

Portsmouth City Council

ARBORICULTURAL DEVELOPMENT STATEMENT

Site:
Land adjacent Holybourne Road,
Havant,
PO9 2BN

ARBORICULTURAL STATEMENT

Client:	Portsmouth City Council
Site:	Land adjacent Holybourne Road, Havant, PO9 2BN
Arboricultural Consultant:	James Fuller <i>FdSc.Arb, BTEC Nat.Dip.Arb, TechArbor.A</i>
Date:	April 2016

SUMMARY

The proposal is for the construction of a residential development of 5 (five) houses and 1 (one) block of apartments on land adjacent to Holybourne Road, Havant, PO9 2BN.

This Arboricultural Statement demonstrates the protection measures for the retained trees and should be read in association with the Tree Protection Plan CBA10551.02_TPP. This report follows the initial tree survey, implications assessment and on-going discussions to minimise the impact upon the existing tree stock.

The emphasis of the report is predominantly that of preservation and tree protection. It identifies methodologies to provide protection for trees, to ensure their healthy and safe retention during and post development, as guided by BS5837:2012 and current best practice.

A total of 7 (seven) individual trees and 2 (two) groups of trees can be retained within and adjacent to the development as detailed within this report.

There are 2 (two) groups of trees and 1 (one) hedge that will be removed to facilitate the proposed development, and allow reasonable and usable garden space.

CBA Trees believes that the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

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SUPPORTING INFORMATION/APPENDICES:

CB1	Tree Survey Schedule including Root Protection Area Schedule
CB2	Tree Survey Plan CBA10551.01 TSP
CB3	Tree Protection Plan CBA10551.02_TPP
CB4	Pre-Commencement Tree Works Schedule

GUIDING PRINCIPLES/APPENDICES:

CB5	Tree Protection Guidance Leaflet
	Construction Exclusion Zone Site Notice
	Common Causes of Damage During Construction Works
CB6	Qualifications and Experience

1.0 INTRODUCTION

- 1.1 There is a development proposal for an area of land adjacent to Holybourne Road, Havant, PO9 2BN. The site is located to the southern end of Holybourne Road just to the north of Compton Close.
- 1.2 The proposal is for the construction of 5 x 4 bed houses, 2 x 2 bed flats, 4 x 1 bed flats and 22 parking spaces.
- 1.3 Document disclosure provided:
- Topographical Site Survey (Ref 1777_15_02_01)
 - Proposed site layout (Ref 1103-PD101-Rev A)
 - Drainage details provided by Rushby Brewster (Ref PMC239/501)
- 1.4 The client provided the original site plans and locations of the trees, and these have been the basis for the production of subsequent plans. Whilst CBA Trees has had a limited input in defining the contents of the development plan, it broadly conforms to the requirements of BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"* and current best practice advice.
- 1.5 Our advice has been sought on the principles of the development in relation to the potential impact on the existing tree stock, to inform and to facilitate the development layout that is acceptable in arboricultural terms.

2.0 CLIENT'S BRIEF

- 2.1 In line with our written quotation and verbal instructions, information has been compiled in accordance with BS5837:2012 and current best practice advice.
- To undertake a Tree Survey (schedule including Root Protection Areas appended at CB1).
 - To produce a Tree Survey Plan that relies on the accuracy of the topographical survey provided by the client. (Plan CBA10551.01 TSP appended at CB2).
 - To undertake an Arboricultural Implications Assessment (AIA) of the proposed development provided by the client to identify which trees will be lost, which can be retained and suggest mitigating build techniques in order to retain trees.
 - Based on the above and further on-going discussions, to provide an Arboricultural Statement detailing the methodologies for the retention of the tree stock where feasible, in relation to the proposed development layout including a Tree Protection Plan CBA10551.02_TPP appended at CB3.
- 2.2 The advice provided is in support of the current planning application and has been formulated without discussion with the main construction contractors who at this stage have not been appointed. Once the main contractors are appointed, amendments to this Method Statement may be required for construction purposes. All amendments will be assessed by the retained arboricultural consultant and approved in writing by Havant Borough Council.

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3.0 DESCRIPTION OF THE SITE

3.1 The site consists of an open area of grassland with rear gardens from the neighbouring houses bordering the site. There is a mix of trees around the boundary of the site of varying qualities. The site is accessed from Holybourne Road, which is located to the west of the site.

3.2 **Photograph 1:** A view of the site from the west



3.3 **Photograph 2:** A view of the site from the east



4.0 THE TREE STOCK

- 4.1 A tree survey was undertaken by CBA Trees on the 5th February 2016 that identified 7 (seven) individual trees, 4 (four) groups of trees and 1 (one) hedge. The Tree Survey Schedule is appended at CB1 and Tree Survey Plan CBA10551.01 TSP is appended at CB2.

4.2 Tree Categorisation Method

Category U = Trees in such a condition that any value would be lost within 10 years, or should be removed for reasons of sound arboricultural management. There were no 'U' grade trees on or adjacent to the site at the time of surveying.

Note: BS5837:2012 states -
"Category U trees are those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years."

Category A = Trees of high quality and value: in such a condition as to make a substantial contribution, (40 years or more is recommended). There were no individual 'A' grade trees on or adjacent to the site at the time of surveying.

Category B = Trees of moderate quality and value, capable of making a significant contribution for in excess of 20 years. There were 2 (two) individual 'B' grade trees adjacent to the site at the time of surveying (Trees 1 and 3).

