



ARBORICULTURAL REPORT

& Impact Assessment

to BS5837:2012 at:

***Coach House,
Doncaster Road,
Barnsley,
South Yorkshire
S71 5EZ***

Prepared for:
White Agus Partnership
*Office One,
34 Victoria Road,
Barnsley,
South Yorkshire
S70 2BU*

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Reference: *AWA2458*



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1. Introduction

1.1 Instructions and Brief

- 1.1.1 We are instructed by Thomas Agus of White Agus Partnership to visit the site and prepare our findings in a report.
- 1.1.2 The report is required in accordance with *BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations*, to provide detailed, independent, arboricultural advice on the trees present, in the context of potential development.

1.2 Survey Details

- 1.2.1 The survey took place during December 2018.
- 1.2.2 The trees were surveyed visually from the ground using “Visual Tree Assessment” techniques and in accordance with the guiding principles of British Standard 5837:2012.
- 1.2.3 Any additional off-site trees that could impact a new development design have been included in the tree survey parameters.
- 1.2.4 The tree positions were plotted on Ordnance Survey map base-layer using enhanced GPS technology (1-2m accuracy) and laser distance measurer.
- 1.2.5 This report has been prepared by Mr Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, Principle and Director of AWA Tree Consultants Ltd. The tree survey data collection was carried out by Mr James Brown BSc (Hons) Arboriculture, MArborA, Arboriculturist at AWA Tree Consultants Ltd.
- 1.2.6 Full qualifications and experience are included within **Appendix 1**. Explanatory details regarding the survey methodology are included within **Appendix 2**. A full explanation of the tree data can be found at **Appendix 3**. Full details of all the trees surveyed are found in **Appendix 4**. For tree locations refer to the Tree Constraints Plan at **Appendix 5** and for detail of the impacts of the new development refer to the Tree Impacts Plan at **Appendix 6**.

