



Arboricultural Report

**Construction of a 45-unit retirement home
complex, parking and landscaping
Woodhead Hall
Cheadle
Staffordshire**

Commissioned by:
Dan Swingwood
Mode Architects Ltd

Surveyed and reported on by:
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Report Date:
6 November 2024

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1.0 Summary

- 1.1 *The proposal is to build a 45-unit retirement village, parking and landscaping on a previously developed part of Woodhead Hall.*
- 1.2 *There are thirteen category B, five category C and two category U trees on, or next to the site. In addition to this there are three category B and six category C groups along with one category C hedge.*
- 1.3 *Three category C trees, one category C group and part of another such group will need to be removed. Some minor crown raising and reduction work is proposed for other trees and groups.*
- 1.4 *The amenity provided by trees to the area will not be harmed. A number of replacement trees are proposed and once established, will provide an increase in the amenity provided by trees to the area and its new setting.*
- 1.5 *Correctly placed protective fencing will ensure retained trees can be suitably protected during the build.*
- 1.6 *The proposal is arboriculturally sound and complies with BS5837.*

2.0 Instructions

- 2.1 I am instructed by Dan Swingewood of Mode Architects Ltd to carry out a survey at land at Woodhead Hall, Cheadle and record all significant trees that may be affected by the proposed development.



- 2.2 The proposal is to construct a retirement village set of housing, parking and landscaping on a disused piece of land at the hall.
- 2.3 There are a number of trees on, next to or on the entrance to the site. Consideration is to be made to justify any that require removal or work to them and to ensure retained trees are not significantly damaged by the proposal.
- 2.4 I am to produce a tree report to support the planning application. The report is to be compliant with BS5837:2012¹ hereafter referred to as BS5837.

3.0 Preliminary matters

- 3.1 The survey and report cover only arboricultural matters relating to trees that may be affected by the development. It deals with identifying the benefits and constraints trees will impose upon the development site, which trees will need to be removed and how the remaining specimens can be protected and how retained trees will affect the site.
- 3.2 Statutory protection of trees, either tree preservation orders (TPOs), conservation area status or historical planning conditions has not been thoroughly investigated. However, viewing the Council's interactive planning map², no tree preservation orders were identified. To be sure of no TPOs being in place, contact with the Council's tree department is recommended.

3.3 Plans supplied to myself:

- i) Topographical survey, site plans and proposal supplied by Mode Architects Ltd.

Plans I have produced to accompany this report:

- i) Tree Constraints Plan PC23/723/TCP
- ii) Tree Protection Plan PC23/723/TPP

- 3.4 Where buildings are constructed close to trees, reference should be made to the NHBC Standards 2024³. This document, updated yearly, gives appropriate foundation depths for buildings close to trees. It is recommended that the soil's modified plasticity index is investigated to consider the likelihood of soil

¹ BS5837:2012 Trees in relation to design, demolition and construction: Recommendations – British Standards Institute

² SMDC Interactive Planning Map: <https://www.staffsmoorlands.gov.uk/smdc-aurora> (note caveats on planning map) accessed 5 November 2024. SMDC Tree Department 01538 395788 trees@staffsmoorlands.gov.uk

³ National House Builders Council Standards 2024 Part 4, Chapter 2 Building near trees <https://nhbc-standards.co.uk/>



movement with moisture change. This will allow the appropriate foundation depth to be calculated.

- 3.5 The data, views and opinions of this report relate to the survey undertaken on the date shown and does not take into account the effects of extreme weather conditions, vandalism or accidental damage. Neither can the effects of poorly executed tree surgery work, not complying to current good practice, be predicted. Old Oak Tree Care cannot accept liability in connection with these factors. This report requires renewal in two years from the date of survey, or as soon as site conditions, tree health or tree structural conditions significantly alter.

4.0 Method of survey

- 4.1 The survey was undertaken on 1 July 2024.
- 4.2 Trees were surveyed to measure height, trunk diameter, crown spread and height, health, structural condition, estimated remaining life expectancy and overall quality. This and other information was gathered to comply with section 4.4.2 of BS5837. Trees were categorised utilising the same standard, see Appendix C.
- 4.3 Stem diameters were measured using a surveyor's tape. Crown spreads and heights were measured using a laser rangefinder. Heights were estimated using the height function of the laser rangefinder.
- 4.4 All measurements and observations were made from the ground and no soil or tissue samples were taken. Although significant visually apparent hazards within trees will be identified and commented upon, the survey is not a dedicated health and safety survey of the identified trees.
- 4.5 Where trees could not be reached when off site or inaccessible, dimensions were estimated.