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. There were 5 (five) individual 'C' grade trees, 4 (four) 'C' grade groups of trees and 1 (one) 'C' grade hedge on or adjacent to the site at the time of surveying (Trees 2, 4, 5, 6 and 7, Groups 1-4 and Hedge 1).

Note:
Trees under these categories are trees that should be a material consideration in the development process; the subcategories are intended to reflect arboricultural, landscape and cultural values respectively.

- 4.3 For more details of the existing tree stock, refer to the Tree Survey Schedule (appended at CB1).

5.0 TREE PRESERVATION ORDER/CONSERVATION AREA

- 5.1 Following consultation with Havant Borough Council, CBA Trees has been made aware that the site is not located within a Conservation Area.

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- 5.2 Following consultation with Havant Borough Council, CBA Trees has been made aware that none of the existing trees are protected by a Tree Preservation Order.

6.0 PROPOSED TREE RETENTION AND TREE LOSS

- 6.1 In accordance with the recommendations contained within BS5837:2012, an experienced arboriculturist has assessed the requirements for tree protection and the Root Protection Area (RPA). The implications of the proposed development are detailed below, along with any mitigating measures to ensure the retention of these trees.
- 6.2 As part of the assessment, dimensions have been scaled from the proposed site layout plan (Ref 1103-PD101-Rev A), which has been prepared and modified, to include the relevant Tree Survey data and the information as shown on Plan CBA10551.02_TPP, appended at CB3.
- 6.3 There are 2 (two) groups of trees (Groups 3 and 4) and 1 (one) hedge (Hedge 1) that will be removed to facilitate the proposed development, and allow reasonable and usable garden space.

7.0 SUMMARY OF ARBORICULTURAL IMPLICATIONS

- 7.1 The following summary of implications relates to only those trees that will require mitigation measures to allow for construction operations.

Tree No.	Species	BS 5837:2012 Cat	Potential cause of harm	Implication	Mitigation
1 2 3 Grp 1	Poplar Oak Sycamore Poplar	B1 C1 B1+2 C2	• N/A	• N/A	• N/A
4 5 6 7	Silver Birch Bay Elder Cypress	C1+2 C1 C1 C1	• Development in close proximity to tree.	• Retained. • Potential for damage to overhanging branches and encroaching RPA.	• Tree Protection Barrier to be erected as detailed in Section 11 of this report in the location specified on the Tree Protection Plan CBA10551.02_TPP appended at CB3.

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ARBORICULTURAL IMPLICATIONS ASSESSMENT

<i>Tree No.</i>	<i>Species</i>	<i>BS 5837:2012 Cat</i>	<i>Potential cause of harm</i>	<i>Implication</i>	<i>Mitigation</i>
Grp 2	Lawson Cypress	C2	Proposed road and parking bays encroach into RPA of group on northern side	- Off site group, Retained. - Potential for damage to overhanging branches. - Root loss through excavation	- Overhanging branches to be reduced, cut with hedge cutters to maintain green screen as detailed within the Tree Works Schedule (TWS) appended at CB4. - Tree Protection Barrier to be erected as detailed in Section 11 of this report in the location specified on the Tree Protection Plan CBA10551.02_TPP appended at CB3. - Excavations for road and car parking within RPA to be carried out by hand under the supervision of the retained arboricultural consultant.

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8.0 PRE-COMMENCEMENT SITE MEETING

- 8.1 It is recommended that a pre-commencement site meeting is held prior to any works commencing on site, to agree all approved processes with the arboricultural consultant, the construction personnel and Havant Borough Council. This meeting could be used to formally agree the methods of work, position of site offices, material storage, compounds, parking and tree protection measures prior to commencement of the development and the associated clearance work.
- 8.2 **General Site Management:** It is the developer's responsibility to ensure that the details of this arboricultural statement and any agreed amendments are known, understood and carried out by all site personnel.

9.0 ADDITIONAL ARBORICULTURAL ADVICE FOR SITE PERSONNEL

- 9.1 To provide site personnel with additional information regarding the requirements of Tree Protection, a leaflet (appended at CB5) shall be issued to all staff at the time of their site induction. Spare copies of this leaflet shall be available in the site office as replacements.
- 9.2 In order to inform site personnel of the purpose of the barriers, information notices shall be fixed to the barriers at 5m intervals. These notices shall be of all-weather construction and shall be substantially in the form of the specimen provided at appendix CB5 and replaced as and when necessary.

10.0 PRE-COMMENCEMENT TREE WORKS

- 10.1 All tree works will be undertaken prior to the commencement of site preparation and construction works.
- 10.2 **All permitted or proposed tree work** should be carried out in accordance with the British Standard "*Recommendations for Tree Work*" BS3998:2010, by suitably qualified and experienced professional arborists. Under no circumstances shall site personnel undertake any tree pruning operations. All tree surgery works should be carried out prior to the development of the site, and erection of protective barriers.
- 10.3 Consideration should be given to the timing of the proposed tree works to avoid the active growing period of trees. Therefore, all tree work should ideally be carried out during the dormant period from November through to February and then again from June to August.
- 10.4 Due to the official bird nesting season considered to be from 1st March through to the 31st July (Natural England) depending on weather conditions, consideration must also be given to the potential for nesting birds. Therefore if tree work is to be carried out within June, July or August the project ecologist must be consulted to:

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- Complete or advise on a pre-works survey which needs to be carried out by a suitably competent person. As a general rule, it should be assumed that birds will be nesting in trees, and it is down to contractors to assess, record and confirm that any works carried out in the management of trees and other vegetation has not disturbed actively nesting birds*.
- 10.5 Should additional tree works become apparent during the construction process; written consent will be required from Havant Borough Council prior to these additional works being undertaken.
- 10.6 All tree works that are required to facilitate the development are detailed within the Pre-Commencement Tree Works Schedule appended at CB4.

