HORSHAM DISTRICT COUNCIL CONSULTATION

TO:	Horsham District Council – Planning Dept
LOCATION:	Springlands Gate, Frylands Lane, Wineham
DESCRIPTION:	Variation of Condition 1 of previously approved application reference DC/23/1920 (Removal of existing pitched roof and erection of a first floor extension and single-storey extensions to the east and west facing elevations. Installation of an outdoor swimming pool and erection of an adjacent detached games room/pool house. Demolition of the existing detached garage and erection of a detached three-bay garage with bin store. Remodelling and enhancement of the existing hard and soft landscaping to suit the proposed works.) plans condition to be amended to replace the approved drawings to allow for design and layout changes.
REFERENCE:	DC-24-1351
RECOMMENDATION:	Advice/ More Information / Modification

SUMMARY OF COMMENTS & RECOMMENDATION:

It is always preferable, where space permits, to provide new ancillary engineering external to recognised rooting constraints of trees of good visual amenity and contribution to landscape character. The relevant design standard (BS5837:2012 – Trees in relation to design. demolition and construction – Recommendations) is very clear in this respect. I have included the relevant text from section 7 of the standard in this respect for information below.

The latterly provided supporting information makes no reference to the type of hard landscaping proposed to the front of the new building or how this would be constructed where the rooting constraint of the A grade oak trees conflicts. Please request this detail to enable fair assessment.

The AMS states that utilities can be connected without trenching through the minimum recommended root protection area (RPA) of these trees. This is at odds with the submitted plans showing connection requirements in the W end of the building within the RPA's. please request clarification.

A draft Tree Protection Plan is required as part of the AIA. Please request.

In addition, in order to show technical feasibility, please request a site specific detailed engineered design of the above ground foundation to be supported on screw piles with a void above the existing turf level. IME, the only way to assess how high the building will be is to be clear on the depth of concrete ring beam required to support the proposed brickwork and superstructure

MAIN COMMENTS:

Relevant excerpt from BS5837 design standard:

7.1.1 Construction within the RPA should accord to the principle that the tree and soil structure take priority, and the most reliable way to ensure this is to preserve the RPA completely undisturbed. Soil structure should be preserved at a suitable bulk density for root growth and function (of particular importance for soils of a high fines content), existing rootable soil retained and roots themselves protected.

7.1.2 The ability of a tree to tolerate some disturbance and alteration of its growing conditions depends on specific circumstances, including prevailing site conditions, and in general, the older the tree, the less successfully it will adapt to new conditions.

7.1.3 Where alternative design solutions are not available such that construction is proposed within the RPA, the potential impact of the proposals on the tree should be assessed (**5.4**), and a tree protection plan (**5.5**) and arboricultural method statement (**6.1**) produced. Details of design proposals should be developed in conjunction with the project arboriculturist and, where required, input from a suitably qualified engineer. In order to demonstrate that the proposals are technically feasible (see Commentary on Clause **6**), such details should be included within planning applications.

ANY RECOMMENDED CONDITIONS:

N/A

NAME:	ANDY CLOUT – ASST. ARBORICULTURAL OFFICER
DEPARTMENT:	STRATEGIC PLANNING - SPECIALISTS
DATE:	03/12/24

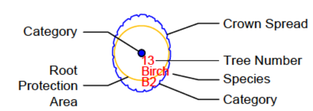


GHAtrees
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www.ghatrees.co.uk

Site: Springlands Gate, Fryland Lane, Wineham, BN5 9BP	1:250 at A2
Drawing Title: Arboricultural Impact Assessment	Rev E, Nov 2024

Key:

- Category A
- Category B
- Category C
- Category U



NOTE: Tree/group numbers marked with an * have approximate locations.

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BS5837:2012 TREE SURVEY AND ARBORICULTURAL IMPACT ASSESSMENT: Springlands Gate, Fryland Lane, Wineham, BN5 9BP

Dated: 18th November 2024

Our reference: GHA/DS/666160:24a

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Arboricultural Impact Assessment

Location: Springlands Gate, Fryland Lane, Wineham, BN5 9BP
Our reference: GHA/DS/666160:24a
Client: Gould Baxter
Dated: 18th November 2024
Prepared by: Glen Harding MICFor, MSc (Forestry), MArborA
Date of Inspection: 14th November 2024

Instructions

Issued by – Gould Baxter

TERMS OF REFERENCE – GHA Trees were instructed to survey the subject trees within and adjacent to Springlands Gate, Fryland Lane, Wineham, in order to assess their general condition and to provide a planning integration statement for the indicative proposed development that safeguards the long term wellbeing of the retained in a sustainable manner.

