



ARBORICULTURAL REPORT

238 Kilburn High Road
London

17th August 2021

Prepared by

Andrew Day HND Arb. M.Arbor.A, CEnv

☎ +44 0777 231 7770 ✉ andy@andrewdayconsultancy.com

5 Brook Place, Halstead, Essex CO9 1DG

All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without our written permission. Its content and format are for the exclusive use of the addressee in dealing with this site. It may not be sold, loaned, hired out or divulged to any third party not directly involved in this site without our written consent.

© (Andrew Day Arboricultural Consultancy Ltd)

Scope

The purpose of this report is to provide Arboricultural advice in relation to identifying the constraints of trees in the adjacent public highway, in relation to the proposal to demolish the existing building and construct a 4 storey apartment block with Class E unit on the ground and basement floors to be built instead. Providing advice on how the trees could be impacted and protection measures to be implemented using the guidelines and principles of BS5837:2012.

Table of Contents

	Page
1 Introduction	4
2 Appraisal	5
3 Conclusions	10
4 Other Considerations	10

Appendices

1 Qualifications and Experience	11
2 Photographs	12
3 Site Specific Information	13
4 Limitations and Qualifications	24
5 Tree Constraints Plan	26

1 INTRODUCTION

1.1 Brief:

This report has been prepared at the request of S2 Architects the project architect on behalf of the site owner, to provide advice on how the trees could be detrimentally impacted by construction activities to implement the proposed layout during construction works. Identifying the constraints of the trees and providing advice on suitable tree protection measures so that construction activities do not impact on them.

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 proposed layout.

1.4 Relevant background information:

All of the trees are located in third party ownership.

1.5 Scope of this report:

This report is concerned with trees in proximity to the proposed construction zone that could be impacted by construction works to implement the proposed layout, 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. Trees with a dbh of less than 75mm have not been included as per the guidance in BS5837:2012 or species considered to be shrub specimens.

2 APPRAISAL

2.1 Brief site description:

The site is a commercial property located on the junction of Kilburn High Road and Grange Way. To the front are set tables on the public highway for the restaurant utilising part of the building. The trees the focus of this report are position into the public highway to the front and side.

2.2 Condition of trees:

The trees appear to be in a healthy condition with no signs of pests or diseases normally associated with the species.

A more detailed analysis of the trees can be found in **Appendix 3**.

2.3 Suitability of tree for location and management requirements at present:

In my opinion the trees are fairly well suited to the site but will need scheduled management to ensure they do not conflict with the building directly from branches extending onto the building causing abrasion damage. I have not been made aware of any conflict with the property either directly or indirectly that has been attributed to the trees. The canopy of T1 is beginning to extend onto the property and could cause damage if not selectively reduced back to clear. T2 has previously been reduce, I suspect to manage the canopy in relation to the building. T3 is of a size where it is not reaching the building.

Please refer to the tree survey in **Appendix 3** for management options.

2.4 Potential effects of development on the trees:

To implement the planning permission being sought, none of the trees will need to be removed, but the canopy overhang of T1 & T2 towards the property will need to be reduced back to provide a 1m clearance to support the need for scaffold erection and maintain a space between the building to prevent abrasion damage from occurring. This will be similar management to what has previously taken place to T2 and other trees along the road where they are close to buildings. This will allow the trees to still offer screening and softening in the street scene without detrimentally affecting their overall amenity value or longevity. All tree works will need to be undertaken in accordance with BS5837:2010 and take into account any relevant wildlife restrictions. Even without the development proposal being a consideration the canopy overhang to the building line would need to be reduced to clear.

The footprint of the building already partly occupies the RPA (Root Protection Area) of T2 already so it is reasonable to surmise that roots from the tree have been deflected by the current foundations and do not extend onto the site. The RPA of T1 & T3 do not extent onto the site, so these trees are unlikely to be directly impacted during works.

