



Arboricultural Method Statement

Stepnell

Hullavington Primary School

The Street

Hullavington

Chippenham

SN14 6EF

Arbtech Project Reference: 43495563

27 April 2026

Table of Contents

Introduction.....	4
Tree Survey.....	5
Arboricultural Impact Assessment	6
Trees to be Removed	6
Arboricultural Method Statement.....	8
Sequencing of works	8
Tree Work.....	9
Protected Species (general informative for tree works).....	10
Protective Measures	12
Demolition	16
Construction	17
Prohibition	23
Site Management	24
Services.....	25
Landscaping.....	26
Soil Amelioration	27
Monitoring and Supervision	28
Arboricultural Monitoring & Supervision Sign-Off Checklist.....	30
Appendices	32
Appendix 1: Tree Schedule.....	33
Appendix 2: Tree Constraints Plan	41
Appendix 3: Arboricultural Impact Assessment.....	43
Appendix 4: Tree Protection Plan.....	45
Appendix 5: Tree Protection Notice	47
Appendix 6: Contact Details.....	49
Document Production Record	51

Table 1: Documents referred to	4
Table 2: Impacts upon the RPAs of retained trees.....	6
Table 3: Number of individual trees to be removed	6
Table 4: Number of groups to be removed.....	7
Table 5: Sequencing of works.....	8
Table 6: Summary of tree works	9
Figure 1: Default specification for protective barrier fencing (BS5837)	14
Figure 2: Example of protective barrier fencing with above-ground stabilising system (BS5837)	15
Figure 3: Example cross-section for multi-dimensional confinement system using kerb edging.....	19
Figure 4: Example cross-section for multi-dimensional confinement system using timber edging	19

Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on April 2026 from Stepnell to attend Hullavington Primary School, The Street, Hullavington, Chippenham, SN14 6EF (The Site – Arbtech Project Reference: 43495563) to undertake an arboricultural survey guided by British Standard 5837:2012: Trees in Relation to Design, Demolition and Construction – Recommendations of all trees, hedges and major shrub groups growing on and/or within influencing distance of the site and to produce a Schedule of Trees, Tree Constraints Plan (TCP), Arboricultural Impact Assessment (AIA), Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP).

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	Footprint Architects	2425-FTP-XX-HS00-DR-A-1004	Existing Ground Floor Plan
Proposed layout drawing	Footprint Architects	2425-FTP- ZZ-HS00-DR-A-1005	Proposed Site Plan
Tree Schedule (TS)	Arbtech Consulting Ltd	43495563 TS 01	Tree Schedule
Arboricultural Impact Assessment (AIA)	Arbtech Consulting Ltd	43495563 AIA 01	Arboricultural Impact Assessment
Tree Protection Plan (TPP)	Arbtech Consulting Ltd	43495563 TPP 01	Tree Protection Plan
Arboricultural Method Statement (AMS)	Arbtech Consulting Ltd	43495563 AMS 01	Arboricultural Method Statment

Tree Survey

An arboricultural survey guided by British Standard 5837:2012: Trees in Relation to Design, Demolition and Construction - Recommendations of all trees within impacting distance of the site was undertaken by Russell Pearce on 08 April 2026.

A total of 33No individual trees and 7No groups and hedges 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 Anthony Jones on 24 April 2026 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.
- 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	
			(m2)	(%)
T1	Western red cedar	Fence	Insignificant	Insignificant
T2	Elm	Fence	Insignificant	Insignificant
T15	Common hawthorn	Building	7.2	7.9
T15	Common hawthorn	Fence	Insignificant	3.4
T16	Common whitebeam	Hard surfacing	8.31	16.9
T29	White willow	Fence	Insignificant	Insignificant
T29	White willow	hard surfacing	13.21	3.4
T30	Norway maple	Fence	Insignificant	Insignificant
T30	Norway maple	hard surfacing	6.64	5.9
T31	Weeping willow	hard surfacing	86.59	34.0

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

Trees to be Removed

A total of 2No. individual 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	0	2

Table 4: Number of groups to be removed

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

() = partial removal of a group

Arboricultural Method Statement

This Arboricultural Method Statement, 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, 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, AMS 01, and the Tree Protection Plan, 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) (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
Stage 6.	Undertake and complete ground works.
Stage 7.	Undertake and complete construction works
Stage 8.	Undertake and complete hard landscaping works.
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 soft landscaping works.
Stage 12.	Site completion and sign-off from Project Arboriculturist.

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
T13	Silver birch	Fell: Remove tree and remove stump	C1
T14	Common whitebeam	Fell: Remove tree and remove stump	C1
T15	Common hawthorn	Prune: Selective branch reduction pruning to the boundary line.	B1
T30	Norway maple	Prune: Crown lift to 3 m for fence line clearance	B1
T31	Weeping willow	Prune: Re-pollard back to previous pollard points	B1
H4	Privet	Prune: reduce back to proposed fence line	C2

Notes

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

Tree Removal

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

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

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

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

Stump Removal – Stump Grinding

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

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

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

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

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

Stump Removal - Digging

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

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

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

After Stump Removal

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

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

Cut Ivy

Cutting of ivy is to be undertaken using hand tools such as hand saws or secateurs to prevent damage to the bark of the tree. the use of chain saws is prohibited. A 300mm high section of ivy is to be cut and removed from within 1m of ground level.

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, 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, AMS 01, dated: 27 April 2026 and Tree Protection Plan, 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, AMS 01, and Tree Protection Plan, TPP 01, the Project Arboriculturist will sign-off the protective measures in writing to the client for which a copy can be sent to the Fencing Contractor, Site Agent and Local Authority Tree Officer.

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

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

The protective measures will remain in place until the completion of Stage 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 and proposed site boundary measures are to be installed and retained for the duration of the development. If, for any reason, the existing and proposed 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.

The proposed hard surfacing is to be installed immediately to act as ground protection. Where this is not a viable option, these areas are to be covered by ground boarding, as designed by the Project Engineer to cope with any likely loading, until the surface is installed.

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 Arboriculturist.

