TREE CONSULTANTS

ARBORICULTURAL REPORT

& Impact Assessment

to **BS 5837:2012** at:

23 Barnsley Road,
Flockton,
Wakefield,
WF4 4DP

Prepared for:
Architecture 1B

Date: *November 2024*

Reference: *AWA6298*

TMP006 – B
Template Revision 01
Auth By: APW
Date: 09/09/2024

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Contents

1. Introduction

1.1 Instructions and Brief

1.1.1 We have been instructed by Architecture 1B 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 October 2024.

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 We have been provided with a topographical survey with tree positions plotted. Where surveyed trees were not included on the topographical survey the tree positions were plotted 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, Principal and Director of AWA Tree Consultants Ltd.

1.2.6 The tree survey data collection was carried out by Mr James Godfrey, BA (Hons), FdSc Arboriculture and Tree Management, TechArborA, PTI (Lantra), QTRA Registered, Arboriculturist at AWA Tree Consultants Ltd.

1.2.7 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 please 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 Barnsley Road in Flockton, a village in Kirklees, West Yorkshire.

2.1.2 The site comprised of a residential dwelling and surrounding hard and soft landscaping. The site is bordered to the north, east and west by adjacent residential properties. Barnsley Road runs along the survey areas southern boundary, with a grassland field beyond.

