

**Tree Survey & Categorisation Report with  
Tree Constraints Plan**

in accordance with  
BS 5837:2005 (Survey Phase 4.2, 4.3 & 5.0)

At

**Land to West of Port Road  
Wenvoe**

ON THE INSTRUCTIONS OF

**Redrow Homes**



**Inspected by Mr. S J Ambler**  
of

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## **1.0. Executive Summary**

**1.1.** Planning approval is required for the development a housing development on a green field site on land to west of Port Rd, Wenvoe, north of the Garden Centre.

**1.2.** This predevelopment Tree Categorisation and Constraint Plan assesses the general health, condition, and amenity value of the trees within the development site and those adjacent to the site where likely to be affected by the proposal. This assessment presents details for the Local Planning Authority to assess the importance of tree cover at the site and to help those involved with design layout, avoiding conflict with existing trees of importance.

**1.3.** Many of the trees assessed here are important within the immediate landscape. The report scores the trees into one of four categories depending on their size, condition, amenity, cultural and conservation value. This system will also identify any unsuitable trees and suggest removal where necessary. For those trees considered suitable for retention, it provides a root protection area, which will be a constraint to the development where a tree is to be retained. The Root Protection Area takes account of both the physical and structural requirements of any retained tree and will require rigorous protection throughout the construction phase.

**1.4.** Trees are present as woodland, groups, and in amongst hedgerow with four open grown mature oak trees that are 'A' rated due to their age, size and condition. The small woodlands on this site provide a mature setting for housing and potentially provide a community resource. There are several

## **2.0. Introduction, Qualifications and Experience**

2.1. I, Stephen James Ambler, am a Professional Arboriculturalist, holding the relevant qualifications: -

- a) Lantra Award, Ref: HO00074336 85978 for undertaking the training course “Bats and Arboriculture – A Guide for Practitioners” developed by The Bat Conservation Trust
- b) Certificate in Arboriculture (Royal Forestry Society)
- c) Professional Technicians Certificate in Arboriculture (Arboricultural Association)
- d) Professional Diploma in Arboriculture (Royal Forestry Society)
- e) Associate Member of the Institute of Chartered Foresters
- f) Fellow of the Arboricultural Association.

2.2. I have 31 years experience working in the arboricultural industry with 19 years of that as a Principal Arboricultural and Woodlands Officer in local government. My Consultancy Practice was established during 1999 and was expanded in 2006 where my Sons became involved in the launch of a specialist ‘Tree Management Unit’. This addition has increased the level of service offered under the revised name of Steve Ambler and Sons Arboricultural Consultancy and Tree Specialists.

2.3. The survey involved a visual inspection which consisted of viewing each tree from close quarters and from a distance where possible. The inspection is carried out from ground level and the trees were not climbed.

2.4. A ground level inspection of the trees was made on the 9<sup>th</sup> March 2012. This inspection proceeds in line with the basic recommendations described within the ‘British Standard ‘Guide for Trees in Relation to Construction Recommendations’ (BS 5837: 2005) as stated in Item 4.2, 4.3, and 5.0, under the heading; Tree Survey, Tree Categorisation and Tree Constraints Plan. This information is required from the outset in the development planning process. The trees are assessed objectively without reference to any site layout.

2.5. The boundary surrounding the proposed development site and identified by plan attached hereto, in which the trees are contained and form the contents of this report, is hereafter referred to as ‘the site’.

2.6. I have been provided with the following:

The topographical survey was supplied which identifies the tree and woodland locations on the site. In all cases where tree positions distances may be critical (e.g. in accurately determining clearances between a tree and a proposed structure) further on-site measurements should be made.

2.7. Trunk diameters are estimated. Accessible crown spreads are measured approximately through pacing and where crowns appear to be symmetrical; they were measured in one direction only. Accessible tree stems and crowns can be measured with a tape if required.

## **3.0. The Background, Scope and Purpose of this Report**

3.1. The purpose of this report is to consider the trees and hedges on this site, their overall perceived importance within the landscape based on their size and position, and to assess their condition, identifying those suitable for retention within any proposed development. The layout of this report encompasses the recommendations of the revised ‘British Standard Guide for Trees in Relation to Construction Recommendations’ (BS 5837: 2005) whereby it recommends; “*the land survey should include all existing trees on the site and adjacent to the site within a distance equal to 12 times their stem diameter from the boundary. The trees shall be categorised for their importance and offered as a constraint to the development*”. The manner of the assessment is adapted to the particular circumstances of this site. In accordance with that standard, each major tree present at the time of my visit has

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<sup>1</sup> *British Standard Trees in Relation to Construction Recommendations 5837:2005 (4.2, 4.3 & 5.0)*

been allocated to a “retention category” essentially they are intended to provide a general guide as to the suitability of each tree for being retained within a developed site.

**3.2.** The trees are assessed in terms of their overall health, condition and likely longevity; their suitability in view of the increased usage that will arise as the site is developed; of their likely ability to withstand some degree of disturbance; and from the point of view of their amenity value (i.e. what contribution do they make to the attractiveness of the site, particularly in the light of the proposed change of use). It is assumed that trees that are to be retained would be subject to good management and protection under the terms of BS: 5837.

**3.3.** The suggested planning approach is relayed in the Flow Diagram Sequence, as **Figure 1**, in 16.0 Appendices. The constraints that any retained tree will pose to this development is either plotted on a Tree Constraints Plan, offered as a radial measurement as the **Root Protection Area (RPA)** within the final column of the Tables headed as RPA (Item 8.0), or in tabular format on the site drawing.

**3.4.** Where any tree is retained, the RPA is essential and becomes, in effect, a construction exclusion zone (there are exceptions). An RPA should be respected during the initial design period and throughout the construction works until completion. The RPA is given as a radial distance as measured from the centre of the trunk (bole) of the tree.

**3.5.** In view of the ‘Planning Flow Chart’ found within in the 16.0 Appendices (text coloured blue), it becomes apparent the British Standard advocates further information will be necessary to provide a **Tree Protection Plan (TPP)**, and information on; construction exclusion zones, protective barriers, ground protection measures, position of services, special engineering requirements, pre construction tree works, approved tree removals, access facilitation pruning and landscaping. The above is usually presented as an **Arboricultural Method Statement (AMS)** which should be undertaken by an ‘Arboriculturalist’ and is usually a requirement of the LPA following their acceptance of the Phase One completion of the tree survey, categorisation, and constraint plans.

**3.6.** The report sets out a way forward for the design element to proceed whilst considering the needs and requirements of those trees in adequate condition and with adequate landscape value.

**3.7.** It must be stressed early on that this report is a pre-development survey and not a risk assessment or a detailed report on the health and condition of the trees. The survey will record details of each tree and may identify, where immediately obvious, works that may be considered appropriate to increase safety through applying sound arboricultural management. Whilst any obvious problems noted during this ground level inspection may be noted, general comments are made only which are based on a somewhat cursory, visual inspection and the findings are preliminary only. In addition, future management may be mentioned briefly, these comments are general comments only for basic information which should not be taken to form immediate or long term management plans nor do they replace the need for having professional management plans for the group, area or woodland. Tree/s should be subject to regular ‘tree condition inspections’ and a full tree condition inspection and appropriate management appraisal is strongly recommended and particularly on completion of any development.

#### **4.0. Site Description and Observations**

**4.1.** The site under investigation is situated to the west of Port Road, Wenvoe, in South Wales. Grid Ref: ST121 723. Area: 6.42 Ha.

**4.2.** The land is predominantly farmland, flat and lies to the north of the nearby Garden Centre Complex. Housing adjoins the site to the east and north with farmland to the west. The site is situated an altitude of 50 metres above sea level. Several Public Rights of Way cross the site at several points. Stock proof fencing often demarcates boundaries along the rear garden of properties. The soil is seemingly base rich, fertile, relatively free draining, and neutral to slightly acid. Currently the land use is for arable crop production, grazing pasture, with shelterbelts and woodland copses primarily to the periphery of the two fields.

