

'C' Grade trees

These are trees considered to be of low quality, with low or temporary landscape conservation or other cultural value, which might remain for a minimum of 10 years, or young trees with stems of less than 150mm diameter.

These trees should be considered in the development process, however, they will usually not be retained where they impose a significant constraint on any proposed development.

'B' Grade trees

These are trees considered to be of moderate quality and value, capable of making a significant contribution for in excess of 20 years. These trees should be a material consideration in the development process.

'A' Grade trees

These are trees considered to be of high quality and value, and to be in such a condition as to make a substantial contribution (40 years or more is recommended). These trees should be a material consideration in the development process.

Interim Grade Trees

It should also be noted that some of the individual trees have been recommended for further investigation, and therefore have been graded with an interim grade that could alter, subject to the results of the further detailed investigation being carried out as advised within the tree survey.

2.0 Existing Above and Below Ground Constraints:

2.1 Root Protection Area (RPA)

The purple circles on the Tree Constraints Plan (TCP) represent the minimum root protection areas which will need to be fenced off. In accordance with BS5837:2005, it is recommended that a view is taken by the arboriculturist on the likely rooting zone of trees, in view of existing on and off-site construction features which may have distorted root patterns, and make allowance for this accordingly.

2.2 Morphology and disposition of the roots

The disposition and morphology of tree roots is a complex one. It can be assumed that tree roots will take the line of least resistance when searching for water and nutrients, and can be diverted by underground structures such as building foundations. With regard to this site the vast majority of the trees can be said to be open grown with their rooting systems unaffected.

2.3 Site Characteristics

The main site access is a tarmac drive running from Chalcraft Lane, turning into a gravel car park. The site is currently used as a garden centre with the main building positioned to the middle of the site. The site is mainly flat with no signs of standing water on the day the tree survey took place. There are a number of ditches within and surrounding the site boundaries. The majority of the ditches were dry with the exception of the ditch running from East to West of the northern boundary which was full of water. There are a number of large areas with unmanaged vegetation growing, which caused difficulties in reaching the base of some of the trees. Along with the overgrown vegetation, there were a number of areas that have been used to store waste material such as chicken wire, fencing piles, burnt out cars and a variety of

other objects. The site also contains dilapidated poly tunnels with very young self-set trees and vegetation growing within them.

2.4 Current height and spread of trees

There are several trees where the crowns overhang the root protection areas, although only by a small amount in these cases; the average distance is 1-2m. This has been taken into account when positioning the tree protective line on the constraints plan, to protect the tree crowns as well as the rooting area.

3.0 **Future Constraints**

3.1 Working Space/Construction Exclusion Zone (CEZ)

In addition to the RPA as calculated for each tree, there is also a need to consider any above ground constraints, and at least a 2.0m construction space to enable the implementation of any construction (i.e. the erection of scaffolding, foundation construction and build), ideally without encroaching on the protection zone. The Tree Constraints Plan shows a protective fencing line forming the Construction Exclusion Zone (CEZ). This allows for adequate below and above ground protection for the trees and provides an indicative "developable area" outside of the tree protective fence line.

3.2 Ultimate height and spread of the trees

Many of the trees within the site are young to middle-aged with considerable future growth potential. Consideration should be given to allowing adequate space for this future growth within any development proposals. The trees and groups along the South and West boundaries will need to be considered for shading issues at the design stage, allowing for adequate distance from the trees.

3.4 Infrastructure requirements to be considered

Consideration should be given to easements for underground services which should be directed outside the Root Protection Areas of trees worthy of retention. This is important to establish at an early stage of the planning process, to avoid difficulties later on in the development stages where tree roots can be damaged, and trees left liable to decline over a number of years.

4.0 **Legal Constraints**

4.1 Tree Preservation Orders and Conservation Areas

CBA Trees has not been instructed to ascertain the protected status of the trees on this site, and it is important to note that before any tree works commence on-site, written approval, if required, is obtained from the Arun District Council in regard to Tree Preservation Orders or Conservation Areas that may be in force on this site.

4.1 Consideration of wildlife, bats, protected species, habitats, ecology

The Wildlife and Countryside Act, 1981 (as amended) provides protection for wildlife, and in particular with regard to trees, attention and consideration should be given to nesting birds and the potential for bat roosts within trees and hedges.

4.0 **Conclusions**

- 4.1 It is anticipated that a development layout can be designed, which is sympathetic to the existing tree cover of the site, which is of value to the immediate area and the site itself.
- 4.2 Prior to finalising a layout and the production of the Arboricultural Development Statement (ADS), CBA Trees is able to provide an Arboricultural Implications Assessment (AIA) of pending layouts to aid in guiding the design process, and a checklist is enclosed of the areas that will need to be considered and resolved prior to producing an ADS.

I trust that this information is of assistance, however, should you have any queries or require further information please do not hesitate to contact me.

