

320180832P

Arboricultural Constraints Appraisal

in Relation to Proposed Demolition of Existing
Outbuildings and Construction of Extension at



**Sagar Fold House, Withgill Fold,
Clitheroe, Lancashire, BB7 3LW**

Prepared by:

Bowland 
Tree Consultancy Ltd

August 2018

ARBORICULTURAL CONSTRAINTS APPRAISAL SAGAR FOLD HOUSE, CLITHEROE

CONTENTS

1. TREE SURVEY SCHEDULE & BS5837: 2012 TABLE 1
2. TEMPORARY PROTECTIVE FENCING SPECIFICATION
3. TREE CONSTRAINTS PLAN

Contact Details

Bowland Tree Consultancy Ltd
First Floor
11 Cannon Street
Preston
Lancashire
PR1 3NR

T: 01772 437150
E: info@bowlandtreeconsultancy.co.uk

**ARBORICULTURAL CONSTRAINTS APPRAISAL
SAGAR FOLD HOUSE, CLITHEROE**

Control sheet

Project No.: BTC1629

Site: Sagar Fold House, Withgill Fold, Clitheroe, BB7 3LW

Agent for Client: Sunderland Peacock & Associates Ltd

Council: Ribble Valley Borough Council

Survey Date: 14 August 2018

Surveyed by: Ryan Gledhill FdSc MArborA

Prepared by: Ryan Gledhill FdSc MArborA

Checked by: Jennie Keighley PhD MSc MArborA

Date of Issue: 28 August 2018

Version No: 1

TREE SURVEY SCHEDULE FOR ARBORICULTURAL CONSTRAINTS APPRAISAL								Surveyor:
Site: Sagar Fold House, Withgill Fold, Clitheroe, Lancashire, BB7 3LW								Survey Date:
Agent for Client: Sunderland Peacock & Associates Ltd.								Job Ref:

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments
T1	Sycamore	13	380	N E S W	2.5 2.5 4 4	4-E 4	SM M	- Unclear ownership. - Located on raised ground level behind retaining boundary wall, with R offset accordingly (see TCP). - Stem trifurcates at a height of approximately 2m. - Frequent instances of partially occluded cavities to approximately 120 diameter up to a height of 5m, from previous crown lift management w - Significant dieback of north stem upper crown.
T2	Common Ash	17	1x460 1x440 1x410 1x340 (ms)	N E S W	8 8.5 3 7	6-S 3	M M	- Located approximately 5m from retaining wall, with RPA offset accord (see TCP). - Multi-stemmed from base. - Several instances of lateral scarring up lower stem to a height of 1m, indicative of previous wire fence enveloped into stem. - Frequent partially occluded cavities to approximately 150mm diameter previous crown lift and thin pruning management works. - Significantly sparse canopy, frequent twig dieback and signs of a redu in vitality; signs indicative of colonisation by Chalara Ash dieback dise (<i>Hymenoscyphus fraxineus</i>).
T3	Common Ash	16	500	N E S W	3 4 6 5	5-W 2	EM M	- Several instances of lateral scarring up lower stem to a height of 1m, indicative of previous wire fence enveloped into stem. - Stem bifurcates at a height of approximately 2m. - Frequent partially occluded cavities to approximately 120mm diameter previous crown lift and thin pruning management works. - Significantly sparse canopy and frequent twig dieback; signs indicative colonisation by Chalara Ash dieback disease.

