



**Tree Survey, Arboricultural Impact Assessment  
Preliminary Arboricultural Method Statement & Tree Protection Plan  
In Accordance with BS 5837:2012**

Proj. No <b>10394</b>	<b>Gillyflower House, Polstead, Suffolk, CO6 5AH</b>		
Client:		Kirkham Sheidow Architects	
Date of Report:	03/08/2023	Revision:	Original

# **Tree Survey, Arboricultural Impact Assessment, Preliminary Arboricultural Method Statement & Tree Protection Plan – In Accordance with BS 5837:2012**

## **Summary**

The purpose of this report is to provide a preliminary consideration of the arboricultural implications created by the proposed development. In accordance with the feasibility and planning sections of BS5837:2012 “*Trees in relation to design, demolition and construction – Recommendations*”, trees deemed to be within the influencing distance of the projected construction have been evaluated for quality, longevity, and initial maintenance requirements. Where trees do not have to be removed for health and safety reasons, a detailed and objective assessment has been made of the consequences of the intended layout.

In this circumstance it is intended to construct a new residential dwelling with associated driveway, services and garden space. As a result, eighteen individual trees, six groups of trees, one area of trees and five hedges were inspected. The arboricultural related implications of the proposal are as follows:

- 1 In addition to trees which require felling irrespective of development, it is necessary to fell five low quality or poor longevity individual trees and two low quality or poor longevity landscape features in order to achieve the proposed layout. Additionally, three trees require tree surgery to permit construction space or access.
- 2 One tree has been identified for removal irrespective of any development proposals. The removal of this items coincides with the requirements of the proposed layout.
- 3 The alignment of the proposed dwelling does not encroach within the Root Protection Areas of any trees that are to be retained. In view of this, and as assessed in accordance with BS5837:2012, no specialist foundation designs or construction techniques will be required to prevent damage to tree roots. Specialist foundations may still be required for other reasons, including mitigating the influencing distance of tree roots, subject to expert advice from a structural engineer.
- 4 The alignment of the proposed driveway nominally intrudes within the Root Protection Areas of two trees to be retained. This has only minor influence on the Root Protection Areas and as such it is considered appropriate to undertake linear root pruning, thus obviating the need for specialist “no dig” construction techniques at this location
- 5 This report recommends that specialist advice is obtained by expert practitioners in other disciplines. Such input should always be sought prior to the submission of this report in support of a planning application in order to demonstrate that the techniques and methods hereby proposed are achievable. In this particular circumstance it is necessary to contact the following:
  - Structural Engineer (foundation design, item 4.4.1)



- 6 All trees and landscape features that are to remain as part of the development should suffer no structural damage provided that the findings with this report are complied with in full. This includes ensuring that protective fencing is erected as detailed at items 4.6.1 and 5.1 of this report.
- 7 Post Planning Permission – Subject to achieving Planning Permission, a detailed Arboricultural Method Statement and Tree Protection Plan will be required. This will include the following: fencing type, access facilitation pruning specification, phasing and an extensive auditable monitoring schedule.

Given the above, there are no overt or overwhelming arboricultural constraints that can be reasonably cited to preclude the proposed construction.



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# 1.0 Introduction

## 1.1 Terms of Reference

1.1.1 Hayden's Arboricultural Consultants Limited has been commissioned by Kirkham Sheidow Architects to prepare a Tree Survey, Arboricultural Impact Assessment, Preliminary Arboricultural Method Statement and Preliminary Tree Protection Plan for the existing trees at Gillyflower House, Polstead, Suffolk, CO6 5AH.

1.1.2 The site survey was carried out on 05/07/2023. The relevant qualitative tree data was recorded in order to assess the condition of the existing trees, their constraints upon the prospective development and the necessary protection and construction specifications required to allow their retention as a sustainable and integral part of the completed development.

1.1.3 Information is given on condition, age, size and indicative positioning of all the trees, both on and affecting the site. This is in accordance with the British Standard 5837:2012 *Trees in relation to design, demolition and construction - Recommendations*.

## 1.2 Scope of Works

1.2.1 The survey of the trees and any other factors are of a preliminary nature. The trees were inspected on the basis of the Visual Tree Assessment (VTA) method as developed by Mattheck and Breloer (1994). The trees were inspected from ground level with no climbing inspections undertaken. It is not always possible to access every tree and as such some measurements may have to be estimated. Trees with estimated measurements are highlighted in the schedule of trees. No samples have been removed from the site for analysis. The survey does not cover the arrangements that may be required in connection with the removal of existing underground services.

1.2.2 Whilst this is an arboricultural report, comments relating to non arboricultural matters are given, such as built structures and soil data. Any opinion thus expressed should be viewed as provisional and confirmation from an appropriately qualified professional sought. Such points are clearly identified within the body of the report.

1.2.3 An intrinsic part of tree inspection in relation to development is the assessment of risk associated with trees in close proximity to persons and property. Most human activities involve a degree of risk with such risks being commonly accepted, if the associated benefits are perceived to be commensurate. In general, the risk relating to trees tends to increase with the age of the trees concerned, as do the benefits. It will be deemed to be accepted by the client that the formulation of the recommendations for all tree management will be guided by the cost-benefit analysis (in terms of amenity), of the tree work.

## 1.3 Documentation

1.3.1 The following documentation was provided prior to the commencement of the production of this report;

- Email of instruction from Trevor Dodwell dated 23<sup>rd</sup> June 2023
- Definition of site boundary
- Description of requirements/deadlines
- Topographical survey drawing no. ALS9622
- Proposed site layout drawing no. 2215/01 E



## 2.0 The Site

### 2.1 Overview

2.1.1 The site is the eastern extent of the existing residential property Gillyflower House, Polstead, Suffolk, CO6 5AH.

### 2.2 Soils

2.2.1 The soils type commonly associated with this site are generally freely draining slightly acid loams. They are of low fertility and typically support neutral and acid pastures, and deciduous woodland type habitats. This soil type constitutes approximately 15.5% the total English land mass.

2.2.2 The data given was obtained from a desk top study which provides indications of likely soil types. By definition, this information is not comprehensive and therefore any decisions taken with regards the management, usage or construction on site should be based on a detailed soil analysis.

2.2.3 Further to item 2.2.2, this report provides no information on soil shrinkability. It may be necessary for practitioners in other disciplines (e.g. engineers considering foundation design) to obtain this data as required.

### 2.3 Statutory Tree Protection

#### 2.3.1 Tree Preservation Order(s)

The local planning authority Babergh Mid Suffolk District Council have deemed it appropriate to provide statutory protection to trees on and/or neighbouring this site through the serving of a Tree Preservation Order (TPO), Ref no BT81/A1. The effect of this on the owners, managers or any persons wishing to undertake work on preserved trees is to require them to obtain written permission from Babergh Mid Suffolk District Council prior to actioning any surgery or felling etc. The purpose of this process is to try to ensure that the works are appropriate, proportionate, and in keeping with the long-term aims of the TPO (as expressed in the original TPO statement) but, given that trees are living organisms, and the locality within which they are set is liable to change, it is often the case that local planning authority decisions relating to TPO applications require regular review to reflect the current situation rather than the historical perspective of the original date of protection.

There are certain circumstances where written permission from the local planning authority may not be necessary before undertaking works. These include;

- Making a tree safe if it is an imminent threat to people or property.
- Removing dead wood, or a dead tree.

Owners, managers or any persons wishing to undertake work as an exemption to the written permission process **are required** to provide the local planning authority with 5 days' notice prior to attending to a tree which they deem as being dead or dangerous; unless such works are required in an emergency. It is the tree owner's responsibility to provide proof that the tree was indeed dead or dangerous should this exception be challenged; hence, it is advisable always to request an inspection by the Local Planning Authority prior to carrying out such operations. Furthermore, and even in the event of an emergency situation, there is still a duty to notify the local planning authority that work has been completed including supplying an explanation of the necessity.



Failure to comply with the requirements of TPO legislation can lead to a maximum fine of up to £20,000 per tree in the Magistrates Court. Fines in the Crown Court are unlimited.

NB: If **detailed planning permission** is granted and as part of the relevant approval, works (felling or surgery) to trees protected by a TPO are agreed as acceptable by the local planning authority, no **additional** written permission to proceed will be required provided that (i) the planning permission remains live, (ii) the works are in strict accordance with the specification of the extant planning permission, and (iii) the works are being completed solely to implement the detailed planning permission.

This information was sourced using the Local Planning Authority's Online Mapping System (as instructed by them) and to our best knowledge was current and accurate at the time the information was accessed. We would advise it prudent that before any tree work commences, this is checked directly with the Local Planning Authority to confirm that their online mapping system is definitive.

### 2.3.2 Conservation Area

The site is located within a locality specifically identified by Babergh Mid Suffolk District Council as a "Conservation Area". This is a planning designation that seeks to provide control over the built environment, but which also has provision for tree protection. The effect of this on the owners, managers or any persons wishing to undertake work on trees sited within a Conservation Area is to require them to submit 6 weeks written notice detailing the surgery or felling they plan to undertake. No work may be carried during the 6-week period unless written permission has been received from Babergh Mid Suffolk District Council. The local Planning authority can only prevent works notified to them within the 6-week period by serving a Tree Preservation Order. If this happens, the owner of the tree has a right to object to the serving of the order.

There are certain circumstances where written permission from the local planning authority may not be necessary before undertaking works. These include;

- Making a tree safe if it is an imminent threat to people or property.
- Removing dead wood, or a dead tree.
- Trees with stem diameters of less than 75mm (measured at 1.5m from ground level). If the works being carried out are to help promote the growth of other trees then trees with stem diameters of less than 100mm (at 1.5m) may be removed or pruned.

