Tree Categories

Trees are categorised in accordance with the cascade chart in Table 1 of the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations'

Category 'U' - Trees in such condition that they cannot realistically be retained as living trees in context of the current land use for longer than 10 years.
Category 'A' - Trees of high quality with an estimated remaining life expectancy of at least 40 years.
Category 'B' - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
Category 'C' - Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

Root Protection Area

In order to avoid damage to the roots or rooting environment of retained trees, the Root Protection Areas (RPAs) should be plotted around each of the category A, B and C trees. This is a minimum area in m² which should be left undisturbed around each retained tree.

The RPA is calculated using the British Standard BS 5837:2012 'Trees in relation to design, demolition and construction - Recommendations.

The calculated RPA is capped to 707m², which is the equivalent to a circle with a radius of 15m. Where there appears to be restrictions to root growth the root protection area is reshaped to more accurately reflect the likely distribution of the roots.

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Project:
83 Copse Wood Way,
Northwood,
HA6 2TX

Client:
Mr Pulkit Shar

Drawing:
Tree Constraints Plan

Based on:
P003

Drawing No:		Rev:
Arbtech TCP 01		A
Date: Nov 2016	Scale: 1:200 @ A2	Drawn: MGM

Key:

Tree Nos.:	1	Tree Canopies:		Trunks:	
RPAs:		Category 'U' trees:		Category 'B' trees:	
Category 'C' trees:		Category 'C' groups:		Generic notional shading arc:	

All dimensions should be checked on site. No dimensions are to be scaled from this drawing.
Please notify us of any discrepancies found. Arbtech Consulting Ltd. cannot be held responsible for inaccuracies in the base drawing in which this plan is based.
This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.
This drawing is not to be read as a definitive part of the engineering or construction designs or method statement. An architect or structural engineer should be contacted over any matters of construction, detailing or specification and for any standards or regulatory requirments relating to proposed structures, hard surfacing or underground services.
This drawing was produced in colour - a monochrome copy should not be relied upon.

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Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction.
Default specification: To comprise either 2.4m wooden site hoarding or a 2.3m high scaffolding framework comprising of vertical and horizontal framework, well braced to resist impacts, with uprights to be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. On to this, standard-grade welded mesh panels are to be securely fixed to each other with wire ties at two scaffold clumps and to the scaffold framework with wire.
Secondary specification: To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabilizer struts, which should should be attached to a base plate and secured with ground pins.
All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Construction exclusion zone - Keep out".

Ground boarding

Note temporary ground protection should be capable of supporting any traffic entering or using the site without being deformed or causing compaction of underlying soil.

Note: The ground protection might comprise one of the following:

a) For pedestrian movements only, a single thickness of exhibited boards placed either on top of a driven scaffold frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
b) For pedestrian-operated plant up to a gross weight of 2t, proprietary interlinked ground protection boards placed on top of a compression-resistant layer (e.g.150mm depth of woodchip), laid onto a geotextile membrane;
c) For wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

Supervised demolition

Demolition of existing structures and foundations situated either partially or completely within the RPAs of retained trees shall be undertaken with care and under the direct on-site arboricultural supervision as these areas are likely to contain roots.
Where this is necessary for the foundations to be removed they are to only be removed where critical to the proposed development and to the minimum depth required. The foundations will be broken up using a hand-held pneumatic breaker, hand tools and a wheel barrow to break up and remove the surfacing. In some situations and at the discretion of the arborist it may be possibly to use an excavator using a hydraulic breaker and suitably sized toothless grading bucket. If an excavator is to be used it must be situated outside of the RPAs, on top of the hard surfacing working away from the RPAs or from ground boarding. If it is likely that there will be any collapse of the soil within the rooting environment excavation is to be stopped immediately and the trench is to be shored up to prevent loss of the rooting environment.
Which ever system is used there is to be NO disturbance of the soil on the tree side of the foundations. If roots are found they are to be covered over with damp hessian and a layer of either sharp sand, wood chip or top soil to prevent desiccation.

