Tree Protection Measures and Arb. Method Statement Shepherd's Cottage. RG20 9NL.



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Validation Statement

This document contains the supporting arboricultural information regarding the protection measures for the retained trees for the proposal at Shepherd's Cottage, RG20 9NL.

For the Local Planning Authority, (LPA), validation purposes, this preliminary report has the following:

A tree survey carried out in accordance with BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations, undertaken by a suitably qualified arborist. (Section 1 and Appendix 1).

A plan showing the tree survey information, including the BS5837:2012 categories. (Arboricultural Impact Assessment Plan).

An arboricultural method statement describing a feasible means of protection, its implementation and the phasing of recommended works. (Section 2).

A plan detailing the tree protection measures for the retained trees during the phases of the proposed development. (Tree Protection Plan).

Proposed Design Statement

Demolish existing 3 x bedroom cottage. Replacement with new build 4 x bedroom detached dwelling + associated landscaping.

Section 1:

Tree Survey Details and Findings

The tree survey has been carried out in accordance with BS 5837:2012. Trees in Relation to Design, Demolition and Construction – Recommendations.

The purpose of the survey is to comment on the subject trees, where they may affect or be affected by the proposed development. Also, the survey will assess the trees' condition and suitability for retention.

- 1. TREE SURVEY LIMITATIONS: (Ref: Appendix 1).
- 1.1 The survey was conducted from ground level.
- 1.2 No internal decay detection devices or other invasive tools were used to assess tree condition.
- 1.3 This survey does not consider the effect that trees and woody vegetation may have on the structural integrity of future building through subsidence or heave.
- 1.4 This survey has been undertaken principally for planning purposes. Although any obvious tree defects have been noted, a full hazard assessment has not been carried out.
- 1.5 The data and findings of the survey are only valid for 2 years from the date stated on the front cover of this document. The condition of trees can be affected by adverse weather conditions, the effect of pests and diseases, and/or other abiotic factors.
 - 2. TREE SURVEY DETAILS: (Ref: Appendix 1).
- 2.1 All trees that were inspected during the site visit are shown on the appended Tree Protection Plan, and are colour coded to indicate their quality and value.
- 2.2 The trees that have been surveyed are categorised according to BS 5837:2012, in the following categories:

CATEGORY A: "Those trees of high quality and value; in such a condition, as to be able to make a substantial contribution for a minimum of 40 years".

CATEGORY B: "Those trees of moderate quality and value; in such a condition, as to be able to make a substantial contribution for a minimum of 20 years".

CATEGORY C: "Those trees of low quality and value, currently in a sufficient condition to remain until new planting can take place and be established. Trees in this category can sustain a contribution for a minimum of 10 years. Also, in this category are trees with a stem diameter at 1.5m above ground level of <150mm.

CATEGORY U: "Those trees in such a condition that any existing contribution will be lost in 10 years. These trees should be removed in the current context, for reasons of good arboricultural management.

2.3 Sub-category Criteria:

Sub-category 1: Mainly arboricultural values.

Sub-category 2: Mainly landscape values.

Sub-category 3: Mainly cultural values, including conservation.

- 2.4 Protection Distance: The protection distance in metres, provides the adequate root protection area recommended in BS 5837:2012, assuming a circular area centred on the tree.
 - 3. PRELIMINARY TREE WORKS: (Ref: Appendix 1).
- 3.1 Any recommended tree works must be carried out to best industry practice. Reference can be made to BS 3998:2010 Tree Work Recommendations.

Section 2:

Arboricultural Method Statement

This Arboricultural Method Statement, (AMS), describes how trees will be protected and managed during the phases of the proposed development.

The Tree Protection Plan, (TPP), must be referred to in conjunction with this Arboricultural Method Statement. The TPP identifies those trees to be retained and the protective fencing position and therefore the Construction Exclusion Zones, (CEZ).

1. CONSTRUCTION EXCLUSION ZONES:

- 1.1 The CEZ's required by the current edition of BS 5837:2012, relates to the stem diameter of each tree when measured at 1.5m above ground level. The CEZ's are to be afforded protection at all times by specified protective fencing. (Ref: 2.1 and Figure 3). No works will be undertaken within any CEZ.
 - 2. PROTECTIVE FENCING. (Ref: Appended TPP).:
- 2.1 The tree protection fencing required for the construction phase has to conform to that specified in BS 5837:2012. The protective fencing used can be "heras" temporary fencing supported by using heavy rubber feet and joined together using a minimum of 2 x anti-tamping couplers. The couplers should be installed so that removal can only take place from inside the fencing. The panels should also be supported on the inner side by stabilizing struts which should be attached to base plate secured with ground pins. (Ref: Figure 3).
- 2.2 The installation of the protective fencing shall correspond with the approximate position as indicated on the TPP.
- 2.3 The fenced area should be treated as "sacrosanct" and a notice to this effect shall be displayed and brought to the attention of all those entering and working on the site.
- 2.4 The fencing shall remain in place until the completion of the construction phase.
 - 3. DEMOLITION PHASE:
- 3.1 Once the protective fencing is in place then the demolition phase can commence.
- 3.2 The demolition should be carried out in such a way that avoids and prevents damage to the retained trees. Ideally, the demolition of the existing building should be dismantled from the outside inwards away from the CEZ's. This technique is often known as the "top down, pull back" method.
- 3.3 Ideally, the debris from this phase should be removed from the site directly, using grab lorries. Failing this, it is advised that any debris stored on site, should be away from the RPA's of the retained trees.

