

# Arboricultural Impact Assessment

## WC-181.1a

Land off Round Ings Road, Outlane,  
Huddersfield HD3 3FQ



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## Executive Summary

Woodsage Consulting Ltd have been instructed by Robert Halstead Chartered Surveyors & Town Planners to undertake an Arboricultural Impact Assessment of the land at Land off Round Ings Road, Outlane, Huddersfield HD3 3FQ, in relation to the proposed development of the site.

The development proposals are for the erection of extensions and alterations to three existing dwellings. Change of use and extensions/alterations are also proposed to an existing barn to form an extended dwelling (no.4), and change of use of land to form access and parking.

According to information available on the website of the Kirklees Council (2024), none of the trees at the site are subject to tree preservation orders (TPOs), and site is not located within the boundaries of a conservation area.

The site survey identified a total of 27 individual trees and four groups of trees with the potential to be affected by the proposed development of the site; these include 15 category B trees of moderate-quality, 11 category C trees and four groups of low-quality, and one category U tree with a safe useful life expectancy (SULE) of < 5 years.

The development proposals will necessitate the removal of three category C trees.

The root protection areas (RPAs) of four category B trees and one category C tree will be impacted by the proposed renewal of hard-standing on the existing driveway. The proposed renewal of the hard-standing within RPAs is considered feasible, with minimal impact to the adjacent trees, providing that the mitigation measures specified in this report are implemented during construction.

In order to meet the specification provided by Paragon Highways Consultants, the existing driveway will need to be widened to 4.5 m. As a result, two category B trees will also be impacted by minor excavations into the soil within the RPAs. To ensure that tree roots are not adversely impacted, these excavations should be carried out using a compressed air soil displacement method.

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

Although the proposed development will necessitate the removal of category C trees of low-quality only, to enhance the local amenity, it is recommended that six new trees are included within a post-development planting scheme.

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. Introduction and Scope of Report

**1.1.1.** Woodsage Consulting Ltd have been instructed by Robert Halstead Chartered Surveyors & Town Planners to undertake an Arboricultural Impact Assessment of the land at Land off Round Ings Road, Outlane, Huddersfield HD3 3FQ, 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 proposals.

**1.1.3.** In accordance with *BS 5837: 2012: Trees in Relation to Design, Demolition and Construction - Recommendations* (hereafter referred to as *BS 5837: 2012*), 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).
- Prescribe 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 site - shown in **Fig. 1.1**, below - is centred on OS Grid Reference SE 08118 17034, and comprises several existing residential buildings, and the associated driveway and gardens, with surrounding agricultural land.



**Figure 1.1:** Aerial imagery showing the approximate boundary of the site, outlined in red (Google Earth Pro, 2024).



**1.2.2.** The site is bound by agricultural land to the north and east, by a residential access track to the south, and by Round Ings Road to the west.

### **1.3. Site Elevation and Topography**

**1.3.1.** The site lies at an altitude ranging between 290-310 m above sea-level.

**1.3.2.** The topography of the site slopes from south to north.

### **1.4. Desk Based Study and Planning Context**

**1.4.1.** Cranfield (2024) states that the site and surrounding area consists of *Soilscape 6*; these are slightly acidic, loamy soils, that are freely draining. No further detailed soil analysis was carried out as part of the survey.

**1.4.2.** According to information available on the website of the Kirklees Council (2024), none of the trees at the site are subject to tree preservation orders (TPOs), and site is not located within the boundaries of a conservation area.

### **1.5. Development Proposals**

**1.5.1.** The development proposals are for the erection of extensions, and alterations to three existing dwellings. Change of use and extensions/alterations are also proposed to an existing barn to form an extended dwelling (no.4), and change of use of land to form access and parking.



## 2. Methods

### 2.1. Survey Details

2.1.1. The site survey was carried out on Monday the 26<sup>th</sup> of June 2023. The weather at time of survey was 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, Mattheck and Breloer, 1994) methodology. 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 should 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

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 heights were measured using a clinometer to the 0.5 m; crown spreads were measured to the north, east, south, and west aspects, using a laser measurer to the nearest 0.5 m.



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

**2.3.8.** The DBH of trees was measured at 1.5 m above ground level, and rounded to the nearest centimetre. This was then used to calculate the root protection area (RPA) of trees using methods prescribed in *BS 5837:2012*:

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

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

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

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

#### **2.4. Constraints**

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

**2.4.2.** The locations of trees plotted during the survey were aided using a topographical plan of the site; the accuracy of this plan is unknown to the author of this document.



### 3. Survey Results and Observations

#### 3.1. Tree Population and Amenity Value

3.1.1. The site survey identified a total of 27 individual trees and four groups of trees at the site, with the potential to be affected by the proposed development.

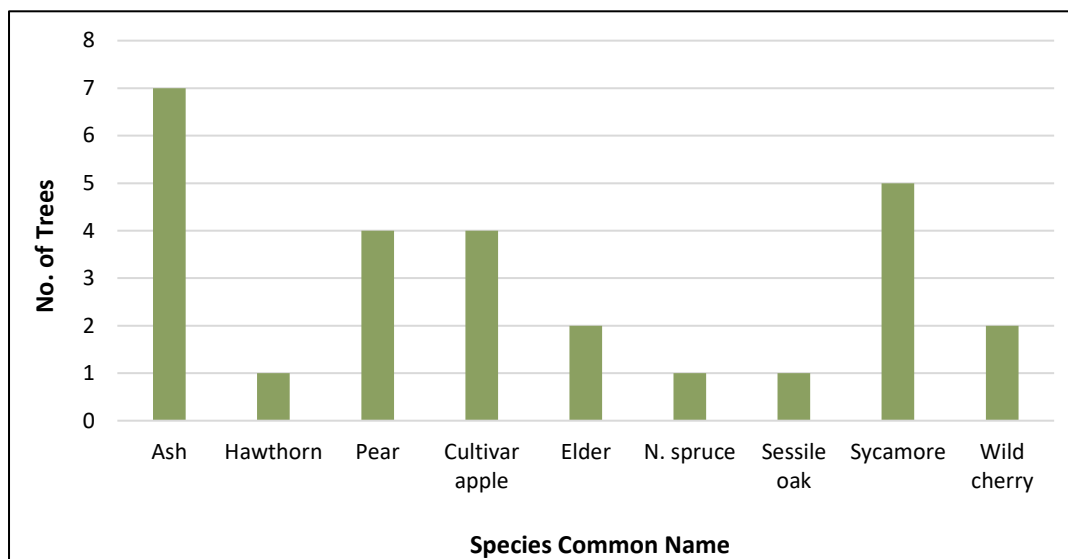


Figure 3.1: Bar chart showing the tree species recorded as individual trees at the site.

