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**ARBORICULTURAL IMPLICATIONS ASSESSMENT
FOR PROPOSED**

NEW DWELLING

AT

**NORTH HAVEN
FOX HILL
HAYWARDS HEATH
RH16 4QY**

BY

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22nd July 2025**

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1. INTRODUCTION

- 1.1 Broad Oak Tree Consultants Ltd. received instructions from Mr J Baxter to undertake an inspection of trees located on and immediately adjacent to the site referred to as North Haven, Fox Hill, Haywards Heath, RH16 4QY. The purpose of the inspection was to produce a base inventory of the tree stock and an Arboricultural Implications Assessment of redevelopment proposals.
- 1.2 The proposals are for the demolition of an existing store and decking area and the construction of a detached two storey house with three parking spaces. The proposals will utilise an existing crossover point onto Fox Hill, with the provision of two parking spaces for the North Haven property. Details of the proposals will have been submitted by George Baxter and others.
- 1.3 The trees were inspected in April 2025 by Tim Laddiman, BSc.(Hons) M.I.C.For. M.Arbor.A., Chartered Arboriculturist and Principal Consultant of Broad Oak Tree Consultants Ltd.

2. GENERAL SITE DESCRIPTION

- 2.1 The site is located on the east side of Fox Hill with an existing crossover leading to an area of stone surfaced parking. To the south of the site is North Haven, a semi detached residential property. To its east is a large outbuilding with gardens to the north and a raised area of decking and store. Along the north boundary and either side of the entrance are developing trees and shrubs with scrub land containing young trees beyond the eastern boundary.

3. SCOPE OF TREE SURVEY

- 3.1 All trees and shrubs of 75mm diameter or more at 1.5m above ground level were included in the survey. This included trees immediately adjacent to the site.
- 3.2 For the offsite trees estimates of location, dimensions and condition had to be made.

4. DATA COLLECTION

- 4.1 All trees were inspected from the ground and no climbing or specialist investigations were undertaken. Only those trees within the site boundary could be basally inspected, with the structural integrity of the trees located outside the site unconfirmed. Each tree was inspected to the requirements of Section 4.4 "Tree Survey" of BS 5837:2012 "Trees in Relation to Design, Demolition and Construction - Recommendations".
- 4.2 The tree survey followed the numbered sequence from G1 – T5 inclusive. Tree numbers, together with BS recommended colour coding of condition, have been added to the Tree Constraints Plan, our drawing no. J66.74/01 Rev A in Appendix 2. This drawing also includes crown spreads based on four compass points and BS calculated root protection areas.

- 4.3 The following categories of information were obtained for each tree. A separate detailed tree survey sheet is attached in Appendix 1, together with comprehensive explanatory sheets which cover the details of the categories listed below.

- (1) Tree reference number
- (2) Species
- (3) Height in metres
- (4) Stem count
- (5) Stem diameter or equivalent in millimetres
- (6) Branch spread in metres
- (7) Age class
- (8) Height of crown clearance in metres
- (9) Physiological condition
- (10) Estimated remaining contribution in years
- (11) Category grading
- (12) Structural condition
- (13) Preliminary management recommendations

- 4.4 Within the assessment of physiological condition and remaining contribution, a visual inspection of each tree was undertaken to assess the crown and stem for any weak structures, deadwood, hollows, forks or other defects that might affect its stability and safety. The base of each tree was also visually inspected, together with tapping and probing, to search for signs of root lifting, bark death or decay. Where stems were heavily ivy clad, no full assessment of structural integrity could be undertaken. Clearance of the ivy would be necessary for confirmation of tree condition.

5. RISK ASSESSMENT - INFORMATIVES

- 5.1 Although the potential risk to someone passing beneath a tree when the tree or part of it fails is relatively remote, the risk is present. This increases significantly in areas of consistent and regular usage on a year round basis, such as footpaths, gardens and roadways. Where static structures exist, the risks become constant and an assessment is made as to whether complete or partial failure of a tree could potentially cause physical damage to such structures.
- 5.2 Within the scope of any tree survey it is a fact that not all risks of stem or crown failure can be covered, particularly in relation to freak occurrences of weather when even healthy trees can suffer stem snap or windblow. There is also a well known propensity for mature trees to occasionally shed limbs for no discernible reason, even on calm days. Although relatively rare, limbs may occasionally be shed and this should be acknowledged as a risk that cannot entirely be mitigated.

