

The Forge Summer House Installation

Tree Constraints and Arboricultural Impact Assessment

2024

Tony Bengler Landscaping
Carried Out By: George Trott



Report Title	The Forge Summer House Installation. Tree Constraints and Arboricultural Impact Assessment
Site Address	The Forge, Shute, EX13 7PU
Client	Mr Carl Coman, The Forge, Shute, EX13 7PU
Date of Site Visit	Friday 29 th March 2024
Date of issue	Saturday 30 th March 2024
Weather conditions	Intermittent cloud, visibility was not impaired.
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Method of Delivery	Electronic

The findings of this report are valid for 12 months from the date of site inspection. Trees are both mechanical and biological structures (biomechanical) and their condition can suddenly and rapidly change, particularly following adverse weather conditions or due to the effect of pests, disease and/or other abiotic factors and therefore may warrant re-inspection at shorter intervals than recommended in this report.

Executive Summary

An arboricultural survey has been carried out and this report prepared to support a full planning application to construct a garden room within the rear garden of The Forge, Shute, EX13 7PU.

This report provides information in compliance with British Standard BS 5837:2012, Trees in relation to design, demolition and construction and considers the effect of the proposal on the local character from a tree perspective.

The reports' purpose is to allow the local planning authority to assess the tree information as part of the planning submission.

To my knowledge this is the first arboricultural input of the project, advice is provided within this report on how the project may be completed with minimal adverse effects on the existing tree population.

20 individual trees and 1 group of trees have been assessed in accordance with BS5837 whilst 2 hedgerows have been recorded as being present.

The impact of the proposal is that there will be;

- 0 incursions into root protection areas

- 0 trees to be removed

- 0 instances of tree surgery works being required

- No foreseeable post construction pressures on the existing tree population

The report contains a draft arboricultural method statement heads of terms in accordance with recommendations in Table B1 of BS 5837. It is often recommended that a detailed arboricultural method statement is produced in response to a planning condition following planning consent. This will describe in detail how retained trees will be protected from the development and methods of work close to trees. On this occasion, I do not believe such a document is necessary due to the proposal having no significant impact on the existing tree population. This report contains general details such as tree barriers which are common to most developments, I have however made effort to reduce and remove generalized information and instead make as much of the information provided as site specific as currently possible at this stage in the process.

If the recommendations made within this report are followed, the proposed construction of a garden room will be achievable in arboricultural terms and should be acceptable to the local planning authority.

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1. Introduction

1.1 Purpose and scope of this report

- 1.1.1. The purpose of this report is to allow the East Devon District Council Planning team to assess the arboricultural information as part of the planning submission. It is also to aid in the layout design and to demonstrate to the East Devon District Council Planning team that appropriate consideration has been given to the presence of trees and their ongoing health as part of the planning process.
- 1.1.2. To assess the quality and value of the trees present and affected by the proposed works. Should trees need to be removed to facilitate the proposed works, these can be restricted to the less significant specimens on site.
- 1.1.3. The report has been produced in accordance with the recommendations and principles of British Standard BS 5837:2012, trees in relation to design, demolition and construction – Recommendations (BS5837).
- 1.1.4. The report contains a draft arboricultural method statement (AMS) head of terms. This is in accordance with recommendations in BS5837 Table B1. It is recommended that a detailed Arboricultural Method Statement (AMS) is produced in response to a planning condition following planning consent. This should be a working document that describes how to protect retained trees from the proposed works and describe methods of works close to trees.
- 1.1.5. The content of this report is restricted to arboricultural issues, although other disciplines such as engineering and ecology may be mentioned where relevant. However, it must be noted that it is essential to seek advice from an appropriate expert on these matters.

1.2 The proposal

- 1.2.1. The proposal is to construct a garden room within the rear garden of The Forge, Shute, EX13 7PU. The proposal is to be constructed upon ground screw style foundations to reduce environmental impact.

1.3 Background information and design input

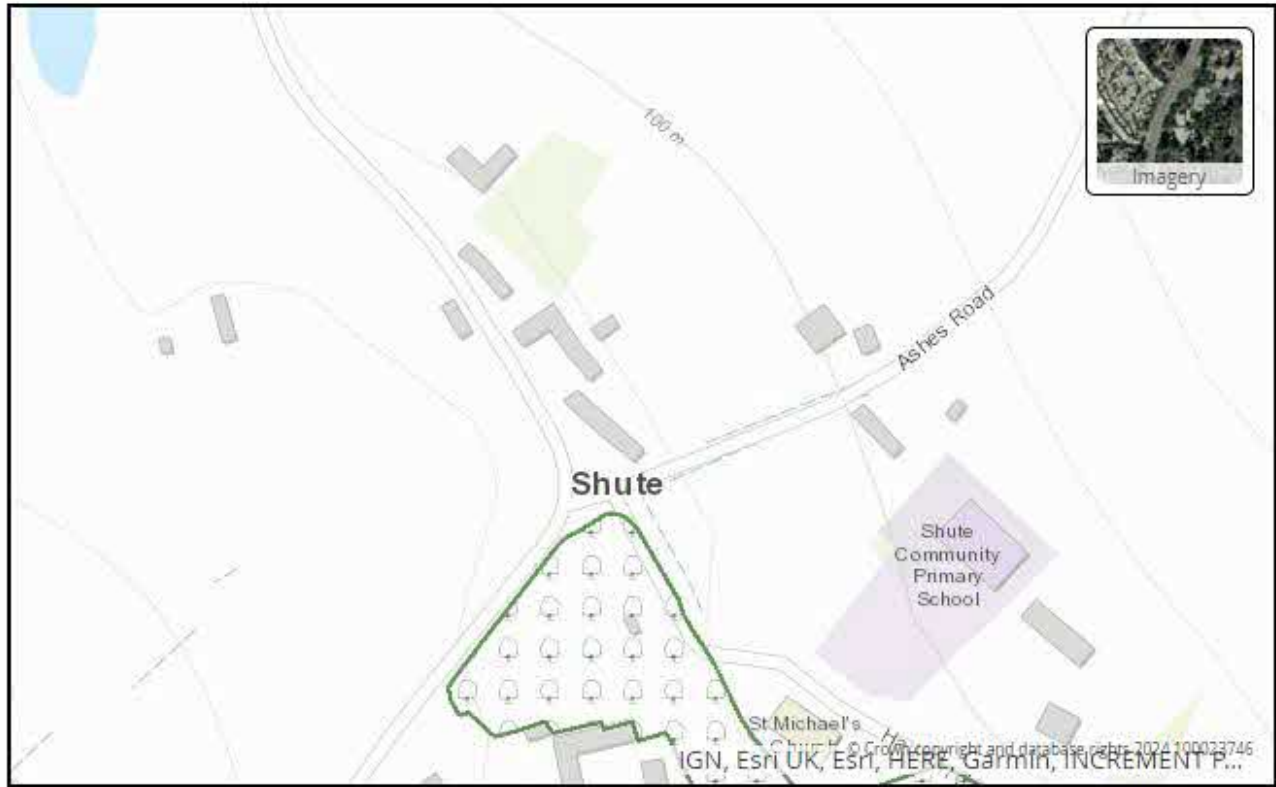
- 1.3.1. To my knowledge this document is the first arboricultural input the proposal has received.

1.4 Planning context

- 1.4.1. I carried out a search using East Devon District Council online mapping service on the 30th March 2024. This indicated that the property is not within a conservation area, not are any of the trees subject to tree preservation orders. However, the legal status of trees can change

and confirmation of the legal status of trees should be confirmed prior to any works taking place. A snip of my search results can be seen presented below as figure 1.

Figure 1



The location you clicked is not within a designated conservation area

1.4.2. There is no distinction within BS5837 between trees subject to statutory protection and those that are not. This is because all trees are a material consideration and full planning consent overrides any statutory protection. Therefore, I do not seek to offer any comparison between, or imply any difference in the quality and/or importance of trees subject to statutory protection and those that are not.

