

13 CHAVLINGTON ROAD, CHANDLERS FORD, EASTLEIGH

Tree Survey Report



AS_1012_300
Tree Survey Report
A
Aug 2024

Quality Management

Version	Status	Authored by	Reviewed by	Approved by	Review date
-	For Planning	Arb-Solute	JN	JH	05 August 2024
A	For Planning	Arb-Solute	JN	JH	19 August 2024

© Copyright Arb-Solute LTD. All rights reserved. 2022

The report has been prepared for the exclusive use of our client and unless otherwise agreed in writing by Arb-Solute Ltd, no other party may use, make use of, or rely on the contents of this report. The report has been compiled using the resources agreed with the client and in accordance with the scope of work agreed with the client. No liability is accepted by Arb-Solute for any use of this report, other than the purpose for which it was prepared. The report does not account for any changes relating to the subject matter of the report, or any legislative or regulatory changes that have occurred since the report was produced and that may affect the report. Arb-Solute does not accept any responsibility or liability for loss whatsoever to any third party caused by, related to or arising out of any use or reliance on the report. No part of this report may be copied or reproduced, by any means, without the prior written consent of Arb-Solute.

Prepared by:

Arb-Solute

7 Latimer Street, Romsey, Hampshire SO51 8DF

T

E info@arb-solute.co.uk

Prepared for:

Owner/Occupier

13 Chavlington Rd, Chandlers Ford, SO53 3DY

T

E

Contents

1	INTRODUCTION.....	2
2	SITE INFORMATION.....	3
3	TREE SURVEY METHODOLOGY (BS5837:2012)	4
4	SUMMARY OF TREE SURVEY FINDINGS.....	5
5	REFERENCES.....	9

Appendices

Appendix A Tree Constraints Plan ARBS_1012_100
Appendix B Preliminary Tree Protection Plan ARBS_1012_110
Appendix C Tree Survey Schedule ARBS_1012_200
Appendix D Tree Protection Fencing Examples
Appendix E Tree Protection Fencing – Signage

1 INTRODUCTION

- 1.1 This Tree Survey Report has been prepared by Arb-Solute on behalf of the Owner/Occupier of 13 Chavlington Road, Chandlers Ford, SO53 3DY (The Site) in respect of a proposed development at The Site and, to accompany the submission of planning documents in relation to proposed development.
- 1.2 A tree survey of the site was carried out by Arb-Solute Ltd on 24th April 2024 in accordance with the requirements set out in BS5837: 2012 'Trees in relation to design, demolition, and construction – Recommendations'¹. This report utilises the findings of this survey.
- 1.3 The purpose of this report is to:
- Assess the landscape and visual amenity value of the existing trees and identify the constraints associated with the trees prior to any potential redevelopment of The Site. An assessment of the quality of the trees has been made, with reference to the categories and sub-categories listed within Table 1 - BS5837:20121.
 - Assess and quantify the arboricultural impact of proposed development within the survey area, based on indicative layout proposals provided by the client.
 - Provide additional arboricultural information and advice in relation to the protection of trees throughout the development of the site.
- 1.4 The relevant plans referred to throughout this document are:
- Tree Constraints Plan ARBS_1012_100
 - Preliminary Tree Protection Plan ARBS_1012_110
 - Tree Survey Schedule ARBS_1012_200

2 SITE INFORMATION

- 2.1 The tree survey covered the existing trees within and bordering an area of land as defined by the survey boundary line shown on the Tree Constraints Plan, ARBS_1012_100 (Appendix A). The application site borders gardens of neighbouring properties to the east and, west. Chavlington Rd to the south and railway tracks to the north. The site was roughly denoted by the drawn redline below.



- 2.2 The broad soilscape of the area in which the survey site is located typically comprises “Slowly permeable seasonally wet slightly acid but base-rich loamy and clayey soils”¹.
- 2.3 The survey area comprised a rear garden. Access to all recorded trees was possible apart from T6 and T11 which were located off site in the neighbouring property to the east. All assessments were made from within the curtilage of The Site, the stem bases of T6 and T11 were obscured by a garden fence. For offsite trees the stem diameter dimensions were estimated. All tree locations were estimated by measuring off of known fixed points using a handheld laser.
- 2.4 The primary trees surveyed were large mature specimens with wide spreading canopies – T3 and T6. The remaining surveyed trees were smaller and less significant filling gaps in space to create a closed canopy across the survey area.

