Arboricultural Method Statement to BS5837:2012

Amy Lawrence

61 Horton Road,
Datchet,
Berkshire,
SL3 9HD

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Emily Kempson BSc (Hons) Dip Arb L4 (ABC)

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1. Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 19th August 2021 from Amy Lawrence to attend 61 Horton Road, Datchet, Berkshire, SL3 9HD; grid reference, SU 99321 76899 (site) to undertake an arboricultural survey a 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 and Tree Constraints Plan. Arbtech received instruction on 9th September 2021 to produce an Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

2. Executive Summary

This report describes the extent and effect of the proposed development at 61 Horton Road, Datchet, Berkshire, SL3 9HD ("site") on individual trees and groups of trees within and adjacent to the site.

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

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

Figure 1: Aerial Image of Site with approximate red line boundary (Google Maps)

Checklist for Submission to Local Planning Authority

Tree survey	✓
Tree constraints plan	✓
Arboricultural impact assessment	✓
Arboricultural method statement	✓
Tree protection plan	✓

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

It is the conclusion of this report that the overall quality and longevity of the amenity contribution provided for by the trees and groups of trees within and adjacent to the site will not be adversely affected as a result of the local planning authority consenting to the proposed development. The proposals do not result in any adverse impact to TPO trees. The only impact is from the proposed incursion of less than half a percent to T01, thus considered as negligible. The design utilises existing foundations adjacent to the RPA of T13, therefore no excavation is required within the RPA of this tree.

It is considered that any issues raised in this report, or beyond the scope of it can be dealt with by planning conditions.

3. General Information

Client: Amy Lawrence

Site: 61 Horton Road, Datchet, Berkshire, SL3 9HD

Brief proposal description: The existing dwelling is to be altered to add a second storey with new side extension.

Planning application reference: N/A

Table 1: Documents referred to.

Document	Reference No.
Topographical / Site survey drawing	FLU.1625.01
Proposed layout drawing	FLU.1625.06
British Standard 5837:2012	“BS5837”
Arboricultural Impact Assessment	Arbtech AIA 01
Tree Protection Plan	Arbtech TPP 01

4. Tree Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Chris Wren 7th September 2021

A total of 17No individual trees, 1No groups of trees and 1No hedges were surveyed. Details for each of the trees surveyed are provided in the Schedule of Trees (see Appendix 2).

The RAVEN (Recognition of Ancient, Veteran & Notable Trees) assessment system was used to classify T13 as a notable individual rather than a veteran tree. T13 currently has no primary features and only one of the secondary features required to classify it as a veteran tree.

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

Document	Originator	Reference Number	Title
Location Plan	Fluent Architectural Design Services	FLU.1625.01	Location Plan

Limitations: The survey was made at ground level using visual observation only. Detailed examinations, such as climbing inspections and decay detection equipment were not employed, though may form part of the survey's management recommendations. Measurements were taken using specialist tapes, laser and GPS devices. Where this was not possible, measurements are estimated.

Scope: Pre-development tree surveys make arboricultural management recommendations based exclusively upon the individual tree or group of trees condition 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. This is principally because a detailed planning consent overrides any TPO protection. 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.

* For more information on the surveyed trees please see Arbtech Consulting Ltd, Tree Survey Schedule (Appendix 1), Tree Survey Report and Tree Constraints Plan.

5. Arboricultural Impact Assessment

Table 3: Documents upon which this assessment has been based.

Document	Originator	Reference Number	Title
Location Plan	Fluent Architectural Design Services	FLU.1625.01	Location Plan
Site Plan	Fluent Architectural Design Services	FLU.1625.06	Proposed Site Plan

There are a number of issues that 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 which would have been scheduled as a part of usual management.

Table 4: Impacts upon the RPAs of retained trees.

Tree Number	Species	Proposed structure	RPA (m^2)	Incursion	
				(m^2)	(%)
T01	Corsican Pine	Extension	443.4	1.2	0.3

These impacts can be seen on the Arboricultural Impact Assessment drawing number Arbtech AIA 01.

Trees to be removed

No trees require removal to facilitate the proposed scheme.

6. Arboricultural Method Statement

The purpose of this method statement is to demonstrate how any aspect of the development that has potential to result in loss or damage to a tree may be implemented and provide an adequate level of protection for those trees that are to be retained during the proposed works.

