



ARBORICULTURAL IMPACT ASSESSMENT
&
Method Statement
for

106 Southleigh Road, Denvilles, Havant

-prepared on behalf of Mr Dylan Haskell –

Bernie Harverson M.Arb.

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1.0 INTRODUCTION & CLIENTS BRIEF

- 1.1 My client on this project is **Mr Dylan Haskell** who owns the property at **106 Southleigh Road, Denvilles**.
- 1.2 The proposal is to utilise the open are at the front of the property formerly occupied by a mature tree to construct a free standing double garage.
- 1.3 There are trees both on and off the site that might be impacted by these proposals.
- 1.3 I have therefore been commissioned to consider and advise on all of the arboricultural aspects of this project and to then prepare a supporting report to satisfy planning requirements.
- 1.4 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 by Mr Haskells Architects who are **Sussex Building Plans:-**

- **SBP – Location Plan – 1:1250**
 - **SBP – Block Plan – 1:500**
 - **SBP – DH – GARAGE/01 – 1:50 & 1:100**
- these hard copy plans have been provided to me for the purposes of my work and I rely totally on their accuracy in terms of tree location; applying crown spreads and setting out protective fencing having enlarged the 1:500 plan to 1:250 for clarity.

3.0 TREE SURVEY & ROOT PROTECTION SCHEDULES & IMPACT ASSESSMENT

3.1 I visited the site on **24th September 2015** and carried out a tree survey exercise in accordance with BS5837:2012 recommendations on just those trees which are close to the areas of proposed redevelopment (see explanatory tree survey notes [at appendix BH1](#))

Tree No.	Species	Ht m	Diam mm	Brch Sprd m	GC m	LS	Condition Comments	Preliminary Management Recommendations	Rem Con yrs	Cat
T1	Peduncular Oak <i>Quercus robur</i>	20	690	N 6 E 5 S 6 W 6	4	M	Multi stemmed 4.5m above ground level-suppressed north side by a tree which has since been removed-small diameter deadwood-previously reduced and reshaped-low branching habit over roof of neighbours building-previously cleaned out and deadwooded-fair shape and form	No work required at this time	>40	A1 / B1
T2	Purple Beech <i>Fagus sylvatica</i> 'Purpurea'	15	760	N 9 E 6 S 5 W 6	3	M	Previously reduced and reshaped-heavy limb over road to north side-previously cleaned out and deadwooded	No work required at this time	>40	B1

3.2 A Tree Root Protection Schedule has been prepared in accordance with BS5837:2012 recommendations (see Plans BJH 01 & 02 at [appendix BH2](#))

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
T1	Peduncular Oak <i>Quercus robur</i>	A1 / B1	690	8.3	215	NO – there are constraints all around this tee which cancel each other out
T2	Purple Beech <i>Fagus sylvatica</i> 'Purpurea'	B1	760	9.1	261	NO – there are constraints all around this tee which cancel each other out

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: **RSAM** = Remove for sound arboricultural management reasons **RTFD** = Remove to facilitate development **UF** = under footprint of proposed development

YES = Yes can be retained and fully protected

YES (1) = 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 Polygon Area m ²	Distance from Site Features (see key above)	Can Tree Be Retained
T1	Peduncular Oak <i>Quercus robur</i>	A1 / B1	690	8.3	215	8.3m to proposed garage building line	YES (1)
T2	Purple Beech <i>Fagus sylvatica</i> 'Purpurea'	B1	760	9.1	261	Existing gravel parking bays are within the RPA 16m to proposed garage	YES (1)

4.2 **YES (1)**

Both of the surveyed trees fit into this category on this project which can be retained and fully protected provided that mitigation measures are applied in accordance with BS5837 recommendations (see **Tree Protection Plan BJH.03/04** at [appendix BH4](#)) :-

1 Pedunculate Oak (A/B)

- The RPA for this tree is hard up against the building line so it will be necessary to drop the protective fencing back by 1.5m to allow for standard building practices and access – the area between the building line and the fencing will be covered and protected in accordance with BS5837 recommendations.
- The protective fencing will shut off the tree and prevent any storage of materials or chemical mixing or vehicular access into this zone.