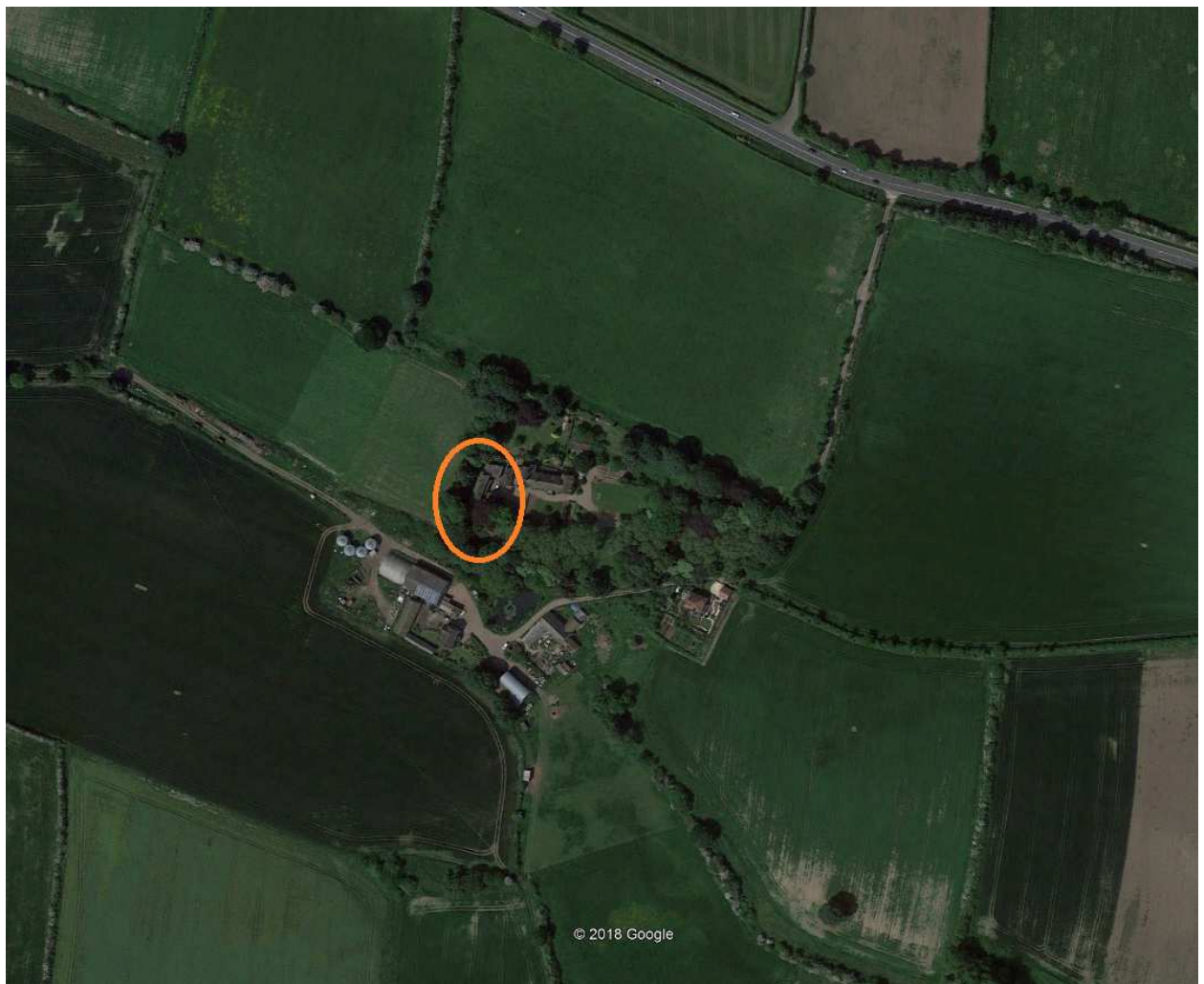
2. The Site

2.1 Location and Description

2.1.1 The site is located off Doncaster Road, Barnsley, South Yorkshire.

2.1.2 The site is a residential property with attached gardens. Neighbouring residential properties are situated to the north and east of the site, with a farm to the south and open fields to the west.

2.1.3 The approximate area of the survey is highlighted in the (2016) image below:



3. The Trees

3.1 Legal

- 3.1.1 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a check should be made with the Local Planning Authority to see if the trees are covered by a Tree Preservation Order or if they are within a Conservation Area (unless such works are approved by planning permission). If either applies, then statutory permission is required before any works can take place.
- 3.1.2 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance. All tree work should be carried out according to British Standard 3998:2010 *Tree Work - Recommendations*.

3.2 Tree Survey Results

- 3.2.1 The tree survey revealed 43 items of woody vegetation, comprised of 42 individual trees and 1 hedge group.
- 3.2.2 Of the surveyed trees: 1 tree is retention category 'U', 3 trees are retention category 'A', 19 trees are retention category 'B' and the remaining 20 trees and groups are retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).
- 3.2.3 Species diversity at the site is good. Sycamore is the dominant species, with several Beech, Lime, Pine and Hawthorn and occasional Ash, Plane, Horse Chestnut, Pear, Cypress and Magnolia. Most of the trees are early mature to mature, with only occasional semi mature trees.
- 3.2.4 The site's most significant individual trees are the Beech T1 and Plane T3, which are large mature trees situated in prominent positions to the front of the property, providing high amenity value to the site and the neighbouring properties. The large mature Sycamore T25 situated to the south west of the property's garden is also of good value. It is recommended to remove the large dead limb from the southern crown of T1 regardless of development at the site, and to remove the rope swing embedded in a lower limb of T25.

- 3.2.5 The Horse Chestnut T2 is in poor overall condition with extensive bark damage, decay and *Cerioporus squamosus* and *Pleurotus ostreatus* fungal brackets to its main stems. There is a partially included bark union at the junction of the tree's two main stems at the base, and the tree appears to have been poorly pruned and 'topped' in the past. The tree's removal is recommended regardless of development at the site.
- 3.2.6 A large mature Ash overhangs a pond situated beyond the site's south eastern corner (T6). The tree has numerous exposed roots at its base and significant deadwood and snap-outs in its crown. There is also an *Inonotus hispidus* fungal bracket in its crown indicating the likelihood of decay to the affected limb. It is recommended to undertake crown cleaning works on the tree, removing any significant deadwood or decayed limbs regardless of development at the site.
- 3.2.7 Trees T7 to T31 are situated in the garden to the side of the property, with trees T15 to T26 growing out of banking bordering a stream along the site's southern boundary. The most significant of these trees are T12, T13, T14, T23, T24, T26, T27 and T28 which are in relatively good overall condition and provide moderate amenity value to the site. The stems of the Sycamore T17 and Pine T18 intertwine and as such both have considerable bark damage and limited long term value. T22 has a long, decayed cavity to the western side of its main stem and likely has limited future prospects.
- 3.2.8 T33 to T41 are situated to the rear of the property. Collectively the trees provide moderate to high amenity value to the site. The most significant of these trees are the Sycamores T35, T36, T40 and T41, Limes T33 and T34 and Pine T37, while T31, T32, T38 and T39 are of low value. The removal of the split stub in the eastern crown of the Sycamore T35 is required regardless of development at the site and the washing line wrapped around the stem of T40 should be removed before it begins to cut into the tree's cambium layer.
- 3.2.9 The Cypress hedge G42 and Sycamore T43 are situated in a neighbouring garden to the north of the site and so were only given cursory inspections with measurements estimated and condition values indicative only. G42 provides some screening value between properties.
- 3.2.10 Some trees were covered in dense Ivy or were inaccessible (as detailed in Appendix 4) in such cases measurements were estimated and the condition values are indicative only.

