

BS5837 Arboricultural Impact Assessment & Method Statement



47 Simon's Lane, Wokingham, RG41 3HG

Client: **Mr. & Mrs. Morgan**

Job Reference: 05072Rv2

Planning Ref: 241871

Consultant: Keiron Hart (BSc Hons, C.Env, F.Arbor.A, MICFor, MEWI, AARC, APAEWE, VETcert)

September 2024

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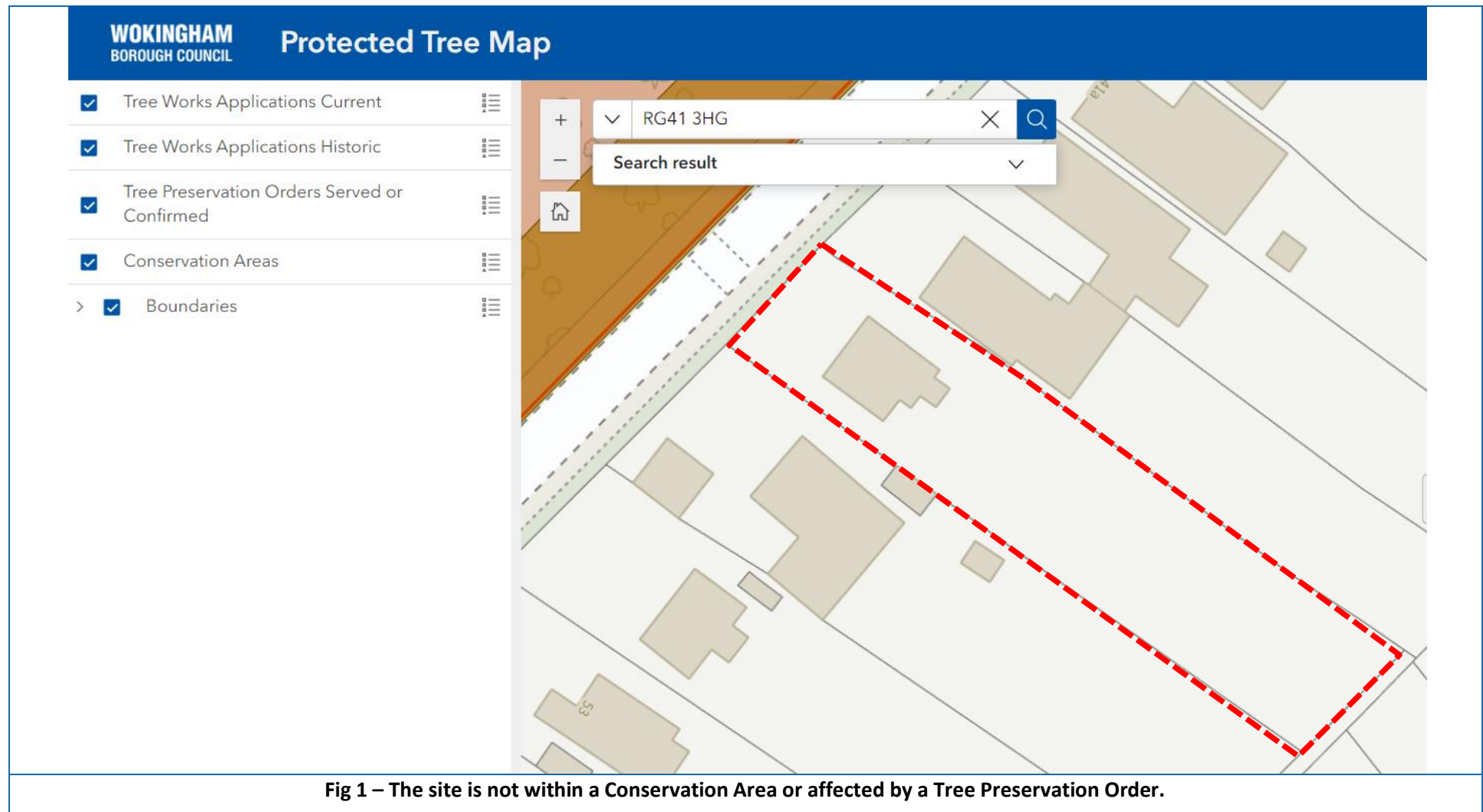
1. Executive Summary

- 1.1 Tamla Trees Ltd has been appointed by Mr & Mrs Morgan to provide advice on the arboricultural issues relating to *“proposed erection of a single storey front extension to create porch, two storey rear and side extension along with changes to fenestration to include additional roof lights, detached garage with associated driveway entrance and dropped kerb plus removal of the 2no existing chimneys.”* We surveyed the site in March 2024. The survey accorded with BS5837:2012 “Trees in relation to design, demolition and construction – Recommendations”.
- 1.2 Changes to the proposed layout have been informed by the tree survey and constraints. No trees are proposed for pruning or removal to facilitate the proposal. T7 (Willow) was identified as Cat U but is located on 3rd party land. The extended property encroaches into the Root Protection Area (RPA) of the 3rd party Willow tree referenced as T8. The (minor) extent of incursion is such that no special foundation measures are proposed.
- 1.3 The revised access/ driveway will be a no dig construction, and this will be installed prior to any site works. The issue with level changes is such that the whole driveway is indicated as no-dig even though only parts of it are within tree RPA’s.
- 1.4 Temporary ground protection and herras fencing (full spec and feet fence spec) will be installed to prevent movement towards site trees (and allow movement through the RPA of other trees). The extended property will tie into the existing building service connections and no new connections within tree RPA’s are advised.
- 1.5 The potential tree issues can be summarised as: **Effective tree protection> No Dig Driveway Installation> Construction works> Service provision> Soft landscaping to make good.**
- 1.6 The site is located within the [Wokingham Borough Council](#) administrative area. It is not located within a Conservation Area or affected by a Tree Preservation Order (TPO).
- 1.7 Subject to the working practices and tree protection measures outlined within this the impact on retained trees should be minimised. This report is based on the client plans ref: P432-0224/PA/002 Rev C

2. Statutory Protection

2.1 At the time of writing, we are advised as follows:

Conservation Area Status	
Is the site located within a Conservation Area?	No
Notes: (i) All trees larger than 7.5cm diameter at 1.5m above ground level are subject to regulations within a Conservation Area. Exemptions apply for trees which are dead and dangerous but clarification before any tree works is advised. A notification is required in many circumstances.	
Tree Preservation Order Status	
Are inspected trees subject to a TPO?	No
Type of TPO	Area Individual Group Woodland
TPO Reference	NA
Date TPO Made	Na
Notes: (i) The type and details of any TPO determine which trees are 'protected'. Exemptions apply for trees which are dead and dangerous but clarification before any tree works is advised. An application may be required before undertaking works. (ii) At the time of writing Wokingham Borough Council website confirms the site is not within a Conservation Area of affected directly by a TPO.	



3. Terms of Reference

- 3.1 [BS5837:2012](#) 'Trees in relation to design, demolition and construction – recommendations'
- 3.2 [BS3998:2010](#) 'Tree work – recommendations'
- 3.3 Arboricultural Associations Approved Tree Work Contractors [List](#)
- 3.4 <https://www.trees.org.uk/Help-Advice/Help-for-Tree-Owners/Guide-to-Tree-Pruning>
- 3.5 [NJUG 4 – National Joint Utilities Group](#) "Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Volume 4, issue 2. London: NJUG 2007" To include [Operatives Hand-out Guidance](#)
- 3.6 Foundation design, tree species water use - [NHBC Chapter 4.2 Building near trees](#)
- 3.7 TDAG Trees Planning & Development – [A guide for delivery](#)
- 3.8 TDAG Trees in Hard Landscapes – [a guide for delivery](#)
- 3.9 TDAG Tree Species Selection for Green Infrastructure – [a guide for specifiers](#)
- 3.10 BGS Open-Source Soil Data <http://www.bgs.ac.uk/nercsoilportal/maps.html>
- 3.11 HSE (2014) Avoiding danger from underground services: <https://www.hse.gov.uk/pubns/books/hsg47.htm>
- 3.12 Eissenstat & Yanai (1997) The ecology of root lifespan. *Advances in Ecological Research*, 27, 1-60.
- 3.13 Hendricks & Pregitzer (1992) The demography of fine roots in a northern hardwood forest. *Ecology*, 73, 1094-1104.
- 3.14 BRE Digest 412: Desiccation in clay soils.
- 3.15 Matheny & Clark (1998) Trees and Development: A Technical Guide to Preservation of Trees During Land Development.
- 3.16 <https://www.wokingham.gov.uk/roadworks-and-outdoor-maintenance/trees-hedges-and-grass-cutting/tree-preservation-orders-tpos>

4. The Trees

4.1 The trees can be summarised as follows:

BS 5837 Cat	A	B	C	U
Specific Trees	-	T1, T3, T5, T9, T11, T13, T14, T15	T2, T4, T6, T8, T10, T12 TG1 & TG2	T7
Total Number	None	8 trees	6 trees and 2 groups.	1 tree*

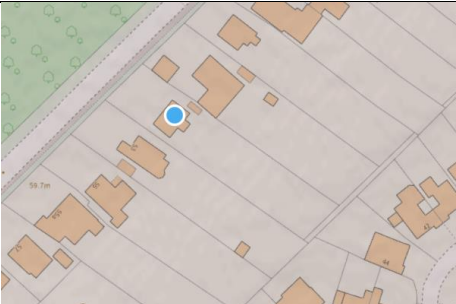
**based on available access*

4.2 There were no hedgerows that qualify for consideration under the 1997 Hedgerow Regulations.

5.0 Arboricultural Impact Assessment

5.1 Site Specific Soils

- 5.1.1 Soil is an important factor in tree growth and the type of underlying soil can impact on successful integration of new developments.
- 5.1.2 A free draining sandy soil containing sand/gravel is likely to lead to water being accessible in the upper horizons during the growing season and available at greater depths and trees will generally be forced to explore a larger volume/ depth on such soils. The structure of such soil also makes compression more difficult (by heavy construction plant), and root penetration is easier for the trees. By comparison, a clay soil is more easily compressed, particularly when wet and compression can have a greater impact on tree health.
- 5.1.3 Soil type is indicated below:

Soil Description	
	Bedrock Deposits: London Clay Formation - Clay, silt and sand. Sedimentary bedrock formed between 56 and 47.8 million years ago during the Palaeogene period.
	Superficial Deposits: None Recorded

Underlying Soil Material contains Clay	Yes
Soil Type increased rooting depth profile?	No
Increased risk of soil compaction due to soil type	Yes

- 5.1.4 All comments regarding soils should be verified with onsite geotechnical investigations and laboratory testing with foundation depth and design undertaken by a structural engineer in accordance with the requirements of NHBC Chapter 4.2.
- 5.1.5 BS5837 indicates: 4.6.2 *“The RPA for each tree should initially be plotted as a circle centred on the base of the stem. Where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced. Modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution.”* It advises at Section 4.6.3 That any deviation in the RPA from the original circular plot should take account of a number of site-specific factors.
- 5.1.6 BS5837 recognises that the root morphology of trees may be affected by a number of factors and in certain situations the plotting of RPA’s will deviate from the circle to reflect site specific considerations. It is our experience that to consider structures such as driveways, houses and garages as areas trees cannot utilise for rooting (and to then modify RPA plotting where they exist within an identified RPA) is too simplistic and not aligned with how trees actually utilise soil.
- 5.1.7 Within around 3 to 4m of the base of mature trees there will generally be a structural root system providing both support and the main structure/ root architecture for smaller roots to originate. These larger roots have the very real capacity to be influenced by any significant structures (footings, roads to adoptable standard construction etc) where there may be a physical obstruction close to them and this can affect root morphology in such locations. In addition to this there will generally be a noticeable increase in structural rooting to the southwest of mature trees in the UK to reflect the prevailing wind direction, particularly where a tree may be isolated/ open grown increasing its wind exposure. Root growth and location will also be influenced by the presence of other trees, structures sheltering trees etc all of which can combine to affect the shape and location of a structural root system.

