TREE CONSULTANTS

ARBORICULTURAL METHOD STATEMENT

to BS 5837:2012 at

99 South End Road, London NW3 2RJ

This document describes how the trees will be protected and managed during the development of this site. It explains how and when the protection measures must be installed and maintained throughout the development.

A copy of this document report must be permanently available on site for the duration of all development activity and should be referenced for practical guidance on how to protect the retained trees at this site.

Prepared for:
David Long Architects
Fordhams,
Littley Green,
Essex
CM3 1BU

Date: *April 2020*

Reference: *AWA3123*

Institute of Chartered Foresters
Registered Consultant

Office: 0114 272 1124 Mobile: 0776 631 0880 Email: info@awatrees.com Website: awatrees.com
Union Forge, 27 Mowbray Street, Sheffield, S3 8EN. AWA Tree Consultants Limited. Company No. 8520123. Registered in England & Wales.

Contents

1. Introduction

1.1 Instruction

1.1.1 We were instructed by David Long of David Long Architects to prepare an arboricultural method statement for the proposed development at:

- **99 South End Road, London NW3 2RJ**

1.2 Purpose

1.2.1 This method statement has been prepared in order to demonstrate that the development operations at this site can be undertaken with minimal risk of adverse impact on the trees to be retained.

1.2.2 This method statement conforms to BS 5837:2012 *Trees in relation to design, demolition and construction - Recommendations*. It is based on the arboricultural data, collected at a site visit during February 2019, detailed within Appendix 3 of this report.

1.3 Description of Development

1.3.1 The proposed development layout has been provided by my client and is the basis for the Tree Protection Plan (TPP) at Appendix 4.

1.4 Details of Consent

1.4.1 Planning consent is subject to this method statement being agreed upon in advance by the Local Planning Authority. The contents of this report must be adhered to, before, during, and after the construction phase.

1.4.2 As such, no equipment, machinery or materials shall be brought onto the site in connection with the development until this arboricultural method statement detailing tree management and tree protection measures has been submitted to and approved by the Local Planning Authority.

2. Method Statement Timeline

2.1 Overview of Sequence of Operations

2.1.1 In overview, it is necessary to undertake the following sequence of operations in relation to arboricultural input for development operations.

1 Method statement approved by the LPA

2 Undertake tree and hedge removals

3 Install tree protection fencing and ground protection boards

4 Pre commencement meeting/ confirm fencing and boards are as specified.

5 Construct new development

6 Remove tree protection fencing and ground protection boards

2.2 Specific Sequence of Operations

2.2.1 The following timeline table informs the key principles for development operations proceeding in relation to arboricultural requirements conditioned as part of this method statement.

2.2.2 The actions and timescales within this table must be adhered to in order to discharge the arboricultural method statement planning condition for this site.

2.2.3 The precise timing and order of some of the development operations may need to be changed due to site specific operational requirements, yet any operations that may affect the trees on the site must be done so under arboricultural supervision by a suitably qualified person appointed by the contractor.

Sequence of Operations		
Stages	***Action***	***Arboricultural Input***
1 Approval	This AMS is submitted to and approved in writing by the LPA.	If necessary, liaise with contractor and LPA to discuss methodologies detailed.
2 Tree Works	Tree removals and pruning works shall be carried out as the first operation on site, in accordance with Appendix 4 and as detailed in section 3.1.	Review the tree work requirements with the tree contractor. If necessary, liaise with the contractor on site during tree works.
3 Tree Protection	Installation of the tree protection fencing and ground protection boards will take place prior to any storage of plant, materials and machinery. As shown at Appendix 4.	If necessary, liaise with the contractor installing the tree protection fencing and ground protection boards until completed to the standard specified in this method statement.
4 Site Meeting	Following installation of tree protection fencing and ground protection boards, the LPA shall be invited to inspect the fencing, ground protection and tree works, and discuss any other site operations that have implications for trees.	Meeting with a representative of the LPA and the site manager. Alternatively, contractor can confirm the fencing, ground protection, and tree works are as specified by taking photographs.
5 Construction	Undertake the construction of the new development.	If necessary, liaise with the local authority and the site foreman to ensure any issues are adequately resolved.
6 Site Finishing	Removal of tree protection fencing and ground protection boards must only be undertaken when all site traffic and machinery has left the site.	If acceptable to the LPA, the contractor can take photos of the site to give to the LPA to gain approval for the removal of tree protection fencing and ground protection boards.