2.1.3 The approximate area of the survey is highlighted in the (2021 Google Earth) image below:

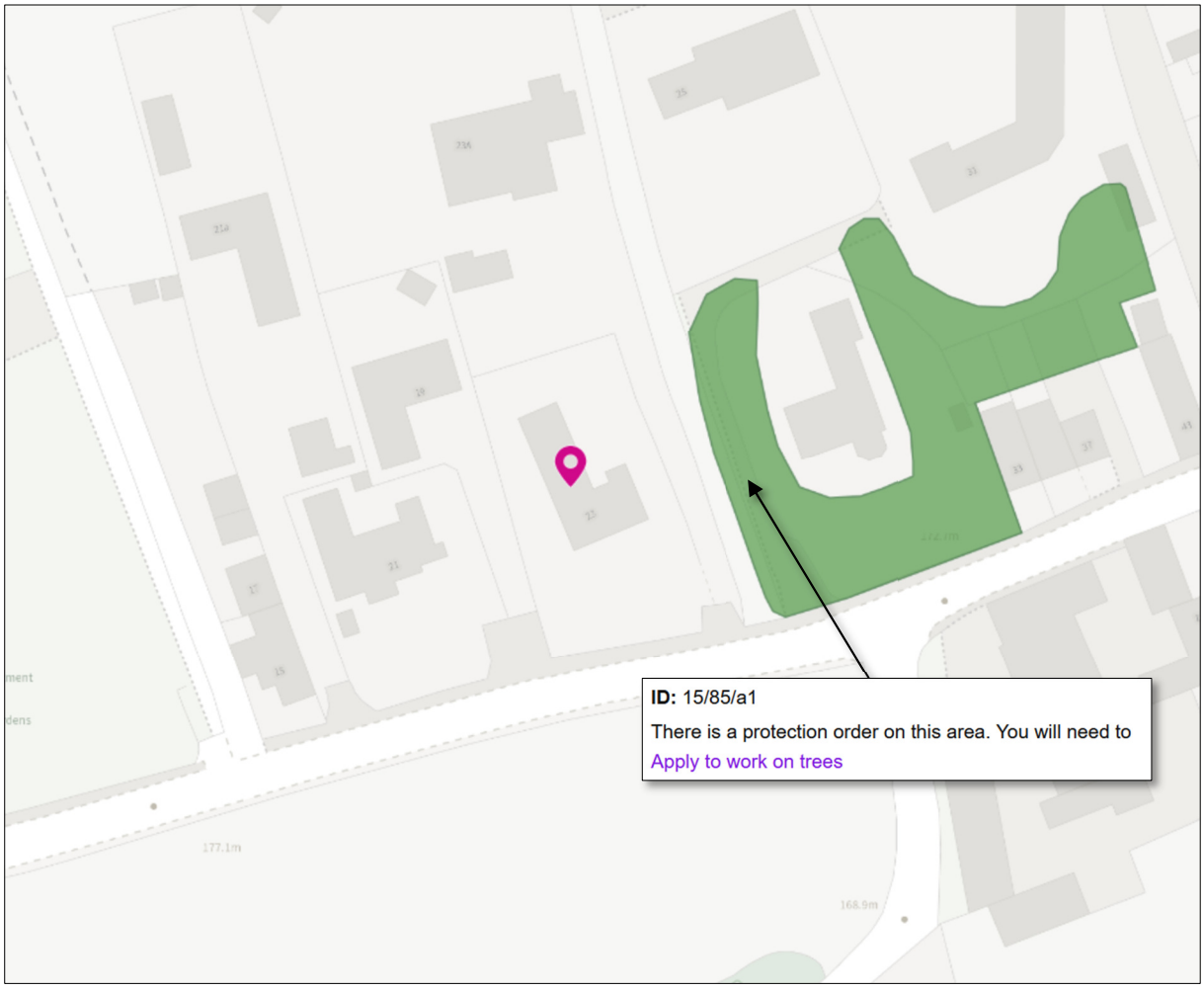
3. The Trees

3.1 Legal

3.1.1 The following advice is for guidance purposes only. Some trees are protected by legislation, and it is essential that the legal status of trees is established prior to carrying out works to them. Unauthorised work to protected trees could lead to prosecution, resulting in enforcement action such as fines or a criminal record. Tree Preservation Orders, Conservation Areas, Planning Conditions, Felling Licences or Restrictive Covenants legally protect many trees in the UK.

3.1.2 An online search was undertaken with Kirklees Council on 15th November 2024 to check whether any trees at the site are protected by a Tree Preservation Order or are located within a Conservation Area. No trees within the site are protected by a Tree Preservation Order, however adjacent trees along the eastern boundary are protected by a Preservation Order, and as such all trees within the site are legally protected. The site is not situated within a Conservation Area.

3.1.3 The accessed map image from Kirklees.gov is detailed below:



3.1.4 Before carrying out any works to protected trees the permission of the local planning authority is required. There are large potential penalties for illegally carrying out work to protected trees. Statutory permission is not required for the removal of deadwood.

3.1.5 The Multi-Agency Geographical Information for the Countryside (MAGIC) website was used to search for areas of ancient woodlands listed on the Ancient Woodland (DEFRA 2021), and a check for catalogued Ancient and Veteran trees using the woodland trust ancient tree inventory (ATI) (Woodland Trust 2021).

3.1.6 It was confirmed that there are no designated ancient woodlands or veteran or ancient trees within the survey area.

3.1.7 Trees provide a wide range of habitats for many species, some of which are legally protected such as bats, nesting birds, badgers and dormice. It is essential that appropriate care is taken to ensure that this legislation is not contravened.

3.1.8 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

3.1.9 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 31 items of woody vegetation, comprised of 23 individual trees and 8 tree groups or hedges.

3.2.2 Of the surveyed trees: 12 trees and tree groups are retention category 'B' and 19 trees, tree groups and hedges are retention category 'C' (explanatory details regarding the retention categories are included at Appendix 3).

3.2.3 Full details of the surveyed trees, tree groups and hedges are provided in the attached tree data schedule at Appendix 4. General comments are provided below:

3.2.4 Species diversity at the site is relatively good. The dominant species are Beech and Cypress, as well as the occasional Cedar, Sumac, Birch, Privet and Apple. The hedgerows are generally comprised of Cypress and Laurel.

3.2.5 Age diversity is good, ranging from young to mature trees.

3.2.6 T1 to T11 make up the woody vegetation within the front and side gardens of the survey area. Cedar T1 is located near the existing entrance to the site. With good amenity and long-term prospects T1 is moderate value overall. T2 to G8 form effective screening of the site from Barnsley Road to the south, however these trees are of lower value.

3.2.7 G9 is a formally planted row of Beech along the garden's western boundary. The lower crowns have been managed as a hedge, kept pruned back and forming effective screening foliage, while the upper crowns are relatively unmanaged. G9 is moderate value overall and provides effective screening. T11 is a larger tree within G9 and is also of moderate value despite some occasional minor defects.

3.2.8 The rear garden area to the north of the site generally consists of low value Laurel and Cypress hedges G12 to G16, though the boundary hedges provide effective screening of the site. Also within the northern garden area are several other trees including Birch T17, Apple T18 and Staghorn Sumac T19 and T20. These trees provide only limited amenity within the wider landscape and are low value overall.

3.2.9 The eastern boundary of the survey area is bordered by Beech T21 to T30. These trees are generally moderate value, providing effective screening and amenity within the local landscape.

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) 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.

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 these low value groups, in conjunction with the tree schedule, is sufficient to assess the associated potential constraints.

3.3 Photographs

Photo 1: T1 and other woody vegetation along the site's southern boundary, looking west.

Photo 2: G9 running along the site's western boundary, looking north.

Photo 3: T11 growing within G9, looking northwest.

Photo 4: G13, looking northeast.

Photo 5: T17, T18 and T19, looking northwest.

Photo 6: T21 to T30 along the site's eastern boundary, looking east.