2 Purple Beech (B)

- This tree is set well back from the proposed garage and there is existing gravel surfaced car parking within the RPA.
- To allow for full protection of this tree the protective fencing will shut it off and prevent any storage of materials or chemical mixing or vehicular access into this zone.

5.0 PRE-DEVELOPMENT TREE WORKS

No	Species	Tree Works Recommended
T1	Peduncular Oak <i>Quercus robur</i>	The owners regular tree surgeons have reduced and reshaped the tree in the past twelve months and no further works are necessary at this time.
T2	Purple Beech <i>Fagus sylvatica</i> 'Purpurea'	The owners regular tree surgeons have reduced and reshaped the tree in the past twelve months and no further works are necessary at this time.

6.0 METHOD STATEMENT

Generic Elements:

- 6.1 Erect the protective fencing as specified and shown on the **Tree Protection Plan BJH03/04** at [appendix BH3](#). 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. These checks will need to be incorporated into a schedule of site monitoring visits to be agreed with the clients subject to phased development operations and subsequently copies of these site visit reports will need to be copied in to the Council.
- 6.2 A copy of the Tree Protection Plan is to be pinned up in the offices/mess hut on site for all site staff to see. 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 :-

- **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

6.3 All site works storage areas and compounds/welfare units and any mixing areas are to be located outside of and well clear of retained tree RPA's.

6.4 It will be very important for any vehicle drivers to have undergone a pre-contract induction session where the trees to be retained are to be highlighted and the need for care and attention when working nearby with wide loads; tall loads; plant with swinging booms, jibs and counterweights (including drilling rigs) or slewing hydraulic arms to avoid contact with trunks or crowns.

Site Specific Elements:

- 6.5 **Ground Protection Measures** - Lay ground protection around the south side of the footprint of the proposed garage as shown on **Tree Protection Plan BJH03/04** at [appendix BH3](#) and in accordance with **BS5837:2012 – Section 6.2.3.3 - a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane.** This will serve to protect the ground during construction works and also allow scaffolding to be erected if required.
- 6.6 **Drive & Turning Head** – The existing gravel surfaced drive and turning head will be retained and not disturbed but added to on the west side to link with the garage frontage – all of which will be outside of tree RPA's.
- 6.7 **New Tree Planting** – There was once a TPO'd tree under the footprint of the proposed garage but this died and the owner has committed to replace this tree and his tree surgeon has this in hand and a new Oak tree will be planted at the location shown on the Tree Protection Plan on completion of all construction works. The protective fencing will help to protect the ground which will receive this tree.
- 6.8 **Evergreen Hedge** – the hedge at the front of the site provides valuable screening and separation and will be retained albeit pruned back on the inner face to allow for standard construction clearances.

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.

It is suggested that the following phased approach should be observed:-

- 7.1 Organise a Pre-commencement site meeting between the development teams arboricultural consultant and the site manager and client representative where the full extent of arboricultural supervision/monitoring can be agreed for the project and the requirements of the AIA report and **Tree Protection Plan BJH.03/04** discussed.
- 7.2 The Protective Fencing and Ground Protection Measures can be inspected and verified [and any adjustments to same requested] and the suitability of the materials used can also be verified [i.e. are they 'fit for purpose'].
- 7.3 A letter is to be issued by the Arboricultural Consultant monitoring the project addressed to the Council verifying satisfactory completion of the initial site set-up and Tree Protection measures – accompanied by details of how the requirements for any need for ongoing arboricultural site monitoring is to be met on this project – although it is very unlikely that there will be a need for any further monitoring.