¹ <https://magic.defra.gov.uk/magicmap.aspx>

3 TREE SURVEY METHODOLOGY (BS5837:2012)

- 3.1 The Tree Survey was carried out by Arb-Solute Ltd on 24th April 2024.
- 3.2 The report and survey were carried out in general accordance with the requirements set out in BS 5837:2012 "Trees in Relation to Design, Demolition and Construction – Recommendations"¹.
- 3.3 The tree survey involved a visual inspection from the ground of individual specimens and groups of trees to record their amenity value, management recommendations, and dimensions. Where observed, the general condition of all the trees has been noted. The survey does not constitute a full arboricultural hazard evaluation assessment involving the detailed inspection of trees in relation to their structural condition, decay, and any other physical and pathogenic defects.
- 3.4 The locations of the trees were estimated using a handheld laser measuring off of fixed points within the property's curtilage.
- 3.5 Where it was possible to access the stem of the tree, a diameter tape was used to measure the diameter of the tree stem. Where access was not possible, best estimations were made.
- 3.6 The survey assesses individual trees and groups of trees for quality and benefits within the context of the proposed development. The quality of each tree or group of trees has been recorded by allocating it to one of four categories described in Table 1 at the back of this report. These categories have been differentiated on the Tree Constraints Plan ARBS_1012_100 by colours.
- 3.7 The survey information was recorded on the attached Tree Survey Schedule in general accordance with the guidance contained within Section 4 of BS 5837:2012 "Trees in Relation to Design, Demolition, and Construction - Recommendations".
- 3.8 The information recorded is detailed in Table 1 at the back of this report.

Limitations

- 3.9 The findings of this survey are not valid following adverse or unpredictable weather conditions or for any failure due to 'force Majeure or unpredictable events.
- 3.10 Trees were not climbed or inspected below ground level and inaccessible trees will have the best estimates made about the location, physical dimensions, and characteristics.
- 3.11 Trees and woody vegetation were not assessed for their potential impact on future construction issues such as foundation designs (ref.: NHBC³ chapter 4.23). Whilst this report may assist in assessing likely future impacts, it should not be classed as a comprehensive vegetation survey in relation to impact upon future designs.

Lifespan of the data used to inform this report

- 3.12 The survey data contained and used to inform the production of this report are considered accurate for 3 years assuming there are no significant changes to the site conditions.

4 SUMMARY OF TREE SURVEY FINDINGS

Generally

- 4.1 The Site was covered by joined canopy predominantly formed by T3 and T6 both categorised as B trees.
- 4.2 The primary on site tree feature was T3. This mature Monterey Cypress tree was a large and broad spreading tree with a clear stem up to approximately 4m. Its stem divided from 0.5m-1.5m into 4 stems with tight unions. The stems formed a canopy of multiple leaders creating a wide spreading habit.
- 4.3 T6 was a large offsite Lime tree protected by a Tree Preservation Order (TPO) and was set back from the property to allow a good distance from the existing built structure and its Root Protection Area. The stem was heavily Ivy infested and would benefit from the Ivy being severed at its base.
- 4.4 The remaining trees were largely insignificant but contributed to forming a close canopy across the whole garden.

Planning considerations/ statutory checks

- 4.5 A desktop investigation into the planning constraints on this site confirmed that the survey area was not covered by a Tree Preservation Order (TPO). However, TPO 560_E protects offsite trees to the west, TPO 591_E protects trees in the northern section of The Site and neighbouring gardens to the east and, the large offsite Lime tree – T6 in the neighbouring property. Further information can be found on the Eastleigh Borough Councils website by using their interactive mapping system - <https://emaps.eastleigh.gov.uk/WebMaps/Map.aspx?MapName=Trees&initialDialog=layersDialog>
- 4.6 If a physical copy of the TPO documentation is required It can be obtained from the council by submitting a request to the Planning Department.
- 4.7 Trees protected by TPO are protected by law that prohibits the cutting down, topping, lopping, uprooting, wilful damage and wilful destruction of the protected trees without the written consent (by way of a TPO application form or full planning permission) of the Councils. The cutting of roots is also a prohibited activity and requires consent from the Council.
- 4.8 A desktop investigation of this site using the Magic maps application² confirmed that no trees within the site boundaries are identified as ancient woodland and The Site is not within a conservation area.
- 4.9 Under the UK planning system, local authorities have a statutory duty to consider the protection and planting of trees when granting planning permission for a proposed development. The potential effect of development on trees, whether statutorily protected (e.g. by a tree preservation order or by their inclusion within a conservation area) or not, is a material consideration that is taken into account in dealing with planning applications.

