arbtech

Arboricultural Method Statement

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Table of Contents

Introduction

Instruction

Arbtech Consulting Limited (Arbtech) received written instruction on 24 September 2024 from Mr E Caruana to attend 15 Groby Road, Ratby, Leicestershire, LE6 0LJ; grid reference, SK 51414 06251 (site) to undertake an arboricultural survey to BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of Trees, Tree Constraints Plan, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

Executive Summary

A tree survey guided by British Standard 5837:2012 'Trees in relation to design, demolition and construction – Recommendations' ("BS5837") was carried out to include all trees within influencing distance of the proposed area for development.

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

It is the conclusion of this report that if followed, the overall quality and longevity of the amenity contribution provided for by retained 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.

Table 1: Documents referred to

Document	Originator	Reference Number	Title
Survey base drawing	Malcolm Hughes Land Surveyors		OS Tile
Proposed layout drawing	Happinest	15 - GR - 113	Proposed Block Plan
Tree Schedule (TS)	Arbtech Consulting Ltd	Arbtech TS 01	Tree Schedule
Arboricultural Impact Assessment (AIA)	Arbtech Consulting Ltd	Arbtech AIA 01	Arboricultural Impact Assessment
Tree Protection Plan (TPP)	Arbtech Consulting Ltd	Arbtech TPP 01	Tree Protection Plan

Tree Survey

An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Alan Smith on 15 October 2024.

A total of 19No. individual trees and 6No. groups of trees were surveyed.

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

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 Jon Hartley on 01 July 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.

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 2: Impacts upon the RPAs of retained trees

Tree Number	Species	Structure	Incursion	
			(m^2)	(%)
G03	A Group	Carport/toolshed	0.8	2.1
G03	A Group	Fence	Negligible	0.0
G04	A Group	Fence	Negligible	0.0
G05	A Group	Fence	Negligible	0.0
G06	A Group	Fence	Negligible	0.0
T02	Western Red Cedar	Boundary wall	9.2	3.7
T02	Western Red Cedar	Hard surfacing	3.8	1.5
T04	Lawson Cypress	Hard surfacing	0.8	0.5
T04	Lawson Cypress	Boundary wall	4.3	2.8
T07	Common Horse Chestnut	Carport/toolshed	6.3	2.0

Tree Number	Species	Structure	Incursion	
			(m^2)	(%)
T07	Common Horse Chestnut	Infill-building	2.5	0.8
T07	Common Horse Chestnut	Fence	Negligible	0.0
T08	Common Lime	Fence	Negligible	0.0
T09	Common Ash	Fence	Negligible	0.0
T10	Common Lime	Fence	Negligible	0.0
T13	Common Ash	Fence	Negligible	0.0
T14	Common Lime	Fence	Negligible	0.0
T15	Common Lime	Fence	Negligible	0.0
T16	Common Lime	Fence	Negligible	0.0
T18	Common Ash	Fence	Negligible	0.0
T19	Goat Willow	Fence	Negligible	0.0

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 6No. individual trees and 2No. groups of trees will require removal as part of this proposed scheme.

A breakdown of all tree works can be seen in Table 6: Summary of tree works.

Table 3: Number of individual trees to be removed

U	A	B	C
0	0	1	5

Table 4: Number of groups to be removed

U	A	B	C
0 (0)	0 (0)	0 (0)	2 (0)

() = partial removal of a group

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.

Sequencing of works

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

Table 5: Sequencing of works

Stage	Event
Stage 1.	Undertake and complete tree works as specified within Table 6: 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.	Re-location of protective measures in accordance with approved Tree Protective Plan(s) (Construction Phase) (Arbtech TPP 01).
Stage 6.	Undertake and complete ground works.
Stage 7.	Undertake and complete construction works
Stage 8.	Undertake and complete external landscaping outside of the construction exclusion zones (CEZs).
Stage 9.	Removal of all machinery and materials from the site.

Stage 10.	Dismantle and removal of protective tree measures.
Stage 11.	Undertake and complete external landscaping within the construction exclusion zones (CEZs).
Stage 12.	Site completion and sign-off from Project Arboriculturalist.

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 6: Summary of tree works

Tree Number	Species	Works	Category
G01	A Group	Fell to ground level & grind stumps.	C2
G02	A Group	Fell to ground level & grind stumps.	C2
G03	A Group	Prune: Crown lift trees locally to achieve 2m clearance to the proposed carport/toolshed, and allow for installation of the proposed fence.	C2
G04	A Group	Prune to gain access for the installation of the boundary fence.	C2
G06	A Group	Prune to gain access for the installation of the boundary fence.	C2
T01	Common Holly	Fell to ground level & grind stump.	B1
T03	Lawson Cypress	Fell to ground level & grind stump.	C1
T04	Lawson Cypress	Prune: Crown lift to achieve 3.5m clearance over the driveway.	B1
T05	Myrobalan Plum	Fell to ground level & grind stump.	C1
T06	Myrobalan Plum	Fell to ground level & grind stump.	C1
T11	Plum	Fell to ground level & grind stump.	C1
T12	Common Lime	Prune. Crown lift southeast canopy to achieve 2m clearance from the existing structure.	B1
T17	Common Ash	Fell to ground level & grind stump.	C1
T19	Goat Willow	Prune to gain access for the installation of the boundary fence.	B1

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.

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.

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: 02 July 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 in any other way disturbed by construction activity.

The protective measures will remain in place until the completion of Stage 9 (see Table 5: 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.

Secondary specification: The fence will comprise 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.