1.5 Other information included within this report

1.5.1. The following information can be found included within the appendices of this report.

Instruction and brief
Documents and information provided
Report limitations
Background information and design input

Legal constraints, liabilities, and planning context
Site information
Survey methodology
Reference documents

1.6 Glossary

1.6.1. I have aimed to keep “technical jargon” to a minimum, however, there are occasions where it is required to best describe an attribute of a tree or action. To aid in understanding such words I have provided a short glossary which can be seen presented within appendix 8 of this report.

2. Appraisal

2.1 The site

2.1.1. The site comprises of a residential dwelling with sizable rear garden containing a variety of tree species of different sizes and life stages, as well as mixed native species boundary hedges situated broadly along the Northern, Eastern, and Western boundaries. There are also occasional shrubs and young planted fruit trees in various locations throughout the garden, these were however not significant enough to warrant individual inclusion as a material consideration under BS5837:2012, but do provide a strong indication of the desire to increase the tree population on site for the future.

2.1.2. The lowermost section (Southern) of the garden is closer to that of a “typical” residential garden, mostly consisting of planted shrubs and small trees. This area has “sectioned off” from the surveyed part of the garden due to its clear lack of relevance to the proposal and lack of significant tree specimens in the planning context.

2.1.3. To the North of the property is an agricultural field, to the East is what appears to be a grassed field through which access during the implementation stage will be granted, to the South the “garden” section of the site and residential property, and to the West is a residential property and associated garden.

2.2 Soils

2.2.1. I have not carried out an assessment of the soil present on site to ascertain its type and/or makeup. If such investigations have been carried out, I have not been made aware of them.

2.2.2. Soil can vary widely at a local level and therefore any decisions with regards to soil type should be based upon the results of a detailed soil analysis.

2.3 Trees in the local area and landscape character

2.3.1. The surrounding area is made up of features typical to the “East Devon countryside”. These include mature hedgerow trees, open agricultural fields, and mixed native species hedgerows.

Directly surrounding the site and its trees are a combination of residential dwellings and their associated gardens and agricultural fields.

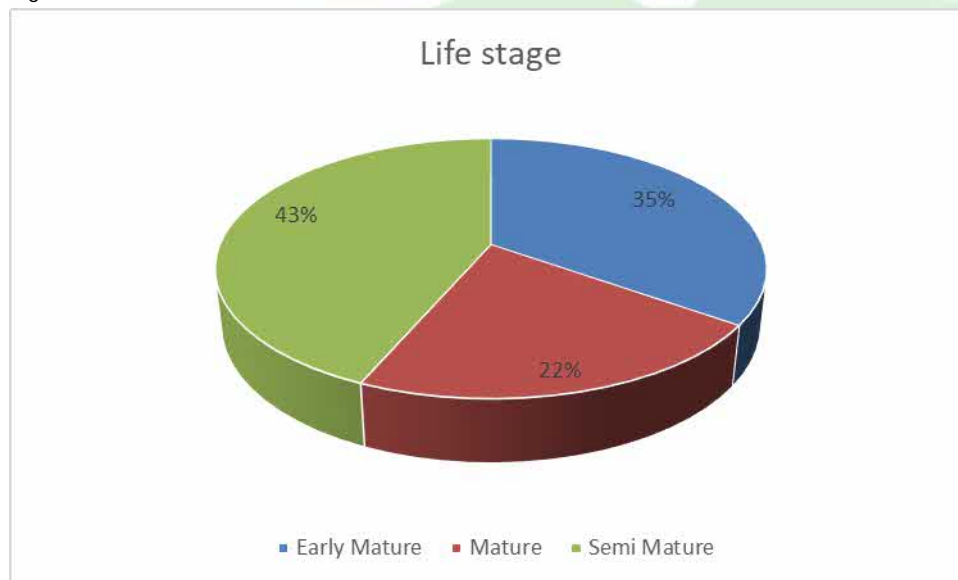
2.3.2. The larger specimens within the site appear to be relatively typical of the local area, e.g., common ash (*Fraxinus excelsior*) and elm (*Ulmus spp.*), whilst the smaller specimens such as the planted fruit trees, e.g., cherry (*Prunus spp.*) and apple (*Malus spp.*), do not appear typical of the surrounding landscape and offer only value to occupants of the site.

2.4 The subject trees

2.4.1. 20 individual trees, 1 group of trees, and 2 hedgerows are the subjects of this report. Details of these trees, as found at the time of the site survey, can be found within the tree survey sheet(s) presented within appendix 3 of this report. Their positions can be found on the plan of tree constraints within appendix 4 and 5 of this report.

2.4.2. The trees are a mixture of life stages. A pie chart is presented below as figure 2 indicating the distribution of life stages amongst the surveyed trees.

Figure 2



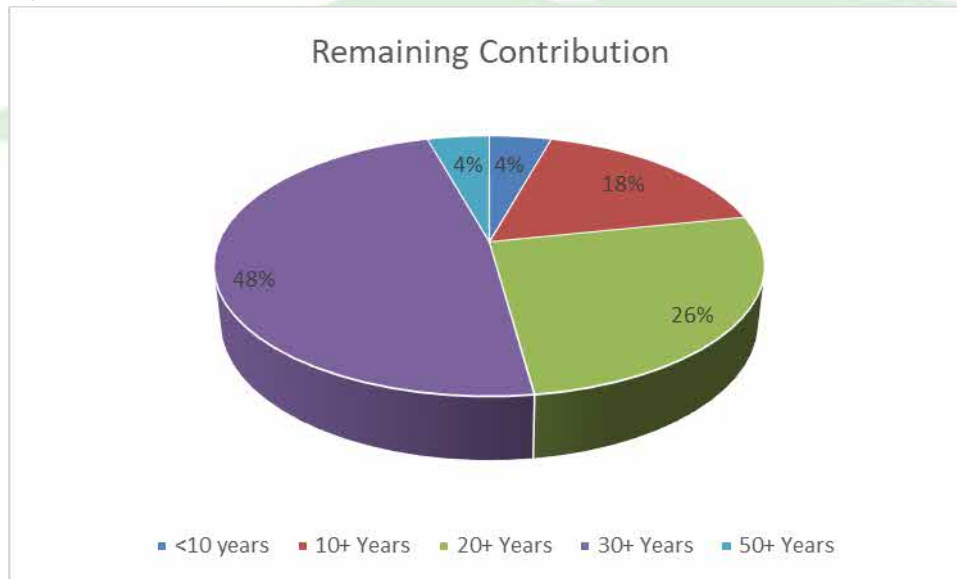
2.4.3. T001 common beech (*Fagus sylvatica*) is a low value specimen that must not provide any constraint on the proposal.

2.4.4. H001 and H002 are mixed native species hedgerows that pose no constraint on the proposal.

2.4.5. T002 common ash (*Fraxinus excelsior*), T003 elm (*Ulmus spp.*), T005 elm (*Ulmus spp.*), T006 elm (*Ulmus spp.*), T009 elm (*Ulmus spp.*), T011 common ash (*Fraxinus excelsior*), T018 cultivar apple (*Malus domestica*), and T019 cultivar apple (*Malus domestica*) are low value (C category) specimens and do not pose any constraints on the proposal.

- 2.4.6. G001 wild cherry (*Prunus avium*) common ash (*Fraxinus excelsior*) and elm (*Ulmus* spp.), T004 field maple (*Acer campestre*), T007 common ash (*Fraxinus excelsior*), T008 elm (*Ulmus* spp.), T012 wild cherry (*Prunus avium*), T013 wild cherry (*Prunus avium*), T014 willow (*Salix* spp.), T015 wild cherry (*Prunus avium*), T016 cultivar apple (*Malus domestica*), T017 cherry (*Prunus* spp. 'cherry'), and T020 cultivar apple (*Malus domestica*) are trees of moderate value and do not pose any constraints on the proposal.
- 2.4.7. T010 horse chestnut (*Aesculus hippocastanum*) is a high value specimen which does not pose any constraints on the proposal.
- 2.4.8. The existing tree population is generally in what I would consider normal health for the species, their age, and the environment in which they are situated, with two exceptions, T002 common ash (*Fraxinus excelsior*) and T011 common ash (*Fraxinus excelsior*) both of which I suspect of being infected with Chalara ash die back (*Hymenoscyphus fraxineus*). I have provided a pie chart illustrating the distribution of the predicted remaining contribution of the surveyed trees below as figure 3.

