

# TREE SURVEY CONSTRAINTS ANALYSIS ARBORICULTURAL IMPACT ASSESSMENT

Grove Farm

East Hill

Blackwater

Truro

TR4 8EG

Reference: EV-3746-TS CA AIA

Site Visit Date: 02 December 2020

Report Date: 12 January 2020

**Evolve Tree Consultancy** 

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## 1 INSTRUCTION

- 1.1 Mr R Buckland, instructed Evolve Tree Consultancy to provide a:
  - 1. Tree Survey.
  - 2. Constraints analysis and Tree Constraints Plan.
  - 3. Arboricultural Impact Assessment and Tree Protection Plan.

## 2 INTRODUCTION

- 2.1 The site comprises the garden to the front of the existing dwelling. There are trees on the boundaries and two groups in within the site; these are the key arboricultural features.
- 2.2 We have been asked to survey the trees to assess their value, in planning terms, in relation to the proposed development of a new dwelling.
- 2.3 This report analyses the final design and describes the implications of the development on the trees.
- 2.4 This arboricultural impact assessment report provides the necessary information to satisfy the validation requirements of a planning application by the local planning authority (LPA).

## 3 METHODOLOGY

- I have undertaken both survey and report to accord with the recommendations in British Standard 5837:2012 Trees in relation to design, demolition & construction Recommendations (BS 5837). It is not a risk assessment, nor does it assess the risks related to subsidence, heave or other forms of disturbance associated with tree root growth or removal.
- 3.2 My survey was a visual one made from ground level. I did not have access to trees outside the boundary of the site. Any observations of these trees are confined to what is visible from within the property.
- 3.3 Tree Schedule Explanatory Notes & Methodology are listed in Appendix A.
- 3.4 Tree positions are indicated on the Tree Constraints Plan (TCP), which is based on the topographical survey provided.

## 4 SUPPORTING DOCUMENTATION

- 4.1 Relevant documents provided to me include:
  - Existing details prepared by James Morford, drawing number 2114-01, dated Oct 2020.
  - Proposed Indicative Details prepared by James Morford, drawing number 2114-02, dated Oct 2020.
- 4.2 This report should be read alongside Evolve drawing:
  - Tree Constraints Plan EV-3746-TCP.
  - Tree Protection Plan EV-3746-TPP.

## 5 STATUTORY PROTECTION & OTHER CONTROLS

- I have used information supplied by Cornwall County Council Interactive map. If any tree is identified for removal, confirmation should be sought from the local planning authority (LPA) in writing about the protected status.
- 5.2 **Tree Preservation Orders**: None of the trees on or adjacent to the site are currently protected by a Tree Preservation Order (TPO).
- 5.3 **Conservation Area**: The site is not within a Conservation Area.
- 5.4 **Felling Licences**: Parts of the site associated with the domestic property will not be subject to the provisions of the Forestry Act. Felling licenses are generally required for felling living trees unless they are fruit trees, or trees growing in a garden, orchard, churchyard or designated open space.
- 5.5 **Hedgerow Regulations**: The hedgerow regulations do not apply to the boundary of a domestic curtilage but will affect those hedgerows that border land used for keeping horses or agriculture. The Hedgerows Regulations 1997 make it an offence to remove most countryside hedges without first giving the local planning authority 42 days' notice.
- Planning Conditions/Covenants: I did not investigate whether any planning conditions or legal covenants relevant to the trees are in place.

## 6 PLANNING POLICY & DESIGNATIONS

- 6.1 National Planning Policy Framework (NPPF): This sets out national planning policy. Paragraph 175 states that:
  - Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons and a suitable compensation strategy.

- 6.2 Cornwall Local Plan: This sets out local planning policy. It includes the following relevant policies:
  - Policy 12: Design Development must ensure Cornwall's enduring distinctiveness and maintain and enhance its distinctive natural and historic character.
  - Policy 22: European Protected Sites mitigation of recreational impacts from development.
  - Policy 23: Natural environment. Development proposals will need to sustain local distinctiveness and character and protect and where possible enhance Cornwall's natural environment and assets according to their international, national, and local significance.
- 6.3 Cornwall Council Planning for Biodiversity Guide: The guide sits below the Local Plan and provides additional information to guide decisions relying on policies 22 and 23.
  - Paragraph 10.7.3 Buffering for hedges suggests that for residential developments that an absolute minimum buffer of 2-metre either side of the hedge is required. For industrial and solar farm developments a 5metre buffer is an absolute minimum. Where woodland is present a 10metre buffer is absolute minimum.