Owners, managers or any persons wishing to undertake work as an exemption to the written notification process are **required** to provide the local planning authority with 5 days' notice prior to attending to a tree which they deem as being dead or dangerous; unless such works are required in an emergency. It is the tree owner's responsibility to provide proof that the tree was indeed dead or dangerous should this exception be challenged; hence, it is advisable always to request an inspection by the Local Planning Authority prior to carrying out such operations. Furthermore, and even in the event of an emergency situation, there is still a duty to notify the local planning authority that work has been completed including supplying an explanation of the necessity. Failure to comply with the requirements of Conservation Area legislation can lead to a maximum fine of up to £20,000 per tree in the Magistrates Court. Fines in the Crown Court are unlimited.





NB: If **detailed planning permission** is granted and as part of the relevant approval, works (felling or surgery) to trees located within a Conservation Area are agreed as acceptable by the local planning authority, no **additional** written permission to proceed will be required provided that (i) the planning permission remains live, (ii) the works are in strict accordance with the specification of the extant planning permission, and (iii) the works are being completed solely to implement the detailed planning permission.

This information was sourced using the Local Planning Authority's Online Mapping System (as instructed by them) and to our best knowledge was current and accurate at the time the information was accessed. We would advise it prudent that before any tree work commences, this is checked directly with the Local Planning Authority to confirm that their online mapping system is definitive.

### 2.3.3 Felling Licence

All trees within the United Kingdom are protected under the Forestry Acts. In general, anyone felling more than 5 cubic metres of timber in any calendar quarter requires a Felling Licence from the Forestry Commission. There are exemptions however and these are as follows:-

A Felling Licence is not required in the following instances:

- To fell trees in a garden, an orchard, a churchyard, or a designated open space (Commons Act 1899).
- To carry out surgery operations such as pruning, reduction, dead wooding or pollarding.
- To fell less than 5 cubic metres in a calendar quarter. (Please note that not more than 2 cubic metres in a calendar quarter may be sold).
- To fell trees that are 8 centimetres or less in diameter when measured 1.3 metres from the ground. Trees removed for thinning may have a diameter of up to 10 centimetres and trees managed under a coppice regime may have a diameter of up to 15 centimetres.
- To fell trees previously approved for removal under a Dedication Scheme, or where Detailed Planning Permission has been granted.

Substantial fines exist for not complying with the requirements of a Felling Licence.

## 3.0 Tree Survey

3.1 As part of this survey a total of eighteen individual trees, six groups of trees, one area of trees and five hedges have been identified. These have been numbered T001 – T018, G001 – G006, A001 and H001 – H005 respectively.

3.2 A topographical survey was provided that showed the position of some of the trees on site. It should be noted however that topographical surveys are not always comprehensive and sometimes it is considered appropriate to record details of trees and landscape features omitted from or beyond the scope of the plan. Where this circumstance occurs, the location of the individual tree or landscape feature is estimated. The position of each tree is shown on the attached drawing no. 10394-D-AIA.



- 3.3 In order to provide a systematic, consistent and transparent evaluation of the trees included within this survey, they have been assessed and categorised in accordance with the method detailed in item 4.3 of *BS 5837:2012 "Trees in Relation to Design, Demolition and Construction - Recommendations"*. For further information, please see the attached Explanatory Notes.
- 3.4 The detailed assessment of each tree and its work requirements with priorities are listed in the attached Schedule of Trees.
- 3.5 In accordance with item 4.2.4 (c) of BS 5837:2012, the items inspected and detailed within this report have been selected for inclusion due to the likely influence of any proposed development on the trees, rather than strictly adhering to the curtilage of the site. However, it must be understood that there may be trees beyond the site and not included in this survey which may exert an influence on the development. Where works for cultural, health and safety, quality of life, or development purposes have been recommended on trees outside the ownership of the site, these can only progress with the agreement of the owner, except where it involves portions of the trees overhanging the boundary.

## **4.0 Arboricultural Impact Assessment**

### **4.1 The Proposal**

- 4.1.1 The proposal is to construct a new residential dwelling with associated driveway, services and garden space within the curtilage of the site.

### **4.2 Access**

- 4.2.1 Site access is encumbered by the theoretical Root Protection Area (RPA) of the following retained trees – G001, G002, T001, T003 and T014. In this case the RPA is safeguarded by existing hard surfaces and therefore, and from a purely arboricultural perspective, it will not be necessary to install a proprietary temporary load bearing surface to protect tree roots.

### **4.3 Demolition**

- 4.3.1 Demolition of a retaining wall affects the theoretical RPA of one retained tree – T016. The presence of the long existing retaining wall is considered likely to have precluded significant root encroachment. However, to ensure there is no damage to the canopy and roots of this tree, works must only be completed with appropriate machinery or by hand within the calculated RPA and crown spread (whichever is the greater). In the proximity of the retained trees, all walls and material must be demolished away from the stem. Furthermore, all demolition within the RPA of T016 must be completed under arboricultural supervision and appropriate root pruning completed as necessary if roots have been found to permeate the structure of the footings (this can only be determined as works proceed).



#### 4.4 **Construction**

- 4.4.1 Construction of foundations or structural supports do not encroach within the Root Protection Area (RPA) of any trees to be retained. Therefore, from an arboricultural perspective, no specialised construction or foundation techniques will be required to protect tree roots. However, dependent on the soil type, species and topography, trees may have an influence on the soil beyond their calculated RPA. Given the proximity of the proposed construction to the trees to be retained, it is recommended that a Structural Engineer is consulted to assess the implications of the tree retention on the required foundation design.
- 4.4.2 Installation of new hard surfaces encroach within a small portion of the RPA of the following trees to be retained – T015 and T016. Given the likelihood of the existing retaining wall impeding significant root encroachment combined with the minor extent of the intrusion at this location it is considered appropriate to undertake linear root pruning as part of the access facilitation pruning (AFP) works. This operation will obviate the need for “no dig” construction methods in this situation.
- 4.4.3 Soil re-modelling will be required to meet the proposed finished floor levels of the dwelling compared to the existing levels. The transition from the existing driveway to the proposal appears to have an acceptable impact at this stage of design.

#### 4.5 **Implications of Sloping Ground**

- 4.5.1 The arboricultural implications of the proposed structure is based on an assumption that despite the existing undulating ground in the zone of development, level changes will not occur within the RPA of trees that are shown to be retained.

#### 4.6 **Requirement for Tree Barrier Fencing**

- 4.6.1 Prior to the commencement of construction and immediately after the completion of the necessary tree surgery and felling work, protective fencing will be erected on site. This must be fit for purpose (including any ground protection if necessary) in full accordance with the requirements of BS 5837:2012 and positioned as shown on the attached Preliminary Arboricultural Impact Assessment & Tree Protection drawing. Full details of fencing will be supplied by Hayden's Arboricultural Consultants in the detailed Arboricultural Method Statement & Tree Protection Plan.

#### 4.7 **Compound**

- 4.7.1 The site provides adequate internal space to locate a construction compound outside the RPA of any trees and landscape features that are to be retained.

#### 4.8 **Phasing**

- 4.8.1 The proposal involves the integration of a number of complex aspects that affect tree protection (e.g. – but not exclusively – access, movement of materials and the installation of services). For this reason, the project must be carefully phased to ensure the highest level of protection for retained trees at all times. As part of the detailed Arboricultural Method Statement & Tree Protection Plan, Hayden's Arboricultural Consultants will produce an in-depth phasing recommendation to cover the major operations on site as they affect retained trees.



#### 4.9 Monitoring

4.9.1 In accordance with item 6.3 of BS 5837:2012, the site and associated development should be monitored regularly by a competent Arboriculturalist to ensure that the arboricultural aspects of the planning permission are complied with. As part of the detailed Arboricultural Method Statement & Tree Protection Plan, Hayden's Arboricultural Consultants will produce an extensive auditable monitoring schedule to assess the progress of key site events/activities.

#### 4.10 Tree Surgery to Facilitate Proposed Development

4.10.1 In order to enable the proposed development it will be necessary to undertake the following tree surgery works to retained trees: -

Feature No	Description of Works Required	BS Category*
T003	Crown lift to 2.5m as shown on drawing no. 10394-D-AIA.	C
T015	Reduce crown and root prune as shown on drawing no. 10394-D-AIA.	C
T016	Crown lift to 2.5m and root prune as shown on drawing no. 10394-D-AIA.	A

#### 4.11 Landscape Implications

4.11.1 In addition to trees necessitating removal for health and safety, cultural or quality of life reasons, (as detailed in the attached Schedule of Works - Irrespective of Development) the items listed in the table below require felling to permit the proposed development to proceed: -

Feature No	Reason for Removal	BS Category*	Visual Amenity Assessment*
A001	Conflicts with proposed dwelling and driveway	C	Moderate
G007	Conflicts with proposed dwelling	C	Moderate
T004	Conflicts with proposed dwelling	C	Low
T005	Conflicts with proposed dwelling	C	Low
T006	Conflicts with proposed dwelling	C	Low
T008	Conflicts with proposed dwelling	C	Low
T011	Conflicts with proposed dwelling	C	Low

\* Please see definitions in the Explanatory Notes attached to this report.

4.11.2 As part of the felling works outlined above, it may be prudent to relocate some of the better-quality trees in A001 instead of felling them. These trees would be replanted adjacent to the proposed post and rail fence on what will become the west boundary of the dwelling. A tree spade is likely to be necessary to carry out such works. It is advised that the tree spade contractor will be better suited in identifying specimens for relocation. Please note: tree spading does not guarantee that the tree will survive post-transplant.

#### 4.12 Post Development Implications

4.12.1 No adverse arboricultural implications are considered reasonably foreseeable for the trees that remain provided that the recommendations of this report are complied with in full.



