



ARBORICULTURAL METHOD STATEMENT

Oak Bank, Wandleys Lane, Walberton

*-prepared on behalf of **Pario Consulting Limited** –*

The Granary, White Chimney Row, Westbourne PO10 8RS



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1.0 INTRODUCTION & CLIENTS BRIEF

- 1.1 I am instructed on this project by **Neil Stantiall of Pario Design Ltd.** who is the Architect for the land owners Mr & Mrs Corbett.
- 1.2 Mr & Mrs Corbett seeks to sub divide the existing plot and using a shared access construct a new bespoke dwelling to the north side of the current one.
- 1.3 There are on site trees which will need to be catered for and protected during this process.
- 1.4 I have been commissioned to prepare a report to satisfy the arboricultural aspects of this project to meet planning requirements.
- 1.5 My work is to be compiled in accordance with the recommendations contained within BS5837:2012.

2.0 DOCUMENT DISCLOSURE STATEMENT

I have been provided with a copy of the Planning Layout drawings as prepared by **Pario Design Ltd.** :-

- **New Dwelling on land adj. Oak Bank, Wandleys Lane – 21034/001P – Rev. C - 1:100 @ A1 – December 2021**
- this drawing has been provided to me for the purposes of my work and I rely totally on its accuracy in terms of tree location; applying crown spreads and setting out protective fencing and tree protection measures.

3.0 TREE SURVEY & ROOT PROTECTION SCHEDULES & IMPACT ASSESSMENT

3.1 I visited the site on **9th December 2021** and carried out a tree survey exercise in accordance with BS5837:2012 recommendations (see also the explanatory tree survey notes at *appendix 001*).

Tree No.	Species	Ht m	Diam mm	Brch Sprd m	GC m	LS	Comments	Preliminary Management Recommendations	Rem Con yrs	Cat
1	Pedunculate Oak <i>Quercus robur</i>	18	1300	N 13 E 11 S 15 W 11	2	M	Ivy smothering the base and trunk of this tree-small and large diameter deadwood present in crown-storm damaged in the past with broken branches and jagged wounds evident-low branching habit especially to the south side-a specimen tree with good shape and form overall.	Advise removal of storm damaged branches and large diameter deadwood – <i>for safety reasons in view of overhang of road.</i>	>40	A1

3.2 A Tree Root Protection Schedule has been prepared in accordance with BS5837:2012 recommendations (see Plans BJH 01 & 02 at *appendix 002*)

Tree No.	Tree Species	Cat	Diam mm	BS5837:2012 Table D1 Radial Protect. Zone m	BS5837:2012 Table D1 Root Protect. Area m ²	Is An Offset Required To Cater For Existing Rooting Pattern Restrictions
1	Pedunculate Oak <i>Quercus robur</i>	A1	1300	15.0	707	NO – free rooting to all directions – it is some 250 to 300 years old and as such pre-dates metalled roads and this would have been a cart track when this tree established its root system.

4.0 IMPACT ASSESSMENT & TREE PROTECTION MEASURES RECOMMENDED

4.1 The finalised planning layout drawing has been provided to me and an assessment made as to the viability of retaining trees as part of this layout in order that they meet the RPA requirements of BS5837 - the data is presented here in tabular format :-

Key: NO-RSAM = Remove for sound arboricultural management reasons NO-RTED = Remove to facilitate development UF = under footprint of proposed development
 YES = Yes can be retained and fully protected YES (D) = Yes can be retained subject to mitigation measures being applied

Tree No	Species	Cat	Stem Diam mm	BS5837:2012 Radial Protection Area m	BS5837:2012 Table D1 Root Protect. Area m ²	Distance from Site Features (see key above)	Can Tree Be Retained
1	Pedunculate Oak <i>Quercus robur</i>	A1	1300	15.0	707	15m to existing driveway access point 10.2m to off site machine excavated footings for a road 29m to existing dwelling 24m to proposed new dwelling 14m to proposed new garage 7.3m to proposed car parking zone	YES (D)

4.2 No (0) trees will need to be removed to facilitate the development as proposed.

4.3 However, works will be taking place within a small part of the Oak trees RPA so mitigation measures will need to be applied. Please see the detailed explanation of same at Section 6.6.

