



Arboricultural Method Statement

**Dr Aruna Navapurkar**

**47 Hillside Road  
Northwood  
HA6 1PY**

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## Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 3rd July 2025 from Dr Aruna Navapurkar to attend 47 Hillside Road Northwood HA6 1PY (the site) to undertake an arboricultural survey guided by British Standard 5837:2012: Trees in Relation to Design, Demolition and Construction – Recommendations of all trees, hedges and major shrub groups growing on and/or within influencing distance of the site and to produce a Schedule of Trees and Tree Constraints Plan (TCP).

A further written instruction was received on 29th of July from Dr Aruna Navapurkar to produce an Arboricultural Impact Assessment (AIA), Tree Protection Plan (TPP) and Arboricultural Method Statement (AMS).

## Executive Summary

This report describes the extent and effect of the proposed development on individual trees and groups of trees within and adjacent to the site.

Trees within the site were surveyed using a methodology guided by British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' ("BS5837").

Subsequently, this report has been produced, balancing the layout of the proposed development against the competing needs of trees. This report comprises all of the requisite elements of an arboricultural implications assessment, method statement and supporting plans.

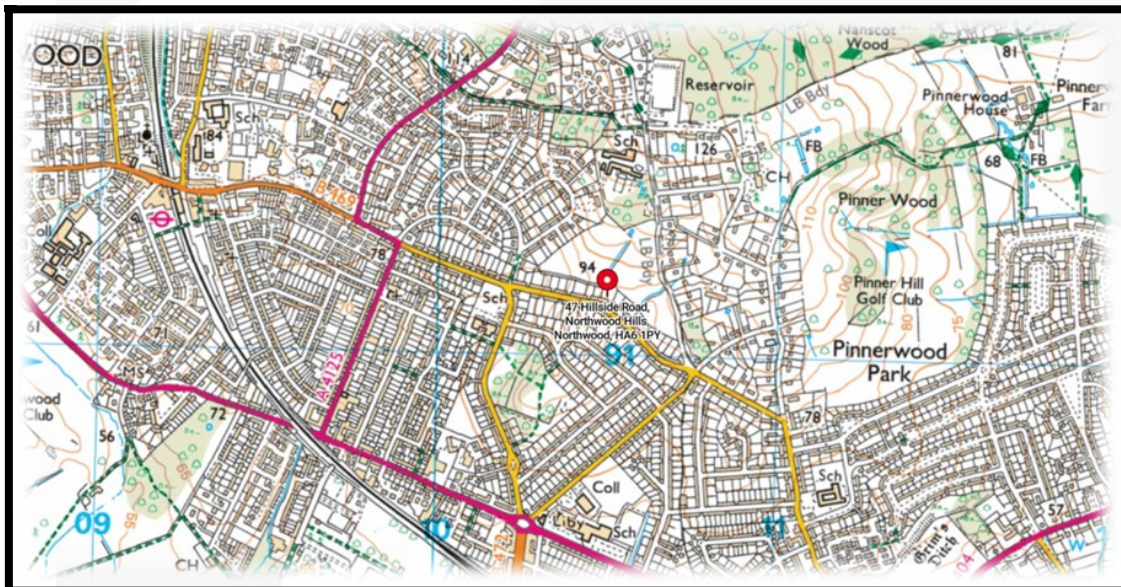


Figure 1: OS Map showing the site location (Bing Maps)

**Site Description:** Dwelling with associated parking and garden areas.






## Proposed Scheme



**Figure 2: Proposed scheme, 47HR(3) E (Ideal Design Ltd)**

Description: Erection of a single storey rear extension, front porch and new pitch roof above existing side extension with associated internal alterations following demolition of existing porch.

**Checklist for submission to Local Planning Authority**

<b>Tree Survey (including schedule)</b>	
<b>Tree Constraints Plan (TCP)</b>	
<b>Arboricultural Impact Assessment (AIA)</b>	
<b>Arboricultural Method Statement (AMS)</b>	
<b>Tree Protection Plan (TPP)</b>	

This report and its appendices precisely follow the strategy for arboricultural appraisal intended to provide local planning authorities with evidence that trees have been properly considered throughout the development process.

It is the conclusion of this report that the overall quality and longevity of the amenity contribution provided for by the trees and groups of trees within and adjacent to the site will not be adversely affected as a result of the local planning authority consenting to the proposed development. It is considered that any issues raised in this report, or beyond the scope of it, can be dealt with by planning conditions.

**Table 1: Documents referred to**

<b>Document</b>	<b>Reference No.</b>
Survey base drawing	OS Tile
Existing measured survey	47HR(01) C
Proposed layout drawing	47HR(3) E
British Standard 5837:2012	“BS5837”
Tree Survey Schedule	Arbtech TS 01
Arboricultural Impact Assessment	Arbtech AIA 01
Tree Protection Plan	Arbtech TPP 01



## Tree Survey

An arboricultural survey guided by British Standard 5837:2012: Trees in Relation to Design, Demolition and Construction - Recommendations of all trees within impacting distance of the site was undertaken by Chris Wren 10th July 2025.

A total of 3No individual trees, 3No groups of trees and 2No hedges were surveyed.

For full details of all the trees surveyed, see Appendix 1: Tree Schedule.

**Table 2: Documents upon which this tree survey has been based**

Document	Originator	Reference Number	Title
Survey base drawing	-	OS tile	-

**Survey Limitations:** The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and advanced decay detection equipment, were not employed, though they may form part of the survey's management recommendations. Measurements were taken using specialist tapes, lasers, and GPS devices. Where this was not possible, measurements are estimated. Inaccessible trees will have the best estimates made about their location, physical dimensions, and characteristics. Trees have been grouped where BS5837 guides us that it is expedient to do so. Trees have been excluded from the survey if they are found by us to be sufficiently far away from the proposed developable area or if they are outside of the red line boundary plan showing the expectations of our client for the extent of the survey.

**Scope:** Pre-development tree surveys make arboricultural management recommendations based exclusively upon the condition of the individual tree or group of trees relative to their present context (*i.e., not in relation to the proposed development*).

**Legal Status:** No statutory protection check has been performed. BS5837 does not draw any distinction between trees subject to statutory protection, such as a Tree Preservation Order ("TPO"), and those trees without, starting at Annex B:

*The potential effect of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that is taken into account in dealing with planning applications.* Consequently, we do not seek to offer any comparison between or infer any difference in the quality or importance of TPO trees and other trees.