Figure 3



2.5 Assessment of tree constraints

2.5.1. The constraints imposed by the existing tree population in the form of root protection areas (RPA), forecasted shade and existing canopy size/position can be seen on the plan of tree constraints in appendix 4 and 5 of this report.

2.5.2. Tree constraints can be broadly categorized into two main areas;

Below ground constraints

A root protection area (RPA) is a layout design tool indicating the minimum area surrounding the tree that contains sufficient rooting volume to maintain the tree’s viability, and where the protection of the roots and surrounding soil structure is treated as priority. BS5837 states that no construction works should be carried out within RPAs except in exceptional circumstances, which may need demonstrating.

Above ground constraints

Above ground constraints are indicated by the crown spread of the trees to be retained. Above ground constraints generally include physical conflict between parts of the above ground, viewable, tree and existing or proposed structures, this may also include conflict with construction machinery such as plant machinery. Above ground constraints may also include issues caused by the shade caused by existing trees. When shading is likely to be a serious constraint, a more detailed analysis of shade pattern using proprietary software may be deemed necessary.

2.5.3. Tree constraints include current conflicts with the proposal as well as with the predicted future site use.

3. Arboricultural Impact Assessment

3.1 Trees to be removed

Table 1

BS 5837 category, tree number and species	Reason for removal	Impact
A (high quality)		
None	-	-
B (Moderate quality)		
None	-	-
C (low quality)		
None	-	-
U (Unsuitable for retention)		
None	-	-

3.1.1. 0 trees require removal to facilitate the proposal.

3.2 Trees requiring tree surgery works prior to development commencement

Table 2

BS 5837 category, tree number and species	Work requirements and reason	Impact
A (high quality)		
None	-	-
B (Moderate quality)		
None	-	-

C (low quality)		
None	-	-
U (Unsuitable for retention)		
None	-	-

3.2.1. 0 trees require tree surgery works prior to development commencement.

3.3 Root protection area (RPA) incursions

3.3.1. The compaction of compressible soils is likely to be the single most common cause of death or damage to trees that are retained on development sites. Soil compaction reduces soil pore space, which in turn reduces soil air, the passage of water and available nutrients. These anaerobic conditions prevent root growth and then significantly reduce microbial activity in the soil essential for root and subsequently tree health. Symptoms in trees will include crown die back, sparse, and small foliage, poor extension growth etc., however, these may not be evident until well after the occurrence of compaction. Even one pass of a vehicle in wet conditions can cause irreparable soil compaction.

3.3.2. The incursions required into RPAs for the implementation of the proposal have taken account of the recommendations set out in section 5.3 of BS5837 which can be seen reproduced below, courtesy of BSI.

Figure 4

5.3 Proximity of structures to trees

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

- a) demonstrate that the tree(s) can remain viable and that the area lost to encroachment can be compensated for elsewhere, contiguous with its RPA;
- b) propose a series of mitigation measures to improve the soil environment that is used by the tree for growth.

5.3.2 The cumulative effects of incursions into the RPA, e.g. from excavation for utility apparatus, are damaging and should be avoided. Where there is evidence that a tree has been previously subjected to damage by construction activity, this should be taken into account when considering the acceptability of further activity within the RPA.

- 3.3.1. There are 0 RPA incursions to facilitate the footprint of the proposal and 0 to allow for site access.
- 3.3.2. There are no RPA incursions required to undertake the implementation of the proposal. Due to the location of the proposed garden room in relation to the existing tree population, its physical presence and that needed to install it, will not enter any root protection areas on site. Furthermore, the route to “bring in” the materials needed for construction traverses an adjacent grassed field to the East and then enters the garden through an existing gap in the hedgerow H001, therefore, no RPA incursions will take place.
- 3.3.3. Temporary ground protection within an RPA should be capable of achieving the objective of avoiding compaction to the soil which can arise from as little as the single passing of a vehicle. Such ground protection should also be suitable for the movement expected to occur within the RPA. On this occasion I predict that only pedestrian movement is likely to occur, therefore a simple ground protection system such as heavy-duty plywood set on a layer of woodchip should provide suitable protection whilst also being proportionate to the predicted level of traffic.

Table 3

BS 5837 category, tree number and species	RPA incursion, precautions and specialized methodology required	Impact
A (high quality)		
-	-	-
B (Moderate quality)		
-	-	-
C (low quality)		
-	-	-
U (Unsuitable for retention)		
-	-	-

3.4 Existing and proposed finished levels

3.4.1. I do not foresee any alteration to levels of the site before, during, or after implantation of the proposal.

3.5 Impact on public amenity to the local landscape

3.5.1. 0 trees are recommended for removal, subsequently the treescape at the property will remain the same and there will be no impact on public amenity to the local landscape in relation to tree removal.

3.5.2. The protection of the retained trees and the specialist methods of construction to be employed (screw foundations) means the retained, existing trees, will continue to provide their current levels of visual amenity.

3.6 Impact of the existing trees on the proposal

3.6.1. The existing tree population will not have any significant impact on the proposal. I foresee no physical conflicts between trees and the proposed garden room.

3.6.2. The majority of trees capable of casting dense shade are situated on the Northern boundary and are not predicted to cast shade which will adversely affect the proposal.

3.6.3. Due to the large number of trees on site, it is the nature of the site that leaves will fall during the autumn. Any guttering present on the proposal is likely to fill with leaves during the autumn and requiring periodical emptying. This however is not a significant issue and should take place under "normal" property maintenance.

3.6.4. There is plenty of available space for storage of materials, the most suitable appeared to be within the neighboring grass field to the East, this is sufficiently far away from any trees.

3.6.5. The topography of the site will mean that storage of materials that have potential to cause run-off must be well thought out and ideally such materials will be situated at the bottom of any slopes to prevent accidental contamination through run-off.

3.7 Protection of retained trees

3.7.1. Protection measures, usually a combination of barriers and ground protection must be in place before any works, including site clearance or demolition begin. They must then stay in place for as long as a risk of damage remains. The protection of trees must take account of the buildability of the proposal, including services, and ensure that all activities such as storage of materials, parking, and the use of plant and vehicles can be accommodated outside of RPAs.

Planning is necessary for the operation of excavators, lifting machinery and cranes to ensure all site movements and/or lifting operations will not impact on retained trees.

- 3.7.2. A draft tree protection plan can be seen presented within appendix 6.
 - 3.7.3. Due to the proximity of operations to root protection areas and the lack of any impact on the existing tree population, traditional use of tree protection fencing is unlikely to be suitable, instead the tree protection fencing will be installed as per the draft tree protection plan (appendix 6), this will still provide suitable protection of the existing trees from physical impacts from site operations.
 - 3.7.4. Due to the minor nature of the site and associated works, I do not believe that traditional tree protection fencing as per BS5837:2012 is suitable. Section 6.2.2.1 of BS5837:2012 states that “Barriers should be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s).” Therefore, due to the minor scale of the project it is my opinion that Heras style fencing with tree protection area warning signs, as shown in appendix 7, will be suitable. There will be no plant machinery used on site so the purpose of the fencing is purely to delineate the construction exclusion zones, prevent accidental physical contact with trees during the movement and installation of materials for the construction of the proposed garden room, and prevent storage of materials within construction exclusion zones.
 - 3.7.5. Arboricultural monitoring will be essential to ensure the requirements of the arboricultural method statement(s) are met and this therefore provides a strong degree of protection for the existing trees. All arboricultural monitoring visits will be recorded and the findings made available to the LPA for inspection upon request.
- 3.8 Contractor’s compound and car parking
- 3.8.1. At the front of the property (South of the main house) there is an existing driveway with more than sufficient room for contractor parking and storage of materials. As long as this area is designated as the sole storage and parking area, I foresee no conflict between the existing trees and the parking/storage requirements of the contractor(s).
 - 3.8.2. The proposed parking/storage area is level in nature and as such there is a very low level of accidental contamination of the rest of the site, including into RPAs of existing trees in the event of a spillage, or leaking of materials.

