



**LAND OFF LAKE LANE,  
BARNHAM, WEST SUSSEX**

**TREE SURVEY  
REPORT**

5th May 2015

**Our Ref: JSL2477\_770A**

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# QUALITY MANAGEMENT

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|                                    |                       |
|------------------------------------|-----------------------|
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| Date:                              | <b>5th May 2015</b>   |
| Project Number/Document Reference: | <b>JSL2477_770A</b>   |
| Status                             | <b>For Planning</b>   |

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# 1 INTRODUCTION

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- 1.1 The Tree Survey was commissioned by Redrow Homes Ltd and undertaken by RPS on the 24th of April 2015. The weather conditions were clear and bright.
- 1.2 This Tree Survey Report is a qualitative survey of the existing trees within and immediately adjacent to land located at Eric Wall Nursery off Lake Lane in Barnham, West Sussex.
- 1.3 The purpose of the survey is to assess the landscape and visual amenity value of the existing trees and to identify the constraints associated with the trees prior to any potential redevelopment of the site. An assessment of the quality of the trees has been made, with reference to the categories and sub-categories listed within Table 1 - BS5837:2012<sup>1</sup>.

<sup>1</sup> *British Standards Institute, (2012); 'British Standard (BS5837) "Trees in Relation to Design, Demolition and Construction - Recommendations"*

## 2 SITE LOCATION

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- 2.1 The survey covered an area of land located off Lake Lane in Barnham, West Sussex. (Ordnance Survey grid reference SU 965 045).
- 2.2 Barnham is a village and civil parish in the Arun district of West Sussex, centred about five miles north of Bognor Regis.
- 2.3 The survey site comprises a number of large growing houses, buildings and ancillary infrastructure within an area of grassland scattered with small ornamental trees, regenerating vegetation with larger broadleaf and coniferous trees to the peripheries.
- 2.4 The site is bordered by growing houses to the east and beyond further to the south by rail infrastructure. The northern and western boundary is formed by the rear gardens of the properties along Lake Lane and Halliford Drive.
- 2.5 Lake Lane runs along the northern boundary of the site. The main settlement of Barnham is to the west.

### 3 SURVEY METHODOLOGY

- 3.1 This report was completed by Chris Chambers, a Chartered Forester and Chartered Landscape Architect of RPS Group.
- 3.2 The report and survey was carried out in general accordance with the requirements set out in BS 5837:2012 "Trees in Relation to Design, Demolition and Construction – Recommendations".
- 3.3 The tree survey involved a visual inspection from the ground of individual specimens and groups of trees in order to record their amenity value, management recommendations and dimensions. Where observed, the general condition of all the trees has been noted. The survey does not constitute a full arboricultural condition assessment involving the detailed inspection of trees in relation to their structural condition, decay, and any other physical and pathogenic defects.
- 3.4 Trees were not climbed or inspected below ground level and inaccessible trees will have best estimates made about the location, physical dimensions and characteristics.
- 3.5 The locations of the trees were based upon topographic survey (ref 7054) produced by M.J. Zara Associates of Lewes, East Sussex in November 2011.
- 3.6 The survey assesses individual trees and groups of trees for quality and benefits. The quality of each tree or group of trees has been recorded by allocating it to one of four categories as described in paragraph 3.8. These categories have been differentiated on tree survey plans (JSL2477\_700 to JSL2477\_702) by colours.
- 3.7 The survey information was recorded on the attached schedule (Appendix 1) in general accordance with the guidance contained within Section 4 of BS 5837:2012 "Trees in Relation to Design, Demolition and Construction - Recommendations".
- 3.8 The information recorded is detailed in Table 3.1.

**Table 3.1 Tree characteristics recorded during survey**

|                                           |                                                                                                                                                                                                                                                                |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tree Ref No:</b>                       | Sequential reference number of trees or groups of trees. Avenues, woodlands and hedgerows were also recorded on the tree survey plan.<br># - denotes inaccessible trees (best estimates are made about the location, physical dimensions and characteristics.) |
| <b>Species</b>                            | Species listed by common name, with scientific names ( <i>italic lettering</i> ).                                                                                                                                                                              |
| <b>Height (m)</b>                         | Estimated height of canopy to nearest metre.                                                                                                                                                                                                                   |
| <b>Branch Spread</b>                      | branch spread, taken as a minimum at the four cardinal points, to derive an accurate representation of the crown                                                                                                                                               |
| <b>Stem diameter @ 1.5 m (m)</b>          | Estimated diameter of trunk at 1.5 m above ground level in metres unless otherwise indicated, multi-stemmed trees being measured in accordance with Annex C: BS5837                                                                                            |
| <b>Existing height above ground level</b> | To inform on ground clearance, crown/stem ratio and shading the estimated height of the first significant branch and direction of growth and canopy above ground level.                                                                                        |
| <b>Stem No.</b>                           | Number of stems (if necessary) of individual tree.                                                                                                                                                                                                             |