11.0 TREE PROTECTION MEASURES

11.1 Tree Protection

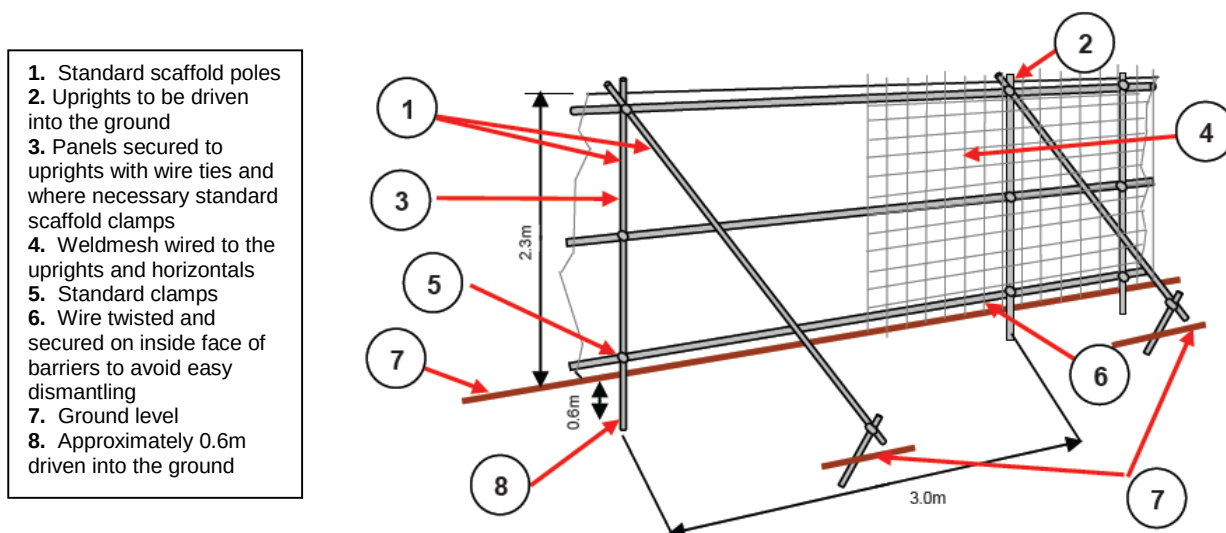
Before starting works on site tree protection will be installed in accordance with Tree Protection Plan CBA10551.02_TPP (appended at CB3). This will occur immediately following the completion of tree works and prior to any site preparation works starting.

It is recommended that a copy of the Tree Protection Plan is displayed in the site office and canteen as a point of reference to all site operatives.

11.2 Tree Protective Barrier

Trees 4, 5 and 6 and Group 2 are adjacent to areas of significant construction activity and will be protected by installing the following protective barrier in the location identified on the Tree Protection Plan CBA10551.02_TPP. The barrier is to comprise of a vertical and horizontal framework, well braced to resist impacts, with vertical tubes spaced at a maximum interval of 3m. Onto this, weldmesh panels should be securely fixed with wire or scaffold clamps.

Figure 1: Protective Barrier



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Example of protective barrier:



Once the barriers are in place they must remain *in-situ* throughout the following:

- Contractor occupancy
- Plant and Materials delivery
- Construction works
- Installation of porous surfacing
- Utility installation
- Completion of development
- Landscaping

The area within the Tree Protection Barriers shall be known as the Construction Exclusion Zone (CEZ) and will be regarded as **sacrosanct**. The Tree Protection Barriers shall not be taken down or relocated at any time without the written approval of Havant Borough Council. An example of a CEZ notice is appended at CB5.

12.0 AVOIDING DAMAGE TO STEMS AND BRANCHES

- 12.1 Care shall be taken when planning site operations, to ensure that wide or tall loads or plant with booms, jibs and counterweights can operate without coming into contact with retained trees. Such contact could result in serious damage to them, and might make their safe retention impossible. Consequently, any transit or traverse of plant in close proximity to trees, will be conducted under the supervision of a banksman, in order to ensure adequate clearance from trees is maintained at all times.

13.0 SITING OF TEMPORARY OFFICES, TOILETS AND MATERIAL STORAGE COMPOUNDS

- 13.1 The locations of the delivery, storage and movement of all essential facilities, as well as aspects such as temporary contractor vehicle parking and site location of chemical mixing (e.g. concrete), will be outside of the RPAs, and avoid areas where 'run off' of chemicals may flow down hill into the RPAs of retained trees.

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13.2 Site Huts

All site huts (if required) that are to be situated on ground that is not existing hard surfacing, shall have appropriate footings or be situated on a temporary surface, which will aid in reducing the potential for compaction of the ground, where they are in close proximity to the existing tree protective barrier line. Site huts can be used as part of the protective barrier boundary, and in some cases, can be beneficial where installation does not conflict with the aerial parts of the tree.

13.3 Material Storage

This shall be accommodated outside of the CEZ, particularly to avoid harmful spillages of fuel, or phytotoxic substances that may damage the health of retained trees.