The writer retains the copyright of this report and it content is for the sole use of the client(s) named above. Copying of this document may only be undertaken in connection with the above instruction. Reproduction of the whole, or any part of the document without written consent from GHA Trees is forbidden. Tree work contractors, for the purpose of tendering only, may reproduce the Schedule for tree works included in the appendices.

Executive Summary

The proposal for the site is to construct a new garden room in the north western corner of the garden. The proposed scheme does not require the removal or pruning of any of the trees; therefore, the landscape character of the site will be unaffected by the proposal. The proposal requires a new structure to be installed within the root protection areas of nearby trees; however, mitigations are proposed to ensure the structure will not adversely affect these trees. The retained trees require protection in accordance with industry best practice and BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations, in order to ensure their longevity.

Documents Supplied

The client supplied the following documents:

- Topographical survey
- Existing layout plans
- Proposed layout plans

Scope of Survey

1.1 The survey is concerned with the arboricultural aspects of the site only.

1.2 The planning status of the subject property was not investigated in detail.

1.3 A qualified Arboriculturist undertook the report and site visit and the contents of this report are based on this. Whilst reference may be made to built structure or soils, these are only opinions and confirmation should be obtained from a qualified expert as required.

1.4 Trees in third party ownership were surveyed from within the subject property, therefore a detailed assessment was not possible and some (if not all) measurements were estimated. Where the stem location of a third party tree has been estimated, this is noted on the plan.

1.5 Dense vegetation or climbers (such as ivy) also prohibited full inspections for some trees; this is noted where applicable.

1.6 No discussions took place between the surveyor and any other party.

1.7 The trees were inspected on the basis of the Visual Tree Assessment method expounded by Mattheck and Breleor (The body language of tree, DoE booklet Research for Amenity Trees No. 4, 1994)

1.8 The survey was undertaken in accord with British Standard 5837: 2012 – Trees in relation to design, demolition and construction – recommendations.

1.9 Underground services near to trees will need to be installed in accord with the guidance given in BS5837.

1.10 The client's attention is drawn to the responsibilities under the Wildlife and Countryside Act (1981).

Survey Method

2.1 The survey was conducted from ground level with the aid of binoculars if needed.

2.2 No tissue samples were taken nor was any internal investigation of the subject trees undertaken.

2.3 No soil samples were taken.

2.4 The height of each subject tree was estimated using a clinometer and recorded to the nearest half metre.

2.5 The stem diameter for each tree was measured in line with the requirements set out in BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations.

2.6 The crown spreads were measured with an electronic distometer and recorded to the nearest half metre. Where the crown radius was notably different in any direction this has been noted on the Plan (appendix A) and within the tree table (Appendix B). The crowns of those trees that are proposed for removal, or trees where the crown spread is deemed insignificant in relation to the proposed development are not always shown on the appended plan; however their stem locations are marked for reference.

2.7 The Root Protection Area (RPA) for each tree is included in the tree table, both as an area, and as the radius of a circle.

2.8 The crown clearance was measured using a clinometer and recorded to the nearest half metre. Where it is significantly lower in one direction, this is noted within the tree table at appendix B.

2.9 All of the trees that were inspected during the site visit are detailed on the plan at Appendix A; this plan was produced in colour and **MUST** only be scanned or reproduced in colour. The trees on this plan are categorised and shown in the following format:

COLOUR CODING AND RATING OF TREES:

Category A – Trees of high quality with an estimated remaining life expectancy of at least 40 years. Colour = light green crown outline on plan.

Category B – Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Colour = mid blue crown outline on plan.

Category C – Trees of low quality with an estimated remaining life expectancy of at least 10 to 20 years, or young trees with a stem diameter below 150mm. Colour = uncoloured crown outline on plan.