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to demolish the existing dwelling and build a new residential dwelling with associated access, parking, landscaping and facilities. 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, 5 trees and 2 hedges will require removal to facilitate the development, as well as the partial removal of 2 hedges, as they are situated in the footprint of the development or their retention and protection throughout the development is not suitable.

4.2.2 The trees that require removal to facilitate the development are T2, T10, T18, T20 and T31.

4.2.3 The hedges that require removal to facilitate the development are G8 and G16.

4.2.4 The hedges that require partial removal to facilitate the development are G13 and G15.

4.2.5 The trees and hedges to be removed are all lower value, retention category 'C'. T2, T10, T18, T20 and T31 provide little amenity within the site and contain minor defects that may limit their long-term safe and useful life expectancy. The hedges requiring removal and partial removal are also low value and provide only minimal amenity. The retained sections of G13 and T15 will readily tolerate the required removals, and their long-term prospects will not be significantly impacted. Screening of the site is suitably maintained by the retention of boundary trees, tree groups and hedges.

4.2.6 Due to the low value of the trees and hedges to be removed the removals will have only a negligible negative arboricultural impact.

4.2.7 In addition to the required removals pruning works are required to facilitate the development, including G4, T7, G9, T11 and T19. The required pruning is relatively minor, and the works will not have a significant long-term impact on the amenity or long-term prospects of the retained trees and tree group.

4.3 Indirect Impacts

4.3.1 The tree Root Protection Area (RPA) detailed on the Tree Plans at Appendices 5 and 6, 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.

4.3.3 The demolition of the existing dwelling will take place close to G9 and within the RPA of T11. The demolition works should not adversely impact on the health or future condition of the trees provided the demolition is undertaken from the east, inwards from within the footprint of the existing dwelling (often referred to as "top down, pull back"), with care taken not to damage any overhanging crowns of G9 and T11.

4.3.4 The new development encroaches close to and into the edge of the RPA of T11. Construction within the RPA, can have negative impacts on tree roots. However, the encroachment is very minor, and the presence of existing hardstanding and structural footings is likely to have deterred any significant root development within this area. As such, it is unlikely that significant roots will be within these areas and T11 should remain largely unaffected by the works, provided care is taken during construction.

4.3.5 A proposed new pedestrian access and widening of a section of existing driveway is proposed within the RPA of retained trees T1, T23, T29 and T30. The encroachment is relatively minor and the presence of existing hardstanding and footings that will have likely deterred any significant root development within these areas. As such, retained trees T1, T23, T29 and T30 should not be significantly impacted by the proposed works, provided care is taken during construction.

4.3.6 New fencing is proposed within the RPAs of retained trees T1, T6, T7 and G9. The encroachment into the trees' RPAs should not significantly adversely impact on the health or future condition of the trees, provided posts and panels type footings are used as opposed to strip footings, with the holes for the posts dug by hand, avoiding significant tree roots where possible.

4.3.7 The design of the new development has considered the trees crown position in relation to the dwelling. Some shade from trees may be beneficial. In particular, deciduous trees give shade in summer but allow access to sunlight in winter. However, the design proposals avoid excessive shading, and give adequate provision for future tree growth.

4.3.8 All the retained trees have been assessed as suitable for retention in terms of BS5837 (2012) section 5 "Proximity of structures to trees." The retained trees will not cause unreasonable inconvenience or nuisance issues, leading to associated pressures for felling or excessive pruning. The layout allows sufficient space to enable the retained trees to grow to maturity without significantly adversely affecting the amenity of the new

development.

4.3.9 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 will 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*

20th November 2024

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Appendices

Appendix 1: Authors Qualifications & Experience

Adam Winson, ***Chartered Arboriculturist, MSc, BSc (Hons), MICFor, MArborA, ACIEEM, QTRA Registered***
Adam is the company Director and Principal 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 he has original research published by the UK Forestry Commission. His work ranges from individual expert tree inspections to managing trees on major 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. Adam also regularly undertakes locum Tree Officer work for several Local Planning Authorities.

James Brown, ***BSc (Hons) Arboriculture, MArborA, PTI (Lantra), QTRA Registered***
James is a highly experienced and qualified Arboricultural Consultant. He has a BSc (Hons) in Arboriculture, attaining first class honours, as well as being awarded the Institute of Chartered Foresters student award. He is a Professional Member of the Arboricultural Association, an Associate of the Institute of Chartered Foresters, and he is working towards becoming a Chartered Arboriculturist. James joined AWA in 2016, he has many years' experience as an Arboricultural Consultant, he previously worked in Europe's largest container tree nursery and he has experience of local authority Tree Officer work.

