

# **Arboricultural Report**

## **– Tree survey in accordance with BS5837: 2012**

**Planning Application: 2016/1273**

**19 Prospect  
Rockside  
Thurlstone  
Sheffield  
S36 9RA**

**12<sup>th</sup> January 2017**

Reference: **JC/065/170112**

Prepared for:

**Adam Pearson**

Prepared by:

**Jon Coe Tree Services Ltd**

Telephone: **0114 235 3889**

Mobile: **07747 664560**

Email: [jon@joncoetreeservices.co.uk](mailto:jon@joncoetreeservices.co.uk)

Registered in England and Wales as limited company number 09689319  
Registered office at 13 Green Oak Road, Sheffield, United Kingdom S17 4FP

## Summary of report

This report presents details of tree protection and arboricultural method statement required by condition of a planning application at 19 Prospect in Thurlstone. The report is prepared in accordance with the requirements of BS5837: 2012 *Trees in relation to design, demolition and construction: Recommendations*.

Eight individual trees and one group of trees were assessed and recorded. Tree locations were plotted. Species and above ground dimensions and constraints were recorded. Observations were made on tree condition. Below ground constraints were assessed, including the assignment of Root Protection Areas. Trees were categorised according to the criteria in BS5837: 2012 – from category 'A' (highest quality), through categories 'B' and 'C', to category 'U' (lowest quality).

One tree was assigned category B. All other trees lacked the qualities required to raise them above category C.

Crown reduction pruning is recommended for two trees.

The report includes written requirements for tree protection and arboricultural method statement. Appendices to the report include a Tree Constraints Plan and Tree Protection Plan.

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## **1. Introduction**

### **1.1 Terms of instruction**

Jon Coe Tree Services Ltd were instructed by Adam Pearson to undertake a tree survey and report at 19 Prospect, Rockside, Thurlstone.

### **1.2 Scope of survey**

The report is required to satisfy a planning condition requiring details of tree protection and arboricultural method statement - to be in accordance with BS5837: 2012 '*Trees in relation to design, demolition and construction: Recommendations*'<sup>1</sup> (referred to herein as BS5837: 2012<sup>1</sup>). This was not a detailed risk assessment survey.

The survey included all trees that the site visit determined could be affected by construction of the approved site layout (see section 1.3)

### **1.3 Documents supplied by client**

The architect's drawings of existing and proposed site layout were supplied by email on 14/12/2016 (drawing 2022\_TP\_002). This did not include accurate tree locations.

### **1.4 Items included within this report**

The main report describes, in this order: the collection of data; summary of data; impact of the proposal on trees; tree protection; arboricultural method statement, and other relevant issues. It is followed by references, a selection of photographs to illustrate points raised, and the appendices.

### **1.5 Essential documents supplied within this report**

Central to the purpose of this report are the Tree Schedule (Appendix A), Tree Constraints Data (Appendix B) and the Tree Protection Plan (Appendix H).

## **1.6 Qualifications and experience**

The survey and report were carried out by Jon Coe, who holds a BSc (Honours) degree in Arboriculture from Myerscough College, Professional-grade membership of the Arboricultural Association, and Associate membership of the Institute of Chartered Foresters.

Jon undertakes many shorter courses as part of his commitment to professional development. These have included the following Arboricultural Association courses:

- BS5837: Tree surveying and categorisation
- BS5837: Tree assessment for planning applications
- BS5837: Managing trees on construction sites

Jon has twelve years of continuous experience working in the arboricultural industry.

## **1.7 Caveats and limitations**

This report is for the use of the client only. Its use or reproduction by any other party is forbidden without the author's prior written consent.

No reliance should be given to any non-arboricultural observations, which are made from the standpoint of a layperson.

The survey was solely concerned with the requirements of BS5837: 2012<sup>1</sup>.

The survey was not a risk assessment survey, and it considered tree health only so far as necessary to fulfil the requirements of BS5837: 2012<sup>1</sup>.

The survey and all observations were made from ground level only.

No soil samples were taken.

On occasion, stem diameter measurements were not possible or practical, and in these cases a conservative estimate (i.e. favouring a larger RPA) was made, and recorded as such. Such cases may include where there are a large number of small stems in a multi-stemmed tree, or where trees are surrounded by dense or thorny undergrowth.

Observations were valid at the time they were made. However, trees are dynamic and growing structures that experience changes affected by time, weather and other factors.

This report's purpose is to advise on the possibilities and priorities for the sustainable retention of trees within the planning process. In all cases, Jon Coe Tree Services Ltd advise strongly against any pre-emptive felling, or other tree works carried out prior to the granting of planning approval.

## **2. Data collection**

### **2.1 Site visit**

The survey was conducted on Friday 16<sup>th</sup> December 2016. It was a dry overcast day, and visibility was good.

### **2.2 The site and trees**

The property is at the western end of a long block of houses, with the proposed extension adding to the west of this. The site layout can be seen in the Tree Constraints Plan (Appendix F). The trees in question are all on neighbouring land. The northerly trees are part of a larger woodland-type block that covers the slopes north of the property. There is also a row of low quality pruned conifers. The land on which the trees are located is raised above the ground level of 19 Prospect by a retaining wall; it also slopes uphill from 19 Prospect to higher neighbouring land (see Photo 1). Further north, the land slopes downwards towards the River Don.

Individual tree's details are recorded in the Tree Schedule (Appendix A) and the Tree Constraints data (Appendix B). Findings are summarised in section 3.1.

### **2.3 Survey method**

The initial tree survey was conducted without reference to the development proposal.

Each tree was given a tree identification number, as shown on the Tree Constraints Plan (Appendix F).