Yours sincerely



James Palmer BTEC Nat Dip in Forestry & Arb

Enclosed:

- Tree Survey Report (x5)
- Root Protection Area Schedule (RPA) (x5)
- Constraints Plan CBA7302.02 (x5)
- AIA Checklist

April 2009
CBA7302

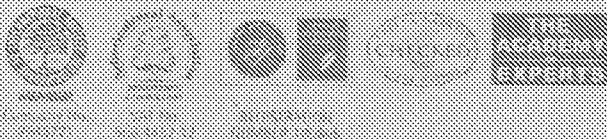
Orchard Enterprises (Southern) Ltd

TREE SURVEY REPORT

Chalcroft Nurseries
Chalcraft Lane
Bognor Regis



*The Complete Professional
Arboricultural Consultancy*



CBA Trees, Apex House, Apex Centre, Church Lane, Colden Common, Winchester, Hampshire, SO21 1TN.

Tel: 01962 715407 (3 Lines) Fax: 01962 711419 Email: info@cbatrees.co.uk Web: www.cbatrees.com



TREE SURVEY NOTES

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2005 and current good arboricultural practice.

- Each tree has been numbered and, where instructed, for future identification on site, has been tagged using small durable metal or plastic tags.
- Due to variations of existing ground levels through the site, height dimensions are estimated and are given in metres. Accurate heights, measured with the aid of optical instruments can be provided where instructed.
- Trunk/stem diameters are measured in mm at 1.5 metres above ground level, or immediately above the root flare for multi-stemmed trees, using a standard measuring tape as defined by British Standards, unless otherwise stated.
- Estimated branch spread is taken in metres from the centre of the trunk, at the four cardinal points of a compass, to achieve an accurate representation of the crown shape which will be recorded on the tree survey plan.
- An assessment of a tree's age classification is made in terms of its maturity within the site's landscape and defined as:

Y	=	young trees
MA	=	middle aged trees
M	=	mature trees
OM	=	over-mature trees
V	=	veteran

- An assessment of a tree's physiological condition is defined as:

Good	=	fully functioning biological system showing average vitality i.e. normal bud growth, leaf size, crown density and wound closure
Fair	=	fully functioning biological system showing below average vitality i.e. reduced bud growth, smaller leaf size, lower crown density and reduced wound closure
Poor	=	a biological system with limited functionality showing significantly below average vitality i.e. limited bud growth, small and chlorotic leaves, low crown density and limited wound closure
Dead	=	dead

- An assessment of a tree's structural condition is defined as:

Good	=	no significant structural defects
Fair	=	structural defects which could be alleviated through remedial tree surgery or management practices
Poor	=	structural defects which cannot be alleviated through tree surgery or management practices
Dead	=	dead

- An assessment of a tree's future life expectancy is defined as: **<10, 10-20, 20-40 or >40 years.**

Categorisation of Trees

The category for each tree is assessed using the recommendations of BS5837:2005. The assessment has not considered any site-specific development proposals, but will have considered any changes on or off-site which may have an effect on the conditions surrounding the surveyed trees.

The trees have been classified into one of the following categories (and one or more sub-categories [this will however not increase the value of the tree]) and are indicated on the associated drawings by colours as indicated.

Category R	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees in such a condition that any value would be lost within 10 years or should be removed for reasons of sound arboricultural management				DARK RED
Category A				
Trees of high quality and value: in such a condition as to make a substantial contribution (40 years or more is recommended)	Trees that are a particularly good example of their species, rare or unusual, essential components of groups or of formal or semi-formal features.	Trees, groups or woodlands providing definite screening of views in and out of the site, or softening effect to the locality, or those of particular visual importance.	Trees, groups or woodlands of significant conservation, historical or other value (e.g. veteran or wood-pasture)	LIGHT GREEN

Category B				
Trees of moderate quality and value, capable of making a significant contribution for in excess of 20 years.	Trees which might be included in the A category, but are downgraded due to impaired conditions/remediable defects.	Trees in numbers, that collectively form a distinct landscape feature but are not individually an essential component of a formal or semi-formal feature. These are likely to be trees situated mainly within the site with little visual impact on the surrounding locality.	Trees with clearly identifiable conservation or other cultural benefits.	MID BLUE
Category C				
Trees of low quality and value which might remain for a minimum of 10 years or young trees with stems of less than 150mm diameter.	Trees not qualifying in higher categories	Trees in groups or woodlands without having significant landscape value or offering low or temporary screening value	Trees with very limited conservation or other cultural benefits	GREY

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. It will identify any visible signs of ill-health or major defects, advising a further detailed investigation where appropriate. This will most often take the form of a request for either “*full ground level inspection*” or “*climbing inspection required*”. There may also be a further reference to the need for “*decay detection equipment*” to aid diagnosis. A tree survey does not include a comprehensive schedule or specification of remedial tree works, but may contain a guide to the work which might be undertaken by a prudent tree owner, purely for reasons of health and safety.

