TREE CONSULTANTS

ARBORICULTURAL REPORT

& Impact Assessment

to **BS 5837:2012** at:

40 Hemingfield Road,
Wombwell,
Barnsley,
South Yorkshire
S73 0LY

Prepared for:
FDA Landscape Ltd
411 Wakefield Road,
Denby Dale,
Huddersfield,
West Yorkshire
HD8 8QH

Date: *June 2020*

Reference: *AWA2947*

Institute of Chartered Foresters
Registered Consultant

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Union Forge, 27 Mowbray Street, Sheffield, S3 8EN. AWA Tree Consultants Limited. Company No. 8520123. Registered in England & Wales.

Contents

1. Introduction

1.1 Instructions and Brief

1.1.1 We are instructed by Sue Farmer of FDA Landscape Ltd 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 November 2019.

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 on Hemingfield Road in Wombwell in the Metropolitan Borough of Barnsley, South Yorkshire.

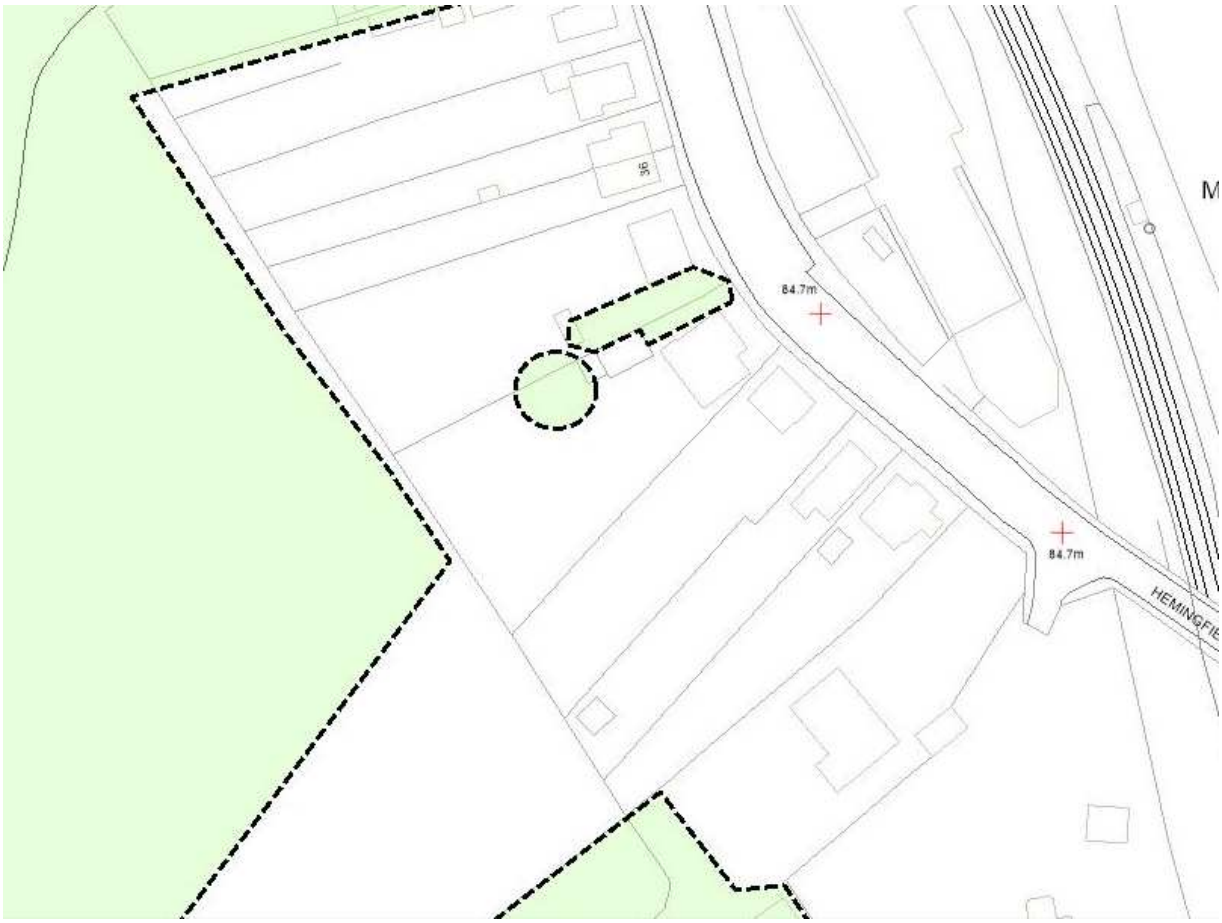
2.1.2 The site comprises a detached residential property with associated outbuildings and gardens. Neighbouring residential properties are situated to the north and south of the site, with an adjacent woodland to the west. Hemingfield Road borders the site's eastern boundary.