5.0 RECOMMENDED TREE WORKS

No	Species	Tree Works Recommended
1	Pedunculate Oak <i>Quercus robur</i>	- Advise the removal of large diameter deadwood for safety reasons given the overhang of the adjacent busy road. - Remove any storm damaged limbs at the same time although only make safe and leave stubs for habitat reasons. - Advise considering crown lifting works to improve light percolation to the new plot.

6.0 METHOD STATEMENT

Generic Measures

- 6.1 Prior to any other works being undertaken on this site the tree works prescribed at Section 5.0 above will need to be carried out by a professional tree surgeon.
- 6.2 Prior to any construction works being undertaken on this site the protective fencing is to be erected as shown on the **Tree Protection Plan BJH 03/04** (see at appendix B113). BS5837 requires that barriers are to be 'Fit For Purpose' to exclude construction activity and must be maintained to ensure that they remain rigid and complete and in the original setting out positions. In my opinion the wooden post and rail fencing meets this requirement.
- 6.3 The area within the fenced off exclusion zone is to be regarded as **sacrosanct** and the fencing shall not be taken down or relocated at any time without the prior written approval of the monitoring arboriculturist or local authority tree officer, unless this has already been agreed as part of the planning application consent process and is detailed in writing and shown on a plan.

The following prohibitions shall apply within the area enclosed by the Tree Protection Fencing [**Construction Exclusion Zone**] :-

- **No** mechanical digging or scraping once the initial ground cover vegetation has been cleared and the site fenced off.
 - **No** storage of plant, equipment or materials
 - **No** vehicular or plant access
 - **No** fire lighting
 - **No** handling, discharge or spillage of any chemical substance, including cement washings
 - **No** action likely to cause localised water-logging
 - **No** change in ground levels
- 6.4 All site works storage areas and compounds/welfare units/toilet blocks and any mixing areas are to be located outside of and well clear of retained trees RPA's and positioned over impervious surfaces or over special catchment areas such that any leakage will be captured and cannot filter into the soil causing contamination.
- 6.5 All new utility service links will need to be made with all services linking in to existing service runs or be installed outside of tree RPA's.

Site Specific Measures

6.6 Tree 1 - Oak

It was noted from my site visit that consented development has been carried out on the site immediately to the north of this plot and machine excavation and ground consolidation have taken place at a distance no greater than 10.2m from the tree (i.e. around 4m within its prescribed RPA).

The works proposed on this site will need to be undertaken in a phased manner with the car parking being laid out as a priority so that this can then be used as a base for machinery to safely access the location for the new garage.

Car Parking Zone

- The existing ground proposed to take a new car parking zone is actually lower than the existing tarmac surfaced parking bays that it will link in to thus a rigid edging will need to be secured 7.3m from the tree to hold infill of materials to form the new parking zone. Provided that this is made up of porous materials this should have minimal impact on the Oak tree. Examples of how this might be achieved are submitted at ~~appendix B13~~ B13. The methodology to be adhered to is as follows :-
 1. Skim and rake level the existing surface (removing grass vegetation) from within the proposed parking zone - using hand tools ONLY to a maximum depth of 50mm.
 2. Set out a Railway Sleeper edge and pin this securely into the ground to form a solid edge point to lay the car parking against and prevent migration of materials into the soil on the tree side of the barrier. The levels differences at the edges can then be adjusted and made safe by feathering out with high quality topsoil.
 3. Backfill any voids and levels changes with washed sharp sand to achieve a basic level grade throughout the area to be worked on – tamp down lightly with hand tools only.
 4. Then cover the exposed ground [with a 50mm overlap on either side] with a geotextile membrane pegging the edges down to secure it in place.
 5. Into this zone lay 200mm depth flexible proprietary cellular confinement system (*e.g. CellWeb or GeoCell*) and expand and peg out the cells ready to receive an infill of washed gravel/aggregate - this will be sufficient to absorb vehicular movements whilst permitting water and gaseous exchange - but if levels will permit and subject to client preference this could be topped off with a layer of porous brick setts (*e.g. Aquapave or Aquaflow*) bedded onto sharp sand – or just topped off with a layer of gravel as appropriate.