#### 7 THE SITE & THE TREES

7.1 **The Site:** Grove Farm is to the east of Blackwater and is accessed from the Blackwater road adjacent to Myrtle Cottage. The land is currently occupied aby many trees with agricultural land to the east and Grove Farm itself to the north. Further residential dwellings are to the south.

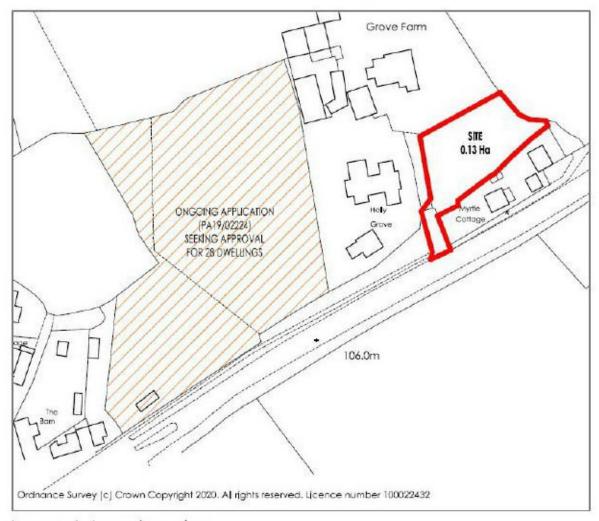


Image 1. Location plan.



Image 2. Survey area as seen on Google Map Data 2020.

- 7.2 The site slopes up to the
- 7.3 **The Trees:** It contains an orchard (G4) in the southern part with various apples and other fruits, a conifer hedge (G5) forming the boundary between the proposed plot and Myrtle Cottage and an area of close planted trees of various species, both broadleaves and conifers (G8), in the eastern part of the garden.
- 7.4 The trees are in reasonable condition though many are of indifferent form as would be expected of close grown trees. I have categorised the more dominant of the trees, for example the Scots pine T6, as B grade reflecting their moderate contribution to the visual amenity.

## 8 CONSTRAINTS ANALYSIS & DESIGN CONSIDERATIONS

- 8.1 The key constraints posed by the trees are shown on the TCP drawing. Both the above and below ground constraints have the potential to influence the design.
- 8.2 **Tree Quality Assessment**: The cascade chart, presented as part of Appendix B, is a construct of the BS5837 designed to help describe the characteristics and relative value of trees. It provides guidance enabling an estimate of which trees are important and which trees are not.
- 8.2.1 It does not dictate which trees ought to be retained or removed, merely the weight that should be given to them when balancing competing interests. Certain trees may be of such importance and sensitivity that they justify having a major influence on design. Others may be of little significance that could be removed without adverse impacts.
- 8.2.2 The key trees are identified in the survey schedule presented as Appendix B.

- The root protection area (RPA): This is an area (representing a volume of soil) considered necessary to maintain the trees viability. The area represented on the TCP is a minimum recommended by BS5837 and is capped at 707m<sup>2</sup>.
- 8.3.1 The shape of the RPA will vary in accordance with site conditions e.g. a road is likely to form a barrier to root growth. Whilst the notional RPA is circular the shape plotted on the TCP may be a polygon to reflect likely barriers to root growth.
- 8.3.2 Encroachment within the RPA of retained trees will require justification and be supported by a sound rationale from the project arboriculturist.
- Tree species: The species will influence a number of factors relevant to design including height (represented by the length of the shade arc), spread (indicated on the TCP), ultimate height and spread (which may be indicated where appropriate), deciduous/evergreen nature, crown density, seasonal nuisance etc.
- 8.4.1 The proximity of a tree to built houses and gardens can be a key factor affecting people's enjoyment of a property.
- Age: Mature and over-mature trees are generally more sensitive to change than young trees. Their inability to adapt to altered soil conditions within or near the RPA means that care is required when designing in these places.
- 8.6 **Shade Arc**: This is an average pattern of the shade as is passes through the day. It provides an indication of how trees may impede direct sunlight.
- 8.6.1 Dense shade can be addressed by the siting of dwellings and a reasonable proportion of the garden outside the shade arcs.
- 8.6.2 Siting buildings within the shade arc can adversely affect the availability of natural daylight to principal living rooms. The internal arrangement of buildings and fenestration design can make significant improvements to daylight availability.
- 8.7 **Services**: It is prudent to locate new service outside the RPA and crown (allowing for future growth) of retained trees. However, the impact of putting services close to trees will be determined by the sensitivity and/or quality of the trees.

