

Arboricultural Survey

Land at Bilsham Road
Yapton
West Sussex



13th March 2018

PJC ref: 3867/15/01 Rev 04

This report has been prepared by
PJC Consultancy Ltd
on behalf of
Gleeson Homes

**Original
Report by**

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Owen has received both an FdSc and a BSc (Hons) in Arboriculture and is a professional member of the Arboricultural Association. Working in the industry for nearly 10 years, Owen has extensive experience in arboricultural contracting, consultancy and business management.

**Updated
by**

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Luke is an arboriculturist with over six years experience working within the arboricultural and forestry industry with the latter four years working within consultancy. He gained a foundation degree in arboriculture with distinction from the University of Brighton in 2012 and is a professional member of the Arboricultural Association.

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1 INTRODUCTION

1.1 Instruction: PJC Consultancy has been instructed by Gleeson Homes to provide an arboricultural survey of Land at Bilsham Road, Yapton, West Sussex. The survey is to be undertaken in accordance with BS5837: 2012 '*Trees in relation to design, demolition and construction – Recommendations*'.

1.2 Survey objectives: This survey has been undertaken with the following objectives:

- To record a schedule of significant trees (dimensions and locations) situated at the prospective development site.
- To assess the quality and value of the existing tree stock in terms of arboricultural, landscape, historical/conservation, or public amenity value.
- To provide information relating to planning constraints that may restrict works to trees at the site.
- To provide an assessment of the material constraints posed by the existing tree stock on potential future developments at the site.
- To aid the design process, ensuring prospective developments integrate appropriately with the existing tree stock, to maximise the potential of the proposed development site.

1.3 Scope of this report: This report is concerned with all significant trees and arboricultural features located within the site boundary. Additionally, trees located around the curtilage of the site have also been surveyed when they are considered likely to have the potential to impact on the development (in relation to root and crown protection or foundation design).

1.4 Contents of report: This report includes the following:

- A summary of the existing tree stock and notable arboricultural features.
- Tree Constraints Plan in accordance with BS5837: 2012.
- Tree Survey Schedule containing the relevant measurements and information for each tree or tree group as required in BS5837: 2012.

1.5 Documents and information provided: The following documents were used to aid the preparation of this report:

- 7Q0C – Land at Bilsham Road, Yapton – Rev4-Full Site (Topographical Survey).

2 SITE VISIT AND SURVEY METHODOLOGY

2.1 Site visit: A site visit was carried out on Wednesday 11th December 2017 by Owen Allpress and then a further updated site visit was completed on 5th March 2018 by Luke White utilising an updated topographical survey. The weather conditions at the time were overcast and the visibility was adequate for visual tree inspection from ground level.

2.2 Tree survey information: The following information was recorded in the Tree Survey Schedule for each individual tree (average dimensions are recorded for groups):

- Tree reference number. (T=tree, G=group, H=hedgerow, W=woodland block). Tree numbers suffixed with PA on the Tree Constraints Plan indicate the trees location was not included on the site plan provided so the tree's position was approximated on site.
- Species (common and scientific name).
- Overall tree height (m).
- Stem diameter (mm) per stem or average diameter for multi-stemmed trees with six or more stems.
- Branch spread (m) measured to the four cardinal points.
- Existing height (m) above ground level of lowest significant branch and direction of growth (for individual trees only).
- Existing height (m) above ground level of canopy.
- Age class (young, semi mature, early mature, mature, over mature or veteran).
- Physiological condition (good, fair, poor).
- Structural condition (good, fair, poor).
- Comments (general description of tree(s) including any notable features).
- Preliminary management recommendations (prescriptions for tree management processes based on the current land use and not related to the prospective development).
- Tree categorisation (see below).
- Root protection area (m²).
- Root protection radius (m).

2.3 Tree categorisation: The condition and value of each tree was evaluated based on the current land use. Each tree or tree group has been awarded either category A, B, C or U and a sub category of either 1,2 or 3 or a combination of the sub categories.

2.4 Tree categorisation summary:

- A – Trees of good condition and high arboricultural, landscape or conservation value. Must have a potential life span in excess of forty years.
- B – Trees of moderate condition, with minor defects or sub-optimal form but are still of modest arboricultural, landscape or conservation value. Must have a potential life span in excess of twenty years.
- C – Unremarkable trees of poor condition or form with limited arboricultural, landscape or conservation value, or trees with a stem diameter under 150mm. Must have a potential life span in excess of ten years.
- U – Trees of such impaired condition that they cannot realistically be retained as living trees in the context of the current land use for more than ten years. These trees do not need to be removed if they are not dangerous and do not conflict with the proposed development, but should not be considered a constraint to development.