Headings and Abbreviations:

No.	Allocated sequential reference number - Tree ('T'), Group ('G'), Woodland ('W') or Hedge ('H') reference number - refer to plan and to numbered tags where applicable
Species:	Common name
Height:	In metres, to nearest half metre - where possible approximately 80% are measured using an electronic clinometer and the remainder estimated against the measured trees. In the case of Groups and Woodland:
Stem Diam.:	Stem diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837:2012. MS = multi-stemmed, TS = twin-stemmed
Branch Spread:	Crown radius measured (or estimated where considered appropriate) from the four cardinal points (north, east, south and west) to give an accurate visual representation of the crown
Branch & Canopy Clearances:	Existing height above ground level, in metres, of first significant branch and direction of growth (e.g. 2.5-N) and of canopy at lowest point - to inform on crown to height ratio, potential for shading, etc.
Life Stage:	Estimated age class - Y = young, SM = semi-mature, EM = early-mature, M = mature, PM = post-mature
PC:	Physiological Condition - a measure of the tree(s)' overall vitality, i.e. D = Dead, MD = Moribund, P = Poor, M = Moderate, G = Good
General Observations and Comments:	Comments relating to the tree(s)' overall condition and any other pertinent factors including structural defects, current and potential direct structural damage, physiological decline, poor form, etc.
Management Recommendations:	Either Preliminary or In Consideration of the Proposal - In the case of Arboricultural Constraints Surveys the recommended management works only take existing site and tree circumstances and conditions into account. Surveys take the proposed development into consideration with recommendations made accordingly. More than one option may be given if considered appropriate
ERC:	Estimated Remaining Contribution - in years as per BS5837:2012 (i.e. <10, 10+, 20+, 40+)
Cat. Grade:	Category Grading - tree retention value listed as U, A, B or C - in accordance with BS5837:2012 Table 1
RPA m²:	Root Protection Area in m² - calculated area around the tree that must be appropriately protected throughout the development process in order avoid root damage
RPA Radius (m):	Root Protection Area Radius - in metres measured from the centre of the stem to the line of tree protection
# (Estimated Dimensions):	Where trees are located off-site, or are inaccessible for any other reason, and accurate measurements or other information cannot be taken then the information provided is estimated and is duly suffixed with a *

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACTS APPRAISAL
Site: Sagar Fold House, Withgill Fold, Clitheroe, Lancashire, BB7 3LW

Agent for Client: Sunderland Peacock & Associates Ltd.

Surveyor:
Survey Date:
Job Ref:

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments
T4	Common Beech	15	2x360 (ts)	N 4 E 4 S 4 W 4	5-N 4	SM	M	- Located on raised ground level atop a 1m high retaining wall, with RP, offset accordingly (see TCP). - Stem bifurcates at ground level. - Growing out of dense hedge cover, which inhibited clear visual inspection. - Number of partially occluded cavities to approximately 140mm diameter a height of 5m, from previous crown lift pruning management works. - Moderate reduction in vitality and dieback of upper crown.
G1	8no. Orchard Apple, 7no. Plum, 1no. Pear, 1no. Quince, 1no. Black Mulberry	≤ 4	≤ 90	N ≤ 1 E ≤ 1 S ≤ 1 W ≤ 1	0.5-N ≥ 0.5	Y	M-G	- Moderately close spaced orchard group. - Support stakes and ties present throughout group.
G2	1no. Silver Birch, 1no. Copper Beech, 1no. Bird Cherry	≤ 14	≤ 420#	N ≤ 4.5 E ≤ 4.5 S ≤ 4.5 W ≤ 4.5	2-E ≥ 2	SM	G	- Close spaced group located on neighbouring land. - Located on raised ground level; RPAs partially offset accordingly (see TCP).
G3	2no. Holly, 1no. Hawthorn	≤ 3.5	≤ 1x140 1x90 1x80 (ms)	N ≤ 1 E ≤ 1 S ≤ 1 W ≤ 1	1.5-W ≥ 2	Y	G	Close spaced group.
G4	4no. Sycamore, 1no. Silver Birch, 1no. Common Pear, 1no. Sour Cherry, 1no. Walnut	≤ 16	≤ 2x390 2x300 1x220 (ms)	N ≤ 5 E ≤ 5 S ≤ 5 W ≤ 5	1.5-N ≥ 2	Y-M	G	- Moderately to loosely spaced group. - Frequent instances of partially occluded cavities to approximately 300 diameter throughout group from previous crown pruning management works. - Cherry evidently previously topped to a height of approximately 3m.
G5	1no. Sycamore, 1no. Elder, 1no. Bird Cherry	≤ 12	≤ 1x380 1x350 (ts)	N ≤ 4 E ≤ 4.5 S ≤ 4 W ≤ 4	1-E ≥ 4	Y-EM	G	- Moderately spaced group. - Sycamore crown lifted to a height of approximately 6m with resultant frequent instances of partially occluded cavities to approximately 150r diameter.
H1	Hawthorn, Hazel	≤ 2	≤ 60	≤ 2 wide	N/A ≥ 0	Y	G	Managed linear hedge line.
H2	Beech	≤ 3.5	≤ 80	≤ 3 wide	N/A ≥ 0	Y	G	Managed linear hedge line.
H3	Yew	≤ 1.5	≤ 3x50 (ms)	≤ 1 wide	N/A ≥ 0	Y	G	Several sections of managed linear hedge lines.