² <https://magic.defra.gov.uk/MagicMap.aspx>

- 4.10 Trees can offer many benefits, including the provision of visual amenity, softening or complementing the effect of the built environment, and adding maturity to new developments by making places more comfortable in tangible ways e.g. contributing screening and shade, reducing wind speed and turbulence, intercepting snow and rainfall, and reducing glare.
- 4.11 Particular care is needed regarding the retention of large, mature trees which become enclosed within a new development. Where such trees are retained, adequate space should be allowed for their long-term physical retention and future maintenance.

Individual Trees

- 4.12 A total of 11 individual trees were recorded as part of the survey. The survey boundary can be seen on the Tree Constraints Plan ARBS_1012_100 (As Amended) Of these:

Category	Total number	Tree Ref
A	0	N/A
B	2	T3 & T6
C	9	T1, T2, T4, T5 & T7 – T11
U	0	N/A

Design and Site Layout Considerations

- 4.13 During any site planning exercises the current and future growth potential of the trees should be considered.
- 4.14 The RPA for single-stem trees broadly equates to a radius 12 times the stem diameter of the tree at 1.5m above ground level or the extent of canopy spread, whichever is greater. For multi-stemmed, low-branching trees or those with trunks with an irregular girth the point of stem diameter measurement is adjusted in consideration of these factors and in accordance with the illustrations in BS5837:2012 (Annex C).
- 4.15 The RPA should become an exclusion zone during construction works and for any development. It should be fenced-off and protected in accordance with BS5837:2012¹. The canopy is likewise susceptible to damage during construction work and requires similar protection.
- 4.16 No activities that result in excavations, changes in level, or soil compaction should take place within the RPA of any retained trees, especially older mature trees. This would include the storage of materials, any construction work, trafficking by vehicles, or even excessive trafficking by pedestrians.

- 4.17 Services likewise should be routed outside the existing or potential root zone of trees. Where it is unavoidable, then certain measures should be employed to avoid damage to the tree's larger roots.
- 4.18 The location and siting of new facilities near trees should consider the potential impact on and conflict with both tree roots and canopy. This should consider the ultimate size of existing young and middle-aged trees at maturity. Conversely, the impact of the tree on the activities should also be considered with regard to obstruction, shading, leaf fall and root action. These are problems that can be managed provided sufficient space is allowed for.

Proposed Impact on Retained Trees

- 4.19 On review of the proposed layout as described in The Site Plan provided by DWG Plans Drawing number 03139 Rev B, it appears that little impact is proposed to RPAs from the proposed structures. A number of the lower quality trees are proposed for removal to provide safe working space and to facilitate the proposed development.
- 4.20 So long as adequate tree protection measures are installed such as Tree Protection Fencing (TPF) and, ground protection, and a no-dig construction is implemented (in blue hatch on plan) as highlighted within the Preliminary Tree Protection Plan the proposed development will have little to no impact on retained trees.
- 4.21 The fence will act as a barrier to construction activity creeping into the RPA and causing compaction to the roots further causing stress upon the tree.
- 4.22 Within the RPA there must be:
- No mechanical digging or scraping,
 - No alteration to existing ground levels including soil stripping,
 - No earthworks,
 - No handling or discharge of any chemical substance, concrete washings, or of any fuels.
 - No vehicular or pedestrian access and the storage of any materials is prohibited within the CEZ.
 - No materials that may contaminate the soil such as concrete mixings, diesel oil, and vehicle washings shall be discharged within 10m of the stem of any tree and,
- 4.23 No fires shall be lit within 10m of the maximum extent of a tree.

Trees and Management of Health and Safety

- 4.24 It is recommended that a program of periodic arboricultural assessments be undertaken in the future (post-development) in order to regularly assess the ongoing full health and safety of all trees both in full leaf and bare stemmed. The assessments should prioritise areas based on levels of access and presence of target (i.e. exposure of people to hazards) and accord with arboricultural advice, taking account of relevant factors (where known) that affect safety such as the age class, and condition, size, and species of the trees.