2.5 Tree sub categorisation summary:

- 1 – Trees have mainly arboricultural value, e.g. trees of good condition, form and vitality or rare tree species.
- 2 – Trees have mainly landscape value, e.g. trees of landscape prominence, that serve to screen unsightly views or that are required for privacy. Also trees present in groups that attain higher collective rating that they would as individuals.
- 3 – Trees with mainly cultural value including conservation, e.g. commemorative trees, trees of historical significance or veteran trees.

2.6 Each tree can only be categorised as A, B or C but may comply with more than one sub category. A cascade chart further explaining how tree categorisation is decided is included in Appendix 3.

2.7 Root protection areas: A root protection area represents the minimum amount of root growth required to support a tree. It is a standardised calculation based on the stem diameter(s) measured at 1.5m and is not necessarily representative of the actual or total rooting area. The formulas used to calculate root protection areas are shown below:

Table 1: Root protection area formulas

For single stemmed trees

$$\text{Root protection area (m)} = \frac{(\text{stem diameter (mm)} \times 12)}{1000} \times \pi$$

For trees with two to five stems, a combined stem diameter is calculated as follows:

$$\sqrt{(\text{stem diameter 1}) + (\text{stem diameter 2}) \dots + (\text{stem diameter 5})}$$

For trees with more than five stems, the combined stem diameter is calculated as follows:

$$\sqrt{(\text{mean stem diameter}) \times \text{number of stems}}$$

2.8 The root protection areas are plotted onto the Tree Constraints Plan in Appendix 1, and recorded in the Tree Survey Schedule in Appendix 2. These are represented as a circle on the plan (unless significant rooting constraints are present), and are colour coded depending on the category the tree has been awarded. Where existing site conditions/features are present that are deemed likely to have affected the root morphology, the root protection areas have represented as a polygon of equivalent area.

2.9 The proposed layout should avoid level changes or the placement of new buildings and areas of hard surfacing within the root protection areas of retained trees. In certain situations, engineered solutions are available to allow construction within the root protection areas however further input from an arboriculturalist should be sought regarding their site-specific viability before these methods are relied upon.

2.10 The disturbance of a tree's root system can result in crown dieback and even death of the tree. Roots are used to support the tree structurally as well as the absorption of moisture and nutrients from the soil. They also act as storage and transport for water and nutrients.

2.11 Direct damage such as root severance can lead to ill health, as can compaction of the soil by construction traffic, heavy plant and storage of materials. Changing the nature of the surface above the

growing medium, (i.e. from porous to non-porous), can alter the resources available to the tree, which in turn can lead to its decline.

2.12 The majority of root growth is usually found within the top 600mm-1000mm of soil. As such, even shallow disturbance within root protection areas can potentially have a significant impact on the trees.

2.13 The root protection areas must be left free from excavation and disturbance, and protected from compaction or contamination during any proposed works. Any construction works within a root protection area required for the proposed layout must be justifiable within the arboricultural impact assessment.

2.14 **Limitations of survey:** The survey methodology was restricted to a visual tree assessment from ground level. No tree climbing or ground investigation was carried out for this report. Where existing site constraints are present such as ivy covered trees, a very dense under-storey, or where trees are located on third party land to which access was not granted, tree dimensions were estimated by eye as accurately as possible.

2.15 This survey represents a preliminary overview of the condition and value trees at the site. It is not a detailed assessment of any individual tree and although preliminary management recommendations are included, this report will not be sufficient to be used as a detailed condition and safety survey.

2.16 The information and measurements in this report are representative of the date of the site visit. The tree survey data will need to be updated to reflect tree growth and changes in the condition of trees after prolonged periods.

3 SITE DETAILS AND SURVEY FINDINGS

3.1 Site location: The site is situated to the south-west of Yapton Village within the county of West Sussex. It has a central OS national grid reference of SU 97525 02876. Residential properties border the site to the north and east with arable land bordering the site to the south and west. The location of the site within its environs is shown in figure 1.



Figure 1: Location of Site and Environs

3.2 Site layout: The site is comprised of several arable fields bordering the village of Yapton on the south west periphery of a large residential area. The fields are separated by a network of tree lined ditches with an understory of dense bramble scrub. A number of public footpaths run throughout the site and appear to be heavily used by both pedestrians and bicycles. Although it is assumed that the redline boundary runs along the centre of ditches, trees included in this report may be located on either side and have been recorded as their root protection areas may extend beyond this theoretical boundary.

3.3 Appraisal of tree stock: Trees at the site are located in linear groups that run adjacent to the network of water filled ditches. A total of five pedunculate oak (T3, T4, T8, T19, and T37) located within the site boundaries have been awarded the retention category A due to their exceptional form, arboricultural merit, landscape value and their predicted future contribution beyond forty years. The site's linear features also contain sixteen individual category B trees. These trees have been downgraded from an A category as they have minor defects that result in a predicted future contribution of less than forty years. The remaining tree stock at the site are of low arboricultural value and have subsequently been awarded either a C category or a U category.