Category U – Those in such a condition that they cannot realisitically be retained as living trees in the context of the current land use for longer than 10 years. Colour = red crown outline on plan.

All references to tree rating are made in accordance with BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations', Table 1.

The Site

3.1 The site is located on Fryland Lane in the village of Wineham.

3.2 Access to the property is currently gained via a driveway to the south of the site.

The Subject Trees

4.1 The details of the subject trees are set out in the Schedule at Appendix B.

4.2 Of the eighteen individual trees, and groups of trees surveyed, fourteen have been assessed as BS 5837 category A, two have been assessed as BS category B, with the remaining tree being assessed as BS 5837 category C.

Category A	14 trees
Category B	2 trees
Category C	2 trees

The Proposal

5.1 The proposal for the site is to construct a new garden room in the north western corner of the garden.

5.2 The proposed location of the above structures can be seen on the appended plan.

Arboricultural Impact Assessment

PROPOSED TREE REMOVAL / RETENTION:

6.1 The proposed site layout and all of its associated structures allows for the healthy retention of all of the trees; therefore, the arboricultural landscape character of the site will be retained.

TREE PRUNING TO ACCOMODATE THE PROPOSAL OR ACCESS TO THE SITE

6.2 The implementation of the proposal does not lead to the requirement to prune any of the retained trees, or shrubs.

6.3 There is a slight overhang of the new structure from the crown of G10. The defining branch structure of this tree is however well clear of the proposed upper building line and building works can progress safely without the need for any facilitation pruning.

ASSESSMENT OF RETAINED TREES ROOT PROTECTION AREAS

6.4 Section 4.6.3 of BS 5837: 2012 states that the Root Protection Area (RPA) of each tree should be assessed by an arboriculturalist considering the likely morphology and disposition of the roots, when known to be influenced by past or existing site conditions.

6.5 The RPAs of T1, T14 and T15 have been amended to take account of the existing road; these adjustments can be seen on the appended plan.

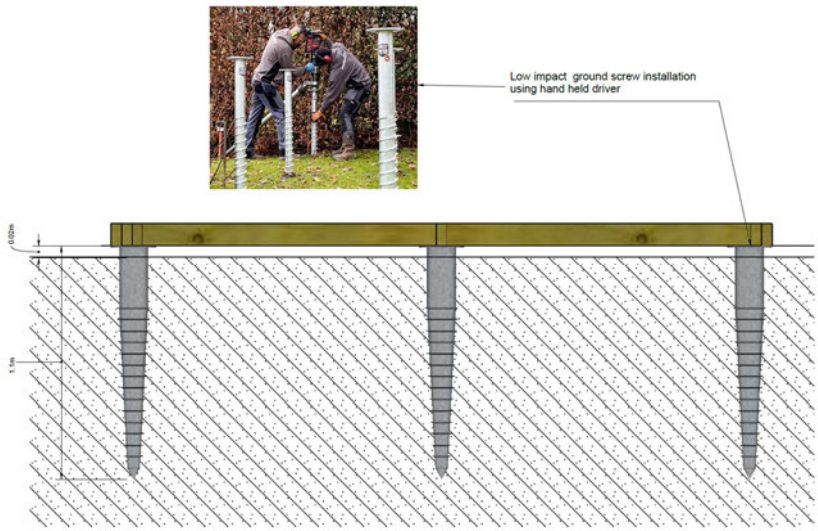
6.6 The other RPAs have been drawn as notional circles, as there are no structures within their RPAs that have been assessed to significantly impact the root layout.

ASSESSED IMPACT ON RPAS BY PROPOSED STRUCTURES & PROPOSED MITIGATIONS

6.7 There is an encroachment into the RPAs of T9 (8% encroachment), G10 (9% encroachment), G10 (9% encroachment) and T12 (4% encroachment) from the new structure as can be seen on the appended plan.