3.8.3. The grassed field to the East of the garden is also suitable for storage of materials, however, due to the topography of the field, only materials which do not pose a risk of leakage or run-off may be suitable for storage in this area.

3.9 Post development pressures

3.9.1. Once the proposed garden room is installed, I foresee no significant long-term pressures on these trees.

3.9.2. There is likely to be an ongoing seasonal requirement to regularly clear the gutters of the proposed garden room, however this is a minor requirement and should form part of normal property maintenance.



4. Arboricultural method statement – Head of terms

- 4.1. An arboricultural method statement (AMS) describes how operations which may affect trees will be carried out to minimize any adverse effect on them. Details of site management, detailed construction methods, materials etc. can only be finalized once the post-consent detailed design begins. For that reason, at this stage in the process, only a list of heads of terms summary is given and this will need more detailed consideration once consent is received. This is as recommended in Table B1 of BS 5837 (reproduced courtesy of BSI below).

Figure 7

Stage of process	Minimum detail	Additional information
Pre-application	Tree survey	Tree retention/removal plan (draft)
Planning application	<p>Tree survey (in the absence of pre-application discussions)</p> <p>Tree retention/removal plan (finalized)</p> <p>Retained trees and RPAs shown on proposed layout</p> <p>Strategic hard and soft landscape design, including species and location of new tree planting</p> <p>Arboricultural impact assessment</p>	<p>Existing and proposed finished levels</p> <p>Tree protection plan</p> <p>Arboricultural method statement – heads of terms</p> <p>Details for all special engineering within the RPA and other relevant construction details</p>
Reserved matters/ planning conditions	<p>Alignment of utility apparatus (including drainage), where outside the RPA or where installed using a trenchless method</p> <p>Dimensioned tree protection plan</p> <p>Arboricultural method statement – detailed</p> <p>Schedule of works to retained trees, e.g. access facilitation pruning</p> <p>Detailed hard and soft landscape design</p>	<p>Arboricultural site monitoring schedule</p> <p>Tree and landscape management plan</p> <p>Post-construction remedial works</p> <p>Landscape maintenance schedule</p>

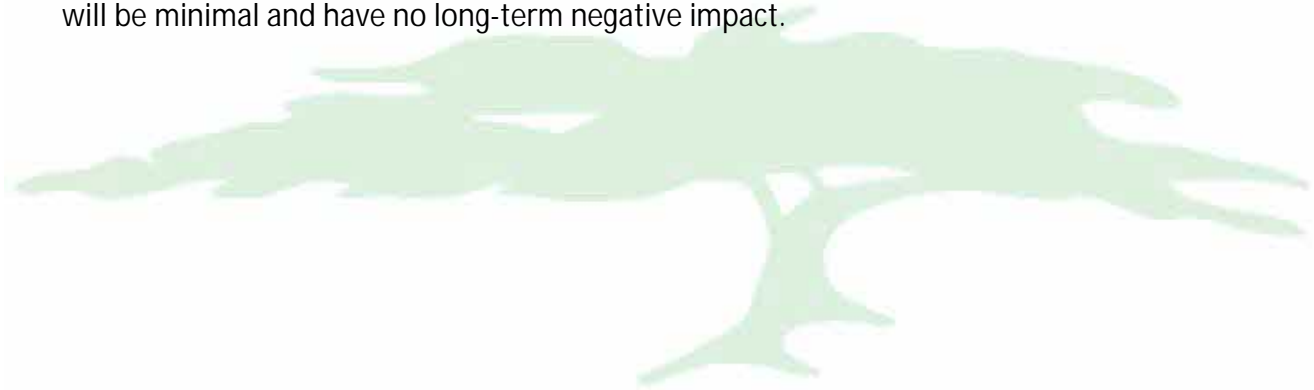
Table 4 – Heads of terms

Heads of terms	Outline of appropriate protective measures
Areas to be protected	<p>Greater detail post-consent may be required in response to a planning condition</p> <p>The position of tree protection fencing is shown on the tree protection plan, areas inside of the fencing are designated as construction exclusion zones (CEZ). Where necessary, areas outside the CEZ but still within the RPA are indicated. Any works within these areas will require arboricultural supervision and likely to require specialist techniques.</p>
Protective barriers	<p>Tree protection barriers must be fit for the purpose of excluding site personnel and machinery. The default specification detailed within Section 6 of BS 5837 is not considered appropriate for the proposal due to the minor nature of the works, instead, Heras style fencing will be used to prevent pedestrian access and storage into the CEZs and to prevent accidental physical conflict with the existing trees. A sign warning of no entry past the fencing will be installed on every other panel.</p>
Site set-up, clearance, grading of soil and changes in ground levels	<p>Tree protection MUST be in place before site set-up or clearance is undertaken. If necessary, localized vegetation clearance to install the protection is to be undertaken using hand tools only (including chainsaws, brushcutters etc.) but without the use of tracked or wheeled plant and machinery.</p> <p>Where site hoarding, signs etc. are within RPAs, it will be necessary to show that account has been taken of retained trees in respect to positioning and installation methodology, such as avoiding important roots and lining post holes to avoid the caustic effect of wet concrete on tree roots.</p> <p>Soil level changes will not occur within RPAs, however even when outside RPAs significant soil level changes can alter soil hydrology and have other consequences for retained trees</p>
New structures within RPAs	<p>No new structures are proposed within any RPAs</p>
Removal of protection	<p>Barriers and other protection must remain in place until all construction activity is complete and there is no realistic risk of damage to soil surfaces. Tree protection measures should not be adjusted without prior written consent of the project arboriculturist.</p>
Landscaping	<p>I have not been made aware of any post construction landscaping activities, however;</p> <p>Landscape operations have the potential to damage trees if not carried out appropriately; in addition, the removal of protective barriers to carry out landscape operations may allow other contractors into previously protected areas. The method statement will need to detail methods to protect RPAs, installation of hard surfaces, fences, topsoil, planting and any other operations within RPAs</p>
Other risks to trees	<p>Whilst not an expected part of the proposal the following guidance must be read and understood.</p> <p>Piling rigs, cranes and other high and wide plant and machinery have the potential to damage trees and site operations must be planned to take account of retained trees in advance of any potential conflict. Proposed locations and routes on and off the site should be supplied to the project arboriculturist.</p> <p>Accidental spillage of any materials which could cause damage to a tree even if outside of an RPA, including dust.</p> <p>Fires must be avoided where head could affect foliage or branches.</p>
<p>Other information required within a detailed AMS</p>	