|                                                      |                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                          |                                             |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Life Stage                                           | Expressed as:-                                                                                                                                                                                                                            | Y (Young)<br>SM (Semi-mature)<br>EM (Early-mature)<br>M (Mature)                                                                                                                                                                                                                                                                         | OM (Over-mature)<br>V (Veteran)<br>D (Dead) |
| Physical Condition                                   | Apparent condition expressed as the following categories, based upon a brief visual inspection from the ground only:-                                                                                                                     |                                                                                                                                                                                                                                                                                                                                          | Good<br>Fair<br>Poor<br>Dead                |
| Comments / Management Recommendations                | General observations, particularly of structural and/or physiological condition (e.g. the presence of any decay and physical defect), and/or preliminary management recommendations and potential for wildlife habitats (not exhaustive). |                                                                                                                                                                                                                                                                                                                                          |                                             |
| Estimated remaining contribution (years)             | Estimated remaining contribution, in years (<10, 10+,20+,40+)                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                          |                                             |
| Tree Quality Assessment Value: <u>Category</u>       | Criteria grading with regards to Table 1: BS 5837:2012, expressed as:-                                                                                                                                                                    | <b>A</b> (Trees/Vegetation of high quality and value)<br><b>B</b> (Vegetation of moderate quality and value)<br><b>C</b> (Trees/Vegetation of low quality and value)<br><b>U*</b> (Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years) |                                             |
|                                                      | * Category U trees can have existing or potential conservation value which might be desirable to preserve.                                                                                                                                |                                                                                                                                                                                                                                                                                                                                          |                                             |
| Tree Quality Assessment Value: <u>Sub - Category</u> | Criteria grading with regards to Table 1: BS 5837:2012, expressed as:-                                                                                                                                                                    | <b>1</b> (Trees with mainly <i>arboricultural</i> value)<br><b>2</b> (Trees with mainly <i>landscape</i> value)<br><b>3</b> (Trees with mainly <i>cultural / conservation</i> value)                                                                                                                                                     |                                             |

- 3.9 It is recommended that further arboricultural assessments be undertaken in order to assess the full health and safety of all trees which may possess structural or pathogenic conditions.

#### Limitations

- 3.10 The findings of this survey are not valid following adverse or unpredictable weather conditions or for any failure due to 'force majeure' or unpredictable events.

## 4 APPRAISAL AND RECOMMENDATIONS

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### Generally

- 4.1 There were variations in the structural condition of the surveyed trees and tree groups, however, in the main their condition was largely consistent with expectations for the age, management and species.
- 4.2 The surveyed trees and wooded areas consist a mix of ornamental and native species of a wide age range. These provide interest, amenity, and screening.

### Surveyed Trees

- 4.3 A number of solitary ornamental trees were identified of moderate amenity value. Tree T6, a Norway Maple has a fairly well-formed crown and on the northern boundary a large Scots Pine (T1) was identified.
- 4.4 Trees T18 to T21 and tree group G3 comprise Alder species are the most dominant natives on the site. These are vigorous and appear suit the ground conditions. G3 are closely established and drawn and consideration should be given to their long term maintenance.
- 4.5 Small ornamental trees and shrubs have established in the grassed areas and bounding the road infrastructure at the entrance of the site and these include Norway Maple and decorative Holly. Many of these trees are in a poor declining condition with a limited useful life.
- 4.6 A number of coniferous trees have been planted in linear groups throughout the site. These are limited and while they do provide some screening and shelter the loss of this vegetation should not be considered as a significant constraint to development.
- 4.7 The northern boundary of the survey site adjoins Lake Lane. Three tree groups were identified, generally the roadside vegetation is closely established and of limited amenity value, comprising cypress and sycamore. The western most comprises a group of lime trees of moderate value, together with the vegetation bounding the public footpath.

### Planning Considerations

- 4.8 A desktop investigation of the site via Arun District Council Mapping site <http://www1.arun.gov.uk> (accessed 30th April 2014) that that are *no* Tree Preservation Orders pertaining to the site and it is *not* located within a Conservation Area.
- 4.9 An offsite Tree Preservation Order (TPO/NBN/1/13 - Arun District Council) is in order on a group of trees closely bounding the site to the north.
- 4.10 Particular care is needed regarding the retention of large, mature trees which become enclosed within the new development. Where such trees are retained, adequate space should be allowed for their long-term physical retention and future maintenance.
- 4.11 Trees may have the potential to provide valuable habitat for significant and/or protected species. It is recommended that consideration be given to the requirement for ecological surveys.

