



TREE SURVEY REPORT

PRE-DEVELOPMENT

Robert C Yates

January 2024

SITE : Land at 'The Leys', Hatchet Leys Lane, Thornborough, Bucks

CLIENT : Rachel Proudlove & Mr. Adam Powell

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A pre-development advisory document, broadly in accord with British Standard 5837 : 2012 'Trees in relation to Design, demolition & construction - Recommendations', designed to inform the conceptual design by highlighting the above and below ground arboricultural constraints in the context of a proposed development.

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1.0 Terms of Reference

- 1.1 We are instructed by Black Shed Works (agent), to undertake a pre-development tree survey and impact assessment on land at the property known as The Leys, Hatchet Leys Lane, Thornborough, which is to be in line with B.S. 5837 : 2012 'Trees in Relation to Design, Demolition & Construction - Recommendations'.
- 1.2 All trees, both on or immediately adjacent the application site have been inspected from ground level only. Should further, more detailed inspection be deemed appropriate, this will be covered under Recommendations. Trees are dynamic living organisms, whose health and condition can be subject to rapid change, depending on a number of external and internal factors. The conclusions and recommendations contained in this report relate to the trees at the time of inspection.
- 1.3 The site survey and tree assessment were undertaken by Robert C Yates, who holds the formal qualification Tech.Cert.(Arbor.A) and the LANTRA Certificate in Professional Tree Inspection, and is a member of the Consulting Arborist Society, the Arboricultural Association and the Royal Forestry Society.
- 1.4 This report, its appendices and any subsequent revisions or additional information, will form part of any formal planning application in respect of the development of this site, and as such will be open to public scrutiny and comment.

2.0 Survey Methodology

- 2.1 The trees have been assessed using the current recommendations, as detailed in British Standard 5837 : 2012 'Trees in relation to Design, Demolition & Construction – Recommendations', in order to arrive at a Retention Category for each individual tree or group of trees. A Root Protection Area (RPA) has been assigned to each tree, based on its stem diameter and in some cases, crown spread, which has then been used to produce the Tree Constraints/Protection Plans (attached as appendix 3). For full details of the relevant assessment criteria and retention categories see Table 1 of B.S. 5837 (attached as appendix 4).
- 2.2 All surveyed trees & hedgerows have been given a notional reference number i.e. T1 – T8, G1 & H1. All collected survey data and work recommendations for the trees is presented in the survey schedule which forms appendix 2 to this report. For the location of the trees see appendix 3A (Tree Constraints Plan - Existing).

3.0 Site Overview / Design Brief

- 3.1 The survey area comprises the land surrounding the outbuilding to the Southwest of The Leys, currently used as stables and for storage. The outbuilding is outside of the Thornborough Conservation Area, whereas The Leys, and the majority of the trees, are within the Conservation Area.
- 3.2 The proposed development briefly comprises the re-construction of the outbuilding to facilitate its ongoing residential function, ancillary to the main dwelling house.

4.0 Summary of Findings & Conclusions

- 4.1 A total of **8no.** individual trees, **1no.** group of trees and **1no.** hedgerow have been surveyed. A breakdown of the numbers of trees in each retention category can be seen in the table below:

Table 1

Retention Category	Individual Trees (T)	Groups of Trees (G)	Hedgerows (H)
A High Quality	1	0	0
B Moderate Quality	4	0	1
C Low Quality	3	1	0
U (Unsuitable for retention)	0	0	0
Totals	8	1	1

- 4.2 All U Category (poor quality) trees should generally be removed for reasons of sound arboricultural practice or health & safety, irrespective of any development proposals, unless they offer particular conservation value to the site, in which case this will be highlighted in the survey schedule along with appropriate recommendations. ***There are no poor quality trees within the scope of the survey.***
- 4.3 As regards the C category trees it may not always be possible or even desirable to retain low quality trees within the context of a proposed development, unless in such a location that they do not represent a significant constraint on the design brief. Young trees, and those with a stem diameter of less than 150mm, will normally be placed in the C category, unless it is considered that they are of especially good form or are of a species that is particularly rare, in which case they may be upgraded. In certain cases, it may be appropriate to consider re-location of young C category trees within the site.
- 4.4 All A & B Category trees (high & moderate quality) will under normal circumstances be retained on development sites, and should ideally influence and inform the conceptual design, site layout, and in some cases the specific construction methods to be used – The root protection area and/or crown spread of these trees will generally form a construction exclusion zone, although under certain circumstances it may be possible to build or operate within these areas providing that appropriate measures and specifications have been formally agreed between the local planning authority, the consulting arboriculturist and the developer/client.

