arbtech

Arboricultural Method Statement to BS5837:2012

M&D Properties Investment Ltd

Marian Court,
Robin Hood Lane,
Sutton,
SM1 2SB

08 December 2023

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1. Introduction

Arbtech Consulting Limited (Arbtech) received written instruction on 14 November 2023 from M&D Properties Investment Ltd to attend Marian Court, Robin Hood Lane, Sutton, SM1 2SB; grid reference, TQ 25521 64313 (site) to undertake an arboricultural survey to BS5837:2012 guidance to assess trees, hedges and major shrub groups growing on and within influencing distance of the site and to produce a Schedule of Trees, Tree Constraints Plan, Arboricultural Impact Assessment, Arboricultural Method Statement and Tree Protection Plan.

2. Executive Summary

This report describes the extent and effect of the proposed development at Marian Court, Robin Hood Lane, Sutton, SM1 2SB ("site") on individual trees and groups of trees within and adjacent to the site. This report has been prepared to specifically address the concerns raised by London Borough of Sutton Council (LBSC) in the Decision Notice, in reference to the two protected trees along the site frontage (Arbtech reference T05 and T06, TPO reference 2009/01 trees T2 and T3).

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 and supporting plans.

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

Checklist for Submission to Local Planning Authority

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

Conclusion

This report seeks to address the tree related comments included in the delegation report and refusal letter received from London Borough of Sutton Council. This report provides evidence that there will be no excessive net change to the pruning regime to the protected cedar trees, which is contrary to the statement that the proposed extension would result in a *much greater need for heavy pruning*. It is therefore the conclusion of this report that the overall quality of the character of the area as provided by the cedar trees, will not be negatively impacted by the proposals.

3. General Information

Client: M&D Properties Investment Ltd.

Site: Marian Court, Robin Hood Lane, Sutton, SM1 2SB

Brief proposal description: The upwards extension of three, three storey detached blocks of flats.

Planning application reference: DM2023/01377

Table 1: Documents referred to.

Document	Reference No.
Topographical / Site survey drawing	MB-SURV-MC-TS-001
Proposed layout drawing	000MA-A-03-101
LPA comments	Decision Notice, dated 3 November 2023 Delegated Report, dated 3 November 2023
British Standard 5837:2012	"BS5837"
Arboricultural Impact Assessment	Arbtech AIA 01

4. Tree Survey

Survey: An arboricultural survey to BS5837 of all trees within impacting distance of the site was undertaken by Fearghus Gage on 17 November 2023.

A total of 43No. individual trees, 9No. groups of trees and 2No. hedges were surveyed. Details for each of the trees surveyed are provided in the Schedule of Trees (see Appendix 1).

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

Document	Originator	Reference Number	Title
Survey base drawing	Icelabz	MB-SURV-MC-TS-001	Topographical Survey

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
Survey base drawing	Icelabz	MB-SURV-MC-TS-001	Topographical Survey
Site Plan	We Are Upp	000MA-A-03-101	Proposed Ground Floor Plan
Roof Plan	We Are Upp	000MA-A-03-105	Proposed Roof Plan
Elevations	We Are Upp	000MA-A-06-102	Proposed North Elevation
Elevations	We Are Upp	000MA-A-02-102	Proposed Rear Visualisation

This Arboricultural Impact Assessment seeks to address the consultee responses included within the Decision Notice and Delegated report. The responses for reference are copied and pasted in italics as follows:

"The proposals to add an additional storey, will place dwellings directly within the upper canopies of the protected Cedar trees and introduce a much greater need for heavy pruning, to create enough clearance to achieve what would be considered, an acceptable juxtaposition. I consider that such pruning would adversely affect the trees amenity value as well as their long-term health and condition. On this basis, I do not consider that compliance with SLP Policy 28 has been achieved."

...

"The Principal Tree Officer has reviewed the application and considers the scheme has not adequately considered the implications of two mature Cedar trees. These are protected by a tree preservation order. It is recognised these have an existing relationship with one of the buildings and has been managed through partial reduction of the lower lateral branches, but the upper canopy has been allowed to develop more naturally and maintains a high amenity contribution. However, the additional storey would play dwellings directly within the upper canopies of the protected trees and introduce a greater need for heavy pruning and would likely result in unacceptable post-development pressure on a feature which has high amenity value and would be detrimental to the appearance of the street scene and surrounding area."

The comments have been addressed in key themes as follows:

<u>Existing situation versus proposed works;</u>

The existing building is three-storeys tall with a pitched roof and overhanging eaves. The proposal seeks to remove the eaves, which will pull the envelope of the building further away from the trees by 0.5 – 0.75m (Figure 3 and AIA plan). The pitched roof is to be removed and replaced with a mansard style roof, increasing the ridge height by 1.5m in total.