## Arboricultural Impact Assessment

An Arboricultural Impact Assessment (AIA), guided by British Standard 5837:2012: Trees in Relation to Design, Demolition and Construction - Recommendations, was undertaken by Chris Wren on 7th August 2025 to determine the potential conflicts between the proposed development scheme and existing trees located on and near the site and has subsequently produced this Arboricultural Method Statement to demonstrate how the proposed scheme can be successfully implemented without causing harm to retained trees.

**Table 3: Documents upon which this tree survey has been based**

Document	Originator	Reference Number	Title
Survey base drawing	-	OS Tile	-
Existing measured survey	Ideal Design Ltd	47HR(01) C	Existing floor plans
Proposed layout drawing	Ideal Design Ltd	47HR(3) E	Proposed floor plans

Several issues may need to be addressed in an Arboricultural Impact Assessment between the trees and the proposed development; these are as follows:

- The effect and extent of the proposed development within the root protection areas (RPAs) of retained trees;
- The potential conflicts of the proposed development with canopies of retained trees and;
- The likelihood of any future remedial works to retained trees beyond those that would have been scheduled as part of usual management.

**Table 4: Impacts upon the RPAs of retained trees**

Tree Number	Species	Structure	RPA (m2)	Incursion	
				(m2)	(%)
G1	Chinese Thuja	Foundations	18.1	0.04	0.2

These impacts can be seen on the Arboricultural Impact Assessment (Arbtech AIA 01). See Appendix 2: Arboricultural Impact Assessment.



### Trees to be Removed

A total of 1No individual tree will require removal as part of this proposed scheme.

A breakdown of all tree works can be seen in Table 8: Summary of tree works.

Table 5: Number of individual trees to be removed

U	A	B	C
0	0	0	1

Table 6: Number of groups to be removed

U	A	B	C
0(0)	0(0)	0(0)	0(0)

() = partial removal of a group

Canopy cover is ecologically important and the loss of canopy cover by this tree will be mitigated with planting within the development.

## Arboricultural Method Statement

This Arboricultural Method Statement (Arbtech AMS 01) demonstrates how any aspect of the development that could potentially result in tree loss or damage may be implemented and provides an adequate level of protection for trees that are to be retained during the proposed works.

Details of key site personnel, including the Site/Project Manager, will be submitted to the Council's Tree Officer before site works commence. This Arboricultural Method Statement (Arbtech AMS 01) is to be approved and agreed to in writing by all key personnel before the commencement of any site works.

No site personnel are to be present, and no demolition, site clearance, building work, or material delivery is to occur until the protective measures are in accordance with this Arboricultural Method Statement (Arbtech AMS 01) and the Tree Protection Plan (Arbtech TPP 01). Unless otherwise specified, protective measures will remain unaltered and in situ for the entire duration of the construction.

**Table 7: Documents upon which this tree survey has been based**

Document	Originator	Reference Number	Title
Survey base drawing	-	OS Tile	-
Existing measured survey	Ideal Design Ltd	47HR(01) C	Existing floor plans
Proposed layout drawing	Ideal Design Ltd	47HR(3) E	Proposed floor plans

## Tree Work

For reasons of public safety, all tree works referred to herein must be carried out before site personnel commence work or building materials are delivered.

**Table 8: Summary of tree works**

Tree Number	Species	Works	Category
T3	Bay	Fell and remove stump.	C2

### Notes

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 - Recommendations for tree work. All arising's are to be removed, and the site is to be left as found. Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber Lorries, tractors, excavators, or cranes shall be parked or driven beneath the crowns of any retained trees to prevent subsequent compaction and root death.

### Tree Removal

A tree should be felled in one piece only when there is no significant risk of damage to people, property, or protected species.

Where restrictions (e.g., lack of space, buildings, other features, land ownership or use, or other trees to be retained) cannot be overcome, trees should be dismantled in sections.

This also applies where a tall stump is being retained but where branches are to be removed/pruned.

Extensively decayed trees can be unpredictable when they are being felled, and special precautions should, therefore, be taken, such as the use of a winch to guide the direction of fall.

### Stump Removal – Stump Grinding

Stump grinding will be to a minimum of 300mm deep or to extend through the base of the stump leaving the major roots disconnected if the intention is to reduce the potential for the spread of Honey fungus.

The grinding residue will be treated as arising's and removed from site.

*NOTE: Mechanical destruction of a stump by stump grinding is less disruptive to the site than digging out.*

The hole left by stump removal will be filled with soil or other material. The filling should be appropriate for future site usage and for any surface treatment that is to be installed.

Where future plant growth is desired, the backfill material will be firmed in 150 mm layers by treading, avoiding excessive compaction and destruction of the soil structure.

### **Stump Removal - Digging**

Stump removal by digging out will include disposal/utilisation of woody material (see Clause 13).

*NOTE: Mechanical destruction of a stump by stump grinding is less disruptive to the site than digging out.*

Where possible, when winching out, a stump, a ground, or other type of anchor will be used rather than a tree to be retained. If there is no alternative to using such a tree as an anchor, appropriate protective measures will be adopted.

### **After Stump Removal**

The hole left by stump removal, whether by digging out or grinding, will be filled with soil or other material. The filling will be appropriate for future site usage and for any surface treatment that is to be installed.

Where future plant growth is desired, the back-fill material will be firmed in 150mm layers by treading, avoiding excessive compaction and destruction of the soil structure.

## Protected Species (general informative for tree works)

### Conservation Status of British Bats

The consensus in Britain and Europe is that virtually all bat species are declining and vulnerable. Our understanding of population status is poor as there is very little historical data for most bat species. Certain species, such as the horseshoe bats, are better understood and have well-documented contractions in range and population size. Given this general picture of decline in the UK Government, the UK Biodiversity Action Plan has designated five species of bats as priority species (greater and lesser horseshoe bats, barbastelle, Bechstein's, and pipistrelle). These plans provide an action pathway for investigating the maintenance and restoration of the former populations' levels.