## **Design and Site Layout Considerations**

- 4.12 A tree constraints plan defines the Root Protection Area (RPA) for each tree shown as a circle, this area maybe adjusted should physical constraints or topographical features limit root activity in a particular area, however the total area should remain the same. Prior to any adjustment of the trees RPA zones the changes should be assessed by an arboriculturalist. During any site planning exercises the current and future growth potential of the trees should be considered.
- 4.13 The RPA for single stem trees broadly equates to a radius 12 times the stem diameter of the tree at 1.5m above ground level or the extent of canopy spread, whichever is the greater. For multi-stemmed, low branching trees or those with trunks with an irregular girth the point of stem diameter measurement is adjusted in consideration of these factors and in accordance with the illustrations in BS5837:2012 (Annex C).
- 4.14 The RPA should become an exclusion zone during construction works and for any development. It should be fenced-off and protected in accordance with BS5837:2012. The canopy is likewise susceptible to damage during construction work and requires similar protection.
- 4.15 No activities that result in excavations, changes in level or soil compaction should take place within the RPA of any retained trees, especially older mature trees. This would include the storage of materials, any construction work, trafficking by vehicles or even excessive trafficking by pedestrians.
- 4.16 If some form of construction has to take place within the RPA then certain measures need to be adopted to avoid disturbance or damage to the roots and to maintain moisture infiltration and gaseous diffusion into the soil.
- 4.17 Services likewise should be routed outside the existing or potential root zone of trees. Where it is unavoidable, then certain measures should be employed to avoid damage to the trees larger roots.
- 4.18 The location and siting of new facilities near trees should consider the potential impact on and conflict with both tree roots and canopy. This should take into account the ultimate size of existing young and middle-aged trees at maturity. Conversely the impact of the tree on the activities should also be considered with regard to obstruction, shading, leaf fall and root action. These are problems that can be managed provided sufficient space is allowed for.
- 4.19 New tree planting opportunities should be included as part of any redevelopment proposals, these designs should allow sufficient space for the ultimate height and crown spread of the trees at maturity. Species should be selected which are suitable for rural, residential areas.

## **Trees and Management of Health and Safety**

- 4.20 It is recommended that a programme of periodic arboricultural assessments be undertaken in order to regularly assess the full health and safety of all trees both in full leaf and bare stemmed. The assessments should prioritize areas based on levels of access and presence of target (i.e. exposure of people to hazard) and accord with arboricultural advice, taking account of relevant factors (where known) that affect safety such as the age class, condition, size and species of the trees.

**APPENDIX 1**

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Tree Survey Schedule JSL2477\_750

**Tree Survey Schedule**

Site Land off Lake Lane, Barnham  
 Project schedule ref: JSL2477\_750A  
 Drawing reference: JSL2477\_700, 701 & 703  
 Survey date: 24th April 2015

Surveyor: CC  
 Status: For Info  
 Revision:  
 Notes:



| Ref. no. | Species                                      | Height (m) | Crown spread (m) |     |     |     | Stem dia. (m) | Stem no. at 1.5m | Height of crown clearance (m) | Dir/ height | Age class | Structural Physiological condition | General observations Management recommendations                                                        | Estimated remaining contribution (years) | Tree Quality Category (BS5837) |
|----------|----------------------------------------------|------------|------------------|-----|-----|-----|---------------|------------------|-------------------------------|-------------|-----------|------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------|
|          |                                              |            | N                | E   | S   | W   |               |                  |                               |             |           |                                    |                                                                                                        |                                          |                                |
| T1       | Ilex aquifolium<br>Variegated Holly          | 4.5        | 1.5              | 1.5 | 1.5 | 1.5 | 0.15, 0.25    | 2.00             | 0.50                          | E           | EM        | Good                               | Well vegetated. Stem wounds are present, Included main stem union.                                     | 10-20                                    | C2                             |
| T2       | Cupressocyparis leylandii<br>Leyland Cypress | 9.0        | 3.0              | 3.0 | 3.0 | 3.0 | 0.40          | 1.00             | 0.00                          | S           | EM        | Fair                               | Stem wounds are present, asymmetric formed crown. Suppressed crown.                                    | 10-20                                    | C2                             |
| T3       | Cupressocyparis leylandii<br>Leyland Cypress | 9.0        | 2.0              | 4.0 | 7.0 | 7.0 | 0.40          | 1.00             | 2.50                          | W           | EM        | Fair                               | Stem wounds are present, asymmetric formed crown. Heavily suppressed crown. General poor form to tree. | 10-20                                    | C2                             |
| T4       | Acer platanoides<br>Norway Maple             | 6.0        | 8.0              | 5.0 | 7.0 | 4.0 | 0.55          | 1.00             | 2.00                          | S           | EM        | Poor                               | Stem wounds are present, asymmetric formed crown. Suppressed crown.                                    | 10-20                                    | C2                             |
| T5       | Acer platanoides<br>Norway Maple             | 6.0        | 9.0              | 5.0 | 4.5 | 6.5 | 0.59          | 1.00             | 2.50                          | S           | EM        | Poor                               | Stem wounds are present, asymmetric formed crown. Suppressed crown.                                    | 10-20                                    | C2                             |
| T6       | Acer platanoides<br>Norway Maple             | 6.0        | 5.0              | 1.8 | 5.0 | 6.5 | 0.59          | 1.00             | 1.50                          | S           | EM        | Good                               | Fair form                                                                                              | + 20                                     | B2                             |
| T7       | Sorbus aria<br>Whitebeam                     | 6.0        | 4.0              | 2.0 | 1.0 | 1.0 | 0.39          | 1.00             | 2.00                          | N/W         | EM        | Fair                               | Some signs of root plate instability, asymmetric formed crown. Tree has no long term potential.        | -10                                      | C2                             |
| T8       | Sorbus aria<br>Whitebeam                     | 7.0        | 3.0              | 2.0 | 1.0 | 3.0 | 0.15          | 1.00             | 1.50                          | S           | EM        | Good                               | Some signs of root plate instability, asymmetric formed crown.                                         | -10                                      | C2                             |
| T9       | Sorbus aria<br>Whitebeam                     | 6.0        | 7.0              | 2.0 | 1.0 | 1.0 | 0.32          | 1.00             | 0.50                          | S/E         | EM        | Poor                               | Asymmetric formed crown. Heavily suppressed crown.                                                     | -10                                      | C2                             |
| T10      | Ilex aquifolium<br>Common Holly              | 3.0        | 3.0              | 1.0 | 1.0 | 1.0 | 0.50          | 10+              | 0.25                          | N/E         | EM        | Good                               | Small scrubby.                                                                                         | -10                                      | C2                             |

Note: This survey is based on a brief visual inspection from the ground.  
 It is not intended as a full arboricultural inspection.  
 # - Indicates estimated / offsite tree

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| Ref. no. | Species                                | Height (m) | Crown spread (m) |     |     |     | Stem dia. (m) | Stem no. at 1.5m | Height of crown clearance (m) | Dir/ height | Age class | Structural Physiological condition | General observations Management recommendations | Estimated remaining contribution (years) | Tree Quality Category (BS5837) |
|----------|----------------------------------------|------------|------------------|-----|-----|-----|---------------|------------------|-------------------------------|-------------|-----------|------------------------------------|-------------------------------------------------|------------------------------------------|--------------------------------|
|          |                                        |            | N                | E   | S   | W   |               |                  |                               |             |           |                                    |                                                 |                                          |                                |
| T11      | Ilex aquifolium<br>Common Holly        | 3.0        | 1.0              | 1.5 | 1.5 | 1.5 | 0.24          | 2.00             | 0.25                          | -           | EM        | Fair                               | Limited crown spread.                           | -10                                      | C2                             |
| T12      | Ilex aquifolium<br>Variegated Holly    | 2.0        | 1.5              | 1   | 1   | 1.0 | 0.15          | 3.00             | 0.25                          | S/E         | EM        | Good                               | Limited crown spread.                           | -10                                      | C2                             |
| T13      | Ilex aquifolium<br>Variegated Holly    | 4.0        | 1.0              | 1.0 | 1.0 | 1.0 | 0.24          | 1.00             | 0.25                          | N           | EM        | Good                               | Limited crown spread.                           | -10                                      | C2                             |
| T14      | Ilex aquifolium<br>Variegated Holly    | 4.0        | 1.5              | 1.5 | 1.5 | 1.5 | 0.24          | 1.00             | 0.25                          | S/E         | EM        | Good                               | Limited crown spread.                           | -10                                      | C2                             |
| T15      | Amelanchier lamarckii<br>Snowy Mespils | 4.5        | 4.0              | 3.0 | 1.5 | 3.0 | 0.10          | 1.00             | 1.25                          | N           | EM        | Fair                               | Fair                                            | 10-20                                    | C2                             |
| T16      | Acer platanoides<br>Norway Maple       | 6.0        | 3.5              | 3.5 | 3.5 | 3.5 | 0.32          | 1.00             | 2.50                          | S/E         | EM        | Fair                               | Fair                                            | 10-20                                    | C2                             |
| T17      | Acer platanoides<br>Norway Maple       | 6.0        | 3.5              | 3.5 | 3.5 | 3.5 | 0.38          | 1.00             | 0.25                          | N           | EM        | Good                               | Fair                                            | 10-20                                    | C2                             |
| T18      | Alnus glutinosa<br>Common Alder        | 14.0       | 3.5              | 3.5 | 3.5 | 3.5 | 0.34          | 1.00             | 1.00                          | S           | EM        | Good                               | Strong typically apical growth. Vigorous.       | + 20                                     | B2                             |
| T19      | Alnus glutinosa<br>Common Alder        | 14.0       | 3.0              | 3.0 | 3.0 | 3.0 | 0.40          | 1.00             | 1.00                          | N/E         | EM        | Good                               | Strong typically apical growth. Vigorous.       | + 20                                     | B2                             |
| T20      | Alnus glutinosa<br>Common Alder        | 11.0       | 2.5              | 2.0 | 1.0 | 2.5 | 0.38          | 1.00             | 1.00                          | N           | EM        | Good                               | Strong typically apical growth. Vigorous.       | + 20                                     | B2                             |
| T21      | Alnus glutinosa<br>Common Alder        | 11.0       | 1.0              | 2.0 | 2.5 | 2.5 | 0.38          | 1.00             | 1.00                          | N           | EM        | Good                               | Strong typically apical growth. Vigorous.       | + 20                                     | B2                             |