Details of key site personnel, including site / project manager will be submitted to the Council's Tree Officer prior to the commencement of site works.

This method statement is to be approved and agreed to in writing by all key personnel prior to the commencement of site works.

No site personnel are to be present and no demolition, site clearance, building work or delivery of materials is to occur until the protective measures are in accordance with this method statement and the Tree Protection Plan drawing number Arbtech TPP 01.

Protective measures should be in accordance with this method statement and the Tree Protection Plan; drawing number Arbtech TPP 01 will remain unaltered and in situ, unless otherwise specified, for the entire duration of the construction.

Table 7: Documents upon which this assessment has been based.

Document	Originator	Reference Number	Title
Location Plan	Fluent Architectural Design Services	FLU.1625.01	Location Plan
Site Plan	Fluent Architectural Design Services	FLU.1625.06	Proposed Site Plan

Tree Works

If any unforeseen tree work is to be undertaken, it must be carried out 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.

Protected Species

Conservation Status of British Bats

The general 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 UK Government within 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 whereby the maintenance and restoration of the former populations levels are investigated.

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 on Annex IV (and some on 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

The legislation although not strictly affording protection to foraging grounds 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, a number of birds enjoy further protection under that Act and are listed on Schedule 1 of the Act. These further protected birds are also protected from disturbance and it may be necessary to operate "no-go" buffer zones around such nests –typically out to 100m.

Planning policy guidance on the treatment of species identified as priorities under the biodiversity action programme suggests that local authorities should take measures to protect the habitats of these species from further decline through policies in local development documents and should ensure that they are protected from the adverse effects of development, where appropriate, by using planning conditions or obligations. The conservation of these species should be promoted through the incorporation of beneficial biodiversity designs within developments.

Sequencing of works

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

Table 9: Sequence of Events

Stage	Event
Stage 1	Installation of protective measures in accordance with the approved tree protection plan
Stage 2	Pre-commencement site meeting
Stage 3	Construction site set up
Stage 4	Undertake and complete construction works
Stage 5	Undertake external landscaping works outside of the construction exclusion zones
Stage 6	Removal of all machinery and materials from site
Stage 7	Arboricultural approval to dismantle and remove tree protection measures
Stage 8	Dismantle and removal of protective measures
Stage 9	Undertake external landscaping works within the construction exclusion zones
Stage 10	Sign off from project arboriculturist

Protective Measures

Protective measures are to be installed and are to be sited and aligned in accordance with the tree protection plan (Arbtech TPP 01) prior to the commencement of any works or the introduction of any machinery or material to site.

Upon installation of the protective measures around the retained trees the project arboriculturist will visit the site to inspect and document the position and specifications of the protective measures.

In the event that the protective measures and their positions do not comply with this arboricultural method statement document number Arbtech AMS 01 (08 April 2022) and tree protection plan drawing number Arbtech TPP 01, the project arboriculturist shall inform the client and fencing contractor so adjustments can be made.

When the protective measures comply with document number Arbtech AMS 01 (08 April 2022) and tree protection plan drawing number Arbtech TPP 01, the project arboriculturist will sign off the protective measures in writing to the client and will send a copy to the fencing contractor, site agent and local authority tree officer.

If the protective measures become damaged or there is any accident or emergencies 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 and all work within in this area is to cease until the project arboriculturist has made a visit to the site. Any and all 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, mixing of concrete or other products, accessed by 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 6 (see Sequencing of Works), there after 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 or LPA tree officer upon the completion of the development or immediately prior to 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 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 banks man. Damage to trees will be considered a breach of this tree protection plan, which in turn could be a breach of planning permission.

Construction exclusion zone

A construction exclusion zone (CEZ) is a designated area where there is to be no construction activity what-so-ever. Access to the area for construction personnel or machinery is strictly prohibited and there is no scope for materials or waste storage etc. There may be some construction activities planned for these areas (e.g., the installation of service trenches) these activities will be undertaken under direct, on-site arboricultural supervision.

Protective Barrier Fencing

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

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 stabiliser struts, which should be attached to a base plate and secured with ground pins.