### Legal Status of British Bats

Given the above position, all British bats, as well as their breeding sites and resting places, enjoy national and international protection. All bat species in the UK are fully protected under the Wildlife and Countryside Act 1981 (as amended) through inclusion in Schedule 5. All bats are also listed in Annex IV (and some in Annex II) of the EC Habitats Directive, giving further European protection. Taken together, the Act and Conservation of Habitats and Species Regulations 2012 (as amended)\* make it an offence to intentionally or deliberately kill, injure or capture (take) bats;

- Deliberately disturb bats (whether in a roost or not);
- Damage, destroy or obstruct access to bat roosts;
- Possess or transport a bat or any part of a bat unless acquired legally;
- Sell, barter or exchange bats or parts of bats

Although the legislation does not strictly protect foraging grounds, it does protect roost sites. Bat roosts are protected at all times of the year, whether or not bats are present. Any disturbance of a roost due to development must be licenced.

*\*the regulations that delivered by the UK's commitments to the Habitats Directive.*

### Breeding Birds

All nesting birds are protected under the Wildlife and Countryside Act (as amended) 1981, which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. Furthermore, several birds enjoy further protection under that Act and are listed on Schedule 1 of the Act. These further protected birds are also protected from disturbance and it may be necessary to operate "no-go" buffer zones around such nests – typically out to 100m. Planning policy guidance on the treatment of species identified as priorities under the biodiversity action programme suggests that local authorities should take measures to protect the habitats of these species from further decline through policies in local development documents and should ensure that they are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. The conservation of these species should be promoted through the incorporation of beneficial biodiversity designs within developments.

## Sequencing of works

A logical sequence of events is to be observed and shall be phased as follows:

**Table 9: Sequencing of works**

Stage	Event
Stage 1.	Undertake and complete tree works as specified within Table 8: Summary of tree works
Stage 2.	Installation of protective measures in accordance with the approved Tree Protection Plan(s) (Arbtech TPP 01).
Stage 3.	Pre-commencement site meeting.
Stage 4.	Undertake and complete demolition of existing site features.
Stage 5.	Undertake and complete ground works.
Stage 6.	Undertake and complete construction works
Stage 7.	Undertake and complete external landscaping outside of the construction exclusion zones (CEZs).
Stage 8.	Removal of all machinery and materials from the site.
Stage 9.	Dismantle and removal of protective tree measures.
Stage 10.	Undertake and complete external landscaping within the construction exclusion zones (CEZs).
Stage 11.	Site completion and sign-off from Project Arboriculturalist.



## Protective Measures

Protective measures are to be installed immediately following the completion of the tree works and sited and aligned in accordance with the Tree Protection Plan (Arbtech TPP 01) before the commencement of any works or the introduction of any machinery or material to the site.

Upon installing the protective measures around the retained trees, the client will instruct on a pre-commencement site meeting, during which the Project Arboriculturist will visit the site to inspect and document the position and specifications of the protective measures.

If the protective measures and their positions do not comply with this Arboricultural Method Statement (Arbtech AMS 01) dated: 07 August 2025 and Tree Protection Plan (Arbtech TPP 01), the Project Arboriculturist shall inform the client and Fencing Contractor so adjustments can be made.

When the protective measures comply with this Arboricultural Method Statement (Arbtech AMS 01) and Tree Protection Plan (Arbtech TPP 01), the Project Arboriculturist will sign-off the protective measures in writing to the client for which a copy can be sent to the Fencing Contractor, Site Agent and Local Authority Tree Officer.

If the protective measures become damaged or there is an accident or emergency involving trees, these areas are to be cordoned off immediately with high-visibility plastic mesh fencing. The site agent is to photograph and document the damage and inform the Project Arboriculturist immediately after the incident. All work within this area is to cease until the Project Arboriculturist has visited the site. Any damaged sections of protective measures shall be replaced within 48 hours of the initial incident.

The protected area is sacrosanct and will not be invaded by the storage of materials, the mixing of concrete or other products, the access of machinery, equipment, or pedestrians, or any other way disturbed by construction activity.

The protective measures will remain in place until the completion of Stage 8 (see Table 9: Sequencing of works) thereafter, they will be carefully dismantled only with the agreement of the Project Arboriculturist and or the Local Authority Tree Officer.

The existing site boundary measures are to be retained for the duration of the development. If, for any reason, the existing boundary measures are not to be used, protective barrier fencing is to be installed along the line of the boundaries and is only to be removed upon the written permission of the Project Arboriculturist upon the completion of the development or immediately before the installation of the permanent boundary measures.

No equipment, vehicles, or plant shall operate beyond the tree protection fencing. Booms, hoists, and rigs should be kept as far away from the canopies of retained trees as possible at all times. Where it is necessary to operate within 5m of a tree canopy, it will be done with the utmost caution and under the control of a banksman. Damage to trees will be considered a breach of this Tree Protection Plan and Arboricultural Method Statement, which in turn could be a breach of planning permission.

## Construction Exclusion Zone

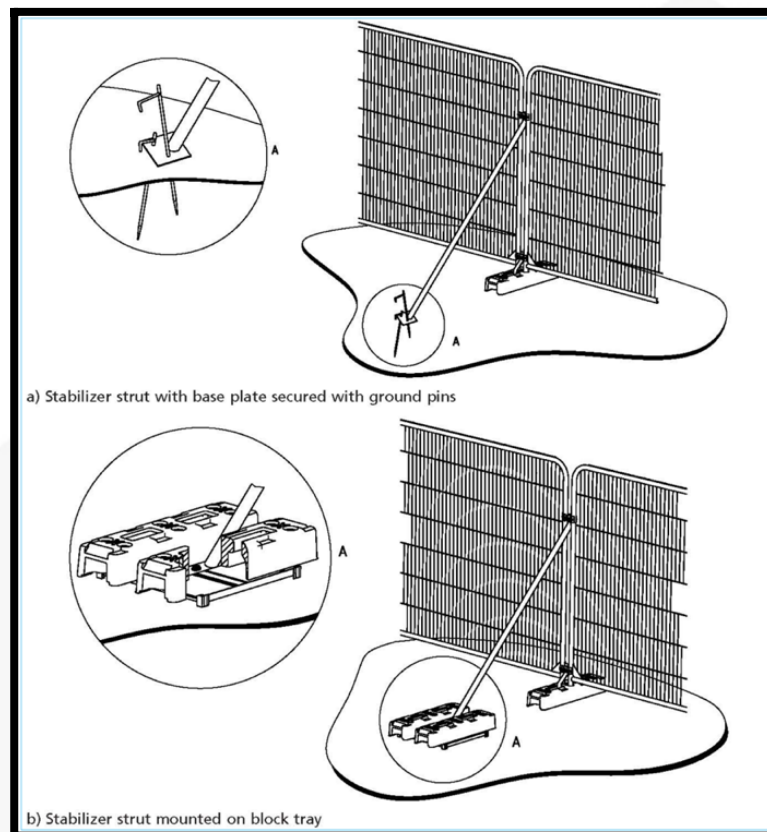
A construction exclusion zone (CEZ), as designated by the protective barrier fencing, is an area where there is to be no construction activity. Access to the area for construction personnel or machinery is strictly prohibited unless detailed in the tree protection plan, and there is no scope for materials or waste storage, welfare facilities, etc. There may be some construction activities planned for these areas (e.g. the installation of service trenches) these activities will be undertaken under the direct supervision of the Project Arboriculturalist.

