

GHA Trees
5 South Drive
High Wycombe
Bucks
HP13 6JU



Glen Harding MSc (Forestry), MA ArborA
t: 07884 056025
e: info@ghatrees.co.uk
www.ghatrees.co.uk

Arboricultural Method Statement: 26 Elgood Avenue, Northwood, HA6 3QS

10th January 2020

Ref: GHA/MS/125260:20

CONTENTS

Section	Subject	Page
	Instructions	3
	Executive Summary	3
	Documents Supplied	4
	Scope of Survey	4
	Survey Method	5
	The Site	6
	Subject Trees	6
	The Proposal	6
	Method statement and procedures for development works	7
	Conclusion	11
	Recommendations	11
Appendix A	TPP: Tree Protection Plan (Attached as a separate PDF file to maintain its integrity / accuracy)	
Appendix B	Tree Table	
Appendix C	Extract from BS5837:2012 – Protective Fencing	
Appendix D	Site monitoring record sheet	

Method Statement

Location: 26 Elgood Avenue, Northwood, HA6 3QS
Ref: GHA/MS/125260:20
Client: Gullett and Sons
Date: 10th January 2020
Prepared by: Glen Harding MICFor, MSc (Forestry), MArborA
Date of Inspection: 7th January 2020

Please note that abbreviations introduced in (brackets) may be used throughout the report.

Instructions

Issued by – Gullett and Sons

TERMS OF REFERENCE – To survey the subject trees within 26 Elgood Avenue, Northwood, in order to assess their general condition and to provide an arboricultural method statement for the approved development, that safeguards the long term well being of the nearby retained trees and satisfies planning condition number 6 (decision notice ref: 57067/APP/2017/801).

The writer retains the copyright of this report and its content is for the sole use of the client(s) named above. Copying of this document may only be undertaken in connection with the above instruction. Reproduction of the whole, or any part of the document without written consent from GHA Trees is forbidden. Tree work contractors, for the purpose of tendering only, may reproduce the Schedule for tree works included in the appendices.

Executive Summary

The proposal for the site is to renovate and extend the existing house. The existing access from Elgood Avenue will be retained and a second access will be formed to create an in/out driveway. The retained trees require protection in accordance with industry best practice and BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations, in order to ensure their longevity.

Documents Supplied

Gullett and Sons supplied the following documents:

1. Existing layout plans
2. Proposed layout plans

Scope of Survey

- 1.1 The survey is concerned with the arboricultural aspects of the site only.
- 1.2 The planning status of the subject property was not investigated in detail.
- 1.3 A qualified Arboriculturist undertook the report and site visit and the contents of this report are based on this. Whilst reference may be made to built structure or soils, these are only opinions and confirmation should be obtained from a qualified expert as required.
- 1.4 Trees in third party ownership were surveyed from within the subject property, therefore a detailed assessment was not possible and some (if not all) measurements were estimated. Where the stem location of a third party tree has been estimated, this is noted on the plan.
- 1.5 Dense vegetation or climbers (such as ivy) also prohibited full inspections for some trees; this is noted where applicable.
- 1.6 No discussions took place between the surveyor and any other party.
- 1.7 The trees were inspected on the basis of the Visual Tree Assessment method expounded by Mattheck and Breleor (The body language of tree, DoE booklet Research for Amenity Trees No. 4, 1994)
- 1.8 The survey was undertaken in accord with British Standard 5837: 2012 – Trees in relation to design, demolition and construction – recommendations.
- 1.9 Pruning works will be required to be in accord with British Standard 3998 – 2010 (Tree Work - Recommendations).
- 1.10 Underground services near to trees will need to be installed in accord with the guidance given in BS5837 together with the National Joint Utilities Group Booklet 4: 2007 Guidelines for the planning, installation and maintenance of utility services in proximity to trees (NJUG4).
- 1.11 The client's attention is drawn to the responsibilities under the Wildlife and Countryside Act (1981).

