



**OBJECTIVE**  
TREE CONSULTANCY

**BS5837 TREE SURVEY REPORT &  
PRELIMINARY CONSTRAINTS ANALYSIS**

**Site Address: Moresk Cottage, Moresk Road, Truro,  
Cornwall, TR1 1EG**

**Client: Mr.S.Baker**

**Commissioning Agent: Evans Planning**

**Ref: Moresk.5837.3.24**

**Dated: 22<sup>nd</sup> March 2024**

Prepared by:

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# BS5837 TREE SURVEY REPORT

Site Name: Moresk Cottage

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## APPENDICES

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## 1.0 Client Instructions

- 1.1 The Client referred to in this report is Mr.S.Baker who is the owner of the survey area. The survey area has been identified within this report as “Moresk Cottage”. The Client has instructed that I undertake and provide the following arboricultural consultancy services:
- A tree survey carried out in accordance with BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.
  - Factual data, findings and interpretation of data / evidence from the tree survey (including photographic records)
  - Tree Constraints Plan (canopy spread, root protection areas, daylight shading)
  - Tree Protection Plan – showing the positions of removed / retained trees and protective fencing
  - Arboricultural Impact Assessment
  - Arboricultural Method Statement – Tree Protective Fencing
- 1.2 The quotation was provided to the commissioning agent by email on the 14<sup>th</sup> March 2024. The service offer and quotation was accepted by the commissioning agent on behalf of the client in an email exchange on the 14<sup>th</sup> March 2024.
- 1.3 Access to the property was confirmed prior to the survey being undertaken.
- 1.4 This report has been prepared in accordance with the Clients instructions by:-



Oliver Bennett Dip Arb (RFS) M Arbor A  
Arboricultural Consultant  
Objective tree Consultancy



## **2.0 Introduction**

### **2.1 Project brief & BS5837 survey background**

- 2.1.1 Provisional project details have been provided to Objective Tree Consultancy in advance of the BS5837 tree survey being undertaken to define the survey areas and inform the AIA.
- 2.1.2 Based on the information provided, it is my understanding that the project aims are the construction of an extension to the dwelling extending south-west into the garden.
- 2.1.3 The purpose of the BS5837 tree survey is to identify and record the quantity, quality and contribution of trees within the project area to assist with the design process.
- 2.1.4 This report will assist the client with the submission of a planning application to Cornwall Council, who are the Local Planning Authority.

### **2.2 Site Description**

- 2.2.1 The property is an existing, detached residential dwelling located to the north-east of Moresk Road.
- 2.2.2 The property incorporates private parking / turning on level ground to the south-west of the property, accessed from the highway on Tresedders Gardens. A pedestrian access is also provided from a private driveway on the north-west boundary.
- 2.2.3 The property incorporates private amenity space which is a designed formal landscape including established trees and shrub planting with hard landscaped features e.g. paths, ornamental walls.
- 2.2.4 The garden area is enclosed level ground which includes minor level changes formed by low ornamental walls and steps for pedestrian access.

### 3.0 Desktop Assessment - Findings

#### 3.1 Location

- 3.1.1 The survey area is located. Site Grid Reference: SW825452. Please refer to Map 1 below for survey area boundaries and aerial imagery of the survey area.



Map 1. Courtesy of Google Maps

#### 3.2 Soils

- 3.2.1 The underlying geology has been evaluated using the British Geological Survey “Geology of Britain viewer (Classic)” public access mapping system, available via the following link:

<https://geologyviewer.bgs.ac.uk/>

- 3.2.2 The geology is described as:

*“Bedrock geology: Porthtowan Formation - Mudstone and sandstone. Sedimentary bedrock formed between 393.3 and 372.2 million years ago during the Devonian period”.*

*“Superficial deposits: Alluvium - Clay, silt, sand and gravel. Sedimentary superficial deposit formed between 11.8 thousand years ago and the present during the Quaternary period”.*

- 3.2.3 The soils have been evaluated using the Cranfield Soil and Agrifood Institute ‘Soilscapes’ interactive mapping system available via the following link:

<http://www.landis.org.uk/soilscapes/>



Ref: Moresk.5837.3.24

3.2.4 The soils are described as:

*“Soilscape 6: Freely draining slightly acid loamy soils. Texture: Loamy. Drainage: Freely draining”.*

3.2.5 This analysis is provisional in nature and relies on third-party data. Further detailed site investigation and soil analysis may be required to assist with detailed designs or structural engineering processes.

