

# Arboricultural Impact Assessment

15 Horndean Road  
Emsworth  
PO10 7PT

19<sup>th</sup> May 2017



PJC ref: 4443/17-02

This report has been prepared by  
PJC Consultancy Ltd  
on behalf of  
Mr Paul Melbert

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Prepared<br>by | <b>Peter Davies FdSc Arboriculture M.Arbor.A</b><br>Peter has a Foundation Degree in Arboriculture and is a professional member of the Arboricultural Association. He has ten years experience in the arboricultural industry, originally working as a groundsman and feller, and progressing into consultancy. He is a Lantra accredited professional tree inspector.                                                                                                                                                |
| Checked<br>by  | <b>Nick Betts HND For M.Arbor.A</b><br>Nick has attained an HND in forestry management and is a professional member of both the Arboricultural Association and the Consulting Arborists Society. He has worked in the arboricultural and forestry industries for 14 years. He started his career as a forestry worker before qualifying as a tree surgeon, working in both the private and commercial sectors. He has been a practising consultant since 2004. He is a Lantra accredited professional tree inspector. |

## **CONTENTS**

1 Executive summary

2 Introduction

3 Initial tree survey summary

4 Arboricultural impact assessment

5 Conclusions

Appendices:

1. Tree Constraints Plan and Tree Retention Plan
2. Tree Survey Schedule
3. Photographs

## 1 EXECUTIVE SUMMARY

1.1 This report should be read in conjunction with arboricultural survey ref. PJC/4443/17-01 and arboricultural method statement ref. PJC/4443/17-03.

1.2 **Site location:** The site is situated on the west side of Horndean Road, more broadly to the north of A27 in Emsworth. It has a central OS national grid reference of SU745068. The surrounding land use is comprised of residential properties to the north, St James Primary School to the east, Emsworth Park to the south and agricultural land to the west. The location of the site within its environs is shown in figure 1.



Figure 1: Location of Site and Environs

1.3 **Proposal:** A proposal has been outlined to construct a new residential dwelling in the rear garden of 15 Horndean Road. The new single storey dwelling will be accessed via a driveway connected to the existing front parking area. The current crossover onto Horndean Road will be used as a shared access.

1.4 **Tree removals:** Trees T1, T2, T3 and T8 will be removed to facilitate the proposed development.

1.5 **Access facilitation pruning:** Trees G4, H9 and H10 will require access facilitation pruning to enable the proposed construction works.

1.6 **Works within root protection areas:** The proposed buildings and new surfacing will be located outside the root protection areas of all retained trees.

## 2 INTRODUCTION

2.1 **Instruction:** PJC Consultancy has been instructed by Mr Paul Melbert to provide an arboricultural impact assessment for proposed construction works at 15 Horndean Road.

2.2 **Brief:** PJC Consultancy has been commissioned to compile an arboricultural impact assessment written in accordance with guidelines set out in BS5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*'.

2.3 **Scope of this report:** This report is concerned with all significant trees located within the site boundary and those located around the curtilage of the site with the potential to impact or be impacted by the proposed construction works.

2.4 **Contents of report:** This report includes the following:

- A schedule of trees to be retained/removed.
- A schedule of access facilitation pruning required for development.
- An assessment of the impact construction works will have on retained trees and mitigation measures to be implemented.
- Tree Constraints Plan and Tree Retention Plan.

2.5 **Documents and information provided:** The following documents were provided by the client to produce this report:

- OS Site Plan
- Drawing ref. HR-00 – Location and Block Plan
- Drawing ref. HR-01 – Proposed Site/Roof Plan
- Drawing ref. HR-02 – Proposed Ground Plan
- Drawing ref. HR-04 – Site Photographs

### 3 INITIAL TREE SURVEY SUMMARY

**3.1 Site visit:** A site visit was carried out on 12<sup>th</sup> May 2017. The weather conditions at the time were light cloud but dry. The visibility was adequate for visual tree inspection from ground level. The initial survey assessed the trees in the context of the existing land use, not in consideration of development proposals.

