



ARBORICULTURAL METHOD STATEMENT

358 London Road, Waterloo

*-prepared on behalf of **Chris Hobbs** -*

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1.0 INTRODUCTION & CLIENTS BRIEF

- 1.1 My clients on this project is **Mr Chris Hobbs** who is the owner of the property at:-
358 London Road, Waterloooville
- 1.2 The proposal is to add a side extension (south) to the property and construct a car barn.
- 1.3 There are trees on and off this site that could be impacted by these proposals so I have been commissioned to consider and advise on all of the arboricultural aspects of this project and to then prepare a supporting AMS report to satisfy these 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 seen and studied the full set of Planning Drawings prepared by **Peter Walker Architects** for this project and my work has been applied to both the existing ordnance survey site layout plan and the proposed planning layout plan – the AMS is based on these drawings.

- **Planning Drawings – Proposed Site Plans – Plan and Elevation drawings at various scales.**

- these plans have been provided for the purposes of my work - I rely totally on their accuracy for tree locations; crown spreads & protective fencing.

3.0 TREE SURVEY & ROOT PROTECTION SCHEDULES & IMPACT ASSESSMENT

3.1 I visited the site on **30th August 2017** and carried out a tree survey exercise in accordance with BS5837:2012 recommendations.

Tree No.	Species	Ht m	Diam mm	Brch Sprd m	GC m	LS	Condition Comments	Preliminary Management Recommendations	Rem Con yrs	Cat
1	Horse Chestnut <i>Aesculus hippocastanum</i>	14	720	N 5 E 7 S 3 W 4	5	M	Ivy smothering trunk-roots exposed and mower damaged-bifurcated at 2m agl-epicormics on trunk-some dieback-high crown lifted-small diameter deadwood throughout-previously heavily reduced and reshaped-fire damage to lower crown on northeast side.	No works required at this time	30 - 40	C1
2	Horse Chestnut <i>Aesculus hippocastanum</i>	14	720 #	N 7 E 9 S 5 W 9	2	M	Unable to access basal area as tree is off-site-cavities in old pruning wounds-suppressed to south side by another tree-crown weighted south-low crown density and vigour and vitality-significant dieback in upper reaches- previously heavily reduced and reshaped- low branching habit-poor quality tree-has shed a large limb from east side – leaf miner and <i>Guignardia</i> leaf infection	Remove major deadwood advised in view of overhang of footpath and road	10- 20	C1
3	English Yew <i>Taxus baccata</i>	4.5	150	N 2.5 E 3 S 1.5 W 2.5	0	Y	Bifurcated at 1.8m agl-epicormics on trunk-suppressed to south side-previously heavily topped out to clear route of BT cable-poor quality tree.	No works required at this time	30 - 40	C1

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
1	Horse Chestnut <i>Aesculus hippocastanum</i>	C1	720	8.6 Propose 5.75m (1/3 rd reduction)	235	NO – free rooting to all directions. N.B. this RPA calculation is for a full crowned and healthy tree which this is clearly not and thus some reduction of the RPA is warranted.
2	Horse Chestnut <i>Aesculus hippocastanum</i>	C1	720 #	8.6 Propose 6.5m (1/4 reduction)	235	NO – the road to one side and other activity to other directions means constraints are all-around this tree and cancel each other out. N.B. this RPA calculation is for a full crowned and healthy tree which this is clearly not and thus some reduction of the RPA is warranted.
3	English Yew <i>Taxus baccata</i>	C1	150	1.8	10	NO – fairly free rooting to all directions.

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-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
1	Horse Chestnut <i>Aesculus hippocastanum</i>	C1	720	8.6 Propose 5.75m (1/3 rd reduction)	235	4.5m to new building line	YES (1)
2	Horse Chestnut <i>Aesculus hippocastanum</i>	C1	720 #	8.6 Propose 6.5m (1/4 reduction)	235	5m to new car barn	YES (1)
3	English Yew <i>Taxus baccata</i>	C1	150	1.8	10	1m to existing consolidated drive 3m to new car barn	YES

4.2 **YES**

There is one (1) trees in this category where work will be taking place outside of their RPA and they can be fully protected in full compliance with BS5837:2012 recommendations.

Trees – **3 English Yew**

4.3 **YES (1)**

There are two (2) trees in this category where work will be taking place within one small sector of its stated RPA requiring mitigation measures to be applied to ensure that it can be safely retained. For the full details of how this will be achieved please refer to section 6.5 of this report.