- 4.12.2 Due to the dynamic nature of trees and their interaction with the environment, their health and structural integrity is liable to change over time. Because of this it is recommended that all trees on or adjacent to the site be inspected on an annual basis.
- 4.12.3 As stated in BS 5837:2012, regular maintenance of newly planted trees is of particular importance for at least three years during the critical post-planting period and might, where required by site conditions, planning requirements or legal agreement, be necessary for five years or more. Therefore, the designer of the new landscaping should, in conjunction with the landscape design proposals, prepare a detailed maintenance schedule covering this period, and appropriate arrangements made for its implementation.

## **5.0 Design Advice, Preliminary Arboricultural Method Statement & Tree Protection Plan**

### **5.1 Securing of Tree Structure and Root Protection Areas (RPA)**

- 5.1.1 The trees to be retained will be protected by the use of stout barrier fencing erected in the positions indicated on the attached Preliminary Arboricultural Impact Assessment & Tree Protection drawing no. 10394-D-AIA. This fencing will be in accordance with the requirements of BS 5837:2012 including any necessary ground protection.
- 5.1.2 All fencing provided for the safeguarding of trees will be erected prior to any demolition or development commencing on the site, therefore ensuring the maximum protection. This fencing, which must have all weather notices attached stating “Construction Exclusion Zone – No Access” will be regarded as sacrosanct and, once erected, will not be removed or altered without the prior consent of the Local Planning Authority.
- 5.1.3 Where footpaths, access drives, or parking bays are constructed within the RPA of retained trees, careful attention will be paid to the type of surface treatment used in these areas, details of which are given in item 5.8, below. If possible, these should be installed as a final phase of the project, thereby protecting the RPA throughout the major construction phase of the proposed development.
- 5.1.4 Where fencing is impractical, consideration must be given to other forms of effective above ground tree structure protection. An example of this would be a combination of Barksavers to secure the stems and a temporary load bearing surface to shield the ground.

### **5.2 Location of Site Office, Compound and Parking**

- 5.2.1 The position of the office, compound and parking will be agreed in writing with the Local Planning Authority prior to commencement of any permitted development works. Any proposed re-location of these items through the various phases of development will be agreed prior to re-siting with the Local Planning Authority.



### **5.3 On Site Storage of Spoil and Building Materials**

- 5.3.1 Prior to and during all construction works on site, no spoil or construction materials will be stored within the RPA of any tree on, or adjacent to the site, even if the proposed development is to be within the RPA. This is to reduce to a minimum the compaction of the roots of the trees. Details of the RPA for each tree where no spoil or building materials will be stored are indicated on the attached Preliminary Arboricultural Impact Assessment & Tree Protection drawing no. 10394-D-AIA. Any encroachment within this protected area will only be with the prior agreement of the Local Planning Authority.
- 5.3.2 Any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The volume of the bund compound shall be at least equivalent to the capacity of the tank plus 10%. If there is a multiple tankage, the compound shall be at least equivalent to the capacity of the largest tank, or the combined capacity of interconnected tanks, plus 10%. All filling points, vents, gauges and sight glasses shall be located within the bund. The drainage system of the bund shall be sealed with no discharge to any watercourse, land or underground strata. Associated pipe-work shall be located above ground and protected from accidental damage. All filling points and tank overflow pipe outlets shall be detailed to discharge downwards into the bund.
- 5.3.3 All material storage facilities and work areas must consider the effects of sloping ground on the movement of potentially harmful liquid spillages towards or into protected areas.

### **5.4 Programme of Works**

- 5.4.1 All tree surgery works, once approved by the Local Planning Authority, will be carried out prior to any other site works. Once completed, the proposed protective fencing will be erected along the lines indicated above. All of this will be carried out prior to commencement of any development works on the site. Outline details of the proposed programme are given in the Design and Construction and Tree Care flow chart attached (Appendix G-1).

### **5.5 Tree Surgery**

- 5.5.1 All tree work will be agreed with the Local Planning Authority and will be carried out in line with BS 3998:2010 (Recommendations for Tree Works). An appropriately qualified, experienced and insured arboricultural contractor will carry out the work. Any alterations to the proposed schedule of works will be agreed with the Local Planning Authority prior to commencement of works.

### **5.6 Levels**

- 5.6.1 Other than for any specific exception which may be referred to at item 4.0, no alterations to soil levels within the RPA of retained trees are envisaged. However, if it is necessary for these to occur, appropriate measures must be taken to prevent or minimise any detrimental effects on the affected root systems as detailed in 5.6.2 and 5.6.3 below.
- 5.6.2 If it is necessary to excavate so close to trees that roots greater than 50mm diameter are likely to be encountered, particular care will be taken to avoid damage. Excavation in these areas will be undertaken by hand or using an air spade, avoiding any damage to the bark. The roots will be surrounded with sharp sand prior to the replacing of any soil or other material in the vicinity.



5.6.3 If it is necessary to raise levels, it is essential that adequate supplies of water and oxygen pass through the soil to the trees' roots. Therefore, where necessary, a granular material will be used which will not inhibit gaseous diffusion. Possible options are no-fines gravel, cobbles or, Type 2 road-stone. All hard surfaces will be of suitable specification to allow such gaseous diffusion, e.g. brick pavers.

## 5.7 Services

5.7.1 At the time of writing this report, no details on proposed services were available. However, the following principles should be adhered to when planning for their installation.

5.7.2 It is proposed that all underground service runs will be placed outside the RPA of the trees on or adjacent to the site. Where it is not possible to do this, the proposed length infringing the RPA will be hand dug 'broken trenches' (NJUG 4 paragraph 4) to ensure the maximum protection of the trees' roots. The trenches may also be excavated using an air spade, or trenchless technology can be employed if this methodology is considered appropriate by the relevant service company (thus allowing services to pass below and through the roots without the need for traditional excavation). If it is necessary to cut any small roots as part of any of these processes, they should be severed in such a way as to ensure that the final wound is as small as possible and free from ragged, torn ends.

5.7.3 All routes for overhead services will aim to avoid the trees. Where this is not possible, any tree work will be agreed prior to commencement with the Local Planning Authority.

5.7.4 All service providers (Statutory Authorities) will be consulted prior to commencement of works with the aim of minimising the number of service runs on the site.

5.7.5 All service runs/trenches where they encroach within the RPA of retained trees will be agreed with the Local Planning Authority prior to commencement of works.

## 5.8 Reporting and Monitoring Procedures

5.8.1 In accordance with item 6.3 of BS 5837:2012, the site and associated development should be monitored regularly by a competent arboriculturalist to ensure that the arboricultural aspects of the planning permission (e.g. the installation and maintenance of protective measures and the supervision of specialist working techniques) are implemented. Furthermore, regular contact between the Site Manager and the Arboriculturalist allows them to effectively deal with and advise on any tree related problems that may occur during the development process. This system should be auditable. Should any issues arise during the arboricultural monitoring of the development the Arboriculturalist will contact the Local Planning Authority and appropriate action taken only with the prior permission of Kirkham Sheidow Architects and the Local Planning Authority.



## 6.0 Recommendations

- 6.1 It is recommended that the measures outlined in this report are implemented in full to provide retained trees with the highest level of protection during the process of construction.
- 6.2 Subject to achieving Planning Permission, it is recommended that a detailed Arboricultural Method Statement & Tree Protection Plan should be provided. This will include the following: fencing type, access facilitation pruning specification, project phasing and an extensive auditable monitoring schedule.
- 6.3 Tree surgery should be completed as detailed in the Schedule of Trees. Where this has been identified for reasons other than to permit development, this work should be completed within the advised timescales irrespective of any development proposals.
- 6.4 The tree surgery works proposed as part of this Survey are recommended to mitigate any identified problems that may be caused by trees in close proximity to the proposed development. To this end, should these recommendations be overruled, this Survey stands as the opinion of Hayden's Arboricultural Consultants Limited, and therefore any damage or injury caused by trees recommended by this practice for felling or tree surgery works, to which the proposed schedule of works has been altered or the tree has been requested to be retained by the Local Planning Authority, cannot be the responsibility of this practice.





## 7.0 Limitations & Qualifications

Tree inspection reports are subject to the following limitations and qualifications.

### General exclusions

Unless specifically mentioned, the report will only be concerned with above ground inspections. No below ground inspections will be carried out without the prior confirmation from the client that such works should be undertaken.

The validity, accuracy and findings of this report will be directly related to the accuracy of the information made available prior to and during the inspection process. No checking of independent third-party data will be undertaken. Hayden's Arboricultural Consultants Limited will not be responsible for the recommendations within this report where essential data are not made available or are inaccurate.

This report will remain valid for one year from the date of inspection subject to the recommendations specified within being adhered to. It must also be appreciated that recommendations proposed within this report may be superseded by extreme weather, or any other unreasonably foreseeable events.

However, if any additional alterations to the property or soil levels are carried out and/or further tree works undertaken other than specified within the report, it will become invalid and a new tree inspection strongly recommended.

It will be appreciated, and deemed to be accepted by the client and their insurers, that the formulation of the recommendations for the management of trees will be guided by the following: -

1. The need to avoid reasonably foreseeable damage.
2. The arboricultural considerations - tree safety, good arboricultural practice (tree work) and aesthetics.

The client and their insurers are deemed to have accepted the limitation placed on the recommendations by the sources quoted in the attached report. Where sources are limited by time constraints or the client, this may lead to an incomplete quantification of the risk.