14.0 GENERAL CONSIDERATIONS WITHIN AND OUTSIDE THE CEZ

14.1 Inside the CEZ formed by the protective barrier, the following prohibitions shall apply:

- No construction activity will occur within the CEZ unless otherwise stated in this report, or agreed in writing with Havant Borough Council prior to the specific activity taking place.

14.2 In addition to the above, further precautions are necessary adjacent to trees outside the CEZ:

- Materials, which will contaminate the soil e.g. concrete mixing, diesel, oil and vehicle washings, shall not be discharged within 10 metres of the tree stem, branches, foliage or RPA. This should take into consideration the topography of the site, to avoid liquids such as concrete washings running down hill towards retained trees.
- Fires shall not be lit in a position where their flames can extend to within 10 metres of foliage, branches or trunk. This will depend on the size of the fire and the wind direction.
- Notice boards, telephone cables or other services shall not be attached to any part of the tree. (See appendix CB5 Common Causes of Damage During Construction Works)

15.0 REPORT DAMAGE TO TREES AND TREE PROTECTION BARRIERS

15.1 Should any damage be caused to trees noted for retention, either by the above works or as the result of any other action, the damage should be reported to the site supervisor immediately. The site supervisor shall report up the chain of responsibility to the retained arboricultural consultant, or in the absence of such an appointment, to an appropriately qualified arboriculturist, to enable remedial measures to be implemented as necessary and as agreed with Havant Borough Council.

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- 15.2 Should damage occur to a protective barrier to impair its function in protecting trees, all work will cease near the damage, until the barrier has been returned to standard.

16.0 REMOVAL OF PROTECTIVE BARRIERS

- 16.1 When the development phase is complete, all drainage and service runs are in place, all site machinery has been removed and any landscaping for the principal area of the site has been implemented, the protective barriers will be dismantled.
- 16.2 This barrier dismantling must be undertaken with great care, and will need to be supervised to avoid heavy machinery being used within the Root Protection Areas. Hoarding, scaffolding and other barrier materials will need to be removed from site immediately.

17.0 CONCLUSIONS

- 17.1 The development proposals for the construction of a residential development of 5 (five) houses and 1 (one) block of apartments on land adjacent to Holybourne Road, Havant, PO9 2BN have been assessed broadly in accordance with BS5837:2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"*.
- 17.2 It is our opinion that the trees identified for retention can be afforded due respect and provided adequate protection, ensuring their safe and healthy retention during the development process.
- 17.3 A total of 7 (seven) individual trees and 2 (two) groups of trees can be retained within and adjacent to the development as detailed within this report. There are 2 (two) groups of trees and 1 (one) hedge that will be removed to facilitate the proposed development, and allow reasonable and usable garden space.
- 17.4 It is our opinion that the loss of the 2 (two) groups and 1 (one) hedge will not have a detrimental effect on the local visual amenity or significantly alter the visual treed character of the local area, once a landscaping scheme that includes quality trees, selected to suit the site conditions and the space available, is implemented.
- 17.5 Provided the recommendations included within this report are strictly adhered to, CBA Trees believes the trees highlighted for retention within this report can be retained without undue stress on their long-term health.

18.0 CONTACT LIST

- 18.1 It is suggested that points of contact and lines of communication are established prior to commencement of the works on site including:-
- Arboricultural Consultant
 - Project Architect
 - Highways Engineer

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- Structural Engineer
- Drainage Engineer
- Landscape Architects
- Havant Borough Council's Tree Officer
- Havant Borough Council's Planning Case Officer
- Site Supervisor and Foreman

18.2 It is advised that the site supervisor establishes their own listing of contact details at the pre-start site meeting, and displays this in their office for general use as necessary.

19.0 BIBLIOGRAPHY

- British Standard 5837:2012 –
"Trees in Relation to Design, Demolition and Construction - Recommendations"
- British Standard 3998:2010 –
"Recommendations for Tree Work"
- National Joint Utilities Group Publication Volume 4 –
"Guidelines for the planning, installation and maintenance of utility services in proximity to trees"
- Wildlife and Countryside Act 1981
- Conservation of Habitats and Species Regulations 2010 (as amended)
- Town and Country Planning Acts







The Professional Arboricultural Consultancy

TREE SURVEY NOTES

This Tree Survey has been undertaken within the recommendations of British Standards 5837:2012 and current arboricultural best 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, 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
SM	=	semi-mature trees
EM	=	early mature trees
M	=	mature trees
OM	=	over-mature trees

- 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+ or 40+ years.**

Categorisation of Trees

The category for each tree is assessed using the recommendations of BS5837:2012. 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 U				Identification colour on plan
Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	• Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) • Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline • Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality			DARK RED
Category A	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands, of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	LIGHT GREEN
Category B	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are down-graded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation value or other cultural value	MID BLUE
Category C	1 – Mainly arboricultural values	2 – Mainly landscape values	3 – Mainly cultural values	Identification colour on plan
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value	GREY

Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey. This 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.

	BS5837:2012 TREE SURVEY REPORT	
	Site:	Land adjacent Holybourne Road, Havant, PO9 2BN
	Date:	05 February 2016
	Consultant:	James Fuller <i>FdSc.Arb, BTEC Nat.Dip.Arb, TechArbor.A</i>
	Tagged:	No

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.
8.
 - a) At this stage the Root Protection Area (RPA) information is for your guidance and ongoing discussion purposes only as it assumes that all but the 'U' grade trees will be retained, which may not be the case.
 - b) 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 4.6.1 of BS5837:2012.
9. Trees marked with * are indicatively plotted on the associated Tree Survey Plan.