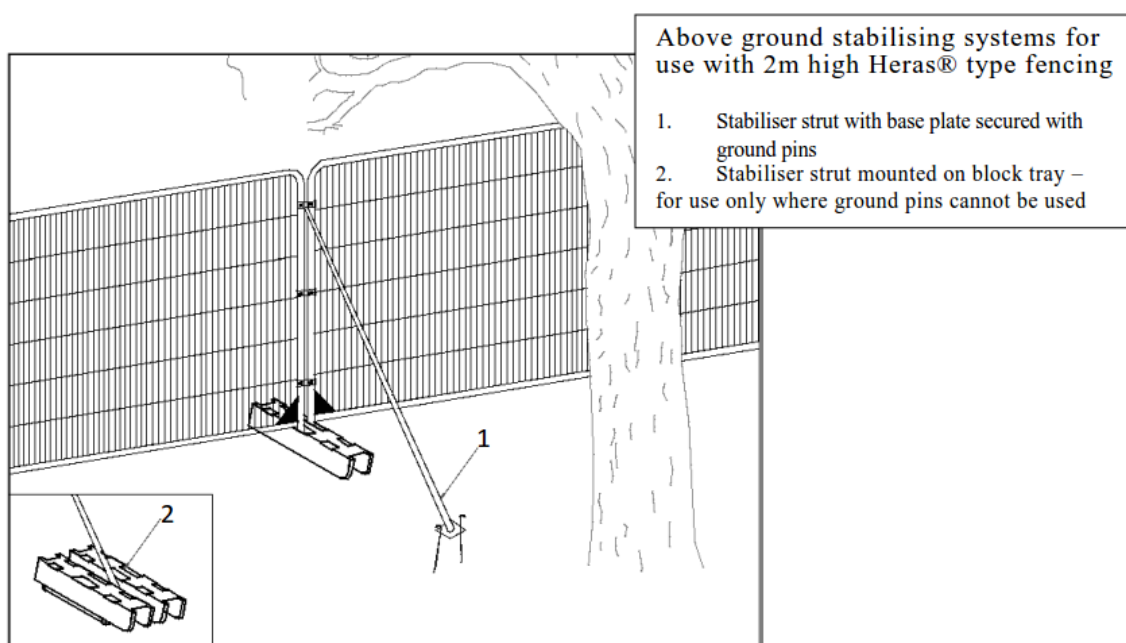
5.0 Arboricultural Impact Assessment

- 5.1 Based upon the proposed site layout, as included at Appendix 3B, the following potential impacts and implications have been identified and assessed:
- 5.1.1 No trees will require removal in order to facilitate the development, and no trees will require any facilitation pruning. Nonetheless, one tree (T1) has been recommended for removal, due to health & safety concerns, particularly if the outbuilding is to be used as residential. The net impact upon the trees, and upon visual amenity, will be insignificant, subject to the provision of suitable tree protection barriers.
- 5.1.2 Although no details of any proposed new service routes are currently available, it is not anticipated that there would be any reason to compromise root protection areas in this way. Excavation works for such applications should generally be prohibited inside root protection areas, unless a suitable low impact method can be successfully demonstrated, and subsequently implemented.

6.0 Recommendations / Tree Protection Strategy

- 6.1 The tree removal works (See Appendix 2) must only be carried out by suitably qualified and experienced contractors, and should conform to guidelines set out in British Standard 3998 : 2010 'Tree Work – Recommendations'. This work is to take place ahead of any other enabling works on the site.
- 6.2 Temporary protective barriers are to be erected following completion of the tree removal works, in the locations indicated on the Tree Protection Plan – Proposed. This should comprise 2 metre high braced Heras® type fencing, as indicated at Fig.1 below. Areas protected in this way shall be kept free of all construction related materials and equipment for the duration of the construction phase of the development. It is further recommended that appropriate weatherproof warning signs are affixed to the fencing to warn contractors that the areas are strictly off-limits.

