



ARBORICULTURAL IMPACT ASSESSMENT, METHOD STATEMENT AND TREE PROTECTION PLAN

FOR THE SITE OF

**89 Lakewood Road
Hiltingbury
Chandler's Ford
SO53 5AD**

Date – 3rd October 2019

Consulting Arborist

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Table of Contents

1 Introduction	3
2 Scope	3
3 Tree Survey & RPA Schedule	3
4 Tree implications	4
5 Sequence of works.....	4
6 Pre-Commencement Site Meeting.....	4
7 Pre-Development Tree Works	4
8 Tree protection requirements	5
9 Existing Services and Utilities	7
10 Avoiding Damage to Trunks and Branches.....	7
11 Vehicle Movements	7
12 Siting of Temporary Offices, Welfare Units and Material Storage.....	7
13 Utility and Drainage Service Connections	8
14 Foundation Design and Construction.....	8
15 General site requirements to protect trees.....	8
16 Ground Level Alterations	9
17 Site Monitoring and Arboricultural Supervision	9
18 Report Damage to Trees and Tree Protection Barriers	10
19 Removal of Protective Barriers.....	10
20 Conclusion	11
21 Disclaimer.....	11

APPENDICES

- AS1 Tree Survey Schedule and Tree Survey Plan Arbor.89LR.TSP.001
- AS2 Tree Protection Plan drawing no. Arbor.89LR.TPP.002
- AS3 Tree Protective fencing poster
- AS4 Qualifications and Experience

1 Introduction

1.1 A planning application has been proposed to demolish a single-story side extension and link and construct a new two story and complete various internal alterations to residential property of 89 Lakewood Road, Hiltingbury, Chandler's Ford, SO53 5AD.

1.2 Arborsphere Ltd has been instructed to provide arboricultural information to enable the Local Planning Authority (Eastleigh Borough Council) to fully consider the impact of the planning proposal on the significant trees on site that may be impacted upon by the proposal.

1.3 It is understood that a Tree Preservation Orders (TPO) that legally protects the trees detailed within this report. Confirmation of which trees are legally protected by this order should be sort prior to carrying out any tree works, and the appropriate consents received from Eastleigh Borough Council prior to completing tree works.

1.4 The client has provided the following drawings:

- Existing Dwelling, drawing no. 01 by MDT Design
- Proposed Alterations, drawing no. 02 Rev B by MDT Design

1.5 These have been the basis to produce the subsequent implications assessment and tree protection plan.

1.6 The assessment made on these documents broadly conforms to the recommendations of BS5837: 2012 *"Trees in Relation to Design, Demolition and Construction – Recommendations"*.

2 Scope

2.1 To attend site to undertake a tree survey in line with the recommendations of BS5837: 2012 Trees in relation to design, demolition and construction - recommendations, appended at AS1

2.2 To produce an Arboricultural Implications Assessment and Arboricultural Method Statement providing details on which trees will be removed (if required) as part of the application and which trees will be retained and how they will be protected.

2.3 To provide a Tree Protection Plan, drawing number Arbor.89LR.TPP.002 (appended at AS2) based on the drawing provided by the client at the time of producing this statement.

3 Tree Survey & RPA Schedule

3.1 The tree survey exercise was completed on the 27th September 2019. It was sunny with a light wind at the time of surveying. This survey data is the basis of the Arboricultural Implications assessment, Method Statement and Tree Protection Plan. This exercise identified eleven individual trees and 4 groups of trees/shrubs that could potentially be affected by the proposals.

3.2 For tree locations and further information on the tree stock assessed for this planning application please refer to appendix AS1 for the tree survey schedule and for the tree survey plan.

4 Tree implications

4.1 The potential for damage to trees comes from the location of the requirement for working space, the delivery, storage and transportation of materials to the area of build, ground works (services, utilities and foundations) and construction. This may be in the form of direct damage where trunks or branches are hit or indirect damage through ground compaction on soft ground damaging and compromising the tree's roots and rooting environment.

4.2 The use of the existing hard surfacing will aid in the reduction of impacts to trees on this site and along with establishing tree protection measures and adopting working methodologies detailed below to guide and restrict movement on site to ensure that the retained trees and their rooting environment are not adversely impacted upon by work to implement the proposals.

5 Sequence of works

5.1 The following order of works are suggested to ensure the retained trees are not adversely impacted upon by the development:

- Tree works completed
- Tree protection measures erected/established in line with this report and in the position detailed on the Tree Protection Plan Arbor.89LR.TPP.002 (appended AS2 **AND RETAINED THROUGHOUT ALL SITE WORKS ASSOCIATED WITH THE PLANNING PERMISSION.**)
- Site preparation works
- Demolition and removal of spoil from single story extension work
- Works to establish foundations and relocation of drainage/services for new extension
- Works to complete external works
- Internal works completed
- Removal of all building materials, spoil and equipment
- Removal tree protection measures

5.2 It is always of paramount importance to protect the retained trees on site when external works are being carried out.