**3.2 Survey methodology:** Explanations for the measurements and information collected for each tree are described in arboricultural report ref. PJC/4443/17-01.

**3.3 Site layout:** The site comprises a detached residential dwelling with a gravel driveway and long rear garden. The trees located within the site comprise a mature holly on the road frontage, a number of poor quality shrubs at the western end of the garden and a large oak on the south-west corner of the garden. Mixed hedgerows line the southern boundary and further trees are located in the park to the south of the site.

**3.4 Tree categorisation summary:** A total of eight trees, two groups and three hedgerows were surveyed and recorded in the Tree Survey Schedule.

*Table 1: Tree categorisation summary*

| Categorisation | Individual tree | Tree group | Hedgerow |
|----------------|-----------------|------------|----------|
| A              | 1               | -          | -        |
| B              | 1               | 1          | -        |
| C              | 6               | 1          | 3        |
| U              | -               | -          | -        |
| Total          | 8               | 2          | 3        |

**3.5 Statutory tree protection:** Havant District Council's online mapping service was used on 18<sup>th</sup> May 2017 to establish restrictions to tree works at the site. No Tree Preservation Order (TPO) was shown to protect the trees on or adjacent to this site and the site is not located within a Conservation Area. However, any persons proposing to undertake tree works must check the status of the trees with the local authority, and gain necessary consent before works are undertaken.

**3.6 Financial penalties and/or criminal proceedings** can result if tree works are carried out on a protected tree without consent. The entirety of the tree is protected, both above and below ground.

## 4 ARBORICULTURAL IMPACT ASSESSMENT

**4.1 Tree removals:** Trees to be removed for the proposed development are shown with dashed outlines on the Tree Retention Plan in Appendix 1 and are shaded to indicate their BS5837 tree category. These comprise T1, T2, T3 and T8 (all category C specimens). All category A and B trees will be retained and protected during the proposed development.

**4.2 Privacy and screening:** The proposed tree removals will not result in a loss of privacy or screening for the adjacent residential properties or park. The hedgerows on the southern boundary will be retained and further planting is proposed on the northern boundary of the development area to strengthen screening already provided by the boundary fence (the detailed soft landscape design it to be confirmed on the date of this report).

**4.3 Access facilitation pruning:** Trees requiring access facilitation pruning to enable the proposed construction works (based on the information currently available) comprise G4, H9 and H10. A summary of access facilitation pruning is shown below.

*Table 2: Summary of access facilitation pruning:*

| Tree number | Species | Works required                                                  | Reason for works                                              |
|-------------|---------|-----------------------------------------------------------------|---------------------------------------------------------------|
| G4          | Mixed   | Reduce back to site boundary as shown on Tree Retention Plan.   | To increase usable garden space for the bungalow.             |
| H9          | Mixed   | Reduce back to the site boundary.                               | To avoid post development conflict with the new turning area. |
| H10         | Mixed   | Reduce back to the site boundary (only minor pruning required). | To avoid post development conflict with the new driveway.     |

**4.4** Any additional requirements for access facilitation pruning that cannot be predicted at this stage in the design process (e.g. for contractor compound or movement of large plant) should be discussed at the pre-commencement meeting with the project arboriculturalist and agreed with the local authority arboricultural officer. All access pruning should be carried out in accordance with BS3998: 2010 'Tree works – recommendations'.

**4.5** In addition to the above, it is also recommended that the ivy be severed around the base of T5 and deadwood over 50mm in diameter is removed from its crown (the frequency of land use within its target area will increase as a result of the proposed development). Also where possible, the ivy should be stripped out of hedgerow H9 and the white poplar suckers removed. The works to H9 would occur within the adjacent park, therefore would require permission from the local authority.