**4.3.** The woodland areas are isolated being dominated with native or naturalised tree species. However, there has been extensive under planting with non native shrubs, perhaps due to the influence of nearby gardens or in order to increase cover for stock. The woodlands are generally open to the site and are therefore not stock proof. There is an absence of hedgerows on this agricultural land, although some standard tree planting has been noted along the western boundary. A shelterbelt occurs centrally between the two fields with several individual trees recorded across the site. There are several mature open grown oaks noted some now being enveloped by planted woodland.

#### **5.0. Tree Survey, Tree Survey Plan**

**5.1.** This tree survey is independent of any specific design for development and will include all trees including any that have been missed during the land survey including those outside of the site boundary where they are felt any development may affect them. In cases where a number of smaller trees and hedges are not included on the topographical survey provided, these have not been included but general comments are provided in General Observations. The quality and value of each tree or group of trees is recorded and allocated to one of four categories each of which are explained under the heading 'Tree Categorisation', (see below Item 6.3).

**5.2.** Each tree or group of trees is identified on the attached plan. Large trees are sometimes identified on site using a numbered tag attached to the trunk of a tree at 1.5-2.0 metres above ground level. A tabular format later in the report (

8.o. Schedule of Findings) records the details of each tree or group against the numbered tag.

5.3. This survey involved recording each tree or group within the site boundary with a stem diameter of above 75-mm when measured at a height of 1.5-m above ground level. In addition, trees over this size growing on land adjacent to the site, which are at or within a distance equal to 12 times their stem diameter from the boundary (or 10 times the stem diameter in the case of multi-stemmed trees).

### **6.0. Tree Categorisation**

6.1. The trees are categorised as stated within the British Standard<sup>1</sup> in a way that should help assist those within local government to help form a balanced judgement. The primary purpose of this report is to provide an assessment of the trees and to determine their suitability for retention in any proposed development.

6.2. The Tree Categories used in evaluating the trees on this site are reproduced below. This categorisation is also included in the tree data schedules and by colour code on the attached plan.

#### **Category R (Coloured Dark Red on Plan)**

Those in poor condition that any existing value would be lost in ten years and which should, in the current context, be removed for reasons of sound arboricultural management.

#### **Criteria**

- 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 R Category trees.
- Trees that are dead or otherwise showing signs of significant, immediate and irreversible overall decline.
- Trees affected with pathogens of significance to health and/or safety of other nearby trees or very low quality trees suppressing adjacent trees of better quality

Note; a bat survey may be necessary on trees such as these and particularly where those trees exhibit signs of potential roost site habitat. A Bat survey and mitigation may be necessary (e.g., bat boxes)

#### **Category A (Colour Green on Plan)**

Those of high quality and value;

In such condition as to be able to make a substantial contribution (a minimum of 40 years is suggested)

- **Sub Category 1 Mainly Arboricultural Values**

Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)

- **Sub Category 2 Mainly Landscape Values**

Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)

- **Sub Category 3 Mainly Cultural Values, including Conservation**

Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)

#### **Category B (Colour mid-blue on Plan)**

Those of moderate quality and value.

Those in such a conditions to make a significant contribution (a minimum of 20 years is suggested)

- **Sub Category 1 Mainly Arboricultural Values**

Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence or remediable defects including unsympathetic past management and minor storm damage)

- **Sub Category 2 Mainly Landscape Values**

Trees present in numbers, usually as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore having little impact on the wider locality.

- **Sub Category 3 Mainly Cultural Values, including Conservation**

Trees with clearly identifiable conservation or other cultural benefits.

### **Category C (Coloured Grey on Plan)**

Those of low quality and value.

Currently in adequate condition to remain until new planting could be established (a minimum of 10 years), or young trees with a stem diameter below 150-mm.

- **Sub Category 1 Mainly Arboricultural Values**

Trees not qualifying in higher categories

- **Sub Category 2 Mainly Landscape Values**

Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value and/or trees offering low or only temporary screening benefit.

- **Sub Category 3 Mainly Cultural Values, including Conservation**

Trees with very limited or other cultural benefits.

#### **NOTE:**

- (1) Category C trees will usually not be retained where they would impose significant constraints on development although young trees with a stem diameter below 150-mm should be considered for relocation.
- (2) Where remaining contributory years score is provided within the 'Findings', and where further investigative works are required, these scores are preliminary only and based on an incomplete inspection.

#### **6.4. Additional Considerations**

**6.5.** During the course of a tree survey, it might be found that certain trees require immediate attention. For example, they might present an immediate and serious hazard to life or property, or they might be affected by a pest or pathogen which would cause widespread and serious damage unless eradicated. These issues should be brought to the attention of the appropriate party as soon as possible.

**6.6.** Particular care is needed when considering the quality and value of young trees, especially where they occur as individual specimens. The relevant standard <sup>1</sup> states that where these are less than 150 mm stem diameter (at 1.5 m above adjacent ground level), it may be relatively straightforward to relocate them within the site (e.g. using a tree spade) or to replace them with similar replacement trees. Whilst the presence of young trees of good form and vitality is generally desirable (i.e. those trees which have the potential to develop into quality mature specimens), they should not be allowed to dominate site layout considerations. When evaluating the merits of retaining and/or relocating such trees, a comparison between the costs of the various options should be the main determining factor. However, they should be categorized as C grade trees.

#### **7.0. Tree Constraints Plan**

**7.1.** The constraints that trees of category A, B, or C pose on the development layout are plotted on the tree constraints plan as a 'Root Protection Area which is calculated on the physical and structural needs of the tree/s taking account of the requirements of the root system. Table 2 of the British Standard is used to achieve the



required distances and is essentially a 12 x multiplier of the stem diameter when measured at a height of 1.5-metres above ground level or multiplied by a factor of 10 in the case of multi stemmed trees.

**7.2.** The precise distances of each RPA is marked on the plan as a solid line and provided in a tabular format on the drawing. All measurements are provided in metres as a radial measurement when taken from the centre of the tree's trunk. Other considerations are provided below along with supporting comments.

**7.3.** Proposed new planting, if necessary, may be marked on the plan as a constraint and soil should be protected from compaction where this is to occur.

## **8.o. Schedule of Findings**

### **Tree & shrub list**

Sycamore – *Acer pseudoplatanus*

Sessile oak – *Quercus petraea*

Willow – *Salix* sp

Hazel – *Corylus avellana*

Common ash – *Fraxinus excelsior*

Hawthorn – *Crataegus monogyna*

Lawson cypress - *Chamaecyparis lawsoniana*

Crab apple – *Malus sylvestris*

Yew – *Taxus baccata*

Wild cherry – *Prunus avium*

Lime – *Tilia* sp

Boxleaf honeysuckle – *Lonicera nitida*

Laurel – *Prunus laurocerasus*

Spindle – *Euonymus europaeus*

Privet - *Ligustrum ovalifolium*

Silver birch – *Betula pendula*

Beech – *Fagus sylvatica*

Rowan – *Sorbus aucuparia*

Dogwood – *Cornus sanguinea*

Alder – *Alnus* sp

Tree Survey, Categorisation and Constraints Plan at Land in Wenvoe  
Dated March 2012

