

Table 1 – BS5837:2012		Cascade chart for tree quality assessment		
Category and definition	Criteria (including subcategories where appropriate)	Identification on plan		
<b>Trees unsuitable for retention</b> (see Note)				
<b>Category U</b> Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unstable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline Trees infested with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <b>NOTE: Category U trees can have existing or potential conservation value, which it might be desirable to preserve; see 4.5.7</b>	<b>Red on Plan</b>		
<b>Trees to be considered for retention</b>				
<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, or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the presence of significant though irremediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years, or trees lacking the special quality necessary to merit the	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	<b>Green on Plan</b>
<b>Category B</b> Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though irremediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years, or trees lacking the special quality necessary to merit the	Trees present in numbers, usually growing in groups or woodlands, such that they attract a higher collective rating than they might as individuals, or trees occurring as collectives but valued so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	<b>Blue on Plan</b>
<b>Category C</b> Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very impaired merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	<b>Grey on Plan</b>

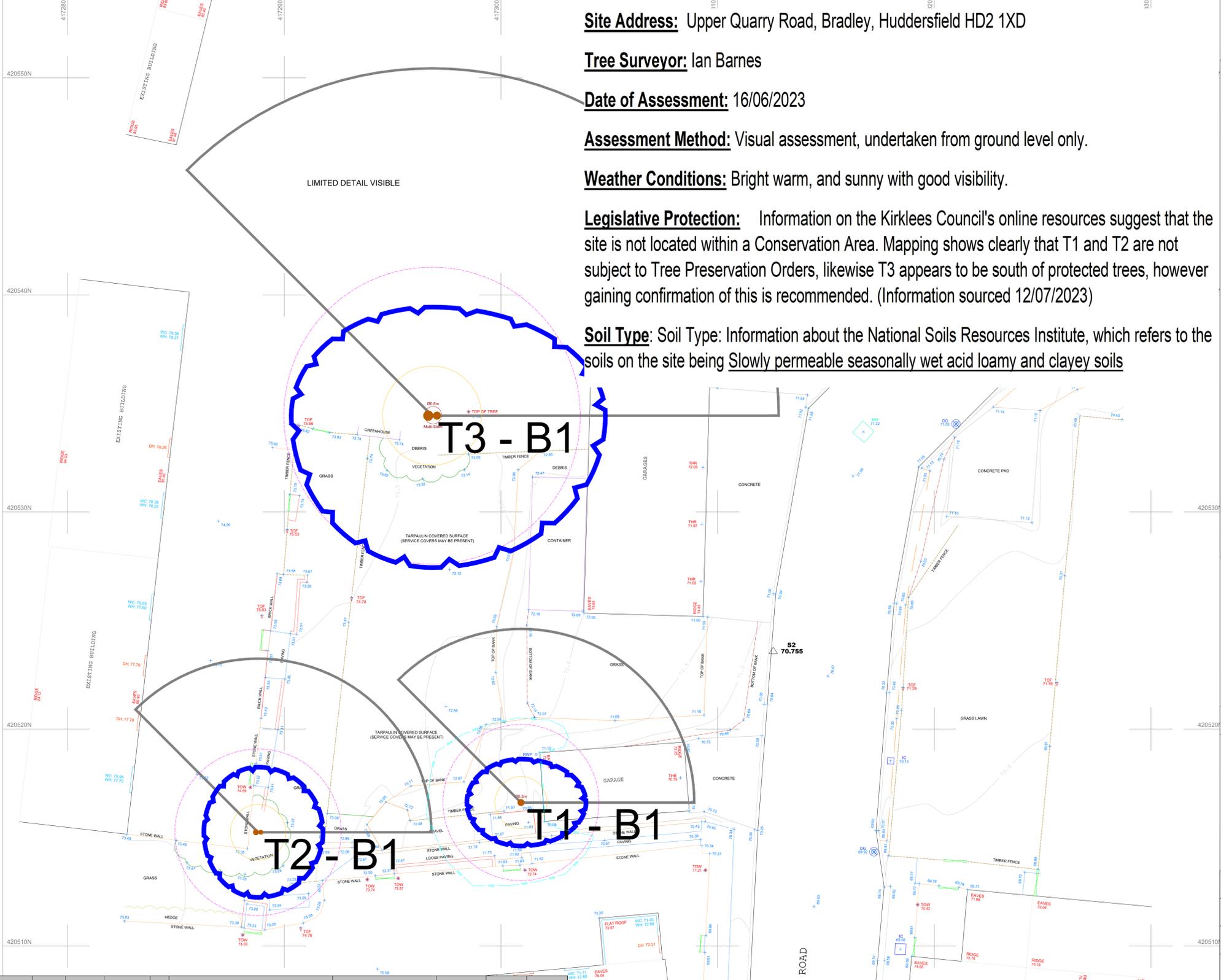
**BS5837: Tree Survey**  
The following survey has been prepared from a visual assessment taken from ground level without any detailed investigation. Observations are based on the visual inspection of the trees and any visual information present at the time of inspection. This survey should be regarded as a preliminary overview; ongoing inspections will be required on another individual. In most situations, the health, condition and safety of trees should be checked on a regular basis, alternating between only and less necessary to ensure a full picture of tree health is established. Therefore should only be carried out by a suitably qualified arborist.

