TREE AWARE UK LTD
Arboricultural Consultancy

Arboricultural Method Statement

5 Merton Lane, London

Written By Alastair Gavin On behalf Of Tree Aware UK Ltd

On the 23rd of September 2015

The purpose of this document is to aid in the protection of the trees on the site above which is being retained throughout the construction process. These trees can easily be protected during this process by clearly setting out tree protection methods, construction techniques and working practices that are appropriate to the site, this document provides this information in line with the recommendations of BS 5837: 2012 “trees in relation to design, demolition and construction - recommendations.

Contents

1.0 Summary

1.1 The points listed below are explained in more detail in this report and it is intended that this summary is for quick reference only. I advise that the report is read fully before any actions are decided and undertaken. This is in order to avoid breach of the tree protection legislation whether by a planning condition, Area planning designation, or specific tree preservation order that may apply to the trees on this site.

1.2 This document will give specific site instructions on the methods required to protect the trees on site during the construction of the proposed Glass House. The following is a list of identified tree protection measures that are appropriate to the 5 Merton Lane, London and the proposed construction of the Glass House that is being undertaken.

1 Pre Construction meeting

If specified by the local planning authority a pre construction meeting should be undertaken to run through the Arboricultural Method Statement (AMS) to ensure all parties are familiar with the tree protection measures and what trees are to be retained/protected on the site.

2 Execute Tree Works

Details of these trees works are contained within this document and should be undertaken before construction work starts and should be in accordance to BS 3998 Tree Work - Recommendations

3 Tree and Ground Protection

Implementation of tree protection fencing and ground protection, if deemed necessary by the local planning authority or another agreed approach undertaken.

4 General principles of tree protection

To aid in the effective protection of the trees indentified for retention.

5 Specialised foundation Construction

Where the proposed construction encroaches into the root protection area of the retained trees a specialised foundation construction will be used to minimise root damage.

6 Site Monitoring

A site inspection if specified by the local authority should be undertaken to check and confirm the specified tree protection methods in this AMS are in place. Further site inspections i.e. site monitoring on a fortnightly basis carried out to confirm that the tree protection measures have not been breached during construction and that the conditions of the trees adjacent to the site have remained intact (undamaged).

7 Landscape re-instatement within the root protection area

Where re-instatement needs to be undertaken within the root protection area of the trees retained care should be undertaken to avoid damage to the trees root system. The following equipment being prohibited within the root protection area; rotavator, roller, mini diggers etc, with only hand tools allowed.

2.0 Introduction

2.1 The majority of tree roots are found in the top one meter of soil, any work to or in the near proximity to trees can result in root damage. This has the likely result that the tree or trees will suffer decline or perish in the years after construction.

2.2 The following detailed methods are in accordance with BS 5837:2012 “trees in relation to design, demolition and construction – recommendations” and are designed to aid in the protection of the trees retained on this site.

2.3 An assessment to BS 5837:2012 has been undertaken to the trees and those trees to be retained have been given a root protection area (RPA).

2.4 The RPA has been used to allow a Construction Exclusion Zone (CEZ) to be designated; this is the area to be protected during development by the use of barriers, ground protection measures, and specialised construction techniques or other agreed measures to ensure the protection of the roots from the construction processes.

2.5 The following methods have been designated as appropriate measures for tree protection on this site and are set out in a sequence to which they should be undertaken.

3.0 Sequenced Methods of Tree Protection

3.1 Phase 1 Pre construction/installation meeting

An onsite meeting will be held if required and if deed necessary by the local planning authority with all relevant parties such as the contactors, the appointed arboricultural supervisor and a representative from the local planning authority. The purpose of this meeting is to agree and record the location of site features and site information such as

- Current tree condition
- Agree tree works (detailed in proposed tree works)
- Locations of site access
- Location of site storage (if required)
- The location of tree protection barriers/fencing and ground protection

3.2 Phase 2 Execute agreed tree works

The following table lists the proposed tree works which should be agreed by the local planning authority before being undertaken.

Tree reference	Proposed works	Comments
T1 Holm Oak	Reduce tree by 30% due to structural defects	Required Health and safety work based on findings and recommendation of the BS 5837 Tree Survey (Please see Appendix 2 Tree Defect Photos)

All tree work should be undertaken by a suitable qualified and insured tree surgeon that carries out tree surgery work in accordance to BS 3998:2010 "Tree work recommendations"

3.3 Phase 3 Tree Protection Barriers and Ground Protection

Tree protection barriers should be erected to protect the construction exclusion zone of the retained trees.