Protective Barrier Fencing

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

The protective barrier fencing will be fixed with signage denoting the words “tree protection area” at 5.0m intervals. See Appendix 5: Tree Protection Notice

Default Specification: The fence will comprise either a 2.4m wooden site hoarding or a 2.3m high scaffold framework, well-braced to resist impacts. The uprights will be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. Standard anti-climb welded mesh panels will be securely fixed to each other with at least two scaffold clamps and to the scaffold framework with wire.

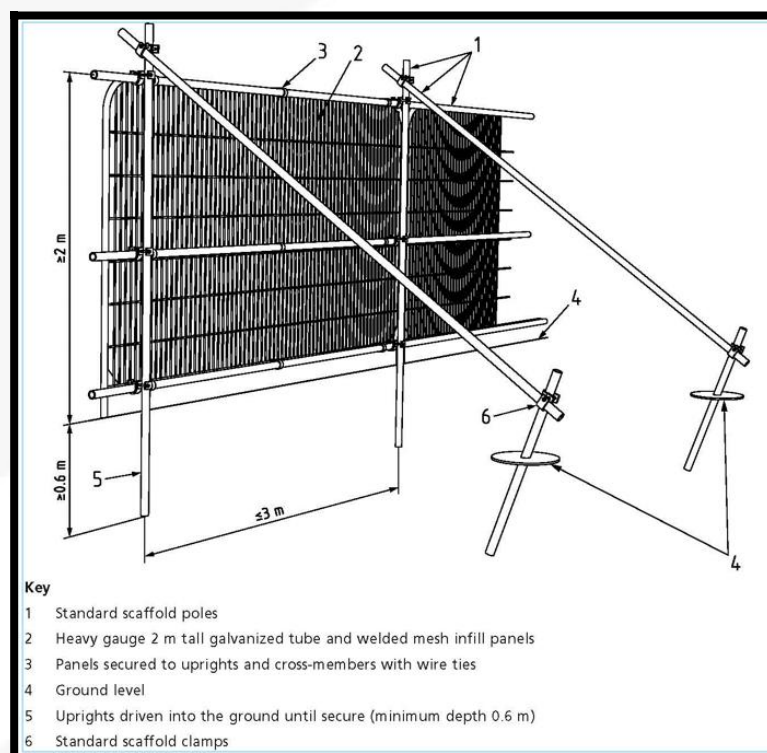


Figure 1: Default specification for protective barrier fencing (BS5837)

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.

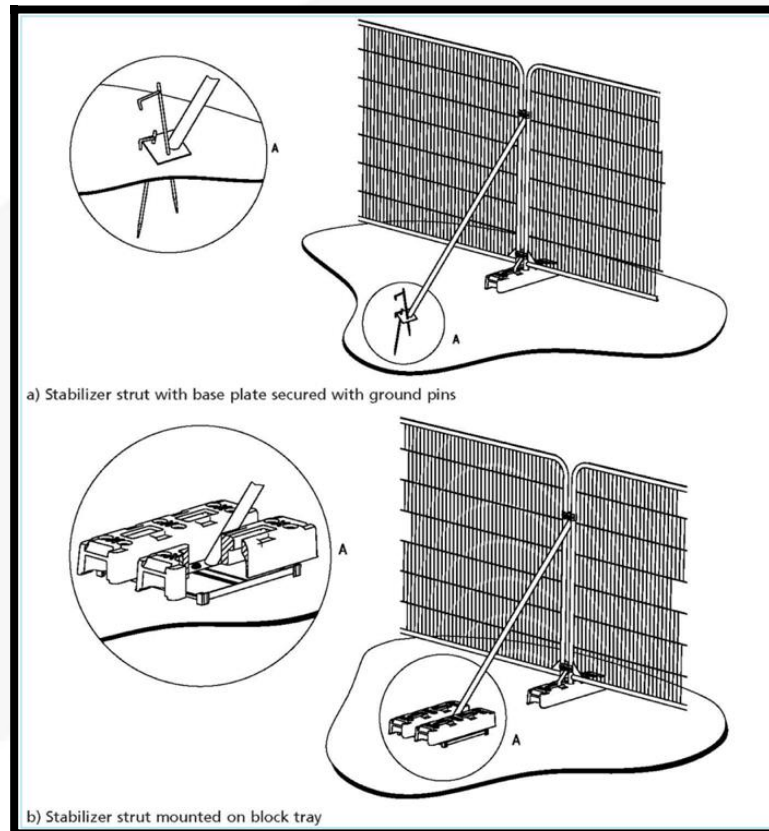


Figure 2: Example of protective barrier fencing with above-ground stabilising system (BS5837)

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, 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.

Structures

Demolition of the existing structures beneath the canopies and within the RPAs of retained trees, as shown on the Tree Protection Plan, TPP 01, is to be undertaken carefully and under the direct supervision of the Project Arboriculturist.

The structures are to be taken down so that all debris and materials fall outside the RPAs and away from the canopies of all retained trees.

Foundations within and immediately adjacent to the RPAs of retained trees are to be left in situ wherever possible. Where this is not possible, the existing foundations must be demolished to the minimum depth required to allow for the installation of the new soft and hard landscaping.

The removal of the existing foundations within the RPA of retained trees is to be undertaken using a handheld pneumatic breaker, hand tools and wheelbarrows to break up and remove the debris from the RPAs. In some situations, and only at the discretion of the Project Arboriculturist, it may be possible to use a hydraulic breaker mounted on an excavator combined with a suitably sized toothless grading bucket.

Where the Project Arboriculturist permits the use of an excavator to demolish and remove foundations, it must be situated outside the RPAs of retained trees, on top of the hard surfacing working away from the RPAs, or from suitable ground boarding capable of handling the expected loading.

If it is likely that soil will collapse or the trench will begin to collapse within the RPAs of retained trees, leading to a loss of rooting environment, excavations are to be stopped immediately, and the trench shored up to prevent further soil collapse.

Where the removal of foundations occurs within the RPAs of retained trees, these voids are to be backfilled with clean topsoil.

Hard Surfacing

Where hard surfacing must be removed and/or resurfaced within the RPAs of retained trees, it is to be undertaken under the direct supervision of the Project Arboriculturist during the landscaping phase of the development.

The wearing course will be broken up using a handheld pneumatic breaker, hand tools, and wheelbarrows to remove the surfacing. Where the subbase must be removed, a fork will be used to loosen the material, and shovels and wheelbarrows will be used to move it.