**4.6 Works within root protection areas:** The proposed building will be located outside the root protection areas of retained trees, therefore use of specialist foundations for root protection is not deemed necessary. NHBC guidelines on foundation depth in proximity to trees must still be followed. This will be determined by a structural engineer but should be guided by information in this report and appropriate sampling to determine soil profiles at the site.

**4.7** The new driveway will also be located outside the root protection area of all retained trees including the boundary hedgerows. Although outside the root protection areas, it is still anticipated that roots from the hedgerows will encroach the site (a root protection area is a calculation of the minimum rooting area required to support a tree, not the total rooting area). As such it is recommended that the new driveway be constructed above ground level without soil stripping and is also of a permeable specification (loose gravel, resin bound gravel or block paving with permeable spacers and on a permeable sub-base).

**4.8** It is important that when landscaping the garden area for the new property, that the existing ground levels are maintained within the root protection area of T5. Further guidance is provided in the arboricultural method statement.

**4.9 Services:** Details of the routing of services for the proposed development are not currently available. Once details of the routing of new services become available, prior to commencement, these shall be reviewed by the project arboriculturalist. The arboriculturalist shall then confirm to the local authority arboricultural officer either that no works will be carried out within root protection areas, or provide details of the methodology required to ensure the works are carried out in accordance with NJUG10 '*Guidelines for the planning, installation and maintenance of utilities in proximity to trees*' and BS5837: 2012.

## **5 CONCLUSIONS**

5.1 Four category C trees/shrubs will be removed to facilitate the proposed development. These are small specimens of limited amenity value and whose loss will not have a notable impact on the surrounding landscape. All category A and B trees will be retained and protected during the proposed development.

5.2 The proposed buildings and areas of new surfacing will be located outside the root protection areas of retained trees. Provided the exclusion zones and methodologies described in the arboricultural method statement and Tree Protection Plan are followed, trees proposed for retention should not be adversely affected by the construction works.

5.3 Based on the above assessment, trees recommended for retention in this report can be protected during the proposed construction works and successfully integrated into the site post development.

## 6 OTHER CONSIDERATIONS

6.1 Trees should be checked for protected species before works are undertaken. It is against the law to disturb bats or their roosts under the Conservation of Habitat and Species Regulations. Nesting birds are protected by the Wildlife and Countryside Act. If protected species are discovered, Natural England should be contacted for advice.

6.2 The tree works contractors should carry out all tree works to BS3998: 2010 '*Tree works – recommendations*', as modified by research that is more recent. They should also carry relevant, adequate and up to date insurance.

6.3 It is also recommended that all tree works be carried out by an Arboricultural Association approved contractor. Approved contractors are expected to work to industry best standards, and the Arboricultural Association website contains contact details and information on engaging a suitable contractor.

6.4 The trees at this site were assessed for their condition and safety in relation to the average range of weather conditions that the region experiences. Any weather events that exceed the average norm cannot be predicted, and so their effects are not considered within this report.

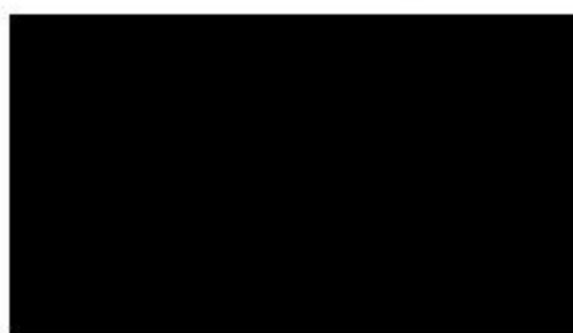
6.5 The views and opinions contained within this report are entirely those of the author.