3. Tree Management

3.1 Tree Works

3.1.1 Trees and hedges T2, T3, T4, T5 and G6 require removal to facilitate the development.

3.1.2 T1 is also recommended for removal regardless of development at the site.

3.1.3 The trees requiring removal are highlighted in red on the plan at Appendix 4 and detailed in the tree data schedule at Appendix 3.

3.1.4 Pruning works have been recommended to T8 regardless of development at the site.

3.1.5 All tree work should be carried out according to British Standard 3998:2010 *Tree Work - Recommendations*.

3.1.6 When appointing a tree surgeon, only properly qualified and experienced companies should be used, who have adequate Public Liability and Employer's Liability Insurance.

4. Tree Protection

4.1 Tree Protection Fencing

4.1.1 The tree protection fencing for this site should be located as shown on the Tree Protection Plan (TPP) at Appendix 4 (as illustrated with a thick purple line).

4.1.2 The tree protection fencing will be appropriate to the degree and proximity of likely construction works. In this instance, the default BS 5837:2012 tree protection fencing will be used to protect retained tree T8 (as detailed in Figures 1 and 2 at Appendix 1).

4.1.3 The precise fencing location may need to be slightly adjusted on site due to local site conditions, but is not expected to differ from that shown on the TPP. The final fencing position must be agreed on by the LPA before the commencement of any site works.

4.1.4 The tree protection fencing details should be incorporated into relevant subsequent plans, method statements used for design purposes and construction drawings issued for use on site, to ensure that all interested parties are fully aware of the areas in which access and works may and may not take place.

4.1.5 The area enclosed by the fencing is referred to as the Construction Exclusion Zone (CEZ); this area should be considered a restricted area. No pedestrians, vehicles, storage of materials, equipment or machinery should be allowed with the CEZ unless specified within this method statement. The site manager must ensure that all personnel are aware of the restrictions that apply to the fenced-off area.

4.1.6 Once the fencing is erected, waterproof warning signs labelled '*Tree Protection Area'* should be placed at 3m intervals to ensure that all personnel are aware of the restrictions that apply to the fenced-off area (see Figures 3 and 4 at Appendix 1 for example signs).

4.1.7 The tree protection fencing should be inspected for faults or damage by the site manager or other responsible named person on a regular basis and a written record kept. Any faults or defects should be repaired or replaced as soon as is reasonably practicable. The Tree Protection Fencing shall not be removed, breached or altered without prior written authorisation from the local planning authority and under arboricultural supervision by a suitable named responsible individual appointed by the site manager.

4.2 Ground Protection

4.2.1 The development work is within the exposed RPA of retained adjacent tree T7. As such, ground protection will be required within the RPA of T7 to avoid compaction of the soil which can arise from the single passage of a heavy vehicle, especially in wet conditions, so that tree root functions remain unimpaired.

4.2.2 Interlinked ground protection boards should be used (as detailed in Figure 5 at Appendix 1). They should be located as shown on the Tree Protection Plan (TPP) at Appendix 5 (as illustrated with a light blue hatched area).

4.2.3 The precise location of the boards may need to be slightly adjusted on site due to local site conditions, but is not expected to differ significantly from that shown on the TPP.

4.2.4 The new temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil.

4.2.5 For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane.

4.2.6 For pedestrian-operated plant up to a gross weight of 2t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane.

4.3 Drainage and Utilities

4.3.1 Drainage and utilities are to be directed away from the retained trees. Over-ground services should ideally be routed away from areas where they are likely to interfere with the crowns of mature trees. New underground services should be grouped together and routed away from RPAs. *NJUG 10: Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees* should be considered when installing services.

4.4 Additional Precautions

4.4.1 Allowance should be made for operations outside of the CEZ that could indirectly impact on trees. Including space for site huts, temporary toilet facilities (including their drainage) and other temporary structures; and space for storing (whether temporary or long-term) materials.

4.4.2 Care must be taken to prevent contamination with chemical spillages, including petrol, diesel and oils. Cement mixers and any other toxic materials should not be permitted within the RPA of the trees. Any materials whose accidental spillage would cause damage to a tree should be stored and handled well away from the outer edge of its RPA.

4.4.3 Fires on the site should be avoided if possible. Where they are unavoidable, and approved by the Local environmental health authority, they should not be lit in a position where heat could affect foliage or branches. The potential size of a fire and the wind direction should be considered when determining its location, and it should be attended always until safe enough to leave.