## Protective Barrier Fencing

Protective barrier fencing should be appropriate for the intensity and proximity of the development to protect trees where development activity is nearby.

The protective barrier fencing will be fixed with signage denoting the words “tree protection area” at 5.0m intervals. See Appendix 4: Tree Protection Notice

The fence will comprise either a 2.4m wooden site hoarding or 2m tall welded mesh panels on rubber or concrete feet. The panels are to be joined together using a minimum of two anti-tamper couplers installed so that they can only be removed from inside the fence. The panels will be supported on the inner side by stabiliser struts, which will be attached to a base plate and secured with ground pins.



**Figure 3: Example of protective barrier fencing with above-ground stabilising system (BS5837)**

## Ground Protection

The existing hard surfacing within the RPAs of retained group G1 and hedge H1, as depicted on the Tree Protection Plan (Arbtech TPP 01), provides passive protection against compaction to the underlying soil and, therefore, must be retained for the duration of the project. If this is removed, it shall be done so under direct supervision of the Project Arboriculturalist and replaced with suitable ground protection, capable of withstanding the likely loading for the site.

New temporary ground protection will be capable of supporting any traffic entering or using the site without being distorted or causing compaction of the underlying soil.

Where the Project Engineer determines that any hard surfacing is not adequate protection from any expected loading, ground boarding is to be installed to the engineer's specification on top of the hard surfacing within the root protection areas of retained trees.

Where machinery will be stored or used on the ground boarding within the RPAs of retained trees, an impervious barrier and/or bunding to prevent oils, fuel, or chemicals from leaching into the soil within or adjacent to the RPAs is to be installed.

***Note: The ground protection might comprise one of the following:***

- a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame to form a suspended walkway or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
- b) 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. 150mm depth of woodchip), laid onto a geotextile membrane;
- c) for wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice to accommodate the likely loading to which it will be subjected.

For any situations other than those described in a) or b) (as above), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice to be suitable for supporting the expected loading to be placed upon it.

In all cases, the objective of the ground boarding is to avoid compaction of the soil beneath so that tree root functions remain unimpaired.

Due to the various sizes of demolition and construction plant available and the potential requirements for material storage within the site, the final specifications for the ground boarding must be designed and supplied to the Project Arboriculturist for their approval by the Project Engineer a minimum of ten (10) working days before its installation.

## Demolition

Before the demolition of the existing site features, all tree works are to have been completed, tree protection measures are to be in place as per Tree Protection Plan document (Arbtech TPP 01) and have been signed-off, and a copy of the demolition method statement submitted and approved by the Project Arboriculturist to ensure that there is no conflict with this Arboricultural Method statement.

All demolition work within or immediately adjacent to RPAs or canopies of retained trees is to be undertaken under the direct supervision of the Project Arboriculturist.

### Existing Underground Services

Existing services within the site should be retained wherever possible. Where existing services within RPAs of retained trees require upgrading, the utmost care must be taken to minimise disturbance. Trenchless techniques should be employed where feasible, and open excavations should be considered only where necessary.

## Construction

Before the proposed development is constructed, a copy of the construction method statement will be submitted and approved by the Project Arboriculturist to ensure that it does not conflict with this Arboricultural Method Statement.

All excavations and construction work within or immediately adjacent to the RPAs or canopies of retained trees is to be undertaken under the direct supervision of the Project Arboriculturist.

### Foundations Design

New foundations for buildings, structures, and hard surfacing situated within the RPAs of retained trees are to be designed in conjunction with arboricultural advice to accommodate the structure's likely loading. The foundations will be designed to limit the amount of excavation required within RPAs to retain significant roots, as identified during site investigations.

The proposed development does not significantly impact any of the retained trees and, as such, will not require a specialist construction methodology.

### Concrete foundations

Before concrete is poured to form the foundations within or immediately adjacent to the RPAs of retained trees, the excavation is to be lined and sealed to prevent any leaching of the concrete into the soil and causing desiccation of retained roots by concrete runoff.

### Manual excavation

Excavation within RPAs will be undertaken by hand under the direct supervision of the Project Arboriculturist to the required depth of the foundations or to a minimum of 600mm deep of any excavation, whether for proposed foundations, hard surfacing, or underground services. The Project Arboriculturist will determine the total depth of the manual excavation while on site.

The soil is to be loosened with a fork or pickaxe and then cleared with an air spade, air vac, or shovel. The Project Arboriculturist will cleanly sever any roots found with either a hand saw or secateurs.

The Project Arboriculturist shall cleanly sever any roots found with a diameter of less than 25mm. Roots of 25mm and above shall be excavated around without damaging them; the Project Arboriculturist shall decide if it is feasible or necessary to retain the root; if not, it shall be severed.

The edge of the excavation closest to the trees will be covered with damp hessian to prevent soil collapse or contamination by concrete.

The soil beneath the depth may be sheet piled, regular piled, or excavated deeper. Machinery may be used for this, provided that it is situated outside of the RPAs of retained trees or has appropriate ground protection in place to move around and work upon.



