Tree Heritage
Arboricultural Contractors and Consultants
Established 1982

TREE REPORT AND SURVEY
AT
Briar Clough
Clay Lake
Endon
Staffordshire
ST9 9DE

1. Instructions

1.1 I was instructed to carry out a tree survey of the trees at the above site in accordance with BS 5837: 2005. This would include categorizing the trees and calculating the Root Protection Areas for each retained tree.

2. General description of the site and trees

2.1 The site is an established garden with many mature trees.

2.2 The trees on the site are all listed in the Tree Condition Survey, which is included as an appendix to this report.

3. The Trees

3.1 The majority of the trees are on the edge of the development site. These can all be retained and protected during the development process.

3.2 The retained trees may need some remedial work to allow the building to take place. It may also be necessary to carryout some work on the grounds of safety. Details of this work are included in the schedule.

3.3 I am concerned about the condition of T6 Beech. This is a tree that has reached the limit of its natural life. Beech trees in this locality tend to decline rather rapidly and this particular tree has already shed a large branch. There are signs, such as the main fork with some included bark, that indicate that it may shed more limbs soon. I understand that the main entrance to the development will have to use the existing driveway that currently passes under the tree. It is clear that there may be a problem if a large limb is shed across the drive.

4 The effect of a development on the trees

4.1 BS 5837:2005 is intended to give recommendations to protect the trees during development and ensure their survival following the construction work. To achieve this there are two main considerations. The first is to protect the roots of the trees and the second to protect the upper parts of the tree, the trunk and branches.

4.2 The main tool to achieve the above is to create “Construction Exclusion Zones” around the trees. These are based on the “Root Protection Area” or RPA as calculated using Table 2 of BS 5837:2005. The RPA’s for all the trees are included in the survey.

4.3 To achieve an effective “Construction Exclusion Zone” (CEZ) it is necessary to erect a protective barrier along the edge of the RPA’s. The details of this fencing are shown in Figure 2, which is included as an appendix (B) to this report. The barrier should be erected a minimum distance from each tree. These distances are shown in the survey as DPB.

5 Arboricultural Method Statement

5.1 To avoid damage to the trees it is essential to carry out the work in the correct order. It is imperative that **NO** construction work commences until all Arboricultural work is complete and the protective barriers are fully installed and approved. The following order of work should be adhered to.

5.2 Tree pruning work

Any pruning work suggested in the survey should also be carried out by a competent arboricultural contractor preferably from the list approved by the Arboricultural Association. This will make the site safe to work on and avoid accidental damage to the trees by construction work. It will also improve the quality of the retained trees.

5.3 Tree Protection Fencing

The position of the fencing should be agreed on site between the fencing contractor and the arboriculturalist to ensure that the RPA’s are maintained. The Local Authority Arboriculturalist may also wish to be involved at this stage. The erection of the fencing should conform to the recommendations in BS 5837:2005 as appendix B

TREE HERITAGE LTD.

H. E. Williams

H.E.WILLIAMS Dated 17th February 2009

Ref. BS 5837:2005 British Standards Institute.

TREE SURVEY SCHEDULE.

Site **Briar Clough, Clay Lake, Endon**

Surveyed by Hugh Williams Date 12th February 2009

Tree Ref.	Species	Height in m	Stem Diam. in mm @ 1.5m.	Branch Spread in m	Height of Crown Clear-ance	Age class	Physiological Condition	Structural Condition	Preliminary Management Recommendations	Estimated remaining contribution in years	Category Grading.	RPA In M. as radius of circle
T1	Leyland Cypress	12	300	4	0	Mid	Good	Good	None	20+	C2	3.6
T2	Variegated Holly	5	290	4	1.2	M	Poor. Sparse foliage, tree in decline	Good	None	10	C1	3.5
T3	Holly	9	410	6	2	M	Poor. Sparse foliage, tree in decline	Good	Potential weak fork.	10	C1	4.9
T4	Rowan	5	180	4	3	M	Fair. Tree has been heavily pruned in past.	Good	None	20+	C2	2.2
T5	Cherry	5	230	5	3	O/M	Poor. Tree in decline	Fair.	None	10	C2	2.8