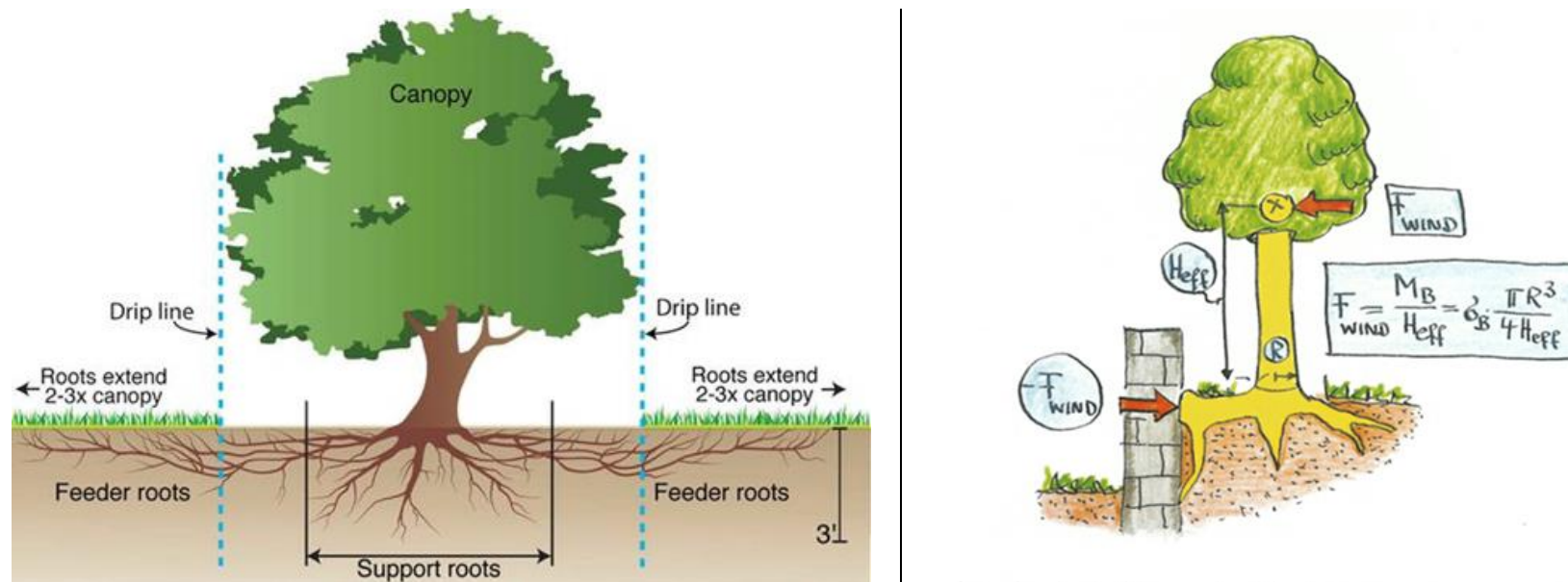


Fig 2 – Open grown trees or those with minimal obstructions close to their stems will have a network of structural roots supporting feeder/ fine root growth beyond (above left). In certain situations, root morphology can be affected by structures close to the main stem (above right: Mattheck)

- 5.1.8 Beyond the structural (and generally permanent) root system will be a network of smaller roots which in turn subdivide to fine roots. Fine roots will also be found throughout the root system (i.e. both close to and distant from a tree) to maximise soil resource uptake and reflect underlying soil conditions. Some larger roots (>25mm and sometimes much larger) can extend away from this area and remain permanent particularly where there may be a constant supply of water (such as a broken downpipe on a building some distance away) which encourages a roots development. Generally, the smaller roots (<10mm and particularly fibrous roots) outside of the immediate structural root plate can be considered to be in a state of constant change. They will grow seasonally, and tree roots generally grow at night. Small fibrous roots are also mostly short lived (ranging from anything

between 10 days to over a year¹). The cyclical death and decay of roots releases both nitrogen and carbon into the soil and is an important part of soil nutrient cycling process. The extent and location of the trees fine root system reflects a trees resource requirement (as resources are removed from certain areas of the soil and exploited in others) as well as the resource capacity required to form such a fibrous root system. Fine roots produced near the soil surface tend to live longer than those deeper in the soil².

¹ Eissenstat & Yanai (1997) The ecology of root lifespan. *Advances in Ecological Research*, 27, 1-60.

² Hendricks & Pregitzer (1992) The demography of fine roots in a northern hardwood forest. *Ecology*, 73, 1094-1104.

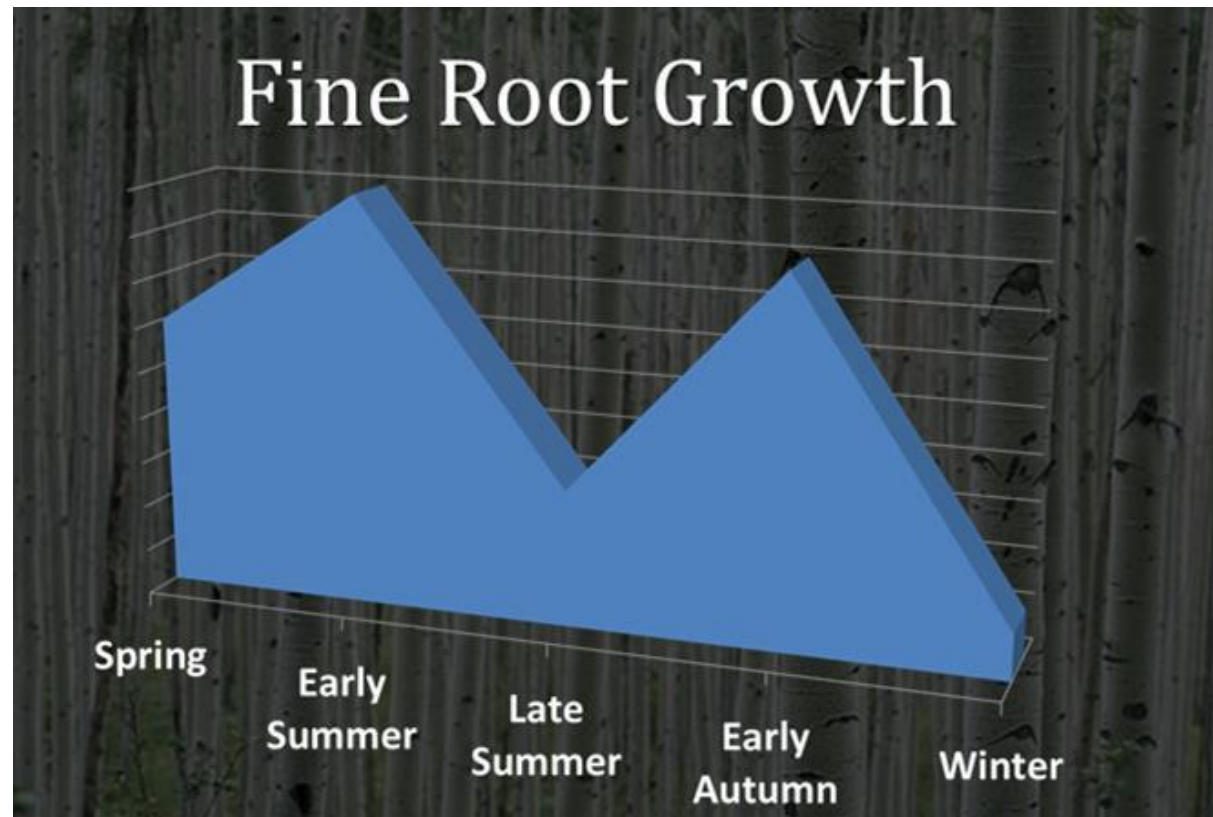


Fig 3 – Fine root growth is (generally) seasonal peaking in late spring and again in early autumn but dying back in winter dormant periods when photosynthetic production ceases. This is an important part of the soil nutrient cycle and demonstrates that a static RPA as calculated by BS5837 is a ‘simplistic’ view of the tree rooting dynamic. (Image Source: Tamla Trees)

- 5.1.9 The fine root system shows species variation and will also vary in depth (depending on species dynamics and underlying soil conditions). Adopted highways generally have a footing that extends < 0.5m and most UK residential properties have footings in the range of 0.5-1.5m depth. Trees will easily root below these depths, and this is evidenced by the fact that every year in the UK there are thousands of tree related subsidence cases.

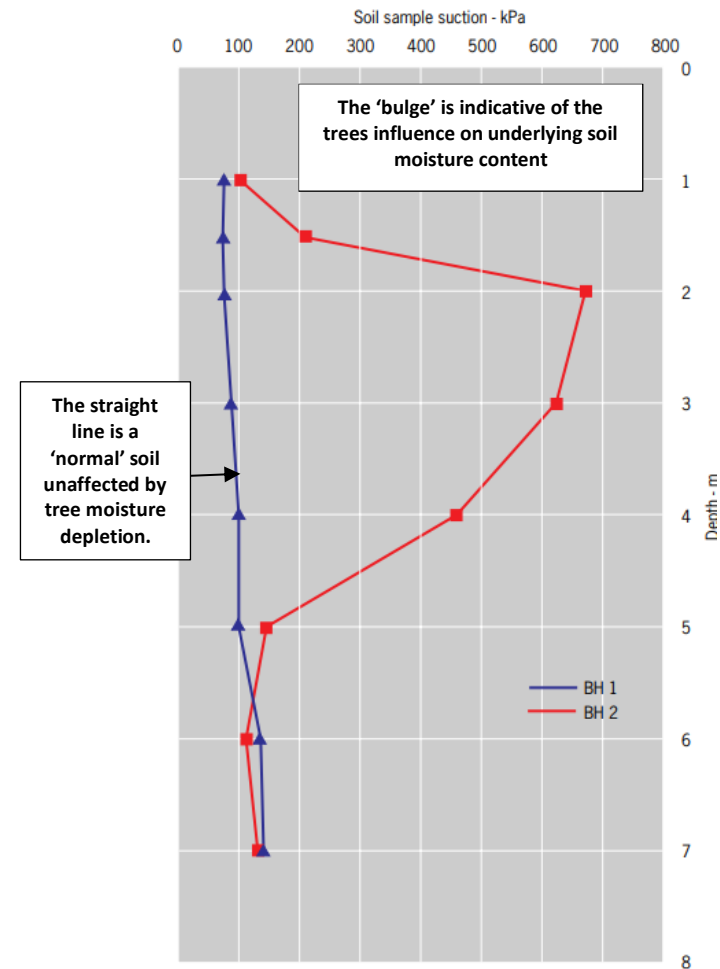
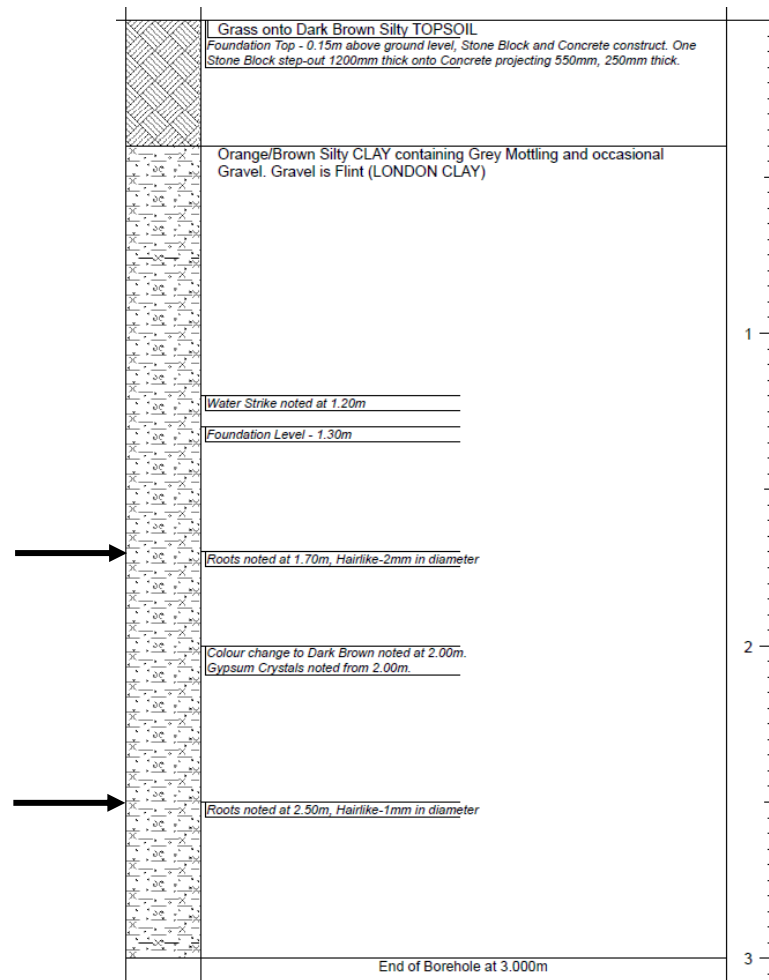


Fig 4 – Borehole log 10m from mature Oak tree on clay soil detailing fine roots to depths of 2.5m indicated with arrows (Source: Tamla Trees project) and annotated soil moisture depletion by trees showing a peak influence at 2m and extending to 5m (above right)

5.1.10 Against this backdrop rooting information seeking to manipulate RPA shapes to account for the presence of houses, garages etc outside of the immediate zone of structural rooting (3-4m) is not considered appropriate. Unless ground obstructions are present within the immediate structural rooting area or to such a depth as to nullify potential fine root growth (below basements or retaining wall step changes in levels for example) Tamla Trees Ltd will show RPA's in a circular fashion but seek to maximise the quality and positioning of specified tree protection measures and encourage ground treatments (such as mulching – see Section 5.7). **Clients and developers must implement these measures for them to be effective. A failure to protect trees during the development process adversely affects soil and roots. Symptoms may not present themselves for a number of years following the development as the tree(s) enter a spiral of potentially irreversible decline.**