TREE SURVEY SCHEDULE FOR ARBORICULTURAL IMPACTS APPRAISAL		
Site:	Sagar Fold House, Withgill Fold, Clitheroe, Lancashire, BB7 3LW	
Agent for Client:	Sunderland Peacock & Associates Ltd.	

Surveyor:
Survey Date:
Job Ref:

No.	Species	Height	Stem Diam.	Branch Spread	Branch & Canopy Clearances	Life Stage	PC	General Observations and Comments
H4	Beech, Hawthorn, Yew	≤ 3	≤ 120	≤ 2 wide	N/A ≥ 0	Y	G	■ Managed garden boundary hedge.

BS5837:2012 Table 1 – Cascade Chart for Tree Quality Assessment

Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention (see Note)			
<u>Category U</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 that will become unviable after removal of other category U trees (e.g. where, for whatever reason, they 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 vermin suppressing adjacent trees of better quality <i>Note: Category U trees can have existing or potential conservation value which it might be desirable to protect, see paragraph 4.5.7.</i>		
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly historical and other wood
Trees to be considered for retention			
<u>Category A</u> 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 of significant historical or other wood
<u>Category B</u> Those of moderate quality and value: those in such a condition as to make a significant contribution. A minimum of 20 years is suggested.	Trees that might be included in the high category, but are downgraded because of impaired condition. Examples include the presence of remediable defects including unsympathetic past management and minor storm damage	Trees present in numbers, usually as groups or woodlands, so they form distinct landscape features which attract a higher collective rating than they might as individuals. But which are not, individually, essential components of formal or semi-formal arboricultural features. For example, trees of moderate quality within an avenue that includes better, A category specimens. Or trees which are internal to the site, therefore individually having little visual impact on the wider locality	Trees of conservation benefit
<u>Category C</u> Those trees of low quality and value: currently in adequate condition to remain until new planting could be established - a minimum of 10 years is suggested - or young trees with a stem diameter below 150 mm	Trees not qualifying 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 screening benefit	Trees of conservation benefit
	Note – Whilst C category trees will usually not be retained where they would impose a significant constraint on other trees with a stem diameter of less than 150mm should be considered for relocation		

DISCLAIMER

Survey Limitations: Unless otherwise stated all trees are surveyed from ground level using non-invasive techniques. The particular where they may be above a reachable height or where trees are ivy clad or in areas of ground vegetation, comments are however, are reported. Detailed tree safety appraisals are only carried out under specific written instructions. Comments up to the tree at the time of the survey only.

Unless otherwise stated all trees should be re-inspected annually in order to appraise their on-going mechanical integrity recognised that tree condition is subject to change, for example due to the effects of disease, decay, high winds, development conditions (e.g. development that increases access frequency) and the occurrence of severe weather incidents are also significant integrity and trees should therefore be re-assessed in the context of such changes and/or incidents and inspected at intervals and associated risks.