6. RESULTS OF TREE INSPECTIONS

- 6.1 A total of two linear groups of shrubs and three individual trees were inspected, ranging from a young olive of less than 10 years of age to an offsite Western Red Cedar (T4) of upto 25 years of age. All have been planted as part of various ongoing landscaping schemes within the two properties. Most appear in good condition though the Olive T3 leans to the south and has a tear wound in its main stem join. Its lifespan is considered to be short. The screening shrubs forming G1 and G2 are in good condition with some past maintenance to control their dimensions.

- 6.2 Of the trees inspected, the following is a breakdown of the various numbers of trees and groups in each BS category.

BS Category	Tree No.	Sub Total
A		
B		
C	G1, G2, T4, T5	4
U	T3	1
	TOTAL	5

6.3 *Interpretation of table*

- Category A** Retention most desirable. Of high quality and value and in such a condition as to be able to make a substantial contribution (a minimum of 40 years is suggested).
- Category B** Retention desirable. Of moderate quality and value and in such a condition as to make a significant contribution (a minimum of 20 years is suggested).
- Category C** Could be retained – of low quality and value. Poor crown form, heavily asymmetric, large numbers of similar species/size. Currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested) or young trees with a stem diameter below 150mm.
- Category U** Trees for removal. Dead/dying/dangerous trees due to structural defects, fungal decay or root plate uplift. Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.

7. **BS CALCULATED ROOT PROTECTION AREAS (RPAs)**

- 7.1 To provide an indication of the critical areas of root plate necessary for tree survival and longevity, BS 5837:2012 requires the calculation of RPAs for trees in the BS Categories A, B and C. Calculations are not made for Category U trees which will require removal on safety grounds within 10 years.
- 7.2 The table in Appendix 3 has been calculated using the measured stem diameters and the formula as described in Section 4.6 in BS 5837:2012. These are represented as basic circles on the Tree Constraints Plan. Where buildings, walls, services and hard surfacing exist within the indicated RPAs it is likely that the architecture of root systems will have been affected. Foundations to walls and buildings can completely obstruct root development, depending on their depth and the nature of the underlying soils. In the absence of detailed site investigations the indicated RPA circles should be used for guidance only within any redevelopment proposals.

ARBORICULTURAL IMPLICATIONS ASSESSMENT

8. REDEVELOPMENT PROPOSALS

- 8.1 The proposals are for the demolition of an existing store and decking area and the construction of a detached two storey house with three parking spaces. The proposals will utilise an existing crossover point onto Fox Hill, with the provision of two parking spaces for the North Haven property. Details of the proposals will have been submitted by George Baxter and others.
- 8.2 The supplied proposed site layout plan has been used as the base for the Broad Oak Tree Consultants Ltd. Tree Protection Plan, drawing no. J66.74/02 in Appendix 4. This indicates trees for removal and measures to protect retained trees in accordance with BS5837:2012 requirements.

9. TREES FOR REMOVAL – REDEVELOPMENT

- 9.1 Based on the supplied layout proposal the following trees will require removal.

Table: Trees for removal – redevelopment

Tree No.	Species	BS Category	Comments
T3	Olive	U	Small, young tree in poor condition
T5	Cabbage Palm	C	Small tree of limited visual presence

- 9.2 Both of the trees for removal are small, young and of minimal visual presence. As BS Category C and U these should not represent a constraint to the proposals, according to BS5837:2012.
- 9.3 The trees for removal for redevelopment purposes are indicated as such with blue dashed crown outlines on the Tree Protection Plan.

10. POTENTIAL IMPACT OF PROPOSALS ON RETAINED TREES

- 10.1 The proposed dwelling will not impact on any of the retained trees.
- 10.2 The proposed parking bays for the new dwelling will overlap with the outer RPA of the offsite Cedar, T4. To avoid any adverse impact the parking spaces will be formed utilising a three dimensional load spreading design, such as BodPave or a similar product, and porous infill. Only the existing turf/ loose soil will be removed by hand tools only. This design approach will accords with section 7.4 'Permanent hard surfacing within the RPA' of BS5837:2012 and is indicated on the TPP.