**Signed:**



**August 2023**.....

**For and on Behalf of Hayden's Arboricultural Consultants Limited**



## 8.0 References

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## 9.0 Appendices

Appendix	<b>A</b>	Species List & Tree Problems
Appendix	<b>B</b>	Schedule of Trees
Appendix	<b>C</b>	Schedule of Works - Irrespective of Development
Appendix	<b>D</b>	Preliminary Schedule of Works to Allow Development
Appendix	<b>E</b>	Explanatory Notes
Appendix	<b>F</b>	Tree Preservation Order Enquiry/Response
Appendix	<b>G</b>	Advisory Information & Sample Specifications
		1. BS 5837:2012 Figure 1 - Flow Chart – Design and Construction & Tree Care
		2. European Protected Species and Woodland Operations Checklist (v.4)
		3. BS 5837:2012 Figure 2 - Default specification for protective barrier
		4. BS 5837:2012 Figure 3 - Examples of above-ground stabilising systems
Appendix	<b>H</b>	Drawing No 10394-D-AIA




## Appendix A - Species List & Tree Problems

### Species List:


Apple	<i>Malus sp</i>
Ash	<i>Fraxinus excelsior</i>
Beech	<i>Fagus sylvatica</i>
Cherry	<i>Prunus sp</i>
Cherry Laurel	<i>Prunus laurocerasus</i>
Copper Beech	<i>Fagus sylvatica 'Purpurea'</i>
English Elm	<i>Ulmus minor var. vulgaris</i>
English Oak	<i>Quercus robur</i>
Field Maple	<i>Acer campestre</i>
Holly	<i>Ilex aquifolium</i>
Hornbeam	<i>Carpinus betulus</i>
Lawson Cypress	<i>Chamaecyparis lawsoniana</i>
Norway Spruce	<i>Picea abies</i>
Silver Birch	<i>Betula pendula</i>
Sycamore	<i>Acer pseudoplatanus</i>


### Tree Problems:

This gives a brief description of the problems identified in the attached Tree Survey.

<b>Name: Deadwood</b>	
<b>Symptoms/damage type and cause:</b>	This relates to dead branches in the crown of the tree. In the majority of cases, this is caused by the natural ageing process of the tree or shading due to its close proximity to neighbouring trees. However, in some situations, it may be related to fungal, bacterial or viral infection.
<b>Consequence:</b>	Depending upon the location and mass of dead wood removal of the affected tissue may be necessary to prevent harm to persons or property as the wood will become unstable as it decays and in some circumstances is likely to fall from the tree with little or no warning.
<b>Control:</b>	Detailed monitoring should be undertaken on those trees showing signs of excessive deadwood production to identify the underlying cause.
<b>Species affected:</b>	Most tree species.
<b>Images:</b>	



<b>Name:</b> <i>Hedera helix</i> (Ivy)	
<b>Symptoms/damage type and cause:</b>	Ivy may grow to varying degrees on all areas of a tree from the base to the upper crown. It is possible that in doing so it will out-compete the host tree for available light thereby suppressing the host.
<b>Consequence:</b>	This is generally only harmful to the tree on already unhealthy specimens which may be constricted by large ivy stems around the trunk or may have their top growth suppressed by a mass of flowering shoots in the crown. Ivy can also mask potentially dangerous faults on a tree.
<b>Control:</b>	Ivy should only be removed if absolutely necessary because it provides abundant cover to wildlife and then by severing twice close to the ground and removing a length of stem thereby causing the gradual dying away of the aerial parts of the plant providing extended benefit to wildlife whilst relieving the pressure on the tree.
<b>Species affected:</b>	Most trees can be affected.
<b>Images:</b>	

<b>Name:</b> <i>Hymenoscyphus fraxineus</i> (Ash Dieback)	
<b>Notifiable to the Forestry Commission:</b> If you suspect that a tree exhibits this pathogen, you should report it immediately to: Forest Research via the TreeAlert system: <a href="https://www.forestryresearch.gov.uk/tools-and-resources/tree-alert/">https://www.forestryresearch.gov.uk/tools-and-resources/tree-alert/</a>	
<b>Symptoms/damage type and cause:</b>	Symptoms of the disease can be visible on leaves, shoots, stems and branches of affected trees. The primary symptom is leaves and young shoot growth wilting and turning black in the late summer months. The leaves will often drop ahead of the usual period of senescence. As the fungus spreads towards the stem, branches start to show a black diamond that marks the area of infection. The diamond will continue to grow as the fungus progresses until it girdles the branch and kills the vascular tissue. In severe cases, the entire crown shows leaf loss and dieback, which is often associated with the formation of epicormic shoots on branches and the trunk.
<b>Consequence:</b>	The genetic variation within the <i>Fraxinus</i> genus means that individual trees have differing levels of resistance to <i>Hymenoscyphus fraxineus</i> resulting in some trees dying in the year of infection and others displaying minimal symptoms and surviving alongside the presence of the pathogen. Infected trees will fall somewhere on this spectrum.
<b>Control:</b>	You can slow the spread of the Ash dieback disease by locally burning, burying or composting fallen Ash leaves.
<b>Species affected:</b>	<i>Fraxinus excelsior</i>
<b>Images:</b>	



# **Appendix B**

Schedule of Trees

**SCHEDULE OF TREES (AIA)** Gillyflower House, Polstead, Suffolk

Surveyed By: Alex Turner Date: 05/07/2023  
 Managed By: Alex Turner

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
		On site	RPA (m <sup>2</sup> )	Aspect	Aspect	SULE						
<b>A001</b>	Ash	120	10		Moderate	N2, E2, S2, W2	Area of young Ash on an earth bund towards the terminus of the dwelling garden. Each of these trees have formed tall slender stems and narrow crowns, as a result if the intense competition for sunlight. An unremarkable feature of limited merit.	C2	No work required.	4	Fell to ground level.	0
		1.44	2		Y	Moderate						
<b>Yes</b>		6.5			10+ years	Grass						
<b>G001</b>	Ash	360	11		Moderate	N3.5, E6, S6, W4	Two semi mature Ash trees in a grass verge adjacent the gravel driveway. The grass lawn ground levels fall away from the gravel driveway to the south, with the ground level on the south side of the trees much lower than the north side. Both are of good structural and physiological condition, and both have been managed over the driveway. Trees of moderate quality.	B2	No work required.	4		
		4.32	0.5		SM	Moderate						
<b>Yes</b>		58.6			40+ years	Grass, Gravel						
<b>G002</b>	Beech	530	18		High	N7.5, E7.5, S7.5, W7.5	Row of four mature Beech in the garden of New House, behind a hedgerow adjacent the driveway of Gillyflower House. Limited access prevents full assessment. All comments are based on that which could be observed from site, and some dimensions are estimated. Each specimen appears to be of good structural and physiological condition, and together they form a row of tall, attractive trees with excellent screening value.	A2	No work required.	4		
		6.36	2.5		M	Moderate						
<b>No</b>		127.1			40+ years	Grass, Gravel						
<b>G003</b>	Holly	320	9		Moderate	N3, E3, S3, W3	Row of four multi-stemmed semi mature Holly within an understorey hedgerow on the east side of the driveway of Gillyflower House. Unclear if these trees with inside or outside the land ownership boundary. They appear to be lapsed hedgerow trees. The two northern specimens are displaying crown thinning via dieback.	C2	As a minimum, fell and dead stems and prune out major deadwood. Consider coppicing each of these trees.	3		
		3.84	2.5		SM	Low						
		46.3			10+ years	Dense undergrowth						

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
		RPA (m <sup>2</sup> )	Aspect	Aspect	SULE	Ground Cover						
G004	Norway Spruce	180	5		Low	N2, E2, S2, W3	Two semi mature Norway Spruce sandwiched between a larger Norway Spruce and a large Field Maple. They have limited growth space, which is stifling their vertical growth and beginning to cause asymmetry in their lateral growth. They appear to have once been topped, possibly to manage them as a hedgerow. Unlikely to reach their potential, but not causing an issue at present.	U	No work required.	4		
		2.16	0.5		SM	Moderate						
Yes		14.7			<10 years	Light undergrowth						
G005	Field Maple, English Oak, Cherry Spp	450	10		High	N4, E4, S4, W4	Row of three Oak, one Cherry, one Field Maple and one Horse Chestnut near the eastern boundary. Forms a tall and effective screen from the adjacent public path and horse pasture. Good structural and physiological condition.	A2	No work required.	4		
		5.4	1		SM	High						
Yes		91.6			40+ years	Bare earth						
G006	Lawson Cypress	400	18		Moderate	N1.5, E3, S3, W3	Row of four mature Cypress approximately 2.25 metres beyond the south boundary. The north face of the crown has been pruned back clear of the overhead cables on the north side of the stems. Unremarkable specimens of limited merit.	C2	No work required.	4		
		4.8	3.5		M	High						
No		72.4			10+ years	Bare earth						
G007	Cherry Spp, Field Maple	350	8		Moderate	N4, E4, S4, W4	Pair of multi-stemmed trees forming a homogenous crown. Tight stem unions. Fair form and condition.	C1	No work required.	4	Fell to ground level.	0
		4.2	0.5		SM	Moderate						
		55.4			10+ years	Grass						
H001	Beech	180	3		Low	N1, E1, S1, W1	Well maintained Beech hedgerow adjacent the gravel driveway. Formed of three stems which have been managed into a hedgerow.	C2	Continue annual maintenance.	3		
		2.16	0		SM	Moderate						
Yes		14.7			10+ years	Bare earth						
H002	Beech	160	1.7		Moderate	N1, E1, S1, W1	Well maintained Beech hedgerow located in the garden of New House, but growing through the hedge into the grass verge of the driveway of Gillyflower House and forming an attractive screen.	B2	Continue annual maintenance.	3		
		1.92	0		SM	Moderate						
Yes		11.6			20+ years	Bare earth						



TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
		RPA (m <sup>2</sup> )	Aspect	Aspect	SULE	Ground Cover						
H003	Cherry Laurel, English Elm, Field Maple	210	3.5		High	N2, E2, S2, W2	Established hedgerow along a portion of the boundary on the east side of the driveway of Gillyflower House. Much of the feature is being overtaken by Ivy. Provides an effective screen, but would benefit from the removal of the Ivy.	B2	Remove all Ivy.	3		
		2.52	0		SM	High						
Yes		20			20+ years	Bare earth						
H004	Cherry Spp, English Elm, Holly, Field Maple	40	2.5		Moderate	N1, E1, S1, W1	Young dense understorey hedgerow on both sides of the east boundary, forming an effective screen.	C2	No work required.	4		
		0.48	0		Y	High						
Yes		0.7			40+ years	Bare earth						
H005	Field Maple, Lawson Cypress, Cherry Laurel, Sycamore	180	4		Low	N2, E2, S2, W2	Hedgerow just beyond the south boundary, with a slight overhang into site. Has been historically topped to keep it clear of the overhead lines.	C2	Continue annual maintenance.	3		
		2.16	0		SM	High						
No		14.7			10+ years	Bare earth						
T001	Silver Birch	430	13.5		Moderate	N4, E4, S4, W4	Tree adjacent to gravel driveway. Stem curves northwards before straightening at approximately 2 metres. Stem has added more wood around the width where the curve occurs. Evidence of past surgery to lift crown over driveway.	B1	No work required.	4		
		5.16	1		EM	Low						
Yes		83.6			20+ years	Grass, Gravel						
T002	Hornbeam	100	2.5		Low	N2.5, E2.5, S5, W3	Tree has been topped and subordinate branches are established apical dominance. No topo position so location is indicative. Fair form and condition.	C1	No work required.	4		
		1.2	0.5		Y	Moderate						
Yes		4.5			10+ years	Grass, Gravel						
T003	Field Maple	230	8		Moderate	N2, E3.5, S3.5, W2.5	Tree adjacent to gravel driveway. Multi-stemmed form. Tree appears typical for species. Evidence of past surgery to lift crown over driveway. Fair form and condition.	C1	No work required.	4	Crown lift to 2.5m as shown on drawing no. 10394-D-AIA.	0
		2.76	1.5		SM	Moderate						
Yes		23.9			10+ years	Grass, Gravel						
T004	Field Maple	390	10.5		Low	N4.5, E4.5, S4, W5.5	Twin stemmed form from 1.2 metres. Tree located on grass bund. Major and minor deadwood. No obvious visual defects at time of inspection. Tree appears typical for species. Fair form and condition.	C1	No work required.	4	Fell to ground level.	0
		4.68	1.5		SM	Moderate						
Yes		68.8			20+ years	Grass						

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
		RPA (m <sup>2</sup> )	Aspect	Aspect	SULE	Ground Cover						
<b>T005</b>	Field Maple	190	9		Low	N2.5, E3, S2.5, W2.5	Twin stemmed form from 0.5 metres. West stem is dominant. Minor deadwood. Tree appears typical for species. No topo position so location is indicative. Fair form and condition.	C1	No work required.	4	Fell to ground level.	0
		2.28	0.5		SM	Moderate						
<b>Yes</b>		16.3			10+ years	Grass						
<b>T006</b>	Field Maple	180	9		Low	N2.5, E2.5, S2.5, W3	Tree growing on bund. More upward form that might otherwise be expected for the species. Twin stemmed form from approximately 3.5 metres. No topo position so location is indicative. Vertical crease at stem base on north aspect. Fair form and condition.	C1	No work required.	4	Fell to ground level.	0
		2.16	1		SM	Moderate						
<b>Yes</b>		14.7			10+ years	Grass						
<b>T007</b>	Ash	90	6		Low	N1.5, E1.5, S1.5, W1.5	Coppice stool with two stems. Evidence of Ash Dieback in crown. Minor deadwood throughout crown. No topo position so location is indicative. Poor form and condition.	U	Fell to ground level.	3		
		1.08	0.1		Y	Moderate						
<b>Yes</b>		3.7			<10 years	Grass						
<b>T008</b>	Hornbeam	500	8.5		Low	N4.5, E4.5, S4.5, W5	Semi mature to early mature Hornbeam on an earth bund adjacent a wooden shed. Appears to be a lapsed coppice. Good physiological condition. Fair structural condition. An unremarkable specimen of limited merit.	C1	No work required.	4	Fell to ground level.	0
		6	1.6		SM	Moderate						
<b>Yes</b>		113.1			20+ years	Grass						
<b>T009</b>	Copper Beech	130	8		Low	N2.5, E3.5, S3.5, W4	Young Copper Beech located in the lawn of a domestic garden, near a wooden shed. Good structural and physiological condition. The crown is suppressed on the north side by adjacent trees. Unremarkable at present but is a tree with excellent future potential.	C1	No work required.	4		
		1.56	0.5		Y	Moderate						
<b>Yes</b>		7.6			40+ years	Grass						
<b>T010</b>	Apple Sp	260	4		Low	N2.5, E2.5, S2.5, W2.5	Semi mature Apple in lawn of domestic rear garden. Fair structural and physiological condition. The crown is suppressed by a larger and more dominant Apple tree. An unremarkable specimen of limited merit.	C1	No work required.	4		
		3.12	0.5		SM	Low						
<b>Yes</b>		30.6			10+ years	Grass						

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
		On site	RPA (m <sup>2</sup> )	Aspect	Aspect	SULE						
T011	Apple Sp	310	5.5		Low	N3.5, E2.5, S3, W4	Semi mature to early mature Apple in lawn of domestic rear garden. Fair structural and physiological condition. The crown is suppressed owing to its located surrounded by other trees. An unremarkable specimen of limited merit.	C2	No work required.	4	Fell to ground level.	0
		3.72	1		EM	Moderate						
Yes		43.5			10+ years	Grass						
T012	Cherry Sp	160	4.5		Low	N1.5, E1.5, S1.5, W1.5	Semi mature Cherry located in the lawn of a domestic garden, near two Apple trees. Good structural and physiological condition. The crown is suppressed on the east side by adjacent trees. Unremarkable specimen of limited merit.	C1	No work required.	4		
		1.92	0.5		SM	Moderate						
Yes		11.6			40+ years	Grass						
T013	English Oak	340	7		Moderate	N5, E5, S5, W5	Semi mature English Oak in domestic lawn, adjacent a concrete retaining wall down to vegetable patches. The bending nature of the crown stems has resulted in a squat and broad crown. However this should not adversely affect the future development of the tree. A tree of high quality.	A1	No work required.	4		
		4.08	1.8		SM	High						
Yes		52.3			40+ years	Grass						
T014	Silver Birch	160	11		Low	N1.5, E3, S3, W3	Young to semi mature Silver Birch tree in a grass verge adjacent the gravel driveway. Tall and slender form with a narrow crown. An unremarkable specimen of limited merit.	C1	No work required.	4		
		1.92	3		SM	Low						
Yes		11.6			40+ years	Grass, Gravel						
T015	Norway Spruce	350	12.5		Moderate	N4, E4, S4, W4	Early mature Norway Spruce between the driveway and east boundary. Twin stemmed from 2 metres, however the stems are fused together at 3.5 metres. The lower crown extends to the edge of the driveway. Poorly suited to long term retention as this tree still has plenty of growth left in its lifespan. For now, an unremarkable specimen of limited merit.	C1	No work required.	4	Reduce crown and root prune as shown on drawing no. 10394-D-AIA.	0
		4.2	0.5		EM	Moderate						
Yes		55.4			20+ years	Grass						
T016	Field Maple	500	10.5		High	N5.5, E5.5, S5.5, W5.5	Early mature Field Maple adjacent the east boundary. Good structural and physiological condition. High amenity value as a screening tree.	A2	No work required.	4	Crown lift to 2.5m and root prune as shown on drawing no. 10394-D-AIA.	0
		6	1		EM	Moderate						
Yes		113.1			40+ years	Grass						

TreeNo	Species	DBH	Height		Visual	Crown Spread	Problems / Comments	BS Cat	Work Required (TS)	Priority (TS)	Work Required (AIA)	Priority (AIA)
		Min Dist	Crown Base	Lowest Branch	Age	Water Demand						
		RPA (m <sup>2</sup> )	Aspect	Aspect	SULE	Ground Cover						
<b>T017</b>	Field Maple	510	6		High	N3.5, E3.5, S3.5, W3.5	Mature lapsed coppice Field Maple located off-site beyond the south east corner of the rear garden. The specimen is located near an overhead cable pole, which the crown meets. It is likely this tree was coppiced to curtail any impact on the overhead lines. Good amenity value as part of a longer screening feature between the garden and public path.	B2	No work required.	4		
		6.12	0.5		M	Moderate						
<b>No</b>		117.7			20+ years	Bare earth						
<b>T018</b>	Sycamore	770	16		High	N1.5, E5.5, S5.5, W5.5	Mature Sycamore approximately 1 metre beyond the south boundary. The north face of the crown has been pruned back clear of the overhead cables on the north side of the stems. Appears to be a lapsed coppice, now comprising four large stems from 1 metre, each with bark included unions. The lower north crown is regrowing below the overhead lines. Although tall and broad, it is of poor structural condition and in an unfavourable situation with the overhead lines.	C2	No work required.	4		
		9.24	6.5		M	Moderate						
<b>Yes</b>		268.2			10+ years	Dense undergrowth						