The new scheme proposes to instal a basement on the footprint of the building which will mean excavating beyond the current foundation depth in the RPA. As mentioned above it is highly likely that roots have developed in a fashion to grow parallel with the buildings current foundation and therefore will not be impacted during works to remove the existing foundations and dig deeper for a basement. Most tree roots develop in the top 600mm of the soil where nutrients, moisture and gaseous exchange are more abundant, given the urban location it can be considered this might extend to 1m. I still consider it unlikely that significant roots have extended onto site where they will be impacted by the excavation works proposed for the basement.

When this part of the site is to require excavation works to remove the existing foundations and dig deeper for the basement construction, a supervising arborist will be present to over see the works and ensure if any roots are exposed, they are suitably pruned clear, protected, and covered. Hand digging will not be feasible for the works, but during excavation if roots are found to be running parallel that can be retained, hand tools and excavation in accordance with the hand dig method statement provided will be used around them to clear as required and protection installed to ensure mechanical equipment does not cause damage as the works progress. As mentioned above, the RPA of T1 & T3 does not extend into the construction zone and therefore the excavation works will not be an issue for these trees.

Apart from the potential direct damage to T2 during excavation works in the RPA, the other potential manner in which the trees could be impacted during the works will be via indirect means. During demolition there is the potential for machinery or debris to cause collision damage if suitable protection is not in place. Given the location of the building and public highway I would assume that a barrier will be placed between the building and highway to prevent this. The over hanging canopy of T1 & T2 will need to be reduced back to provide a 1 meter clearance form the building line to facilitate such a barrier or scaffold line. This work will need to be undertaken and the protective barrier in place before demolition works begin. An arborist will need to be appointed to oversee the protection measures and discuss with the site manager how the protection for the trees is instigated and worked around during the development of the site. The demolition of the building also needs to consider the trees and their protection. Care will need to be taken to ensure collision damage does not occur, despite protective barriers being in place. A method to carefully dismantle the building, pulling it away form the trees will need to be used where possible. The demolition contractor will provide details on how this will be achieved and the trees protected in line with this report.

Because hard surfacing is already in place across the RPA where access will be required, no ground protection will be needed. However, if at any time the supervising arborist feels further protection is needed due to heavy machinery or plant needing to access the site, ground protection suitable to accommodate the load will be laid down. Details of the type of ground protection in relation to the traffic crossing it can be found in **Appendix 3**. It is important that the ground is suitably protected from being compacted, failure to do so could result in the build being stopped or legal action by the council taken.

The other risks this development proposal presents to the trees will be via indirect actions from construction activities such as, inconsiderate material storage, manoeuvring of equipment / materials, loading / unloading and etc. However, this can be addressed by careful planning of work procedures and installing protection fencing, ground protection etc. as required. There is limited space around the trees for this so it will be imperative that the site manager is aware of the protection measures needed and ensure this is in place.

The site manager will need to confirm the locations of material storage, work access etc. and how this will be managed around the ground protection of the trees, demonstrating how the trees will be protected in accordance with this report.

Details of protection measures are provided in the method tree protection method statement in **Appendix 3**.

In this case the potential impact of the proposal in relation to the trees is moderate, with specific measures being able to be implemented to ensure that construction pressures do not adversely affect their health or longevity.

The trees can be sufficiently protected by following the principles and measures contained within this report and those within the method statement in **Appendix 3**.

2.5 Potential effects of the trees to be retained on the development:

Leaf litter could become a problem if it causes drains or gutters to become blocked, that could impact in other ways on the building, or if left on access surfaces where they could become a slip hazard. To address this gutter guards could be installed to prevent build-up of leaf litter that could become a problem, or regular cleaning of the gutters employed. Regular clearing of falling leaves on the access route, especially in times of wet weather will address any potential slip hazards caused by this seasonal occurrence.

Shadow cast caused by T2 & T3 should not be of any great concern, because it is likely to fall on the side of walls and not impact too much on habitable rooms.