## Contact details

PJC Consultancy Ltd  
Chapter House  
Priesthawes Farm  
Hailsham Road  
Polegate  
East Sussex  
BN26 6QU

Tel: 01323 400311

E-mail: [pete@pjcconsultancy.com](mailto:pete@pjcconsultancy.com)



Author: Peter Davies

Date: 19<sup>th</sup> May 2017

## APPENDIX 1

### Tree Constraints Plan and Tree Retention Plan

**Key:**

-  RPA for CAT A\* tree
-  RPA for CAT B\* tree
-  RPA for CAT C\* tree
-  Tree canopy

*\* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.*

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. no. PJC/4443/17-01 contains further information for each tree.

*This drawing should be viewed in colour.*

**All tree positions on this drawing are approximate and must be checked on site.**

Small cypress shrubs under 1m in height.

15

H11

H10

T7

T8

T6

G4

T1

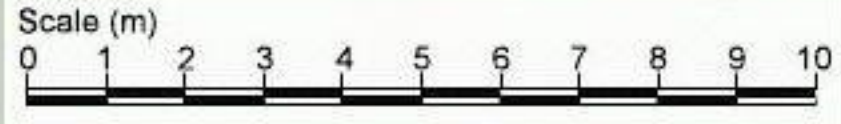
T2

T3

T5

G13

H9



|                                             |                       |                             |