Conclusions

- 4.25 A tree survey has been completed in accordance with BS5837:2012 to assess the landscape and visual amenity value of the existing trees on and in close proximity to The Site.
- 4.26 A preliminary assessment has been made in relation to the proposed arboricultural impact of the proposed layout as per the Site Plan by DWG Plans. Several of the lower-quality trees are proposed for removal to provide a safe working space and to facilitate the construction of the proposed development. The removal of said trees is not seen to have a significantly detrimental impact on the treed nature of the garden and surrounding environment.
- 4.27 Little to no impact on the retained RPAs from construction activity is foreseen so long as Tree Protection Fencing (TPF), ground protection are installed, and a no-dig construction method is implemented for the stairs.
- 4.28 Tree protection measures are proposed around the RPAs of all trees to reduce the likelihood of compaction from builders' materials occurring during the proposed construction. Similarly, it is important to ensure that this protected area remains free from any excavation whatsoever – including any proposed drainage or service trenches.
- 4.29 In summary, little to no impact on retained trees is proposed in order to achieve the proposed development. So long as tree protection measures highlighted within the Preliminary Tree Protection Plan are followed it is unlikely that adverse impact to retained trees.

5 REFERENCES

- ¹ British Standards Institute. *British Standard (BS5837) Trees in Relation to Design, Demolition and Construction - Recommendations*. 2012.
- ² DEFRA. 'Magic Map Application'. www.magic.gov.uk. (Checked – April 2024.)
- ³ NHBC. 'Chapter 4.2- Building Near Trees'. *NHBC Standards 2016*. 2016.
- ⁴ British Standards Institute. *British Standard (BS3998) Trees Work - Recommendations*. 2010
- ⁵ Royal Town Planning Institute. *National Planning Policy Framework (England)*. 2012.
- ⁶ Natural England and Forestry Commission (2015) Standing Advice for Ancient Woodland.
- ⁷ British Standards Institute. *British Standard (BS8545) Young Trees: From Nursery to Independence in the Landscape*

Table 1

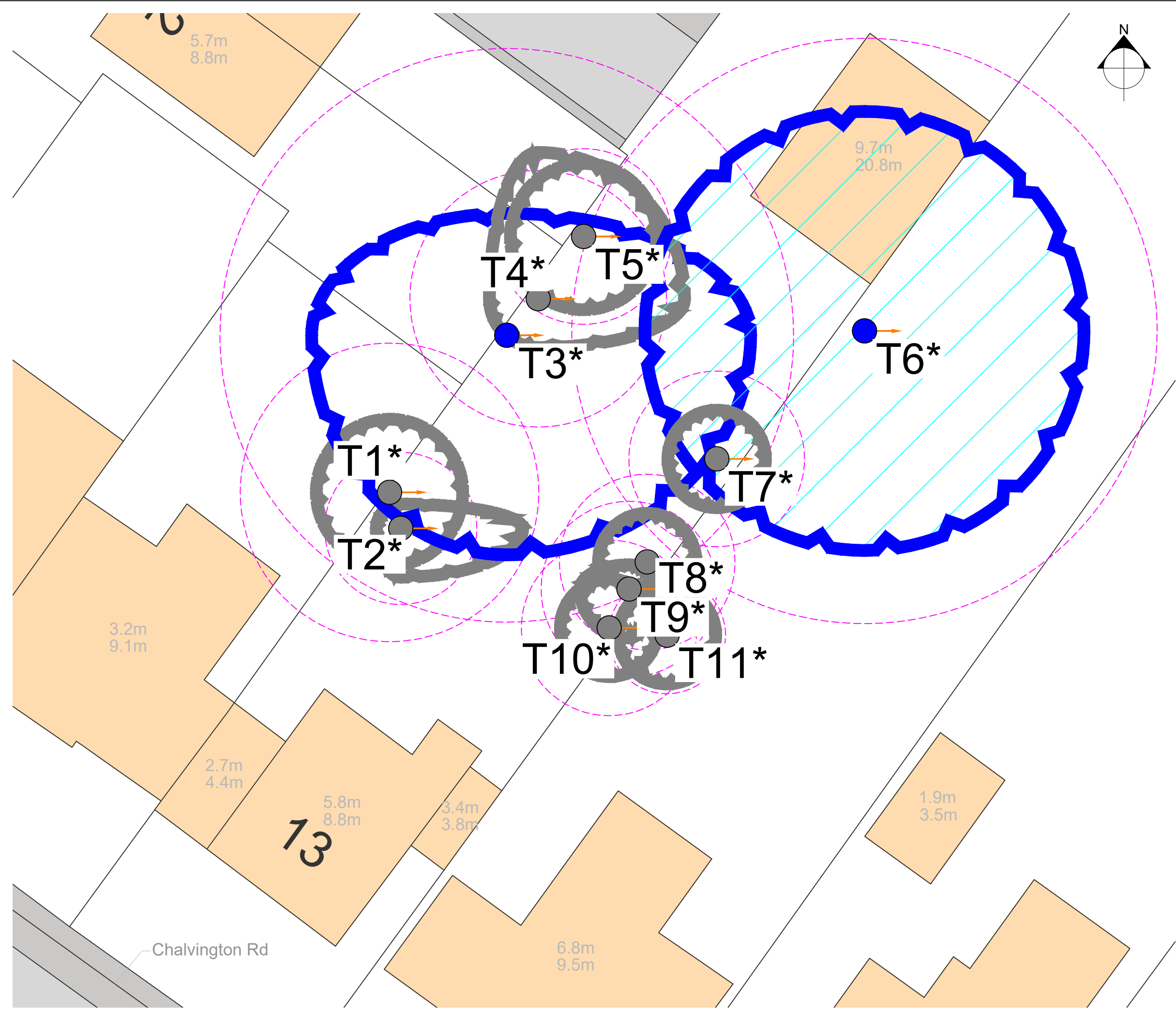
Tree characteristics recorded during survey