As the eaves are to be removed, the finished building will be slightly further away from the tree canopies compared to the existing, and the overall net change in height is only 1.5m.

Therefore, there is no significant change to the elevation of the building to warrant a drastic change to the existing tree maintenance regime.

Greater need for heavy pruning compared to the existing;

Table 4 demonstrates that the trees are already part of an ongoing pruning regime, where pruning works are typically applied for every 3-4 years. However, the most recent tree works to remove branches away from the building were approved in 2016, meaning that no tree work has been carried out for the last 7 years. This suggests that the previous pruning carried out has successfully reduced the need for excessive ongoing pruning. As shown in Figure 4, all branches that are within 2-3m of the existing building are comprised of the regrowth from the previous pruning cycle, and as such are no more than 25mm in diameter of tertiary branch order.

Table 4: All previously approved TPO tree work applications at Marian Court as available on the LBSC planning portal.

Planning Reference	Date validated	Works specified (works relating to the two cedars are in bold).
B2012/0094	07 August 2012	Remove deadwood and crown clean a sycamore, a Horsechestnut and lime tree, crown reduce a horsechestnut by 20%, and **remove lateral branches to two cedars giving 3 metre clearance from buildings and deadwood and crown clean.** (Lesser works granted).
B2016/0104	09 September 2016	T8 **Cedar x2 - prune back overhanging branches by 2-2.5m; lift lower branches to 4.5m;** T10 - Sycamore x 2 & Lime- remove epicormic growth, lift Lime to 4.5m; Sycamore - prune back by 1.5-2m; T11 Monkey Puzzle - remove epicormic growth
TREE2019/00017	06 March 2019	**Two Cedar trees (T12 and T13), cut back lateral growth over road by 2.5m to balance canopy.**

Works have previously been approved to prune the trees to achieve up to 3m clearance of the building. The 2017 aerial imagery in Figure 5 demonstrates that the ongoing approved pruning strategy maintains the crown to avoid any canopy from overhanging the roof of the building. As such the proposed extension would not result in any net change to the type or extent of tree work to be applied for in the future, given the net increase in elevation of 1.5m and slightly reduced envelope of the building with the removal of the eaves.

Figure 4 demonstrates that the next pruning regime would only require the pruning of tertiary branches to achieve the required clearance. No pruning above 13m above ground level will be required, allowing the upper canopy to remain untouched.

The Arbtech AIA 01 plan includes sectional crown information to demonstrate the crown spread at key heights.

Pruning would adversely affect the amenity value and long-term health and condition;

As the trees are protected by TPO, the council are in direct control of all works carried out to these trees. All tree works must first be approved by the council and therefore any inappropriate or excessive pruning that would affect the character of the area or long-term vitality would be reasonably refused.

The aerial imagery in Figures 5 and 6 demonstrate the rate of growth between 2017 and 2021 to be minor, with Figure 2 taken during the Arbtech site visit in 2023 to demonstrate that the canopy is still not in contact with the building. Therefore, a prescribed pruning cycle of 5 years would be considered appropriate to maintain a suitable crown clearance of the building. As such, there is no obvious reason why the growth rate and resulting pruning requirements would significantly change as a result of the extension and thereby not introduce any new impact to the character of the area or introduce impacts to the long-term vitality of the trees.

Construction phase;

In order to carry out the works, scaffolding will be required around the perimeter of the existing building. Whilst the crowns are not currently in contact with the building, some minor access facilitation pruning may be required. As the branches that fall within the scaffolding area are minor, it is likely that most (particularly the lower branches) can be retained as they will not interfere with the works to the roof area. Any pruning that is deemed necessary will be limited to the tertiary order branches as visible in Figures 4, 7 and 8.

Summary and Conclusion;

1. The existing canopies are not in contact with the roof of the existing building.
2. The trees are part of an existing pruning regime to maintain a clearance between the canopies and roof. This pruning regime will not require any greater intensity or frequency as a result of the extension.
3. The removal of the existing eaves will bring the building an additional 0.75m away from the tree canopies.
4. The council are directly in control of all pruning works to TPO trees.
5. Minor pruning of tertiary branches may be required to facilitate the proposed construction; however, it is likely that most branches will be retainable.

In conclusion, the evidence presented in this report demonstrates that the proposed extension will not result in any net change to the existing pruning regime, and no heavy or excessive pruning will be required. Therefore, the proposal will not create additional pressure for tree works applications and thus will not negatively affect the character of the area.

Figure 2: Photograph of the crowns in relation to the existing building (Photograph - Arbtech 2023).

Figure 3: Photograph of the crowns in relation to the existing building, with the eaves to be removed highlighted in red (Photograph - Arbtech 2023).