6 Pre-Commencement Site Meeting

6.1 It is recommended that a pre-commencement site meeting be held prior to any works commencing on site, to agree all approved processes with the arboricultural consultant, the construction personnel and Eastleigh Borough Council.

6.2 This meeting could be used to formally agree/mark up the shrubs to be removed, methods of work, position of site offices (if required), material storage, site compounds (if required), contractor parking and confirm that the tree protection measures are set out correctly prior to commencement site works.

7 Pre-Development Tree Works

7.1 Depending upon how the appointed contractors decide to work, part of Group 2 may need to be removed to provide access to the rear of the site for a mini dumper or mini excavator such as a 1.5 tonne machine. The pruning or removal of edge shrubs will only provide a maximum distance separation of 2.0m from the existing house.

7.2 It is advised but not essential to the requirements of the planning application that T6 is removed due to its size and location and T9 is removed or reduced subject to a separate tree works application due to its poor health.

7.3 Should any further tree works become apparent during the construction process; written consent will be required from Eastleigh Borough Council prior to these additional works being undertaken.

8 Tree protection requirements

8.1 All the trees to be retained on site as part of this planning application will always be protected by fit for purpose tree protection measures during site preparation, ground and construction work as indicated on the Tree Protection Plan Arbor.89LR.TPP.002 (appended at AS2).

8.2 The tree protection measures must be erected prior to any work commencing on site relating to the planning application and immediately following the tree works. The protection measures and the ground that is beyond it will be regarded as sacrosanct and will not be removed or altered without prior recommendation by an arboriculturist and approval of the Eastleigh Borough Council Tree Officer. The tree protection forms the Construction Exclusion Zone (CEZ) which is off limits to contractors.

8.3 At all times the tree protection measures will be fit for purpose i.e. it will exclude all ground and construction activity.

8.4 All site operations will be planned, implemented and supervised to prevent the following:

- Root severance
- Damage to the bark, branches and trunks
- Compaction of the soil within the Construction Exclusion Zone
- Alterations in soil level
- Soil contamination by phytotoxic materials such as herbicides, petrol, oils, diesel, cement and concrete washings or other construction additives

8.5 It is our recommendation that, for this site two types of tree protection are established. The first tree protection barrier is that of a 'light form' where the trees are already generally protected by site features. This light barrier will be established around the edge of the existing kerbed driveway to denote to contractors that the shrub beds are not storage areas. The light barrier will consist of safety netting fencing held taught in position by steel road pins or similar. This is thought appropriate for the existing frontage driveway area.

8.6 The appropriate barrier to the northern (excluding the existing garden boundary fence section) and western side will consist of a robust barrier where it (the barrier) is resistant to impact and requires a positive or considered movement of the barrier to adjust its position.

Figure 3 Examples of above-ground stabilizing systems

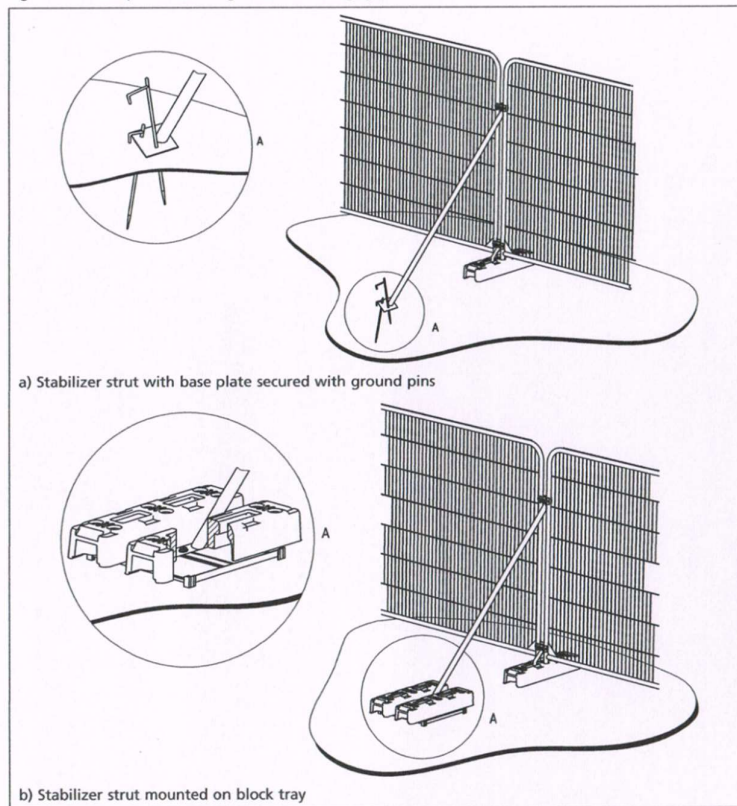


Figure 1: Figure 3 of BS5837: 2012 fencing example

8.7 The robust barrier will consist of weld mesh panels coupled together with two clasps fastened from the inside, mounted on rubber feet which are secured into position with ground pins or similar. The weld mesh panels will be stabilised by supporting struts secured in position with ground pins (see Figure 1 below). The barriers will be established on site as shown on the Tree Protection Plan Arbor.89LR.TPP.002 (appended at AS2).