Survey Method

- 2.1 The survey was conducted from ground level with the aid of binoculars if needed.
- 2.2 No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- 2.3 No soil samples were taken.
- 2.4 The height of each subject tree was estimated using a clinometer and recorded to the nearest half metre.
- 2.5 The stem diameter for each tree was measured in line with the requirements set out in BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations.
- 2.6 The crown spreads were measured with an electronic distometer and recorded to the nearest half metre. Where the crown radius was notably different in any direction this has been noted on the Plan (appendix A) and within the tree table (Appendix B). The crowns of those trees that are proposed for removal, or trees where the crown spread is deemed insignificant in relation to the proposed development are not always shown on the appended plan; however their stem locations are marked for reference.
- 2.7 The Root Protection Area (RPA) for each tree is included in the tree table, both as an area, and as the radius of a circle.
- 2.8 The crown clearance was measured using a clinometer and recorded to the nearest half metre. Where it is significantly lower in one direction, this is noted within the tree table at appendix B.
- 2.9 All of the trees that were inspected during the site visit are detailed on the plan at Appendix A; this plan was produced in colour and **MUST** only be scanned or reproduced in colour. The trees on this plan are categorised and shown in the following format:

COLOUR CODING AND RATING OF TREES:

Category A – Trees of high quality with an estimated remaining life expectancy of at least 40 years. Colour = light green crown outline on plan.

Category B – Trees of moderate quality with an estimated remaining life expectancy of at least 40 years. Colour = mid blue crown outline on plan.

Category C – Trees of low quality with an estimated remaining life expectancy of at least 40 years, or young trees with a stem diameter below 150mm. Colour = uncoloured crown outline on plan.

Category U – Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Colour = red crown outline on plan.

All references to tree rating are made in accordance with BS 5837: 2012 – Trees in relation to design, demolition and construction – recommendations’, Table 1.

The Site

- 3.1 The site is located on Elgood Avenue, a residential road located to the east of Northwood.
- 3.2 A good tree cover is present on the site itself as well as adjacent sites, with many semi-mature and mature trees of both native and exotic origin characterising the local area.
- 3.3 Access to the property is currently gained via a driveway to the front (east) of the site.

The Subject Trees

- 4.1 The details of the subject trees are set out in the Schedule at Appendix B.
- 4.2 Of the nine individual trees, and groups of trees surveyed, four have been assessed as BS 5837 category B, with the remaining two trees being assessed as BS 5837 category C.

Category B	4 trees / groups
Category C	5 trees / groups

The Proposal

- 5.1 The proposal for the site is to renovate and extend the existing house.
- 5.2 The existing access from Elgood Avenue will be retained and a second access will be formed to create an in/out driveway.
- 5.3 The proposed location of the above structures can be seen on the appended plan.

Method Statement and Procedures for Development Works

THE PROCEDURES OUTLINED BELOW ARE LISTED IN THE CHRONOLOGICAL ORDER THAT THEY SHOULD COMMENCE. ITEMS 6.1 AND 6.2 MUST BE UNDERTAKEN BEFORE ANY CONSTRUCTION MACHINERY ENTERS THE SITE OR BEFORE ANY CONSTRUCTION ACTIVITY (TO INCLUDE DEMOLITION) COMMENCES.

6.1 TREE PRUNING / REMOVAL

A list of all tree works that are required (including trees to be removed) is included in the tree table at Appendix B. Pruning / removal has only been specified for the following reasons:

- Where work is necessary to implement the approved scheme.
- Where works are required for safety reasons.
- Where work is required to improve tree form, or improve the appearance of overgrown areas of the site.

Where any tree work is needed, this work will be in accordance with British Standard 3998 – 2010 (Tree Work - Recommendations).

6.2 TREE PROTECTION BARRIERS

It is essential for the future health of the trees to be retained on site, that all development activity is undertaken outside the root protection zone of these trees, whenever this is practical. The position of the proposed protective fencing for the site is shown on the plan 'Appendix A' by a **pink** line. The position of the fence is to be marked out with biodegradable marker paint on site and agreed with appropriate representatives from the LPA and contractor. The fencing will be erected **prior** to any works in the vicinity of the trees and removed only when all development activity is complete. The protective fencing will be as that shown in BS 5837 (see Appendix C). The herras panels must be joined together using a minimum of two anti-tamper couplers which must be installed so they can only be removed from the inside of the fence. The panels should be supported by stabilizer struts, which must be installed on the inside and secured to the ground using pins or appropriate weights.