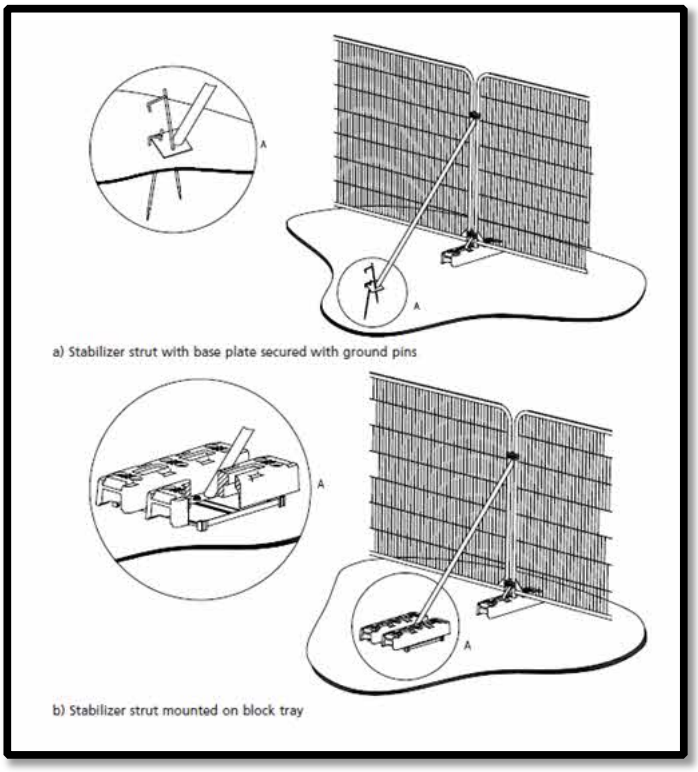

Figure 2: BS5837:2012 - Figure 3, Examples of above-ground stabilising systems.

Signage denoting the words "*tree protection area*" at 5.0m intervals should be fixed to the protective barrier fencing (See Appendix 2).

Protective fencing is to be removed ONLY with the written permission of the arboricultural consultant and approval of the local planning authority (LPA).

Ground boarding

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.

Where it is determined by the project engineer that the 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 from the ground boarding within the RPAs of the retained trees an impervious barrier and or bunding to prevent oils, fuel or chemicals is to be installed to prevent leaching into the soil within or adjacent to the RPAs.

NOTE: The ground protection might comprise of 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;

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 of 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 is to be designed and supplied to the LPA tree officer for their approval by the project engineer a minimum of ten (10) working days before its installation.

Construction

Prior to the construction of the proposed development, a copy of the construction method statement should have been submitted and approved by the project arboriculturist and LPA tree officer, to ensure that there is no conflict with this method statement.

All excavations and construction work within or immediately adjacent to RPAs or canopies of retained trees is to be undertaken under the direct on-site supervision of an arboriculturist.

Foundations –Trees T01 and T13.

The foundations incursion to T01 by the proposed extension equates to 0.3% of the RPA and as such is deemed negligible so as to allow the construction of standard foundations following the pruning of any roots identified, without causing harm to the long term vitality of the tree. Please refer to Temporary Retaining System and Root Pruning for further details.

The existing foundations have been confirmed as suitable by a structural engineer to support the proposed upper storey extension. Therefore, the foundations within the existing house footprint are to be reused, avoiding the need for any excavation in these areas.

New foundations are required for the southwestern extension within the same footprint of the existing impermeable concrete patio area (Figure 3). This area has been previously accepted as a root barrier by the tree officer and the RPA has been adapted to reflect this. The footprint of the new foundations is adjacent to the area of patio and existing lawn and thus RPA of T13, as shown in Figure 4. As a result, the excavation of the foundations in this area is to be undertaken manually, under direct arboricultural supervision. Please refer to Supervised excavation for further details.

Figure 3 –Photograph of the existing concrete patio. The proposed foundations are aligned to the same footprint.

Figure 4 –Photograph of existing rear elevation adjacent to the RPA of T13.

Temporary Retaining System (TRS) –Tree T01.

Prior to the excavations for the foundations the project engineer is to have assessed the soil conditions to determine the likelihood of soil collapse in or adjacent to the RPAs of all retained trees, to prevent the potential of any loss to the rooting environment and destabilisation of trees.

If it is determined that there is any risk of soil collapse a temporary retaining system TRS (sheet piling or similar) is to be installed along the line of the proposed excavation to retain the surrounding rooting environment and remove the chance of any soil collapse.

The type of TRS and its nature of being temporary or permanent are to be confirmed by the project engineer but the TRS is to be capable of retaining the retained rooting environment during the excavation and construction phases.