## **Appendix C**

Schedule of Works - Irrespective of Development

# SCHEDULE OF WORK IRRESPECTIVE OF DEVELOPMENT

Gillyflower House, Polstead, Suffolk

Surveyed By: Alex Turner

Surveyed: 05/07/2023

Managed By: Alex Turner

Tree No.	Species	Work required	Priority
<b>G003</b>	Holly	As a minimum, fell and dead stems and prune out major deadwood. Consider coppicing each of these trees.	<b>3</b>
<b>H001</b>	Beech	Continue annual maintenance.	<b>3</b>
<b>H002</b>	Beech	Continue annual maintenance.	<b>3</b>
<b>H003</b>	Cherry Laurel, English Elm, Field Maple	Remove all Ivy.	<b>3</b>
<b>H005</b>	Field Maple, Lawson Cypress, Cherry Laurel, Sycamore	Continue annual maintenance.	<b>3</b>
<b>T007</b>	Ash	Fell to ground level.	<b>3</b>

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## **Appendix D**

Preliminary Schedule of Works to Allow Development

## SCHEDULE OF WORKS (AIA)

Gillyflower House, Polstead, Suffolk

Surveyed By: Alex Turner

Surveyed: 05/07/2023

Managed By: Alex Turner

Tree No.	Species	Work required	Priority
<b>A001</b>	Ash	Fell to ground level.	<b>0</b>
<b>G007</b>	Cherry Spp, Field Maple	Fell to ground level.	<b>0</b>
<b>T003</b>	Field Maple	Crown lift to 2.5m as shown on drawing no. 10394-D-AIA.	<b>0</b>
<b>T004</b>	Field Maple	Fell to ground level.	<b>0</b>
<b>T005</b>	Field Maple	Fell to ground level.	<b>0</b>
<b>T006</b>	Field Maple	Fell to ground level.	<b>0</b>
<b>T008</b>	Hornbeam	Fell to ground level.	<b>0</b>
<b>T011</b>	Apple Sp	Fell to ground level.	<b>0</b>
<b>T015</b>	Norway Spruce	Reduce crown and root prune as shown on drawing no. 10394-D-AIA.	<b>0</b>
<b>T016</b>	Field Maple	Crown lift to 2.5m and root prune as shown on drawing no. 10394-D-AIA.	<b>0</b>

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## **Appendix E**

Explanatory Notes

# Explanatory Notes



## Categories

Below is an explanation of the categories used in the attached Tree Survey.

**No** Identifies the tree on the drawing.

**Species** Common names are given to aid understanding for the wider audience.

**BS 5837 Main Category** Using this assessment (BS 5837:2012, Table 1), trees can be divided into one of the following simplified categories, and are differentiated by cross-hatching and by colour on the attached drawing:

**Category A** - Those of high quality with an estimated remaining life expectancy of at least 40 years;

**Category B** - Those of moderate quality with an estimated remaining life expectancy of at least 20 years;

**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;

**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.

**BS 5837 Sub Category** Table 1 of BS 5837:2012 also requires a sub category to be applied to the A, B, C, and U assessments. This allows for a further understanding of the determining classification as follows:

**Sub Category 1** - Mainly arboricultural qualities;

**Sub Category 2** - Mainly landscape qualities;

**Sub Category 3** - Mainly cultural values, including conservation .

Please note that a specimen or landscape feature may fulfil the requirements of more than one Sub Category.

**DBH (mm)** Diameter of main stem in millimetres at 1.5 metres from ground level. Where the tree is a multi-stem, the diameter is calculated in accordance with item 4.6.1 of BS 5837:2012.

**Age** Recorded as one of seven categories:

**Y** Young. Recently planted or establishing tree that could be transplanted without specialist equipment, i.e. less than 150 mm DBH.

**S/M** Semi-mature. An established tree, but one which has not reached its prospective ultimate height.

**E/M** Early-mature. A tree that is reaching its ultimate potential height, whose growth rate is slowing down but if healthy, will still increase in stem diameter and crown spread.

**M** Mature. A mature specimen with limited potential for any significant increase in size, even if healthy.

**O/M** Over-mature. A senescent or moribund specimen with a limited safe useful life expectancy. Possibly also containing sufficient structural defects with attendant safety and/or duty of care implications.



## D Dead.

<b>Height</b>	Recorded in metres, measured from the base of the tree.
<b>Crown Base</b>	Recorded in metres, the distance from ground and aspect of the lowest branch material.
<b>Lowest Branch</b>	Recorded in metres, the distance from ground and aspect of the emergence point of the lowest significant branch.
<b>Life Expectancy</b>	Relates to the prospective life expectancy of the tree and is given as 4 categories:  1 = 40 years+; 2 = 20 years+; 3 = 10 years+; 4 = less than 10 years.
<b>Crown Spread</b>	Indicates the radius of the crown from the base of the tree in each of the northern, eastern, southern and western aspects.
<b>Minimum Distance</b>	This is a distance equal to 12 times the diameter of the tree measured at 1.5 metres above ground level for single stemmed trees and 12 times the average diameter of the tree measured at 1.5 metres above ground level tree for multi stemmed specimens. (BS 5837:2012, section 4.6).
<b>RPA</b>	This is the Root Protection Area, measured in square metres and defined in BS5837:2012 as “a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree’s viability, and where the protection of the roots and soil structure is treated as a priority”. The RPA is shown on the drawing.. Ideally this is an area around the tree that must be kept clear of construction, level changes of construction operations. Some methods of construction can be carried out within the RPA of a retained tree but only if approved by the Local Planning Authority’s tree officer.
<b>Water Demand</b>	This gives the water demand of the species of tree when mature, as given in the NHBC Standards Chapter 4.2 “Building Near Trees”.
<b>Visual Amenity</b>	Concerns the planning and landscape contribution to the development site made by the tree, hedge or tree group, in terms of its amenity value and prominence on the skyline along with functional criteria such as the screening value, shelter provision and wildlife significance. The usual definitions are as follows:  Low                    An inconsequential landscape feature.  Moderate            Of some note within the immediate vicinity, but not significant in the wider context.  High                    Item of high visual importance.
<b>Problems/ Comments</b>	May include general comments about growth characteristic, how it is affected by other trees and any previous surgery work; also, specific problems such as deadwood, pests, diseases, broken limbs, etc.
<b>Work Required (TS)</b>	Identifies the necessary tree work to mitigate anticipated problems and deal with existing problems identified in the “Problems/comments” category.



**Work Required (AIA)**

Identifies the tree work specifically necessary to allow a proposed development to proceed.

**Priority**

This gives a priority rating to each tree allowing the client to prioritise necessary tree works identified within the Tree Survey.

- 1** Urgent – works required immediately;
- 2** Works required within 6 months;
- 3** Works required within 1 year;
- 4** Re-inspect in 12 months,
- 0** Remedial works as part of implementation of planning consent.