The Fence must be marked with a clear sign reading:

“Construction Exclusion Zone – No Access”

6.3 GROUND PROTECTION – LIGHTWEIGHT ACCESS ONLY

An area of the garden will require ground protection to ensure that soil erosion or excessive compaction does not occur. The areas where this protection is required are outlined in **orange** hatching on the appended plan. These areas will be covered with a permeable membrane (laid on top of all existing patios / hard surfacing areas for additional protection) then a layer (minimum 100mm depth) of compressible woodchip will be laid over it with wood chip also being used to fill any low spots to create a level surface. 18mm marine ply boards will then be secured on top of the woodchip to allow a 1.5tonne mini-digger to access the area without causing major compaction or soil erosion.

6.4 REMOVAL / DEMOLITION OF THE EXISTING STRUCTURES

Prior to the new buildings construction commencing, some existing structures located within retained trees RPAs will need to be removed. If these areas do not require removal to facilitate the development, they should be left in situ for the main phase of building works to offer additional ground protection and then removed as part of the landscaping phase, once all larger machinery has left site.

- The top surfaces must be removed by hand, using hand tools only.
- The removed material must be stored outside of the RPA of all of the retained trees whilst work commences.
- Their sub bases must be broken up using a small, lightweight "kango" drill into pieces that can be lifted by hand and removed.
- If during the work, any roots from the retained trees are discovered in excess of 25mm, the retained arboriculturalist must be contacted immediately to assess the roots and arrange subsequent working methods that will cause no damage to the tree(s).

6.5 BOUNDARY TREATMENTS

Boundary fencing installation / upgrades **MUST** be undertaken as part of the soft landscaping phase and **MUST** be installed **ONLY** when all machinery that is on site for the main build has permanently left the site (NB. If needed, boundary fencing can also be installed prior to the commencement of site works, i.e.. before any machinery has been brought onto the site). Where sections of new / upgraded fencing are located within the RPA of ANY tree that is to be retained, this work **MUST** be undertaken by hand using hand tools only. The locations of the new fence upright posts will be finalised following trial digs to confirm there are no major (over 25mm) roots present; if any such roots are found, the location must be altered. If any smaller roots are found, these can be cut using sharp hand sharp tools to leave a 'clean' cut, in order to minimise the risk of infection by decay pathogens. The post holes within the RPAs should then be lined with plastic sheeting before any concrete or cement is placed into the hole, in order that there is no risk of leaching into the nearby soil as the mixture dries.

6.6 DELIVERY AND STORAGE OF BUILDING MATERIALS

The existing driveway will be used for delivery and storage.

6.7 SITE HUTS, WELFARE FACILITIES AND STORAGE OF EQUIPMENT, MATERIALS AND CHEMICALS

All site huts will be positioned outside of the retained trees RPA's.

6.8 MIXING OF CONCRETE

All mixing of cement / concrete must be undertaken outside of the RPA of all of the retained trees.

6.9 USE CRANES, RIGS AND BOOMS

Precautionary measures must be observed to avoid contact of any retained trees when manoeuvring cranes rigs or booms into position.

6.10 INCOMING SERVICES, DRAINAGE AND SOAKAWAYS

New services **MUST** be routed to avoid all RPAs of retained trees on site and within nearby sites. From an assessment of the subject site, undertaken in conjunction with the project architect, there is no reason to assume this isn't possible. Inspection chambers **MUST** be sited outside the RPA.

6.11 ON SITE SUPERVISION

Regular site supervision is essential to ensure all potentially damaging activities near to trees are correctly supervised. A pre start meeting will occur to ensure all parties are aware of their responsibilities relating to tree protection on site; this will include a site induction for key personnel.