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T6	Beech	22	1010	22	4	O/M	No obvious serious problems.	Potential weak main fork. Cavity in main stem. Tree has shed large branch recently.	This tree may shed large branches either in bad weather or as summer branch drop. I would not advise building within falling distance	10-20	B1	12.1
T7	Sycamore	18	510	12	5	M	Good. Minor dead wood only.	Good.	None	40+	A1	6.1
T8	Elwood's Silver (Conifer)	6	120	1.5	0.5	O/M	In decline.	Snow or storm damaged.	Not suitable for long-term retention.	5-10	C2	1.4
T9	Sycamore	18	690	14	4	M	Good. Minor dead wood only.	Heavy lower limbs may shed.	Lighten lower limbs. Crow may need lifting.	40+	A1	8.3

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T10	Leyland Cypress	6	120	2	0.5	Mid	Suppressed	Fair	None	20	C2	1.4
T11	Silver Birch	12	380	7	3	O/M	In decline.	Dieback in crown.	Consider replacement.	5-10	C1	4.6
T12	Leyland Cypress	10	230	2	0.5	Mid	Suppressed	Fair	None	20	C2	2.8
T13	Leyland Cypress	11	290	2	0.5	Mid	Suppressed	Fair	None	20	C2	3.5
T14	6 stemmed Sycamore	14	490 max	25	4	M	Good	Multi-stemmed. Good.	None.	40+	B1	5.9

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T15	Sycamore	16	800	18	4	M	Good	Good	Crown may need to be raised over site.	40+	A1	9.6
T16	Beech	18	620	10	3	Mid	Suppressed on one side.	Good	Crown may need to be raised over road.	30+	B2	7.4
T17	Beech	18	400	10	3	Mid	Old hedgerow tree now suppressed.	Good	Crown may need to be raised over road.	30+	B2	4.8
T18	Beech	8	200	10	3	Mid	Old hedgerow tree now suppressed.	Good	Crown may need to be raised over road.	30+	B2	2.4
T19	Beech	9	160	10	3	Mid	Old hedgerow tree now suppressed.	Good	Crown may need to be raised over road.	30+	B2	1.9

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T20	Beech	18	320	10	3	Mid	Old hedgerow tree now suppressed.	Good	Crown may need to be raised over road.	30+	B2	3.8
T21	Beech	18	320	10	3	Mid	Old hedgerow tree now suppressed.	Good	Crown may need to be raised over road.	30+	B2	3.8
T22	Beech	18	610	10	3	Mid	Old hedgerow tree now suppressed.	Good	Crown may need to be raised over road.	30+	B2	7.3
T23	Beech	16	310	10	3	Mid	Old hedgerow tree now suppressed.	Good	Crown may need to be raised over road.	30+	B2	3.7
T24	Oak	14	940	14	5	O/M	Dieback on road side.	Some decay in lower bole.	Tree can be retained but would need to be reduced to minimise risk to road.	40+	B1	11.3

APPENDIX TO TREE SURVEYS

Number - Each tree is given a number that allows it to be identified on the site plan. This site plan should only be used for identification only as the trees are not plotted to scale.