Barriers should be fit for purpose and be appropriate to the proximity of work taking place around the retained trees. The following specification should be used as the default specification for a tree protection barrier.

It is suggested however that Harris fencing would be an appropriate alternative for tree protection at this site, as it would provide the necessary temporary protection as no heavy plant machinery is to be used, as opposed to the default tree protection fencing detailed below.

Default Tree Protection Barrier Specification

The barrier should consist of vertical and horizontal scaffold framework, well braced to resist impacts. The vertical tubes should be spaced at a maximum interval of 3m and driven securely into the ground (where the ground surface such as concrete or tarmac prevents ground intrusion an alternative method of fixing the verticals poles should be adopted and agreed by the local planning authority).

Onto the framework, welded mesh panels should be securely fixed. Bracing poles should be used to support the framework however care should be taken to avoid contact with structural roots,

(Please see Appendix 1 Default tree protection fencing for diagram)

Once the agreed barrier is in position it should not be moved and should be considered as a permanent structure on the site until construction of the Gall House and construction usage of the site is completely finished.

All personnel on the site should be informed of the barriers role in protecting the tree and its importance. This should be enforced during usage of the site.

To aid in the protection of the trees and the none admittance to the tree protection area signs should be used. These signs should be clear and straight forward and fixed upon the barrier. An example of the wording is as follows

"EXCULSION ZONE – NO ACCESS"

Ground Protection

Where tree protection fencing cannot be used due it restricting construction access an appropriate form of ground protection should be used.

This should be in the form of ground protection matting supplied/brought from a reputable supplier and with agreement from the local planning authority before purchase or hire.

The ground protection matting should be installed as per manufactures instructions before construction of the proposed takes place and remain in situ throughout the construction process and construction usage of the site.

The ground protection matting should not be moved or altered unless in agreement with the local planning authority.

All personnel on the site should be informed of the ground protections role in protecting the trees root systems and its importance. This should be enforced during usage of the site.

3.4 Phase 4 General Principles of Tree Protection

A copy of this Method Statement and Tree Protection Plan should be retained on site at all times for ease of reference.

No fires should be lit next to or adjacent to the tree protection barriers. If a fire is required the position on site should be agreed by the supervising Arboriculturalist.

If heavy plant is required in the construction process such as a JCB or 360 excavator care should be taken that the excavating arm does not encroach over the root protection barriers.

A designated storage area should be created and the position agreed upon (away from the tree). All materials for construction should be stored in this compound. Care must be taken to avoid any leakages or spillages of toxic materials into the soil. The gradient of the site must be taken into consideration when agreeing the location of the storage area to stop any run off entering the tree protection areas.

3.5 Phase 5 Specialised Foundation Construction

As the proposed Glass House encroaches into the root protection area (RPA) of Trees T1 Holm Oak and T2 Mulberry a specialised foundation construction in the form of a shallow raft is proposed and will minimise any perceived damage to the trees roots system.

Details of this foundation construction i.e. its location and depth can be provided and submitted to the council for approval before excavation/construction starts.

During the construction process of the foundation raft care must be taken not to cause any additional damage to the RPA of the tree such as compaction, the use of tree protection measures such as ground protection matting will be used throughout the construction process and under supervision by the appointed arboricultural consultant and or Local authority tree officer.

3.6 Phase 6 Site Monitoring

Once the listed tree protection measures are in place this being the site fencing and ground protection matting and if deemed necessary by the local planning authority, a site visit should be carried out by the appointed arboricultural supervisor to check and confirm that the tree protection measures are in place and in accordance to this AMS. Confirmation of the exact condition of the trees prior to commencement of the construction should also take place and the findings reported to the local planning authority.

Further visits should be undertaken on a fortnightly basis while construction is taking place andif the construction exceeds this timeframe, to check if the tree protection measures are intact and to report on any changes to the trees conditions.

After completion of the construction a further check should be undertaken to confirm that no damage has been sustained to the trees.

After each site visit by the appointed arboricultural supervisor a site inspection form should be produced detailing the findings/checks of each site visit and be submitted to the local planning authority (Please see Appendix 3 Site Inspection Form)

3.7 Phase 7 Landscape re-instatement within the root protection area

Where re-instatement of the ground, landscaping and, or planting including the applications of top soil or mulch needs to be undertaken within the root protection area of the retained tree. Care should be taken to avoid damage to the trees root system.

Access to the area should only be undertaken once all construction work has finished.

Levelling, top dressing, and cultivation should be undertaken via manual handheld equipment only, with the use of rotavators, mini diggers, rollers and

other mechanical equipment being prohibited within the root protection area of the trees.