The key personnel relating to this project are:

Name	Position	Contact number / email:
Glen Harding	Retained arboriculturalist	07884 056 025 Or info@ghatrees.co.uk
TBC	Local authority Arboricultural Officer	TBC
TBC	Site manager	TBC

A detailed supervision programme will be devised by the developer and retained Arboriculturalist, ensuring that Arboricultural supervision is present at the appropriate periods during construction; all phases listed below will be overseen by the retained arborist and site manager with an invitation also extended to the local authority tree officer. It is deemed necessary for the retained arboriculturalist to visit the site at the following critical points.

- Prior to tree pruning / removal to ensure work is correctly identified. **Date and time yet to be agreed, however once confirmed, these dates will be sent to the Local Planning Authorities Arboricultural Officer in order that he / she can attend if required.**
- Following completion of tree pruning / removal to ensure work is completed to the correct specification. **Date and time yet to be agreed, however once confirmed, these dates will be sent to the Local Planning Authorities Arboricultural Officer in order that he / she can attend if required.**
- Prior to erection of protective fencing to ensure it is located in the correct locations. **Date and time yet to be agreed, however once confirmed, these dates will be sent to the Local Planning Authorities Arboricultural Officer in order that he / she can attend if required.**
- Following completion of the erection of protective fencing to ensure it is constructed to the correct specification at the required proximity to ensure the healthy retention of the trees. **Date and time yet to be agreed, however once confirmed, these dates will be sent to the**

Local Planning Authorities Arboricultural Officer in order that he / she can attend if required.

- Installation of the ground protection to ensure it is constructed to the correct specification at the required proximity. **Date and time yet to be agreed, however once confirmed, these dates will be sent to the Local Planning Authorities Arboricultural Officer in order that he / she can attend if required.**
- Pre start and periodically during demolition of the existing building(s) to ensure no damage occurs to the retained trees. **Date and time yet to be agreed, however once confirmed, these dates will be sent to the Local Planning Authorities Arboricultural Officer in order that he / she can attend if required.**

The records of future site monitoring will be recorded on the site monitoring sheet at appendix D, and submitted to the local planning authority for their records.

6.12 OTHER TREE PROTECTION PRECAUTIONS

- No fires lit on site within 20 metres of any tree to be retained.
- No fuels, oils or substances which will be damaging to the tree shall be spilled or poured on site.
- No storage of any materials within the root protection zone.

6.13 HARD / SOFT LANDSCAPING NEAR RETAINED TREES

All new pathways and hard landscaping areas within the Root Protection Areas (RPA's) of the retained trees should be designed using no-dig, up and over construction techniques, and be specified in close co-ordination with the retained Arboriculturalist. Porous materials should also be used when surfacing near the trees. No machinery will be used for this work, which must all be done by hand.

6.14 SPECIFICATION FOR LAYING NEW GRASS BENEATH TREES

- Any Imported topsoil must be in accordance with the current British Standard 3882:2015 Specification for Topsoil and Requirements for Use i.e. good quality, screened and free from contaminants e.g. oil, diesel fuel, toxic materials or heavy metals, perennial weeds etc .
- No machinery may be operated within the canopy of any retained tree during the installation of soft landscaping, i.e there must be no mechanical rotivation, rolling or use of other machinery. Any cultivation necessary shall be undertaken by the use of hand tools only. Compaction of the ground within the canopy of any retained tree must not occur. If compaction does occur the ground will be immediately de-compacted with an air spade to a minimum dept of 500mm
- Preparations for turf application will be carried out during appropriate weather conditions. They will include close cutting and spraying any weed growth with a systemic herbicide. All Chemicals used shall be non toxic to human beings, birds and animals, under normal use and chemicals no on the 'Agricultural Chemicals Approved Scheme' current list of approved products shall not be used.

