



# Marcus Foster

## Arboricultural Design & Consultancy

BA (Hons) | NDArb | Techcert (AA) | MArborA

### Arboricultural Survey Impact Assessment & Method Statement Report (BS5837:2012)

Site

Malvern Cottage  
Gorse Lane  
Chobham  
Surrey  
GU24 8RB

Client

Andrea Hayter

Date of Report:

April 2023

Report Reference:

AIA/MF/056/23

Report Prepared by:

Marcus Foster  
BA (Hons) NDArb. TechCert (AA) MArborA



**Marcus Foster**  
**Arboricultural Design & Consultancy**  
Tel: + 44 (0) 7812 024 070  
[mail@marcus-foster.com](mailto:mail@marcus-foster.com)  
[www.marcus-foster.com](http://www.marcus-foster.com)

## **Contents**

1. Instructions
2. Introduction
3. Survey methodology
4. Survey Limitations
5. Tree Survey Summary
6. Arboricultural Impact Assessment
7. Arboricultural Method Statement
8. Communication Monitoring & Compliance
9. Tree Works Schedule

### Appendices

- A: Tree Survey*
- B: Tree Survey Plans: T001-T003*
- C: Photographs*
- D: Tree Protection Notice*
- E: Tree Protection Fencing Specifications*
- F: References*

## **1.0 Instructions**

1.1 This report has been commissioned by Andrea Hayter to survey, assess and provide an Arboricultural Impact Assessment and Method Statement for the trees sited within close proximity of proposed development works at Malvern Cottage, Gorse Lane, Chobham, Surrey, GU24 8RB.

## **2.0 Introduction**

2.1 A site visit was conducted on 27th March 2023 to survey and assess the trees. The weather at the time of inspection was bright and mild with trees in early spring mode.

2.2 The tree survey, report and recommendations have been compiled for the 26 no. trees and 4 no. hedges (T1-T30) surveyed within and within close proximity of the subject site where deemed relevant to development proposals.

2.3 The details of the subject trees are set out in the Tree Survey Schedule in *Appendix A*. The trees were surveyed on the date and time shown above and the tree survey assessment information for the tree describing size, condition and surroundings are found within this appendix.

2.4 The trees located within the site are shown in site plans T001-T003, Appendix B, and these correspond to the tree survey results table, Appendix A. Photographs of the trees can also be found in Appendix C.

2.5 This report and the opinions within it have been produced by Marcus Foster, a qualified arboriculturist and Professional Member of the Arboricultural Association with over 20 years experience and holding a National Diploma in Arboriculture, the Arboricultural Association's Technicians Certificate, Professional Tree Inspection Certificate (LANTRA) as well as a degree in History and Society. Work experience within the industry includes work as a Contracts Manager for an Arboricultural Association Approved Company, a Local Authority Tree Preservation Officer and an independent Arboricultural Consultant. As a consultant many of projects undertaken are in the inner London Boroughs of Islington, Hackney, Westminster, Camden, Southwark and RBKC, making Marcus Foster familiar with the most recent requirements of development and constraints on urban trees.

### **3.0 Survey Details and Scope**

3.1 The site survey included the 26 no. trees and 4 no. hedges (T1-T30) as shown in the survey, *Appendix A*, and also highlighted on the site plans, *Appendix B*.

3.2 The trees and group were surveyed from ground level from within their site location. The diameter of the trunks have been measured using a DBH tape at 1.5m height. The height of the trees have been estimated.

3.3 The following information was recorded for each tree and is shown in the Tree Schedule included in *Appendix A*:

- Number: an identity number which cross-references locations shown on the plan in Appendix A with the schedule in Appendix B.
- Species: listed by common names
- Tree Height: height in metres (m)
- Tree Spread: spread in metres (m)
- Stem diameter: measured in millimetres (mm) and taken at 1.5m above ground level
  - o (e) denotes estimated diameter due to off site location
- Age Class: Y (young); EM (early-mature); M (mature); OM (over-mature)
- Vigour: G (good); F (fair); P (poor); D (dead)
- Structural Condition: G (good); F (fair); P (poor); D (dead)
- General Condition Specific comments relating to each tree
- Estimated Remaining Contribution (years)
- BS5837 Category Grading
- Protection Distance m2 Area (where applicable – BS5827: 2012)
- Protection Distance Radius (where applicable – BS5827: 2012)

3.4 Information recorded in the tree survey, *Appendix A* is expanded in the report findings and preliminary recommendations have been made in *Section 5*.

3.5 Findings as shown within *Appendix A* and assessed within *Section 5* are also highlighted within *Appendix B* which incorporates the Tree Constraints Plan (TCP) - drawing T002 addressing areas where mitigation is required. The Tree Protection Plan (TPP) - drawing T003 provides outline tree protection measures.



## **4.0 Survey Limitations**

4.1 No soil excavations have been carried out.

4.2 This report only considers the trees and conditions at the time of inspection. As the inspection was only visual no guarantee can be given concerning the condition of the wood at present in any of the trees inspected and furthermore that no future problems or deficiencies may arise.

4.3 The survey has been undertaken as a survey of the trees without prior influence of the development and implicating factors.

4.4 No invasive tools were used during this site survey.

4.5 It should be noted that vegetation including shrubs within this / the neighbouring sites have not been included in the survey as none were within close or relevant proximity .

4.6 The survey has been undertaken from within the site only.

4.7 No additional documentation unrelated to the property or development has been referred to for the trees or the property for the compilation of this report.

## **5.0 Tree Survey Summary**

5.1 The trees have been surveyed in accordance with BS5837: 2012 'Recommendations for trees in relation to construction' (BS5837: 2012) and have been rated as follows:

### Category 'A' trees

Trees of high quality with an estimated remaining life expectancy of at least 40 years. Trees have been categorised as 'A' trees for one of the following reasons:

- Mainly arboricultural qualities
- Mainly landscape qualities
- Mainly cultural values including conservation

Within the Site Plan (Appendix B) those trees rated as 'A' category trees have a **green** outline as denoted within the site plan key / survey.

**N/A**

### Category 'B' trees

Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. Trees have been categorised as 'B' trees for one of the following reasons

- Mainly arboricultural qualities
- Mainly landscape qualities
- Mainly cultural values including conservation

Within the Site Plan (Appendix B) those trees rated as 'B' category trees have a **blue** outline as denoted within the site plan key.

**T1, T4, T12, T19, T20, T21, T24, T26, T30**

### Category 'C' trees

Trees of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Trees have been categorised as 'C' trees for one of the following reasons

- Arboricultural qualities - unremarkable trees of very limited merit
- Mainly landscape qualities
- Trees with no material conservation or cultural value

Within the Site Plan (Appendix B) those trees rated as 'C' category trees have a **grey** outline as denoted within the site plan key.

**H2, T5, T6, H7, T8, T9, T10, T11, H13, T14, T22, T23, T25, T27, T28, H29**

### Category 'U' trees

Trees 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. Within the Site Plan (Appendix B) those trees rated as 'U' category trees have a **red** outline as denoted within the site plan key.

**T15, T16, T17, T18**

5.2 The trees have been surveyed taking into account condition, general health and form without the development process influencing the survey. In addition they have also been surveyed taking account of amenity value that is offered in relation to both the landscape and surrounding buildings and streetscape. This report outlines the impact that the proposed development will have on the overall treescape and landscape; it provides recommendations to ensure that long-term amenity value for the area is retained.

5.3 The report has been written with close reference to the British Standard Guidance, British Standard 5837: 2012 'Recommendations for trees in relation to construction' (BS5837: 2012), which addresses the juxtaposition between trees and structures. The Arboricultural Impact Assessment highlights areas where the trees will require protection which should be addressed within the Arboricultural Method Statement (AMS) and/or Tree Protection Plan (TPP) specific to the site and proposed scheme, and corroborating with all construction and landscape method statements as relevant.

5.4 The report specifies precautions which shall be taken when working close to retained trees. Important terms include:

#### **Root Protection Area (RPA)**

The area defined as requiring protection from development from retained trees within BS5837 (2012). Using a calculation provided within BS5837 a radius distance is provided based on a measurement of the main stem taken at 1.5m height.

