

# Arboricultural Impact Assessment

## WC-460.1a

Berry Well, Kirkwood Bridge Lane,  
Spring Vale, Barnsley S36 6AX



### **Woodsage Consulting Ltd**

Unit 2, Hey End Farm, Luddendenfoot, Halifax,  
West Yorkshire HX2 6JN

T: 07962401997

E: [info@woodsage.co.uk](mailto:info@woodsage.co.uk)

W: <https://woodsage.co.uk>





<b>Report type:</b>	Arboricultural Impact Assessment
<b>Report reference:</b>	WC-460.1
<b>Revision:</b>	a
<b>Client:</b>	Will Tomson
<b>Site address</b>	Berry Well, Kirkwood Bridge Lane, Spring Vale, Barnsley S36 6AX
<b>Grid reference:</b>	SE 25802 02699
<b>Report prepared by:</b>	Jack Delaney MICFor MArborA
<b>Date:</b>	13 <sup>th</sup> November 2025

---

### Limitations of use and copyright

This document has been prepared with all reasonable skill, care, and diligence, within the terms of the contract with the addressee. Woodsage Consulting Ltd accepts no responsibility to third-parties to whom this report may be made known. All rights in this report are reserved. The contents and format of this document are for the exclusive use of the addressee in dealing with this site.



## Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>1. INTRODUCTION .....</b>	<b>4</b>
1.1. SCOPE OF REPORT .....	4
1.2. SITE DETAILS .....	4
1.3. SITE TOPOGRAPHY AND ELEVATION .....	5
1.4. DESK BASED STUDY AND PLANNING CONTEXT .....	5
1.5. DEVELOPMENT PROPOSALS.....	5
<b>2. METHODS.....</b>	<b>6</b>
2.1. SURVEY DETAILS .....	6
2.2. SURVEY PERSONNEL .....	6
2.3. SURVEY METHODOLOGY.....	6
2.4. CONSTRAINTS.....	7
<b>3. SURVEY RESULTS .....</b>	<b>8</b>
3.1. ARBORICULTURAL OBSERVATIONS .....	8
3.2. TREE CATEGORISATION.....	8
<b>4. IMPACT ASSESSMENT.....</b>	<b>9</b>
4.1. TREE REMOVALS .....	9
4.2. FACILITATION PRUNING.....	9
4.3. TREE ROOT PROTECTION AREAS (RPAs).....	9
4.4. SHADE ANALYSIS.....	10
<b>5. RECOMMENDATIONS .....</b>	<b>11</b>
5.1. TREE WORKS.....	11
5.2. LEGAL CONSTRAINTS.....	11
5.3. TREE PROTECTION.....	11
5.4. ADDITIONAL INFORMATION.....	12
<b>TABLES AND FIGURES</b>	
FIGURE 1.1: AERIAL IMAGERY SHOWING THE APPROXIMATE BOUNDARIES OF THE SITE .....	4
TABLE 2.1: <i>BS 5837: 2012</i> CASCADE CHART .....	6
TABLE 3.1: SUMMARY OF <i>BS 5837: 2012</i> TREE CATEGORIES RECORDED AT THE SITE.....	8
<b>APPENDICES.....</b>	<b>13</b>
APPENDIX 1: TREE SURVEY SCHEDULE .....	13
APPENDIX 2: IMAGES OF TREES.....	17
APPENDIX 3: OUTLINE ARBORICULTURAL METHOD STATEMENT (AMS) .....	20
APPENDIX 4: TREE CONSTRAINTS PLAN .....	24
APPENDIX 5: SHADE ANALYSIS PLAN.....	25
APPENDIX 6: TREE PROTECTION PLAN.....	26



## Executive Summary

Woodsage Consulting Ltd have been instructed by Will Tomson to prepare an Arboricultural Impact Assessment for the land at Berry Well, Kirkwood Bridge Lane, Spring Vale, Barnsley S36 6AX, in relation to the proposed development of the site.

The development proposals are to demolish an existing dilapidated bungalow and to replace this with a new building.

According to information which is available on the website of by Barnsley Metropolitan Borough Council, none of the trees at the site are subject to tree preservation orders and the site is not located within a conservation area.

The site survey identified a total of 11 individual trees and four groups of trees with the potential to be impacted by the development proposals. These include one category A tree of high-quality, five category B trees and one group of moderate-quality, and five category C trees and three groups of low-quality.

One category C group will require partial removal to facilitate the development proposals.

One category B tree will require facilitation pruning.

The RPAs of the retained trees are to be suitably protected throughout the development process by temporary tree protection fencing and ground protection.

Providing the recommendations made within this report are followed, the development is considered achievable, with minimal impact in arboricultural terms to the site and surrounding area.



## 1. Introduction

### 1.1. Scope of Report

- 1.1.1.** Woodsage Consulting Ltd have been instructed by Will Tomson to prepare an Arboricultural Impact Assessment for the land at Berry Well, Kirkwood Bridge Lane, Spring Vale, Barnsley S36 6AX, in relation to the proposed development of the site.
- 1.1.2.** The purpose of this report is to allow the local planning authority (LPA) to assess information regarding trees at the site as part of the planning submission and to demonstrate to the LPA that appropriate consideration has been given to the subject of trees as part of the development.
- 1.1.3.** In accordance with *BS 5837: 2012*<sup>1</sup> this report sets out to:
- assess the quality and value of the trees on and immediately adjacent to the site;
  - identify trees for removal and/or retention, in consideration of the development proposals (where feasible, removals will be restricted to the less significant specimens on site);
  - prescribe tree protection measures where necessary, which will ensure the successful retention of the retained trees at the site - in accordance with *BS 5837: 2012*, these measures will be further detailed in an outline Arboricultural Method Statement (AMS); and,
  - where necessary, provide preliminary recommendations for mitigation tree planting.
- 1.1.4.** The contents of this report are concerned with arboricultural issues alone; although other disciplines such as engineering and ecology may be referenced, it is important to gain advice from an appropriate expert on these matters.

### 1.2. Site Details

- 1.2.1.** The application site - hereafter referred to as 'the site' and shown in **Fig. 1.1**, below - is located approximately 0.8 miles to the east of Penistone town centre.



**Figure 1.1:** Aerial imagery showing the approximate boundaries of the site, outlined in red<sup>2</sup>

<sup>1</sup> British Standards (2012). *BS 5837: 2012 - Trees in Relation to Design, Demolition and Construction: Recommendations*. London: British Standards Institute.