Order of work	It is not the project arboriculturist's role to determine the timing and implementation of works on site, however, an input into the process can avoid issues once work is underway.
Responsibility and site management	It is the responsibility of the main contractor or assigned agent to ensure that details regarding tree protection are understood and followed by all site personnel and should be incorporated into site inductions
Contacts	Contact details of: <ul style="list-style-type: none"> • Site manager or another person on site responsible for ensuring tree protection is complied with – Mr Carl Coman - 07967390320 • The LPA tree officer and/or case office – Unknown at this time. • The project arboriculturist – George Trott - 07394563903 <ul style="list-style-type: none"> • Any other relevant party.
Auditable system of arboricultural site monitoring and supervision	The project arboriculturist will advise on tree protection and to attend an initial pre-commencement site meeting before works start and regular site visits to monitor compliance with tree protection and/or to supervise works which could affect trees. The frequency of such visits will be determined during the detailed design stage and will be guided by the LPA and the likely risk to trees). Due to the minor nature of the project visits will likely only be required pre-commencement, partway through implementation and upon completion of the works but before tree protection measures are removed. Site monitoring/supervision reports will be issued as an audit trail for the client and LPA.
Contractor areas/ site facilities	The location of site facilities, areas for loading, unloading, and storage of materials and plant, temporary services, car parking etc. will be sited to ensure minimal impact on retained trees, the proposed location is the existing gravel driveway at the front of the property. No discharge of potential contaminants will occur within 10m of a retained tree, or where there is a risk of run-off into an RPA.
Movement of plant and machinery	No plant machinery is expected to be used during the construction of the proposed summer house. Therefore, the associated risk is minimal.
Post construction damage and amelioration	I consider the likelihood for post construction damage and amelioration to be minimal. However, during the final site monitoring visit such a need will be assessed and should it be required the project arboriculturist will at that stage specify the required works and how they will be carried out.
Emergency contingencies	In the event of an incident occurring which results in damage to any of the existing trees on site, unexpected/accidental incursions into any root protection areas (RPA), or any leaks or spillages which enter the root protection areas (RPA) of any trees: <p style="margin-left: 40px;">Works in the area will cease The site management will be informed, who will then inform the project arboriculturist and the LPA tree officer/case officer. Their advice will be followed to as to minimise any further damage to the existing trees on site.</p> The contact details of the aforementioned people will be presented within the arboricultural method statement.

5. Conclusions

- 5.1. 0 trees are to be removed as a direct result of the proposal; therefore, the wider landscape will remain unaffected by the proposal.
- 5.2. 0 trees require tree surgery works.
- 5.3. 0 root protection area incursions are required.
- 5.4. The correct application of the recommended tree protection techniques will be critical in achieving the aim of having minimal impact on the retained trees. A detailed arboricultural method statement produced post planning consent, along with a thorough understanding of the issues by the main contractor and monitoring by the project arboriculturist will enable the proposal to be achieved and the trees to continue contributing into the future.
- 5.5. Providing tree protection and methods of work close to trees outlined in this report and the arboricultural method statement are followed, the impact of the proposal on the existing trees will be minimal and have no long-term negative impact.



6. Recommendations

- 6.1. That post planning consent, a detailed arboricultural method statement is unlikely to be necessary due to the low risk of harm to the existing tree population. However, should one be considered necessary, it must be completed prior to the commencement of the proposal.
- 6.2. During construction, the arboricultural method statement (if considered necessary) must be followed by all site personnel and supervised at key stages by the project arboriculturist. A copy of it and associated plans must be kept on site and be part of the site induction where applicable. Supervision/monitoring reports to be issued after each inspection as a record of compliance and audit trail for the local authority.
- 6.3. Tree protection measures in the form of tree protection fencing constructed using Herras style fencing must be in place before any works begin, and remain there until all other site activities are completed.



Signed	 George Trott DipArb L4(ABC), TechArborA, MCIHort, CertArb RFS, PMICS
Date	30 th March 2024

Appendix 1 – Further Information

1. Instruction and brief

- 1.1. I was instructed by Carl Coman of The Forge, Shute, EX13 7PU, via an email dated Monday 25th March 2024, to produce arboricultural supporting documents in a report format for submission to the local planning authority relating to the proposed construction of a garden room within the garden at the aforementioned address.

2. Documents and information provided

- 2.1. I was provided with the following documents and information in relation to the proposal.

Garden room site plan – Garden-Room-Site-Plan-0.pdf

3. Copyright

- 3.1. Copyright is retained by Tony Benger Landscaping Ltd. The report is for the sole use of the client. Any other person relies upon the report entirely at their own risk. Neither the whole nor any part of the report may be reproduced or included in any published document without the prior written approval of Tony Benger Landscaping Ltd.

4. Report limitations

- 4.1. The findings of this report are valid for 12 months from the date of site inspection. Trees are both mechanical and biological structures (biomechanical) and their condition can suddenly and rapidly change, particularly following adverse weather conditions or due to the effect of pests, disease and/or other abiotic factors.
- 4.2. The survey was of ground level only. No specialist decay detection equipment was used. Where appropriate the use of basic sounding and probing tools may have been used. The survey did not include the taking of or assessment of soil samples.
- 4.3. The content of this report is restricted to arboricultural issues, although other disciplines such as engineering, and ecology may be mentioned where relevant. However, it must be noted that it is essential to seek advice from an appropriate expert on these matters.
- 4.4. The survey and this report are not a safety assessment of trees. Any obvious faults, hazards or health issues will be commented on; however, this must not be relied on to ensure the tree owner's Duty of Care has been fulfilled.
- 4.5. Any suggested ultimate height of trees is based on physiological and site conditions and may differ from industry tables. Its purpose is to inform shading, visual aspects and post-development pressures and not necessarily foundation design.

5. Background information and design input

5.1. To my knowledge this document is the first arboricultural input and consideration this project has received.

6. Legal and planning constraints

6.1. I carried out a search using East Devon District Council online mapping service on the 30th March 2024. This indicated that the property is not within a conservation area, not are any of the trees subject to tree preservation orders.

6.2. The tree protection status stated in 6.1 of this appendix is considered to be correct at the time of report production but can be subject to change. It is therefore the responsibility of any persons undertaking tree works operations to the trees which are the subject of this report and in accordance with my recommendations, to undertake their own statutory tree protection checks with the local planning authority, to include TPO, conservation area and planning conditions prior to works commencing. Any tree work agreed as part of a full planning consent overrides the need to apply separately although pre-commencement planning conditions may need to be discharged first.

6.3. The following is a brief description of legal constraints as they apply to trees. Please note the information is for guidance only and is in no way a definitive interpretation of the law as it affects trees.

Tree preservation orders: Tree preservation order gives statutory protection to trees and makes it a criminal offence to carry out most work to them without written permission from the local planning authority. Tree works necessary to implement full planning consent overrides the need to apply separately. Please note there may be a need to discharge pre-commencement conditions before tree works can be undertaken.

Conservation areas: If trees are within a conservation area, a minimum of six weeks' written notice (a Section 211 Notice) must be given to the LPA of the intention to carry out works to trees. The LPA then has the option to allow the works or to place a TPO on the tree/s to manage the works. Tree work necessary to implement full planning consent overrides the need to notify separately. Please note there may be a need to discharge pre-commencement conditions before tree works can be undertaken.

Trees and the planning system: LPAs have a statutory duty to consider the protection and planting of trees when granting planning permission. The potential effect of development on trees is a material consideration, whether statutorily protected (e.g. by a TPO or by being within a CA) or not.

Other legal restrictions: Restrictive covenants and existing planning conditions sometimes restrict works to trees. Sites within or adjacent to Sites of Special Scientific Interest, Ancient Semi-Natural

Woodland, nature reserves and other land designations, restrict some works to trees. Legal advice may be required in some of these cases.

Occupiers Liability 1957 and 1984: The Occupiers liability act places a duty of care to ensure that no reasonably foreseeable harm takes place due to tree defects. This report is not a tree safety report and does not provide recommendations on tree management.

Common Law: This enables pruning back of the crown and roots of trees on adjacent land where they overhang neighbouring property, providing the work is reasonable and does not cause harm. This right does not override TPO and CA legislation.

Ecological constraints: The Wildlife and Countryside Act 1981, as amended, The Conservation of Habitats and Species Regulations 2010 and the Countryside and Rights of Way Act 2000, provide statutory protection to species of flora and fauna including birds, bats and other species that are associated with trees. These could impose significant constraints on the use and timing of access to the site. It is the responsibility of the main contractor and tree surgery contractor to ensure that no protected species are harmed whilst carrying out site clearance or tree surgery works. Unless competent to do so, the advice of an ecologist must be sought.