#### **Construction Exclusion Zone (CEZ)**

This is the RPA where no construction activity should occur and damage is prevented by either installing fencing to restrict access or installing ground protection that allows limited access above the ground, while protecting the rooting environment below.

Due to site constraints and the encroaching nature of development for an area within the RPA outside the CEZ where works are proposed, works must be carried out with care to minimise any impact on the tree rooting environment.

#### **Tree Protection Plan (TPP)**

The document which defines the extent and methodology of tree protection for the entire development process. This should be referred to AT ALL TIMES by the principal contractor and shall ensure safe protection of all retained trees on site.

#### **Precautionary Area**

An area where works must be undertaken with direct consultation with methodology as specified within the AMS report and / or scheme of Arboricultural supervision

## 6.0 Arboricultural Impact Assessment

### Site Overview

6.1 The 26 no. trees and 4 no. hedges (T1-T30) located within close proximity of the proposed development works are sited within the following sites within Surrey Heath Borough Council:

Malvern Cottage, Gorse Lane:  
T1, H2, T3, T4, T5, T6, H7, T8, T9, T10, T11, T12, H13, T14, T15, T16, T17, T18

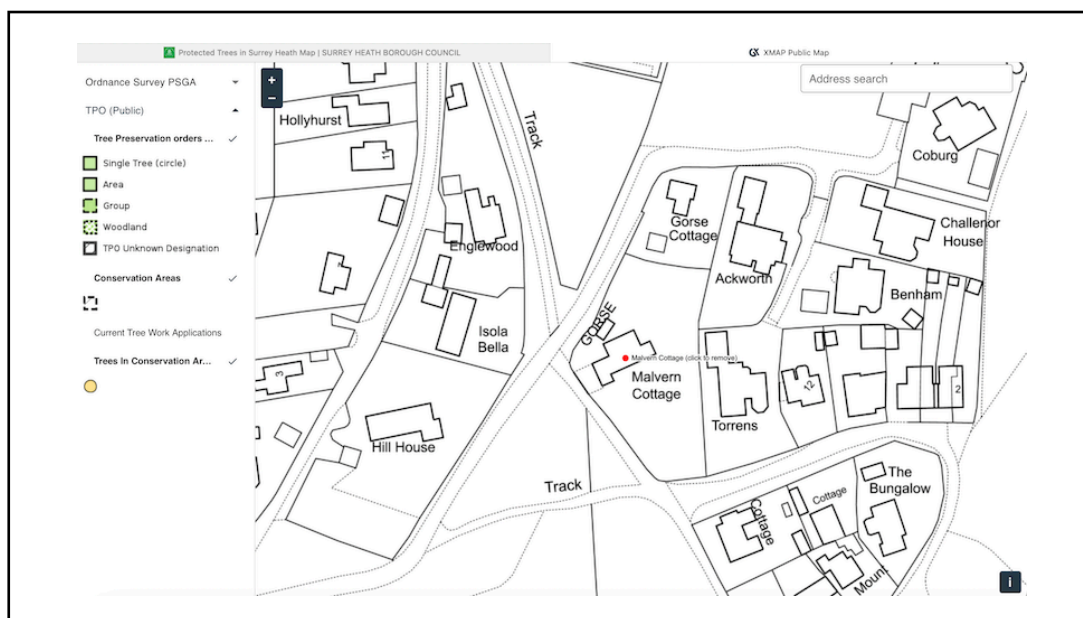
Burrow Hill Green Public Realm:  
T22, T23, T24, T25, T26, T27, T28, H29, T30

Land at Electricity Distribution Site:  
T19, T20, T21

6.2 The following statutory checks have been made in relation to the trees at the property and their status within the Local Planning Authority:

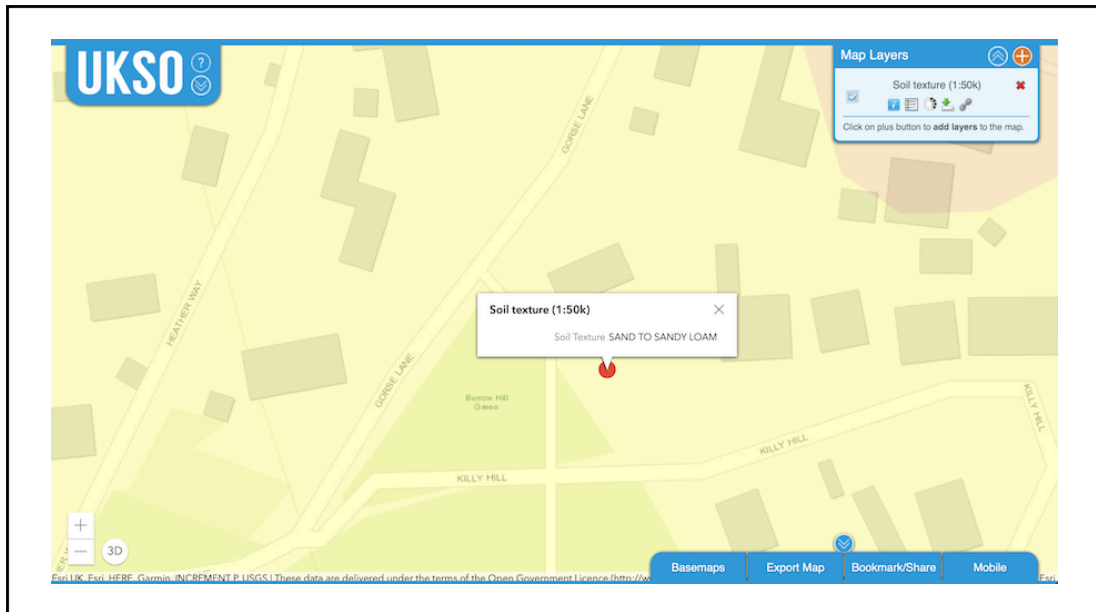
LOCAL PLANNING AUTHORITY:  
Surrey Heath Borough Council  
CONSERVATION AREA STATUS  
*None applicable*  
TREE PRESERVATION ORDER (TPO) STATUS  
*None applicable*

6.3 Online checks have been made below - 13/04/23 - as below:



EXTRACT FROM:  
<https://shared.xmap.cloud/?map=02216c09-8e24-4334-b095-2f8d0657d388>

6.4 The underlying soil to this area is classified as 'sand to sandy loam' within the UK Soil Observatory - [www.ukso.org](http://www.ukso.org) - a light to medium soil mix:



Extract from [www.ukso.org](http://www.ukso.org) - April 23

6.5 The absence of a clay element within the soil is significant in terms of both tree protection and foundation design. Whilst clay soils can experience substantial volume changes when vegetation extracts moisture from the ground and are prone to compaction when wet sand based soils are prone to less volumetric change. Any foundations and structural elements of the proposed structure should also be designed in accordance with the recommendations contained within NHBC Chapter 4.2 (National House Building Council, 2010) and should account for the possibility of both subsidence and heave.

6.6 The site comprises. The school comprises a series of single storey buildings within gardens including young to semi and early mature trees.

6.7 For the purposes of this report, reference has been made to the following plans for the proposed development:

TOPOGRAPHICAL SURVEY  
*Wardell Survey Partnership*  
DWG 2230

ARCHITECTURAL DRAWINGS  
*Philip Roy Architecture*  
DWG Site Layout

6.8 The development proposal is for demolition of existing structure and construction of new dwelling with updated site access and layout to the north also from Gorse Lane.