A Tree Survey should not be confused with a Tree Inspection or Arboricultural Implication Assessment, which are totally separate exercises.

	TREE SURVEY SCHEDULE			
	Client:	Orchard Enterprises (Southern) Ltd	Site:	Chalcroft Nurseries, Chalcraft Lane, Bognor Regis
	Date:	15th April 2009	Consultant:	James Fuller <i>BTEC Nat Dip in Forestry & Arb</i>
	Tagged:	No	Weather:	Sunny

Notes:-

1. It may be advised that some trees should have the ivy removed to enable a re-survey to be carried out. This would also alleviate the tree from becoming suppressed; carrying additional weight that increases the chance of windthrow due to a larger dense crown area; and only receiving restricted light. Unless otherwise stated, in order to prevent regrowth, it is only necessary to remove a 300mm section of ivy and clear around the base.
2. It may be advised that it was only possible to estimate the diameter of some trees because of ivy smothering, dense vegetation, or trees located off-site with no access.
3. The estimated remaining contribution in years, and the tree grading category have been calculated for the current situation and may alter where further investigation works are advised.
4. Some trees or groups may have been given an interim grade. The reason for the interim grading is addressed in the timescales given as this may have a bearing on health and safety and/or any development proposals.
5. Tree Groups have been assessed with estimated and representative data.
6. This is not a Tree Works Schedule. Any preliminary management recommendations are listed in the interests of health and safety and should be carried out by a prudent tree owner.
7. Any management recommendations are suggested for reasons of health and safety only, regardless of development proposals at this stage. However, the defects requiring remedial tree surgery are by their very nature potential wildlife habitats, including protected species which needs consideration prior to any tree surgery works commencing.

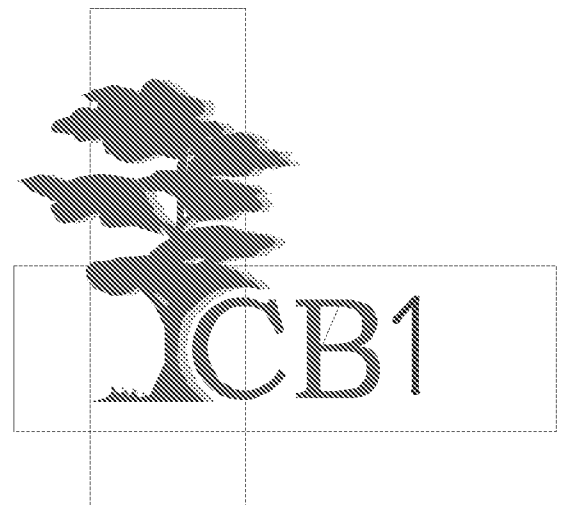
Tree No	Species	H't (m)	Single/ Multi- Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Age	Physio- logical Condition	Structural Condition and Relevant Comments	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
1	Common Elder <i>Sambucus nigra</i>	4	MS	280	4.0	4.0	4.0	4.0	1.5	2.0	2.0	1.0	MA	Fair	Fair Multi-stemmed at 0.5m above ground level Ivy on trunk Crossing branches Minor deadwood in crown	None required at time of survey	10-20	C1
2	Leyland Cypress <i>X Cuprocyparis leylandii</i>	16	S	750	5.0	5.0	5.0	5.0	1.0	2.0	2.5	3.0	MA	Good	Good Ivy on trunk Minor deadwood in crown Bifurcated with included bark at 8m above ground level	None required at time of survey	20-40	B1