Hard Surfacing Removal

Removal of and or replacement of hard surfacing situated either partially or completely within the RPAs of retained trees shall be undertaken with care and under the direct on-site arboricultural supervision as these areas are likely to contain roots.
Where this is necessary the wearing course will be broken up using a hand-held pneumatic breaker, hand tools and a wheel barrow to break up and remove the surfacing. If it is necessary to remove the sub base this is to be undertaken using hand tools such as a fork to loosen the material and removed using shovels and wheelbarrows.
In some situations and at the discretion of the arborist it may be possibly to use an excavator using a hydraulic breaker and suitably sized toothless grading bucket. If an excavator is to be used it must be situated outside of the RPAs, on top of the hard surfacing working away from the RPAs or from ground boarding.
Which ever system is used there is to be NO disturbance of the soil beneath. If roots are found they are to be covered over with damp hessian and a layer of either sharp sand, wood chip or top soil to prevent desiccation.

Manual Excavation

Excavation within the RPAs will be initially undertaken by hand under direct on-site arboricultural supervision to a minimum of 600mm depth of any excavation, whether for proposed foundations, hard surfacing or underground services. The soil is to be loosened with the use of a fork or pick and then cleared with the aid of an air-spade and service. All roots to be cut will be cleanly severed with the use of a hand saw or secateurs. The edge of the excavation closest to the retained trees will be covered over with damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination by concrete. If appropriate soil beneath the depth 600mm may be sheet piled, trip pile piled or individual piles. Any deeper excavations may be undertaken by a machine provided it works form outside of the RPA or has appropriate ground protection in place to move and work upon.

Supervised Excavation

Excavation adjacent to RPAs are to be undertaken under direct on-site arboricultural supervision. Excavation will consist of a mixture of mechanical and manual excavation.
Initial excavation will be undertaken by hand under to a minimum of 200mm deep of any excavation, the soil is to be loosened with the use of a fork or pick and then cleared with the aid of an air-spade, service or shovel. Then after excavation can be undertaken using an excavator with a suitably sized toothless grading bucket using a grading motion rather than digging and taking no more than 10 - 20mm deep swipes at any time. If any roots are discovered mechanical excavation will be stopped immediately and manual excavation will resume to expose the root. All roots to be cut will be cleanly severed with the use of a hand saw or secateurs. The edge of the excavation closest to the retained trees will be covered over with damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination by concrete. If appropriate soil beneath the depth 600mm may be sheet piled, trip pile piled or individual piles. Any deeper excavations may be undertaken by a machine provided it works form outside of the RPA or has appropriate ground protection in place to move and work upon.

Tree Protection Area

KEEP OUT

Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990)
TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITION & ANYONE ARE THE SUBJECT OF A TREE PRESERVATION ORDER, CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL PROSECUTION