The installation of the TRS is to be undertaken under direct on-site arboricultural supervision prior to the excavation of foundations. A trench along the line of the TRS will be excavated wide enough to allow the project arboriculturist to gain access to the bottom of the trench. This trench should be a minimum of 1000mm deep (or to the total depth of the foundation), the final depth of this initial excavation will be determined by the project arboriculturist whilst on site. During this excavation any roots that might have been exposed during these initial excavations will be severed cleanly by the project arboriculturist.

Root Pruning –Tree T01

The line of the proposed root pruning is to be situated at a 200mm offset from the proposed extension foundations, as highlighted by the purple line in Arbtech TPP 01. Excavations for root pruning within RPA of tree number T01 will be undertaken using an Air-spade or hand tools to a minimum of 600mm deep. The total depth of the excavation will be determined by the arboriculturist whilst on site.

The soil is to be loosened with the aid of a fork or pickaxe and then cleared with the aid of an Air-spade, Air-vac and or shovel. Any roots found will be cleanly severed by the arboricultural consultant or the specialist arboricultural contractor with either a hand saw or secateurs leaving a clean cut.

Once all roots have been severed the edge of the excavation closest to the trees will be covered and retained prevent drying out, soil collapse or contamination.

Concrete foundations

Prior to concrete being 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 run off.

Supervised excavation –Trees T01 and T13.

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

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 it 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.

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.

Prohibition

Mechanical digging or scraping is not permitted within a defined root protection area or within 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 of 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 within areas cordoned off by protective barrier fencing.
Cement silos, mixing site to be situated within a bunded area to prevent pillage/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.
It is essential that allowance should be made for the slope of the 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 whilst setting up, moving or operating within this distance of retained trees canopies.
Storage of all caustic material and chemicals are to be situated well clear of protected areas and preferably on lower ground if slopes are present, or to be situated within a bonded area to prevent any spills or leaks 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 and 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 method statement and tree protection plan drawing number 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 arborist about any tree related matters and prior to 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.

Any incidents of damage to retained trees or of tree protection measures will be documented by the site manager who will then report these incidents to the project arboriculturist immediately and make sure that works within this area cease until the project arborist has had an opportunity to inspect the damage and where appropriate, agree a mitigation plan with the local planning authority tree officer.

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

If the site manager is replaced or is absent from site for more than three consecutive working days, the project arborist will be informed, and a prestart 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 the 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 at any time pruning works are required other than those previously approved, permission must be sought from the LPA tree officer and once permission is granted, they are to be carried out by a suitably qualified person in accordance with BS3998:2010 Tree work – Recommendations.

Services

Existing services within the site should be retained wherever possible. Where existing services within RPAs require upgrading, the upmost care must be taken to minimise disturbance, and 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 should be located outside of RPAs, where they will not interfere with tree roots. If any excavations are required within the RPAs all trenches are to be excavated by hand and radially to the tree trunks under direct on-site arboricultural supervision and are to be carried out under NJUG guidelines.

Final positions of any proposed services should be verified and approved by the arboricultural consultant and local authority tree officer before implementation.

New Underground services

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

Where it has been impossible to keep underground services from passing through RPAs or within close proximity to trees, these sections are to be installed in one of three ways in accordance with the guidance set out in National Joint Utilities Group guidelines (NJUG 4), under on-site arboricultural supervision.

Trenchless Techniques

There are three main types of trenchless techniques, these include, guided and unguided boring and pipe replacement by lining or bursting. These allow for the installation, maintenance or renewal of underground services, without the disturbance of soil in which roots are likely to be growing. Starting and receiving pits for the boring machinery are to be located outside of the RPAs of any retained trees, with the bore depth being maintained at a minimum depth of 600mm below the existing ground level.

Techniques involving external lubrication of the equipment shall use no material other than water as other lubricants could contaminate the soil (e.g., oil, bentonite, etc.).

Manual Excavation

Excavation within RPAs will be undertaken by hand under direct on-site arboricultural supervision of the required depth of the foundation; Or to a minimum of 600mm deep of any

excavation, whether for proposed foundations, hard surfacing or underground services. The total depth of the manual excavation will be determined by the arboriculturist whilst on site.

The soil is to be loosened with the aid of a fork or pickaxe and then cleared with the aid of an Air-spade, Air-vac and or shovel. Any roots found will be cleanly severed by the arboricultural consultant with either a hand saw or secateurs.