5.0 Site details

- 5.1 The site is the previous grounds of a rural hall whose grounds appear to have been used as some type of industrial units. The retirement village appears to be planned in the area where the industrial units and parking were located well away from the hall.
- 5.2 To the north is an area of planted woodland. In an easterly and southerly direction are new housing and commercial developments which are likely to have once been part of the grounds of the hall. To the west is the hall and its extensive grounds.

- 5.3 The level of the land within the development site slopes gently down from north to south.
- 5.4 There are many trees on the site and next to it. Some are large specimen trees others being planted woodland types along with garden trees. I would describe the site as having a significant tree presence.
- 5.5 Viewing the Cranfield soil map⁴, it appears that the soil is slowly permeable, seasonally wet, acid, loamy and clayey. Soil of this kind provides a good medium for tree growth. The modified plasticity index of the soil is not known.

6.0 Summary of trees

- 6.1 All data gathered on trees is supplied in appendix E. Table 1 and 2 below give a summary of the information.

Category	Description of category	Number
A	High quality with an estimated remaining life span of at least 40 years. Particularly good examples of their species, especially if rare or unusual. They will be visually important and may have significant conservation or historical values.	0
B	Moderate quality and expected to remain between 20 to 40 years. Might have been included as a category A but downgraded by impaired conditions. Possibly lacking special qualities to be regarded as Category A. Group which collectively increase its value from C to B or a particularly effective screen.	13
C	Low quality with an expected lifespan of 10 to 20 years or below 150mm in diameter. Unremarkable trees, either young, impaired or poor species. Unlikely to increase in quality as time goes by. No conservation or cultural value.	5
U	Those in such a condition that they cannot be realistically retained as living trees for longer than 10 years. Serious structural or physiological problems. Also dead trees.	2
Group	Trees of similar species, size or character which are grouped together. The number of the group is given together with the categorisation.	3 – B 6 – C
Hedge	Groups of trees planted in lines as a hedge. Trees originally planted as a hedge but have not been managed in some time, reverting back to a line of trees. The number of the hedge is given together with its categorisation.	1-C

Table 1: Number of categorised trees, groups and hedges. A brief description of categorisation together with colour coding. Appendix E gives full detail.

⁴ Cranfield Soil and Agrifood Institute Soilscales. www.landis.org.uk/soilscales/



6.2 A brief description of pertinent data relating to all trees is given in table 2. A key to the table is found below it.

No.	Species	Height	Stem Dia.	Cat.	Comment
As1	Ash	16	400	U	50% crown death from ash dieback
As2	Ash	16	400	U	70% crown death from ash dieback
Sy3	Sycamore	15	425	C	0
Sy4	Sycamore	18	450	B	0
Sy5	Sycamore	19	375	B	0
H6	Hedge	8	150	C	Mainly laurel hedge with some younger ash. Ash dieback visible
Ro7	Red Oak	17	425	B	0
Sy8	Sycamore	19	425	B	0
Sy9	Sycamore	18	675	B	0
Be10	Beech	21	800	B	0
Cy11	Cypress	16	400	C	0
Cy12	Cypress	10	300	C	0
Cy13	Cypress	8	250	C	0
Ch14	Cherry	20	375	B	0
Sy15	Sycamore	22	475	B	0
Sy16	Sycamore	22	675	B	Most prominent tree in this group of sycamores
Sy17	Sycamore	21	600	B	0
G18	Group	18	500	B	Group of sycamore
G19	Group	20	350	B	Group of birch, sycamore, ash, cherry
G20	Group	17	400	B	Group of sycamore and cherry, one dead cherry
G21	Group	15	200	C	Group of cypress willow and yew
Ch22	Cherry	8	375	C	big lean into car park
G23	Group	12	150	C	Group of cherry, sycamore and ash
Al24	Alder	21	375	B	0
G25	Group	17	300	C	Very tall cypress hedging
G26	Group	15	150	C	Self set willow and ash
As27	Ash	23	700	B	Off site ash
As28	Ash	21	600	B	thin crown
G29	Group	16	300	C	Group of ash and sycamore
G30	Group	8	125	C	Group of 3 goat willow

Table 2: Summary of trees (Key below)

No: Tree identifier using letters to indicate species and a sequential number.
 G indicates a group, H indicates a hedge.
 Species: Tree species using the common name.
 Height: Height in metres.
 Stem Dia: Stem diameter measured at 1.5 metres from the ground in millimetres.
 Cat: Category according to BS5837. See Appendix C for details on categorisation.
 Note: Numbers for sub-categorisation are not used.