6.9 The summary of arboricultural impact which shall be assessed is as follows:

- Retention of all trees
- Potential damage to tree roots from proposed driveway within RPA of retained trees T20 & T21
- Potential compaction and damage of the retained trees in relation to the development and landscape process
- Potential damage to canopies of the retained trees surrounding the site during development and landscape process
- The use of and storage of materials and chemicals on site within close proximity of the trees

6.10 The trees and the impact from the proposed development are evaluated within this section to determine overall arboricultural impact from the proposed development. Where trees are retained the Root Protection Area (RPA) for each tree is evaluated in relation to proposed development works. The following is assessed within this section:

- (i) Where tree protection measures are deemed appropriate these are highlighted
- (ii) No mitigation for tree loss is relevant due to retention of all trees

## **Arboricultural Impact Assessment**

6.11 The trees and shrubs surveyed are of the following species:

*Quercus robur* (English oak)  
*Acer pseudoplatanus* (Sycamore)  
*Acer spp* (Maple)  
*Cupressus x leylandii* (Leyland Cypress)  
*Corylus avellana* (Hazel)  
*Ilex aquifolium* (Holly)  
*Castanea sativa* (Sweet chestnut)  
*Crataegus monogyna* (Hawthorn)

6.12 The trees surveyed have the following attributes

- (i) Trees within the site limited to northern and eastern boundary - comprising trees T1-T18 - B, C & U category trees
- (ii) Mature oak tree (T1) and Sycamore (T12) both B category trees on eastern boundary offering highest visual amenity
- (iii) Trees within the site notably T1-T14 on eastern boundary pruned poorly by off site landowners to east to give unbalanced crowns
- (iv) Trees T19-T23 off site to north and north west within public realm at Burrow Hill Green and electricity distribution site with overhanging crowns and RPA's for trees T20 & T21 within the northern extent of subject site
- (v) Trees T24 - T30 all located off site to the south and west within the land at Burrow Hill Green with limited impact upon the site

6.13 Existing site and landscape features comprise as follows:

- (i) Flat topography across the site
- (ii) Existing dwelling sited to the north and west with access currently from the north west corner
- (iii) At point of proposed access (northern boundary) a raised embankment (planted with Cherry laurels) is sited between existing highway and boundary fence

6.14 Summary photographs of the trees are shown within *Appendix C* with full findings within the Tree Survey Schedule - *Appendix A*.

6.15 The demolition of existing structure and construction of proposed building footprint shall occur with all works outside of the RPA of retained trees as is confirmed within the TCP - DWG reference T002. Therefore there shall be no impact within the root plate or canopy of retained trees. Additionally there shall be no impact upon the trees in relation to future occupancy due to existing dwelling within the site and significant distance of trees from footprint and site aspect to east.

6.16 The construction site activities incorporating demolition of existing structure and replacement dwelling shall require the following works which have the potential to impact the trees:

- (i) Updated site access for development process
- (ii) Storage of spoil, materials and chemicals
- (iv) Site infrastructure including welfare
- (v) Final landscape works

6.17 Therefore tree protection measures are applied for the development of the dwelling and associated works as follows:

(i) TREE PROTECTION FENCING  
BS5837:2012 Figure 2 tree protection fencing to create CEZ's to protect RPA and canopies of all retained trees

(ii) GROUND PROTECTION  
Ground protection for RPA area exposed to construction works shall be implemented as shown within the AMS & TPP to enable development process within RPA

6.18 For the site access which shall be updated centrally to northern boundary as shown within the TCP incursion within the proposed layout is as follows:

T20 - English oak: 5% incursion of total 247.76m<sup>2</sup> are  
T21 - English oak: 7% incursion of total 399.78m<sup>2</sup> are

6.19 For the implementation of the access route within southern RPA of T20 & T21 the proposal is justified by the following factors:

- (i) Limited extent of incursion at 5% & 7% only for T20 & T21
- (ii) Existing highway between trees and proposed access providing existing ground protection for initial root plate of trees T19-T22
- (iii) Application of ground protection via load bearing membrane for initial access
- (iv) Additional applied protection measures including tree protection methodology



6.20 Therefore tree protection measures are applied for the development of the dwelling and associated works as follows to mitigate the incursion:

- (i) GROUND PROTECTION FOR DRIVEWAY  
Cell web / load bearing membrane constructed to specifications outlined within AMS for development process and final use

6.21 It is confirmed that there is no tree loss associated with the development and therefore canopy cover and amenity value shall not be impacted.

### **Summary of Arboricultural Impact**

6.22 The proposed development has very limited arboricultural impact by virtue of the proposed structure including all ground works associated being outside of the RPA of retained trees. Those works taking place require mitigation via tree protection measures as follows

- Tree Protection applicable to the following trees:  
*26 no. trees and 4 no. hedges (T1-T30)*
- Mitigation applicable for the removal of the following trees:  
*None applicable due to no tree removal associated with the development*

6.23 The tree protection measures shall limit arboricultural impact to ensure that the removal of existing structure and construction of proposed does not detrimentally impact the health and / or structural integrity of the trees therefore preserving the amenity value and canopy cover within the subject site.

6.24 Tree protection measures applied for the

6.25 In summary the arboricultural impact as outlined within the TCP, DWG T002 requires tree protection measures as set out within the AMS & DWG T003 - Tree Protection Plan (TPP):

- (i) TREE PROTECTION FENCING
- (ii) GROUND PROTECTION FOR DEVELOPMENT PROCESS
- (iii) GROUND PROTECTION FOR ACCESS ROAD

## **7.0 Arboricultural Method Statement**

The following tree protection measures require close adherence AT ALL TIMES as outlined within this report. The measures are outlined within Tree Protection Plan (TPP) - drawing T003.

### **7.1 Tree Works**

7.1.1 No tree works are required as confirmed within Tree Works Schedule - Section 9.

### **7.2 Tree Protection Fencing**

7.2.1 Protection of the trees highlighted for retention must be implemented as explained below and as specified within the TPP - drawing T003.

7.2.2 These measures must remain for the entire construction process in order to provide a comprehensive barrier from the trees

- The area surrounding the trees must be surrounded by protective fencing as outlined in TPP - T003
- This barrier must remain rigid and complete during the entire construction process. Protection is not required surrounding the whole tree as the remainder of the root plate will remain unaffected by virtue of being located within the neighbouring properties
- Once the Exclusion Zones have been protected by fencing all weather notices as included in *Appendix D* must be put onto the barrier warning that the area is a construction exclusion zone.
- No heavy plant shall come into contact with any part of the canopies of the trees.
- No building materials or chemicals are stored within the tree protection zone as indicated on the TPP

### 7.3 Ground Protection - Development

7.3.1 For ground protection this shall be installed prior to enabling works with commencement of development. The following must be adhered to:

- Implementation of 75mm bark mulch layer overlapped with minimum 15mm plyboard surface or load bearing ground protection boards to provide ground protection for development process
- No storage of spoil within this area
- No storage of chemicals within this area

7.3.2 Where applied, ground protection shall be removed for final landscapes works within the RPA of retained trees.

### 7.4 Site Welfare & Site Office

7.4.1 Site welfare must be located outside of the RPA of retained trees. Strict adherence to this area must be made to this area and any amendment would require written consent from the tree officer.

### 7.5 Storage of Construction site related materials, plant and spoil

7.5.1 A designated storage area must be located outside of the RPA of retained trees. Strict adherence to this area must be made to this area and any amendment would require written consent from the tree officer.

### 7.6 Ground Protection - Driveway

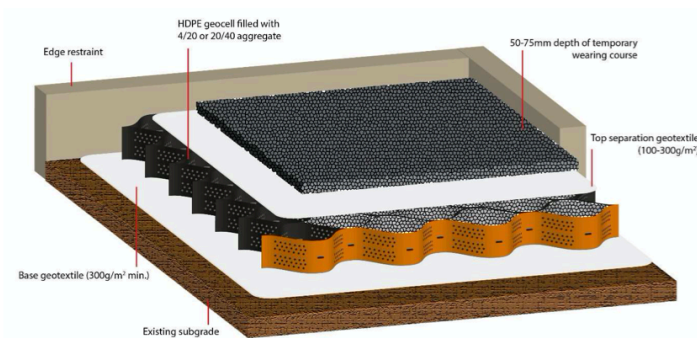
7.6.1 Protection is required for access within the RPA of retained tree T20 & T21. The ground protection shall be installed to the specification as below, or to a similar specification prior to any enabling works at pre-commencement stage and for the area as defined within the TPP which provides the required protection for the southern RPA's.