Fig.1 Specification for temporary tree protection barrier/fencing for retained trees



- 6.3 The above specified tree protection measures are to remain in place until such time as all construction & external works are complete and all excess materials and equipment have been removed from site.

- 6.4 The installation of any new underground services is to be designed to avoid conflict with root protection areas; this includes power, water, foul and storm drainage. Once details of the proposed services becomes available, a further assessment of arboricultural impact may be necessary.

7.0 Statutory Obligations

- Works to trees which are covered by Tree Preservation Orders [TPOs] or are within a Conservation Area [CA] require permission or consent from your Local Planning Authority [LPA]. Full planning consent would, however, override the need for a separate application, providing that details of all tree works were included in the submission and subsequently approved by the local authority.
- It is a criminal offence under normal circumstances to disturb or destroy - whether intentional or unintentional - the nesting sites of wild birds or the roost sites of bats, under the 'Wildlife & Countryside Act 1981, the 'Countryside and Rights of Way Act 2000' and the 'Conservation of Habitats & Species Regulations 2017'.

Therefore, avoid carrying out significant tree works during the bird nesting season [mid-March to end of August] and ensure that trees are professionally surveyed for signs of bat roosts and/or bat activity before starting any significant tree work, such as felling or heavy crown reduction. Further advice on how to proceed should bat occupation be suspected can be obtained from your local office of Natural England or any qualified ecologist.

APPENDIX 1 :

KEY TO SURVEY CRITERIA & HEADINGS:

Tree No.	Notional ID given to each tree or group of trees (unless tagged)
Species	Botanical name with common name in brackets
Age Class	Young, semi-mature, early mature, mature or over-mature
Height	Estimated in metres
Crown Spread	Crown spread (North / East / South / West) measured from centre of trunk, in metres
Crown clearance	Approximate height between lowest part of canopy and ground level (metres)
Stem dia.	Trunk diameter (mm) measured at 1.5m above ground level, or other height as specified
Vigour	Objective assessment of a tree's vigour e.g. shoot extension growth (normal, reduced or low)
Amenity	Subjective assessment of a tree's contribution to the amenity value of the immediate area: High to Low
Condition	Good, Fair or Poor, based on the general health and structural condition of the tree
Recommendations	Remedial works in order to facilitate retention, or recommendation to remove
Ret.Cat.	Based on B.S.5837 Retention categories: A = Those of High Quality & Value B = Those of Moderate Quality & Value (Sub-categories 1, 2, 3 for A & B categories in brackets) C = Those of Low Quality & Value U = Unsuitable for retention
RPA	Root Protection Area, measured in metres (radius) from centre of tree, or may be expressed in m ²

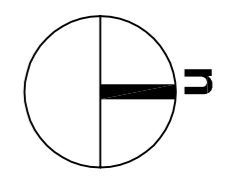
APPENDIX 2 : SURVEY SCHEDULE (page 1 of 2)

Tree No.	Species (common name)	Age class	Height (m)	Crown Spread (m) :				Crown Clearance	Stem dia. (mm)	Vigour	Amenity Value	Condition	Comments	Recommendations	Ret. Cat. (sub cat.)	RPA (m)
				N	E	S	W									
T1	<i>Fraxinus excelsior</i> (Ash)	mature	20	4.5	8	5	3.5	6	650 360	normal	moderate	Fair/poor	Co-dominant stems, pronounced basal decay in larger South stem (Ganoderma fungus)	Remove both stems to ground level for immediate/future H&S reasons	C	(8.9)
T2	<i>Fraxinus excelsior</i> (Ash)	mature	20	8	10	6	5	3	670	normal	moderate	Good/fair	Co-dominant stems from 3m	No works required	B (1)	8.1
T3	<i>Acer platanoides</i> (Norway Maple)	Semi-mature	5	2	2	2	2	1.5	160	normal	low	Good/fair	No comments	No works required	C	1.9
T4	<i>Fraxinus excelsior</i> (Ash)	mature	22	9.5	9.5	9.5	9.5	3.5	930	normal	Mod/high	Good/fair	No comments	No works required	B (1)	11.1
T5	<i>Sorbus aria</i> (Whitebeam)	Early mature	8.5	3	3	3	3	2	250	normal	low	good	No comments	No works required	B (2)	3.0
T6	<i>Betula utilis</i> (Himalayan Birch)	mature	10	4.5	4.5	4.5	4.5	2	290	normal	Mod/low	good	No comments	No works required	A (1)	3.5
T7	<i>Malus domestica</i> (Apple)	Over-mature	4.5	3	4.5	2	1	1	400	normal	low	Fair/poor	Hollow stem	No works required	C	4.8