### 3.3 Access

3.3.1 The site is currently accessed from the public highway on both Moresk Road and Tresedders Gardens which are public highway suitable for construction vehicles.

### 3.4 Planning Constraints

3.4.1 Based on a check with the Cornwall Council “Interactive Map” on the 22<sup>nd</sup> March 2024, the survey area is not within a Tree Preservation Order. Link below:

<https://map.cornwall.gov.uk/website/ccmap/?zoomlevel=10&xcoord=182590&ycoord=45303&wsName=ccmap&layerName=Tree%20preservation%20order%20areas:Tree%20preservation%20order%20points>

3.4.2 Based on a check with the Cornwall Council Interactive Map, the survey area is not within a Conservation Area.



## **4.0 Survey Method & Report Outcomes**

### **4.1 Surveyor Access**

- 4.1.1 Access was agreed following consultation with the Client. I visited the property on the 19<sup>th</sup> March 2024 and carried out the required tree survey during an unaccompanied assessment of the potential development area.
- 4.1.2 Where access or assessment has been restricted due to the site constraints, this will be set out within the survey data.

### **4.2 Tree Survey Methodology**

- 4.2.1 The tree survey was undertaken as a ground level, walkover visual assessment of the project area as defined by the site boundaries – see Section 2.1 above. No tissue samples or invasive site investigations were undertaken.
- 4.2.2 Tree positions have been obtained with the use of a hand-held Trimble Juno T41 GPS datalogger. A topographic survey of the property was provided and used to plot trees within the survey area.
- 4.2.3 The tree survey has been undertaken in accordance with Section 4.4 of BS5837.
- 4.2.4 Trees within the survey have been categorised in accordance with Section 5.5 of BS5837 – see Appendix 2 - BS5837 Table 1 cascade chart.
- 4.2.5 Individual trees have been identified with a unique reference number on the site plans.

### **4.3 Canopy Data**

- 4.3.1 Canopy spread for individual trees has been measured on the four cardinal compass points where required.

### **4.4 Root Protection Areas**

- 4.4.1 Root protection areas will be identified for modification where the ground conditions preclude root growth as stated within the survey schedule.

### **4.5 Tree Height**

- 4.5.1 Individual trees have been accurately measured with a laser rangefinder where a direct line of sight of the tree is available. Estimated dimensions are provided where required.

### **4.6 Reporting**

- 4.6.1 Tree Constraints Plans have been prepared based on the tree survey data set out in Section 5 of this report.



Ref: Moresk.5837.3.24

- 4.6.2 A Tree Protection Plan has been prepared based on the project proposals. This relates to Appendix 3 of his report and the arboricultural method statement for tree protective fencing.
- 4.6.3 All plans provided in support of this report are separate 'pdf' copies which are locked to prevent editing. Plans must be reproduced at the stated scale in colour to be correctly interpreted.
- 4.6.4 Following the Arboricultural Impact Assessment should any arboricultural method statements (other than Tree Protection) be required they will be produced as a separate documents outside of this report.
- 4.6.5 This report contains technical terms which may be unfamiliar to the reader. I have used plain English and simple terms of reference and explanation to assist the reader. My aim is to ensure you have a clear idea of what I am saying and why.
- 4.6.6 An on-line glossary of technical terms commonly used within my reports is available by clicking the link below:  
  

<http://objectivetreconsultancy.co.uk/information-resource>
- 4.6.7 Objective Tree Consultancy has an Environmental Policy which seeks to reduce unnecessary printing in order to minimise the use of resources. Where possible, links to on-line sources of information will be provided in accordance with that policy.