Figure 4: Photograph of the regrowth following the previous pruning cycle. The pruning cuts are clearly visible, with only minor regrowth beyond.

Figure 5: Aerial Image of Site taken in 2017 (Google Earth)

Figure 6: Aerial Image of Site taken in 2021 (Google Earth)

Figure 7: Photograph to demonstrate the current clearance of tree T06 (December 2023)

Figure 8: Photograph to demonstrate the current clearance of tree T05 (December 2023), with only 1 minor branch overhanging the roof.

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 5: Documents upon which this assessment has been based.

Document	Originator	Reference Number	Title
Survey base drawing	Icelabz	MB-SURV-MC-TS-001	Topographical Survey
Site Plan	We Are Upp	000MA-A-03-101	Proposed Ground Floor Plan
Roof Plan	We Are Upp	000MA-A-03-105	Proposed Roof Plan
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Tree Works

For reasons of public safety, all tree works referred to herein must be carried out prior to any site personnel commencing works or any building materials being delivered.

Table 6: Summary of Tree Works.

No.	Species	Works	Category
T05	Deodar Cedar	Prune; to achieve 2m clearance of the existing building and proposed mansard roof. This will be achieved by pruning of tertiary order branches only. Branches growing at 13m above ground level and higher will remain untouched.	A2
T06	Deodar Cedar	Prune; to achieve 2m clearance of the existing building and proposed mansard roof. This will be achieved by pruning of tertiary order branches only. Branches growing at 13m above ground level and higher will remain untouched.	A2

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.

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 7: Sequence of Events

Stage	Event
Stage 1	Carry out tree works as specified within the summary of tree works
Stage 2	Installation of protective measures in accordance with the approved tree protection plan
Stage 3	Pre-commencement site meeting
Stage 4	Construction site set up, scaffolding installation
Stage 5	Undertake and complete demolition works of pitched roof and eaves
Stage 6	Undertake and complete construction works of mansard roof
Stage 7	Undertake external landscaping works outside of the construction exclusion zones
Stage 8	Removal of all machinery and materials from site
Stage 9	Arboricultural approval to dismantle and remove tree protection measures
Stage 10	Dismantle and removal of protective measures
Stage 11	Undertake external landscaping works within the construction exclusion zones
Stage 12	Sign off from project arboriculturist

Protective Measures

Protective measures are to be installed immediately following the completion of the tree works 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 December 2023) 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 December 2023) 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 9 (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.

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.

Default specification: To comprise either 2.4m wooden site hoarding; or a 2.3m high scaffold framework, well braced to resist impacts, with uprights to be spaced at a maximum of 3.0m intervals and driven into the ground by a minimum of 600mm. On to this, standard anti-climb welded mesh panels are to be securely fixed to each other with at least two scaffold clamps and to the scaffold frame work with wire.

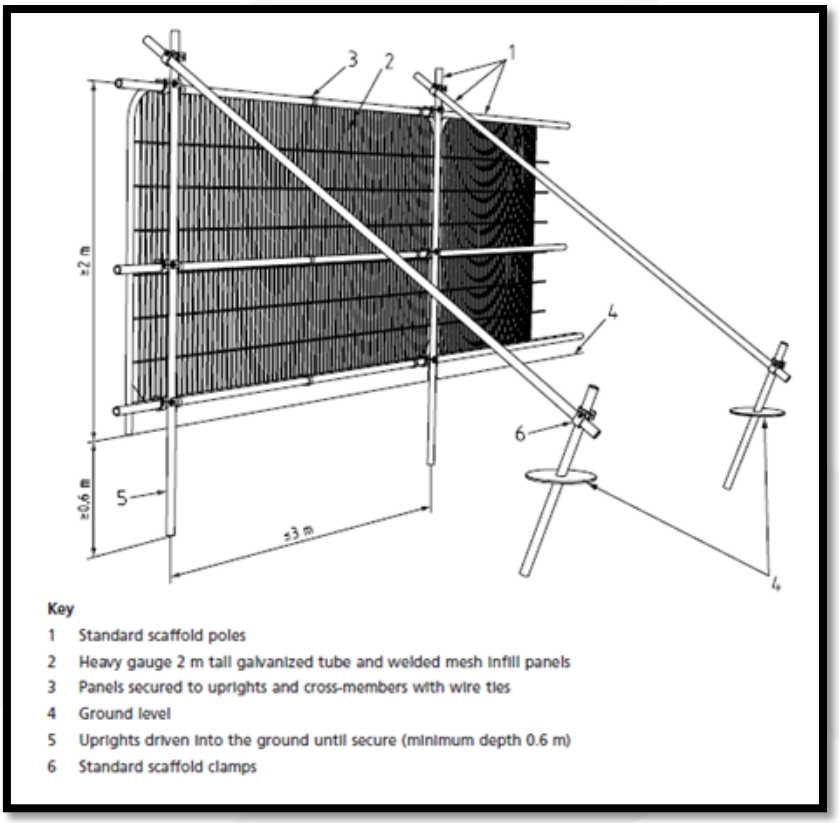

Figure 2: BS5837:2012 - Figure 2, Default specification for protective barriers.