Garage Construction

- The new garage will be a maximum of 750mm into the RPA of the Oak and therefore as a precautionary measure it is proposed that there will be Arboricultural Expert monitoring and supervision of the 'Hand Digging' of a slit trench along the line of the closest point of the new garage foundations.
- The slit trench will be dug - initially forks will be used to loosen the soil and prise out any root material that may be found therein.
- Any roots of 25mm diameter or less will then be severed at the trench edge by the Arboricultural Expert using sharp bypass secateurs (*although with such a small area of RPA overlap it is highly probable that very few roots will be found*).
- Once the roots have been severed spades and shovels and machinery may be used to clear any loose spoil.

7.0 SITE MONITORING & SUPERVISION

BS5837 recommends that wherever trees on or adjacent to a site have been identified on the Tree Protection Plan as requiring special protection measures, there should be an auditable system of arboricultural site monitoring. This should extend to direct arboricultural monitoring whenever demolition/construction and development activity is to take place within or adjacent to any RPA.

- 7.1 A Pre-commencement site meeting is to take place between the development teams arboricultural consultant and the site manager and client representative where the protective fencing will be inspected to verify that it is 'Fit For Purpose' and has been erected as shown on the **Tree Protection Plan**. A further site meeting will be required to monitor and supervise the 'hand dig' trenching works.
- 7.2 Lines of communication will be established with the Site Manager and a Contact Directory compiled and issued to all development team members so that in the event that an incident occurs involving the retained trees that requires urgent advice and guidance from the project Arboricultural Expert this can be easily organised.

- 7.3 The details of the trenching works and any other site monitoring visits will be photographed by the Arboricultural Expert and the following reporting procedure will be adopted. This is an example of the format for the **Site Monitoring Schedule** that would be prepared. :-

Schedule Of Site Monitoring & Supervision for – Land dj Oak Bank, Wandleys Lane, Walberton

* In accordance with the Arboricultural Method Statement Report - 1220.bjh.Dec21 & Tree Protection Plan - SJH 03/04

Date of Inspection	Item	In Attendance	Notes/Observations From Inspection	Details Of Any Follow Up Action Required
tba	Pre-Commencement Meeting	Local Authority Tree Officer (to be invited to attend) Project Arb Consultant & Site Construction Manager	A joint site inspection was conducted and agreement reached that the protection measures are in place and that everyone understands their responsibilities in respect of protecting the trees.	
tba	Hand Digging Trenching Works	Project Arb Consultant & Site Construction Manager	A joint site inspection was conducted and	

