Tree Heritage
Arboricultural Contractors and Consultants

Established 1982

Site

Hallscroft
The Drive
Rudyard
Leek
ST13 8RN

Client: Mr. & Mrs. J Reaney

ARBORICULTURAL IMPACT ASSESSMENT

Ref:THR14/45a

ARBORICULTURAL IMPACT ASSESSMENT

Site: Hallscroft, Rudyard, ST13 8RN

CONTENTS

ARBORICULTURAL IMPACT ASSESSMENT

Site: Hallscroft, Rudyard, ST13 8RN

1. Introduction

1.1. This report should be read in conjunction with the Arboricultural Report ref: THR14/45.

1.2. Further to our report dated 16th May 2014 the proposed scheme has been designed and submitted to me for assessment of its impact on the trees.

2. Limitations of the report

2.1. The contents of this report relate solely to information gathered on the original site survey on 16th May 2014 and a subsequent site visit on 20th November 2014

2.2. This assessment is based on the drawing from RLM Associates No.RLM673/8 Rev E for the proposed development.

3. Arboricultural Implications of the Proposal

3.1. The majority of the trees on this site were fairly low quality trees and were put into either Category U or C. This is mainly due to their age and the fact that they are growing very close to each other so they are now poorly shaped.

3.2. These include two trees along the frontage; T1 Sycamore which is severely decayed and T5 Horse Chestnut that has died and collapsed. These two trees should be removed, irrespective of the scheme, on the grounds of safety.

3.3. There are some important landscape trees along the frontage with The Drive notably T2 and T4 both Limes and T6 a Sycamore which were all put into Category B along with T23 Yew; which is in the rear corner of the site.

3.4. I also consider T8 a Yew on the front corner as you approach the entrance to be of sufficient visual importance as to put into Category A.

3.5. The proposal will retain most of the trees along the frontage of the site including some of the conifer between Hallscroft and the adjacent property Avondale to maintain the character of The Drive.

3.6. The scheme will require the removal of some of the boundary trees that have been left to grow too large and too close together for them to be separated out and retained. All the removed trees are considered to be of fairly low value and none are higher than Category C.

3.7. The scheme has been designed with a communal drive using the original access point and adapting this to make the entrance easier to access. This avoids the requirement to form any new accesses from the existing road through the RPAs of the frontage trees.

3.8. The new access drive will run parallel to the avenue at the level of the existing lawn, which is around a metre higher than the level of the existing avenue. It will be built using a "No-dig" technique so that there will be no requirement for excavating within the RPAs of the frontage trees.

3.9. The drive will be constructed using block paving on a geotextile base that will remain porous to both water and air so the implication to the trees will be minimal.

3.10. There appears to be plenty of scope within the proposal to plant new trees and it is my recommendation that a tree planting scheme should be included within the development.

4. Arboricultural Methods

4.1. All tree work should be carried out by highly skilled professionals and it is recommended that contractors are selected from the Approved List of Arboricultural Association Contractors. This is obtained from www.trees.org.uk

4.2. All tree work should be carried out to the latest standards based on BS 3998: 2010 'Recommendations for Tree Work'.

4.3. The tree work is should be done prior to any construction work starting.

4.4. Following completion of the tree work the barriers should be erected and maintained for the duration of the building work.

5. Protection of the retained trees

5.1. It is essential to erect tree protective fencing to prevent damage to the trees on the neighbouring land. The proposed position of the fence is shown on our drawing THL-0205 Rev. 2.

5.2. The fencing should be erected according to the drawing shown in BS 5837:2012 and included at the end of this report as Appendix B. The fencing has been extended along the edge of the existing road to prevent contractors parking or storing materials under the trees and causing compaction damage.

Tree Heritage Ltd

H.E. Williams

H.E. Williams

25th November 2014

Site: Hallscroft, Rudyard
Surveyed by: Hugh Williams
Date: 26/11/14

Tree Heritage Ltd, 100 North St, Leek, Staffs, ST13 8DQ
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TREE WORK SCHEDULE

KEY:

Measurements	Life Stage	Physiological Condition	Category Grading	Symbols
Height - *Metres* Stem Diameter - *Millimetres at 1.5m above ground level* Branch Spread - *Metres (North, South, East and West)* Crown Clearance - *Metres* RPA Radius - *Metres* Estimated Remaining Contribution - *Years* FSB - First Significant Branch - *Metres*	Y - *Young* SM - *Semi-Mature* EM - *Early Mature* M - *Mature* OM - *Over-Mature* V - *Veteran*	G - *Good* F - *Fair* P - *Poor* D - *Dead*	A - *High (green)* B - *Moderate (blue)* C - *Low (grey)* *U - Poor/Trees for removal (red)* **Sub-Categories:** 1 - *Mainly Arboricultural value* 2 - *Mainly Landscape value* 3 - *Mainly Cultural value*	< - *Less than* ~ - *Approximately* > - *Greater than*
RPA - *Root protection area (equivalent to a circle with a radius 12x the stem diameter measured at 1.5m above ground level)*				