Tree Number	Species	Height	Branch Spread				Effectual Diameter	Crown Clearance	Age class	Physiological Condition	Structural Condition	Notes	Remaining Contribution Years	Category	Protection Radius in M
			N	S	E	W									
521	Ornamental cherry	12	6	3.5	5	2	360	2	M	G	G	<p>Congested crown formation atypical for species. Street tree growing in grass verge. RPA may be reduced due to the physical restrictions to rooting offered by the presence of a footpath between tree and the site although this should be confirmed through a trail pit.</p> <p>(Refer to photograph in Appendices)</p>	20-40	B 2	4.32
522	Lime	13	6	4	3	4	440	5	M	G	G	<p>Street tree growing on the grass verge. RPA may be reduced due to presence of footpath between tree and the site (need to ascertain extent of rooting under the path)</p> <p>(Refer to photograph in Appendices)</p>	40 +	B 2	5.28
523	Rowan	13	6	4.5	5	4	660	3.5	M	F	F	<p>Linear basal decay and cavity to the east up to 1-m above ground level. Possible stem decay. Numerous occluding pruning wounds. RPA may be reduced due to presence of footpath between tree and the site (need to ascertain extent of roots ingress under the path)</p> <ul style="list-style-type: none"> <li>• <b>Undertake diagnostic investigation to establish extent of decay and its significance.</b></li> </ul> <p>(Refer to photograph in Appendices)</p>	10-20	C 2	7.92

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			N	S	E	W									
G 1	Lime , alder	6	1.5	1.5	1.5	1.5	180	3	Y	G	G	Row of recently planted street trees. 1 x dead to south of the row. RPA may be reduced due to presence of footpath between tree and the site ( need to ascertain extent of roots ingress under the path ) <ul style="list-style-type: none"><li>• <b>Fell &amp; replace dead tree.</b></li></ul>	40+	C 2	2,16
G 2	Sycamore – boxleaf honeysuckle, ash, oak, willow, laurel, alder, spindle, privet, dogwood	20	3	3	3	3	320 Ave	2	EM	G	F	Predominantly mixed broadleaved copse with the occasional exotic conifer. The dense under storey is dominated by introduced exotic shrubs. The western tip becomes more mature in composition replicating an oak, ash woodland with hazel understorey. Provides a screen for the house to the north. <ul style="list-style-type: none"><li>• <b>A woodland management plan and detailed tree condition survey is advised.</b></li></ul> (Refer to photograph in Appendices)	40+	B 2 B 3	3,84
T 1	Oak	22	7	9	7	10	1100 Est	2	M	G	F	Viewed at distance and situated in centre of adjoin garden. Well formed open grown specimen tree.  (Refer to photograph in Appendices)	40+	A 2 A 3	13,20

Tree Survey, Categorisation and Constraints Plan at Land in Wenvoe  
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			N	S	E	W									
G 3	Sycamore, boxleaf honeysuckle, laurel, ash, oak	16	3	3	3	3	250 Ave	0.0	EM	G	F	11-m wide shelterbelt providing a linear corridor between woodlands G 2 & G 12.	40+	C 3	3.0
G 4	Oak, willow, hazel, ash, hawthorn, Lawson cypress	14	3	3	3	3	220 Est Ave	1.5	Y - EM	G	F	Trees occur between stock fence and garden fences. Scrub woodland with a row of planted Lawson cypress to the south. Screening value for houses.  (Refer to photograph in Appendices)	40+	B 2 B 3	2.64
T 2	Oak	22	8	9	9	8	920 Est	2.0	M	G	G	Open grown oak between stock fence and garden fences.	40+	A 2 A 3	11.04
G 5	Ash, sycamore, hazel, apple, Lawson cypress, yew.	20	11	5	5	5	370 Ave	1.0	EM - M	G	F	Recent 'topping' of several trees has occurred near housing to north east. Large diameter multi stemmed poplar has failed at the base and has been sectioned up on the woodland floor. Screening value for houses. <ul style="list-style-type: none"> <li>• <b>Tree tag number 524: Fell leaning ash stem growing at 45 degrees to west .</b></li> <li>• <b>Cut high poplar stump to ground level.</b></li> <li>• <b>Plant up gaps to maintain screen.</b></li> <li>• <b>A woodland management plan and tree and detailed tree condition survey is advised.</b></li> </ul> (Refer to photograph in Appendices)	40+	B 2 B 3	4.44

Tree Survey, Categorisation and Constraints Plan at Land in Wenvoe  
Dated March 2012

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			N	S	E	W									
525	Oak	20	2	7	7	5	610	1.5	EM	G	F	Grossly asymmetric crown predisposed to the south due to presence of Group 6. Twin stemmed specimen at 1-m. Ivy clad stem growing into the crown.	40+	C 2 C 3	7.32
526	Oak	20	2	8	7	7	480	1.5	EM	G	F	Grossly symmetric crown predisposed to the south due to presence of Group 6.	40+	C 2 C 3	5.76
G 6	Lawson cypress	10	2	2	2	2	190 Est	4	EM	G	F	Recently topped hedgerow providing some screening growing on the boundary of the adjoining garden.	40+	B 2 B 3	2.28
G 7	Lawson cypress, sycamore, oak, ash, hazel	18	6	6	4	4	200	0	Y-EM	G	F	Row of Lawson cypress on garden side of boundary with broadleaves occurring on the site side. Conifers encroach by some 8-m into the site. Broadleaves often poorly formed due to suppression from conifers. Conifers offer screening value for houses; broadleaves could be removed without adversely affecting screen.  (Refer to photograph in Appendices)	40+	B 2 B 3	2.40

Tree Survey, Categorisation and Constraints Plan at Land in Wenvoe  
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			N	S	E	W									
G 8	Sycamore, hawthorn, ash, willow, birch	19	5	5	>8	4	310 Ave	1	Y - EM	G	F	Woodland with even aged canopy with sparse under storey and regeneration.  <b>Several trees noted with weak forks, basal decay, standing deadwood etc.</b>  <ul style="list-style-type: none"> <li><b>A woodland management plan and tree and detailed tree condition survey is advised.</b></li> </ul> (Refer to photograph in Appendices)	40+	C 3	3.72
G 9	Willow	10	8	2	7	4	320	0	EM	P	P	Collapsed willows re growing from layered stems. Extensive deadwood.  (Refer to photograph in Appendices)	<10	C 3	3.84
G 10	Beech, ash, poplar X 20	10	1.5	1.5	1.5	1.5	100	2	Y	G	G	Row of recently planted standard trees along fence line.  <ul style="list-style-type: none"> <li><b>Consider planting a native hedge along boundary to link Group 8 &amp; Group 12 woodland. Retain existing standard trees, except for poplars, as these are not suitable for retention near housing.</b></li> </ul>	40 +	C 2 C 3	1.20

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Tree Number	Species	Height	Branch Spread				Effectual Diameter	Crown Clearance	Age class	Physiological Condition	Structural Condition	Notes	Remaining Contribution Years	Category	Protection Radius in M
			N	S	E	W									
G 11	Ash, willow,	15	8	6	3	4	320	2	Y - EM	F	P	<p>Sporadic trees in a row along boundary with small group on garden centre side of fence.</p> <p>Multi stemmed willows of poor structural integrity. Limited retention value close to power lines and likely to be removed in the future under resilience cutting by Western Power Distribution.</p> <ul style="list-style-type: none"> <li>• <b>Consider removing trees and planting a native hedge along boundary to link Group 8 &amp; Group 12 woodlands.</b></li> </ul> <p>(Refer to photograph in Appendices)</p>	<10	C 2 C 3	3.84
G 12	Oak, rowan, cherry, poplar, ash, boxleaf honeysuckle, horse chestnut, yew, sycamore	22	7	7	7	7	400 Ave	0	Y EM M	F	F	<p>Woodland comprising of predominantly native woodland cover with several introduced non native shrubs.</p> <p><b>There are several faults noted within this woodland including, windblown trees, deadwood and structural issues.</b></p> <p><b>There are several mature poplars which have become windblown, many of which are hung up.</b></p> <ul style="list-style-type: none"> <li>• <b>Fell all poplars to ground level.</b></li> <li>• <b>A woodland management plan and tree and detailed tree condition survey is advised</b></li> <li>•</li> </ul> <p>(Refer to photograph in Appendices)</p>	40+	B 2 B 3	4.80