Tree Ref No:	Sequential reference number of trees or groups of trees. Avenues, woodlands and hedgerows were also recorded on the tree survey plan. # - denotes inaccessible trees (best estimates are made about the location, physical dimensions and characteristics.)				
Species	Species listed by common name, with scientific names (italic lettering).				
Height (m)	Estimated height of canopy to nearest metre.				
Branch Spread	branch spread, taken as a minimum at the four cardinal points, to derive an accurate representation of the crown				
Stem diameter @ 1.5 m (m)	Measured diameter of trunk at 1.5 m above ground level in metres unless otherwise indicated, multi-stemmed trees being measured in accordance with Annex C: BS5837				
Existing height above ground level	To inform on ground clearance, crown/stem ratio and shading the estimated height of the first significant branch and direction of growth and canopy above ground level.				
Stem No.	Number of stems (if necessary) of individual tree.				
Life Stage	Expressed as:-	Y	(Young)	OM	(Over-
		SM	(Semi-	mature)	
		EM	(Early-	V	(Veteran)
		mature)	D	(Dead)	
		M	(Mature)		
Physical Condition	Apparent condition expressed as the following categories, based upon a brief visual inspection from the ground only:-			Good Fair Poor Dead	
Comments / Management Recommendations	General observations, particularly of structural and/or physiological condition (e.g. the presence of any decay and physical defect), and/or preliminary management recommendations and potential for wildlife habitats (not exhaustive).				
Estimated remaining contribution (years)	Estimated remaining contribution, in years (<10, 10+,20+,40+)				
Tree Quality Assessment Value: Category	Criteria grading with regards to Table 1: BS 5837:2012, expressed as:-	A (Trees/Vegetation of high quality and value) B (Vegetation of moderate quality and value) C (Trees/Vegetation of low quality and value) U* (Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years)			
	* Category U trees can have existing or potential conservation value which might be desirable to preserve.				
Tree Quality Assessment Value: Sub - Category	Criteria grading with regards to Table 1: BS 5837:2012, expressed as:-	1 (Trees with mainly <i>arboricultural</i> value) 2 (Trees with mainly <i>landscape</i> value) 3 (Trees with mainly <i>cultural / conservation</i> value)			

Appendices

Appendix A

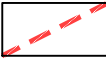
Tree Constraints Plan ARBS_1012_100



© Arb-Solute Tree Management Ltd



Key

 Survey boundary.

 T1

Tree with numbered reference.
Canopy spread and coloured BS5837:2012 tree quality category as shown below.
* = Tree location estimated / not plotted on topographical survey

BS 5837:2012 Tree Quality Categories - Table 1

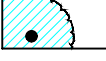
 Category A - High quality

 Category B - Moderate quality

 Category C - Low quality

 Category U - Unsuitable for retention

 Root protection area (RPA)
Calculated in accordance with Section 4.6 - BS5837:2012

 Tree protected by Tree Preservation Order No.TPO.591-E. Please check with Eastleigh Borough Council for further detail.