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Tree Ref.	Species	Height	Stem Diameter	Branch Spread				Crown Clearance	FSB Height + Direction	Life Stage	Phys. Condition	Structural Condition	Recommendations	Estimated Remaining Contribution	Category Grading	RPA Radius
				N	S	E	W									
T10	Holly(Ilex aquifolium)	6	160	3	3	3	3	2	2(N)	M	F	Poor shape & form. Unbalanced crown shape. Crown distorted due to group pressure.		10+	C1	1.92
T11	Lawson Cypress(Chamaecyparis lawsoniana)	9	300	2	2	2	2	2	2(S)	M	F	Crown distorted due to group pressure.		10+	C1	3.6
T12	Whitebeam(Sorbus aria)	6	180,150	4	1	3	3	2	2(S)	EM	F	Poor shape & form. Leaning North. Unbalanced crown shape.	Remove tree for development.	10+	C1	2.81
T13	Holly(Ilex aquifolium)	7	150	2	2	2	2	1	3(NE)	EM	F	Suppressed tree.	Remove tree for development.	10+	C1	1.8
T14	Yew(Taxus baccata)	7	360	6	2	5	5	0.5	1(N)	M	F	Poor shape & form. Stunted habit. Pollard. Unbalanced crown shape. Crown distorted due to group pressure.	Remove tree for development.	20+	C1	4.32
T15	Sycamore(Acer pseudoplatanus)	9	160	0	3	3	3	4	4(SW)	Y	P	Suppressed tree.	Remove tree for development.	10+	C1	1.92
T16	Lawson Cypress(Chamaecyparis lawsoniana)	11	360	2	2	2	2	3	4(N)	M	F	General poor shape.	Remove tree for development.	10+	C1	4.32
T17	Purple-leaved Cherry(Prunus cerasifera 'Pissardii')	8	190	3	3	3	3	3	3(S)	OM	F	Unbalanced crown shape. Crown distorted due to group pressure.		10+	C1	2.28

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				N	S	E	W									
T1	Sycamore(Acer pseudoplatanus)	10	480	3	3	3	3	2	4(E)	OM	P	Declining. Pollard. Decay present on stem. Cavity on stem.	Fell tree on grounds of safety.	<10	U	5.76
T2	Common Lime(Tilia X europaea)	15	620	6	6	6	6	2	6(E)	M	G	Pollard. Epicormics on stem.	Remove major deadwood. Crown lift to 5m.	20+	B1	7.44
T3	Red Hawthorn(Crataegus oxycantha)	7	180	2	2	2	2	2	2(N)	M	F	Low vitality. Declining.		20+	B1	2.16
T4	Common Lime(Tilia X europaea)	15	590	6	6	6	6	2	6(E)	M	F	Pollard. Epicormics on stem.	Remove major deadwood. Crown lift to 5m.	20+	B1	7.08
T5	Horse Chestnut(Aesculus hippocastanum)	7	580	4	4	4	4	2	2(S)	OM	P	Low vitality. Decay present at base. Decay present on stem. Broken branches in crown. Major deadwood in crown.	Fell tree on grounds of safety.	<10	U	6.96
T6	Sycamore(Acer pseudoplatanus)	14	500	6	6	6	6	3	3(E)	OM	F	Pollard. Major deadwood in crown.	Remove major deadwood. Crown lift to 5m.	20+	B1	6
T7	Yew(Taxus baccata)	5	100	3	3	3	3	1	0.5(N)	Y	G	Suppressed tree.		40+	C1	1.2
T8	Yew(Taxus baccata)	7	460	4	4	4	4	1	2(E)	M	G	Crown distorted due to group pressure.		40+	A1	5.52
T9	Sawara Cypress(Chamaecyparis pisifera)	7	360	3	3	3	3	1.5	1(SW)	M	F	Poor shape & form. Unbalanced crown shape. Crown distorted due to group pressure.		10+	C1	4.32