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Age	Physio-logical Condition	Structural Condition and Relevant Comments	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
3	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	16	MS	640	4.0	4.0	4.0	4.0	2.0	2.0	2.0	2.0	MA	Fair	Fair Multi-stemmed at ground level Minor deadwood in crown Crossing branches Growing on bank Bark wounds in crown	None required at time of survey	10-20	C1
4	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	16	MS	500	3.0	4.0	4.0	3.0	2.0	2.0	3.0	3.0	MA	Fair	Fair Growing on bank Multi-stemmed at ground level Crossing branches Deadwood and stubs in crown	None required at time of survey	10-20	C1
5	Silver Birch <i>Betula pendula</i>	10	MS	320	3.0	2.5	3.0	3.0	2.0	2.0	2.0	2.0	MA	Good	Fair Trench dug on North side Mechanical damage to exposed surface roots Bifurcated at ground level with included bark Compaction on South side	None required at time of survey	10-20	C1
6	Pedunculate Oak <i>Quercus robur</i>	10	S	350	2.0	3.0	5.0	4.0	2.0	2.0	2.0	3.0	Y	Poor	Fair Ivy on trunk and in crown Major deadwood in crown Major dieback in crown Epicormics in crown	Advise removal	<10	R
7	Pedunculate Oak <i>Quercus robur</i>	14	S	540	6.0	8.0	7.0	9.0	6.0	6.0	6.0	6.0	MA	Good	Good Ivy on trunk Growing in ditch Minor deadwood in crown Epicormics in crown	None required at time of survey	>40	B1+2
8	Field Maple <i>Acer campestre</i>	12	MS	1000	4.0	2.0	6.0	8.0	1.0	6.0	1.0	1.0	MA	Fair	Poor Growing on bank Multi-stemmed at ground level Major decay in base Crown dominant to North side Crown shape distorted due to group pressure	None required at time of survey	10-20	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Age	Physio-logical Condition	Structural Condition and Relevant Comments	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
9	Pedunculate Oak <i>Quercus robur</i>	16	S	800	7.0	7.0	10.0	10.0	4.0	6.0	4.0	2.0	MA	Good	Good Boundary edge tree Ivy on trunk and in crown Major deadwood in crown Crown shape distorted due to group pressure Epicormics in crown	None required at time of survey	>40	B1+2
10	Pedunculate Oak <i>Quercus robur</i>	15	MS	Est 800	8.0	6.0	10.0	7.0	1.0	2.0	3.0	6.0	MA	Good	Good Growing on bank Bifurcated at 1m above ground level Ivy on trunk Epicormics in crown Rubbing and crossing branches Minor deadwood in crown	None required at time of survey	>40	B1+2
11	Common Ash <i>Fraxinus excelsior</i>	14	MS	850	6.0	6.0	9.0	8.0	1.0	2.0	2.0	3.0	MA	Fair	Fair Growing on bank Multi-stemmed at ground level Minor deadwood in crown Ivy on trunk and in crown	None required at time of survey	20-40	C1+2
12	Common Ash <i>Fraxinus excelsior</i>	14	S	Est 500	6.0	5.0	4.0	5.0	2.0	2.0	2.0	2.0	MA	Fair	Fair Unable to verify health and safety due to dense bramble Ivy on trunk and in crown	Clear bramble and re-survey within 1 month	20-40	C1 Interim
13	Monterey Cypress <i>Cupressus macrocarpa</i> 'Gold Crest'	10	S	Est 250	4.0	4.0	4.0	4.0	1.0	2.0	4.0	2.0	Y	Good	Good Unable to verify health and safety due to no access Previously crown lifted on South side leaving stubs and old pruning wounds Minor deadwood in crown BT lines run through North side of crown	Gain access and re-survey within 1 month	20-40	C1+2 Interim

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Age	Physio-logical Condition	Structural Condition and Relevant Comments	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
14	Dawn Redwood <i>Metasequoia glyptostroboides</i>	11	S	Est 300	4.0	3.0	3.0	3.0	2.0	2.0	4.0	2.0	Y	Good	Good Unable to verify health and safety due to no access Previously crown lifted on South side to 4m above ground level Stubs and old pruning wounds BT line runs through North side of crown	Gain access and re-survey within 1 month	>40	B1+2 Interim
15	Pedunculate Oak <i>Quercus robur</i>	Est 16	S	Est 950	10.0	12.0	10.0	10.0	4.0	4.0	4.0	4.0	MA	Good	Fair Unable to verify health and safety due to no access Minor deadwood in crown Ivy on trunk and in crown Decay in branch to North side occluding	Gain access and re-survey within 1 month	>40	B1 Interim
16	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	Est 7	S	Est 200	2.0	2.0	2.0	2.0	1.0	1.0	1.0	1.0	Y	Good	Good Unable to verify health and safety due to no access Low hanging branches	Gain access and re-survey within 1 month	20-40	C1 Interim
Grp 1	Flowering Cherry Elder Lonicera Goat Willow Bramble Holly Poplar Laurel Box Hornbeam	5	MS	350	-	-	-	-	-	-	-	-	MA	Fair	Fair Multi-stemmed at ground level Ivy on trunk Overgrown boundary group Creates good site boundary Poor quality trees within	None required at time of survey	20-40	C1+2
Grp 2	Common Ash Goat Willow Field Maple Pedunculate Oak Elder Common Hawthorn	6	MS	300	-	-	-	-	-	-	-	-	MA	Fair	Fair Creates good site boundary Poor quality group Ivy on trunk and in crowns Overgrown bramble	None required at time of survey	20-40	C1+2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Branch Spread (m)				H't of Crown AGL (m)				Age	Physiological Condition	Structural Condition and Relevant Comments	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
					N	E	S	W	N	E	S	W						
Grp 3	Field Maple	9	MS		-	-	-	-	-	-	-	-	MA	Good	Fair Creates linear group on bank Crown shape distorted due to group pressure Group creates good landscape feature along with trees 7, 8 and 9	None required at time of survey	10-20	C1+2
G3.1				140														C1+2
G3.2				170														C1+2
G3.3				500														C1+2
G3.4				400														C1+2
Grp 4	Common Hawthorn Elder Bramble Common Ash Pedunculate Oak Flowering Cherry	8	MS	200	-	-	-	-	-	-	-	-	Y	Fair	Fair Boundary edge group Creates good site containment Poor quality group	None required at time of survey	20-40	C1+2
Grp 5	Common Ash	15	S	Est 600	-	-	-	-	-	-	-	-	MA	Good	Good Unable to verify health and safety due to dense understorey, will need picking up in more detail	Clear overgrown understorey and re-survey within 1 month	20-40	B1+2 Interim
Grp 6	Mixed shrubs including Photinia, Hebe	4	MS	110	-	-	-	-	-	-	-	-	Y	Good	Good Garden shrub	None required at time of survey	20-40	C1+2
Grp 7	Cypress spp Japanese Maple	Est 3	MS	Est 100	-	-	-	-	-	-	-	-	Y	Good	Good Unable to verify health and safety due to no access	Gain access and re-survey	20-40	C2 Interim
H1	Common Hawthorn Elder	3	MS	140	-	-	-	-	-	-	-	-	MA	Good	Good Multi-stemmed at various heights Fully managed hedge 2m high at North end, 3m high at South end	None required at time of survey	20-40	C2 Interim