- 3.2.11 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5, has been used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority.
- 3.2.12 Some lower value tree, hedge and shrub groups do not have RPAs detailed on tree plans. The detailed extent and spread of the low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.
- 3.2.13 The RPA for each tree has been plotted as a polygon centred on the base of the stem. Due to the presence of roads, structures, topography (and past tree management) the RPA is likely to be a simplified representation of the tree roots actual morphology and disposition. However, detailed modifications to the shape of the RPA would largely be based on conjecture and so have been avoided.

4. Arboricultural Impact Assessment

4.1 Proposed New Development

- 4.1.1 It is proposed to extend the existing property. The development proposals have been provided by my client and inform this arboricultural impact assessment and the Tree Impacts Plan at Appendix 6.

4.2 Direct Impacts

- 4.2.1 From assessing the new development proposals, no trees will require removal as there are no trees situated in the footprint of the structure and the retention and protection of all trees throughout the development is suitable.
- 4.2.2 The removal of the Horse Chestnut T2 is recommended regardless of development at the site due to its poor condition.

4.3 Indirect Impacts

- 4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Constraints Plan at Appendix 5, has been used as a layout design tool, to inform on the area around a tree where the protection of the roots and soil structure is treated as a priority.
- 4.3.2 Potentially damaging activities are proposed in the vicinity of retained trees. The new development encroaches into the RPA of T35 and T36. The construction within the RPA may have negative impacts on tree roots. However, it should be possible to employ special foundation design such as mini/micro pile and suspended beam or a cantilevered foundation, in order to overcome or minimise any negative impact on the tree roots.

4.4 Protection of the Retained Trees

- 4.4.1 The retained trees will require protection by fencing in accordance with BS 5837: 2012, during the development phase.
- 4.4.2 If required by the Local Planning Authority, an associated Arboricultural Method Statement, detailing protective fencing specifications and construction methods close to the retained trees can be provided.

5. Signature

I trust this report provides all the required information.

Signed



.....

Adam Winson, Chartered Arboriculturist, MSc, BSc (Hons), MICFor, ACIEEM.

20th December 2018

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Appendices

Appendix 1: Authors Qualifications and Experience

Appendix 2: Survey Methodology and Limitations

Appendix 3: Explanation of Tree Descriptions

Appendix 4: Tree Data

Appendix 5: Tree Constraints Plan

Appendix 6: Tree Impacts Plan

Appendix 1: Authors Qualifications & Experience

Mr Adam Winson *Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered.*

Adam is the company Director and Principle Consultant. He has a mix of the highest level academic qualifications and relevant work experience. He has worked within the tree care profession for over 20 years, and was awarded an MSc in Arboriculture and Urban Forestry, with distinction. Adam is a Chartered Arboriculturist and a Registered Consultant with the Institute of Chartered Foresters, a Professional Member of the Arboricultural Association and has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major multimillion pound housing developments and infrastructure projects. His work often involves trees with preservation orders or litigation, and he has appeared as a tree expert, at planning appeal hearings up to the Crown Court.

Mr James Brown *BSc (Hons) Arboriculture, MArborA.*

James has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Forester's Student award. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. James previously worked in Europe's largest tree nursery and has experience of Local Authority tree officer work. His main work consists of tree surveys for development projects and preparing Tree Protection Schemes to BS 5837:2012.

Mr Dave Farmer *FdSc (Arb), MArborA, PTI (Lantra).*

Dave has a Foundation Degree in Arboriculture (with Distinction) and is qualified in Professional Tree Inspection. He is a Professional Member of the Arboricultural Association and an Associate of the Institute of Chartered Foresters. Dave has many years of experience within the tree care profession, including lecturing in arboriculture. His work focuses on diagnosing potential tree risk problems, and recommending appropriate treatments and work programmes.

Dr Felicity Stout *Ph.D, MA, BA (Hons), Cert Ed (Forestry), TechArborA.*

Felicity has worked in the tree care profession for the last 10 years. She has a Certificate in Higher Education in Forestry, with a focus on Urban Forestry. She has practical arboricultural contractor experience and is a qualified and experienced Social Forestry practitioner. Felicity has a PhD in History, with a particular interest in the history of woodland and tree management and has published in The Arboricultural Journal on this subject.

Mr Patrick Rowntree *Cert Arb L3. TechArborA.*

Patrick is a trained arborist with 5 years of experience in the private and commercial sectors, both in the UK and New Zealand. Formerly a professional rugby player, Patrick was awarded a distinction in the Extended Diploma in Forestry & Arboriculture and is a technician Member of the Arboricultural Association. Patrick now uses his experience at AWA focusing on BS5837:2012 tree surveys for development projects; this involves accurate tree data collection and the preparation of tree reports to BS 5837:2012.