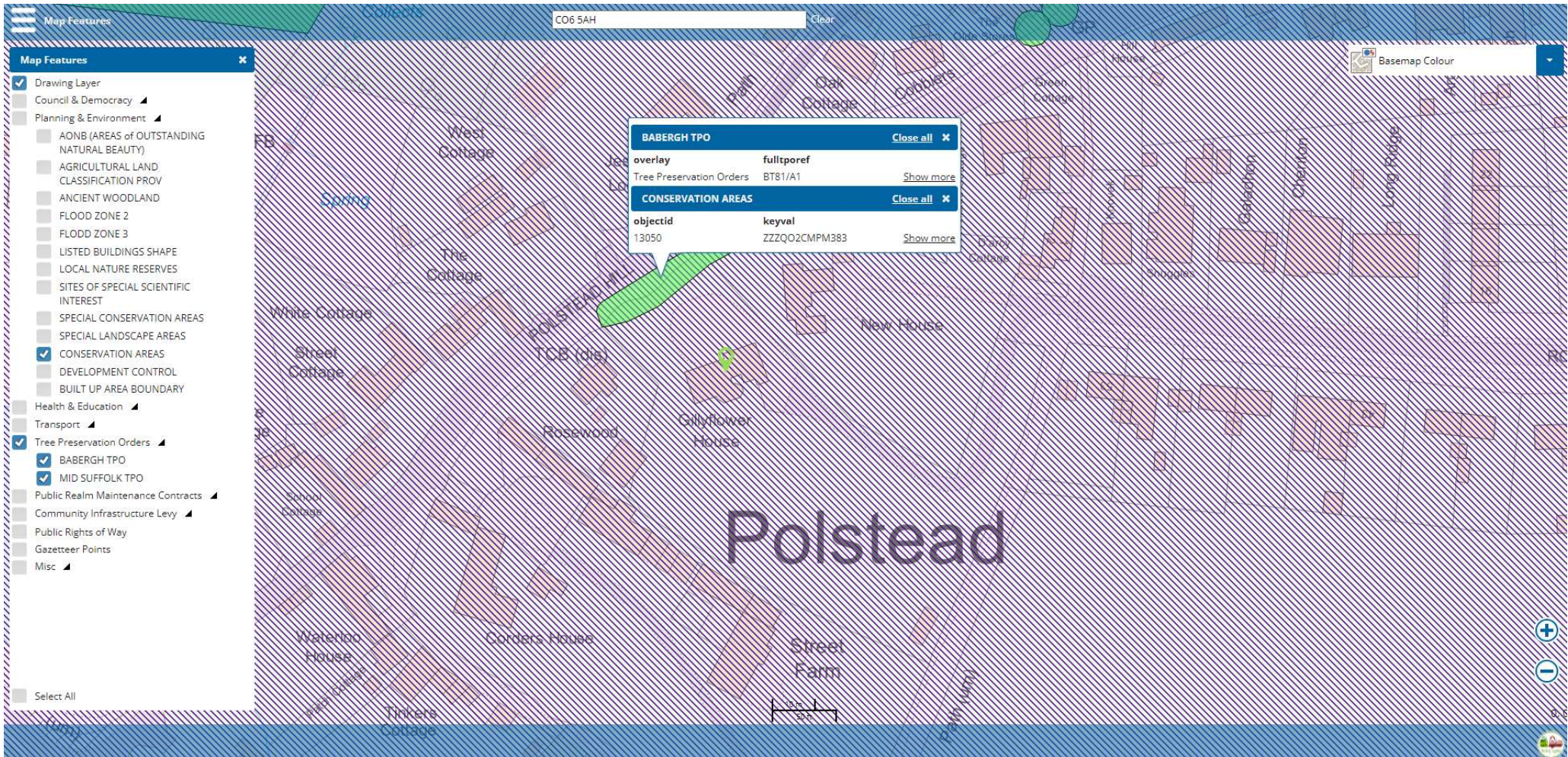
## BS 5837:2012 Terms and Definitions

<b>Access Facilitation Pruning</b>	One-off tree pruning operation, the nature and effects of which are without significant adverse impact on tree physiology or amenity value, which is directly necessary to provide access for operations on site.
<b>Arboricultural Method Statement</b>	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.
<b>Arboriculturist</b>	Person who has, through relevant education, training and experience, gained expertise in the field of trees in relation to construction.
<b>Competent Person</b>	Person who has training and experience relevant to the matter being addressed and an understanding of the requirements of the particular task being approached. <i>NOTE - a competent person is expected to be able to advise on the best means by which the recommendations of this British Standard may be implemented.</i>
<b>Construction</b>	Site-based operations with the potential to affect existing trees.
<b>Construction Exclusion Zone</b>	Area based on the root protection area from which access is prohibited for the duration of a project.
<b>Root Protection Area (RPA)</b>	Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.
<b>Service</b>	Any above or below ground structure or apparatus required for utility provision. <b>NOTE</b> - examples include drainage, gas supplies, ground source heat pumps, CCTV and satellite communications.
<b>Stem</b>	Principal above ground structural component(s) of a tree that supports its branches.
<b>Structure</b>	Manufactured object, such as a building, carriageway, path, wall, service run, and built or excavated earthwork.
<b>Tree Protection Plan</b>	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.
<b>Veteran Tree</b>	Tree that, by recognized criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned. <b>NOTE</b> - these characteristics might typically include a large girth, signs of crown retrenchment and hollowing of the stem.



## **Appendix F**

Tree Preservation Order Enquiry/Response

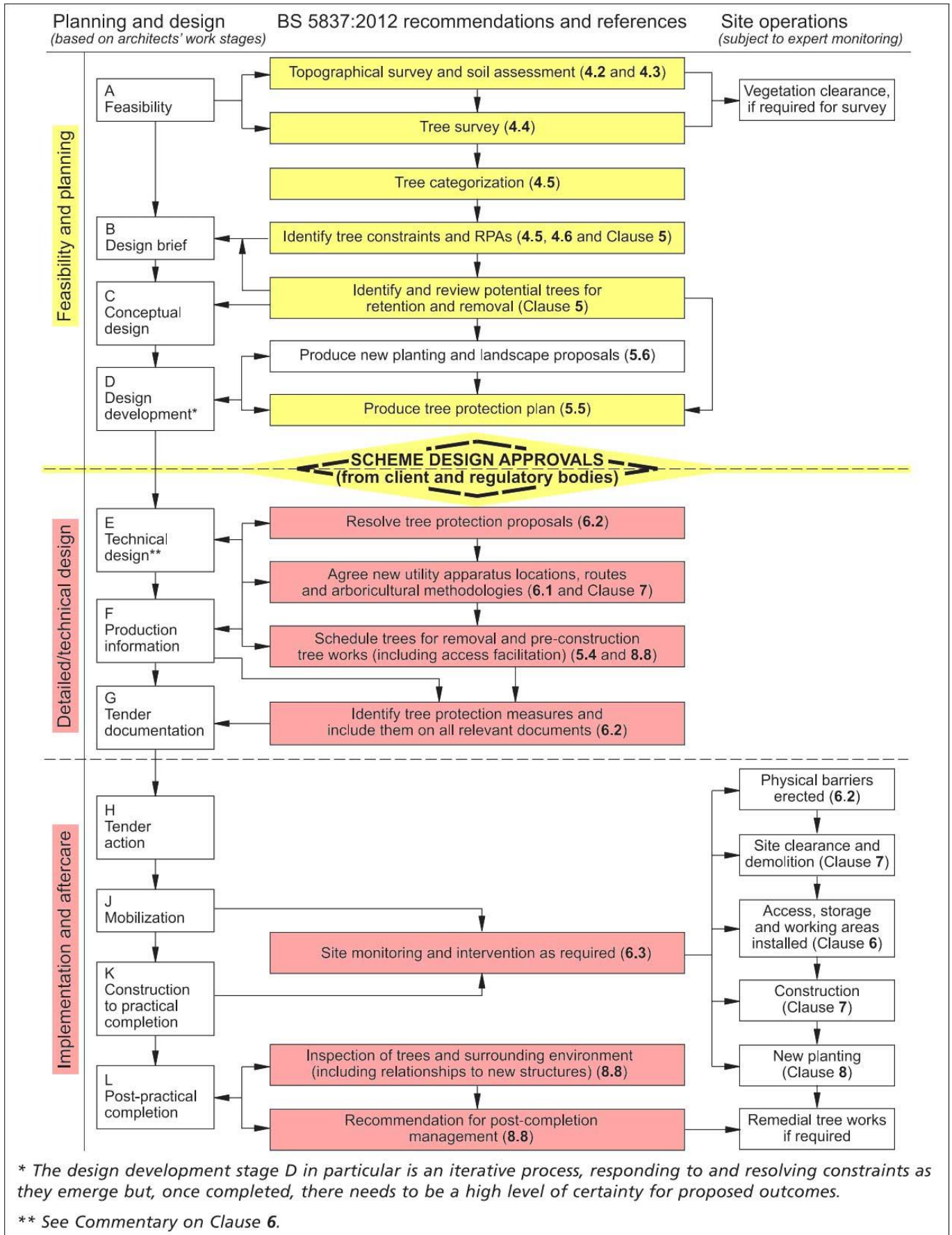


## **Appendix G**

Advisory Information & Sample Specifications



# 1. BS 5837:2012 Figure 1 - Flow Chart – Design and Construction & Tree Care

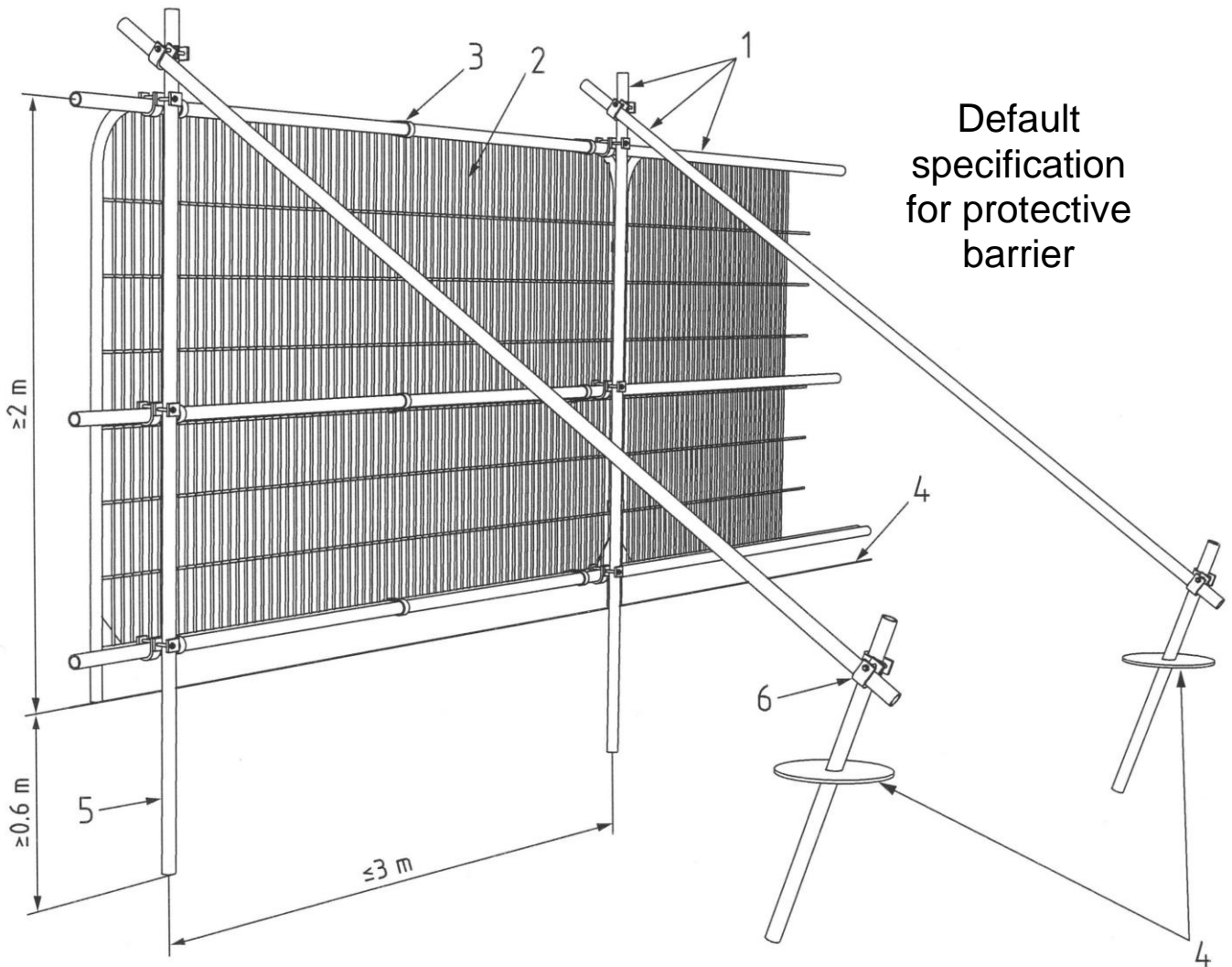


2.