Where trees are located wholly or partially on neighbouring private third-party land then said land is not accessed and reasonably be seen from within the site. Stem diameters of trees located on such land are estimated. Any subsequent measurements of trees are based on these restrictions and are our preliminary opinion only. Recommendations for works to neighbouring trees are based on these restrictions and are our preliminary opinion only. Where significant structural defect unacceptable risk to persons and/or property has been identified during our survey. Where significant structural defect management works are considered essential to negate any risk of harm and/or damage then we will first attempt to inform the relevant Council. Where a more detailed assessment is considered necessary then appropriate recommendations will be made.

Where tree stem locations are not included on the plan(s) provided then they are plotted at the time of the survey using, where possible, of measurement triangulation and GPS co-ordination. Where this is not possible then locations are estimated. Restrictions on access to trees are noted.

The tree survey and any report information provided is intended as a guide to identify key tree related constraints to site development. Trees upon existing or proposed buildings or other structures resulting from the effects of their roots abstracting water from the ground herein. The tree survey information in its current form should not therefore be considered sufficient to determine structural integrity. Accordingly, an updated survey, with reference to the current NHBC Standards Chapter 4.2 - Building Near Trees, must be undertaken informing suitable foundation depths subsequent to planning approval being granted. The advice of a structural engineer should be sought for foundation depths for new buildings.

Copyright & Non-Disclosure Notice: The content and layout of this report are subject to copyright owned by Bowland Tree Consultancy Ltd. Copyright has been legally assigned to us by another party or is used by Bowland Tree Consultancy Ltd under license. This report is for the written agreement for any purpose other than those indicated.

Third Parties: Any disclosure of this document to a third party is subject to this disclaimer. The report was prepared by and for use by our client, as named. This report does not in any way constitute advice to any third party who is able to access it. Bowland Tree Consultancy Ltd excludes to the fullest extent lawfully permitted all liability whatsoever for any loss or damage arising from reliance on the content of this report.

Statutory Tree Protection: It is the client's responsibility to check for the presence of any statutory tree protection measures in the Area and/or the presence of any Tree Preservation Orders, directly with the applicable Council's planning department prior to any work. In turn, it is also the client's responsibility to check for the need for a felling licence with the Forestry Commission prior to any work. Bowland Tree Consultancy Ltd cannot be held responsible for any decisions made by the client to prune or remove trees where any such work is undertaken.

- TEMPORARY PROTECTIVE FENCING & GROUND PROTECTION SPECIFICATION -

Construction Exclusion Zones (CEZs), shall be enclosed by **Temporary Protective Fencing** and/or, where necessary, **Temporary Ground Protection Measures**. The fencing/ground protection Type(s), locations, and extents shall be agreed, in writing, with the Local Planning Authority (LPA). In turn, the **Temporary Protective Fencing** and/or **Temporary Ground Protection Measures** shall:

1. be constructed as in accordance with the Type 1, Type 2 or Type 3 'Temporary Protective Fencing Construction' sections and, where applicable the 'Temporary Ground Protection Measures' section, as detailed herein and agreed, in advance with the LPA;
2. be retained in place throughout the development process until completion of the project, and only removed following receipt of written permission from the LPA;
3. be sited in the area(s) defined by the Root Protection Areas on the associated Tree Impact Plan, or as the CEZs on the Tree Protection Plan;
4. be erected prior to any construction, demolition or excavation works and remain in place for the duration of the project;
5. preclude any delivery of site accommodation and/or materials and/or plant machinery;
6. preclude all construction related activity, with the sole exception of specified arboricultural works and any other works to be carried out under supervision that have been agreed by all parties;
7. preclude the storage of all development related materials and substances including fuels, oils, additives, cement and/or any other deleterious substance; and
8. be affixed with a 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1, below), at every 10.0 metre length of protective fencing.
9. Important: Any incursion into CEZs must be by prior arrangement, following consultation with the LPA.