The conflicts normally encountered with having buildings near to trees can be addressed with scheduled maintenance.

2.6 Proposed solutions to safeguard the trees to remain during construction works:

2.6.1 Protective fencing / Barrier

A protective fencing / barrier will need to be placed in the locations to prevent collision damage occurring to the trees. Because this will impact on the public highway the location will need to be determined by the site manager and have any relevant permissions.

2.6.2 Services

No details relating to service runs have been provided to me, although I suspect the existing services will be utilised and connected to. Careful consideration will be required as to where service runs are to be placed and connected to external services to avoid excavation works in the RPA. If service runs need to be opened in the RPA this will be done using hand digging / air spade. Alternatively, trenchless techniques to install the services will be used and approved by the local authority. The project architect will confirm locations, installation method and any arboricultural methodology that needs to be considered to achieve this prior to them being installed to ensure the potential impact on the trees is to a minimum.

2.6.3 Site facilities and material storage

Care will have to be taken to identify the type of materials required and the access of any machinery, vehicles or plant needed to move them, as these can cause collision damage to aerial parts of the trees as well as soil contamination or compaction. At no point will materials be stored within the RPA of the trees on soft ground and with unless suitable protection measures have been put in place as outlined within this report and directed by the supervising arborist. The site manager will provide details on this aspect of the project if felt necessary by the local authority.

2.6.4 Works within RPA

Part of the RPA of T2 will require excavation works to remove the existing foundations and instal the new ones including the basement. Excavation will be carefully undertaken using pneumatic tools where hand digging or handheld pneumatic tools cannot be used. A supervising arborist will be present to ensure any roots encountered are suitably pruned clear or covered and protected.

2.6.5 Site supervision

The site manager will provide a timetable of works on the site, listing all of the key stages of development, starting with the placing of protection fencing / hoarding around the trees, establishing site facilities, through to completion of the site. Arboricultural supervision will take place prior to works commencing on site to ensure protection measures are understood and implemented with a pre-commencement meeting with the site manager and other relevant personnel. Site supervision will be undertaken by a suitably qualified arborist once at the start of the project, one mid-way through and once towards the end. If this is not to the tree officer's satisfaction, then supervision visits will be on a monthly basis until the completion of the project. **Arboricultural supervision will be present at all times where excavation work in the RPA is being undertaken.**

Prior to work, all key personnel connected with the site will be briefed by an arborist with regard to the importance of the tree protection and methods of ensuring that the trees are protected during the construction period. A record of all arboricultural related site meetings will be made, signed off and available for inspection by the local authority if required.

Any personnel inducted on site will be made aware of the tree protection measures and will be responsible for their own actions in maintaining them and not breaching them in any way.

2.6.6 Site completion

Once work has been completed, an arborist will inspect the trees and comment on their condition and prescribe any mitigation works required. The tree protection measures are expanded upon in **Appendix 3**.

3 CONCLUSIONS

- To implement this development the trees will not need to be removed. Only the overhanging canopy of T1 & T2 will need to be reduced back to shape to provide a 1m clearance from the building line. This will not impact on the amenity or longevity of the tree. All works will be in accordance with BS3998:2010. This work would need to be done to maintain a clearance from the building even if the proposal was not a consideration.
- Part of the RPA of T2 will be compromised by the footprint of the building. However, this is already occupied by the current building and it is highly likely that roots will not have extended onto site but grown in a parallel fashion along the foundation line. The RPA of T1 & T3 does not extend into the construction zone.
- Excavations in the RPA will not practically be able to be completed using hand digging, so pneumatic tools will be used with a supervising arborist present to oversee. Any roots encountered will be carefully excavated around with hand tools and retained and protected where possible.
- Protective fencing will not be able to be set up as normally with tree protection measures, because this will involve extending onto the public highway. Instead, a protective barrier utilising the scaffold required in the demolition / build will be used to ensure collision damage to the trees does not occur.
- There is limited space around the trees from the building for material storage, deliveries, etc. Therefore, the site manager will carefully plan how the trees will be protected during works on site to ensure damage to the trees does not occur. The site manager will need to demonstrate how the trees will be worked around in relation to this aspect of the construction works on site.
- The trees can be adequately protected from construction pressures by implementing and adhering to the protection measures provided in the method statement in **Appendix 3**.