3.1.2. Fig. 3.1, above, shows that the prevalent tree species at the site is ash (*Fraxinus excelsior*), which accounts for approximately 26% of the trees recorded as individuals, followed by sycamore (*Acer pseudoplatanus* – 19%), pear (*Pyrus communis* – 15%), and cultivar apple (*Malus domestica* – 15%). The remaining 25% is comprised of hawthorn (*Crataegus monogyna*), Norway spruce (*Picea abies*), wild cherry (*Prunus avium*), sessile oak (*Quercus petraea*), and elder (*Sambucus nigra*).

3.1.3. Additional species which were recorded in groups include silver birch (*Betula pendula*), summer lilac (*Buddleia davidii*), Leyland cypress (*Cupressus x leylandii*), holly (*Ilex aquifolium*), sour cherry (*Prunus cerasus*), cherry laurel (*Prunus laurocerasus*), white willow (*Salix alba*), and goat willow (*Salix caprea*).

3.1.4. The trees are positioned to the north, east and west of the site:

- To the north, the trees predominantly consist of young and semi-mature Leyland cypress (*C. x leylandii*), which form a hedge on the boundary of the existing gardens.
- To the east, the majority of the trees are semi-mature or early-mature and form an orchard, with species such as cultivar apple (*M. domestica*), wild cherry (*P. avium*) and pear (*P. communis*).
- To the west, young, semi-mature, and early-mature trees - predominantly ash (*F. excelsior*) and sycamore (*A. pseudoplatanus*) - are located on a strip of rough land between the existing drive and Round Ings Road.

#### 3.2. Tree Categorisation

3.2.1. The trees at the site include 15 category B trees of moderate-quality, 11 category C trees and four groups of low-quality, and one category U tree which has a SULE of less than 5 years.

3.2.2. There were no category A trees of high-quality 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 Tree Categories.

<i>BS 5837: 2012</i> Category	Description	Tree/Group Numbers	Totals
<b>B</b>	Trees of moderate-quality, which should where possible be retained throughout any proposed development	T001, T002, T006, T009, T010, T011, T013, T015, T016, T018, T019, T020, T021, T022, T024	15 Trees
<b>C</b>	Trees of low-quality, which should not be considered a constraint to development	T003, T004, T005, T007, T008, T012, T014, T017, T023, T025, T026 G001, G002, G003, G004	11 Trees 4 Groups
<b>U</b>	Trees that have serious, irremediable, structural and/or physiological defects, which should not be considered a constraint to development	T027	1 Tree
<b>Subtotal:</b>			<b>27 Trees</b> <b>4 Groups</b>

**3.2.4.** Tree data 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 Plan** in **Appendix 4**.



## 4. Impact Assessment

### 4.1. Tree Removals

- 4.1.1. The development proposals will necessitate the removal of T003, T004, and T026.
- 4.1.2. T003 and T004 are positioned within the footprint of a proposed refuse collection point, and will therefore necessitate removal to facilitate the development.
- 4.1.3. T026 is positioned within proximity to an existing dilapidated barn, which is proposed to be disassembled and rebuilt upon the same footprint. T026 will therefore necessitate removal to facilitate the demolition and construction process.
- 4.1.4. T003, T004, and T026 are all category C trees of low-quality; in accordance with *BS 5837:2012*, these trees should not be considered a constraint to the development.

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

- 4.2.1. The RPAs of T001, T002, T005, and T006 will be impacted by the proposed widening of the driveway, in order to meet the specification provided by Paragon Highways Consultants.
- 4.2.2. T001, T002, T005, T006, and T010 will also be impacted by the proposed refurbishment of hard-standing within the RPAs.
- 4.2.3. A summary of the affected RPAs is given in **Tab 4.1**, below.

**Table 4.1:** Summary of tree RPAs impacted by the renewal of hard-standing and excavations.

Tree Ref.	BS 5837: 2012 Category	Total RPA (m <sup>2</sup> )	Total existing hard-standing within RPA to be refurbished (m <sup>2</sup> )	Total proposed excavations within RPA (m <sup>2</sup> )	Total affected RPA by excavations (%)
T001	B	75.5	19.5	5.2	6.9
T002	B	128.7	25.7	8.1	6
T005	C	32.2	2	3	9.3
T006	B	75.4	< 1	2.5	3.3
T010	B	162.9	26.9	1	< 1%

- 4.2.4. The proposals to refurbish hard-standing within the RPAs of T001, T002, T005, T006, and T010 are considered feasible, with minimal impact to tree roots, providing that:
  - the existing hard-standing is left in-situ beneath the new surfacing, or, if this is not feasible, the existing hard-standing should be removed using hand-operated tools only.
  - the replacement hard-standing is of a permeable construction, to help maintain the infiltration of water and free gaseous exchange between tree roots and the atmosphere.
- 4.2.5. Renewal of hard-standing within tree RPAs should adhere to the guidelines detailed in **Section 8** of the **Outline AMS** in **Appendix 3**.
- 4.2.6. The portions of the RPAs of T006 and T010 which will be impacted by the proposed excavations to widen the driveway are considered negligible. In the cases of T001 and T002, the relatively small proportions of impacted RPA, along with the low-intensity of the required excavations (which will require the removal of the top 20-30 cm only, much of which consists of fallen leaf litter and other debris) suggests that the proposals are feasible, providing that the following mitigation measures are implemented during construction:
  - Any existing vegetation within tree RPAs should be removed using hand-operated tools only.



- All excavations into the soil within the RPAs of T001 and T002 are to be carried out using a compressed air soil displacement method. Compressed air soil displacement is an efficient method of soil removal within RPAs which - when compared to traditional mechanical methods - significantly reduces the damage incurred to tree roots.
- If major roots that are greater than 25 mm are encountered, these should not be severed without first consulting with the Project Arboriculturalist. If roots under this diameter are present, these will be pruned using an appropriate sharp pruning tool, such as pruning saw or secateurs. Any temporarily exposed roots will be covered with sharp sand to prevent desiccation.

