



WE KNOW SERVICES

ARBORICULTURAL METHOD STATEMENT

Address

Woodlands, Lodge Lane, Widnes

Client

Mr and Mrs Crosby

Report Date

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Version

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Arboricultural Method Statement – Woodlands, Lodge Lane, Widnes



A northern view of the site showing G3 (Left), G5 (Central) and part of G6 (Right).

Quality Assurance

The information which the author has prepared and provided is true and has been prepared and provided in accordance with the Arboricultural Association's Code of Ethics and Conduct. We confirm that the opinions expressed within this report are true and represents the author's professional opinions.

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1. Introduction

Resulting from the Arboricultural Impact Assessment (ref: 21/00064/AIA), an Arboricultural Method statement has been recommended to ensure good working practices when working in proximity to trees to implement the proposed development.

The need for this method statement is a result of the client's proposals (ref: 1704 02_01 PROPOSED PLANS AND ELEVATIONS), as outlined in the Arboricultural Impact Assessment.

The following information outlines the need for an Arboricultural Method Statement.

2. The Importance of Protecting Tree Roots from Development Related Activities

Most of the root system of a tree is in the top 600mm of the soil, extending radically for distances frequently more than the trees height. Beyond the main structural roots, the root system rapidly sub-divides into smaller diameter roots until a mass of fine roots develops.

The main structural roots develop in response of the need for the tree to have physical stability. Beyond these major roots, root growth and development are influenced by the availability of water and nutrients.

Unless conditions are uniform around the tree, the location and extent of the root system is typically irregular and difficult to predict. Typically, it will not reflect the symmetry seen in the branch system.

The parts of the root system, which are active in water and nutrient uptake are very fine, typically less than 0.5mm diameter. They are short lived and develop in response to the needs of the tree, with the majority dying each winter.

It is essential that conditions in the soil remain conducive to the healthy growth of these fine roots so that the water and nutrients necessary for healthy tree growth can be absorbed.

All parts of the root system, but especially the fine roots, are vulnerable to damage. Once they are damaged, water and nutrient uptake will be restricted until new roots have regenerated. Vigorous young trees will be capable of rapid regeneration, but over mature trees will respond slowly, if at all.

To live and grow, roots need oxygen from the soil. Respiration by the roots and other soil organisms depletes this oxygen and increases carbon dioxide levels in the soil; a correct balance of these gases is normally maintained by diffusion between the soil and the atmosphere. Anything, which disturbs this balance, will affect the condition of the root system.

The factors that most commonly affect this diffusion adversely, and therefore damage roots, are the following: -

- A. Compaction of the ground, which reduces the space between soil particles. This is particularly important on clay soils. A single passage by heavy equipment on clay soils or storage of heavy materials can cause significant damage to the structure of the soil.
- B. Altered soil levels, even for a few weeks.
- C. Covering the root area with impervious surfaces.
- D. A rise in the level of the water table. Roots can tolerate submersion for short periods. But a permanent rise will deplete the soil of oxygen.
- E. Excavations in the rooting area can sever roots. As most roots are in the surface 600mm, even shallow excavations can cause damage.
- F. Excavations for foundations, landscaping, service trenches or soil stripping which sever or damage the roots may impair the stability of the tree and make it dangerous.

Serious damage is often caused during preliminary site works by stripping the topsoil. For this reason, such works should be avoided until protective fencing has been erected.

3. Method Statement

3.1 Tree Works

Before any form of development commences on the site the following works should be undertaken: -

Tree No.	Proposed Works
T1, T7	Remove trees as detailed on tree protection plan (Ref:21/00064/TPP).
G3	Remove section as detailed on tree protection plan (Ref:21/00064/TPP).

3.2 Protective Fencing

All fencing used on the site should fully comply with BS 5837:2012 (Trees in Relation to Construction – Recommendations)- refer to Appendix 2.0.

The fencing should be strong and suitable for local conditions. It should also consider the degree of construction activity on the site.

The fencing should be at least 2.3m in height and should be erected with both a vertical and horizontal scaffolding framework capable of withstanding impact, with vertical tubes spaced at a maximum of 3 m. This should support either weldmesh panels which should be securely fixed with wire or scaffold clamps.

Notices should also be erected on the fencing stating 'Protected Area - No operations within fenced area'.

Where it is demonstrated that there is a presence of underground services, an alternative arrangement is acceptable using boots to support the vertical sections of the fence and a stabilizer strut mounted on a block tray.

The positioning of the protective fencing is also very important and should be erected in the proposed locations identified in *Appendix 1.0*. Once the fence has been erected it should never be crossed and particular care should be taken to store any materials or soil within the protected area.