James Godfrey, ***BA (Hons), FdSc Arboriculture and Tree Management, TechArborA, PTI (Lantra), QTRA Registered***
James has had extensive arboricultural experience working as an arborist within the public and private sector. While working at AWA, James completed his FdSc in Arboriculture and Tree Management, graduating with a distinction and was also awarded for achieving the highest overall mark in his year. James has used his arboricultural knowledge to inform and carry out accurate tree surveys and produce detailed reports that aim to balance appropriate tree retention with the requirements of landowners.

Joe Thomas, ***MSci Biology, Award L4 Arboriculture, TechArborA, PTI (Lantra), QTRA Registered***
Joe achieved a first class degree in Biology with an integrated Masters (MSci) from the University of Sheffield. Additionally, he has a Level 4 Award in Arboriculture. Joe joined AWA after an Urban Forestry role with the Sheffield and Rotherham Wildlife Trust and Sheffield City Council, where he gained a variety of experience in different aspects of the arboriculture sector.

Lucy Garbutt, ***MSc Animal Behaviour, BSc (Hons) Biology, PTI (Lantra), TechArborA, QTRA Registered***
Lucy graduated with a masters degree in Animal Behaviour from the UK's highest rated university, St Andrews of Scotland, immediately following the completion of her BSc degree in Biology from Lancaster University. Lucy has experience in botany and plant science and moved into arboriculture after previous experience of protected species and botanical surveys with a large environmental consulting company.

Sophie Beckerman, ***BA (Hons), Dip Arboriculture Level 4, PTI (Lantra), TechArborA, QTRA Registered***
Sophie has more than 10 years' experience as an arborist, working for a variety of private companies as well as undertaking tree management with Sheffield City Council Ranger Service and The Wildlife Trust. Her expertise in arboriculture is demonstrated in the practical NPTC qualifications gained, and her excellent knowledge is reflected in the L4 diploma in Arboriculture, which she completed while working. Her roles as a climbing arborist and team leader included estimating for jobs and project management, supervising tree contracting teams - ensuring that work is carried out safely and efficiently and that health and safety standards are adhered to, and risk assessments are carried out.

Ross Lane, ***FdSc Environmental Conservation, Diploma Arboriculture, TechArborA, PTI (Lantra), QTRA Registered***
Ross has a diverse background spanning horticulture, arboriculture, and ecology. Ross has extensive experience conducting surveys throughout the UK and has worked on projects of all sizes, including major infrastructure projects such as HS2. In his previous role as a Tree Inspector at Derbyshire County Council, projects involved managing the county wide tree stock in relation to the ash dieback response and contributing to ambitious County Council targets of planting a million trees. Possessing technician-level membership with the Arboricultural Association, coupled with a comprehensive range of qualifications from tree risk assessment to habitat management, underscores Ross' dedication in professional arboriculture.

Appendix 2: Survey Methodology and Limitations

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 BS 5837:2012 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.

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 in 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 unsuitable for retention. 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*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T1	Cedar	*Cedrus deodara*	Early-mature	13	1	450	No	2	3.2	4	4	3	No visual defects	Single stemmed. Vertical. Old pruning wounds	Minor deadwood. Snapped /hanging branches		Fair	Good	>40 yrs	High	B	No works required
T2	Leyland Cypress	*X Cupressocyparis leylandii*	Semi-mature	6	6	110 avg	Yes	0	2	1.5	1	1.5	No visual defects	Multiple stemmed at base. Vertical. Tight union	Minor deadwood. Snapped /hanging branches		Fair	Fair	10 to 20 yrs	Low	C	Removal required to facilitate development
T3	Beech	*Fagus sylvatica 'Purpurea'*	Young	7	1	110	No	1	2	2	2	2	No visual defects	Single stemmed. Vertical. Old pruning wounds. Stubs	Minor deadwood. Snapped /hanging branches		Good	Good	>40 yrs	Moderate	C	No works required
G4	Rhododendron Acacia Holly	*Rhododendron sp. Acacia sp. Ilex sp.*	Young	5	10+	80	Yes	0	See Plan				Understorey screening shrub group. Effective screening but shrubs are of low individual arboricultural value				Good	Good	>40 yrs	Low	C	Pruning works required to facilitate development - Reduce southern crowns by 2m to facilitate proposed fence, pruning to suitable growth points
T5	Cotoneaster	*Cotoneaster sp.*	Early-mature	6.5	6	120 avg	Yes	1.5	6	4	4.5	1.5	No visual defects	Multiple stemmed at base. Vertical. Epicormic growths. Stubs. Tight union	Minor deadwood. Snapped /hanging branches. Overhanging adjacent land	Larger tree within screening group G4. Overhangs road and footpath to south	Good	Fair	20 to 40 yrs	Moderate	C	No works required