Secondary specification: 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.

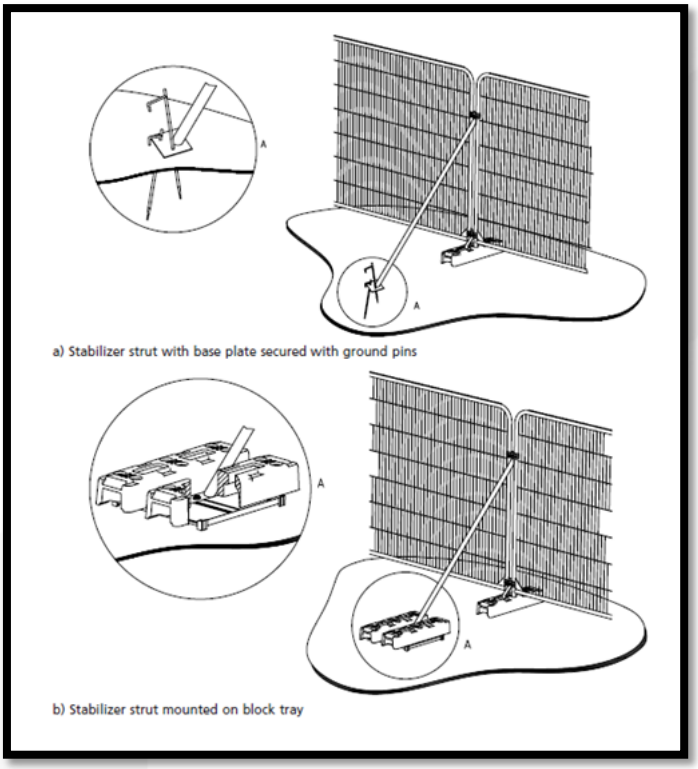

Figure 3: BS5837:2012 - Figure 3, Examples of above-ground stabilising systems.

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;
c) for wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g., proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

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

Demolition

Prior to 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 Arbtech Consulting Ltd. tree protection plan document number Arbtech TPP 01 and have been signed off and a copy of the demolition method statement has been submitted and approved by the project arboriculturist and LPA tree officer, to ensure that there is no conflict with this method statement.

All demolition 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.

Demolition of the existing pitched roof and eaves adjacent to the canopies of retained tree numbers T05 and T06 as shown on Arbtech TPP 01 by a red 'Cross' hatching are to be undertaken carefully under direct on-site arboricultural supervision.

Pitched Roof and Eaves

The roof and eaves are to be taken down under arboricultural supervision so that all debris and materials are to fall outside of the RPAs and away from the canopies of all retained trees.

Existing Underground 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.

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.

Mansard Roof

The proposed extension does not require any excavation to reinforce the foundations, as such there is no impact to the RPAs of retained trees.

The proposed roof is within proximity to the crown extremities of two protected cedar trees (T05 and T06). As such, the proposed roof is to be installed under arboricultural supervision to ensure that no materials or works come into contact with the canopy.

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 demolition of pitched roof and eaves.
4. Supervised installation of new mansard roof within proximity to canopies.
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.

Appendix 1: Tree Survey Schedule

BS5837:2012 Tree Survey

Client: M&D Properties Investment Ltd
Project: Marian Court, Robin Hood Lane, Sutton, SM1 2SB
Survey Date: 17/11/2023
Surveyor: Fearghus Gage