TREE PRESERVATION ORDER/CONSERVATION AREA:

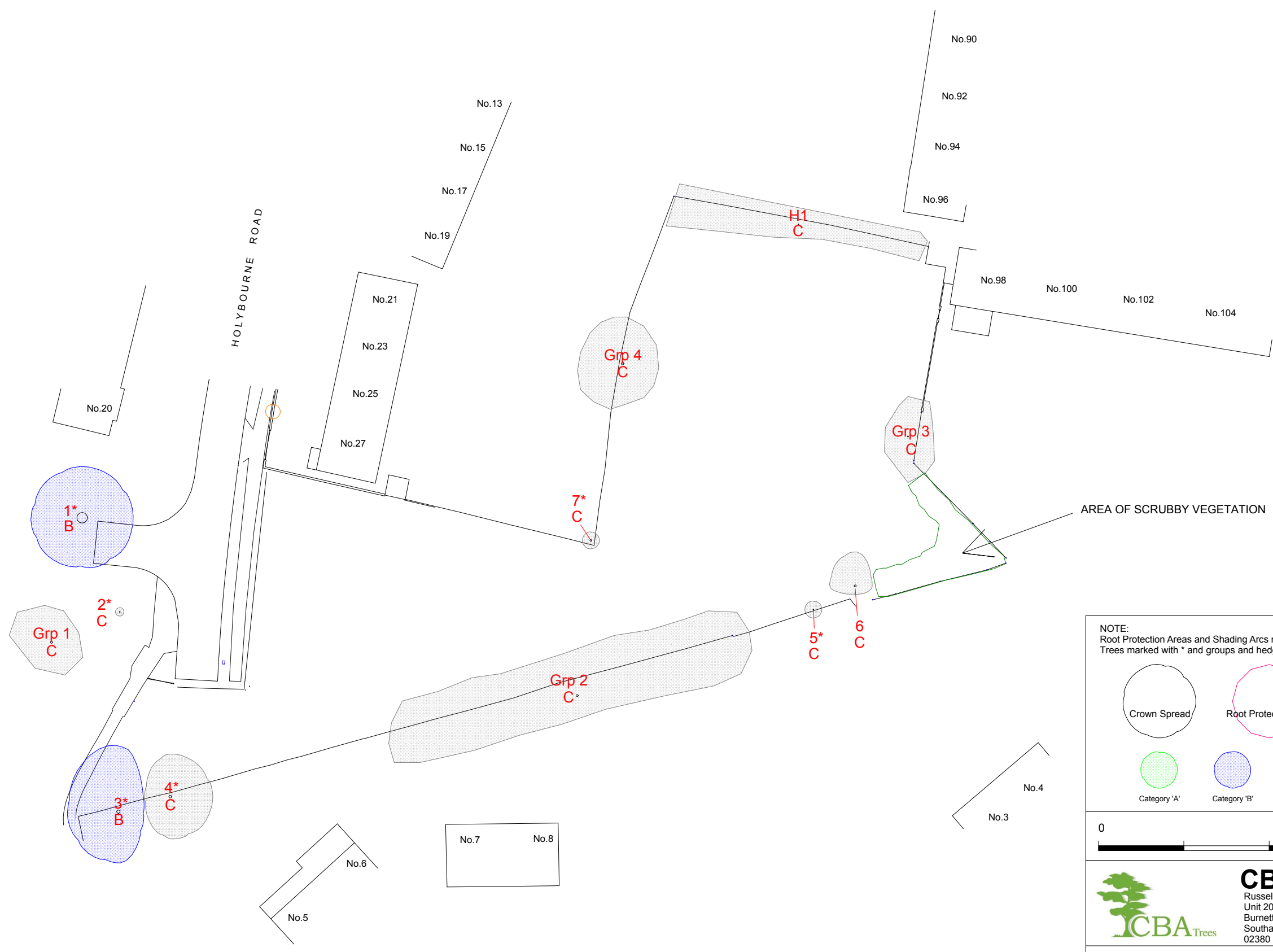
CBA Trees has been instructed to investigate whether trees on or adjacent to the site are protected by a Tree Preservation Order or located within a Conservation Area. The Local Authority has confirmed that no trees are protected by a Tree Preservation Order (TPO) and that the site is not located within a Conservation Area.

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
1*	Lombardy Poplar <i>Populus nigra 'Italica'</i>	15	S	1250	707	15.0	N 6 E 6 S 6 W 6	N 4 E 4 S 4 W 4	Over Mature	Good	Structural Condition - Fair Offsite tree Ivy on trunk and in crown Basal suckers Previously pollarded Old pruning wounds Epicormics in crown Previously pollarded at 8m above ground level	Inform owner of duty of care	20+	B1
2*	Pedunculate Oak <i>Quercus robur</i>	3	S	75	3	0.9	N 0.5 E 0.5 S 0.5 W 0.5	N 2 E 1.5 S 2 W 2	Newly Planted	Good	Structural Condition - Good Developing tree	None required at time of survey	40+	C1
3*	Sycamore <i>Acer pseudoplatanus</i>	12	S	400	72	4.8	N 8 E 3 S 6 W 6	N 2 E 4 S 3 W 2	Early Mature	Good	Structural Condition - Good Offsite tree Unable to verify health and safety due to no access Boundary line tree Crown shape distorted due to group pressure Estimated data	Gain access and resurvey within 1 month	40+	B1+2 Interim
4*	Silver Birch <i>Betula pendula</i>	10	MS	240 220	48	3.9	N 5 E 5 S 5 W 3	N 2 E 2 S 2 W 2	Early Mature	Good	Structural Condition – Fair Offsite tree Unable to verify health and safety due to no access Boundary line tree Crown shape distorted due to group pressure Minor deadwood in crown Estimated data Bifurcated at ground level	Gain access and resurvey within 1 month	10+	C1+2 Interim
5*	Bay <i>Laurus nobilis</i>	2	MS	40 40 40 40	3	1.0	N 1 E 1 S 1 W 1	N 1 E 1 S 1 W 1	Young	Good	Structural Condition - Good Boundary line tree Developing tree Multi-stemmed at ground level	None required at time of survey	20+	C1