Age - These are given in approximate terms

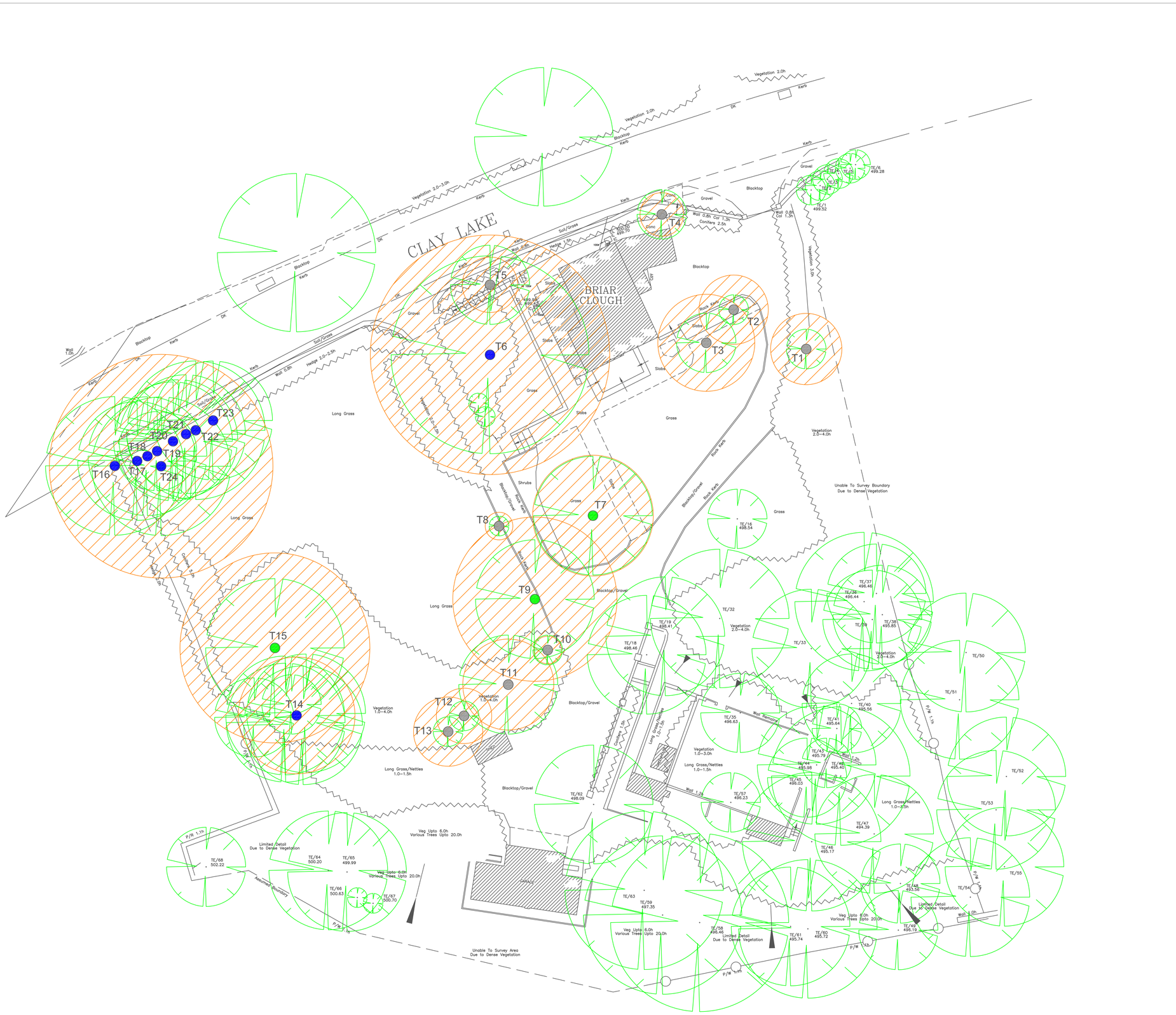
Y	Young tree	Less than 10yrs old
E/M	Early-mature	Established tree up to one third of mature height.
M/A	Middle Aged	Established tree half grown
M	Mature	Tree at least two thirds to full mature size.
O/M	Over-mature	Full size tree usually beginning to decline.
Vet	Veteran	Tree of exceptional age for species.

Condition - In terms of health and structure

Good	A tree with few or no defects, and in general good health. Reasonably long life expectancy and worth retaining if possible.
Good/Fair	Some minor defects that may require treatment. Life expectancy is in the order of 30 years or more, but could be shortened by these defects, that may or may not be treatable.
Fair	The tree has defects, and may require surgery. The defects may be related to general health and not be treatable, and could shorten the life expectancy.
Fair/Poor	The tree has significant defects or diseases that may not constitute a safety hazard, but are not treatable, and give the tree a short life expectancy. It may be desirable to retain the tree in the short term.
Poor	The tree has major defect, either in the tree itself or its environment. The tree may be in very poor health. It may require major surgery or felling depending on the risk assessment. It will have a fairly short life expectancy.