Trees – **1 Horse Chestnut & 2 Horse Chestnut**

5.0 PRE-DEVELOPMENT TREE WORKS

N.B. – These works are recommended not only to facilitate works but also to improve the shape and form of retained trees for the future.

No	Species	Tree Works Recommended
1	Horse Chestnut <i>Aesculus hippocastanum</i>	Remove fire damaged branches
2	Horse Chestnut <i>Aesculus hippocastanum</i>	Off –site tree – not under control of applicant
3	English Yew <i>Taxus baccata</i>	Lightly prune back to reshape and tidy and give a more compact form that does not interfere with vehicle access to the site.

6.0 METHOD STATEMENT

Generic

6.1 Undertake any tree works that are specified at Section 5.

6.2 Erect the protective fencing as specified under **BS5837 Section 6 & Figure 2 & 3** as 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.

6.3 The area within the fenced off **CONSTRUCTION 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

6.4 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

6.5 **Tree 1 – Horse Chestnut**

- This tree will have a new extension constructed within one small sector of its total RPA.
- Despite the fact that this is a TPO'd tree it has been very heavily topped out in the past and has a much reduced crown than would be expected of a tree of this age – it is clear that this will be a cyclic repeat pruning operation to maintain the tree at or around this size in the future – thus I feel justified in proportionally reducing its RPA to reflect this.
- There will be a need for ground protection to be laid adjacent to the area of overlap abutting the footprint of the extension and an Arboricultural Expert will need to be in attendance to supervise and monitor 'Hand Digging' works at the southeast corner where there is RPA overlap.
- The contractors will use only hand operated forks and no machinery will be permitted to access the zone at this stage of the works.
- It is highly probable that only small fibrous rooting will be found and provided that it is not prolific then in accordance with BS5837 small rooting under 25mm diameter will be severed with sharp bypass secateurs by the monitoring Arb Expert as they are teased out in the dig process.
- The hand dig will go down to 1m depth so that full discovery of any root matter can be made and dealt with.
- Once the excavation works have been completed and any root matter dealt with machinery may be introduced to pull out the remainder of the excavation for the footings of the new extension to the west side.
- The ground protection is to remain in place until completion of the build.

6.6 **Tree 2 – Horse Chestnut**

- This off site tree has suffered major structural branch loss from the east side of the crown and a cavity and decay are clearly visible.
- This has left the tree misshapen and distorted in crown shape and to add to this it shows signs of dieback and low crown density with low vigour and vitality. For these reasons I feel justified in reducing the RP proportionate to the leaf area.
- There will be a need for ground protection to be laid adjacent to the area of overlap abutting the footprint of the car barn and an Arboricultural Expert will need to be in attendance to supervise and monitor ‘Hand Digging’ works at the southwest corner where there is RPA overlap.
- The contractors will use only hand operated forks and no machinery will be permitted to access the zone at this stage of the works.
- It is highly probable that only small fibrous rooting will be found and provided that it is not prolific then in accordance with BS5837 small rooting under 25mm diameter will be severed with sharp bypass secateurs by the monitoring Arb Expert as they are teased out in the dig process.
- The hand dig will go down to 1m depth so that full discovery of any root matter can be made and dealt with.
- Once the excavation works have been completed and any root matter dealt with machinery may be introduced to pull out the remainder of the excavation for the footings of the new car barn to the east side.
- The ground protection is to remain in place until completion of the build.

Utility Services & Drainage & Lighting

- 6.7 It is my understanding that any such new connections that may be required can link into the existing service runs and there will be no need to go through the RPA of any of the retained trees on this site to install utility service links.

Site Set Up/Delivery/Materials Storage/Works Compound/Site Office/Welfare Units

- 6.8 This will all be accommodated on the consolidated car parking area to the front to the house and well outside of any tree RPA's.