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| Ref. no. | Species                                                                  | Height (m) | Crown spread (m) |     |     |     | Stem dia. (m) | Stem no. at 1.5m | Height of crown clearance (m) | Dir/ height | Age class | Structural Physiological condition | General observations Management recommendations                                                                                                                                                                                                                                       | Estimated remaining contribution (years) | Tree Quality Category (BS5837) |
|----------|--------------------------------------------------------------------------|------------|------------------|-----|-----|-----|---------------|------------------|-------------------------------|-------------|-----------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------|
|          |                                                                          |            | N                | E   | S   | W   |               |                  |                               |             |           |                                    |                                                                                                                                                                                                                                                                                       |                                          |                                |
| T22      | Populus alba<br>White Poplar                                             | 21.0       | 7.0              | 7.0 | 7.0 | 7.0 | 0.39          | 1.00             | 4.50                          | N           | M         | Good                               | Large boundary tree, part of the linear group.                                                                                                                                                                                                                                        | + 20                                     | C2                             |
| T23      | Pinus sylvestris<br>Scots Pine                                           | 17.0       | 5.5              | 4.0 | 5.5 | 4.0 | 0.45          | 1.00             | 7.00                          | -           | M         | Good                               | Large mature tree, crown has been suppressed due to adjacent trees.                                                                                                                                                                                                                   | + 40                                     | B2                             |
| G1       | Cupressocyparis leylandii<br>Leyland Cypress                             | 17.0       | As shown         |     |     |     | -             | -                | -                             | -           | M         | Fair                               | These have asymmetrical formed crowns. This group consists of fairly grown out individuals                                                                                                                                                                                            | + 20                                     | C2                             |
| G2       | Cupressocyparis leylandii, Thuja plicata                                 | 4.0        | As shown         |     |     |     | -             | -                | -                             | -           | M         | Fair                               | Two distinct linear groups . These have asymmetrical formed crowns. The lesser bounding group to the north and running east-west has been managed as a lower 6m hedge. The to the west buffer group is greater in height provides enclosure to the car parking area, little else.     | + 20                                     | C2                             |
| G3       | Alnus glutinosa<br>Common Alder                                          | 18.0       | As shown         |     |     |     | -             | -                | -                             | -           | EM        | Good                               | There are asymmetrical formed crowns, and the trees have a heavily suppressed form, but good overall condition. Well suited to ground conditions.                                                                                                                                     | + 40                                     | B2                             |
| G4       | Salix caprea<br>Goat Willow                                              | 8.0        | As shown         |     |     |     | -             | -                | -                             | -           | Y         | Fair                               | Typically vigorous, self-seeded vegetation                                                                                                                                                                                                                                            | + 20                                     | C2                             |
| G5       | Cupressocyparis leylandii, Thuja plicata                                 | 9.0        | As shown         |     |     |     | -             | -                | -                             | -           | EM        | Fair                               | Two distinct linear groups . These have asymmetrical formed crowns. The lesser bounding group to the north and running east-west has been managed as a lower 6m hedge. The to the west buffer group is greater in height and provides enclosure to the car parking area, little else. | + 20                                     | C2                             |
| G6       | Populus alba<br>White Poplar                                             | 4.5        | As shown         |     |     |     | -             | -                | -                             | -           | EM        | Fair                               | All along eastern boundary Part of linear group along road. Some snapped branches but good overall condition.                                                                                                                                                                         | + 20                                     | C2                             |
| G7       | Cupressocyparis leylandii<br>Leyland Cypress                             | 4.0        | As shown         |     |     |     | -             | -                | -                             | -           | M         | Fair                               | All along eastern boundary Part of linear group along road. Some snapped branches but good overall condition.                                                                                                                                                                         | + 20                                     | C2                             |
| G8       | Cupressocyparis leylandii, Populus alba<br>Leyland Cypress, White Poplar | 4.0        | As shown         |     |     |     | -             | -                | -                             | -           | M         | Fair                               | Buffer/ shelter belt group                                                                                                                                                                                                                                                            | + 20                                     | C2                             |