## Prohibition

- Mechanical digging or scraping is not permitted within a defined root protection area or areas cordoned off by protective barrier fencing.
- No access will be permitted within the protected areas;
- No materials, equipment or debris will be stored within any of the fenced areas or against the fencing;
- Fires are not permitted within 10m of any vegetation.
- Leaning objects against or attaching objects to a tree is not permitted.
- Machinery, plant, and vehicles are not permitted to be washed down within 10m of vegetation.
- Chemicals and materials are not to be transported, stored, used, or mixed within a root protection area or areas cordoned off by protective barrier fencing.
- Cement silos and mixing sites are to be situated within a bunded area to prevent spillage/leaking of chemicals harmful to trees. These areas are to be sited well clear of protected trees.
- Refuelling of plant or machinery is prohibited within 10m of the construction exclusion zones.
- An allowance must be made for sloping ground so that damaging materials such as concrete washings, mortar, or diesel oil cannot run towards trees.
- Where machinery is to be used within 5m of retained tree canopies, a banks man will be required at all times while setting up, moving, or operating within this distance of retained tree canopies.
- All caustic material and chemicals must be stored well clear of protected areas and preferably on lower ground if slopes are present or within a bonded area to prevent spills or leaks from entering the ground.

## Site Management

The Site Manager will be responsible for briefing and inducting all personnel who will be working on any stage of this development, especially those who will be working within or adjacent to the canopies or RPAs of retained trees, and will make them aware of and provide a copy of this Arboricultural Method Statement (Arbtech AMS 01) and Tree Protection Plan (Arbtech TPP 01); this is to include but not exclusively the movement and or operation of plant, excavations, unloading deliveries, mixing and or pouring of cement and concrete.

The Site Manager will be responsible for the day-to-day running and protection of all retained trees and for liaising with the Project Arboriculturalist about any tree-related matters and before any works that may or will affect the RPAs or canopies of retained trees; this is to include but not exclusively the movement and or operation of plant, excavations, unloading deliveries, mixing, pouring and storage of all caustic materials that may cause harm to retained trees.

The Site Manager will document any incidents of damage to retained trees or tree protection measures. Then, the Site Manager will report these incidents to the Project Arboriculturalist immediately and ensure that works within this area cease until the Project Arboriculturalist has had an opportunity to inspect the damage and, where appropriate, agree on a mitigation plan with the Local Planning Authority Tree Officer.

The Site Manager may designate another person to take charge of the briefing and inducting process of new site personnel or visitors in his absence.

If the Site Manager is replaced or is absent from the site for more than three consecutive working days, the Project Arboriculturalist will be informed, and a new pre-start meeting will be held with the new or acting Site Manager.

It is the responsibility of the Site Manager to ensure that the planning conditions attached to any granted planning consent are adhered to at all times and that a monitoring regime and supervision of any works within or adjacent to the RPAs are adopted.

If pruning works other than those previously approved are required at any time, permission must be sought from the Local Authority Tree Officer. Once permission is granted, they are to be carried out by a suitably qualified person in accordance with BS3998:2010 Tree work—Recommendations.

## Services

Detailed drawings of proposed underground services are not available at this time; hence, it is not possible to identify any specific potential impacts associated with the scheme at this stage.

Existing services within the site will be retained wherever possible. Where existing services within RPAs require upgrading, the utmost care must be taken to minimise disturbance. Where feasible, trenchless techniques are to be employed, and only where necessary should open excavations be considered.

Where new services are to be introduced into the site, they will be located outside of RPAs so that they do not interfere with tree roots. If any excavations are required within the RPAs, all trenches are to be excavated by hand radially to the tree trunks under the direct supervision of the Project Arboriculturalist and carried out under NJUG guidelines.

The final positions of any proposed services will be verified and approved by the Project Arboriculturist and Local Authority Tree Officer before implementation.

### **New Underground services**

Trenching for the installation of underground services and drainage routes could sever any roots that may be present and, as such, adversely affect the tree's health. For this reason, particular care will be taken in routing and installation methods of all underground services. All underground services and drainage routes will be located so that no excavations are required within RPAs.

Where underground services have been impossible to prevent from passing through RPAs or within proximity to trees, these sections are to be installed in one of three ways and under the direct supervision of the Project Arboriculturalist and in accordance with the National Joint Utilities Group guidelines (NJUG 4).

### **Trenchless Techniques**

There are three main types of trenchless techniques: guided and unguided boring and pipe replacement by lining or bursting. These techniques allow for the installation, maintenance, or renewal of underground services without disturbing soil in which roots are likely to grow. Starting and receiving pits for the boring machinery are to be located outside of the RPAs of any retained trees, with the bore depth maintained at a minimum depth of 600mm below the existing ground level. Techniques involving external lubrication of the equipment shall use only water, as other lubricants (e.g., oil, bentonite, etc.) could contaminate the soil.

### **Broken Trench – Hand Dug**

This technique combines both trenchless techniques and manual excavation, where excavation is unavoidable. Excavations will be limited to where there is clear access around and below the roots. All trenches shall be excavated by hand with the same precautions taken as for manual excavation. The open section of the trench will only be large enough to allow access for linking to the next section.

## Manual Excavation

Excavation within RPAs will be undertaken by hand under the direct supervision of the Project Arboriculturist to the required depth of the foundations or to a minimum of 600mm deep of any excavation, whether for proposed foundations, hard surfacing, or underground services. The Project Arboriculturist will determine the total depth of the manual excavation while on site.

The soil is to be loosened with a fork or pickaxe and then cleared with an air spade, air vac, or shovel. The Project Arboriculturist will cleanly sever any roots found with either a hand saw or secateurs.

The Project Arboriculturist shall cleanly sever any roots found with a diameter of less than 25mm. Roots of 25mm and above shall be excavated around without damaging them; the Project Arboriculturist shall decide if it is feasible or necessary to retain the root; if not, it shall be severed.

The edge of the excavation closest to the trees will be covered with damp hessian to prevent soil collapse or contamination by concrete.

The soil beneath the depth may be sheet piled, regular piled, or excavated deeper. Machinery may be used for this, provided that it is situated outside of the RPAs of retained trees or has appropriate ground protection in place to move around and work upon.

## Landscaping

A specification for and notation relating to the precise alignment of replacement trees will be contained in the landscape proposals.

Landscaping, such as planting, turfing, fencing, etc., around retained trees may only be carried out once all tree protection measures have been removed.