3.4 Measurements and further information for each tree can be viewed in the Tree Survey Schedule in Appendix 2.

3.5 Tree categorisation summary: A total of forty-four individual trees and seven tree groups were surveyed and recorded in the Tree Survey Schedule. Overall five individual trees were categorised as A due to their exceptional form and predicted future contribution of more than forty years. Sixteen

individual trees were categorised as B and sixteen individual trees and seven tree groups were categorised as C. The predicted future contribution of seven individual trees is less than ten years leading to their categorisation U. Category U trees should be removed due to their existing defects and not as a result of any future development.

Table 2: Tree categorisation summary

Categorisation	Individual tree	Tree group	Total
A	5	0	5
B	16	0	16
C	16	7	23
U	7	0	7

3.6 Statutory tree protection: Information supplied by Arun District Council Planning Department confirms that a number of the trees across the site are protected by Tree Preservation Order (TPO) TPO/Y/3/18 and TPO/Y/4/18. Protected trees have been highlighted as such on both the Tree Constraints Plan in Appendix 1 and the Tree Survey Schedule in Appendix 2.

3.7 Any persons proposing to undertake tree works should check the status of the trees with the local authority, and gain necessary consent before works are undertaken. 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 RECOMMENATIONS

4.1 Arboricultural input to planning application: To comply with BS5837: 2012, an arboricultural impact assessment should be produced when the proposed layout has been fixed. The arboricultural impact assessment should include a schedule of trees to be retained or removed as well as access facilitation pruning required to enable the construction works. It should also evaluate the likely effects of the construction works on retained trees including post development pressures and provide recommendations on mitigation measures to be implemented.

4.2 It is recommended that input is sought from the project arboriculturalist into the proposed layout before it is fixed. This will help ensure the proposed layout integrates well with the retained tree stock, and will allow potential areas of conflict that may not be identified by non-arboricultural professionals to be rectified whilst the layout is being developed.

4.3 The arboricultural impact assessment should be accompanied by an arboricultural method statement and a dimensioned Tree Protection Plan to show how retained trees will be protected whilst the development is constructed.

4.4 Arboricultural considerations for proposed layout: The proposed layout should take into account the following considerations related to trees:

- The proposed layout should seek to retain higher quality trees, particularly those that cannot be easily replaced. Where tree removal is necessary to facilitate the wider regeneration benefits associated with development, a tree replacement strategy could be implemented to mitigate tree loss. A net loss in tree cover within a development site will not be looked on favourably when determining a planning application.
- The proposed layout should take into account the root protection areas of retained trees. These should be left free of construction activities including hard landscaping unless the project arboriculturalist confirms engineered solutions or sympathetic construction methodology will be a viable option to mitigate the encroachment.
- The proposed layout should take into account the shade cast by trees. Over-shading of gardens and buildings (notably habitable rooms) can result in future pressures to prune or remove additional trees post development and will be a material consideration for the local authority when determining a planning application.
- The proposed layout should also take into account other common potential nuisances resulting from trees including nuisance caused by leaf/fruit drop or honeydew drip (particularly onto footpaths, parking areas or roof guttering) and an over-bearing presence of large trees.
- Allowance should be made for future canopy growth of both existing and newly planted trees. Trees growing in areas of limited space may require regular future pruning works. The suitability of different species for regular crown reductions, the affect on their amenity value and the cost of future tree works (as well as who would be responsible for undertaking the works) should be considered.

4.5 If further tree planting does occur within the development site, consideration should be given to species selection (in relation to form and potential size) and planting locations to ensure their successful integration into the new development. Recommendations for mitigation tree planting may be included in the arboricultural impact assessment, or a more thorough landscaping strategy may be provided by a landscape designer/architect.

4.6 The final design should show service locations and their routing. New utilities should be located outside of the trees root protection areas where they are underground and outside of the anticipated

area of mature crown spread where above ground. If this is not possible, recommendations outlined in NJUG10 '*Guidelines for the planning, installation and maintenance of utilities in proximity to trees*' should be followed. Advice should also be sought from the project arboriculturalist.