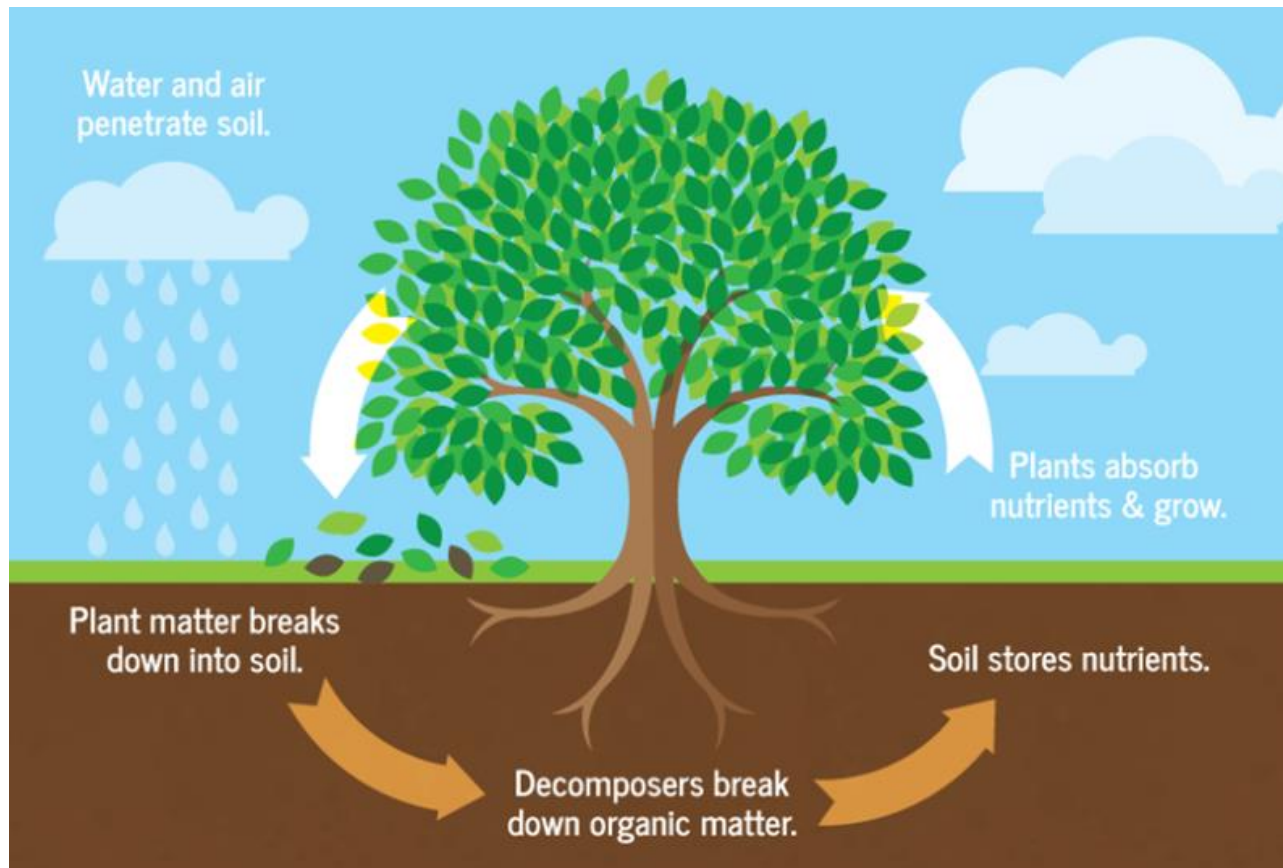


Fig 5 - Manion's spiral of tree decline for Norway Spruce (modified by Mrkva 1993)

5.1.11 BS5837 Section 4.6.3 Site Specific Assessment:

Section	Consideration	Site Specific Comments
4.6.3 (a)	<i>the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures, and underground apparatus);</i>	The general area is garden and driveway and whilst the upper layers of the existing driveway are likely compacted, we would expect rooting from the surveyed trees through the whole soil profile in the locality.
4.6.3.(b)	<i>topography and drainage;</i>	The site is generally level and there is nothing to indicate adverse draining conditions or periods of water pooling.
4.6.4.(c)	<i>the soil type and structure;</i>	- Soil is indicated by the BGS data to be a London Clay. This (clay) can elevate the risk of ground compaction and rutting. - This increases the need to install the no dig driveway prior to site works to allow appropriate movement and minimise the risk of ground compaction. - Temporary ground protection and herras fencing seeks to maintain the soil structure with the specification and location of these protective measures outlined at Appendix 6, Tree Protection Plan.
4.6.4.(d)	<i>the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.</i>	- The no dig driveway does not excavate into the ground and root loss for the affected trees should therefore not occur. - The extended property has a traditional footing which encroaches marginally into the RPA of T8 (Willow). <i>Salix</i> spp show an intermediate tolerance of root disturbance/ loss.³ - Subject to the protection measures and detailed working practices being adhered to the encroachment into the RPA of T8 should be within tolerable levels for the species. This opinion is formed on the basis that the works are at the periphery of the RPA and to relatively minimal levels (see 5.2.2). In addition, robust protection measures are proposed, and a large portion of the trees root system is located within 3rd party land.

³ Matheny & Clark (1998) Trees and Development: A Technical Guide to Preservation of Trees During Land Development



- *Development has the very real capacity to adversely impact existing trees.*
- *Tree Protection Measures seek to maintain the integrity of the identified area (See Appendix 6)*
- *This is a 'damage limitation exercise' as identified Root Protection Areas only identify part of the trees rooting area.*
- *Retaining the integrity of the existing soil and ground conditions can help trees to be successfully retained within projects.*
- *Where possible try and maintain areas below tree canopies as mulched or soft landscape (not mown grass) as this maximises the natural nutrient cycle helping retain healthy trees.*

Image source: <https://sswm.info/>

Fig 6 – The Tree Nutrient Cycle – Every effort should be made to retain this through the development cycle.

5.2 Root Protection Area (RPA) Incursions

5.2.1 The following incursions into the RPA's of trees to be retained have been identified:

BS 5837 Cat	A	B	C	Summary
RPA Incursion	-	-	T8	Demolition – All tree protection and no dig driveway works to be installed prior to any demolition works. T8 (Willow) – The proposal places the extended building partially within the RPA area of T8. On an individual level the footprint incursion is minimal. The RPA (overall revised footprint) incursions (including no dig driveway) are tabulated on the following page. We consider that the extent of incursion for T8 is within the tolerable threshold subject to the relevant protection being adhered to. No Dig Driveway – There are revisions to the access and driveway. The new driveway will be a no dig surface. This should be laid prior to any onsite activity and then made good/ final wearing course added upon project completion. This will allow movement around the site and within the RPA of the identified trees. The small area of existing concrete driveway in the vicinity of T2, T3 & T4 can then be broken out by hand and soft landscaped. Services – No services within the RPA for the retained trees are advised but, in the event, they are required then any excavation within the RPA should follow the hand digging principles detailed within this report. The likely connection point is to the main property given the proposal is an extension of this. The general principles of NJUG 4 – National Joint Utilities Group “Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Volume 4, issue 2. London: NJUG 2007” should be adhered to. Special guidance (overview) on hand digging is included within this report for any service excavation which may be required within the RPA. Any new manhole chambers must be located outside the RPA of any
		T3, T5	T2, T4,	

				retained tree. Contractors (demo & construction) must be made aware of this requirement. Landscaping – Following the works BS3882 compliant topsoil will be spread/ raked out by hand to a depth no greater than 100mm and any localized shrub/ grass planting as required. Detailed further comment on landscaping proposals is outside the scope of this report.
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5.2.2 The relative incursions into the RPA are as follows.

Tree Number	RPA Total (Sqm)	Existing Incursion (Sqm)	As % of trees RPA	Proposed Incursion (Sqm)	As % of trees RPA	Difference +/-
T2	191	-	-	40 Nd	21%	+ 21%
T3	72	-	-	18 Nd	25%	+ 25%
T4	41	-	-	12 Nd	29%	+ 29%
T5	41	-	-	1 Nd	2.5%	+2.5%
T8	222	2	0.9%	15 ext	7%	+6%
Increase in RPA covered		Decrease in RPA covered				

Note: Nd – no dig driveway, ext - extension

5.2.3 It is recognised that BS5837 recommends all structures be placed outside the RPA of retained trees: 5.3.1 *The default position should be that structures (see 3.10) are located outside the RPAs of trees to be retained. However, where there is an overriding justification for construction within the RPA, technical solutions might be available that prevent damage to the tree(s) (see Clause 7). If operations within the RPA are proposed, the project*

arboriculturist should: a) demonstrate that the tree(s) can remain viable and that the area lost to encroachment can be compensated for elsewhere, contiguous with its RPA; b) propose a series of mitigation measure.

5.2.4 On this project the justification is considered on the basis of the relatively small incursion for T8 (Willow) as it relates to the extension footings.

5.2.5 The assessed risk based on the likely impact to the health and safety of trees is LOW to MODERATE on the basis that all the working practices to retain all roots >25mm as outlined within this report are implemented and maintained for the duration of all site works is summarised below:

Tree & Development Risk Indicator							
^							
- Our assessment has confirmed the presence of probable underlying CLAY soil. - This increases the risk of modifications (compaction) to the underlying soil from construction activity (if clay is present close to surface levels). - The Tree & Development Risk Indicator (TDRI™) is therefore LOW to MODERATE. Note: This level of risk is a visual guide only and is only relevant if all advised tree protective measures are put in place prior to any on site activity and maintained for the duration of the works.							
Note: Only on-site testing can confirm the local soil conditions below foundation level, but available information suggests the presence of a CLAY subsoil.							

5.3 Tree Loss

5.3.1 No trees are indicated for pruning or removal although attention is drawn to T7 (Willow) which is a 3rd party Cat U tree.

Tree Surgery

Tree No.	Species	Proposed Tree Works	BS Cat

Proposed Removal

Tree No.	Species	Proposed Tree Works	BS Cat

5.3.2 **Birds** - In the event future tree works are required to be completed between 1st March & the 31st of July (inclusive) a due diligence check for nesting birds must be completed before work starts in order to comply with the Wildlife & Countryside Act 1981. This check should be recorded in the Site-Specific Risk Assessment. If active nests are found work should not take place until the young have fledged.

5.3.3 **Bats** – It should be noted that in England and Wales, the relevant legislation is the Wildlife and Countryside Act (1981) (as amended); the Countryside and Rights of Way Act, 2000; the Natural Environment and Rural Communities Act (NERC, 2006); and by the Conservation of Habitats and Species Regulations (2010).

Tree Pruning Indicator

Λ

- Tree canopies are away from both the building and minimal overhang to the driveway itself. As a result, pruning pressure from the proposal is considered LOW.
- **Note:** This is an indicative assessment. All and any future works should be undertaken in accordance with BS3998 (Tree Works), and we recommend the use of Arboricultural Association approved contractors.⁴

5.3.4 Please note that this is not a health and safety assessment report and that vigilance for the emergence of any fungal pathogens is advised. Some surveyed trees were on 3rd party land. Further information on tree safety can be found [here](#).⁵

⁴ <https://www.trees.org.uk/ARB-Approved-Contractor-Directory>

⁵ <https://ntsgroup.org.uk/guidance-publications/>

5.4 Demolition & Foundations

5.4.1 All tree protection will be installed prior to any on site activity. The proposed tree protection procedure can be summarised as follows:



Stage 1

- Install no dig driveway.
- Install BS5837 tree protection & Temporary Ground Protection - (See Appendix 6).
- Brief all contractors on purpose of fencing.



Stage 2

- Undertake any demolition and then construction works.

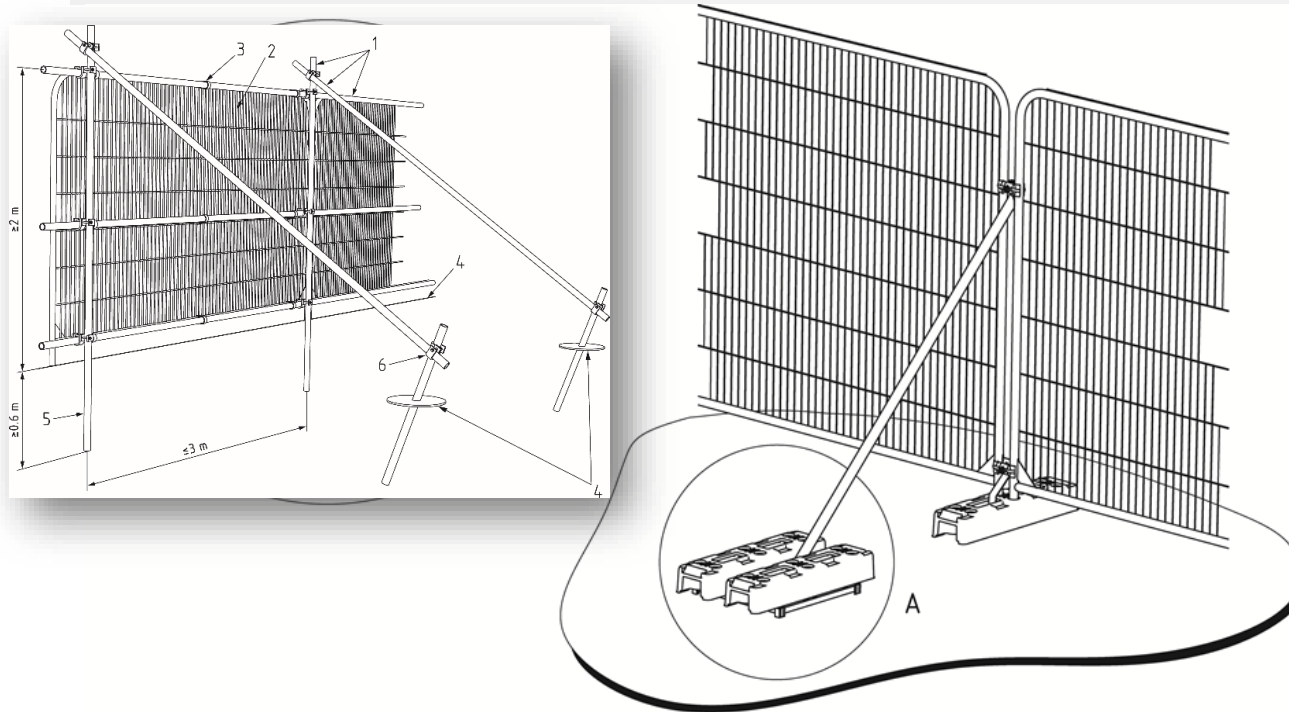


Stage 3

- Protection remains in place for complete construction phase. Removed prior to soft landscaping.
- Break out small concrete area close to T1, T2, T3 & T4.
- BS3882 compliant topsoil imported and raked out where required to 'make good'.
- Undertake soft landscaping (to include mulch below retained tree canopies where possible).

