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Title:	**BS5837 Tree Report**
Site:	**The Vicarage Waterloo Road Cranbrook Kent TN17 3JQ**
Client:	**Hill-Wood & Co. (Kent) Limited**
Survey Date:	**29th March, 2022**
Report Issue Date:	**28th October, 2022**
Reference:	**L830AIA**
Based upon Design Layout:	**TA1606-10 Rev P5**

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Appendices

1. Arboricultural Impact Assessment Summary

Suitability of current design layout in relation to trees

1.1 It will be necessary to remove 7No. C category trees (T32. T34, T35, T36, T41, T55 and T57) to allow the proposed design layout. **Mitigation: These trees are not generally significantly visible from outside of the site and their removal is unlikely to detract from the general amenity value of the area. In addition there is scope for replacement planting as part of the landscaping scheme to the rear of the site.**

1.2 There will be an impingement on the RPA of 1No. individual C category tree (T1) by the proposed positioning of permeable new hard surfaces and temporary impermeable wearing course as indicated on the Tree Protection Plan (L830TPP) included as Appendix 7. **Mitigation: Impingement covers only 10% of RPA that is not already covered in hard surfaces at a reasonable distance from the main stem. Existing and proposed spot levels indicate levels will not require excessive excavation (at the distance from the main stem involved) for new hard surfaces to widen the access drive and create the parking space within the RPA of T1 (Orange hatched area). In addition Arboricultural supervision will ensure the minimum of damage occurs during the installation of the permeable hard surface and temporary impermeable wearing course. The temporary impermeable wearing course will be removed and replaced with a permeable wearing course under Arboricultural supervision at the end of the main construction phase.**

1.3 There is a risk that trees may cast prohibitive shade on the finished development: **Mitigation: The orientation of the site and existing vegetation suggest that there will be considerable shade on the building and garden of unit 4. The client has expressed a desire to retain as much vegetation as possible at this point to try and balance Planning Inspectorate recommendations for four units with the screening effect of boundary trees. However there would be scope for the removal of C category trees T29, T37, T38, T39, T40 and T42 for replacement with low level soft landscaping if the climate change mitigating benefits of shade are not considered sufficiently high value by the Local Authority.**

If climate warning predictions are accurate the shade cast by trees may become considered as a benefit over the mid to long term. In addition the large majority of the trees on the southern elevation of the site all trees are deciduous. They will cast less shade in the winter months. If the recommendation to cut ivy on retained trees is followed this will also reduce shade.

1.4 Providing the measures outlined in this report are followed it should be relatively straight forward to protect the remaining retained trees and in particular ensure that there is little effect on the street scene on Waterloo Road.

1.5 I am therefore led to the conclusion that the current design layout is reasonably acceptable for development in relation to trees.

2. Overview

This BS 5837 (2012) tree report consists of the following:

A Tree Survey. This records the tree details and assigns a category in accordance with BS5837. The tree survey schedule (See Appendix 2) supplies the information that is shown on the Tree Constraints Plan.

Tree Constraints Plan (TCP). A scale drawing showing the crown spread, tag number, BS5837 category and nominal Root Protection Area of each surveyed tree. This should be used to inform a basic design layout that takes account of important trees (see attached Appendix 6).

An Arboricultural Impact Assessment (AIA). Study undertaken by an Arboriculturist, to identify, evaluate and aim to mitigate the extent of direct and indirect impacts on existing trees that may arise as a result of the implementation of the current design layout proposal (see item 3 below).

An Arboricultural Method Statement (AMS). Methodology for the implementation of any aspect of development that has the potential to result in loss or damage to a tree (see item 4 below).

A Tree Protection Plan (TPP). A Scale drawing showing the current design layout proposals, tree retention and tree and landscape/protection measures (see attached Appendix 7).

Tree Removal Plan (TRP)
A Scale drawing showing the trees to be retained and the trees to be removed (see attached Appendix 8).

3. Arboricultural Impact Assessment (AIA)

Scope of the AIA

To superimpose the proposed site layout Drawing No A1606-10 Rev P5 onto the Tree Constraints Plan L830TCP.
Assess the conflict between existing trees/replacement planting and the proposed site layout.
Outline specific mitigating measures on the Tree Protection Plan (See Appendix 7) that will reduce impact to an acceptable level and will inform the preparation of tree surgery requirements (see Appendix 4) and an Arboricultural Method Statement (AMS) detailed enough for planning application purposes.

General Impact Assessment and Mitigating Measures

The specific mitigating measures shown on Tree Protection Plan L830TPP included as Appendix 7 should reduce the risk of damage to an acceptable level. In addition the following general impacts are considered and mitigated accordingly:

3.1 There is a risk that limited space to demolish and carry out the construction process will put pressure on protected areas. **Mitigation: Liaison with the design team has allowed the proposed site layout to be adjusted to largely avoid the RPA and crown spread of retained trees.**

3.2 It will be necessary to remove 7No. C category trees (T32. T34, T35, T36, T41, T55 and T57) to allow the proposed design layout. **Mitigation: These trees are not generally significantly visible from outside of the site and their removal is unlikely to detract from the general amenity value of the area. In addition there is scope for replacement planting as part of the landscaping scheme to the rear of the site.**

3.3 There will be 6 No. U category trees (T18, T23, T33, T44, T48 and T62) removed within the site boundaries. **Mitigation: Due to their poor quality or the damage they are likely to cause in the next ten years these trees are likely to have been removed irrespective of development.**

3.4 There will be a minor impingement on the RPA of 2No. individual C category trees T53 and T54 and 1No. B category tree T56 by the proposed positioning of new hard surfaces. **Mitigation: The RPA of these trees is based upon a nominal assessment of likely root spread. It would not be unreasonable to assume that roots may have spread into other adjacent areas that, on this site, can be simply protected with protective fencing during the demolition and construction phase. The species of trees involved suggests that the distance from main stems and buttress roots where impingements would occur is unlikely to have a significant effect on the long term health of the trees and there is adequate scope for future root growth elsewhere.**

3.5 There will be an impingement on the RPA of 1No. individual C category tree (T1) by the proposed positioning of permeable new hard surfaces and temporary impermeable wearing course as indicated on the Tree Protection Plan (L830TPP) included as Appendix 7. **Mitigation: Impingement covers only 10% of RPA that is not already covered in hard surfaces at a reasonable distance from the main stem. Existing and proposed spot levels indicate levels will not require excessive excavation (at the distance from the main stem involved) for new hard surfaces to widen the access drive and create the parking space within the RPA of T1 (Orange hatched area). In addition Arboricultural supervision will ensure the minimum of damage occurs during the installation of the permeable hard surface and temporary impermeable wearing course. The temporary impermeable wearing course will be removed and replaced with a permeable wearing course under Arboricultural supervision at the end of the main construction phase.**

3.6 There is a risk that new services entering the site will damage roots of retained trees. **Mitigation: Where possible services will enter the site or** connect to existing services **outside the RPA of retained trees. However if excavations are required they will be carried out in accordance with NJUG regulations. Attenuation tanks and soakaways will not be within the RPA of retained trees.**

3.7 Due to the proximity of trees to the development and the likely soil conditions on site it is likely that there is a possibility that there may be a significant effect on the load bearing capacity of soils by the retention, replacement or removal of trees. **Mitigation: A Structural Engineer could advise further on this using the species and proximity information from this report.**

3.8 There is a risk that trees may cast prohibitive shade on the finished development: **Mitigation: The orientation of the site and existing vegetation suggest that there will be considerable shade on the building and garden of unit 4. The client has expressed a desire to retain as much vegetation as possible at this point to try and balance Planning Inspectorate recommendations for four units with the screening effect of boundary trees. However there would be scope for the removal of C category trees T29, T37, T38, T39, T40 and T42 for replacement with low level soft landscaping if the climate change mitigating benefits of shade are not considered sufficiently high value by the Local Authority.**

If climate warning predictions are accurate the shade cast by trees may become considered as a benefit over the mid to long term. In addition the large majority of the trees on the southern elevation of the site all trees are deciduous. They will cast less shade in the winter months. If the recommendation to cut ivy on retained trees is followed this will also reduce shade.

3.9 There is a risk that the relatively close proximity of existing large or potentially large deciduous trees to the proposed development may impose an onerous future requirement for leaf clearance from gutters. **Mitigation: Fit gutter guards as part of the construction process.**

3.10 There is a risk that new planting will fail or not flourish due to a poor growing environment. **Mitigation: Ensure that sufficient planting area is prepared to *BS4428: (1989), Code of Practice for General Landscape Operations.* Decontaminate and de-compact subsoil before the addition of topsoil. Replacement trees will be maintained and replaced if they die or appear to be dying for 3 years after planting.**

3.11 There is a risk that boundary walls would require strip foundations within the RPA of retained trees. **Mitigation: Use a 2m high fence with posts at 1.8m centres. Post holes will be excavated by hand and moved if roots over 25mm in diameter are encountered. Trees will be crown lifted to 2.5m to allow the erection of fencing if necessary.**

3.12 Replacement Planting Scheme

Drawing L830TPP indicates sufficient space for relatively extensive replanting. Full details to be confirmed by a landscape architect.

3.13 Regular inspections

In the long term regular inspections would maximise the safe useful life expectancy of the trees and ensure that tree owner's discharge their duty of care. The trees on this site would benefit from inspections on a 3 yearly basis or after severe weather.

3.14 Wildlife

Over recent years there has been new legislation concerning the protection of wildlife.

The Wildlife and Countryside Act 1981 and Countryside and Rights of Way act 2000 mean that it is an offence to wilfully or recklessly harm a bird nesting site, bat roost, certain mammals and some rare plants.

