

ARBORICULTURAL TREE PROTECTION METHOD STATEMENT

Landscaping Works

18 Well Road Hampstead London

REV₁

19th May 2020

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Scope

The purpose of this report is to identify the tree protection measures required to facilitate the implementation of the landscape scheme, as provided by EP Landscape Architecture. To demonstrate that the trees to be retained will be suitably protected. Using the guidelines and principles of BS5837:2012.

Table of Contents

		Page
1	Introduction	4
	Appendices	
1	Qualifications and Experience	5
2	Site Specific Information	6
3	Limitations and Qualifications	18
4	Trees Protection Plan	20

1 INTRODUCTION

1.1 Brief:

This method statement has been prepared at the request of F3 Architecture the project architects, to identify how the trees to be retained will be protected during works to implement the landscape scheme provided.

1.2 Qualifications and experience:

I have based this report on my site observations and the provided information, and I have come to conclusions in the light of my experience. I have experience and qualifications in arboriculture and list the details in **Appendix 1.**

1.3 Documents and information provided:

A plan of the Landscape scheme.

1.4 Relevant background information:

Planning permission has been granted for remodelling work to the building and a tree protection method has been submitted as part of the planning application, to address the tree protection in relation to the construction works.

1.5 Scope of this report:

This report is only concerned with the protection of the trees to be retained that could be impacted by works to implement the landscape scheme, and the measures required to provide protection for it as best prescribed in the guidance of BS5837: 2012 'trees in relation to design, demolition and construction'. Any issues regarding construction methods etc. is outside the remit of an Arborist and remedy should be sought with suitably qualified persons, for example builder, engineer etc. For the purposes of this report an Arborist / Arboriculturalist is someone who through training and experience has the knowledge to assess trees and their condition in a competent manner.

Brief qualifications and experience of Andrew Day

I hold a Higher National Diploma in Arboriculture. I have been working in the field of arboriculture for approximately 10 years, spending time as a contracting arborist undertaking all aspects of practical arboriculture both in the UK and Europe. I have also worked within local government as a trees officer working for a variety of local authorities. I have a broad experience of both the practical and theoretical aspects of arboriculture having worked within the public and private sector.

1. Qualifications:

Higher National Diploma in Arboriculture (1996)

NPTC (National Proficiency Training Council) units 20, 21 and 22

Lantra professional trees inspection certificate

2. Practical experience:

Prior to establishing my company, I worked for a private Arboriculture company for three years undertaking many practical aspects of Arboriculture. I moved on from this to become a local authority trees officer for five years, my duties included consultation on planning matters with regard to trees, advice to the general public, managing the council's trees stock and liaising with other professionals on Arboricultural related issues. I was approached by an established tree contracting and consulting company in Essex to develop and run the consultancy department as their principle consultant which I did for three years.

SITE SPECIFIC INFORMATION

Explanatory Notes

Trees Survey

Trees Protection Method Statement and Protection Criteria

Informatives for protection fencing

Arboricultural Considerations notice for site hut and inducted personnel

Explanatory Notes

Measurements/estimates: All dimensions are estimates unless otherwise indicated. Measurements taken with a tape or clinometer are indicated with a '*'. Less reliable estimated dimensions are indicated with a '?'.

Species: The species identification is based on visual observations and the common English name of what the trees appeared to be is listed first, with the botanical name after in brackets. In some instances, it may be difficult to quickly and accurately identify a particular tree without further detailed investigations. Where there is some doubt of the precise species of trees, it is indicated it with a '?' after the name in order to avoid delay in the production of the report. The botanical name is followed by the abbreviation sp if only the genus is known. The species listed for groups and hedges represent the main component and there may be other minor species not listed.

Height: Height is estimate height to the nearest metre.

Spread: The maximum crown spread is visually estimated to the nearest metre of the total crown spread diameter. It should be noted that the crown of some trees can be one side, however this usually indicated within the report.

Diameter: These figures relate to 1.5m above ground level and are recorded in centimetres. Estimate measurements are banded 0-10cm, 11-20, 21-30 etc. If appropriate, diameter is measure with a diameter tape. 'M' indicates trees or shrubs with multiple stems. 'AV' indicates average and is the average of two stems when dealing with twin stem trees.

Estimated Age: Age is assessed as **M** mature (last one third of life expectancy), **EM** early-mature (one third to two thirds life expectancy) and **Y** young (less than one third life expectancy).

FSB: First significant branch from ground level (direction shown on trees protection / constraints plan)

SULE: This is the estimated Safe Useful Life Expectancy of the trees. Trees can live longer than this value but can pose a risk to persons or property.