7.0 SITE MONITORING & SUPERVISION

- 7.1 There will need to be a **Pre-Commencement Site Meeting** [PCSM] between the development teams arboricultural consultant and the clients builders to verify that the protective measures are in place before any work commences out on site and to also verify that the materials are of the desired quality and ‘Fit for Purpose’.
- 7.2 There is a requirement for ongoing Site Monitoring and Supervision on this project once the work commences on the extension and car barn.
- 7.3 The details of the PCSM and Hand Dig works will be photographed by the Arb Expert and the following reporting procedures will be adopted:-

This is an example of the format for the **Site Monitoring Schedule** that would be prepared and updated after each site monitoring visit with copies going to the clients and the local planning authority:-

Schedule Of Site Monitoring & Supervision for – 358 London Road, Waterloooville

Notes:

- In accordance with the Arboricultural Impact Assessment & Method Statement Report & Tree Protection Plan Ref: 0959.bjh.Aug17 & BJH 03/04
- To satisfy LPA arboricultural related Conditions No's

Date of Inspection	Item	In Attendance	Notes/Observations From Inspection	Details Of Any Follow Up Action Required
TBA	Pre-Commencement Meeting [Condition No....]	Jamie Gargett – HBC Tree Officer [JG] Bernie Harverson- Arbor. Expert [BH] + Site Construction Manager	• A joint site inspection was conducted and agreement reached that the Protective Fencing was ‘Fit For Purpose’ and in the correct locations.	•
TBA	Monitoring Visit – Hand Dig works	Bernie Harverson- Arbor. Expert [BH]	•	•

8.0 CONCLUSIONS

- All of the trees shown to be retained can be adequately protected behind Protective Fencing and with the use of mitigation measures in accordance with BS5837 recommendations.

SUMMARY OF TREE RETENTIONS & REMOVALS					
<i>BS5837:2012 Grading</i>	A (high quality)	B (moderate quality)	C (low quality)	U (fell grade)	TOTALS
<i>Trees to be Removed</i>	0	0	0	0	0
<i>Groups to be Removed</i>	0	0	0	0	n/a
<i>Trees to be Retained</i>	0	0	3	-	3
<i>Groups to be Retained</i>	0	0	0	-	n/a

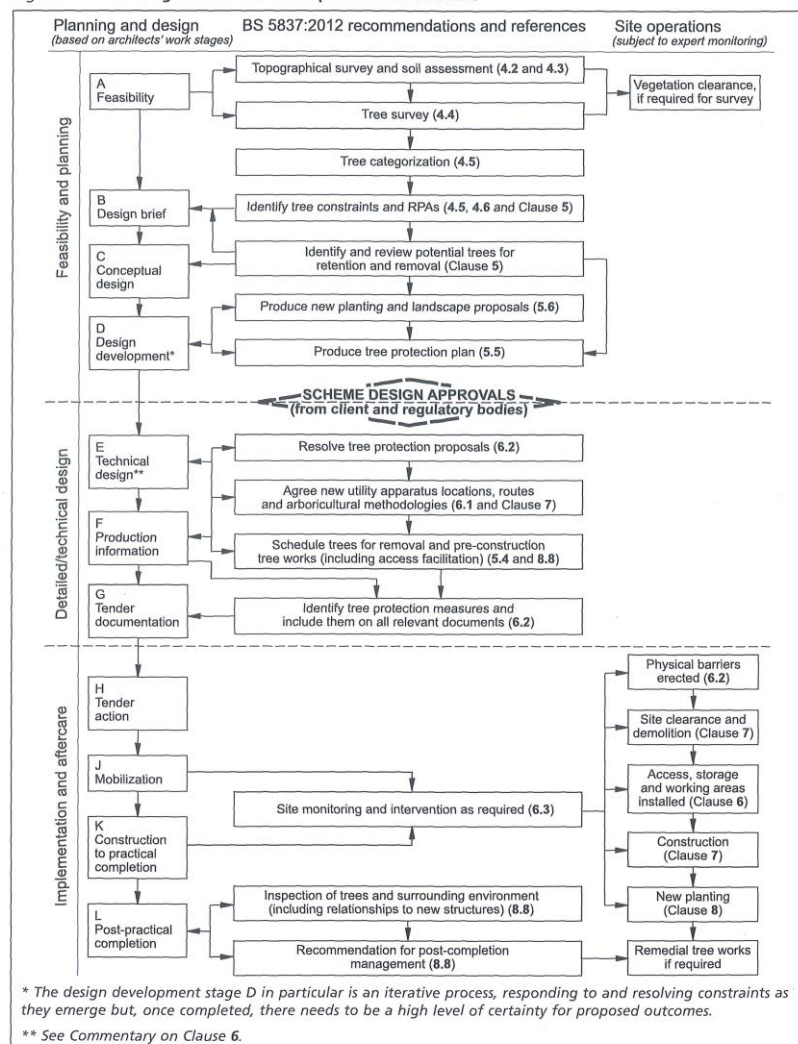
- Provided that all development works are undertaken in strict accordance with this report and its associated plans I can see no reason why the retained trees would suffer any ill effects to the detriment of their ongoing health and vitality.