There did not seem to be any evidence of nesting birds or bat roosts on this site but a further inspection should be made by a suitably qualified agent of the developer or tree surgery contractor before any tree-work is carried out. If a nest or bat roost becomes evident the developer should contact Natural England wildlife Licensing Unit (0845 601 4523) for further advice.

3.15 Other considerations

If full planning consent is granted after the Local Authority have considered the recommendations in this report then work to trees required to fulfil either permission, or a condition attached to permission granted under the Town and Country Planning Act by the Local Authority does not need any additional authorisation. However before full planning permission is granted it would be necessary to apply to the Local Authority to work on trees covered by a TPO or in a Conservation Area.

4. Arboricultural Method Statement (AMS)

The purpose of this Arboricultural Method Statement (AMS) is to demonstrate that it will be possible to carry out development without causing unacceptable damage to trees, and vice versa, in sufficient detail to gain planning permission. At this stage there is limited information available in relation to the exact construction process.

Once planning permission has been granted, and it is clear that there will be a requirement for Arboricultural Supervision, a pre-commencement meeting will be arranged with the Arboricultural Consultant, the Main Contractor and ideally the LPA Tree Officer. This will resolve design and logistical details and inform a refined order of works. In addition it will allow the AMS and Tree Protection Plan to be revised and issued as working documents along with a Schedule of Supervision agreed by all parties.

General AMS

Site equipment and storage areas for material will be outside the Construction Exclusion Zone (CEZ) formed by protective fencing indicated on Drawing L830TPP

Any construction activity required within the retained RPA of retained trees will be carried out over approved temporary ground protection or under Arboricultural supervision.

Material which will contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, will not be discharged within the RPA of retained trees indicated on Drawing L830TPP.

Fires will not be lit in a position where their flames can extend to within 5m of foliage, branches or trunk.

The jib or arms of machinery will not cross the line of protective fencing. Machinery with a height clearance greater than 5m will not be used on this site beneath the crown spread of retained trees.

No additional below ground services or connections to existing services, temporary or permanent, will cross into the RPA of retained trees indicated on drawing L830TPP unless excavations are carried out under Arboricultural supervision and in accordance with NJUG regulations (see more detail in item 4.8 below). This will include the positioning of rainwater gulleys to soakaways or attenuation tanks. Soakaways and attenuation tanks will not be positioned within the RPA of retained trees.

Order of Works in Relation to Trees with Site Specific AMS for Each Operation

4.1 **Confirm Service routes**

4.2 **Carry out a pre-commencement meeting to refine Arboricultural Method Statement**

Arboricultural Consultant to meet with main contractor and ideally the Local Authority Tree Officer to resolve design and logistical details and inform a refined order of works.

Mark out position of permitted buildings and hard surfaces adjacent to retained trees.

Confirm exact tree surgery requirements.

Revise AMS and Tree Protection Plan and issue as working documents along with a Schedule of Supervision agreed by all parties.

4.3 **Carry out an induction meeting**

Arboricultural consultant to revisit site to induct main contractor Project Manager and run through Arboricultural Method Statement. Main contractor Project manager will sign induction sheet to confirm that they understand the implications of protective measures not being followed.

Issue main contractor Project Manager with standard sheets that they will use to induct sub- contractors. Sub-contractors will sign induction sheet to confirm that they understand the implications of protective measures not being followed.

4.4 **Carry out tree surgery**

All tree-work will be carried out to BS3998, by a reputable, fully insured contractor. Tree surgery will not be undertaken by untrained construction operatives.

Refer to schedule included as Appendix 4 for a tree by tree specification of tree surgery requirements.

Stumps will be removed by stump grinder within the RPA of retained trees or treated to prevent regrowth with the appropriate herbicide by qualified operatives.

4.5 **Erect first phase protective fencing (Black dashed line on drawing No. L830AIA)**

Protective Fencing

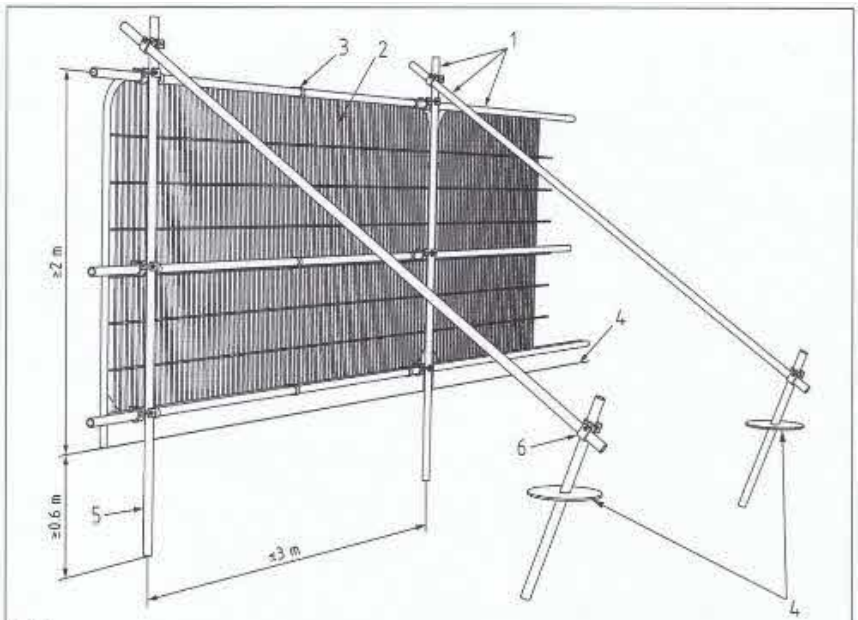
BS5837: (2012) *Trees in Relation to Development* stipulates the following:

6.2.2.1 Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). Barriers should be maintained to ensure that they remain rigid and complete.

This will be achieved by erecting 2.3m high Heras fencing fixed to scaffold supports at 3m centres as shown in the following drawing from BS5837 (2012)). Due to limited space it may not be possible to fix diagonal struts. Contractors will submit a suitable alternative to the Arboricultural Consultant for approval if planning permission is granted:

Signs will be fixed to the construction side of the fence with the wording indicated in Fig. 2 below:

Fig. 1:



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Fig. 2:

4.6 **Position Temporary protection of existing access onto site**

Steel road plate or similar will be laid over the existing access on to the site before demolition, construction or access to site by heavy plant to prevent rutting or localized compaction from heavy vehicles.

4.7 **Lay Temporary Ground Protection in the position shown on drawing No L830TPP**

The light blue areas indicated on the Tree Protection Plan L830TPP will require temporary ground protection to allow works or storage of materials within the RPA of retained trees. Temporary ground protection will be laid before demolition, construction or access to site by heavy plant. If machinery is required to spread woodchips this will use temporary ground protection already laid to avoid crossing unprotected RPA of trees.

Temporary ground protection will consist of Trakmats or similar laid over a permeable geotextile membrane and 150mm of woodchips within the RPA of retained trees. It will be necessary to position timber edging (38x150x2000 long treated timber held in place with metal pins or 50x50x500 long pointed stakes at 1m centres) to retain woodchips.

Areas of small level changes will be made up with sharp sand beneath the Geotextile membrane. Areas of greater level changes (across existing footpaths) will be bridged with a sufficiently strong structure, possibly constructed with scaffolding and scaffold boards.

The following companies provide suitable Geotextile membrane:

Terram Ltd, (Terram 1000) 01495 757 722, www.terram.com
Geosynthetics, (Fibretex f4m), 01456 617139, www.geosyn.co.uk

The following companies provide suitable temporary ground protection sheets:

Eve-Trakway, 08700 76 76 76, www.evetrakway.co.uk
Nixon Ground Guard Hire, 0844 477 2909, www.groundguards.com

Temporary ground protection will remain in position until the contract is complete. A qualified Arboriculturalist will be consulted before re-location or re-positioning of temporary ground protection near the RPA of retained trees.

4.8 **Position new service routes in accordance with NJUG regulations under Arboricultural supervision if it is necessary to impinge upon RPA of retained trees.**

Excavations and Laying of services (if necessary) within the RPA of retained trees in accordance with NJUG regulations

Excavations and laying of services etc. will be supervised by the Arboricultural Consultant.

Excavations must comply with NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees, Volume 4. Summarized as:

After careful removal of hard surfaces (if present) material digging must proceed with hand tools. Clumps of roots less than 25mm in diameter (including fibrous roots) should be retained in situ without damage. Throughout the excavation works great care should be taken to protect bark around the roots.

Any cut root ends or exposed roots will be temporarily covered with damp Hessian until the excavation is backfilled.

Backfilling should be carefully carried out to avoid direct damage to roots and excessive compaction of the soil around them. The backfill should, where possible, include the placement of an inert granular material mixed with top soil or sharp sand (not builder's sand) around the roots. This should allow the soil to be compacted for resurfacing without damage to the roots securing a local aerated zone enabling the root to survive in the long term.

Generally areas adjacent to excavations will be protected by "Trakmat" or similar ground protection during excavations. In addition work will be carried out in a methodical manner by a small workforce to reduce the frequency of footfalls across otherwise unprotected ground.

4.9 **Lay permeable hard surfaces within the RPA of Retained Trees (T1).**

A suitable cellular confinement system of adequate depth to provide support for anticipated traffic will be used to cover the orange hatched area indicated on drawing No L830TPP. The following companies provide cellular confinement systems:

Terram Ltd, (Geocell cellular system with Terram 1000 geotextile), 01495 757 722, www.terram.com
Geosynthetics, (Cellweb cellular confinement system with Fibretex f4m geotextile), 01455 617139, www.geosyn.co.uk

Geosynthetics provide a full engineering service, including the provision of surveys, structural designs, CAD drawings and installation supervision at no cost to the client. However as an indication of likely process that will be required the following is based on Terram's recommendations for the "no dig" installation of a cellular confinement system:

The following process will be carried out under Arboricultural supervision.