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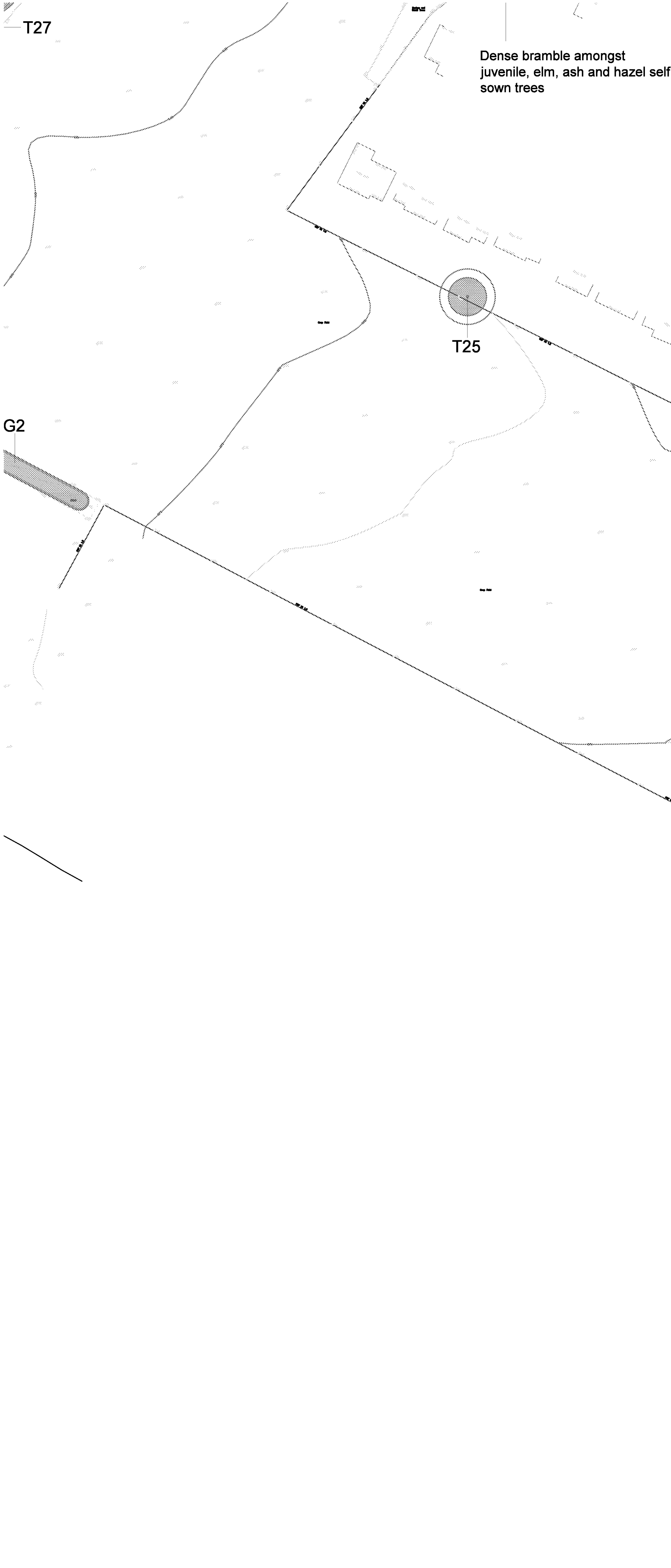
Date: 13th March 2018

E-mail:

APPENDIX 1

Tree Constraints Plan





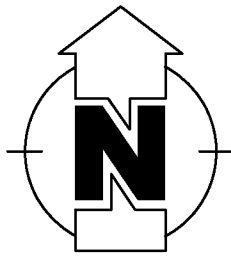
Key:

- RPA for CAT A Tree*
- RPA for CAT B Tree*
- RPA for CAT C Tree*
- RPA for CAT U 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/3867/15/01 Rev 04 contains further information for each tree.

This drawing should be viewed in colour.



Drawing no: PJC/3847/15/A Rev: 04 Sheet number: 2 of 4

Client and site:
Gleeson Homes
Land at Bilsham Road
Yapton
West Sussex

Drawing title: Tree Constraints Plan

Date drawn: 13/03/2018

Scale: NTS at A1

Drawn by: LW

Checked by: NB



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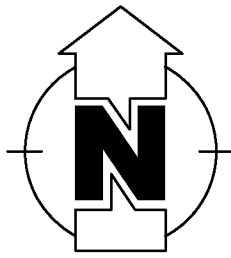
Key:

-  RPA for CAT A Tree*
-  RPA for CAT B Tree*
-  RPA for CAT C Tree*
-  RPA for CAT U 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/3867/15/01 Rev 04 contains further information for each tree.

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Drawing no: PJC/3847/15/A Rev: 04 Sheet number: 3 of 4

Client and site:
Gleeson Homes
Land at Bilsham Road
Yapton
West Sussex

Drawing title: Tree Constraints Plan

Date drawn: 13/03/2018

Scale: NTS at A1

Drawn by: LW

Checked by: NB



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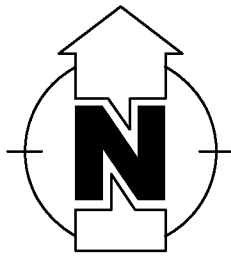
Key:

- RPA for CAT A Tree*
- RPA for CAT B Tree*
- RPA for CAT C Tree*
- RPA for CAT U 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/3867/15/01 Rev 04 contains further information for each tree.