4 OTHER CONSIDERATIONS

4.1 Trees subject to statutory controls:

I do not know if the trees are protected by a Tree Preservation Order (TPO) or other restriction, but I do believe the trees are in the ownership of the local authority. I suggest that the local authority is contacted to confirm this and kept updated with any proposed tree works including root pruning so as to form a good working relationship and to prevent misunderstandings or contravention of protection measures. This statement is meant for readers of this report as an advisory, to make sure they make the relevant checks so as not contravene any protection status the trees may have.

*Andrew Day HND Arb
For Andrew Day Arboricultural Consultancy Ltd.*

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 tree 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 tree 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 tree officer for five years, my duties included consultation on planning matters with regard to trees, advice to the general public, managing the council's tree 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 PHOTOGRAPHS



Showing T1 & T2



Showing T2 & T3



Showing encroachment of T1 onto the building



A view showing the lean on T3

SITE SPECIFIC INFORMATION

Explanatory Notes

Tree Survey

Tree Protection Method Statement and Protection Criteria

Hand Dig Method Statement

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 tree appeared to be is listed first, with the botanical name after in brackets. In some instances, it may be difficult to identify a particular tree quickly and accurately without further detailed investigations. Where there is some doubt of the precise species of tree, it is indicated 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 tree protection / constraints plan)

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

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

RPA: Root protection area for tree 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 (mm)	Height (m)	Crown Hgt (m)	FSB Hgt (m)	Crown Spread (N S E W) (m)				Life Exp	Recommendations	Category	RPR (m)	RPA Area (m)
T1	Acer platanoides (Norway Maple)	SM	150	12(3)	3	2	3	3	3	3	20+	Located in the public highway and in third party ownership. Eastern crown starting to encroach onto the building and could cause abrasion damage. Selectively reduce the canopy back from the building to clear by 1m.	C1	1.8	10.18
T2	Platanus X hispanica (London Plane)	M	550	15(6)	6	6	4	4	4	4	20+	Located in the public highway and in third party ownership. Appears to have been recently reduced back hard. No works required at present.	B3	6.6	136.87
T3	Crataegus monogyna (Hawthorn)	SM	150	6(2)	2	2	1	3	2	1	20+	Located in the public highway and in third party ownership. Leans to the west but no signs of root plate movement to suggest instability. No works required at present.	C2	1.8	10.18

Method Statement for Tree Protection Measures

PROJECT: 238 Kilburn High Road, London

CLIENT: S2 Architects

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 measures 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 tree protection measures where required and liaise with the tree officer as required. The contact information of this arborist will be made available to the council tree officer prior to works starting on site.
- All excavation work in the RPA will be carefully undertaken using pneumatic tools. If roots are encountered that can be retained, the work around them will continue in accordance with the hand dig method statement.
- The foundation design for the building will be suitable to address any potential influence that the trees may have on them. Location of services and details of their installation will have been provided, with any arboricultural protection measures or methodologies of working programmed in the works schedule and approved by the council.
- A pre- commencement meeting with a suitably qualified arborist will take place with the site manager and other relevant site personnel, to debrief them on the importance of the protection measures and to assist in setting up of the ground protection etc. before work commences on site.
- A schedule of arboricultural site supervision will be formulated at the pre-commencement meeting and be provided to the council by the site manager once this plan of visits has been set. It is then the responsibility of the site manager to ensure the arboricultural supervision visits are booked in and undertaken at the relevant times.
- The canopy overhang of T1 & T2 towards the property will be reduced back to facilitate a 1m clearance. These works will be in accordance with BS5837:2010. Any relevant wildlife legislation will be taken into account.