Clearance of vegetation should be undertaken by hand held equipment such as strimmers, chainsaws, power loppers only etc with tractor mounted equipment being prohibited within the root protection area of the trees. The clearance of vegetation within 1 meter or the stem (trunk) of the trees should be undertaken by hand without the use of powered machinery.

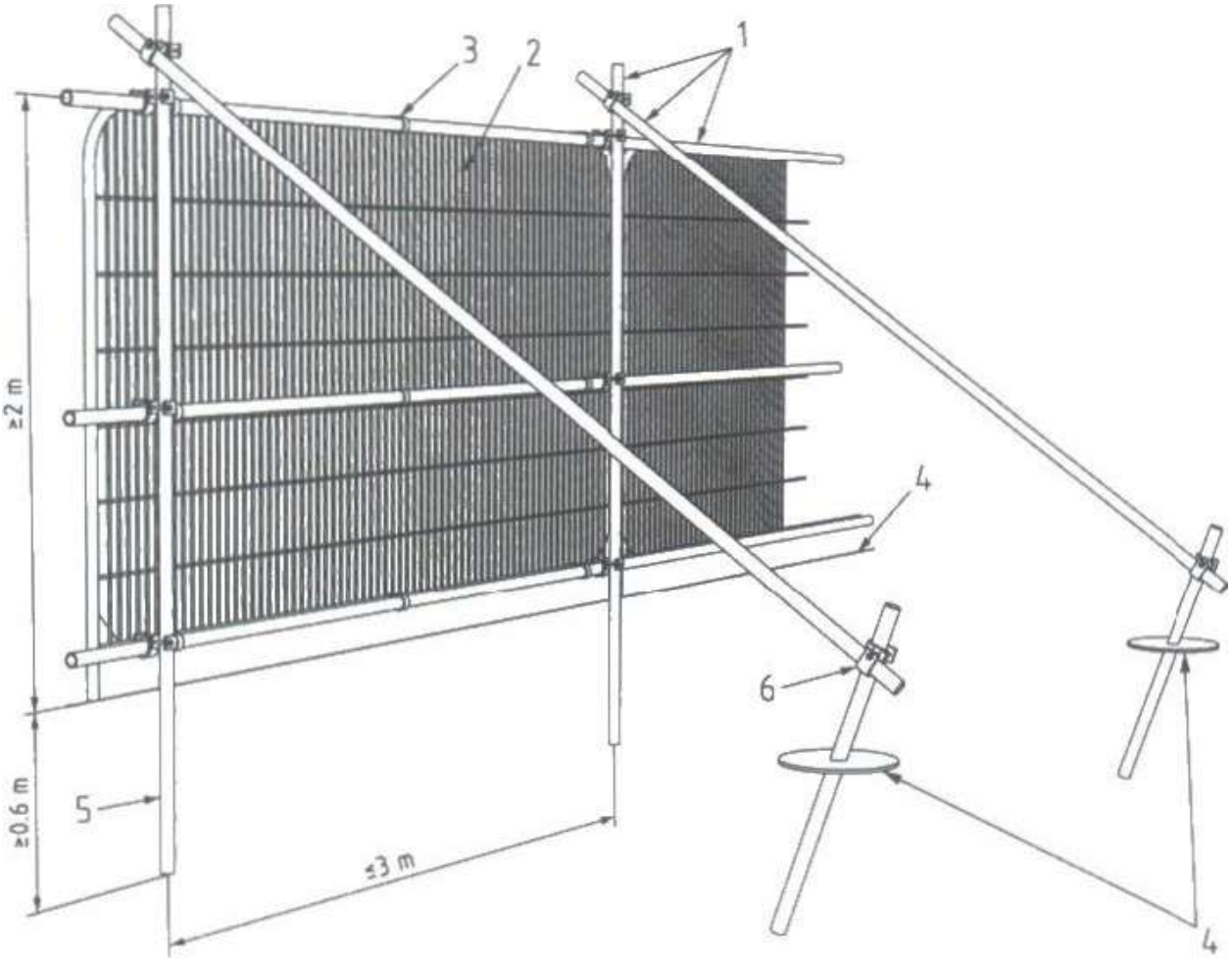
Where levelling of the site is required within the root protection area and involves the incorporation of additional top soil or mulch. The soil used should meet the standards of BS 3882: 2007 Specification for topsoil and requirements for use. There must only be a maximum of 100mm increase in soil level and no reduction to the existing soil level. Only minimal excavation to prepare the soil is permitted.