Figure 1: CEZ Warning Sign

**– TREE PROTECTION AREA –
KEEP OUT!**

(TOWN & COUNTRY PLANNING ACT 1990)

**THE TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING
CONDITIONS AND/OR SUBJECTS OF A 'TREE PRESERVATION ORDER',
THE CONTRAVENTION OF WHICH MAY LEAD TO CRIMINAL
PROSECUTION**

THE FOLLOWING MUST BE OBSERVED BY ALL PERSONNEL:

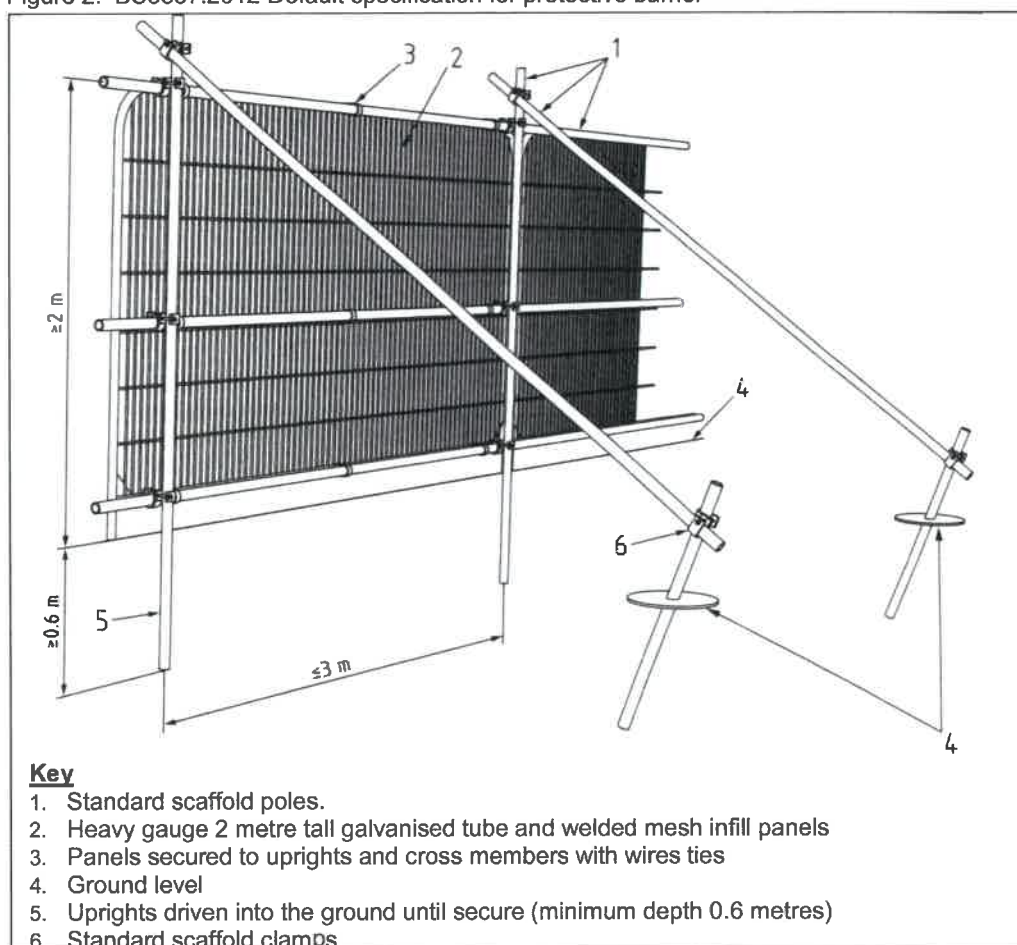
- THE PROTECTIVE FENCING MUST NOT BE MOVED
- NO PERSON SHALL ENTER THE CONSTRUCTION EXCLUSION ZONE
- NO MACHINE, PLANT OR VEHICLES SHALL ENTER THE EXCLUSION ZONE
- NO MATERIALS SHALL BE STORED IN THE EXCLUSION ZONE
- NO SPOIL SHALL BE DEPOSITED IN THE EXCLUSION ZONE
- NO EXCAVATION SHALL OCCUR IN THE EXCLUSION ZONE
- NO FIRES SHALL BE LIT IN THE EXCLUSION ZONE

