TREE CONSULTANTS

ARBORICULTURAL REPORT

& Impact Assessment

to **BS 5837:2012** at:

Greenland Cottages,
High Hoyland,
Barnsley,
South Yorkshire
S75 4AZ

Date: ***September 2024***

Reference: *AWA6205*

Institute of Chartered Foresters
Registered Consultant

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1. Introduction

1.1 Instructions and Brief

1.1.1 We have been instructed 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 September 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 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 in High Hoyland, a small village in the metropolitan borough of Barnsley, South Yorkshire.

2.1.2 The site is an area of land located to the north of a small strip of residential housing. The site is set back from the road and is in an elevated position.

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 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. If either applies, then statutory permission is required before any works can take place.

3.1.3 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.

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

3.1.5 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 9 items of woody vegetation, comprised of 6 individual trees and 3 tree groups or hedges.

3.2.2 Of the surveyed trees: 1 tree is retention category 'U', 3 trees are retention category 'B' and 5 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 The significant tree cover within the site consists of trees along or beyond the eastern and northern boundary, with a small clump of trees to the western area.

3.2.5 Species diversity at the site is fair, with a mix of species including Sycamore and Oak, and shrubs including Hawthorn, Plum and Holly. Most of the trees are semi-mature or early-mature with only occasional mature trees.

3.2.6 A line of semi to early mature Sycamore and Oak trees are situated along the site's eastern boundary (T1 to T5). The Sycamore T1 and Oak T3 are in the most prominent positions and are of moderate amenity value.

3.2.7 The Oak T2 is the least significant of the trees and has significant dieback in its crown. The tree has very limited prospects and is unsuitable to retain in the current site context (category U).

3.2.8 The land to the west of trees T1 o T3 drops down sharply, with an old quarry wall and retaining structures restricting root growth int the site.

3.2.9 The Root Protection Area (RPA) for each tree has been plotted as a polygon centred on the base of the stem. Where the presence of roads/hard surfaces, retaining structures and topography will have clearly impacted the tree roots actual morphology and disposition, the shape of the RPA has been modified to reflect this, without a reduction its area. Where modifications to the RPA have been undertaken this has been clearly detailed and justified on the attached Tree Constraints Plan at Appendix 5.

3.2.10 Some lower value 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: Looking south-east towards T1 – T3, highlighting ground level changes



Photo 2: Looking east towards T1- T3 highlighting quarry face /level changes

4. Arboricultural Impact Assessment

4.1 Proposed New Development

4.1.1 It is proposed to build a new residential development 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, no trees will require removal to facilitate the development, all the trees can be retained as part of the new development.

4.2.2 Oak T2, is retention category U and is unsuitable to retain in the current site context.

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. The new development encroaches close to the RPA of T1 and T3. Construction within the RPA can have negative impacts on tree roots. However, due to the sharp changes in land levels and landform, there will be little to no significant roots will be within the developed area from trees T1 and T3. As such, the retained trees should remain largely unaffected by the works, provided care is taken during construction.

4.3.3 The design of the new development has considered the trees crown position in relation to the dwelling. Some shade from trees may be beneficial. However, the design proposals avoid excessive shading and give adequate provision for future tree growth.

4.3.4 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.

4.3.5 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 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



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

18th September 2024

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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

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 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 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.