**European Protected Species and woodland operations. (V4)**  
Complete all sections of the Checklist

Checklist		Details												
<b>1</b>	<p>Are you within, or close to, the known mapped range of any of the protected species OTHER THAN BATS which are potentially everywhere? Tick any that apply. See distribution maps in the Good Practice Guidance for each species -</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Dormice</li> <li><input type="checkbox"/> Otters</li> <li><input type="checkbox"/> Great crested newts</li> <li><input type="checkbox"/> Sand lizards</li> <li><input type="checkbox"/> Smooth snakes</li> </ul>	<p>Name of Wood:</p> <hr/> <p>Grid Reference:</p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table> <p>Area: (ha)</p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table> <p>Date of Assessment:</p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"> <tr> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> <td style="width: 25%;"></td> </tr> </table> <p>Name of Assessor:</p> <hr/>												
<b>2</b>	<p>Does your wood contain any of the following habitats? Tick any that apply.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Old trees with holes and crevices which might be used bats</li> <li><input type="checkbox"/> Species rich scrub/coppice, early growth stage plantations and forest interfaces</li> <li><input type="checkbox"/> Rivers on which otters might be found</li> <li><input type="checkbox"/> Ponds which might be occupied by great crested newts</li> <li><input type="checkbox"/> Open areas on heathy soils</li> </ul>	<p>YES</p> <p>NO</p>												
<b>3</b>	<p>Have any of the protected species been recorded in this wood or on adjoining sites? Tick any that apply. Indicate which sources of information you have checked:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> National Biodiversity Network (<a href="http://www.nbn.org.uk">www.nbn.org.uk</a>)</li> <li><input type="checkbox"/> Local Biological Records Centre</li> <li><input type="checkbox"/> Local Wildlife Trust</li> <li><input type="checkbox"/> Other</li> </ul> <p>Specify Other:</p>	<p>YES</p> <p>NO</p>												
<b>4</b>	<p>Have your inspections or any expert surveys found any of the following signs or evidence? Tick any that apply.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Signs (e.g. otter spraint, nuts gnawed by dormice, leaves folded by newts)</li> <li><input type="checkbox"/> Sightings (or echo-location)</li> <li><input type="checkbox"/> Potential breeding or roosting sites (e.g. veteran trees, old trees with crevices, riverside hollow trees, ponds, timber stacks, large fallen deadwood)</li> <li><input type="checkbox"/> Confirmed breeding or roosting sites (i.e. evidence of sites actually being used)</li> </ul> <p>Details:</p>	<p>YES</p> <p>NO</p>												
<b>CHECK POINT</b>	<p>If you have answered NO to ALL of the above then only bats need to be considered in your operations.</p> <p>If you have answered YES to any of the above then the species concerned must be considered as well as bats.</p>													
<b>5</b>	<p>Do the operations comply with Good Practice for bats and any other species found (or likely to be found in your wood) or can the operations be modified to do so? <i>Details: Use reverse of form to expand as required.</i></p>	<p>YES</p> <p>NO</p>												
<b>6</b>	<p><u>Whether or not a licence is required...</u> Has the information been communicated to operators (including the location of breeding sites and sensitive areas)? Tick any that apply.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Included in documentation (e.g. contract, letter of instruction, site assessment or other management plan)</li> <li><input type="checkbox"/> Shown to operators and/or their supervisor</li> <li><input type="checkbox"/> Marked with paint or hazard tape</li> <li><input type="checkbox"/> Shown on the site plan</li> </ul> <p>Other means:</p>	<p>YES</p> <p>NO</p>												
<b>7</b>	<p>Have arrangements for supervision been made to ensure Good Practice guidance is complied with during the operations? <i>Details:</i></p>	<p>YES</p> <p>NO</p>												
		<b>Notes</b>												
		<p>A licence is not required but continue to sections 6 and 7 below</p> <p>You will need to obtain a licence BEFORE carrying out the work (see EPS Licence Application Forms and Notes)</p>												
		<p>You may commit an offence if you do not tell your operators about the protected species in your wood.</p>												
		<p>You may commit an offence if you do not take steps to ensure that your operators comply with the Good Practice guidance.</p>												

3. BS 5837:2012 Figure 2: Default specification for protective barrier

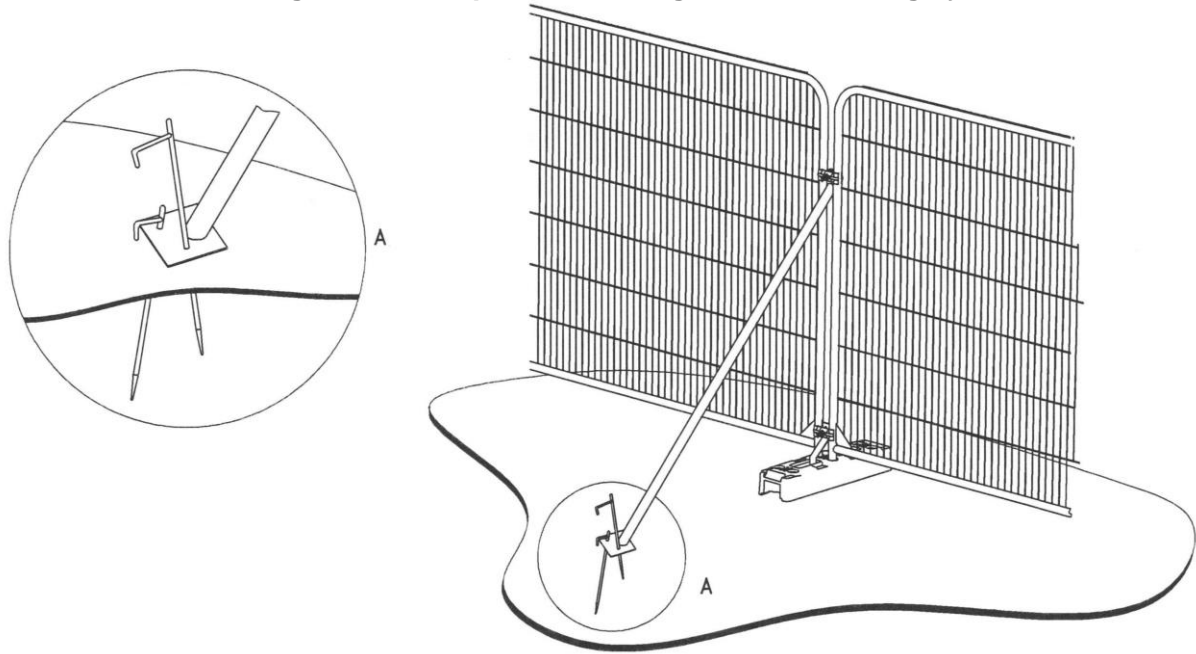


Default  
specification  
for protective  
barrier

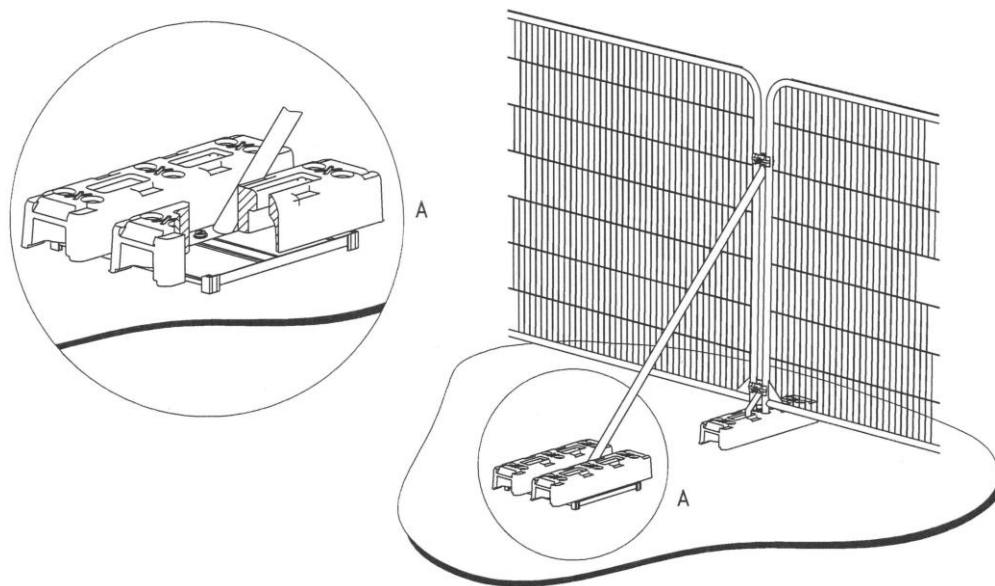
Key

- 1 Standard scaffold pole
- 2 Heavy gauge 2m tall galvanised 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 0.6m)
- 6 Standard scaffold clamps

4. BS 5837:2012 Figure 3: Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

## **Appendix H**

Hayden's Drawing

- Arboricultural Impact Assessments ●
- Arboricultural Method Statements ●
- Tree Constraints Plans ●
- Arboricultural Feasibility Studies ●
- Shade Analysis ●
- Picus Tomography ●
- Arboricultural Consultancy for Local Planning Authority ●
- Quantified Tree Risk Assessment ●
- Health & Safety Audits for Tree Stocks ●
- Tree Stock Survey and Management ●
- Mortgage and Insurance Reports ●
- Subsidence Reports ●
- Woodland Management Plans ●
- Project Management ●
- Ecological Surveys ●



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