1.2.1

A pre-commencement inspection by the supervising arborist will take place to ensure the protective measures are understood and a schedule of arboricultural site monitoring is formulated at the start of the project, this will consist of a visit by a suitably qualified arborist once at the start of the project, once mid-way through and once at the end. If this is not to the council's satisfaction, then visits arboricultural visits will take place once a month for the duration of the project. A log of these visits and any actions required will be available to the council on request and kept on site.

1.2.2

Protective fencing in the conventional manner will not be possible because the area where it is required is on the public highway. A suitable protection barrier will be set up where permitted by the local authority to avoid collision damage occurring to the property.

The informatives provided will be attached to the fencing to highlight its importance 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.

AT NO POINT WILL THE HOARDING / FENCING BE ATTACHED TO THE TREES. Key site personnel will also be briefed about the need for the fencing and how the trees could be affected by their actions.

1.2.3

Access across the RPA will be on the existing hard surface. If heavy machinery or plant need to access site and extra ground protection needed, this will be installed as set out in 1.7 before access into the protected area is allowed.

The placing of tree 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.

1.2.4

A pre-commencement inspection by the supervising arborist will take place to ensure the protective measures are understood and a schedule of arboricultural site monitoring is formulated at the start of the project, this will consist of a visit by a suitably qualified arborist once a month for the duration of the project. **Arboricultural supervision will always take place during works in the RPA where excavation works are to take place.** A log of these visits and any actions required will be available to the council on request and kept on site.

All personnel inducted on site will be made aware of the tree protection measures and will be responsible for their own actions in maintain 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. The piling rig will sit outside the RPA at all times.

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

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

- 1.3.2 No ground disturbance works 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.

1.5 Works in the RPA

- 1.5.1 **No excavation / ground disturbance works will take place within the RPA unless permission is granted by the local authority to do so.**
- 1.5.2 **Where excavation works are needed in the RPA of T2, then the arboricultural hand dig method statement provided will be adhered to as far as practically possible. If hand tools are not possible to use then handheld pneumatic tools or machinery will be used instead. If roots are encountered that can be retained, these will be suitably covered by the supervising arborist. If they cannot be retained, they will be pruned clear and suitably covered.**

- 1.5.3 The foundation design for the building will demonstrate how it is fit for purpose to ensure that the trees will not indirectly impact on the structure, resulting in pressures to remove the trees in the future.

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 plant or materials be allowed to be parked or stored in areas where the trees will be at risk of collision damage. This will be strictly policed by the site manager.**

1.7 Ground Protection

- 1.7.1 Where access across the RPA is required and if it is felt extra ground protection is needed or if soft ground is exposed, 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 100mm 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 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.

2 HAND DIG METHOD STATEMENT

PROJECT: 238 Kilburn Road, 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

TREE 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 SUITABLE 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 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 tree 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 tree 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 tree.

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

Site Personnel Contact Information

As far as I am aware the only personnel associated with this site at the time of writing this report are the project architect. Table 1 shows the contact details of the project architect who is to be contacted if any enquires relating to this project need answering.

Table 1

Name	Relation to Site	Contact Details
S2S Architects	Project Architect	violeta@s2sarchitects.co.uk

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 potential impact construction activities could have on the trees and is 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 tree 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 will not be responsible for the recommendations within this report where essential data are not made available or are inaccurate.

This report will remain valid for one year from the date of inspection but will become invalid if any tree works not recommended within the report are undertaken, soil levels around the trees are altered in any way, and extreme weather conditions are experienced or if any building works that could impact on the tree are undertaken or not disclosed.

If any of the above occurs, then it is strongly recommended that a new tree 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 – Tree 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 CONSTRAINTS PLAN

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