COMPANY PROFILE, QUALIFICATIONS AND EXPERIENCE

CBA Trees, one of the leading professional arboricultural consultancy practices in the UK is based in Colden Common, Hampshire. There are currently three consultants working from this building, all of varying expertise and qualifications with another consultant working from Cardiff. There is also a team of three trainee consultants/surveyors at varying stages in their training, together with a student from a local college also working from Colden Common.



The team is headed by its Chairman **Colin Bashford** *MBE M.Arb., F.Arbor.A, MAE* who, with over 40 years in the profession, is considered to be one of the most eminent professionals in this field and is a Registered Consultant of the Arboricultural Association, a Law Society approved Expert Witness and a member of the Academy of Experts.

Colin has worked on private estates; for Local and Central Government where in the latter he advised up to Ministerial level for government bodies, agencies and departments, as well as acting as the Inspecting Officer on Appeals, or Technical Assessor at Public Local Inquiries.

In 1990, Colin retired from public service, but after numerous contacts and offers from the industry, formed a sole practitioner company, this has since blossomed into a thriving Practice which was formally incorporated in 1993.

His expertise leads Colin to act as an expert witness on behalf of well-known household names. A listing of some of the clients of CBA Trees can be found on pages 3 and 4 of this document.

Colin is a past Chairman of the Board of Governors for Merrist Wood College in Guildford, and has served for many years on the Board of Directors of the International Society of Arboriculture and that of ISA Europe Ltd. He is currently a Vice President of the International Society of Arboriculture.



Ken Sheppard, our Senior Consultant, joined CBA Trees as a consultant in November 2005 and works mainly from his office in Cardiff, covering projects throughout the UK. He is a member of the Institute of Chartered Foresters (by examination) and a Fellow of the Arboricultural Association; he also holds the following qualifications relevant to arboriculture:

- Royal Forestry Society Diploma of Arboriculture
- Arboricultural Association Technician's Certificate

Prior to joining CBA Trees, Ken spent a period of eight years as a Tree Preservation Officer with Cardiff City Council. This has provided him with an extensive and varied experience of arboricultural work within the Local Authority field. During the course of this work, he was frequently required to attend Court as an expert witness. His past experience of the commercial sector includes employment with a landscaping company, as well as experience as a groundsman/arboricultural foreman with a local tree surgery company.



Stefan Rose joined CBA Trees in 1998 as a junior surveyor/arborist, and he has gained experience in almost every field of our work, under guidance and supervision of the senior consultants. Stefan holds the Arboricultural Association Technician's Certificate, and now as a Consultant, he takes instructions from his own expanding client base, as well as assisting our Principal Consultant on prestigious casework.

Stefan continues his studies towards the Professional Diploma in Arboriculture and maintains a supervisory role with our young surveyors and trainees.



Alex Monk has had many years of experience as an independent tree surgeon/surveyor, running his own business in Hampshire. He holds the National Certificate in Arboriculture, and is has recently successfully completed his studies to attain the Arboricultural Association Technician's Certificate.

Alex came to CBA Trees in May 2004 as a trainee surveyor/consultant, soon became a reliable and trusted member of staff, and is now a Consultant with his own extensive client base.



Our surveying team includes:



Graham Sear joined CBA in November 2005 and had, until that time, worked for several years in the field of tree surgery and as a tree inspector for Local Authorities. Graham is now a Senior Surveyor, undertaking Tree Surveys, Health & Safety Audits. He provides Constraints Advice and undertakes Arboricultural Implications Assessments for our clients. He holds a National Diploma in Arboriculture, and has recently successfully attained the Arboricultural Association Technician's Certificate.