## 9 THE PROPOSAL

9.1 The proposal for the site is to construct 1 no. two storey dwelling with associated vehicle access, services, and drainage.

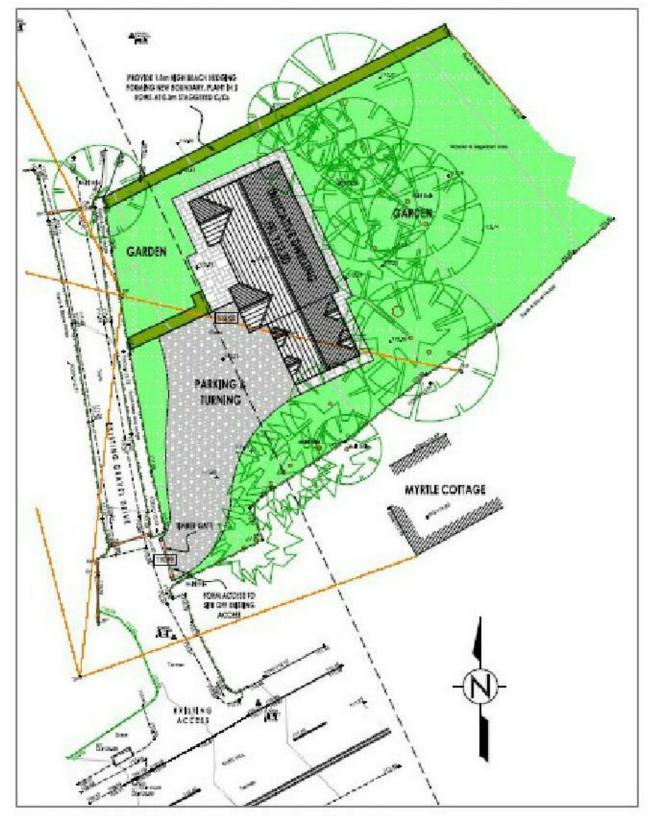


Image 3. Extract from Drawing no. 2114-02.

9.2 The new access will be off the existing drive at the bottom, southern part of the site.

## 10 POTENTIAL IMPACT OF DEVELOPMENT ON TREES

- 10.1 Arboricultural impacts are a predicted change in condition because of an activity related to the project. The importance of an impact is a result of the relationship between the magnitude of a change (positive or negative) and the quality or sensitivity of the feature being affected.
- 10.2 Impacts are generally described as either none (no arboricultural effects or inconvenience), low, moderate, or high (major arboricultural effects of inconvenience). Time frames are referred to as short (0—10 years), medium (10—20 years), long (20—40 years) and very long (40+ years).

- 10.3 My assessment focuses on the impacts relevant to planning merits and is guided by the British Standard BS5837 'Trees in relation to design, demolition, and construction recommendations'.
- 10.4 Typical considerations include:

Tree loss.
 Construction access.
 Shading.

Build practicability.
 Statutory Protection.
 Design conflicts.

Mitigation planting.
 Canopy protection.
 Necessary pruning.

Future conflicts.
 Proximity to
 Infrastructure.

structures.

Removal of
 Effect on amenity
 Use of land near trees.

## 11 IMPACT OF PROPOSAL ON TREES

- 11.1 It will be necessary to remove most of the trees to both construct the proposal and to make it a liveable space. Should trees be retained too close to a dwelling then the shade and interruption of natural daylight will be likely to lead to pressure to remove these trees. The relationship is not sustainable.
- 11.2 Tree Removal & Retention: Trees to be felled are listed in Table 1. It describes why they are to be removed and the effects of doing so. The impacts of removing the trees are

Tree No.	Tree Species	Action	Reason	Impact
G1	Leyland cypress	Fell in part as shown on TPP	For new access	Low, can be readily replaced.
T2	Ash	Fell	Under footprint of new access	Low, poor form & condition.
G3	Sycamore & ash	Remove in part as shown on TPP	Under footprint of new access	Low, not visible from outside dwelling.
G4	Orchard	Fell	Under footprint of building and infrastructure.	Low, smaller trees. Can be replaced in part.
Т6	Scots pine	Fell	Proximity to new build, RPA compromised.	Moderate. Replace tree in corner of garden further from dwelling.