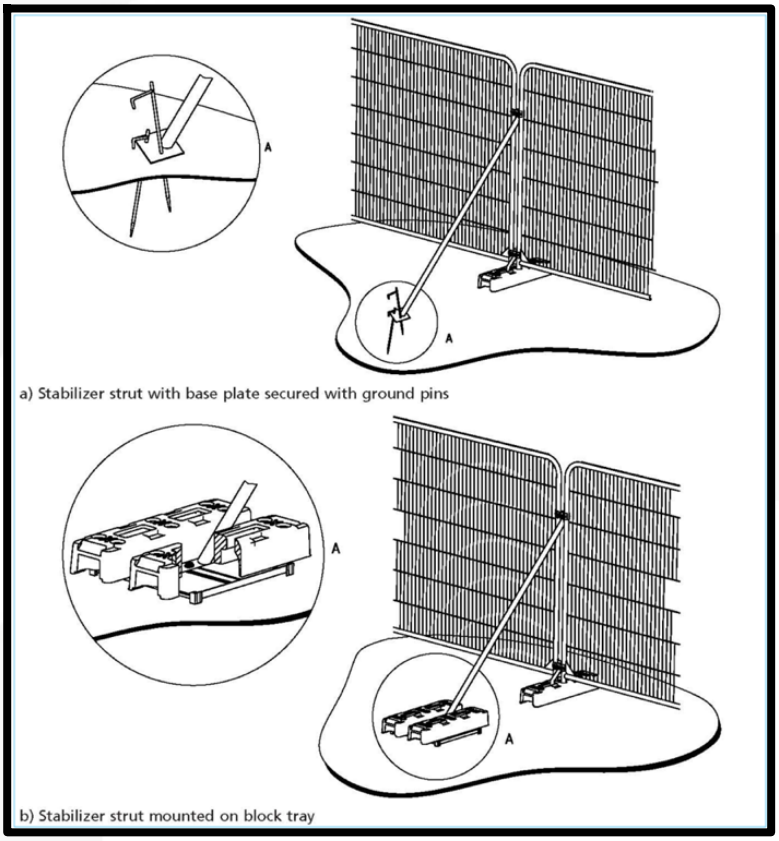


Figure 1: Example of protective barrier fencing with above-ground stabilising system (BS5837)

Ground Protection

The existing hard surfacing within the RPAs of retained trees, 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.

At this stage, no contractors have been approached, so it is not possible to know exactly what equipment they have available and will be using.

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 the site investigations.

Infill Building

The Infill Building within the RPA of tree T07 may utilise traditional strip foundations as the extent of the installation is small enough, and far enough away from the tree so as to be highly unlikely to impact upon significant individual roots or root masses. Excavation for these foundations will be undertaken using **Manual Excavation** techniques.

Carport/Tool Shed

Where a slab for minor structures (e.g. carport/tool shed) is to be formed within the RPA, it will bear on the existing ground level, and should not exceed an area greater than 20% of the existing unsurfaced ground.

Boundary and Entrance Walls

The boundary wall and entrance wall will utilise a piled foundation with an above-ground beam to minimise

Root damage will be minimised by using:

- Piles with site investigation used to be determined their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm;
- Beams, laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.

Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters for ground boarding. Use of the smallest practical piling rig is also important where piling within the branch spread is proposed, as this can reduce the need for access facilitation pruning. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of uncured concrete, e.g. sleeved bored piles or screw piles.

Boundary/Acoustic Fences

Proposed and/or replacement boundary fence posts are to be located so that they will not damage or require the removal of significant roots 25mm or greater in diameter. This may require individual posts to be relocated.

Note: *this will increase or decrease the spacing between the posts (bay lengths).*

All posts within the RPAs of retained trees are to be excavated manually using handheld tools (spade, shovel, rabbiting spade, post hole digger); no mechanised equipment (handheld or plant-mounted post borer) is to be used.

Concrete Use within RPAs

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 Arboriculturalist 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 Arboriculturist 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 Arboriculturalist 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 new 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. Pre-commencement site meeting (construction phase).
4. Supervised excavations for hard surfacing within RPA of tree T02.
5. Supervised excavations for site investigations to inform pile locations for the boundary and entrance wall foundations within the RPA of tree T02.
6. Supervised excavations for hard surfacing within RPA of tree T04.
7. Supervised excavations for site investigations to inform pile locations for the boundary wall foundations within the RPA of tree T04.
8. Supervised excavations for site investigations to inform foundation design for the carport/tool shed within RPA of tree T07.
9. Supervised excavations for foundations for infill building within the RPA of tree T07.
10. Supervised excavations for acoustic boundary fence posts within RPAs of trees G03-06, T07-10, T13-16 & T18-19.
11. Any demolition and or excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services (a non-exhaustive list).
12. Arboricultural sign off and removal of protective measures.

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.

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,

Jon Hartley BSc (Hons) MArborA

Principal Arboricultural Consultant

07860951396

jh@arbtech.co.uk

Appendix 1: Tree Schedule

BS5837:2012 Tree Survey

Arbtech Consulting Limited
Unit 3
Well House Barns
Chester
Cheshire
CH4 0DH
Phone: 07706323231

Client: Mr E Caruana
Project: 15 Groby Road, Ratby, Leicestershire, LE6 0LJ
Survey Date: 15/10/2024
Surveyor: Alan Smith

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
G01										Estimated Measurements	
A Group	6	1	100	N 2	1.5	EM	A: 4.5	Good	C: Good		C.2
See comments for details				E 2	1.5		R: 1.19		S: Good	Small cluster of cherry laurel stems located along the east planting border, adjacent to the site driveway/entrance; no significant/notable features; good overall condition; low landscape value.	10+ yrs
				S 2	1.5				B: Good		
				W 2	1.5						
G02										Estimated Measurements	
A Group	3	1	75	N 1.5	0	EM	A: 2.5	Fair	C: Fair		C.2
See comments for details				E 1.5	0		R: 0.89		S: Fair	Dense collection of small trees and shrubs located within the driveway planting border; species include cherry laurel, pear, japonica, rhododendron, blackthorn, plum, lilac, yew and sycamore; generally good condition throughout; low landscape value; recorded measurements denote the estimated maximum dimensions for the group.	10+ yrs
				S 1.5	0				B: Not visible		
				W 1.5	0						
G03										Estimated Measurements	
A Group	8	4	288 (Eq)	N 5	2	SM	A: 37.5	Fair	C: Fair		C.2
See comments for details				E 5	2		R: 3.45		S: Ivy	Clusters of self-set, multi-stemmed sycamore and hawthorn; prolific ivy growing throughout; fair overall condition; low value specimens; recorded measurements denote the estimated maximum dimensions for the group.	10+ yrs
				S 5	2				B: Not visible		
				W 5	2						
G04										Estimated Measurements	
A Group	8	1	210	N 2	0	M	A: 20	Fair	C: Fair		C.2
See comments for details				E 2	0		R: 2.52		S: Ivy	Tree group located along the north site boundary fence, forming an understorey to the dominant trees; species include hawthorn and holly; prolific ivy growing throughout; poor form and generally low value specimens; recorded measurements denote the estimated maximum dimensions for the group.	10+ yrs
				S 2	0				B: Not visible		
				W 2	0						