Stem locations were identified to the best ability of the arboricultural surveyor. This involved triangulation of stem location using a laser rangefinder (Leica Disto D810), referenced to existing building features. The accuracy of stem location should not be relied upon to the same extent as with a topographical survey.

The species of each tree was recorded. Common names are used in the Tree Schedule (Appendix A), with a list of botanical names supplied in Appendix C.

Where appropriate, trees were assigned to group locations if they formed cohesive arboricultural units.

Tree height was estimated in metres (m), to the nearest 0.5 m (rounded up) - or the nearest metre for trees above 10 m. At regular intervals, or for trees where precise height is likely to be important, it was recorded using the 'Measure Height' Android app; this has been checked for accuracy using a Suunto clinometer, to which it bears close comparison.

Stem diameter was measured in millimetres (mm) using a diameter tape, in accordance with the conventions detailed in Annex C of BS5837: 2012<sup>1</sup>, which in most cases is at 1.5m above ground level.

Crown spread was recorded at the four cardinal points, to the nearest 0.5m (rounded up) - using a laser range-finder (Leica Disto D810).

Where it was likely to be relevant, height and direction of growth of the first major branch, was estimated to the nearest 0.5 m.

Where it was likely to be relevant, height of canopy clearance was recorded to the nearest 0.5 m. This was necessarily an estimate, as canopy clearance is not usually consistent around the whole tree; a figure for the typical low point around the canopy was therefore estimated. Where appropriate, minor or epicormic branch growth was disregarded, in order to better portray the situation so far as clearance was concerned. Where canopy cover extends both on and off site (i.e. boundary trees), the on-site value for canopy clearance was used unless otherwise stated.

Age class was assessed according to the five possible categories listed in BS5837: 2012<sup>1</sup>. These are young, semi-mature, early-mature, mature and over-mature.

Structural and physiological condition of trees were separately assessed and summarised using five possible categories: poor, moderate, fair, good, very good. More specific observations on condition were noted under 'Observations'.

'Observations' included details of specific structural and physiological issues, notes on past and suggested future management, and problems currently presented by the trees.

An estimate was made (in years) of the potential remaining contribution that each tree could offer, in its current situation, without a need for significant tree surgery operations.

Each tree was categorised according to the guidance given in BS5837: 2012<sup>1</sup> (Appendix D). Retention categories of A, B, C or U were allocated (in descending order of tree quality), with an additional sub-category of 1, 2 or 3 that defines whether the principal category was allocated for arboricultural, landscape or cultural reasons respectively.

### **3. Summary of data**

#### **3.1 Trees**

The survey includes eight individual trees and one tree grouping. Individual trees' and groups' details and comments are recorded in the Tree Schedule (Appendix A) and the Tree Constraints data (Appendix B). Individual tree locations are shown on the Tree Constraints Plan (Appendix F).

#### **3.2 Retention categories**

Retention categories have been assigned in accordance with the criteria in BS5837: 2012<sup>1</sup> (Appendix D).

Tree 5 is a relatively prominent and well-structured common ash, without obvious defect. It is assigned category B.

The remainder of the trees on site lack the qualities required to raise them above the level of category C.

### **3.3 Below ground constraints**

The Root Protection Areas (RPAs) are the areas in which construction and activities related to the construction process should not take place, in order to protect the trees' root systems. Where such activities cannot be avoided, it may be possible to incorporate design measures that prevent the damage that may occur to the tree's health and stability through soil compaction, level changes, root severance and contamination. Sections 6 and 7 of BS5837: 2012<sup>1</sup> outline methods for protecting RPAs during the construction process, and for building within them where this is unavoidable.

RPAs are generically calculated as an area equivalent to a circle with a radius 12 times the stem diameter, in accordance with section 4.6.1 of BS5837: 2012<sup>1</sup>; this also provides methods for calculating the combined stem diameter of multi-stem trees.

In accordance with BS5837: 2012<sup>1</sup>, the RPAs listed in the Tree Constraints data (Appendix B) have been determined from the stem diameter by using Table 4 (Appendix E), whose values are themselves extracted from Table D.1 in Annex D of the standard (BS5837: 2012<sup>1</sup>). Stem diameters are rounded up to align with those in Table 4; potentially to the trees' benefit.

Where group locations occur, a continuous RPA boundary has been shown on the Tree Constraints Plan (Appendix F). The extent of this boundary has been determined by the tree assessor, using a balanced judgement of the various contributing factors – particularly the species composition and density of the group.

### **3.4 Above ground constraints**

Data for crown spread is listed in the Tree Constraints Data (Appendix B). Additionally, the Tree Schedule (Appendix A) contains data on canopy clearance, and the height of the first major branch (where applicable).

## **4. Arboricultural Impact Assessment**

### **4.1 Overview of the impact of proposed development on trees on this site**

No tree removals are required.

Crown reduction pruning is recommended for two trees.

### **4.2 Tree pruning**

Crown reduction pruning of an elm is recommended (Tree 1) to address issues of shade and light. This should be an approximate 4 metre reduction in height, with lateral branches pruned by approximately 3 metres.

Crown reduction pruning of a sycamore is recommended (Tree 2), again to address issues of shade and light. This should be an approximate 3 metre reduction in height, with lateral branches pruned to match this.

In all cases, pruning cuts should be to appropriate growing points in accordance with BS 3998: 2010 *Tree work – Recommendations*<sup>2</sup>.

### **4.3 Impact on Trees 6 to 9**

The reconstruction of outbuildings will take place within the Root Protection Areas (RPAs) of trees 6 to 9. However, ground level within the outbuilding's footprint is approximately two metres lower than the ground level surrounding trees 6 to 9. As such, all roots will be contained behind the retaining wall that is also the structural wall of the outbuilding (see Photos 4 and 6). It is not yet certain if the retaining/structural wall will require rebuilding, but all land beyond the existing wall is neighbouring property, and there can therefore be no excavation beyond the existing wall. If wall reconstruction exposes any root ends, the Arboricultural Method Statement outlines how these should be dealt with (see section 6.3).