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Tree Ref.	Species	Height	Stem Diameter	Branch Spread				Crown Clearance	FSB Height + Direction	Life Stage	Phys. Condition	Structural Condition	Recommendations	Estimated Remaining Contribution	Category Grading	RPA Radius
				N	S	E	W									
T18	Holly(Ilex aquifolium)	8	190	2	2	2	2	3	3(N)	OM	P	Pollard. Low bud/leaf density. Unbalanced crown shape. Crown distorted due to group pressure.	Remove tree for development	10+	C1	2.28
T19	Lawson Cypress(Chamaecyparis lawsoniana)	6	250	3	3	3	3	2	2(N)	OM	P	Unbalanced crown shape. Crown distorted due to group pressure.	Remove tree for development	10+	C1	3
T20	Lawson Cypress(Chamaecyparis lawsoniana)	6	160	2	2	2	2	2	2(N)	OM	D	Dead.	Fell tree on grounds of safety.	<10	U	1.92
T21	Lawson Cypress(Chamaecyparis lawsoniana)	8	170	2	2	2	2	2	2(N)	OM	P	Poor shape & form. Low vitality. Unbalanced crown shape.	Remove tree for development.	<10	C1	2.04
T22	Elder(Sambucus nigra)	5	220	2	2	2	2	1	1(N)	OM	P	Poor shape & form. Low vitality. Unbalanced crown shape. Crown distorted due to group pressure.	Remove tree for development.	10+	C1	2.64
T23	Yew(Taxus baccata)	9	200,200	5	5	5	5	0.5	0.5(N)	M	F	Poor shape & form. Crown distorted due to group pressure.		20+	B1	3.4

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Tree Ref.	Species	Height	Stem Diameter	Branch Spread				Crown Clearance	FSB Height + Direction	Life Stage	Phys. Condition	Structural Condition	Recommendations	Estimated Remaining Contribution	Category Grading	RPA Radius
				N	S	E	W									
T24	Holly(Ilex aquifolium)	8	200,130	3	3	0	3	2	2(S)	M	F	Unbalanced crown shape. Crown distorted due to group pressure.	Remove tree for development.	10+	C1	2.87
T25	Rowan(Sorbus aucuparia)	5	200	2	2	2	2	3	2(E)	OM	P	Low vitality. Declining. Dieback in crown. Major deadwood in crown.	Fell tree on grounds of safety.	<10	U	2.4
T26	Yew(Taxus baccata)	3	140	1	1	6	0	0	0.5(N)	EM	P	Leaning East.	Remove tree for development.	<10	U	1.68
T27	Lawson Cypress(Chamaecyparis lawsoniana)	5	120,120	2	2	2	2	0.5	0.5(E)	OM	F		Remove tree for development.	10+	C1	2.04
T28	Lawson Cypress(Chamaecyparis lawsoniana)	10	290	3	3	3	0	0.5	0.5(NE)	OM	P	Pollard. Leaning East. Dieback in crown. Low bud/leaf density. Major deadwood in crown.	Remove tree for development.	<10	U	3.48
T29	Laburnum(Laburnum anagyroides)	5	110	2	2	2	2	1	1(N)	OM	D		Fell tree on grounds of safety.	<10	U	1.32
T30	Yew(Taxus baccata Fastigiata)	7	120,120, 120	2	2	2	2	0.5	0.5(S)	M	F	Crown distorted due to group pressure.	Remove tree for development.	20+	C1	2.5
T31	Beech(Fagus sylvatica)	6	140	4	4	4	4	0.5	0.5(S)	EM	F		Remove tree for development.	10+	C1	1.68
T32	Lawson Cypress(Chamaecyparis lawsoniana)	8	300	3	3	3	3	0.5	0.5(SE)	EM	F	Crown distorted due to group pressure.	Remove tree for development.	10+	C1	3.6