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
G05										Estimated Measurements	
A Group *See comments for details*	17	1	780	N 7 E 7 S 7 W 7	4 4 4 4	M	A: 275.3 R: 9.36	Good	C: Good S: Good B: Good	Linear group of mature lime trees with sporadic hawthorn and elder forming an understorey to the dominant trees; trees within the group share a combined canopy and exhibit a range of features commensurate with species and maturity; crowns contain a small amount of minor to moderate dead wood (25-50mm) throughout; generally good structural and physiological condition throughout; recorded measurements denote the maximum dimensions for the group.	**B.2** 20+ yrs
G06										Estimated Measurements	
A Group *See comments for details*	6.5	1	100	N 2.5 E 2.5 S 2.5 W 2.5	1 1 1 1	Y	A: 4.5 R: 1.19	Good	C: Good S: Good B: Good	Linear collection of young/newly planted Prunus species (15 trees), located along the south site boundary planting border; no significant/notable features; generally good condition throughout; recorded measurements denote the maximum dimensions for the group.	**C.2** 20+ yrs
T01										Estimated Measurements	
Common Holly *Ilex aquifolium*	9	1	200	N 2 E 3 S 2 W 3	1.5 1.5 2 2	SM	A: 18.1 R: 2.4	Good	C: Good S: Good B: Not visible	Typical form of species; one main stem and minor surrounding stems; stem has a slight southward lean, due to suppression from dominant neighbouring tree; good overall condition; recorded measurements are estimates due to limited access.	**B.1** 20+ yrs
T02										Estimated Measurements	
Western Red Cedar *Thuja plicata*	18	3	737 (Eq)	N 4.5 E 4.5 S 4.5 W 4.5	0.5 2.5 2 2.5	M	A: 246 R: 8.84	Good	C: Fair S: Ivy B: Good	Multi-stemmed from ground level; prolific ivy covers the entirety of all stems and inner crown; apical dieback evident at southernmost stem, crown otherwise indicates good vitality; fair overall condition.	**B.1** 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T03											
Lawson Cypress *Chamaecyparis lawsoniana*	18.5	2	617 (Eq)	N 3 E 3 S 4 W 3	2 3 2 2	M	A: 172.3 R: 7.4	Decline	C: Fair S: Fair B: Good	Twin-stemmed from ground level, with adjoining/included bark between stems up to approx. 1m; ivy-clad north stem; crown appears sparse with minor to moderate dead wood (25-50mm) throughout, suggesting some physiological dysfunction; fair overall condition at present.	**C.1** 10+ yrs
T04										Estimated Measurements	
Lawson Cypress *Chamaecyparis lawsoniana*	19	3	583 (Eq)	N 3.5 E 4 S 3 W 4	2 2 2 3	M	A: 153.8 R: 6.99	Good	C: Good S: Ivy B: Not visible	Multi-stemmed from ground level; prolific ivy and surrounding vegetation obscures the lower stems and basal area; tall and wide spreading crown, typical of species; good overall condition; recorded measurements are estimates due to limited access.	**B.1** 20+ yrs
T05											
Myrobalan Plum *Prunus cerasifera*	7	1	470	N 3.5 E 3 S 3.5 W 3	2 3 3 2	M	A: 99.9 R: 5.63	Good	C: Good S: Fair B: Fair	Mature specimen, located along the boundary planting border; typical form of species; *Ganaderma australe/ applanatum* fruiting bodies present at base of stem, however, crown foliage indicates good vitality at present.	**C.1** 10+ yrs
T06										Estimated Measurements	
Myrobalan Plum *Prunus cerasifera*	7	1	350	N 2 E 2 S 2.5 W 2	2.5 2 2 2.5	M	A: 55.4 R: 4.19	Fair	C: Fair S: Ivy B: Fair	Mature specimen, located along boundary planting border; typical form of species; prolific ivy obscures the entire stem; *Ganaderma australe/applanatum* fruiting bodies present at base of stem; crown foliage indicates fair vitality at present; recorded measurements are estimates due to limited access.	**C.1** 10+ yrs
T07											
Common Horse Chestnut *Aesculus hippocastanum*	16	1	840	N 7 E 7 S 4.5 W 5	3 5 3 4	M	A: 319.2 R: 10.07	Good	C: Good S: Ivy B: Good	Mature specimen, located on raised border (approx.1.5m above driveway level); stem bifurcates at approx. 1.5m; prolific ivy obscures the south stem and inner crown; crown contains a small amount of minor deadwood (<25mm) throughout; generally good overall condition.	**B.1** 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T08										Estimated Measurements	
Common Lime *Tilia europaea*	18	2	500 (Eq)	N 4 E 4 S 4 W 3	2 2 2 2	M	A: 113.1 R: 6	Good	C: Good S: Good B: Not visible	Off-site tree, located just beyond the site boundary fence; typical form of species; twin-stemmed from ground level; lower stem and basal area obscured by boundary fence; good structural and physiological condition; recorded measurements are estimates due to limited access.	**B.1** 20+ yrs
T09										Estimated Measurements	
Common Ash *Fraxinus excelsior*	18	1	800	N 10 E 11 S 10.5 W 10.5	1.5 5 4 4	M	A: 289.6 R: 9.6	Good	C: Good S: Good B: Not visible	Mature specimen, located along the north site boundary; lower stem and basal area obscured by surrounding vegetation; stem bifurcates at approx. 2m, into co-dominant stems; tall and wide spreading crown; crown historically raised, pruning wounds now showing full and partial occlusion; minor deadwood (<25mm) throughout; good structural and physiological condition; recorded measurements are estimates due to limited access.	**B.1** 20+ yrs
T10											
Common Lime *Tilia europaea*	18	1	410	N 4.5 E 4.5 S 4.5 W 3	5 4 3 5	M	A: 76.1 R: 4.92	Good	C: Good S: Good B: Good	Mature specimen; typical form of species; no significant/notable features; good structural and physiological condition.	**B.1** 20+ yrs
T11											
Plum *Prunus Domestica*	5	2	168 (Eq)	N 1.5 E 3 S 5 W 2	2 2.5 2.5 1	EM	A: 12.7 R: 2.01	Good	C: Good S: Ivy B: Not visible	Suppressed form; stem has a pronounced southward lean; south side of canopy touching adjacent outbuilding; fair overall condition.	**C.1** 10+ yrs
T12											
Common Lime *Tilia europaea*	18	1	340	N 2 E 4 S 6.5 W 3	3 3 3 2	M	A: 52.3 R: 4.08	Good	C: Good S: Good B: Good	Mature specimen; typical form of species; no significant/notable features; good structural and physiological condition.	**B.1** 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T13										Estimated Measurements	
Common Ash *Fraxinus excelsior*	18	3	793 (Eq)	N 9 E 4 S 8 W 5	4 5 8 8	M	A: 284.2 R: 9.51	Good	C: Good S: Good B: Good	Mature specimen, located along the north site boundary; multi-stemmed from ground level; tall and wide spreading crown; minor deadwood (<25mm) throughout; good structural and physiological condition.	**B.1** 20+ yrs
T14											
Common Lime *Tilia europaea*	18	1	470	N 2.5 E 2.5 S 8 W 2.5	3 3 3 4	M	A: 99.9 R: 5.63	Good	C: Good S: Good B: Good	Mature specimen; typical form of species; crown contains a small amount of minor to moderate dead wood (25-50mm) throughout; good structural and physiological condition.	**B.1** 20+ yrs
T15											
Common Lime *Tilia europaea*	18	1	610	N 6 E 4.5 S 7 W 4.5	2 4 2.5 7	M	A: 168.4 R: 7.32	Good	C: Good S: Good B: Good	Mature specimen; typical form of species; crown contains a small amount of minor to moderate dead wood (25-50mm) throughout; good structural and physiological condition.	**B.1** 20+ yrs
T16											
Common Lime *Tilia europaea*	15	1	460	N 6 E 3 S 3 W 4.5	7 5 5 3	M	A: 95.7 R: 5.51	Good	C: Good S: Good B: Good	Mature specimen; typical form of species; crown contains a small amount of minor to moderate dead wood (25-50mm) throughout; good structural and physiological condition.	**B.1** 20+ yrs
T17										Estimated Measurements	
Common Ash *Fraxinus excelsior*	17	1	280	N 3.5 E 3 S 3 W 4	4 7 7 7	M	A: 35.5 R: 3.36	Fair	C: Fair S: Ivy B: Poor	Mature specimen, located along the west side boundary; formally twin-stemmed, one stem removed at approx. 2m and rests against boundary fence; remaining stem is heavily clad with ivy and has a pronounced westward lean towards the adjacent neighbouring garden; exposed surface roots and visible hollow beneath root plate suggest possible rootplate movement; fair physiological condition at present, however poor overall form; low value specimen requires removal to prevent risk of uprooting.	**C.1** 10+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Tree and Tag No Species	Hght (m)	Stems No	Ø (mm)	Crown Spread (m)	Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T18										Estimated Measurements	
Common Ash *Fraxinus excelsior*	16	2	233 (Eq)	N 4 E 1 S 4 W 4	4 4 4 4	M	A: 24.6 R: 2.79	Fair	C: Fair S: Ivy B: Not visible	Mature specimen, located along the west site boundary; suppressed form due to proximity of dominant neighbouring trees; stems lean over the adjacent property; fair overall condition.	**C.1** 10+ yrs
T19											
Goat Willow *Salix caprea*	10	1	240	N 4 E 4 S 3 W 3	2 2 2.5 2	SM	A: 26.1 R: 2.88	Good	C: Good S: Good B: Good	Typical form of species; north crown extents now touching the adjacent property; no other significant/notable features; good structural and physiological condition.	**B.1** 20+ yrs