Remove the minimum length of protective fencing necessary to carry out works.

Remove grass and other vegetation and the upper organic layer of soil by hand digging (Approximately 50-100mm) and a further 100-200mm of soil to accommodate the necessary depth of cellular confinement system. Any roots encountered under 25mm in diameter will be cut back to the edge of the excavation with a sharp saw or secateurs. The significance of any roots over 25mm in diameter will be considered by the Arboriculturalist. If a significant number of this size root are encountered it may be necessary to sleeve or bridge these roots within the proposed structure.

Arisings should be wheel barrowed out of the tree protection area. Machinery (even low ground pressure tracked vehicles) should not be used due to the risk of soil compaction.

Small depressions may be filled with sharp sand to establish a level base for the ground protection. Create a fall away from the RPA of retained trees.

Position edging. Edging should be positioned with minimum excavation but be sufficient to prevent the lateral spread of the cellular confinement system and wearing course. The structural requirements of the edging should be verified with a Structural Engineer.

Lay out Terram Permeable Geotextile (T1000).

Lay out Terram Geocell and carefully peg in place. (100mm deep for pedestrian and cycle traffic, 150mm deep for light vehicles and 200mm deep for heavier or more frequent vehicles.)

Fill the cells with a well graded, 4/20 or 20/40 crushed, angular stone. Over fill the cells by 25mm with no compaction with whacker plates. Further filling should be carried out using the filled Geocells as a platform

Lay an impermeable membrane (250 micron, 1200 gauge dpm) to reduce the risk of soil contamination during construction from wet materials.

Re-erect protective fencing in the position of the blue dashed line on drawing L830TPP.

Cover with 100mm of temporary reinforced concrete slab to act as a temporary wearing course during the construction phase. A structural engineer should be consulted to confirm that this would be sufficient for bearing the load of anticipated construction traffic.

4.10 **Complete main construction phase**

4.11 **After main construction phase is complete replace temporary impermebale hard surface wearing course within RPA of retained trees**

After construction is complete and all wet trades and heavy plant have left site remove temporary wearing course and impermeable geotextile/dpm.

Add a further layer of Terram Permeable Geotextile (T1000) to prevent fines from mixing with the granular fill below.

Permanent wearing course will be permeable, ideally open jointed brick paving on a bed of 2-6mm graded angular material. 2-6mm graded angular material will also be used for jointing the wearing course.

4.12 **Carry out Soft Landscaping**

Soft landscaping details are to be provided by others.

Soft landscaping will either be carried out by a reputable landscaping contractor used to working near trees or under Arboricultural supervision.

Soft landscaping will only be carried out after all external works requiring heavy plant and wet trades that could harm trees have been completed

Levels will not be re-graded by any more than 100mm within the RPA of retained trees.

4.13 **Erect Permanent fencing within RPA of retained trees**

2m high panels or railings will be fitted between posts at 1.8m centres.

Post-holes will be excavated to the minimum depth required for the ground conditions. Holes will be made with a manually operated post-hole digger. Where roots over 25mm in diameter are encountered the post hole will be moved to a different location and the fence panels cut to fit.

Fence posts will be no closer than 500mm from tree stems or buttress roots.

New fence panels will clear stem and buttress roots by 50mm. There will be scope for future adjustment to maintain a 50mm clearance.

4.14 **Fit gutter guards**

Fit gutter guards to reduce the frequency of gutter clearance due to leaf fall. The following companies supply gutter guards:

Hedgehog Gutter Brush and drain Leaf Guard, Truly PVC Supplies, 0161 339 4982, www.trulypvc.com

Poly-net Leaf Guard System, Marley, www.marley-germany.com.

4.15 **Remove protective measures**

After all external works or works that could cause harm to trees are finished and with permission from the Arboricultural Consultant remove remaining protective fencing.

4.16 **Monitor health of trees.**

Arboricultural consultant or Landscaping contractor will re-visit site annually for three years to monitor replacement tree and suggest remedial action of necessary.

In the long term regular inspections would maximize the safe useful life expectancy of the trees and ensure that tree owners discharge their duty of care. The trees on this site or surrounding this site would benefit from inspections on a 3 yearly basis or after severe weather.

Appendix 1

Qualifications and Experience

Qualifications in date order

1. ONC and HNC in Construction Management. Between 1987 and 1992. Although I have not studied this subject recently, I still retain a general knowledge of construction techniques.

2. Royal Forestry Certificate in Arboriculture.

3. Completion of Trees and Mortgage/Insurance reporting module 2002. (Member of AMIUG, 2005)

4. Arboricultural Association Technicians Certificate in Arboriculture.

5. Lantra approved Professional Tree Inspector since 04 July 2006.
   Most recent refresher course 19 September 2019

6. Licensed Quantified Tree Risk Assessment (QTRA) user since 04 May 2007.
   Most recent QTRA Advanced Training course 24 April 2019

Quantified Tree Risk Assessment Limited
Registered Office: 9 Lowe Street, Macclesfield, Cheshire, SK11 7NJ, United Kingdom
T: +44 (0)1625 618999 | W: www.qtra.co.uk E: admin@qtra.co.uk

Experience

1. Quantity Surveyor for a national builder between 1987 and 1992.

2. Owning and managing a Tree Surgery Company between 1994 and 2006 after working for other tree surgery companies for approximately 2 years.

3. In this time compiling a portfolio of tree ailments and failures.

4. Carrying out various individual tree inspections and surveys for domestic and commercial clients since 2001.

5. Attending courses on tree and woodland surveys, surveys for mortgage purposes, report writing and BS 5837 2005.

6. Attending court as an expert witness.

Appendix 2

Tree Survey and Methodology Information

Tree Survey

1.0 Scope of the survey

Carry out a tree survey in accordance with BS 5837:2012 Trees in relation to Construction. This involves the following:

Make a visual, “from the ground” inspection of all trees with a stem diameter greater than 75mm at a height of 1.5 that may be affected by the design or construction processes of the proposed development.
Complete a schedule of information for each tree.
Indicate preliminary recommendations for works to maximise the likelihood of retained trees having a Safe Useful Life Expectancy (SULE) of at least ten years.
Categorise the trees.
Plot the trees on drawing L830TCP and indicate the Root Protection Area (RPA), crown spread, tag number and BS5837 category.

The survey is based upon information that was available at the time of the inspection. Further inspections are necessary over time to give a fuller picture of the health of trees.

1.1 Brief instruction

I have been instructed by Lucy McCloskey on behalf of Hill-Wood & Co. (Kent) Limited to carry out a BS5837 tree survey in relation to a planning application for development at The Old Vicarage, Waterloo Road, Cranbrook, Kent. TN17 3JQ.

1.2 Qualifications and experience

I have based this report on my site observations. I have come to conclusions in the light of my experience. I have experience and qualifications in arboriculture and construction and list the details in Appendix 1.

1.3 Documents and information provided

I was provided with the following information:

Omega topographical survey No. 15-0127-Topo 03

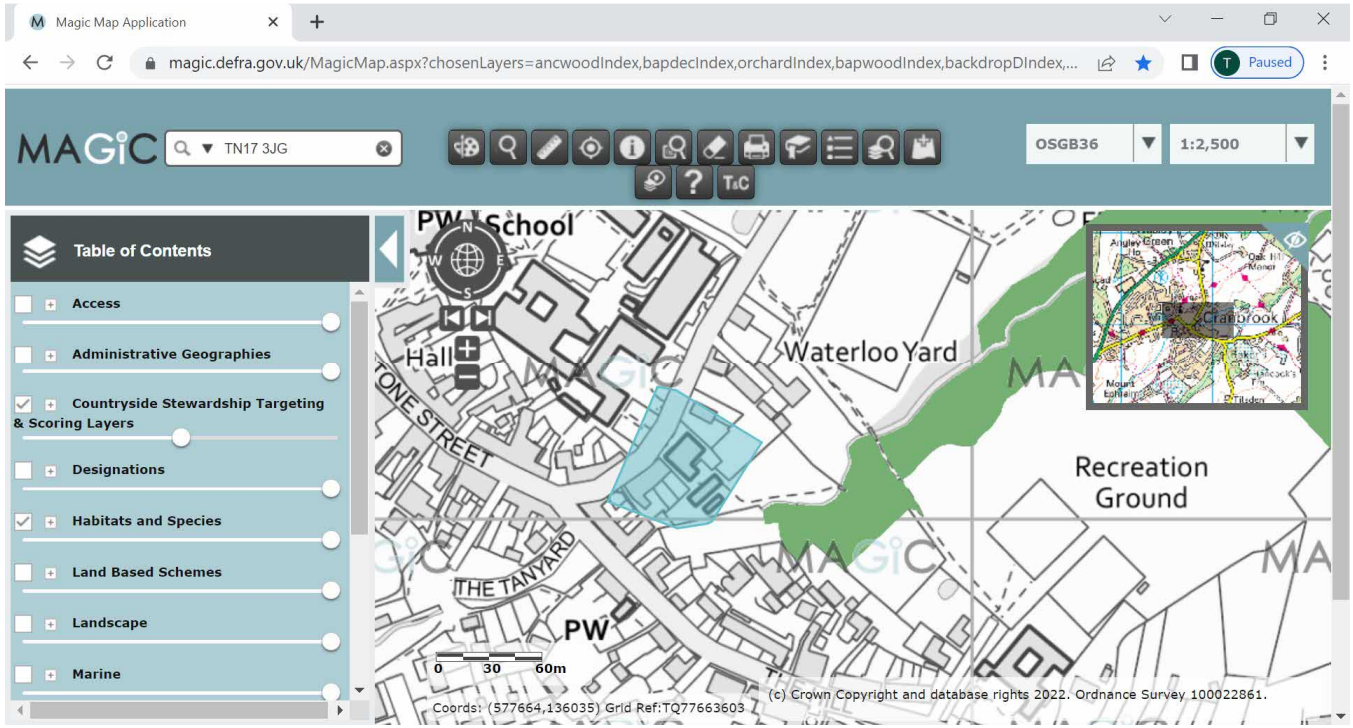
1.4 Tree Protection Order (TPO) /Conservation Area/ Ancient Woodland Status

At the date of the survey status of the site is as follows:-

Tunbridge Wells Council website indicates that there are no TPO's on the site.
Tunbridge Wells Council website indicates that the site is within a conservation area.