|---------------------------------------------|-----------------------|-----------------------------|
| <b>Drawing no:</b> PJC/4443/17/A            | <b>Rev:</b> -         | <b>Sheet number:</b> 1 of 1 |
| <b>Client and site:</b><br>Mr Paul Melbert  |                       |                             |
| Farmview<br>15 Horndean Road<br>Emsworth    |                       |                             |
| <b>Drawing title:</b> Tree Constraints Plan |                       |                             |
| <b>Date drawn:</b> 17/05/2017               |                       |                             |
| <b>Scale:</b> 1:200 at A3                   |                       |                             |
| <b>Drawn by:</b> PD                         | <b>Checked by:</b> NB |                             |

**Key:**

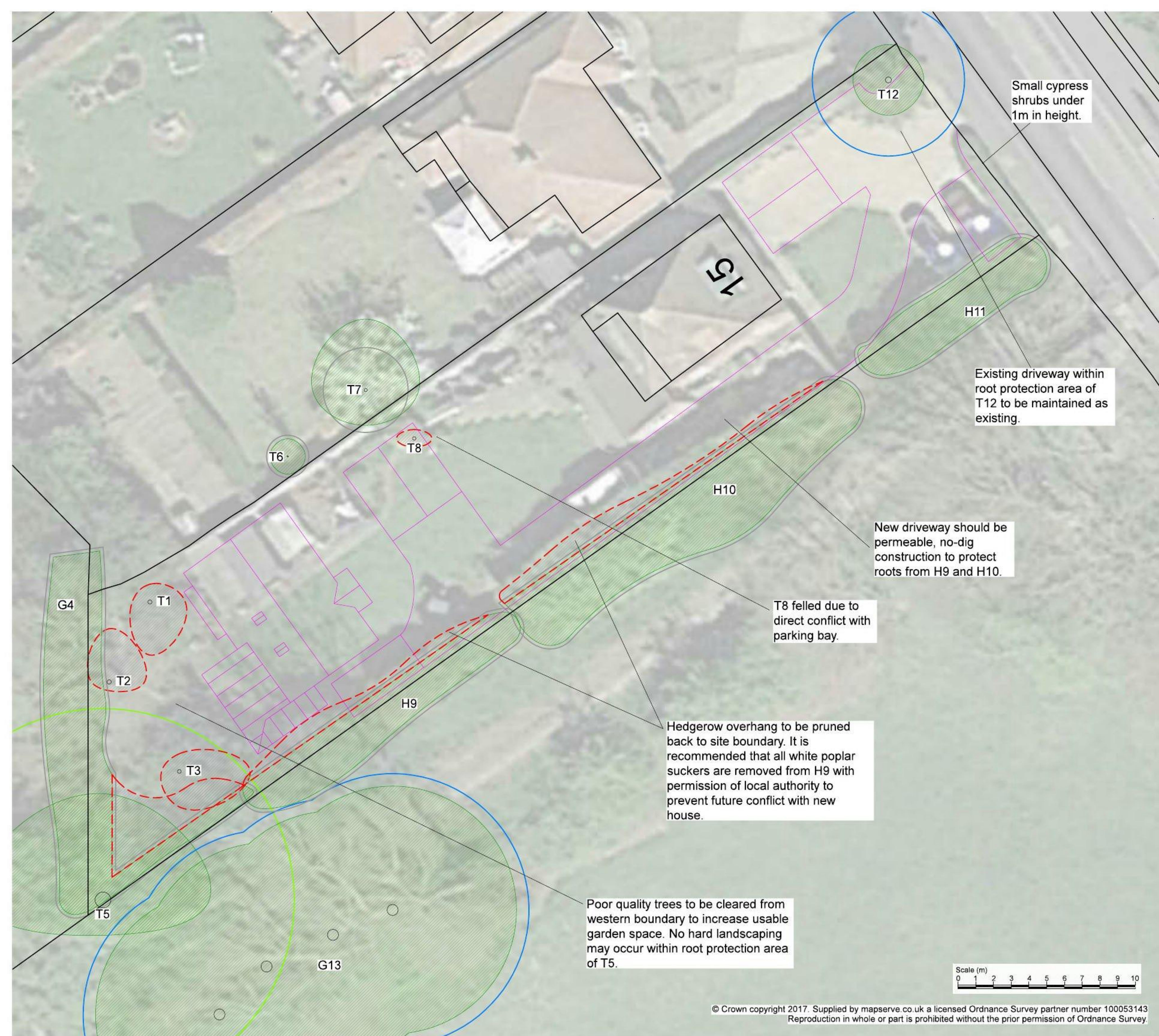
-  RPA for CAT A\* tree to be retained
-  RPA for CAT B\* tree to be retained
-  RPA for CAT C\* tree to be retained
-  Canopy of tree to be retained
-  Canopy of CAT C\* tree to be removed