7.0 Arboricultural impact assessment

- 7.1 Some trees will need to be removed given their overgrown nature and lack of quality. However, the larger more impressive trees which add to the character and appearance of the area are to be retained as they do not need to be removed and will provide a pleasant and mature setting for the retirement village.
- 7.2 At the northern entrance, two large ashes, As1 and As2 will be at either side of the new drive into the village. Both of these trees are showing significant signs of ash dieback above the 50% threshold of crown death to warrant their removal⁵. They should be removed for both aesthetic and safety reasons.
- 7.3 Branches from several category B trees stretch considerably above the already existing drive from the north and several further large category B trees will overhang the drive. These trees, which will provide much amenity for those entering and leaving the site should have their crowns raised to 5m above the ground where necessary. This work only needs to take place where the tree crowns overhang the drive. This will also ensure any delivery vehicles will not strike trees. Such minor works will be needed, if necessary, on Sy5, Be10, Cy11, Cy12, Cy13, Ch14, Sy16 and Sy17.
- 7.4 At the northern part of the parking area, a number of category C trees and groups have grown to a position where they are preventing the effective use of the parking area. G21 a group of unattractive cypress should be removed along with Ch22 an unattractive semi collapsed cherry. In addition to this the crowns of G23, Al24 and G25 should be raised to 5m above the car park to allow it to be easily used again. Some of G26 a group of self set ash should be removed to ensure space for parking is not compromised.
- 7.5 A small part of the crown of As28 will overhang the buildings. This tree is currently in fairly good condition. A 2m crown reduction on its northern aspect will allow the removal of a small section of crown that overhangs the houses.
- 7.6 While the crowns of As28, G29 and G30 will cause some shading of the dwellings to the north, they will also provide screening. The lay out of the buildings appears to focus into the centre of the development. Therefore, proximity to trees to the south, at worst, As28 being 7m from a building, will not cause significant concerns for residents. Trees As28, G29 and G30 will provide a pleasant backdrop to the retirement village adding to the mature landscape in which the village is placed.

⁵ <https://treecouncil.org.uk/science-and-research/ash-dieback/public-guidance/>

- 7.7 The effect on trees to the character and appearance of the area following this work will be minimal. The majority of trees will remain in place and the overall shape of trees worked upon will not be considerably altered by what is proposed.
- 7.8 While three trees, one group and part of one group will be lost, all category C or U, there is plenty of space to replant with fitting species for the landscape that can provide long lasting amenity to the area. Once established the amenity provided by trees to the area will be increased. Appendix B shows the location where these trees can be planted.
- 7.9 No other trees will be affected by the development.

8.0 Tree protection

- 8.1 Appendix A and B show the category of trees, their crown spread and their root protection area (RPA), an area of rooting around the tree which if retained will provide suitable medium for the tree to continue to grow without significant harm.
- 8.2 RPAs do not show the entire rooting area of the tree. They may show just $\frac{1}{2}$ or $\frac{1}{3}$ of it depending upon site conditions. The RPA is usually drawn as a circle 12 times the diameter of the tree at 1.5m from the ground or, for multiple stemmed trees, its mathematical equivalent given in BS5837. However, site conditions may require the RPA to be drawn differently depending upon the most likely area where good rooting is found for the tree. In this case, although RPAs may have been altered by hardstanding and roads they have not been redrawn as protection of the trees most likely RPA will be ensured by the use of protective fencing.
- 8.3 Protected RPAs are to be kept clear of refuse, materials, fuels and chemicals. These items are to be prevented from leaking into RPAs, either above or below ground.
- 8.4 Protective fencing should be in place before any plant, materials, deliveries, site offices or skips arrive. No demolition or construction work is to take place until protective fencing is installed and approved for use.
- 8.5 Protective fencing similar to that presented in BS5837, shown in Appendix D, is to be used to protect RPAs from vehicular and foot access. The fencing is to be securely joined and attached to immovable objects to prevent it from being moved. Fencing should be firmly attached into the ground and will require tools to move it.
- 8.6 The distance trees should be from the trunk of trees is shown by a purple arrow in appendix B.

- 8.7 Services should not enter the RPA of trees on the site and there is plenty of room to position them. However, should a service trench need to be dug within the RPA of a tree then a site-specific method statement for this operation will need to be produced.

9.0 Conclusion

- 9.1 The proposal is to build a 45-unit retirement village, parking and landscaping on a previously developed part of Woodhead Hall.
- 9.2 There are thirteen category B, five category C and two category U trees on, or next to the site. In addition to this there are three category B and six category C groups along with one category C hedge.
- 9.3 Three category C trees, one category C group and part of another such group will need to be removed. Some minor crown raising and reduction work is proposed for other trees and groups.
- 9.4 The amenity provided by trees to the area will not be harmed. A number of replacement trees are proposed and once established, will provide an increase in the amenity provided by trees to the area and its new setting.
- 9.5 Correctly placed protective fencing will ensure retained trees can be suitably protected during the build.
- 9.6 The proposal is arboriculturally sound and complies with BS5837.



