

Arboricultural Advice Note:

Arboricultural Impact Assessment and Tree Protection Measures

Client: Mr and Mrs Middleton

Site Address: Costells Wood, Lewes Road, Scaynes Hill, West Sussex, RH17 7PN

Prepared by: James Cox (BSc. Hons, AA Tech Cert Arb, M.Arbor.A)

Date: 20th May 2025

Ref: an1/cw/25

Appendices

- Appendix 1 Tree Survey Schedule (TSS1)
- Appendix 2 Tree Protection Plan (TPP1_CL_25)
- Appendix 3 Examples of Tree Protection Measures
- Appendix 4 Example of Site Supervision Record

1.0 Introduction and Scope

- 1.1 A planning proposal to demolish the existing conservatory and erect a single storey extension has been submitted to the Local Planning Authority (LPA) for consideration.
- 1.2 I have been appointed by the client as a competent and qualified arboricultural consultant to; i) assess relevant trees in accordance with BS 5837:2012 'Trees in relation to design, demolition and construction- Recommendations' (The BS); ii) detail the arboricultural consequences of the proposed project and assess its visual impact upon trees and amenity; iii) provide recommendations for effective tree protection where necessary, which are commensurate and appropriate for the scale and type of development.

- 1.3 This advice note sets out protection measures that may be adopted to ensure effective tree preservation during construction of the proposed scheme. The general principles are that; the established fenced and ground protected areas are exclusion zones for the duration of the construction (or as duly agreed) and; excavations within the BS root protection areas (RPA) of retained trees will be subject to professional assessment.
- 1.4 Any operational practices recommended in this report are to be undertaken by the appropriate specialist company. Operatives are to carry out the relevant risk assessment and record such information, prior to commencement of tasks and work in accordance with current Health and Safety standards, practices and legislation. Unless formally agreed, no contractors are assessed, appointed or monitored by Southern Beeches Ltd. Responsibility and liability of all actions, non-actions, products and services associated directly with this report will be limited to the relevant client and contractor.

2.0 Site Visit and Tree Survey Methodology

- 2.1 The trees were initially inspected in accordance with the BS5837: 2012 Trees in relation to design, demolition and construction – Recommendations during 15th May 2025 and a total of 9 tree records are provided within the Tree Survey Schedule (TSS) at **Appendix 1**.
- 2.2 **Tree Survey and Report Limitations:** The trees were visually inspected from ground level from within the site boundary using non-invasive methods only. The height, crown spread and crown clearance for each tree was estimated to the nearest metre. The DBH (stem diameter at breast height) was measured to the nearest millimetre where access permitted.
- 2.3 A tree's BS root protection area (RPA) is based upon a radius measurement taken from the trunk centre and is included with reference to para. 4.6 of the BS (See **Appendix 1**). Professional arboricultural judgement may identify modifications to the morphology of an RPA. Any work within a tree's RPA will be subject to professional advice and guidance, particularly where construction is required within this area but beyond the position of fixed tree protection fencing.

- 2.4 A full condition assessment of the trees (including for example the assessment of decay or defects and its implications) has not been undertaken as this information is considered beyond the scope of this report. Significant defects/ features have been identified in the schedule and I recommend that these are acted upon as soon as practicable.

Notes on tree survey methodology:

1. The trees have been inspected from ground level (with the use of binoculars where necessary) on the date shown on the survey schedule.
2. The details of the trees have been recorded in line with the recommendations set out in paragraphs 4.4.2 to 4.5.11 of BS5837:2012 Trees in relation to design, demolition and construction – recommendations (The BS).
3. The trees have been recorded for their quality and value which can be influenced by their physiological or structural condition, their expected useful life span and their suitability to the location.
4. A summary of the categorization method is as follows:
 - A – Trees of high quality with an estimated remaining life expectancy of at least forty years.**
 - B – Trees of moderate quality with an estimated remaining life expectancy of at least twenty years.**
 - C – Trees of low quality with an estimated remaining life expectancy of at least ten years, or young trees with a stem diameter of below 150mm.**
 - U – Those 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 ten years.**
5. The tree's BS root protection area (an area surrounding the tree's base) (RPA), is calculated in line with paragraph 4.6 (a) and (b). Modifications to the form of the RPA may be provided where site circumstances dictate. The RPA is depicted upon the plan as a dashed circle or magenta irregular form. In general, the radius of the circle equates to 12 x the diameter of the trunk measured at 1.5m above ground level.