Tree No.	Tree Species	Action	Reason	Impact
T7.	Lime	Fell	Proximity to new dwelling and potential for growth.	Low, small tree.
G8	Several tree of various species	Fell	Proximity to new dwelling and overbearing/light issues.	Moderate, replace with trees along boundary and in property adjacent to the north.

Table 1. Tree loss

- 11.3 Visual Amenity The impact on visual amenity will be noticeable internally but of little significance outside the site.
- 11.4 Sunlight/Daylight Availability (Shading)The TPP indicates the shade arcs for retained trees and demonstrates that the trees will have no effect on the enjoyment of the garden or dwelling.
- 11.5 Build Practicability. The root protection area (RPA) and canopy of the key trees can be protected during development by establishing a Construction Exclusion Zone (CEZ). The CEZ will be protected by way of a tree protection barrier (TPB) as indicated on the TPP.

#### 12 TREE PROTECTION PROPOSALS

- 12.1 Based on the information provided to date, this report and TPP provide defined tree protection proposals (related to this design) which can be implemented without further specification.
- 12.2 The TPP defines the position of tree protection fencing which will be erected prior to the commencement of development and thereafter retained until completion. Please refer to Appendices D E F G

## 13 CONCLUSIONS

- 13.1 The overall arboricultural impacts of the proposed development are moderate. However, there is some potential for managing the landscape and therefore the proposal does not conflict with either local or national planning policies.
- 13.2 I recommend that the tree protection measures indicated on the tree protection plan are implemented. It would be reasonable for the LPA to enforce compliance by way of a planning condition.

Tim Scott-Ellis BSc Hons (For), Dip Arb (RFS), F Arbor A, MICFor, MRICS Evolve Tree Consultancy

I am a Fellow of the Arboricultural Association, a Chartered Arboriculturist and a Chartered Surveyor. I hold an honours degree in Forestry and the Royal Forestry Society Professional Diploma in Arboriculture. I have been working as a full-time, professional arboriculturist since 1999.







The authority of this report ceases when any site conditions change or pruning or other works unspecified in the report are carried out to, or affecting, the subject tree(s). The statements made in this report do not consider the effects of extremes of climate, vandalism, or accident, whether physical, chemical or fire. Evolve Tree Consultancy cannot accept any liability about these factors, nowhere prescribed work is not carried out in a correct and professional manner in accordance with current good practice.

The recommendations within this report remain valid for the period stated for reinspection or twelve months from the date of survey.

The limit of Evolve Tree Consultancy's indemnity over any matter arising out of this report extends only to the instructing client; Evolve Tree Consultancy cannot be held liable for any third-party claim that arises following or out of this report. This report remains the intellectual property of Evolve Tree Consultancy.

#### APPENDIX A

## Tree Schedule Explanatory Notes

#### Sequential Tree, Group or Woodland Reference Number.

Name: Scientific name (Common name in brackets).

**Height:** Recorded in metres by inclinometer in each discrete area and estimated from the measured tree. (**lwr crn ht**) Lower crown height, the height of the canopy above the ground.

**Trunk diameter:** Tree stem diameter in millimetres at 1.5 metres above adjacent ground level rounded up to nearest 50 millimetres. For multi-stemmed trees, a cumulative diameter is calculated (in accordance with BS 5837:2012 Annex C). **Crown Spread:** Measured in metres & taken at four cardinal points (N E S W).

1<sup>st</sup> **Sig branch**: Existing height in metres above ground level (agl) of the first significant branch with direction of growth (if available).

Life	Y	Young	Recently planted or establishing tree.
stage	SM	Semi-mature	Age less than one-third life completed. Established tree but one that has not reached its potential ultimate height and has significant growth potential.
	One-third to two-thirds life completed. A tree reaching its ultimate potential height, whose growth rate is slowing down but will still increase in stem diameter and crown spread.		
	1999		Two thirds plus life completed. Specimen with limited potential for any significant increase in size but with a reasonable life expectancy.
	LM	Late-mature (Over-mature in the BS)	Two-thirds plus life completed and declining. A tree that has passed its optimum growth rate and may require specialist management. These trees may offer significant benefits in terms of nature conservation
	V	Veteran	A tree that 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.

**Category:** A grade given in accordance with BS 5837:2012 - Tree Categories (see copy of Table 1 from BS 5837:2012 below). **Comments:** General observations e.g. collapsing, the presence of any decay and physical defect and including further investigation of suspected defects that require more detailed assessment and potential for wildlife habitat.