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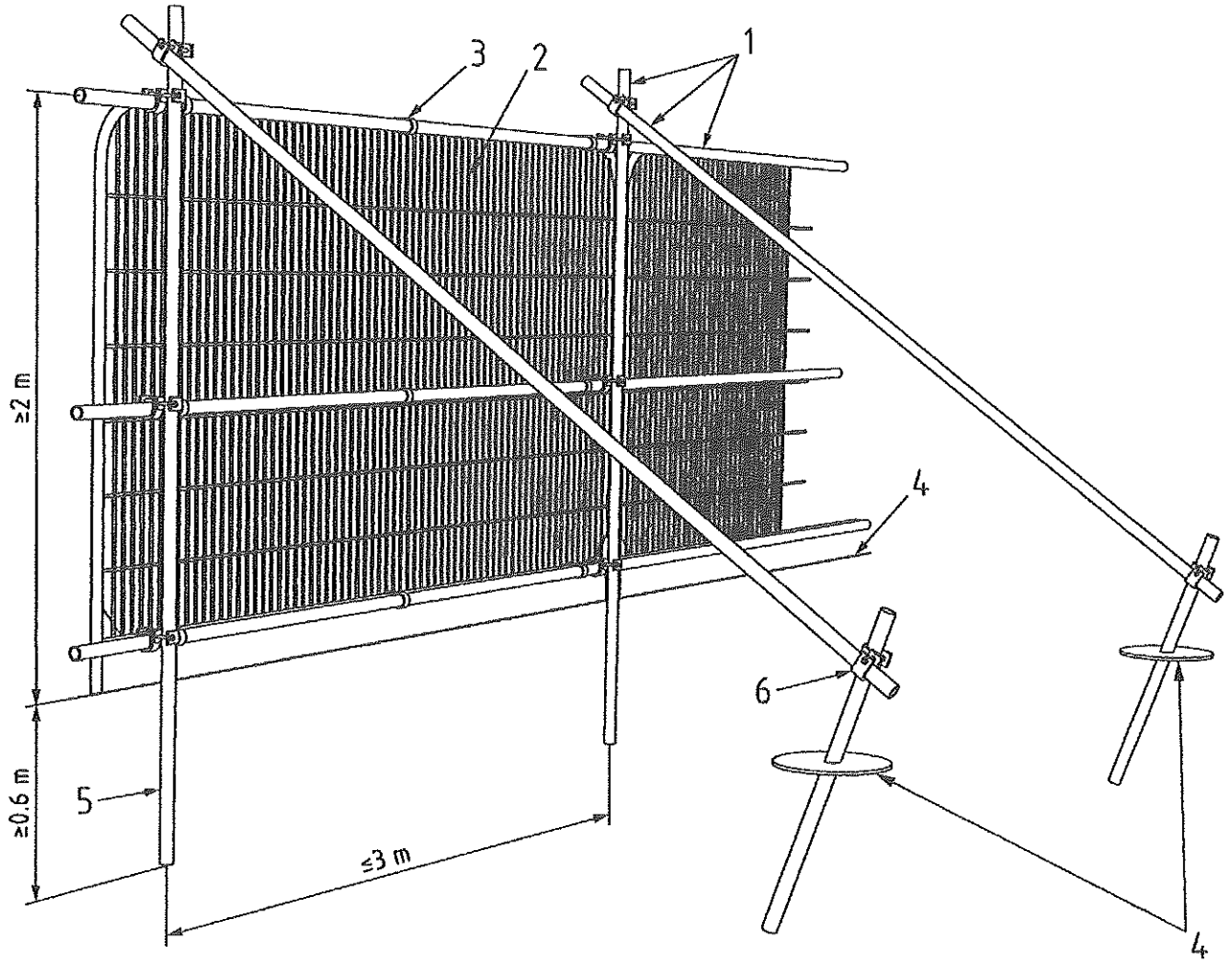
Tree Ref.	Species	Height	Stem Diameter	Branch Spread				Crown Clearance	FSB Height + Direction	Life Stage	Phys. Condition	Structural Condition	Recommendations	Estimated Remaining Contribution	Category Grading	RPA Radius
				N	S	E	W									
T33	Variegated Holly (Ilex aquifolium 'Gold')	6	170	1.5	1.5	1.5	1.5	2	2(N)	OM	P	Poor shape & form. Low vitality. Declining. Low bud/leaf density. Major deadwood in crown.	Remove tree for development.	<10	U	2.04
H1	Beech,Privet (Fagus sylvatica,Ligustrum ovalifolium)	4	250	1	1	1	1	0	0.5(N)	M	F	This hedge was overgrown and has recently been cut back hard.	It may take some time and regular trimming to get it back into a decent hedge.	10+	C1	

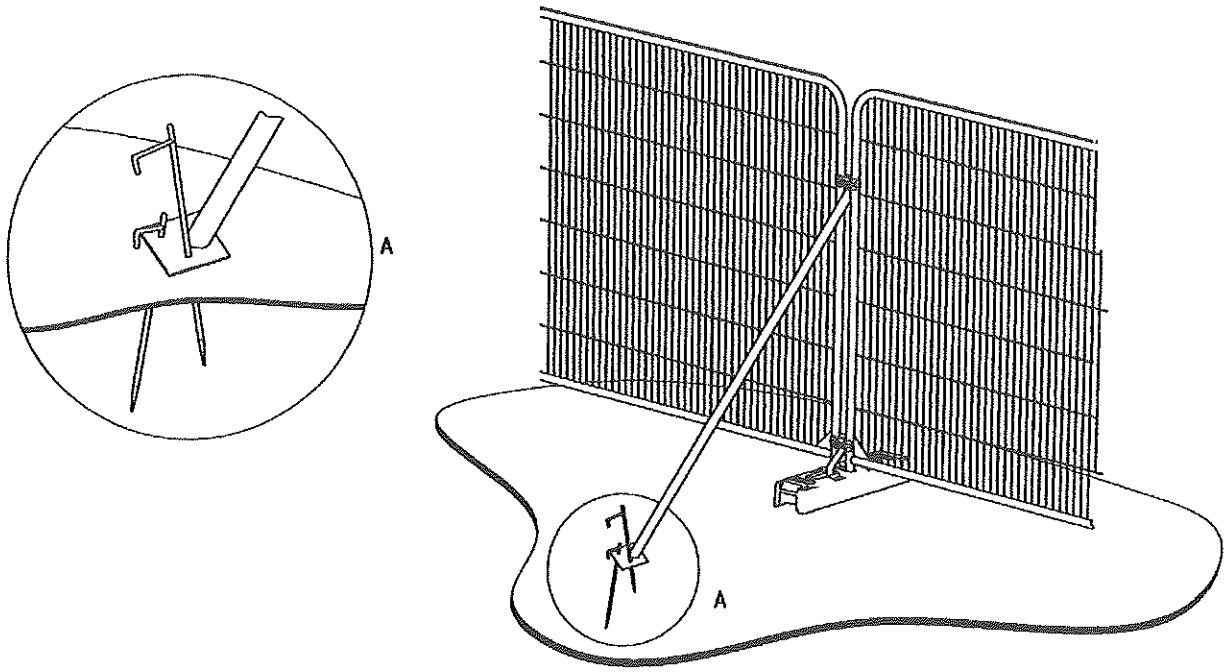
Figure 2 **Default specification for protective barrier**