8.8 Within the tree protective barrier an allowance will be made to allow the client access to the remaining part of their garden for continued garden maintenance and access to their rear garden during the works. This will take the form of a personnel gate set within the fencing panel or through the fencing panels being set with a gap no wider than 1000mm to allow for homeowner/pedestrian access

8.9 Fit for purpose ground protection will be established at the same time as setting up the tree protection barrier on soft ground areas to the northern side of the building to be demolished and utilise the areas of existing hard standing. The ground protection should be fit for purpose and for pedestrian access it will take the form of 18mm OSB or plyboard sheets on top of 75mm woodchip with a geotextile membrane beneath. This ground protection should be sufficient to support a small light excavator of 1.5t or less anything larger than this and the ground protection will need to be amended to prevent compaction of the ground beneath.

8.10 It is imperative that the contractors are made aware that the tree protection measures are located to restrict their movements and that the area beyond them is sacrosanct (and only accessible for the homeowners) to avoid unnecessary damage to trees, their roots and the rooting environment.

8.11 At all times the tree protection measures will be fit for purpose i.e. it will exclude all construction activity or guide plant movement past the trees.

8.12 Contractors **will be made aware** that the barrier/fencing is located to restrict their movements and that the area beyond this is sacrosanct and only available for the homeowners.

9 Existing Services and Utilities

9.1 No Information has been provided on the location and size of existing services. Given the existing site, it is considered unlikely that existing services are present in close proximity to significant trees. However, should the existing services be within the root protection area of retained trees and need to be amended, they will not be chased out but cut at the edge of any structure/root protection area and left *in-situ*.

9.2 Cabling will only be recovered from beneath a root protection area where it is in ducting and can be removed by winching from an existing service manhole beyond the root protection area.

9.3 Service pipes and ducts, where they are located within the root protection area or root protection area of retained trees, will be made redundant either by pipe bursting or by filling with an inert material such as foamed concrete.

10 Avoiding Damage to Trunks and Branches

10.1 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.

10.2 Consequently, any transit, traverse of plant or delivery of materials with booms and lifts near trees, will be conducted under the supervision of a banksman, to ensure adequate clearance from trees is always maintained.

11 Vehicle Movements

11.1 There should be minimal vehicular or plant movement in the potential rooting zone outside the root protection area of all retained trees but in particular on the soft ground around the base of the trees. Plant and vehicles will make use of the existing driveway and hard standing to access the majority of the site.

12 Siting of Temporary Offices, Welfare Units and Material Storage

12.1 It is anticipated that all storage materials and deliveries shall make use of the existing driveway area to the front of the house and on its western side of the site to avoid significant trees.

12.2 The locations of Site Offices/Welfare Units (if required) and material storage and mixing shall be agreed in writing with Eastleigh Borough Council prior to the commencement of works on site and will remain in only those agreed locations throughout the construction phases to ensure that retained trees are fully respected throughout the development works enforced through appropriate planning conditions. These must be located so that are outside of the root protection area of retained trees. If an alternative location is required, this must be agreed in writing with Eastleigh Borough Council prior to any changes on site. This will include 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). All such locations will be outside of the root protection areas and avoid areas where 'run off' of chemicals may flow into root protection areas.

12.3 All site huts (if required) 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 near 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.

12.4 Material storage will be accommodated outside of the root protection areas, particularly to avoid harmful spillages of fuel, or phytotoxic substances that may damage the health of retained trees.

12.5 At no time shall any materials at any time be stored on the soft ground immediately either side of the driveway beyond the tree protection barriers.

13 Utility and Drainage Service Connections

13.1 Details of service and drainage location proposals have not been designed yet given that planning consent that not been granted. It is however assumed, given the location and importance of the retained trees and that existing services and drainage serve the building being demolished that services and drainage will be installed outside the root protection areas of retained trees, and connected to the existing where practicable, this will avoid disturbance of tree roots and ensure their healthy retention.

13.2 This report and the associated plans will be provided as part of the tender documents for potential contractors and project consultants to inform them of the areas where they can and cannot install services and drainage.

14 Foundation Design and Construction

14.1 Building foundations are outside the root protection areas of trees and can therefore be constructed in a traditional manner without detriment to retained trees.