2.1.3 The approximate area of the survey is highlighted in the (2018 Google Earth) image below:

3. The Trees

3.1 Legal

3.1.1 An online check was made with Barnsley Metropolitan Borough Council on the 19th of November 2019. This showed that trees at the site are protected by a Tree Preservation Order (TPO) As such, written statutory permission is required before any works can take place to the protected trees. The accessed map image from http://barnsley.gov.uk is detailed below:



3.1.2 Trees protected by TPO are identified within this report as T29, T30, T31, T32, T33, T37, T38, T39, T44 and T45.

3.1.3 Due to the large potential penalties for illegally carrying out work to protected trees, before authorising any tree works a further 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).

3.2 Tree Survey Results

3.2.1 The tree survey revealed 45 items of woody vegetation, comprised of 39 individual trees and 6 groups of trees.

3.2.2 Of the surveyed trees: 6 trees are retention category 'B', and 54 trees, tree groups or hedges are retention category 'C' (explanatory details regarding the retention categories are included within Appendix 3).

3.2.3 The most significant trees within site boundaries are the Monkey Puzzle T37 and Pine T38. These are large early mature trees in good overall condition which provide moderate amenity value to the site and the surrounding area.

3.2.4 Trees T1, T2, T4, T8, T11, T12, T17, T23, T24, T25, T26, T27, T28, T29, T30, T31, T32, T44 and T45 are situated in adjacent land with limited access and so were only given cursory inspections with measurements estimated and condition values indicative only. The adjacent Rowan T2, Birch T12, T17, T24, T26, Oak T29 and Cherries T30, T31 and T32 all appear of moderate value.

3.2.5 The Oak T29 and Cherries T30, T31 and T32 form the eastern edge of an adjacent high value woodland situated beyond the site's western boundary. T29, T30, T31 and T33 are of moderate individual value and T32 is of low value.

3.2.6 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.

3.2.7 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.

3.2.8 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 residential 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, 1 tree will require removal as its retention and protection throughout the development is not suitable.

4.2.2 The tree requiring removal is the Pine T38. Its removal will have some negative arboricultural impact in the short term. New tree plantings at the site would mitigate for the tree's removal in the longer term.

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 proposed new extension is situated within the RPA of the adjacent Rowan T2. The construction within the RPA may have negative impacts on tree roots. However, the existing hardstanding and retaining walls situated between the tree and the proposed extension mean the detailed RPA for the tree is likely to be an exaggerated representation of the tree's actual rooting area. As such, it is unlikely that significant roots will be within these areas and the retained tree should remain largely unaffected by the works, provided care is taken during construction.

4.3.3 The buildability of the proposed development has been assessed in terms of access, adequate working space and provision for the storage of materials, including topsoil, in relation to the trees.

4.4 Suitable Mitigation

4.4.1 The development of the site provides an excellent opportunity to undertake new tree planting throughout the site as part of a soft landscaping scheme. As such, suitable new tree planting has the potential to mitigate for the required tree removals and, in the longer term, has the potential to improve the sites tree cover.

4.5 Protection of the Retained Trees

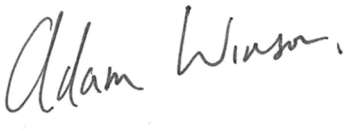
4.5.1 The retained trees may require protection by fencing in accordance with BS 5837: 2012, during the development phase.

4.5.2 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



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

1st June 2020

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Appendices

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.