<sup>2</sup> Microsoft Bing (2025). Bing Maps [online]. Available at: > [www.bing.com/maps/search?style=h&q=+S36+6AX+&srs=sb&cp=53.520365%7E-1.612233&lvl=17.9](http://www.bing.com/maps/search?style=h&q=+S36+6AX+&srs=sb&cp=53.520365%7E-1.612233&lvl=17.9) < [accessed 7<sup>th</sup> November 2025].



- 1.2.2. The site is centred on OS Grid Reference SE 25802 02699 and covers approximately 0.16 ha.
- 1.2.3. The site is accessed via a track from Sheffield Road (B6462), and currently comprises an existing dilapidated timber bungalow and the surrounding garden.

### 1.3. Site Topography and Elevation

- 1.3.1. The site lies at an elevation which ranges between 203 m above ordnance datum (AOD) at the western boundary with Castle Dike, to 214 m AOD at the eastern boundary.
- 1.3.2. The topography of the site is variable, with a general fall in elevation from east to west.

### 1.4. Desk Based Study and Planning Context

- 1.4.1. Cranfield University<sup>3</sup> states that the soils at site and in the surrounding area consist of *Soilscape* 6; these are slightly acidic, loamy soils, that freely draining. No further detailed soil analysis was carried out as part of the survey.
- 1.4.2. According to information which is available on the website of Barnsley Metropolitan Borough Council<sup>4</sup>, none of the trees at the site are subject to tree preservation orders (TPOs) and the site is not located within a conservation area.

### 1.5. Development Proposals

- 1.5.1. The development proposals are to demolish the existing bungalow and replace this with a new building.
- 1.5.2. The development proposals have been issued by More Architecture, and include:
- a ground floor plan of the proposed building (Drawing No: (PL)A400);
  - a first-floor plan of the proposed building (Drawing No: (PL)A401); and,
  - the elevations of the proposed building (Drawing No: (PL)A501).

---

<sup>3</sup> Cranfield University (2025). *Soilscales* [online]. Available at: > [www.landis.org.uk/soilscales](http://www.landis.org.uk/soilscales) < [accessed 7<sup>th</sup> November 2025].

<sup>4</sup> Barnsley Metropolitan Borough Council (2025). *TPO/Conservation Area Map* [online]. Available at: > <https://www.barnsley.gov.uk/barnsley-maps/tree-preservation-orders-map/> < [accessed 7<sup>th</sup> November 2025].



## 2. Methods

### 2.1. Survey Details

- 2.1.1. The site survey was carried out on Wednesday the 5<sup>th</sup> of November 2025.
- 2.1.2. The weather conditions at the time of the survey were fine and dry; visibility of the trees was not impeded.

### 2.2. Survey Personnel

- 2.2.1. The survey was carried out by Jack Delaney. Jack is a Chartered Arboriculturalist (Member of the Institute of Chartered Foresters), and has worked in the arboricultural sector for over 15 years. Jack holds an FdSc in Arboriculture with distinction, and is a Professional Member of the Arboricultural Association. Jack is also a LANTRA qualified Professional Tree Inspector, and is a trained and registered user of Quantified Tree Risk Assessment (QTRA).

### 2.3. Survey Methodology

- 2.3.1. Only substantial trees with a stem diameter of 75 mm or above were included as part of the survey, as is recommended in *BS 5837:2012*.
- 2.3.2. The trees were inspected from ground level, using the Visual Tree Assessment (VTA)<sup>5</sup>. Although notable defects of trees were recorded, the site survey did not constitute a full tree safety assessment. No specialist decay detection equipment was used as part of the survey, though sounding and probing tools were used where necessary.
- 2.3.3. Tree information was collected in accordance with *BS 5837: 2012*, and includes species, height, diameter at breast height (DBH), crown spread, crown clearance, age class, condition, vitality, and safe useful life expectancy (SULE).
- 2.3.4. Trees were allocated to one of four categories (U, A, B or C) as defined in **Tab. 2.1**, below, to reflect amenity value and suitability for retention, in consideration of the development proposals.

**Table 2.1:** *BS 5837: 2012* cascade chart (adapted from *British Standards, 2012*).

<i>BS 5837: 2012</i> Category	Definition	Retention	Colour code
<b>Category A</b>	Trees of high quality with an estimated remaining life expectancy of at least 40 years; trees that are particularly good examples of their species, especially if rare or unusual.	Highly desirable	Light green
<b>Category B</b>	Trees of moderate quality with an estimated remaining life expectancy of at least 20 years; trees lacking the special quality to merit category A designation.	Desirable	Dark blue
<b>Category C</b>	Trees of low quality with an estimated remaining contribution of at least 10 years, or trees with a stem diameter below 150 mm; unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Feasible, but may be removed if posing a constraint to development	Grey
<b>Category U</b>	Trees that have serious, irremediable, structural and/or physiological defects, including those that will become unviable after removal of other category U trees.	Unfeasible	Red

<sup>5</sup> Mattheck, C., Breloer, H. (1994). *The Body Language of Trees, a Handbook for Failure Analysis*. Her Majesty's Stationary: London.



2.3.5. Subcategories 1, 2 and 3 were also given to trees, and reflect arboricultural and landscape qualities, and cultural values, respectively.

2.3.6. Tree dimensions were determined using the following methods<sup>6</sup>:

- Tree heights were measured from the base of the main stem to the top of the crown, using an electric clinometer
- Crown spreads were measured at the four cardinal points, using a laser distometer
- Crown clearances were measured from the base of the main stem to the first significant branch, using an electric clinometer

2.3.7. The DBH of trees was measured using the methods detailed in *Annex C of BS 5837:2012*, and were rounded to the nearest centimetre. The DBHs were then used to calculate tree root protection areas (RPAs) using the following equations:

1. For single stem trees, the RPA was calculated as a circle with a radius 12 times the DBH
2. For trees with 2-5 stems, the combined stem diameter was first calculated using the formula:

$$\sqrt{(\text{Stem 1 DBH})^2 + (\text{Stem 2 DBH})^2 + \dots (\text{Stem 5 DBH})^2}$$

3. For trees with 6 or more stems, the combined stem diameter was first calculated using the formula:

$$\sqrt{(\mu \text{ DBH})^2 \times \text{number of stems}}$$

2.3.8. Where access to trees was obstructed or obscured, DBH, height, and crown spread measurements have instead been estimated

## 2.4. Constraints

2.4.1. The survey was constrained by the season in which it took place; certain tree pathogens and/or defects, for example, the fructifications of decay fungi are only visible at specific times of the year.

2.4.2. The locations of the trees shown in the *Tree Constraints Plan* in *Appendix 4* were aided by a topographical plan of the site (Survey Job No: S9664), which was issued by the client.