All excavations within the RPAs of retained trees shall be undertaken by hand and without reducing current ground levels unless it is agreed in writing with the Local Planning Authority. At no time is the use of a rotavator permitted within the RPAs of retained trees.

Any tree roots discovered will be left in situ and shall not be cut or otherwise damaged. Where possible, the soil structure within the RPA shall be preserved.

No works will be carried out within the RPAs of any trees if the soil moisture is at a level where soil compaction may be likely. Should the soil become compacted or have a poor structure that would hinder the development of the existing trees and plants or any new plantings, the arboriculturist will be consulted about soil decompaction techniques.

## Monitoring and Supervision

Where trees have been identified within this Arboricultural Method Statement (Arbtech AMS 01) and Tree Protection Plan (Arbtech TPP 01) for retention, there will be an auditable system of arboricultural monitoring. This is to extend to arboricultural supervision whenever demolition or construction activity is to take place within or adjacent to any canopy or RPA.

The development's tree protection measures are to be monitored, and all demolition and construction works are to be undertaken within or adjacent to the RPAs of retained trees. The Project Arboriculturist will supervise the work and record and report observations to the Council at appropriate intervals.

### Pre-commencement site meeting

Before the commencement of any works or machinery and materials arriving on site, a pre-commencement site meeting involving the Project Arboriculturalist, Landowner or Agent, Site Manager, contractors and Engineer (as appropriate) and the relevant Local Planning Authority Officers will be held to ensure that all aspects of the Arboricultural Method Statement and Tree Protection Plan are understood and for all parties to swap contact details. See Appendix 5: Contact Details.

### Monitoring and supervision schedule

The initial monitoring visit will check that the tree protection measures are in the correct location and as specified within the approved Arboricultural Method Statement, and if so, to sign off on their installation.

Thereafter, monitoring visits are to take place at regular intervals to ensure that tree protection measures are in place and are functioning as designed or whenever necessary to undertake works to be carried out under arboricultural supervision. The frequency of the monitoring visits is to be agreed upon with the Local Authority Tree Officer at the pre-commencement site meeting.

A record of all arboricultural monitoring and supervision visits will be kept, and any faults will be logged; this will then be copied to the Site Agent, Developer, and Local Planning Authority in a digital format.

If areas must be redesigned during the development so that they would require changes to the approved Arboricultural Method Statement or Tree Protection Plan and so affect retained trees, the Project Arboriculturalist and Local Authority Tree Officer will be invited to attend a site meeting with all relevant parties. Before any changes are implemented, they must have been approved in writing by the Local Authority Tree Officer.

## **Supervision**

The Project Arboriculturist will be required to attend the site to directly supervise all demolition and construction works that are to be undertaken within or adjacent to the RPAs of all retained trees and will be advised a minimum of 72 hours before the commencement of any works that require his attendance; these will include:

1. Pre-commencement site meeting.
2. Location of protective measures.
3. Supervised excavations for foundations within RPA of group no. G1.
4. Any excavations within and immediately adjacent to RPAs, including foundations, hard surfacing, or underground services (a non-exhaustive list).
5. Removal of protective measures and sign-off.

## **Completion meeting**

Once all construction works have been completed and all materials and machinery have been removed from the site, the Project Arboriculturalist shall be informed and will invite the Local Authority Tree Officer to meet on-site to discuss the process, final remedial works that may be required and sign the development off so that the protective measures may be removed.



## Arboricultural Monitoring & Supervision Sign-Off Checklist

### 47 Hillside Road Northwood HA6 1PY

Tree Number	Task	Date Completed	Signed (Arboriculturalist)	Signed (Site Manager)
All	Pre-commencement site meeting			
All	Sign-off of the location and specification of the protective measures			
All	Completion of demolition			
G1	Manual excavation of foundations			
All	Additional excavations (if required)			
All	Completion of groundworks			
All	Completion of construction			
All	Removal of machinery and materials from site			
All	Dismantle & removal of protective measures			
All	Completion of Landscaping			
All	Sign-off from Project Arboriculturist			

## Appendices

The following documents were released to the Client as appendices to this report:

- Appendix 1: Tree Schedule
- Appendix 2: Arboricultural Impact Assessment
- Appendix 3: Tree Protection Plan
- Appendix 4: Tree Protection Notice
- Appendix 5: Contact Details

If you require clarification of the information contained herein, please do not hesitate to contact us via 01244 661170.

Yours Sincerely,



Chris Wren BSc (Hons) MArborA  
Senior Arboricultural Consultant

07842313167

Christopherwren@arbtech.co.uk

A large, light gray, stylized graphic of a house roof with a chimney, spanning the width of the page and partially behind the text.

## Appendix 1: Tree Schedule

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## BS5837:2012 Tree Survey

## Arbtech Consulting Ltd.

Client: Dr Aruna Navapurkar  
 Project: 47 Hillside Road Northwood HA6 1PY  
 Survey Date: 10/07/2025  
 Surveyor: Chris Wren



Unit 3, Well House Barns  
 Chester Road  
 Chester  
 Cheshire  
 CH4 0DH  
 Phone: 01244 661170

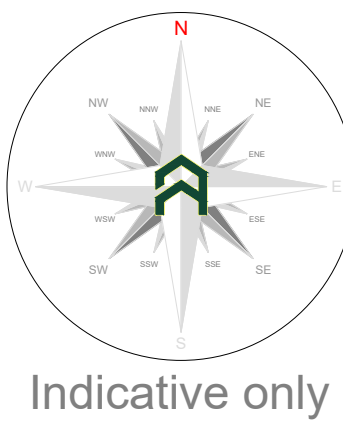
Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC	
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment				
G1												Estimated Measurements			
Chinese Thuja <i>Thuja orientalis</i>		3.5	1	200	N	1	0	EM	A: 18.1 R: 2.4	Good	C: Good S: Not visible B: Not visible	Group of approx., 5 individuals. Stems and basal area obscured by canopy and site hoarding. Dimensions recorded represent approximated largest measurements.			C.2 10+ yrs
G2												Estimated Measurements			
A Group - -		18	1	400	N	7	3	M	A: 72.4 R: 4.8	Good	C: Good S: Not visible B: Not visible	Off site group primarily comprising of oak and ash. Stems and basal area obscured by canopy and adjacent group. Dimensions recorded represent approximated largest measurements.			B.2 20+ yrs
G3															
English Elm <i>Ulmus procera</i>		9	1	200	N	0.5	6	Y	A: 18.1 R: 2.4	Decline	C: Good S: Good B: Not visible	Boundary group either of dead or dying individuals. Basal area obscured by undergrowth.			U <10 yrs
H1												Estimated Measurements			
Common Beech <i>Fagus sylvatica</i>		3	1	100	N	1.5	0	M	A: 4.5 R: 1.19	Good	C: Good S: Not visible B: Not visible	Hedge formally maintained at current dimensions. Stems and basal area obscured by canopy.			C.2 10+ yrs
Age Classifications:		N	Newly planted	EM	Early Mature		Condition:		C	Crown	Stems:		Ø	Diameter	
		Y	Young	M	Mature				S	Stem			(Eq)	Equivalent stem diameter using BS5837:2012 definition	
		SM	Semi-mature	OM	Over Mature				B	Basal area	ERC:		Estimated Remaining Contributio		