Tree No.	Species (common name)	Age class	Height (m)	Crown Spread (m) :				Crown Clearance	Stem dia. (mm)	Vigour	Amenity Value	Condition	Comments	Recommendations	Ret. Cat. (sub cat.)	RPA (m)
				N	E	S	W									
T8	<i>Prunus avium</i> (Wild Cherry)	mature	17	7.5	7.5	7.5	7.5	1	600 400	normal	Mod/high	Good/fair	Co-dominant stems from 1m	No works required	B (1)	8.7

GROUPS OF TREES / HEDGEROWS:

Ref. No.	Species (common name)	Age class	Height (m)	Crown Spread:	Crown Clearance	Stem dia. (mm)	Vigour	Amenity Value	Condition	Comments	Recommendations	Ret. Cat. (sub cat.)	RPA (m)
G1	2no. <i>Crataegus monogyna</i> (Hawthorn), 1no. <i>Betula pendula</i> (Silver Birch) 1no. <i>Acer platanoides</i> (Norway Maple)	Semi-mature	2.5 – 7.0	see plan	1.5	Avg. 150	normal	low	Good to fair	No comments	No works required	B (2)	1.8
H1	<i>Cupressus x leylandii</i> (Leyland Cypress)	Early mature	2.5	1.5	0	n/a	normal	moderate	good	Well maintained boundary hedge on edge of driveway (root line not accessible)	No works required	B (2)	1.2



- KEY:**
- U Category Trees - REMOVE
 - A Category Trees - HIGH QUALITY
 - B Category Trees - MODERATE QUALITY
 - C Category Trees - LOW QUALITY
 - Root Protection Areas for A, B & C category trees
 - Actual Crown Spread of individual and measured trees/groups