2.4.3. There are trees on the site which:

- are situated within dense areas of understorey vegetation;
- display dense adventitious growth on the main stems; and/or,
- have epiphytic plants established upon them.

Whilst such trees were surveyed insofar as was reasonably practicable, the accuracy of such data cannot be guaranteed.

---

<sup>6</sup> Height, crown spread and crown clearance have been recorded to the nearest half metre for dimensions up to 10 m, and the nearest whole metre for dimensions over 10 m



### 3. Survey Results

#### 3.1. Arboricultural Observations

- 3.1.1. The survey identified a total of 11 individual trees and four groups of trees with the potential to be impacted by the proposed development.
- 3.1.2. The surveyed trees comprise a total of 14 species, 13 genera, and 11 families.
- 3.1.3. The tree species recorded at the site include sycamore *Acer pseudoplatanus*, horse chestnut *Aesculus hippocastanum*, monkey puzzle *Araucaria araucana*, downy birch *Betula pubescens*, Leyland cypress *Cupressus x leylandii*, common hawthorn *Crataegus monogyna*, common holly *Ilex aquifolium*, black walnut *Juglans nigra*, wild privet *Ligustrum vulgare*, laurel cherry *Prunus laurocerasus*, crack willow *Salix fragilis*, goat willow *Salix caprea*, elder *Sambucus nigra*, and English yew *Taxus baccata*.

#### 3.2. Tree Categorisation

- 3.2.1. The surveyed trees include one category A tree of high-quality, five category B trees and one group of moderate-quality, and five category C trees and three groups of low-quality.
- 3.2.2. There were no category U trees with a SULEs of less than 10 years identified at the site.
- 3.2.3. A summary of the BS 5837: 2012 categories of trees at the site is given in **Tab. 3.1**, below.

**Table 3.1:** Summary of BS 5837: 2012 tree categories.

Category	Description	Tree/Group Ref.	Line Totals
<b>A</b>	Trees of high-quality, which should be retained throughout the proposed development	T003	1 Tree
<b>B</b>	Trees of moderate-quality, which should where possible be retained throughout the proposed development	T001, T002, T005, T010, T011 G002	5 Trees 1 Group
<b>C</b>	Trees of low-quality, which if removed to facilitate the development can be easily mitigated for	T004, T006, T007, T008, T009 G002, G003, G004	5 Trees 3 Groups
<b>U</b>	Trees of such a condition that they cannot realistically be retained in the context of the current land use for longer than 10 years	-	-
<b>Totals:</b>			<b>11 Trees 4 Groups</b>

- 3.2.4. The full results of the survey can be viewed in **Appendix 1: Tree Survey Schedule**. Images of the trees can be viewed in **Appendix 2: Images of Trees**. Tree locations, and the above and below ground constraints posed by trees, can be viewed in the **Tree Constraints Plans** in **Appendix 4**.



## 4. Impact Assessment

### 4.1. Tree Removals

- 4.1.1. The development proposals will necessitate the partial removal of G004.
- 4.1.2. Alterations are proposed to the existing entrance, which will see the immediate view on entering the garden being focussed on the natural pool at the heart of the site. These alterations are intended to ensure that the focus of the experience is that of the garden, with the architecture of the dwelling secondary to this. In order to facilitate these proposals, a portion of G004 will require removal.
- 4.1.3. G004 is a category C group of low-quality. The removal of low-quality trees will have a negligible impact upon the amenity of the site.

### 4.2. Facilitation Pruning

- 4.2.1. The north-west elevation of the proposed building is in the region of 1-2 m taller than that of the existing building.
- 4.2.2. To accommodate the proposed increase in height at the north-west elevation, branches extending south and east from T001 will need to be reduced by approximately 2 m. The crown of T001 should also be lifted, so that the lowest branches measure approximately 5 m from ground level.

### 4.3. Tree Root Protection Areas (RPAs)

- 4.3.1. Although the proposed building encroaches onto the RPA of T001, in the most part it will be constructed on top of the footprint of the existing building. It is reasonable to assume that the existing structure and foundations will have impacted the morphology and disposition of tree roots, with soil conditions beneath this sealed surface being unfavourable to root growth. The impacts on T001 of erecting the proposed building on to the footprint of the existing building will therefore be low.
- 4.3.2. The proposed building will however be slightly larger than the existing building footprint, and consequently will extend onto approximately 3.25 m<sup>2</sup> of existing uncovered ground within the RPA of T001. In such areas, it is likely that tree roots will be present.
- 4.3.3. These proposals are still considered feasible, providing that the following mitigation measures are implemented during construction to minimise disturbance to tree roots:
- The use of conventional strip footings can result in extensive damage to tree roots and should be avoided within the RPA of T001. The design of the footings should therefore not require excavation into the soil (including through lowering of levels and/or scraping), other than the removal, using hand tools, of any turf layer or other surface vegetation.
  - The proposed building should be constructed upon pile foundations - of the smallest feasible diameter - which will reduce the possibility of striking major tree roots. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of uncured concrete; for example, sleeved bored or screw piles.
  - To determine the optimal location of piles in relation to tree roots, site investigation should be carried within the RPA of T001, by means of hand-operated tools or compressed air soil displacement, to a minimum depth of 60 cm.
  - The smallest practical piling rig should be employed during installation of the piles. The piling rig should be operated upon a piling mat. The piling mat should conform to the parameters for temporary ground protection provided in **Section A3.7** of the **Outline AMS** in **Appendix 3**.



- If tree roots are encountered during installation of the footings which occur in clumps or that are greater than 25 mm diameter, then these should not be severed without first consulting with the Project Arboriculturalist. If roots under this diameter are present, then these can be pruned using an appropriate sharp pruning tool, such as pruning saw or secateurs. Any tree roots which are temporarily exposed be covered with sharp sand or dampened hessian sacks to prevent desiccation.

**4.3.4.** An air source heat pump (ASHP) is proposed within the RPA of T001. The ASHP will be set onto paving slabs, which will be laid onto the existing levels, and will occupy less than 1% of the total RPA. The impacts of the ASHP on the roots of T001 are therefore anticipated to be negligible.

**4.3.5.** The temporary tree protection fencing and ground protection - which are detailed in **Sections A3.5** and **A3.7** of the **Outline AMS** in **Appendix 3**, and which are shown in the **Tree Protection Plan** in **Appendix 6** - will ensure that the RPAs of the retained trees are suitably protected from development activities.

#### **4.4. Shade Analysis**

**4.4.1.** The proposed building will occupy the same space relative to the adjacent trees as the existing building. As a result, there will be very little change to the current level of shading which is imposed on the building.

**4.4.2.** A **Shade Analysis Plan**, which shows the predicted shade patterns of the trees at the site, can be viewed in **Appendix 5**.