Appendix 2: Survey Methodology and Limitations of Report

The survey was undertaken in accordance with British Standard 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*. The trees were assessed objectively and without reference to any proposed site layout. The trees were surveyed from the ground using 'Visual Tree Assessment' (VTA) methodology. VTA is appropriate and is endorsed by industry guidance. It is used by arboriculturists to evaluate the structural integrity of a tree, relying on observation of trees biomechanical and physiological features. Measurements are obtained using a diameter tape, clinometer, laser distometer and loggers tape. Where this is not practical measurements are estimated. Tree groups have been identified in instances as defined in BS 5837:2012. Shrubs and insignificant trees may have been omitted from the survey.

This report represents a BS5837 tree survey and should not be accepted as a detailed tree safety inspection report; however, tree related hazards are recorded and commented upon where observed, yet no guarantee can be given as to the absolute safety or otherwise of any individual tree. All recommended tree work must be to BS 3998:2010 - 'Tree Work: Recommendations'.

The findings and recommendations contained within this report are valid for a period of twelve months from the date of survey. The author shall not be responsible for events which happen after this time due to factors which were not apparent at the time, and the acceptance of this report constitutes an agreement with these guidelines and terms.

Appendix 3: Explanation of Tree Descriptions

HEIGHT of the tree is measured from the stem base in metres. Where the ground has a significant slope the higher ground is selected.

CROWN HEIGHT is an indication of the average height at which the crown begins and includes information of the first significant branch and direction of growth.

STEM DIAMETER is measured at 1.5 metres above (higher) ground level. Where the tree is multi-stemmed at this point; the diameter is measured close to ground level or else a combined stem diameter is calculated.

CROWN SPREAD is measured from the centre of the stem base to the tips of the branches in all four cardinal points.

AGE CLASS of the tree is described as young, semi-mature, early-mature, mature, or over-mature.

PHYSIOLOGICAL CONDITION is classed as good, fair, poor, or dead. This is an indication of the health of the tree and takes into account vigour, presence of disease and dieback.

STRUCTURAL CONDITION is classed as good, fair or poor. This is an indication of the structural integrity of the tree and takes into account significant wounds, decay and quality of branch junctions.

LIFE EXPECTANCY is classed as; less than 10 years, 10-20 years, 20-40 years, or more than 40 years. This is an indication of the number of years before removal of the tree is likely to be required.

Retention Categories

A (marked green on Appendix 5) = retention most desirable. These trees are of very high quality and value with a good life expectancy.

B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

U (marked in red on Appendix 5) = trees for removal. These trees are in such a condition that any existing value would be lost within 10 years.

Appendix 4: Tree Data

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T1	Beech	<i>Fagus sylvatica</i> 'Purpurea'	Mature	19	1	1010	No	2	7.5	5	8	8.5	Exposed roots. Soil compaction. Lots of ground compaction to north from vehicles parking.	Bulging to main stem. Single stemmed. Vertical. Old pruning wounds	Occasional minor old pruning wounds in crown. Minor deadwood. Old pruning wounds	Numerous large old pruning wounds to stem with large stubs to northern and western side of main stem at 7m. Western stub is decayed. Extensive pruning may limit long term value.	Fair	Fair	>40 yrs	High	A	No works required
T2	Horse Chestnut	<i>Aesculus hippocastanum</i>	Mature	12	2	580, 610	No	2	6.5	7	9	4.5	Lots of soil compaction to north from car parking. Exposed roots. Soil compaction. Girdled roots	Twin stemmed at base. Tight union with partially included bark at junction of two main stems at base. Slight lean. Stubs. Large old pruning wounds. Bark damage. Major decay. Fungal brackets. Large snapped limbs from eastern stem.	Tree has been poorly 'topped' at 12m approx. 75% dead/ absent. Minor deadwood. Snapped/ hanging branches	Western stem has extensive decay with <i>Pleurotus ostreatus</i> and <i>Ceriporus squamosus</i> fungal fruiting bodies. Staining to main stems likely from bleeding canker of horse chestnut.	Poor	Poor	<10 yrs	Low	U	Removal required regardless of development

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T3	Plane	<i>Platanus x hispanica</i>	Mature	24	1	1230	No	2	11	7	4.5	11	Exposed roots. Damage to buttress roots	Single stemmed. Vertical. Old pruning wounds. Minor cavities	Moderate deadwood	Large old pruning wound to eastern side of main stem at 1.5m. Large dead limb in southern crown at 4m. Occasional minor cavity in lower crown.	Fair	Fair	>40 yrs	High	A	Remove large dead limb in southern crown at 4m regardless of development
T4	Sycamore	<i>Acer pseudoplatanus</i>	Mature	22	1	470	No	15	3.5	2	2.5	5	Exposed roots. Damage to buttress roots, Damage to buttress roots likely from mowers.	Single stemmed. Vertical. Bark damage. Old pruning wounds	Minor deadwood. Birds' nest	Very high crown. Likely previously crown lifted. Occasional small pruning wounds to main stem.	Good	Fair	>40 yrs	Moderate	B	No works required
T5	Sycamore	<i>Acer pseudoplatanus</i>	Mature	20	1	420	No	5	1.5	2.5	3.5	3.5	No visual defects	Single stemmed. Twin stemmed at 3m. Slight lean. Stubs. Bark damage. Minor cavities. Moderate decay	25% dead/absent. Moderate dieback. Minor deadwood	Western limb is decayed at base. Lots of dieback in crown. Limited long term value.	Poor	Fair	10 to 20 yrs	Moderate	C	Remove decayed western limb regardless of development