Rev	Description	By	CB	Date



ARB-SOLUTE
TREE MANAGEMENT

7 Latimer Street, Romsey, Hampshire, SO51 8DF
E: info@arb-solute.co.uk

Client

Mr & Mrs Smith

Project

13 Chalvington Road
Chandlers Ford, SO53 3DY

Title

Tree Constraints Plan

Status

For Planning

Drawn By

JN

Scale @ A3

1:150

Date Created

June 2024

Drawing / Figure Number

ARBS_1012_100

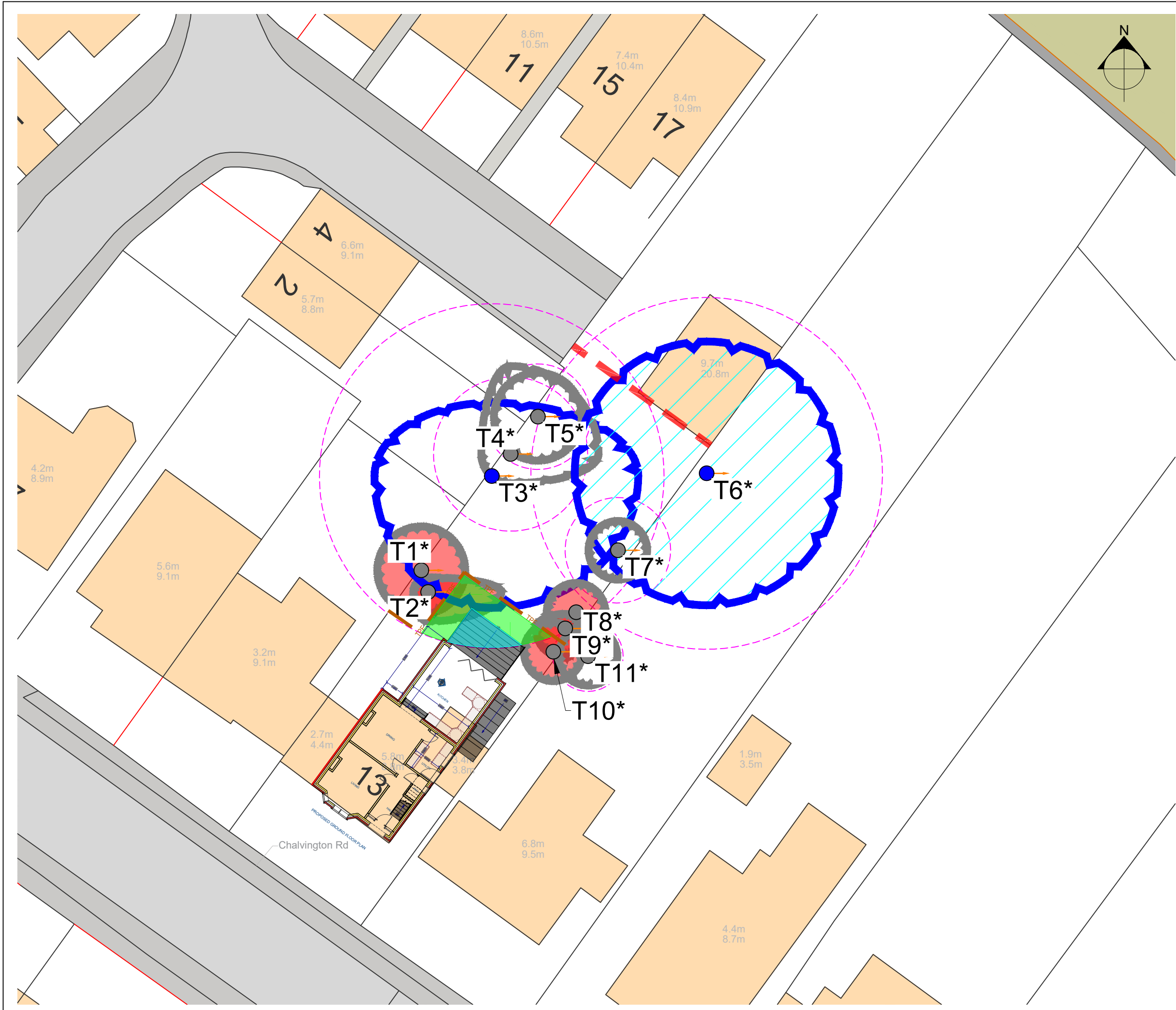
Rev

-

arb-solute.co.uk

Appendix B

Preliminary Tree Protection Plan ARBS_1012_110



© Arb-Solute Tree Management Ltd

Key

Survey boundary.

Tree with numbered reference.
Canopy spread and coloured BS5837:2012 tree quality category as shown below.
* = Tree location estimated / not plotted on topographical survey

BS 5837:2012 Tree Quality Categories - Table 1

Category A - High quality

Category B - Moderate quality

Category C - Low quality

Category U - Unsuitable for retention

Root protection area (RPA)
Calculated in accordance with Section 4.6 - BS5837:2012

Tree protected by Tree Preservation Order No.TPO.591-E. Please check with Eastleigh Borough Council for further detail.