## 5. Recommendations

### 5.1. Tree Works

#### 5.1.1. Prior to development works commencing:

- G004 should be partially removed to facilitate the proposed alterations to the site entrance;
- branches extending south and east from T001 should be reduced by approximately 2 m; and,
- the crown of T001 should be lifted, so that the lowest branches measure approximately 5 m from ground level.

### 5.2. Legal Constraints

**5.2.1.** According to information which is available on the website of Barnsley Metropolitan Borough Council<sup>4</sup>, T001 and G004 are not subject to TPOs. However, as the allocation of TPOs can be liable to change, tree protection statuses should be checked and verified with Barnsley Metropolitan Borough Council - by the applicant or assigned arboricultural contractor - prior to commencement of works. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.

**5.2.2.** All tree works, including tree removals, should be carried out by a fully insured and suitably qualified arboricultural contractor who is able to comply with *BS 3998: 2010*<sup>7</sup>.

**5.2.3.** Trees provide valuable habitat for wild birds, bats, and many other forms of wildlife. The risks posed to these should be suitably assessed before the recommendations within this report are completed.

**5.2.4.** Under the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 and the Wildlife and Countryside Act 1981:

- it is an offence to intentionally or recklessly disturb any wild bird listed on Schedule 1 while it is nest building, or destroy at a nest containing eggs or young; and,
- it is an offence to intentionally or recklessly damage or destroy a bat roost site, even if the roost is not occupied at the time.

### 5.3. Tree Protection

**5.3.1.** Construction, and any other works involving excavations, can cause irreversible damage to trees - particularly those which have reached maturity - which are far less capable of adapting to alterations in their surrounding environment. Whilst above-ground injuries are usually obvious, root damage is often concealed, though can have equally devastating impacts to tree health.

**5.3.2.** Direct root damage includes root severance, which can be caused by digging of trenches and ditches, and the stripping of topsoil. Indirect damage may involve the raising of soil levels, alterations in drainage patterns, the laying of impervious surfaces, and soil compaction.

**5.3.3.** Compaction of soils is a common cause of death or damage to retained trees on development sites. Soil compaction reduces soil pore space, which in turn reduces soil air, the passage of water and available nutrients. These anaerobic conditions prevent root growth and the proliferation of soil microbes essential to tree health. Symptoms in trees may include crown die-back, sparse and small foliage, and poor extension growth; however, these are usually not evident until well after

---

<sup>7</sup> British Standards (2010). *BS 3998:2010 - Tree Works: Recommendations*. British Standards Institute: London.



the occurrence of compaction. Even one pass of a vehicle in wet conditions can cause irreparable soil compaction.

- 5.3.4. To avoid both direct and indirect damage to the roots of the retained trees, temporary tree protection fencing and ground protection should be installed prior to the development commencing, in the locations shown in the ***Tree Protection Plan***, which can be viewed in ***Appendix 6***.
- 5.3.5. It is recommended that development works follow the ***Outline AMS*** provided in ***Appendix 3***. This includes the specifications for temporary tree protection fencing, temporary ground protection, and other protective measures to be adhered to throughout the development.
- 5.3.6. As aspects of the development may be subject to change, the ***Outline AMS*** should be reviewed by the Project Arboriculturalist prior to the commencement of development works.

#### 5.4. Additional Information

- 5.4.1. All visual observations and recommendations specified within this document relate to the condition of the trees and surroundings at the time of the survey. As such, any subsequent changes to landform in the proximity of the trees could invalidate the advice given.
- 5.4.2. Trees are dynamic living organisms, and their condition can change rapidly; the information given in this report is therefore valid for a period of 12 months. This period may be reduced if significant changes occur to the trees, or the ground conditions, which surround them.



## Appendices

### Appendix 1: Tree Survey Schedule

Table Key														
<b>Tree/Group Ref:</b> Reference numbers, as illustrated in the <i>Tree Constraints Plan</i> in <b>Appendix 4</b>							<b>DBH:</b> Diameter at breast height (1.5 m), in millimetres							
<b>Height (Ht.):</b> Overall height of tree, measured to nearest metre							<b>SULE:</b> Safe useful estimated life expectancy of tree, in years							
<b>Crown Spread (CS):</b> Radius of crown to N, E, S, and W aspects, measured to nearest metre							<b>Crown Clearance (CC):</b> Clearance from ground level of lowest branch, measured to nearest metre							
<b>Structural Condition (SC):</b> An assessment of structural condition. <b>G</b> = Good; <b>F</b> = Fair; <b>D</b> = Decaying; <b>C</b> = Collapsing; <b>PD</b> = Physical Defect							<b>Physiological Condition (PC):</b> An assessment of vitality and vigour <b>F</b> = Fair; <b>P</b> = Poor; <b>D</b> = Dead							
<b>Species:</b> Common (and <i>binomial name</i> )							#: Denotes estimated value							
Age	<b>Young (Y):</b> Newly planted or self-seeded tree				<b>Early-mature (EM):</b> Trees in second-third of life expectancy for species type				<b>Over-mature (OM):</b> Mature trees which have entered stages of natural decline					
	<b>Semi-mature (SM):</b> Trees in within first-third of life expectancy for species type				<b>Mature (M):</b> Trees in final-third of life expectancy for species type				<b>Veteran/Ancient (V/A):</b> Trees of any age with veteran characteristics or which are remarkably old for the species type					
BS 5837: 2012 Categories	<b>Category A:</b> Trees of high-quality with an estimated remaining life expectancy of at least 40 years, and that are particularly good examples of their species type							<b>Category C:</b> Unremarkable trees of low-quality offering limited arboricultural merit and/or of such impaired condition that they do not warrant in higher categorisation						
	<b>Category B:</b> Trees of moderate-quality with an estimated remaining life expectancy of at least 20 years, though lacking the necessary qualities to warrant Category A designation							<b>Category U:</b> Trees which display serious, irremediable, structural and/or physiological defects						

### Individual Trees

Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	SC	BS 5837: 2012 Category	Recommendations
						N	E	S	W						
T001	Downy birch ( <i>Betula pubescens</i> )	EM	40-80	10	400	4	6	4	3.5	3	Unable to access base of main stem due to dense understorey vegetation. Witches broom apparent in the crown. Minor deadwood < 100 mm in diameter scattered throughout the crown	F	F	B1	<ul style="list-style-type: none"> <li>Reduce branches extending east by approx. 2 m</li> <li>Crown lift to 5 m</li> </ul>
T002	Downy birch ( <i>Betula pubescens</i> )	EM	40-80	11	340	3	3	5	2	3	Bifurcates at 2 m into two co-dominant stems. Minor deadwood < 100 mm in diameter scattered throughout the crown	F	F	B1	No works recommended
T003	Sycamore ( <i>Acer pseudoplatanus</i> )	M	40-80	21	780	6	6	7	5	2	No obvious significant defects.	G	G	A1	No works recommended



Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	SC	BS 5837: 2012 Category	Recommendations
						N	E	S	W						
T004	Common holly ( <i>Ilex aquifolium</i> )	SM	40-80	8	260	1	2	3	3	0	No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher BS 5837 categorisation.	F	F	C1	No works recommended
T005	Crack willow ( <i>Salix fragilis</i> )	EM	20-40	14	590	4	3.5	6	4	2	Historically topped at approx. 9 m.	F	F	B1	No works recommended
T006	Common hawthorn ( <i>Crataegus monogyna</i> )	SM	10-20	3	80 70 50 50	1	0.5	2	2	1	Multiple-stemmed tree. No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher BS 5837 categorisation.	F	F	C1	No works recommended
T007	Elder ( <i>Sambucus nigra</i> )	SM	10-20	5.5	210 190	3	2.5	2.5	3	1	Multiple-stemmed tree. No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher BS 5837 categorisation.	F	F	C1	No works recommended
T008	Leyland cypress ( <i>Cupressus x leylandii</i> )	EM	20-40	9	460	2	2	3	3	2	No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher BS 5837 categorisation.	G	G	C1	No works recommended
T009	English yew ( <i>Taxus baccata</i> )	SM	20-40	6	340	2	2	2	2	0	No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher BS 5837 categorisation.	G	G	C1	No works recommended
T010	Black walnut ( <i>Juglans nigra</i> )	EM	20-40	12	380	3	6	6	3	3	Multiple branch tear-out wounds and broken tertiary branches throughout the crown.	F	F	B1	No works recommended
T011	Monkey puzzle ( <i>Araucaria araucana</i> )	SM	40-80	6.5	280	2	3	3	2	2	Minor deadwood < 100 mm in diameter scattered throughout the crown	F	G	B1	No works recommended



**Groups of Trees**

Group Ref:	Species Composition	Age	SULE	Mx. Ht.	Mx. DBH	Approx. No. of Stems	CC	Comments	V	SC	BS 5837:2012 Category	Recommendations
G001	Sycamore ( <i>Acer pseudoplatanus</i> ) Horse chestnut ( <i>Aesculus hippocastanum</i> ) Downy birch ( <i>Betula pubescens</i> ) Common holly ( <i>Ilex aquifolium</i> ) Goat willow ( <i>Salix caprea</i> ) Elder ( <i>Sambucus nigra</i> )	Y SM	40-80	13	350	20	1.5	Woodland group. Individually, the trees are generally of low-quality, though collectively, the group contributes moderately to the local amenity.	F	F	B1	No works recommended
G002	Sycamore ( <i>Acer pseudoplatanus</i> ) Common hawthorn ( <i>Crataegus monogyna</i> ) Leyland cypress ( <i>Cupressus x leylandii</i> ) Wild privet ( <i>Ligustrum vulgare</i> ) Laurel cherry ( <i>Prunus laurocerasus</i> )	SM	20-40	9	150	50	0	Linear group forming hedge along northern boundary of the site. No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher BS 5837 categorisation.	F	F	C1	No works recommended
G003	Common holly ( <i>Ilex aquifolium</i> ) Laurel cherry ( <i>Prunus laurocerasus</i> ) Wild privet ( <i>Ligustrum vulgare</i> )	SM	20-40	3.5	100	50	0	Linear group forming hedge along eastern boundary of the site. No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher BS 5837 categorisation.	F	F	C1	No works recommended



Group Ref:	Species Composition	Age	SULE	Mx. Ht.	Mx. DBH	Approx. No. of Stems	CC	Comments	V	SC	BS 5837:2012 Category	Recommendations
G004	Wild privet ( <i>Ligustrum vulgare</i> )	SM	20-40	4	110	20	2	No obvious significant defects, though of limited arboricultural merit, and lacks the necessary qualities for higher BS 5837 categorisation.	F	F	C1	Partial removal of group to facilitate proposed alterations to site entrance



**Appendix 2: Images of Trees**



*Plate 1: T001*



*Plate 2: T002 (right) & T003 (left)*



*Plate 3: T005*



*Plate 4: T006 (right) & T007 (left)*



**Plate 5:** T008 (left) & T009 (right)



**Plate 6:** T010



**Plate 7:** T011



**Plate 8:** G001



***Plate 9: G002***



***Plate 10: G003***



***Plate 11: G004***



## Appendix 3: Outline Arboricultural Method Statement (AMS)

### A3.1 Introduction

- A3.1.1** Woodsage Consulting Ltd have been instructed by Will Tomson to prepare an Outline AMS in relation to the proposed development of the land at Berry Well, Kirkwood Bridge Lane, Spring Vale, Barnsley S36 6AX.
- A3.1.2** The development proposals are to demolish the existing bungalow and replace this with a new building.
- A3.1.3** This Outline AMS should be read in conjunction with the Arboricultural Impact Assessment (Ref: WC-460.1a).

### A3.2 Timing of Works

- A3.2.1** It is not the Project Arboriculturist's role to determine the timing and implementation of works on site however, an input into the process can avoid issues once work is underway.
- A3.2.2** The phasing of works should be carried out in accordance with **Tab. A3.1**, below.

**Table A3.1:** *Timing of Works.*

Stage	Description
1	Site induction
2	Carry out the tree works specified in <b>Section A3.4</b> of this <b>AMS</b>
3	Install the temporary tree protection fencing and ground protection, to the specification detailed in <b>Sections A3.5</b> and <b>A3.7</b> of this <b>AMS</b> , in the locations shown in the <b>Tree Protection Plan</b>
4	Inspection of tree protection measures by the Project Arboriculturalist
5	Carry out development works (precautionary measures detailed in <b>Section A3.6</b> of this <b>AMS</b> to be followed throughout the development)
6	Remove temporary tree protection fencing and ground protection once the development works have been completed
7	Final inspection by the Project Arboriculturalist

### A3.3 Site Supervision

- A3.3.1** Prior to works commencing, it is the responsibility of the main contractor, or assigned agent, to ensure that details regarding tree protection are understood and adhered to by all site personnel.
- A3.3.2** During the site induction, the final AMS and a copy of the **Tree Protection Plan** - which can be viewed in **Appendix 6** - should be made available to all contractors attending the site.