**4.2.7.** The strip excavations required for the installation of kerbs can inflict serious damage upon tree roots. Within the RPAs of T001, T002, T005, T006, and T010 this should be avoided by using alternative methods of edge support; for example, Tanalised® board edging positioned directly on top of existing grade levels, and secured with track or road pins, as is detailed in **Section 8** of the **Outline AMS** in **Appendix 3**.

**4.2.8.** Although RPA intrusions are in most circumstances best avoided, due to the constraints of the site, there appears no feasible alternative to widen the driveway other than those which have been proposed. *BS 5837:2012* states that minor excavations using compressed air soil displacement within RPAs can be acceptable, subject to justification.

**4.2.9.** A proposed wooden post and rail fence will pass through the RPAs of T024, T025, G004. Although the proposed fence is considered a minor structure in respect of impact to tree roots, installation within tree RPAs should adhere to the guidelines detailed in **Section 9** of the **Outline AMS** in **Appendix 3**.

**4.2.10.** The temporary tree protection fencing - detailed in **Section 5** of the **Outline AMS** in **Appendix 3**, and illustrated in the **Tree Protection Plan** in **Appendix 5** - will ensure that the RPAs of the retained trees are suitably protected from development activities.

#### **4.3. Shade Analysis**

**4.3.1.** The trees at the site are located a suitable distance away from the buildings, whilst the southern aspect of the buildings is unobstructed; therefore, an assessment of shading by the adjacent trees has not been carried out.

#### **4.4. Services and Other Considerations**

**4.4.1.** At time of writing, no details of proposed service routes and/or soak-aways were provided. Any alterations to the existing service routes and/or soak-aways must be installed outside the RPAs of the retained trees.



## 5. Recommendations

### 5.1. Tree Works

5.1.1. T003, T004, and T026 will necessitate removal.

### 5.2. Legal Constraints

5.2.1. According to information available on the website of the Kirklees Council (2024), T003, T004, and T026 are not subject to TPOs.

5.2.2. As the allocation of TPOs can be subject to change, tree protection status should be checked and verified with Kirklees Council prior to the commencement of works. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.

5.2.3. 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: Tree Works - Recommendations*.

### 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 regarded as the most 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 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 should be installed prior to development works commencing, in the locations shown in the *Tree Protection Plan* in **Appendix 5**.

5.3.5. The tree protection fencing shall only be removed once construction works have been completed, to facilitate the proposed soft-landscaping.

5.3.6. It is recommended that development works follow the *Outline AMS* provided in **Appendix 3**. This includes the specifications for tree protection fencing, installation guidance for permanent hard-standing and wooden fencing within tree RPAs, and other protective measures to be adhered to throughout the development.

5.3.7. 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. Mitigation**

- 5.4.1.** Although the proposed development will necessitate the removal of category C trees of low-quality only, to enhance the local amenity, it is recommended that six new trees are included within a post-development planting scheme.
- 5.4.2.** The specifications, locations, and maintenance requirements of the proposed tree planting should be further detailed in a tree planting plan.

#### **5.5. Additional Information**

- 5.5.1.** 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.
- 5.5.2.** 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.
- 5.5.3.** 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 to destroy a nest containing eggs or young.
  - 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.
- 5.5.4.** Trees are dynamic living organisms, and their condition can change rapidly; the information given in this report is therefore valid for a period of 18 months. This period may be reduced if significant changes occur to the trees, or the ground conditions which surround them.



## References

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## Appendices

### Appendix 1: Tree Survey Schedule

Table Key														
<b>Tree/Group Ref:</b> Reference numbers, as shown in the <i>Tree Constraints Plan</i> in <b>Appendix 4</b>						<b>DBH:</b> Diameter at breast height (1.5m), in millimetres								
<b>Height (Ht.):</b> Overall height of tree, measured to nearest 0.5 m						<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 0.5 m						<b>Crown Clearance (CC):</b> Clearance from ground level of lowest branch, measured to nearest 0.5 m								
<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 physiological condition for species and age of tree. <b>G</b> = Good; <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 (V):</b> Trees of any age, which display ancient characteristics			
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	BS 5837:2012 Category	Recommendations
						N	E	S	W					
T001	Common Ash ( <i>Fraxinus excelsior</i> )	SM	20-40	11	410	7.5	5.5	2	4	4	Asymmetrical crown spread p due to proximity with adjacent trees. Minor deadwood < 100 mm in diameter scattered throughout crown. Multiple pruning stubs on west aspect of main stem from historic crown lifting.	F	B1	No works recommended
T002	Common Ash ( <i>Fraxinus excelsior</i> )	EM	20-40	16	530	6	6.5	4	3.5	3	Minor deadwood < 100 mm in diameter scattered throughout crown.	F	B1	No works recommended



Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	BS 5837:2012 Category	Recommendations
						N	E	S	W					
T003	Common Ash ( <i>Fraxinus excelsior</i> )	Y	40-80	8	160	2	2	2	2	2	No obvious significant defects, though lacks qualities for higher BS 5837 categorisation.	F	C1	Remove tree
T004	Common Ash ( <i>Fraxinus excelsior</i> )	Y	40-80	8	160	2	2	2	1	2	No obvious significant defects, though lacks qualities for higher BS 5837 categorisation.	F	C1	Remove tree
T005	Elder ( <i>Sambucus nigra</i> )	SM	10-20	5	230 100 90	3	3.5	1.5	1.5	2	No obvious significant defects, though lacks qualities for higher BS 5837 categorisation. Tertiary branches to south-east encroach upon power cables.	F	C1	No works recommended
T006	Sycamore ( <i>Acer pseudoplatanus</i> )	SM	40-80	16	410	3	4	5	4	1	No obvious significant defects, though lacks qualities for higher BS 5837 categorisation. Tertiary branches to east encroach upon power cables.	G	B1	No works recommended
T007	Sycamore ( <i>Acer pseudoplatanus</i> )	SM	10-20	7	210	1	2.5	3.5	2.5	1	Asymmetrical crown spread due to proximity with adjacent trees. Historically topped at circa 5 m.	F	C1	No works recommended
T008	Common Ash ( <i>Fraxinus excelsior</i> )	SM	10-20	17	290	3.5	3	2	3.5	6	Minor crown tip dieback, possibly indicating Chalara ash dieback ( <i>Hymenoscyphus fraxineus</i> ).	P	C1	No works recommended



Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	BS 5837:2012 Category	Recommendations
						N	E	S	W					
T009	Common Ash ( <i>Fraxinus excelsior</i> )	EM	40-80	16	490	4.5	4	4.5	4	0	Minor deadwood < 100 mm in diameter scattered throughout crown	F	B1	No works recommended
T010	Sycamore ( <i>Acer pseudoplatanus</i> )	EM	40-80	14	420 430	6	5.5	6	3	2	Bifurcates at ground level into two co-dominant primary stems; union is acute and possibly included.	G	B1	No works recommended
T011	Common Hawthorn ( <i>Crataegus monogyna</i> )	M	20-40	7	560	4.5	4.5	4	3	0	Bifurcates at 0.3 m into two co-dominant primary stems; union is acute and possibly included. Minor deadwood < 100 mm in diameter scattered throughout crown	F	B1	No works recommended
T012	Common Ash ( <i>Fraxinus excelsior</i> )	Y	5-10	6	110 90 100	2	2	2	1.5	3	Multiple stemmed, self-seeded tree. Minor crown tip dieback, possibly indicating Chalara ash dieback ( <i>Hymenoscyphus fraxineus</i> ).	P	C1	No works recommended
T013	Common Pear ( <i>Pyrus communis</i> )	EM	40-80	10	470	4	5	2	2	3	Bifurcates at 1 m into two co-dominant primary stems; union is acute and possibly included. Asymmetrical crown spread to the north-east.	F	B1	No works recommended
T014	Common Pear ( <i>Pyrus communis</i> )	EM	10-20	6	360	0	8	6	2	0	Historically failed at root plate, though appears to have now rerooted and stabilised.	F	C1	No works recommended



Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	BS 5837:2012 Category	Recommendations
						N	E	S	W					
T015	Common Pear ( <i>Pyrus communis</i> )	EM	40-80	9	350	0.5	5	6	2	3	Bifurcates at 1 m into two co-dominant primary stems; union appears structurally optimised. Asymmetrical crown spread to the south-east.	F	B1	No works recommended
T016	Common Pear ( <i>Pyrus communis</i> )	EM	40-80	10	410	1	3.5	4	2.5	2	Asymmetrical crown spread to the south-east.	F	B1	No works recommended
T017	Cultivar Apple ( <i>Malus domestica</i> )	SM	40-80	3	410	0	6	5	1	0	Historically failed at root plate, though appears to have now rerooted and stabilised.	F	C1	No works recommended
T018	Cultivar Apple ( <i>Malus domestica</i> )	EM	40-80	8	310	3	5	5	3	2	Asymmetrical crown spread to the south-east.	F	B1	No works recommended
T019	Cultivar Apple ( <i>Malus domestica</i> )	SM	40-80	5	230	2.5	5	3	1	2	Asymmetrical crown spread to the south-east.	F	B1	No works recommended
T020	Sycamore ( <i>Acer pseudoplatanus</i> )	EM	40-80	15	590 380	3	7	7	6.5	1	Asymmetrical crown spread to south due to proximity with adjacent tree.	F	B1	No works recommended



Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	BS 5837:2012 Category	Recommendations
						N	E	S	W					
T021	Sycamore ( <i>Acer pseudoplatanus</i> )	EM	20-40	15	410 380	7	5	2	6	1	Asymmetrical crown spread to north due to proximity with adjacent tree. Bifurcates at ground level into two co-dominant primary stems; both stems have historically been ring-barked, with some crown tip dieback as a result.	F	B1	No works recommended
T022	Wild Cherry ( <i>Prunus avium</i> )	EM	20-40	6	410	5	6	6	4	1	No obvious significant defects.	F	B1	No works recommended
T023	Cultivar Apple ( <i>Malus domestica</i> )	SM	20-40	6	210	3.5	2	2	3.5	1	Main stem leans slightly to the north-west, though with no indication of root plate movement. Partially failed secondary branch within north aspect of crown at approx. 2.5 m.	F	C1	No works recommended.
T024	Wild Cherry ( <i>Prunus avium</i> )	EM	20-40	7	360	3	2.5	5.5	5.5	1	Asymmetrical crown spread to south-west.	F	B1	No works recommended
T025	Norway Spruce ( <i>Picea abies</i> )	Y	40-80	5	160	1.5	1.5	1.5	1.5	0	No obvious significant defects, though lacks qualities for higher BS 5837 categorisation.	G	C1	No works recommended
T026	Elder ( <i>Sambucus nigra</i> )	SM	10-20	5	150 100 90 90 110 210	1	3	3.5	3	0	Multiple-stemmed self-seeded tree, growing from base of gable end of barn. Asymmetrical crown spread to the south.	F	C1	Remove tree



Tree Ref:	Species	Age	SULE	Ht.	DBH	CS				CC	Comments	PC	BS 5837:2012 Category	Recommendations
						N	E	S	W					
T027	Sessile Oak ( <i>Quercus petraea</i> )	M	Dead	4	710	1	2	2	1	1	Moribund tree	D	U	No works recommended

### Groups of Trees

Group Ref:	Species Composition	Age	SULE	Av. Ht.	Av. DBH	Approx. No. of Stems	CC	Comments	PC	BS 5837 :2012 Category	Recommendations
G001	Common Ash ( <i>Fraxinus excelsior</i> )	Y	20-40	8	100	20	1	Group containing self-seeded sapling ash. No obvious significant defects, though of limited arboricultural merit, and lacking qualities for higher BS 5837 categorisation. Tertiary branches to west encroach upon adjacent streetlamp.	F	C1	No works recommended
G002	Sour Cherry ( <i>Prunus cerasus</i> ) Wild Cherry ( <i>Prunus avium</i> ) Cultivar Apple ( <i>Malus domestica</i> )	Y SM	20-40	6	200	15	0	Group of fruit orchard trees. No obvious significant defects, though of limited arboricultural merit, and lacking qualities for higher BS 5837 categorisation.	F	C1	No works recommended
G003	Common Ash ( <i>Fraxinus excelsior</i> ) White Willow ( <i>Salix alba</i> ) Silver Birch ( <i>Betula pendula</i> ) Common Holly ( <i>Ilex aquifolium</i> ) Leyland Cypress ( <i>Cupressus x leylandii</i> )	Y	20-40	7	150	30	0	Linear group predominantly consisting of Leyland cypress. No obvious significant defects, though of limited arboricultural merit and lacking qualities for higher BS 5837 categorisation.	G	C1	No works recommended