11. TREE PROTECTION MEASURES – FENCING

11.1 ***Location of fencing***

- 11.1.1 The Tree Protection Plan indicates the proposed location of protective fencing based on the calculated tree protection areas and space available.

11.2 *Design of fencing*

11.2.1 Protective fencing to comprise weldmesh panels securely fixed together with scaffold ties set within rubber/plastic feet to form a continuous barrier. Feet to be pinned to the ground with road pins/short scaffold bars or panel joins back braced. Waterproof signs to be attached to every 5th panel declaring "TREE ROOT PROTECTION ZONE – KEEP OUT" or similar wording. Fencing to be constructed in accordance with Fig 3 of Section 6.2 of BS5837:2012.

11.2.2 Examples of the fencing specification and signage required are included in Appendix 5.

11.3 *Timing of fencing*

11.3.1 Protective fencing is to be erected prior to commencement of site works and remain in place until completion of construction. The location and suitability of the fencing can be confirmed to the local authority by an arboricultural consultant prior to commencement of construction. Any tree felling will need to be undertaken prior to fence installation to minimise risks to operatives. All tree surgeons' vehicles will be kept outside the indicated protection zones utilising existing areas of hard standing and drive.

11.4 *Additional precautions*

11.4.1 Potentially injurious materials such as fuels, oils, chemicals and cement will be stored at least 20m from any stem, or in a bunded storage vessel. No fires will be lit within 5m of the drip line of any retained tree. No level changes will occur, either raising or lowering within the protected areas. A list of these additional precautions are included on the Tree Protection Plan.

12. SITE OPERATIONS AND MATERIALS STORAGE

12.1 Details of site zoning cannot be specified by an Arboriculturalist as these are commonly determined by contractors on the basis of Health & Safety Assessments. However, the robust protective fencing will define the remaining site space available for storage and operations.

12.2 As this is a small scale development the existing area of surfaced parking will be sufficient for temporary materials storage and site welfare. Materials will only be delivered in as and when needed, minimising the requirement for storage space.

13. SERVICES/DRAINAGE/SOAKAWAYS

13.1 Based on the supplied layout, any new services, drainage or soakaway alignments should be located outside root protection areas. If incursion into the protective areas of retained trees is unavoidable, then the routing should be obtained either by hand tool excavation or air spade, supervised by an arboricultural consultant. Any works within the protective areas will need to be undertaken to the requirements of NJUG Volume 4 "Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees".

14. ARBORICULTURAL METHOD STATEMENT

14.1 A separate AMS is not considered necessary for this site, given the limited potential for damage to occur to the trees and the robust tree protection measures proposed. The TPP can be referred to as an approved drawing in a specifically worded condition to ensure the trees are appropriately protected.

15. SUMMARY

- 15.1 The proposals will require the removal of two small, young trees of limited visual presence. Both are BS Category C and U and as such should not represent a constraint according to BS5837:2012.
- 15.2 The proposed dwelling will not impact on any of the retained tree RPAs.
- 15.3 The parking spaces for the new dwelling could have a limited impact on near surface roots of an offsite BS Category C tree. A load spreading, porous design for the spaces has been proposed, in line with BS recommendations to avoid any adverse impact.
- 15.4 The Tree Protection Plan can be referred to as an approved drawing or in a specifically worded condition to ensure that the retained trees are appropriately protected during the demolition and construction works.

Tim Laddiman
Chartered Arboriculturist
Broad Oak Tree Consultants Ltd.