**5.0 BS5837 Tree Survey**

Site name: Moresk Cottage														
Survey Date: 19.3.24							Weather: Dry, overcast. Still. Good visibility.							
Surveyor: Oliver Bennett, Arboricultural Consultant														
Tree ID	Tree species	Age	Height (M)	Lowest significant branch height / Orientation	No of stems	Stem D@1.5m (mm)	Crown Spread				Condition / Comments	Category / Sub-Category		Life Expectancy Years
							N	E	S	W				
T1	Golden Yew (Taxus baccata 'Aurea')	Y	3.5		10	20	0.5	0.5	0.5	0.5	Upright, columnar form. In 600mm high planted bed with rooting constraints by patio internal to garden.. Good structural and physiological condition.	C	1	20 to 40 yrs
T2	Ornamental cypress	Y	3.4		1	90	1.5	1.5	1.2	1.3	Fair structural condition. Laterally suppressed by planted bed. Good physiological condition.	C	1	10 to 20 yrs
T3	Acer palmatum	SM	4.2		6	70	0.9	1.7	2.7	1.7	Poor structural condition with stems topped at 1.5 & 2m gl+. Hedge trimmed on N side. Good physiological condition. Remove.	C	1	10 to 20 yrs



T4	Ornamental cypress	Y	6.2		3	70, 100, 100	0.8	1.2	1.2	0.8	Fair structural condition with climbing plants affecting crown form. Columnar form. Good physiological condition. Modify RPA due to rooting constraints.	C	1	10 to 20 yrs
T5	Maple (Acer palmatum)	Y	2.1		3	70	1.5	0.7	1.2	1.3	Small form Good physiological condition	C	1	10 to 20 yrs
T6	Maple (Acer palmatum)	Y	1.7		2	70, 70	0.8	1.1	1.2	1	Small form Good physiological condition	C	1	10 to 20 yrs
T7	Maple (Acer palmatum)	Y	1.8		1	70	1.6	1.3	0.9	1.1	Small form Good physiological condition	C	1	10 to 20 yrs
T8	Larch (Larix sp)	SM	11.2		1	340	3	2.7	2.6	2.3	Good structural and physiological condition. Canopy height 2m gl+.	B	1,2	20 to 40 yrs
T9	Bull Bay (Magnolia grandiflora)	SM	8.8		1	320	4.4	4.8	4.4	2.7	Good structural and physiological condition. Canopy height 3m gl+ o SW side.	B	1,2	20 to 40 yrs
T10	Ornamental cypress (Chamaecyparis sp)	SM	6.4		9	110	2.3	2.8	2.6	1.5	Poor physiological condition with sparse foliage and areas of dieback. Fair structural condition. Remove (management)	C	1	10 to 20 yrs
T11	Apple (Malus sp)	SM	7.2		1	160	2.6	3.2	3.6	3.2	Poor structural condition with stems topped at 4m. Good physiological condition. Canopy height 3m gl+ over parking area.	C	1	10 to 20 yrs





## 6.0 Photos



*Fig 1. T1 on boundary*



*Fig 2. T2 suppressed by shrubs*



*Fig 3. T3 to be removed – T4 rear of image*



*Fig 4. T4 rooting environment*





*Fig 5. Lower garden containing T5 – T11*



## **7.0 Findings**

### **7.1 Observations**

- 7.1.1 The structure of the existing garden in the project area includes only limited ornamental species of conifers and shrubs. These are laid out on the site boundaries.
- 7.1.2 The project area consists of level ground which has been subject to soft and hard landscaping works.
- 7.1.3 The main garden associated with the house is at a marginally lower level and bar maintaining the pedestrian access to the dwelling, is physically separated from the project area.
- 7.1.4 The existing parking area provides a viable space for storage of materials and equipment during any potential construction phase.
- 7.1.5 Existing paths and gated areas provide a means of access for pedestrians and small or lightweight tracked machinery.

### **7.2 Trees to be removed for development**

- 7.2.1 No trees are required for removal to facilitate development.

### **7.3 Amenity & Contribution**

- 7.3.1 The planted trees within the project area do not make a significant contribution to amenity despite being visible from the highway. None of the trees are high or moderate quality in the project area, based on their size and condition.
- 7.3.2 The future contribution of the trees is limited due to ornamental species and cultivars planted in the garden.