Group Ref:	Species Composition	Age	SULE	Av. Ht.	Av. DBH	Approx. No. of Stems	CC	Comments	PC	BS 5837 :2012 Category	Recommendations
G004	Goat Willow ( <i>Salix caprea</i> ) Laurel Cherry ( <i>Prunus laurocerasus</i> ) Leyland Cypress ( <i>Cupressus x leylandii</i> ) Summer Lilac ( <i>Buddleia davidii</i> )	Y	20-40	6	160	20	0	Linear group predominantly consisting of Leyland cypress. No obvious significant defects, though of limited arboricultural merit and lacking qualities for higher BS 5837 categorisation.	G	C1	No works recommended



**Appendix 2: Images of Trees**



**Plate 1:** T001 (right) & T002 (left)



**Plate 2:** T003 (left) & T004 (right)



**Plate 3:** Group containing T005, T006, and T007



**Plate 4:** T009



***Plate 5: T010***



***Plate 6: T011***



***Plate 7: T012***



***Plate 8: T013, T014, & T015 (left to right)***



**Plate 9:** Group containing T016, T017, T018, and T019



**Plate 10:** T020 (right) and T021 (left)



**Plate 11:** T022



**Plate 12:** T023



***Plate 13: T024***



***Plate 14: T025***



***Plate 15: T026***



***Plate 16: T027***



*Plate 17: G001*



*Plate 18: G004*



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

### A3.1 Introduction

- A3.1.1** Woodsage Consulting Ltd have been instructed by Robert Halstead Chartered Surveyors & Town Planners to produce an Outline AMS in relation to the proposed development of the land at Round Ings Road, Outlane, Huddersfield HD3 3FQ.
- A3.1.2** The development proposals are for the erection of extensions, and alterations to three existing dwellings. Change of use and extensions/alterations are also proposed to an existing barn to form an extended dwelling (no.4), and change of use of land to form access and parking.
- A3.1.3** This Outline AMS should be read in conjunction with the Arboricultural Impact Assessment (Ref: WC-181.1a).

### 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. The phasing of works should be carried out in accordance with **Tab. A2.1**, below.

**Table A2.1:** *Timing of Works.*

Stage	Works
1	Site induction
2	Carry out tree removals
3	Install temporary tree protection fencing, as directed in the <b>Tree Protection Plan</b> in <b>Appendix 5</b>
4	Inspection of tree protection measures by the Project Arboriculturist
5	Carry out construction works
6	Remove tree protection fencing once construction works are completed
7	Carry out soft-landscaping
8	Final inspection by the Project Arboriculturist

### A3.3 Timing of Works

- 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 found in **Appendix 5** - should be made available to all contractors attending the site.

### A3.4 Tree Removals

- A3.4.1** Prior to development works commencing, T003, T004 and T026 will necessitate removal.
- A3.4.2** According to information available on the website of the Kirklees Council (2024), T003, T004, and T026 are not subject to TPOs.
- A3.4.3** As the allocation of TPOs can be subject to change, tree protection status should be checked and verified with Kirklees Council prior to the commencement of works. Killing or damaging a protected tree is a criminal offence and can result in an unlimited fine.
- A3.4.4** 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: Tree Works - Recommendations*.



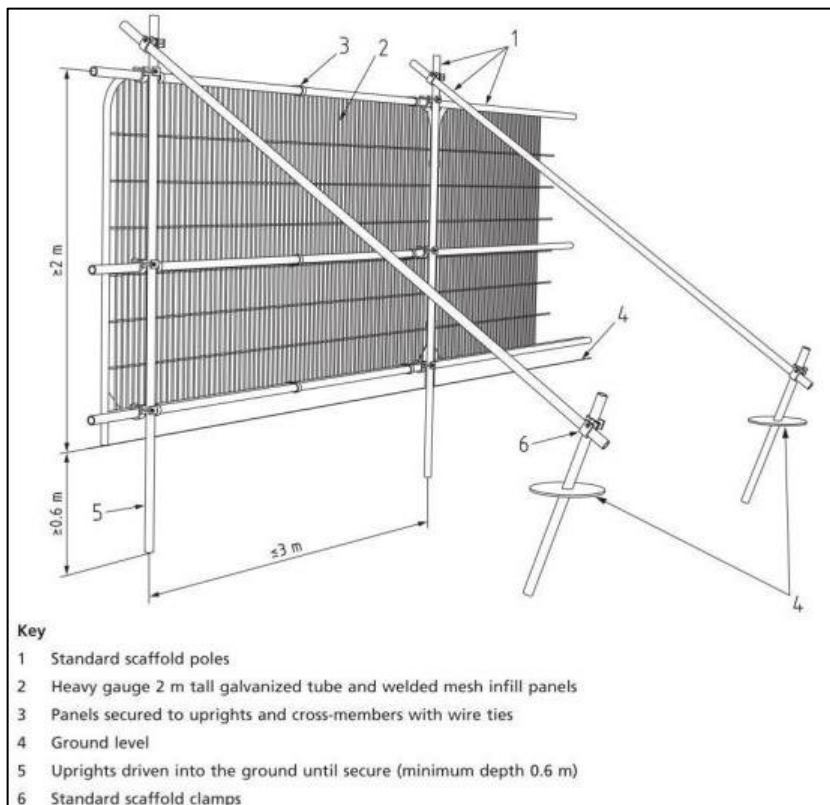
### A3.5 Tree Protection Fencing

**A3.5.1** Tree protection barriers 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*.



*Figure A5.1: Example of mesh welded type barriers in-situ.*

**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. A5.1*, above, and *Fig. A5.2*, below.



*Figure A5.2: Temporary 2 m steel protective fencing.*

**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.



**A4.5.4** All-weather notices shall be attached to the barriers at 9 m intervals with the words 'TREE PROTECTION ZONE - NO ACCESS' clearly visible.

**A4.5.5** **Location:** Temporary tree protection fencing should be installed prior to development works commencing, in the locations shown in the *Tree Protection Plan*.

**A4.5.6** 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.

**A4.5.7** If any breach in the tree protection fencing occurs, it is the Site Manager's responsibility to report this to the Project Arboriculturist, 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.

### **A3.6 Additional Details**

**A3.6.1** No materials hazardous to tree health, such as oil, bitumen or cement should be stored within the 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 RPAs should be carried out by use of hand-operated tools only, and only under prior approval of the Project Arboriculturist. No roots > 25 mm in diameter should be severed without first consulting the Project Arboriculturist.