**Mathematical abbreviations:** > Greater than, < Less than.  
Ed: This includes any attributes that have been estimated.  
Measurement/estimate: Measurements are taken with a tape, clinometer or laser. If dimensions are estimated, this will be indicated with the Ed column.  
Tree number: Numbered Tag attached to each stem, usually on the inside face of the stem at roughly 2.5 metres. Where the number is prefixed by a T, G, H, A, R, S or W this denotes that the tag refers to a Tree, Group, Hedge, Area, Stump, Branch or Woodland.  
Name: Tree species are detailed by their common name. Latin can be provided upon request.  
Age: Record the age as an estimate of the tree's likely span for guidance only, i.e.:  
T Young Recently established/planted tree  
M Mid Mature Fully established and growing with high vigour  
EM Early Mature The first third of its likely expected lifespan  
M Mature The middle third of its likely expected lifespan  
OM Over Mature The latter third of its likely expected life span with signs of canopy retardation.  
M Fully established and growing with high vigour  
EM Early Mature The first third of its likely expected lifespan  
M Mature The middle third of its likely expected lifespan  
OM Over Mature The latter third of its likely expected life span with signs of canopy retardation.  
A Ancient Beyond its expected life span possible of historical interest or in a state of decline

**Height:** Estimate height to the nearest metre to the mean height.  
**Crown Height:** Estimate height to the nearest half metre to the mean underside of the canopy.  
**FSB:** The height and direction of the First Significant Branch.  
**Diameter:** These Spreads refer to a measurement of the stem at 1.5m above ground level recorded in millimetres, measured with a rounded-down diameter tape.  
**Canopy (N.E.S.W.):** indicates the distance of the canopy from the nearest metre to provide a mean distance of separation between the stem and the outer canopy.  
**Condition:** Is a personal assessment of the tree's growth rate in the current season, in comparison to other trees within the locality, region and an indicator of the tree likely response to site change.  
**Life Expectancy:** Is a personal assessment of the tree's likely remaining life span in years, assuming the current site management continues, or the tree is protected from significant environmental change. Trees can enter into various decline with site changes and blooms, the expected site life can be significantly improved following changes/improvements to site management and following remedial works.  
**Good** A tree of normal ability **Fair** A tree of lower ability **Poor** A tree of low ability **Dead** A dead or very low ability tree

**Comments:** Observations General comments referring to tree health, structure and condition.  
**Management Options:** Comments detailing remedial works required to improve immediate safety or improve the management of the tree.  
**The Risk Assessment:** We typically apply our BS5837 (Barnes Associates Risk Method (B) York) - we are a private based in Yorkshire and could not read the inclusion of the 'Y'. We openly admit this is a method based upon the TORBATS methodology. The complete details of TORBATS (The Hazard: Risk Evaluation and Treatment System) can be found at <https://www.barnesassociates.co.uk/bs5837-torbats> and will contain detailed information, however the risk offered for the next year.