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

Tree and Tag No / Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations / Survey Comment	Cat ERC
G01										Estimated Measurements	
Various *See comments for details*	3.5	1	150	N 2 E 2 S 2 W 2	2 2 2 2	SM	A: 10.2 R: 1.8	Good	C: Good S: Good B: Good	Mixed group of common yew, lilac, holly and black matipo on site boundary.	C.2 20+ yrs
G02										Estimated Measurements	
Various *See comments for details*	12	1	420	N 4 E 4 S 4 W 4	2 2 2 2	EM	A: 79.8 R: 5.03	Good	C: Good S: Good B: Good	Dense group of common yew and Leyland cypress. Group forms effective visual screen to neighbouring property.	B.2 20+ yrs
G03										Estimated Measurements	
Various *See comments for details*	6	1	150	N 2.5 E 2.5 S 2.5 W 2.5	0 0 0 0	SM	A: 10.2 R: 1.8	Good	C: Good S: Not visible B: Good	Dense group of holm oak, holly and beech on site boundary. Group forms dense visual screen to neighbouring properties.	C.2 10+ yrs
G04										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	19	1	450	N 6 E 6 S 6 W 6	4 4 4 4	M	A: 91.6 R: 5.39	Good	C: Good S: Ivy B: Good	Three individual trees with combined canopy. Lower stems not visible due to ivy. Crown lifted on south side where overhanging neighbouring garden.	B.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	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
G05										Estimated Measurements	
Various *See comments for details*	4	1	150	N 2 0 E 2 0 S 2 0 W 2 0		SM	A: 10.2 R: 1.8	Good	C: Good S: Not visible B: Good	Mixed group of cherry, firethorn, apple, holly and common yew on site boundary.	**C.2** 10+ yrs
G06										Estimated Measurements	
Various *See comments for details*	7	1	300	N 3 2 E 3 2 S 3 2 W 3 2		EM	A: 40.7 R: 3.59	Good	C: Good S: Good B: Good	Three common yews and one holly with combined canopy. Trees growing from planted bed.	**B.2** 40+ yrs
G07										Estimated Measurements	
Various *See comments for details*	4	1	120	N 2 2 E 2 2 S 2 2 W 2 2		SM	A: 6.5 R: 1.43	Good	C: Good S: Not visible B: Not visible	Off-site group of black matipo and myrtle overhanging site boundary fence.	**C.2** 10+ yrs
G08										Estimated Measurements	
Various *See comments for details*	8	1	200	N 3 3 E 3 3 S 3 3 W 3 3		SM	A: 18.1 R: 2.4	Good	C: Good S: Not visible B: Not visible	Off-site group of English elm and common yew. No access to base of group.	**C.2** 10+ yrs
G09										Estimated Measurements	
Himalayan Birch *Betula utilis*	7	1	150	N 3 2 E 3 2 S 3 2 W 3 2		SM	A: 10.2 R: 1.8	Good	C: Good S: Not visible B: Not visible	Off-site group of Himalayan birch growing from neighbouring garden. No access to base of group.	**C.2** 20+ yrs
H01										Estimated Measurements	
Various *See comments for details*	2	1	80	N 0.5 0 E 0.5 0 S 0.5 0 W 0.5 0		EM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Dense beech and English elm hedge lining property front forming effective visual screen from adjacent road.	**C.2** 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	Stems Ø (mm)	Crown Spread (m)		Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
H02											Estimated Measurements	
Various *See comments for details*	2	1	80	N E S W	0.5 0.5 0.5 0.5	0 0 0 0	EM	A: 2.9 R: 0.96	Good	C: Good S: Good B: Good	Dense beech and English elm hedge lining property front forming effective visual screen from adjacent road.	C.2 20+ yrs
T01												
Sycamore *Acer pseudoplatanus*	10	1	190	N E S W	2.5 2.5 2.5 2.5	3.5 3.5 3.5 3.5	SM	A: 16.3 R: 2.27	Good	C: Fair S: Good B: Good	Crown raised to 3.5m height. Fence panel at base. Crown pruned away from building.	C.2 10+ yrs
T02												
Sycamore *Acer pseudoplatanus*	10	1	250	N E S W	2.5 2.5 4 3	3.5 3.5 3.5 3.5	SM	A: 28.3 R: 3	Good	C: Fair S: Fair B: Good	Crown raised to 3.5m height. Fence panel at base. Crown slightly suppressed by neighbouring tree.	C.2 10+ yrs
T03												
Sycamore *Acer pseudoplatanus*	10	1	220	N E S W	3 4 2 3	3.5 3.5 3.5 3.5	SM	A: 21.9 R: 2.64	Good	C: Fair S: Good B: Good	Crown raised to 3.5m height. Fence panel at base. Crown slightly suppressed by neighbouring trees.	C.2 10+ yrs
T04												