6.4. National and local planning policy can influence tree retention on sites. The National Planning Policy Framework (NPPF) 2012 sets out the Government's planning policies for England and how these are expected to be applied. It includes several principles in relation to conserving and enhancing the natural environment and minimising impacts on biodiversity and to provide net gains where possible. Local planning policy often specifically refers to tree retention irrespective of whether trees are protected by TPOs.

7. Site visit

7.1. A site visit was carried out on Friday 29th March 2024 by George Trott and Chris Fry of Tony Benger Landscaping Ltd. The conditions were intermittent clouds. Visibility was not impeded by weather conditions.

8. Survey Method

8.1. All trees with a trunk diameter of 75 mm or above were surveyed as recommended in BS5837. Obvious hedges and shrub masses were identified where appropriate, these boundary hedges contained smaller trees of little significance which were not individually recorded on many instances. Information collected is in accordance with recommendations in subsection 4.4.2.5 of BS 5837 and includes species, height, diameter, branch spread, crown clearance, age class, physiological condition, structural condition, and remaining contribution. Each tree was then allocated one of four categories (U, A, B or C) to reflect its suitability as a material constraint on development.

- 8.2. The trees were surveyed from ground level without detailed investigations.
- 8.3. The height of surveyed trees was measured using a clinometer where practicable, where not practicable heights were visually estimated.
- 8.4. The stem diameters were measured in millimeters at 1.5 meters above associated ground level and otherwise in accordance with Annex X of B5837:2012, unless otherwise indicated.
- 8.5. Crown spreads were measured using either a tape, paced out, or visually estimated where access was not practicable.



Appendix 2 – Key to tree survey sheets

Table 5

Survey Key	
Ref	<p>T: Tree G: Group – trees which form cohesive arboricultural features W: Woodland H: Hedge – regularly maintained domestic hedges just species and height noted -hedgerows and substantial internal hedges are specified in the tree schedule S: Shrub mass – Just species and height noted</p>
Species	Name of the tree species – Both common and scientific name is given
Ht (M)	Height of the tree measured in meters. Tree height is measured using a clinometer.
Crown Spread (M)	Crown spread at the four cardinal points. Paced or measured where critical. If estimated this is indicated with a # after the entry.
Stem Dia @ 1.5m (mm)	The diameter of the stem in millimetres at 1.5m above ground level for single-stemmed trees or in accordance with Annex C of BS 5837 for multi-stemmed trees or trees with low forks or irregular stems. If trees were inaccessible for any reason the diameter is estimated. This is shown with an # after the entry.
RPA circle radius (M2)	The size of the circle radius of the tree root protection area – measure in meters. Root protection area size measured in square meters
Ht of lowest branch (m) & direction of growth	The height above relative ground level of the lowest branch of the tree – measure in meters The direction of growth as indicated by a compass and the distance in meters the branch grows in indicated direction

<p>Life stage</p>	<p>NP: Newly planted</p> <p>Y: Young - an establishing tree that could be easily transplanted.</p> <p>SM: Semi-mature - an established tree still to reach its ultimate height and spread and with considerable growth potential.</p> <p>YM: Early mature - a tree reaching its ultimate height and whose growth is slowing, however, it will still increase considerably in stem diameter and crown spread.</p> <p>MA: Mature - a tree with limited potential for further significant increase in size Although likely to have a considerable safe useful life expectancy.</p> <p>LM: Late mature - a senescent tree, in decline, although may still have a useful life expectancy.</p> <p>V: Veteran – has features associated with advanced age for its species but not necessarily very old chronologically.</p> <p>A: Ancient - a tree older than typical for the species and of great ecological, cultural or aesthetic value.</p>
<p>Estimated Remaining Contribution in years</p>	<p>Estimated remaining useful contribution in years. This is not necessarily the ultimate life expectancy of the tree as trees can often exist in a collapsed, decayed form for many years, however, this may not be appropriate in the site context.</p>
<p>General Observations P – Physiological condition S – Structural condition.</p>	<p>General observations of the tree recorded during the initial tree survey. These are not comments resulting from a detailed arboricultural inspection of the tree.</p> <p>Physiological condition: A categorization of the physiological condition of the tree based upon visual observations during the initial tree survey. Good, Fair, Poor, Dead.</p> <p>Structural condition: A categorization of the structural condition of the tree based upon observations occurring within the initial tree survey. Good, Fair, Poor, Dead.</p>

<p>Preliminary Management Recommendations</p>	<p>Preliminary recommendations for tree surgery found within the tree survey sheets are based on findings at the time of the tree survey and are not based on any development proposal and are usually works for safety or sound arboricultural reasons and are irrespective of any change in land use</p>
<p>Category of Retention + sub category</p>	<p>Using BS5837:2012 Trees in relation to design, demolition and construction, trees can be divided into one of the following categories</p> <p>Category A - Those of high quality with an estimated remaining life expectancy of at least 40 years;</p> <p>Category B - Those of moderate quality with an estimated remaining life expectancy of at least 20 years;</p> <p>Category C - Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm;</p> <p>Category U - Those trees in such condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years</p> <p>Table 1 of BS5837:2012 Trees in relation to design, demolition and construction also provides the following sub categories to aid in the understanding of the areas of value each tree provides</p> <ul style="list-style-type: none"> 1 - Mainly arboricultural qualities. 2 - Mainly landscape qualities. 3 - Mainly cultural values, including conservation <p>Please note that a tree or group may fulfil the requirements of more than one sub category.</p>