**ANY INCURSION INTO THE EXCLUSION ZONE MUST BE WITH THE
WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY**

Type 1 (i.e. 'Default') Temporary Protective Fencing Construction (see Figure 2, below)

1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
2. The panels shall butt together and be securely fixed to a scaffold framework, as per points 3 to 5 of Figure 2, overleaf.
3. The scaffold framework shall comprise of upright poles of at least 3.0 metres in length driven no less than 0.6 metres into the ground at maximum 3.0 metre centres with horizontal and diagonal poles fixed to the uprights, as per points 4 to 5.
4. The two horizontal rail poles shall be attached to the uprights at heights of 0.6 and 1.8 metres with 3 no. clamps to each joint.
5. The diagonal scaffold pole struts be clamped to the top rail of the scaffold framework at a 45° angle and extend back into the CEZ and clamped to a 0.7 metre length of scaffold tube that shall be driven no less than 0.5m into the ground.
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.

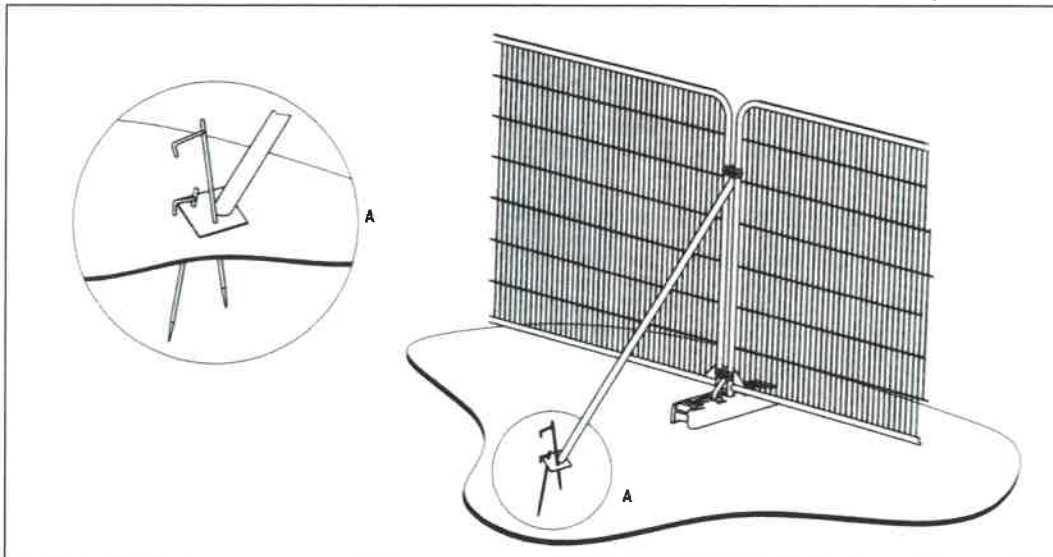
Figure 2: BS5837:2012 Default specification for protective barrier



Type 2 Temporary Protective Fencing Construction (see Figure 3(a), below)

1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
2. The panels shall stand on rubber or concrete feet.
3. The panels shall butt together, and be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence.
4. The distance between the fence couplers shall be at least 1.0 metre, and shall be uniform throughout the fence.
5. The panels shall be supported on the inner side by stabiliser struts, which shall be clamped to the scaffold framework at a 45° angle and extend back into the CEZ and shall be attached to a base plate, which shall be secured to the ground with pins (Figure 3a).
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.