Phase one fencing, as highlighted on the Tree Protection Plan (Ref:21/00064/TPP) should be erected prior to any works commencing on site. Phase two fencing should be erected upon completion of the works outlined in *section 3.4*.

3.3 Special Precautions for Working within the RPAs of trees.

If any tree roots are encountered within the RPAs during site works, the following methodology should be followed:

- No roots - continue without constraint.
- Minor roots (<10mm) - continue to monitor.
- Moderate roots (<25mm) - prune roots neatly.
- Major roots (>25mm) - agree additional design, methodology or tree management measures. This would be discussed with the LPA to agree an acceptable way forward.
- If roots less than 25mm in diameter are present they will be pruned using an appropriate sharp clean pruning tool such as pruning saw or secateurs and treated with an approved fungicidal sealant.
- Fine roots (< 25mm in diameter) will not be left exposed overnight where there is a risk of frost.

3.4 Methodology for the Demolition of the Outbuildings

The following methodology supports the drawing indicating the demolition of the outbuildings (ref: 1704 02_01 PROPOSED PLANS AND ELEVATIONS) and is acceptable in accordance with BS5837:2012.

The methodology has been prepared based on the sequence of operations necessary to complete the demolition of the outbuildings with the minimum damage to the trees proposed for retention.

All work within the RPA will be carried out under a watching brief from a qualified arboricultural consultant.

1. Before the start of any demolition on site, Phase One Tree protective fencing should be erected in the locations shown on the Tree Protection Plan (Ref: 21/00064/TPP).
2. Demolition should be taken place inwards within the footprints of the existing outbuildings.
3. All demolition should be undertaken using hand tools.
4. If plant machinery is needed, all machinery should be operated outside of the root protection areas under a watching brief from a qualified arboriculturalist.
5. Once the main structure of the outbuildings has taken place, the excavation of the foundations should be done with handheld machinery.
6. Excavations should start at the closest point to the tree, working away from the tree until completion.
7. Exposed ground is then to be covered with top soil.
8. The tree protective fencing should then be moved to phase two positions.

If any roots are encountered during these operations, the guidelines outlined in *Section 3.3* should be followed.

3.5 Additional Precautions When Working in Proximity of Trees

Oil, bitumen, cement, or other material likely to cause damage to the tree will not be stacked or discharged within 10m of the trees stem or within the protective area. Also, materials in general will not be stacked or discharged within the exclusion zone.

Concrete mixing and washing will not be carried out within 10m of any retained trees.

Fires will not be lit beneath the foliage or in a position where the flames could extend to within 5m of the foliage, branches, or trunk. If the fire is large, then this may necessitate a distance of at least 20m.

Trees that are to be retained will not be used as anchorage for equipment.

Notice boards, telephone cables, or other services will not be attached to any part of the retained tree.

Care should be taken when using cranes or other equipment near the canopy of the retained trees. Also, any trees to be felled in proximity to the retained trees should be done so with particular care.

3.6 Tree Planting

Trees and shrubs planted shall comply with *BS 3936 Specification of Nursery Stock* and shall be planted in accordance with *BS 4428 General Landscape Operations* and *BS8545:2014 Trees from Nursery to Dependence in the Landscape*.