## 8.0 Arboricultural Impact Assessment

\*Note: this assessment has been undertaken using detailed designs assessed against the Tree Constraints Plans

**Table 1. Plans provided to Objective Tree Consultancy**

Drawing Title	Date	Drawing No	Revision	Format
Proposed Ground & First Floor Plans	Dec 23	Sheet 5	N/A	PDF

**Table 2. Arboricultural Impact Assessment & Mitigation**

Proposed Activity	Impact Type	Mitigation
Daylight shading	Minor shading impacts from T4	No mitigation required
Future pressure to fell or prune retained trees	No impacts due to columnar form of conifers and ornamental species	No mitigation required
Removal of Trees (required for proposed development)	No impacts identified	No mitigation required
Demolition / Construction Access	No impacts identified	No mitigation required
Contractor Parking	No impacts identified	Contractor parking to be defined within curtilage of property within existing parking turning areas
Underground services	No impacts identified	No mitigation required Connect to existing service runs where practicable



Tree Protection	Low risk to retained trees from project related activity due to ground level changes to lower garden Boundary trees T1 – T4 indicated for retention Damage to retained trees if tree protection not installed prior to commencement.	Tree protective fence installed prior to works commencing

## 9.0 Recommendations

### 9.1 Trees to be removed

- 9.1.1 T3 is recommended for removal as a management action unrelated to the development.

### 9.2 Trees requiring management works

- 9.2.1 No tree management works are required as part of the project aims.

### 9.3 Trees to be retained

- 9.3.1 T1, T2, T4 – T11 are recommended for retention.

### 9.4 Temporary Tree Protection

- 9.4.1 Temporary tree protection has been specified within the Arboricultural Method Statement in Appendix 3 of this report. This specification tree protective fencing (Fig 2 BS5837) relates only to trees T2 & T4 and the fencing positions indicated on the Tree Protection Plan map filename: TPPV1. Any subsequent revisions to this plan will be identified subject to advice from the project arboriculturist.
- 9.4.2 Tree protection for trees T5 – T11 will be provided using barrier mesh fixed to steel road pins on the south-east side of the existing hard surfaced plan as shown on TPPV1. This specification is commensurate to the scale of the project and the likely risk associated with construction activity.
- 9.4.2 Trees which are retained must be enclosed within tree protective fencing to form a construction exclusion zone. Within the construction exclusion zone, no development or activity associated with the development is permitted unless it is informed and supported by an arboricultural method statement.





## **10 Conclusions**

- 10.1 The project aims and objectives include the construction of an extension within an existing garden area.
- 10.2 The size, age and form of the existing trees does not constrain the developable area or conflict with the proposed design and layout of the extension.
- 10.3 The retention of existing hard landscaped features (steps & ornamental walls) ensures that the lower garden can be fenced off and retained without any damage. The largest and better quality trees are located within this part of the property.
- 10.4 Tree protection will be required to separate T1, T2 & T4 – T11 from the operational areas required during any construction period. The risk of harm to retained trees T5 – T11 is low and tree protective reflects this by providing a lower specification to segregate pedestrian access from the garden.
- 10.5 Overall, the proposed development does not conflict with existing trees within the survey area and there will be no future pressure to fell or prune retained trees.
- 10.6 In my professional opinion, the arboricultural constraints are negligible, and the project objectives are broadly acceptable.

**Report Ends**



## **Appendix 1**

### **Report Limitations**

*The content, conclusions and recommendations in this report are valid for a period of one year from the date of survey. Trees are both living organisms and dynamic structures subject to change; the validity period may be reduced should changes in condition occur to the subject(s) of the report or surrounding area e.g. fire, flood, chemical spill, mechanical damage etc.*

*All recommendations are given in the context of the site's current usage and condition; any change in use or activity therein would dictate a re-survey and updated assessment which may invalidate this report.*

*Should the client knowingly withhold information which is essential to the tree survey process or has a material bearing on the outcomes of any recommendations therein, this may affect the validity of the report.*

*This report does not constitute a 'safety' inspection and has not considered issues of tree risk or hazard management*

*Access to third-party land was not agreed prior to the tree survey being undertaken. Any trees identified on third-party property have been assessed within the limitations of publicly accessible vantage points resulting in estimated positions within any site plans.*

*Estimated dimensions and reference to tree attributes, have been provided to the best of the surveyors' abilities where such features are not accessible.*

*This report remains the intellectual property of Objective Tree Consultancy unless otherwise stated.*