5.4.2 High quality BS5837 compliant tree protection is to be installed on site and remains for the duration of the project with minor setting out manipulations as required to deliver the proposal.

Tree Protection



Overview

- *Braced feet spec fencing (left) for the rear garden area with full spec (inset) to protect T1 – T4.*
- *Note: To be marked with signs (inset) and purpose to be briefed to all ground workers.*
- *Maintained for duration of the build.*

Threat Level to Retained Trees

LOW

5.4.3 All internal tree protection must be appropriately signed to ensure that all site operatives know its purpose.



e: info@tamlatrees.com w: tamlatrees.com o: 01252 811 233
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Fig 7 – Professional grade weatherproof tree protection signs no smaller than 297 x 420 mm (A3) will be located at 5m intervals and all ‘return’ faces for tree protective fencing.

5.4.4 Temporary ground protection is also required. This will be laid in the areas of RPA not covered by the No Dig Driveway.

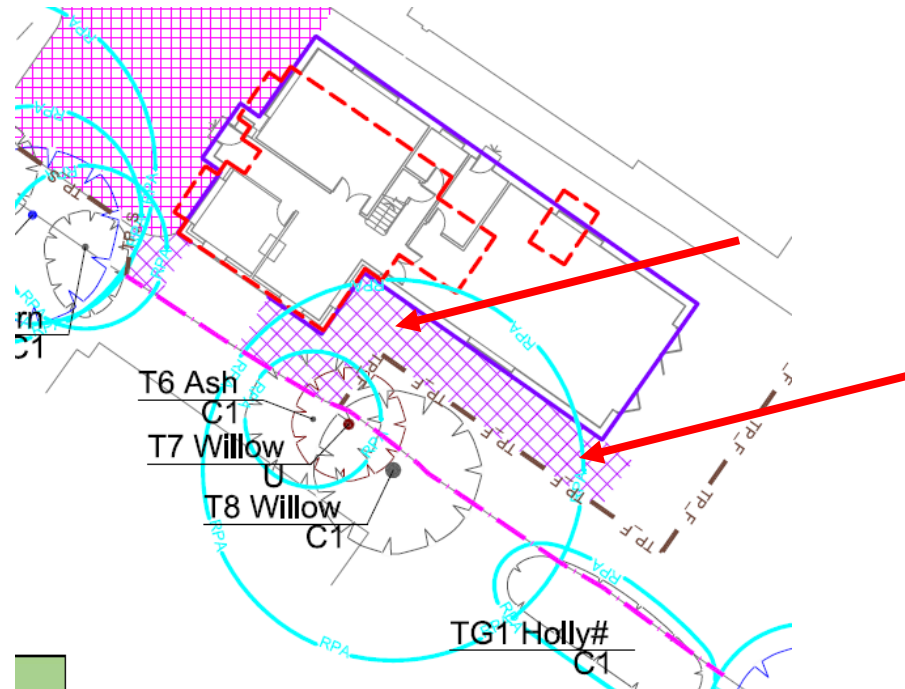


Fig 8 – 2 areas of Temporary Ground Protection will allow movement through the RPA of T8 (Willow)

5.4.5 Temporary ground protection is advised to supplement the herras fencing and allow movement of personnel, machinery and materials through the RPA without compromising the underlying soil. To be effective it must be laid prior to the onset of all works and maintained for the duration of them.



PRODUCT COMPARISON CHART

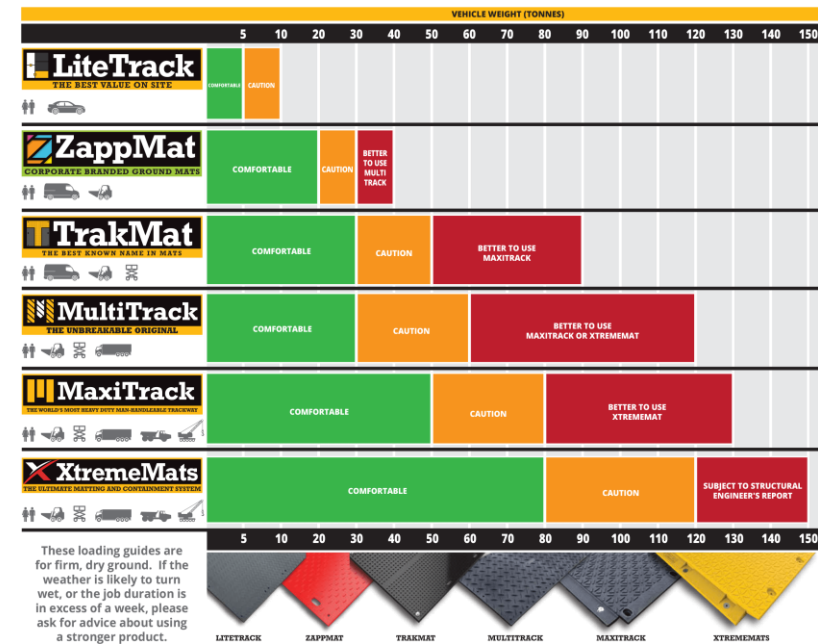


Fig 9 – An assessment of what type of tracking material is required will be relative to what is required following removal of the existing structures within the RPA. In this instance only pedestrian/ access within the surface area appears to be required but this should be confirmed with the construction firm/ contractors prior to any on site works.



Fig 10 – Temporary ground protection is an effective way of allowing access through the RPA of retained trees. It must be installed prior to any on site activity and maintained for the duration of all works to be effective. Above left Tamla Trees project ground protection in place and above right being removed following the completion of site works. (Note: depending on the length of time it is in place it will adversely affect underlying grass ground cover which will need reseeded/ turfed accordingly)

5.4.6 **Site Manager/ Consultant Sign Off:** At this point a site inspection is required to confirm the appropriate tree protection measures have been completed (ground protection if required).

Date of Inspection	Compliance with Tree Protection Plan?			
	Yes		No	
Rectification Actions (insert notes)				
Site Manager Signature:				
Print Name:				
Arboricultural Consultant Signature:				
Print Name:				

SITE TREES ARE NOW ADEQUATELY PROTECTED AND CONSTRUCTION ACTIVITY CAN COMMENCE

5.5 Surfaces near Trees

- 5.5.1 The revised driveway is a no dig form of construction. Whilst only part of the driveway is within the RPA of retained trees it is generally difficult to marry traditional forms of driveway construction with no dig specifications and as such the whole driveway is shown as no dig. There will be localised grading at the entrance (outside tree RPA's) to achieve levels. This work is completed prior to construction to provide vehicular access/ site storage:

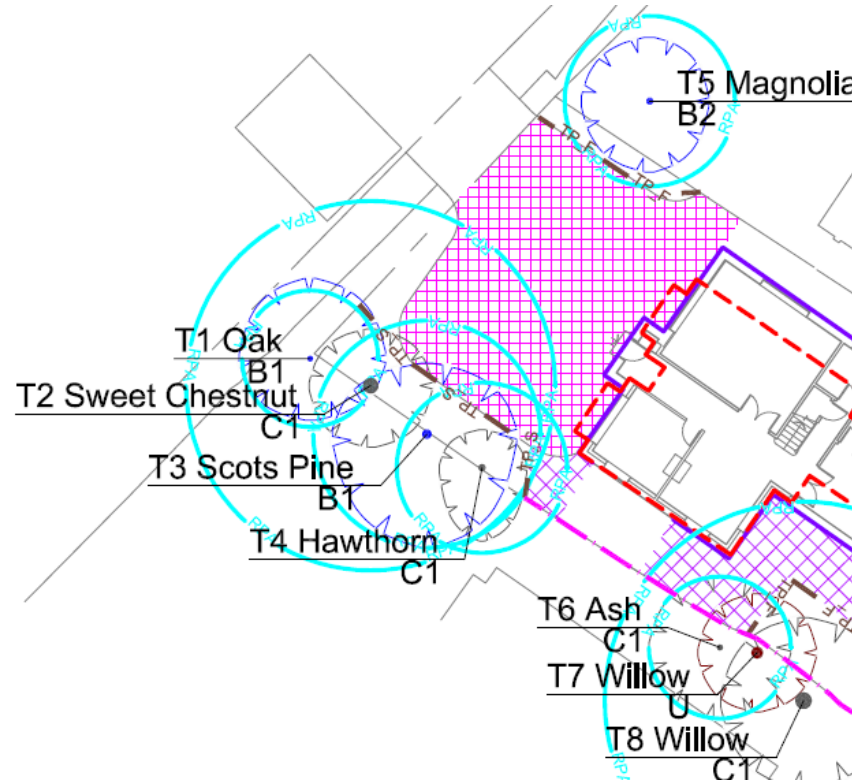


Fig 11 – The driveway is to be a no dig form of construction.

5.5.2 The driveway will be supported on a no dig footing and installed at the very beginning of the project. An overview of the no dig surface installation is as follows (**Note:** exact dimensions/ thicknesses amended to reflect surface use).



- *Ground made up in levels with BS3882 compliant topsoil raked out by hand to no more than 150mm depth within RPA and to achieve flat surface where necessary.*
- *Cellweb 3-Dimensional Cellular Confinement System expanded (left) –thickness proposed to reflect end use.*
- *Laid on Permatex 300 Separation Geotextile*
- *Secured with Cellweb Staking Pins*
- *Mesh joined by Cellweb Stapler and Staples*
- *Mesh filled with 4/20mm Clean angular stone to BS EN 13242 and 12620*
- *Edge supported with suitable timber edging or floating concrete set as appropriate.*
- *Wearing course then installed (Note: this can be completed at the end of the project).*

Fig 12 – No Dig Surface Overview

5.5.3 The process can be summarised as follows:

Step 1

- Remove surface vegetation/ existing surface by hand or with suitable herbicide/ or existing hard surface. Rake out topsoil.
- Fill any hollows in the exposed ground with sharp sand or 4/20mm clean angular stone.
- Install timber / granite set (floating) edge treatment.
- Place Permatex 300 Geotextile over the area to be protected ensuring laps are a minimum of 300mm

Step 2

- Place the collapsed panel on the geotextile and pin through 3 cells across the driveways secure using cellweb staking pins.
- Expand the panel to its full length of and pin across the opposite panel end using cellweb staking pins.
- Staple any adjacent panels together using the cellweb stapler and staples.
- The panels can be cut to shape if required with a heavy duty Stanley Knife
- Install final edge treatment (floating set or similar) to abutt existing timber edge.

Step 3

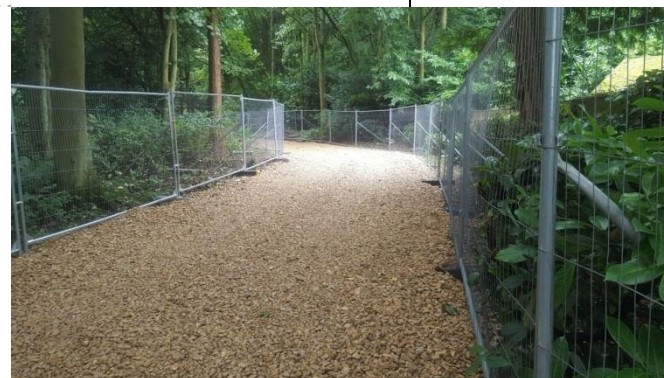
- Fill the pockets with a 4/20mm **clean** angular stone.
- Allow for any settlement of the stone in the cells and top up if necessary.
- Ensure edge oversite to abut resin/ block/ wearing surface.
- Lay top wearing course.

Note: Exact specifications to be agreed with structural engineers/ architects as appropriate

- Area of no dig surface marked out.
- Edge treatment installed.
- Geo-fabric laid following localised levelling/ veg removal.
- Geo-cell expanded.



- Cells then filled working from filled cells only.



- Wearing course then installed (gravel shown in example)

Fig 13 – Simple overview flow of surface installation process

5.6 Site Service Provision

5.6.1 No new services within the RPA of retained trees is advised. In the event of any additional excavation within the RPA of retained trees hand digging will be used where within RPA with overview advice as follows. Connections likely to main dwelling given project nature (extension).