8.0 CONCLUSIONS

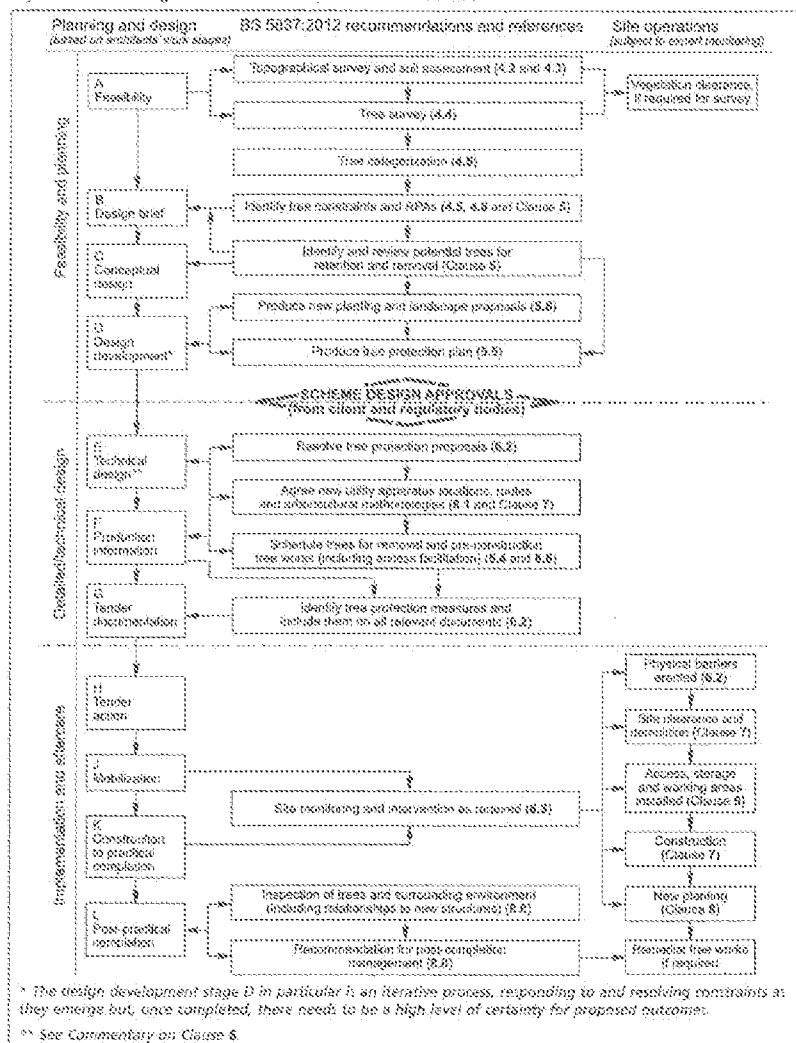
- No (0) trees will need to be removed to facilitate the development as proposed although some incursion into the RPA is required in order to construct the car parking zone and garage.
- Mitigation measures have been proposed to ensure that minimal root disturbance takes place and that the Oak tree proposed for retention will survive the construction works in a safe and healthy condition. (see methodology at Section 6.6 of this report).
- Overall, provided that the above methodology is strictly adhered to in the carefully considered and phased and supervised manner prescribed then I would not foresee any detrimental impact taking place that might undermine the ongoing health and stability or visual amenity value of the Oak tree shown for retention.



BH 1

Figure 1 - Flow Diagram
& Tree Survey Notes

Figure 1 The design and construction process and tree care



TREE SURVEY NOTES

These Tree Survey Notes have been prepared in accordance with the recommendations of **British Standard 5837:2012** and they define the criteria for pre –development tree surveys.