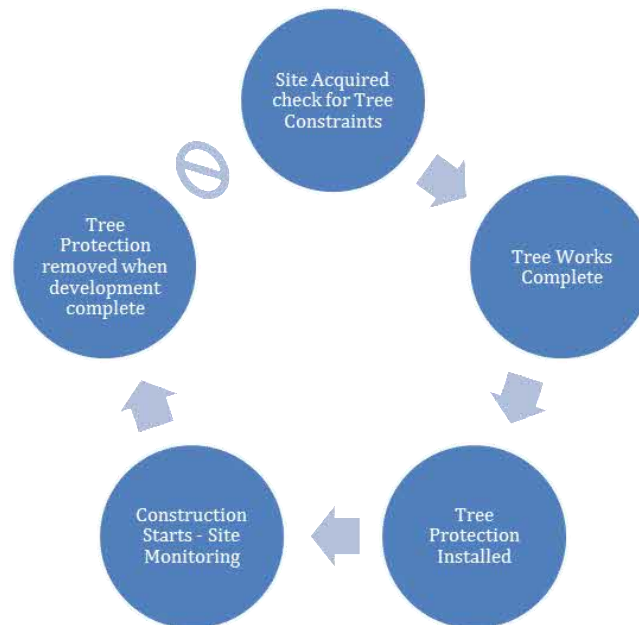


**Appendix 2**  
**BS5837 Table 1.**

TREES UNSUITABLE FOR RETENTION				
Category and Definition	Criteria			Identification on Plan
<p><b>Category U</b> Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.</p>	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other Category U trees (eg, where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.</li> <li>Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.</li> </ul> <p><i>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>			
TREES TO BE CONSIDERED FOR RETENTION				
Category and Definition	Criteria			Identification on Plan
	1. Mainly arboricultural qualities	2. Mainly landscape qualities	3. Mainly cultural values, including conservation	
<p><b>Category A</b> Trees of high quality with an estimated remaining life expectancy of at least 40 years.</p>	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (eg, the dominant and/or principal trees within an avenue.	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e, veteran trees or wood-pasture).	
<p><b>Category B</b> Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.</p>	Trees that might be included in category A, but are downgraded because of impaired condition (eg, presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	
<p><b>Category C</b> Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.</p>	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	

### Appendix 3

#### Arboricultural Method Statement Tree Protective Fencing – BS5837 Fig 2



*The site manager shall be aware of the Tree Protection Plan and its requirements before the site becomes operational. This is critical to work planning and site management.*

*Tree Work Contractors & other contractors, subcontractors and any other persons entering and operating within the site shall be made aware of any tree constraint areas and the limitations they place on the workspace. Site inductions shall include a component on any tree protection issues.*

*All trees that are being retained on site must be protected by barriers (see Fig 2 below) and/or ground protection prior to:*

*invasive ground site investigations, boreholes, trial pits etc  
materials or machinery being brought onto the site  
soil stripping, service installation, infrastructure works, demolition or construction activity*

*Should the Tree Protection Plan refer to the protection of hedges, structural planting or future soft landscape areas, these must also be protected before the site becomes operational.*

*All tree protective fencing must be fit for purpose and maintained in good order for the duration of the development, defining and protecting construction exclusion zones.*