- 3.4 Above all, given the specialist nature of this phase, consultation with the demolition contractor needs to take place prior to the commencement of operations to ensure the wellbeing of the retained trees.
 - 4. EXCAVATION WORKS New Parking Area:
- 4.1 The excavation works and installation for the proposed new parking will impact on the RPA of T1 by 0.5%.
- 4.2 It is recommended that the required excavation works for the new parking area is carried out from outside of the RPA for <u>T1</u>, pulling back the spoil and away from the RPA.
- 4.3 Given the proximity of the excavation work near the RPA of <u>T1</u> then it is advised that a banksman should be used to spot any root activity.
- 4.4 In the unlikely event that roots may be discovered during this phase of excavation work for the new parking area, the following precautions must be taken:

Roots while exposed should be kept moist and covered to prevent desiccation. Prior to back filling, the wrapping needs to be removed.

If pruning is required: then roots with a diameter of < 25mm can be cut cleanly using secateurs. In the event that roots are discovered with a greater diameter of 25 mm, then the client's retained arboriculturist should consulted prior to any pruning taking place. This also applies to clumps of smaller roots with a diameter of 25mm or less.

Prior to back filling, the roots should be surrounded in de-compacted top soil free of contaminants. It is advisable to incorporate an organic rooting compost with the top soil.

5. ADDITIONAL PRECAUTIONS:

- 5.1 No storage of materials or mixing of cement shall take place within close proximity of the CEZ's. These activities shall not take place on a slope where they may leach into the CEZ's. A meeting needs to take place between the site foreman and the client's retained arboriculturist to decide where best to position the storage of materials and mixing of cement etc..
- 5.2 No fires shall be lit within 20m of any retained tree. The lighting of fires will consider fire size and wind direction, so that no flames come within 5m of any tree canopy.

6. TREE LOSS MITIGATION:

- 6.1 Once the build the excavation works have been completed, then the landscaping phase and in particular tree planting can commence.It is advised that the tree planting should take place during the months of December through to March.
- 6.2 The associated landscape plan for the project will give the proposed positioning for the new trees and species choice etc..

- 6.3 Tree species to be considered: Field maple/Swedish whitebeam/Rowan/Crab apple/Prunus avium etc.. Trees should be 8-10cm girth standards with a clear stem – either container grown or root-balled.
- 6.4 Tree Planting Method:

Once the positioning has been finalised, then the planting-pit should be hand-dug approximately 1.5 x the size of the tree's root-ball.

A mixture of organic rooting compost and excavated top soil should be added to the bottom of the planting-pit and the tree placed in position.

The remaining soil/compost mixture should be added and firmed along with installing an irrigation pipe as required.

Once in place a layer of well-rotted mulch should spread to dress the planting pit.

The support system can then be installed: 2 x 1.2m machined tree stakes with cross-member + strapping.

Add spiral guard on the tree's stem at base to prevent mammalian damage.

6.5 Aftercare Programme:

It is important that an aftercare programme is initiated for at least 5 years after planting to ensure establishment and quality tree form.

Work Detail	Year 1	Year 2	Year 3	Year 4	Year 5	Years 6-10
Herbicide application/hand weeding - (May/June)	П	П	П	П	П	
Stake and spiral guard maintenance - (Jan)	П	П	П	П	П	
Formative pruning - (Feb)		П			П	
Stake and shelter removal						П

7. RESPONSIBILITIES:

- 7.1 It will be the responsibility of the main contractor to ensure that the planning conditions associated with the planning consent are adhered to at all times, and that a monitoring regime with regards to tree protection is adopted on site.
- 7.2 A site agent should be nominated to be responsible for all arboricultural matters. This person must be:

Present on site the majority of the time.

Aware of the arboricultural responsibilities.

Responsible for ensuring that all site personnel are aware of their responsibilities towards the retained trees on site, and the consequences of their failure to observe those responsibilities.

Able to contact the client's retained arboriculturist in the event of any tree related problems occurring whether actual or potential.

7.3 The main contractor will ensure that the excavation and build sequence is appropriate to make certain that no damage occurs to any retained tree. The protective fencing shall remain in place until the completion of all construction works on the site.

References:

- BS 5837:2012. Trees in Relation to Design, Demolition and Construction.
- APN 12. Through the Trees to Development.
- Tree Roots in the Built Environment. J. Roberts, N. Jackson, M. Smith.
- NHBC Chpt. 4.2. Building Near Trees.

Appendices:

- Tree schedule.
- Arboricultural Impact Assessment Plan. Shepherd's Cottage AIA Aug 2023
- Tree Protection Plan. Shepherd's Cottage TPP Aug 2023
- Diagram of the protective fencing as specified in BS 5837:2012.
- Example of Tree Protection Notice.

Signed:	

Date: 31st August 2023

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