In some situations, and at the discretion of the Project Arboriculturist, an excavator using a hydraulic breaker and a suitably sized toothless grading bucket may be possible. If an excavator is to be used, it must be situated outside of the RPAs, on top of the hard surfacing, working away from the RPAs or from suitable ground boarding capable of withstanding the expected loading.

Whichever system is used, there is to be **NO** disturbance of the underlying soil. If roots are found, they are to be covered over with damp hessian, and a layer of either sharp sand, wood chip, or topsoil will be applied as soon as practicably possible to prevent desiccation.

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.

The use of strip foundations within the RPAs of retained trees can cause extensive root loss and, as such, must be avoided.

The foundation design for the building within the RPAs of retained trees T15 is to be designed to minimise the adverse impact upon trees and should pay particular attention to the existing ground levels and proposed finished floor level. Foundation design will be undertaken using site-specific information in conjunction with the Project Arboriculturist and Engineer.

Root damage can be minimised using:

- Piles, with a site investigation it is possible to determine their optimal location whilst avoiding damage to roots important for the stability of the tree. Investigative excavations are to be undertaken with the use of hand tools or compressed air displacement to a minimum depth of 600mm.
- Beams laid at or above ground level and or cantilevered as necessary to avoid tree roots identified by the site investigation.

- Multi-dimensional confinement systems.

These are just an example of a few types of foundations that can be used to minimise root damage. To arrive at a suitable solution, site-specific and specialist advice regarding foundation design should be sought from the Project Arboriculturist and Engineer.

Large structures: Slabs for larger structures, such as dwellings, should be designed and constructed with a ventilated air space between the underside of the slab and the existing soil surface. A specialist irrigation system, e.g., rainwater runoff from the roof, is to be installed underneath the slab.

Small structures: Slabs for smaller structures (less than 20% of the total area of the un-surfaced RPA), such as garages and sheds, may be formed/constructed directly onto the existing soil surface. A multi-dimensional confinement system such as CellWeb™ or similar may be possible as the foundation for these structures (specialist advice should be sought from the manufacturer).

Where piling is to be installed near trees, the smallest practical pile diameter will be used, as this reduces the possibility of striking major tree roots and the size of the rig required to sink the piles. If a piling mat is required, it will conform to the specification for ground boarding.

All and any excavations required for foundations within the RPAs of retained trees will initially be undertaken manually and under the direct supervision of the Project Arboriculturist. See manual excavation.

Hard Surfacing

New hard surfacing situated within the RPAs of retained trees is to be designed in conjunction with advice from the Project Engineer and Arboriculturist to ensure it can accommodate the likely loading required. The design will not require excavation. However, the removal of the turf layer or other surface vegetation may be acceptable if necessary. Ideally, the construction will be situated entirely above the existing ground level.

Appropriate options for the sub-base of hard surfacing situated within the RPAs of retained trees include multi-dimensional confinement systems (CellWeb™ or similar). Alternatively, piles, pads or elevated beams can be used to bridge over the RPAs or, following exploratory investigations to determine location, provide support within the RPAs while allowing retention of roots of 25mm or greater in diameter.

An exploratory investigation is to be undertaken manually under arboricultural supervision using hand tools (See Manual excavation).

Before the installation of the hard surfacing within the RPAs, vegetation may be removed using hand tools or sprayed with an approved non-residual herbicide such as 'Glyphosate'.

Note: *The use of a multi-dimensional confinement system will raise the finished level of the hard surfacing, which needs to be considered when designing foundations and setting the finished floor level of adjacent buildings.*

Multi-dimensional confinement system: If a multi-dimensional confinement system (such as CellWeb™ or similar) is to be used, it is to be laid entirely above the existing soil surface over a geotextile membrane and or a bi-axel geo-grid (such as Tensar TriAx). Prior to this, any small hollows on the surface may be filled with clean, sharp sand (not builders' sand) to a maximum depth of 150mm. The 'CellWeb' is to be backfilled by hand with a no-fines aggregate of 20mm – 30mm. The use of an excavator/machinery to fill the confinement system may be possible at the discretion of the Project Arboriculturist.

The area of 'CellWeb' shall be covered with permeable geotextile fabric, and the finished wearing course shall be laid on top. The wearing course shall be permeable to both water and air to comply with 'SUDS' regulations.

Edge supports of an appropriate size and strength will be set above ground level and will be secured with either haunching or steel pins driven into the ground. The outer edge of the supports may be banked up with clean topsoil.

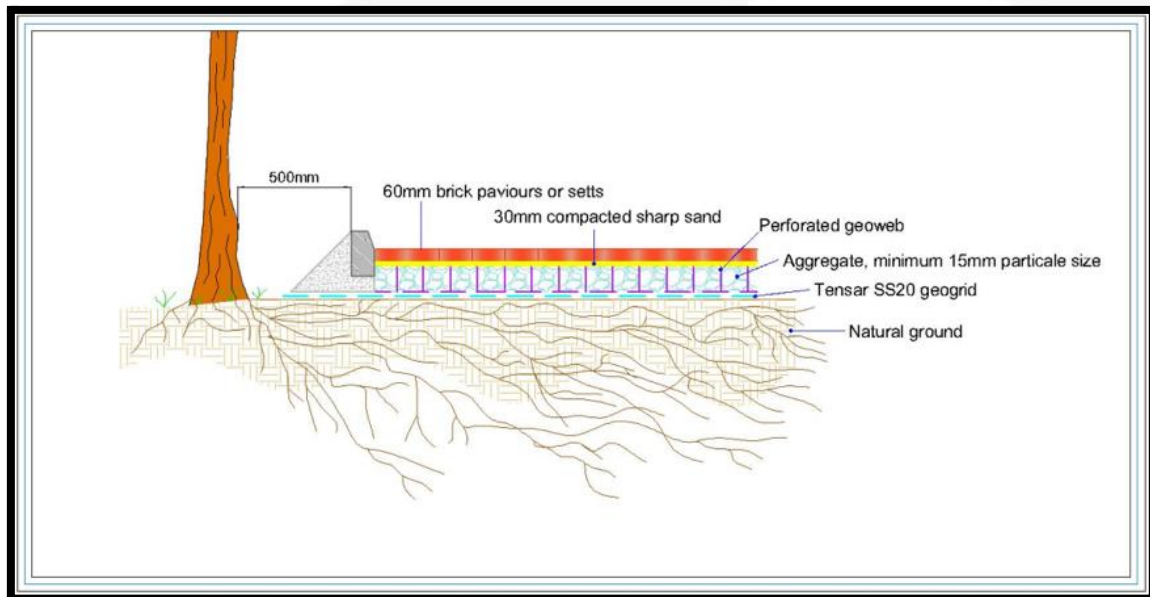


Figure 3: Example cross-section for multi-dimensional confinement system using kerb edging