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			N	S	E	W									
527	Oak	24	9.5	13	10	10	1080	4	M	F	G	Medium diameter deadwood.	40+	A 2 A 3	12.96
528	Oak	23	6	13	7	9	1100 Est	5	M	F	F	<p>Medium diameter deadwood. Ivy clad stem growing into the crown. Basal decay cavity to north measuring 30-cm x 120 cm x 30-cm. A sounding hammer indicated suspected stem decay &gt;2-m above ground level.</p> <ul style="list-style-type: none"> <li>• <b>Severe and remove ivy and brambles from up to 2-m above ground level,</b></li> <li>• <b>Undertake intrusive investigation to establish extent of decay and sound wall thickness.</b></li> </ul> <p>(Refer to photograph in Appendices)</p>	20-40	B 2 B 3	13.2
529	Oak	12	5	7	5	6	430	0	EM	F	P	<p>Stunted form with heavy lower limbs and a lost leader at 1.5-m above ground level.</p> <p>No Action at this time</p> <p>(Refer to photograph in Appendices)</p>	40+	C 3	5.16
530	Oak	13	6	6	8	6	530	1	EM	F	F	<p>Deep broad crown formation.</p> <p>(Refer to photograph in Appendices)</p>	40 +	B 3	6.36

Tree Survey, Categorisation and Constraints Plan at Land in Wenvoe  
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Tree Number	Species	Height	Branch Spread				Effectual Diameter	Crown Clearance	Age class	Physiological Condition	Structural Condition	Notes	Remaining Contribution Years	Category	Protection Radius in M
			N	S	E	W									
531	Oak	12	5	2	5	5	470	3	EM	P	P	Multi stemmed specimen with several weak forks with included bark. South stem has decay > 150 degrees of stem circumference.  <ul style="list-style-type: none"> <li><b>If to be retained, some remedial works will be necessary.</b></li> </ul> (Refer to photograph in Appendices)	20-40	C 2 C 3	5.64
532	Oak	20	3	8	9	7	970	1.5	M	F	P	Basal decay suspected up to 2=m above ground level using sounding hammer. Small diameter basal cavity to east leading to 80=cm deep hollow. Large diameter limb failed to south east at 8-m above ground level, leaving a 2-m dead peg with holes and splits - potential bat habitat. Medium diameter deadwood and several linear wounds within crown.  <ul style="list-style-type: none"> <li><b>Undertake diagnostic investigation to establish extent of decay and significance.</b></li> </ul> (Refer to photograph in Appendices)	20 - 40	B 2 B 3	11.64
533	Oak	25	5	9	8	9	870	1	M	F	G	Ivy clad stem growing into the crown. 'U' shaped fork at 3-m above ground level leading to two scaffold limbs.  (Refer to photograph in Appendices)	40+	A 2 A 3	10.44

Tree Survey, Categorisation and Constraints Plan at Land in Wenvoe  
Dated March 2012

Tree Number	Species	Height	Branch Spread				Effectual Diameter	Crown Clearance	Age class	Physiological Condition	Structural Condition	Notes	Remaining Contribution Years	Category	Protection Radius in M
			N	S	E	W									
G 13	Oak, Hawthorn	12	5	5	4	4	1	310	EM	G	G	Trees occur inside and outside the site boundary. Site side of fence: 3 x oaks and 1 x hawthorn. 2 Two of the oaks have asymmetric crowns due to suppression from the one dominant oak.	40+	B 2 B 3	3.72
G 14	Willow, laurel, ash	10	2	2	2	2	100	0	Y	G	F	Sporadic tree cover with dense brambles. <ul style="list-style-type: none"> <li><b>Remove and replace with native hedge</b></li> </ul>	40+	C 2 C 3	1.20
534	Oak	14	6	6	6	6	430	0	EM	G	G	Growing on fence line and enveloping the stock netting. Broad deep crown formation	40+	C 2 C 3	5.16
535	Oak	15	9	10	8	8	620 Est	1	EM	G	G	Growing on garden centre side of fence	40+	B 2 B 3	7.44

## **9.0. General Comments and Observations**

**9.1.** In order to retain any trees on a development site successfully, adequate physical protection will be required throughout the construction phase. Damage to trees often occurs on construction sites due to soil compaction, root severance, mechanical injury to roots, stems or branches and or changes in ground levels when it occurs in proximity to trees. Adequate **tree protection** measures will involve the erection of a suitably robust 'Barrier Fencing' to encapsulate the full RPA of each retained tree. The type of barrier fencing is recommended within the British Standard Guide for Trees in Relation to Construction Recommendations (BS 5837: 2005). Whilst outside the scope of this report, a 'Tree Protection Plan' and 'Arboricultural Method Statement' is required and should be produced following the initial design phase.

**9.2.** The younger trees, those with a stem diameter of below 150-mm, should not impose significant restraints on the development layout and could be considered for relocation using specialist techniques, if they appear in a soft landscape surface, or through replacing their loss with the replanting of heavy, semi-mature stock.

**9.3.** If the woodland areas are retained as part of the development then a woodland management plan should be considered in order to improve their habitat value as well as improving their aesthetic value near the proposed housing development. There may also be some value in developing low key access within some of these woodlands. A detailed tree condition survey would need to be undertaken within these retained woodlands / shelterbelts. As the woodlands are isolated, there is scope to plant native hedgerows to the periphery of the site in order to create corridors and improve habitat connectivity as well as creating a rural setting for the development.

**10.0. Recommendations**

- (1) Design should take account of existing trees of importance and consider their requirements to maintain existing landscape value, where possible. The design should specifically exclude the root protection areas from any development pressures including underground services.
- (2) Once a final layout for the development is approved by the LPA, a Tree Protection Plan and Arboricultural Method Statement will be required.
- (3) Tree clearance works or works other than those to deal with serious defects posing considerable risk shall not commence until such time written approval or full planning approval is received from the Local Planning Authority

#### **11.0. Limitations of this Report**

**11.1.** It must be stressed early on that this report is a pre-development survey and not a risk assessment or a detailed report on the health and condition of the trees. Whilst any obvious problems noted during this ground level inspection may be noted, general comments are made based on a somewhat cursory, visual inspection. In addition, future management may be mentioned or briefly discussed but these comments made are general comments only for basic information which should not be taken to form immediate or long term management plans nor do they replace the need for having professional management plans for the group, area or woodland.

**11.2.** There are occasions when even healthy and completely defect-free trees break or become windblown. This represents a "normal failure rate" which is the price of the lightweight, energy-saving structure that favours the species to compete with others in a cost-effective way. However, Visual Tree Assessment (VTA) can be used to determine when a tree is at greater risk of breaking, compared with a completely sound one. Trees have an inherent margin of safety or 'safety factor', as they are usually able to withstand much stronger mechanical loading than occurs under average conditions. Thus, provided that they are free from significant mechanical defects, they can withstand quite severe winds. If, under exceptionally severe conditions, the safety factor of a tree is exceeded, failure is of course possible. It must, however, be accepted that conditions such as these are potentially hazardous whether or not trees are present. On the other hand, trees with mechanical defects sometimes fail under weather conditions which could be reasonably expected to occur from time to time. If such a tree is so placed that it could harm people or property, there is a need to decide whether it represents an unacceptable hazard. If so, some form of remedial action, considered appropriate, will be offered within the schedule.

**11.3.** Every attempt has been made to provide a realistic and accurate assessment of trees and their condition at the time of this inspection. No responsibility can be accepted for damage or injury as a result of the failure of any tree or its parts due to faults not apparent upon a visual inspection carried out at this season, or for faults developing subsequent to the survey. Similarly, no liability can be accepted for the condition of the trees that are obscured in part or by whole (e.g. due to dense ivy or other foliage), nor for any that proved inaccessible to the inspector. Certain features which might provide evidence of ongoing decay or decline (Such as seasonal fruiting bodies, damage to foliage, insect emergence holes etc) may not be in evidence. Only those features present at the time of inspection could be assessed.

**11.4.** This report is based on the trees circumstances and condition at the time of the survey. It must be recognised that the circumstances may be altered radically over the course of any development process and that such changes cannot be accurately predicted. The report also does not provide any specific long-term management recommendations.