Tree with numbered reference. Red hatch proposes tree removal.

Ground protection within exposed RPA proposed.
100mm non compressible layer with ground protection boards pinned down on top.

Tree with numbered reference. Red hatch proposes tree removal.

Above ground construction requiring no-dig into RPA.

BUpdated LayoutJNJH19.08.24

AUpdated LayoutJNJH03.06.24

RevDescriptionByCBDate

B	Updated Layout	JN	JH	19.08.24
A	Updated Layout	JN	JH	03.06.24
Rev	Description	By	CB	Date

ARB-SOLUTE
TREE MANAGEMENT

7 Latimer Street, Romsey, Hampshire, SO51 8DF
E: info@arb-solute.co.uk

Client

Mr & Mrs Smith

Project

13 Chalvington Road
Chandlers Ford, SO53 3DY

Title

Preliminary Tree Protection & Removal Plan

Status
For Planning

Drawn By
JN

Scale @ A3
1:150 (Do Not Scale From This Plan)

Date Created
June 2024

Drawing / Figure Number
ARBS_1012_110

Rev
B

arb-solute.co.uk

Appendix C

Tree Survey Schedule ARBS_1012_200

TREE SURVEY SCHEDULE

Site: 14 Calvington Road, Chandlers Ford
 Project Schedule Ref: ARBS_1012_200
 Drawing Reference: ARBS_1012_100
 Survey date: 24.04.2024

Surveyor: JN
 Status: For Planning
 Revision: -
 Notes: Stem dia. (mm) for trees with 6 or more stems are estimated averages.
 FSB - First Significant Branch. (e)-est. Ht.Can = Height of Canopy



Ref. no	Species	Height (m)	Ht. Can	Crown spread (m)				Stem dia. (mm)	Stem no. at 1.5m	Age class	Structural Condition	General Observations	Management Recommendations	Estimated remaining contribution (yrs)	Tree Quality Category (BS5837)
				N	S	E	W								
T1	Cupressocyparis leylandii (Layland Cypress)	17	4(E)	3	3	3	3	510	1	M	Fair	Clear stem up to approx. 3m where stem divides into 3 and divides in 2 at 6m resulting in multiple stems - a typical result of topping management practises. Resulting stem unions are tight and create a weakness. Tree canopy is relatively sheltered position. No other obvious major defects.	None at time of survey.	10+	C2
T2	Laburnum anagyroides (Laburnum)	5	4(E)	1	5	2	1	150, 150, 150	3	M	Fair	Asymmetric canopy shape growing beneath canopy of adj. tree. Attractive flowering as garden ornamental.	None at time of survey.	10+	C2
T3	Cupressus macrocarpa (Monterey Cypress)	18	4(E)	5	10	9	8	980	1	M	Fair	Large mature tree growing on boundary. Stem divides from 0.5 - 1.5m into 4 stems with tight and included unions that can result in a weak attachment point. Stems form multiple canopy leaders. Ivy on one of the stems. No other obvious major defects.	None at time of survey.	20+	B2
T4	Cupressus macrocarpa (Monterey Cypress)	10	4(E)	6	6	2	2	310,310	2	M	Fair	Suppressed tree within canopy of large adj. tree. Twin stem from ground level with tight included union. Ivy on stem obscures assessment of union.	None at time of survey.	10+	C2
T5	Cupressocyparis leylandii (Layland Cypress)	12	4(E)	3	3	3	3	300	1	M	Fair	Good quality single stem conifer. Has not been topped before so has retained natural single-leader form. No obvious major defects.	None at time of survey.	10+	C2
T6	Tilia X europaea (Common Lime)	20	5(E)	9	9	9	9	1,000	1	M	Fair	Offsite superb tree. Protected by Tree Preservation Order administered by Eastleigh Borough Council. Stem is obscured by the boundary fence. Multiple stems from 2-3m with tight forks and included bark. Ivy on stem partially obscures unions. No other obvious major defects. Canopy appears to be in good physiological and structural condition.	None at time of survey.	20+	B1
T7	Cupressocyparis leylandii (Layland Cypress)	5	0(E)	2	2	2	2	300	1	M	Fair	Tree has been topped at approx. 4m and regrown multiple tops. Regrowth is still young at this stage. No particular arboricultural merit.	None at time of survey.	10+	C2
T8	Cupressocyparis leylandii (Layland Cypress)	5	0(E)	2	2	1	2	300	1	M	Fair	Tree has been topped at approx. 4m and regrown multiple tops. Regrowth is still young at this stage. Canopy forms a hedge between properties.	None at time of survey.	10+	C2
T9	Cupressocyparis leylandii (Layland Cypress)	5	0(E)	1	1	2	2	300	1	M	Fair	Tree has been topped at approx. 4m and regrown multiple tops. Regrowth is still young at this stage. Canopy forms a hedge with adj. tree between properties. No particular arboricultural merit.	None at time of survey.	10+	C2
T10	Cupressocyparis leylandii (Layland Cypress)	5	0(E)	2	2	2	2	300	1	M	Fair	Tree has been topped at approx. 4m with limited regrowth from tops. Canopy forms a hedge with adj. tree between properties. No particular arboricultural merit.	None at time of survey.	10+	C2
T11	Conifer	5	0(E)	2	2	2	2	200	1	M	Fair	Offsite tree. No particular arboricultural merit.	None at time of survey.	10+	C2