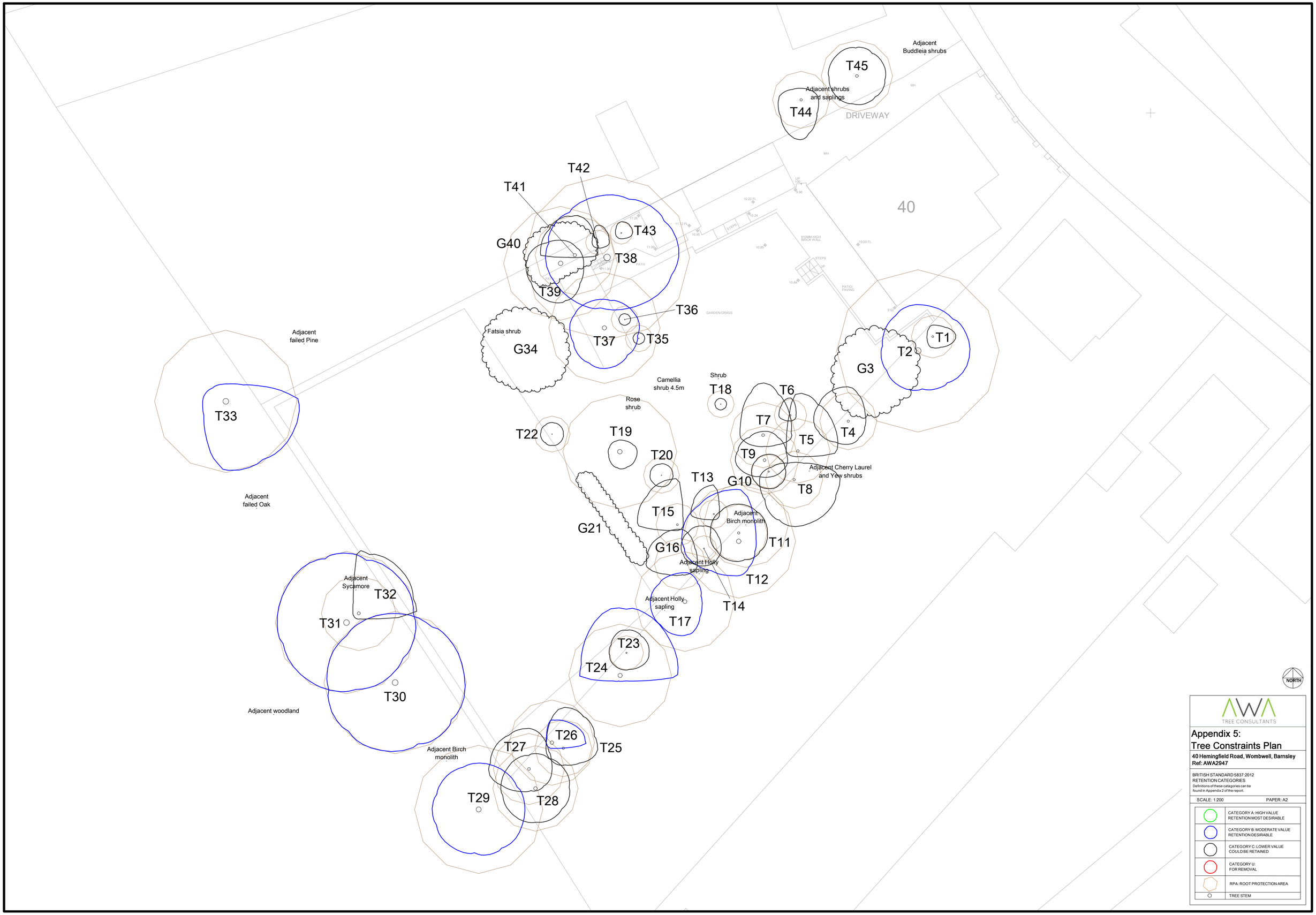
B (marked in blue on Appendix 5) = retention desirable. These trees are of good quality and value with a significant life expectancy.