**Life Expectancy**: Estimated remaining contribution in years in terms of amenity (<10, 10+, 20+, 40+).

Physiological condition	G	Good	Tree that appears to be in good condition and healthy without significant defects.
	F	Fair	Tree that appears to be structurally sound but due to minor defects is downgraded from good.
	P	Poor	Tree which shows signs of poor health, in decline and/or with significant defects.
	D	Dead	Tree which is moribund or has died.

**Recommendations**: Preliminary management recommendations based on the site as surveyed and for any likely pruning likely to be required should any development proceed.

**RPA-R (m) -** Root Protection Area (RPA) Radius - The radius of an indicative circle of the RPA.

**RPA** (m<sup>2</sup>) - RPA Area in metres squared.

## APPENDIX B Tree Schedule

				Br	anch	and the second	ead									
	Name		Stem		(r	n)		1 <sup>st</sup> sig			Life					RPA
Tree	(Common &	Ht	dia.					branch	Life		Ехр				RPA	Α
No.	Scientific)	(m)	(mm)	N	E	S	W	(m)	Stage	Comments	(yrs)	Cond	Advice	Cat	Rm	m <sup>2</sup>

Table 1 from BS 5837:2012

Trees in relation to design, demolition & construction – Recommendations. Cascade chart for tree quality assessment

Category and definition Trees unsuitable for retention (se	Criteria (including subcategories where appropriate)			Identification on plan				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul> <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 (e.g. 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>							
	NOTE Category U trees can have existing or potential cor 1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values conservation	, including				
Trees to be considered for retent	ion		outen du avant de av					
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	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 semiformal arboricultural features (e.g. 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.g. veteran trees or wood-pasture)	GREEN				
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. 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	BLUE				
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	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	GREY				

## APPENDIX C Legal Constraints

#### Trees outside the site/property

Landowners and managers have a duty of care not to damage trees on the neighbouring land. The common causes of damage (root damage, compaction, physical damage, and inexpert pruning) must be avoided through good planning and site management.

However, branches and roots from trees on adjacent properties that extend over boundaries can be pruned back to the boundary line without the permission of the owners. However, the branch material belongs to the tree owner and should be returned where appropriate.

#### Statutory wildlife obligations

The Wildlife and Countryside Act 1981 as amended by the Countryside and Rights of Way Act 2000 provides statutory protection to birds, bats and other species that inhabit trees. All wild birds are protected by law under the Wildlife & Countryside Act 1981, and it is an offence to disturb injure or kill a nesting bird intentionally or to take damage or destroy an occupied nest or egg. If nesting birds are discovered works on the trees should be deferred until the nests are abandoned. Care should be taken during any felling operation, or surgery works to trees to avoid damage or disturbance to birds during the nesting season.

#### **Tree Preservation Orders**

Advice can be found at: <a href="http://planningguidance.communities.gov.uk/blog/guidance/tree-preservation-orders/tree-preservation-orders-general/">http://planningguidance.communities.gov.uk/blog/guidance/tree-preservation-orders-general/</a>

#### **Conservation Areas**

Advice can be found at: <a href="http://planningguidance.communities.gov.uk/blog/guidance/tree-preservation-orders/protecting-trees-in-conservation-areas/">http://planningguidance.communities.gov.uk/blog/guidance/tree-preservation-orders/protecting-trees-in-conservation-areas/</a>

## Important: Exceptions for tree work relating to planning permission and permitted development from the Planning Practice Guidance 15 April 2015 paragraph 36-083-20150415.

Under the heading "Is there an exception for tree work relating to planning permission and permitted development?", of the PPG states:

"The authority's consent is not required for carrying out work on trees subject to an Order so far as such work is necessary to implement a full planning permission. For example, the Order is overridden if a tree has to be removed to make way for a new building for which planning permission has been granted.

Conditions or information attached to the permission may clarify what work is exempt.

However, the authority's consent is required for works on trees subject to an Order if:

- development under a planning permission has not been commenced within the relevant time limit (i.e. the permission has 'expired'):
- only outline planning permission has been granted; and
- it is not necessary to carry out works on protected trees in order to implement a full planning permission."

#### Felling licence

In any calendar quarter\*, you may fell up to 5 cubic metres on your property without a licence if no more than two cubic metres are sold. Contact your local Forestry Commission office if you are not certain whether these exemptions apply.