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Drawing no: PJC/3847/15/A Rev: 04 Sheet number: 4 of 4

Client and site:
Gleeson Homes
Land at Bilsham Road
Yapton
West Sussex

Drawing title: Tree Constraints Plan

Date drawn: 13/03/2018

Scale: NTS at A1

Drawn by: LW **Checked by:** NB



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APPENDIX 2

Tree Survey Schedule

Tree Survey Schedule

Client: Gleeson Homes
Site: Land at Bilsham Road, Yapton, West Sussex.
Survey date: 5th March 2018
Surveyor: Luke White



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments and preliminary management recommendations	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T1	ash (<i>Fraxinus excelsior</i>)	10	390 AV	N: 5 E: 5 S: 4 W: 6	Crown: 1 AV Branch: 3 AV	Mature	Good	Fair	Multiple stems arising from embankment of water filled ditch. No remedial works required at time of survey.	C2	68.9	4.7
T2	pedunculate oak. (<i>Quercus robur</i>)	6	450	N: 0 E: 3 S: 7 W: 3	Crown: 1 AV Branch: 1 AV	Mature	Good	Fair	Pronounced lean into field. Crown weighted west. No remedial works required at time of survey.	C2	91.7	5.4
T3	pedunculate oak. (<i>Quercus robur</i>)	13	770	N: 6 E: 6 S: 6 W: 6	Crown: 2 AV Branch: 2 AV	Mature	Good	Good	Single stem specimen with well formed crown structure. Growing on embankment of water filled ditch. No remedial works required at time of survey. TPO	A1+2	268.6	9.2
T4	pedunculate oak. (<i>Quercus robur</i>)	15	840	N: 5 E: 7 S: 6 W: 6	Crown: 3 AV Branch: 4 AV	Mature	Good	Good	Single stem specimen with well formed crown . Deadwood throughout crown. Remove deadwood if land use changes. TPO.	A1+2	319.6	10.1
T5	ash (<i>Fraxinus excelsior</i>)	15	500 EST	N: 7 E: 7 S: 6 W: 3	Crown: 3 AV Branch: 3 AV	Mature	Fair	Fair	Deadwood throughout crown. Minor cavities throughout crown. One co-dominant stem has previously failed into ditch. No remedial works required at time of survey.	C1+2	113.3	6.0
T6	field maple. (<i>Acer campestre</i>)	5	350 EST	N: 4 E: 4 S: 4 W: 4	Crown: 1 AV Branch: 1 AV	Mature	Poor	Poor	Located in centre of ditch. Basal decay evident. Remove due to existing defects.	U	55.5	4.2

Tree Survey Schedule

Client: Gleeson Homes
Site: Land at Bilsham Road, Yapton, West Sussex.
Survey date: 5th March 2018
Surveyor: Luke White



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments and preliminary management recommendations	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T7	pedunculate oak. (<i>Quercus robur</i>)	12	680	N: 5 E: 5 S: 5 W: 4	Crown: 2 AV Branch: 3 AV	Mature	Fair	Fair	Situated in dense linear group on field boundary. Showing signs of coastal exposure. No remedial works required at time of survey. TPO.	B1+2	209.5	8.2
T8	pedunculate oak. (<i>Quercus robur</i>)	14	< 1500 EST	N: 8 E: 9 S: 8 W: 8	Crown: 3 AV 3 AV	Veteran	Fair	Fair	Veteran tree of considerable size and ecological value. Significant soil compaction within RPA. Protect throughout future development. TPO.	A2+3	707.8	15.0 CAPPED
T9	pedunculate oak. (<i>Quercus robur</i>)	14	730	N: 9 E: 9 S: 8 W: 4	Crown: 5 AV Branch: 5 AV	Mature	Fair	Good	Single stem specimen with typical crown form. Situated in water filled ditch. No remedial works required at time of survey. TPO.	B1+2	241.4	8.8
T10	pedunculate oak. (<i>Quercus robur</i>)	13	680	N: 10 E: 3 S: 10 W: 9	Crown: 4 AV Branch: 4 AV	Mature	Fair	Good	Situated adjacent to water filled ditch. Single stem specimen with crown weighted north. Dense ivy on main stem. Sever ivy. TPO	B1+2	209.5	8.2
T11	goat willow (<i>Salix caprea</i>)	11	350 EST	N: 5 E: 4 S: 5 W: 3	Crown: 4 AV Branch: 4 AV	Mature	Fair	Poor	One co-dominant leader has failed leaving wound on main stem. Significant deadwood in crown. No remedial works required at time of survey.	C2	55.5	4.2
T12	ash (<i>Fraxinus excelsior</i>)	13	650 EST	N: 5 E: 5 S: 5 W: 5	Crown: 6 AV Branch: 6 AV	Mature	Poor	Fair	Cavity on main stem at 4m. Inonotus hispidus fruiting bodies throughout crown. Remove due to existing defects.	U	191.4	7.8