APPENDIX 1

TREE SURVEY EXPLANATORY SHEET

Height	in metres (estimated where ground uneven or access restricted).
Stem count	number of stems
Stem diameter	in mm. at 1.5m. above ground level.
Branch spread	radial spread in metres at four main compass points (estimated where no access).
Age class	Young - Y Semi Mature - SM Mature - M Over mature - OM Veteran - V
Height of crown clearance	in metres. Normally range of heights of outer branches above ground level, e.g. 2-4m.
Physiological condition	Good, Fair, Poor, Dead, Variable
Estimated remaining contribution	in years e.g. less than 10, 10-20, 20-40, 40+
Category grading	see attached sheet
Structural condition	comment on presence of defects, decay, crown form, past management, deadwood, other features worthy of note. N.B. If trees are ivy clad, no full structural assessment will have been possible.
Preliminary management recommendations	requirements of further investigations, works necessary to alleviate potential hazards based on current setting and levels of access. NB: Works that may be necessary in relation to development are not included here

CASCADE CHART FOR TREE QUALITY ASSESSMENT

TREES FOR REMOVAL				
Category and definition	Criteria			Identification on plan
Category U Those in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management	- 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 R category trees (i.e. 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 (e.g. Dutch elm disease), or very low quality trees suppressing adjacent trees of better quality NOTE Habitat reinstatement may be appropriate (e.g. R category tree used as a bat roost: installation of bat box in nearby tree.)			DARK RED
TREES TO BE CONSIDERED FOR RETENTION				
Category and definition	Criteria - Subcategories			Identification on plan
	1. Mainly arboricultural values	2. Mainly landscape values	3. Mainly cultural values, including conservation	
Category A Those of high quality and value: in such a condition as to be able to make a substantial construction (a minimum of 40 years is suggested)	Trees that are particularly good examples of their species, especially if rare or unusual, or essential components of groups, or of formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands which provide a definite screening or softening effect to the locality in relation to views into or out of the site, or those of particular visual importance (e.g. avenues or other arboricultural features assessed as groups)	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)	LIGHT GREEN
Category B Those of moderate quality and value: those in such a condition as to make a significant contribution (a minimum of 20 years is suggested)	Trees that might be included in the high category, but are downgraded because of impaired condition (e.g. presence of remediable defects including unsympathetic past management and minor storm damage)	Trees present in numbers, usually as groups or woodland, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals but which are not, individually, essential components of formal or semi-formal arboricultural features (e.g. trees of moderate quality within an avenue that includes better, A category specimens), or trees situated mainly internally to the site, therefore individually having little visual impact on the wider locality	Trees with clearly identifiable conservation or other cultural benefits	MID BLUE
Category C Those of low quality and value: currently in adequate condition to remain until new planting could be established (a minimum of 10 years is suggested), or young trees with a stem diameter below 150mm.	Trees not qualifying in higher categories	Trees present in groups or woodland, but without this conferring on them significantly greater landscape value, and/or trees offering low or only temporary screening benefit.	Trees with very limited conservation or other cultural benefits	GREY
	NOTE Whilst C category trees will usually not be retained where they would impose a significant constraint on development, young trees with a stem diameter of less than 150mm should be considered for relocation			

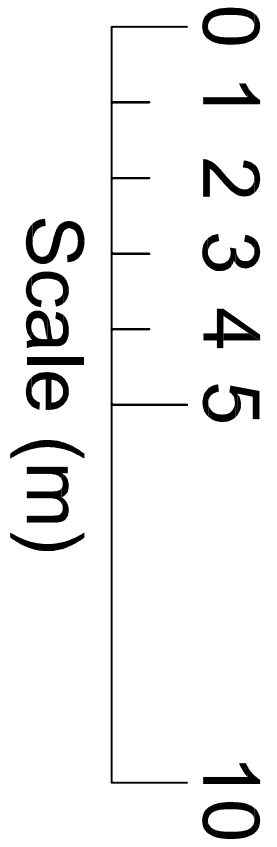
Tree ref. no.	Species	Height (m.)	Stem Count	Stem diameter or equivalent (mm.)	Branch spread (m.)				Age class	Ht. of crown clearance (m.)	Physiological condition	Estimated remaining contribution (years)	Category grading	Structural condition and Notes	Preliminary management recommendations
					N	E	S	W							
G1	Cherry Laurel	<2.5	Multi	<100	<1	<1	<1.5	<1	Y	0+	Good	40+	C2	Screen	
G2	Mixed Shrubs	<3.5	Multi	<100	<1.5	<1.5	<1.5	<1.5	Y	0+	Good	40+	C2	Screen	
T3	Olive	5.5	2	90	0.5	1	2	2	Y	1.1+	Poor	<10	U	Twin stemmed at 1.4m with tear wound in join to N. Leaning S	
T4	Western Red Cedar	7	1	c250	2	3	2.5	2.5	Y	0+	Good	40+	C2		
T5	Cabbage Palm	5.5	1	210	1.5	1	0.5	1.5	Y	3+	Fair	20-40	C2	High crown	