4.5 Post Construction Landscaping

4.5.1 Many of the trees on site may be subject to some form of landscaping or seeding beneath their canopies after the development phase. At this stage the protective fencing will have been removed and the property may be occupied.

4.5.2 Landscaping works should be carried out in such a way as to avoid ground level changes or deep digging. Tractor mounted rotovation or other mechanised cultivation methods must not be used.

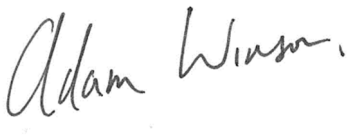
4.5.3 No heavy machinery should be brought into the vicinity of retained trees.

4.5.4 Herbicides should be appropriate for the purpose and should not be used in such a way as to damage any retained trees or vegetation.

5. Signature

I trust this report provides all the required information.

Signed



.....

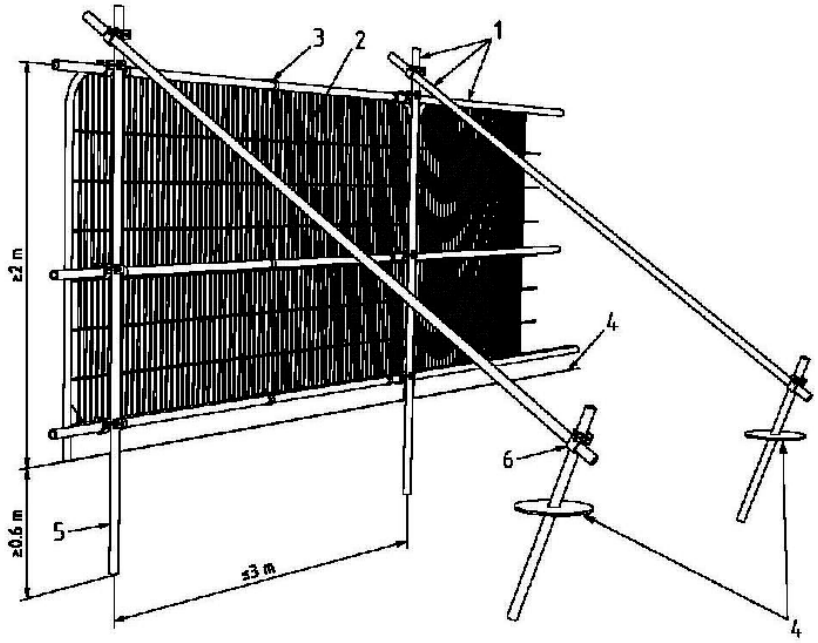
Adam Winson
Chartered Arboriculturist, MSc, BSc (Hons), MICFor, AIEEM.

21st April 2020

AWA Tree Consultants Limited
Union Forge
27 Mowbray Street
Sheffield
S3 8EN

www.awatrees.com

Appendix 1: Images and Figures



Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Figure 1: Fencing to BS 5837:2012

Figure 2: Photo of Fencing to BS 5837:2012

Figure 3: Warning sign for fencing

Figure 4: Example of A3 correx tree protection warning sign fixed to fencing panel

Figure 5: Inter-linked ground protection boards placed on top woodchip

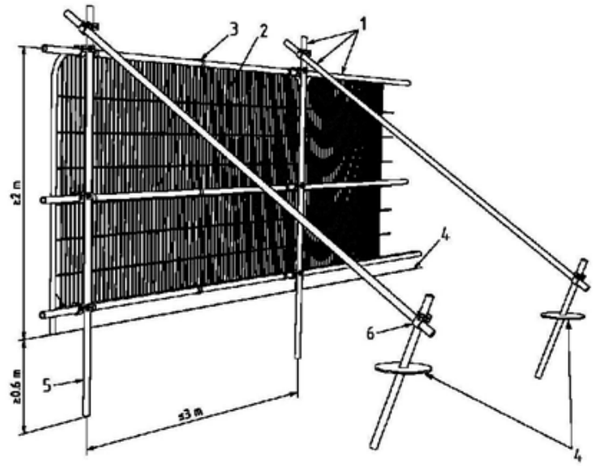
Appendix 2: Relevant Contact Details

Contact Name	Organisation/ Details	Contact Number	Contact E-mail
David Long	David Long Architects	07478 722554	dlong@dlaltd.com
Adam Winson	AWA Tree Consultants Ltd	0114 272 1124	adam@awatrees.com
Development Management Regeneration and Planning	Camden London Borough Council	020 7974 4444	planning@camden.gov.uk