1.5 Ancient Woodland Status

Natural England's Website and the "Magic Map Viewer" indicate that trees within (or adjacent) to the site are not in an area classified as Ancient Woodland.
https://magic.defra.gov.uk/MagicMap.aspx?chosenLayers=ancwoodIndex,bapdecIndex,orchardIndex,bapwoodIndex,backdropDIndex,backdropIndex,europeIndex,vmlBWIndex,25kBWIndex,50kBWIndex,250kBWIndex,miniscaleBWIndex,baseIndex&box=207763:417195:576753:592195&useDefaultbackgroundMapping=false



2. Site Visit and Observations

2.1 Site visit

I surveyed the trees on the 29th March, 2022. The weather was overcast with no wind.

2.2 Brief site description

The site is currently occupied by a two storey detached vicarage. To the north there is a public footpath and then private parkland, to the east agricultural land and to the south residential property. There is vehicular access to Waterloo Road to the west.

The site is generally level with a gentle slope down to the south in the southern side of the side and a steep slope down to the west on the boundary with the highway.

2.3 The Trees

65 No individual trees and 6 No. groups of trees (G2, G4, G13A, G27, G43 and G58) were surveyed.

8 No. individual trees (T5, T6, T7, T8, T9, T10, T11 and T31) are in neighbouring property and I was therefore not able to carry out a full 360 degree survey of these trees.

11 No. individual trees (T7, T8, T10, T11, T13, T25, T26, T35, T37, T57 and T68) and 2No. groups of trees (G43 and G70) were missed from the Topographical Survey. The position of these trees were found using a tape measure from known points.

Specific details of each tree surveyed are recorded in the tree survey schedule included as Appendix 3 and on the Tree Constraints Plan L830TCP included as Appendix 6.

2.4 The Soils

Detailed soil investigations were not carried out. However the British Geological Survey website (https://mapapps.bgs.ac.uk/geologyofbritain/home.html) indicates that the area is on “Tunbridge Wells sand formation – Sandstone and Siltstone interbedded”. This suggests there maybe be a significant effect on the load bearing capacity of soils by the retention, replacement or removal of trees. A Structural Engineer could advise further on this using the species and proximity information from this report.

This may also have a bearing on the compactability of the soil within the RPA of retained trees.

Survey maps only indicate a general trend in an area. They do not take account of pockets of different types of soil that may be present.

2.5 Services

There is a telephone cable running from the southeast corner of the existing vicarage through trees in the southeast corner of the site. Below ground services were not considered.

2.6 Shade

The southern elevation of the existing house is probably affected by some degree by the dense vegetation at the front of the building.

2.7 Identification and location of trees

The trees surveyed are identified by referring to drawing L830TCP.

3.0 Tree Categorisation

3.1 Retention and Removal

The category for each tree is ascertained by following the guidelines in the cascade chart for tree quality assessment included with the TCP tree schedule in Appendix 3.

It should be noted that the categories given to the trees in this survey assume the tree work specified in the schedule included as Appendix 3 is going to be carried out in the short term as part of the development or by the tree owners independent of the development. If this work is not carried out as recommended the category of the trees would be reduced to reflect a shorter Safe Useful Life Expectancy (SULE).

A brief summary of each category is outlined as follows:

3.2 **Category A trees**

This category signifies trees that are of a high quality and value. Occasionally a veteran tree, although not in the best condition may warrant this category because of its wildlife and cultural value. It is essential to retain these trees. The design of the proposed development should take into account the retention of category A trees.

A Category trees are coloured green on drawing L830TCP..

3.3 **Category B trees**

This category signifies trees that are of a moderate quality and value. It is important to retain these trees. The design of the proposed development, where feasibly possible, should take into account the retention of category B trees. A design layout that suggests the removal or impingement of category B trees has an increased risk of planning refusal. If affecting B category trees is unavoidable it may be possible to negotiate their replacement with similar size specimens providing adequate consideration is given to supplying sufficient future growing conditions.

B category trees are coloured blue on drawing L830TCP.

3.4 **Category C trees**

This category signifies trees that are of low quality and value. They could generally remain and be expected to have a safe useful life expectancy of between 10 and 20 years if no development were to occur. However, because of their low quality it should not be prejudicial to remove them if they are likely to be a significant constraint to the design or construction process. Particular attention is drawn to the phrase “significant constraint”. Although it should not be necessary, I would suggest that replacement of removed category C trees, where possible, would assist in obtaining planning permission

C Category trees are coloured grey on drawing L830TCP.

3.5 **Category U trees**

This category signifies trees that are in such a condition that any existing value would be lost within 10 years and which may, in the current context, generally be removed for reasons of sound Arboricultural management.

U category trees are coloured red on drawing L830TCP.

4.0 Root Protection Areas (RPA)

4.1 Approximately eighty percent of a tree’s roots are in the top 600 mm of soil. Therefore any changes in this vital environment including: ground level, soil compaction, physical damage to roots, moisture or levels of contaminants can have a dramatic effect on the health of a tree. At deeper strata alterations in water table and routing of services can cause detrimental, long term, effects.

4.2 The area of roots that a tree generally needs to survive is called the Root Protection Area (RPA). The RPA is calculated using a formula based upon the diameter of the tree or tree stems at 1.5 metres high.

At this stage it is generally represented by a circle centred on the trees stem.

The RPA of groups of trees has been defined by the largest edge tree or in the case of hedges by the average size of individual trees stems.

5.0 Survey Conclusion

The schedule included as Appendix 3 and the Tree Constraints Plan included as Appendix 5 indicates the position and quality of each tree on or adjacent to the site. Section 3 of this Appendix further indicates the implications that the BS5837 category of individual trees will have on the proposed site layout.

Trees that are of particular importance or worthy of comment are as follows:

5.1 To ensure planning permission is granted, in relation to trees, it would be necessary to design the layout to avoid impingement on all A, B and C category trees. U category trees do not normally need to be considered because they are likely to require removal within the next ten years irrespective of development.

5.2 If this cannot be achieved without making the site non-viable for development it should be appreciated that the likelihood of gaining planning permission will be reduced if retainable trees are encroached upon.

5.3 Notwithstanding this there is often room for negotiation depending on the category of the trees on site, the degree of encroachment and whether it is possible to mitigate damage by using engineering solutions or even replacement planting if removal of high category trees is unavoidable.

5.4 From a planning perspective I would suggest that, where possible, neighbour's trees are for the purpose of design layout considered to be important to retain and impingement upon their RPA or crown spread avoided. The exception to this may be where the survey considers a neighbour's tree to be unsafe. In this situation it may be necessary to negotiate with the tree owner over its removal or consult the Local Authority concerning the Miscellaneous Provisions Act 1976 that can be used to ensure that the tree is made safe at the tree landowners eventual cost. There are no neighbour's trees that fall into this category at present.

5.5 As the property is within a conservation area it will be necessary to consult the local authority before any pruning works other than certain exemptions can be carried out. The works specified in the "preliminary management recommendations to ensure SULE is at least 10 years irrespective of development" column of the tree survey schedule included as Appendix 3 are necessary for reasonable management and should be acceptable to the local authority. However, applicants should appreciate that the local authority may take an alternative point of view and have the option to refuse consent.

5.5 An Arboricultural Implication Assessment, Tree Protection Plan and Arboricultural Method Statement will consider proposed design layouts and clarify further whether there is a significant conflict between trees and proposed development.

6. References

BS5837:2012. Trees in Relation to Construction.
SULE. Jeremy Barrell.
BS3998: (2010) Recommendations for tree work

Appendix 3

BS5837 Tree Survey Schedule

Tree schedule explanatory notes

Evaluating the information gathered in the attached schedules

1. Tree no.

   The Tree number (T), Shrub (B) or Group number (G).

2. Species

   A visual assessment of tree species. Where species is questionable samples can be taken and sent off for laboratory analysis if necessary. The common name is usually indicated with the scientific name in brackets where necessary.

3. Height

   Height in metres from the base of the tree. Visually estimated unless indicated otherwise.

4. Stem diameter

   The diameter of the stem in millimetres at 1.5 m above adjacent ground level (on sloping ground, taken on the upslope side of the tree base) or immediately above the root flare for multi-stemmed trees. This is accurately measured using a girthing tape.

   MS = Multi stemmed

5. Branch spread in metres taken at the four cardinal points to derive an accurate representation of the crown and recorded on the attached drawing included as Appendix 3. This is generally paced out unless otherwise indicated.

6. Height of crown clearance

   Height in metres of crown clearance above adjacent ground level at the base of the tree (to inform on ground clearance, crown stem ratio and shading).

7. Age class

N Newly planted or self-seeded sapling.
Y Young trees (less than 1/3 of normal life expectancy).
M Middle age trees (1/3 to 2/3 of normal life expectancy).
Ma Mature trees
OM Over mature (in decline or veteran)

8. Physiological condition

Good, fair, poor or dead.