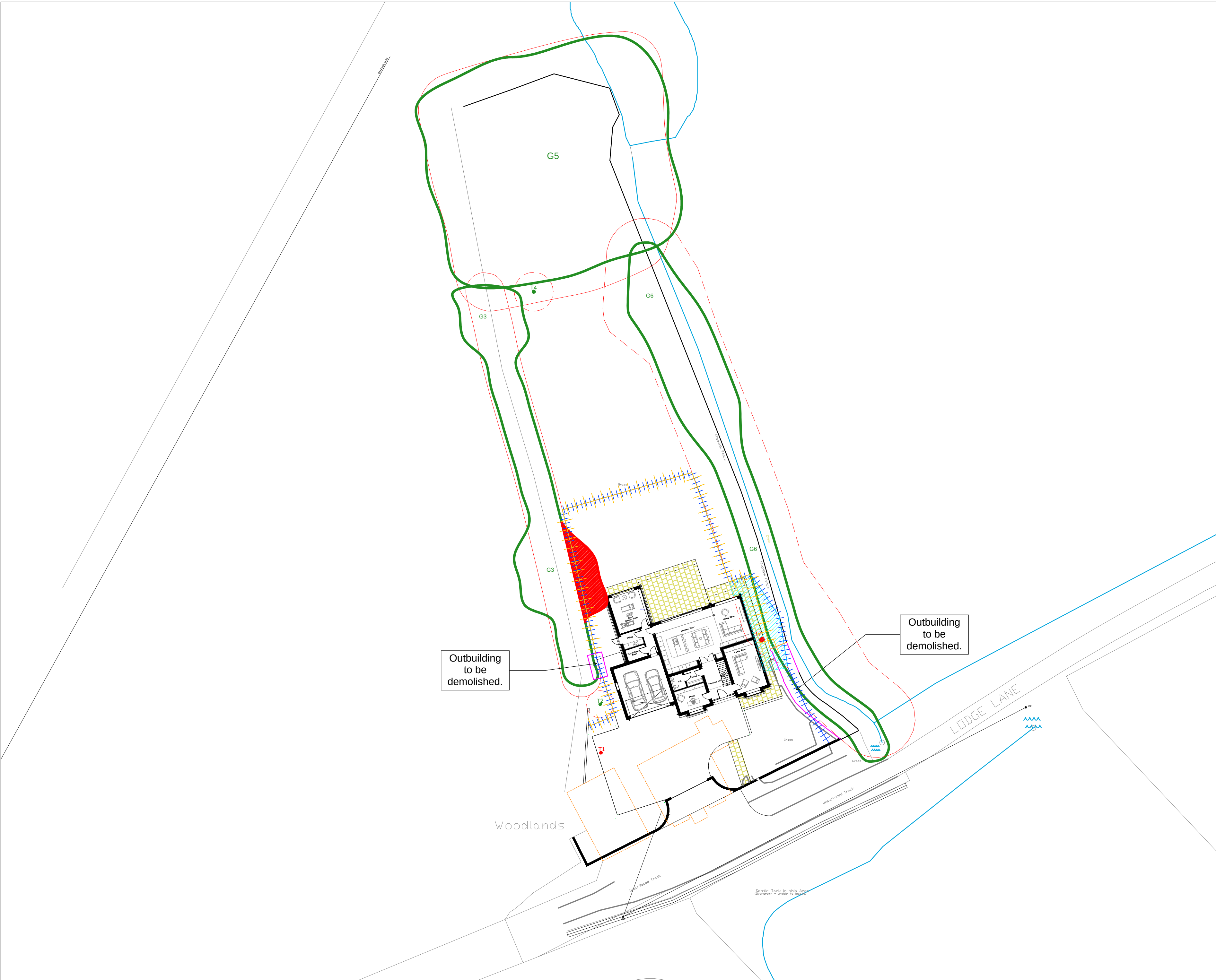
All imported soils should be uncontaminated and from a recognised supplier in accordance with *BS 3882:2015 Specification for Top Soil*.

Bare root and root-balled stock to be planted in the dormant season (which typically extends between from mid-November to late-March). All planting stock to be clearly labelled on delivery with the full botanical name.

Tree pits to be dug 400mm larger than rootball in any direction. Organic soil improvement compost to be dug into all planting areas and used at 1m³ per 10m². All planting beds to be mulched in 75mm depth medium grade bark mulch immediately after planting.

Appendix I.0

Tree Protection Plan



- Retained Trees
- Trees to be Removed
- Root protection area
- Ground Protection
- Phase One Tree Protective Fencing
- Phase Two Tree Protective Fencing