## **5. Tree Protection Plan**

### **5.1 Temporary fencing**

Areas where temporary fencing is required - to protect tree RPAs - are shown in Appendix H. Details of the required specification for this fencing are given in section 5.3.

### **5.2 Timing**

The requirements of the Tree Protection Plan should be implemented in full prior to the commencement of any construction work. All parties operating on site, and all those involved in planning construction operations, should be made aware of the requirements of the Tree Protection Plan.

### **5.3 Temporary fencing specification**

Due to the uneven terrain adjacent to the trees' RPAs, and its significantly upsloping nature, installation of the typical 2 metre high welded mesh panels is impractical and would require further pruning for it to be accommodated. It can be seen from Photos 1 and 2 that the terrain is such that it is unlikely to be considered useable by builders, except at its lowest edge. Furthermore, it is on neighbouring private land, and any usage would therefore require the neighbouring landowner's permission. As such it is sufficient in this instance to specify a basic tree protection barrier formed from site pins and flexible plastic mesh - this must be at least one metre high. This should be installed wherever the Tree Protection Plan indicates 'tree protection fencing', with its location to be measured precisely using a scale version of the supplied drawing (Appendix H). An all-weather notice should be affixed to the fencing with the following (or similar) wording: "Construction exclusion zone (tree protection) – no access" (BS5837: 2012<sup>1</sup>).

## **6. Arboricultural Method Statement**

### **6.1 Scheduling**

The various components of this method statement are arranged sequentially, in the order in which they should be carried out.

### **6.2 Tree surgery**

Details of all tree surgery operations required or recommended to facilitate the proposed construction works are detailed within the Arboricultural Impact Assessment (section 4).

All pruning operations should be carried out in accordance with the various guidance in BS 3998: 2010 *Tree work – Recommendations*<sup>2</sup>.

### **6.3 Severing or exposing tree roots**

During reconstruction of the outbuildings, it is likely that some minor roots will be encountered. This is most likely to apply to trees 6 to 9 during wall reconstruction. If it is necessary to sever any of these individual minor roots (less than 25 mm diameter), this can be done using secateurs or a sharp handsaw. If small-diameter roots occur in clumps, or if roots exceed 25 mm diameter, they should only be severed after consultation with the project arboriculturist. (BS5837: 2012<sup>1</sup>).

Any roots that are exposed should be immediately covered to prevent drying out, and to protect them from sudden temperature changes. This is especially important during the colder months, when frost damage of roots is a significant risk. (BS5837: 2012<sup>1</sup>).

### **6.4 Contact details – relevant parties**

In the event of queries during any part of this project, the project's arboriculturist is Jon Coe, who can be contacted on 07747 664560 or [jon@joncoetreeservices.co.uk](mailto:jon@joncoetreeservices.co.uk)

## **7. Other observations**

### **7.1 Legal status of trees on site**

The existence of Tree Preservation Orders and Conservation Areas has not been checked in the writing of this report. Work to such trees requires approval by the local planning authority; for any works recommended in this report, the discharge of conditions provides the required approval for the necessary tree work. The relevant legislation to these matters is contained within the Town and Country Planning Act 1990 <sup>3</sup> and The Town and Country Planning (Tree Preservation) (England) Regulations 2012 <sup>4</sup>.

### **7.2 Wildlife considerations and law**

The requirements the following legislation should also be considered in the planning of any arboricultural operations.

- Wildlife and Countryside Act 1981 <sup>5</sup>
- Countryside and Rights of Way Act 2000 <sup>6</sup>
- The Conservation of Habitats and Species Regulations 2010 <sup>7</sup>
- The Conservation of Habitats and Species (Amendment) Regulations 2011 <sup>8</sup>

One combined effect of the above legislation is that tree work operations must be planned to avoid disturbance to nesting, breeding or roosting birds, or to bats and their roosts. The nests of wild birds are protected whilst in use, and all 18 bat species found in the UK are afforded European Protected Species status.

### **7.3 Standards of tree work**

Unless otherwise specified, any tree work recommended in this report should be carried out in accordance with the British Standard *BS 3998: 2010 Tree work – Recommendations* <sup>2</sup>.

## Reference List

1. British Standards Institution (2012) *BS 5837: 2012 Trees in relation to design, demolition and construction – Recommendations*. London, BSI Standards Ltd.
2. British Standards Institution (2010) *BS 3998: 2010 Tree work – Recommendations*. London, BSI Standards Ltd.
3. *Town and Country Planning Act 1990*. London, HMSO.
4. *The Town and Country Planning (Tree Preservation) (England) Regulations 2012*. London, HMSO.
5. *Wildlife and Countryside Act 1981*. London, HMSO.
6. *Countryside and Rights of Way Act 2000*. London, HMSO.
7. *The Conservation of Habitats and Species Regulations 2010*. London, HMSO.
8. *The Conservation of Habitats and Species (Amendment) Regulations 2011*. London, HMSO.