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
6	Common or Black Elder <i>Sambucas nigra</i>	3	MS	180 160	26	2.9	N 4 E 2 S 1 W 3	N 0 E 1.5 S 1 W 1	Semi-mature	Good	Structural Condition - Fair Basal suckers Boundary line tree Trunk and crown shape distorted Epicormics in crown	None required at time of survey	10+	C1
7*	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	4	S	200	18	2.4	N 1 E 1 S 1 W 1	N 1.5 E 1.5 S 1.5 W 1.5	Semi-mature	Fair	Structural Condition - Fair Boundary line tree Offsite tree Poor quality tree	None required at time of survey	10+	C1
Grp 1	Poplar	12	S	250	28	3.0	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition - Good Unable to verify health and safety due to no access Off site group of three trees Estimated data	Gain access and resurvey within 1 month	20+	C2 Interim
Grp 2	Lawson Cypress	7	S	250	28	3.0	N - E - S - W -	N - E - S - W -	Semi-mature	Fair	Structural Condition - Fair Unable to verify health and safety due to no access Provides good visual separation Off site boundary edge group Estimated data Previously topped at 6-7m above ground level	Gain access and resurvey within 1 month	20+	C2 Interim
Grp 3	Common Lilac	3	MS	90 90	7	1.5	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition - Good Boundary edge group	None required at time of survey	20+	C2

Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
Grp 4	Lawson Cypress	12	S	300	41	3.6	N - E - S - W -	N - E - S - W -	Semi-mature	Good	Structural Condition - Fair Boundary line trees Low hanging branches Minor deadwood in crowns Numerous trees creating one canopy	None required at time of survey	20+	C2
H1	Privet Bramble Ivy Climber	2	S	100	5	1.2	N - E - S - W -	N - E - S - W -	Semi-mature	Fair	Structural Condition - Fair Boundary edge hedge Mainly bramble and climber Poor quality hedge	None required at time of survey	10+	C2





NOTE:
Root Protection Areas and Shading Arcs not shown on this plan
Trees marked with * and groups and hedges are indicatively plotted

Crown Spread

Root Protection Area

Shading Arc

Category 'A'

Category 'B'

Category 'C'

Category 'U'

CBA TREES
Russell House
Unit 20 Chalcroft Business Park
Burnetts Lane, West End,
Southampton, SO30 2PA
02380 986229

10551
Land adjacent Holybourne Road, Havant, PO9 2BN
Tree Survey Plan

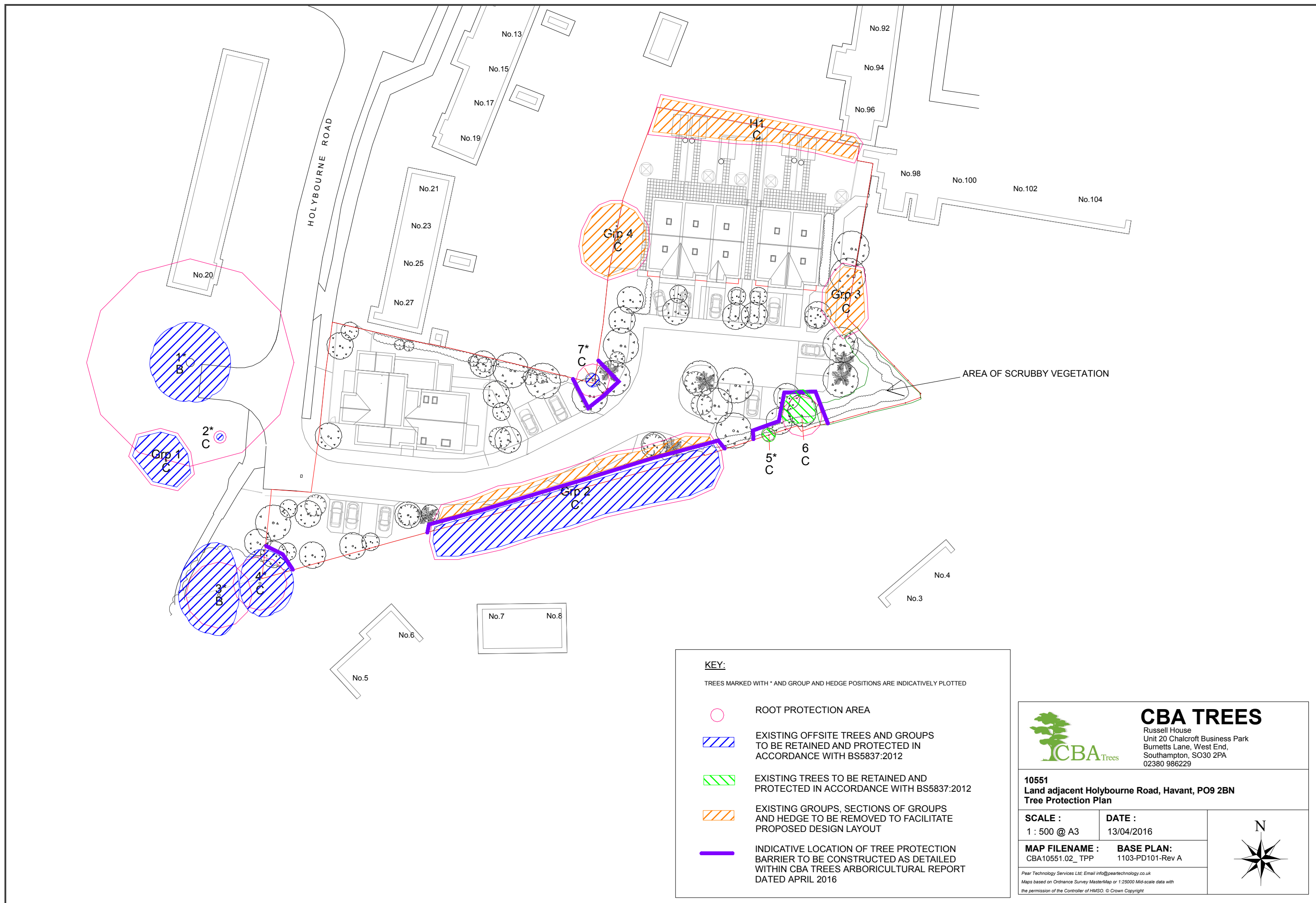
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1 : 500 @ A3