\* Tree categorised in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'.

Appendix 2, (Tree Survey Schedule) contained within the arboricultural report ref. no. PJC/4443/17-02 contains further information for each tree.

This drawing should be viewed in colour.

All tree positions and building dimensions on this drawing are approximate so must be checked on site and using architects/engineers drawings.



Drawing no: PJC/4443/17/B Rev: - Sheet number: 1 of 1

Client and site:  
Mr Paul Melbert

Farmview  
15 Hordean Road  
Emsworth

Drawing title: Tree Retention Plan

Date drawn: 18/05/2017

Scale: 1:200 at A3

Drawn by: PD

Checked by: NB

## APPENDIX 2

### Tree Survey Schedule

## Tree Survey Schedule

|  |                                                        |             |                        | Client: Mr Paul Melbert<br>Site: 15 Horndean Road, Emsworth<br>Survey date: 12/05/2017<br>Surveyor: Peter Davies |                                       |              |                         |                      |                                                                                                 |                                                    | T: Individual tree or shrub<br>G: Group of 2 or more trees<br>H: Hedgerow<br>W: Woodland block |                           |                            |
|-----------------------------------------------------------------------------------|--------------------------------------------------------|-------------|------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------|-------------------------|----------------------|-------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------|----------------------------|
| Tree ref. no.                                                                     | Species                                                | Height (m)  | Stem diameter (mm)     | Branch spread (m)                                                                                                | Crown clearance (m)                   | Age class    | Physiological condition | Structural condition | Comments                                                                                        | Management recommendation                          | Category grading                                                                               | Root Protection Area (m2) | Root Protection Radius (m) |
| T1                                                                                | Hawthorn (Crataegus monogyna)                          | 6           | 200, 100, 80           | N: 1<br>E: 2<br>S: 3<br>W: 1                                                                                     | Crown: 2 south<br>Branch: 1 south     | Mature       | Good                    | Fair                 | Secondary stem recently removed and under-storey surrounding tree cleared. Foliage only at top  | Fell to ground level and remove stump.             | C1                                                                                             | 25.5                      | 2.8                        |
| T2                                                                                | Holly (Ilex aquifolium)                                | 7           | 270                    | N: 3<br>E: 2<br>S: 0<br>W: 1                                                                                     | Crown: 0 west<br>Branch: 1 west       | Mature       | Good                    | Fair                 | One sided crown with minor defects. Adjacent vegetation recently cleared.                       | Fell to ground level and remove stump.             | C1                                                                                             | 33.0                      | 3.2                        |
| T3                                                                                | Pittosporum (Pittosporum tenuifolium)                  | 6           | 140, 100, 100, 100 est | N: 1<br>E: 4<br>S: 2<br>W: 1                                                                                     | Crown: 0 average<br>Branch: 0 average | Early mature | Good                    | Fair                 | One sided crown with minor defects. Adjacent vegetation recently cleared.                       | Fell to ground level and remove stump.             | C1                                                                                             | 22.4                      | 2.7                        |
| G4                                                                                | Mixed (including blackthorn, hawthorn, bramble, holly) | 1-3 average | Under 75 average       | 1-3 average                                                                                                      | 0 average                             | Semi mature  | Fair                    | Fair                 | Largely unmanaged scrub on site boundary.                                                       | Reduce group back as shown on Tree Retention Plan. | C1                                                                                             | 2.5 average               | 0.9 average                |
| T5                                                                                | Pedunculate oak (Quercus robur)                        | 18          | 900 est                | N: 6<br>E: 6<br>S: 2<br>W: 7                                                                                     | Crown: 1 west<br>Branch: 3 west       | Mature       | Good                    | Good                 | Ivy clad. Chain link fence presents accurate stem measurement. Uneven crown due to suppression. | Sever ivy. Remove deadwood over 50mmØ over site.   | A1/2                                                                                           | 366.4                     | 10.8                       |
| T6                                                                                | Ornamental pear (Pyrus spp.)                           | 4           | 100 est                | N: 1<br>E: 1<br>S: 1<br>W: 1                                                                                     | Crown: 1 average<br>Branch: 1 average | Semi mature  | Good                    | Good                 | Third party fruit tree, only viewed from site.                                                  | No action required.                                | C1                                                                                             | 4.5                       | 1.2                        |