- Each tree/group/hedge/shelterbelt/woodland has been allocated a unique number (**No.**), where specifically requested and appropriate fees are agreed small durable numbered metal tags can be applied to each tree/group surveyed.
- The tree species (**Species**) is provided in both English and Latin name formats.
- Height assessments (**Ht**) are estimated in metres. This will be adequate for the majority of cases, but where accurate heights become a critical issue it may be necessary to return to site, as a separately commissioned exercise, to collect accurate measurements with the aid of optical instruments.
- Trunk/stem diameters (**Diam**) are measured in millimetres **at 1.5m above ground level** – where the tree is inaccessible the diameter is estimated as indicated by suffix #
- Radial crown spread assessments (**Brch Sprd**) are estimated in metres from the centre of the trunk/group to each of the four primary points of the compass (**N**-north; **E**-east; **S**-south and **W**-west) in order to achieve a representation of the crown shape which will be shown on the accompanying tree survey plan. These provide a general guide as to the main bulk outline of a tree/groups crown but **are not tape measured dimensions**. These would only be undertaken as part of a separately commissioned exercise, where precise dimensions are critical to the project at hand.
- Both the canopy ground clearance (**GC**) and the height & compass direction of the lowest major branch (**LMB**) are estimated and shown in metres
- An assessment of a tree/groups 'life stage' (**LS**) is made in terms of its site specific maturity as part of the surrounding landscape, taking into account its overall shape and form in that setting, and is recorded thus :-
Y - Young tree/group; **SM** - Semi-Mature tree/group; **EM** - Early-Mature tree/group;
M – Mature tree/group; **OM** - Over – mature tree/group
- Data on the structural condition (**Condition Comments**) of the tree/group is provided to give its visual appearance and any significant health and safety issues.
- Details of any recommended tree works required at the time of survey is given under the heading – **Preliminary Management Recommendations**.
- An estimate of a tree/groups remaining contribution in years (**RC**) is made and is recorded thus :-
0-5; 5-10; 10-20; 20-30; 30-40 or >40 years.
- The category grading (**Cat**) for each tree/group is assessed according to the criteria provided within **BS5837:2012**. The assessment is made of the tree/group in its current condition and within the environment encountered bearing in mind its suitability for retention as part of any future proposed

development; although the exact layout detail of any specific scheme will not be known at the time of surveying. The trees have been classified into one of four categories and colour coded as BS5837 recommends :- **■** (dark red); **■** (light green); **■** (mid-blue) and **■** (grey). Please note that suffixed numerical sub-categories are also applied for guidance only and do not carry any cumulative or increased value for the tree/group. This colour coding scheme will be applied to all drawings provided.

Table 1 – Cascade chart for tree quality assessment

Category and definition	Criteria			Colour on plan
Trees unsuitable for retention				
Category  Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	- 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 category U trees (i.e. 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				
	Criteria – Subcategories			
	1	2	3	
Category  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, 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  Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in the category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable 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 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	Mid Green
Category  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