ANY INTERVENTION WITH THE PROTECTED AREA SHOULD BE WITH THE WRITTEN PERMISSION OF THE LOCAL PLANNING AUTHORITY

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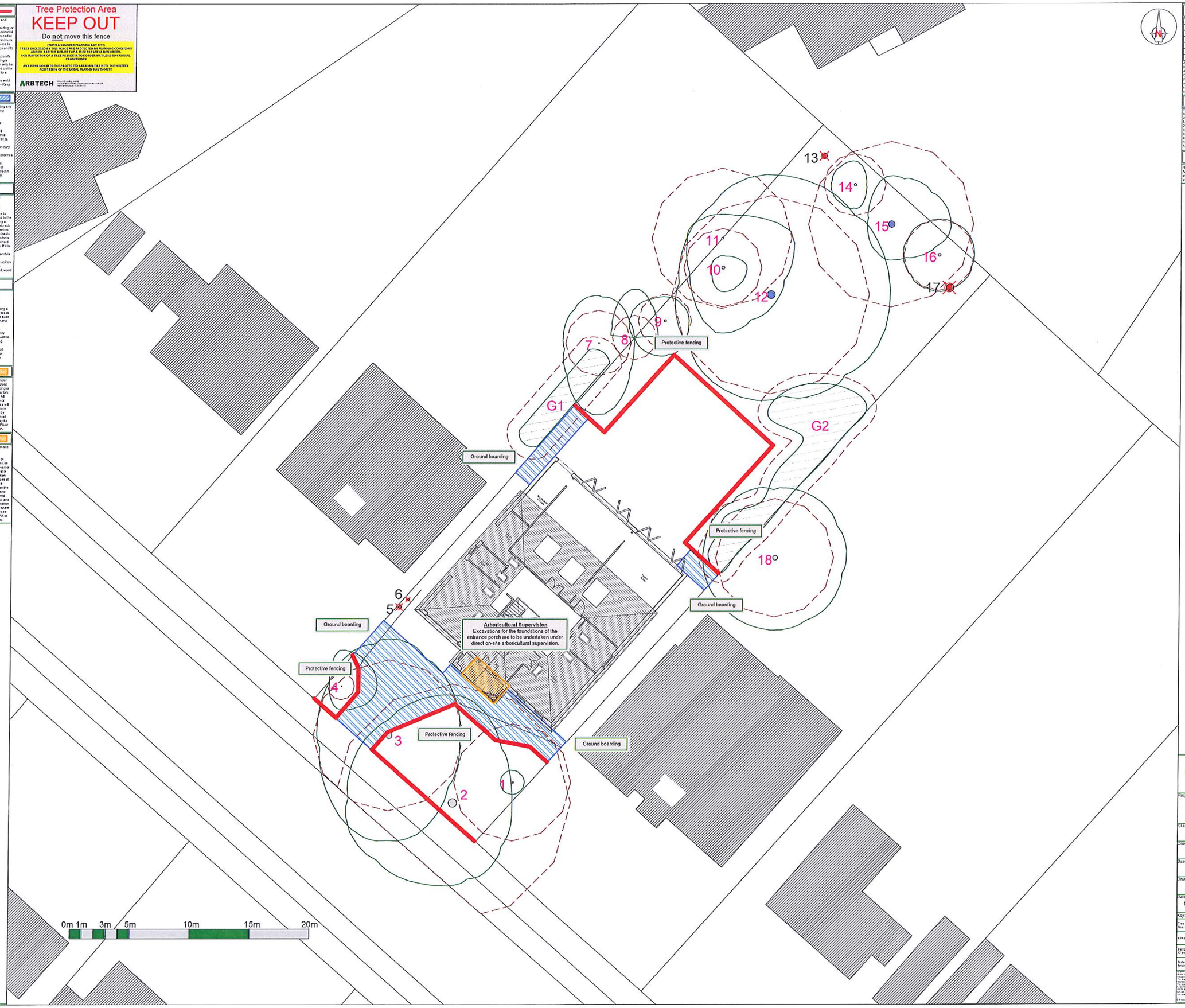

Tree Work Schedule

No.	Species	Works	Category
2	English oak	Crown lift to 6.0 metres, to the north to clear the garage	C
3	English oak	Crown lift to 6.0 metres, to the north to clear the garage	C
5	Sycamore	Fell to ground level to remove stump	U
6	Sycamore	Fell to ground level to remove stump	U
13	English oak	Fell to ground level	U
17	English oak	Fell to ground level	U

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 'Tree work - Recommendations'.
All arisings are to be removed and the site is to be left as found.
Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber lorries, tractors, excavators or cranes is/will be parked or allowed to run in the crowns of any retained trees, to prevent subsequent compaction and root death.

Arboricultural Supervision

The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:
1. Pre-commencement site meeting.
2. Location of protective measures.
3. Manual / Supervised excavation of foundations for the entrance porch within the RPA of tree no.2.
4. Any excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services.
5. Arboricultural sign off and removal of protective measures.

Arboricultural Method Statement

Please refer to Arbtech Consulting Ltd. Tree Schedule and Arboricultural Method Statement, for full details on all surveyed trees and how all aspects of the development maybe implemented without detriment to retained trees.

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Project:
83 Copse Wood Way,
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Client:
Mr Pulkit Shar

Drawing:
Tree Protection Plan

Based on:
1592 P103

Drawing No: Arbtech TPP 01 | Rev:

Date: Nov 2016 | Scale: 1:100 @ A0 | Drawn: MGM

Key:

Tree Nos.	1	Tree Canopies		Trunks	
RPAs		Category 'A' trees		Category 'B' trees	
Category 'C' trees		Category 'U' trees		Trees to be removed	5
Protective fencing		Ground boarding		Arboricultural supervision - Entrance porch	