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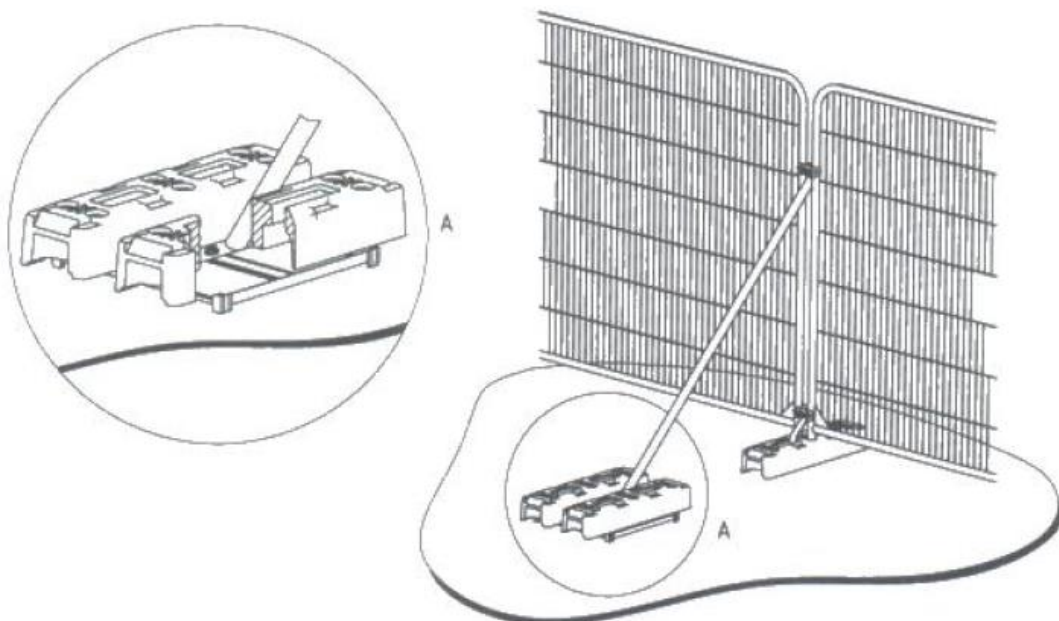
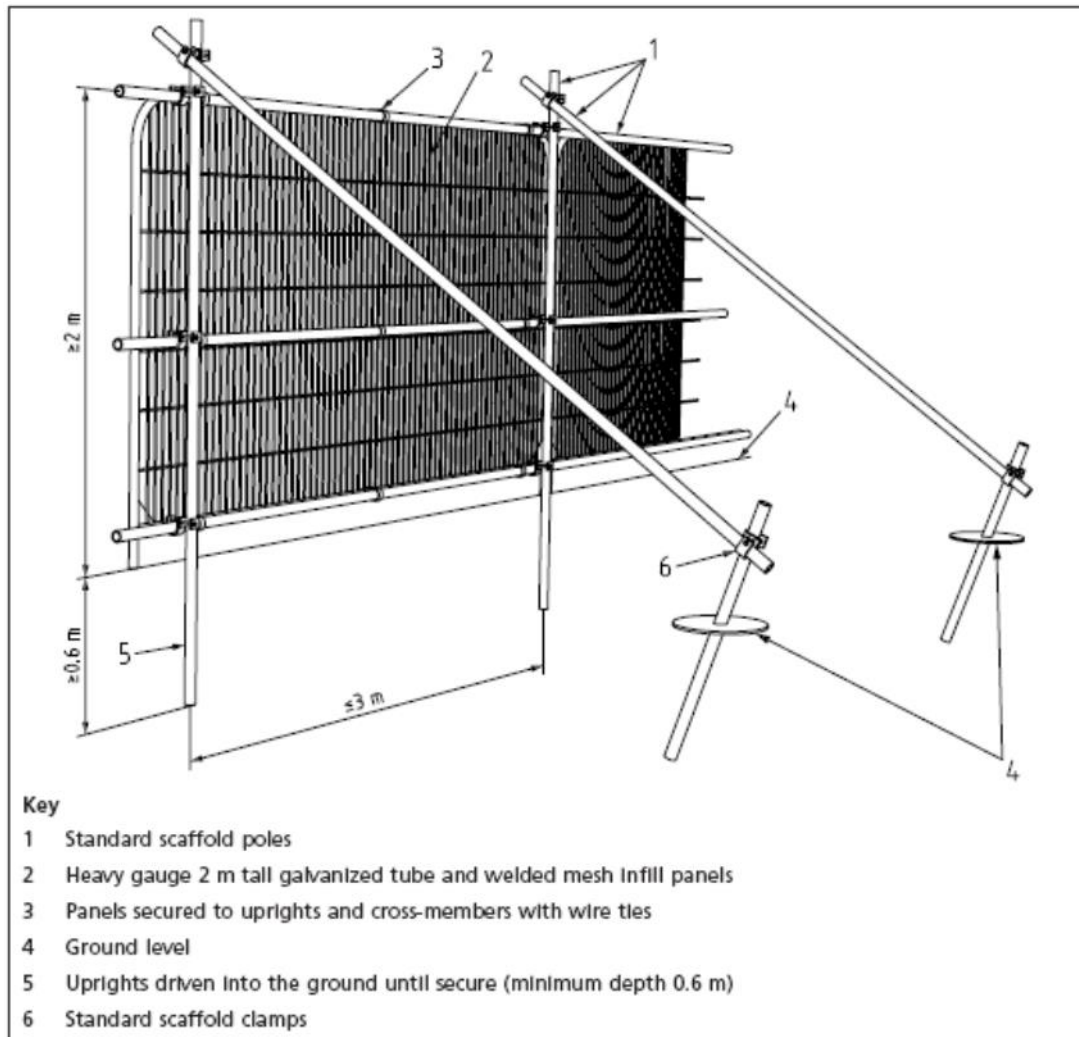
Drawing Title:	Drawing No:	
Tree Protection Plan	21/00064/TPP	
Date:	Scale:	Drawn by:
07/09/2021	1:300@A2	JH