**11.5.** The effect this new development may have on localised wind turbulence has not been assessed during this inspection. As trees grow, they respond and mechanically adapt to their surroundings and exposure limits. With the erection of dwellings in close proximity to existing trees, new turbulence is created. The author accepts no liabilities to any failure subsequent upon such new imposed, artificial conditions.

**11.6.** Unless stated in writing, the inspection shall not include any underground parts of the tree. It does not consider **indirect** damage resulting from the extraction of moisture from shrinkable clay soils by tree roots causing **subsidence** or by **heave** occurring through soil rewetting following removal of trees on this site. Such problems are almost entirely restricted to areas of shrinkable clay soils and as I have **not** considered a soil analysis as part of my present brief, this aspect is **not** addressed at this time.

**11.7.** The majority of tree works are identified because some risk is associated with them although sometimes it is for cultural reasons. Whilst the urgency of the works is provided as a priority rating, this urgency is estimated only and precise forecasts or predications of when failure is likely to occur cannot be given with any accuracy. There is no guaranteed for example a priority two rated defect could not fail tomorrow or indeed a priority four although it is the authors opinion that priority one is more likely to fail first due to the type of defect. This priority rating should be used with caution and may be considered useful to allow the prudent use of finances if they are limited. Its accuracy however cannot be guaranteed and the author cannot accept liability for injury or damage that arises as result of failure within any period given here.

11.8. Unless otherwise stated in writing and in the absence of altered circumstances, a report on the health and safety of a tree or trees cannot be relied on after a period of 12 months. Following such a period, a further inspection is required.

11.9. Further and more general report limitations are set out in the authors Terms and Conditions. A copy is provided with this report and further copies are available upon request

#### **12.0. Legal Constraints**

12.1. **With regards trees**, the legal constraints on any site should be considered in early planning and well before any work commences on site. Such constraints can cause time delays or problems and should be given full consideration from the outset. The legal constraints here are general constraints that relate to arboriculture and do not cover any other legal matters that may be relevant on this site.

#### **12.2. Tree Preservation Orders and Conservation Area Status**

The law on TPOs is in **Part V111 of the Town and Country Planning Act 1990 Town and Country Planning (Trees) Regulations 1999**. When any tree/s are protected by a TPO or are situated within a Conservation Area, it is an offence (1) cut down (2) uproot (3) top (4) lop (5) wilfully damage or (6) wilfully destruct a tree without the express written permission from the Local Planning Authority (LPA), there are exceptions. A LPA may grant permission, if considered reasonable following the submission of an application for consent to undertake the works, or where in accordance with an Approved Planning Application or under the exemptions within the Town and Country Planning Act 1990 of dead, dying, or dangerous. It is advisable to consult the LPA and an Arborist prior to conducting any tree works under these exemptions.

##### **12.2(a) Felling License**

A Felling Licence may be required in certain felling operations, and these are administered by the Forestry Commission. If you are felling more than five cubic metres of wood in one calendar quarter and selling more than two cubic metres then a licence may be required. There are exceptions and these are in the Forestry Act 1967 and Regulations made under this Act. Contravention of the felling licence controls can incur substantial penalties. Where tree felling forms part of a Local Authority Planning Approval, it is exempt.

12.3. **The Wildlife and Countryside Act 1981** protects nesting birds and to disturb nesting birds can be a criminal offence. Therefore, caution must be aired if tree works are programmed during the nesting season, between March and August. Should nesting birds be present then all but essential works will be postponed. If in undertaking essential works a nest or nests are found to be present, then further advice will be sought from the Countryside Council for Wales.

#### **12.4. (Wildlife and Countryside Act (as amended) Conservation (Natural Habitats) Regulations 1994)**

In Britain, all bats and their roost sites are currently protected by law. The part of the law that protects them is found within the Wildlife and Countryside Act 1981 and as amended by schedule 12 of the Countryside and Rights of Way Act 2000 and by the Conservation Regulations 1994 under Section 39(1).

12.4.1. The probability of bats being in residence in any tree or that any of the trees are a roost site, has been scored according to the habitat potential each tree provides and is awarded a score in the column headed 'Habitat' within the Findings (Item 7.o). This reflects a potential score and not an actual score. **The score ranges from Low through to High and details are provided below of this scoring system which should be offered to the statutory bodies for approval prior to commencement of the works.**

##### **12.4.2. Low Potential (L)**

Trees within this category will generally be of a young age, below 30 years, and or with a distinct absence of features that are known to appeal to bats. It would consist of trees without wind damage or obvious cavities, having smooth bark, perhaps of a young age, with little or no ivy, splits or cracks and as such, offers no obvious bat habitat.

***It is suggested that where trees have been awarded a low potential, felling or surgery works may proceed without restriction.***

#### **12.4.3. Medium Potential (M)**

A medium potential score would reflect those trees which may have dense ivy, some cracks or splits and wind damage and perhaps some cavities that are small or situated not in an ideal position, perhaps low down on the tree or facing north and with a distinct absence of other indicative features. Such trees may provide emergency shelter to a transient male but where alternative and better quality sites are likely to be preferred.

***In these instances where a medium potential is noted, a climbing inspection must be undertaken by a climber who is experienced in bat habitat recognition, prior to any works commencing. Once a climber is satisfied there are no potential habitat, works may proceed with vigilance and under the guidance of a method statement relating to bats and trees. In the event any indications of bats are present, then works will be suspended and a licensed bat worker will be engaged to assess the situation.***

#### **12.4.4. High Potential (H)**

A tree with a high potential score would be a tree where potential habitat is immediately recognised. This may be large cavities facing south and above 6 meters above ground level (AGL) and where additional indications may be noted such as scratch marks, dark staining and or insect activity around cavity entrances, bat droppings or a tree that has a variety of potential such as splits, cracks, hazard beams, cavities, ivy and other rot holes.

***Where trees receive a high potential score, they are recommended for a full and detailed examination by a licensed bat inspector.***

**12.5.** The legislation makes it an offence to intentionally or recklessly damage, destroy or obstruct access to a site used by bats whether bats are present at the time or not. This can include work on trees whether it is surgery, felling, the covering, or filling of cavities or the installation of rod braces and flexible cable braces, where a bat roost is present.

**12.6.** There are some 16 species of bat native to the British Isles, all are insectivorous and depend to some extent on habitat in which trees are a significant element. Bats are a protected species and are in decline both globally and nationally. Therefore, they are to be fully considered before any tree work commences and particularly if the trees are mature. If a bat roost is known to be in any tree that is to be removed or worked on a license must be obtained from the Welsh Assembly Government beforehand, there are exceptions.

**12.7.** Where there is a risk bat roosts may be present, it is incumbent upon the owner or manager to commission a specialist bat survey to identify bat roosts before instructing tree surgery to commence. Failure to do so and in the event of disturbing a roost site or injuring any bats is an offence. Maximum penalties for committing offences relating to bats or their roosts can amount to imprisonment for a term not exceeding six months or to fines of up to Level 5 on the standard scale under the Criminal Justice Act 1982/ 1991 (i.e. £5000 in April 2001) per roost or bat disturbed or killed, or to both.

#### **12.9. Statute and Common Law.**

A landowner or land manager should be aware that both statute and common law dictates regular inspections of trees on land in their control are necessary where such trees could cause injury or damage in the event they should fall or shed any parts. A person suitably qualified in arboriculture should undertake such routine inspections and any remedial tree works recommended should be carried out within the time constraints specified, to prevent injury or damage occurring. A landowner should retain records of all inspections and any remedial tree works that have resulted from such inspections. The **Arboricultural Association** at Ampfield House, Ampfield, near Romsey, Hampshire. Telephone 01794 368717 are able to provide advice on suitably qualified persons or indeed suitable qualifications a person should hold to undertake qualified inspections.