Sycamore *Acer pseudoplatanus*	12	1	340	N E S W	5 5 4 5	3.5 3.5 3.5 3.5	SM	A: 52.3 R: 4.08	Good	C: Good S: Fair B: Good	Crown raised to 3m height. Fence panel at base. Crown slightly suppressed by neighbouring trees. Stem leans west. Telegraph wire through crown. Ivy covering lower stem.	C.2 20+ yrs
T05												
Deodar Cedar *Cedrus deodara*	18	1	705	N E S W	7 6 5 7	5 5 5 5	M	A: 224.9 R: 8.46	Good	C: Good S: Good B: Good	Large open grown symmetrical crown. Dominant landscape feature. Building to south likely root barrier.	A.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	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T06											
Deodar Cedar *Cedrus deodara*	18	1	710	N 7 E 6.5 S 6.5 W 6	5 5 5 5	M	A: 228.1 R: 8.52	Good	C: Good S: Good B: Good	Large open grown symmetrical crown. Dominant landscape feature. Building to south likely root barrier.	A.2 40+ yrs
T07											
Common Horse Chestnut *Aesculus hippocastanum*	15	1	850	N 6 E 6 S 6 W 6	5 5 5 5	M	A: 326.9 R: 10.2	Fair	C: Fair S: Fair B: Fair	Further inspection :: Climb and inspect Dead ivy covering stem. Evidence of previous crown reduction with large pruning cuts approximately 120mm diameter. Decay from pruning wounds spreading into branches. Possible decay in upper main stem not entirely visible from ground level.	C.2 10+ yrs
T08											
Sycamore *Acer pseudoplatanus*	8	2	665 (Eq)	N 4 E 3 S 4 W 4	3.5 3.5 3.5 3.5	M	A: 199.8 R: 7.97	Fair	C: Fair S: Fair B: Good	Further inspection :: On internal trunk decay. Historic heavy pruning evident. Pruning cuts of approximately 400mm diameter with decay cavities visible. Approximately 200mm diameter regrowth from large pruning wounds has also been unsympathetically cut with additional decay visible.	C.2 10+ yrs
T09											
Common Lime *Tilia europaea*	18	1	575	N 6 E 2 S 5.5 W 6	5 5 5 5	M	A: 149.6 R: 6.9	Good	C: Fair S: Good B: Good	Crown suppressed to east by neighbouring tree. Minor basal growth.	B.1.2 40+ yrs
T10											
Common Horse Chestnut *Aesculus hippocastanum*	16	1	625	N 5.5 E 4 S 5.5 W 4	4.5 4.5 4.5 4.5	M	A: 176.7 R: 7.49	Good	C: Fair S: Good B: Good	Occluding pruning wounds on stem. Good response to previous crown reduction. Crown slightly suppressed to east and west by neighbouring trees.	B.2 20+ yrs
T11											
Sycamore *Acer pseudoplatanus*	16	1	525	N 7 E 7 S 5.5 W 2	5 5 5 5	M	A: 124.7 R: 6.3	Good	C: Good S: Fair B: Good	Stem breaks into three leaders at 2.5m height. Stem unions acute with minor bark inclusion. Crown significantly suppressed to west by neighbouring tree.	B.2 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	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T12											
Himalayan Birch *Betula utilis*	6	1	205	N 3 2.5 E 3 2.5 S 3 2.5 W 3 2.5		EM	A: 19 R: 2.45	Good	C: Fair S: Good B: Good	Previous crown reduction with minor decay from pruning wounds.	C.1.2 10+ yrs
T13											
Silver Birch *Betula pendula*	6	1	240	N 3 2.5 E 3 2.5 S 3 2.5 W 3 2.5		EM	A: 26.1 R: 2.88	Poor	C: Poor S: Poor B: Good	Significant deadwood in crown. Chicken of the woods fungi (Laetiporus sulphureus) throughout crown - indicative of internal decay.	U <10 yrs
T14											
Silver Birch *Betula pendula*	7	1	300	N 3 2.5 E 3 2.5 S 3 2.5 W 3 2.5		EM	A: 40.7 R: 3.59	Good	C: Good S: Good B: Good	Good regrowth from previous crown reduction. Open grown symmetrical crown.	C.1.2 20+ yrs
T15											
Silver Birch *Betula pendula*	7	1	220	N 3 2.5 E 3 2.5 S 3 2.5 W 3 2.5		EM	A: 21.9 R: 2.64	Good	C: Good S: Good B: Good	Good regrowth from previous crown reduction. Open grown symmetrical crown.	C.1.2 20+ yrs
T16											
Silver Birch *Betula pendula*	7	1	220	N 3 2.5 E 3 2.5 S 3 2.5 W 3 2.5		EM	A: 21.9 R: 2.64	Good	C: Good S: Good B: Good	Good regrowth from previous crown reduction. Open grown symmetrical crown.	C.1.2 20+ yrs
T17											
Cherry *Prunus sp.*	5	1	295	N 3 2.5 E 3 2.5 S 3 2.5 W 3 2.5		EM	A: 39.4 R: 3.54	Good	C: Fair S: Good B: Fair	Previous crown reduction with good regrowth. Chicken of the woods fungi (Laetiporus sulphureus) throughout crown - indicative of internal decay. throughout crown. Decay likely from pruning wounds. Significant surface roots surrounding base of tree. Some roots with mower damage on upper sides.	U <10 yrs