Appendix A

Woodhead Hall, Cheadle, Staffordshire

Tree Constraints Plan
Showing all trees, crown dimensions, tree categories
and root protection areas (RPAs)

SCALE :
1 : 600 @ A3 DATE :
06/11/2024

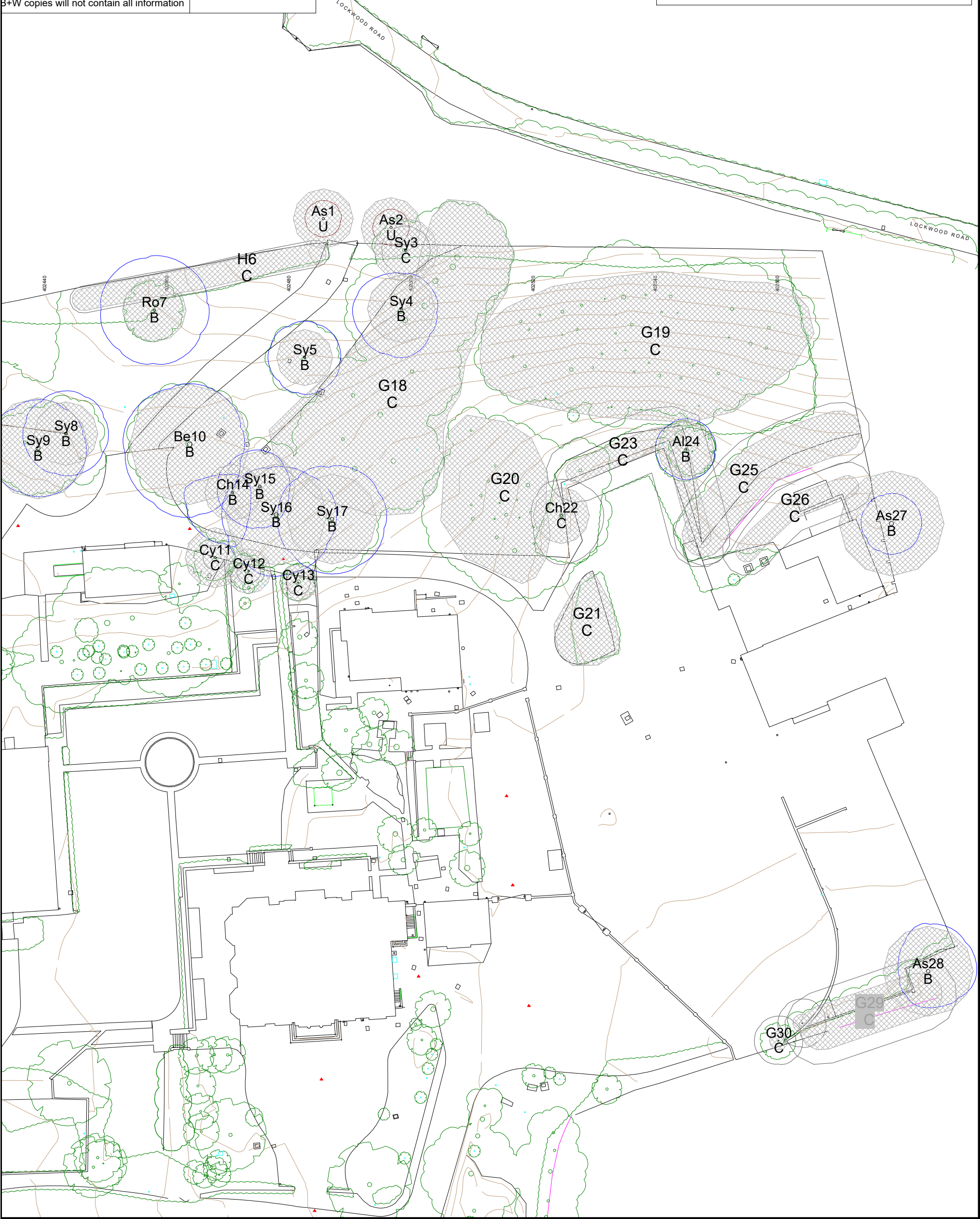
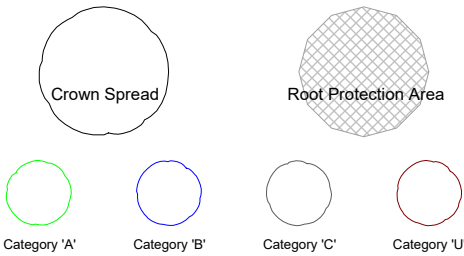
David Bailey Old Oak Tree Care 01630 673216
07813 808174 oldoaktree@talktalk.net