DATE :
09/02/2016

MAP FILENAME :
CBA10551.01 TSP

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	TREE WORKS SCHEDULE			
	Client:	Portsmouth City Council	Site:	Land adjacent Holybourne Road, Havant, PO9 2BN
	Date:	April 2016	Consultant:	James Fuller <i>FdSc.Arb, BTEC Nat.Dip.Arb, TechArbor.A</i>

Tree No.	Species	Recommended Works
1	Lombardy Poplar	• N/A
2	Pedunculate Oak	• N/A
3	Common Sycamore	• N/A
4	Silver Birch	• N/A
5	Bay	• N/A
6	Elder	• N/A
7	Lawson Cypress	• N/A
Grp 1	Poplar	• N/A
Grp 2	Lawson Cypress	• Reduce overhanging branches with hedge cutter back as far possible without fully removing foliage
Grp 3	Common Lilac	• Remove
Grp 4	Lawson Cypress	• Remove
H1	Mixed Species	• Remove

- All tree works are advised to be carried out between July and September or November and February. Tree works should also avoid the season for nesting birds.
- All tree works should be carried out in accordance with current best practice guidelines and BS3998 – Tree Works. Only natural target pruning method to be used.
- We recommend the use of an Arboricultural Association Approved Contractor or an ISA Certified Arborist/Tree Worker suitably insured and experienced to carry out the tree works.





TREES AT _____ :

SUMMARY OF

TREE PROTECTION MEASURES

Introduction

This leaflet shall be issued to all site personnel as part of their induction briefing.

It describes in summary form the precautions that site personnel shall at all times follow, to ensure that the existing trees on the site come to no harm.

The precautions described are neither arbitrary nor reducible and must be adhered to in full.

These precautions are necessary because unprotected trees are very vulnerable to damage during demolition and construction works.

Furthermore, many of the trees on the site are under **LEGAL PROTECTION** and damaging them can result in heavy fines.

Two common misconceptions about trees:

MYTH: Trees have deep taproots and so shallow excavations will not harm the tree.

FACT: 90% of all tree's roots are found in the top 600mm of soil; all excavations near to trees are likely to cause root damage which can kill the tree.

MYTH: Trees will quickly heal over any bark wound, with no ill effect.

FACT: Bark wounds take years to heal and larger ones never do; missing bark can lead to disease and even the death of the tree.

Tree Protection

All trees adjacent to unsupervised work areas have been protected by tree protection barriers.

These barriers must be respected at all times and no attempts shall be made to damage, bypass or ignore them.

In areas designated for supervised working, no works shall be undertaken without the supervisor being present or without him/her issuing a "carry on" chit.

Prohibitions Adjacent to Trees

Inside the exclusion area of the tree protection, the following prohibitions shall apply.

- **No** digging or scraping
- **No** storage of plant or materials
- **No** vehicular access
- **No** fire lighting
- **No** handling, discharge or spillage of any chemical substance
- **No** water-logging

In addition to the above, further precautions shall be taken near to trees.

- A 10m separation distance shall be observed between trees and any substance injurious to their health, including fuels, oil, bitumen, cement (including washings) builders' sand, concrete mixing and other chemicals.
- No fire shall be lit such that flames come within 5m of any foliage; this shall be taken to mean a fire separation distance to the leaved of 20m.

Avoiding Damage to Stem and Branches

Care shall be taken when planning site operations to ensure that wide or tall loads or plant with booms, jibs and counterweights, can operate without coming into contact with trees.

Consequently, any transit or traverse of plant in proximity to trees shall be conducted under the supervision of a spotter to ensure that adequate clearance is at all times maintained.

In some circumstances, it may be impossible to achieve this, necessitating the pruning of the tree.