Note: Dimensions are not to be scaled from this drawing.
All written measurements are to be checked on site by the contractor. Copyright WeKnow Services.
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Appendix 2.0

Tree Protection Fencing Specifications

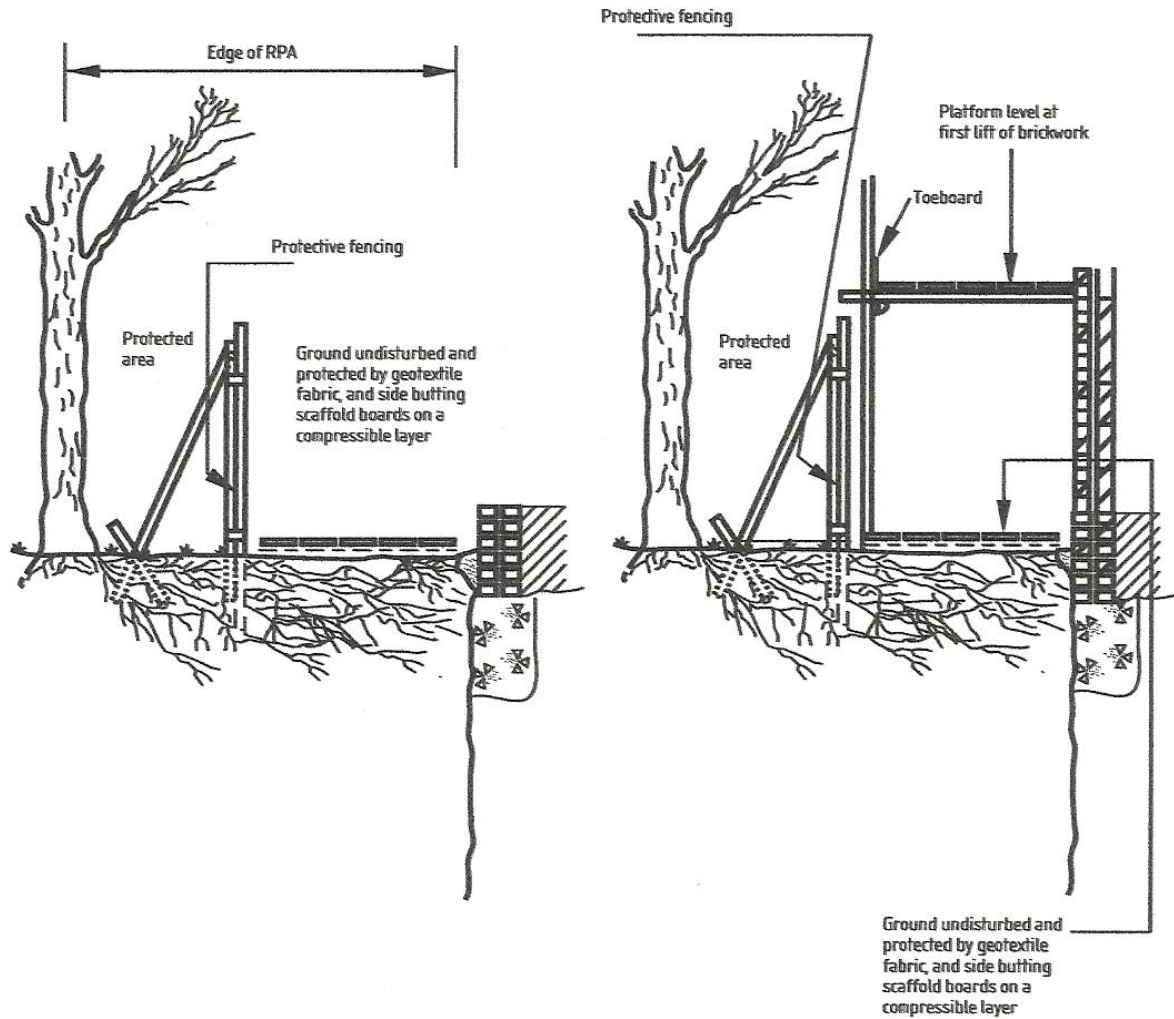
Arboricultural Method Statement – Woodlands, Lodge Lane, Widnes



b) Stabilizer strut mounted on block tray

Appendix 3.0

Ground Protection Measures



The scaffold boards may be substituted for plywood sheets (e.g. 2440mm by 1220mm) of at least 19mm thickness and laid on 150mm depth mulch in order to spread the load of any high points on the original surface.