## Photographs



**Photo 1.** View from north



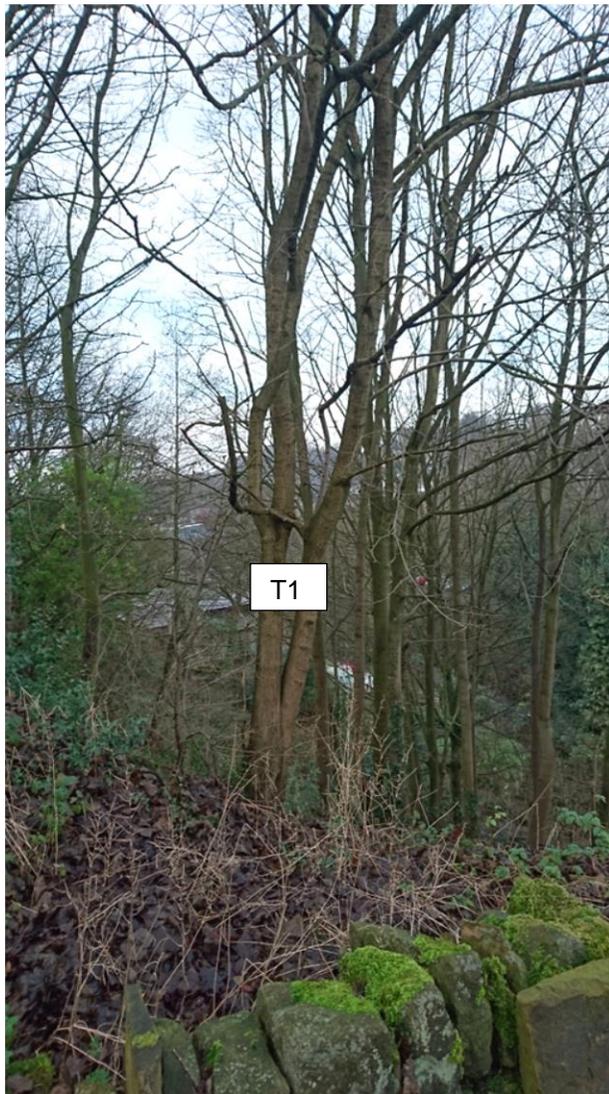
**Photo 2.** Another view from north



**Photo 3.** View from south-east. The drystone retaining wall will be the westernmost limit of the house extension – beyond that is neighbouring property.



**Photo 4.** View from north, showing the outhouses that are to be replaced, and the location of conifers (trees 6 to 9) on much higher adjacent ground.



**Photo 5.** Tree 1 is an unremarkable early-mature elm, with a tight co-dominant union and included bark.



**Photo 6.** Outbuilding due for replacement, with conifer trees 6 to 9 on much higher ground above.

## Appendices

### Appendix A: Tree Schedule (excluding Root Protection Areas and crown spread)

**Table 1** (overleaf) contains data for all trees, excluding Root Protection Areas and crown spread details – which are found in Appendix B.

**Condition categories, in ascending order of quality:**

*poor – moderate – fair – good - very good*

Tree Number	Species (common name)	Height (m)	1st major branch - height (m) and direction	Canopy clearance (m)	Life stage	Condition (structural : physiological)	Observations, and suggestions for management	Remaining contribution (years)	BS retention category
1	Elm	17	6 , E	3.5	Early Mature	Moderate : Fair	A younger tree than diameter suggests - it is twin stemmed above 1 m height. SEE PHOTO 5. Co-dominant stems with bark inclusion. Native elm likely to die from Dutch Elm Disease. Overhangs proposed layout footprint at a low level. Major effect on light to existing and proposed property - a 4 metre height reduction is recommended, with lateral branches pruned back by 3 m.	10+ Years	C1
2	Sycamore	15	3.5 , E	2	Early Mature	Fair : Fair	3 m height reduction recommended, pruning lower branches to match this. A nondescript woodland sycamore. NOTE ALL CANOPY CLEARANCE FIGURES GIVEN ARE FOR CLEARANCE OVER THE LAND AT 19 PROSPECT	40+ Years	C1
3	Hawthorn	4.5		1.5	Semi Mature	Fair : Fair	No significant issues observed	40+ Years	C1
4	Cherry	5	3 , E	3	Early Mature	Moderate : Fair	Previously reduced in height	10+ Years	C1
5	Common ash	17	4 , E	9	Early Mature	Good : Fair	No significant issues observed	40+ Years	B1,2
6	Cypress, Lawson	6		3.5	Early Mature	Moderate : Fair	Part of row pruned at 6 m height	20+ Years	C1
7	Leylandii	6		2.5	Early Mature	Moderate : Fair	Part of row pruned at 6 m height	20+ Years	C1
8	Leylandii	6		2.5	Early Mature	Moderate : Fair	Part of row pruned at 6 m height	20+ Years	C1
9	Group - Leylandii	6		2.5	Early Mature	Moderate : Fair	Part of row pruned at 6 m height	20+ Years	C1

## **Appendix B: Tree Constraints Data: Root Protection Areas (RPAs) and crown spread**

**Table 2** (overleaf) contains data for Root Protection Areas and crown spread for all trees – all other tree data is found in in Appendix A.

Tree Number	No. of stems	Diameter (mm) single stem	Diameter (mm) - 2 to 5 stems					Mean stem diameter (mm) > 5 stems	Calculated stem diameter (mm)	Radius of nominal circle (from BS5837: 2012 <sup>1</sup> Annex D)	RPA Area (m <sup>2</sup> ) (from BS5837: 2012 <sup>1</sup> Annex D)	Crown spread (m)			
			stem 1	stem 2	stem 3	stem 4	stem 5					north	south	east	west
1	1	490							490	6	113	7	5	8	2
2	1	450							450	5.4	92	3	6	7	1
3	1	150							150	1.8	10	2.5	1.5	2.5	1
4	1	190							190	2.4	18	3	3	2.5	1
5	1	520							520	6.3	124	6	6.5	7	5
6	1	190							190	2.4	18	1.5	1.5	2	1
7	1	150							150	1.8	10	1.5	1.5	2.5	1
8	1	180							180	2.4	18	1.5	1.5	2.5	1
9	Group location - Root Protection Area and canopy extent are as shown on Tree Protection Plan														

## Appendix C:    Key to botanical names

Cherry	- <i>Prunus</i> spp.
Common ash	- <i>Fraxinus excelsior</i>
Common hawthorn	- <i>Crataegus monogyna</i>
Elm	- <i>Ulmus</i> spp.
Lawson cypress	- <i>Chamaecyparis lawsoniana</i>
Leylandii	- X <i>Cupressocyparis leylandii</i>
Sycamore	- <i>Acer pseudoplatanus</i>

## **Appendix D: Tree retention categories**

Trees are assessed for retention categories in the order in which those categories appear in the table below – with all trees initially assessed against the criteria for category ‘U’, followed sequentially by categories ‘A’, ‘B’ and ‘C’.