Age Classifications: N Newly planted; Y Young; SM Semi-mature; EM Early Mature; M Mature; OM Over Mature

Condition: C Crown; S Stem; B Basal area

Stems: Ø Diameter; (Eq) Equivalent stem diameter using BS5837:2012 definition

ERC: Estimated Remaining Contribution

Appendix 2: Arboricultural Impact Assessment

Arboricultural Impacts

Impacts	Nos. of trees
Trees to be removed	9
Groups / Hedges to be removed (Partial removal of groups)	2 (0)
Trees with proposed incursions into RPAs	12
Groups / Hedges with proposed incursions into RPAs	4
Trees that will require pruning	3
Groups / Hedges that will require pruning	3
Trees to be transplanted	0
Groups / Hedges to be transplanted	0

No.	Species	Proposed structure	Incursion
G03	A Group	Carport/toolshed	RPA & crown
G03	A Group	Fence	RPA & crown
G04	A Group	Fence	RPA & crown
G05	A Group	Fence	RPA
G05	A Group	Fence	RPA & crown
T02	Western Red Cedar	Boundary wall	RPA
T04	Lawson Cypress	Hard surfacing	RPA
T04	Lawson Cypress	Boundary wall	RPA
T07	Common Horse Chestnut	Carport/toolshed	RPA
T07	Common Horse Chestnut	Infill-building	RPA
T07	Common Horse Chestnut	Fence	RPA
T08	Common Lime	Fence	RPA
T09	Common Ash	Fence	RPA
T10	Common Lime	Fence	RPA
T13	Common Ash	Fence	RPA
T14	Common Lime	Fence	RPA
T15	Common Lime	Fence	RPA
T16	Common Lime	Fence	RPA
T18	Common Ash	Fence	RPA
T19	Goat Willow	Fence	RPA & crown

Arboricultural Impacts - RPAs (Area)