- Time of sowing. Grass seeding/Turfing works may be carried out from May to September in appropriate weather conditions
- No turf will be laid on water logged soils, exceptionally dry weather or during air/ground frost
- Grassing works: Preparation and grassing works shall be carried out in general accordance with the requirements of Section 5 of the current British Standard 4428 Recommendations for General landscape Operations.
- Turfs shall be in supplied in accordance with the current British Standard 3969:1992 Recommendations for Turf for General landscape Purposes. Turfs shall be clean meadow or downland turfs, fibrous and well rooted, free from matted dead grass and perennial weeds and shall have been subject to proper maintenance and treatment with selective weed killers and insecticides during the previous growing season.
- Under no circumstances will the soil levels be lowered or deeply cultivated

6.15 DISMANTLING PROTECTIVE BARRIERS

Protective barriers must only be completely removed when all machinery, and equipment has left site. A minimum of seven days notice must be given to the local planning authority prior to dismantling works begin.

Conclusion

- 7.1 In conclusion, the principal arboricultural features within the site can be retained and adequately protected during development activities.
- 7.2 Subject to precautionary measures as detailed above, the proposal will not be injurious to trees to be retained.

Recommendations

- 8.2 Site supervision – An individual e.g. the Site Agent, must be nominated to be responsible for all arboricultural matters on site. This person must:
 - a. Be present on the site the majority of the time.
 - b. Be aware of the arboricultural responsibilities.
 - c. Have the authority to stop any work that is, or has the potential to cause harm to any tree.
 - d. Be responsible for ensuring that all site personnel are aware of their responsibilities towards trees on site and the consequences of the failure to observe those responsibilities.
 - e. Make immediate contact with the local authority and / or retained arboriculturalist in the event of any related tree problems occurring whether actual or potential.

8.3 It is recommended, that to ensure a commitment from all parties to the healthy retention of the trees, that details are passed by the architect or agent to any contractors working on site, so that the practical aspects of the above precautions are included in their method statements, and financial provision made for these.

10th January 2020

Signed:

A handwritten signature in blue ink, appearing to read 'Glen Harding', with a stylized, cursive script.

Glen Harding MICFor, MSc (Forestry), MArborA
For and on behalf of GHA Trees

Appendix A

Appendix B

Tree Number	Tree Name (species)	Ht (m)	Calculated Stem Diameter (mm)	Number of Stems	Root Protection Area (Radius, m)	N (m)	E (m)	S (m)	W (m)	Age Class	Clearance (m)	Estimated life expectancy	BS Category	Comments / Recommendations
T1	Laburnum	6	245	3	2.94	3	3	1	0	M	2	10-20	C1	Off site - full inspection not possible.
T2	Spruce	14	400	1	4.80	4.5	4.5	4.5	3	M	3 east and south	20-40	B1	Ivy clad tree.
T3	Fir	20	470	1	5.64	5	2.5	3	5	M	4 south and west	20-40	B1	Recommend: remove / clean up 4x previously cut lower limbs. Remove 1x lowest branch (south west) growing toward house.
T4	Field maple	4	283	2	3.39	1.5	1.5	1.5	2.5	M	2	10-20	C1	Topped in past.
T5	Holly	8	335	5	4.02	2.5	2.5	2.5	2.5	M	4 south	10-20	C1	Off site - full inspection not possible.
T6	Spruce	16	350	1	4.20	4	4	4	4	M	3	20-40	B1	Recommend: crown lift to 5m over site.
T7	Cypress	5	100	1	1.20	1	1	1	1	MA	2	10-20	C1	Off site - full inspection not possible.
G8	Pine and cypress	18	500	1	6.00	5	5	5	5	M	6	20-40	B2	Off site - full inspection not possible.
G9	Leyland cypress	14	200	1	2.40	3	3	3	3	M	2	10-20	C2	Lapsed hedge.