15 General site requirements to protect trees

15.1 As a general note for the requirements to protect trees, contractors and sub-contractors will be made aware of their duty towards trees prior to commencing work; this will be achieved by a tool box talk by the site manager, the client or the retained arboricultural consultant and a signed record of such completed and kept on file.

15.2 There will be no storage of chemicals or materials and mixing of materials within the protected soft ground rooting area of retained trees as set out by the tree protection barriers.

15.3 All chemical, material storage and mixing will be located on site to account for the topography of the site and therefore avoid any run off that will damage the soil structure and roots. In this instance, materials will be delivered to the roadside, carried into the site on the back of a Transit van or similar size vehicle or temporarily placed on the existing driveway and then immediately moved and stored adjacent to the house. Deliveries may also be made by use of the public road, the delivery lorries and the lifting arm to place materials into the site outside of root protection areas.

15.4 Fires shall not be lit where flames will be within 5m of any retained canopy edge.

15.5 If there is any reason for amendments to the tree protective barrier design or location, the retained arboricultural expert will be consulted and advised accordingly. Approval will be required from the Eastleigh Borough Council's Tree Officer prior to the amending of the tree protection as detailed on the Tree Protection Plan Arbor.89LR.TPP.002.

15.6 Should the tree protection measures become damaged or becomes unfit for purpose, all works within 3m from the defective tree protective barrier/ground protection will immediately cease until the defect has been remedied and the tree protection is again fit for purpose.

15.7 Should any damage be caused to the tree noted for retention, either by the construction works, associated activity or as the result of any other action during the works related to this planning application, the damage should be reported to the site supervisor immediately.

15.8 The site supervisor shall immediately report up the chain of responsibility to the retained consultant arboriculturist, 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 Eastleigh Borough Council's Tree Officer.

15.9 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 AS4 and replaced as and when necessary.

16 Ground Level Alterations

16.1 There will be no ground level changes within the protected areas formed by the ground protection and tree protection barriers.

17 Site Monitoring and Arboricultural Supervision

17.1 To ensure that the tree protection measures are maintained correctly and as per the approved documents (subject to any written approval for amendments if required), arboricultural supervision may be conditioned by the Eastleigh Borough Council. If conditioned, it could take either of the following forms:

- Regular inspections (timing to be agreed, but at least one visit per month by the retained arboricultural consultant during the site works is advised. The aim of the visits is to maintain on-going liaison with all personnel involved in the site development, the Eastleigh Borough Council and its Tree Officer.
- A photographic record could be taken and kept by the appointed person of the Client and/or Contractor (to be confirmed) and sent to the retained arboricultural consultant and the Eastleigh Borough Council Case Officer and Tree Officer showing the tree protection measures in situ.

17.2 Once all construction work is complete, materials, plant, scaffolding and tree protection measures can be removed from site.

17.3 It is imperative that the contractors are made aware that the barriers and ground protection measures are located to restrict **their** movements and that the area beyond this is sacrosanct to avoid unnecessary damage to trees, their roots and the rooting environment.

17.4 Any defects in the tree protection measures requiring rectification shall be notified to the Contractor/Site Manager, the client and the Tree Officer of Eastleigh Borough Council.

18 Report Damage to Trees and Tree Protection Barriers

18.1 Should any damage be caused to trees noted for retention, either by the above works or as the result of any other action related to the site works to implement the planning application, the damage should be reported to the site supervisor immediately. The site supervisor shall report up the chain of responsibility to the retained consultant arboriculturist, 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 the Eastleigh Borough Council's Tree Officer.

18.2 Should protective barriers become damaged to impair its function in protecting trees and their rooting environment, all work shall cease near the damage, until the barrier has been returned to standard.

19 Removal of Protective Barriers

19.1 When the ground and construction phases are complete, all new drainage and service runs are in place and all site machinery has been removed from site the protective barriers will be dismantled.

19.2 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. Scaffolding and other barrier materials will need to be removed from site immediately.

20 Conclusion

20.1 A planning application has been proposed to demolish a single-story side extension and link and construct a new two story and complete various internal alterations to residential property of 89 Lakewood Road, Hiltingbury, Chandler's Ford, SO53 5AD has been broadly assessed as per the current industry recommendations.

20.2 This report and the associated plans will form part of the tender package to enable contractors to fully consider their working practises in relation to the constraints of the site and the requirement to continually respect and protect the retained trees. This will ensure that the trees, the constraints they have on the site and required working practices to work around the retained trees are at the forefront of any information and appointed contractor's decision making.

20.3 The proposal will retain all of the identified trees and groups within the survey and report. The internal edge of Grp 2 consisting of typical garden shrubs maybe removed to provide plant access to the rear of the site but this will not be detrimental to the site or the more important significant trees on site.