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 Figure 2 & 3

Figure 2 Default specification for protective barrier

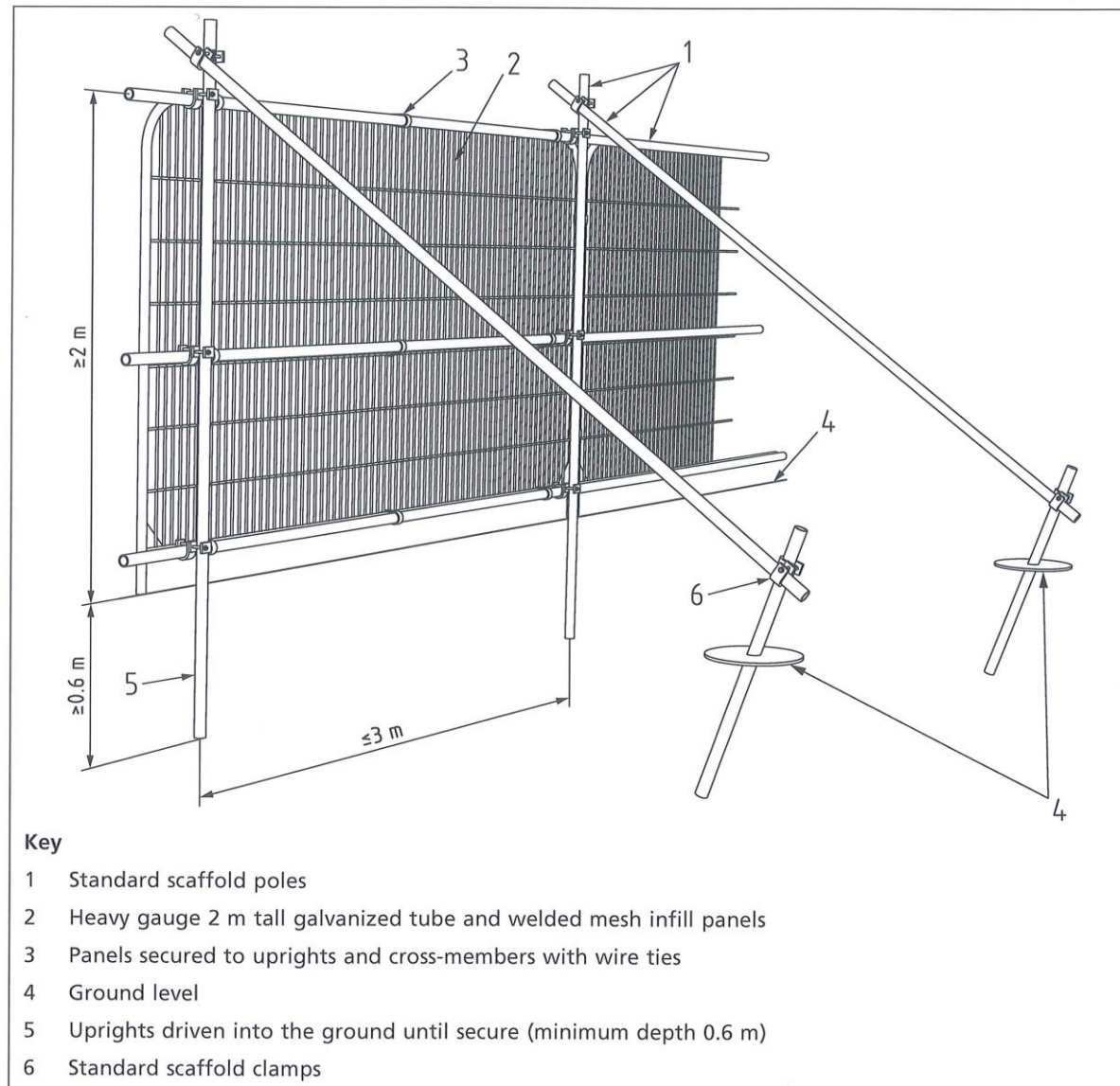
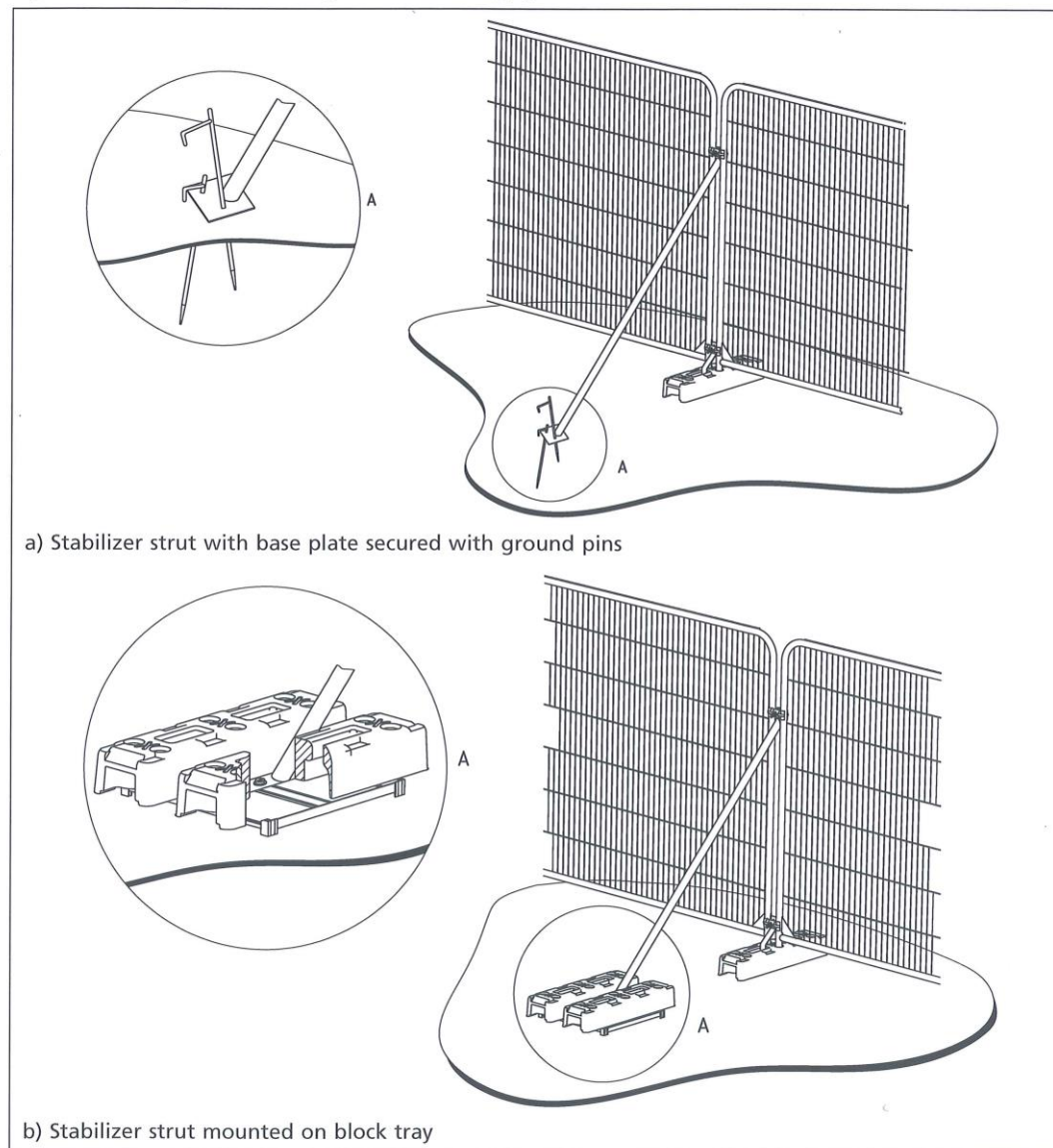


Figure 3 Examples of above-ground stabilizing systems





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 at Cedar Court, 5 College Street, Petersfield GU31 4AE
- I hold the following arboricultural qualification – **National Diploma in Arboriculture** (Royal Forestry Society – 1976)
- I have **forty seven** 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 the CBA Tree Consultancy Practice as Managing Director and Senior Arboricultural Consultant.
- As an independent self employed Arboricultural Consultant [since 2005] 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 Local Inquiries.

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