RPR: Radius of root protection area around the trees /group

RPA: Root protection area for trees or group

BS 5837 2012 - On the basis of this assessment, trees can be divided into one of the following categories:

- A Trees whose retention is most desirable; High category
- **B** Trees where is desirable; Moderate category
- C Trees which could be retained; Low category
- **U** Trees that cannot realistically be retained; Fell category

Tag	Name	Age	Diameter	Height	Crown Hgt	FSB Hgt	С	(NS	Sprea E W) n)		Life Exp	Recommendations	Category	RPR	RPA
T1	Fagus sylvatica (Beech)	М	500	20(6)	6	6	9	8	8	8	20+	No works required at present.	B3	6	113.11
T2	Taxus baccata (Yew)	SM	100	7(2)	2	2	2	1	3	2	20+	No works required at present.	C3	1.2	4.52
T3	Castanea sativa (Sweet Chestnut)	SM	100	15(10)	10	10	2	2	4	2	20+	No works required at present.	C3	1.2	4.52
T4	Taxus baccata (Yew)	EM	250	8(2)	2	2	5	5	1	4	20+	No works required at present.	C1	3	28.28
T5	Magnolia Spp	SM	100	4(2)	2	2	1	2	1	1	10+	No works required at present. Suppressed by other vegetation. Consider removing and replacing.	СЗ	1.2	4.52
Т6	Magnolia Spp	SM	100	4(2)	2	2	2	1	1	1	10+	No works required at present. Suppressed by other vegetation. Consider removing and replacing.	СЗ	1.2	4.52

Method Statement for Trees Protection Measures

PROJECT: 18 Well Road, Hampstead London, Landscaping Works

CLIENT: F3 Architecture

1.1 Brief

Provide protective measures specification for trees to be retained using the guidelines and principles prescribed in BS5837: 2012 'trees in relation to design, demolition and construction'.

1.2 Protective Fencing and Site Supervision

An important factor in providing protection for the trees during the construction works is the chronological order in which development tasks are undertaken. Before work continues on site, the following issues will be addressed and submitted to the council for approval.

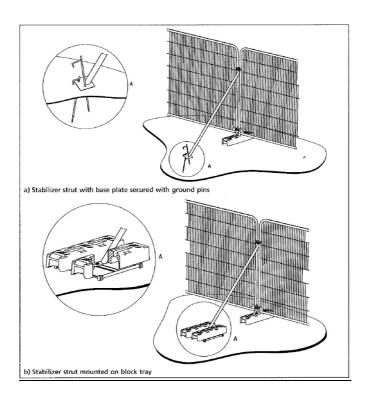
- A suitably qualified arborist will be retained to oversee the tree protection set up and site supervision. The contact details of this person will be provided to the council along with details of the site manager, should the council wish to contact anyone regard tree protection issues.
- All excavation and ground cultivation works within the RPA (Root Protection Area) will follow the hand dig method statement provide. It is important that arboricultural supervision is present when these works take place.
- The arboricultural site supervision will be completed by a suitably qualified arborist and will provide a supervision log at the end of each visit. This will detail what protection measures were in place and any works required to address the safeguarding of the trees. The supervision logs will be available to the local authority if requested.

Protective fencing will be as shown in **Diagram 1** or similar that demonstrates that it is fit for purpose. This will be placed in the locations as shown on the tree protection plan in **Appendix 4**, prior to works commencing on site. The informatives provided will be attached to the fencing to highlight its importance at a height of 1.5m and at 5m intervals along the line of fencing, or in locations that can demonstrate they are clearly visible to identify the purpose of the fencing in relation to the project.

1.2.2

If access is required across the RPA, it will only be done with good reason and the ground protection outlined in 1.7 below, will stay in place until such a time that construction works have been completed.

Diagram 1



A briefing on the tree protection requirements on site by the supervising arborist will take place at the first site visit, with the other visits undertaken as shown on the programme. A log of these visits and any actions required will be kept and made available to the council on request. It will be the responsibility of the site manager or other named person to ensure this is maintained for the duration of the project.

1.2.4

The placing of trees protection measures works within the construction timescale will not be altered and it is re-emphasised that this is to take place prior to any other activities.

1.2.5

All personnel inducted on site will be made aware of the trees protection measures and will be responsible for their own actions in maintaining these and ensuring that they do not cause any damage to the trees.

1.3 Forbidden activities within RPA

1.3.1 Within the root protection area, the following activities will be prohibited, unless the local authority in writing grants specific permission:

No storage of chemicals or other substances likely to leach and cause harm to the trees to be stored.

No storage of heavy plant or materials likely to cause further soil compaction.

No ground disturbance works, apart from what has been approved by any planning permissions or specifically form the council.

No activities that could indirectly affect the trees such as bonfires etc.

1.3.2 No ground disturbance work apart from those granted in the planning permission is to be undertaken within the confines of the RPA without the written permission of the local authority.

The protected area is not to be breached at any time, unless the local authority has granted permission and a qualified arborist has been consulted and supervises any work activities that need to take place.