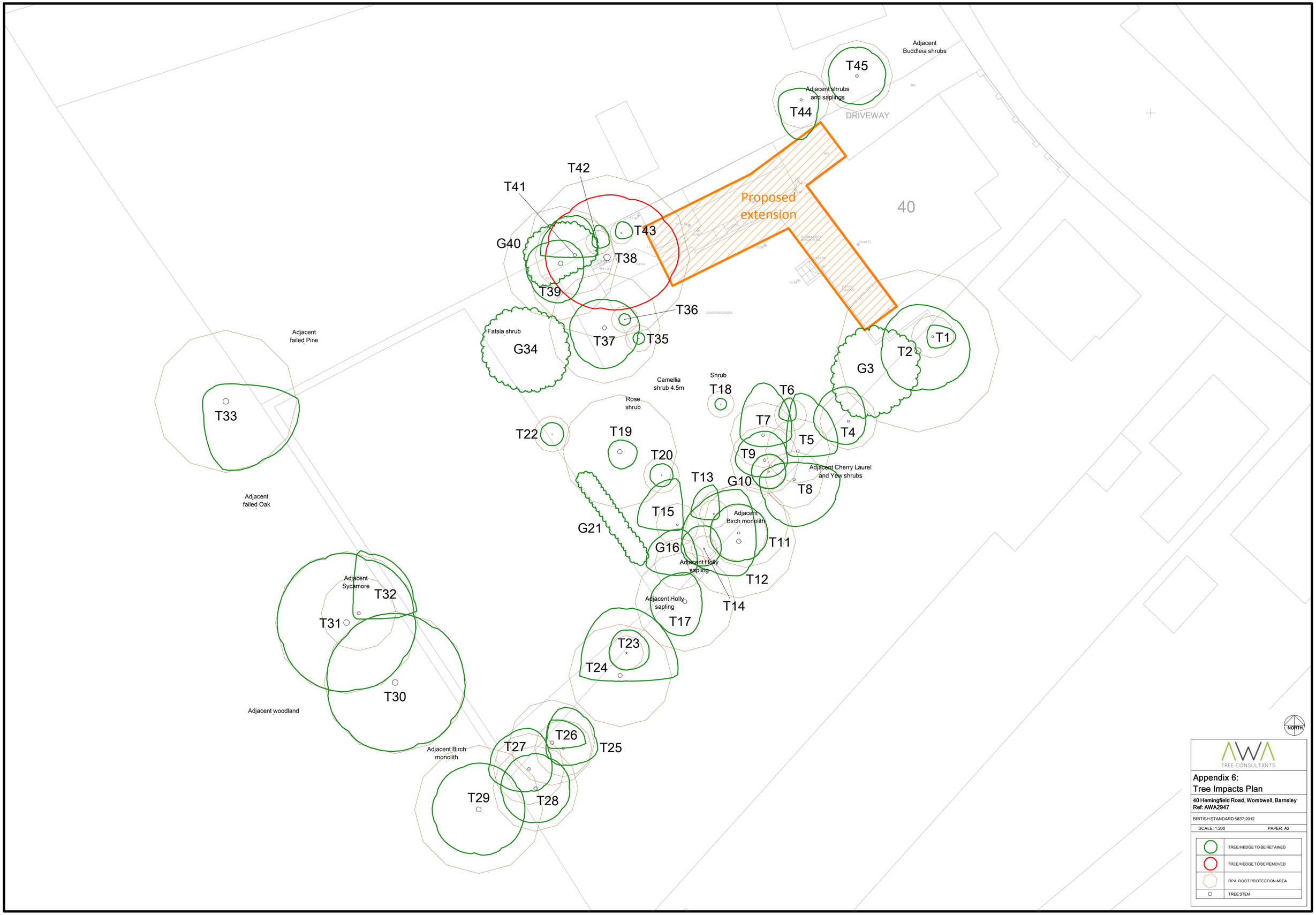
C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

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.

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T1	Holly	*Ilex aquifolium*	Semi-mature	5	1	150	No	1.5	1	2	1	0.5	Limited access around base	Single stemmed. Vertical. Old pruning wounds. Stubs. Epicormic growths	Normal	Adjacent, no access	Good	Good	20 to 40 yrs	Low	**C**	No works required
T2	Rowan	*Sorbus aucuparia*	Mature	12	5	350, 200, 300, 250, 100	Yes	3	4	4.5	3.5	3.2	Limited access around base	Multiple stemmed at base. Vertical. Old pruning wounds. Bark damage. Tight unions	Minor deadwood	Adjacent, no access	Good	Fair	20 to 40 yrs	Moderate	**B**	No works required
G3	Hazel	*Corylus avellana*	Early-mature	10	10+	70	No	0.5	See plan				Linear group of Hazel shrubs. Some screening value.				Good	Good	20 to 40 yrs	Moderate	**C**	No works required
T4	Holly	*Ilex aquifolium*	Early-mature	10	1	200	No	1.5	3	1.5	2	3	Limited access around base	Single stemmed. Vertical	Normal	Adjacent, no access. Two co-dominant stems at 3.5m.	Good	Good	20 to 40 yrs	Moderate	**C**	No works required
T5	Cherry Laurel	*Prunus laurocerasus*	Early-mature	9	3	130, 120, 140	No	1.5	5	3.5	0.5	1	No visual defects	Multiple stemmed at base. Significant lean north	Normal	Growing from base of fence	Good	Fair	20 to 40 yrs	Low	**C**	No works required
T6	Cypress	*Cupressus sp.*	Semi-mature	4	2	70, 90	No	1.5	1.5	0.5	0.5	1	Exposed roots	Twin stemmed at 0.5m. Vertical. Old pruning wounds	Minor deadwood		Fair	Fair	10 to 20 yrs	Low	**C**	No works required