**Table 3** (overleaf) is based on Table 1 of BS5837: 2012 <sup>1</sup>; some but not all of the text is necessarily reproduced verbatim.

Table 3.

<b>Trees that are not suitable for retention</b>			
<p><b>Category U</b></p> <p>Trees whose condition means that their retention as living trees beyond 10 years is unrealistic in the context of the current land use</p>	<p>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 (where, for example, 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> <p>In some circumstances, category U trees may have conservation value which it might be desirable to preserve, despite tree condition.</p>		
<b>Trees whose retention should be prioritised</b>			
	1.	2.	3.
	Predominantly arboricultural merit	Predominantly landscape merit	Predominantly cultural merit (includes conservation value)
<p><b>Category A</b></p> <p>High quality trees, currently with life expectancy of at least 40 years</p>	<p>Trees that are particularly good examples of their species, especially rare or unusual species. Also trees that are essential components of groups or formal or semi - formal arboricultural features (such as an avenue's dominant or principal trees).</p>	<p>Trees, groups or woodlands that have particular visual importance as arboricultural and/or landscape features</p>	<p>Trees, groups or woodlands that have significant conservation, historical, commemorative or other value (such as veteran trees or wood - pasture)</p>

<b>Trees whose retention should be considered (with Category B assuming the greater priority in retention decisions)</b>			
	<b>1. Predominantly arboricultural merit</b>	<b>2. Predominantly landscape merit</b>	<b>3. Predominantly cultural merit (includes conservation value)</b>
<b>Category B</b> Moderate quality trees, currently with life expectancy of at least 20 years	Trees that are excluded from category A due to impaired condition (such as the presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention beyond 40 years. Also trees that simply lack the special quality necessary to merit the category A designation.	Trees present in numbers, often those growing as groups or woodlands, such that their collective rating is higher than that which they might attract as individuals. Also trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees that have material conservation or other cultural value.
<b>Category C</b> Low quality trees, currently with life expectancy of at least 10 years. Also young trees of stem diameter <150mm.	Trees that are unremarkable or of very limited merit, or that have such impaired condition that they do not qualify in higher categories.	Trees growing as groups or woodlands, but without this conferring on them significantly greater collective landscape value. Also trees offering low or only temporary/transient landscape benefits.	Trees lacking any material conservation or other cultural value.

## Appendix E: Calculating Root Protection Areas

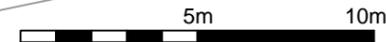
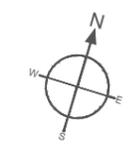
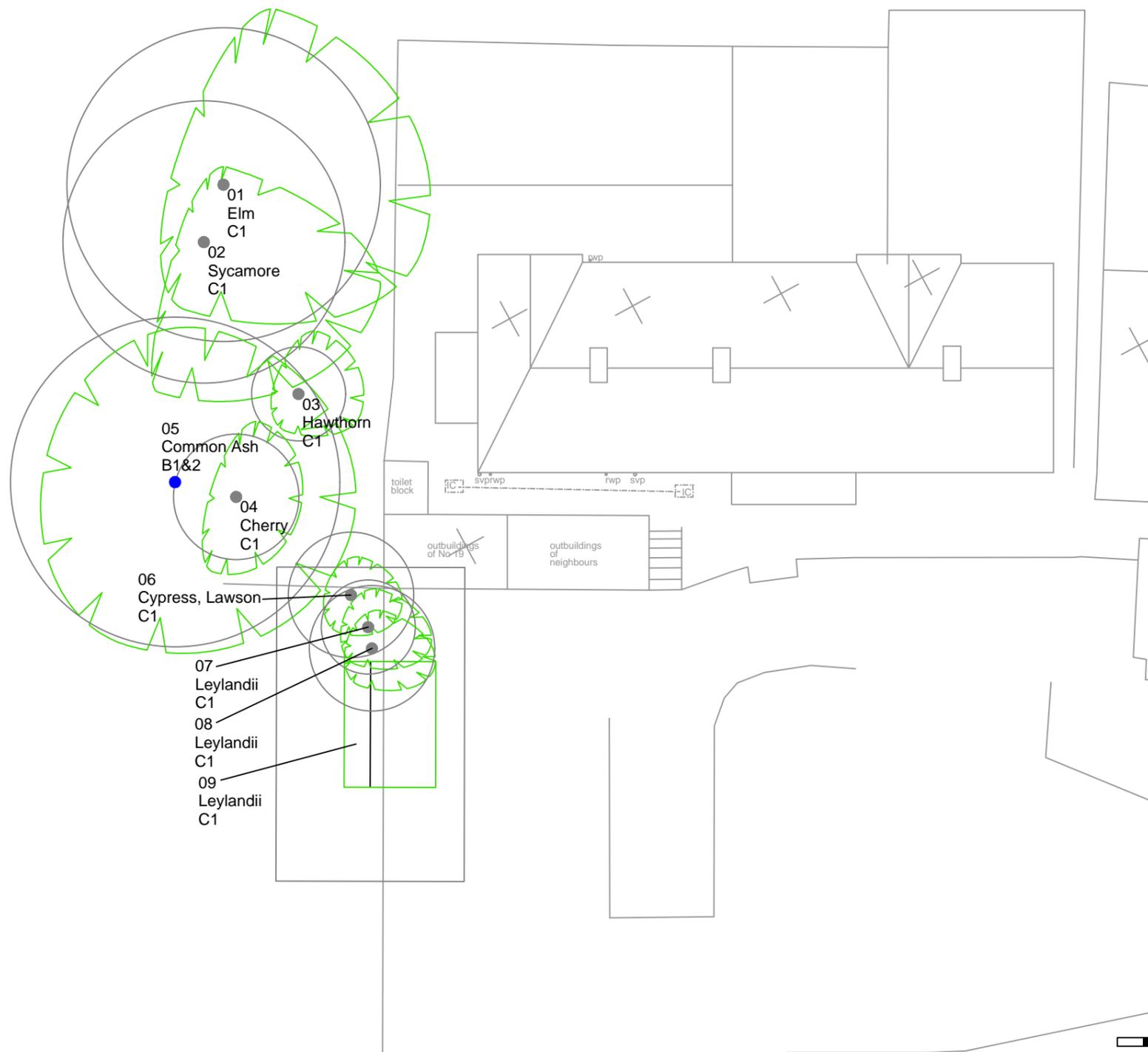
**Table 4.** This table was used to establish Root Protection Areas (RPAs) in accordance with section 4.6.1 of BS5837: 2012<sup>1</sup>, and Annex D of the same standard (from which this table's values are drawn). 'Stem diameter' refers to either the measured diameter of single stem trees, or the calculated combined stem diameter of multi-stem trees (BS5837: 2012<sup>1</sup>, 4.6.1).