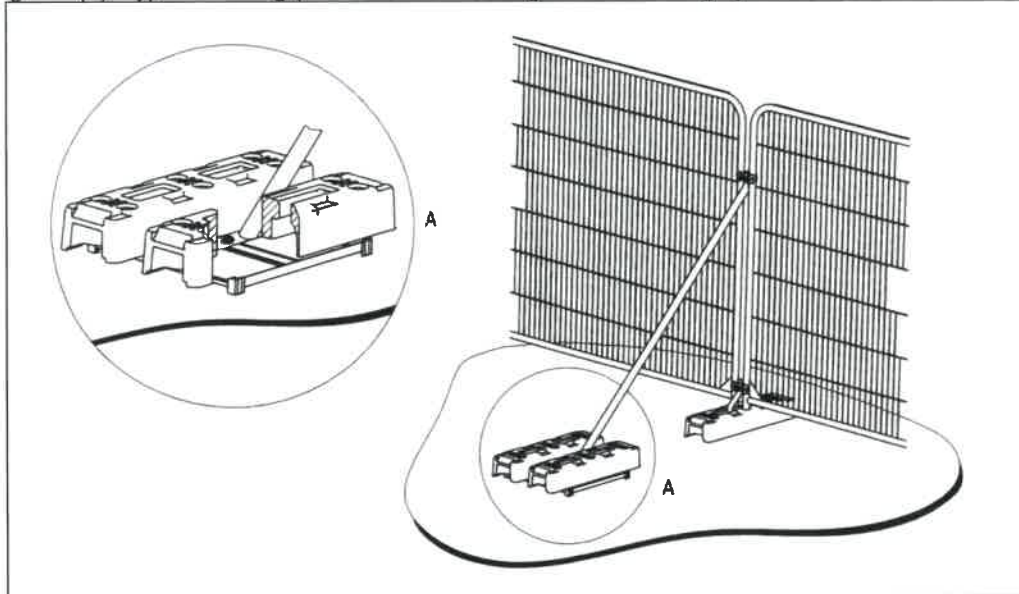
Figure 3(a): Type 2 Fencing (BS5837:2012 above-ground strut stabilising system with ground pins)



Type 3 Temporary Protective Fencing Construction (see Figure 3(b), overleaf)

1. Temporary protective fencing panels shall be weldmesh "Heras" panels of at least 2.0 metres in height.
2. The panels shall stand on rubber or concrete feet.
3. The panels shall butt together, and be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence.
4. The distance between the fence couplers shall be at least 1.0 metre, and shall be uniform throughout the fence.
5. The panels shall be supported on the inner side by stabiliser struts, which shall be clamped to the scaffold framework at a 45° angle and extend back into the CEZ and shall be attached to a block tray base (Figure 3b).
6. No fixing shall be made to any tree and all possible precautions shall be taken to prevent damage to tree roots when locating posts.
7. A 600mm x 300mm warning sign reading "TREE PROTECTION AREA KEEP OUT" (see Figure 1) shall be fixed to every 10.0 metre length of protective fencing.
8. On completion of erection, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Protective Fencing.

Figure 3(b): Type 3 Fencing (BS5837:2012 above-ground stabilising system with strut on block tray)



Temporary Ground Protection

1. Any necessary Temporary Ground Protection areas shall conform to Figure 4, below, unless otherwise agreed with the LPA.
2. The Ground Protection Area shall be left undisturbed and covered by a semi-permeable geotextile membrane which shall, in turn, be covered by a compressible layer consisting of a material such as woodchip.
3. Side-butting scaffold boards shall then be fitted to cover the Ground Protection Area.
4. On completion of installation, and prior to any demolition or construction works, site preparation, excavation or delivery of plant and materials, the Consulting Arboriculturist or the LPA Tree Officer, as agreed, shall inspect the Temporary Ground Protection.
5. The Temporary Ground Protection shall remain in place until completion of the project and only removed following receipt of written permission from the LPA.

Figure 4: Temporary Ground Protection – Recommended Construction