6.8 The construction design process has shown consideration of this issue (of working within the RPA) by specifying the use of 'screw pile' footings (https://www.groundscrewcentre.co.uk); these footings will ensure minimal root disturbance occurs near these trees as the new building will sit above the existing levels with the new screw piles being the only below ground part of the structure. The locations of the new screw piles will be confirmed following hand dug trial digs to check for the presence of any significant (over 25mm) roots which **MUST** be retained and avoided if found. **There MUST be an air void beneath the new structure and rain water must be gathered from the roof and redistributed beneath the new structure to allow any root growth present to be allowed to continue to thrive.**

Below: screwpile and above ground beams



HARD LANDSCAPING IN RPAS

6.9 Patios and paths: Where sections of the new patio and paths are within the RPAs of retained trees, a no-dig construction will be necessary, to ensure that all existing ground levels are retained in their current form, as well as ensuring that satisfactory moisture and oxygen can be obtained from the underlying soil by any tree roots in this area. Porous materials must be used to ensure rainwater can penetrate the soil beneath the new patio / paths.

INSTALLATION OF SERVICES

6.10 New services must be routed to avoid all RPAs of retained trees on site and within nearby sites. From an assessment of the subject site, undertaken in conjunction with the project architect, there is no reason to assume this isn't possible. Inspection chambers must also be sited outside the RPAs of any nearby trees.

Post Development Pressure

FUTURE TREE AND STRUCTURE RELATIONSHIPS

7.1 The retained trees are at a satisfactory distance from the proposed new structure and highly unlikely to give rise to any inconvenience.

7.2 Regular inspections of the retained trees by a suitably qualified Arboriculturalist and subsequent remedial works will ensure that the trees are maintained in a suitable manner, to exist in harmony with the new structures and its occupants for many years to come.

Tree Protection Measures and Preliminary Method Statement for Development Works

8.1 TREE PROTECTION BARRIERS

The position of the fence **MUST** be marked out with biodegradable marker paint on site and agreed with appropriate representatives from the LPA and contractor. The fencing **MUST** be erected **prior** to any works in the vicinity of the trees and removed only when all development activity is complete. The protective fencing **MUST** be as that shown in BS 5837 (see Appendix C). The herras panels **MUST** be joined together using a minimum of two anti-tamper couplers which **MUST** be installed so they can only be removed from the inside of the fence. The panels **MUST** supported by stabilizer struts, which **MUST** be installed on the inside and secured to the ground using pins or appropriate weights.

The Fence must be marked with a clear sign reading:

"Construction Exclusion Zone – No Access"

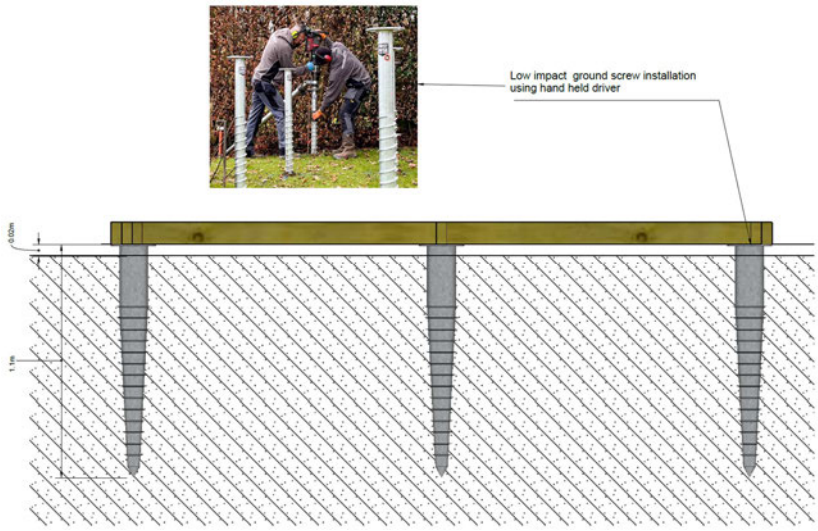
8.2 GROUND PROTECTION – LIGHTWEIGHT ACCESS ONLY

Where any additional ground protection is required, these areas **MUST** be covered with a permeable membrane, with 150mm layer of compressible woodchip overlaying it; an 18mm marine ply boards will then be secured on top of the woodchip to allow a 1.5tonne mini-digger to access the area without causing major compaction or soil erosion.