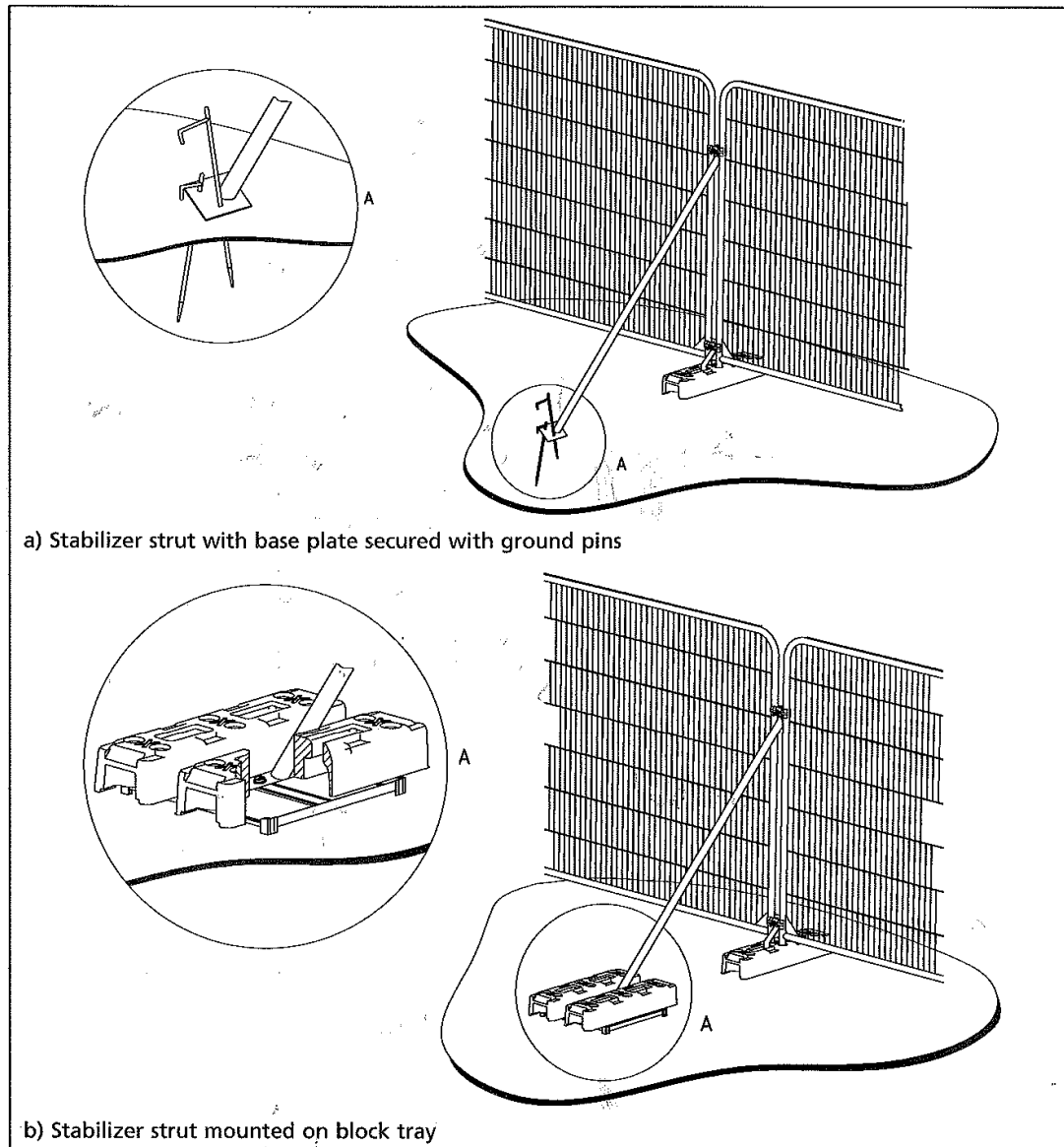
KEY :

Tree No: (T= individual tree, G= group of trees, W= woodland)
Age class: Young (Y), Middle aged (MA), Mature (M), Over mature (OM),
Veteran (V)

Height (Ht): Measured in metres +/- 1m

Appendix C

Figure 3 Examples of above-ground stabilizing systems



Appendix D

Site Monitoring Sheet

Site:			
Project:			
Client:		Contact:	
Site monitoring inspection date:			Name of inspector:
Notes:			
Action required to rectify any issues:			
Date Action taken:			
Site monitoring inspection date:			Name of inspector:
Notes:			
Action required to rectify any issues:			
Date Action taken:			
Site monitoring inspection date:			Name of inspector:
Notes:			
Action required to rectify any issues:			
Date Action taken:			