## Tree Survey Schedule

|  |                                                         |             |                    | Client: Mr Paul Melbert<br>Site: 15 Horndean Road, Emsworth<br>Survey date: 12/05/2017<br>Surveyor: Peter Davies |                                       |              |                         |                      |                                                                                      |                                                                              | T: Individual tree or shrub<br>G: Group of 2 or more trees<br>H: Hedgerow<br>W: Woodland block |                           |                            |
|-----------------------------------------------------------------------------------|---------------------------------------------------------|-------------|--------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------------|--------------|-------------------------|----------------------|--------------------------------------------------------------------------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------|----------------------------|
| Tree ref. no.                                                                     | Species                                                 | Height (m)  | Stem diameter (mm) | Branch spread (m)                                                                                                | Crown clearance (m)                   | Age class    | Physiological condition | Structural condition | Comments                                                                             | Management recommendation                                                    | Category grading                                                                               | Root Protection Area (m2) | Root Protection Radius (m) |
| T7                                                                                | Ornamental pear (Pyrus spp.)                            | 5           | 200 est            | N: 4<br>E: 3<br>S: 2<br>W: 3                                                                                     | Crown: 1 average<br>Branch: 1 average | Early mature | Good                    | Fair                 | Third party tree only viewed from site.                                              | No action required.                                                          | C1                                                                                             | 18.1                      | 2.4                        |
| T8                                                                                | Lilac (Syringa vulgaris)                                | 2           | 160, 140           | N: 0<br>E: 1<br>S: 0<br>W: 1                                                                                     | Crown: 0 average<br>Branch: 0 east    | Mature       | Good                    | Poor                 | Pollarded shrub.                                                                     | Fell to ground level and remove stump.                                       | C1                                                                                             | 20.4                      | 2.6                        |
| H9                                                                                | Mixed (including box, white poplar, Euonymus japonicus) | 3-4 average | Under 75 average   | N: 1<br>E: 1<br>S: 2<br>W: 1                                                                                     | 0 average                             | Semi mature  | Fair                    | Poor                 | Sporadic hedgerow with poplar suckers. Smothered by ivy in places. Part third party. | Reduce to site boundary. Strip ivy and remove poplar suckers (if permitted). | C2                                                                                             | 2.5 average               | 0.9 average                |
| H10                                                                               | Mixed (Leyland cypress, cherry laurel, box)             | 3-4 average | Under 75 average   | N: 1<br>E: 1<br>S: 3<br>W: 1                                                                                     | 0 average                             | Semi mature  | Good                    | Good                 | Managed hedgerow, part third party. Good overall condition.                          | Reduce overhang to site boundary.                                            | C2                                                                                             | 2.5 average               | 0.9 average                |
| H11                                                                               | Mixed (Leyland cypress dominant and privet)             | 3 average   | Under 75 average   | 1 average                                                                                                        | 0 average                             | Semi mature  | Good                    | Good                 | Formal hedgerow extending to front boundary.                                         | No action required.                                                          | C2                                                                                             | 2.5 average               | 0.9 average                |
| T12                                                                               | Varigated holly (Ilex aquifolium spp.)                  | 6           | 360 over ivy       | N: 2<br>E: 2<br>S: 2<br>W: 2                                                                                     | Crown: 2 average<br>Branch: 2 east    | Mature       | Good                    | Good                 | Ivy clad. Crown previously lifted over driveway. Located on road frontage.           | No action required.                                                          | B2                                                                                             | 58.6                      | 4.3                        |

## Tree Survey Schedule

|  |                                |                  |                    | Client: Mr Paul Melbert<br>Site: 15 Horndean Road, Emsworth<br>Survey date: 12/05/2017<br>Surveyor: Peter Davies |                     |           |                         |                      |                                                              |                           | T: Individual tree or shrub<br>G: Group of 2 or more trees<br>H: Hedgerow<br>W: Woodland block |                           |                            |
|-----------------------------------------------------------------------------------|--------------------------------|------------------|--------------------|------------------------------------------------------------------------------------------------------------------|---------------------|-----------|-------------------------|----------------------|--------------------------------------------------------------|---------------------------|------------------------------------------------------------------------------------------------|---------------------------|----------------------------|
| Tree ref. no.                                                                     | Species                        | Height (m)       | Stem diameter (mm) | Branch spread (m)                                                                                                | Crown clearance (m) | Age class | Physiological condition | Structural condition | Comments                                                     | Management recommendation | Category grading                                                                               | Root Protection Area (m2) | Root Protection Radius (m) |
| G13                                                                               | 4x white poplar (Populus alba) | Up to 25 average | Up to 640 average  | 7 average                                                                                                        | 2-3 average         | Mature    | Good                    | Good                 | Third party trees located in park. No major visible defects. | No action required.       | B1/2                                                                                           | 185.3                     | 7.7                        |

## APPENDIX 3

### Photographs



**Photograph 1 – Tree T5**



**Photograph 2 – Tree T1**



**Photograph 3 – Tree T3**



**Photograph 4 – Western garden boundary**



**Photograph 5 – Hedgerow H9**



**Photograph 6 – Hedgerow H10**



**Photograph 7 – Hedgerow H11**



**Photograph 8 – Tree T12**



**Photograph 9 -**



**Photograph 10 – Group G13 over hedgerow H9**