20.5 It is our opinion that the planning application will not have an adverse impact on the retained trees if the methods of tree protection detailed within this report and as shown on the Tree Protection Plan Arbor.89LR.TPP.002 are adhered to during the site preparation, ground and construction works.

21 Disclaimer

21.1 The statements made in this report do not take account of the effects of extreme weather, vandalism or accident, whether physical, chemical or fire. Arborsphere Ltd cannot therefore accept any liability in connection with these factors, nor where prescribed work is not carried out in a correct and professional manner in accordance with that stated within this report or current good practice. The authority of this report ceases at any stated time limit within it, or if none stated after one year from the date of inspection/survey, when a consented planning application time limit lapses, or when there are any significant changes to the site conditions, if pruning or other works unspecified in the report are carried out to, or affecting, the subject trees, whichever is the sooner.

AS1



BS5837:2012 Tree Survey

Trees in relation to design, demolition and construction - Recommendations

89 Lakewood Road, Chandler's Ford, Eastleigh, SO53 5AD

Date – 27th September 2019

Consulting Arborist

Stefan Rose BSc (Hons), Tech Cert (ArborA), TechArborA

TREE SURVEY NOTES



This Tree Survey has been undertaken within the recommendations of British Standards 5837:2012 and current arboricultural best practice. Clients are advised that Tree Surveys are a basic data collection exercise and record of tree condition at the time of survey and should not be confused with a Tree Inspection.

The Tree Survey 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.

Each tree has been numbered and, where instructed, for future identification on site, they have been tagged using small durable metal or plastic tags.

- o 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.
- o 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.
- o 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.

- o An assessment of a tree’s life stage classification is made in terms of its maturity within the site’s landscape and defined as:

Y	=	young trees, trees that are pre-sexual maturity and high in vitality
SM	=	semi-mature trees, trees that are juvenile and within the first $\frac{1}{3}^{\text{rd}}$ of life expectancy of an average tree for any given species
EM	=	early mature trees, trees that are perhaps within in $\frac{1}{3}^{\text{rd}}$ and $\frac{2}{3}^{\text{rd}}$ of life expectancy of an average tree for any given species
M	=	mature trees, trees that have reached peak height and reproduction capacity and perhaps in the last $\frac{1}{3}^{\text{rd}}$ of life expectancy of an average tree for any given species
OM	=	Over-mature trees, trees showing signs of retrenchment in the crown

- O 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	=	No obvious signs of outward living parts

- O 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	=	No obvious signs of outward living parts

- O An assessment of a tree's future estimated remaining contribution is defined as: **<10, 10+, 20+ or 40+ years.**

Categorisation of Trees

The category for each tree is assessed using the advice of Table 1 within BS5837:2012 Trees in relation to design, demolition and construction - Recommendations. 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 [these sub categories 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 of 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 through 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

	BS5837: 2012 TREE SURVEY REPORT	
	Site:	89 Lakewood Road, Chandler's Ford, Eastleigh, SO53 5AD
	Date:	27 th September 2019
	Consultant:	Stefan Rose BSc (Hons), TechCert ArborA, TechArborA
	Tagged:	No