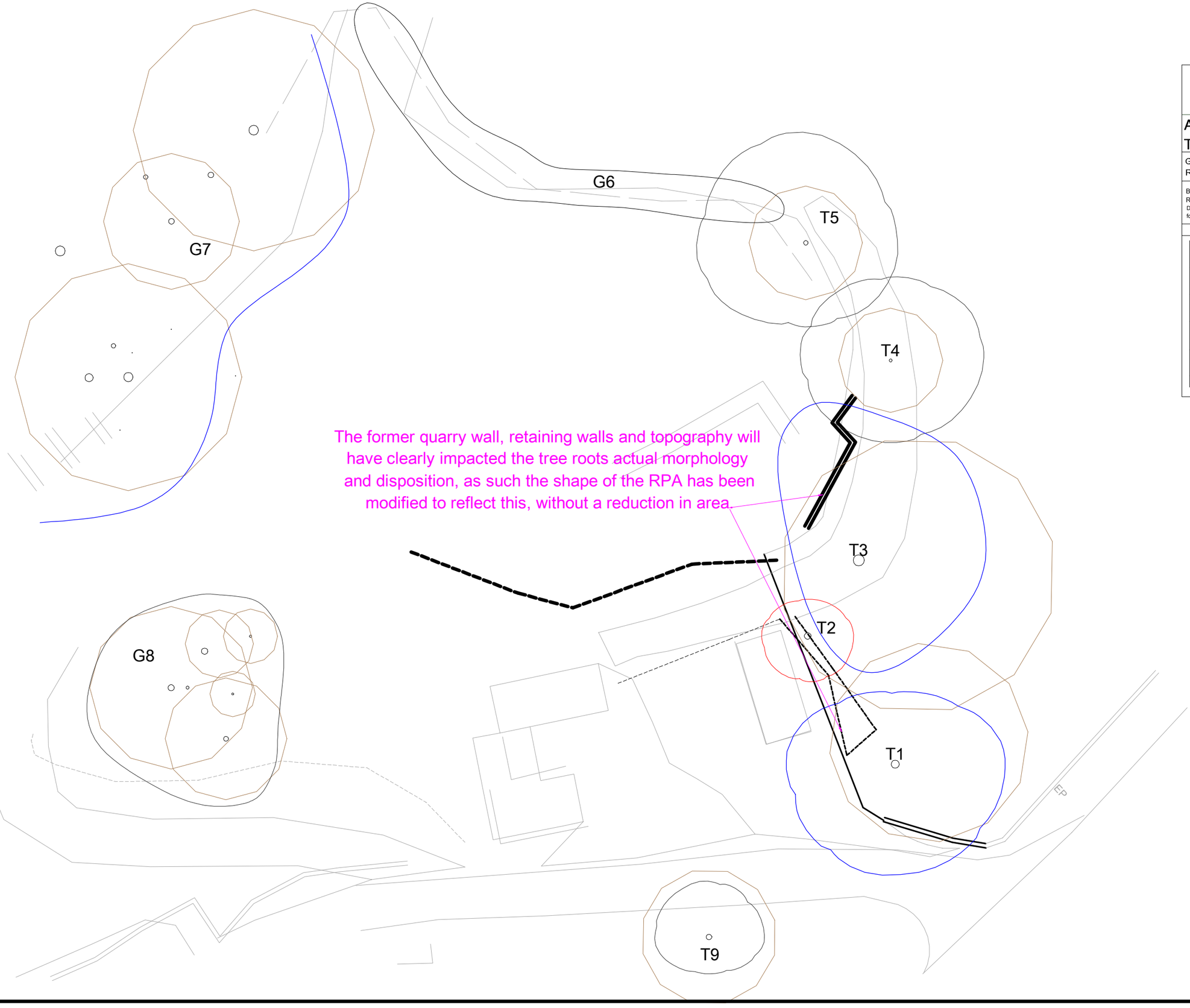
C (marked in grey on Appendix 5) = trees which could be retained. These trees are of low or average quality and value, and are in adequate condition to remain until new planting could be established.