### **A3.7 Excavations within Tree RPAs**

**A3.7.1** Excavations within the RPAs of T001 and T002 which will be required to facilitate widening of the driveway shall adhere to the following guidelines:

- Any existing vegetation within the RPAs of T001 and T002 should be removed using hand-operated tools only.
- All excavations into the soil within the RPAs of T001 and T002 shall be carried out using compressed air soil displacement, and under the supervision of the Project Arboriculturist.
- If major roots that are greater than 25 mm are encountered, these should not be severed without first consulting with the Project Arboriculturist. If roots under this diameter are present, these will be pruned using an appropriate sharp pruning tool, such as pruning saw or secateurs. Any temporarily exposed roots will be covered with sharp sand to prevent desiccation.

### **A3.8 Installation Method Statement for Permanent Hard-standing within Tree RPAs**

**A3.8.1** Renewal of hard-standing within tree RPAs shall adhere to the following guidelines:

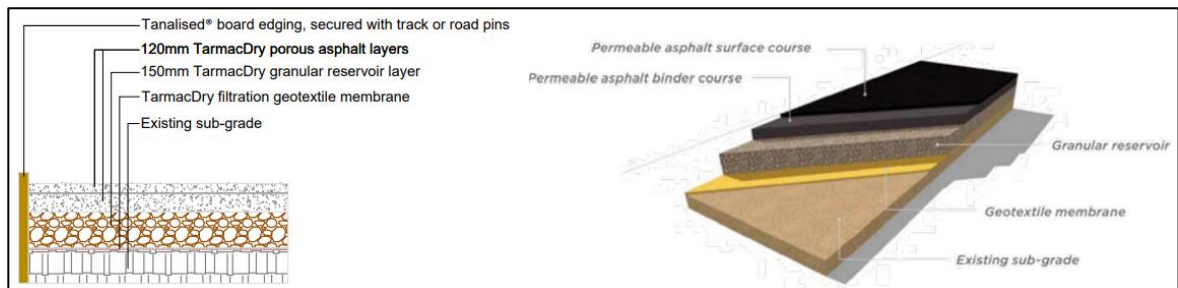
1. Clear existing hard-standing (if retention beneath the new hard-standing is not feasible) from the surface using hand-operated tools only. Once the hard existing hard-standing is removed, there shall be no further excavations into the soil.
2. Fill any major hollows with a granular material that will remain gas and water-permeable throughout its design life.
3. Cover surface with a non-woven, geotextile separation filtration layer, with a minimum



thickness of 300g/m<sup>2</sup> and a CBR puncture resistance of 4000 N. Geotextiles made from recycled products are becoming increasingly available and can be used in the geo-cellular confinement system providing it has a sufficient tensile strength and puncture resistance.

4. The strip trenching required for the installation of traditional kerbs must be avoided within the RPAs of T001, T002, T005, T006, and T010. Alternatively, Tanalised® board edging will be appropriate within tree RPAs, and should be installed directly on top of existing grade levels. The edging boards shall be held in place with track or road pins placed at 1 m intervals, and concealed by grading into the adjoining levels, using good quality topsoil.
5. Apply 150 mm TarmacDry granular reservoir layer.
6. Apply 120 mm TarmacDry porous asphalt layers.
7. Apply permeable asphalt surface course.

**A3.8.2** A cross-sectional diagram of the permeable hard-standing proposed within the RPAs of T001, T002, T005, T006, and T010 is shown in **Fig. A8.1**, below.

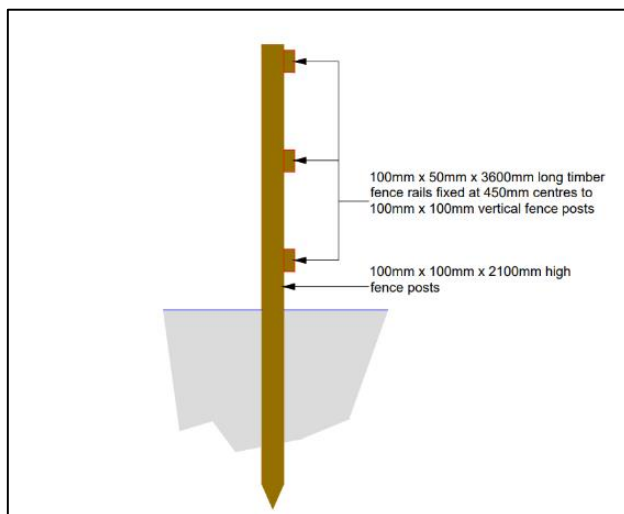


**Figure A8.1:** Cross-sectional diagram of the proposed permeable hard-standing.

**A3.8.3** Since the majority of tree roots are typically found within the first 100 cm of ground level, particular attention should be paid to existing levels; no excavations should be carried out within the RPAs of T001, T002, T005, T006, and T010 without first consulting with the Project Arboriculturalist.

### **A3.9 Installation Method Statement for Permanent Wooden Fencing within Tree RPAs**

**A3.9.1** Permanent wooden post and rail fencing (refer to **Fig. A9.1**, below) is proposed as part of the development, and will pass through the RPAs of T024, T025, and G004.



**Figure A9.1:** Cross-sectional diagram of the proposed wooden post and rail fencing.



**A3.9.2** Installation of permanent fencing within tree RPAs should adhere to the following guidelines:

1. No part of any fencing is to be attached to the adjacent trees.
2. The post dimensions are to be a maximum of 100 mm x 100 mm; holes are to be hand-dug to a depth of 600 mm.
3. If significant roots with a diameter greater than 25 mm are encountered, posts will be repositioned. No roots with a diameter greater than 25 mm diameter shall be severed without first consulting with the Project Arboriculturalist. If roots under this diameter are present, these will be pruned using an appropriate sharp pruning tool such as pruning saw or secateurs. Any temporarily exposed roots will be covered with sharp sand.
4. Posts will be set in concrete and in holes lined with polythene to minimise leaching.
5. Concrete will be mixed outside of tree RPAs and transported to site.

**A3.10 Responsibility and Site Management**

**A3.10.1** 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.

**A3.10.2** It is recommended that inspections by the Project Arboriculturalist are undertaken at the following stages:

1. Once the temporary tree protection fencing has been installed – in the locations shown in the **Tree Protection Plan** – and prior to development works commencing.
2. During compressed air soil displacement excavations within the RPAs of T001 and T002.
3. Upon completion of the development works.