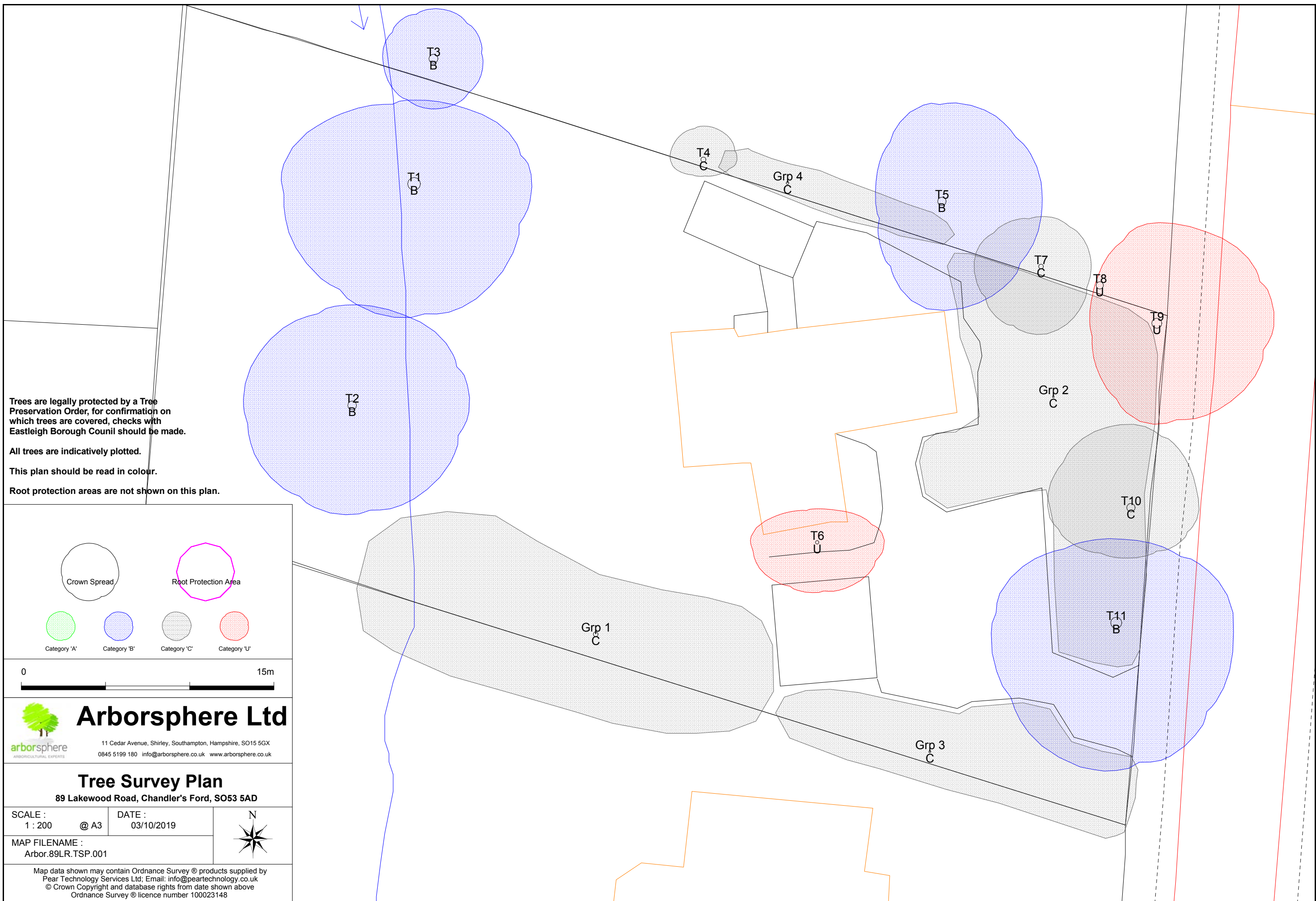
Notes:

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.