1.4 Storage of chemicals / mixing of materials

1.4.1 Storage of chemicals will be placed in a sealed bund / area, with no discharge allowed onto the ground or watercourses. The area containing these materials will have an impervious surface and stored **if possible** 10m away from the RPA. If accidental spillage of chemicals or other damage to the trees takes place the local authority is to be notified as soon as possible and a suitably qualified arborist is consulted as to the best actions to take to mitigate any damage that may have occurred as a result of the accident and these works to be undertaken to mitigate the situation as soon as possible. Please refer to the site accommodation plan for details.

1.5 Works in the RPA

- 1.5.1 No excavation / ground disturbance works will take place within the RPA to construct the new dwellings.
- 1.5.2 It is reiterated that the consent of the LPA (local planning authority) is required prior to any excavation / ground disturbance works taking place in the RPA, and the hand dig method statement provided will be adhered to.
- 1.5.3 At no point will access across the RPA be allowed if ground protection is not present.
- 1.5.8 Any excavation works required and permitted in this protective area for whatever will have the relevant permissions in place and the hand dig method statement adhered to at all times, with the supervising arborist present to oversee the operation and provide a supervision log.
- 1.5.9 Where post holes or concrete bases are required to be located within the RPA, these will be placed on the existing surface, with minimal scrapping of the topsoil to level, and in accordance with the hand dig method statement. A non-porous membrane will be laid down to prevent leaching of toxins into the soil while it sets.

1.6 Material storage / site parking

- 1.6.1 Particular attention will be made to the type of materials to be stored and the type of machinery needed to move them, ensuring that sufficient protection measures in accordance with this method statement and space are provided to prevent damage to the trees to remain. The details outlined in 1.4 above will be adhered to.
- 1.6.2 At no point will materials be allowed to be stored in the RPA unless on hard surfaces and with the trees officers gives permission, or any area where the trees could be impacted. This will be strictly policed by the site manager.

1.7 Ground Protection

1.7.1 Where access across the RPA is required, the following ground protection measures will be implemented as required.

For pedestrian traffic:

A single thickness of scaffold boards placed on top of a scaffold frame so as to form a suspended walkway (similar to diagram 2), or boards laid on to a geotextile membrane with a layer of wood chips 100m in thickness.

For pedestrian operated plant up to 2 tonnes:

Interlinked ground protection boards of plywood or similar at least 2.5cm thick, laid onto a geotextile membrane on a bed of wood chip 150mm in depth.

For wheeled or tracked traffic exceeding 2 tonnes gross weight:

Metal tracking designed and fit for purpose, pre-cast concrete slabs or similar, laid to an engineering specification on a compression resistant layer e.g. wood chips that will likely spread the weight of the load and prevent compression of the soil underneath.

1.7.2 AT NO POINT WILL THE GROUND WITHIN THE RPA BE LEFT UNPROTECTED IF ACCESS IS REQUIRED IN THIS AREA.

1.8 Completion

1.8.1 Once all of the construction activities on the site have been completed and a suitably qualified arborist will assess the condition of the trees and liaise with the local authority accordingly if any works are considered necessary. Landscaping works will be discussed with the supervising arborist prior to work commencing, to ensure that it does not conflict with the tree protection measures and suitable procedures are in place.

2 HAND DIG METHOD STATEMENT

PROJECT: 18 Well Road, Hampstead, London

- **2.1** The area to be excavated will be inspected by a professional arborist to assess the likely proximity of root activity and concentration prior to the commencement of any works. All relevant authorized personnel to be informed and required permissions gained before work commences.
- **2.2** If hand digging is not possible/practicable a method of excavation will be agreed and undertaken by a suitably qualified person for example air spading or a competent digger operator etc., in the presence of a qualified arborist.
- **2.3** During excavation great care will be taken to minimize damage to retained roots, including the bark around the roots.
- **2.4** All roots greater than 25mm diameter should be retained and worked around. Where clumps of smaller roots (including fibrous roots) are found these are to be retained.
- **2.5** Roots with a diameter in excess of 25mm must not be severed without permission from an Arborist.
- 2.6 If roots are encountered, the Arborist must conduct the root pruning and inform the relevant person to suggest mitigation works to the tree(s) if required. If severance is unavoidable roots must be cut back using a sharp tool, leaving the smallest wound possible.
- **2.7** If there is a possibility of infection being passed from one specimen to another, tools will be sterilized in an appropriate method to reduce the risk of cross contamination.
- **2.8** When backfilling an inert granular material mixed with topsoil or sharp sand (not builder's sand) is to be used around the retained roots. Unless an alternative backfill substrate has been agreed with in writing by the appropriate authorized personnel.
- **2.9** If roots are to be left exposed for a period of longer than 1 hour (dependent on weather conditions), then a covering of dampened Hessian or similar material is to be used to cover the exposed roots. Any changes to this practice are to be authorized by a qualified arborist.
- **2.10** All levels are to be returned to the original plane after any excavation, unless specific design and relevant permission has been authorized.
- **2.11** A qualified Arborist is to be on site to supervise during any operations within the protection zone.