Any roots found with a diameter of less than 25mm shall be cleanly severed by the arboricultural consultant. Any roots of 25mm and above shall be excavated around without damaging them; the arboricultural consultant shall decide if it's 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.

Soil beneath the depth may be sheet piled, regular piled or excavated deeper. Machinery may be used for this providing that it is situated outside of the RPA or has appropriate ground protection in place to move around on and work upon.

Broken Trench –Hand Dug

This technique combines both trenchless techniques and manual excavation where excavation is unavoidable. Excavations should 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. Open section of trench should only be large enough to allow access for linking to the next section.

Landscaping

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

All excavations within the Root Protection Areas shall be undertaken by hand and without reducing current ground levels unless it is agreed in writing with the LPA. At no time is the use of a rotavator permitted within the RPAs of retained tree.

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

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

Monitoring and Supervision

Where trees have been identified within this method statement and tree protection plan drawing number Arbtech TPP 01 for retention, there should 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 to be undertaken within or adjacent to the RPAs of retained trees are to be supervised by project arboriculturist, who should be retained to record and report observations to the council at appropriate intervals.

Pre-commencement site meeting

Prior to the commencement of any works or machinery and materials arriving on site a pre-commencement site meeting involving the project arborist, landowner or agent, site manager, contractors and engineer (as appropriate) and the relevant LPA officers will be held to ensure that all aspects of the arboricultural method statement and tree protection are understood and for all parties to swap contact details (see Appendix 3).

Monitoring and supervision schedule

The initial monitoring visit will be to check that the tree protective measures are in the correct location and as specified within the approved method statement; if so to sign off their installation.

There after 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 determined with the LPA 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 during the course of the development, it is necessary for areas to be re-designed so that they would require changes to the approved arboricultural method statement or tree protection plan and so affecting retained trees the project arborist and LPA tree officer will be invited to attend a site meeting with all relevant parties. Prior to any changes being implemented these must have been approved in writing by the LPA tree officer.

Supervision

The arboricultural consultant will be required to attend 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 prior to the commencement of any works that require his attendance, these will include:

1. Pre-commencement site meeting.
2. Location of protective measures.
3. Supervised excavations root pruning of T01 and installation of TRS.
4. Supervised manual excavation for foundations within existing concrete patio adjacent to RPA of tree T13.
5. Any demolition and or excavations within or adjacent to RPAs, including foundations, hard surfacing or underground services (a non-exhaustive list).
6. Arboricultural sign off and removal of protective measures.

Completion meeting

Once all construction works have been completed all materials and machinery has been removed from site the project arborist shall be informed and will invite the LPA tree officer to meet on site to discuss the process and discuss any final remedial works that may be required and to sign the development off so that the protective measures may be removed.

Arboricultural Monitoring and Supervision Sign Off Checklist
61 Horton Road, Datchet, SL3 9HD

Tree Number	Task	Date Completed	Signed (Project arboriculturist)	Signed (Site Manager)
All	Pre-commencement site meeting			
All	Sign off of the location and specification of the protective measures			
T01	Supervised root pruning and TRS installation			
T13	Manual excavation of foundations			
	Any / Additional excavations (as required)			
All	Completion of ground works			
All	Completion of construction			
All	Removal of machinery and materials from site			
All	Dismantle & removal of protective measures			
All	Completion of Landscaping			
All	Sign off from project arboriculturist			

Appendix 1: Tree Survey Schedule

BS5837:2012 Tree Survey

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

Client: Amy Lawrence
Project: 61 Horton Road, Datchet, Berkshire, SL3 9HD
Survey Date: 07/09/2021
Surveyor: Chris Wren