Appendix 3 – Tree survey schedule

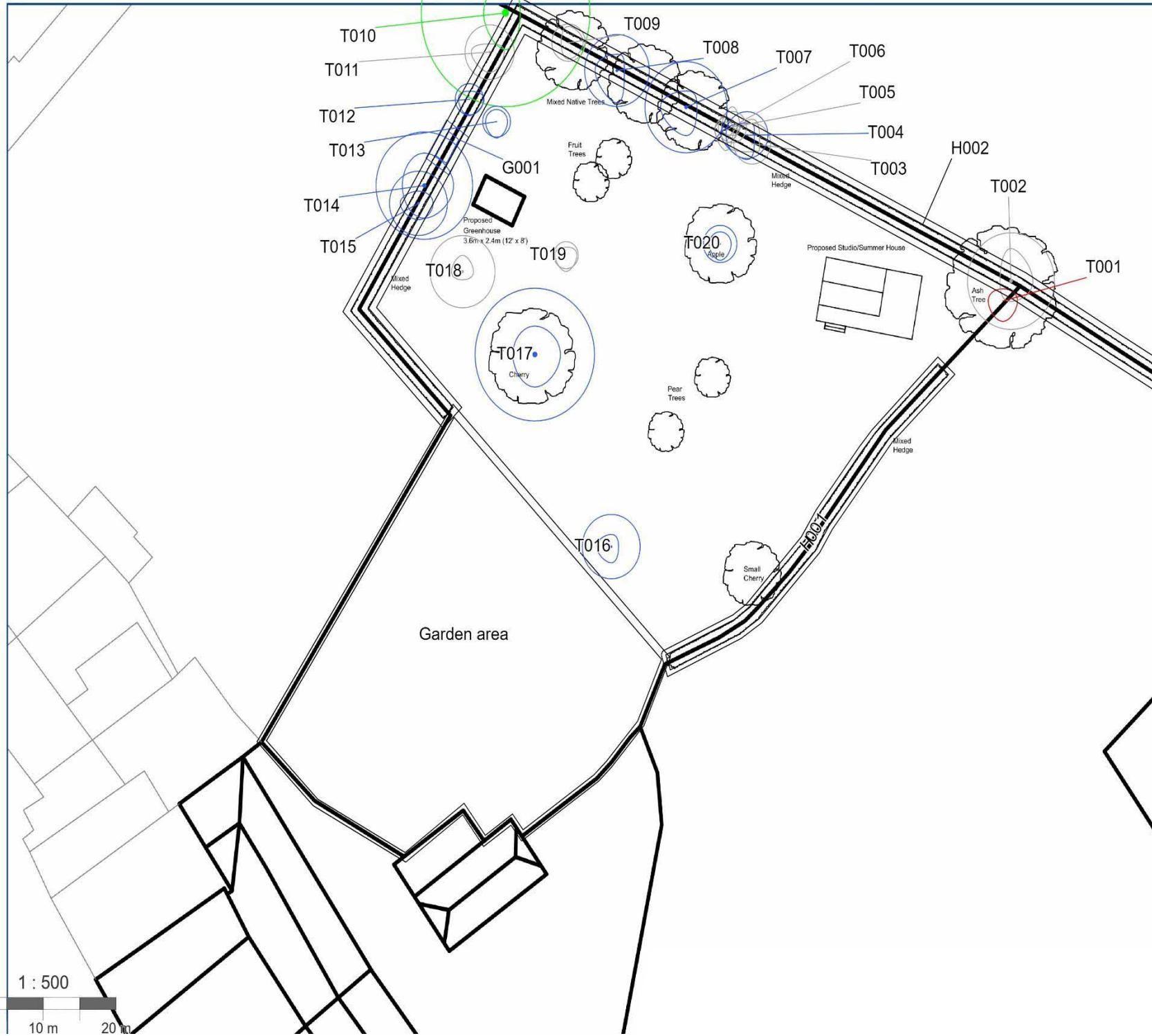
Table 6

Ref	Species	Ht (M)	Crown Spread (M)	Stem Dia @ 1.5m (mm) RPA circle radius (M ²)	Ht of lowest branch (m) & direction of growth	Life stage	Estimated Remaining Contribution in years	General Observations P – Physiological condition S – Structural condition.	Preliminary Management Recommendations	Category of Retention + sub category
G001	Wild cherry (Prunus avium) Common ash (Fraxinus excelsior) Elm (Ulmus sp.)	8.0	N:2.5 E:3 S:3 W:3	220 Area: 20 sq m.	1.5(E)	SM	30+ Years	Group of overgrown hedgerow specimens now forming a moderate height vegetative barrier. P – Good S - Good	N/A	B1,2
H001	Mixed species (Mixed species)	2.0	N:0.5 E:0.5 S:0.5 W:0.5	50 Radius: 0.6m. Area: 170 sq m.	N/A	SM	N/A	P – Good S - Good	N/A	N/A
H002	Mixed species (Mixed species)	4.0	N:0.5 E:0.5 S:0.5 W:0.5	70 Radius: 0.8m. Area: 660 sq m.	N/A	SM	N/A	P – Good S - Good	N/A	N/A
T001	Common beech (Fagus sylvatica)	2.5	N:1.5 E:2 S:2.5 W:2	130 No RPA due to Retention Category of U.	1.5(W)	SM	10+ Years	Poor quality ex hedgerow specimen. P - Good S - Fair	N/A	U
T002	Common ash (Fraxinus excelsior)	10.0	N:4 E:3 S:2.5 W:1.5	350 Radius: 5.9m. Area: 109 sq m.	2(SW)	M	10+ Years	Sparse canopy. Suspected early ADB infection (lvl 1 0-25% loss in foliar density). Reduced life span expected. P – Fair S – Good	N/A	C1
T003	Elm (Ulmus sp.)	5.0	N:3 E:1 S:1 W:3.5	210 Radius: 2.5m. Area: 20 sq m.	3(E)	SM	20+ Years	Poor quality specimen leaning into adjacent field to the N. P – Fair S - Fair	N/A	C1
T004	Field maple (Acer campestre)	4.0	N:1.5 E:1	170	2(SE)	EM	30+ Years	Dense ivy coverage. Hedgerow specimen.	N/A	B1

			S:3 W:3.5	Radius: 2.9m. Area: 26 sq m.				P – Good S – Good		
T005	Elm (Ulmus sp.)	6.0	N:2.5 E:1 S:1 W:1.5	160 Radius: 1.9m. Area: 11 sq m.	3.5(N)	SM	10+ Years	P – Good S - Good	N/A	C1
T006	Elm (Ulmus sp.)	5.0	N:1 E:1 S:2.5 W:1.5	130 Radius: 1.6m. Area: 8 sq m.	2.5(SW)	SM	10+ Years	P – Good S - Good	N/A	C1
T007	Common ash (Fraxinus excelsior)	12.0	N:2 E:1.5 S:3.5 W:3.5	330 Radius: 5.6m. Area: 99 sq m.	3.5(SE)	M	30+ Years	Dense ivy. Moderate deadwood. P – Fair S - Good	N/A	B1
T008	Elm (Ulmus sp.)	7.0	N:2 E:1 S:4 W:3	260 Radius: 4.4m. Area: 61 sq m.	1.5(S)	EM	20+ Years	Poor form. Strong growth bias to the S. P – Good S – Fair	N/A	B1
T009	Elm (Ulmus sp.)	8.0	N:2 E:2 S:2 W:1	190 Radius: 2.3m. Area: 17 sq m.	3(N)	EM	20+ Years	Dense ivy. P – Fair S – Good	N/A	C1
T010	Horse chestnut (Aesculus hippocastanum)	15.0	N:4 E:2 S:4.5 W:3	480 Radius: 11.5m. Area: 415 sq m.	2(SE)	M	50+ Years	Situated on neighboring land. Measurements visually estimated. P – Good S – Good	N/A	A1,2
T011	Common ash (Fraxinus excelsior)	10.0	N:1 E:2 S:2.5 W:2.5	280 Radius: 3.4m. Area: 36 sq m.	1.5(E)	EM	<10 years	Sparse canopy. Suspect ash die back level 2 (25-50% loss in foliar density). P – Fair S - Good	N/A	C1
T012	Wild cherry (Prunus avium)	6.0	N:1 E:2	160	1.5(E)	SM	30+ Years	P – Good S – Good	N/A	B1

			S:2 W:1.5	Radius: 1.9m. Area: 11 sq m.						
T013	Wild cherry (Prunus avium)	7.0	N:1.5 E:1.5 S:2 W:1.5	160 Radius: 1.9m. Area: 11 sq m.	2(E)	EM	30+ Years	P – Good S – Good	N/A	B1
T014	Willow (Salix sp.)	5.0	N:4 E:4 S:4 W:3	550 Radius: 6.6m. Area: 137 sq m.	2(SE)	EM	30+ Years	Previously been topped, strong regrowth. P – Good S – Good	N/A	B1
T015	Wild cherry (Prunus avium)	10.0	N:1.5 E:2 S:2 W:2.5	330 Radius: 4.0m. Area: 50 sq m.	2.5(S)	EM	30+ Years	Dense ivy. P – Good S – Good	N/A	B1
T016	Cultivar apple (Malus domestica)	3.0	N:1.5 E:1 S:2 W:2	330 Radius: 4.0m. Area: 50 sq m.	2(S)	M	30+ Years	P – Good S – Fair	N/A	B1
T017	Cherry (Prunus sp. 'Cherry')	3.5	N:3.5 E:3.5 S:4 W:3	340 Radius: 8.2m. Area: 211 sq m.	2(S)	M	30+ Years	P – Good S – Good	N/A	B1
T018	Cultivar apple (Malus domestica)	2.5	N:2 E:1.5 S:1 W:1.5	370 Radius: 4.4m. Area: 61 sq m.	1.5(N)	EM	20+ Years	Historic longitudinal crack in trunk. P – Fair S – Physical Defect	N/A	C1
T019	Cultivar apple (Malus domestica)	2.5	N:1 E:1.5 S:2 W:1.5	140 Radius: 1.7m. Area: 9 sq m.	0.5(S)	SM	30+ Years	P – Good S – Good	N/A	C1
T020	Cultivar apple (Malus domestica)	2.5	N:1.5 E:1.5 S:2 W:1.5	190 Radius: 2.3m.	1.5(S)	SM	30+ Years	P – Good S – Good	N/A	B1

Appendix 4 – Plan of tree constraints (RPA only)