9. Structural condition

This notes specific areas of the tree's condition that might require attention e.g. collapsing, the presence of any decay and physical defect.

10. Preliminary management recommendations to ensure SULE of at least ten years
Includes further investigation of suspected defects that require more detailed assessment and potential for wildlife habitat.

11. Estimated remaining contribution

Estimated remaining contribution in years e.g. less than 10, 10-20, 20-40, more than 40. This is based upon Jeremy Barrells' system of SULE (Safe Useful Life Expectancy).

12. Cat.

R or A to C category grading recorded on the attached drawing included as Appendix 3. Trees are categorised in accordance with the following cascade chart. (Extract from BS 5837: 2005):-

Cascade chart for tree quality assessment (extract from BS 5837: 2012)

TREES UNSUITABLE FOR RETENTION

Category and definition	Criteria	Identification on plan
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use 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 removal of other U category 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;	DARK RED

TREES TO BE CONSIDERED FOR RETENTION

Category and definition	Criteria — Subcategories			Identification on plan
	1 Mainly Arboricultural values	**2 Mainly landscape values**	**3 Mainly cultural values, including conservation**	
Category A **Those 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 group s or formal or semi-formal Arboricultural features (e.g. the dominant and/or principal trees within an avenue)	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)	LIGHT GREEN
Category B **Those of moderate quality and value** with an estimated remaining life expectancy of at least 20 years.	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant remediable defects including unsympathetic past management and minor 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 present in numbers, usually growing as groups or woodlands, such that they attract a high collective rating than they might as individuals; or trees occurring as collectives but situated so to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	MID BLUE
Category C **Those 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 landscape value, and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	GREY

Tree Survey Schedule- Also see drawing L830TCP

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Physiological condition	Structural condition And comments.	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development.	Estimated remaining contribution (years)	Cat.	RPA Radius (m)
T1	Oak	20	1250	1	7	7	7	7	2	M	Fair.	Fair. Topped in past and likely to require re-topping within 10 – 20 years to reduce the risk of failure at potentially weak unions.	None at present.	10 – 20	C	15.0
G2	Hawthorn & Holly	4	150	1	1	1	1	1	0.5	Y	Fair. Extensive ivy in places.	Fair. Good low to mid-level screen with road.	Cut ivy.	10 – 20	C	1.8
T3	Holly	5	300	1.5	2	2	2	2	1.5	Y	Fair. Extensive ivy.	Fair.	Cut ivy.	10 – 20	C	3.6
G41	Privet	2	150	1	0.5	1	1	1	0	M	Fair.	Fair. Reasonable low level screen but collapsed in places at northern end.	Reinstate collapsed sections.	10 – 20	C	1.8
T5	Sycamore	12	400	1	4	0	4	4	6	M	Fair. Extensive ivy.	Fair. Neighbour's tree. On other side of public footpath.	Inform Neighbour of benefits of cutting ivy.	20+	B	4.8
T6	Oak	12	472	2	5	2	5	3	1.5	Y	Fair. Extensive ivy.	Fair. Neighbour's tree. On other side of public footpath.	Inform Neighbour of benefits of cutting ivy.	20+	B	5.7
T7	Oak	12	300	1	5	4	4	1	2	Y	Fair. Extensive ivy.	Fair. Neighbour's tree. On other side of public footpath.	Inform Neighbour of benefits of cutting ivy.	20+	B	3.6
T8	Oak	12	350	1	5	2	2	3	1	2	Fair. Extensive ivy.	Fair. Neighbour's tree. On other side of public footpath.	Inform Neighbour of benefits of cutting ivy.	20+	B	4.2

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Physiological condition	Structural condition And comments.	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development.	Estimated remaining contribution (years)	Cat.	RPA Radius (m)
T9	Oak	12	350	1	5	5	5	5	4	Y	Fair. Extensive ivy.	Fair. Neighbour's tree. On other side of public footpath.	Inform Neighbour of benefits of cutting ivy.	20+	B	4.2
T10	Goat Willow	10	283	2	3	5	5	4	4	Y	Fair. Extensive ivy.	Fair. Neighbour's tree. On other side of public footpath.	Inform Neighbour of benefits of cutting ivy.	20+	B	3.4
T11	Birch	12	250	1	4	3	3	3	10	Y	Fair	Fair. Growing through chain link fence.	None at present.	10 – 20	C	3.0
T12	Holly	9	429	4	3	3	3	3	1.5	M	Fair.	Fair. Multi-stem.	None at present.	20+	B	5.2
T13	Holly	8	150	1	1	1.5	1.5	0	11.5	Y	Fair. Suppressed.	Fair.	None at present.	10 – 20	C	1.8
G13A	Holly & Privet	4	150	1	1	1	1	1	0	Y	Fair.	Fair. 1.5 metres privet hedge with 4 metre holly taking over.	None at present.	20+	C	1.8
T14	Rowan	10	377	3	3	3	3	3	3	M	Fair.	Fair. Topped in past at 4 metres and allowed to re-grow. Likely to require re-topping in 10 – 20 years to reduce the risk of failure at potentially weak unions.	None at present.	10 – 20	C	4.5
T15	Oak	10	350	1	6	7	6	4	1.5	Y	Fair. Extensive ivy.	Fair.	Inform tree owner of benefits of cutting ivy.	20+	B	4.2
T16	Birch	16	600	1	7	10	10	2	4	OM	Fair but showing early signs that this tree may be approaching over maturity.	Fair. Has recently failed tree hung up in crown.	Remove recently failed tree.	10-20	C	7.2

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Physiological condition	Structural condition And comments.	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development.	Estimated remaining contribution (years)	Cat.	RPA Radius (m)
T17	Birch	17	350	1	7	5	4	2	6	OM	Fair but showing early signs that this tree may be approaching over maturity.	Fair.	None at present.	10-20	C	4.2
T18	Birch	17	350	1	1.5	1.5	1.5	1.5	9	M	Poor.	Poor.	Remove tree.	<10	U	4.2
T19	Birch	11	250	1	0	1	3	1	8	Y	Fair. Some ivy. Suppressed.	Fair.	Cut ivy.	10 – 20	C	3.0
T20	Birch	18	400	1	2	3	5	4	7	M	Fair. Extensive ivy.	Fair.	Cut ivy.	10 – 20	C	4.8
T21	Birch	18	400	1	2	5	6	6	15	M	Fair. Extensive ivy. Dieback in upper crown.	Fair.	Cut ivy. Monitor dieback.	10 – 20	C	4.8
T22	Birch	16	400	1	2	0	9	8	8	M	Fair. Extensive ivy.	Fair. Poor form.	Cut ivy.	10 – 20	C	4.8
T23	Sweet Chestnut	7	424	2	0	4	6	6	1.5	M	Poor. 1 No. stem 60% dead. Very extensive ivy.	Poor. Poor form.	Remove tree.	<10	U	5.1
T24	Sweet Chestnut	18	1014	3	8	2	6	8	2	M	Fair. Some ivy.	Fair. ??? Stems.	Cut ivy.	20+	B	12.2
T25	Holly	6	175	5	2	2	2	2	0	Y	Fair.	Fair. Small tree relatively simple to replace if necessary.	None at present.	10 – 20	C	2.1
T26	Hawthorn	7	139	3	2	0	2	2	1	Y	Fair.	Fair. Small tree relatively simple to replace if necessary.	None at present.	10 – 20	C	1.7

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Physiological condition	Structural condition And comments.	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development.	Estimated remaining contribution (years)	Cat.	RPA Radius (m)
G27	Holly	7	200	1	2	2	2	2	0.5	Y	Fair.	Fair. Very close to fence line. Height of hedge reduces to 2 metres at southern end.	None at present.	10 – 20	C	2.4
T28	Pine	18	403	2	4	6	4	4	2	Y	Fair.	Fair.	Consider removing co-dominant stem to north.	20+	B	4.8
T29	Apple	8	500	1	5	5	5	5	2	M	Fair. Some ivy.	Fair. Regularly pruned for fruit in past but allowed to grow out. Likely to require heavy reduction in 10 – 20 years to reduce the risk of failure at potentially weak unions.	Cut ivy.	10 – 20	C	6.0
T30	Yew	8	250	1	3	3	3	3	0	Y	Fair. Suppressed.	Fair.	None at present.	20+	C	3.0
T31	Oak	18	1100	1	7	8	7	9	4	M	Fair.	Fair. Neighbour's tree. Small deadwood in lower crown over site.	Remove small deadwood.	40+	A	13.2
T32	Apple	8	500	1	5	5	5	5	2	M	Fair. Some ivy.	Fair. Regularly pruned for fruit in past but allowed to grow out. Likely to require heavy reduction in 10 – 20 years to reduce the risk of failure at potentially weak unions.	Cut ivy.	10 – 20	C	6.0
T33	Damson	7	574	4	9	2	0	5	0	M	Fair.	Poor. Multiple stems have partially failed in past.	Remove tree.	<10	U	6.9
T34	Pear	8	250	1	3	3	3	3	1.5	M	Fair. Some ivy.	Fair.	Cut ivy.	10 – 20	C	3.0