Richard Harris joined CBA Trees in April 2007 as a trainee surveyor after working as a tree surgeon for 8 years both as an employee and in a self-employed capacity. He has now progressed to Consulting Arborist, and is regarded as a mature, well-respected member of staff. He is now responsible for Health & Safety Audits, British Standard Surveys, Constraints Advice, Implication Assessments etc. Richard is now commencing studies to attain the Arboricultural Association Technician's Certificate, and already holds the HND Forestry qualification.



All consultants are trained in the use of 'state of the art' decay detection equipment, and other professional tools.



We also offer support to students studying and training in the field of arboriculture, and currently have an arboricultural degree student from Sparsholt College, Winchester.



CBA Trees has its own Graphics Department with the latest 'state of the art' software which, along with the most up to date computer equipment, colour copier and scanning facilities, and two AO colour plotters, enables us to compile expertly produced reports and presentations for our clients. This coupled with the qualifications and experience of our consultancy staff, and the expertise of the office based personnel, enables CBA Trees to be The Complete Arboricultural Consultancy. Listed below are some of the services we provide:

- Arboricultural Consultancy
- Arboricultural Impact Studies & Method Statements
- Trees in Conservation Areas
- Advice on Veteran Trees and Ancient Woodlands
- Expert Witness at PLI, and Court Work
- Arboricultural/Landscape Design
- PLI, Expert Witness and Court Work/Litigation
- Tree Survey Work (street trees, development projects, individual private sites)
- Tree Preservation Order Advice
- Tree Inspections and Hazard Risk Assessments
- Woodland Creation, Maintenance & Management
- Health & Safety issues – Inspections on behalf H&SE
- Arboricultural site and project management

CBA Trees is very proud of its client base that includes the following companies:



Residential Developers

Bryant Homes (Southern) Ltd
Bryant Homes (Weald) Ltd
Wimpey Construction
Alfred McAlpine Limited
McLean Homes (South-West) Ltd
Bovis Homes Limited
Fairview New Homes plc

Beazer Homes plc
Berkeley Homes Ltd
Edward Ware Homes
Bryant Homes (South-West) Ltd
Beechwood Homes Ltd
Taywood Homes Ltd
Heron Homes/Development Ltd

Charles Church Homes
Premier Properties Limited
Persimmon Homes Ltd
Fairclough Homes Ltd
Countryside Properties
David Wilson Developments Ltd



Retail Properties/Parks

CRS Home World Limited
Allied Breweries
John Lewis Partnership

Greene King plc
Tesco Stores Ltd
North Oxfordshire Consortium

J Sainsbury plc
Lidl GmbH UK Ltd



Business Parks

Arlington

Brixton plc

Slough Estates Ltd



Leisure

Haven Europe
BskyB

Brands Hatch Leisure Group Ltd
Royal London Parks

Siblu Holidays
Oasis Projects



Design & Legal

Barton Willmore Partnership
Terra firma Consultancy
Boyer Planning Associates
Acanthus, Lawrence & Wrightson
Cunningham Ellis & Buckle
Penningtons

Tucker Parry Knowles Partnership
Derek Lovejoy Partnership
David Huskisson Associates
Acanthus Ferguson Mann
Masons
RPS Planning, Transport & Environment

Town Planning Consultancy
MacGregor Smith
Lester Aldridge
Denton Hall
Bond Pearce
McKennas



Local Authorities & Government Bodies

Royal Borough of Kensington & Chelsea
Surrey Heath Borough Council
Borough of Bexley
Highways Agency
Department of Transport
Test Valley Borough Council

Rushmoor Borough Council
West Sussex County Council
Interserve Defence Services
Basingstoke Borough Council
Southampton City Council
Aspire Defence

Royal Borough of Kingston
Poole Borough Council
Hampshire County Council
Elmbridge Borough Council
Ministry of Defence



Administration Services

Our professional service to clients, which was recently awarded ISO9001 accreditation, could not be achieved without a committed office based staff, headed up by Anne Phillips, Operations Director. We pride ourselves in having recruited an excellent team which provides a prompt and courteous response to our clients.

In an effort to make this task easier, our administration staff are provided with:

- Internet and email access for all users
- Up to date computer hardware with state of the art word processing packages capable of reading and transferring data by network and email
- Spacious and modern offices
- An extensive library of technical books and information literature
- Modern telephone system and ASDL Broadband for fast delivery of data, unlimited volume.

CBA Trees can be found at Apex House, Apex Centre, Church Lane, Colden Common, Winchester, Hampshire SO21 1TN (Tel:01962 715407).

For further information, visit our web site at www.cbatarees.com which gives more detail of our expertise, and of course, our staff are always willing to help answer any queries you may have.