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	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T6	Leyland Cypress	*X Cupressocyparis leylandii*	Early-mature	12	2	320 100	Yes	0	4	3	4	2	No visual defects	Twin stemmed at 0.5m. Vertical. Stubs. Tight union. Partially included bark	Minor deadwood. Snapped /hanging branches	Tight unions in crown	Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T7	Sycamore	*Acer pseudoplatanus*	Early-mature	11	1	430	No	4	4.5	3	4.5	4	No visual defects	Single stemmed. Slight lean to east. Epicormic growths. Stubs	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches	Pruned to south away from telegraph pole and road. Lean corrects at 1.5m	Good	Good	20 to 40 yrs	Moderate	C	Pruning works required to facilitate development - Crown lift southern crown to 2m from ground level, pruning to suitable growth points
G8	Leyland Cypress	*X Cupressocyparis leylandii*	Semi-mature	3.5	10+	110 avg	Yes	0	See Plan				Managed cypress screening hedge. Planted almost directly adjacent to retaining wall to south				Good	Good	10 to 20 yrs	Low	C	No works required
G9	Beech	*Fagus sylvatica*	Early-mature	18	10+	230 avg	Yes	0	See Plan				Boundary screening row of Beech and Copper Beech, alternating. Lower 5m managed as hedge within site, managed as hedge to approximately 10m within adjacent property. Dense foliage at base prevented detailed inspection. Tight unions throughout group with occasional included bark. Minor to moderate deadwood and stubs. Accessible stems plotted individually, see Appendix 5 and 6				Good	Good	>40 yrs	Moderate	B	Pruning works required to facilitate development - Crown lift branches within southern aspect to 2m to facilitate proposed fencing, pruning to suitable growtrh points
T10	Privet	*Lingustrum ovalifolium*	Mature	5	5	110 100 90 90 70	No	3	2.5	2.5	3	2.5	No visual defects	Multiple stemmed at base. Vertical. Old pruning wounds. Stubs. Epicormic growths. Bark damage. Minor decay	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches	Larger shrub	Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development

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	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T11	Beech	*Fagus sylvatica*	Early-mature	19	1	600	No	4	4.5	6	4	4	No visual defects	Single stemmed. Vertical. Old pruning wounds. Minor cavities. Minor decay. Tight union	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches	Growing within G9. Tight unions at approximately 4m. Possibly two individual stems that have grafted together to form single distinct trunk	Good	Fair	>40 yrs	Moderate	B	Pruning works required to facilitate development - Crown lift eastern crown to 5m from ground level, pruning to suitable growth points
G12	Laurel	*Prunus laurocerasus*	Early-mature	3.5	10+	100 avg	Yes	0	See Plan				Dense screening hedge, managed				Good	Good	20 to 40 yrs	Low	C	No works required
G13	Leyland Cypress	*X Cupressocyparis leylandii*	Semi-mature	4	10+	110 avg	Yes	0	See Plan				Managed Cypress hedge. Wooden trellis archway across gap				Good	Good	>40 yrs	Low	C	Partial removal required to facilitate development - Retain western section (see Appendix 6)
G14	Leyland Cypress	*X Cupressocyparis leylandii*	Semi-mature	2.5	10+	100 avg	Yes	0	See Plan				Managed Cypress hedge				Good	Good	>40 yrs	Low	C	No works required
G15	Laurel	*Prunus laurocerasus*	Semi-mature	3	10+	100 avg	Yes	0	See Plan				Managed Laurel hedge, fencing to lower southern aspect				Good	Good	20 to 40 yrs	Low	C	Partial removal required to facilitate development - Remove eastern section (see Appendix 6)

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	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
G16	Leyland Cypress	*X Cupressocyparis leylandii*	Semi-mature	3	10+	100 avg	Yes	0	See Plan				Managed Cypress hedge				Good	Good	>40 yrs	Low	C	Removal required to facilitate development
T17	Birch	*Betula pendula*	Semi-mature	8	1	140	No	2	2	3	2	2	No visual defects	Single stemmed. Slight lean to east. Epicormic growths. Stubs	Minor deadwood. Snapped /hanging branches. Slightly unbalanced to east		Good	Good	>40 yrs	Moderate	C	No works required
T18	Apple	*Malus sylvestris*	Semi-mature	4	1	90	No	1	1	1.5	2	1.5	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Stubs. Bark damage. Minor cavities. Minor decay	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches	Tree stake at base	Fair	Fair	20 to 40 yrs	Low	C	Removal required to facilitate development
T19	Staghorn Sumac	*Rhus typhina*	Early-mature	5	4	90 80 70 60	No	0.5	1.5	2.5	3	2.5	No visual defects	Multiple stemmed at 1m. Slight lean to south. Tight union. Partially included bark. Minor decay	Minor deadwood. Snapped /hanging branches. Unbalanced to south	Tight unions at base	Good	Fair	20 to 40 yrs	Moderate	C	Pruning works required to facilitate development - Reduce southern crown by 1m, pruning to suitable growth points
T20	Staghorn Sumac	*Rhus typhina*	Early-mature	6.5	1	160	No	2	2	2	2.5	3.5	No visual defects	Single stemmed. Vertical. Bark damage. Minor cavities	Minor deadwood. Snapped /hanging branches	Lower northern crown suppressed by adjacent Laurel hedge	Good	Fair	20 to 40 yrs	Moderate	C	Removal required to facilitate development