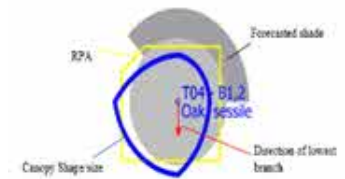


Plan of tree Constraints (RPA only)

Site Address: The Forge, Shute, Devon, EX13 7PU

Client: Carl Comen, The Forge, Shute, Devon, EX13 7PU

Tree constraints Key

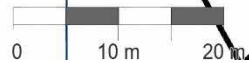


Tree BS5837 category

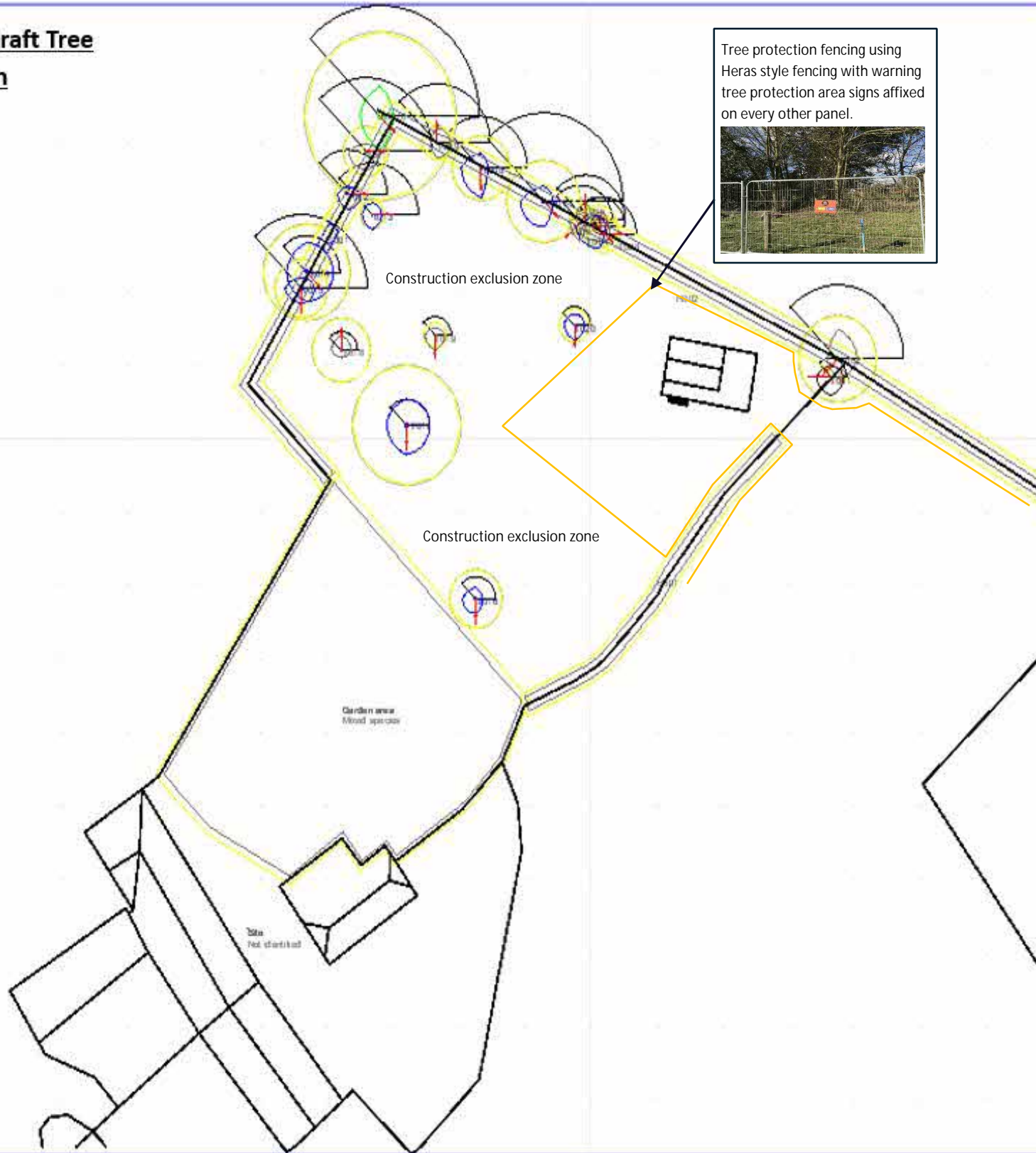
- Category A
- Category B
- Category C
- Category U
- Not Recorded



1 : 500



Appendix 6 - Draft Tree Protection Plan

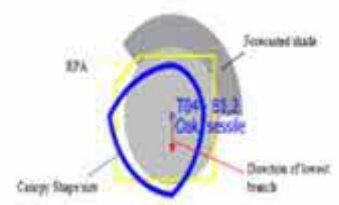


Plan of tree Constraints (Detailed)

Site Address: The Forge, Shute, Devon, EX13 7PU

Client: Carl Comen, The Forge, Shute, Devon, EX13 7PU

Tree constraints Key



Tree BS5837 category

- Category A
- Category B
- Category C
- Category U
- Not Recorded



Appendix 7 – Tree protection Barriers

Design of welded mesh, Heras type tree protection fencing

Tree protection fencing should be fit for the purpose of excluding the proposed construction activity and appropriate to the degree and proximity of work taking place. The default specification should be in accordance with 6.2.2.2 of BS 5837, as shown below. However due to the minor scale of the activity on site a lesser specification will be suitable and more proportionate to the proposal.

Specifications

The site circumstances and associated risk of the works involved in implementing the proposal do not necessitate the default level of protection recommended within 6.2.2.2 of BS5837:2012. Instead, a Heras type welded mesh fencing will be used on rubber feet. The panels will be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. An example photograph can be seen presented below.

All weather notices will be attached with wording that notifies site operatives that it should not be tampered with, and the area behind the fencing is a tree protection area. An example of this can be seen presented below.

Location(s)

Barriers shall be positioned on the perimeter of the root protection area(s) to define the tree protection zone, as well as specified on the tree protection plan presented in appendix 6.

Example of Heras type fencing acting as tree protection fencing with a suitable warning sign attached





**TREE PROTECTION AREA
KEEP OUT !**

(TOWN & COUNTRY PLANNING ACT 1990)

**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS 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 PROJECT
ARBORICULTURIST**

Appendix 8 – Glossary

Access facilitation pruning

One-off tree pruning operation, the nature and effects of which are minimal and without significant adverse impact on the overall tree health. Works are necessary to provide access for operations on site.

Arboricultural method statement

A document providing methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained.

Construction

Any site-based operations with the potential to affect existing trees.

Construction exclusion zone (CEZ)

Any area where access is prohibited for the duration of the project. This, by default, includes all root protection areas unless specifically mentioned and measures put in place to protect the associated tree(s).

Crown lifting/ raising

The removal or shortening of the branches that form the lower part of the crown of a tree.

Longitudinal crack

A longitudinal crack typically refers to a fissure or split that runs vertically along the trunk or branches of a tree. These cracks can develop due to various factors such as rapid temperature changes, mechanical stress, diseases or natural aging processes. Longitudinal cracks can compromise the structural integrity of a tree making it vulnerable to further damage or disease.

Root protection area (RPA)

Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain a tree's viability, and where the protection of the roots and soil structure is treated as a priority.

Stem/trunk

Principal above-ground structural component(s) of a tree that supports its branches.

Structure

Manufactured object, such as a building or path.

Tree protection plan

Scale drawing, informed by descriptive text where necessary, based upon the finalized proposals, showing trees for retention and illustrating the tree and landscape protection measures.

Vitality

In tree assessment, an overall appraisal of physiological and biomechanical processes, in which high vitality equates with near-optimal function, in which high vitality equates with healthy function.



Bibliography

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British Standards Institute (2010) BS 3998: Tree work – Recommendations

DTLR (2001) Principles of Tree Hazard Assessment and Management - David Lonsdale.

Research for amenity trees No.8 – Tree roots in the built environment

