

## **Tree Constraints, Considerations and Construction**

Trees are a material consideration in the UK planning system and the following is a brief guide to the constraints and considerations associated with trees on and immediately adjacent to a proposed construction site.

### **Constraints**

The quality and value (non fiscal) of existing trees in the context of proposed development.

The ownership and control of existing trees on and immediately adjacent to the proposed development site.

The Root Protection Area (RPA) of retained trees which should be left undisturbed.

The obstruction of sunlight or daylight by retained trees.

The foliage, flowers, fruit and other debris associated with the normal functions of a healthy tree.

The physical presence of large trees which can cause apprehension to occupiers and users of buildings and open spaces.

The space permitted for future growth and maintenance.

The characteristics and condition of retained trees.

### **Considerations**

Tree preservation orders, conservation areas or other regulatory protection.

The access and working area required to enable construction, including the effects of pruning on the amenity value of retained trees.

The requirement to protect the overhanging canopies of trees where they may be damaged by construction activity.

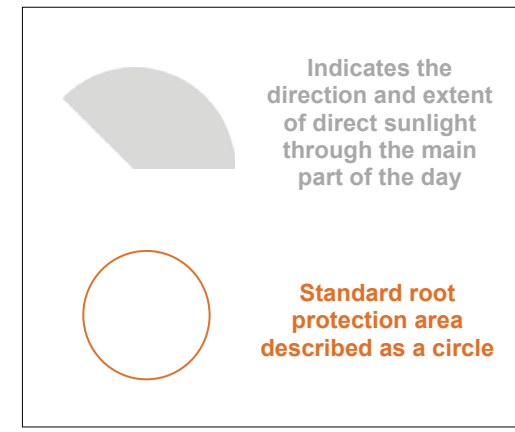
The requirements of infrastructure e.g. easements for underground or above-ground apparatus; highway safety and visibility splays; substations, refuse stores, lighting, signage, solar panels, satellite dishes and CCTV sightlines.

The proposed end use of the space adjacent to retained trees.

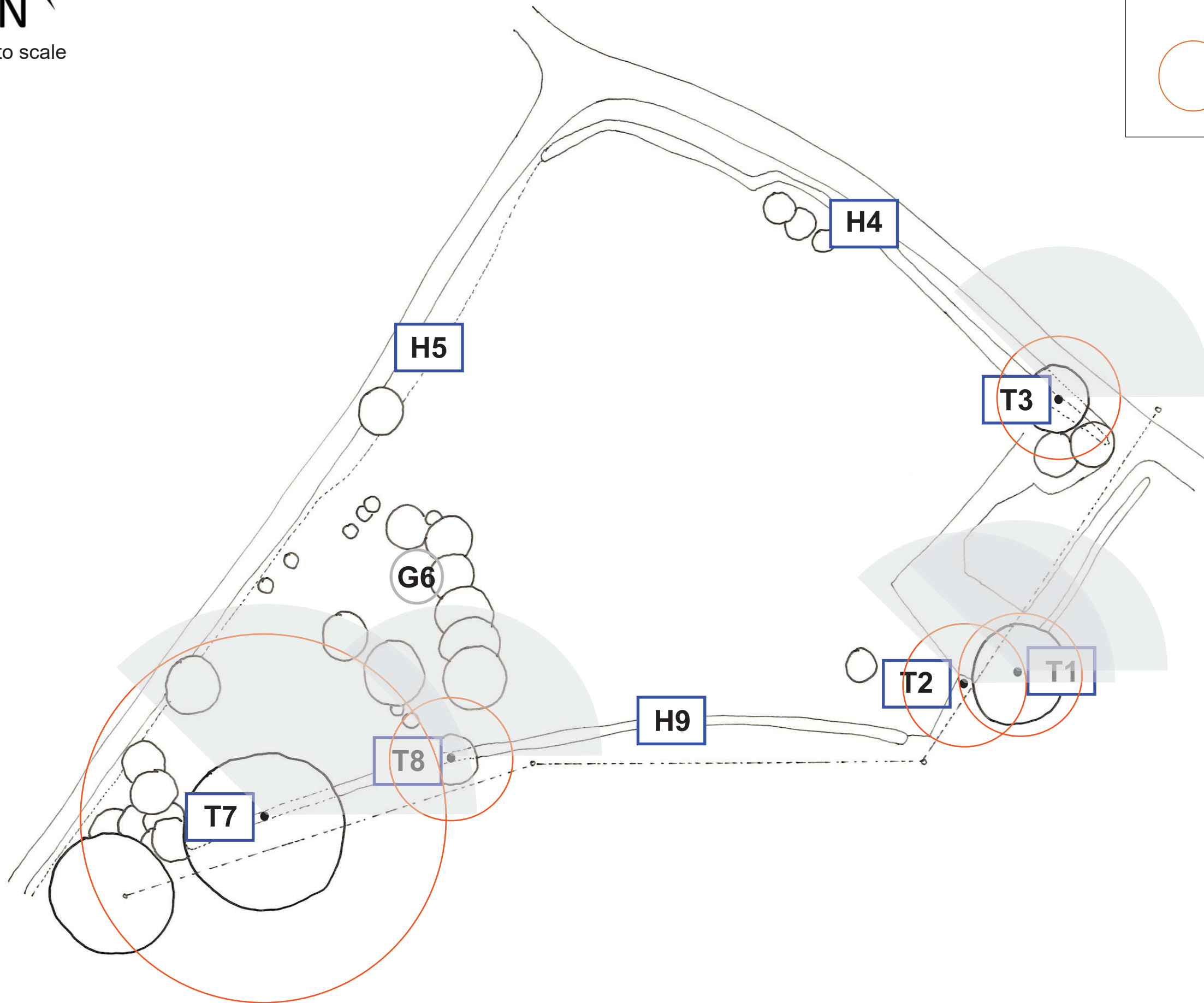
The potential for planting and landscaping to provide mitigation for any tree losses.