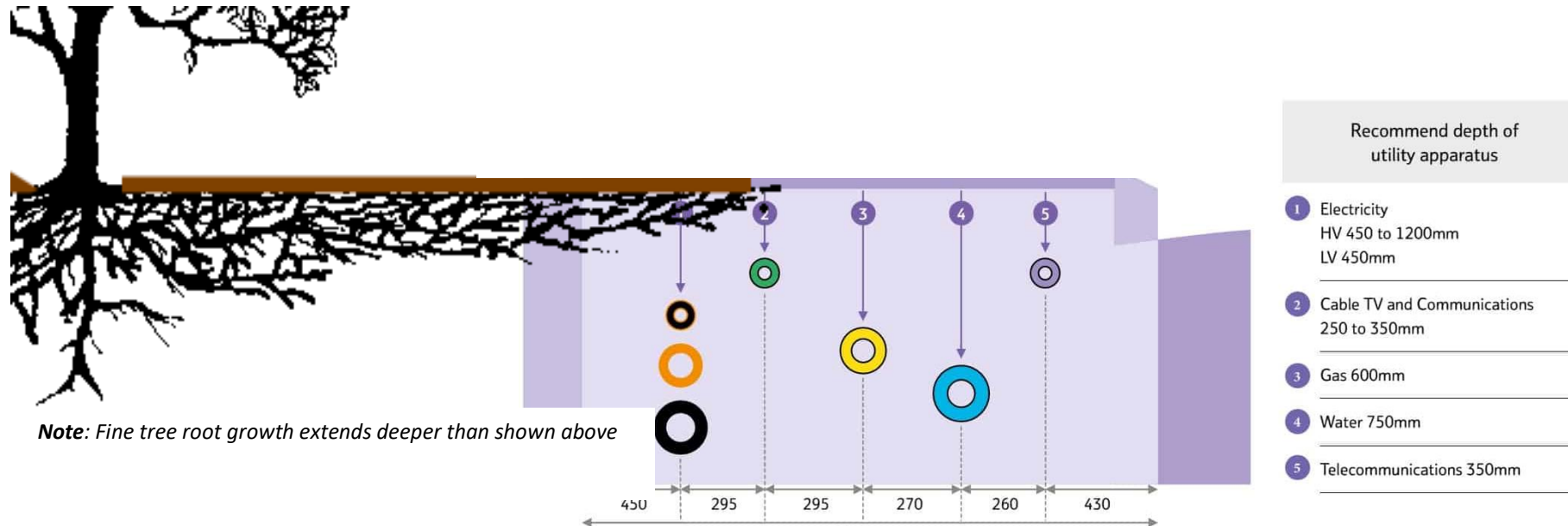


Fig 14 – Annotated service installation depth drawing (source: Thorne & Derrick). Service installations occupy the same soil volume/ depth where the greatest level of tree roots will likely be found.

5.6.2 **Services** - Any activity to excavate within the RPA has the capacity to cause root damage and should be hand dug in accordance with the principles detailed elsewhere within this report. Prior to any excavation not detailed in this report the project arboriculturalist shall be consulted.

PLEASE NOTE THIS OPERATION HAS AN ELEVATED CAPACITY TO CAUSE DAMAGE TO TREE ROOTS

5.6.3 **Planning the excavation:** A 'toolbox talk' will spot mark and agree the locations and working practices. In the event tree roots (multiple &/or roots >25mm in diameter) are encountered work will stop and progress with hand tools only.

 Narrow Face Spade & Hand Trowel	 Stiff Hand Brush	 Hi Vis Paint (for spot marking roots)	 Hessian (to wrap exposed roots)	 Duct Tape (to secure hessian)
--	--	--	--	--

Fig 15 – Advised tools/ materials which should be available for all excavation works within RPA.

5.6.4 Digging around tree roots is a skill and operatives must proceed with caution. Once a root is located it is often necessary to use a combination of hand tools and a stiff hand brush to track and 'trace' the roots location. Spot marking roots >25mm with spray paint is advised. **All roots >25mm in diameter will be retained. Please also note that retention of all roots where possible (including fibrous ones) is advised.**

- 5.6.5 **How deep?** – The excavation need only be as deep as the relevant service to be installed requires. **WARNING:** Breaking the ground has the potential to uncover services/ destabilise adjacent structures etc. Some general advice from the HSE can be found [here](#).
- 5.6.6 **Root Wrapping/ Protection:** In the event the footing works expose any roots >25mm in diameter these must be wrapped or protected with a covering of soil if left exposed overnight or for longer than any single 4-hour period before backfilling following service install.

Root Wrapping		
		Overview
		- Any exposed roots >25mm should be wrapped in hessian (example left) if exposed overnight or for any 4-hour period. - Spot marking with spray paint to highlight locations also advised. - Alternatively, roots can be covered over with topsoil to maintain moisture retention. - Example Tamla Trees project on London Plane (left).
Threat Level to Retained Trees		HIGH

5.7 Ground Level Changes

- 5.7.1 No ground level changes within the RPA are proposed other than the installation of the no dig surface and minor footings for T8 (Willow). The small area of existing concrete driveway can be broken out by hand after removal of protection.

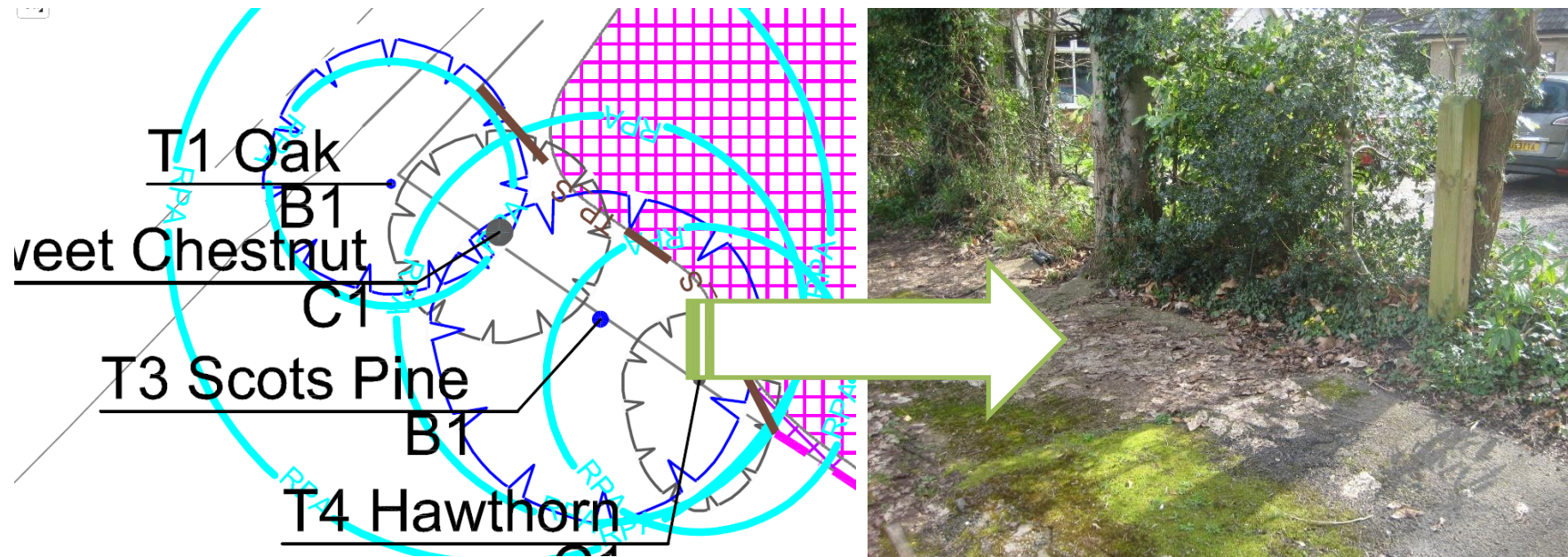


Fig 16 – Any removal of existing surfacing in the area indicated above will be undertaken by hand.

- 5.7.2 Following completion of the project any 'making good' will be with BS3882 compliant topsoil raked out by hand (to no more than 100mm depth within any tree RPA) and then seeded/ planted as appropriate. We encourage the use of composted bark mulch where possible within the RPA of retained trees.



Fig 17 – In the event of 'making good' topsoil will be BS3882 compliant and raked out by hand to no greater depth than 100mm.

- 5.7.3 We recommend the use of composted bark mulch where possible within the retained tree RPA's. As well as aiding water retention and increasing soil microbial activity it can design out issues associated with leaf and needle drop or lawns not establishing close to mature trees.

Mulching



Overview

- *Circular area edged to 50-100mm depth to stop mulch from 'creeping' on to surround lawn.*
- *Composted mulch then spread around below tree by hand – no need to lift or remove underlying grass.*
- *Mulch topped up annually/ as required.*
- *Positive benefits for mulched trees.*

Threat Level to Retained Trees

LOW

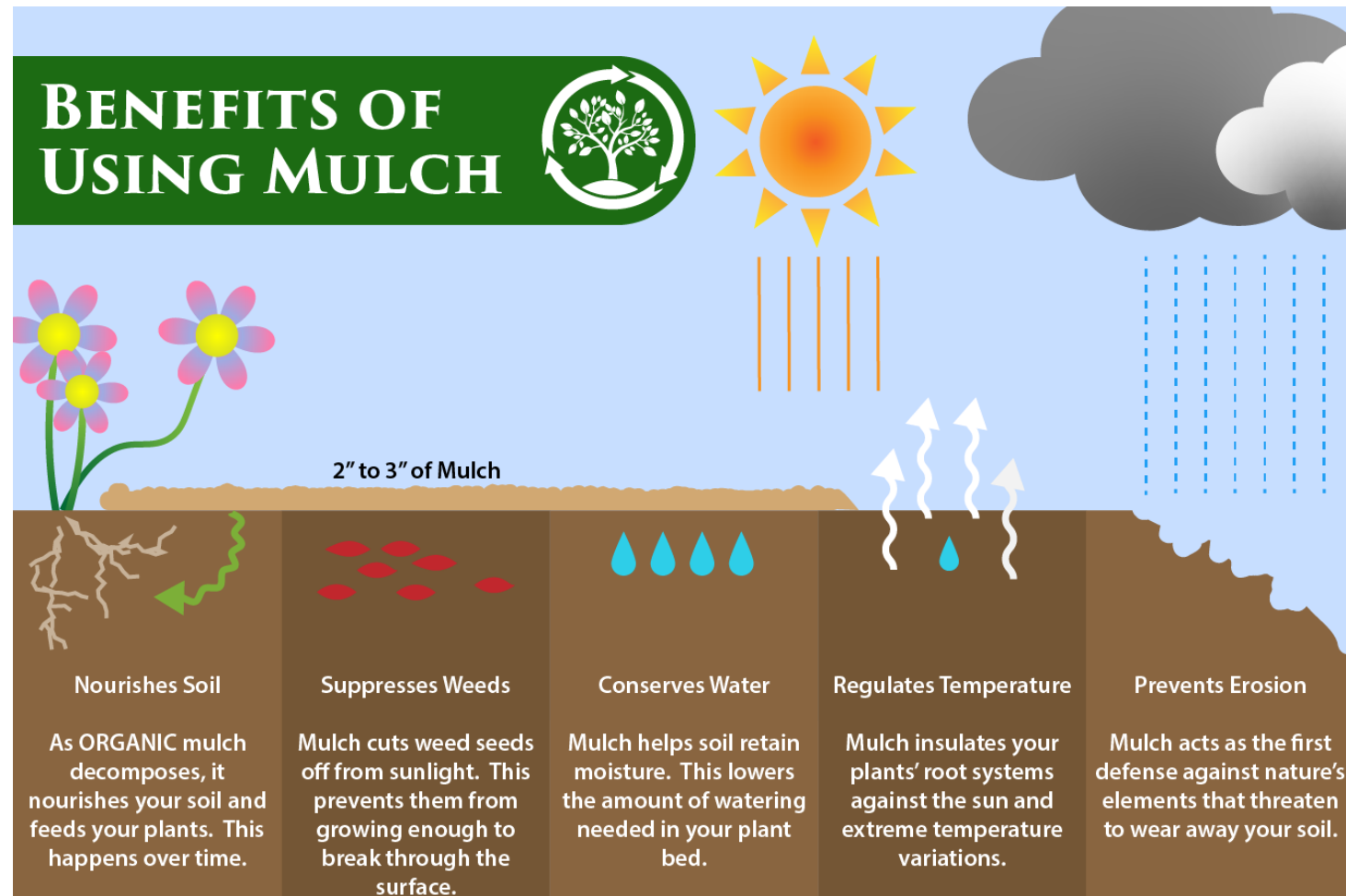


Fig 18 – Benefits of Mulch (Image Source 1st Stop Landscape Supply (US))

5.7.4 Where soft landscape planting occurs within the RPA of retained trees, we advise the use of small pot sizes and plug planting where possible to minimize the risk of root disturbance.

Plug and Pot Planting	
	Overview • Within 1.5m of retained trees planting should be with plug stock (left) • Small plant pot sizes <3l utilised for new planting in further areas. • Hand dug planting holes. • Top dressed in compacted bark mulch/ soil as appropriate. • Watered weekly May – September during season 1 & 2.
	Threat Level to Retained Trees
	LOW

5.8 Tree Shading of Proposal

- 5.8.1 The property benefits from a generally open aspect with the relationship largely unchanged. Open plan living areas with large bifold doors/ windows further maximize natural light penetration.