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Map reference:
PC24/723/TCP

Legend





Appendix B

Woodhead Hall, Cheadle, Staffordshire

Tree Protection Plan
Showing all retained trees, crown dimensions, tree categories,
root protection areas (RPAs) protective fencing and proposed planting

SCALE :
1 : 600 @ A3 DATE :
06/11/2024

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07813 808174 oldoaktree@talktalk.net

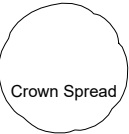


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Map reference:
PC24/723/TPP

Legend

Protective
fencing



Category 'A'

Category 'B'

Category 'C'

Category 'U'

0

50m

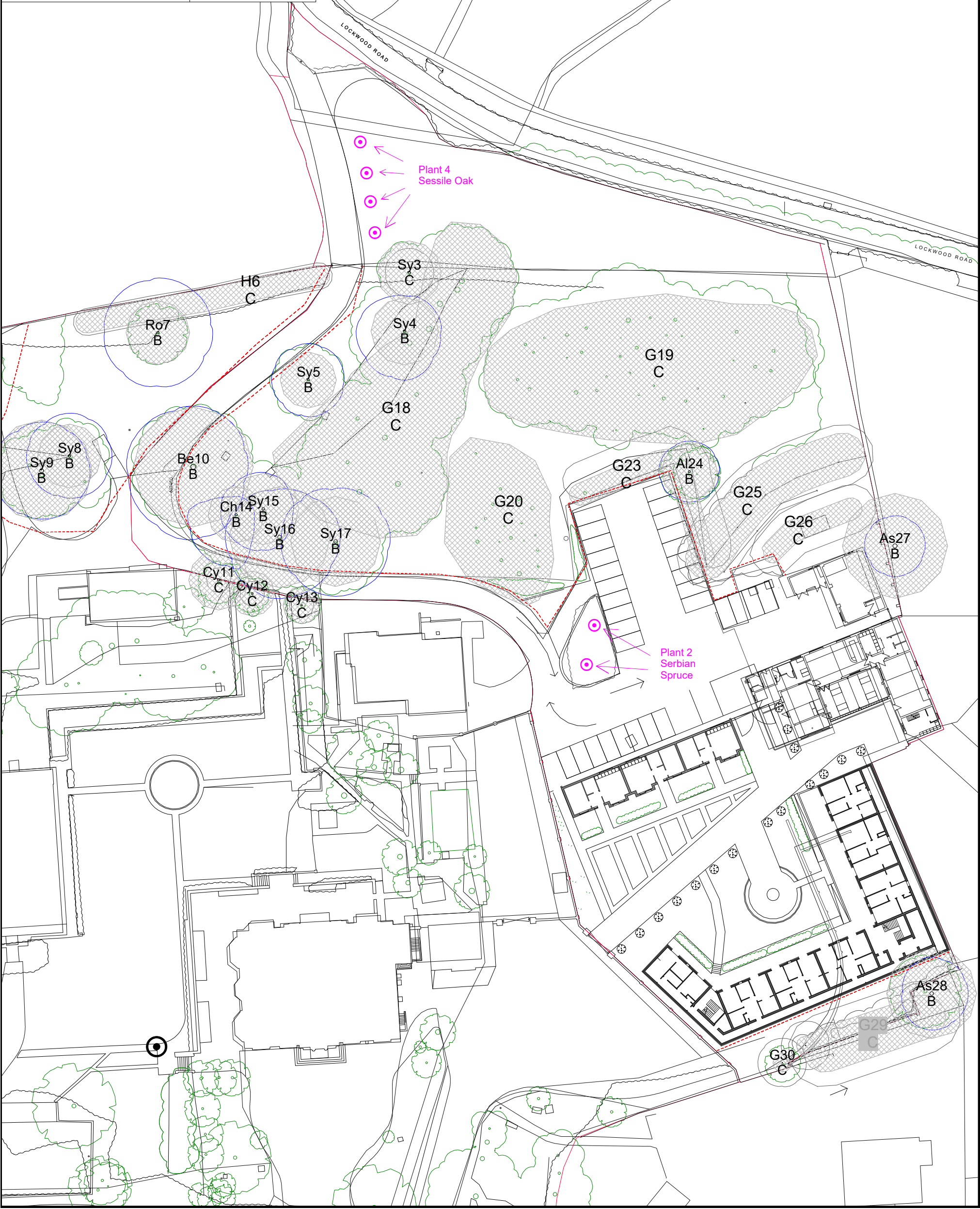


Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)	Identification on plan
Trees unsuitable for retention (see Note)		
Category 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	- 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 <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>	See Table 2
Trees to be considered for retention		
1 Mainly arboricultural qualities 2 Mainly landscape qualities 3 Mainly cultural values, including conservation		
Category A 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 significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
Category B 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 downgraded 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 with material conservation or other cultural value
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees with no material conservation or other cultural value