If this is necessary, a specialist team shall be called in following referral to the project Arboriculturist.

No tree pruning shall be undertaken by demolition or construction personnel.

Asking for Help

If you see any damage to a tree or its protective fencing, or if you need a tree pruning for plant clearance, contact **CBA Trees** as follows:

Office Telephone: 020 8098 6229

REMEMBER:

**ALL TREE DAMAGE IS
AVOIDABLE –**

SO AVOID IT!

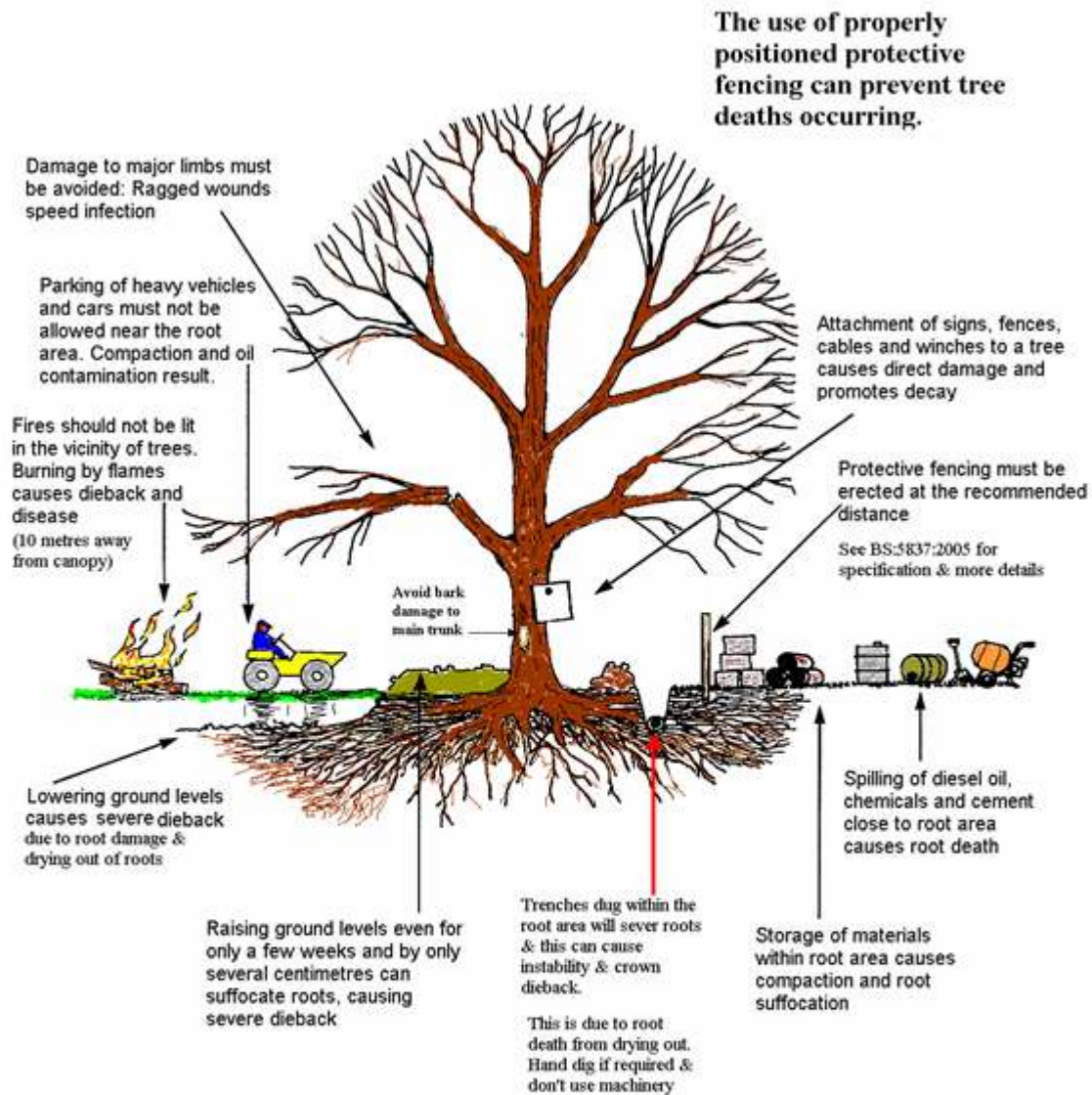


**PROTECTIVE BARRIERS.
THESE BARRIERS MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**
(TOWN & COUNTRY PLANNING ACT 1990)
**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.**
**CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION**
**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSION OF THE LOCAL
PLANNING AUTHORITY**

Common causes of Tree Death



Please use copies of this as an on-site poster for personnel

(Source: Arboricultural Information Exchange website, 2005)







The Professional Arboricultural Consultancy

Qualifications of James Fuller Senior Consultant

James Fuller FdSc.Arb, BTEC Nat.Dip Arb, TechArbor.A joined CBA Trees in 2007 as a gap-year junior surveyor/arborist having attained the Foundation Degree in Arboriculture at Sparsholt College near Winchester and has more recently acquired the Professional Tree Inspector's Certificate.

Over the years James has gained experience in every field of our work, undertaking all elements of consultancy including large BS5837:2012 tree surveys using the latest data capture equipment to produce Implication Assessments and Method statements for planning applications.

Having broadened his knowledge and gained considerable experience, James is now a retained Senior Consultant, undertaking site assessments, site monitoring, and provision of advice to prominent development companies for large and complex projects.