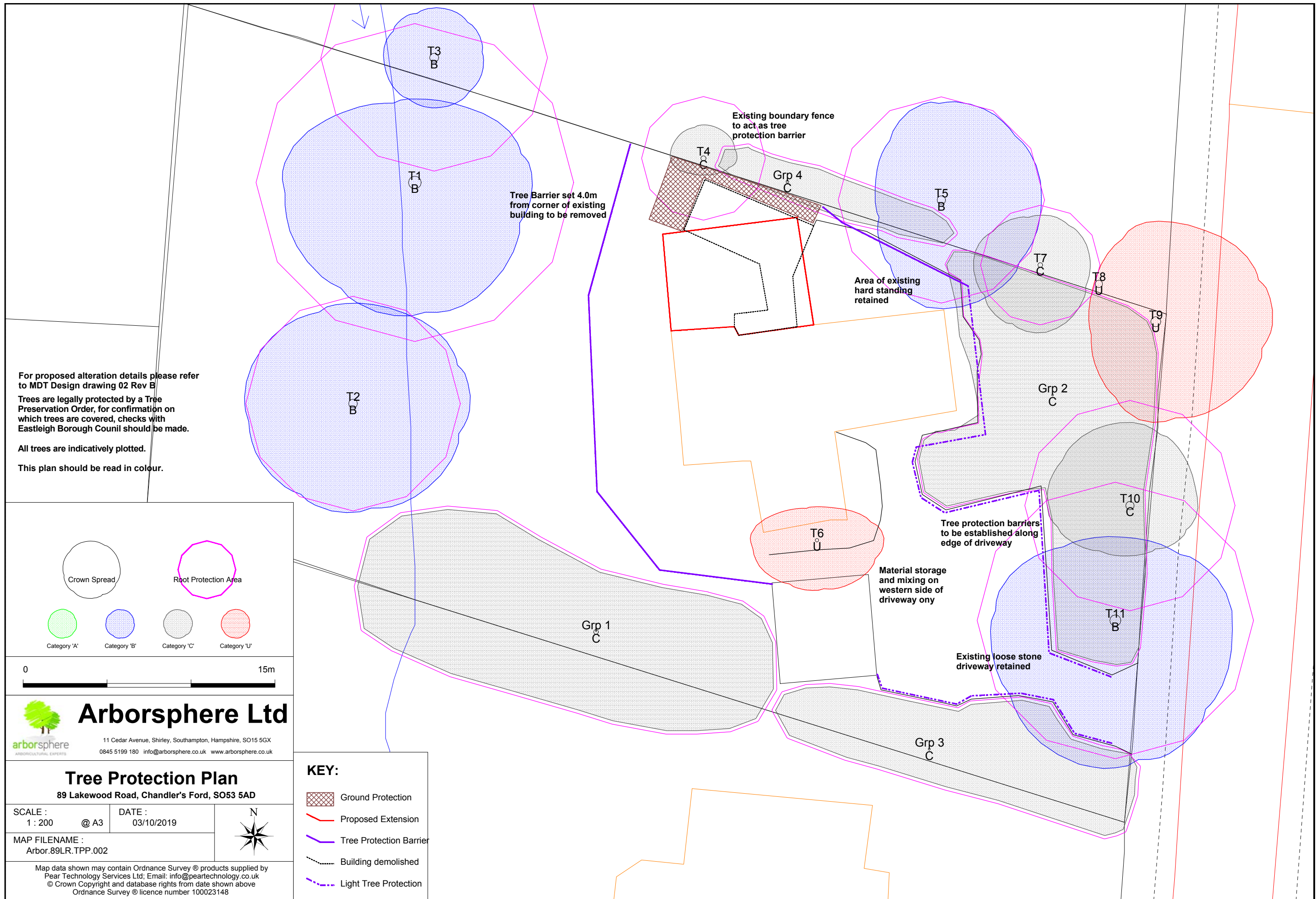
Tree No	Species	H't (m)	Single/ Multi-Stemmed (S or MS)	Stem Diam (mm)	Root Protection Area (m²)	Root Protection Distance (m)	Branch Spread (m)	H't of Crown AGL (m)	Life Stage	Physio-logical Condition	Structural Condition and General Observations	Preliminary Management Recommendations	Est. Rem. Contrib. (Yrs)	Cat
1	Pedunculate Oak <i>Quercus robur</i>	21	S	770	186.29	7.70	N 5 E 7 S 8 W 8	N 10 E 6 S 6 W 8	Mature	Good	Structural Condition - Fair Stream to west Ivy on trunk Mechanical damage to surface roots Main leader historically lost Major deadwood in crown Old pruning wounds on trunk and in crown Crown shape distorted due to group pressure	Remove major deadwood with a branch attachment diameter >50mm	20+	B1+2
2	Pedunculate Oak <i>Quercus robur</i>	17	S	520	84.96	5.20	N 6 E 7 S 6.5 W 6.5	N 5 E 5 S 6 W 5	Mature	Good	Structural Condition - Fair Stream to east Epicormics on trunk and in crown Mechanical damage to surface roots Bifurcated at 7m above ground level Major deadwood in crown Old pruning wounds on trunk and in crown Crown shape distorted due to group pressure	Remove major deadwood with a branch attachment diameter >50mm	20+	B1+2
3	Lawson Cypress <i>Chamaecyparis lawsoniana</i>	23	S	550	95.05	5.50	N 3 E 3 S 3 W 3	N 4 E 4 S 4 W 4	Mature	Good	Structural Condition - Good Offsite Unable to verify health and safety due to access Minor deadwood in crown	No works required ar time of survey	20+	B1+2
4	Common Holly <i>Ilex aquafolium</i>	6	S	300	28.28	3.00	N 2 E 2 S 1 W 2	N 2 E 2 S 2 W 2	Early Mature	Good	Structural Condition – Fair Offsite Unable to verify health and safety due to access Grows on alnd approximately 300mm higher than site level	No works required ar time of survey	10+	C1
5	Scots Pine <i>Pinus sylvestris</i>	22	S	160	8.04	1.60	N 6 E 6 S 6.5 W 4	N 8 E 10 S 10 W 10	Mature	Good	Structural Condition - Fair Offsite Unable to verify health and safety due to access Old pruning wounds on trunk Minor deadwood in crown	No works required ar time of survey	20+	B1+2