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC	
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment				
H2											Estimated Measurements			
Common Beech <i>Fagus sylvatica</i>	3	1	100	N	1.5	0	M	A: 4.5	Good	C: Good			C.2	
				E	1.5	0		R: 1.19		S: Not visible	Hedge formally maintained at current dimensions. Stems and basal area obscured by canopy.		10+ yrs	
				S	1.5	0				B: Not visible				
				W	1.5	0								
T1											Estimated Measurements			
Cedar <i>Cedrus sp.</i>	9	2	431	(Eq)	N	4.5	3	M	A: 84.2	Good	C: Good		B.1	
					E	4.5	3		R: 5.17		S: Good	Off site tree. Historically topped at current height, wounds not visible from site. Lower 3m of stems, stem unions and basal area obscured by boundary hedge.	20+ yrs	
					S	4.5	3				B: Not visible			
					W	4.5	3							
T2											Estimated Measurements			
Plum <i>Prunus domestica</i>	6	2	250	(Eq)	N	3	5	M	A: 28.3	Good	C: Good		C.2	
					E	3	4		R: 3		S: Good	Off site tree. Northern stem dead. Asymmetrical crown due to dead stem and proximity of companion trees.	10+ yrs	
					S	3.5	3				B: Not visible			
					W	3	4							
T3														
Bay <i>Laurus nobilis</i>	3	10	126	(Eq)	N	1.5	0	SM	A: 7.2	Good	C: Good		C.2	
					E	1.5	0		R: 1.51		S: Not visible	Stems, stem unions and basal area obscured by canopy.	10+ yrs	
					S	1.5	0				B: Not visible			
					W	1.5	0							

## **Appendix 2: Arboricultural Impact Assessment**

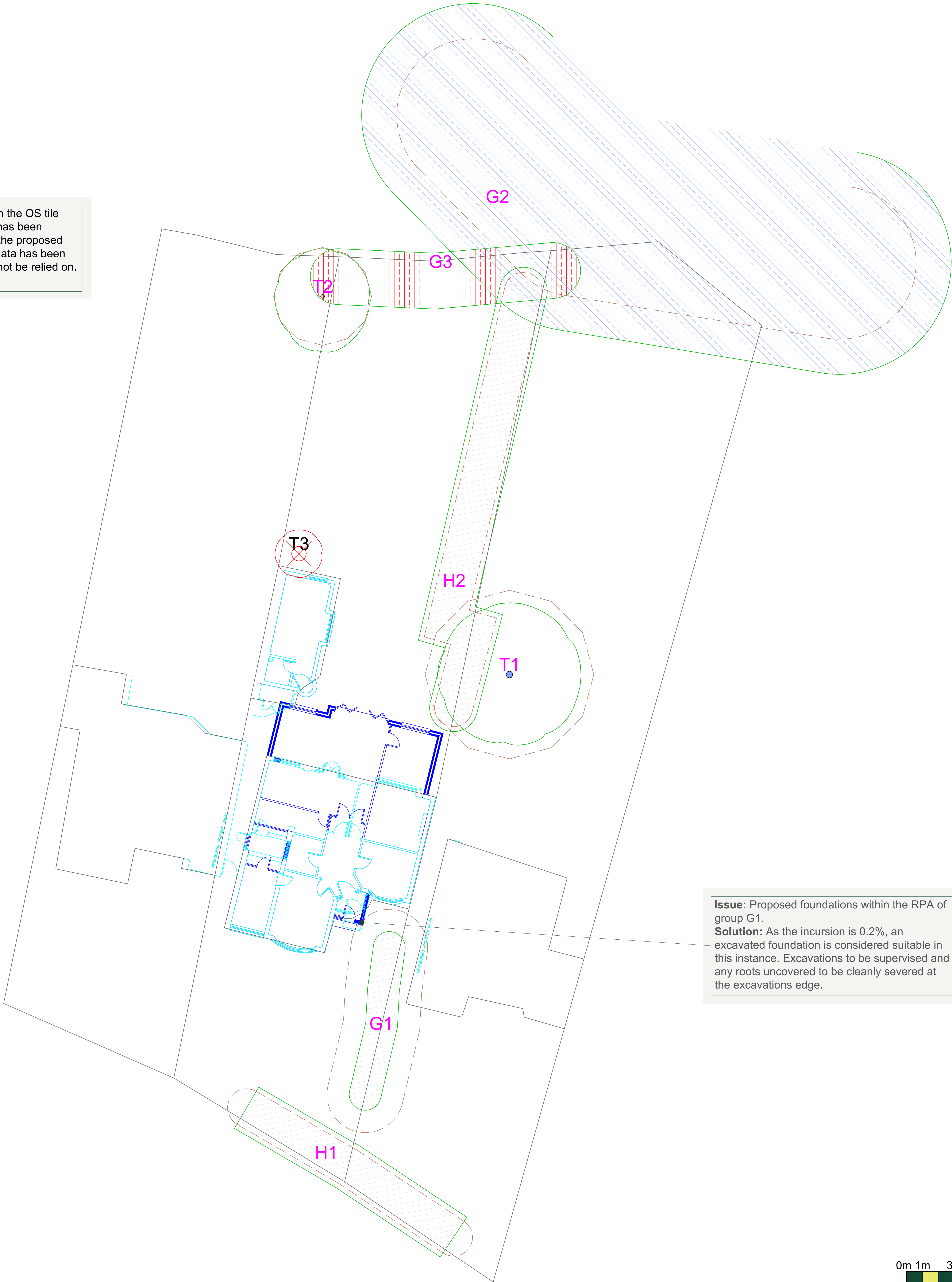
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Indicative only

**Note:** Due to the inaccuracies in the OS tile base plan, a measured survey has been inserted at a best visual fit and the proposed overlaid onto that. The OS tile data has been retained for context but should not be relied on.