ANDREW DAY ARBORICULTURAL CONSULTANCY LTD

REDUCING COSTS BY DELIVERING PRACTICAL SOLUTIONS

TREES PROTECTION ZONE

DO NOT CROSS WITHOUT PERMISSION

BREACHING THIS BARRIER CAN RESULT IN THE FOLLOWING:

- SHUT DOWN OF THE JOB
- FINANCIAL IMPLICATIONS
- CRIMINAL PROCEEDINGS

ARBORICULTURAL SITE CONSIDERATIONS

THIS NOTICE IS TO BE DISPLAYED IN THE SITE OFFICE OR A SUITIBLE LOCATION WHERE IT IS CLEARLY VISIBLE AND ISSUED TO ALL PERSONNEL INDUCTED ONTO SITE

The following site considerations must be observed at all times during the development process, from site preparations through to completion.

- ❖ The protected area of the RPA must be regarded as sacrosanct and not breached except where to implement the planning permission granted, without prior consultation with either the local planning authority or the supervising arborist.
- Ground protection must not be lifted or removed without prior consultation with either the local planning authority or the supervising arborist.
- ❖ Damage caused to ground protection must be reported to the site manager to ensure suitable repair or actions are taken.
- ❖ No materials, chemicals, machinery or vehicles to be stored within the RPA (root protection area) as defined on the tree's protection plan and on site by fencing and ground protection.
- ❖ No materials etc. must be rested against or machinery chained to trees.
- No pruning of trees may be undertaken by anyone other than a qualified arborist and approved by the supervising arborist and local authority trees officer.
- Any physical damage caused to a tree to be retained must be reported to the site manager immediately so that suitable remedial works can be commissioned without delay.
- ❖ Builder's sand (which contains high levels of salt) must not be used to back fill excavations within or in close proximity to trees roots, as it has a toxic effect and can cause root desiccation. Sharp sand must be used under such circumstances.
- ❖ Soil contaminants such as concrete mixings, diesel oil and vehicle washings must be kept suitably contained, preferably within bunded areas. Any spillages within 2m of a fenced area must be reported to the site manager and supervising arborist immediately so that suitable mitigation works can be commissioned.
- ❖ Fires must not be lit in positions where their flames can extend to within 5m of foliage, branches or trunks. Wind direction and size of fires will impact on this.
- Notice boards, telephone cables or other services etc. must not be attached to any part of a trees.

Remember the trees officer can turn up at any time or neighbours may report any poor practice or threats to the trees.

Site Personnel Contact Information

Table 1 shows the contact details of the project architect if any enquires relating to this project need answering.

Table 1

Name	Relation to Site	Contact Details
F3 Architects LLP	Project Architects	+44 (0)20 72678332

LIMITATIONS AND QUALIFICATIONS

LIMITATIONS AND QUALIFICATIONS

Unless specifically mentioned the report will only be concerned with ground inspections. No below ground inspections will be carried out without prior confirmation from the client that such works should be undertaken. This report is for the purposes of identifying the constraints of trees in relation to development and not a health and safety assessment of the trees. A cursory assessment of the trees health and condition will be recorded, but this is not to be taken as a detailed assessment of its structural condition, health and management recommendations in relation to this. A separate trees inspection regime focusing on these aspects will need to be undertaken if this is required.

The validity, accuracy and findings of this report will be directly related to the accuracy of the information made available during the inspection process. No checking of independent data will be undertaken, Andrew Day Arboricultural Consultancy will not be responsible for the recommendations within this report where essential data are not made available or are in accurate.

This report will remain valid for one year from the date of inspection but will become invalid if any trees works not recommend within the report are undertaken, soil levels around the trees are altered in any way and if any building works which were not disclosed during the inspection are undertaken. If extreme weather changes occur such as heavy winds, snow etc., the trees will need to be re-inspected to ensure their condition has not been affected or has altered from the initial inspection details obtained.

If any of the above occurs, then it is strongly recommended that a new trees inspection is carried out.

It will be appreciated, and deemed to be accepted by the client that the formulation of the recommendations for the management of the trees will be guided by the following:

- 1. The need to avoid reasonable foreseeable damage
- 2. The arboricultural considerations Trees safety, good Arboricultural practise and aesthetics.

The client is deemed to have accepted the limitation placed on the recommendations by the sources quoted in the attached report. Where time constraints or the client limits sources, this may lead to an incomplete quantification of the risk.

TREE PROTECTION PLAN

(This plan is for reference only; please refer to the separate A3 plan for scaling if required)