7.6.2 The product specification which is recommended and shall be agreed in writing at pre-commencement stage is:

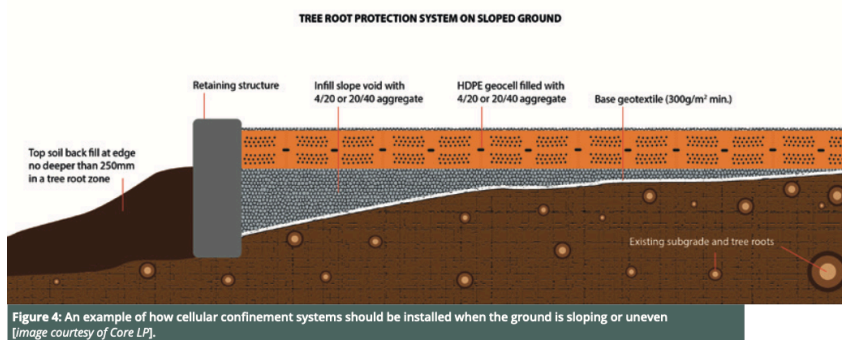
*Terram Geocell 22/20 – 200mm depth / 220mm cell diameter*

This product must be installed to guidelines as highlighted within *Terram Cellular Confinement System – For the Protection of Tree Roots* guidelines as issued by the manufacturer and also as highlighted within: *The Use of Cellular*

*Confinement Systems Near Trees: A Guide to Good Practice*, Arboricultural Association (2020). An extract below shows the specification for the use of cellular products



*Extract from AA Guidance Note 12 showing profile of ground protection for construction process with temporary road surface*



*Extract from AA Guidance Note 12 showing profile of ground protection for construction process with temporary road surface where sloping topography exists*

Figure 4: An example of how cellular confinement systems should be installed when the ground is sloping or uneven [Image courtesy of Core LP].

7.6.3 At pre-commencement stage the following shall be agreed in writing with the Local Authority Tree Officer prior to commencement of works:

- (i) Exact product specification
- (ii) Specification of edging to road surface for construction process
- (iii) Specification of wearing course for construction phase
- (iv) Specification of edging to road surface for final finish
- (iii) Specification of wearing course to road surface for final finish

7.6.4 The following methodology must be applied:

**Set Out & Approval**

Minor grading - refer to Precautionary Area methodology - Section 7.6.6  
Laying of geo textile membrane over marked areas prior to  
implementing ground protection



**Installation**

Implementation of cellular load bearing layer with the following methodology:

- (i) All works undertaken without use of heavy machinery on RPA
- (ii) Turf layer stripped
- (iii) No grading of levels other than for minor updates (up to 50mm) or turf removal with hand tools as specified within this AMS



**Approval of Installation**

Inspection and approval by consulting Arboriculturist



**Development / Construction Phase**

Inspection and approval by consulting Arboriculturist



**Final Finish**

Final finish applied and inspection / approval by consulting arboriculturist upon removal  
of all tree protection measures

7.6.5 Any proposed amendment to construction methodology which requires  
for alterations to specification as highlighted above shall require written  
notification to the Local Authority Tree Officer.

## PRECAUTIONARY AREA GUIDANCE FOR EXCAVATIONS WITHIN RPA's

7.6.6 Where requirement for undertaking excavations within the RPA 'Precautionary Area' guidance below must be adhered to as below:

### *Excavation and dealing with roots*

BS5837 (2012) makes provision for undertaking excavations in RPAs, explaining that all excavation must be carried out carefully using spades, forks and trowels, It is important not to damage the bark and wood of any roots. For this area, these tools should be used with no machinery used for the preliminary works.

All excavations to be hand dug excavations only to ensure no severance of major roots

### *Tree Root Severance Guidance*

The contractors must be aware of tree protection specifications in relation to tree roots which must be applied as follows:

- The severance of any tree roots encountered larger than 25mm in diameter MUST NOT occur without prior consultation with the Local Authority Tree Officer or appointed Arboricultural Consultant.
- Any exposed ground within the RPA must be covered in hessian and kept damp where left exposed during works
- If at any point it is deemed not possible to continue with excavations without having to damage very significant tree roots, the Local Authority Tree Officer and / or the appointed Arboricultural Consultant must be contacted.

The works shall be undertaken using hand tools only such as this included below or similar for 'Precautionary Area' as highlighted within the TPP:



## 7.7 Installation of utility services

7.7.1 No utility services are required within the RPA of retained trees. If for any reason installation and/or amendment of utility services within the RPA of trees is required the consulting arboriculturist and Local Authority must be notified prior to any ground tree protection / fencing and barrier removal and the following details adhered to:

- Trenching for the installation of underground services severs any tree roots present and can have a detrimental impact on the structural integrity of affected trees. When services are required to pass through a Tree Protection Area / CEZ, detailed plans showing proposed routes should be drawn up in conjunction with the consulting arboriculturist to avoid long term problems for related trees.
- The preferable method for trenching is to use a 'Air Spade' or similar to remove soil with compressed air, therefore minimising damage to roots in the process. Should hand dug excavations be required within the RPA this shall only be undertaken with arboricultural supervision.

7.7.2 Further reference can be made to National Joint Utilities Group (Volume 4, Issue 2) for guidance but any approach must be approved by both the consulting arboriculturist and Local Authority tree officer.

## 7.8 Final Hard Landscape Works

7.8.1 For final landscaping works the following must apply should this be required to be carried out within the RPA of retained trees

- No reduction in levels of the underlying soil surface will occur during final landscaping works within the RPA of retained trees
- Close adherence with detailed root protection specifications (Precautionary Area - Section 7.5) as outlined within this report
- No compaction of soils for establishing level base
- No soakaway within RPA of retained trees
- Newly proposed flagstone surfaces shall be installed above existing soil level only where located in ground currently unsurfaced. The following shall apply:

## 7.9 Fires

7.9.1 There must UNDER NO CIRCUMSTANCES be fires within this site.

## **8.0 Communication, Monitoring and Compliance**

8.1 For all tree protection measures these must be considered as sacrosanct and should not be removed or altered without prior written consent from the Local Authority tree officer and/or consulting arboriculturist.

8.2 The Tree Officer will have free access to the site and forward any concerns / recommendations directly to the consulting arboriculturist.

8.3 The following individuals and organisations are central to the delivery of the scheme in relation to the tree protection measures it requires:

### **CONSULTING ARBORICULTURIST**

**Name** - Marcus Foster MArborA

**Telephone** - 07812024070

**Contact** - Marcus Foster

**Email** - [mail@marcus-foster.com](mailto:mail@marcus-foster.com)

---

### **SURREY HEATH BOROUGH COUNCIL- TREE OFFICER**

**Name** - Arboricultural Services

**Telephone** - 01276 707296

**Contact** - Arboricultural Officer

**Email** - TBC

8.4 The consulting arboriculturist must be notified of schedule of works to ensure availability should this be required



## 9.0 Tree Works Schedule

9.1 Tree works are required as confirmed below, to be undertaken in accordance with BS3998 (2010): Tree Work Recommendations:

<b>TREE WORKS SCHEDULE:</b> <b>Malvern Cottage, Gorse Lane, Chobham, Surrey, GU24 8RB</b>				
Tree No.	Common Name	BS5837 Category	Tree Works	Reasons for works
<i>No tree works required</i>				

**NOTE: Wildlife & Habitat Protection Guidelines**

The tree work specifications included within this report do not provide an exemption from the requirements to comply with the Wildlife and Countryside Act 1981, the Habitats Regulations 1994 and the Countryside and Rights of Way Act 2000, or any acts offering protection to wildlife. Of particular note is the protection offered to bats, birds and their nests, whilst being built or in use. It must be noted that failure to comply with the Acts may result in a criminal prosecution.