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T6	Ash	<i>Fraxinus excelsior</i>	Mature	25	1	900	No	3	5.5	9	9	5	Soil erosion. Exposed roots	Single stemmed. Slight lean. Stubs. Bark damage. Minor cavities	Moderate deadwood. Snapped/ hanging branches. <i>Inonotus hispidus</i> bracket.	Growing out of edge of pond, leaning east. Numerous large exposed roots. Moderate pieces of deadwood in crown. Large snapout in southern crown at 6m with <i>Inonotus hispidus</i> bracket.	Fair	Fair	20 to 40 yrs	Moderate	B	Recommended to remove significant deadwood from crown regardless of development
T7	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	8	1	100	No	2	1	1	2.5	2	No visual defects	Single stemmed. Slight lean. Stubs	Old pruning wounds		Good	Good	10 to 20 yrs	Low	C	No works required
T8	Pine	<i>Pinus sylvestris</i>	Semi-mature	6	1	90	No	1.5	1.5	1.5	1	1	No visual defects	Single stemmed. Slight lean. Stubs	Minor deadwood		Fair	Good	10 to 20 yrs	Low	C	No works required
T9	Ash	<i>Fraxinus excelsior</i>	Semi-mature	10	1	90	No	1.5	2	1.5	1	1.5	No visual defects	Single stemmed. Slight lean	Normal	Stem kinks at 1m	Good	Fair	10 to 20 yrs	Low	C	No works required
T10	Magnolia	<i>Magnolia sp.</i>	Semi-mature	4	3	70, 60, 70	No	1	2	3	1.5	1.5	No visual defects	Multiple stemmed at base. Slight lean. Stubs. Tight unions	Old pruning wounds		Good	Good	20 to 40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T11	Pear	<i>Pyrus sp.</i>	Mature	12	1	490	No	3	1.5	8.5	4.5	2	Exposed roots	Single stemmed. Twin stemmed at 1.5m. Significant lean. Bark damage. Moderate cavity. Moderate decay	Moderate dieback. 25% dead/ absent. Moderate deadwood	Significant lean east. Moderate cavity with moderate decay to western side of main stem at 1m. Moderate deadwood stub in central crown.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T12	Sycamore	<i>Acer pseudoplatanus</i>	Mature	22	2	270, 480	No	3	6	3.5	2	7	No visual defects	Twin stemmed at base. Slight lean. Old pruning wounds. Bark damage	Minor deadwood	Growing against wall to east. Will affect wall in future.	Good	Fair	>40 yrs	Moderate	B	No works required
T13	Sycamore	<i>Acer pseudoplatanus</i>	Mature	22	1	440	No	10	4.5	1	0.5	7.5	No visual defects	Single stemmed. Slight lean	Minor deadwood	Two co-dominant stems at 3.5m. May affect wall to east in future.	Good	Good	>40 yrs	Moderate	B	No works required
T14	Sycamore	<i>Acer pseudoplatanus</i>	Mature	23	1	530	No	12	1.5	5	3.5	4.5	No visual defects	Single stemmed. Vertical. Bark damage. Minor decay	Minor deadwood	Large bark wound at very base of main stem to south west, but occluding well and only minor decay. Tree will affect wall to east in future.	Good	Fair	>40 yrs	Moderate	B	No works required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T15	Sycamore	<i>Acer pseudoplatanus</i>	Mature	22	2	390, 220	No	7	0.5	4	6	3.5	Soil erosion. Exposed roots	Twin stemmed at 1m. Vertical. Old pruning wounds. Stubs. Moderate cavity. Moderate decay	Moderate dieback. Minor deadwood	Large decayed wound at base to west. Two main stems intertwine and rub at 2m. Bird box nailed to stem. Moderate dieback in crown. On banking.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T16	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	20	3	330, 240, 280	No	5	0.5	1.5	7	3	Soil erosion. Exposed roots	Multiple stemmed at base. Slight lean. Old pruning wounds. Stubs. Bark damage. Major cavities. Moderate decay	Moderate dieback. Minor deadwood	Large cavities with moderate decay at base of main stems to east. Moderate dieback in crown. On banking.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T17	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	14	1	270	No	5	7.5	0.5	0.5	3.5	Soil erosion. Exposed roots	Single stemmed. Significant lean. Old pruning wounds. Minor cavities. Minor decay	Minor deadwood	Significant lean north. Cavity with decay to south eastern side of main stem at base. Main stem intertwines with Pine to north at 3m and is causing damage to both trees. On banking. Southern small stem previously 'topped' at 1.5m.	Fair	Fair	10 to 20 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T18	Pine	<i>Pinus nigra</i>	Early-mature	19	1	380	No	15	1	1	4	3	Soil erosion. Exposed roots	Single stemmed. Slight lean. Stubs. Old pruning wounds. Bark damage	Major dieback. Moderate deadwood	Main stem intertwines with neighbouring Sycamore at 3m and is damaging both trees. Main limb kinks to west at 10m. Crown has extensive deadwood and dieback. On top of banking.	Poor	Fair	<10 yrs	Moderate	C	No works required
T19	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	12	1	230	No	6	0.5	2	5	2	Soil erosion. Exposed roots	Single stemmed. Slight lean. Stubs. Old pruning wounds. Bark damage. Minor decay	Minor deadwood. Minor dieback	On banking	Fair	Fair	10 to 20 yrs	Low	C	No works required
T20	Pine	<i>Pinus nigra</i>	Mature	22	1	710	No	14	4	2	4	2.5	Soil erosion. Exposed roots	Single stemmed. Twin stemmed at 1.5m. Slight lean. Old pruning wounds. Stubs	Minor deadwood	Tight union at junction of two main stems at 1.5m. Numerous old pruning stubs to southern side of stem.	Good	Good	>40 yrs	Moderate	B	No works required
T21	Sycamore	<i>Acer pseudoplatanus</i>	Mature	20	1	520	No	7	1	2.5	7	3.5	Soil erosion. Exposed roots	Single stemmed. Twin stemmed at 2m. Significant lean. Bark damage. Minor cavities. Minor decay	Minor deadwood	Growing out of banking, leaning south. Minor cavity with decay to south western side of stem at base. Two co-dominant stems at 2m.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required