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Physiological condition	Structural condition And comments.	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development.	Estimated remaining contribution (years)	Cat.	RPA Radius (m)
T35	Birch	7	100	1	1.5	1.5	1.5	1.5	1.5	Y	Fair.	Fair. Small tree.	None at present.	20+	C	1.2
T36	Yew	5	256	11	4	4	4	5	0	Y	Fair.	Fair. Multi-stem from ground.	None at present.	10 – 20	C	3.1
T37	Holly	4	163	6	1.5	1.5	1.5	1.5	0	Y	Fair.	Fair. Topped in past at 2 metres. Likely to require re-topping in 10 – 20 years to reduce the risk of failure at potentially weak unions.	None at present.	10 – 20	C	2.0
T38	Rowan	10	180	1	0	3	3	0	3	Y	Fair. Suppressed.	Fair.	None at present.	10 – 20	C	2.16
T39	Cherry	14	200	1	0	4	7	3	3	Y	Fair. Suppressed.	Fair.	None at present.	10 – 20	C	2.4
T40	Rowan	14	180	1	0	3	4	3	8	Y	Fair. Suppressed.	Fair.	None at present.	10 – 20	C	2.16
T41	Cherry	14	464	4	6	6	2	5	1.5	M	Fair. Extensive ivy.	Poor. Multiple stems with tight union at base. 1 No. stem has multiple areas of decay and has recently failed at 4 metres.	Remove damaged stem and adjacent stem. Cut ivy on remaining stems.	10 – 20	C	5.6
T42	Damson	8	450	3	7	4	4	4	2	M	Fair.	Fair. Multiple stems from base.	None at present.	10 – 20	C	5.4
G43	Elm	5	150	1	1	2	1	1	2	Y	Fair.	Fair. Likely to succumb to Dutch Elm disease.	None at present.	10 – 20	C	1.8

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Physiological condition	Structural condition And comments.	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development.	Estimated remaining contribution (years)	Cat.	RPA Radius (m)
T44	Elm	7	200	1	2	2	2	2	4	Y	Poor. Has Dutch Elm disease.	Fair.	Remove tree.	<10	U	2.4
T45	Holly	7	180	2	1	4	1	0	0.5	Y	Fair.	Fair. Poor form.	None at present.	10 – 20	C	2.2
T46	Cherry	7	180	1	2	4	2	1	2	Y	Fair.	Fair. Poor form.	None at present.	10 – 20	C	2.16
T47	Yew	7	200	1	2	4	3	2	0.5	Y	Fair.	Fair. Small tree relatively simple to replace if necessary.	None at present.	10+	C	2.4
T48	Leylandii	7	150	1	1	2	2	1	0.5	Y	Poor.	Poor form.	Remove tree.	<10	U	1.8
T49	Yew	7	250	1	3	5	5	3	0.5	Y	Fair.	Poor form.	None at present.	10 – 20	C	3.0
T50	Cherry	9	150	1	2	0	0	3	3	Y	Fair. Extensive ivy.	Poor form.	Cut ivy.	10 – 20	C	1.8
T51	Holly	9	200	1	2	2	2	2	0.5	Y	Fair. Extensive ivy.	Poor form.	Cut ivy.	10 – 20	C	2.4
T52	Holly	7	100	1	1	0	1	1	1	Y	Fair.	Poor form.	None at present.	10 – 20	C	1.2
T53	Hawthorn	9	359	4	5	5	4	5	1	M	Fair. Very extensive ivy.	Fair.	Cut ivy.	10 – 20	C	4.3

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Physiological condition	Structural condition And comments.	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development.	Estimated remaining contribution (years)	Cat.	RPA Radius (m)
T54	Rowan	10	339	8	3	3	3	3	2	M	Fair.	Poor. Very tight unions and multiple stems from ground. 2 stems have decay.	Monitor decayed stems and tight unions.	10 – 20	C	4.1
T55	Rowan	8	292	2	3	3	3	3	1.5	M	Fair. Extensive ivy.	Fair. Tight union at base and necrotic bark	Cut ivy and monitor necrotic bark	10 – 20	C	3.5
T56	Birch	20	600	1	5	4	6	7	2	M	Fair. Extensive ivy and brambles restricting full inspection.	Fair. Lowest branch to west and road is becoming excessively long for its diameter.	Reduce long branch towards road by 2 metres. Cut ivy.	20+	B	7.2
T57	Beech	4	147	6	1	1	1	2	1.5	M	Fair.	Fair. Cut down to ground and multiple heights and allowed to re-grow. Likely to require re-topping in 10 – 20 years to reduce the risk of failure at potentially weak unions.	None at present.	10 – 20	C	1.8
G58	Mixed Native	4	150	1	1	1	1	1	0	Y	Fair.	Fair. Includes Hawthorn & Holly. Reasonable low to mid-level screen.	None at present.	10 – 20	C	1.8
T59	Hawthorn	5	200	1	2	1	1	4	2	M	Fair. Ivy recently cut.	Fair. Poor form but may regain shape now ivy has been cut.	None at present.	10 – 20	C	2.4
T60	Hawthorn	8	300	1	1.5	1	1	4	2	M	Fair.	Fair. Poor form. Suppressed.	None at present.	20+	C	3.6
T61	Elm	10	250	1	0	2	5	2	4	M	Fair.	Fair. Poor form. Likely to succumb to Dutch Elm disease.	None at present.	10 – 20	C	3.0
T62	Hawthorn	4	180	1	1	0	1	1	2	Y	Poor. Very extensive ivy and low crown volume.	Fair.	Remove tree.	<10	U	2.16

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Physiological condition	Structural condition And comments.	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development.	Estimated remaining contribution (years)	Cat.	RPA Radius (m)
T63	Oak	10	250	1	3	3	2	3	4	M	Fair.	Fair.	None at present.	20+	B	3.0
T64	Elm	10	200	1	2	2	2	2	2	Y	Fair.	Fair. Likely to succumb to Dutch Elm disease.	None at present.	10 – 20	C	2.4
T65	Elm	6	200	1	6	0	1	4	3	Y	Fair.	Fair. Poor form. Confirm ownership. Likely to succumb to Dutch Elm disease.	None at present.	10 – 20	C	2.4
T66	Beech	16	559	2	7	4	3	5	4	M	Fair. Extensive ivy.	Fair. Confirm ownership.	Cut ivy.	20+	B	6.7
T67	Beech	15	300	1	1	0	2	4	3	M	Fair. Extensive ivy.	Fair. Confirm Ownership. Suppressed.	Cut ivy.	10 – 20	C	3.6
T68	Beech	9	200	1	0	0	2	2	2	Y	Fair. Extensive ivy.	Fair. Confirm Ownership. Suppressed.	Cut ivy.	10 – 20	C	2.4
T69	Beech	15	384	1	2	4	4	4	3	M	Fair. Extensive ivy.	Fair. Confirm Ownership. Tight unions at base.	Cut ivy. Monitor tight unions at base.	10 – 20	C	4.6
G70	Elm	3	100	1	1	1	1	1	2	Y	Fair.	Fair. Suckers from trees within site. Likely to succumb to Dutch Elm disease.	None at present.	10 – 20	C	4.5

Appendix 4

Tree Surgery Schedule- Also see drawing L830TPP

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development	Tree Surgery required to allow development	Tree surgery contractor's notes
T1	Oak	20	1250	1	7	7	7	7	2	M	None at present.	As previous column	
G2	Hawthorn & Holly	4	150	1	1	1	1	1	0.5	Y	Cut ivy.	Remove end section of hedge as indicated on tree removal plan and grind out roots to no more than 1m from position of protective fencing.	
T3	Holly	5	300	1.5	2	2	2	2	1.5	Y	Cut ivy.	As previous column	
G41	Privet	2	150	1	0.5	1	1	1	0	M	Reinstate collapsed sections.	As previous column	
T5	Sycamore	12	400	1	4	0	4	4	6	M	Inform Neighbour of benefits of cutting ivy.	As previous column	
T6	Oak	12	472	2	5	2	5	3	1.5	Y	Inform Neighbour of benefits of cutting ivy.	As previous column	
T7	Oak	12	300	1	5	4	4	1	2	Y	Inform Neighbour of benefits of cutting ivy.	As previous column	
T8	Oak	12	350	1	5	2	2	3	1	2	Inform Neighbour of benefits of cutting ivy.	As previous column	
T9	Oak	12	350	1	5	5	5	5	4	Y	Inform Neighbour of benefits of cutting ivy.	As previous column	

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development	Tree Surgery required to allow development	Tree surgery contractor's notes
T10	Goat Willow	10	283	2	3	5	5	4	4	Y	Inform Neighbour of benefits of cutting ivy.	As previous column	
T11	Birch	12	250	1	4	3	3	3	10	Y	None at present.	As previous column	
T12	Holly	9	429	4	3	3	3	3	1.5	M	None at present.	As previous column	
T13	Holly	8	150	1	1	1.5	1.5	0	11.5	Y	None at present.	As previous column	
G13A	Holly & Privet	4	150	1	1	1	1	1	0	Y	None at present.	As previous column	
T14	Rowan	10	377	3	3	3	3	3	3	M	None at present.	As previous column	
T15	Oak	10	350	1	6	7	6	4	1.5	Y	Inform tree owner of benefits of cutting ivy.	As previous column	
T16	Birch	16	600	1	7	10	10	2	4	M	Remove recently failed tree.	As previous column	
T17	Birch	17	350	1	7	5	4	2	6	M	None at present.	As previous column	
T18	Birch	17	350	1	1.5	1.5	1.5	1.5	9	M	Remove tree.	Remove tree irrespective of development and treat or grind out stump.	