### 13.0. Abbreviations

**Number (No)** The tree number provides reference to an individual tree either by way of T1, T2 (tree 1 or tree 2) and relates to an attached plan showing their approximate positions or through a series of numbers (00123) that relates to a tag on the tree and may also be indicated on an attached plan.

**Species** The species is the given name of the tree which is usually provided in both the common and scientific names.

**Diameter (DBH)** The diameter for each tree is in millimetres based on the diameter or circumference of the trunk measured at a height of approximately 1.5 metres above ground level, unless otherwise stated. All measurements are approximate.

**Crown Spread** The crown spread of the tree is measured as the radius (from the centre of the trunk) in meters and in most cases covering the four points of the compass.

**Height** The height of the tree is measured in metres and is usually approximate. If the abbreviation 'Clinom' appears after the given measurement, it indicates the tree has been measured with an optical measuring instrument, a Clinometer, and is accurate to within 5 metres.

**Age** The age of the tree is given based on its life expectancy. For example, an oak tree at an age of 100-years is perceived as early mature when a hawthorn at 100 years would be considered old. Age classes are given as follows: -

- Y.** **Young trees** (age less than 1/3 life expectancy)
- MA.** **Middle aged** (between 1/3 – 2/3 life expectancy, still growing vigorously but not as fast as a younger tree)
- M.** **Mature trees** (above 2/3 life expectancy. Growth rates beginning to slow down at this stage)
- OM.** **Over Mature trees** (growth rates slow and possibly beginning to display signs of decline)
- V.** **Veteran** (decline is well set-in but the tree **may** be of specific ecological value. The tree is likely to contain sufficient deadwood and decay that is a special habitat for many rare invertebrates that are considered to be at risk from extension)

**Structural Condition** column notes any defect, signs or symptoms of ill health, structural weaknesses or other problems that are easily and visibly recognised that may affect the physiology or structural integrity of the tree.

**Recommendations** The recommendations are provided giving the appropriate action required for the tree or groups of trees to fulfil the brief, which possibly include reducing foreseeable risk or improve the physiology of the tree.

**Priority Coding** is provided to relay the urgency in which any recommended work is required based on the health and safety of the site and the considered target occupancy. It may be helpful for budgeting purposes.

- Priority 1** Top priority; to be undertaken as soon as it is practicable for reasons of offsetting foreseeable risk, injury or damage and where the probability of such occurring is considered high.
- Priority 2** Medium priority; attention strongly advised at your earliest convenience to deal with a problem that whilst is not as serious as priority one, carries significant concern. In any event, works should be completed within 6 months.
- Priority 3** Low Priority; the work is advised but of a lower priority than above which should be carried out before a period of 12-months lapses.
- Priority 4** Minor Problems representing no immediate hazard at the time of inspection although potential for harm or hazard to develop as the tree grows or faults developing that may become significant at a later date if left to develop. Works without any immediate urgency, possibly to rectify a minor fault or to abate a nuisance present or developing.

**Root Protection Area** this is a protection area established for around the base of each tree to prevent physical, chemical or compaction damage occurring. This is usually achieved through the erection of fencing or other barrier.

**Construction Exclusion Zone** this is an area established where construction is not permitted and usually correlates to the Root Protection Area.

**Special Precaution Area** this is an area, usually within the root protection area, where construction or other activity may be permitted but only under the direction of a 'Arboricultural Method Statement' and the supervision of an Arborist.

- **All measurements given are approximate.**
- AGL: an abbreviation for above ground level.

#### 14.0. Glossary of Terms

**Abscission;** the shedding of a leaf or other part of a plant, involving the formation of a corky layer across its base (SOME TREE SPECIES SHED TWIGS IN THIS WAY). See also cladoptosis).

**Adaptive Growth;** in tree biomechanics, the process whereby wood formation is influenced both in quality and in quantity by the action of gravitational force and mechanical stresses on the cambial zone (THIS HELPS TO MAINTAIN A UNIFORM DISTRIBUTION OF MECHANICAL STRESS)

**Adventitious;** Latent or dormant bud on stem or root often invisible until stimulated into growth which occurs from an unusual place i.e. not a twig, leaf or bud.

**Anchorage;** in trees, the holding of the root system within the soil, involving the flow of forces from the stem through the branches of the root system to the cohesive root/soil interface.

**Architecture;** in a tree, a term describing the pattern of branching of the crown or root system.

**Assessment;** in relation to tree hazards, the process of estimating the risk which a tree or group of trees poses to persons or property (THIS INVOLVES A VISUAL INSPECTION FOR DEFECTS AND CONTRIBUTORY SITE FACTORS, AND SOMETIMES ALSO A DETAILED INVESTIGATION OF SUSPECTED DEFECTS)

**Assym;** This abbreviation means...asymmetric...and refers to the tree having an asymmetric or unbalanced crown. This is usually preceded by a measurement in metres which provides the extent of crown asymmetry and is measured from the centre of the trunk. It may also have a correlation to the lever arm

**Arboriculturalist;** person who has, through relevant education, training and experience, gained recognised qualifications and expertise in the management of trees generally and in relation to construction.

**Architecture:** in a tree, a term describing the pattern of branching of the crown or root system.

**Arboricultural Implication Assessment (AIA)** study, undertaken by an arboriculturalist, to identify, evaluate and possibly mitigate the extent of direct and indirect impact on existing trees that may arise as a result of the implementation of the site layout.

**Arboricultural Method Statement:** methodology for the implementation of any aspects of development that has the potential to result in loss of or damage to a tree.

**Assessment:** in relation to tree hazards, the process of estimating the risk which a tree or group of trees poses to persons or property (THIS INVOLVES A VISUAL INSPECTION FOR DEFECTS AND CONTRIBUTORY SITE FACTORS, AND SOMETIMES ALSO A DETAILED INVESTIGATION OF SUSPECTED DEFECTS)

**Bole (trunk):** the main stem of a tree below its first major branch

**Branch:** a limb extending from the main stem or parent branch of a tree

**Canopy:** the topmost layer of twigs and foliage in a woodland, tree or group of trees

**Construction Exclusion Zone;** area based on the RPA (meters as a radial measurement and sometimes a m<sup>2</sup>), identified by an Arboriculturalist, to be protected during development, including demolition and construction work, by use of barriers and/or ground protection fit for the purpose to ensure the successful long-term retention of a tree.

**Crown:** in arboriculture the main foliage-bearing portion of a tree containing the leaves and branches

**Defect:** in relation to tree hazards, any feature of a tree that detracts from the uniform distribution of mechanical stress, or which makes the tree mechanically unsuited to its environment.

**Dysfunction:** in woody tissues, the loss of physiological function, especially water conduction.

**Failure:** in connection with tree hazards, a partial or total fracture within woody tissues or loss of cohesion between roots and soil. (IN TOTAL FAILURE, THE AFFECTED PART SNAPS OR TEARS AWAY COMPLETELY. IN PARTIAL FAILURE, THERE IS A CRACK OR DEFORMATION WHICH RESULTS IN AN ALTERED DISTRIBUTION OF MECHANICAL STRESS)

**Group:** the term 'group' is intended to identify trees that form cohesive arboricultural features either **aerodynamically** (e.g. trees that provide companion shelter), **visually** (e.g. avenues or screens) or **culturally** including for biodiversity (e.g. parkland or wood pasture).

**Heave:** in relation to a shrinkable clay soil, expansion due to re-wetting, sometimes after the felling or root severance of a tree which was previously extracting moisture from the deeper layers; also, in relation to root growth, the lifting of pavements and other structures by radial expansion; also, in relation to tree stability, the lifting of one side of a wind-rocked root plate.

**Leader:** in a tree, a topmost shoot that has apical dominance.

**Preventive action:** in a tree hazard management, action that helps to prevent injury to persons or damage to property.

**Pruning:** the removal or cutting back of twigs, branches or roots; in some contexts applying only to twigs or small branches only, but more often used to describe all kinds of work involving cutting.