APPENDIX 2

BS Category of Condition

0	BS Condition B
T4	BS Condition C
T3	BS Condition U

The roof protection areas have been calculated using the measured dimensions and the formula as described in Section 4.6 in BS8987:2012. These are represented as basic circles on the Three Constraints Plan. Where buildings, walls, services and hard surfacing exist within the delineated RPAs, it is likely that the architecture of roof systems will have been affected. Foundations to walls and buildings can completely obstruct roof development depending on their depth and the nature of the underlying soils. In the absence of geotechnical site investigations, the indicated RPAs should be used for guidance only. Any further redevelopment proposals within any redevelopment proposals



APPENDIX 3

TABLE OF BS CALCULATED ROOT PROTECTION AREAS (RPAs)
AT
NORTH HAVEN, FOX HILL, HAYWARDS HEATH RH16 4QY

Tree no.	Species	BS Category	Stem diameter or calculated equivalent (mm.)	BS calc. radial equiv. root protection area (m.)	BS calc. total RPA (m ²)
G1	Cherry Laurel	C2	<100	<1.2	<5
G2	Mixed Shrubs	C2	<100	<1.2	<5
T3	Olive	U	90	1.1	4
T4	Western Red Cedar	C2	c250	c3	c28
T5	Cabbage Palm	C2	210	2.5	20

APPENDIX 4

Broad Oak Tree Consultants Limited
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 Tel: 01435 862444

Site: North Haven
 Fox Hill
 Haywards Heath RH16 4QY

Title: TREE PROTECTION PLAN

Key:

- Tree Location
- Group Location
- Tree/Group Number
- Crown spread
- BS calculated root protection area