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development	Tree Surgery required to allow development	Tree surgery contractor's notes
T19	Birch	11	250	1	0	1	3	1	8	Y	Cut ivy.	As previous column	
T20	Birch	18	400	1	2	3	5	4	7	M	Cut ivy.	As previous column	
T21	Birch	18	400	1	2	5	6	6	15	M	Cut ivy. Monitor dieback.	As previous column	
T22	Birch	16	400	1	2	0	9	8	8	M	Cut ivy.	As previous column	
T23	Sweet Chestnut	7	424	2	0	4	6	6	1.5	M	Remove tree.	Remove tree irrespective of development and treat or grind out stump.	
T24	Sweet Chestnut	18	1014	3	8	2	6	8	2	M	Cut ivy.	As previous column	
T25	Holly	6	175	5	2	2	2	2	0	Y	None at present.	As previous column	
T26	Hawthorn	7	139	3	2	0	2	2	1	Y	None at present.	As previous column	
G27	Holly	7	200	1	2	2	2	2	0.5	Y	None at present.	As previous column	
T28	Pine	18	403	2	4	6	4	4	2	Y	Consider removing co-dominant stem to north.	As previous column	

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development	Tree Surgery required to allow development	Tree surgery contractor's notes
T29	Apple	8	500	1	5	5	5	5	2	M	Cut ivy.	As previous column	
T30	Yew	8	250	1	3	3	3	3	0	Y	None at present.	As previous column	
T31	Oak	18	1100	1	7	8	9	9	4	M	Remove small deadwood.	As previous column	
T32	Apple	8	500	1	5	5	5	5	2	M	Cut ivy.	Remove tree and stump to allow development	
T33	Damson	7	574	4	9	2	0	5	0	M	Remove tree.	Remove tree irrespective of development and grind out stump.	
T34	Pear	8	250	1	3	3	3	3	1.5	M	Cut ivy.	Remove tree and stump to allow development	
T35	Birch	7	100	1	1.5	1.5	1.5	1.5	1.5	Y	None at present.	Remove tree and stump to allow development	
T36	Yew	5	256	11	4	4	4	5	0	Y	None at present.	Remove tree and grind out stump to allow development	
T37	Holly	4	163	6	1.5	1.5	1.5	1.5	0	Y	None at present.	As previous column	
T38	Rowan	10	180	1	0	3	3	0	3	Y	None at present.	As previous column	

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development	Tree Surgery required to allow development	Tree surgery contractor's notes
T39	Cherry	14	200	1	0	4	7	3	3	Y	None at present.	As previous column	
T40	Rowan	14	180	1	0	3	4	3	8	Y	None at present.	As previous column	
T41	Cherry	14	464	4	6	6	2	5	1.5	M	Remove damaged stem and adjacent stem. Cut ivy on remaining stems.	Remove tree and treat or grind out stump to allow development	
T42	Damson	8	450	3	7	4	4	4	2	M	None at present.	As previous column	
G43	Elm	5	150	1	1	2	1	1	2	Y	None at present.	As previous column	
T44	Elm	7	200	1	2	2	2	2	4	Y	Remove tree.	Remove tree and stump irrespective of development	
T45	Holly	7	180	2	1	4	1	0	0.5	Y	None at present.	As previous column	
T46	Cherry	7	180	1	2	4	2	1	2	Y	None at present.	As previous column	
T47	Yew	7	200	1	2	4	3	2	0.5	Y	None at present.	As previous column	
T48	Leylandii	7	150	1	1	2	2	1	0.5	Y	Remove tree.	Remove tree and treat or grind out stump irrespective of development	

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development	Tree Surgery required to allow development	Tree surgery contractor's notes
T49	Yew	7	250	1	34	5	5	3	0.5	Y	None at present.	As previous column	
T50	Cherry	9	150	1	2	0	0	3	3	Y	Cut ivy.	As previous column	
T51	Holly	9	200	1	2	2	2	2	0.5	Y	Cut ivy.	As previous column	
T52	Holly	7	100	1	1	0	1	1	1	Y	None at present.	As previous column	
T53	Hawthorn	9	359	4	5	5	4	5	1	M	Cut ivy.	As previous column	
T54	Rowan	10	339	8	3	3	3	3	2	M	Monitor decayed stems and tight unions.	As previous column	
T55	Rowan	8	292	2	3	3	3	3	1.5	M	Cut ivy and monitor necrotic bark	Remove tree and stump to allow development	
T56	Birch	20	600	1	5	4	6	7	2	M	Reduce long branch towards road by 2 metres. Cut ivy.	As previous column	
T57	Beech	4	147	6	1	1	1	2	1.5	M	None at present.	Remove tree and grind out stump to allow development	
G58	Mixed Native	4	150	1	1	1	1	1	0	Y	None at present.	Remove end section of hedge as indicated on tree removal plan and grind out roots to no more than 1m from position of protective fencing.	

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development	Tree Surgery required to allow development	Tree surgery contractor's notes
T59	Hawthorn	5	200	1	2	1	1	4	2	M	None at present.	As previous column	
T60	Hawthorn	8	300	1	1.5	1	1	4	2	M	None at present.	As previous column	
T61	Elm	10	250	1	0	2	5	2	4	M	None at present.	As previous column	
T62	Hawthorn	4	180	1	1	0	1	1	2	Y	Remove tree.	Remove tree and treat or grind out stump irrespective of development	
T63	Oak	10	250	1	3	3	2	3	4	M	None at present.	As previous column	
T64	Elm	10	200	1	2	2	2	2	2	Y	None at present.	As previous column	
T65	Elm	6	200	1	6	0	1	4	3	Y	None at present.	As previous column	
T66	Beech	16	559	2	7	4	3	5	4	M	Cut ivy.	As previous column	
T67	Beech	15	300	1	1	0	2	4	3	M	Cut ivy.	As previous column	
T68	Beech	9	200	1	0	0	2	2	2	Y	Cut ivy.	As previous column	

Tree No.	Species	Height (m)	Stem Dia. (mm)	No. of stems	Branch Spread (m) N,E,S,W				Height of crown clearance (m)	Age class	Preliminary management recommendations to ensure SULE is at least 10 years irrespective of development	Tree Surgery required to allow development	Tree surgery contractor's notes
T69	Beech	15	384	1	2	4	4	4	3	M	Cut ivy. Monitor tight unions at base.	As previous column	
T70	Elm	3	100	1	1	1	1	1	2	Y	None at present.	As previous column	

Appendix 5

Photographs

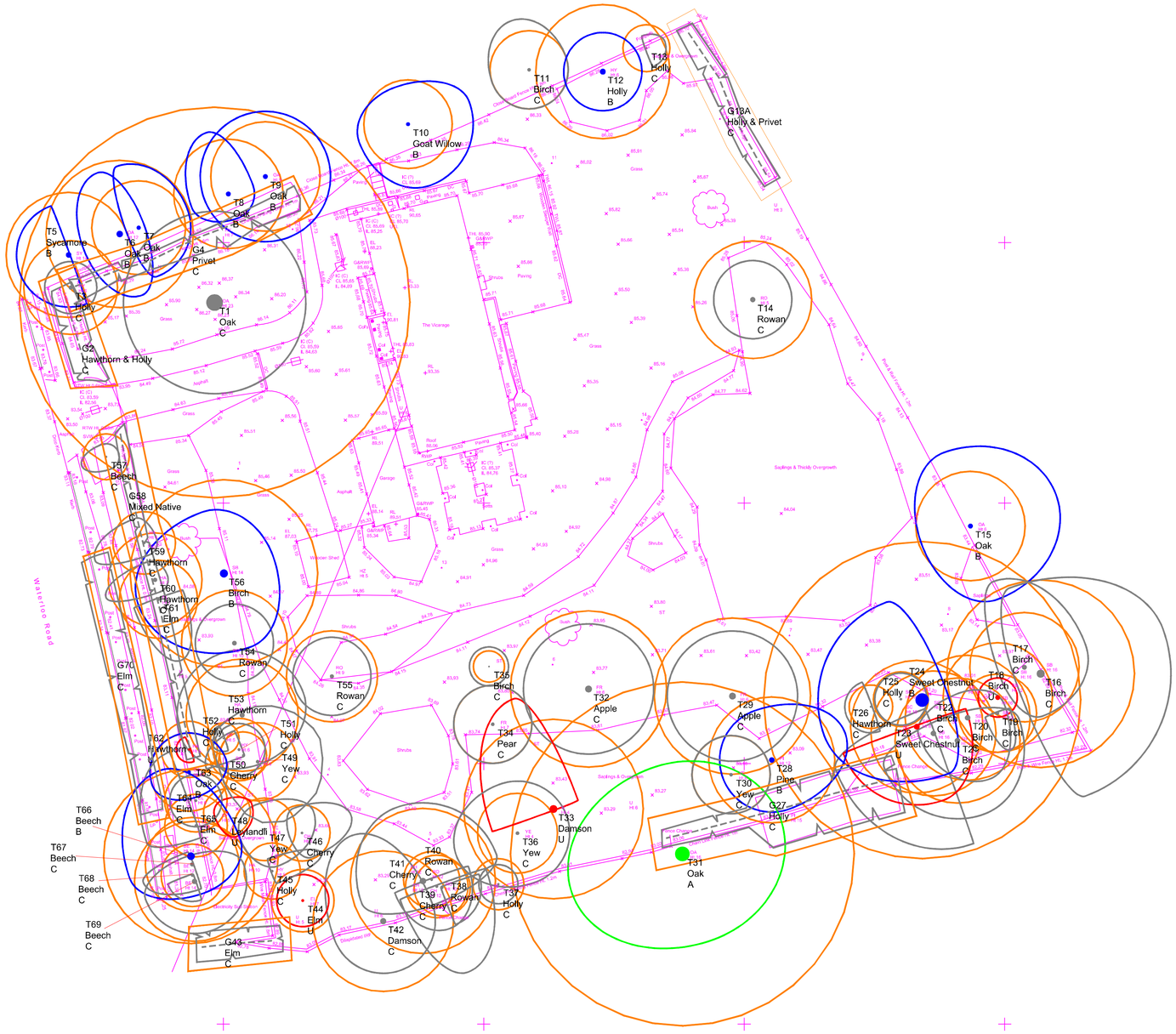
No photographs

Appendix 6
Tree Constraints Plan L830TCP

Please see attached drawing L830TCP.

