disruption to the tree roots within the RPAs.

Excavations will be undertaken using hand tools only and when investigations have been carried out the information will be supplied in a revision of this report or in response to a planning condition.

#### Materials, Access and Storage

Access for machinery will be via the existing driveway. There is adequate space for storage of materials on site as shown on the Tree Protection Plan at **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.

## **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 protective barriers and ground protection
  - Exploratory excavations for rear extension (Possibly for outbuilding and service runs also)
- 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 Insurance cover trading as Johnston Tree Consultancy.*