Stem diameter (mm)	Radius of a uniformly circular RPA (m)	RPA – area (m <sup>2</sup> )	Stem diameter (mm)	Radius of a uniformly circular RPA (m)	RPA – area (m <sup>2</sup> )
75	0.9	3	675	8.1	206
100	1.2	5	700	8.4	222
125	1.5	7	725	8.7	238
150	1.8	10	750	9.0	255
175	2.1	14	775	9.3	272
200	2.4	18	800	9.6	290
225	2.7	23	825	9.9	308
250	3.0	28	850	10.2	327
275	3.3	34	875	10.5	346
300	3.6	41	900	10.8	366
325	3.9	48	925	11.1	387
350	4.2	55	950	11.4	408
375	4.5	64	975	11.7	430
400	4.8	72	1000	12.0	452
425	5.1	81	1025	12.3	475
450	5.4	92	1050	12.6	499
475	5.7	102	1075	12.9	519
500	6.0	113	1100	13.2	547
525	6.3	124	1125	13.5	573
550	6.6	137	1150	13.8	598
575	6.9	150	1175	14.1	625
600	7.2	163	1200	14.4	652
625	7.5	177	1225	14.7	679
650	7.8	191	1250+	15.0	707

## **Appendix F: Tree Constraints Plan**

The Tree Constraints Plan (overleaf) indicates the locations, retention categories, Root Protection Areas and crown spreads of all relevant trees.

A topographical survey was not provided to Jon Coe Tree Services Ltd prior to the survey. The arboricultural surveyor has therefore recorded stem locations himself, to the best of his ability. This involved triangulation of stem location using a laser rangefinder. The accuracy of stem location should not be relied upon to the same extent as with a topographical survey.



**Jon Coe Tree Services Ltd**  
 mobile: 07747 664560  
 office: 0114 235 3889  
 email: jon@joncoetreeservices.co.uk  
 www.joncoetreeservices.co.uk

---

Site: 19 Prospect, Rockside, Thurlstone	1-200@A3
Drawing Title: Tree Constraints Plan	Dec 2016

---

**Key:**

<ul style="list-style-type: none"> <li><span style="color: green;">●</span> Category A</li> <li><span style="color: blue;">●</span> Category B</li> <li><span style="color: grey;">●</span> Category C</li> <li><span style="color: red;">●</span> Category U</li> </ul>	<p style="font-size: small;">NOTE: tree locations are approximate</p>
--	---

## **Appendix G: Proposed development plan**

The proposed (and existing) layout overleaf, on which this report's findings are based, was supplied by Design Space Architecture. Note that tree locations and numbering on this drawing are incorrect - see Appendices F and H for correct tree information.

**Notes:**

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**Revision: -**

Revision List:



Project/ Client: 19-21 Prospect / Pearson

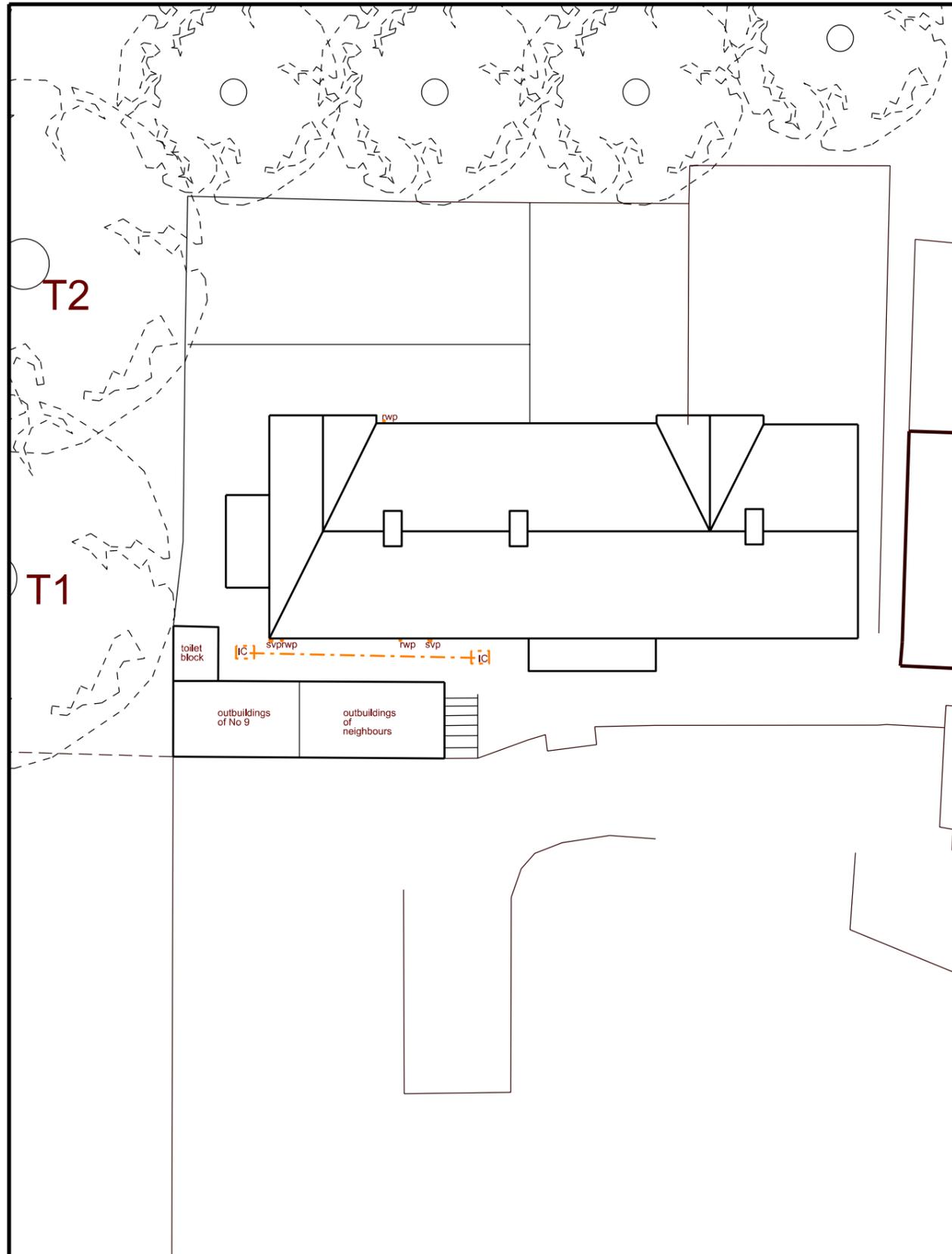
Drawing Title: Site Plan - Existing & Proposed