**Rootplate:** Is a representation of the area under a tree that is subject to high loading and is important for tree stability. It is calculated by 4 x Diameter of the Tree stem, as detailed by C. Mettack in 'The Body Language of Trees'.  
**Minimum RPA (m):** Root Protection Area: Minimum distance in metres of the position of protective fencing in the with section 4.4 of BS5837:2012. In order to avoid damage to the roots or rooting environment of retained trees, an area equivalent to a circle with a radius 12 times the stem diameter.  
**Root Protection Zone (RPZ) (m):** This is an additional distance offset of 2m beyond the RPA, to provide space for growth and to act as a buffer to the RPA however, essentially, this provides construction access, such as a zone for scaffolding.  
**Root Protection Area (Radius) (m):** - RPA given in metres from the centre of the stem.  
**Root Protection Area (Area) (m<sup>2</sup>):** - The ideal total area for the RPA given in metres squared.  
**Buffer Zone:** - The magenta RPA line offers the minimum root protection area in line with BS5837, the buffer zone offers a 2m zone outside the RPA which should be considered in the project planning phase to include further protection/exclusion to protect potential tree roots and allow future growth. It also provides access/scaffolding space outside the minimum RPA.



**Site Address:** Upper Quarry Road, Bradley, Huddersfield HD2 1XD

**Tree Surveyor:** Ian Barnes

**Date of Assessment:** 16/06/2023

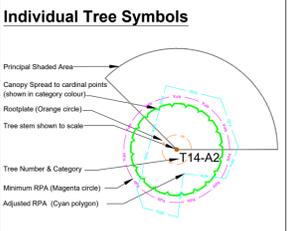
**Assessment Method:** Visual assessment, undertaken from ground level only.

**Weather Conditions:** Bright warm, and sunny with good visibility.

**Legislative Protection:** Information on the Kirklees Council's online resources suggest that the site is not located within a Conservation Area. Mapping shows clearly that T1 and T2 are not subject to Tree Preservation Orders, likewise T3 appears to be south of protected trees, however gaining confirmation of this is recommended. (Information sourced 12/07/2023)

**Soil Type:** Soil Type: Information about the National Soils Resources Institute, which refers to the soils on the site being Slowly permeable seasonally wet acid loamy and clayey soils

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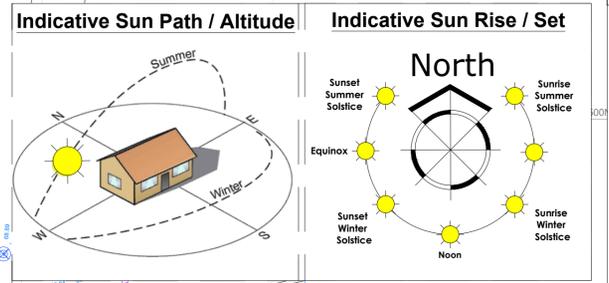
**BS5837 - Conditional Colour Code**

- A - High Quality Tree or Group
- B - Moderate Quality Tree or Group
- C - Low Quality Tree or group
- U - Unsuitable for Retention

Revision	Description
12/07/2023	Preliminary Issue

Client:	Hemingway Design House
Project:	Upper Quarry Road
Title:	Tree Survey & Constraints Plan
Drawing No.:	BA23077TS
Scale:	1:100 @ A1
Date:	12/07/2023
Drawn By:	BS
Checked:	MM
Approved:	SB

Tag No.	Name	Age	Height (m)	Height (m)	FSB (m)	North (m)	South (m)	East (m)	West (m)	Condition	Life Exp (Yrs)	BS5837 Category	Diameter (mm)	Stem No.	Comments	Recommendations	Risk	Rootplate (m)	Root Protection Radius (m)
T1	Sorbus aucuparia (Rowan).	EM	8	8	1	2	3	2	2.5	Fair	20 or more	B1	300	1	Compaction by stored materials within rootzone. The levels look to be up to 50% of the drip line have been raised around the tree and there is significant crossing and rubbing branches visible with in the canopy and the canopy looks to have been lopped & redeveloped.	Tree felling in line with section 12.2 BS3998:2010. Stump grinding in line with section 12.4.3 BS3998:2010	Slight	3.6	40.72
T2	Buddleja davidii (Butterfly Bush).	EM	8	8	1	3	3	3	2.5	Fair	20 or more	B1	250,200	1	Biforked close to ground level with epicormic trunk shooting. Ivy has started to develop on the main stem and a climber has started to develop on the main stem.	No Works	Insignificant	3.84	46.33
T3	Eucalyptus gunnii (Cider Gum).	M	16	16	3	5	8	7	6.5	Fair	20 or more	B1	450,350	1	Biforked close to ground level with a marked lean and self-corrected canopy. Typical foliage suggests good vitality and typical foliage density.	No Works	Insignificant	6.84	147



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