No.	Species	RPA	Incursion	
			(m^2)	(%)
G03	A Group	37.5	0.8	2.1
G03	A Group	37.5	Negligible	0.0
G04	A Group	20.0	Negligible	0.0
G05	A Group	275.2	Negligible	0.0
G06	A Group	4.5	Negligible	0.0
T02	Western Red Cedar	246.0	9.2	3.7
T04	Lawson Cypress	153.8	0.8	0.5
T04	Lawson Cypress	153.8	4.3	2.8
T07	Common Horse Chestnut	319.2	6.3	2.0
T07	Common Horse Chestnut	319.2	2.5	0.8
T07	Common Horse Chestnut	319.2	Negligible	0.0
T08	Common Lime	113.1	Negligible	0.0
T09	Common Ash	289.5	Negligible	0.0
T10	Common Lime	78.0	Negligible	0.0
T13	Common Ash	284.1	Negligible	0.0
T14	Common Lime	99.9	Negligible	0.0
T15	Common Lime	168.3	Negligible	0.0
T16	Common Lime	95.7	Negligible	0.0
T18	Common Ash	24.6	Negligible	0.0
T19	Goat Willow	28.1	Negligible	0.0

Tree Work Schedule

No.	Species	Works	Category
G01	A Group	Fell to ground level & grind stumps.	C2
G02	A Group	Fell to ground level & grind stumps.	C2
G03	A Group	Prune: Crown lift trees locally to achieve 2m clearance to the proposed carport/toolshed, and allow for installation of the proposed fence.	C2
G04	A Group	Prune to gain access for the installation of the boundary fence.	C2
G06	A Group	Prune to gain access for the installation of the boundary fence.	C2
T01	Common Holly	Fell to ground level & grind stump.	B1
T03	Lawson Cypress	Fell to ground level & grind stump.	C1
T04	Lawson Cypress	Prune: Crown lift to achieve 3.5m clearance over the driveway.	B1
T05	Myrobalan Plum	Fell to ground level & grind stump.	C1
T06	Myrobalan Plum	Fell to ground level & grind stump.	C1
T11	Plum	Fell to ground level & grind stump.	C1
T12	Common Lime	Prune: Crown lift southeast canopy to achieve 2m clearance from the existing structure.	B1
T17	Common Ash	Fell to ground level & grind stump.	C1
T19	Goat Willow	Prune to gain access for the installation of the boundary fence.	B1

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.

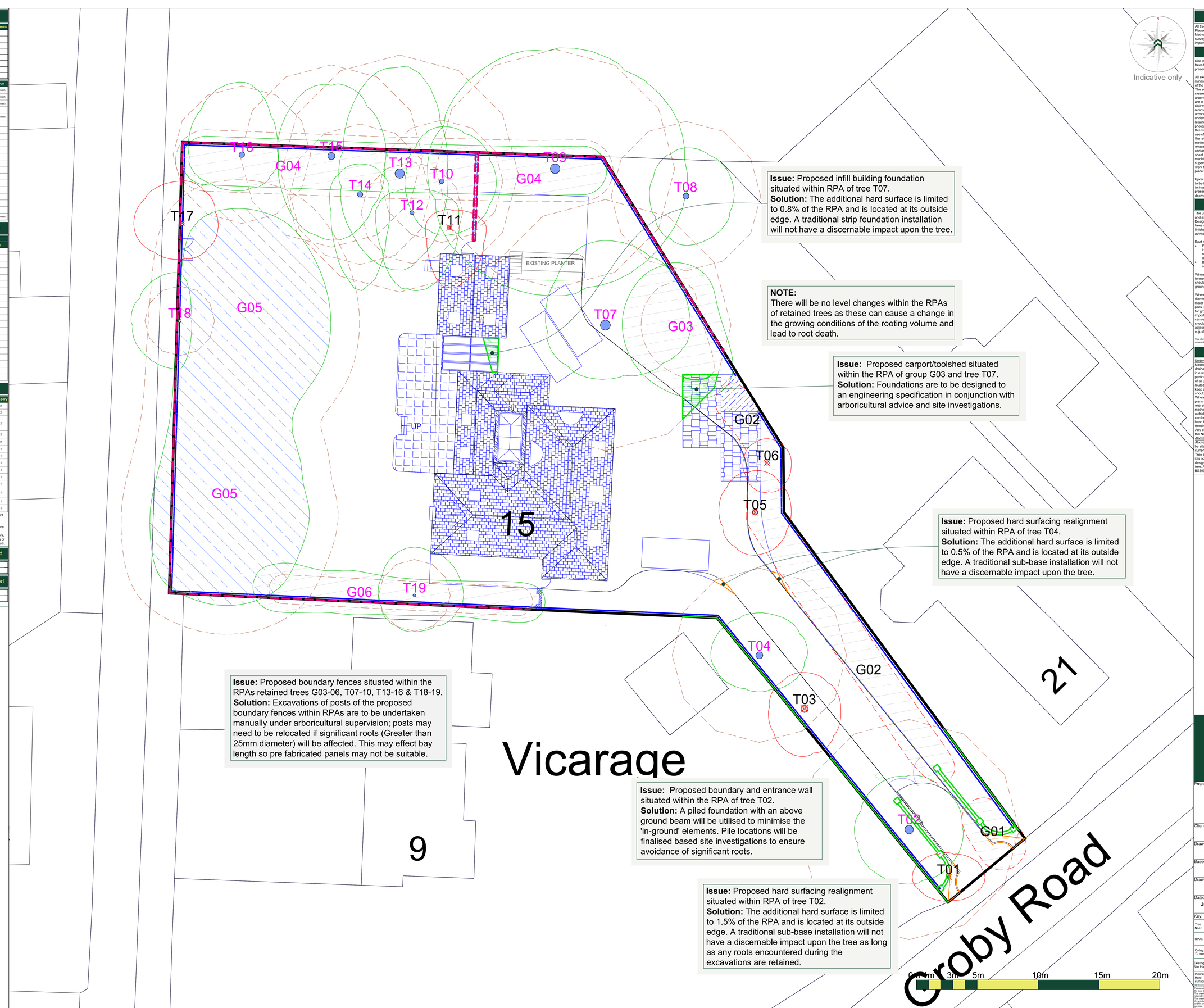
No. of individual trees to be removed

U	A	B	-
0	0	1	5

No. of groups / hedges to be removed

U	A	B	-
0 (0)	0 (0)	0 (0)	2 (0)

( ) = Partial removal of a groups



Issue: Proposed infill building foundation situated within RPA of tree T07.
Solution: The additional hard surface is limited to 0.8% of the RPA and is located at its outside edge. A traditional strip foundation installation will not have a discernable impact upon the tree.