**A3.10.3** 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 construction works.

**A3.11 Project Arboriculturalist Details:**

Mr Jack Delaney  
Woodsage Consulting Ltd  
Unit 2, Hey End Farm  
Shield Hall Lane  
Luddendenfoot  
West Yorkshire HX2 6JN  
**Tel:** 07962401997  
**Email:** info@woodsage.co.uk

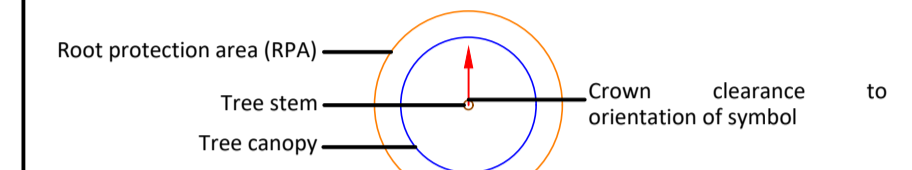
## Appendix 4: Tree Constraints Plan

Project:	Land off Round Ings Road, Huddersfield HD3 3FQ
Drawn by:	Jack Delaney
Date:	3rd January 2024
Scale:	1:200 @ A1
Drawing Number:	WC-181.1a.4

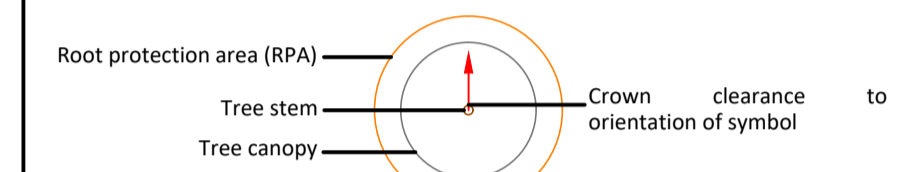
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### Key:

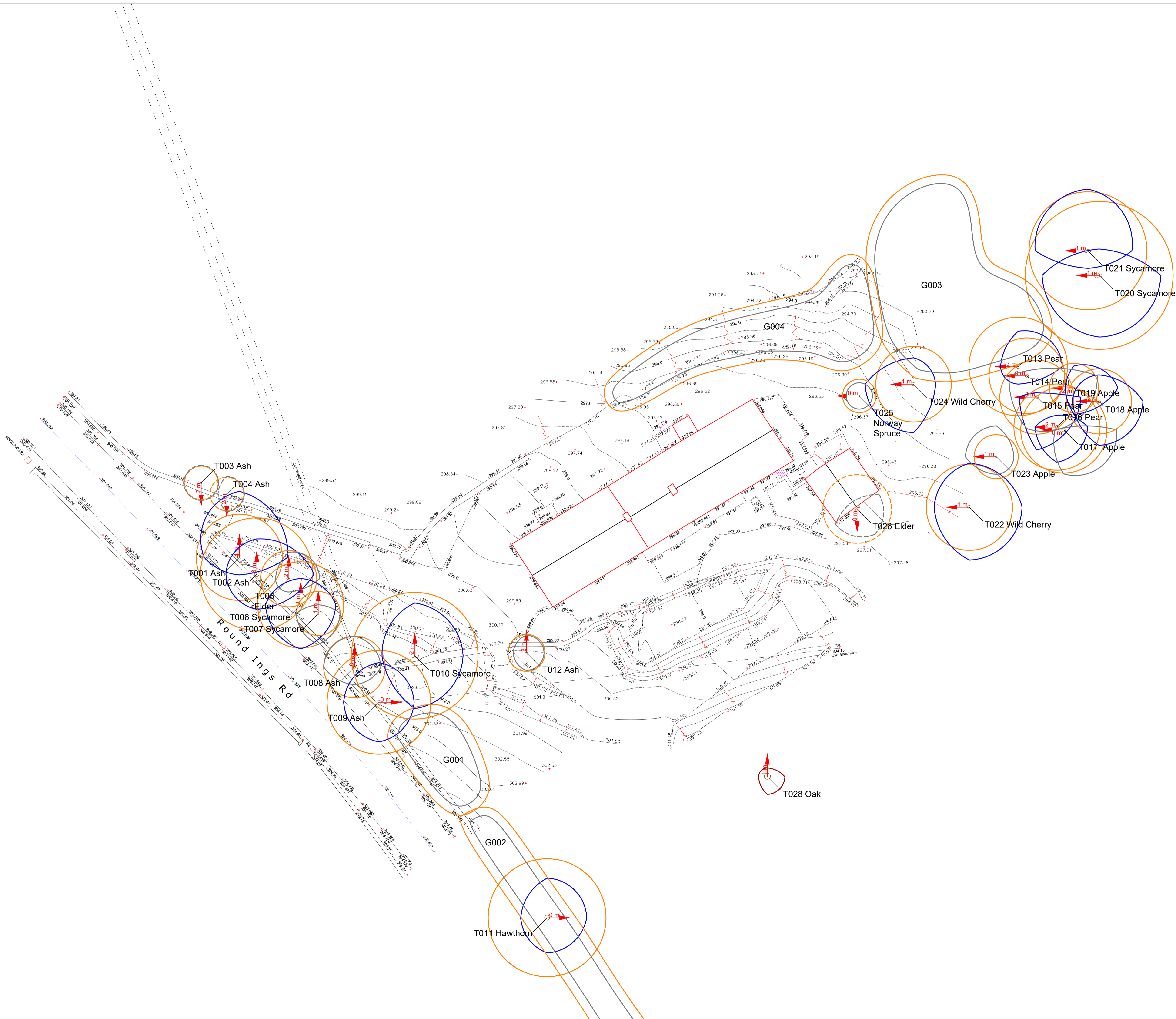
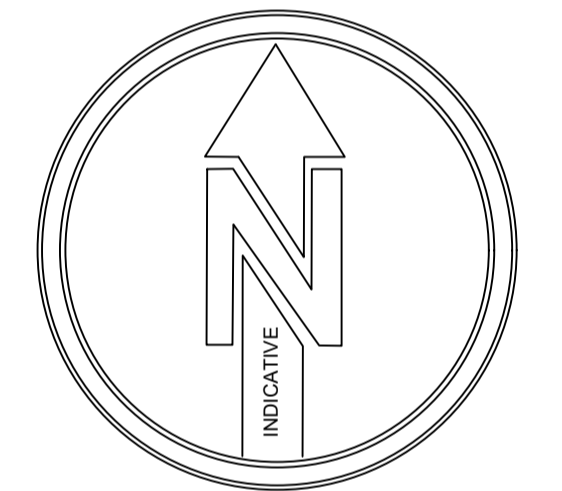
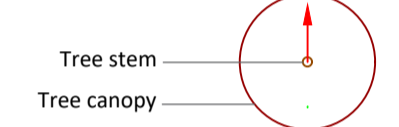
Category B trees of moderate-quality