ALWAYS REPRODUCE THIS DRAWING IN COLOUR

PROJECT INFO

Site: L/A The Leys, Hatchet Leys Lane
Thornborough, Bucks

Title: Tree Constraints Plan

Client: Rachel Proudlove & Adam Powell

Drawing No: appendix 3A

Scale: 1:200 @A1

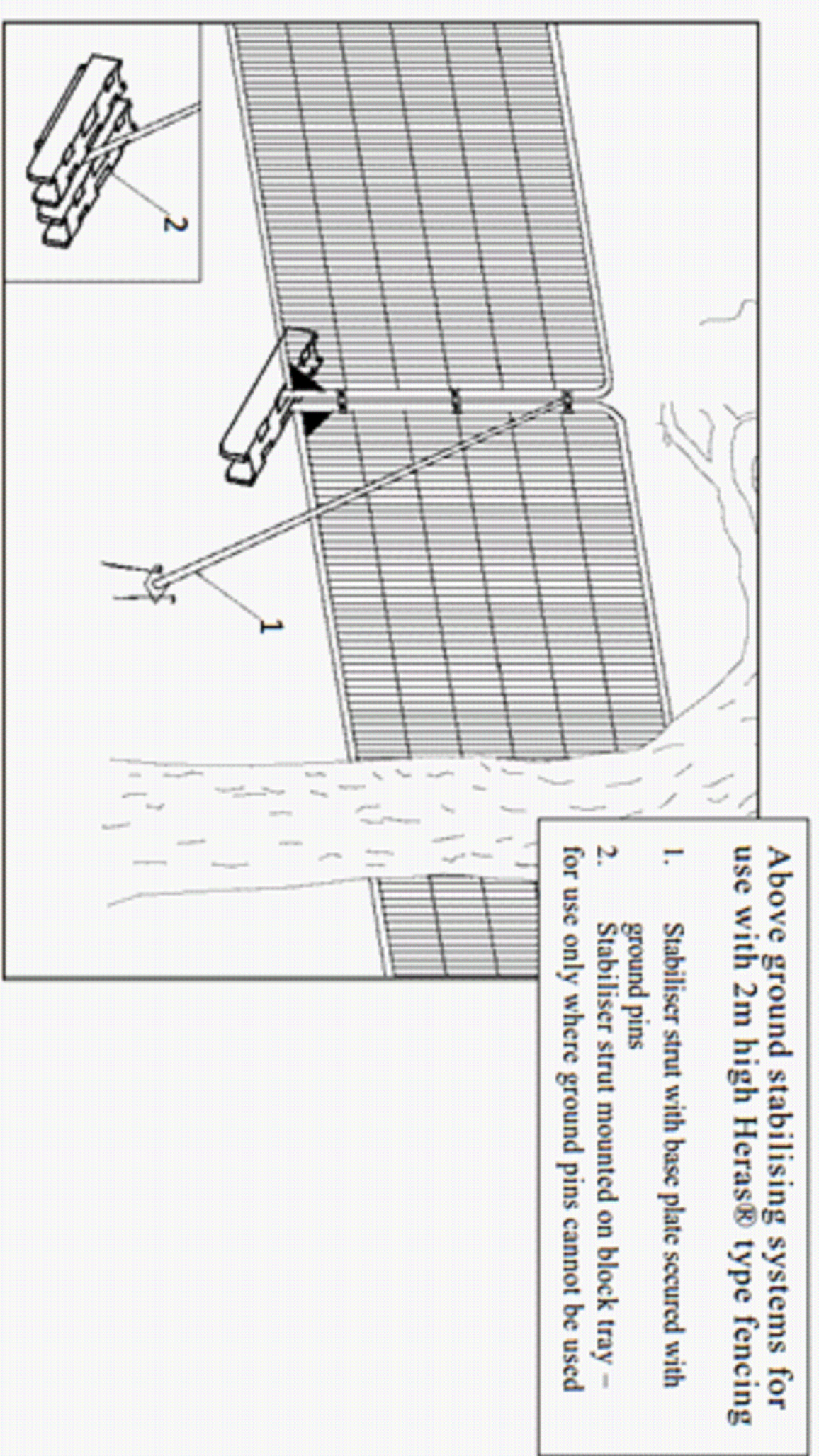
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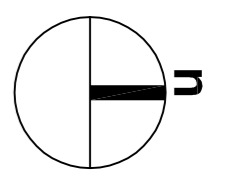
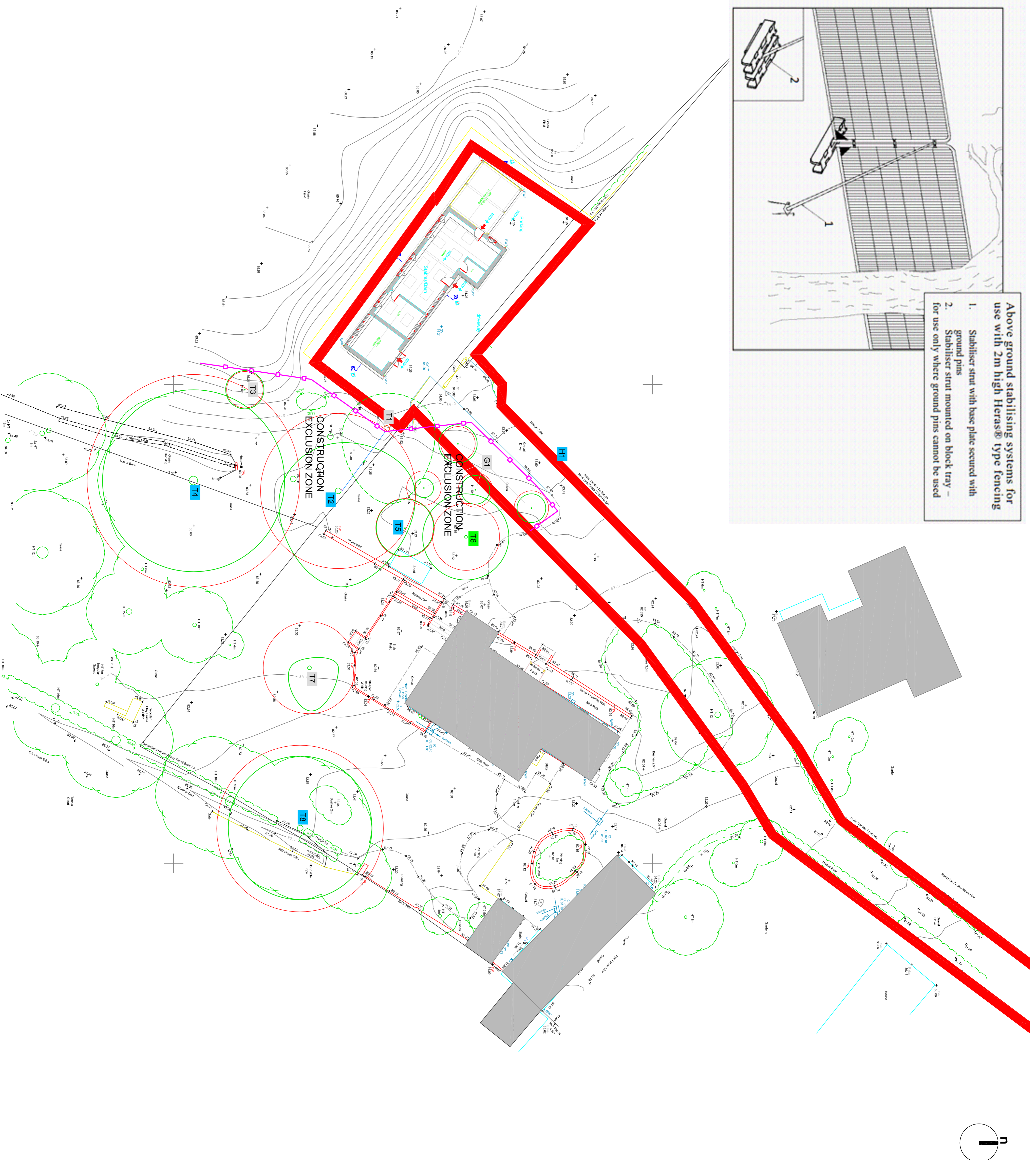