# **Appendices**

## **Appendix A**

### Tree Survey Schedule (BS5837:2012)

Colour Key: BS5837: 2012 (see Section 5)

-  Category A
-  Category B
-  Category C
-  Category U

Tree Survey Key: BS5837: 2012

- Number: an identity number which cross-references locations shown on the plan in Appendix A with the schedule in Appendix B.
- Species: listed by common names
- Tree Height: height in metres (m)
- Tree Spread: spread in metres (m)
- Stem diameter: measured in millimetres (mm) and taken at 1.5m above ground level
  - o (e) denotes estimated diameter due to off site location
- Age Class: Y (young); EM (early-mature); M (mature); OM (over-mature)
- Vigour: G (good); F (fair); P (poor); D (dead)
- Structural Condition: G (good); F (fair); P (poor); D (dead)
- General Condition Specific comments relating to each tree
- Estimated Remaining Contribution (years)
- BS5837 Category Grading
- Protection Distance m2 Area (where applicable – BS5827: 2012)
- Protection Distance Radius (where applicable – BS5827: 2012)

**BS5837:2012 TREE SURVEY**  
**SITE: Malvern Cottage, Gorse Lane, Chobham, Surrey, GU24 8RB**  
**DATE OF SURVEY: 27th March 2023**

Tree No	Species	Height (m)	DBH (mm)	Spread (m) N/E/S/W	Age	Structural Condition	Vitality	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	First branch height (m)	First canopy height (m)	Root Protection Area (RPA) m2	Root Protection Area (RPA) Radius (m)
T1	English oak	18	1060 (taken at 1.0m)	6 6 9 9	M	F	G	B1	20+	Sited on south eastern boundary. Northern and eastern crown pruned off site. Mature form	5	5	508.37	12.70
H2	Leyland cypress	13	m/s 200	5 2 5 2	SM	F	F	C2	10+	Lapsed boundary hedge / screening within crown of T1; suppressed beneath.. Limited management	1	1	12.57	2.00
T3	Sweet chestnut	15	t/s 440	1 1 3 1	SM	P	P	U	Less than 5 years	Largely dead; crown dominant to south	-	-	/	/
T4	Sweet chestnut	18	920 (taken at 1.0m)	5 5 5 5	M	F	G	B1	20+	Twin stemmed at 1.6m height. Northern stem heavily pruned. Major deadwood throughout	5	5	382.95	11.00
T5	Sweet chestnut	15	580	2 1 1 2	SM	P	F	C1	10+	Poorly pruned; northern and eastern crown heavily reduced to 12m height off site. No branch framework remains	7	7	152.20	7.00
T6	Hawthorn	6	m/s 80	1 1 2 1	SM	F	F	C1	10+	Ornamental. Suppressed with low vitality; deadwood	2	2	2.01	1.00
H7	Leyland cypress	9	m/s 200	4 2 4 2	SM	F	F/P	C1	10+	Lapsed screening hedge. 1 no. dead tree to south within grouping	1	1	12.57	2.00
T8	Sycamore	16	m/s 380	5 3 5 5	SM	F	F	C1	10+	11 no. stems to form tree - multi-stemmed. East crown and stems pruned to boundary. Coppiced with regenerative growth forming crown	4	4	45.37	3.80
T9	Sweet chestnut	13	t/s 200	3 1 1 3	SM	F	F	C1	10+	Lean to north; excessively ivy clad to 10m; unbalanced crown	5	6	12.57	2.00
T10	Sweet chestnut	12	400 (e)	3 2 3 4	SM	F	F	C1	10+	Excessively ivy clad at base / to 8m. One-sided crown to west	5	6	72.39	4.80
T11	Sweet chestnut	14	460	4 4 5 5	EM	F	F	C1	10+	Excessively ivy clad to 10m height. Major deadwood in lower to mid crown. Associated dead / dying leader to north with open cavity at 0.8m + 1.6m to south west	5	5	95.74	5.50
T12	Sycamore	15	680	6 7 6 5	M	F	G	B1	20+	Western crown pruned / managed. Sweep at base to west. Growing against Holly grouping	7	7	209.21	8.20

Tree No	Species	Height (m)	DBH (mm)	Spread (m) N/E/S/W	Age	Structural Condition	Vitality	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	First branch height (m)	First canopy height (m)	Root Protection Area (RPA) m <sup>2</sup>	Root Protection Area (RPA) Radius (m)
H13	Holly/ Cypress	7	m/s 80	5 2 5 2	SM	F	F	C2	10+	Screening hedge; mixed species. Partially managed 2-3 years	2	2	2.01	1.00
T14	Maple	13	450	2 5 4 5	M	F	G	C2	10+	Selectively reduced with unbalanced form - absent northern crown	5	5	91.62	5.40
T15	Sycamore	5	400 (e)	1 1 1 1	M	P	P	U	Less than 10 years	Boundary location. Heavily pollarded with no remaining branch framework. Excessive ivy from base	-	-	/	/
T16	Sycamore	5	400 (e)	1 1 1 1	M	P	P	U	Less than 10 years	Boundary location. Heavily pollarded with no remaining branch framework. Excessive ivy from base	-	-	/	/
T17	Sycamore	5	400 (e)	1 1 1 1	M	P	P	U	Less than 10 years	Boundary location. Heavily pollarded with no remaining branch framework. Excessive ivy from base	-	-	/	/
T18	Sycamore	5	400 (e)	1 1 1 1	M	Y	P	U	Less than 10 years	Boundary location. Heavily pollarded with no remaining branch framework. Excessive ivy from base	-	-	/	/
T19	English oak	22	760	4 4 8 4	EM	F	G	B2	20+	Off site to north. Highway between tree and site. Northern crown heavily pruned - unbalanced	9	10	261.33	9.10
T20	English oak	22	740	3 4 8 3	EM	F	G	B2	20+	Off site to north. Highway between tree and site. Northern crown heavily pruned - unbalanced. Sycamore saplings adjacent growing to south growing over site at 5m height	7	9	247.76	8.90
T21	English oak	22	940	5 4 11 7	M	F	G	B2	20+	Off site to north. Highway between tree and site. Northern crown heavily pruned - unbalanced. Lean to south. Staining on main stem at 4m height to south west. Crown overhanging site - 4m branch lengths at 5-15m height	5	7	399.78	11.30
T22	English oak	18	460	5 3 4 7	SM	F	F	C2	10+	Unbalanced crown to west. No overhang to site	4	4	95.74	5.50
T23	English oak	18	t/s 600 (e)	4 4 8 9	EM	F	F	C1	10+	Off site. Excessive ivy to 12m height. Low crown developing over highway	5	3	113.11	6.00
T24	Sycamore	16	640	5 7 6 5	M	F	F	B1	20+	Off site; no overhang of crown to site. Excessive ivy to 12m height	4	4	185.32	7.70