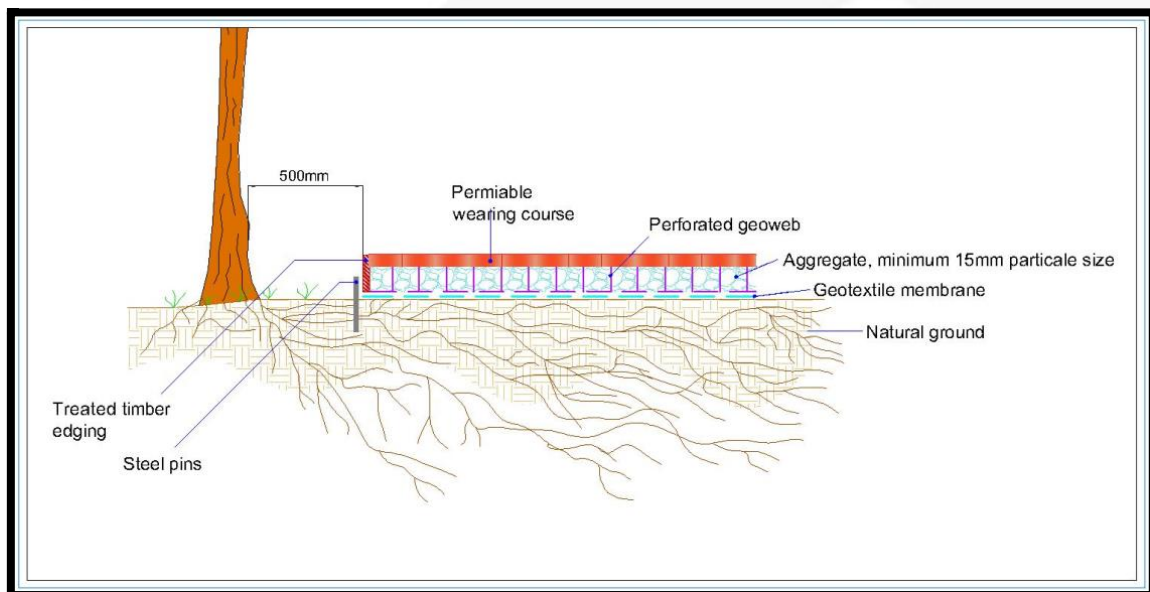


Figure 4: Example cross-section for multi-dimensional confinement system using timber edging

Based on the design of the hard surfacing, the proposed use is for a footpath (pedestrian access) and a road (vehicular access). Geosynthetics Limited recommends, within the product data sheet 'CellWeb® TRP weight capabilities', that a cell depth of 75mm (pedestrian use) to 200mm (vehicular access to include emergency access vehicles and HGVs) of their product CellWeb® TRP would possibly be suitable for the proposed use.

As a part of the design process and to allow Geosynthetics Limited to be able to calculate the exact correct depth of CellWeb® TRP please contact the Geosynthetics engineers.

Installation of a multi-dimensional confinement system

a) Prepare the surface

- Remove any surface rocks and debris.
- Create a level surface by filling in any hollows with clean, angular stone or sharp sand.
- Do not level off any high spots or compact the soil through rolling.

b) Layout Geotextile membrane

- Layout the permeable Geotextile membrane, overlaying the edges of the required area by 300mm.
- Overlap any joints by 300mm or more.

c) Layout multi-dimensional confinement system (MDC)

- Layout the collapsed MDC system on top of the Geotextile membrane.
- Place one steel pin into the centre cell at one end of the panel and secure it into the ground.
- Pull out the MDC to its full length (see manufacturer specifications), place a steel pin in the centre at the opposite end and secure it into the ground.
- Pull out the MDC to its full width (see manufacturer specifications), and secure each corner into the ground with steel pins.
- Create a panel of the correct size using the required number of steel pins (as per the manufacturer's specifications).
- Makes sure all cells are fully extended (as per manufacturer specifications).
- Staple adjacent panels together (as per manufacturer specifications).
- If a curved shape is required, the panels are to be cut down to the required size and shape (once the MDC is pinned out. Do not curve or bend panels into place).

d) Infill with clean angular stone

- The infill material must be a clean (no fines) angular stone (as per manufacturer specifications)
- Do not use M.O.T type 1 or crushed stone with fines within or adjacent to RPAs.
- Infill the MDC cells with clean angular stone, working towards the tree using the infilled panels as a platform.
- The infill does not require compaction. Do not use a whacker plate, roller, or any other means of compaction.

e) Edge restraints

- All kerb edging will be situated on top of the MDC within RPAs. do not excavate within RPAs to install kerb edging.
- Where edging is required for light structures, a peg and treated timber board edging is normally acceptable.
- Other options include wooden sleepers, plastic, or metal edging.
- The outer edges of the supports may be banked up with clean topsoil and or mulch.

f) Wearing course

- Install a permeable geotextile membrane, overlapping any joints by 300mm before laying the wearing course.
- Surfaces can include block paving, asphalt, loose gravel, resin-bound gravel, concrete, etc..
- Within RPAs, the wearing course shall be permeable to both water and air.

Boundary 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, rabbeting spade, post hole digger). no mechanised equipment (handheld or plant-mounted post borer) is to be used.

Note: *All boundary fencing must be installed prior to the commencement of any site works to serve as primary tree protection. In the event of a delay in installing permanent fencing, BS 5837-compliant temporary protective barriers must be erected until the permanent solution is in place.*

Concrete foundations

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

Manual excavation

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

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

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

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

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

Prohibition

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

Site Management

The Site Manager will be responsible for briefing and inducting all personnel who will be working on any stage of this development, especially those who will be working within or adjacent to the canopies or RPAs of retained trees, and will make them aware of and provide a copy of this Arboricultural Method Statement, AMS 01, and Tree Protection Plan, 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 Arboriculturist 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 Arboriculturist 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 Arboriculturist 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 Arboriculturist.