\*1 Jan to 31 March, 1 April to 30 June, 1 July to 30 September and 1 October 31 December

Exemptions: Certain types of felling do not need permission from the Forestry Commission. The Forestry Act 1967, as amended, and related regulations give these exceptions in full. The main categories are listed below:

Lopping and topping (which usually includes tree surgery, pruning and pollarding).

Felling included in an approved dedication plan.

Felling fruit trees, or trees growing in a garden, orchard, churchyard or designated public open space (e.g. under the Commons Act 1899).

Felling trees which, when measured at the height of 1.3 metres from the ground:

- have a diameter of 8 centimetres or less; or if thinnings have a diameter of 10 centimetres or less; or
- if coppice (i.e. managed by cutting to promote multi-stemmed growth arising at or near ground level) or underwood, have a diameter of 15 centimetres or less.

Felling trees immediately required for carrying out development authorised by planning permission (granted under the Town and Country Planning Act 1990) or for work carried out by certain providers of gas, electricity and water services and which is essential for the provision of these services.

Felling necessary for the prevention of danger or the prevention or abatement of a nuisance (e.g. which may involve the threat of danger to a third party). This exemption will only apply if there is a real rather than a perceived danger. We may be able to give you advice that would minimise the danger without felling the trees. We strongly recommend that you contact us if you are considering felling a tree or trees in these circumstances. You may be prosecuted for illegal felling if it is shown that the tree did not present a real or immediate danger.

Felling necessary to prevent the spread of a quarantine pest or disease and done in accordance with a notice served by a Forestry Commission Plant Health Officer (under the Plant Health (Forestry) (Great Britain) Order 1993, as amended.

The felling is done in compliance with any obligation imposed by or under an Act of Parliament.

More advice can be found at

http://www.forestry.gov.uk/pdf/treefellingaugust.pdf/\$FILE/treefellingaugust.pdf

#### APPENDIX D

#### Tree Protection Barriers

No equipment, machinery or materials shall be brought onto the site for the purposes of the development until fencing has been erected in accordance with the plans and particulars which shall have been previously approved by the local planning authority in writing.

The areas forming the Construction Exclusion Zone are to be protected by Tree Protection Barriers as per the recommendations in BS 5837:2012 (Figure 2) or as specified below at Appendix H.

This fencing is to be erected before any work commences on site and is to remain in place undamaged for the duration of all work or each phase. It will only to be removed once all work is completed and if required by planning condition, with the formal consent of the local planning authority.

If the fencing be broken or removed during the course of carrying out the development, it shall be promptly repaired or replaced to the satisfaction of the local planning authority.

Within any area fenced in accordance with this condition, nothing shall be stored, placed or disposed of on the above or below ground, the ground level shall not be altered, no excavations shall be made, nor shall any fires be lit, without the prior written consent of the local planning authority.

Other than works detailed within this method statement or approved in writing by the local planning authority, no works at all (including storage or dumping of materials) shall take place within the exclusion zones defined by the protective fencing.

The fencing is to carry waterproof warning notices denying access within the RPA. The following signs or similar will be attached to the fence panels.

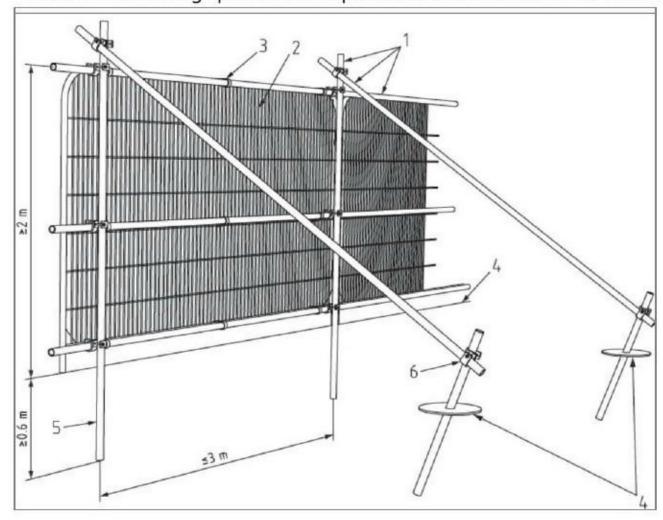




## APPENDIX E

## Specification for Tree Protection Barriers

Below is the fencing specification reproduced from BS 5837:2012 Trees in relation to design, demolition, and construction - Recommendations.