8.3 NEW STRUCTURE INSTALLED ON GROUND SCREWS

The construction design process has shown consideration of the issue of working within the RPA by specifying the use of 'screw pile' footings; these footings will ensure minimal root disturbance occurs near the nearby affected trees, as the new building will sit above the existing levels with the new screw piles being the only below ground part of the structure. The locations of the new screw piles will be confirmed following hand dug trial digs to check for the presence of any significant (over 25mm) roots which **MUST** be retained and avoided if found.

Below: screw pile example



METHODOLOGY

- **NOTE: any excavations in the RPAS with the use of mechanical excavators will undoubtedly sever any roots that may be present and can change the hydrology and structure of the nearby soil in a way that will adversely affect the health of any nearby trees.**

- The design of the new screw piles layout must have sufficient flexibility that the locations of the supporting screw piles is changeable. The location for these screw piles will be confirmed following hand excavated, trial digs of the top 1000mm of each potential hole (this is where the majority of roots exist).

- The foundation design must also incorporate a void that will allow for water to reach the area beneath the structure and ensure that gaseous exchanges are not restricted.

- Hand tool excavations will only be undertaken by fully briefed site personnel. This operation will be done slowly and carefully to ensure the retention and protection of any roots that are discovered that are in excess of 25mm. These roots **MUST** then be covered and protected using damp hessian whilst further

excavation commences; hessian must be left in situ until backfilling commences and re-wetted if needed to avoid root desiccation. **NOTE: OPERATIVES MUST CHECK FOR THE PRESENCE OF ANY EXISTING UNDERGROUND SERVICES PRIOR TO THE COMMENCEMENT OF SUCH WORK.**

- Any roots discovered in these trial pits in excess of 25mm diameter will immediately signal the requirement for a change of pit location.

- Ground protection as that detailed above **MUST** be placed over the working area whilst the deeper excavation of the final locations commences, with the use of or hand tools. This will alleviate the possibility of excessive compaction or erosion within the RPA's.

- Once the screw piles are installed, the excavated holes **MUST** then be backfilled and the soil compacted using hand tools only, to ensure not air pockets are left as these can be damaging to tree roots.

8.4 SITE HUTS, WELFARE FACILITIES AND STORAGE OF EQUIPMENT, MATERIALS AND CHEMICALS
All site huts **MUST** be positioned outside of the retained trees RPA's.

8.5 MIXING OF CONCRETE
All mixing of cement / concrete **MUST** be undertaken outside of the RPA of all of the retained trees.

8.6 USE CRANES, RIGS AND BOOMS
Precautionary measures **MUST** be observed to avoid contact of any retained trees when manoeuvring cranes rigs or booms into position.

8.7 INCOMING SERVICES, DRAINAGE AND SOAKAWAYS
New services **MUST** be routed to avoid all RPAs of retained trees on site and within nearby sites. From an assessment of the subject site, undertaken in conjunction with the project architect, there is no reason to assume this isn't possible. Inspection chambers **MUST** be sited outside the RPA.

8.8 ON SITE SUPERVISION
Regular site supervision is essential to ensure all potentially damaging activities near to trees are properly supervised. A pre start site meeting **MUST** occur to ensure all parties are aware of their responsibilities relating to tree protection on site; this **MUST** include a site induction for key personnel.

Key personnel:

Name	**Position**	**Contact number / email:**
Glen Harding	Retained arboriculturalist	[redacted] Or info@ghatrees.co.uk
TBC	Local authority Arboricultural Officer	TBC
TBC	Site manager	TBC

After this pre start meeting, day-to-day responsibility for tree protection will be devolved to the site manager who will make contact with the retained arboriculturalist as needed.

8.9 OTHER TREE PROTECTION PRECAUTIONS

- **NO** fires lit on site within 20 metres of any tree to be retained.
- **NO** fuels, oils or substances with will be damaging to the tree shall be spilled or poured on site.
- **NO** storage of any materials within the root protections zone.

Conclusion

9.1 In conclusion, the principal arboricultural features within the site can be retained and adequately protected during development activities.

9.2 Subject to precautionary measures as detailed above, the proposal will not be injurious to trees to be retained.

Recommendations

10.1 Site supervision – An individual e.g. the Site Agent, must be nominated to be responsible for all arboricultural matters on site. This person must:

a. Be present on the site the majority of the time.
b. Be aware of the arboricultural responsibilities.
c. Have the authority to stop any work that is, or has the potential to cause harm to any tree.
d. Be responsible for ensuring that all site personnel are aware of their responsibilities towards trees on site and the consequences of the failure to observe those responsibilities.
e. Make immediate contact with the local authority and / or retained arboriculturalist in the event of any related tree problems occurring whether actual or potential.