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

Condition: C Crown; S Stem; B Basal area

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

ERC: Estimated Remaining 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 Recommendations Survey Comment	Cat ERC
T18											
Chinese Crab *Malus spectabilis*	7	1	330	N 4.5 E 4.5 S 3.5 W 4.5	3 3 3 3	M	A: 49.3 R: 3.96	Good	C: Good S: Good B: Good	Minor surface roots. Open grown dense crown.	**B.2** 40+ yrs
T19											
Sweetgum *Liquidamber styraciflua*	5.5	1	230	N 2.5 E 2.5 S 2.5 W 2.5	2 2 2 2	SM	A: 23.9 R: 2.75	Good	C: Good S: Good B: Good	Open grown symmetrical crown.	**C.1.2** 20+ yrs
T20											
Apple *Malus sp.*	3.5	1	170	N 2 E 2 S 2 W 2	2 2 2 2	SM	A: 13.1 R: 2.04	Good	C: Good S: Good B: Good	Maintained at current spread. Minor occluding pruning wounds on stem.	**C.1** 20+ yrs
T21											
Common Oak *Quercus robur*	10	1	385	N 4 E 3 S 4 W 4	3 3 3 3	EM	A: 67.1 R: 4.62	Good	C: Good S: Good B: Good	Previous crown reduction with good regrowth. Brick wall and panel fence in RPA to west.	**B.1.2** 40+ yrs
T22											
Himalayan Tree-Cotoneaster *Cotoneaster frigidus*	5	8	226 (Eq)	N 2.5 E 2.5 S 2.5 W 2.5	2 2 2 2	SM	A: 23.2 R: 2.71	Good	C: Good S: Good B: Fair	Multi-stemmed from base. Brick walls in RPA to south and west possibly acting as root barrier.	**C.2** 20+ yrs
T23											
Sycamore *Acer pseudoplatanus*	16	1	525	N 4.5 E 4.5 S 5.5 W 5	5 5 5 5	M	A: 124.7 R: 6.3	Good	C: Good S: Good B: Good	Stem has slight lean to south. Minor surface roots. Possible root barrier building to north. Previous crown reduction with good regrowth.	**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	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T24											
Monkey Puzzle Tree *Araucaria araucana*	15	1	510	N 5 E 5 S 5 W 5	5.5 5.5 5.5 5.5	M	A: 117.7 R: 6.12	Good	C: Good S: Good B: Good	Open grown symmetrical crown. Bench in RPA to south.	**B.1.2** 40+ yrs
T25											
Sycamore *Acer pseudoplatanus*	22	2	1083 (Eq)	N 10 E 10 S 10 W 10	6 6 6 6	M	A: 530.7 R: 12.99	Good	C: Good S: Fair B: Good	Very large open grown symmetrical crown. Dominant landscape feature. Multi-stemmed from base with some included bark.	**A.1.2** 40+ yrs
T26											
Tibetian Cherry *Prunus serrula*	4.5	1	120	N 2 E 1 S 1.5 W 2.5	2 2 2 2	SM	A: 6.5 R: 1.43	Good	C: Fair S: Good B: Good	Minor surface roots. Crown suppressed by trees to east.	**C.1** 10+ yrs
T27											
Strawberry Tree *Arbutus unedo*	5	1	290	N 0 E 3 S 4 W 1	2 2 2 2	EM	A: 38.1 R: 3.48	Good	C: Good S: Fair B: Good	Stem has significant lean to south. Occluding pruning wounds on stem.	**C.1** 20+ yrs
T28											
Norway Maple *Acer platanoides*	17	1	585	N 7.5 E 7.5 S 7.5 W 7.5	5 5 5 5	M	A: 154.8 R: 7.01	Good	C: Good S: Fair B: Good	Crown breaks at 2m height. Minor surface roots with damage on upper sides. Previous crown reduction with good regrowth.	**B.2** 40+ yrs
T29											
Callery Pear *Pyrus calleryana 'Chanticleer'*	6	1	80	N 1 E 0.5 S 1 W 2	2.5 2.5 2.5 2.5	SM	A: 2.9 R: 0.96	Good	C: Fair S: Fair B: Good	Long, thin and drawn up stem. Crown suppressed to east by neighbouring tree.	**C.2** 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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Tree and Tag No Species	Hght (m)	Stems No	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T30											
Apple *Malus sp.*	4	2	156 (Eq)	N 3 E 1 S 1 W 1	2 2 2 2	SM	A: 11 R: 1.87	Poor	C: Fair S: Poor B: Good	Stem heavily decayed. Multiple cavity openings on stem.	**U** <10 yrs
T31											
Sycamore *Acer pseudoplatanus*	17	2	721 (Eq)	N 6 E 7 S 3 W 6	5 5 5 5	M	A: 235.5 R: 8.65	Good	C: Good S: Good B: Good	Off-site tree. No access to base of stem. Twin stemmed from 1m height. Southern crown suppressed by neighbouring tree.	**B.1.2** 40+ yrs
T32										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	17	3	1005 (Eq)	N 6 E 3 S 7 W 8	5 5 5 5	M	A: 457.2 R: 12.06	Good	C: Fair S: Fair B: Good	Three-stemmed from 1m height. Eastern crown suppressed by neighbouring tree.	**B.2** 40+ yrs
T33											
Common Ash *Fraxinus excelsior*	16	1	580	N 4.5 E 3 S 5 W 6.5	5.5 5.5 5.5 5.5	M	A: 152.2 R: 6.96	Good	C: Good S: Fair B: Good	Large pruning wound at base of stem approximately 250mm diameter, occluding. Previous crown reduction with good regrowth.	**B.2** 20+ yrs
T34										Estimated Measurements	
Common Ash *Fraxinus excelsior*	16	1	550	N 4.5 E 6 S 5 W 3	5 5 5 5	M	A: 136.9 R: 6.6	Good	C: Good S: Fair B: Not visible	Base of stem not accessible due to dense vegetation. Stem breaks into three leaders at 2m height with included bark. Previous crown reduction with good regrowth.	**B.2** 20+ yrs
T35										Estimated Measurements	
Monterey Pine *Pinus radiata*	12	1	500	N 6 E 6 S 6 W 6	4 4 4 4	M	A: 113.1 R: 6	Good	C: Good S: Not visible B: Not visible	Off-site tree. No access to base of stem. Large open grown symmetrical crown overhanging on-site garages.	**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