Figure 2 Default specification for protective barrier

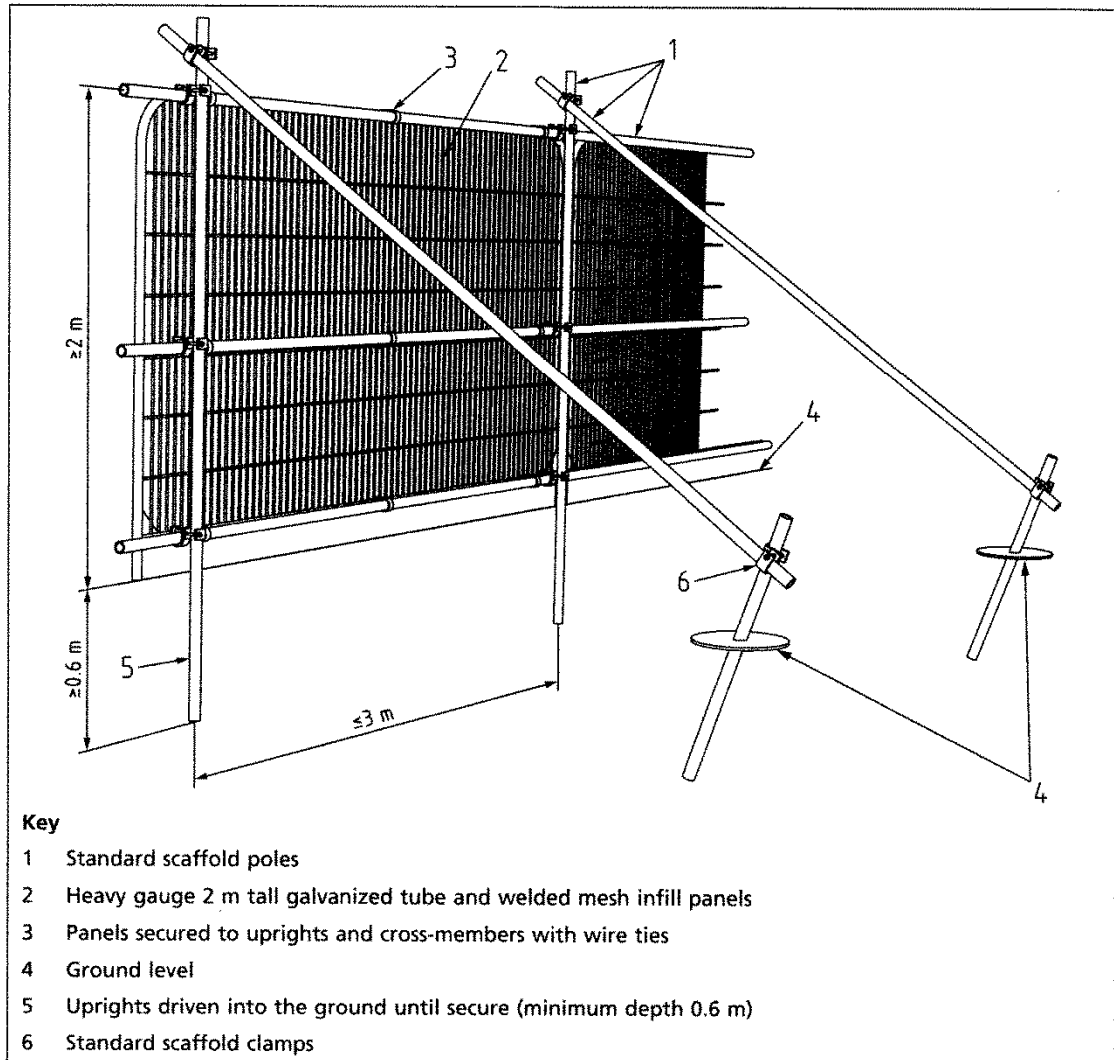
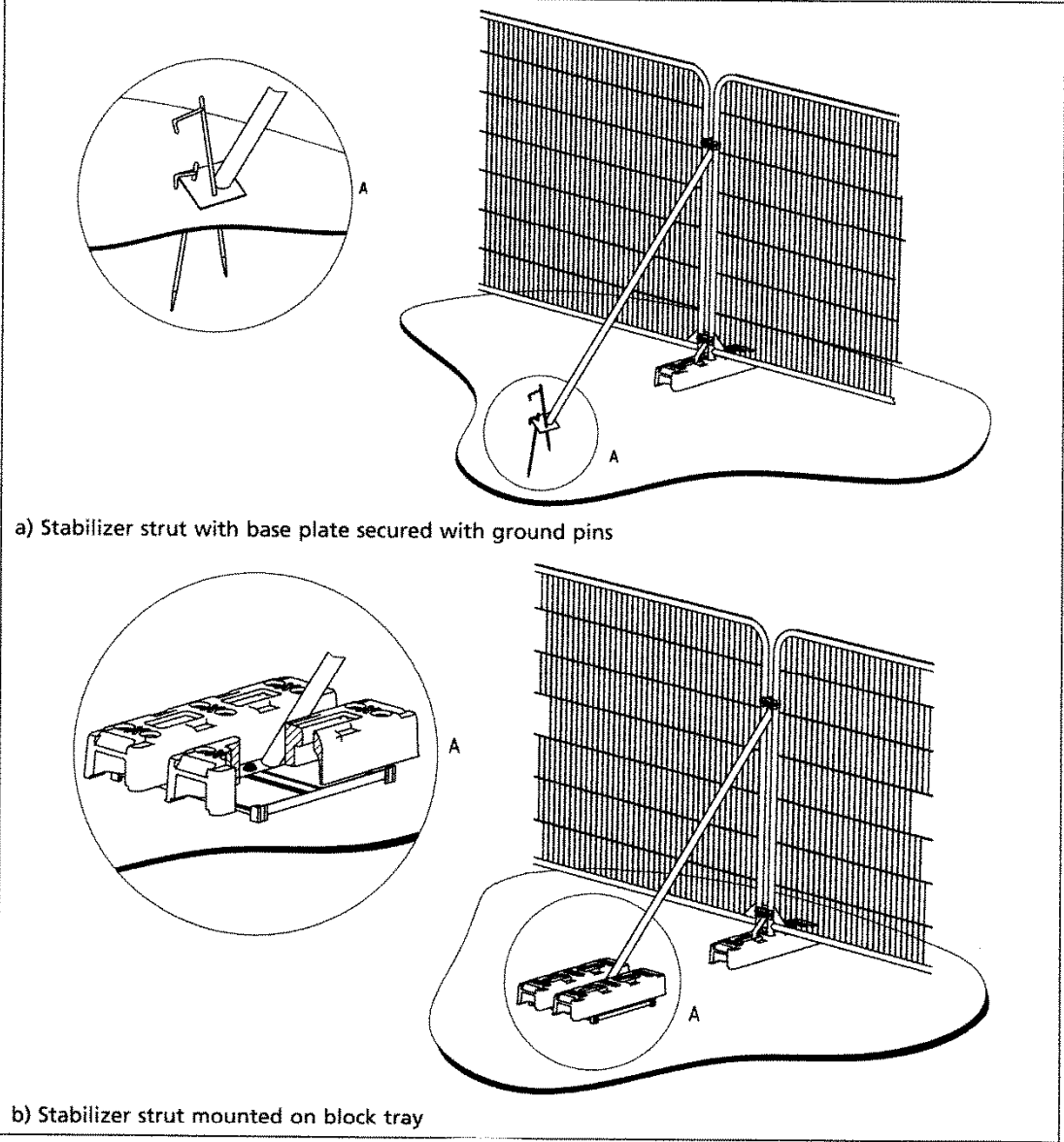