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	Goat Willow <i>Salix caprea</i>	7	MS	500	79	5.00	N 2 E 4 S 3 W 4	N 2.5 E 2.5 S 2.5 W 2.5	Semi Mature	Good	Structural Condition - Fair Bifurcated at 1.2m above ground level Grows between house and garage Limited useful life expectancy due to location	No works required ar time of survey	<10	U
7	Silver Birch <i>Betula pendula</i>	14	S	190	11	1.90	N 3 E 3 S 4 W 4	N 5 E 5 S 5 W 5	Early Mature	Fair	Structural Condition - Fair Offsite Unable to verify health and safety due to access Crown shape distorted due to group pressure Minor deadwood in crown	No works required ar time of survey	10+	C1+2
8	Scots Pine <i>Pinus sylvestris</i>	-	S	290	26	2.90	N - E - S - W -	N - E - S - W -	Early Mature	Dead	Structural Condition - Dead Offsite Dead tree	Advise owner of condition of tree	-	U
9	Sweet Chestnut <i>Castanea sativa</i>	14	S	610	117	6.10	N 6 E 7 S 6 W 4	N 3 E 5 S 3 W 4	Mature	Poor	Structural Condition - Poor Basal suckers Bark wounds on lower trunk Epicormics on trunk and in crown Major deadwood in crown In decline Cavity in trunk at 3m above ground level on west side Old pruning wounds on trunk and in crown	Fell to ground level subject to Local Authority approval	<10	U
10	Norway Spruce <i>Picea abies</i>	22	S	510	82	5.10	N 5 E 4 S 3 W 5	N 4 E 5 S 7 W 4	Mature	Fair	Structural Condition - Fair Old prunign wounds on trunk Crown shape distorted due to group pressure – weighted north Lower crown appears sparse Minor deadwood in crown	No works required ar time of survey	10+	C1+2

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
11	Douglas Fir <i>Pseudotsuga menziesii</i>	23	S	670	141	6.70	N 5 E 7 S 9 W 7.5	N 5 E 4 S 3 W 5	Mature	Good	Structural Condition - Good Ivy on trunk previously cut Minor deadwood in crown Crown shape distorted due to group pressure Old pruning wounds on trunk	No works required ar time of survey	20+	B1+2
Grp 1	Goat Willow Rhododendron Mixed shrubs	7	S	280	25	2.80	N - E - S - W -	N - E - S - W -	Semi Mature	Good	Structural Condition - Fair Trunk and crown shape distorted due to group pressure Grows along site boundary Low hanging branches	No works required ar time of survey	20+	C2
Grp 2	Cherry Laurel Rhododendron Camellia Amelanchier Mixed shrubs	5	MS	100	3	1.00	N - E - S - W -	N - E - S - W -	Semi Mature	Good	Structural Condition - Fair Garden planting consisting of mixed species Trunk and crow sahpe distorted due to group pressure Low hanging branches	No works required ar time of survey	20+	B2
Grp 3	Japanese Maple Photinia Bay Laurel	4	S	120	5	1.20	N - E - S - W -	N - E - S - W -	Semi Mature	Good	Structural Condition - Fair Garden planting consisting of mixed species Trunk and crow sahpe distorted due to group pressure Low hanging branches	No works required ar time of survey	20+	B2
Grp 4	Rhododendron	4	MS	100	3	1.00	N - E - S - W -	N - E - S - W -	Semi Mature	Good	Structural Condition - Fair Offsite Unable to verify health and safety due to access Multi stemmed at ground level Forms boundary screen Growing on land approximately 300mm higher than site level	No works required ar time of survey	10+	C2



AS2





**PROTECTIVE FENCING. THIS
FENCING 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**

Mr Stefan Rose
Arboricultural Consultant of Arborsphere Ltd
Bsc (Hons), Tech Cert (Arbor.A), TechArborA

Stefan Rose is an Arboricultural Consultant based in Hampshire and Director of Arborsphere Ltd.

He holds the following qualifications relevant to arboriculture:

- Technicians Certificate in Arboriculture (Arboricultural Association)
- Professional Tree Inspection Certificate (Lantra Awards Ltd)
- Tree Surgery for Craftsmen (City and Guilds)

Professional Memberships:

- Technical member of the Arboricultural Association
- Member of the Royal Forestry Society

Stefan started Arborsphere Ltd in December 2011 and has been running the consultancy practice successfully for 8 years now with over 20yrs within the arboricultural industry, working with many Clients across the South of England carrying out a range of arboricultural services from development site tree surveys and site supervision to health and safety tree inspections.

Prior to starting his own company he was working as a Senior Consultant for CBA trees based in West End Hampshire from 1998 to 2011 assessing a wide range of arboricultural issues for projects across the UK and maintains a directorate level of working with them currently. The main focus related to carrying out tree surveys in accordance with the recommendations within BS5837:2005/12, looking at and advising on development sites in preparation for planning as well as the extensive involvement with major projects carrying out site monitoring and providing on going arboricultural advice. Work for smaller/private client was also an important

part of his work enabling them to extend and improve homes in close proximity to trees.

Within his time at CBA Trees Stefan also undertook work as a locum Tree Officer for Eastleigh Borough Council, Fareham Borough Council, Havant Borough Council, Southampton City Council, Rushmoor Borough Council and most recently Hart District Council where he undertook the task of reviewing the status of Tree Preservation Orders, assessing tree work and planning applications. This provided him with a wide range of experience in respect of trees, the law and planning issues surrounding trees.

Stefan trained whilst in the position of Tree Surveyor with CBA Trees at both Merrist Wood (1998 and 2001 – 2002) and with Tree Life Training to provide on going and continued professional development.



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