AWA TREE CONSULTANTS

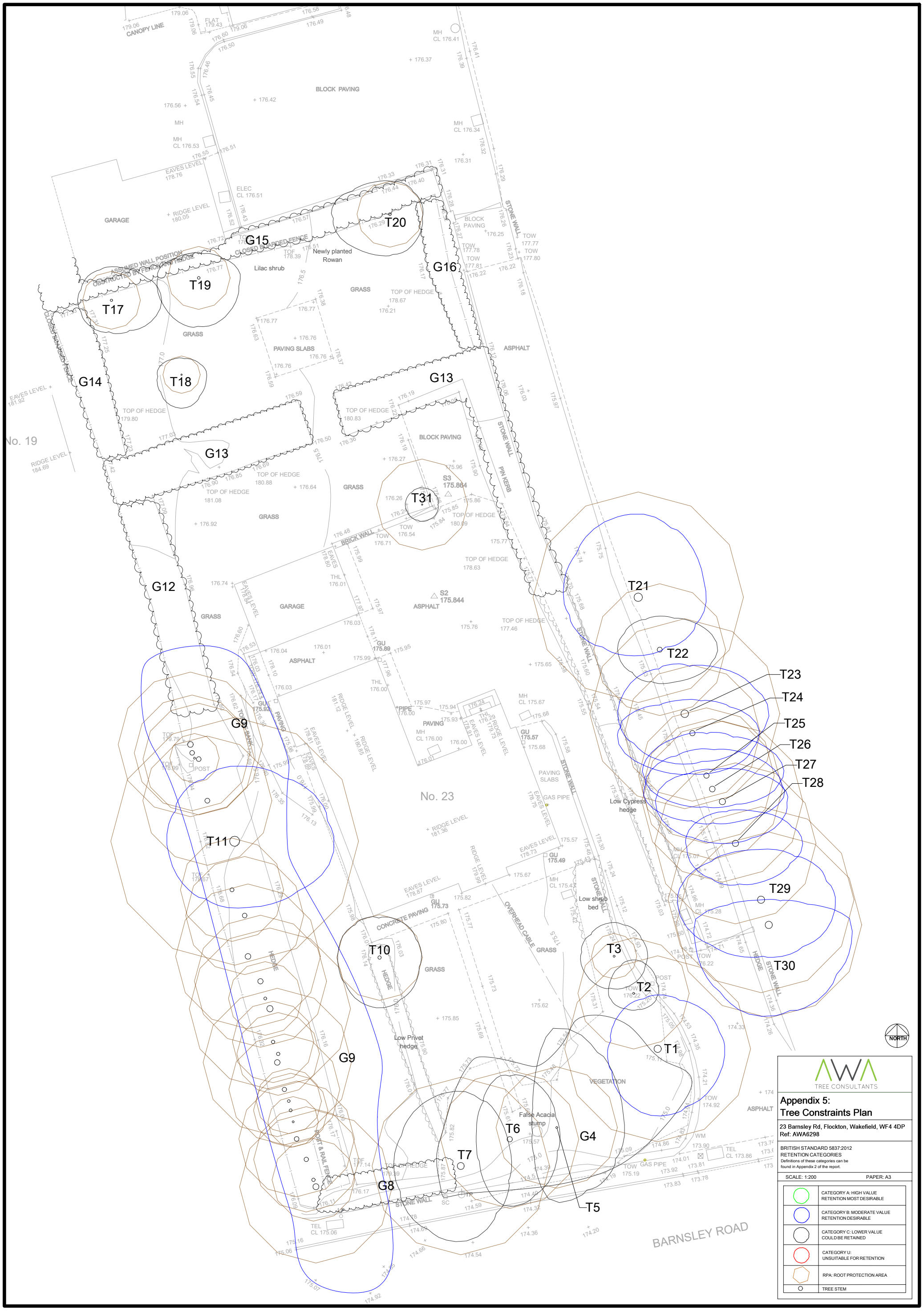
	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T21	Beech	*Fagus sylvatica*	Early-mature	17	2	380 340	No	7	5	4	3.5	4.5	Damage to buttress roots	Twin stemmed at 1m. Vertical. Epicormic growths. Old pruning wounds. Stubs. Tight union. Partially included bark	Old pruning wounds. Minor deadwood. Snapped /hanging branches	Buttress damage to western aspect, lifting driveway kerb	Good	Fair	20 to 40 yrs	Moderate	B	No works required
T22	Beech	*Fagus sylvatica*	Early-mature	17	2	270 170	No	8	2	3.5	2	2.5	No visual defects	Twin stemmed at 0.5m. Vertical. Old pruning wounds. Stubs. Epicormic growths. Minor cavities. Minor decay	Minor deadwood. Snapped /hanging branches	Cavity at base	Fair	Fair	20 to 40 yrs	Moderate	C	No works required
T23	Beech	*Fagus sylvatica*	Early-mature	17	2	340 310	No	8	3	5	3	4	No visual defects	Twin stemmed at base. Vertical. Old pruning wounds. Epicormic growths. Tight union. Partially included bark	Old pruning wounds. Minor deadwood. Snapped /hanging branches		Good	Fair	20 to 40 yrs	Moderate	B	No works required
T24	Beech	*Fagus sylvatica*	Early-mature	17	1	330	No	8	2	4	2.5	4.5	No visual defects	Single stemmed. Vertical. Old pruning wounds. Epicormic growths	Old pruning wounds. Minor deadwood. Snapped /hanging branches		Good	Good	20 to 40 yrs	Moderate	B	No works required