Not to scale



Tree Quality Assessment	
	Category A
	Category B
	Category C
	Category U



### Indicative Tree Constraints Plan



### Tree Survey and Tree Quality Assessment

Tree No.	Species	Height (m)	Stem Diameter (mm)	Average Crown Spread NESW (m)	Existing Branches	Life Stage	Observations Recommendations Management	Contribution in years	Category	RPA radius (m)
<b>T1</b>	Common ash	12.0	350	6.00	1.80	Young	A young tree of moderate quality	40+	B 1/2	4.20
<b>T2</b>	Common ash	12.0	350	6.00	1.20	Young	A young tree of moderate quality	40+	B 1/2	4.20
<b>T3</b>	Common ash	12.0	350	6.00	2.50	Young	A young tree of moderate quality	40+	B 1/2	4.20
<b>H4</b>	Mixed native	2.1	n/a	n/a	Ground	Middle	A maintained native hedgerow <b>Remove approx. 15.0m section</b>	40+	B 2	1.80
<b>H5</b>	Mixed native	up to 2.5	n/a	n/a	Ground	Middle	A maintained native hedgerow	40+	B 2	1.80
<b>G6</b>	Gean cherry, field maple English oak goat willow, hawthorn	typically 4.0 - 7.0	150 - 200	up to 3.50	Ground	Young	A group of young, otherwise unremarkable trees	40+	C	2.40

agl: above ground level

#: estimated dimension

tree works required by proposed development are noted in **bold orange** type

recommended tree works to manage the existing tree stock are noted in **bold blue** italic text

**T:** Individual tree

**H:** Hedgerow or garden hedge

**G:** Cohesive group of trees

**W:** Woodland

Tree Survey and Tree Quality Assessment

Site: land at Bucknole Hill Lane, Northleigh

Our reference: 17/03/49/NH

Tree No.	Species	Height (m)	Stem Diameter (mm)	Average Crown Spread NESW (m)	Existing Branches	Life Stage	Observations Recommendations Management	Contribution in years	Category	RPA radius (m)
<b>T7</b>	English oak	21.0	950	10.0	5.0	Over mature	A tree in decline. Restricted access to the stem base. Remnants of Oak Bracket present at stem base hence in decline	20+	B 2/3	11.40
<b>T8</b>	English oak	13.0	350	5.0	4.0	Middle	A young tree of moderate quality	40+	B 1/2/3	4.20
<b>H9</b>	Mixed native	1.2	n/a	n/a	Ground	Middle	A maintained native hedgerow	40+	B 2	1.80

There are various other small/young or otherwise unremarkable trees and shrubs present both on and immediately adjacent to the site. These trees and shrubs are not considered a constraint to any proposed design or subsequent development.

agl: above ground level

#: estimated dimension

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recommended tree works to manage the existing tree stock are noted in **bold blue** italic text

**T:** Individual tree

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**G:** Cohesive group of trees

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Tree survey schedule:

- a) an sequential reference number for each tree or group of trees (also recorded on the Tree Plan);
- b) species (common names only);
- c) estimated height in metres;
- d) estimated stem diameter measured in millimetres typically at 1.5 metres above ground level;
- e) estimated branch spread in metres taken at the four cardinal points, as appropriate; (also recorded on the Tree Plan, as appropriate);
- f) existing height above ground level of canopy;
- g) life stage as follows,
  - i. young - a tree in the first third of average life expectancy for species.
  - ii. middle - a tree in the middle third of average life expectancy for species.
  - iii. mature - a tree in the last third of average life expectancy for species.
  - iv. over mature - a mature tree, which by reason of its physical or structural condition, has an estimated remaining contribution of less than 20 years
  - v. ancient - 'a tree which, because of its great age, size or condition is of exceptional value culturally, in the landscape or for wildlife' English Nature.
- h) observations, particularly of structural and/or physiological condition, as appropriate and pertinent to the matter being considered;
- i) management recommendations, as appropriate;
- j) estimated remaining contribution in years e.g. less than 10, 10+, 20+, 40+;
- k) a category is allocated to each tree or group of trees depending in part upon the information gathered in the tree survey, it depending in part upon the 'cascade chart for tree quality assessment' at Appendix 2 and it is in part, subjective; and
- l) rpa is based on the guidance given within BS: 5837.

**Cascade Chart for Tree Quality Assessment (April 2012)**

Category and definition	Criteria (including subcategories where appropriate)			Identification on Plan
<b>Trees unsuitable for retention</b>				
<b>Category U</b> Trees 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	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>Trees infected 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</li> </ul> <p><i>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve</i></p>			 <b>DARK RED</b>
<b>Trees to be considered for retention</b>				
	<b>1. Mainly arboricultural qualities</b>	<b>2. Mainly landscape qualities</b>	<b>3. Mainly cultural values, including conservation</b>	<b>Identification on plan</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 dominant and/or principal trees within an avenue)	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>LIGHT GREEN</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 remediable 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 category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	 <b>MID BLUE</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 limited 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 collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	 <b>GREY</b>