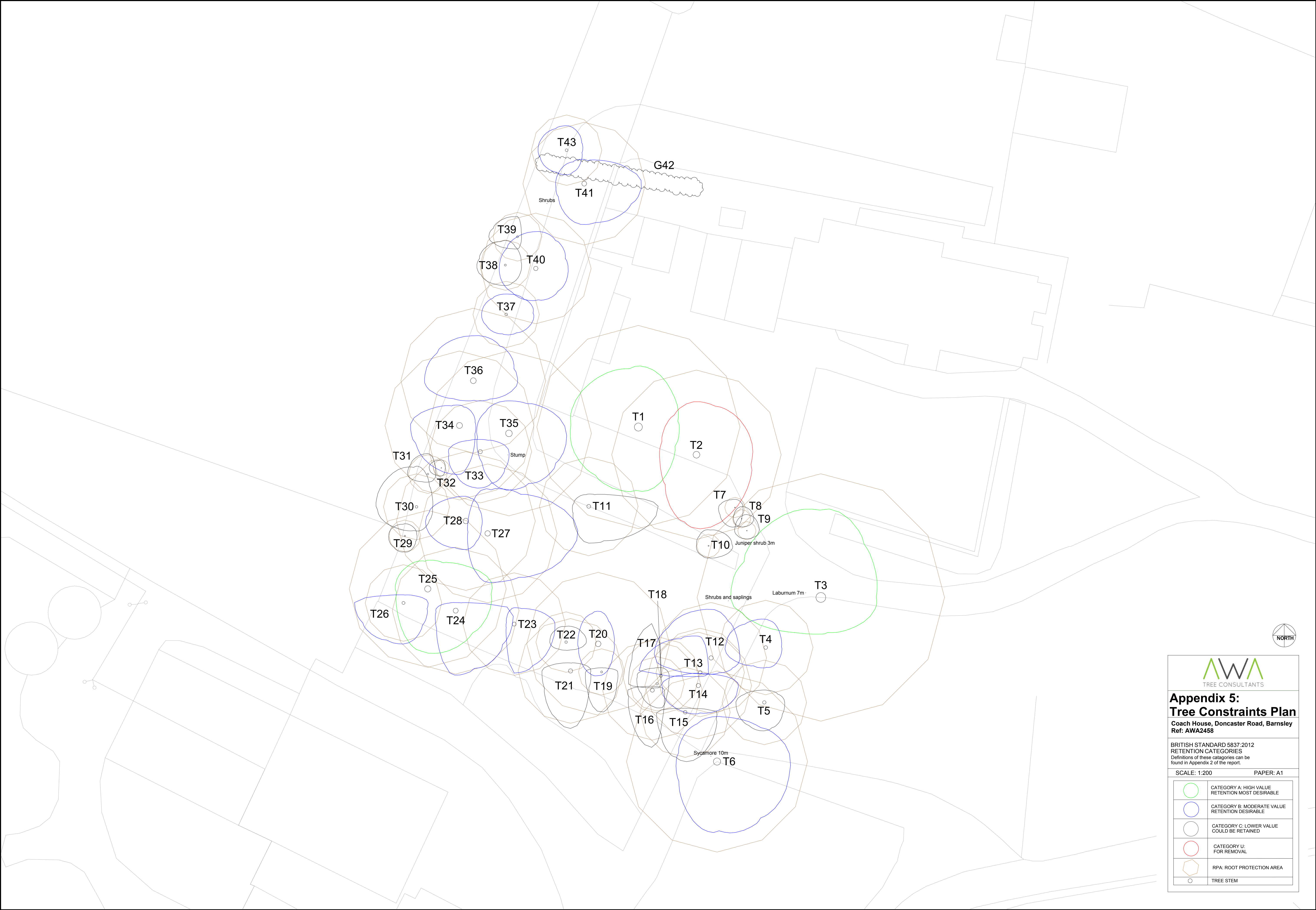
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T22	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	18	1	300	No	9	2	2.5	1	2	Soil erosion	Single stemmed. Slight lean. Stubs. Old pruning wounds. Epicormic growths. Bark damage. Major cavity. Major decay	Minor deadwood	Large long decayed cavity on western side of main stem from base to 2m. Cherry stump to north.	Fair	Poor	<10 yrs	Low	C	No works required
T23	Sycamore	<i>Acer pseudoplatanus</i>	Mature	20	1	510	No	5	2	5	6	1	Soil erosion. Exposed roots	Single stemmed. Slight lean. Epicormic growths. Old pruning wounds. Minor cavity	Minor deadwood	On banking. Occasional old pruning wound to main stem.	Good	Good	>40 yrs	Moderate	B	No works required
T24	Beech	<i>Fagus sylvatica</i>	Mature	20	1	630	No	4	1	7	8	2.5	Soil erosion. Exposed roots	Single stemmed. Slight lean. Old pruning wounds. Minor cavities	Minor deadwood. Old pruning wounds	Minor old pruning wounds in crown from crown lifting. Slight lean south east.	Good	Good	>40 yrs	Moderate	B	No works required
T25	Sycamore	<i>Acer pseudoplatanus</i>	Mature	22	1	780	No	4	3.5	8	8	4	No visual defects	Single stemmed. Vertical. Epicormic growths. Bark damage. Stubs	Old pruning wounds. Minor deadwood	Decayed small stub on southern side of main stem at 3.5m. Large southern limb at 4m has rope swing wrapped around it at its base which is beginning to cut into cambium.	Good	Fair	>40 yrs	Moderate	A	Remove rope swing from limb regardless of development