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T1	Hawthorn	*Crataegus monogyna*	Dead	6	3	230, 170, 130	No	1	1.5	0.5	3	2.5	Ivy covered	Multiple stemmed at base. Slight lean south. Stubs. Old pruning wounds. Bark damage. Ivy covered. Tight unions	All dead/ absent. Major dieback. Moderate deadwood		Dead	Dead	n/a	Dead	**U**	Removal required regardless of development
T2	Maple	*Acer palmatum*	Semi-mature	4.5	4	100, 60, 50, 80	No	2	1.5	2	2.5	1.5	Ivy covered	Multiple stemmed at base. Slight lean. Old pruning wounds. Stubs	Normal	Numerous old pruning wounds and stubs to main stems	Good	Good	20 to 40 yrs	Moderate	**C**	Removal required to facilitate development
T3	Hawthorn	*Crataegus monogyna*	Semi-mature	6	1	120	No	2	2.5	2	2	2.5	No visual defects	Twin stemmed at base. Vertical. Ivy covered. Stubs. Old pruning wounds. Bark damage. Tight unions	Minor deadwood	Ivy prevented detailed inspection	Fair	Fair	20 to 40 yrs	Moderate	**C**	Removal required to facilitate development
T4	Maple	*Acer palmatum*	Mature	6	1	170	No	1.5	2.5	2	2.5	3.5	No visual defects	Single stemmed. Multiple stemmed at 1.5m. Slight lean north west. Bark damage	Normal	Considerable bark damage	Good	Good	20 to 40 yrs	Moderate	**C**	Removal required to facilitate development
T5	Portuguese Laurel	*Prunus lusitanica*	Semi-mature	5.5	1	110	No	0.5	1	1	1	1	No visual defects	Single stemmed. Vertical	Normal		Good	Good	>40 yrs	Moderate	**C**	Removal required to facilitate development
G6	Yew	*Taxus baccata*	Semi-mature	2	10+	40	No	0.5	See plan				No visual defects	Single and Multiple stemmed. Old pruning wounds. Stubs	50% dead/ absent. Moderate dieback. Minor deadwood. Old pruning wounds	Yew hedge. Poorly pruned. Limited future prospects. Very low value.	Poor	Fair	10 to 20 yrs	Low	**C**	Removal required to facilitate development

	Tree Species		Measurements					Crown (m)					Tree Condition							Value		Management
Tree ID	*Common Name*	*Latin Name*	*Maturity*	*Height (m)*	*Stems*	*Stem Dia (mm)*	*Estimated*	*Ave Height*	*N*	*E*	*S*	*W*	*Roots*	*Stem*	*Crown*	*Comments*	*Physiological*	*Structural*	*Life Expectancy*	*Amenity*	*Category*	*Works*
T7	Cherry	*Prunus sp.*	Early-mature	9	1	500	Yes	3	3.5	3.5	3.5	3.5	Limited access around base	Single stemmed. Vertical. Bark damage. Minor decay. Tight unions. Minor cavities. Epicormic growths	Old pruning wounds. Minor deadwood	Adjacent, no access	Fair	Fair	10 to 20 yrs	Moderate	**C**	No works required in current site context
T8	Magnolia	*Magnolia sp.*	Early-mature	8	4	110, 90, 50, 60	No	1.5	2	2.5	2.5	3	No visual defects	Multiple stemmed at base. Vertical. Old pruning wounds. Stubs	Minor deadwood. Old pruning wounds	In small walled bed. Moderate northern stem previously removed at base leaving stub. Has had previous crown reduction works. Southern crown is in contact with neighbouring property.	Good	Good	>40 yrs	Moderate	**B**	Reduce southern and western crown by around 1m to 1.5m regardless of development, pruning to suitable points. Prune between mid-summer and early autumn.