### A3.4 Tree Works

- A3.4.1** Prior to development works commencing:
- G004 should be partially removed to facilitate the proposed alterations to the site entrance;
  - branches extending south and east from T001 should be reduced by approximately 2 m; and,
  - the crown of T001 should be lifted, so that the lowest branches measure approximately 5 m from ground level.
- A3.4.2** According to information which is available on the website of Barnsley Metropolitan Borough Council, T001 and G004 are not subject to TPOs. However, as the allocation of TPOs can be liable to change, tree protection statuses should be checked and verified with Barnsley Metropolitan Borough Council - by the applicant or assigned arboricultural contractor - prior to commencement



of works. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.

**A3.4.3** All tree works, including removals, should be carried out by a fully insured and suitably qualified arboricultural contractor, who is able to comply with *BS 3998: 2010 - Tree Works: Recommendations*.

**A3.4.4** Trees provide valuable habitat for wild birds, bats, and many other forms of wildlife. The risks posed to these should therefore be suitably assessed before the recommendations within this AMS are completed.

### **A3.5 Temporary Tree Protection Fencing**

**A3.5.1** The temporary tree protection fencing shall be installed prior to the commencement of development works, and should be fit for the purpose of excluding site personnel and machinery. The default specification should be in accordance with *BS 5837: 2012 - Trees in Relation to Design, Demolition and Construction: Recommendations*.

**A3.5.2 Specification:** Barriers shall be a minimum 2 m high, and should consist of a vertical and horizontal scaffold framework, well braced to resist impacts, as illustrated in **Fig. A3.1**, below, and **Fig. A3.2**, on the next page.

**A3.5.3** The vertical tubes shall be spaced at a minimum interval of 3 m and driven securely into the ground. Onto this framework, welded mesh panels should be securely fixed.



**Figure A3.1:** Examples of scaffold framework temporary tree protection.

**A3.5.4** All-weather notices shall be attached to the barriers at 9 m intervals with the words 'TREE PROTECTION ZONE - NO ACCESS' clearly visible.

**A3.5.5 Location:** The temporary tree protection fencing should be installed prior to development works commencing - in the locations shown in the **Tree Protection Plan** - and shall remain in place until the development is completed.

**A3.5.6** The protected areas should be regarded as sacrosanct, and once installed, tree protection fencing should not be removed or altered without prior consultation with the Project Arboriculturist.

**A3.5.7** If any breach in the tree protection fencing occurs, it is the Site Manager's responsibility to report this to the Project Arboriculturalist, so that appropriate measures may be taken. Any breach which results in death or damage to the trees could result in a criminal offence being committed.

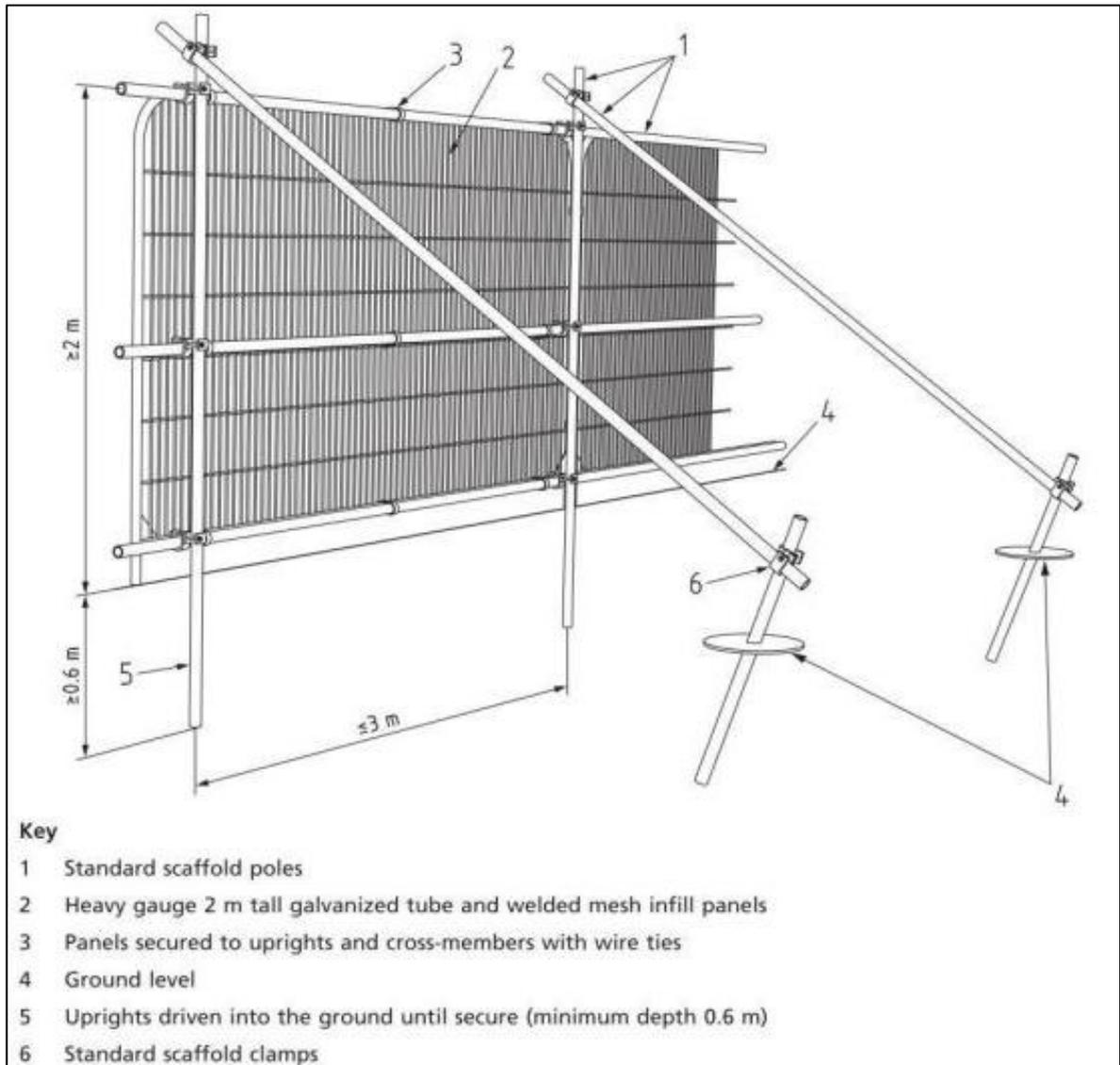


Figure A3.2: Temporary 2 m steel protective fencing.