Figure 3 Examples of above-ground stabilizing systems



Appendix E Tree Schedule - Key

Where measurements are estimated due to lack of access or vegetation, a * denotes this.

Tree Number -	Identification for specific tree. Using a couple of letters to help with species identification together with a number. Groups or hedges will be identified as Gr.
Species-	Tree species, using common name.
Height-	Taken using angular triangulation function of a laser rangefinder.
Diameter-	Taken by measuring circumference with a tape measure and applying Pi equation or by measuring circumference by eye if entire circumference is not accessible (in this case denoted by *).
Crown spread-	Radius of crown at four cardinal points, north, east, south and west measured by laser rangefinder. (Estimates denoted with a *).
Crown height-	Height of lowest branch at each cardinal point. Measured by laser rangefinder. (Estimates denoted with a *).
Age bracket-	Estimated life stage of tree ranging from young, mid-aged, early-mature, mature and over-mature.
Physiological condition-	Assessment of health and vitality of the tree. Good, fair, poor or dead. Fair or poor will have more details attached.
Structural condition-	Assessment of physical structure of tree. Good, fair, poor or dead. Fair or poor will have more details attached.
Years remaining-	Estimate of likely useful life of tree taking into account age, species, character, situation and likely management requirements.
Quality assessment-	Subjective assessment. Either A-very good, B-good, C-reasonable or U-unsuitable for retention. See appendix C for more details.
RPA radius-	Positioning of root protection area (RPA) measured from centre of the tree to the radius. This is for circular RPAs. Where RPAs have been adjusted for site conditions and are no longer circular this value will not be correct.
RPA area-	Area of RPA irrespective of its shape.
Notes:	Any notable comments on group make up, physiological, structural condition or notable features.