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 listed below and under the direct supervision of the Project Arboriculturist.

Trenchless Techniques

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

Broken Trench – Hand Dug

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

Manual Excavation

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

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

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

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

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

Landscaping

The ratio of trees removed to trees replanted should not necessarily be 1:1. Instead, the ratio should take into consideration the available space for tree growth and development to ensure the trees are physically suited to the site at maturity. A specification for and notation relating to the precise alignment of replacement trees will be contained in the landscape proposals.

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

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

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

No works will be carried out within the RPAs of any trees if the soil moisture is at a level where soil compaction may be likeFly. 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.

Soil Amelioration

On completion of the proposed development, the area indicated in the Arboricultural Impact Assessment (Arbtech AIA01) will be subject to soil amelioration to restore the soil conditions where the existing structure was situated and mitigate the loss of the notional RPAs for retained trees 1, 2, and 3, therefore improving the soil conditions for root development within the on-site RPAs of retained trees.

Soil is a natural medium in which plant roots propagate. It is formed of a combination of mineral aggregates of varying sizes, organic matter, macropores, and micropores. Macropores are larger spaces between aggregates that allow the soil to be aerated. Micropores are smaller, generally holding water that is available to plants via their roots. Roots use the air in the soil and grow through this medium when the bulk density of the soil is below a particular threshold.

The action of downward loads to the surface of the soil from installation and the use of hard surfacing can cause the soil to be compressed, closing up first the macropores and, ultimately, micropores. This increases the bulk density of the soil and is referred to as compaction. A compacted soil is less aerated and has a greater bulk density than a well-formed soil. This has two significant negative effects on roots within that growing medium:

- 1) Root cells respire. They use oxygen from the soil for chemical processes and expel carbon dioxide into the soil. Gaseous exchange must be possible between the soil and the atmosphere to enable the ingress of oxygen and the egress of expelled carbon dioxide to the soil around a healthy root. Soil compaction closes the macropores between the soil aggregates and reduces/stops this gaseous exchange.
- 2) Root elongation is only possible within soil bulk densities below a particular threshold. soil compaction increases soil bulk density and can limit/stop new root development.

Installation of an impermeable surface over the rooting volume can also limit irrigation and ventilation of soil.

To improve the soil structure in the rooting area of retained trees it will be decompacted and organic matter added.

Monitoring and Supervision

Where trees have been identified within this Arboricultural Method Statement, AMS 01, and Tree Protection Plan, 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 Arboriculturist, 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 6: 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 Arboriculturist and Local Authority Tree Officer will be invited to attend a site meeting with all relevant parties. Before any changes are implemented, they must have been approved in writing by the Local Authority Tree Officer.

Supervision

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

1. Pre-commencement site meeting.
2. Location of protective measures.
3. Supervised demolition of structures within and adjacent to RPAs of tree nos. T16, T29 and T30.
4. Relocations of tree protective measures
5. Supervised excavations for fence posts within RPAs of tree nos. T1, T2, T15, T29 and T30.
6. Installation of 'No Dig' hard surfacing and replacement hard surfacing within the RPAs of tree nos. T1, T2, T15 T16, T29, T30, T31 and T32.
5. Supervised excavations/ site investigation to inform building foundations within RPAs of tree nos. T15.
6. Any demolition and or excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services (a non-exhaustive list).
7. 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 Arboriculturist shall be informed and will invite the Local Authority Tree Officer to meet on-site to discuss the process, final remedial works that may be required and sign the development off so that the protective measures may be removed.

Arboricultural Monitoring & Supervision Sign-Off Checklist

Hullavington Primary School, The Street, Hullavington, Chippenham, SN14 6EF

Tree Number	Task	Date Completed	Signed (Arboriculturalist)	Signed (Site Manager)
All	Pre-commencement site meeting			
All	Sign-off of the location and specification of the protective measures			
T16, T29, T30	Supervised demolition of structures			
All	Completion of demolition			
T1, T2, t15, T29, T30	Manual excavation of fence posts			
T1, T2, T15, T16, T29,T30, T31, T32II	Installation of no dig hard surfacing and replacement hard surfacing			
T15	Supervised excavations/ site investigations for building foundations			
All	Completion of groundworks			
All	Completion of construction			
All	Removal of machinery and materials from site			

Tree Number	Task	Date Completed	Signed (Arboriculturalist)	Signed (Site Manager)
All	Dismantle & removal of protective measures			
All	Completion of Landscaping			
All	Sign-off from Project Arboriculturist			

Appendices

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

- Appendix 1: Tree Schedule
- Appendix 2: Tree Constraints Plan
- Appendix 3: Arboricultural Impact Assessment
- Appendix 4: Tree Protection Plan
- Appendix 5: Tree Protection Notice
- Appendix 6: Contact Details

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

Yours Sincerely,



Anthony Jones BSc (Hons) TechArborA

Arboricultural Consultant



Appendix 1: Tree Schedule

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Crown Spread (m)				Crown Clear. (m)				Age Class	Phys. Cond.	Struct. Cond.	Comments	Est. Rem. Cont. (years)	Cat.
				N	E	S	W	N	E	S	W						
T1	Western red cedar	11	440	4	3	3	2	3	2	2	1	Semi Mature	Good	Good	Good form and vitality. Single straight stem. Open balanced crown.	20+ Years	B1
T2	Elm	13	500	6	7	6	6	3	2	2	2	Semi Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Minor deadwood throughout. Minor mechanical damage to exposed surface roots.	20+ Years	B1
T3	Pedunculate oak	10	500	7	8	6	8	2	3	2	3	Early Mature	Good	Good	Good form and vitality. Open balanced squat form. Minor deadwood throughout. Large partially occluded pruning wounds from previous crown lifts.	40+ Years	B1
T4	Dawn redwood	18	680	6	6	5	5	2	2	2	2	Early Mature	Good	Good	Good form and vitality. Pronounced basal fluting typical of species. Open balanced spreading crown. Single straight stem. Roots deflecting adjacent tarmac footpath. Excellent specimen.	40+ Years	A1
T5	Dogwood	5	240	4	4	3	3	2	2	0	0	Mature	Fair	Fair	Suppressed by adjacent larger trees. With minor lean and weight bias to east. Dense water shoots throughout crown. Dense ivy throughout. Limited access to stem - DBH estimated.	10+ Years	C1