BH 2

Combined
Tree Survey Plan BJH 01
&
Root Constraints Plan BJH 02

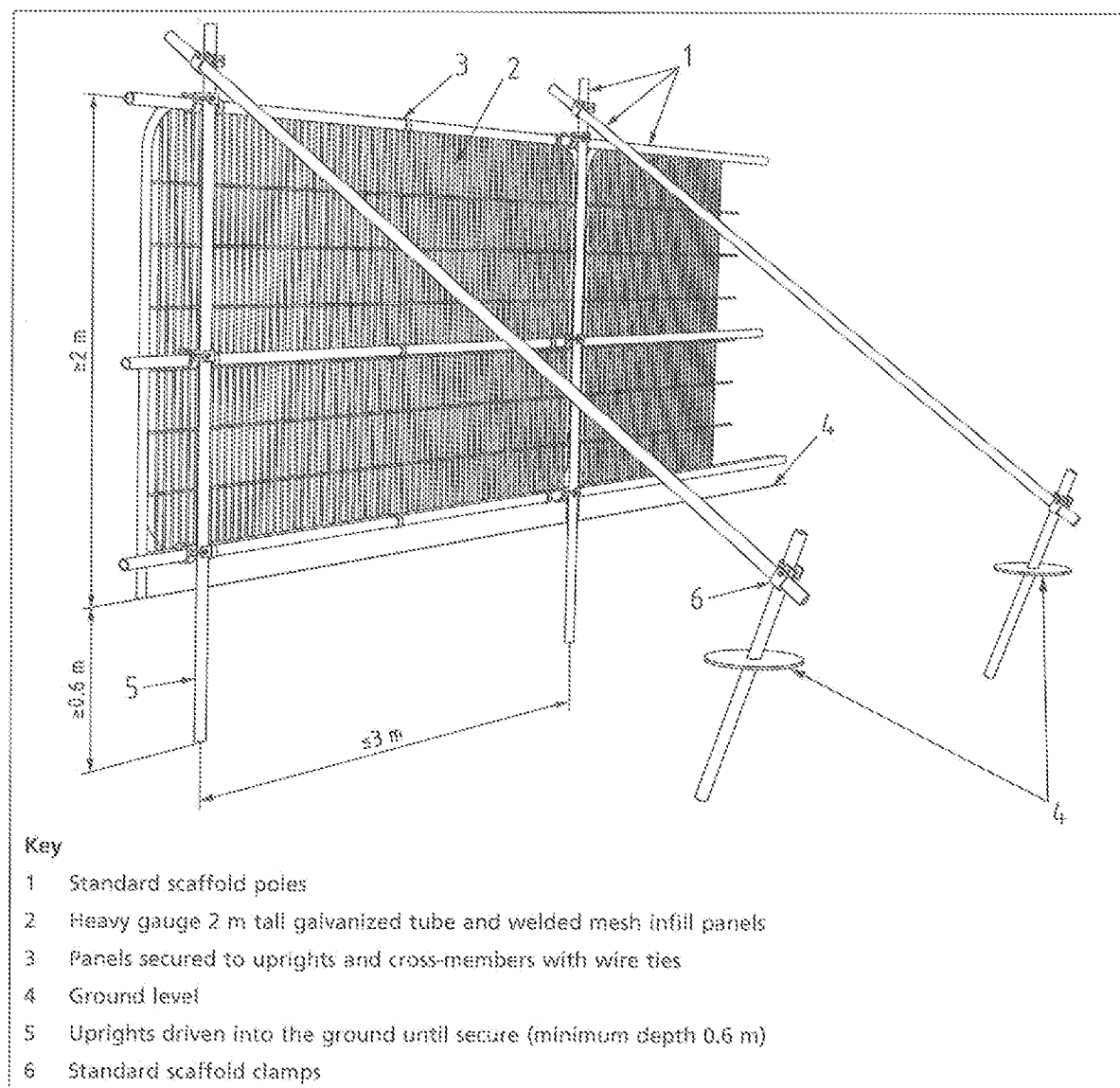


BH 3

Combined
Tree Retentions and Removals Plan BJH 03
&
Tree Protection Plan BJH 04

+ Examples of No Dig Porous Surfacing

Figure 2 Default specification for protective barrier





BH 4

Qualifications & Experience



QUALIFICATIONS AND EXPERIENCE

- My name is **Bernie Harverson** and I am a self employed independent arboricultural consultant in private practice.
- I take instructions primarily in the South of England but also on occasions work nationwide and abroad and have offices at : –

The Granary, White Chimney Row, Westbourne PO10 8RS
- I hold the following arboricultural qualification – **National Diploma in Arboriculture (Royal Forestry Society – 1976)**
- I have **fifty-one (51)** years of practical and managerial experience in the arboricultural industry including periods in both the public and private sectors.
- My Local Government sector experience comprises one year as a tree surgeon with Brighton Parks and nine years spent in Arboricultural Officer posts with both Westminster City Council and Portsmouth City Council.
- My past practical experience in the private sector includes two years at Tilhill Forest Nursery and over ten years for various companies as a Climbing Arborist/Tree Surgeon.
- Managerial work in the private sector includes two years as manager of Beechings Tree Surgeons and twelve years with CBA Trees as Managing Director & Senior Arboricultural Consultant.
- As an independent self employed Arboricultural Consultant I now provide a comprehensive range of services including :-
 Tree surveys, appraisals, assessments and inspections with particular reference to planning and development and tree safety audits with a service offered as a climber to undertake full climbing inspections to better understand the condition of a given tree before prescribing a management strategy.
- I also undertake litigation work appearing as an Expert Witness in Court Actions and at Planning Appeals, Hearings and Public Local Inquiries.

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