AWA TREE CONSULTANTS

	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T25	Beech	*Fagus sylvatica*	Early-mature	17	2	280 170	No	8	2.5	4.5	2	4	No visual defects	Twin stemmed at 0.5m. Vertical. Old pruning wounds. Stubs. Epicormic growths. Tight union. Partially included bark	Old pruning wounds. Minor deadwood. Snapped /hanging branches		Good	Fair	20 to 40 yrs	Moderate	B	No works required
T26	Beech	*Fagus sylvatica*	Early-mature	17	1	340	No	8	2.5	4.5	2	4	No visual defects	Single stemmed. Vertical. Old pruning wounds. Stubs. Epicormic growths. Minor cavities. Minor decay	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches		Good	Good	20 to 40 yrs	Moderate	B	No works required
T27	Beech	*Fagus sylvatica*	Early-mature	17	1	390	No	8	2	4	2.5	4	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Stubs. Tight union. Partially included bark	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches		Good	Fair	20 to 40 yrs	Moderate	B	No works required
T28	Beech	*Fagus sylvatica*	Early-mature	17	1	390	No	7.5	2	4	2.5	3	No visual defects	Single stemmed. Vertical. Old pruning wounds. Stubs. Epicormic growths. Minor cavities. Minor decay	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches	Two western stems pruned to stubs with epicormic regrowths and decay	Good	Fair	20 to 40 yrs	Moderate	B	No works required

AWA TREE CONSULTANTS

	Tree Species			Measurements				Crown (m)					Tree Condition						Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Diameter (mm)*	*Estimated*	*Crown height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T29	Beech	*Fagus sylvatica*	Early-mature	17	1	450	No	8	3	4.5	3.5	5	No visual defects	Single stemmed. Vertical. Epicormic growths. Old pruning wounds. Stubs. Tight union. Partially included bark	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches		Good	Fair	20 to 40 yrs	Moderate	B	No works required
T30	Beech	*Fagus sylvatica*	Early-mature	17	1	450	Yes	8	1.5	5	5.5	4.5	No visual defects	Single stemmed. Vertical. Old pruning wounds. Epicormic growths. Stubs. Minor cavities. Minor decay	Old pruning wounds. Cavities. Minor deadwood. Snapped /hanging branches		Good	Good	20 to 40 yrs	Moderate	B	No works required
T31	Leyland Cypress	*X Cupressocyparis leylandii*	Young	3.5	6	90 avg	Yes	0	1	1	1	1	Limited access around base	Multiple stemmed. at base. Vertical	Minor deadwood. Snapped /hanging branches	Managed Cypress shrub, pruned to columnar shape	Good	Good	20 to 40 yrs	Low	C	Removal required to facilitate development