Inset 1: Tree protection fencing

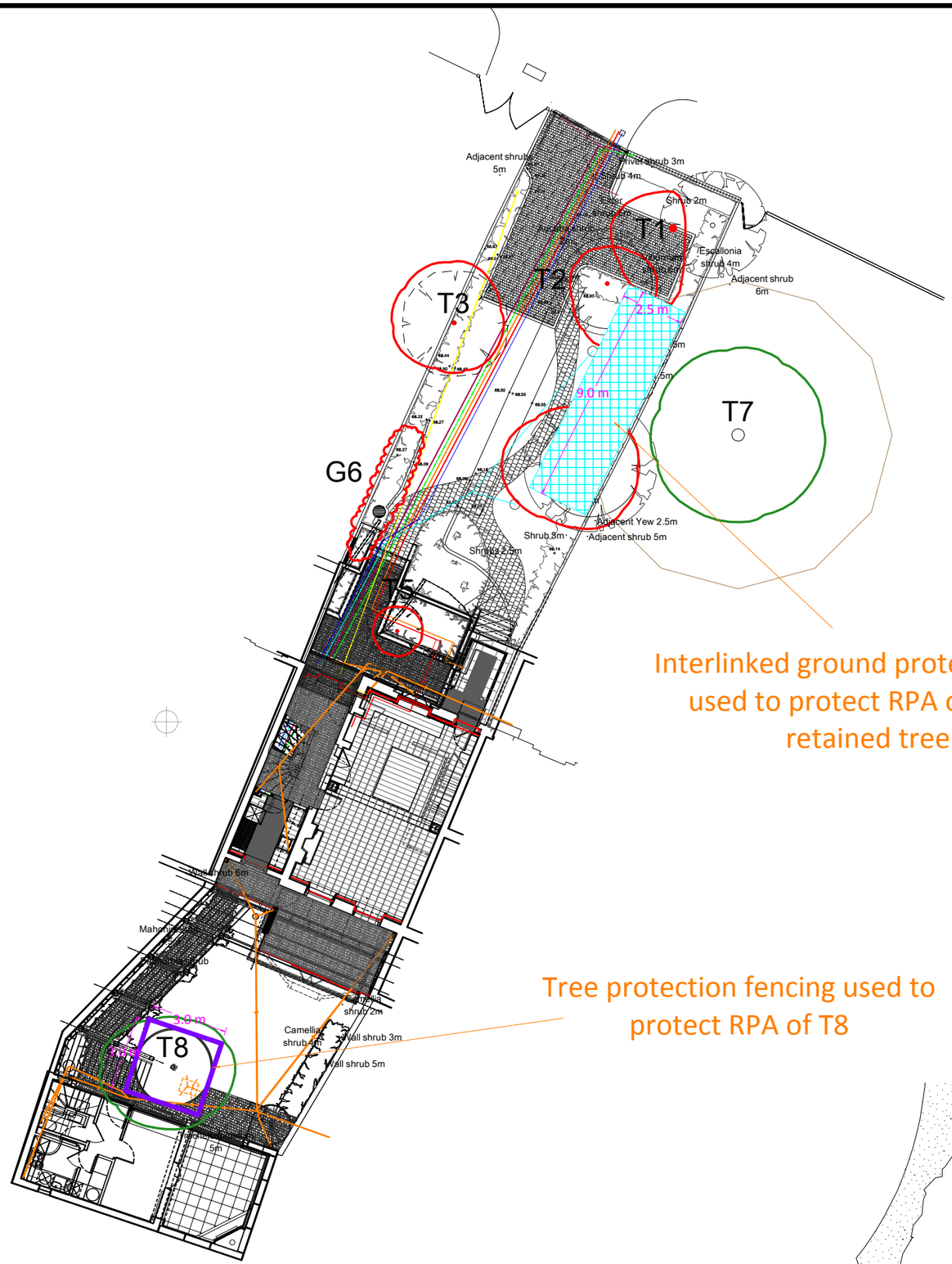


Key

1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

Inset 2: Warning sign for tree protection fencing

Inset 3: Interlinked ground protection boards placed on top woodchip



Interlinked ground protection boards used to protect RPA of adjacent retained tree T7

Tree protection fencing used to protect RPA of T8

AWA TREE CONSULTANTS

Appendix 4:
Tree Protection Plan

99 South End Road, London
Ref: AWA3123

BRITISH STANDARD 5837:2012

SCALE: 1:200 PAPER: A3

	TREES TO BE RETAINED
	TREES FOR REMOVAL
	TREE STEM
	TREE STEM TO REMOVE
	RPA: ROOT PROTECTION AREA
	TREE PROTECTION FENCING
	INTERLINKED GROUND PROTECTION BOARDS