RPA	Root protection area required for retained trees as calculated using BS 5837: 2005 Table 2. (Calculated as radius of circle)

Retention Category	**A** High Value Trees that should retained if at all possible. Usually with at least 40 years of useful life.
	B Moderate value trees to be retained if possible. At least 20 years of useful life.
	C Low value trees that can be retained but should not if this imposes a significant constraint on the development. At least 10 years of useful life.
	R Poor trees that are not suitable for long term retention and should be removed prior to development for reasons of sound arboricultural management. Less that 10 years useful life.



Notes:

1. Do not scale off this drawing.

Rev:	Date:	Status/Amendments:	By:

Key:

- Category A Tree
- Category B Tree
- Category C Tree
- Category R Tree
- Branch Spread
- Tree to be Removed
- Root Protection Area (RPA)
- Root Protective Barrier

Tree Heritage

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Established 1982

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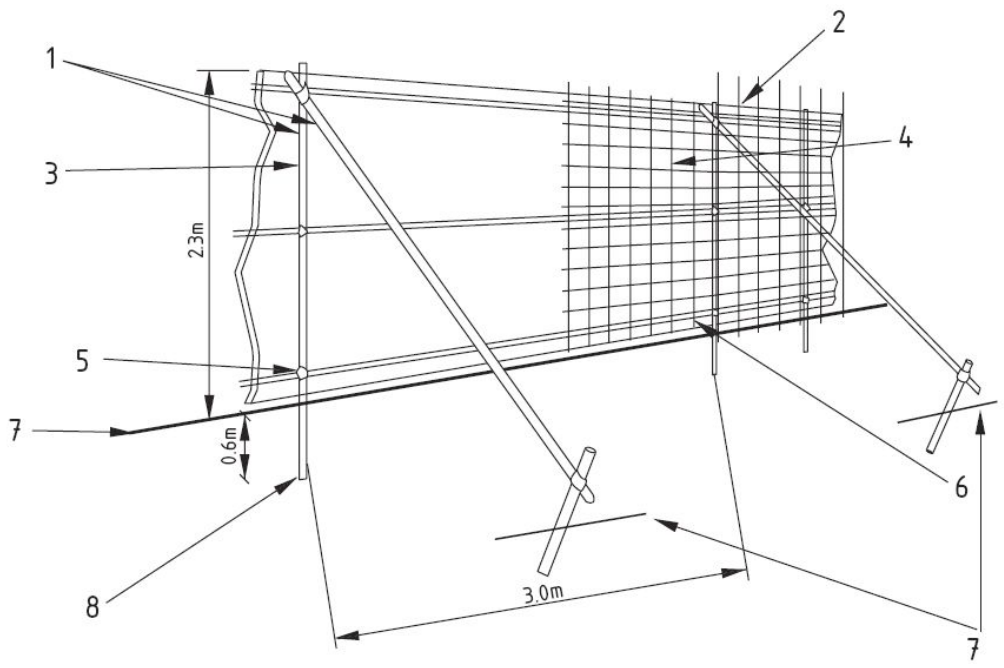
Briar Clough, Clay Lake

Drawing Title:

Tree Constraints Plan

Scale:	Paper Size:	Date Created:
1:200	A1	19/02/09
Drawing Number: THL/JW18		*Drawing Revision:* 1

Appendix B – Tree Protective Barrier



1 Standard scaffold poles
2 Uprights to be driven into the ground
3 Panels secured to uprights with wire ties and where necessary standard scaffold clamps
4 Weldmesh wired to the uprights and horizontals
5 Standard clamps
6 Wire twisted and secured on inside face of fencing to avoid easy dismantling
7 Ground level
8 Approx. 0.6 m driven into the ground

Figure 2 — Protective barrier