**Retained Tree:** a tree that has been considered suitable by an Arborist for retention and which during the design stage is selected for retention and incorporated within the development.

**Risk:** the likelihood of the potential harm from a particular hazard becoming actual harm.

**Root Protection Area (RPA):** layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree, shown in plan form in m<sup>2</sup>

**Soil heave:** see heave

**Subsidence:** in relation to soil or structures resting in or on soil, a sinking due to shrinkage when clay soils dry out, sometimes due to extraction of moisture by tree roots.

**Subsidence:** in relation to branches of trees, a term that can be used to describe a progressive downward bending due to increasing weight.

**Targets:** in a tree hazard assessment (and with somewhat incorrect terminology), persons or property or other things of value, which might be harmed by mechanical failure of the tree or by objects falling from it.

**Tree:** a woody plant, which typically has a single main stem and, in maturity, attains a height of at least four metres and a stem diameter at breast height of at least 75-mm.

**Tree Constraint Plan (TCP):** plan prepared by an Arboriculturalist for the purpose of layout design showing the RPA and representing the effect that the mature height and spread of retained trees will have on layouts through shade dominance, etc.

**Tree Preservation Order:** in Great Britain, an order made by a local authority, whereby the authority's consent is generally required for the cutting down, topping or lopping of specified trees.

**Tree Protection Plan:** scale drawing prepared by an arboriculturalist showing the final layout proposals, tree retention and tree and landscape protection measures detailed within the arboricultural method statement (AMS), which can be shown graphically.

**Trunk:** the single main stem of a tree.

**Vigour:** in tree assessment, an overall measure of the rate of shoot production, shoot extension or diameter growth (cf. **vitality**)

**Visual Tree Assessment (VTA):** in addition to the literal meaning, a system expounded by Mattheck & Breloer (1995) to aid the diagnosis of potential defects through visual signs and the application of mechanical criteria.

**Wind exposure:** the degree to which a tree or other object is exposed to wind, with regard both to duration and velocity.

**Wind pressure:** the force exerted by wind on a tree or other object.

**Wind snap:** the breaking of a tree stem by wind.

**Windthrow:** the blowing over of a tree at its roots.

## **15.0. References**

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**Lonsdale D.** Principles of Tree Hazard Assessment and Management.

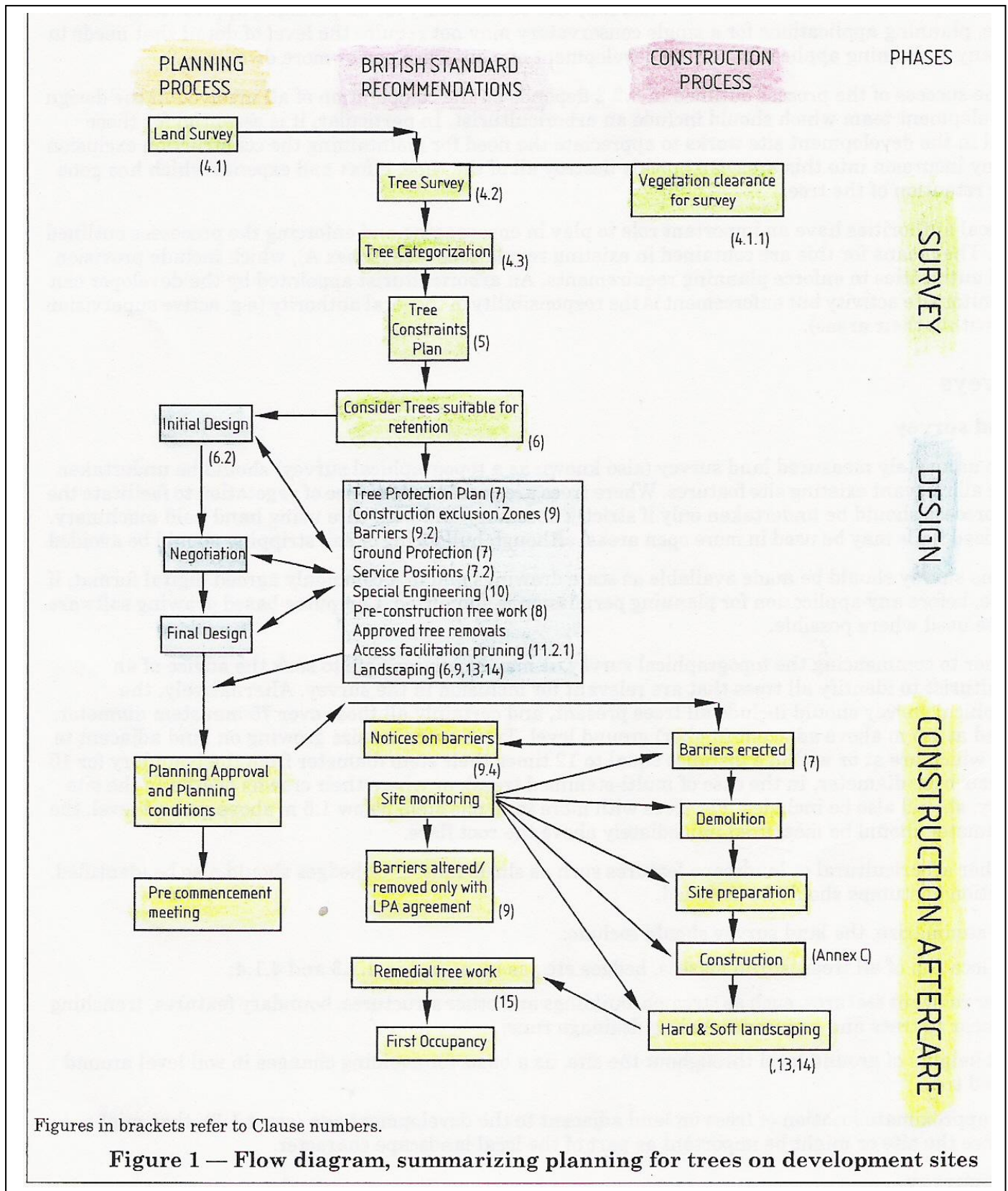
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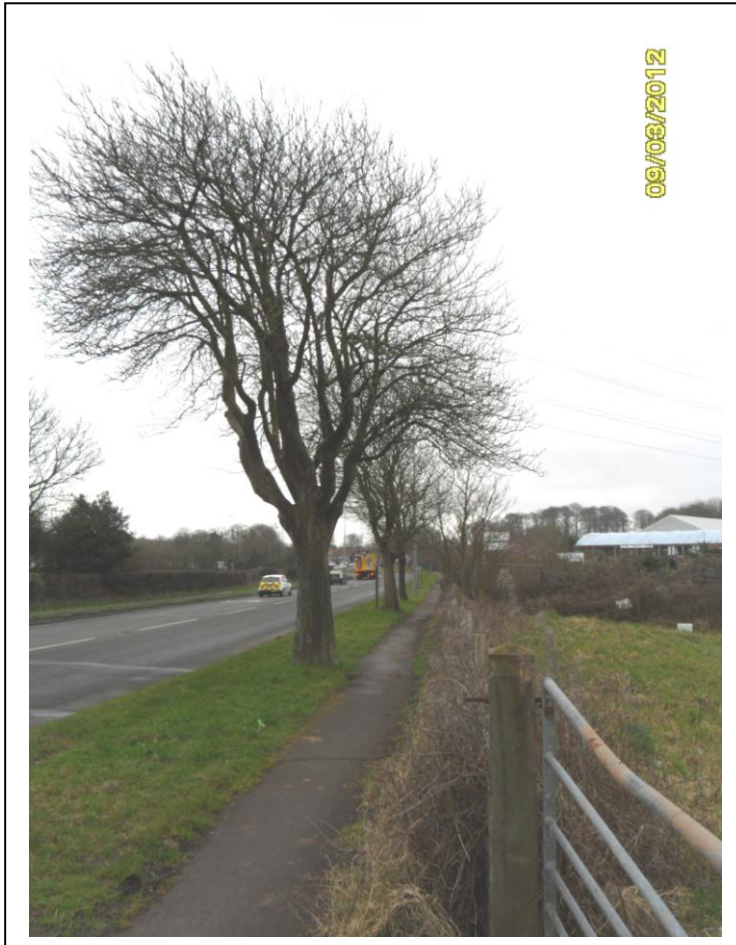
16.0 Appendices



Figures in brackets refer to Clause numbers.