	Tree Species			Measurements				Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T7	Yew	*Taxus baccata*	Semi-mature	8.5	1	230	No	1.5	4.5	2.5	1	2	No visual defects	Single stemmed. Slight lean north. Epicormic growths	Minor deadwood		Fair	Good	20 to 40 yrs	Moderate	**C**	No works required
T8	Birch	*Betula pendula*	Early-mature	15	1	200	Yes	4	1.5	4	4	3	Limited access around base	Single stemmed. Vertical	Minor deadwood	Adjacent, no access. Two co-dominant stems at 2m.	Fair	Fair	20 to 40 yrs	Moderate	**C**	No works required
T9	Rowan	*Sorbus aucuparia*	Early-mature	8.5	1	240	No	2	2.5	2	1.5	2.5	No visual defects	Single stemmed. Vertical. Old pruning wounds. Bark damage	Old pruning wounds. Moderate dieback. Minor deadwood		Fair	Fair	10 to 20 yrs	Moderate	**C**	No works required
G10	Holly	*Ilex aquifolium*	Young	6	2	80, 90	No	1.5	1.5	1.5	1.5	1.5	No visual defects	Twin stemmed at base. Vertical. Old pruning wounds. Stubs	Minor deadwood	Two trees forming one crown	Fair	Good	10 to 20 yrs	Low	**C**	No works required


Adjacent
Buddleia shrubs
T45
Adjacent shrubs
and saplings
T44
DRIVEWAY
MH
T42
T41
T43
G40
T38
PATH
T39
T36
GARDEN/GRASS
Fatsia shrub
G34
T37
T35
Adjacent
failed Pine
T33
Camellia
shrub 4.5m
Shrub
T18
Rose
shrub
T22
T19
T20
T6
T7
T5
T4
T9
T1
T2
G3
Adjacent Cherry Laurel
and Yew shrubs
T8
T13
G10
T15
Adjacent
Birch monolith
T11
G21
G16
Adjacent Holly
sapling
T12
T14
Adjacent
failed Oak
Adjacent
Sycamore
T32
T31
Adjacent Holly
sapling
T17
T23
T24
T30
Adjacent woodland
T26
T27
T25
Adjacent Birch
monolith
T29
T28
40
NORTH
AWA
TREE CONSULTANTS
Appendix 5:
Tree Constraints Plan
40 Hemingfield Road, Wombwell, Barnsley
Ref: AWA2947
BRITISH STANDARD 5837:2012
RETENTION CATEGORIES
Definitions of these catagories can be
found in Appendix 2 of the report.
SCALE: 1:200
PAPER: A2
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


Adjacent
Buddleia shrubs
T45
Adjacent shrubs
and saplings
T44
DRIVEWAY
MH
T42
T41
Proposed
extension
40
T43
G40
T38
PATH
T39
T36
GARDEN/GRASS
Fatsia shrub
G34
T37
T35
Adjacent
failed Pine
T1
T2
G3
Camellia
shrub 4.5m
Shrub
T18
T6
Rose
shrub
T33
T7
T4
T22
T19
T5
T20
T9
Adjacent Cherry Laurel
and Yew shrubs
T13
G10
T8
Adjacent
failed Oak
T15
Adjacent
Birch monolith
G21
T11
G16
Adjacent Holly
sapling
T12
Adjacent
Sycamore
T32
Adjacent Holly
sapling
T14
T31
T17
T23
T24
T30
Adjacent woodland
T26
T27
T25
Adjacent Birch
monolith
T29
T28
NORTH
AWA
TREE CONSULTANTS
Appendix 6:
Tree Impacts Plan
40 Hemingfield Road, Wombwell, Barnsley
Ref: AWA2947
BRITISH STANDARD 5837:2012
SCALE: 1:200
PAPER: A2
TREE/HEDGE TO BE RETAINED
TREE/HEDGE TO BE REMOVED
RPA: ROOT PROTECTION AREA
TREE STEM