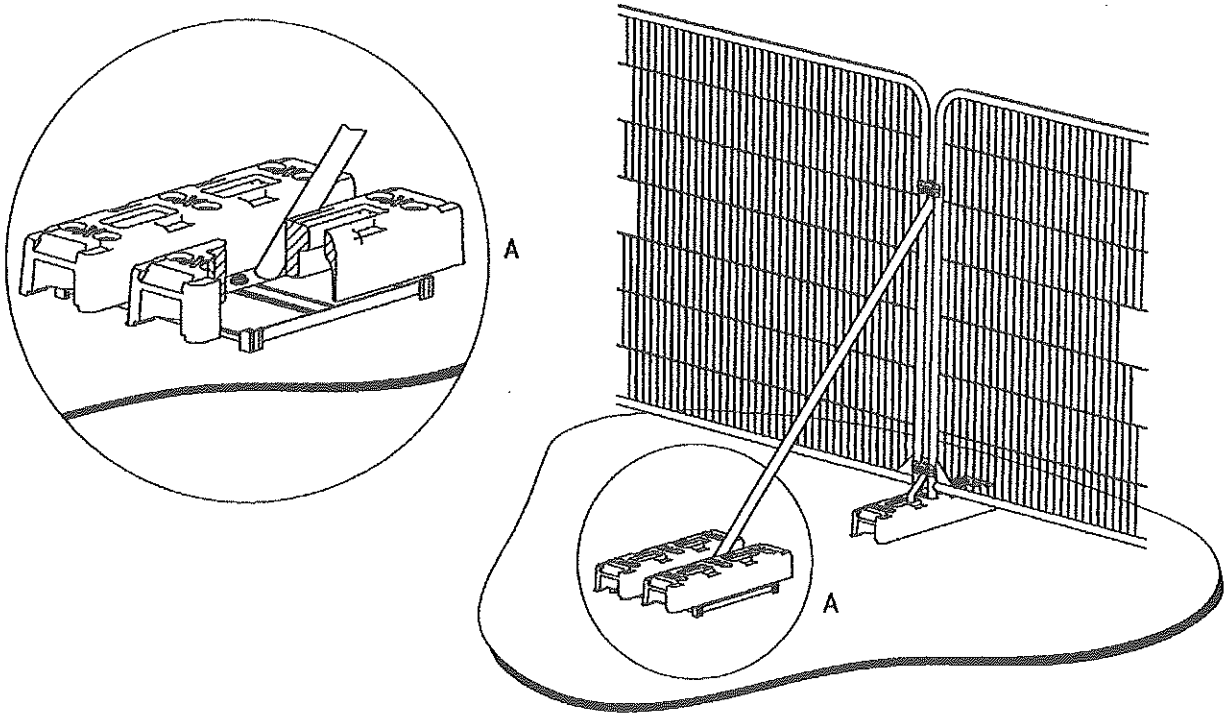
Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