### A3.6 Precautionary Measures

- A3.6.1** No materials hazardous to tree health, such as oil, bitumen or cement should be stored within the temporary protective fencing. Where possible, this area should be extended to 10 m away from the fencing.
- A3.6.2** Where there is a risk of polluted water runoff into root protection areas (RPAs), heavy duty plastic sheeting and sandbags must be used to contain any spillages and prevent contamination. No fires should be lit within 20 m of the protective fencing.
- A3.6.3** As the majority of tree roots are typically found within the first 100 cm of ground level - particular attention should also be paid to existing levels - which should be observed and maintained within tree RPAs.
- A3.6.4** Any unavoidable excavations into the soil within tree RPAs should be carried out using compressed air soil displacement or hand-operated tools, and only under prior approval of the Project Arboriculturalist. If roots are encountered which occur in clumps or which are greater than 25 mm in diameter, these should not be severed without first consulting the Project Arboriculturalist.



### A3.7 Temporary Ground Protection

**A3.7.1** Due to site constraints, and to allow for suitable working space during construction, the temporary tree protection fencing adjacent to T001 will be setback from the default *BS 5837:2012* positioning. As a result, soft-landscape within the RPA of T001 will be exposed to development activities.



*Figure A3.3: Examples of temporary ground protection panels.*

**A3.6.2** Temporary ground protection should therefore be installed in the locations shown in the **Tree Protection Plan** - and shall remain in place until construction of the dwelling is completed.

**A3.7.3** The temporary ground protection should consist of inter-linked boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip) which are laid onto a geotextile membrane, as illustrated in **Fig. A3.3**, above.

**A3.7.4** Any vehicles, plant, or machinery operating within the RPA of T001 must ensure that it does so upon the ground protection at all times.

### A3.8 Responsibility and Site Management

**A3.8.1** It is the responsibility of the main contractor or assigned agent to ensure that details regarding tree protection are understood and followed by all site personnel.

**A3.8.2** Inspections by the Project Arboriculturalist are to be undertaken at the following stages:

1. Once the temporary tree protection fencing and ground protection have been installed - in the locations shown in the **Tree Protection Plan** - and prior to development works commencing
2. Upon completion of the development works

**A3.8.3** After each inspection, a letter should be submitted by the Project Arboriculturalist to the LPA Arboricultural Officer, to confirm if the method statement has been followed correctly, and if trees have not been adversely affected by development works.

### A3.9 Project Arboriculturalist Contact Details

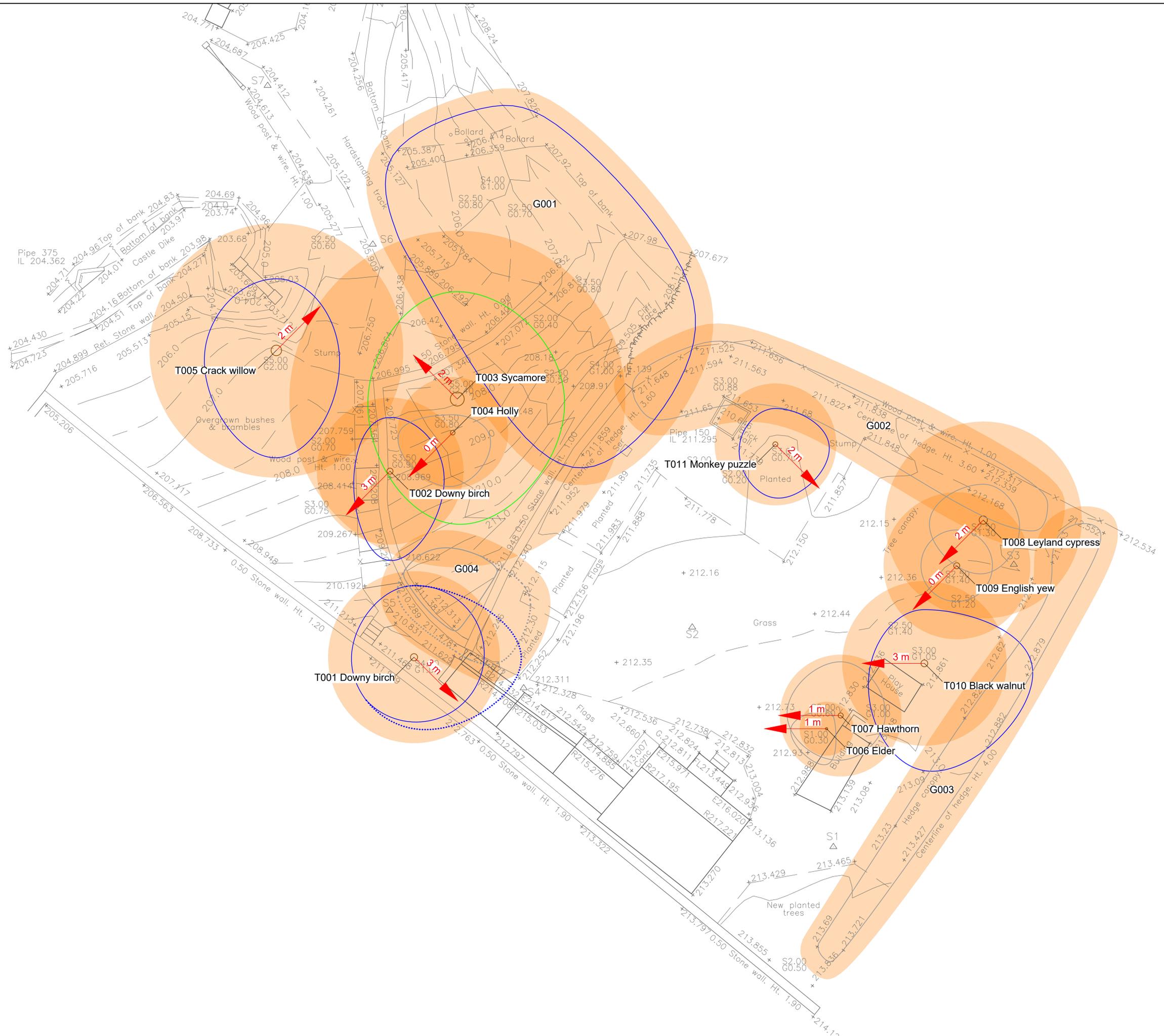
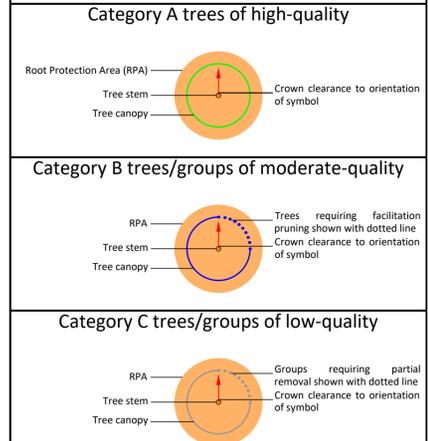
Mr Jack Delaney MICFor  
Woodsage Consulting Ltd  
Unit 2, Hey End Farm,  
Shield Hall Lane,  
Luddendenfoot,  
West Yorkshire HX2 6JN  
Tel: 07962401997  
Email: [jack@woodsage.co.uk](mailto:jack@woodsage.co.uk)