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Crown Spread (m)				Crown Clear. (m)				Age Class	Phys. Cond.	Struct. Cond.	Comments	Est. Rem. Cont. (years)	Cat.
				N	E	S	W	N	E	S	W						
T6	Dogwood	3	180	2	2	3	2	0	0	0	0	Young	Good	Good	Prolifically multi-stemmed at base - DBH estimated. Young established shrub. Slightly suppressed by adjacent trees.	10+ Years	C1
T7	Crab apple	3	90	2	2	3	1	1	1	1	1	Young	Fair	Good	Established young tree. Slightly suppressed by adjacent larger trees. Strimmer damage at base.	10+ Years	C1
T8	Hornbeam	11	340	3	4	5	6	2	0	0	0	Semi Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Crown lifted over footpath to south. Minor upper crown asymmetry with weight bias to SE.	40+ Years	B1
T9	Sycamore	4	150	2	3	2	1	2	2	2	2	Young	Fair	Fair	Suppressed by adjacent trees. Asymmetric leaning crown with weight bias to northeast. Low aesthetic value.	10+ Years	C1
T10	Silver birch	9	290	1	3	4	2	3	2	3	3	Semi Mature	Good	Good	Good form and vitality. Minor crown asymmetry due to proximity of adjacent tree. Weight bias to SE.	20+ Years	B1
T11	Silver birch	14	330	4	3	4	4	3	3	3	6	Semi Mature	Good	Good	Good form and vitality. Slender phototropic stem. Minor crown asymmetry due to proximity of adjacent trees.	20+ Years	B1

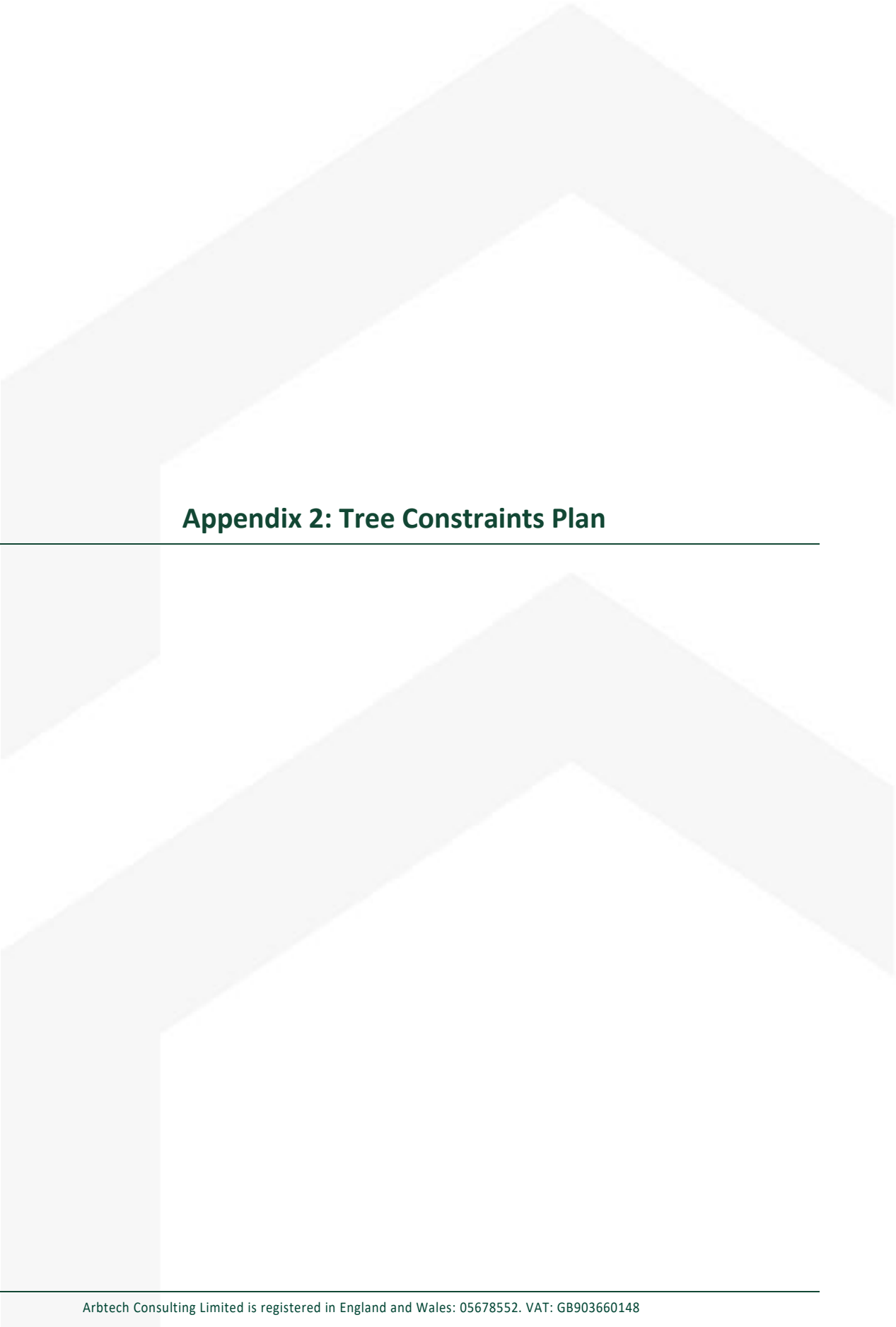
Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Crown Spread (m)				Crown Clear. (m)				Age Class	Phys. Cond.	Struct. Cond.	Comments	Est. Rem. Cont. (years)	Cat.
				N	E	S	W	N	E	S	W						
T12	Sycamore	13	540	6	5	6	7	3	2	2	2	Early Mature	Good	Good	Good form and vitality. Open balanced spreading crown.	40+ Years	B1
T13	Silver birch	5	80	1	2	1	1	2	2	2	2	Young	Good	Good	Young established tree. Good form and vitality.	10+ Years	C1
T14	Common whitebeam	6	160, 190	2	3	4	2	2	2	2	2	Semi Mature	Good	Fair	Good form and vitality. Open balanced spreading crown. Dense ivy covering primary branch framework.	10+ Years	C1
T15	Common hawthorn	5	450	4	4	5	4	2	2	2	2	Mature	Good	Good	3rd party tree. Good form and vitality. Multi-stemmed at base - dense ivy covering stems and primary branch framework - DBH estimated.	20+ Years	B1
T16	Common whitebeam	6	330	3	3	4	2	3	3	3	1	Semi Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Overhangs adjacent modular classroom.	20+ Years	B1
T17	Black pine	20	680	7	7	8	8	2	3	3	3	Mature	Good	Good	3rd party tree. Excellent specimen. Good form and vitality. Open balanced spreading crown. No defects noted.	40+ Years	A1