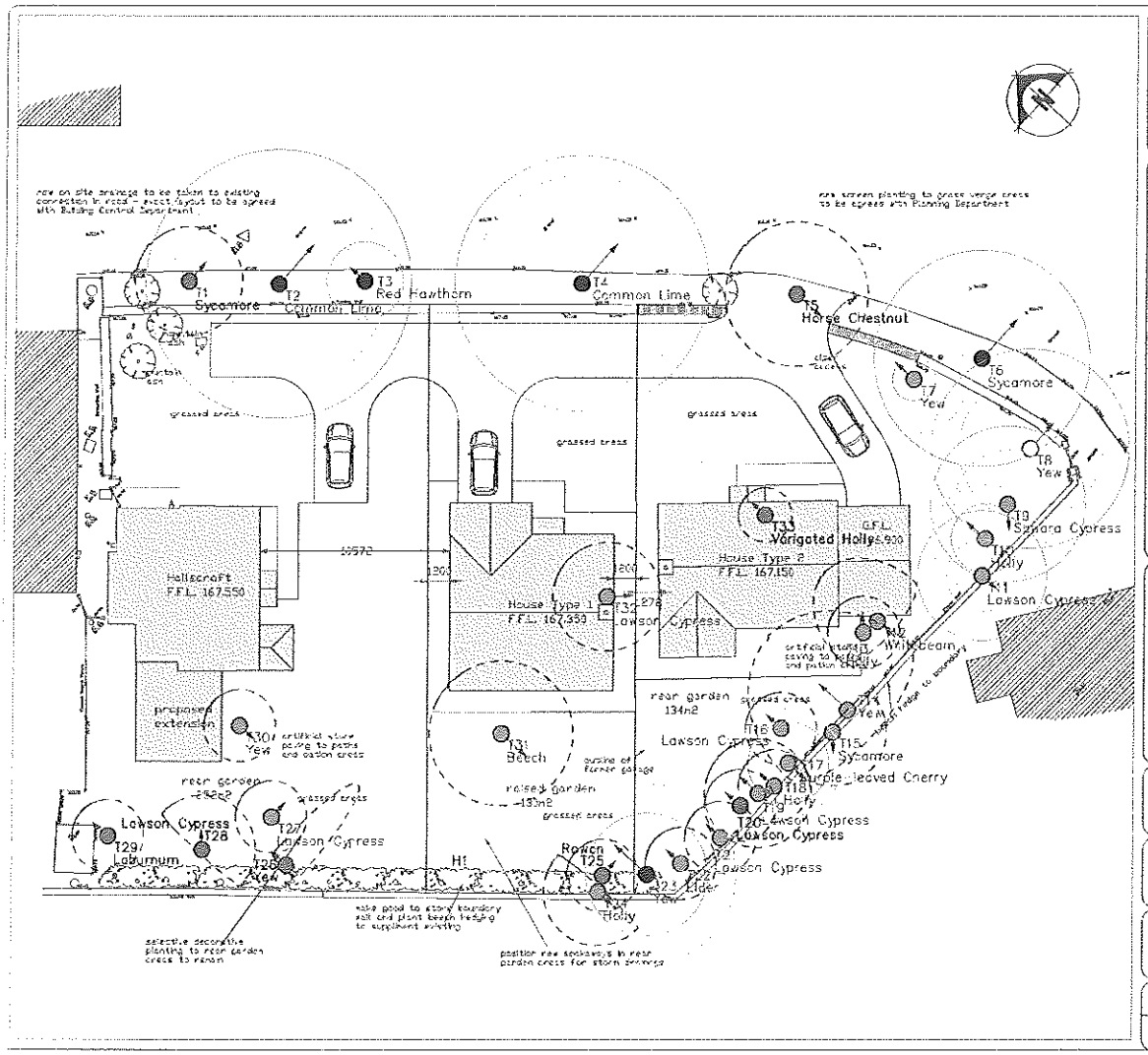
Figure 3 **Examples of above-ground stabilizing systems**



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray



Notes:

1. Do not scale off this drawing. Tree canopies are symbolic only and are representative of the average spread; this may not represent the true outline. Note that the tree stem may not sit centrally to canopy. Tree stems not shown to scale - see schedule.

Rev	Date	Status/Amendments	By

Key

- Category A Tree
- Category B Tree
- Category C Tree
- Category U Tree
- Branch Spread
- Tree to be Removed
- Root Protection Area (RPA)
- First Significant Branch Direction
- Root Protective Barrier
- Special Measures
- Tree Shadow

Tree Heritage

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Client:

Mr J. & Mrs S. Reaney

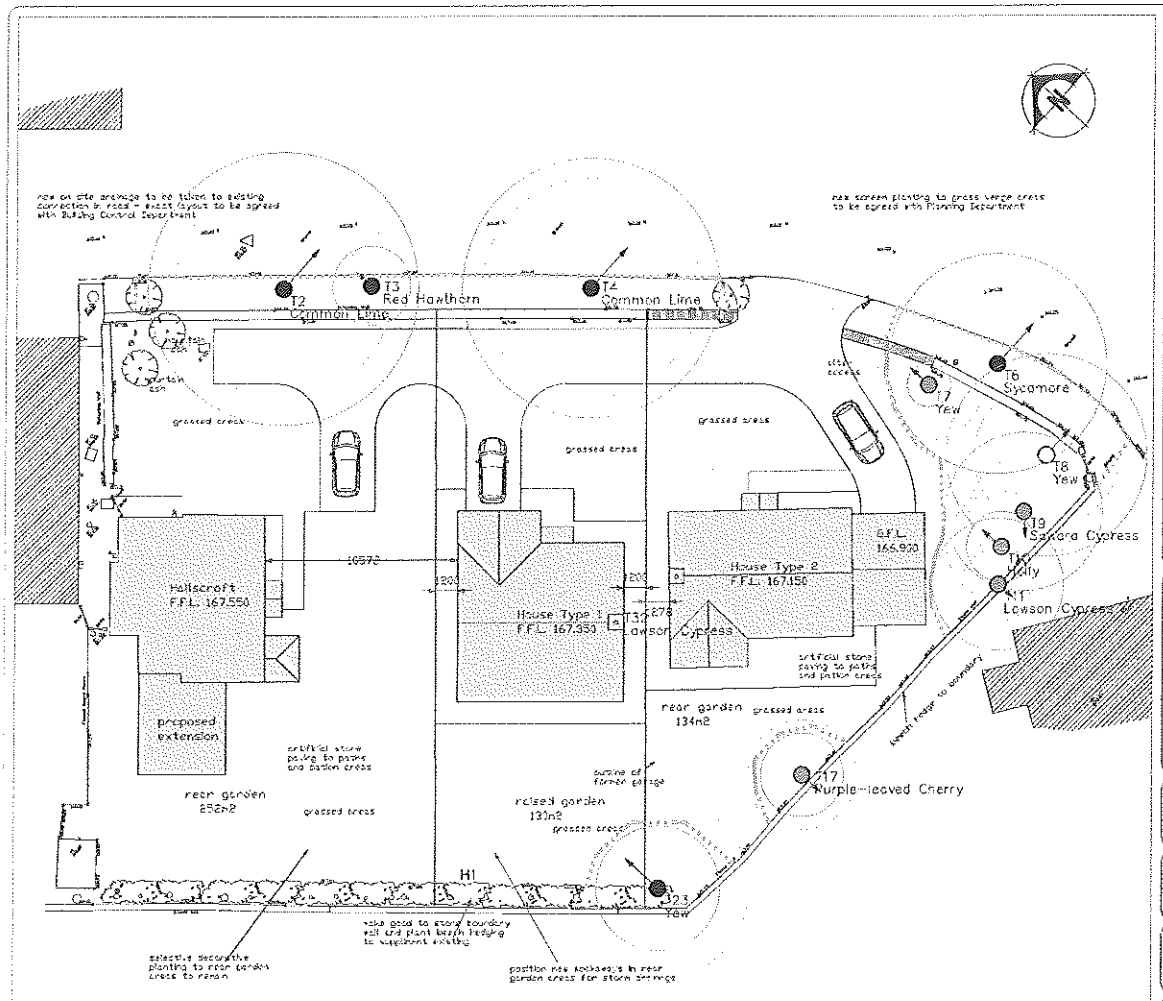
Project:

Hallscroft, Rudyard

Drawing Title:

Arboricultural Implications Assessment

Scale:	Paper Size:	Date Created:
1:200	A3	25/11/14
Drawing Number:		Drawing Revision:
THL-0175		2



Notes:

1. Do not scale off this drawing. Tree canopy is are symbolic only and are representative of the average spread. We may not represent the true outline. Note that the tree stem may not sit centrally to canopy. The stem is not shown to scale - see schedule.

Rev:	Date:	Description of Amendments	By:

Key

- Category A Tree
- Category B Tree
- Category C Tree
- Category U Tree
- Branch Spread
- Tree to be Removed
- Root Protection Area (RPA)
- First Significant Branch Direction
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Project:

Hallscroft, Rudyard

Drawing Title:

Tree Protection Plan

Scale:	Paper Size:	Date Created:
1:200	A3	25/11/14
Drawing Number: THL-0175		Drawing Revision: 3

Appendix D

Construction of Roads and Footpaths through Trees

Special measures should be taken to ensure no damage occurs. A "no dig method" of construction should be adopted in accordance with Arboricultural Practice Note 12 (APN12).

1.1 It is essential to protect the RPA of the trees from the start of operations and that the Tree Protection Fencing is erected before any construction work or site clearance begins at this point.

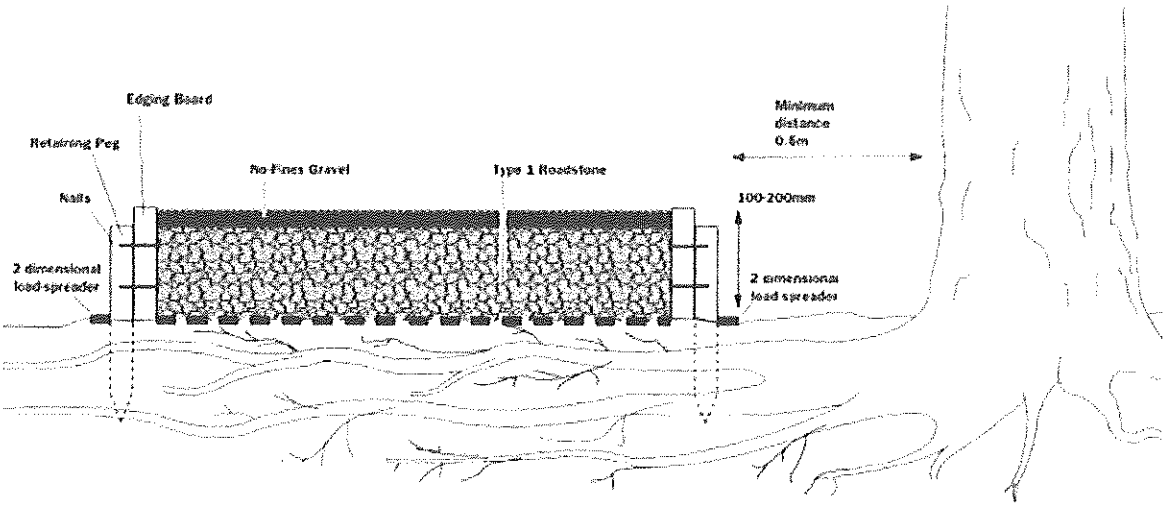
1.2 A "no dig method" means; Roots must not be severed, cut or broken. Ground levels must not be changed. Soil must not be compacted. Oxygen must be able to diffuse into the soil beneath the engineered surface.