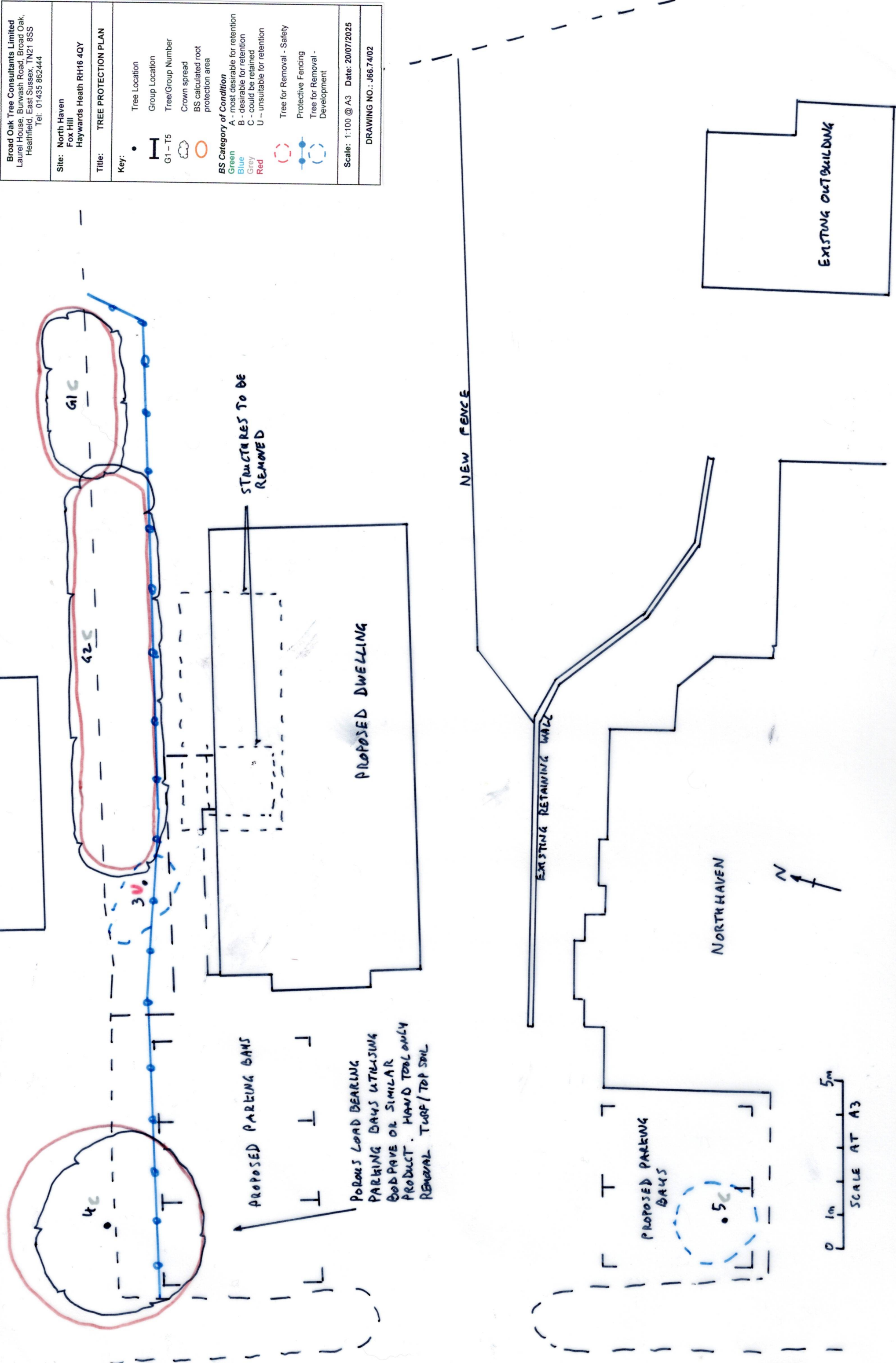
BS Category of Condition

- Green A - most desirable for retention
- Blue B - desirable for retention
- Grey C - could be retained
- Red U - unsuitable for retention

- Tree for Removal - Safety
- Protective Fencing
- Tree for Removal - Development