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- Above ground stabilising systems for use with 2m high Heras® type fencing**
1. Stabiliser strut with base plate secured with ground pins
 2. Stabiliser strut mounted on block tray – for use only where ground pins cannot be used



- KEY:**
- U Category Trees - REMOVE
 - A Category Trees - HIGH QUALITY
 - B Category Trees - MODERATE QUALITY
 - C Category Trees - LOW QUALITY
 - Root Protection Areas for retained trees
 - Actual Crown Spread of individual and measured trees/groups, as retained
 - Crown Spread of trees to be removed
 - Temporary Tree Protection Barrier/Fence - See inset diagram for specification

ALWAYS REPRODUCE THIS DRAWING IN COLOUR

PROJECT INFO

Site: L/A The Leys, Hatchet Leys Lane
Thornborough, Bucks

Title: Tree Protection Plan
(Proposed)

Client: Rachel Proudlove & Adam Powell

Drawing No: appendix 3B

Scale: 1:200 @A1

Date: Jan 2023

Drawn: RY

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Table 1 : Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan				
Trees unsuitable for retention (see Note)								
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	<ul style="list-style-type: none"> • 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 (e.g. 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 <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>			Dark Red				
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:25%;"></th> <th style="width:25%; text-align: center;">1 Mainly arboricultural qualities</th> <th style="width:25%; text-align: center;">2 Mainly landscape qualities</th> <th style="width:25%; text-align: center;">3 Mainly cultural values, including conservation</th> </tr> </thead> </table>						1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation					
Trees to be considered for retention								
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 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 of 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				