10.2 It is recommended, that to ensure a commitment from all parties to the healthy retention of the trees, that details are passed by the architect or agent to any contractors working on site, so that the practical aspects of the above precautions are included in their method statements, and financial provision made for these.

18th November 2024



Glen Harding MICFor, MSc (Forestry), MArborA
For and on behalf of GHA Trees

Appendix A
TREE PLAN
(see separate PDF)

Appendix B
TREE TABLE

Tree Number	Tree Name (species)	Ht (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	N (m)	E (m)	S (m)	W (m)	Age Class	Clearance (m)	Estimated life expectancy	BS Category	Comments / Recommendations
T1	Oak	16	710	1	8.52	3.5	5	6	5	M	6 east	40+	A1 and A2	Off site - full inspection not possible. Some measurements estimated.
T2	Oak	18	670	1	8.04	2	5	4.5	7	M	8 east	40+	A1 and A2	No significant / notable defects observed during inspection.
T3	Oak	18	450	1	5.40	2	3.5	1.5	7	M	8 east	40+	A1 and A2	No significant / notable defects observed during inspection.
T4	Oak	8	470	1	5.64	2	4.5	2	7	M	7 east	20-40	B1	Suppressed tree of poor form.
T5	Oak	22	720	1	8.64	2	5	4	7	M	8 east	40+	A1 and A2	No significant / notable defects observed during inspection.
T6	Oak	23	840	1	10.08	6	9.5	2	8	M	8 east	40+	A1 and A2	No significant / notable defects observed during inspection.
T7	Oak	19	667	2	8.00	2	6.5	3	7	M	8 east	40+	A1 and A2	No significant / notable defects observed during inspection.
T8	Oak	20	560	1	6.72	2	6	3	8	M	9 east	40+	A1 and A2	No significant / notable defects observed during inspection.
T9	Oak	25	1010	1	12.12	4	7	6	7	M	8 east	40+	A1 and A2	No significant / notable defects observed during inspection.