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|----------|-------------------------------------------------------------------------------------------|------------|------------------|---|---|---|---------------|------------------|-------------------------------|-------------|-----------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------|
|          |                                                                                           |            | N                | E | S | W |               |                  |                               |             |           |                                    |                                                                                                                         |                                          |                                |
| G9       | Cupressus macrocarpa<br>Monterey cypress                                                  | 18.0       | As shown         |   |   |   | -             | -                | -                             | -           | M         | Fair                               | Buffer/ shelter belt group                                                                                              | + 20                                     | C2                             |
| G10      | Salix caprea, Acer pseudoplatanus<br>Goat Willow, Sycamore                                | 7.5        | As shown         |   |   |   | -             | -                | -                             | -           | Y         | Fair                               | Typically vigorous, self-seeded vegetation                                                                              | + 20                                     | C2                             |
| G11      | Acer pseudoplatanus,<br>Cupressocyparis leylandii, Thuja plicata<br>Sycamore, conifer sp. | 10.0       | As shown         |   |   |   | -             | -                | -                             | -           | EM        | Fair                               | Buffer/ shelter belt group                                                                                              | + 20                                     | C2                             |
| G12      | Acer pseudoplatanus,<br>Cupressocyparis leylandii, Thuja plicata<br>Sycamore, conifer sp. | 11.0       | As shown         |   |   |   | -             | -                | -                             | -           | EM        | Fair                               | Part of linear group along road and the northern boundary                                                               | + 20                                     | C2                             |
| G13      | Tilia sp, Acer pseudoplatanus,<br>Lime sp. Sycamore                                       | 12.0       | As shown         |   |   |   | -             | -                | -                             | -           | EM        | Fair                               | A group of lime and other broadleaf trees of moderate value, together with the vegetation bounding the public footpath. | + 20                                     | B2                             |
| H1       | Crataegus monogyna, Ligustrum ovalifolium<br>Hawthorn, Privet                             | 1.8        | As shown         |   |   |   | -             | -                | -                             | -           | EM        | Fair                               | Hawthorn- rich hedge                                                                                                    | + 20                                     | C2                             |
| H2       | Crataegus monogyna, Corylus avellana<br>Hawthorn, Hazel                                   | 2.25       | As shown         |   |   |   | -             | -                | -                             | -           | EM        | Fair                               | Mixed species agricultural hedge at foot of the nursery site                                                            | + 20                                     | C2                             |

Note: This survey is based on a brief visual inspection from the ground.  
 It is not intended as a full arboricultural inspection.

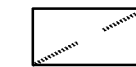
# - Indicates estimated / offsite tree

# APPENDIX 2

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Tree Survey Drawings JSL2477\_700 to 702 (as amended)

- Key



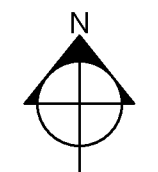
BS 5837:20

Category U - Unsuitable for reevaluation

Tree group protected by Tree Preservation Order No.(TPO/BN/1/13)

Root protection area (RPA)  
Calculated in accordance with Section  
4.6 - BS5837:2012

- Refer to RPS Tree Survey Report & Schedule for further details.
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
- Plan produced in accordance with recommendations set out in BS 5837:2012 - 'Trees in Relation to design, demolition and construction'.
- Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period; generally, although not restricted to, March - August inclusive.
- Survey based upon topographic survey produced by produced by M.J. Zera Associates of Lewes, East Sussex in November 2011 (ref 7054)



|     |              |            |         |         |
|-----|--------------|------------|---------|---------|
|     |              |            |         |         |
| A   | Minor amends | 09/06/2015 | JB      | CC      |
| Rev | Description  | Date       | Initial | Checked |