Appendix E		Tree Schedule																	
Tree number	Species	Height (m)	Diameter (mm)	N Crown spread (m)	E	S	W	N Crown Height (m)	E	S	W	Age bracket	Physiological Condition	Structural Condition	Years remaining	Quality assessment	RPA radius(m)	RPA Area (m2)	Notes
As1	Ash	16	400	3	3	3	3	3	3	3	3	mature	poor	poor	<10	U	4.8	72	
As2	Ash	16	400	3	3	3	3	5	5	5	5	mature	poor	poor	<10	U	4.8	72	70% crown death from ash dieback
Sy3	Sycamore	15	425	4	4	4	4	5	5	5	5	mature	good	good	20 to 40	C	5.1	82	
Sy4	Sycamore	18	450	6	6	8	8	3	3	3	3	mature	good	good	20 to 40	B	5.4	92	
Sy5	Sycamore	19	375	6	6	6	6	2	2	2	2	mature	good	good	20 to 40	B	4.5	64	
H6	Hedge	8	150	2	2	2	2					mature	good	good	10 to 20	C	1.8	10	Mainly laurel hedge with some younger ash. Ash dieback visible
Ro7	Red Oak	17	425	9	9	9	9	2	2	2	2	mature	good	good	10 to 20	B	5.1	82	
Sy8	Sycamore	19	425	7	7	7	7	3	3	3	3	mature	good	good	20 to 40	B	5.1	82	
Sy9	Sycamore	18	675	8	8	8	8	3	3	3	3	mature	good	good	20 to 40	B	8.1	206	
Be10	Beech	21	800	10	9	12	11		2		1	mature	good	good	>40	B	9.6	290	
Cy11	Cypress	16	400	2	2	2	2	1	1	1	1	mature	good	good	10 to 20	C	4.8	72	
Cy12	Cypress	10	300	2	2	2	2	1	1	1	1	mature	good	good	10 to 20	C	3.6	41	
Cy13	Cypress	8	250	2	2	2	2	1	1	1	1	mature	good	good	10 to 20	C	3	28	
Ch14	Cherry	20	375	3	3	9	8	6	6	2	3	mature	good	good	20 to 40	B	4.5	64	
Sy15	Sycamore	22	475	6	5	7	7	4	4	4	4	mature	good	good	20 to 40	B	5.7	102	
Sy16	Sycamore	22	675	8	10	10	9	3	3	3	3	mature	good	good	20 to 40	B	8.1	206	Most prominent tree in this group of sycamores
Sy17	Sycamore	21	600	9	9	9	9	4	4	4	4	mature	good	good	20 to 40	B	7.2	163	
G18	Group	18	500	7	7	7	7	2	2	2	2	mature	good	good	20 to 40	B	6	113	Group of sycamore
G19	Group	20	350	3	3	3	3	6	6	6	6	mature	good	good	20 to 40	B	4.2	55	Group of birch, sycamore, ash, cherry
G20	Group	17	400	5	5	5	5	6	6	6	6	mature	good	good	20 to 40	B	4.8	72	Group of sycamore and cherry, one dead cherry
G21	Group	15	200	3	3	3	3					early-mature	good	good	10 to 20	C	2.4	18	
Ch22	Cherry	8	375	6	7	8	5	2	2	2	2	mature	good	poor	10 to 20	C	4.5	64	big lean into car park
G23	Group	12	150	5	5	5	5	3	3	3	3	mid-aged	good	good	10 to 20	C	1.8	10	Group of cherry, sycamore and ash
Al24	Alder	21	375	5	5	5	5	2	2	2	2	mature	good	good	20 to 40	B	4.5	64	
G25	Group	17	300	5	5	5	5					mature	good	good	10 to 20	C	3.6	41	Very tall cypress hedging
G26	Group	15	150	4	4	4	4	5	5	5	5	mature	good	good	10 to 20	C	1.8	10	Self set willow and ash
As27	Ash	23	700	5	5	5	5	6	6	6	6	mature	good	good	10 to 20	B	8.4	222	Off site ash
As28	Ash	21	600	8	8	6	5	3	3	3	3	mature	good	good	10 to 20	B	7.2	163	thin crown
G29	Group	16	300	6	6	6	6	3	3	3	3	mature	good	good	10 to 20	C	3.6	41	Group of ash and sycamore
G30	Group	8	125	4	4	4	4	1	1	1	1	mid-aged	good	good	10 to 20	C	1.5	7	Group of 3 goat willow