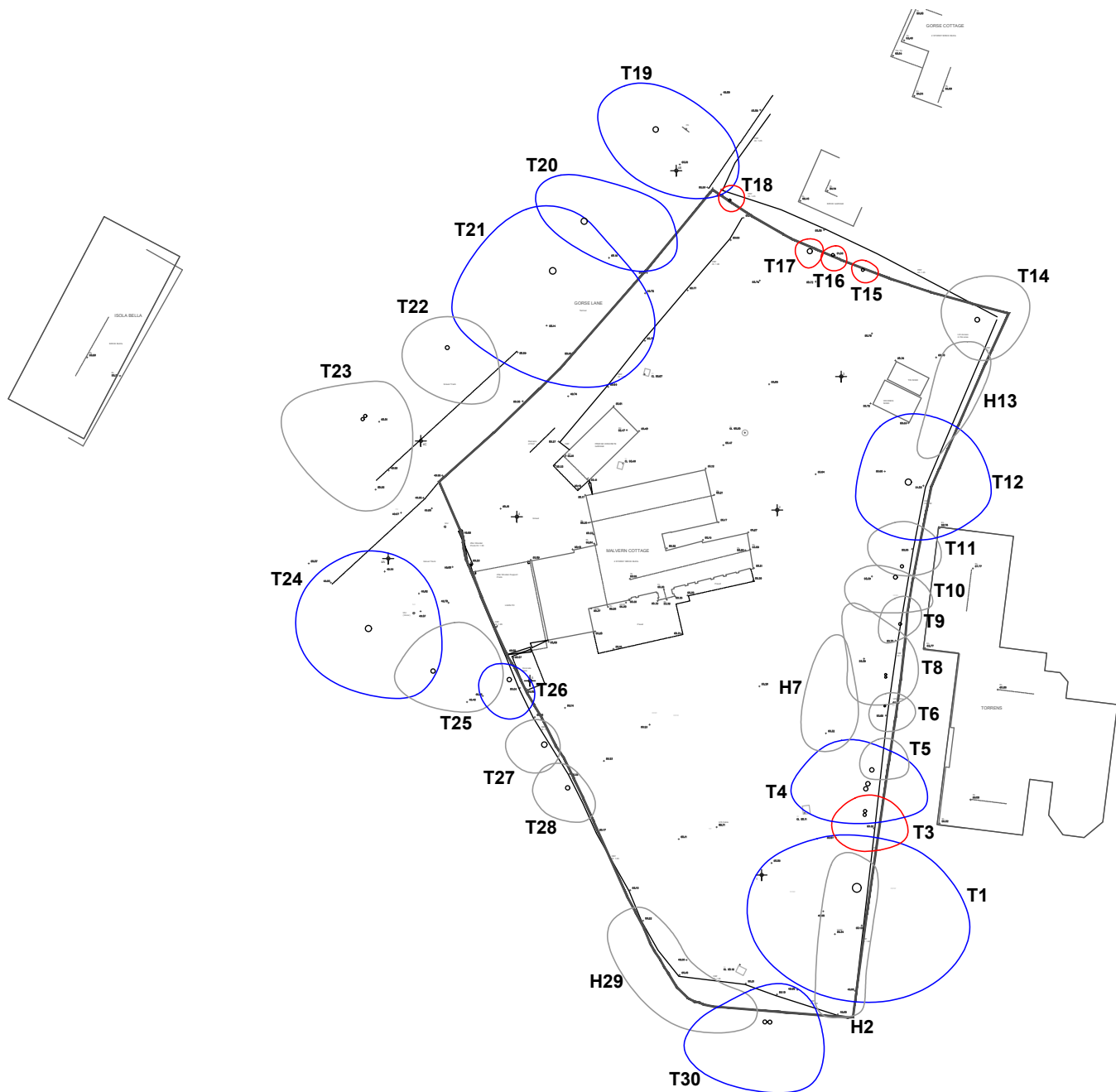
Tree No	Species	Height (m)	DBH (mm)	Spread (m) N/E/S/W	Age	Structural Condition	Vitality	BS5837 (2012) Rating	Remaining Contribution (years)	Comments / Structural Condition	First branch height (m)	First canopy height (m)	Root Protection Area (RPA) m <sup>2</sup>	Root Protection Area (RPA) Radius (m)
T25	English oak	14	350	4 4 4 4	SM	F	G	C1	10+	Off site to west; no overhanging crown to site	4	4	55.42	4.20
T26	Holly	12	t/s 320	3 3 2 2	EM	F	G	B1	20+	Off site; columnar. Limited overhang to site of 0.5 @ 2m - 4m height	2	2	32.17	3.20
T27	Hazel	7	m/s 100	3 4 3 2	M	F	F	C1	10+	Off site; lapsed coppice - overhang to site at 3-7m height - up to 3m branch lengths	2	2	3.14	1.00
T28	English oak	7	200	2 4 2 2	SM	F	F	C1	10+	Off site; developing form - overhang to site at 4-7m height - up to 3m branch lengths	7	7	18.10	2.40
H29	Leyland cypress	15	m/s 500 (e)	5 8 5 8	EM	F	F	C1	10+	Lapsed screening hedge; off site. Dead sweet chestnut growing within. Limited overhang to site	4	4	78.55	5.00
T30	English oak	20	t/s 800 (e)	6 7 8 7	M	F	G	B1	20+	Off site to south. Limited overhang to site at 12m height plus only	10	10	201.09	9.6

## **Appendix B**

*Existing Tree Survey (T001)*  
*Tree Constraints Plan (T002)*  
*Tree Protection Plan (T003)*  
*(BS5837:2012)*

Colour Key: BS5837: 2012 (see Section 3.6)

-  Category A
-  Category B
-  Category C
-  Category U



KEY

	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	TREES REMOVED
	RPA
	RPA INCURSION
	SHADING ARC

**BS5837 (2012) Tree Survey Notes**

- In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white
- If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.
- This drawing should be read in conjunction with all other relevant drawings and specifications
- Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided
- Off site trees have been plotted based on site visit survey and locations are not based upon topographical survey

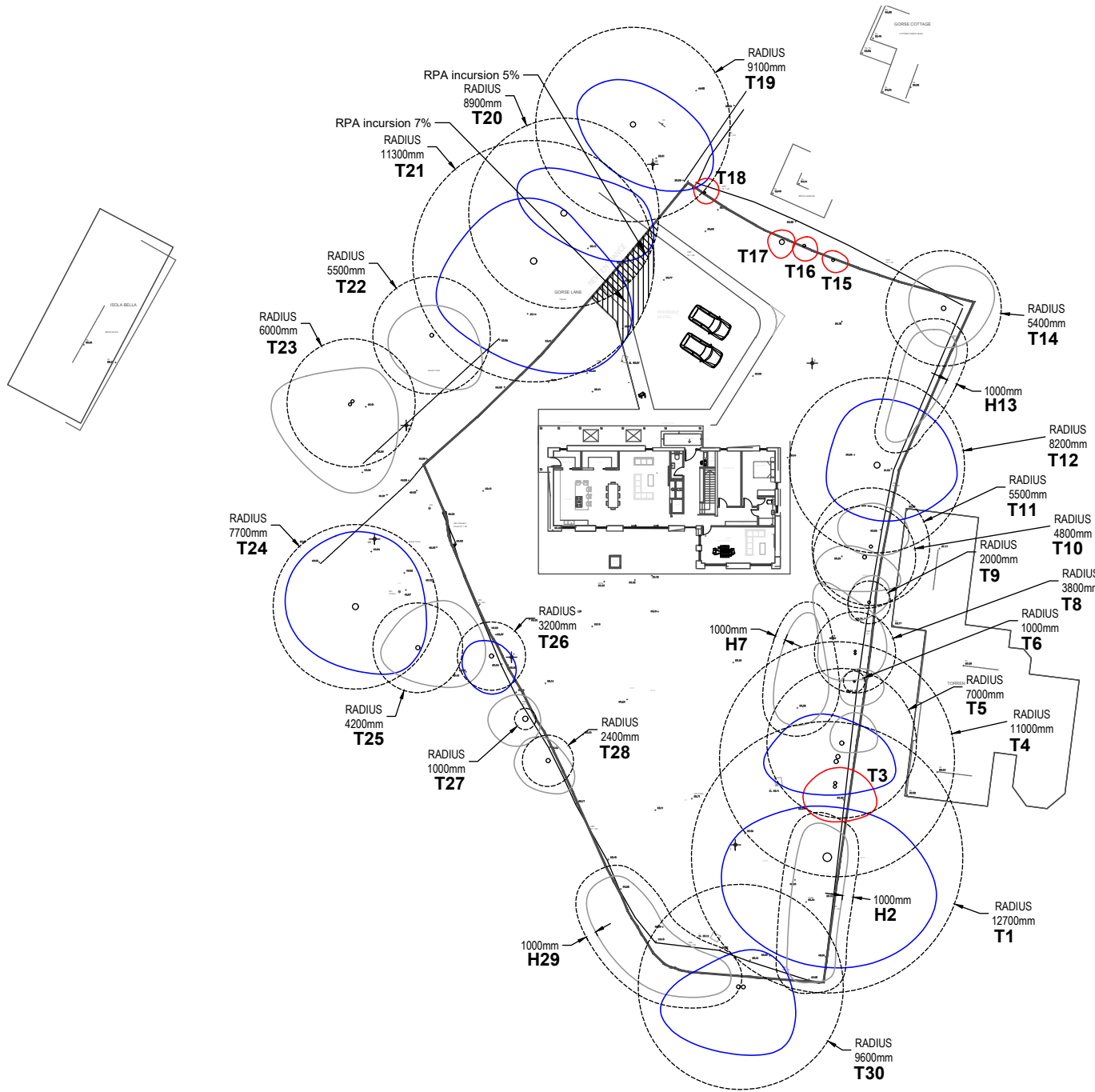
NOTE: Tree survey locations based on previous undertaken topographical surveys for design issue and additional GIS mapping has not been undertaken for the purposes of this survey  
 All off site trees where not plotted within topographic survey information are plotted using on site survey tools from within the site only.