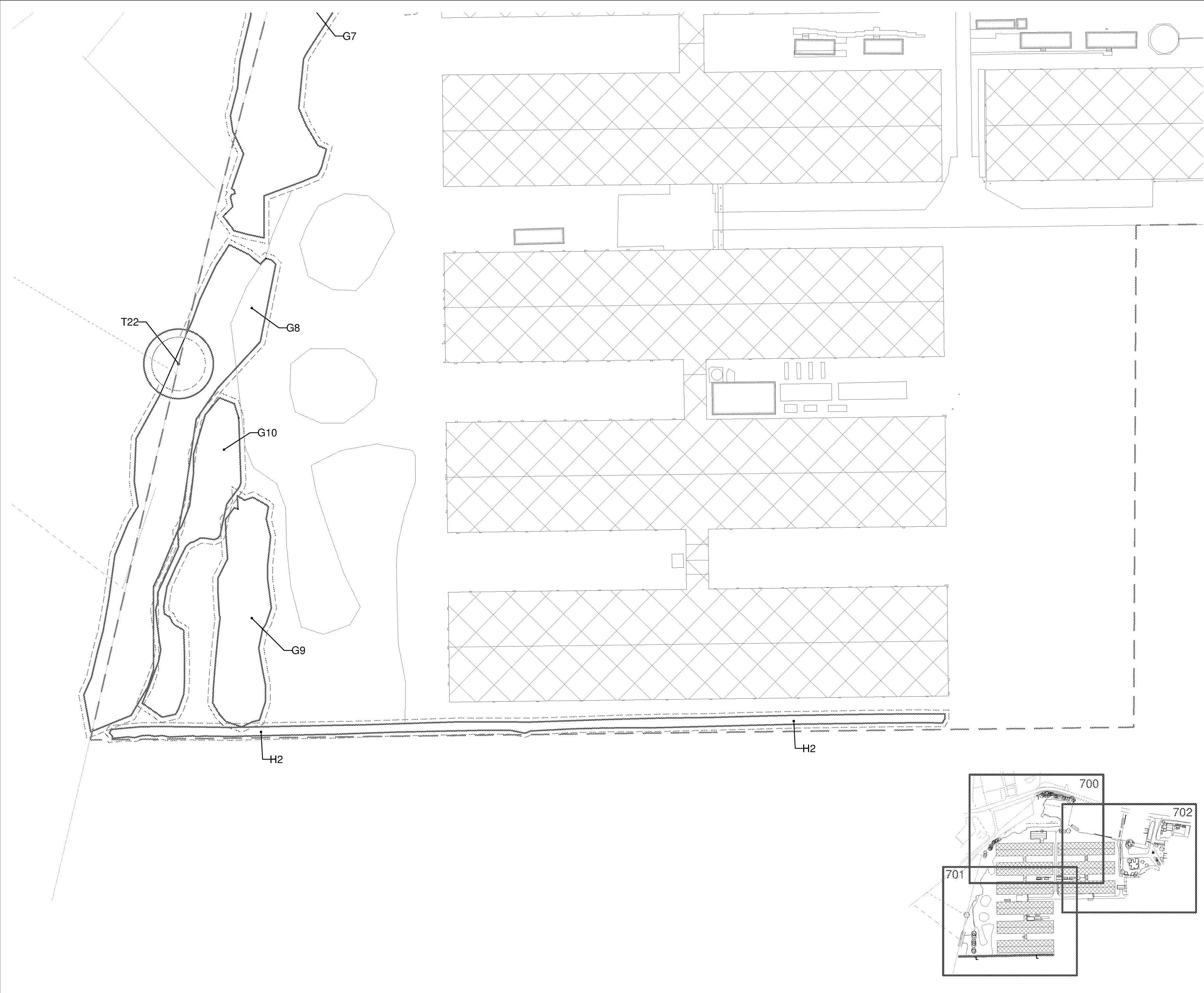


Title Tree Survey  
(Sheet 1 of 3)

|             |            |               |
|-------------|------------|---------------|
| Status      | Drawn By   | PM/Checked by |
| For Comment | SH         | CC            |
| Job Ref     | Scale @ A2 | Date Created  |
| JSL 2477    | 1:500      | 27/04/2015    |

|                |     |
|----------------|-----|
| Drawing Number | Rev |
| 700            | A   |

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Notes

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2. If received electronically it is the recipient's responsibility to print to correct scale. Only written dimensions should be used.