ARBTECH

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 Recommendatio / Survey Commen	Cat ERC
G01										Estimated Measurements	
Various *See comments for details*	3.5	1	220	N 0.5 E 0.5 S 0.5 W 0.5	0 0 0 0	SM	A: 21.9 R: 2.64	Good	C: Good S: Not visible B: Not visible	Group primarily comprising of spotted laurel, cherry laurel, holly, verigated holly, Japanese spindletree and Lawson cypress. Group formally maintained for screening at current dimensions. The group contains several dead standing stems from previously topped Lawson cypress hedge. Dimensions recorded represent average for the group.	C.2 40+ yrs
H01										Estimated Measurements	
Various *See comments for details*	3.5	1	90	N 0.5 E 0.5 S 0.5 W 0.5	2 0 0 0	M	A: 3.7 R: 1.08	Good	C: Good S: Not visible B: Not visible	Off site Boundary hedge primarily comprising of hawthorn with elements of ivy. Basal area and stems obscured by undergrowth and canopy. Dimensions recorded represent average for the hedge.	B.2 40+ yrs
T01											
Corsican Pine *Pinus nigra var.maritima*	22	1	990	N 3.5 E 5 S 9 W 9	8 7 7 7	M	A: 443.4 R: 11.88	Good	C: Good S: Good B: Not visible	Ivy on stem to 4m, obscuring visual inspection. Basal area obscured by undergrowth. Stem bifurcates at 2.5m into one dominant and one sub-dominant stems, union included. Dominant stem bifurcates again at 6.5m, union included. Crown on the south and western sides raised to current dimensions, pruning wounds up to 250mm diameter. Major deadwood (>75mm diameter and /or longer than 2m) throughout crown, typical of species.	A.1.2 40+ 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 Contributio

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 Recommendatio Survey Commen	Cat ERC
T02												
Common Yew *Taxus baccata*	6.5	3	491	(Eq)	N 4 E 5 S 4.5 W 3.5	3 0 0 2	EM	A: 108.9 R: 5.88	Good	C: Good S: Fair B: Not visible	Historically topped at 3m, regrowth up to 100mm diameter and 4m long. Topping wounds not visible due to debris from adjacent tree. Basal area obscured by undergrowth.	B.2 40+ yrs
T03												
Common Yew *Taxus baccata*	14	5	922	(Eq)	N 5 E 7.5 S 6.5 W 5.5	2 4 2 5	M	A: 384.5 R: 11.06	Good	C: Good S: Good B: Not visible	Stems diverge at 1m, unions included. Basal area obscured by undergrowth. Major deadwood (>75mm diameter and /or longer than 2m) throughout crown. Southern crown raised to current dimensions, pruning wounds up to 80mm diameter with callus wood to 20mm. Physical wound on northern side of southern stem, would approx 1050mm tall and 280mm wide with callus wood to 80mm.	A.1.2 40+ yrs
T04												
Bay *Laurus nobilis*	6	8	170	(Eq)	N 1.5 E 1.5 S 2 W 1.5	2 2 1.5 2	Y	A: 13 R: 2.03	Good	C: Good S: Good B: Not visible	Stems diverge at ground level, typical of species. Historically topped at 2m, regrowth up to 40mm and 4m long. Basal area and stem unions obscured by undergrowth.	C.2 20+ yrs
T05												
Norway Maple *Acer platanoides*	9	1	190		N 4 E 1 S 5 W 4	4 6 2 5	EM	A: 16.3 R: 2.27	Decline	C: Good S: Good B: Not visible	Drummondii variety. Crown at 10% expected density likey due to being overcrowded by adjacent trees.	U <10 yrs
T06												
Blue Atlas Cedar *Cedrus atlantica 'Glauca'*	10	1	400		N 6 E 4 S 3.5 W 4	6 6 2 2	EM	A: 72.4 R: 4.8	Good	C: Good S: Good B: Not visible	Basal area obscured by undergrowth. Historically topped at current height, wound approx 230mm diameter but partially obscured by crown and its height.	B.1.2 40+ 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 Contributio