Tree Survey Schedule

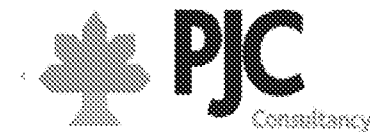
Client: Gleeson Homes
Site: Land at Bilsham Road, Yapton, West Sussex.
Survey date: 5th March 2018
Surveyor: Luke White



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments and preliminary management recommendations	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T13	ash (<i>Fraxinus excelsior</i>)	10	400 EST	N: 3 E: 3 S: 3 W: 3	Crown: / Branch: /	Dead	Poor	Poor	Dead standing tree. Remove due to existing defects.	U	72.5	4.8
T14	pedunculate oak. (<i>Quercus robur</i>)	14	636 MS	N: 5 E: 6 S: 5 W: 4	Crown: 4 AV Branch: 4 AV	Mature	Fair	Good	Situated in water filled ditch. Two co-dominant stems at ground level. No remedial works required at time of survey. TPO.	B2	183.2	7.6
T15	pedunculate oak. (<i>Quercus robur</i>)	13	550 MS	N: 6 E: 6 S: 6 W: 5	Crown: 2 AV Branch: 2 AV	Mature	Good	Fair	Large basal cavity with incipient decay. Situated in ditch. No remedial works required at time of survey. (TPO)	C2	137.0	6.6
T16	pedunculate oak. (<i>Quercus robur</i>)	13	890	N: 8 E: 7 S: 7 W: 8	Crown: 3 AV Branch: 3 AV	Mature	Good	Good	Single stem specimen with well formed crown structure. Dense ivy on main stem. Sever ivy. TPO.	B2	358.8	10.7
T17	ash (<i>Fraxinus excelsior</i>)	13	610 MS	N: 7 E: 6 S: 6 W: 7	Crown: 4 AV Branch: 4 AV	Mature	Fair	Fair	Deadwood present within crown. Evidence of coastal exposure. Dense ivy on main stem. Sever ivy.	B2	168.6	7.3
T18	field maple. (<i>Acer campestre</i>)	12	450 EST	N: 6 E: 6 S: 6 W: 6	Crown: 1 South Branch: 2 AV	Mature	Fair	Fair	Dense ivy inhibits thorough inspection. Sever ivy. TPO.	B1+2	91.7	5.4

Tree Survey Schedule

Client: Gleeson Homes
Site: Land at Bilsham Road, Yapton, West Sussex.
Survey date: 5th March 2018
Surveyor: Luke White



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments & Preliminary Management Recommendation	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T19	pedunculate oak. (<i>Quercus robur</i>)	13	740 EST	N: 10 E: 8 S: 9 W: 8	Crown: 4 AV Branch: 4 AV	Mature	Good	Good	Single stem specimen with well formed crown structure. Dense ivy inhibits thorough inspection. Sever ivy. TPO.	A2	248.1	8.9
T20	pedunculate oak. (<i>Quercus robur</i>)	11	400 EST	N: 6 E: 5 S: 6 W: 5	Crown: 3 AV Branch: 3 AV	Mature	Good	Good	Situated on field boundary. Crown has grown up with the crown of T19. No remedial works required at time of survey. TPO.	B2	72.5	4.8
T21	elder. (<i>Sambucus nigra</i>)	5	328 MS	N: 5 E: 5 S: 2 W: 5	Crown: 1 North Branch: 2 North	Mature	Poor	Poor	Multi-stem specimen. Significant decay throughout basal unions. Deadwood throughout crown. Remove due to existing defects.	U	48.7	3.9
T22	elder. (<i>Sambucus nigra</i>)	3	160 MS	N: 1 E: 3 S: 1 W: 3	Crown: 0 AV Branch: 0 AV	Young	Fair	Fair	Multiple stems arising from ground level. Dense ivy throughout crown. Poor form. No remedial works required at time of survey.	C2	11.6	1.9
T23	hazel. (<i>Corylus avellana</i>)	5	313 MS	N: 3 E: 3 S: 3 W: 0	Crown: 2 AV Branch: 2 AV	Semi mature	Fair	Fair	Coppice stool adjacent to footway. Dense understory. No remedial works required at time of survey.	C2	44.4	3.8
G1	Leyland cypress (<i>Cupressocyparis leylandii</i>)	7. AV	210 AV	N: 2 E: 2 S: 2 W: 2	Crown: 0 AV Branch: 0 AV	Early mature	Good	Fair	Linear group of trees situated on site boundary. Planted as screening. No remedial works required at time of survey.	C2	20.0	2.5

Tree Survey Schedule

Client: Gleeson Homes
Site: Land at Bilsham Road, Yapton, West Sussex.
Survey date: 5th March 2018
Surveyor: Luke White