Note: This survey is based on a brief visual inspection from the ground.
 It is not intended as a full arboricultural inspection.

Appendix D

Tree Protection Fencing Examples

Figure 2 Default specification for protective barrier

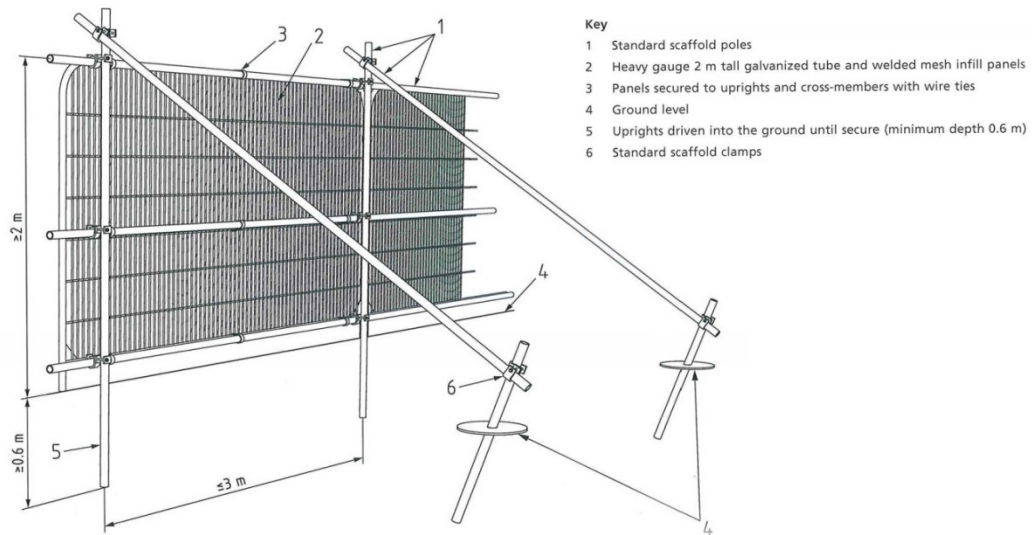
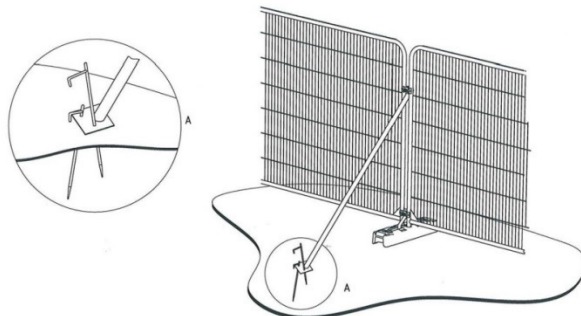
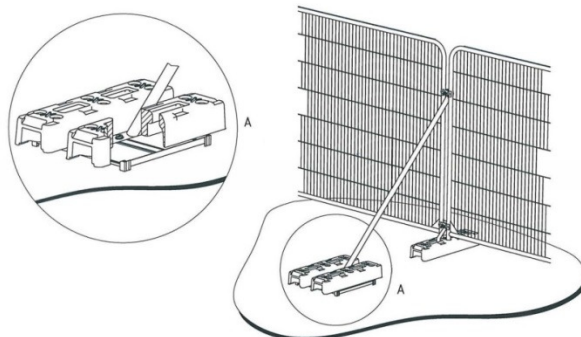


Figure 3 Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

Appendix E

Tree Protection Fencing – Signage