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 Recommendatio Survey Commen	Cat ERC
T07												
Indian Bean Tree *Catalpa bignonioides*	9	2	332	(Eq)	N 6 E 6 S 5 W 4	5 4 4 6	EM	A: 50 R: 3.98	Good	C: Good S: Good B: Good	Crown on the west and northern side historically raised to current dimensions, pruning wounds approx 100mm diameter.	B.1 40+ yrs
T08												
Strawberry Tree *Arbutus unedo*	5.5	3	209	(Eq)	N 3 E 1.5 S 2.5 W 4	1.5 4 3 2	M	A: 19.8 R: 2.51	Good	C: Good S: Good B: Good	Asymmetrical crown due to proximity of companion trees and historical pruning. Crown on the west side historically reduced to clear the off site garage, wounds approx. 60mm diameter.	C.1 20+ yrs
T09												
Portuguese laurel *Prunus lusitanica*	5	1	150		N 2 E 2.5 S 2.5 W 2	2 1 1 2	M	A: 10.2 R: 1.8	Good	C: Good S: Good B: Good	Portuguese laurel. Asymmetrical crown due to proximity of companion tree and historical pruning to give clearance to the adjacent building.	C.1.2 20+ yrs
T10												
Tulip Tree *Liriodendron tulipifera*	15	1	440		N 6 E 6 S 7 W 6	5 2 2 4	M	A: 87.6 R: 5.28	Good	C: Good S: Ivy B: Good	Ivy on stem to 5m. Major deadwood (>75mm diameter and /or longer than 2m) throughout crown.	B.1 40+ yrs
T11												
Fig *Ficus carica*	5	5	152	(Eq)	N 3 E 2 S 2 W 4	2 2 2 2	EM	A: 10.5 R: 1.82	Good	C: Good S: Good B: Good	Asymmetrical crown due to proximity of companion trees. Stems diverge at ground level, unions included.	C.1 40+ yrs
T12												
Norway Maple *Acer platanoides*	7	1	270		N 2 E 2 S 2.5 W 2	2 2 2 2	EM	A: 33 R: 3.24	Good	C: Good S: Poor B: Good	Physical wound at ground level. Wound approx. 750mm tall and 140mm wide with callus wood to 70mm. Wound opens into internal cavity that extends below ground level and up into the stem. Extents of cavity not visible. Historically topped at 2m, regrowth up to 90mm diameter and 5m long	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

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ERC: Estimated Remaining Contributio

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 Recommendatio Survey Commen	Cat ERC
T13												
Common Oak *Quercus robur*	19	1	1380	N E S W	6.5 8 8.5 8	7 2 2 7	M	A: 707 R: 15	Good	C: Fair S: Fair B: Fair	Mature tree with minor veteran features, but not enough to classify the tree as a veteran according to the RAVEN method of classifying veteran trees. Basal area partially obscured by undergrowth. Physical wound on northwestern side of stem, wound approx 1m tall and 0.5m wide with callus wood to 100mm. Wound approx. 400mm deep in places. Ivy on stem to 5m. Woodpecker holes visible on eastern side of stem at 10m, one of which is used as an entrance to a bee hive. Major deadwood (>75mm diameter and /or longer than 2m) throughout crown. Multiple physical and pruning wounds throughout crown, wounds up to 300mm diameter. Crown historically reduced approx. 2m inside of current crown dimensions, regrowth up to 130mm diameter.	A.1.3 40+ yrs
T14											Estimated Measurements	
Silver Birch *Betula pendula*	8	1	260	N E S W	3 3 3 3	4 4 4 4	EM	A: 30.6 R: 3.12	Good	C: Good S: Not visible B: Not visible	Off site tree. Stem and basal area obscured by 2m boundary wall, undergrowth and crown.	C.1 20+ yrs
T15												
Common Holly *Ilex aquifolium*	5	1	500	N E S W	2 2 2 2	2 2 2 2	M	A: 113.1 R: 6	Good	C: Good S: Fair B: Not visible	Basal area obscured by undergrowth. Historically topped at 2m (regrowth up to 170mm diameter) and again at 3m (regrowth up to 50mm diameter and 2m long). Pruning wounds not visible due to proliferation of stems and regrowth.	B.1 20+ yrs
T16											Estimated Measurements	
Common Beech *Fagus sylvatica*	13	1	320	N E S W	4 5 5 5	5 4 4 4	M	A: 46.3 R: 3.83	Fair	C: Good S: Good B: Not visible	Off site tree. Crown at 80% expected density, cause not visible at time of survey. Basal area obscured by undergrowth.	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 Contributio

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 Recommendatio Survey Commen	Cat ERC
T17											Estimated Measurements	
Lawson Cypress	10	6	661	(Eq)	N 3	4	M	A: 197.9	Good	C: Good		B.1
Chamaecyparis lawsoniana					E 3	2		R: 7.93		S: Not visible		20+ yrs
					S 3	2				B: Not visible	Off site tree. Stems diverge at ground level, unions not visible. Crown raised to current dimensions on the west side, wounds up to 130mm diameter with no callus wood visible.	
					W 3	2						

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 Contributio

Appendix 2: Tree Protection Notice

(To be printed at A3 or larger)

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

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

Appendix 3: Contact Details

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

Document Production Record

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