5.9 Arboricultural Project Supervision

- 5.9.1 Most damage to trees on developments sites is caused inadvertently and to ensure continued protection during development a system of site monitoring is normal.
- 5.9.2 Basic checks will be undertaken as the construction phase progresses to ensure that protective fencing remains intact and ensure the proposed works close to trees are completed in accordance with this report. Any unforeseen issues can be identified and discussed with the consulting arboriculturalist before any damage to trees occurs.
- 5.9.3 This approach allows a strong working relationship with the site manager/ construction staff to identify issues that may affect retained trees and ensure they are addressed before they escalate.
- 5.9.4 After each site inspection is completed, a formal record will be sent to the local authority. The nature and duration of the proposed installation is such that we advise the following regime:

Visit Detail	Date	Status
1st Site Inspection Attend site once tree protection is in place. Inspect/ Toolbox talk with site operatives regarding tree protection. Discuss site surface removal/ no dig and footing works with contractors. Update local authority on findings.	TBC	Incomplete
Final Site Inspection Final site visit to confirm that no damage has been done to retained trees/ identify any remedial actions in the event damage has occurred. Assess any required tree surgery following construction. Update local authority and project team on findings.	TBC	Incomplete

Appendix 1 – BS5837 Survey Key

BS 5837 Cat	Description
A	Those of high quality and value: in such a condition as to be able to make a substantial contribution (> 40 years)
B	Those trees of moderate quality and value: those in such a condition as to make a significant contribution (> 20 years)
C	Those trees of low quality and value: currently in an adequate condition to remain until new planting could be established (> 10 years)
U	Those in such a condition that any existing value would be lost within 10 years, and which should, in the current context, be removed regardless of development (< 10 years)

Note: Subcategories are denoted in the tree survey data (A1, B1, C2 etc.). You are referred to BS5837 for further detail if required.

Tree No.	T (tree), G (group), H (hedge), W (woodland) + Ref No.
Species	Common Name
Ht (m)	Measured height in metres
DBH (m)	Diameter at 1.5m above ground level
No of stems	An indication of the trees form @1.5m (1 = single stem, m/s = multi-stemmed)
Branch Spread	In m to cardinal points
Cr Ht Clearance (m)	Overall height of lowest branches from the ground level on side of proposed development
Life Stage	Young, Semi-Mature, Early Mature, Mature, Over-Mature
General Observations	Observations on the condition of the tree(s)
Tree Work Specification	Proposed tree works in accordance with BS3998
BS Cat	See above
Life Exp	Estimated remaining contribution in years.
RPA Radius(m)	Radius of the trees Root Protection Area measured from the trunk to the edge of the RPA circle in metres.

Appendix 2 – BS5837 Tree Classification

The classification of trees is undertaken during the survey to inform decisions as they relate to designs and retention/ removal. The ‘value’ of a tree in terms of its visual amenity is subjective and the full condition of a tree may not be apparent given access and other site-specific factors. If a tree is proposed for retention in many respects its BS category is irrelevant. We encourage the retention of all trees where the design realistically allows this with the exception of U cat trees (as these are usually ‘defect’ trees). There should not be a presumption that all C category trees can or should be removed. Generally, A & B Category trees are those of greatest value to a development and designs should be manipulated to retain these where possible. Further detail on classification of trees is contained at Section 4.5 of BS5837. Some selective extracts are detailed below:

4.5.2 *The purpose of the tree categorization method, which should be applied by an arboriculturist, is to identify the quality and value (in a non-fiscal sense) of the existing tree stock, allowing informed decisions to be made concerning which trees should be removed or retained in the event of development occurring.*

4.5.5 *When determining the appropriate category for any given tree, group, or woodland (see 4.4), the arboriculturist should start by considering whether the tree falls within the scope of category U. Assuming that it does not, the arboriculturist should then proceed on the presumption that all trees are considered according to the criteria for inclusion in category A. Trees that do not meet these criteria should then be considered in light of the criteria for inclusion in category B. This process should be repeated, as required, until the appropriate quality or value assessment is reached.*

4.5.6 *Trees of generally high quality and/or value which have a defect or defects that do not reduce their retention span below the suggested 40-year threshold, should be placed in category A, i.e. they should not be downgraded as a result of minor imperfections. **Tamla Trees Note:** We do not apply a simple >40 = Cat A approach as many trees will have retention values in excess of 40 years but not be considered Cat A.*

4.5.11 *The tree survey might identify the presence of veteran trees on the site. The implications of their presence on the use of the surrounding land should be assessed at the earliest possible stage of the design process. Where such trees are to be retained, particular care should be taken in the design to accommodate them in a setting that aids their long-term retention.*

Please note assessments are made based on available access and factors can affect full inspections (3rd party tree location, extensive basal undergrowth, Ivy etc). This survey is not a full health and safety inspection although obvious defects (where noted) will be identified.

BS5837 Table 1 is shown on the following page and provides detail on the relevant categorisation. Elements of this remain subjective and if a tree is shown for retention its category is somewhat irrelevant as we consider all trees should be afforded the same value/ protection if to be retained.

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (Including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	- Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) - Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline - Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	See Table 2
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	See Table 2
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	See Table 2

Appendix 3 – BS5837 Survey Data

Tree No.	Species	DBH (m)	No of Stems	Ht (m)	Crown Spread				BS Cat	Age Class	Life Expect	Cr Ht (m)	Observation	Recommendations	RPR (m)
					N	E	S	W							
T1	Oak	0.24	1	9.5	3.4	3.2	2.6	3	B1	Mature	> 40	4	Boundary tree. Marked up on the basis the species has long retention value. Light close.	No works	2.9
T2	Sweet Chestnut	0.65	2	6.5	2.4	2.6	2.6	2.6	C1	Mature	20 to 40	1.8	Twin stemmed boundary tree. Previously topped.	No works	7.8
T3	Pine (Scots)	0.4	1	12.5	3	3.8	4.8	4	B1	Mature	> 40	1.7	Ivy covered boundary tree but visually prominent. Appears in good condition but Ivy free inspection required to confirm.	No works	4.8
T4	Hawthorn	0.3	M/S	4.2	1.6	1.9	3.1	1.8	C1	Early mature	20 to 40	1.6	Ivy covered boundary tree with asymmetric canopy form.	No works	3.6

Tree No.	Species	DBH (m)	No of Stems	Ht (m)	Crown Spread				BS Cat	Age Class	Life Expect	Cr Ht (m)	Observation	Recommendations	RPR (m)
					N	E	S	W							
T5	Magnolia	0.3	M/S	3.5	2.7	2.5	3	2.9	B2	Mature	> 40	1.6	Established low ornamental. Striking spring feature tree.	No works	3.6
T6	Ash	0.25	1	10	3	3	3	3	C1	Mature	10 to 20	4.5	3rd party tree with no access to inspect. Previous topped. Bamboo below.	No works	3
T7	Willow	0.5	1	7	2.5	2.5	2.5	2.5	U	Mature	<10	3	3rd party tree with no access to inspect. Appears dead.	Advise 3rd party to remove.	6
T8	Willow	0.7	1	10	3.5	3.9	3.7	3.5	C1	Mature	20 to 40	2.5	3rd party tree with no access to inspect. Previously topped. Ivy.	No works	8.4
T9	Hawthorn	0.38	1	7	3.6	4	3.5	3.6	B2	Mature	> 40	2.5	Minor basal decay. Poorly reduced by pruning. Large, stemmed example for species.	No works	4.6

Tree No.	Species	DBH (m)	No of Stems	Ht (m)	Crown Spread				BS Cat	Age Class	Life Expect	Cr Ht (m)	Observation	Recommendations	RPR (m)
					N	E	S	W							
T10	Ash	0.45	1	14	6.3	5.1	5	5	C1	Mature	10 to 20	3	3rd party tree with no access to inspect. Ivy. Vigilance for Ash Dieback advised.	No works	5.4
T11	Pine (Scots)	0.5	1	12.5	3	5	5	3	B1	Mature	> 40	1.7	Ivy covered tree but visually prominent. Appears in good condition but Ivy free inspection required to confirm. 3rd party tree with no access to inspect.	No works	6
T12	Cypress	0.3	1	4.5	4	3.5	3	3	C1	Mature	20 to 40	2	3rd party tree with no access to inspect. Reduced. Poor quality tree.	No works	3.6
T13	Hawthorn	0.35	1	6	4	4	3.6	3.6	B2	Mature	> 40	2.5	Ivy covered tree but appears good form. Native value.	No works	4.2
T14	Acer	0.25	1	7.5	3	3	3	3	B1	Early mature	> 40	1.8	3rd party tree with no access to inspect. Establishing ornamental.	No works	3

Tree No.	Species	DBH (m)	No of Stems	Ht (m)	Crown Spread				BS Cat	Age Class	Life Expect	Cr Ht (m)	Observation	Recommendations	RPR (m)
					N	E	S	W							
T15	Cypress	0.25	1	7.5	2.5	2.5	2.5	2.5	B1	Early mature	> 40	1.8	3rd party tree with no access to inspect. Establishing ornamental variety.	No works	3
TG 1	Holly	0.18	1	4.5	1.6	1.6	1.6	1.6	C1	Early mature	> 40	1	3rd party trees with no access to inspect. Localised screening.	No works	2.2
TG 2	Hawthorn, Pear/ Prunus spp	0.2	1	8	3	3	3	3	C1	Early mature	> 40	1	3rd party trees with no access to inspect. Ivy, localised screening.	No works	2.4

Appendix 4 – Tree Works Schedule

Tree Surgery

Tree No.	Species	Proposed Tree Works	BS Cat

Proposed Removal

Tree No.	Species	Proposed Tree Works	BS Cat

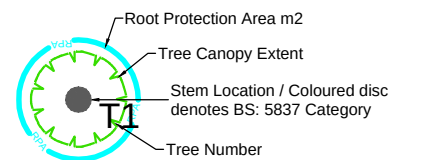
NOTE: All tree works to be undertaken in accordance with BS 3998:2010 'Tree work - Recommendations'.

Appendix 5 - Tree Constraints Plan



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Tree Survey Drawing Key



See Tamla Trees, Tree Survey for Individual Tree Details

KEY

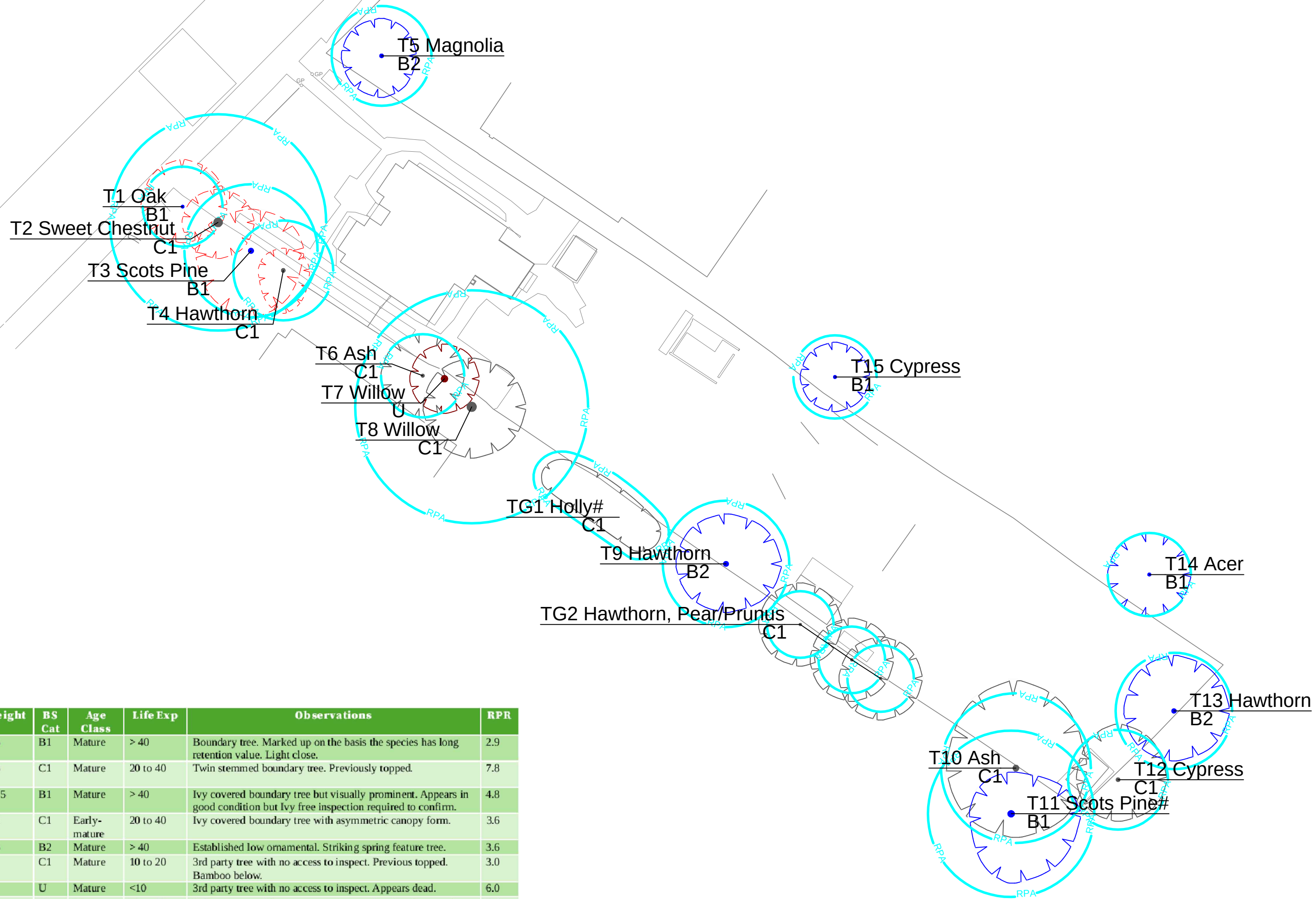
Please refer to Tamla Trees report for details