NOTE:
There will be no level changes within the RPAs of retained trees as these can cause a change in the growing conditions of the rooting volume and lead to root death.

Issue: Proposed carport/toolshed situated within the RPA of group G03 and tree T07.
Solution: Foundations are to be designed to an engineering specification in conjunction with arboricultural advice and site investigations.

Issue: Proposed hard surfacing realignment situated within RPA of tree T04.
Solution: The additional hard surface is limited to 0.5% of the RPA and is located at its outside edge. A traditional sub-base installation will not have a discernable impact upon the tree.

Issue: Proposed boundary fences situated within the RPAs retained trees G03-06, T07-10, T13-16 & T18-19.
Solution: Excavations of posts of the proposed boundary fences within RPAs are to be undertaken manually under arboricultural supervision; posts may need to be relocated if significant roots (Greater than 25mm diameter) will be affected. This may effect bay length so pre fabricated panels may not be suitable.

Issue: Proposed boundary and entrance wall situated within the RPA of tree T02.
Solution: A piled foundation with an above ground beam will be utilised to minimise the 'in-ground' elements. Pile locations will be finalised based site investigations to ensure avoidance of significant roots.

Issue: Proposed hard surfacing realignment situated within RPA of tree T02.
Solution: The additional hard surface is limited to 1.5% of the RPA and is located at its outside edge. A traditional sub-base installation will not have a discernable impact upon the tree as long as any roots encountered during the excavations are retained.

Indicative only

Arboricultural Method Statement

All tree work is to be undertaken in accordance with British Standard Please refer to Arbtech 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 maybe implemented without detriment to retained trees.

Site investigations

Site investigations are to be undertaken within the RPAs of retained trees to determine the size, depth and location of any roots that may be present for the purpose of informing foundation design.

All excavation within the RPAs are to be initially undertaken to a minimum depth of 800mm deep for any excavation or to the full depth of the proposed foundations, hard surfacing or underground services. The soil is to be loosened with the use of a fork or pick and then cleared with the aid of an air-spade and air-vac using a specialist arboricultural contractor; If an air-spade is not used and all excavations are to be undertaken using hand tools (forks, shovel, trowel, brush). Soil will be loosened with the aid of a fork or trowel and the spoil removed from with the aid of a shovel. Where an air spade or specialist arboricultural contractor is not employed, all excavations are to be undertaken under direct arboricultural supervision. All roots are to be retained in situ and the project arborist will visit the site to recorded and photograph the depth, location, and size of any roots present; during this visit the project arborist may be able to cut specific roots with the use of a hand saw or secateurs. The edge of the excavation closest to the retained trees and all uncovered roots will be covered over with a minimum of two layers of damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination. If appropriate soil beneath the depth of 800mm may be shed piled with any deeper excavations being undertaken by a machine with an appropriate bucket under direct arboricultural supervision. If a decision is made for a machine to be used it must work form outside of the RPA or have appropriate ground protection in place to move and work upon.

Upon the completion of the site investigations all trial excavations are to be back filled with the original material or inert fill. It may be suitable to insert a root barrier in locations where the proposed roots are not present or are beginning to enter to prevent root activity within areas deemed to be root free.

Foundations within RPAs

The use of traditional strip foundations can result in excessive root loss and as such should be avoided.
Designs for foundations that would minimize the adverse impact upon trees should include particular attention to the existing levels, proposed finished levels and cross sectional details. Site specific and specialist advice should be sought from the project engineers and arboriculturist.

Root damage can be minimised by using:

- Piles with site investigation used to be determined their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm.
- Beams, laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.

Where a slab for minor structures (e.g. carport/tool shed) is to be formed within the RPA, it should bear on the existing ground level, and should not exceed an area greater than 20% of the existing unsurfaced ground.

Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters for ground boarding. Use of the smallest practical piling rig is also important where piling within the branch spread is proposed, as this can reduce the need for access facilitation pruning. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of uncured concrete, e.g. sleeved bored piles or screw piles.

This information is compliant with British Standard BS5837:2012 Trees in relation to design demolition and construction - Recommendations, section 7.5 Special engineering for foundations within the RPA.

Utility apparatus

Underground utility apparatus
Mechanical trenching for the installation of underground apparatus and drainage severs 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 rout 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, forks, shovels) 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 bean initial design solution unless this is a suitable management outcome for the tree. Any pruning should be undertaken in accordance with BS3998:2010

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https://arbtech.co.uk, 01244 661170

Project:
15 Groby Road,
Ratby,
Leicestershire,
LE6 0LJ

Client:
Mr E Caruana

Drawing:
Arboricultural Impact Assessment

Based on:
15 - GR - 113

Drawing No: Arbtech AIA 01
Rev: --

Date: July 2025
Scale: 1:100 @ A0
Drawn: JCH

Key:
Tree Nos.: T02
Tree Canopies:
Trunks:
RPAs:
Category 'B' trees:
Category 'B' groups:
Category 'C' trees:
Category 'C' groups:
Trees to be removed: T01
Existing Site Plan:
Proposed Site Plan:
Incursion - Structures:
Incursion - Hard surfacing:
Incursion - Fences:

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. Please notify us of any discrepancies found. Arbtech Consulting Ltd. cannot be held responsible for inaccuracies in drawings that have been scaled by others.
This drawing is designed to reflect the principles of the layout or design only, and relates only to the protection of retained trees.
This drawing is not to be read as a definitive part of the engineering or construction designs or method statement. An architect or structural engineer should be contacted over any matters of construction, detailing or specification and for any standards or regulatory requirements relating to proposed structures, hard surfacing or underground services.
This drawing was produced in colour - a monochrome copy should not be relied upon.