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Crown Spread (m)				Crown Clear. (m)				Age Class	Phys. Cond.	Struct. Cond.	Comments	Est. Rem. Cont. (years)	Cat.
				N	E	S	W	N	E	S	W						
T18	Wild cherry	16	400	5	5	5	0	2	1	1	3		Good	Good	Heavily suppressed by adjacent trees. Multi-stemmed at base. Slender phototropic form. Significant weight bias to east.	20+ Years	C1
T19	Wild cherry	7	150	3	3	4	1	0	0	0	0	Young	Fair	Fair	Suppressed asymmetric crown due to proximity of adjacent trees.	10+ Years	C1
T20	European lime	14	600	8	7	6	5	2	2	2	2	Early Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Acute primary unions typical of species. Minor deadwood within crown.	40+ Years	B1
T21	Norway maple	14	560	8	8	6	7	2	2	2	2	Early Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Multi-stemmed below 3m. Large partially occluded pruning wounds at 2m.	40+ Years	B1
T22	European lime	13	460	7	4#	5	5	2	2	2	3	Semi Mature	Good	Good	Good form and vitality. Minor asymmetry due to proximity of adjacent tree. No basal taper on NE side. Some compaction within RPA. Multi-stemmed below 4m.	40+ Years	B1
T23	Common ash	17	520	8	4	7	7	2	2	2	3	Early Mature	Good	Fair	Minor crown asymmetry due to proximity of adjacent tree. Compaction within RPA. Early signs of ADB - reduced vitality, lions tailing and contorted peripheral growth.	10+ Years	C1

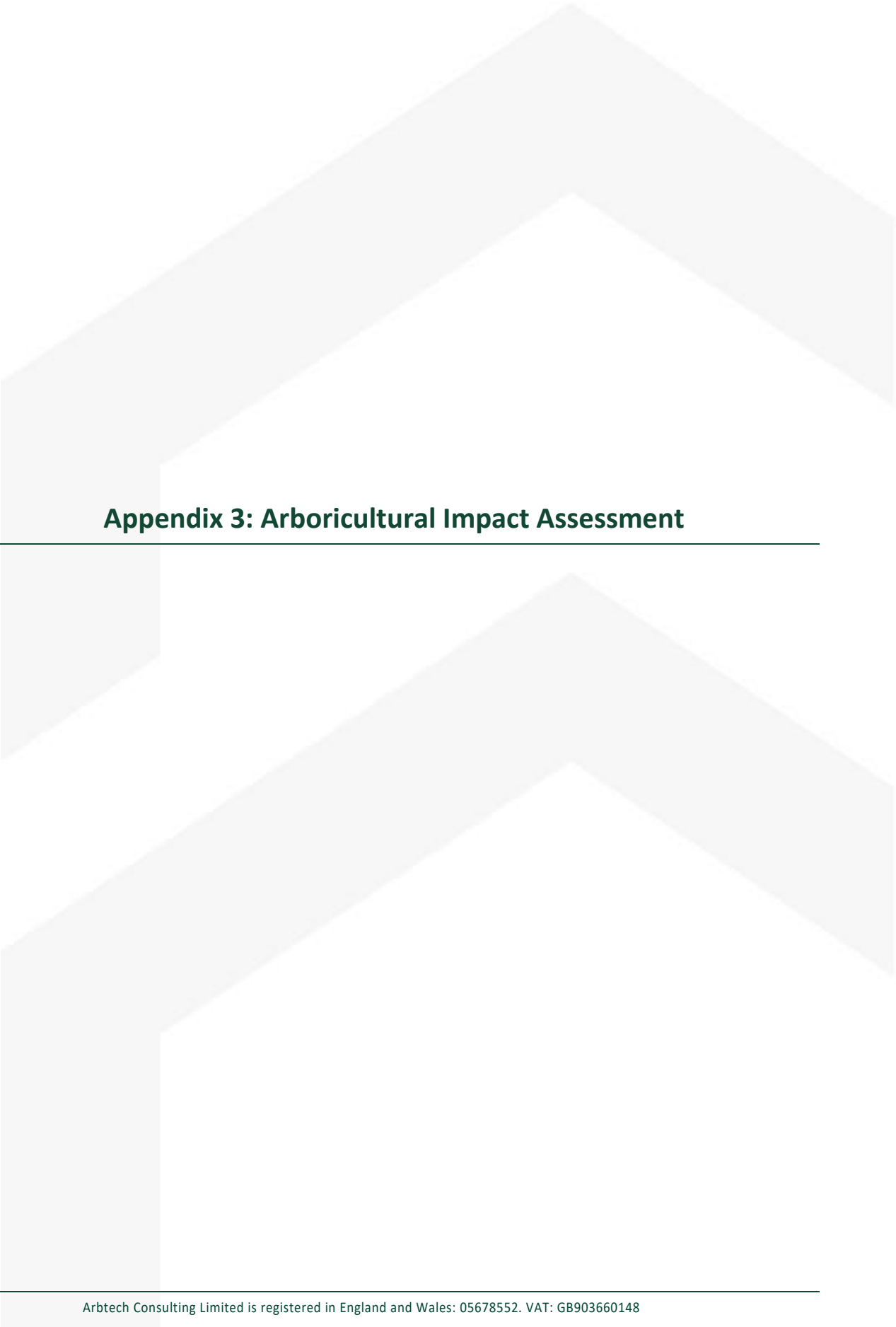
Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Crown Spread (m)				Crown Clear. (m)				Age Class	Phys. Cond.	Struct. Cond.	Comments	Est. Rem. Cont. (years)	Cat.
				N	E	S	W	N	E	S	W						
T24	Silver maple	16	590	9	8	8	7	2	1	1	1	Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Hazard beams in lower crown. Acute primary unions.	40+ Years	B1
T25	Silver maple	11	470	8	7	4	7	2	2	2	2	Early Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Slender limbs. Crossing limbs. Basal growth.	40+ Years	B1
T26	Common whitebeam	7	460	6	6	4	5	2	2	2	2	Early Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Minor stem lean to NE. Minor mechanical wound at base of buttressing on SW side.	20+ Years	B1
T27	Common alder	8	280	3	5	4	3	2	2	2	2	Semi Mature	Fair	Fair	Reduced vitality. Reduced crown density. Minor stem lean to east.	10+ Years	C1
T28	Common alder	6	170	2	3	2	2	0	0	0	0	Semi Mature	Fair	Poor	Poor vitality. Retrenching upper crown. Reduced crown density. Prolific basal growth.	<10 years	U
T29	White willow	6	930	4	5	3	3					Mature	Fair	Good	Old pollard. Recently repollarded with prolific vigorous regeneration growth. DBH taken at 0.5m due to stem from. Excellent specimen.	40+ Years	A1,3