Tree ref.	Species	Height (m)	Stem diameter (mm)	Branch spread (m)	Crown clearance (m)	Age class	Physiological condition	Structural condition	Comments & Preliminary Management Recommendation	Category grading	Root Protection Area (m2)	Root Protection Radius (m)
T24 PA	silver birch (<i>Betula pendula</i>)	10	230 EST	N: 3 E: 3 S: 3 W: 3	Crown: 3 AV Branch: 1 AV	Mature	Good	Fair	Third party tree located in adjacent garden. No access to survey. Protect throughout future development.	B1	24.0	2.8
T25	blue gum (<i>Eucalyptus globulus</i>)	11	480 EST	N: 4 E: 4 S: 4 W: 4	Crown: 4 AV Branch: 3 AV	Mature	Good	Good	Third party tree located in adjacent garden. No access to survey. Protect throughout future development.	B1	104.4	5.8
G2	goat willow (<i>Salix caprea</i>)	8	140 AV	N: 2 E: 2 S: 2 W: 2	Crown: 0 AV Branch: 0 AV	Semi mature	Fair	Fair	Linear group of trees situated in ditch. Multi-stem specimens with poor crown form. No remedial works required at time of survey.	C2	8.9	1.7
G3	pedunculate oak goat willow. Elder	6 AV	210 AV	N: 3 E: 3 S: 3 W: 3	Crown: 1 AV Branch: 1 AV	Semi mature	Fair	Fair	Linear group located adjacent to water filled ditch. No remedial works required at time of survey.	C2	20.0	2.5
T26	goat willow (<i>Salix caprea</i>)	9	347 MS	N: 4 E: 4 S: 4 W: 4	Crown: 1 AV Branch: 1 AV	Early mature	Fair	Poor	Multiple stems arising from compressed unions at ground level. Poor crown form. No remedial works required at time of survey.	C2	54.5	4.2
T27. PA	ash (<i>Fraxinus excelsior</i>)	9	410 EST	N: 2 E: 2 S: 4 W: 3	Crown: 3 AV Branch: 3 AV	Mature	Poor	Poor	Multiple leaders have previously failed. Wounds and desiccated fruiting bodies located throughout crown. Remove due to existing defects.	U	76.2	4.9

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T28	field maple. (<i>Acer campestre</i>)	10	492 MS	N: 2 E: 4 S: 3 W: 2	Crown: 0 AV Branch: 0 AV	Mature	Fair	Poor	Two co-dominant stems at ground level. Crown weighted heavily east. No remedial works required at time of survey.	C2	109.7	5.9
T19	hawthorn (<i>Crataegus monogyna</i>)	5	472 MS	N: 4 E: 3 S: 3 W: 3	Crown: 2 AV Branch: 2 AV	Mature	Good	Fair	Multiple stems arising from ground level. Dense ivy throughout crown. Poor form. No remedial works required at time of survey.	C2	100.9	5.7
T30	ash (<i>Fraxinus excelsior</i>)	14	623	N: 6 E: 5 S: 5 W: 6	Crown: 4 AV Branch: 4 East	Mature	Good	Good	Four large co-dominant stems arising from well formed union at 1m. Spreading crown structure. No remedial works required at time of survey.	B1+2	175.8	7.5
G4	elm. (<i>Ulmus minor var. vulgaris</i>)	4. AV	180 AV	N: 2 E: 2 S: 2 W: 2	Crown: 0 AV Branch: 0 AV	Semi mature	Fair	Fair	Dense linear group adjacent to ditch. Dense understory. No remedial works required at time of survey.	C2	14.7	2.2
T31	pedunculate oak. (<i>Quercus robur</i>)	10	820	N: 6 E: 9 S: 6 W: 5	Crown: 3 AV Branch: 4 AV	Mature	Good	Good	Single stem specimen. Crown weighted east. Roots likely to be restricted by presence of ditch. No remedial works required at time of survey. TPO.	B1+2	304.6	9.8
T32	pedunculate oak. (<i>Quercus robur</i>)	10	795	N: 7 E: 6 S: 6 W: 6	Crown: 4 East Branch: 4 AV	Mature	Good	Good	Single stem specimen. Crown weighted south east. Dense ivy on stem and deadwood in crown. Sever ivy and remove deadwood from crown. TPO.	B1+2	286.3	9.5