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T26	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	12	1	380	No	3	1	3	5	6	Soil erosion. Exposed roots	Single stemmed. Slight lean. Epicormic growths	Minor deadwood	Leaning south. Growing out of banking.	Good	Fair	20 to 40 yrs	Moderate	B	No works required
T27	Beech	<i>Fagus sylvatica</i>	Mature	23	1	690	No	9	5.5	11	6	2.5	No visual defects	Single stemmed. Slight lean. Old pruning wounds. Stubs	Old pruning wounds. Minor deadwood	Slight lean east. Steps at base to west. Occasional recent moderate pruning wound to main stem. Minor cavity in old pruning wound to south eastern side of stem at 4m. Moderate stub on southern side of stem.	Good	Good	>40 yrs	Moderate	B	No works required
T28	Sycamore	<i>Acer pseudoplatanus</i>	Mature	20	1	690	No	4	3	2	3.5	5	No visual defects	Single stemmed. Slight lean. Stubs. Old pruning wounds. Epicormic growths	Minor deadwood	Steps at base to east	Good	Good	>40 yrs	Moderate	B	No works required
T29	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	8	3	110, 90, 70	No	3	1.5	1.5	2	2	No visual defects	Multiple stemmed at base. Slight lean. Old pruning wounds	Normal		Good	Good	10 to 20 yrs	Low	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T30	Hawthorn	<i>Crataegus monogyna</i>	Mature	8	2	200, 260	No	1.5	5	2	3	5	Exposed roots	Twin stemmed at 1m. Slight lean. Stubs. Old pruning wounds. Bark damage. Tight unions. Minor cavities. Minor decay	Minor deadwood	Some screening value	Fair	Fair	>40 yrs	Moderate	C	No works required
T31	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	7	2	150, 120	No	2	2.5	1	1	2.5	No visual defects	Twin stemmed at base. Slight lean. Epicormic growths. Stubs. Old pruning wounds. Bark damage. Tight unions. Minor cavities. Minor decay	Minor deadwood	Some screening value	Fair	Fair	10 to 20 yrs	Low	C	No works required
T32	Horse Chestnut	<i>Aesculus hippocastanum</i>	Semi-mature	7	1	80	No	2	1	0.5	1	1.5	No visual defects	Single stemmed. Vertical. Old pruning wounds. Stubs	Normal		Fair	Good	10 to 20 yrs	Low	C	No works required
T33	Lime	<i>Tilia x europaea</i>	Mature	18	1	510	No	4	1.5	3.5	4.5	4	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Minor cavities	Minor deadwood	Occasional minor cavities in old pruning wounds	Good	Good	>40 yrs	Moderate	B	No works required
T34	Lime	<i>Tilia sp.</i>	Mature	22	1	740	No	1.5	2.5	2	6	6	Girdled roots	Single stemmed. Vertical. Old pruning wounds. Stubs	Minor deadwood	Western stem previously 'topped' at 2m	Good	Good	>40 yrs	Moderate	B	No works required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T35	Sycamore	<i>Acer pseudoplatanus</i>	Mature	22	1	820	No	10	4	7	7	4	No visual defects	Single stemmed. Vertical. Bark damage. Stubs	Minor deadwood	Moderate split stub in eastern crown over conservatory needs removing regardless of development.	Good	Fair	>40 yrs	Moderate	B	Remove split stub over conservatory regardless of development
T36	Sycamore	<i>Acer pseudoplatanus</i>	Mature	22	1	720	No	5	5.5	5.5	2.5	6	No visual defects	Single stemmed. Twin stemmed at 3m. Vertical. Old pruning wounds. Stubs. Minor decay. Minor cavities	Minor deadwood	Minor cavities and decay in occasional old pruning wounds. Two co-dominant stems at 3m.	Good	Good	>40 yrs	Moderate	B	No works required
T37	Pine	<i>Pinus sylvestris</i>	Early-mature	14	1	330	No	3	2.5	3.5	2.5	3	No visual defects	Single stemmed. Vertical. Stubs	Minor deadwood		Good	Good	>40 yrs	Moderate	B	No works required
T38	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	7	1	250	No	1.5	3	2	2.5	3.5	No visual defects	Single stemmed. Slight lean. Epicormic growths. Old pruning wounds. Stubs. Bark damage. Partially included bark. Minor cavities. Minor decay	Minor deadwood	Some screening value. Stem measurement estimated.	Fair	Fair	20 to 40 yrs	Moderate	C	No works required