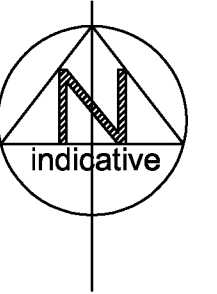
	TREE ROOT PROTECTION AREA SCHEDULE			
	Client:	Orchard Enterprises (Southern) Ltd	Site:	Chalcroft Nurseries, Chalcroft Lane, Bognor Regis
	Date:	15th April 2009	Consultant:	James Fuller <i>BTEC Nat Dip in Forestry & Arb</i>

Notes:

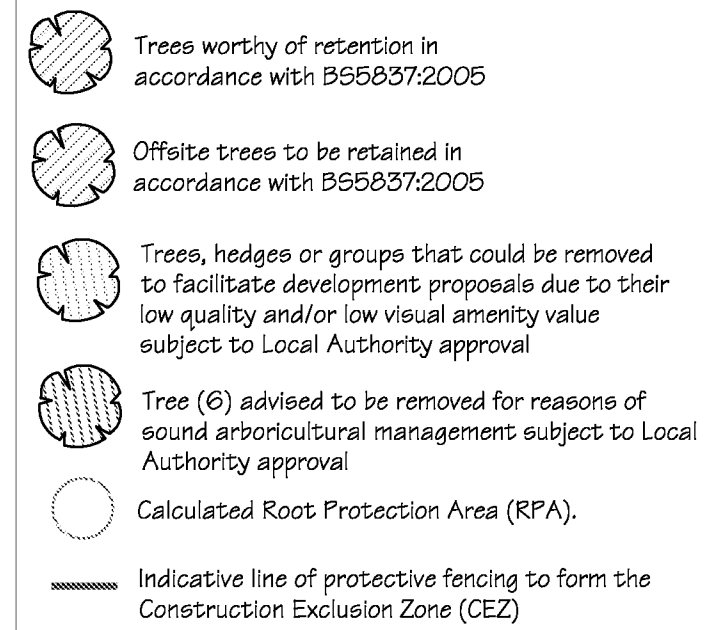
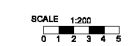
1. This is an assessment of the Root Protection Area (RPA) required, based on the individual tree data collected and Table 2 of BS5837:2005.
2. At this juncture this document is for your sole guidance and ongoing discussions purposes only and is not intended for general circulation, as it assumes that all but the 'R' trees will be retained, which clearly may not be the case.
3. For all single stem trees with a stem diameter greater than 1250mm, and multi-stem trees with a stem diameter greater than 1500mm, the calculated RPA has been capped at 707m² in accordance with Section 5.2.3 of BS5837:2005.

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m ²)
1	Common Elder	C1	MS	280	2.80	24.63
2	Leyland Cypress	B1	S	750	9.00	254.50
3	Lawson Cypress	C1	MS	640	6.40	128.70
4	Lawson Cypress	C1	MS	500	5.00	78.55
5	Silver Birch	C1	MS	320	3.20	32.17
6	Pedunculate Oak	R	S	350	-	-
7	Pedunculate Oak	B1+2	S	540	6.48	131.93
8	Field Maple	C1+2	MS	1000	10.00	314.20
9	Pedunculate Oak	B1+2	S	800	9.60	289.57
10	Pedunculate Oak	B1+2	MS	800	8.00	201.09
11	Common Ash	C1+2	MS	850	8.50	227.01
12	Common Ash	C1 Interim	S	500	6.00	113.11
13	Monterey Cypress	C1+2 Interim	S	250	3.00	28.28
14	Dawn Redwood	B1+2 Interim	S	300	3.60	40.72
15	Pedunculate Oak	B1 Interim	S	950	11.40	408.33
16	Lawson Cypress	C1 Interim	S	200	2.40	18.10
Grp 1	Flowering Cherry Elder	C1+2	MS	350	3.50	38.49
Grp 2	Common Ash Goat Willow	C1+2	MS	300	3.00	28.28
Grp 3	Field Maple					

Tree No	Species	Category	Single/ Multi-Stemmed (S or MS)	Stem Diameter (mm)	Initial Linear Root Protection Distance (Radius m)	Root Protection Area (m2)
G3.1		C1+2	MS	140	1.40	6.16
G3.2		C1+2	MS	170	1.70	9.08
G3.3		C1+2	MS	500	5.00	78.55
G3.4		C1+2	MS	400	4.00	50.27
Grp 4	Common Hawthorn Elder	C1+2	MS	200	2.00	12.57
Grp 5	Common Ash	B1+2 Interim	S	600	7.20	162.88
Grp 6	Mixed shrubs including Photinia, Hebe	C1+2	MS	110	1.10	3.80
Grp 7	Cypress spp Japanese Maple	C2 Interim	MS	100	1.00	3.14
H1	Common Hawthorn Elder	C2 Interim	MS	140	1.40	6.16

[illegible]