1:200 at A1

0 25m



Legend

- Root Protection Area
- Category A tree
  Those of High quality and value.
- Category B tree
  Those of moderate quality and value
- Category C tree
  Those of low quality and value
- Category U tree. Likely to have a Safe Useful Life Expectancy of less than 10 years irrespective of development.
- Not inspected

Notes

Based upon Omega Topographical survey Drawing No. 15-0127-Topo 03. The position of trees T7, T8, T10, T11, T13, T25, T26, T35, T37, G43, T57, T68 and G70 added by Treeventures Ltd.

Also please refer to Treeventures report ref: L830AIA

Rev:	Date:	Description:
-	-	-

Project:

The Vicarage
Waterloo Road
Cranbrook, TN17 3QJ

Title:

Tree Constraints Plan

Survey Date:	Scale:
29-03-22	1:200 at A1

Drawing No:	Revision:
L830TCP	-

Tree Ventures Limited
Office No. 2, Top Floor,
Hollywood House
76 Hollywood Lane, Wainscott,
Rochester, Kent. ME2 4SY
Tel: 01634 712703
Mob: 07774 741 933

Appendix 7
Tree Protection Plan L830TPP

Please see attached drawing L830TPP.

1:200 at A1

0 25m

Blue finished levels are where existing levels will be altered to a minor degree. Red finished levels are where they will remain the same as existing which effectively means a reduction of 100mm to remove turf and a further 100 t0 200mm to allow for cellular confinement system and permeable wearing course. Approximately 10% of T1's RPA (in orange hatching) that isn't already covered by existing hard surface would be covered in new permeable hard surface. At the distance from the main stem this degree and quantity of Arboriculturally supervised excavation is unlikely to have a significant effect on the long term health of the tree.

Black dashed line indicates first phase protective fencing erected before demolition, construction or access to site by heavy plant. Specific length of protective fencing will be moved back to the position of the blue dashed line after a cellular confinement system has been positioned under Arboricultural supervision with a temporary impermeable wearing course in the position of the orange hatched areas. The impermeable temporary wearing course will be removed and replaced with a permeable wearing course atthe end of the main construction phase.

Steel road plate or similar will be laid over the existing access on to the site before demolition, construction or access to site by heavy plant to prevent rutting or localised compaction from heavy vehicles.

Very minor incursions at the edge of the RPA of T56, T54 and T53 are unlikely to have a significant impact on the long term health of these trees. There is scope for these trees to quickly compensate for small percentage of RPA lost in extensive rooting environment elsewhere.

Existing Rectory Retained
Extensions Removed

Existing Private Drive

Area of increased hardstand within RPA of T1 hatched green

Dwelling 1
Dwelling 2
Dwelling 3
Dwelling 4

Waterloo Road

Black dashed line indicates first phase protective fencing erected before demolition, construction or access to site by heavy plant.

Very minor incursions at the edge of the RPA of T29 is unlikely to have a significant impact on the long term health of this tree. There is scope for this tree to quickly compensate for small percentage of RPA lost in extensive rooting environment elsewhere.

Light blue hatching indicates temporary ground protection positioned before demolition, construction or access to site by heavy plant.

T1 Oak C
T2 Oak B
T3 Holly C
T4 Oak B
T5 Sycamore B
G2 Hawthorn & Holly C
G4 Privet C
T8 Oak B
T9 Oak B
T10 Goat Willow B
T11 Birch C
T12 Holly B
T13 Holly C
G18A Holly & Privet C
T14 Rowan C
T15 Oak B
T16 Birch C
T17 Birch C
T18 Birch C
T19 Birch C
T20 Birch C
T21 Birch C
T22 Birch C
T24 Sweet Chestnut B
T25 Holly C
T26 Hawthorn C
T28 Pine B
T29 Apple C
T30 Yew C
G27 Holly C
T31 Oak A
T32 Holly C
T36 Rowan C
T37 Holly C
T38 Rowan C
T39 Cherry C
T40 Rowan C
T41 Elm C
T42 Damson C
T43 Elm C
T45 Holly C
T46 Cherry C
T47 Yew C
T48 Elm C
T49 Yew C
T50 Cherry C
T51 Elm C
T52 Holly C
T53 Hawthorn C
T54 Rowan C
T55 Elm C
T56 Beech B
T57 Beech C
T58 Beech C
T59 Hawthorn C
T60 Hawthorn C
T61 Elm C
T66 Birch B
T66 Beech B
T67 Beech C
T68 Beech C
T69 Beech C
G38 Mixed Native C
G70 Elm C

ebank
Mylen
irklands
View
Rydal

The comments on this drawing indicate mitigating measures that will be taken to reduce the impact of development on trees and vice versa. More details of how to achieve the mitigating measures are included within the Arboricultural Method Statement in Tree Report No. L830AIA.

All Boundary treatments within the RPA of retained trees to consist of fencing with fence posts at 1.8m centres. Post holes will be excavated by hand and moved if roots over 25mm in diameter are encountered. Crown lift retained tree to 2.5m to allow the erection of fencing if necessary.

Ideally any new services entering the site will be outside the RPA of retained trees. Any excavations required for new services within the RPA of retained trees will be carried out in accordance with NJUG regulations and under Arboricultural supervision. Soakaways or attenuation tanks will not be within the RPA of retained trees.

Soft landscaping within the RPA of retained trees will either be carried out under Arboricultural supervision or by a landscape contractor experienced in working near trees.

Legend

- Root Protection Area
- Category A tree
  Those of High quality and value.
- Category B tree
  Those of moderate quality and value
- Category C tree
  Those of low quality and value
- Category U tree. Likely to have a Safe Useful Life Expectancy of less than 10 years irrespective of development.
- Not inspected
- BS 5837 Protective Fencing
- Trees to be retained
- Construction Exclusion Zone (CEZ). Only to be crossed under Arboricultural supervision.

Notes

Based upon Omega Topographical survey Drawing No. 15-0127-Topo 03 and Proposed Site Plan A1606010 Rev P5. The position of trees T7, T8, T10, T11, T13, T25, T26, T35, T37, G43, T57, T68 and G70 added by Treeventures Ltd.

Also please refer to Treeventures report ref: L830AIA

Rev:	Date:	Description:
-	-	-

Project:

The Vicarage
Waterloo Road
Cranbrook, TN17 3QJ

Title:

Tree Protection Plan

Survey Date: 29-03-22
Scale: 1:200 at A1
Drawing No: L830TPP
Revision: -

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Appendix 8
Tree Removal Plan L830TRP

Please see attached drawing L830TRP.

1:200 at A1

0 25m

Ends of G2 and G58 removed to allow development.

C category trees T55 and T57 removed to allow development.

U category T48 and T62 to be removed irrespective of development because of their poor condition.

U category T44 to be removed irrespective of development because of its poor condition.

C category trees T36 and T41 removed to allow development.

U category T33 to be removed irrespective of development because of its poor condition.

C category trees T32, T34 and T35 removed to allow development.

U category T18 and T23 to be removed irrespective of development because of their poor condition.

Existing Rectory Retained - Extensions Removed

Existing Private Drive

Dwelling 1

Dwelling 2

Dwelling 3

Dwelling 4

Waterloo Road

Mylen

irklands

View

Rydal

ebank

T1 Oak C

T2 Holly C

G2 Hawthorn & Holly C

T5 Sycamore B

T6 Oak B

T7 Oak B

G4 Privet C

T8 Oak B

T9 Oak B

T10 Goat Willow B

T11 Birch C

T12 Holly B

T13 Holly C

G18A Holly & Privet C

T14 Rowan C

T15 Oak B

T16 Birch C

T17 Birch C

T18 Birch U

T19 Birch C

T20 Birch C

T21 Birch C

T22 Birch C

T23 Sweet Chestnut U

T24 Sweet Chestnut B

T25 Holly C

T26 Hawthorn C

T27 Sweet Chestnut U

T28 Pine B

G27 Holly C

T29 Apple C

T30 Yew C

T31 Oak A

T32 Apple C

T33 Damson U

T34 Pear C

T35 Birch C

T36 Yew C

T37 Beech C

G58 Mixed Native C

T38 Holly C

T39 Cherry C

T40 Rowan C

T41 Cherry C

T42 Damson C

T43 Holly C

T44 Elm U

T45 Holly C

G43 Elm C

T46 Cherry C

T47 Yew C

T48 Hollandii U

T49 Yew C

T50 Cherry C

T51 Holly C

T52 Holly C

T53 Hawthorn C

T54 Rowan C

T55 Rowan C

T56 Birch B

T57 Beech C

T59 Hawthorn C

T60 Hawthorn C

T61 Elm C

G70 Elm C

T62 Hawthorn C

T63 Elm C

T64 Elm C

T65 Oak B

T66 Beech B

T67 Beech C

T68 Beech C

T69 Beech C

Legend

- Root Protection Area
- Category A tree Those of High quality and value.
- Category B tree Those of moderate quality and value
- Category C tree Those of low quality and value
- Category U tree. Likely to have a Safe Useful Life Expectancy of less than 10 years irrespective of development.
- Not inspected
- Trees to be removed

Notes

Based upon Omega Topographical survey Drawing No. 15-0127-Topo 03 and Proposed Site Plan A1606-10 Rev P5. The position of trees T7, T8, T10, T11, T13, T25, T26, T35, T37, G43, T57, T68 and G70 added by Treeventures Ltd.

Also please refer to Treeventures report ref: L830AIA

Rev:	Date:	Description:
-	-	-

Project:

The Vicarage
Waterloo Road
Cranbrook, TN17 3QJ

Title:

Tree Removal Plan

Survey Date: 29-03-22

Scale: 1:200 at A1

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Revision: -

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