#### Key

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

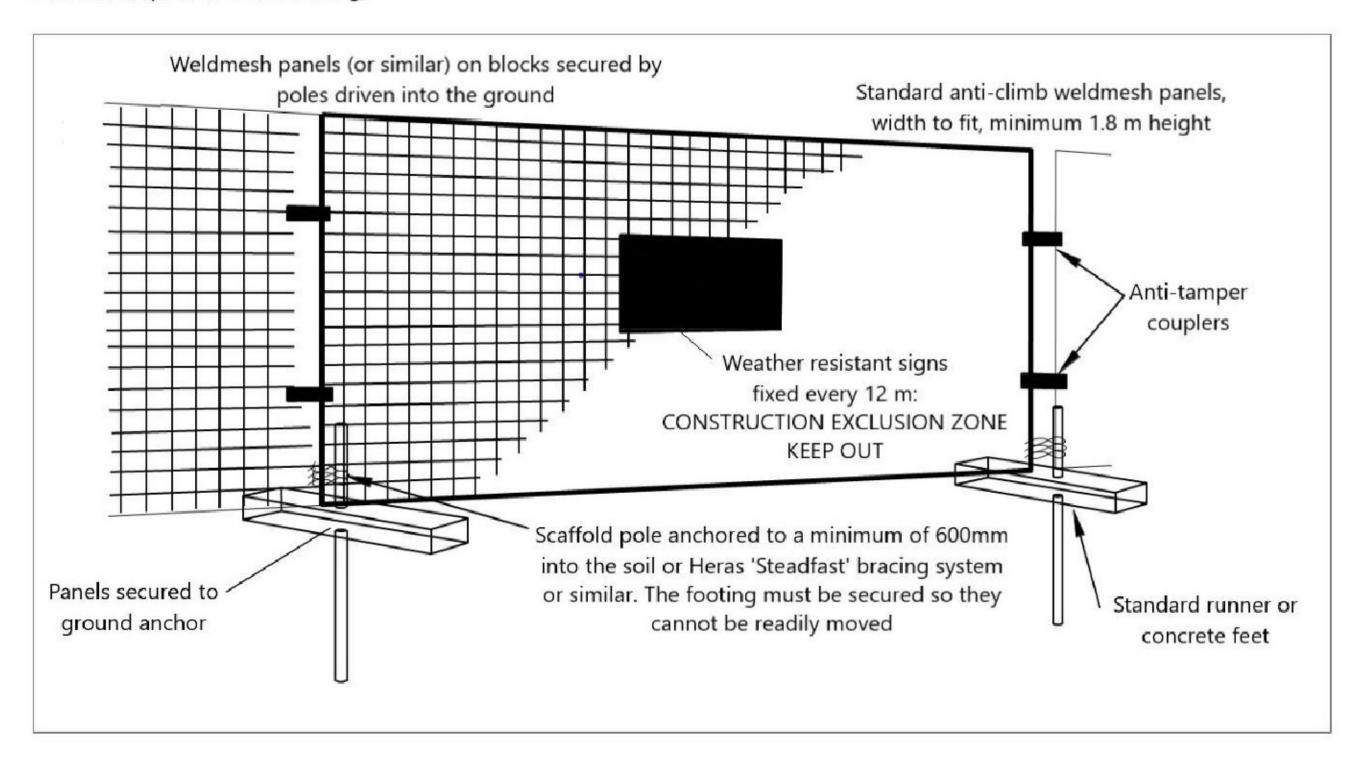




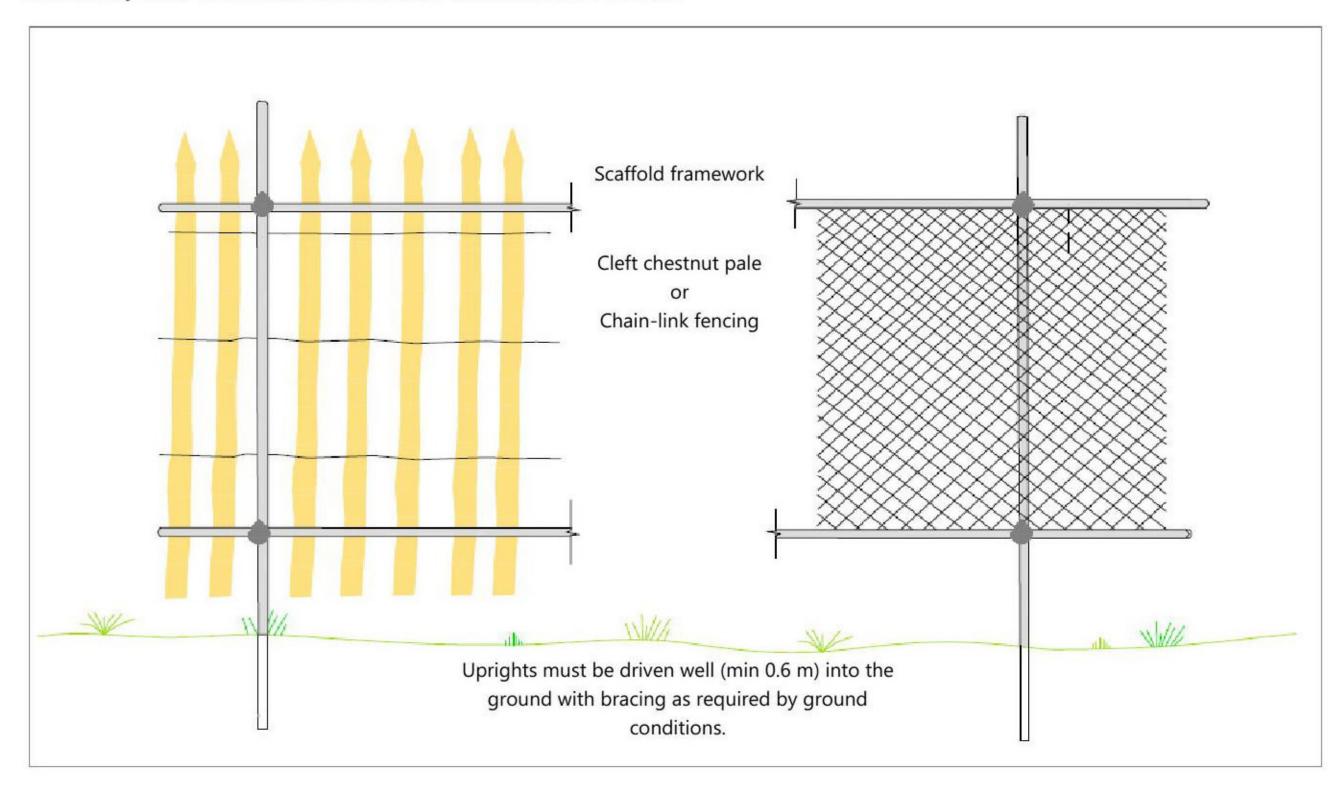
## APPENDIX F

## Tree Protection Barriers Medium Construction Pressure

Tree Protection Barriers (derived & amended from BS5837:2012 Figure 2) where there is insufficient space to install bracing.



APPENDIX G Secondary Tree Protection Barriers Low Construction Pressure



# APPENDIX H Tree Protection Site Notice

Arboricultural Site Considerations - To be displayed in a prominent place.

Tree Protective Barriers must be regarded as sacrosanct and must not be removed or altered without prior consultation with either the Local Planning Authority (LPA) or the arboricultural consultant responsible for the site supervision.

Ground protection must not be lifted or removed without prior consultation with either the LPA or the arboricultural consultant responsible for the site supervision.

Damage caused to protective fencing or ground protection must be reported to the site supervisor immediately to ensure efficient repair.

No materials, chemicals, machinery, or vehicles must be stored within the Construction Exclusion Zone as defined on the Tree Protection Plan (TPP) and identified on site by fencing and above ground root protection.

No materials must be rested against a tree's trunk or machinery chained to it.

No pruning of trees may be undertaken by anyone other than an arborist, and all work must be approved by the supervising arboricultural consultant.

Any physical damage caused to a tree retained on site must be reported to the site manager so remedial work can be undertaken without delay.

Builder's sand, which contains salt, must not be used to back fill excavation within or in close proximity to tree roots, as this can have a toxic affect. Sharp sand can be used instead.

Material that will contaminate the soil, e.g. concrete mixings, diesel oil and vehicle washings, must not be discharged within 10 metres of a tree stem.

Fires must not be lit in a position where their flames can extend to within 5 m of foliage, branches, or trunk. This will depend on the size of the fire and wind direction.

Notice boards, telephone cables or other services must not be attached to any part of a tree.



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