Drawing Number: 2022/TP/002

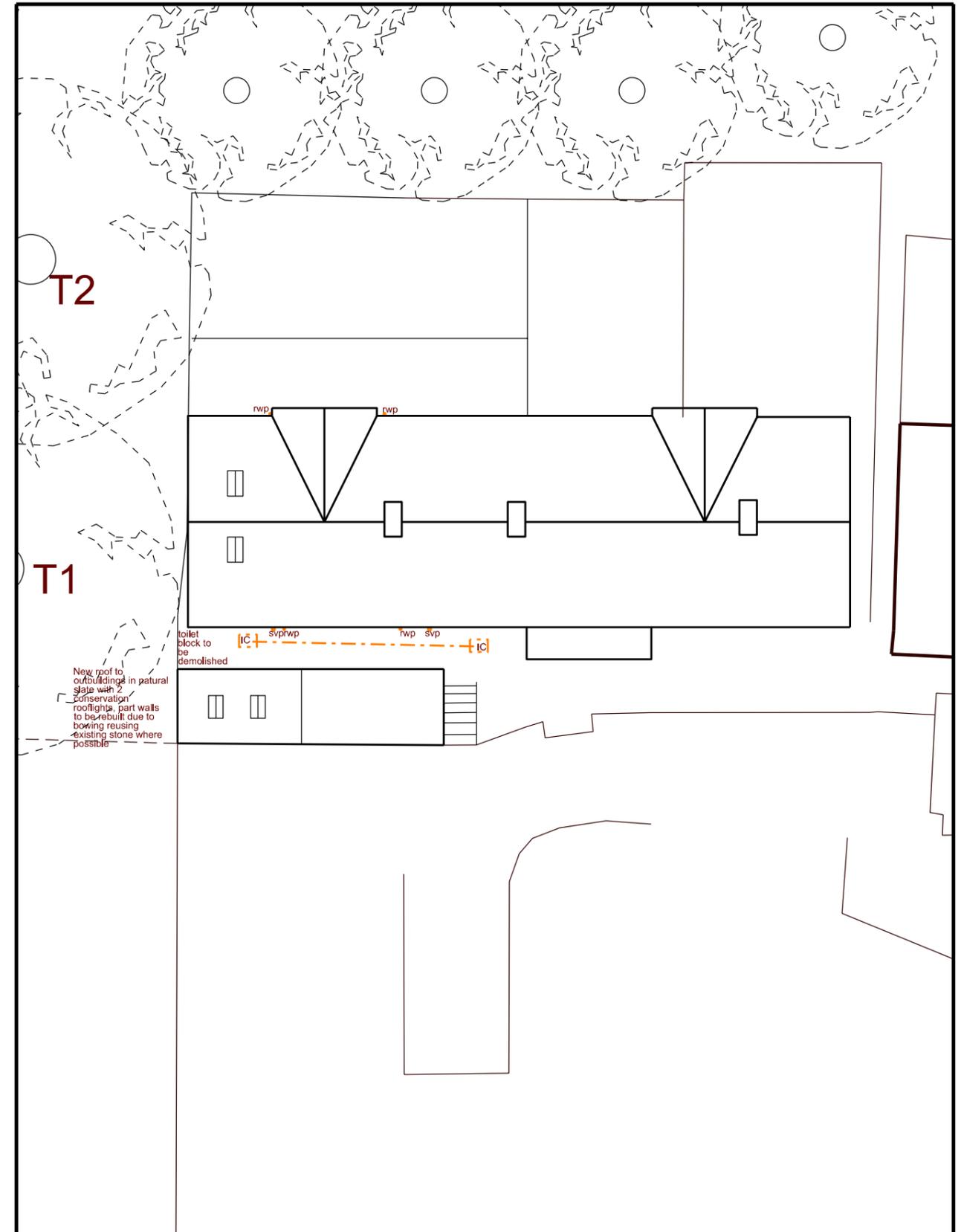
Scale at A3: 1:200



Date: Sept 16



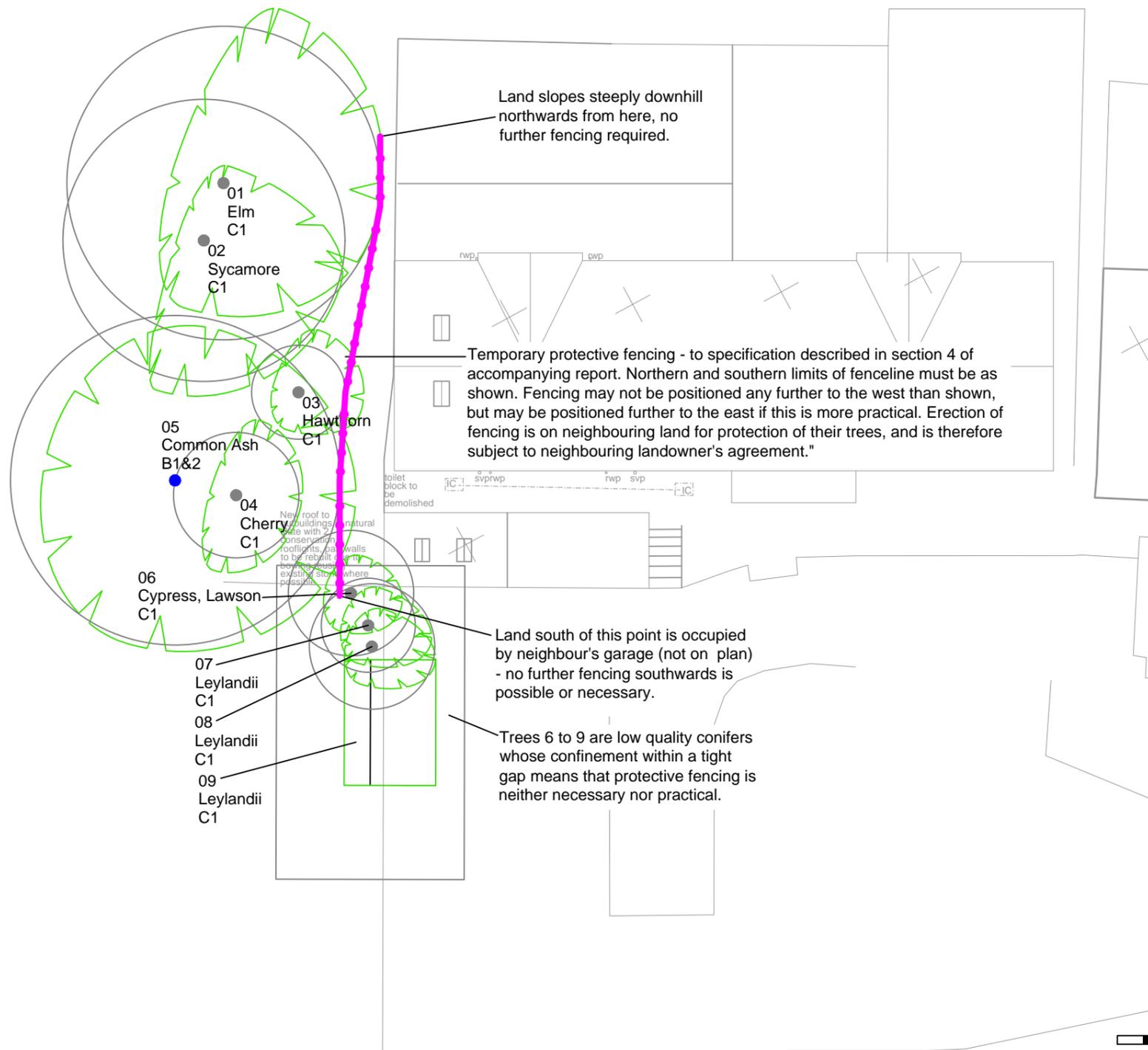
Site Plan - Existing



Site Plan - Proposed

## **Appendix H: Tree protection plan - drawing**

The drawing overleaf illustrates the layout referred to in the Tree Protection Plan (section 5). Neither this drawing nor section 5 stands alone; it is essential that both are referred to together.

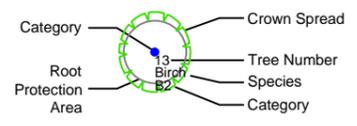



Jon Coe Tree Services Ltd  
 mobile: 07747 664560  
 office: 0114 235 3889  
 email: jon@joncoetreeservices.co.uk  
 www.joncoetreeservices.co.uk

Site: 19 Prospect, Rockside, Thurlstone	1-200@A3
Drawing Title: Tree Protection Plan	Rev A, Jan 2017

Key:

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



NOTE: tree locations are approximate

— Tree Protection Fencing BS5837:2012