Tree ID	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Dia (mm)	Estimated	Ave Height	N	E	S	W	Roots	Stem	Crown	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
T39	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	7	2	210, 120	No	1.5	2.5	0.5	1.5	3.5	Exposed roots	Twin stemmed at 1m. Slight lean. Epicormic growths. Old pruning wounds. Stubs. Bark damage. Tight unions. Minor cavities. Minor decay	Minor deadwood	Some screening value	Fair	Fair	10 to 20 yrs	Moderate	C	No works required
T40	Sycamore	<i>Acer pseudoplatanus</i>	Mature	20	1	550	No	5	4.5	4	4	4.5	No visual defects	Single stemmed. Vertical. Old pruning wounds. Stubs. Bark damage	Minor deadwood	Washing line wrapped around main stem needs removing	Good	Good	>40 yrs	Moderate	B	Remove washing line from main stem regardless of development
T41	Sycamore	<i>Acer pseudoplatanus</i>	Mature	20	1	610	No	5	3	7	5	3.5	No visual defects	Single stemmed. Vertical. Old pruning wounds. Stubs. Bark damage	Minor deadwood	Nail in stem	Good	Good	>40 yrs	Moderate	B	No works required
G42	Cypress	<i>Cupressus sp.</i>	Semi-mature	4	10+	50	Yes	1.5	See plan				No visual defects	Single and Multiple stemmed. Tight unions	Minor deadwood	Adjacent unmanaged. Cypress hedge. Some screening value.	Fair	Good	20 to 40 yrs	Moderate	C	No works required
T43	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	14	1	350	Yes	2	3	2	3	3.5	Limited access around base	Single stemmed. Vertical	Minor deadwood	Adjacent, no access	Fair	Fair	20 to 40 yrs	Moderate	B	No works required





**Appendix 5:
Tree Constraints Plan**
Coach House, Doncaster Road, Barnsley
Ref: AWA2458

BRITISH STANDARD 5837:2012
RETENTION CATEGORIES
Definitions of these categories can be found in Appendix 2 of the report.

SCALE: 1:200 PAPER: A1

	CATEGORY A: HIGH VALUE RETENTION MOST DESIRABLE
	CATEGORY B: MODERATE VALUE RETENTION DESIRABLE
	CATEGORY C: LOWER VALUE COULD BE RETAINED
	CATEGORY U: FOR REMOVAL
	RPA: ROOT PROTECTION AREA
	TREE STEM