Scale: 1:100 @ A3 **Date:** 20/07/2025

DRAWING NO.: J66.74/02



APPENDIX 5

BS5837:2012: FENCING SPECIFICATIONS

Figure 2 Default specification for protective barrier

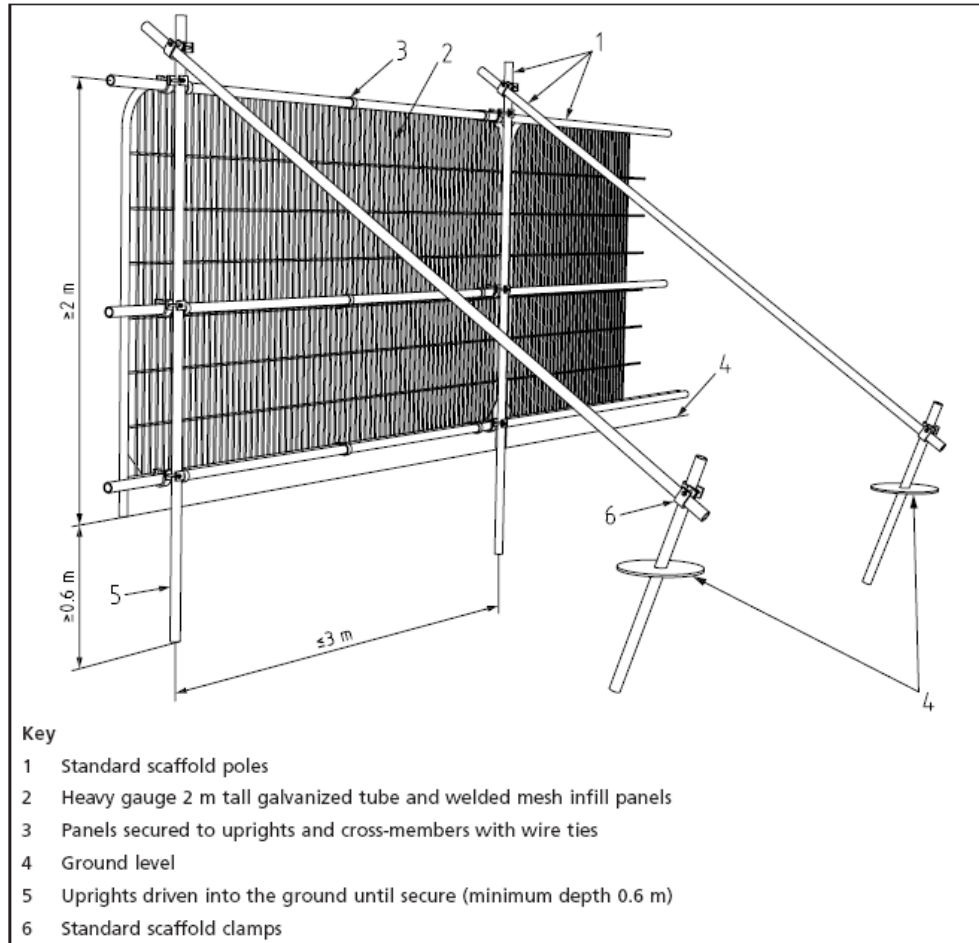
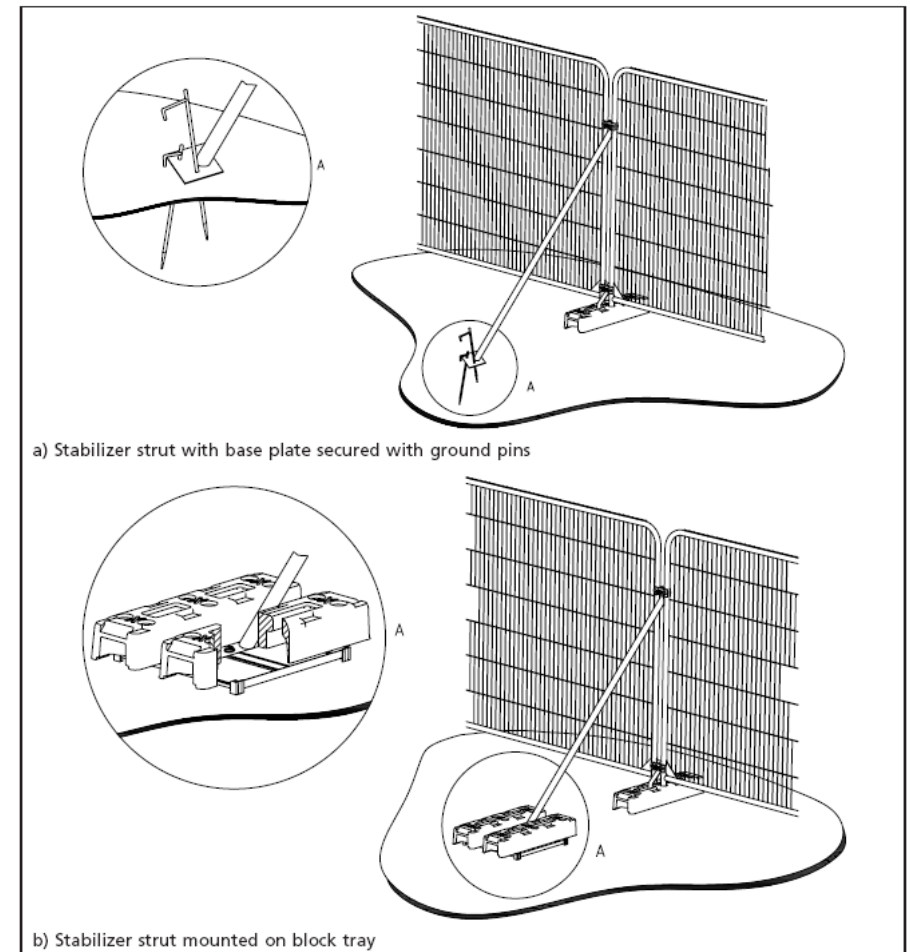


Figure 3 Examples of above-ground stabilizing systems





**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 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