Category C trees/groups of low-quality



Category U trees with serious structural and/or physiological defects



# Appendix 5: Tree Protection Plan

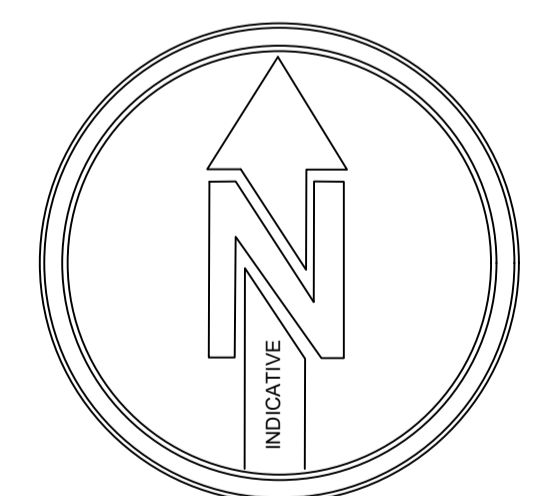
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<b>Drawn by:</b>	Jack Delaney
<b>Date:</b>	3rd January 2024
<b>Scale:</b>	1:200 @ A1
<b>Drawing Number:</b>	WC-181.1a.5

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

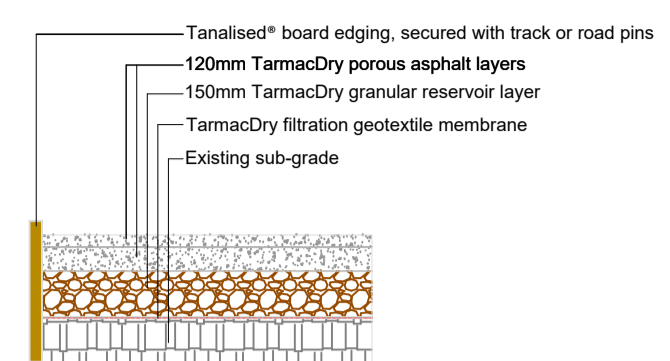
## Map Key:

<b>Category B trees of moderate-quality</b>	
<b>Category C trees/groups of low-quality</b>	
<b>Category U trees with serious structural and/or physiological defects</b>	

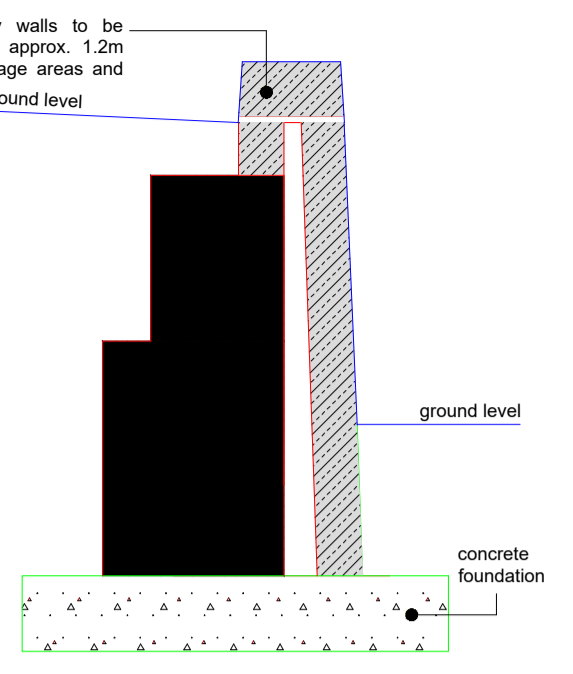
	Temporary tree protection fencing; refer to <b>Outline Arboricultural Method Statement (AMS)</b> for detailed specification
	Existing tarmac driveway resurfaced with permeable tarmac; refer to <b>Outline AMS</b> for detailed specification
	Grass fill to Ecogrid E40 (or similar system), in accordance with manufacturers instructions
	Gravel to infill Ecogrid E40 (or similar system), allowing for 20mm overfill in accordance with manufacturers instructions
	Private gardens to be turfed, topsoil shall be a minimum 150mm depth with all weeds, rubbish, roots and stones over 30mm removed
	Areas to be seeded with wildflower mix
	Existing tarmac within tree RPAs to be retained beneath the renewed surfacing
	Excavations within tree RPAs to be carried out using compressed air soil displacement, and under the supervision of the Project Arboriculturalist



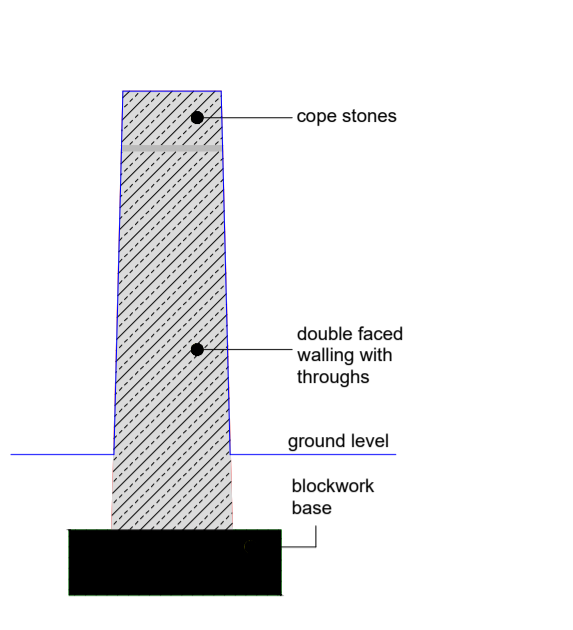
### Permeable Macadam Specification 1:40



### DryStone Retaining Wall Typical Section 1:40



### Boundary Dry Stone Wall Typical Section 1:40



### Post and Rail Fencing Typical Section 1:40