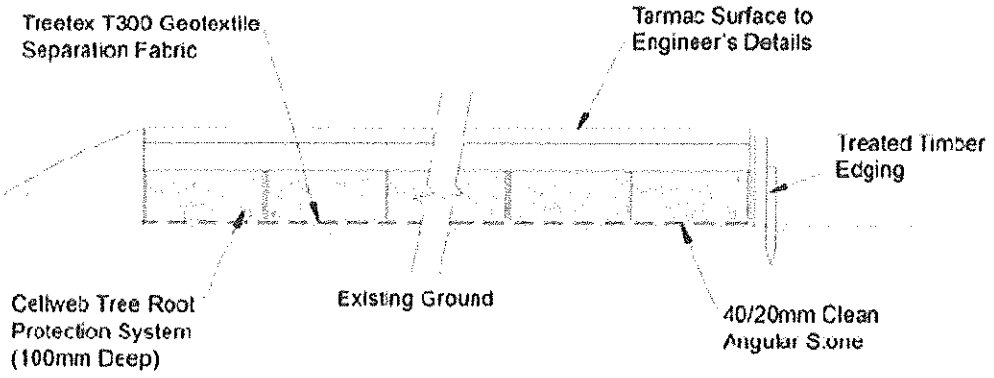
1.3 The road or footpath should be designed to sit on top of the existing ground level without any excavating. This may mean adjusting the levels elsewhere to avoid sudden changes in levels around the trees.

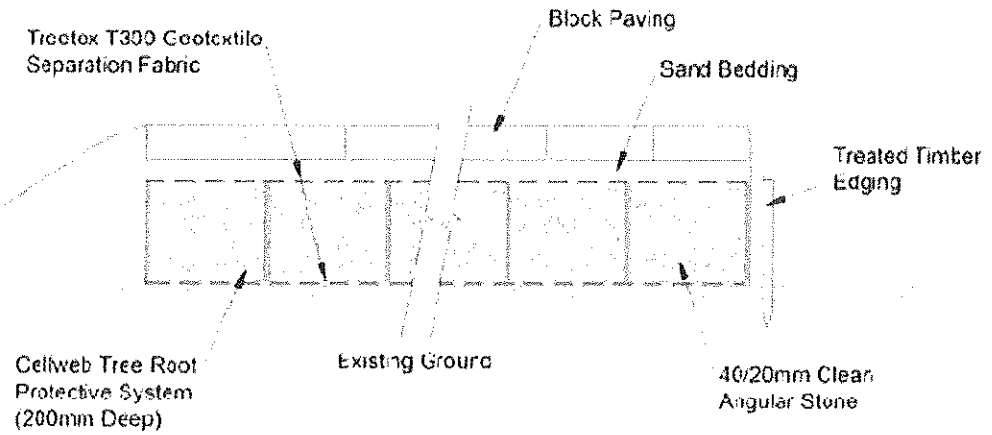
1.4 If a "Tarmac" surface is used it would be desirable to incorporate some perforated section to allow the exchange of gasses if the path is wider than a normal footpath. If the surface is "Block Paving" then no pointing should take place to allow water and gas exchange.

1.5 An example of a possible construction method is shown below in Figure 1 using a 3-dimensional load spreader.

Figure 1


Edging Board
Retaining Peg
Nails
No-Fines Gravel
Type 1 Roadstone
Minimum distance 0.5m
100-200mm
2 dimensional load spreader
2 dimensional load spreader


Treetex T300 Geotextile Separation Fabric
Tarmac Surface to Engineer's Details
Treated Timber Edging
Cellweb Tree Root Protection System (100mm Deep)
Existing Ground
40/20mm Clean Angular Stone


Block Paving
Treetex T300 Geotextile Separation Fabric
Sand Bedding
Treated Timber Edging
Cellweb Tree Root Protective System (200mm Deep)
Existing Ground
40/20mm Clean Angular Stone