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)										Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Crown height	N	E	S	W	Comments	Physiological	Structural	Life Expectancy		Amenity	Category	Works
T1	Sycamore	*Acer pseudoplatanus*	Early-mature	11	1	440	Yes	5	4	6	6	6	No major visible defects. Crown overhanging road. Land drops to the west, limiting any root growth into the site.	Good	Fair	>40		Moderate	B	No action required - advised to crown lift overhanging road to clear 5.5m from ground level.
T2	Oak	*Quercus robur*	Semi-mature	12	2	280, 250	No	5	2	2.5	2.5	2.5	Growing from edge of old quarry face, limited rooting area. Significant dieback. No long term value	Poor	Poor	<10		Low	U	Unsuitable to retain regardless of any new development.
T3	Oak	*Quercus robur*	Early-mature	16	2	500, 350	No	5	9	7	7	4	No major visible defects. Adjacent/boundary tree. Land drops to the south west with old quarry face, and rises sharply to the north west, with retaining wall around 3m from stem, limiting any root growth into the site.	Fair	Fair	>40		Moderate	B	No action required - advised to crown lift occasional low overhanging branches to clear 3m from ground level.
T4	Sycamore	*Acer pseudoplatanus*	Semi-mature	12	1	160	Yes	5	4	5	5	5	No major visible defects	Fair	Fair	>40		Low	C	No action required
T5	Sycamore	*Acer pseudoplatanus*	Semi-mature	12	6	250	Yes	5	6	5	5	6	Multiple-stemmed form	Fair	Fair	>40		Low	C	No action required

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	Tree Species			Measurements				Crown (m)									Value		Management
Tree ID	Common Name	Latin Name	Maturity	Height (m)	Stems	Stem Diameter (mm)	Estimated	Crown height	N	E	S	W	Comments	Physiological	Structural	Life Expectancy	Amenity	Category	Works
G6	Blackthorn	*Prunus spinosa*	Semi-mature	3	1	100	Yes	5	2	2	2	2	Shrubby boundary group	Fair	Fair	>40	Low	C	No action required
G7	Sycamore, Oak, Beech	*Acer pseudoplatanus*	Semi-mature	7	1	500	No	5	2	2	2	2	Established boundary group	Good	Good	>40	Moderate	B	No action required
G8	Oak, sycamore	*Quercus robur*	Semi-mature	11	2	300	No	5	4	3	6	5	Small clump of trees	Fair	Fair	20 to 40	Low	C	No action required
T9	Spruce	*Picea sp*	Semi-mature	11	1	300	No	5	3	3	2	3	Situated by access drive in adjacent garden area	Good	Good	>40	Moderate	C	No action required



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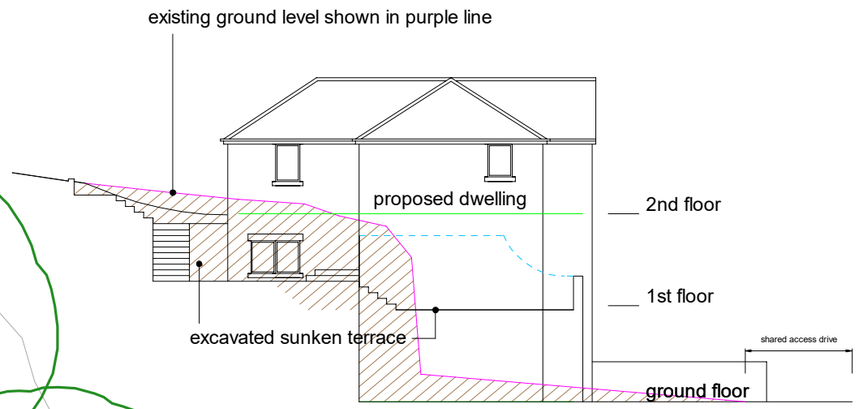
Appendix 5: Tree Constraints Plan

Greenland Cottages, S75 4AZ
Ref: AWA6205

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



diagonal brown hatched area denotes ground to be removed/reduced

proposed section A - A

diagonal brown hatched area denotes ground to be removed/reduced in order to create the sunken terrace areas

G7
G6
T5
T4
T3
T2
T1
G8
T9
A
terrace
terrace
garden
parking
access drive
EP
CL 103.38
CL 104.75
SV

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Appendix 6:
Tree Impacts Plan

Greenland Cottages, S75 4AZ
Ref: AWA6205

BRITISH STANDARD 5837:2012

SCALE: 1:200 PAPER: A3

	TREE TO BE RETAINED
	TREE TO BE REMOVED
	RPA: ROOT PROTECTION AREA
	TREE STEM