If herbicides are to be used to control weed/vegetation permission for use of the product type needs to be sought from the local planning authority and or supervising Arboriculturalist. Any membrane material used within the root protection area for the control of weeds or other use should be permeable.

Additional

In the event that the appointed contractor is uncertain of the correct cause of action when undertaking construction/installation processes in connection to the construction that affects the trees. Or a situation that is unexpected arises that affects the retained tree. The appointed arboricultural supervisor should be contacted and the process discussed and an agreed approach with agreement from the local authority undertaken.

Appendix 1 Default Tree Protection Fencing



Key

1 Standard scaffold poles

2 Heavy gauge 2m tall galvanised tube welded mesh infill

3 Panels secured to uprights and cross-members with wire ties

4 Ground level

5 Uprights driven into the ground until secure (minimum depth 0.6m)

6 Standard scaffold clamps

Appendix 2 Tree Defect Photos (T1 Holm Oak)

Photo 1 - Showing the split union with potential decay.

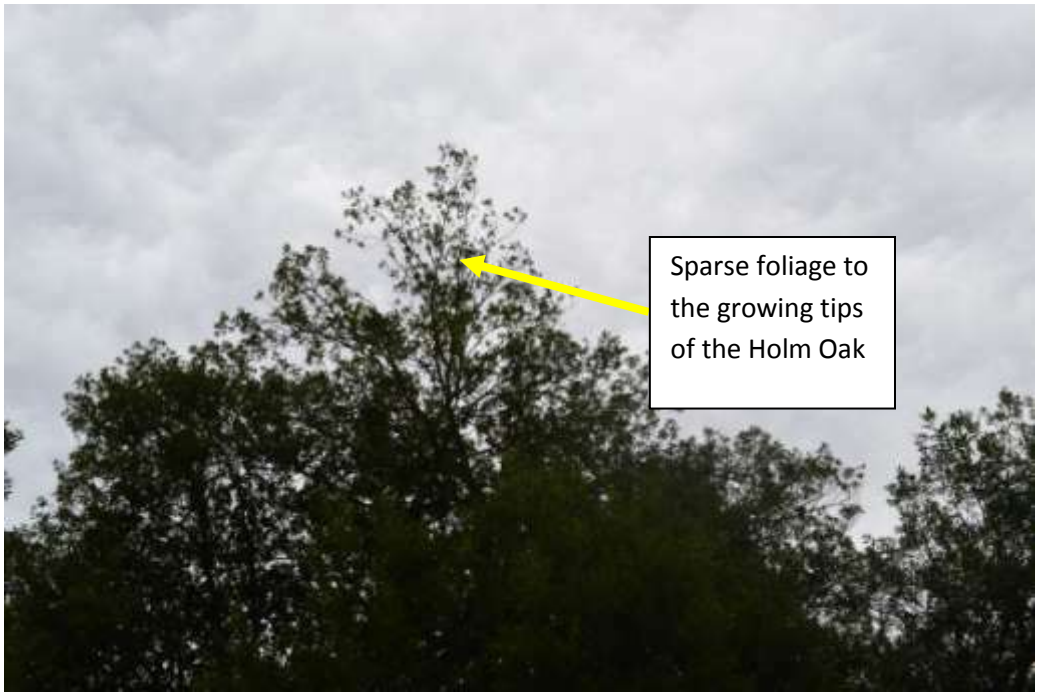


Photo 2 - Showing the sparse foliage to the growing tips of the Holm Oak.

Photo 3 - Showing the bark tare/wound to the stem of the Holm Oak from a previous lost branch.

Based on the above photographed defects it is proposed that the T1 Holm Oak is reduced by 30%.

Appendix 3 Site Inspection Form

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Tree Protection Site Inspection Record Sheet

Address/location of site:	
Planning Ref:	
Date of Site Inspection:	
Site Inspected by:	

Was the specified tree protection stated in the Arboriculture Method Statement in place on the date of inspection Yes / No

Please provide details:

Were there any signs of damage to the tree/trees retained on or adjacent to the site Yes / No

Please provide details:

Please rate the adequacy of the tree protection to protect the retained tree/trees on or adjacent to the site including materials used:

Inadequate Poor Adequate Satisfactory

Please list materials used to for the tree protection:

Is the site storage within the agreed area or away from influencing distance of the tree/trees on or adjacent to the site? Yes / No

Please provide details:

Date of next tree protection inspection if required:

Inspected by (Signature)

Date

Photographs of tree protection measures for the site to be inserted below;