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Crown Spread (m)				Crown Clear. (m)				Age Class	Phys. Cond.	Struct. Cond.	Comments	Est. Rem. Cont. (years)	Cat.
				N	E	S	W	N	E	S	W						
T30	Norway maple	11	500	7	7	6	6	2	2	2	3	Semi Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Previously pruned back from adjacent modular classroom.	40+ Years	B1
T31	Weeping willow	8	750	4	5	4	4	1	1	1	1	Early Mature	Fair	Good	Old pollard. Good form and vitality.	40+ Years	B1
T32	Crab apple	4	230	3	2	2	3	2	2	2	2	Semi Mature	Good	Good	Good form and vitality. Open balanced spreading crown. Previously pruned back from road surface.	40+ Years	B1
T33	Common hawthorn	4	190	2	3	2	2	0	0	0	0	Semi Mature	Good	Good	Good form and vitality. Open balanced crown. Pruned back to road edge. No access to stem - DBH estimated. Dense ivy covering stem and primary branch framework.	20+ Years	C1
G1	Mixed species (see comments)	11	120	2	2	2	2	0	0	0	0	Young	Good	Good	x7 Silver Birch, x1 Wild Cherry, x1 Common Alder. Linear group of young established trees with slender phototropic form. No defects noted.	20+ Years	C1,2
G2	Wild Cherry, Hazel & Western Red Cedar	12	320	5	5	5	5	0	0	0	0	Semi Mature	Good	Good	Linear group of x13 trees. Predominantly Cherry. Good form and vitality. Open balanced crowns. Slender phototropic form.	20+ Years	B1,2

Tree No.	Species	Ht. (m)	Trunk Diam. (mm)	Crown Spread (m)				Crown Clear. (m)				Age Class	Phys. Cond.	Struct. Cond.	Comments	Est. Rem. Cont. (years)	Cat.
				N	E	S	W	N	E	S	W						
G3	Mixed species (see comments)	5	100	2	2	2	2	0	0	0	0	Young	Good	Good	Mixed ornamental shrubs with crab Apple and cypress present. Good form and vitality. Well maintained and pruned back from road edge. No defects noted.	10+ Years	C2
H1	Common hawthorn	2	50	1	1	1	1	0	0	0	0	Semi Mature	Fair	Good	Dense well-maintained hedge. Dense ivy within.	20+ Years	B2
H2	Hornbeam	3	60	1	1	1	1	0	0	0	0	Young	Fair	Good	Previously topped at 1.5m. Loaded management. Suppressed by adjacent trees. Ivy covered stems.	10+ Years	C2
H3	White willow	2	100	1	1	1	1	0	0	0	0	Young	Fair	Fair	Curved linear group of approximately x20 trees. Recently topped.	10+ Years	C2
H4	Privet	2	40	1	1	1	1	0	0	0	0	Semi Mature	Good	Good	Well maintained hedge.	10+ Years	C2

A large, light green, stylized house icon that serves as a background for the page. It is composed of several geometric shapes: a large triangle for the roof, a rectangle for the main body, and a smaller triangle at the bottom left corner.

Appendix 2: Tree Constraints Plan

A large, light green, stylized house icon that serves as a background for the central section of the page. It is composed of several geometric shapes forming a roof and walls.

Appendix 3: Arboricultural Impact Assessment

A large, light green, stylized house icon that serves as a background for the page. It is composed of several geometric shapes forming a roof and walls.

Appendix 4: Tree Protection Plan

A large, light green, stylized house icon that serves as a background for the central section of the page. It is composed of several geometric shapes forming a roof and walls.

Appendix 5: Tree Protection Notice

Tree Protection Area **KEEP OUT**

Do not move this fence

(TOWN & COUNTRY PLANNING ACT 1990)

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

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

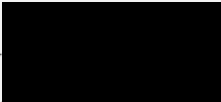


Unit 3, Well House Barn, Chester Road, Chester, CH4 0DH
<https://arbtech.co.uk> - 01244 661170

Appendix 6: 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	Author	Signature	Position	Date
AMS 01	Anthony Jones		Arboricultural Consultant	27/04/26

Report Limitations

Arbtech Consulting Ltd has prepared this report for the sole use of the above-named Client/Agent in accordance with our terms of business, under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by us. This report may not be relied upon by any other party without the prior and express written agreement of Arbtech Consulting Ltd. The assessments made assume that the sites and facilities will continue to be used for their current purpose without significant change. The conclusions and recommendations contained in this report are based upon information provided by others and upon the assumption that all relevant information has been provided by those parties from whom it has been requested. Information obtained from third parties has not been independently verified by Arbtech Consulting Ltd.

Copyright

© This Report is the copyright of Arbtech Consulting Ltd. Any unauthorised reproduction or usage by any person other than the addressee is strictly prohibited.