Revisions

Rev.	Date	Issued For Information	Checked
1	05.04.2023	ISSUED FOR INFORMATION	MF

SITE	Malvern Cottage, Gorse Lane, Chobham, Surrey, GU24 8RB
CLIENT	Andrea Hayter
DWG TITLE	Existing Tree Survey Plan
SCALE	1:400 @ A3
DATE	APR 2023
JOB NO	AIA/MF/056/23
DWG NO.	T001

T: 0781 2024070  
 mail@marcus-foster.com  
 www.marcus-foster.com  
**Marcus Foster**  
 TREE CONSULTANCY



KEY

	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	TREES REMOVED
	RPA
	RPA INCURSION
	SHADING ARC

**BS5837 (2012) Tree Survey Notes**

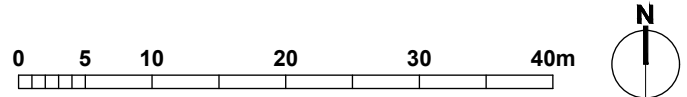
- In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white
- If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.
- This drawing should be read in conjunction with all other relevant drawings and specifications
- Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided
- Off site trees have been plotted based on site visit survey and locations are not based upon topographical survey

NOTE: Tree survey locations based on previous undertaken topographical surveys for design issue and additional GIS mapping has not been undertaken for the purposes of this survey. All off site trees where not plotted within topographic survey information are plotted using on site survey tools from within the site only.

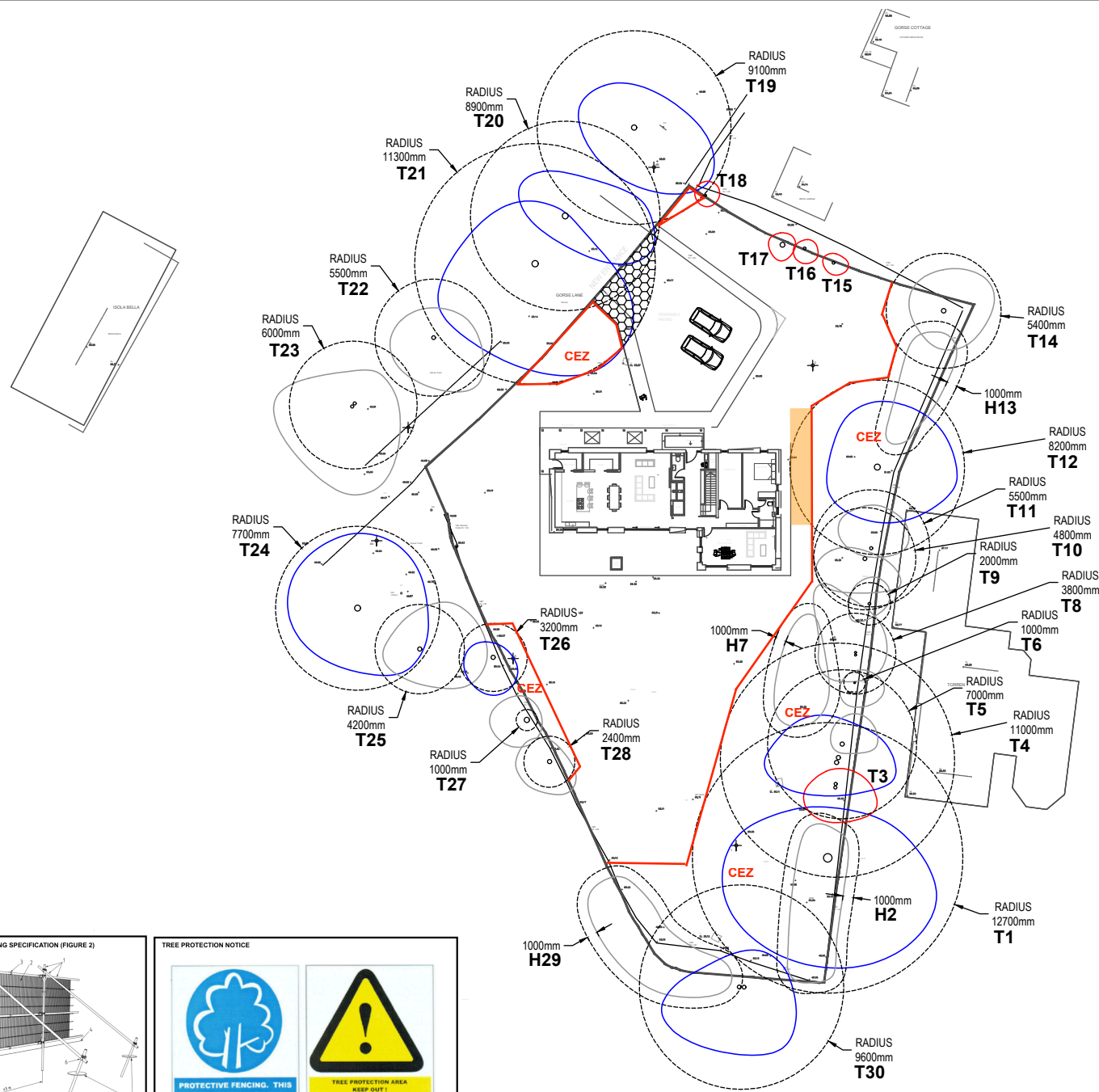
Revisions

Rev.	Date	Checked
1	05.04.2023	MF

SITE	Malvern Cottage, Gorse Lane, Chobham, Surrey, GU24 8RB
CLIENT	Andrea Hayter
DWG TITLE	Tree Constraints Plan
SCALE	DATE
1:400 @ A3	APR 2023
JOB NO	DWG NO.
AIA/MF/056/23	T002







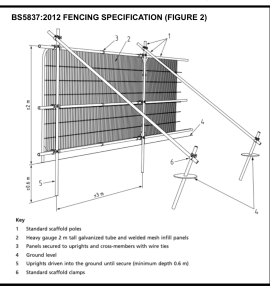
TREE PROTECTION KEY	
	BS5837: 2012 SPECIFICATION FENCING
	GROUND PROTECTION: 75MM LAYER OF BARK MULCH OVERLAYED ON 15mm OSB PLYWOOD BOARDS RETAINED FOR DURATION OF DEVELOPMENT
	CELL WEB / LOAD BEARING MEMBRANE FOR DRIVEWAY WITHIN RPA
ALSO REFER TO AMS TREE REPORT FOR FULL SPECIFICATIONS & SEQUENCING / PHASES OF TREE PROTECTION	

KEY	
	CATEGORY A
	CATEGORY B
	CATEGORY C
	CATEGORY U
	TREES REMOVED
	RPA
	RPA INCURSION
	SHADING ARC

**BS5837 (2012) Tree Survey Notes**

- In accordance with BS5837(2012) this drawing is a colour coded schedule and should not be read in black and white
- If received electronically it is the recipients responsibility to print this drawing to correct scale. Only written dimensions should be used where not printed to scale.
- This drawing should be read in conjunction with all other relevant drawings and specifications
- Marcus Foster Arboricultural Design & Consultancy accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided
- Off site trees have been plotted based on site visit survey and locations are not based upon topographical survey

NOTE: Tree survey locations based on previous undertaken topographical surveys for design issue and additional GIS mapping has not been undertaken for the purposes of this survey. All off site trees where not plotted within topographic information are plotted using on site survey tools from within the site only.