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T33	hawthorn (<i>Crataegus monogyna</i>)	6	382 MS	N: 4 E: 4 S: 4 W: 2	Crown: 3 AV Branch: 2 South	Mature	Good	Fair	Three co-dominant stems arising from ground level. Typical form. No remedial works required at time of survey.	C2	66.1	4.6
T34	field maple. (<i>Acer campestre</i>)	7	325	N: 2 E: 3 S: 3 W: 2	Crown: 4 AV Branch: 3 AV	Mature	Fair	Fair	Single stem specimen with poor crown form. Dense ivy throughout main stem. No remedial works required at time of survey.	C2	47.8	3.9
G5	elder. Hawthorn	5	225	N: 3 E: 3 S: 3 W: 3	Crown: 0 AV Branch: 0 AV	Semi mature	Fair	Fair	Linear group on field boundary. Poor crown forms due to exposure. Dense understory. No remedial works required at time of survey.	C2	22.9	2.7
T35	pedunculate oak. (<i>Quercus robur</i>)	8	675	N: 5 E: 5 S: 5 W: 5	Crown: 4 AV Branch: 4 AV	Mature	Good	Good	Single stem specimen with well formed crown structure. Dense ivy on main stem. Sever ivy. TPO.	B1+2	206.4	8.1
T36	hawthorn (<i>Crataegus monogyna</i>)	6	310	N: 4 E: 4 S: 4 W: 4	Crown: 0.5 North Branch: 1 AV	Mature	Fair	Fair	Dense ivy throughout crown. Typical mature form. No remedial works required at time of survey.	C1	43.5	3.7
T37	pedunculate oak. (<i>Quercus robur</i>)	14	890 EST	N: 8 E: 8 S: 8 W: 8	Crown: 2 AV Branch: 3 AV	Mature	Good	Good	Single stem specimen with well formed crown structure. Dense ivy on main stem. Sever ivy. TPO.	A1+2	358.8	10.7

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T38	hawthorn (<i>Crataegus monogyna</i>)	7	339 MS	N: 2 E: 1 S: 2 W: 4	Crown: 3 West Branch: 2 West	Mature	Poor	Poor	One co-dominant leader has failed leaving wound on main stem. Remove due to existing defects.	U	52.1	4.1
T39	hawthorn (<i>Crataegus monogyna</i>)	7	360	N: 3 E: 5 S: 2 W: 0	Crown: 4 AV Branch: 2 AV	Mature	Fair	Poor	Crown weighted east. Dense ivy throughout crown. No remedial works required at time of survey.	C2	58.7	4.3
T40	hawthorn (<i>Crataegus monogyna</i>)	5	280	N: 1 E: 0 S: 1 W: 2	Crown: / Branch: /	Mature	Poor	Poor	Heavily failed crown. Poor form with significant basal wound from past failed leader. Remove due to existing defects.	U	35.5	3.4
T41	pedunculate oak. (<i>Quercus robur</i>)	9	680	N: 4 E: 0 S: 8 W: 8	Crown: 3 AV Branch: 4 South	Mature	Good	Fair	Single stem specimen with crown weighted south west. Major deadwood in crown. Remove deadwood if land use changes. TPO.	B2	209.5	8.2
T42	pedunculate oak. (<i>Quercus robur</i>)	11	725	N: 7 E: 7 S: 7 W: 5	Crown: 2 South Branch: 4 North	Mature	Good	Good	Single stem specimen with two co-dominant leaders arising from main stem at 3m. No remedial works required at time of survey. TPO.	B1+2	238.1	8.7
G6	elm. (<i>Ulmus minor</i> var. <i>vulgaris</i>)	9. AV	220 AV	N: 3 E: 3 S: 3 W: 3	Crown: 1 AV Branch: 1 AV	Early mature	Fair	Fair	Linear group of trees situated adjacent to ditch. No remedial works required at time of survey.	C2	21.9	2.6

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T43	field maple. (<i>Acer campestre</i>)	10	740 EST	N: 7 E: 7 S: 7 W: 7	Crown: 2 AV Branch: 3 AV	Mature	Good	Good	Single stem specimen with well formed crown structure. Ivy on main stem and minor deadwood in crown. Sever ivy.	C1+2	248.1	8.9
G7	elm. goat willow	8. AV	210 AV	N: 3 E: 3 S: 3 W: 3	Crown: 1 AV Branch: 1 AV	Early mature	Fair	Fair	Linear group of trees situated adjacent to ditch. No remedial works required at time of survey.	C2	20.0	2.5
T44	field maple. (<i>Acer campestre</i>)	8	576 MS	N: 6 E: 6 S: 6 W: 6	Crown: 1 AV Branch: 1 AV	Mature	Good	Fair	Three co-dominant leaders at 0.5m. Spreading crown structure. Significant compaction throughout rooting medium. No remedial works required at time of survey.	C2	150.3	6.9

APPENDIX 3

Cascade Chart for Tree Quality Assessment

Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of their current land use for longer than 10 years.	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after the removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning). • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline. • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality. Note Category U trees can have existing or potential conservation value which it might be desirable to preserve			Red
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years.	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue). Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remedial defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood--pasture).	Green
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.		Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	Blue
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	Grey