**Issue:** Proposed foundations within the RPA of group G1.  
**Solution:** As the incursion is 0.2%, an excavated foundation is considered suitable in this instance. Excavations to be supervised and any roots uncovered to be cleanly severed at the excavations edge.



Arboricultural Impacts

Impacts	Nos. of trees
Trees to be removed	0 (0)
Group 1 / Hedges to be removed (Partial removal of groups)	0
Trees with proposed incursions into RPAs	0
Group 1 / Hedges with proposed incursions into RPAs	1
Trees that will require pruning	0
Group 1 / Hedges that will require pruning	0
Trees to be transplanted	0
Group 1 / Hedges to be transplanted	0

No.	Species	Proposed structure	Incursion
G1	Chinese Elm	Foundations	RPA

Arboricultural Impacts - RPAs (Area)

No.	Species	RPA	Incursion
G1	Chinese Elm	18.1	0.04

Tree Work Schedule

No.	Species	Works	Category
T3	Bay	Fall and remove stump	C2

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 Tree work - Recommendations.  
All arising's are to be removed and the site is to be left as found.  
Care is to be taken of the ground around retained trees to make sure that it does not become compacted as a result of tree surgery operations. No equipment or vehicles such as timber lorries, tractors, excavators or cranes shall be parked or driven beneath the crowns of any retained trees, to prevent subsequent compaction and root death.

No. of individual trees to be removed

U	A	B	-
0	0	0	1

No. of groups / hedges to be removed

U	A	B	-
0 (0)	0 (0)	0 (0)	0 (0)

Arboricultural Method Statement

All tree work is to be undertaken in accordance with British Standard BS 3998:2010 Tree work - Recommendations.  
Please refer to Arbtch Consulting Ltd. Tree Schedule, Arboricultural Method Statement and Tree Protection Plan, for full details of all surveyed trees and how all aspects of the development may be implemented without detriment to retained trees.

Utility apparatus

**Underground utility apparatus**  
Mechanical trenching for the installation of underground apparatus and drainage serves any roots present and can change the local hydrology in a way that adversely affects the health of the tree. For this reason, particular care should be taken in the root and methods of installation of all underground apparatus. Wherever possible, apparatus should be routed outside of RPAs. Where this is not possible, it is preferable to keep apparatus together in common ducts, all inspection chambers should be sited outside of the RPAs.  
Where underground apparatus is to pass within the RPAs, detailed plans showing the proposed route should be drawn up in conjunction with the project arboriculturist. In such cases trenchless insertion methods should be used with entry and retrieval pits being located outside of the RPAs. If this option is not feasible and providing roots can be retained and protected excavations should be undertaken using hand held tools (air-spade, fork, shovel) or a combination of trenchless and manual excavation (broken trench).  
Any design and installation should be undertaken in accordance with the National Joint Utilities Guidelines (NJUG).

**Above-ground utility apparatus**  
Above-ground apparatus (including CCTV cameras and lighting) should be sited to avoid the need for detrimental tree pruning, as such the current and future crown size of the tree should be assessed. Tree branches can be pruned back with care to provide space, though it is not appropriate for repetitive and significant tree work to be an initial design solution unless this is a suitable management outcome for the tree. Any pruning should be undertaken in accordance with BS3998:2010

Unit 3, Well House Barns, Chester, CH4 0DH  
https://arbtch.co.uk, 01244 661170

arbtch

Project: 47 Hillside Road  
Northwood  
HA6 1PY

Client: Dr Aruna Navapurkar

Drawing: Arboricultural Impact Assessment

Based on: 47HR(03) E

Drawing No: Arbtch AIA 01

Date: Aug 2025

Scale: 1:100 @ A0

Drawn: CMW

Key:

Tree Nos.	T1	Tree Canopies	Trunks	
RPAs	Category '1' groups	Category '2' trees	Category '3' trees	
Category '3' groups	Category '2' trees	Category '1' groups	Category '3' trees	
Trees to be removed	Existing Site (OS Map)	Existing Site (Measured)	Existing Site (Measured)	
Proposed Site	Incursion - Structures			

Arbtch Consulting Ltd. 2025

A large, light gray, stylized graphic of a house or roof structure, composed of several chevron-like shapes, serves as a background for the central section of the page.

## Appendix 3: Tree Protection Plan

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**Ground protection:**  
The existing hard surface will be retained to act as ground protection within the RPAS of retained group G1 and hedge H1 for the duration of the development. If removed this will be done under direct arboricultural supervision and replaced with temporary ground boarding.

**Arboricultural supervision:**  
Excavations within the RPA of retained group G1

[illegible]

## Appendix 4: Tree Protection Notice

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# Tree Protection Area **KEEP OUT**

Do not move this fence

**(TOWN & COUNTRY PLANNING ACT 1990)**

**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS  
AND/OR ARE THE SUBJECT OF A TREE PRESERVATION ORDER.  
CONTRAVENTION OF A TREE PRESERVATION ORDER MAY LEAD TO CRIMINAL  
PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE WITH THE WRITTEN  
PERMISSION OF THE LOCAL PLANNING AUTHORITY**




Unit 3, Well House Barn, Chester Road, Chester, CH4 0DH  
<https://arbtech.co.uk> - 01244 661170

## **Appendix 5: Contact Details**

---

Name	Position	Company	Contact
	Client		
	Agent / Project Manager		
	Tree Officer		
	Project Arboriculturist	Arbtech Consulting Ltd.	01244 661170 <a href="https://arbtech.co.uk">https://arbtech.co.uk</a>
	Site Manager		
	Main contractor		

## Document Production Record

Document number	Editor	Signature	Position	Issue number	Date
Arbtech AMS 01	Chris Wren		Senior Arboricultural Consultant	01	07/08/25

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