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T36										Estimated Measurements	
Common Yew *Taxus baccata*	11	1	500	N 6 E 6 S 6 W 6	3 3 3 3	M	A: 113.1 R: 6	Good	C: Good S: Not visible B: Not visible	Off-site tree. No access to base of stem. Open grown symmetrical crown.	**B.1.2** 40+ yrs
T37										Estimated Measurements	
Poplar *Populus sp.*	12	1	250	N 3.5 E 3.5 S 3.5 W 3.5	2 2 2 2	SM	A: 28.3 R: 3	Good	C: Good S: Not visible B: Not visible	Off-site tree growing from neighbouring garden. Stem bifurcated with included bark.	**C.2** 10+ yrs
T38										Estimated Measurements	
Common Ash *Fraxinus excelsior*	16	1	450	N 6 E 6 S 6 W 6	3.5 3.5 3.5 3.5	M	A: 91.6 R: 5.39	Good	C: Good S: Not visible B: Not visible	Off-site tree. No access to base of stem. Open grown symmetrical crown.	**B.2** 20+ yrs
T39										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	10	1	350	N 3 E 3 S 3 W 3	3 3 3 3	EM	A: 55.4 R: 4.19	Fair	C: Fair S: Not visible B: Not visible	Off-site tree. No access to base of stem. Tree topped at full height. Decay visible from pruning wounds.	**C.2** 20+ yrs
T40										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	9	1	300	N 2.5 E 2.5 S 2.5 W 2.5	3 3 3 3	EM	A: 40.7 R: 3.59	Fair	C: Fair S: Not visible B: Not visible	Off-site tree. No access to base of stem. Tree topped at full height. Decay visible from pruning wounds.	**C.2** 20+ yrs
T41										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	7	1	300	N 2.5 E 2.5 S 2.5 W 2.5	3 3 3 3	EM	A: 40.7 R: 3.59	Fair	C: Fair S: Not visible B: Not visible	Off-site tree. No access to base of stem. Tree topped at full height. Decay visible from pruning wounds.	**C.2** 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	Stems Ø (mm)	Crown Spread (m)	Crown Clear (m)	Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations Survey Comment	Cat ERC
T42										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	8	1	300	N 2.5 E 2.5 S 2.5 W 2.5	3 3 3 3	EM	A: 40.7 R: 3.59	Fair	C: Fair S: Not visible B: Not visible	Off-site tree. No access to base of stem. Tree topped at full height. Decay visible from pruning wounds.	**C.2** 20+ yrs
T43										Estimated Measurements	
Sycamore *Acer pseudoplatanus*	9	2	439 (Eq)	N 3.5 E 3.5 S 3.5 W 3.5	3 3 3 3	EM	A: 87.1 R: 5.26	Fair	C: Fair S: Fair B: Not visible	Off-site tree. No access to base of stem. Previous crown reduction with good regrowth. Bark missing from lower stem on visible side of stem.	**C.2** 20+ yrs

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