Figure 1 — Flow diagram, summarizing planning for trees on development sites

**Photographs**

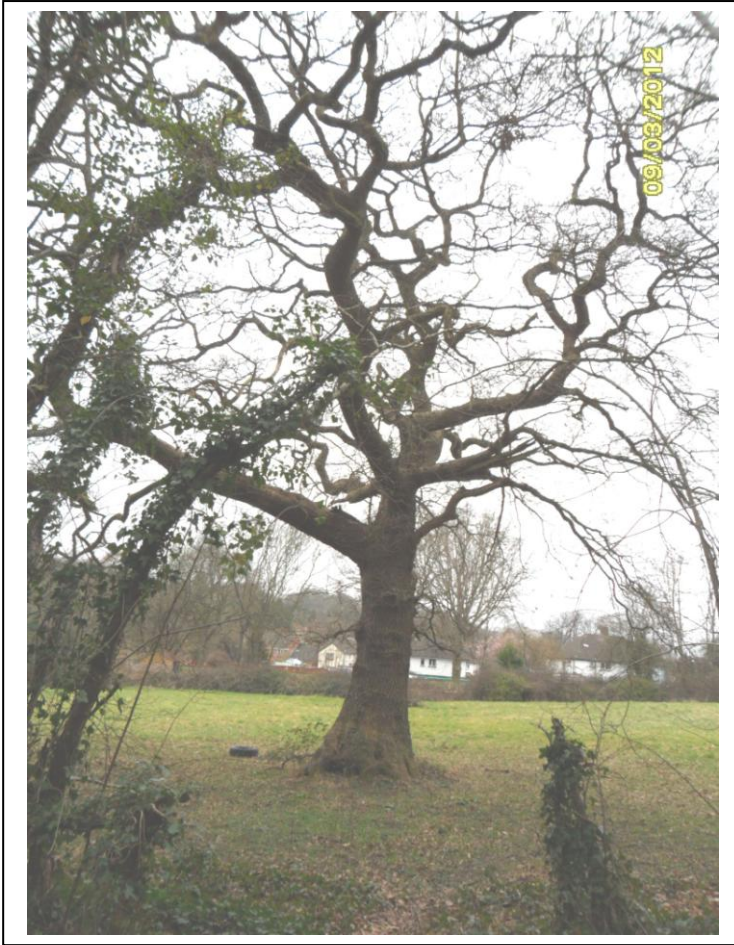


**Tree No 521,522,523:**  
Rowan in foreground with  
lime and cherry in  
background respectively.

**Picture below - Group 2**  
Wooded copse with dense  
under storey.



**Photographs**



**T 1:** 'A' rated open grown oak in private garden.



**Group 4 & T 2** (refer to arrow)

**Photographs**



**Group 5:**

Windblown poplar in foreground of woodland edge. With 'topped' trees in background.  
(Refer to arrows)



**Group 6 & 7:** Conifer element growing over from adjoining gardens.



**Group 8 (left) & 9 (right).**

**Photographs**



**Group 11:**  
Pylon and power lines pass close to these trees.



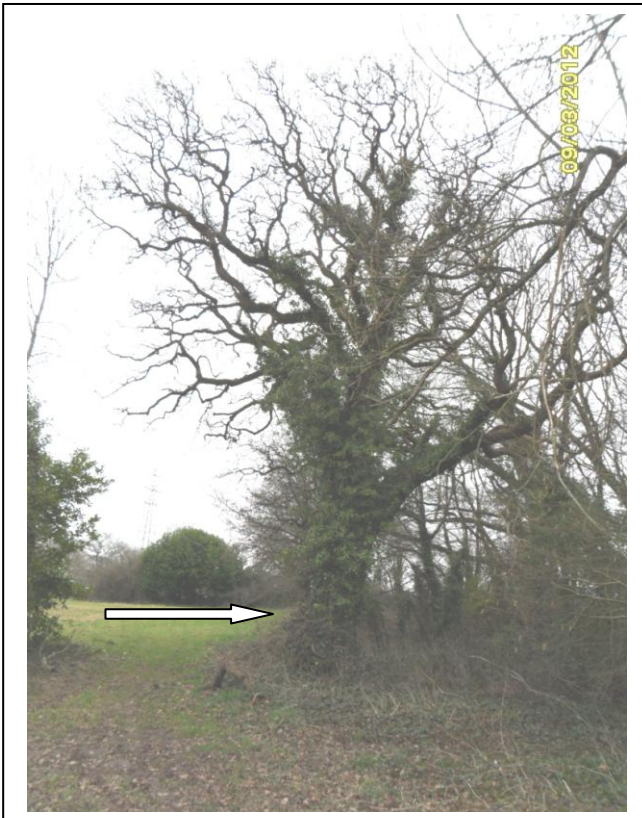
**Group 12:**  
Woodland.



**Tree number 529** (background)  
Trees numbered **539 & 531**  
(foreground).



**Photographs**

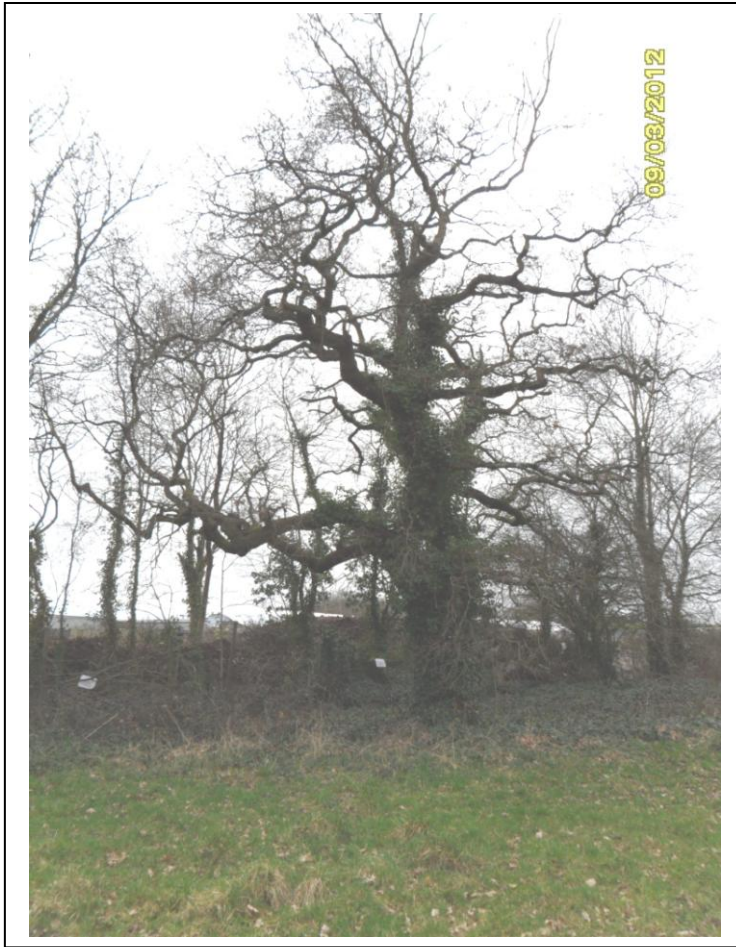


**Tree No 528:**  
Basal decay (refer to arrow)



**Tree number 532**  
Basal decay and failed scaffold limb  
with potential bat habitat value  
(refer to arrow)

**Photographs**



**Tree number 533** in the foreground  
**Group 13** in the background