8.0 CONCLUSIONS

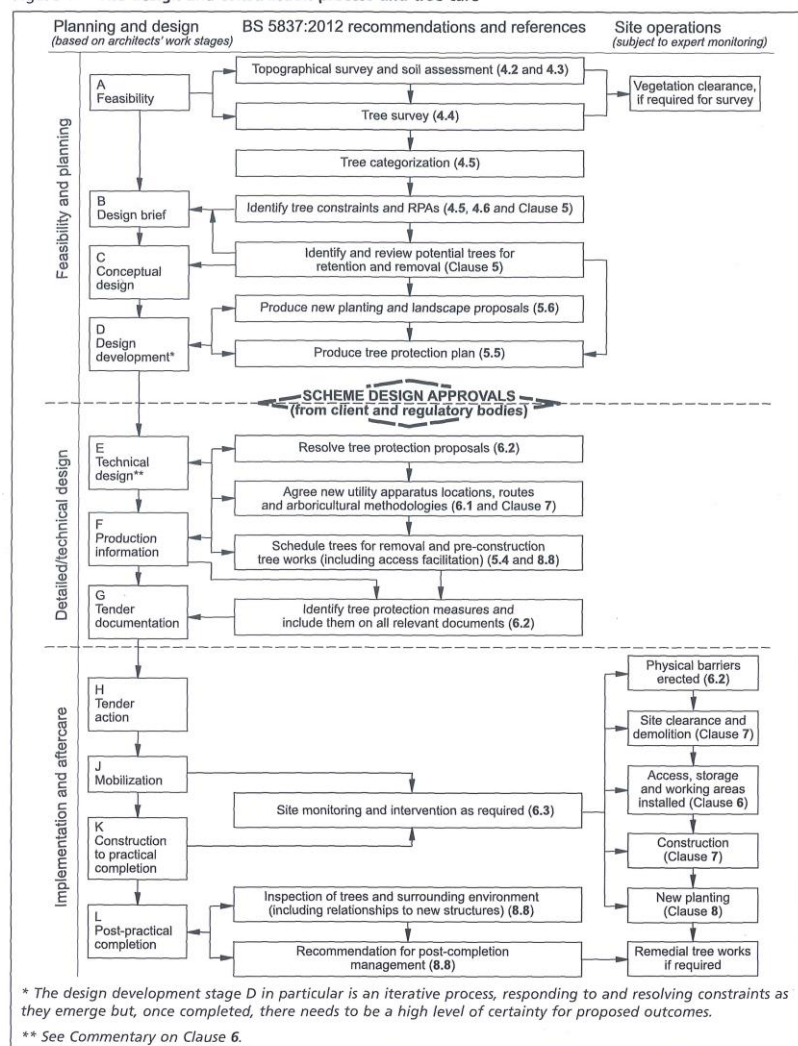
- No trees will need to be removed to facilitate this development and all retained trees can be adequately protected in accordance with BS5837.
- A young Oak tree will be planted to replace the one that was removed for safety reasons.
- Provided that the above methodology is strictly adhered to in the phased manner advocated (along with any agreed requirement for site supervision/monitoring) I would not foresee any detrimental impact taking place that might otherwise undermine the health and stability or visual amenity value of the trees which are 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 :- **U** (dark red); **A** (light green); **B** (mid-blue) and **C** (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 U 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 A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual, or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, 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 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 Blue
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	Grey