## Appendix 4: Tree Constraints Plan

<b>Project:</b>	Berry Well, Kirkwood Bridge Lane, Barnsley, S36 6AX
<b>Drawn by:</b>	Jack Delaney
<b>Date:</b>	13th November 2025
<b>Scale:</b>	1:100 @ A1
<b>Drawing Number:</b>	WC-460.1a.4

**Do not scale off this drawing - to be reproduced in colour only**

### Map Key:



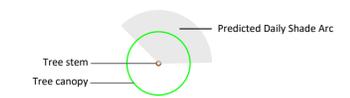
## Appendix 5: Shade Analysis Plan

<b>Project:</b>	Berry Well, Kirkwood Bridge Lane, Barnsley, S36 6AX
<b>Drawn by:</b>	Jack Delaney
<b>Date:</b>	13th November 2025
<b>Scale:</b>	1:100 @ A1
<b>Drawing Number:</b>	WC-460.1a.5

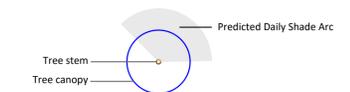
**Do not scale off this drawing - to be reproduced in colour only**

### Key:

Category A trees of high-quality



Category B trees/groups of moderate-quality



Category C trees/groups of low-quality



## Appendix 6: Tree Protection Plan

<b>Project:</b>	Berry Well, Kirkwood Bridge Lane, Barnsley, S36 6AX
<b>Drawn by:</b>	Jack Delaney
<b>Date:</b>	13th November 2025
<b>Scale:</b>	1:100 @ A1
<b>Drawing Number:</b>	WC-460.1a.6

**Do not scale off this drawing - to be reproduced in colour only**

### Map Key:

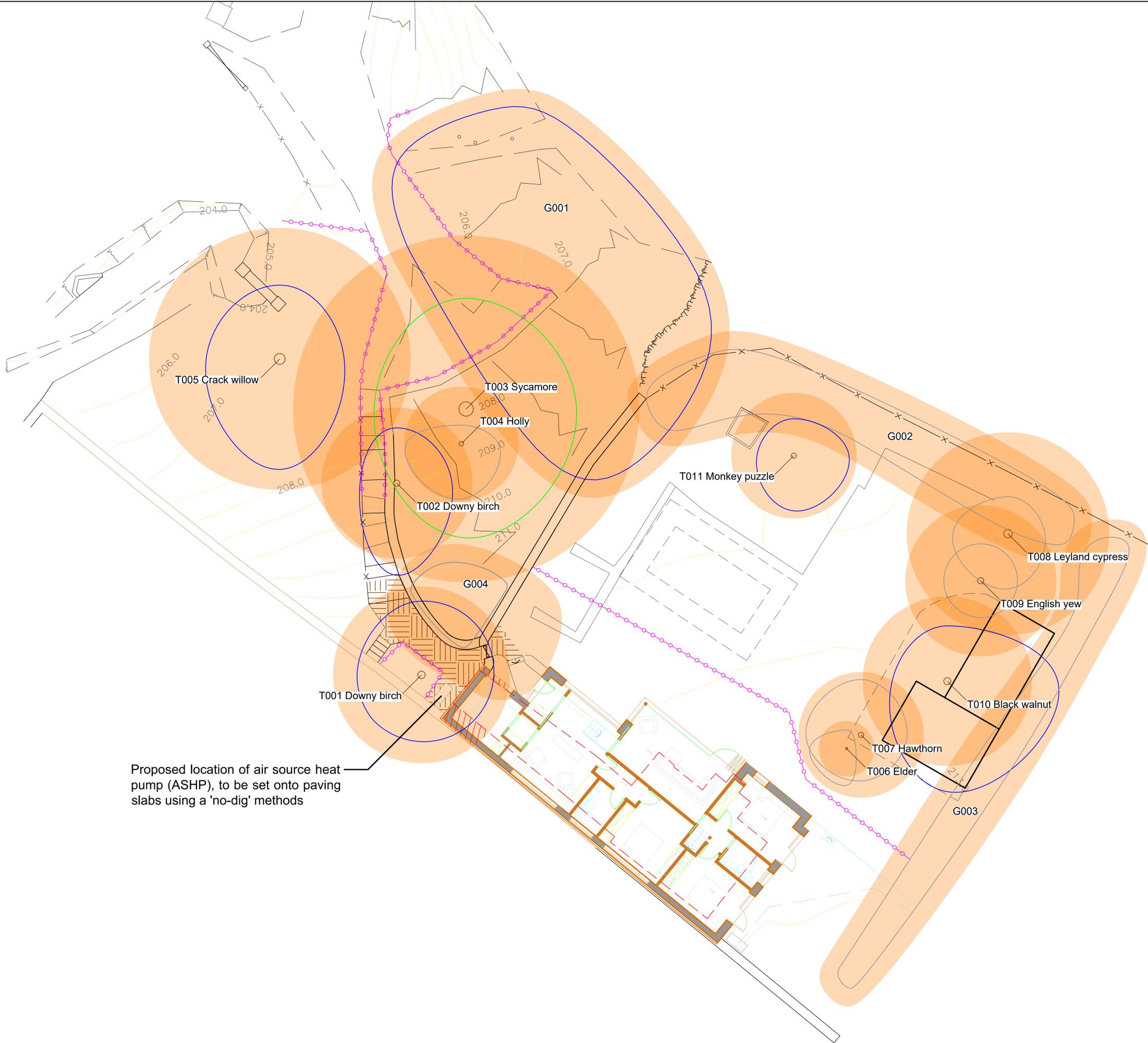
<b>Category A trees of high-quality</b>
<b>Category B trees/groups of moderate-quality</b>
<b>Category C trees/groups of low-quality</b>

Temporary tree protection fencing, to BS 5837: 2012 specification, as detailed in Section A3.5 of the *Outline Arboricultural Method Statement (AMS)*.

Temporary ground protection, to BS 5837: 2012 specification, as detailed in Section A3.7 of the *Outline AMS*.

Outline of demolished building

Areas of existing uncovered ground within tree RPAs which will be covered by the replacement building



Proposed location of air source heat pump (ASHP), to be set onto paving slabs using a 'no-dig' methods