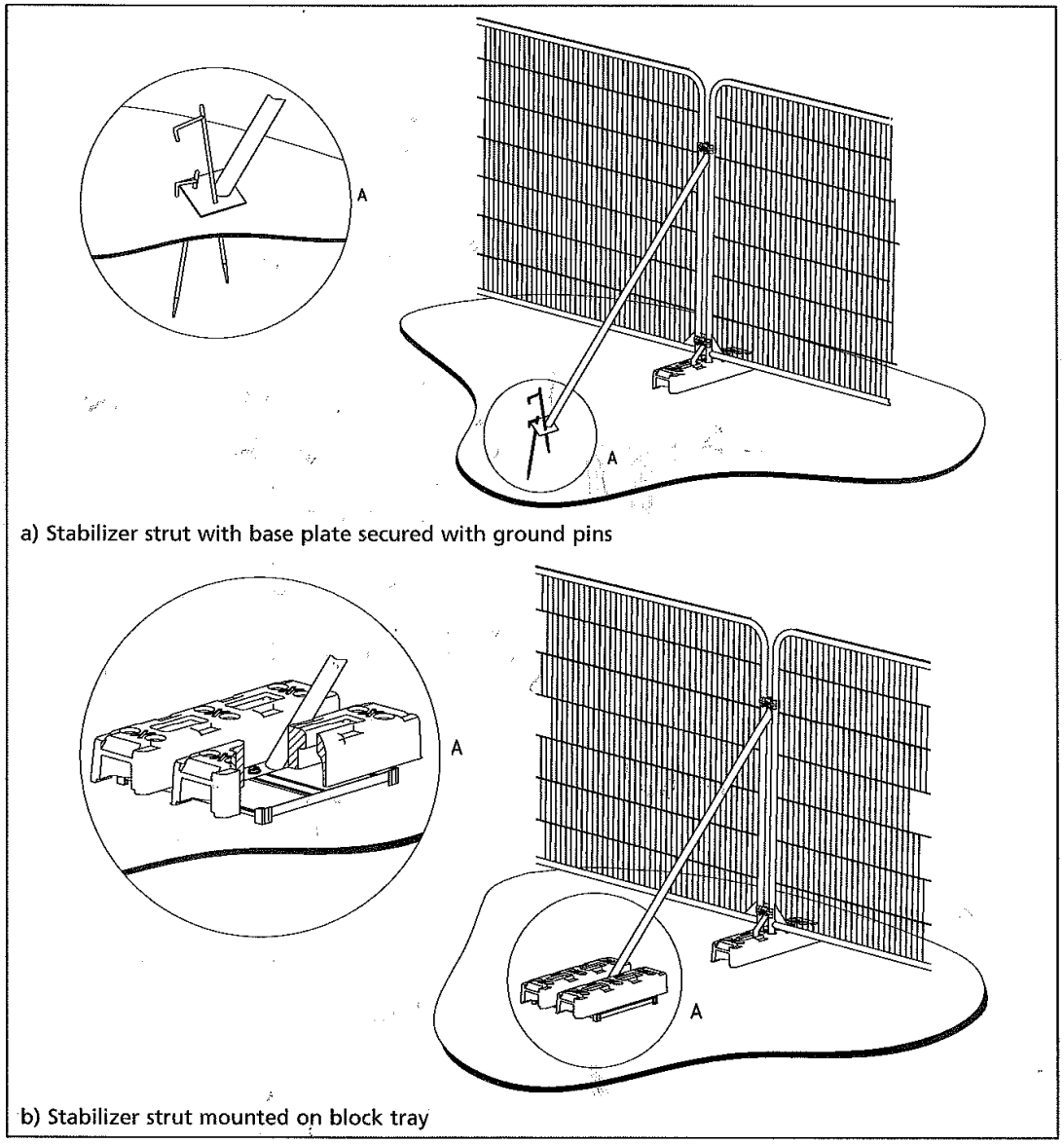
Tree Number	Tree Name (species)	Ht (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	N (m)	E (m)	S (m)	W (m)	Age Class	Clearance (m)	Estimated life expectancy	BS Category	Comments / Recommendations
T10	Oak	24	1168	2	14.01	7	11	5.5	9	M	7 east	40+	A1 and A2	No significant / notable defects observed during inspection.
T11	Oak	18	670	1	8.04	3	4	5	9	M	7	40+	A1 and A2	No significant / notable defects observed during inspection.
T12	Oak	24	930	1	11.16	9	8	7	9	M	7 south	40+	A1 and A2	No significant / notable defects observed during inspection.
T13	Weeping willow	15	510	1	6.12	6.5	7.5	5	3	M	2	20-40	B1	No significant / notable defects observed during inspection.
T14	Oak	18	720	1	8.64	6.5	2	7	6	M	5 north	40+	A1 and A2	No significant / notable defects observed during inspection.
T15	Oak	18	550	1	6.60	6.5	5.5	7	1	M	5 north	40+	A1 and A2	No significant / notable defects observed during inspection.
T16	Sorbus	4	140	1	1.68	2	2	2	2	M	2	10-20	C1	Unremarkable tree of modest quality and of limited value in the wider landscape.
T17	Cherry	6	354	4	4.24	4	4.5	5.5	4.5	M	2	10-20	C1	Unremarkable tree of modest quality and of limited value in the wider landscape.

Tree Number	Tree Name (species)	Ht (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	N (m)	E (m)	S (m)	W (m)	Age Class	Clearance (m)	Estimated life expectancy	BS Category	Comments / Recommendations
T18	Oak	18	800	1	9.60	8	8	8	8	M	3	40+	A1	Off site - full inspection not possible. Some measurements estimated.

KEY :
Tree No: (T= individual tree, G= group of trees, W= woodland)
Age class: Young (Y), Middle aged (MA), Mature (M), Over mature (OM), Veteran (V)
Height (Ht): Measured in metres +/- 1m

Appendix C
TREE FENCING DETAIL

Figure 3 **Examples of above-ground stabilizing systems**



a) Stabilizer strut with base plate secured with ground pins

b) Stabilizer strut mounted on block tray