Appendix 3: Tree Protection Plan

Tree Work Schedule

No.	Species	Works	Category
G01	A Group	Fell to ground level & grind stumps.	C2
G02	A Group	Fell to ground level & grind stumps.	C2
G03	A Group	Prune: Crown lift trees locally to achieve 2m clearance to the proposed carport/cladred, and allow for installation of the proposed fence.	C2
G04	A Group	Prune to gain access for the installation of the boundary fence.	C2
G06	A Group	Prune to gain access for the installation of the boundary fence.	C2
T01	Common Holly	Fell to ground level & grind stump.	B1
T03	Lawson Cypress	Fell to ground level & grind stump.	C1
T04	Lawson Cypress	Prune: Crown lift to achieve 3.5m clearance over the driveway.	B1
T05	Myrobalan Plum	Fell to ground level & grind stump.	C1
T06	Myrobalan Plum	Fell to ground level & grind stump.	C1
T11	Plum	Fell to ground level & grind stump.	C1
T12	Common Lime	Prune: Crown lift southeast canopy to achieve 2m clearance from the existing structure.	B1
T17	Common Ash	Fell to ground level & grind stump.	C1
T19	Goat Willow	Prune to gain access for the installation of the boundary fence.	B1

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.

Protective Fencing

To be erected prior to the commencement of all works on site, and retained in place throughout construction.

To comprise of 2m tall welded mesh panels on rubber or concrete feet. 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 should be supported on the inner side by stabilizer struts, which should should be attached to a base plate and secured with ground pins.
All weather notices should be erected at regular intervals on the weld mesh panels with words such as "Tree Protection Area - Keep out".

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

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

Ground protection

The existing had surface will be retained with the RPAs to act as passive ground protection. This will remain in situ for the duration of the development process. If removed/replaced this will be done under direct, onsite arboricultural supervision and replaced immediately with new temporary ground boarding or the replacement hard surface.

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

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, as 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 2 t 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 situations other than those described in a) or b), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice, to be able to support 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 function remains unimpaired.

Foundations within RPAs

The use of traditional strip foundations can result in excessive root loss and as such should be avoided.
Designs for foundations that would minimize the adverse impact upon trees should include particular attention to the existing levels, proposed finished levels and cross sectional details. Site specific and specialist advice should be sought from the project engineers and arboriculturist.

Root damage can be minimised by using:

- Piles with site investigation used to be determined their optimal location whilst avoiding damage to roots important for the stability of the tree, by means of hand tools or compressed air soil displacement, to a minimum depth of 600mm;
- Beams, laid at or above ground level, and cantilevered as necessary to avoid tree roots identified by site investigation.

Where a slab for minor structures (e.g. carport/tool shed) is to be formed within the RPA, it should bear on the existing ground level, and should not exceed an area greater than 20% of the existing unsurfaced ground.

Where piling is to be installed near to trees, the smallest practical pile diameter should be used, as this reduces the possibility of striking major tree roots, and reduces the size of the rig required to sink the piles. If a piling mat is required, this should conform to the parameters for ground boarding. Use of the smallest practical piling rig is also important where piling within the branch spread is proposed, as this can reduce the need for access facilitation pruning. The pile type should be selected bearing in mind the need to protect the soil and adjacent roots from the potentially toxic effects of uncured concrete, e.g. sleeved bored piles or screw piles.

This information is compliant with British Standard BS5837:2012 Trees in relation to design demolition and construction - Recommendations, section 7.5 Special engineering for foundations within the RPA.

Supervised Excavation

All excavations within and immediately adjacent to RPAs are to be undertaken under direct on-site arboricultural supervision.

Any roots that are to be cut will be cleanly severed by the project arboriculturist using a suitable hand saw or secateurs. The edge of all excavation closest to the retained trees will be covered over with damp hessian to prevent drying out, and where necessary be shuttered to prevent soil collapse or contamination by concrete.
If appropriate soil beneath the depth of the excavation may be sheet piled, tegular piled or have individual piles installed.

Manual excavation:
Excavations within the RPAs will be initially undertaken by hand under direct on-site arboricultural supervision to a minimum of 600mm deep (to be confirmed by the project arboriculturist), whether its is for proposed foundations, hard surfacing or underground services. The soil is to be loosened with the use of a fork or pick and or air-spade and then cleared with a shovel and or the aid of an air-spade and air-vac.
Mechanical excavation:
Excavation within the RPAs will consist of a mixture of mechanical and manual excavation.
Where an excavator is used it will be fitted with a suitably sized toothless grading bucket; using a grading / scrapping motion rather than digging. During each motion the excavator will not be permitted to removing no more than 10 - 20mm deep of soil in any any one pass.
If any roots are discovered, mechanical excavation will immediately be stopped and manual excavation will take over to expose the root. Upon the root being uncovered and either severed or protected the excavations can then continue.
Any excavator or other machinery that is to be used will be situated outside of the RPAs of all retained trees or on top of a suitable ground protection.
Where an excavator or any other machinery is to be used within RPAs or beneath canopies the project arboriculturist will clearly instruct the operator about what they want and expect to happen prior to any works may commence.