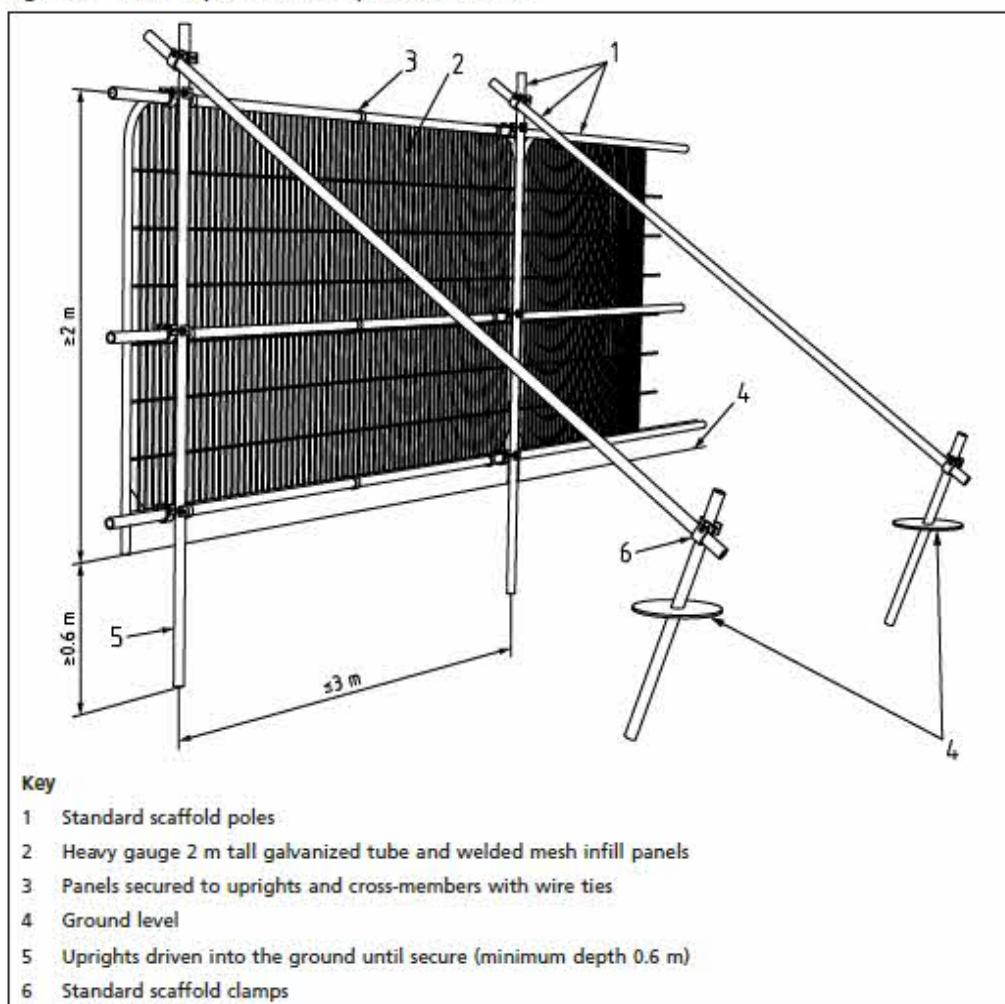
*The ground within the protected area shall not be used for any activity in relation to the development including:*

Excavations  
Raised or lowered levels  
the provision of services  
storage of any materials, tools or vehicles  
storage of soils, aggregates waste or contaminants  
vehicular traffic or parking / turning  
Fires

## Site Management

Retained trees must be separated from the operational area of the site by protective barriers. The default specification for tree protective fencing is set out below:

Figure 2 Default specification for protective barrier



Tree protective fencing shall be identified as a constraint to site operations by suitably worded signage. An example sign can be found on my website :

<http://objectivetreconsultancy.co.uk/information-resource>

## Appendix 4

### Terms of Reference

#### Key to Tree Survey Schedule (Abbreviations)

##### Age

<b>Age Class</b>	
Newly Planted <i>(within 5 years of planting)</i>	NP
Young <i>(first third of life expectancy)</i>	Y
Semi-mature <i>(second third of life expectancy)</i>	SM
Early-mature <i>(life stage between semi-maturity and maturity – stem wood growth stage, reduced branch extension growth)</i>	EM
Mature <i>(within final third of life useful life-expectancy retaining vitality)</i>	M
Over-mature <i>(symptoms of declining vitality and impaired condition)</i>	OM
Veteran <i>(containing features of biodiversity interest related to age)</i>	V

##### Abbreviations

ADB – Ash Dieback

gl – ground level

gl+ - above ground level



### Compass Points

<i>N (North)</i>	<i>S (South)</i>
<i>NNE (north-north-east)</i>	<i>SSW (South-south-west)</i>
<i>NE (North-east)</i>	<i>SW (South-west)</i>
<i>ENE (East-north-east)</i>	<i>WSW (West-south-west)</i>
<i>E (East)</i>	<i>W (West)</i>
<i>ESE (East-south-east)</i>	<i>WNW (West-north-west)</i>
<i>SE (South-east)</i>	<i>NW (North-west)</i>
<i>SSE South-south-east</i>	<i>NNW</i>

### Tree Attributes

*Ivy – an evergreen plant which can provide many wildlife habitat benefits but may create unseasonal crown weight in trees during the winter months. This can affect trees, in particular smaller hedgerow trees, once established. Tree inspections (visual) can be impeded by this plant, and where an inspection cannot be carried out for this reason, severance will be recommended.*

*Bats – Potential Roost Features (Bat PRF) – features which may provide potential roosting features for bats (transient or in regular use). All species of bats are protected in law.*

### **Appendices End**