SOLENT SURVEYS
BUILDING AND LAND SURVEY CONSULTANTS
SOLENT HOUSE, 7 KENILWORTH GARDENS
WEST END, SOUTHAMPTON, SO30 3RE
Tel: 02380 26470 Fax: 02380 26471



NOTE
Trees marked * are indicatively
plotted only and should be
verified by Land Surveyor

- KEY
- category A trees
 - category B trees
 - category C trees
 - category R trees

CLIENT
Orchard Enterprises
(Southern) Ltd

JOB TITLE
Chalcroft Nurseries
Chalcroft Lane

Bognor Regis
DRAWING TITLE
Tree Constraints Pl

DRAWING No.
CBA7302.02
SCALE 1:500@A1
DRAWN lg
DATE April 2009

THIS DRAWING IS COPYRIGHT OF CBA LTD. AND SHOULD NOT BE REPRODUCED WITHOUT PERMISSION. ALL DIMENSIONS MUST BE CHECKED ON SITE AND NOT SCALED FROM THIS

DRAWING.



DCBA Trees.

CBA Trees, Apex House, Apex Centre, Church Lane
Golden Common, Winchester, Hampshire, SO21 1TN
Tel: 01962 715407 Fax 01962 714419

AIA for Chalcroft Nurseries Site

Dear Paul

I would be very grateful if you would accept this as my AIA (*Arboricultural Implications Assessment*) for Chalcroft Nurseries on Chalcroft Lane in Bognor Regis.

This AIA seeks to consider the implications this development proposal will have upon the existing tree stock on the site, and will also advise on solutions to any implications to ensure the safe and healthy retention of any trees which have been considered to be worthy of retention. The existing tree stock was assessed by a qualified arboriculturist in accordance with BS5837:2005 and the results of this survey exercise and *Root Protection Areas (RPA's)* for the trees have now been compared with your proposed site plans. This AIA only considers the implications of the works which are illustrated on the Indicative Proposed Block/ Site Plan. If any further works are required then further advice should first be sought.

The RPA of a tree is defined in BS5837:2005 as “*the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree*”. This is calculated as an area based on the stem diameter of the tree. It is usually considered to be a circular shape centred on the trunk of the tree unless an arboriculturist considers site factors may have affected this.

Although you have supplied the Indicative Proposed Block/ Site Plan this allows me to carry out a basic AIA of the implications that your development will have on the site and tree stock. This AIA will highlight specific areas of conflict and ways to mitigate those particular implications.

This AIA does not seek to authorise any works to the trees on the site, and CBA Trees have not been made aware of any trees that are covered by Tree Preservation Orders. Before any works are carried out to those trees planning permission will have to be granted by Arun District Council.

ARBORICULTURAL IMPLICATIONS ASSESSMENT

1. All the boundary trees and groups are being retained, with all the construction activity being undertaken to the centre of the site. This is a very positive step and CBA Trees supports the retention of the boundary tree stock as this creates very good site containment limiting the affect on the wider landscape.
2. Tree 13 has been graded as low ‘C’ grade tree, and due to its current condition and position should be removed to facilitate the construction of the proposed access road into the site. The proposed access road will limit root space for this tree. The loss of this tree will be mitigated for through appropriate planting with more rooting and growing space available as part of the landscape proposal.
3. Tree 14 is a Dawn Redwood-*Metasequoia glyptostroboides* and has been graded as a moderate ‘B’ grade tree. Due to its potential size and location should be

- removed to facilitate the proposed access. This particular species of tree has the potential to grow into a very large tree; the proposed access will limit rooting space and be damaged by future growth of the base of the tree. The BS5837:2005 states in Table 3 that the minimum distance a path or driveway should be from a tree that can grow larger than 60cm diameter should be 1 meter away, but a distance of 3 meters should be allowed for to avoid all damage. As these distances can not be allowed for this tree should be removed and mitigated for with more appropriate planting and growing space as part of the landscape proposal.
4. The removal of the existing house (Number 78) will make room for an area of open space which will make an ideal position for new planting. The proposals also take in to account areas for soft landscaping throughout the site, this along with the proposed open space will increase tree cover within this area and enhance the visual amenity of the site.
 5. There is a proposal for a footpath to run through Group 4 towards the Eastern end of the group to link up with an existing footpath. The construction of this footpath will require a small section of the group to be removed to facilitate the footpath. This area of the group is mainly shrub species with dense bramble, and it is not thought necessary to use any special foundation construction.
 6. Group 6 & 7 have been highlighted to be removed; this is because of their species and location. The two groups are positioned in an area that has been proposed as an open space with the view for soft landscaping and tree species to be planted to enhance the visual amenity of the area.
 7. The proposed pedestrian link that runs through the RPA of tree 15 is to be reinstated as grass. The hard standing that is currently occupying this area will need to be removed by hand, so that limited damage is caused within the RPA of this tree.

I trust that you find this advice clear and useful. If you require any further advice or have any questions please don't hesitate to call me.

James Fuller