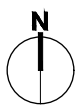
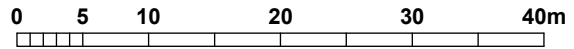
**TREE PROTECTION NOTICE**

**PROTECTIVE FENCING, THIS FENCING MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND DRAWINGS FOR THIS DEVELOPMENT.**

**TREE PROTECTION AREA KEEP OUT!**

THOSE ENTERING PROTECTED AREAS MUST BE ADVISED BY THE CONTRACTOR OF THE PROTECTED AREAS AND THE SIGNIFICANCE OF A CONTRADICTION OF A TREE PROTECTION ORDER MAY LEAD TO PROSECUTION.

DO NOT ENTER INTO THE PROTECTED AREA UNLESS SO INSTRUCTED BY THE CONTRACTOR.



Revisions

Rev.	Date	Issued For	Checked
1	05.04.2023	ISSUED FOR INFORMATION	MF

SITE: Malvern Cottage, Gorse Lane, Chobham, Surrey, GU24 8RB  
 CLIENT: Andrea Hayter

DWG TITLE: Tree Protection Plan

SCALE: 1:400 @ A3 DATE: APR 2023

JOB NO: AIA/MF/056/23 DWG NO: T003

T: 0781 2024070  
 mail@marcus-foster.com  
 www.marcus-foster.com  
**Marcus Foster**  
 TREE CONSULTANCY

# Appendix C: Tree Survey Photographs

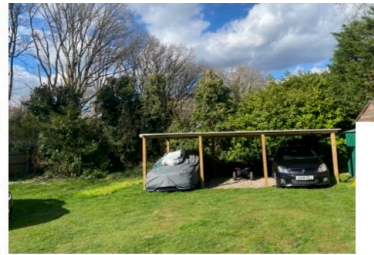
Site Photographs for:  
Malvern Cottage, Gorse Lane, Chobham, Surrey, GU24 8RB



Eastern boundary as viewed to south



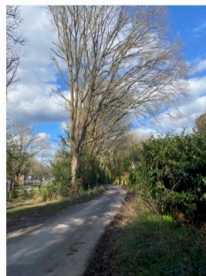
T1, T30 & H29 viewed to south



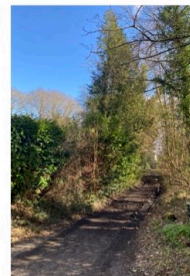
Trees T15-T18 viewed to north



Off site English oak trees T19-T21 viewed to north



Off site English oak trees T19-T21 viewed to east



Off site western boundary viewed to east



Off site English oak trees T19-T21 viewed to south east



Off site English oak trees T19-T21 viewed to east



Trees T10-H13 viewed to east



Trees T5-H13 viewed to east



T1, T30 & H29 viewed to south

March 2023\_MFoster

## **Appendix D:** **Tree Protection Notice**

Generic Tree Protection Notice  
(BS5837: 2012):

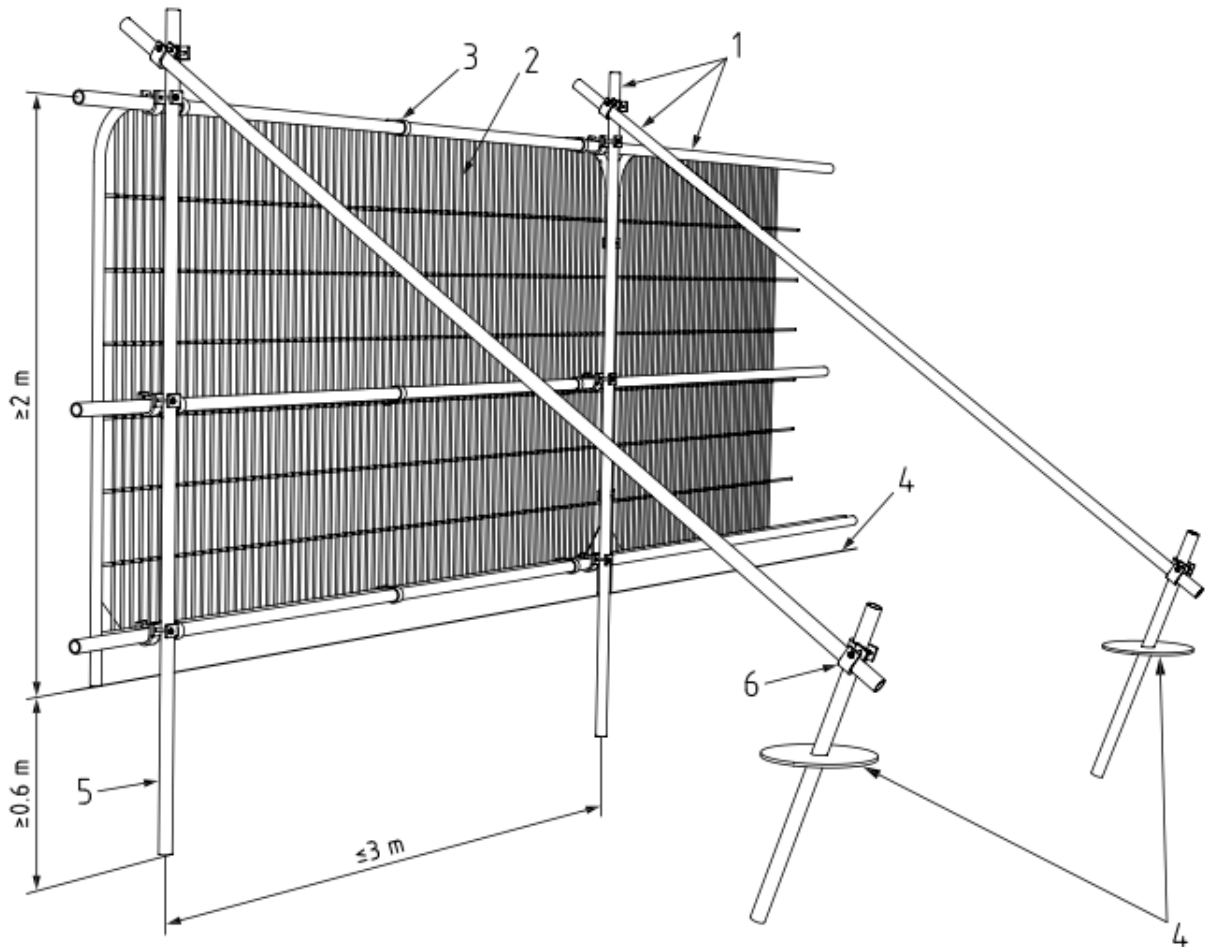
*Notice to be clearly shown on site where  
fencing constructed  
AT ALL TIMES*





## **Appendix E**

# **Tree Protection Fencing Specification**



### **Key**

- 1 Standard scaffold poles
- 2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
- 3 Panels secured to uprights and cross-members with wire ties
- 4 Ground level
- 5 Uprights driven into the ground until secure (minimum depth 0.6 m)
- 6 Standard scaffold clamps

## **Appendix F: References**

1. BS5837: British Standard: Trees in relation to construction - Recommendations, British Standard (2012)
2. Principles of Tree Hazard Assessment and Management, Lonsdale, D. (Department for Transport, Local Government and the Regions, 1999)
3. The Body Language of Trees, Mattheck, C. and Breloer, H. (HMSO, 1994)
4. Trees in Britain, Philips, R. (Pan Books, 1978).
5. Diagnosis of Ill Health in Trees, Strouts, R. and Winter, (TSO, 1994)
6. National Planning Policy Framework February 2019 Ministry of Housing, Communities and Local Government
7. NJUG Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 2), (November 2007)

**PREPARED BY MARCUS FOSTER** MArborA  
**END OF REPORT \_ Page 33/33**