BH 2

Tree Survey & Root Protection Plans

BJH 01/02

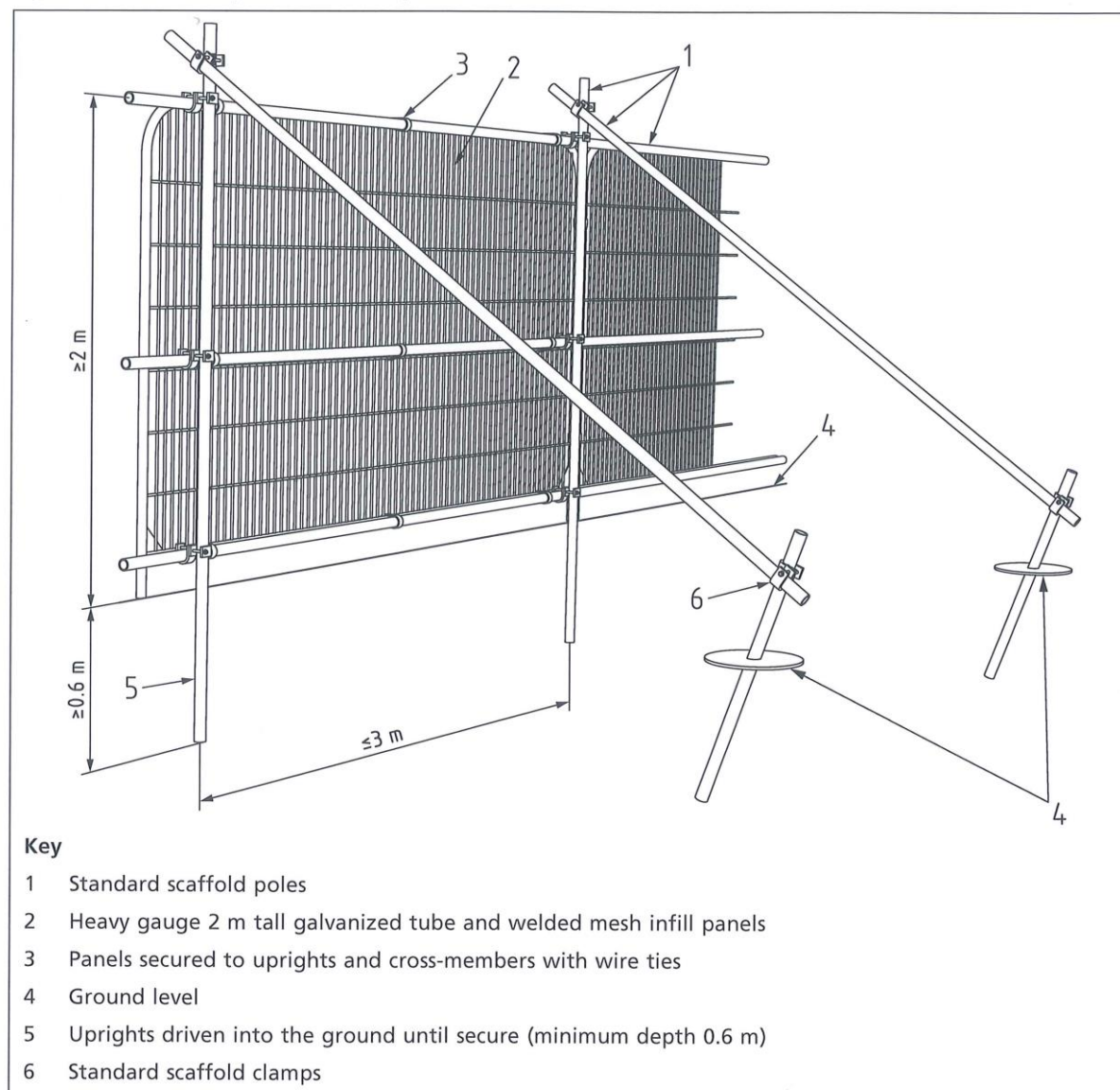


BH 3

Tree Retention & Protection Plan BJH 03/04

+ BS5837:2012 – Figure 2

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 : –
3 Foxcombe Cottages, South Harting, West Sussex GU31 5PL and also at Cedar Court, 5 College Street, Petersfield
- I hold the following arboricultural qualification - **Master of Arboriculture** (Royal Forestry Society – 1976)
- I have over **forty** 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 surgery company and twelve years with CBA Trees as an 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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