Key

- Survey boundary.
- Tree with numbered reference. Canopy spread and BS5837:2012 tree quality category as shown below.
- Vegetation group with numbered reference. Canopy extents and BS5837:2012 tree quality category as shown below.
- Hedge with numbered reference. Width and BS5837:2012 tree quality category as shown below.

BS 5837:2012 Tree Quality Categories - Table 1

- Category A - High quality
- Category B - Moderate quality
- Category C - Low quality
- Category U - Unsuitable for retention

- Tree group protected by Tree Preservation Order No.(TPO/BN/1/13)

- Root protection area (RPA) Calculated in accordance with Section 4.6 - BS5837:2012

NOTES:

- Refer to RPS Tree Survey Report & Schedule for further details.
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
- Plan produced in accordance with recommendations set out in BS 5837:2012 - 'Trees in Relation to design, demolition and construction'.
- Due to the legal protection afforded to breeding birds vegetation removal should not take place during the bird nesting period; generally, although not restricted to, March - August inclusive.
- Survey based upon topographic survey produced by produced by M.J. Zara Associates of Lewes, East Sussex in November 2011(ref 7054)



|     |              |            |         |         |
|-----|--------------|------------|---------|---------|
| A   | Minor amends | 09/06/2015 | JB      | CC      |
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Client Redrow Homes

Project Lake Lane, Barnham

Title Tree Survey (Sheet 2 of 3)

|             |            |               |
|-------------|------------|---------------|
| Status      | Drawn By   | PM/Checked by |
| For Comment | SH         | CC            |
| Job Ref     | Scale @ A2 | Date Created  |
| JSL 2477    | 1:500      | 27/04/2015    |

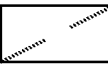
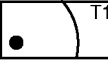
|                |     |
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| 701            | A   |

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Key

-  Survey boundary.
-  Tree with numbered reference.  
Canopy spread and BS5837:2012 tree quality category as shown below.
-  Vegetation group with numbered reference.  
Canopy extents and BS5837:2012 tree quality category as shown below.
-  Hedge with numbered reference.  
Width and BS5837:2012 tree quality category as shown below.
- BS 5837:2012 Tree Quality Categories - Table 1

 Category A - High quality

 Category B - Moderate quality

 Category C - Low quality

 Category U - Unsuitable for retention
-  Tree group protected by Tree Preservation Order No. (TPO) (BN/1/13)
-  Root protection area (RPA)  
Calculated in accordance with Section 4.6 - BS5837:2012

NOTES:

- Refer to RPS Tree Survey Report & Schedule for further details.
- Survey based on a visual inspection from the ground and is not intended as a full arboricultural inspection.
- Plan produced in accordance with recommendations set out in BS 5837:2012 - 'Trees in Relation to design, demolition and construction'.
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|     |              |            |         |         |
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| A   | Minor amends | 09/06/2015 | JB      | CC      |
| Rev | Description  | Date       | Initial | Checked |



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Client Redrow Homes

Project Lake Lane,  
Barnham

Title Tree Survey  
(Sheet 3 of 3)

|             |            |               |
|-------------|------------|---------------|
| Status      | Drawn By   | PM/Checked by |
| For Comment | SH         | CC            |
| Job Ref     | Scale @ A2 | Date Created  |
| JSL 2477    | 1:500      | 27/04/2015    |

|                |     |
|----------------|-----|
| Drawing Number | Rev |
| 702            | A   |

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## APPENDIX 3

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### Botanical and Common Names of Trees on Site

|                              |                   |
|------------------------------|-------------------|
| <i>Acer platanoides</i>      | Norway Maple      |
| <i>Acer pseudoplatanus</i>   | Sycamore          |
| <i>Alnus glutinosa</i>       | Alder             |
| <i>Amelanchier lamarckii</i> | Amelanchier       |
| <i>Cupressus macrocarpa</i>  | Monterey Cypress  |
| <i>Cupressus × leylandii</i> | Leyland Cypress   |
| <i>Crataegus monogyna</i>    | Common Hawthorn   |
| <i>Ilex aquifolium</i>       | Holly             |
| <i>Ligustrum ovalifolium</i> | Privet            |
| <i>Sorbus aria</i>           | Whitebeam         |
| <i>Pinus sylvestris</i>      | Scots Pine        |
| <i>Populus alba</i>          | Poplar            |
| <i>Salix caprea</i>          | Goat Willow       |
| <i>Thuja plicata</i>         | Western Red Cedar |
| <i>Tilia sp.</i>             | Lime sp.          |