TREE CONSULTANTS

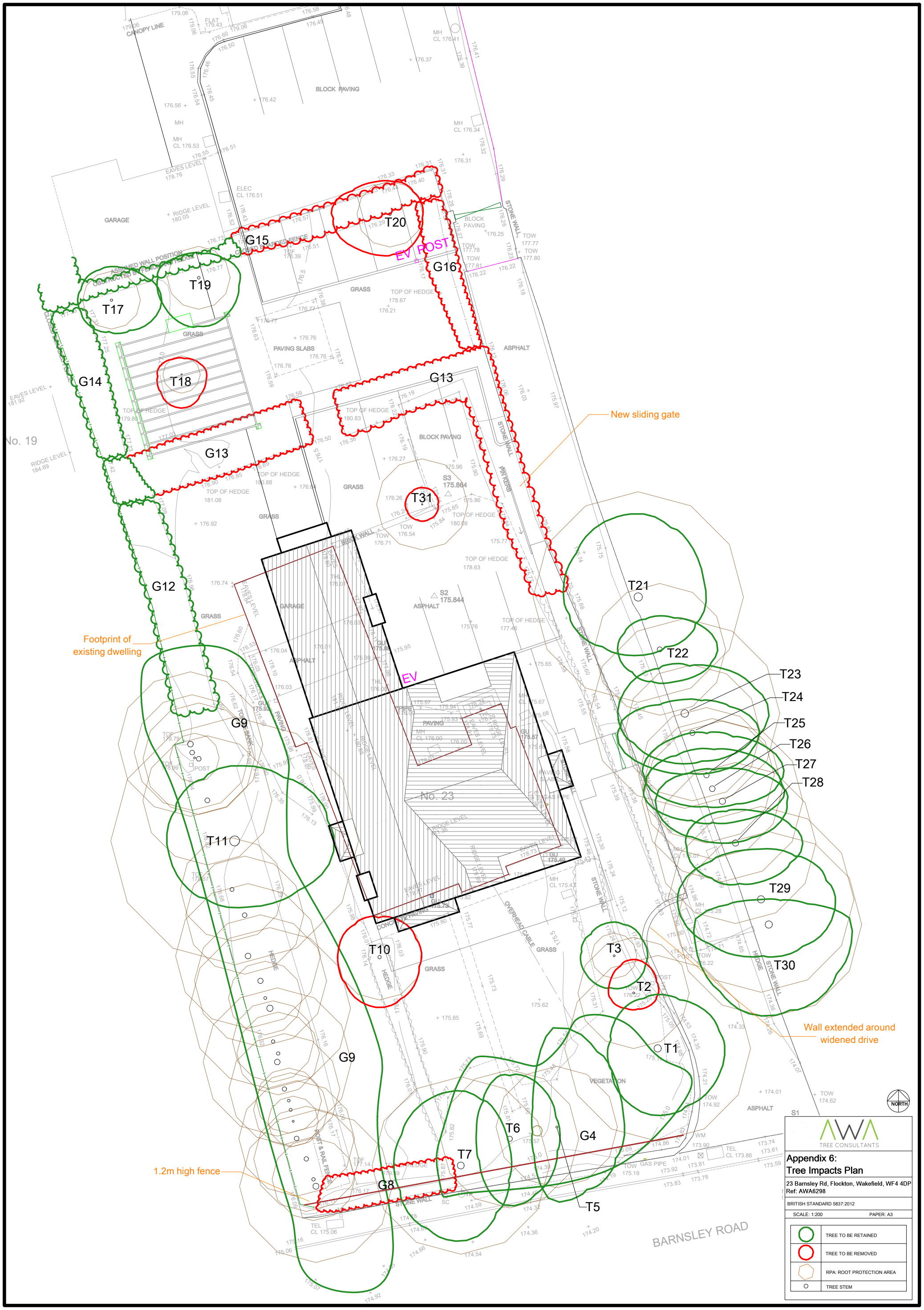
Appendix 5: Tree Constraints Plan

23 Barnsley Rd, Flockton, Wakefield, WF4 4DP
Ref: AWA6298

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

SCALE: 1:200 PAPER: A3

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


New sliding gate
Footprint of existing dwelling
1.2m high fence
Wall extended around widened drive
EV POST
EV
No. 19
No. 23
GARAGE
BLOCK PAVING
GRASS
ASPHALT
PAVING SLABS
TOP OF HEDGE
STONE WALL
BRICK WALL
HEDGE
POST & RAIL FENCE
OVERHEAD CABLE
VEGETATION
BARNSLEY ROAD
T1
T2
T3
T5
T6
T7
T10
T11
T17
T18
T19
T20
T21
T22
T23
T24
T25
T26
T27
T28
T29
T30
T31
G4
G8
G9
G12
G13
G14
G15
G16
S1
S2
S3
NORTH
AWA TREE CONSULTANTS
Appendix 6:
Tree Impacts Plan
23 Barnsley Rd, Flockton, Wakefield, WF4 4DP
Ref: AWA6298
BRITISH STANDARD 5837:2012
SCALE: 1:200
PAPER: A3
TREE TO BE RETAINED
TREE TO BE REMOVED
RPA: ROOT PROTECTION AREA
TREE STEM