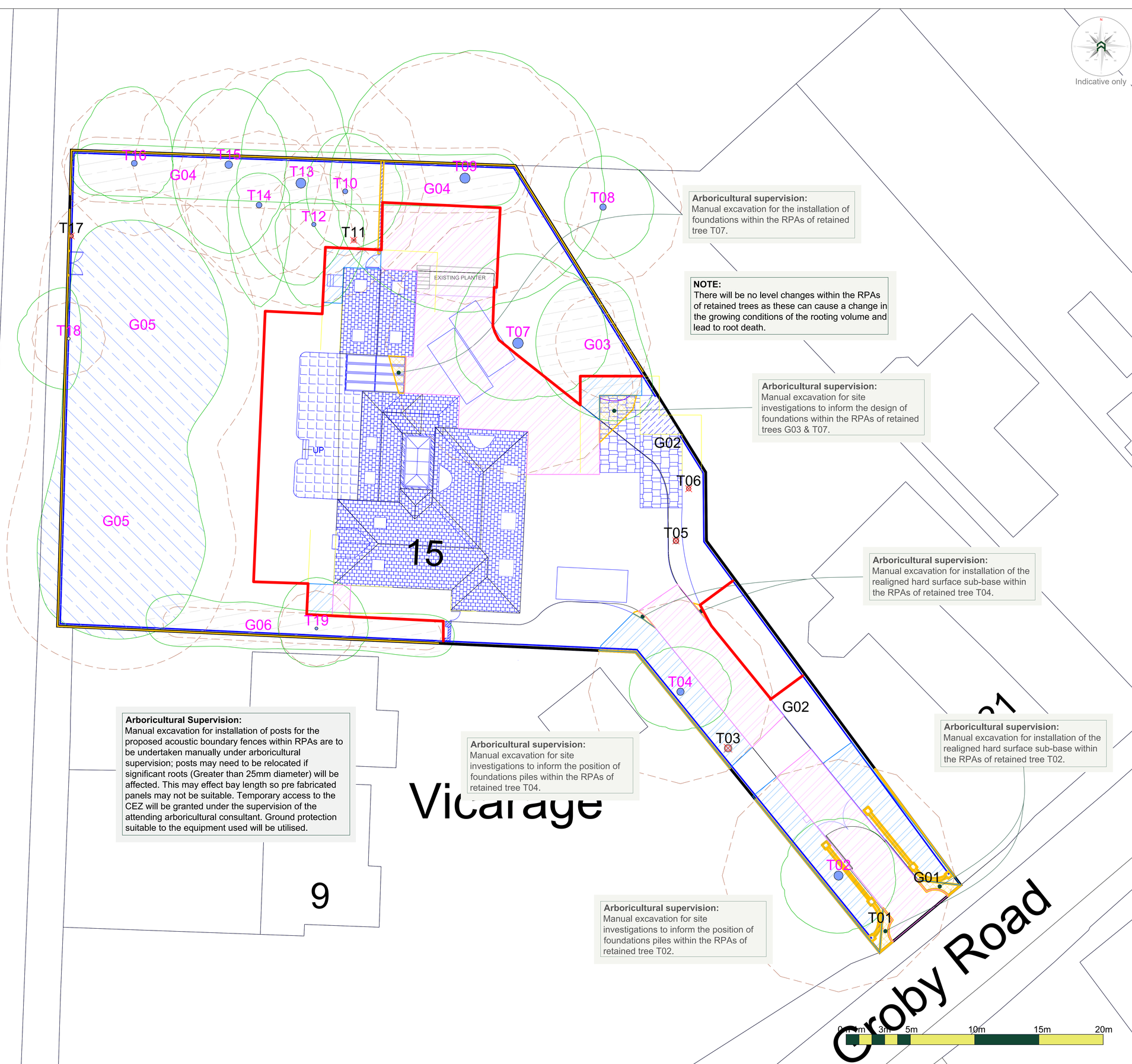
Arboricultural Supervision

The arboricultural consultant will be required to attend site to directly supervise all demolition and construction works that have to be undertaken within the root protection areas. This will include:

1. Pre-commencement site meeting.
2. Location of protective measures.
3. Pre-commencement site meeting (construction phase).
4. Supervised excavations for hard surfacing within RPA of tree T02.
5. Supervised excavations for site investigations to inform pile locations for the boundary and entrance wall foundations within the RPA of tree T02.
6. Supervised excavations for hard surfacing within RPA of tree T04.
7. Supervised excavations for site investigations to inform pile locations for the boundary wall foundations within the RPA of tree T04.
8. Supervised excavations for site investigations to inform foundation design for the carport/tool shed within RPA of tree T07.
9. Supervised excavations for foundations for infill building within the RPA of tree T07.
10. Supervised excavations for acoustic boundary fence posts within RPAs of trees G03-06, T07-10, T13-16 & T18-19.
11. Any demolition and or excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services (a non-exhaustive list).
12. Arboricultural sign off and removal of protective measures.

Arboricultural Method Statement

Please refer to Arbtech Consulting Ltd. Tree Schedule and Arboricultural Method Statement, for full details on all surveyed trees and how all aspects of the the development maybe implemented without determent to retained trees.



N

Indicative only

Arboricultural supervision:
Manual excavation for the installation of foundations within the RPAs of retained tree T07.

NOTE:
There will be no level changes within the RPAs of retained trees as these can cause a change in the growing conditions of the rooting volume and lead to root death.

Arboricultural supervision:
Manual excavation for site investigations to inform the design of foundations within the RPAs of retained trees G03 & T07.

Arboricultural supervision:
Manual excavation for installation of the realigned hard surface sub-base within the RPAs of retained tree T04.

Arboricultural Supervision:
Manual excavation for installation of posts for the proposed acoustic boundary fences within RPAs are to be undertaken manually under arboricultural supervision; posts may need to be relocated if significant roots (Greater than 25mm diameter) will be affected. This may effect bay length so pre fabricated panels may not be suitable. Temporary access to the CEZ will be granted under the supervision of the attending arboricultural consultant. Ground protection suitable to the equipment used will be utilised.

Arboricultural supervision:
Manual excavation for site investigations to inform the position of foundations piles within the RPAs of retained tree T04.

Arboricultural supervision:
Manual excavation for installation of the realigned hard surface sub-base within the RPAs of retained tree T02.

Arboricultural supervision:
Manual excavation for site investigations to inform the position of foundations piles within the RPAs of retained tree T02.

Rev:	Date:	Notes:

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Project:
15 Groby Road,
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Client:
Mr E Caruana

Drawing:
Tree Protection Plan

Based on:
15 - GR - 113

Drawing No:	Rev:
Arbtech TPP 01	

Date:	Scale:	Drawn:
July 2025	1:100 @ A0	JCH

Key:

Tree Nos:	T02	Tree Canopies:		Trunks:	
RPAs:		Category 'B' trees:		Category 'B' groups:	
Category 'C' trees:		Category 'C' groups:		Trees to be removed:	T01
Existing Site Plan:		Proposed Site Plan:		Protective fencing:	
Ground protection (Boarding):		Ground protection (Passive):		Arboricultural supervision - Excavations:	

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Appendix 4: Tree Protection Notice

Tree Protection Area

KEEP OUT

Do **not** move this fence

(TOWN & COUNTRY PLANNING ACT 1990)
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Appendix 5: Contact Details

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

Document Production Record

Document number	Editor	Signature	Position	Issue number	Date
Arbtech AMS 01	Jon Hartley		Principal Arboricultural Consultant	01	02/07/25

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