- Category A - Trees of high quality
- Category B - moderate quality
- Category C - low quality
- Category U - Dead, Dying or Defect trees with <10 years retention value

RPA - root protection area as defined by Table 2 BS 5837:2012

Tree removed since survey

Tree No	Species	DBH	Height	BS Cat	Age Class	Life Exp	Observations	RPR
T1	Oak	0.24	9.5	B1	Mature	> 40	Boundary tree. Marked up on the basis the species has long retention value. Light close.	2.9
T2	Sweet Chestnut	0.65	6.5	C1	Mature	20 to 40	Twin stemmed boundary tree. Previously topped.	7.8
T3	Pine (Scots)	0.4	12.5	B1	Mature	> 40	Ivy covered boundary tree but visually prominent. Appears in good condition but Ivy free inspection required to confirm.	4.8
T4	Hawthorn	0.3	4.2	C1	Early-mature	20 to 40	Ivy covered boundary tree with asymmetric canopy form.	3.6
T5	Magnolia	0.3	3.5	B2	Mature	> 40	Established low ornamental. Striking spring feature tree.	3.6
T6	Ash	0.25	10	C1	Mature	10 to 20	3rd party tree with no access to inspect. Previous topped. Bamboo below.	3.0
T7	Willow	0.5	7	U	Mature	<10	3rd party tree with no access to inspect. Appears dead.	6.0
T8	Willow	0.7	10	C1	Mature	20 to 40	3rd party tree with no access to inspect. Previously topped.	8.4
T9	Hawthorn	0.38	7	B2	Mature	> 40	Minor basal decay. Poorly reduced by pruning. Large, stemmed example for species.	4.6
T10	Ash	0.45	14	C1	Mature	10 to 20	3rd party tree with no access to inspect. Ivy. Vigilance for Ash Dieback advised.	5.4
T11	Pine (Scots)	0.5	12.5	B1	Mature	> 40	Ivy covered tree but visually prominent. Appears in good condition but Ivy free inspection required to confirm. 3rd party tree with no access to inspect.	6.0
T12	Cypress	0.3	4.5	C1	Mature	20 to 40	3rd party tree with no access to inspect. Reduced. Poor quality tree.	3.6
T13	Hawthorn	0.35	6	B2	Mature	> 40	Ivy covered tree but appears good form. Native value.	4.2
T14	Acer	0.25	7.5	B1	Early-mature	> 40	3rd party tree with no access to inspect. Establishing ornamental.	3.0
T15	Cypress	0.25	7.5	B1	Early-mature	> 40	3rd party tree with no access to inspect. Establishing ornamental variety.	3.0
TG1	Holly	0.18	4.5	C1	Early-mature	> 40	3rd party trees with no access to inspect. Localised screening.	2.2
TG2	Hawthorn, Pear/ Prunus spp	0.2	8	C1	Early-mature	> 40	3rd party trees with no access to inspect. Ivy, localised screening.	2.4



NOTE # Tree positions indicatively mapped due to lack of detailed topographical plan

REV AMENDMENTS DRAWN DATE AUTHD

PROJECT
47 Simon's Lane,
Wokingham,
RG41 3HG

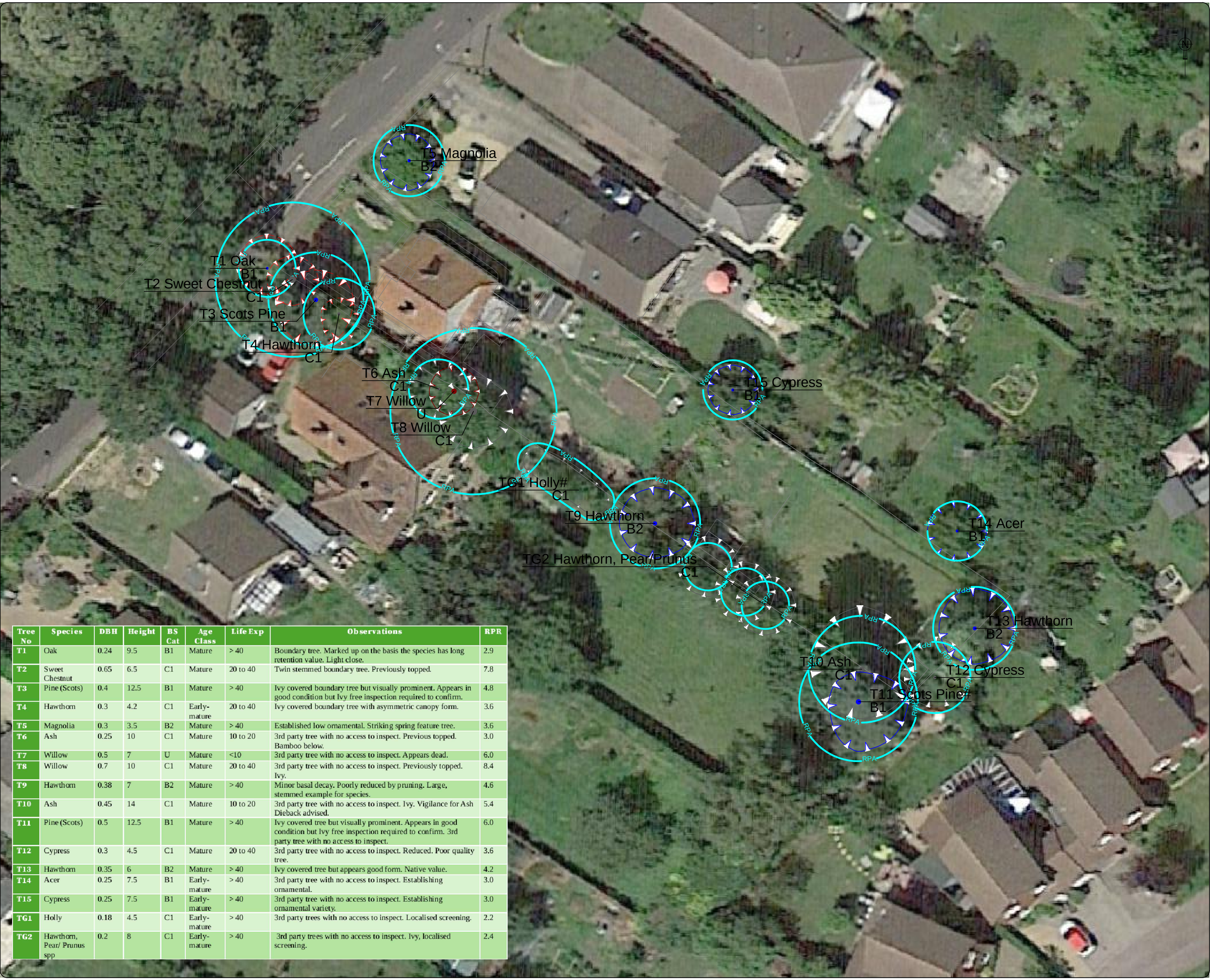
CLIENT
Mr & Mrs Morgan

TITLE
Tree Constraint Plan (TCP)

Job	Scale	DRG NO	Revision
05072R	1:250 @ A2		
Date	Type	05072P_TCP_01	A
01/07/2024	a		

Tel: 01252 811 233
Email: info@tamlatrees.com
Web: www.tamlatrees.com

Tamla Trees
consulting arborists



Tree No	Species	DBH	Height	BS Cat	Age Class	Life Exp	Observations	RPR
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T13	Hawthorn	0.35	6	B2	Mature	> 40	Ivy covered tree but appears good form. Native value.	4.2
T14	Acer	0.25	7.5	B1	Early-mature	> 40	3rd party tree with no access to inspect. Establishing ornamental.	3.0
T15	Cypress	0.25	7.5	B1	Early-mature	> 40	3rd party tree with no access to inspect. Establishing ornamental variety.	3.0
TG1	Holly	0.18	4.5	C1	Early-mature	> 40	3rd party trees with no access to inspect. Localised screening.	2.2
TG2	Hawthorn, Pear/ Prunus spp	0.2	8	C1	Early-mature	> 40	3rd party trees with no access to inspect. Ivy, localised screening.	2.4

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Tree Survey Drawing Key

Root Protection Area m2

Tree Canopy Extent

Stem Location / Coloured disc denotes BS: 5837 Category

Tree Number

See Tamla Trees, Tree Survey for Individual Tree Details

KEY

Please refer to Tamla Trees report for details

Category A - Trees of high quality

Category B - moderate quality

Category C - low quality

Category U - Dead, Dying or Defect trees with <10 years retention value

RPA - root protection area as defined by Table 2 BS 5837:2012

Tree removed since survey

NOTE # Tree positions indicatively mapped due to lack of detailed topographical plan

REV

AMENDMENTS

DRAWN

DATE

AUTHD

PROJECT

47 Simon's Lane,
Wokingham,
RG41 3HG

CUSTOMER

Mr & Mrs Morgan

TITLE

Tree Constraint Plan (TCP)

Job

05072R

Date

01/07/2024

Scale

1:250 @ A2

Type

a

DRG NO

05072P_TCP_02

Revision

A

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Tamla Trees

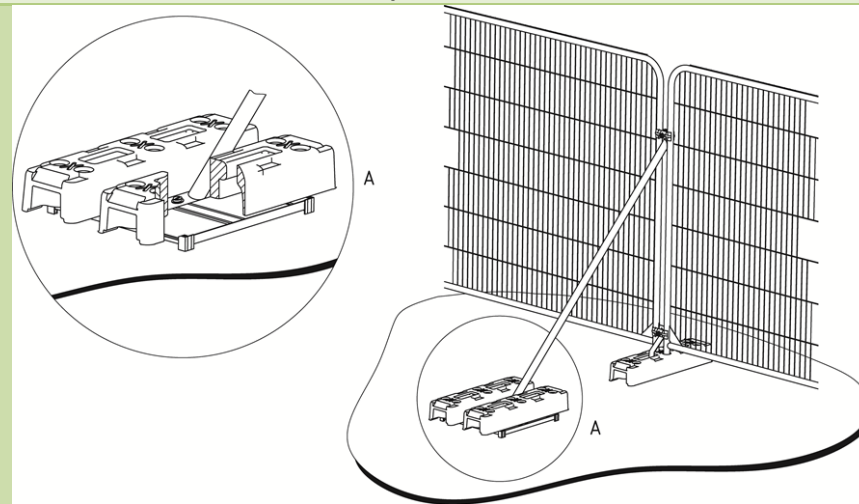
consulting arborists

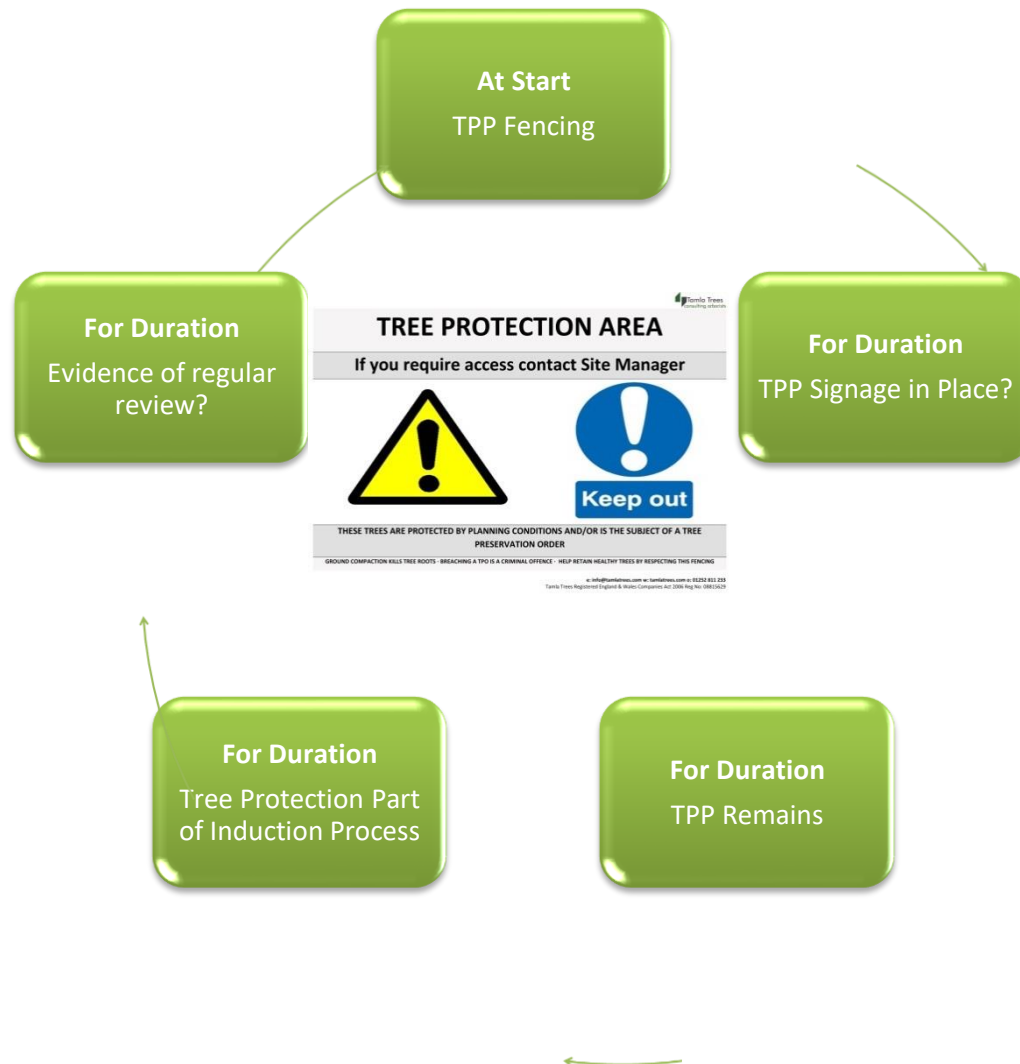
Appendix 6 - Tree Protection Plan

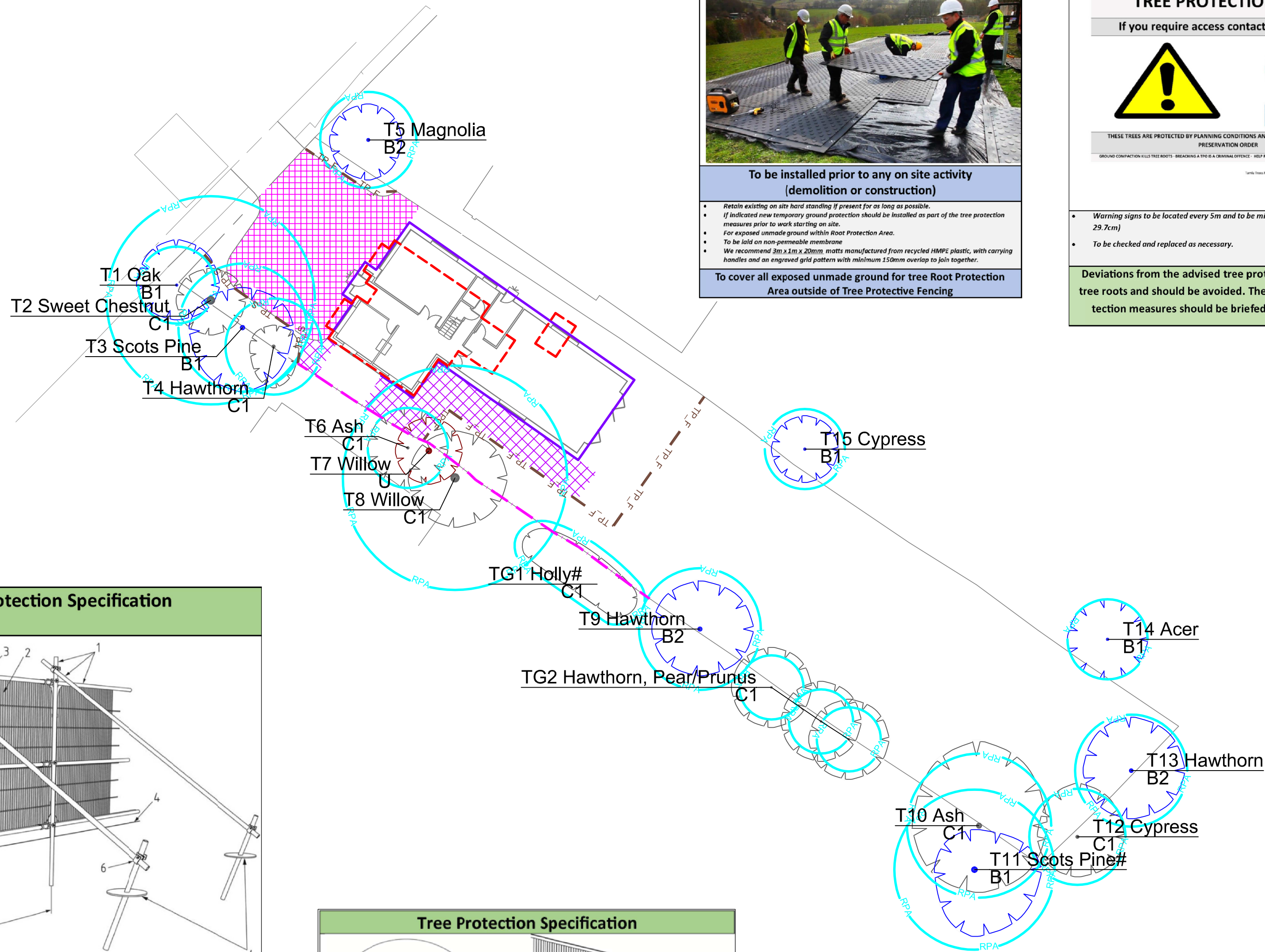
Tree protection is essential to successfully integrate the proposal into the surrounding trees. It is designed to manage the impact on the underlying soil and rooting environment. It must therefore be installed prior to any further site activity. Even apparently minimal tracking of the soil near trees has the capacity to irretrievably modify the soil environment to the detriment of tree health and stability.

All our fencing specifications accord with advice and guidance within BS 5837. Modifications to fence types are possible but should be discussed prior to implementation. In all other instances the form detailed below should be shown. This offers the best protection to retained trees.

- All tree protection must be in place prior to any site activities. It is recommended that this fencing is installed prior to any site works (including demolition).
- To be effective Tree Protection must remain in place for the duration of the development and form part of the site induction process.
- Site operatives to be briefed on ground protection prior to work commencing.
- On this project feet fencing specification proposed (right) for the rear with full scaffold for front garden fencing and to be combined with temporary ground protection (not shown).







Temporary Ground Protection Specification

To be installed prior to any on site activity (demolition or construction)

- Retain existing on site hard standing if present for as long as possible.
- If indicated new temporary ground protection should be installed as part of the tree protection measures prior to work starting on site.
- For exposed unmade ground within Root Protection Area.
- To be laid on non-permeable membrane
- We recommend 3m x 1m x 20mm matts manufactured from recycled HMPE plastic, with carrying handles and an engraved grid pattern with minimum 150mm overlap to join together.

To cover all exposed unmade ground for tree Root Protection Area outside of Tree Protective Fencing

TREE PROTECTION AREA

If you require access contact Site Manager

Keep out

THESE TREES ARE PROTECTED BY PLANNING CONDITIONS AND/OR IS THE SUBJECT OF A TREE PRESERVATION ORDER

GROUND CONSTRUCTION KILLS TREE ROOTS - BREAKING A TREE IS A CRIMINAL OFFENCE - HELP RETAIN HEALTHY TREES BY RESPECTING THIS FENCING

• Warning signs to be located every 5m and to be minimum A3 in size (i.e. 42cm x 29.7cm)

• To be checked and replaced as necessary.

Deviations from the advised tree protection compromises tree roots and should be avoided. The purpose of tree protection measures should be briefed to all on site staff.

Tree Protection Specification

Fencing to be installed prior to any on site activity (demolition or construction)

- Scaffold frame should be spaced at a maximum interval of 3 m and driven securely into the ground.
- Welded mesh panels should be securely fixed.
- Care should be exercised when locating the vertical poles to avoid underground services and, structural tree roots.
- Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabilizer struts should be mounted on a block tray.
- Fencing should not be moved without prior approval.

Tree Protection Specification

Fencing to be installed prior to any on site activity (demolition or construction)

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DO NOT SCALE FROM THIS DRAWING

Tree Survey Drawing Key

See Tamla Trees, Tree Survey for Individual Tree Details

KEY

Please refer to Tamla Trees report for details

- Category A - Trees of high quality
- Category B - moderate quality
- Category C - low quality
- Category U - Dead, Dying or Defect trees with <10 years retention value

- RPA - root protection area as defined by Table 2 BS 5837:2012
- Location of protective fencing - BS 5837 Feet Fence (or similar)
- Location of protective fencing - Scaffold Frame Fence
- Existing boundary acting as protective fencing
- Temporary ground protection
- No dig construction
- Existing building
- Proposed building

NOTE # Tree positions indicatively mapped due to lack of detailed topographical plan

REV AMENDMENTS DRAWN DATE AUTHD

PROJECT
47 Simon's Lane, Wokingham, RG41 3HG

CLIENT
Mr & Mrs Morgan

TITLE
Tree Protection Plan (TPP)

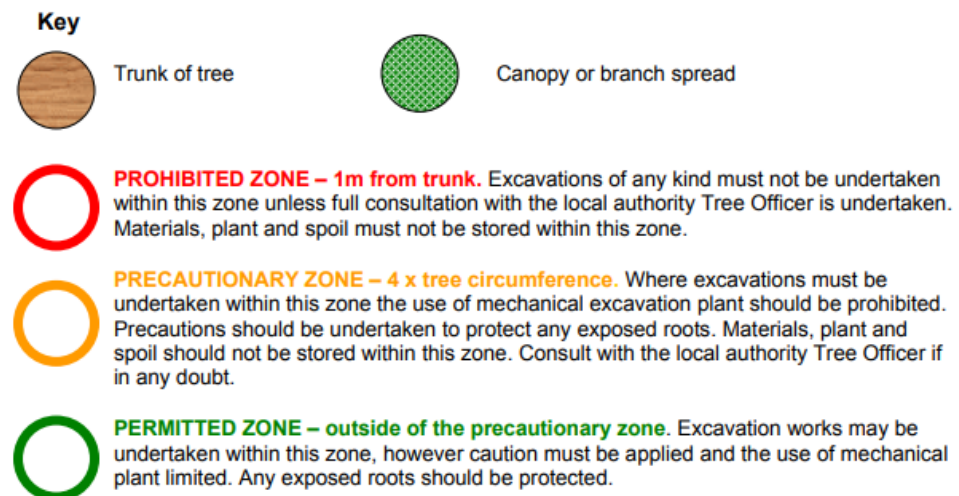
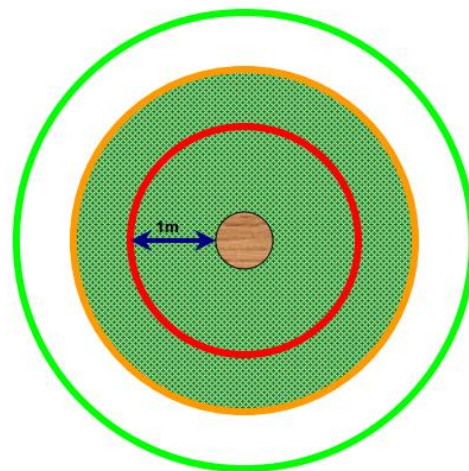
Job 05072R	Scale 1:250 @ A2	DRG NO 05072P_TPP_01	Revision E
Date 18/09/2024	Type A		

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Email: info@tamlatrees.com
Web: www.tamlatrees.com

Tamla Trees
consulting arborists

Appendix 7 - Tree & Services Plan

- Indicative service routes relative to retained tree and Root Protection Areas
- To be kept under review as part of site inspection process.
- **Note:** All service companies should be provided with a copy of the Tree Protection Plan as early in the design process as possible to ensure that service routes are located outside RPA's where possible.
- NJUG 4 – National Joint Utilities Group “Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Volume 4, issue 2. London: NJUG 2007” to be adhered to at all times. A copy is available [here](#).



Extract from National Joint Utilities Group “Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees. Volume 4, issue 2. London: NJUG 2007”

No Service Plan is currently available – all services advised as located outside RPA's.

Appendix 8 – Site Photographs



Image 1 – T8 relative to the property from the rear.



Image 2 – T2 T3 & T4



Image 3 – T5 Magnolia

Appendix 9 – Limitations

Full Legal Disclaimer

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Specific - Trees

All tree inspections, unless specified, have been undertaken from ground level and using non-invasive techniques. Comments contained within the report on the condition and risk associated with any tree relate to the condition of the tree at the date and time of survey. Please note that the condition of trees is subject to change. This change may occur but is not limited to biological and non-biological factors as well as mechanical/ physical changes to conditions in the proximity of the tree. Trees should be inspected at intervals relative to risk/ target areas and in accordance with relevant [HSE guidance](#). Tamla Trees Ltd can provide further information on this matter if required. Where full access to trees (Ivy, materials at base, location on 3rd party land) was not possible Tamla Trees Ltd accept no liability for issues that arise.

Please note no statutory control checks have been undertaken (unless specified). Where tree surgery works have been identified these works are based on the assumption that planning is approved, no tree works should be undertaken prior to determination of this application without up-to-date confirmation of the Tree Preservation Order / Conservation Area Status of the vegetation. All works should be undertaken in accordance with the appropriate Duty of Care. This should include, for example, site specific risk assessments and due diligence inspections for the presence of protected species.

Any comment/ measurements relating to 3rd party trees have been made without full access to the tree(s). Should these trees have any impact on the proposed development we would advise you to instruct us to contact the 3rd party and undertake further detailed inspection work.

A legal Duty of Care requires that any tree works specified in this report should be performed by qualified, arboricultural contractors who have been competency tested to determine their suitability for such works in line with Health & Safety Executive Guidelines. Additionally, all works should be carried out according to British Standard 3998 (2010) Recommendations for Tree Work.