3.0 Site and Tree Appraisal

- 3.1 The details of trees relevant to the proposal are presented within the Tree Survey Schedule (TSS) at **Appendix 1** with their locations shown upon the Tree Protection Plan (TPP1_CW_25) at **Appendix 2**.
- 3.2 In general, trees which merit A and B grade should be retained and protected in a development scheme with consideration given to both above and below ground constraints (i.e. rooting areas and mature canopy size) during development design.

- 3.3 The majority of relevant trees in terms of size and/ or quality to this project are located within woodland that surrounds the site, particularly to the west of the property, nearer to the proposed area of construction. Two good quality Liquidamber's and a Copper Beech are located within the site to the north and south respectively and other trees are located adjacent to the main driveway, remote from the proposed area of development.



Figs. 1 & 2: View of property from site entrance and existing conservatory that is to be demolished and replaced with single storey extension.

- 3.4 According to the British Geological Survey (BGS) website 'Geology of Britain Viewer' geological records suggest that the local bedrock is 'Upper Tunbridge Wells Sand', suggesting that the associated soil will be free draining in nature. However, a thorough soil assessment should be carried out to ascertain details relating to soil structure, pH and composition, the latter of which is related to issues such as vegetation related subsidence on shrinkable clay soils.
- 3.5 The Town & Country Planning Act (Tree Preservation) (England) Regulations 2012 and the Town & Country Planning Act 1990 (as amended) provides legislative protection for trees within England. According to Mid Sussex Councils online records, the site is surrounded by a woodland Tree Preservation Order (Ref: LR/01/TPO/02), but the site as a whole is not included within a Conservation Area. This should be verified with the local planning authority prior to commencing work on any trees within the site.

4.0 Arboricultural Impact Assessment (AIA)

- 4.1 The proposed scheme includes demolition of the existing conservatory and replacement with a single storey extension. The following paragraphs assess the impact of the proposal upon nearby trees and likely implications for the character of the local landscape.
- 4.2 **Tree Removal and Pruning- Visual Impacts:** There is no requirement for trees to be removed to facilitate the scheme, therefore the visual impact of the proposed extension will be negligible in relation to the character of the local landscape. The woody shrubs (T6 and T7) may require some light pruning back to allow space to construct the proposed extension but this will also be insignificant within the context of the wider landscape.
- 4.3 **Retained Trees- Root Protection Area (RPA):** The TPP at **Appendix 2** illustrates that the footprint of the proposed extension lies outside the RPA's of important trees, although a very small portion of the root systems belonging to the less significant Rhododendron (T6) and Chinese Osmanthus (T7) may be affected by construction. However, in my view, this is unlikely to have any significant impact upon their longer-term health. Furthermore, the existing patio wall adjacent to T6 and T7 will be retained during construction, affording further protection against potential root damage.
- 4.4 **Retained trees- Post Development Considerations:** The relationship between trees, their growth and living space is common cause for concern and conflicts; through size, excess shading and dropping of debris such as leaves and fruit. In this current scheme, the separation between trees and the proposed extension is adequate in my opinion, and I see no reason to expect undue or irresistible pressure to be placed upon nearby trees in the future.

5.0 Tree Protection Measures (Arboricultural Method Statement- AMS)

- 5.1 Effective tree protection will be afforded by following a logical sequence of events, as suggested within Table 3 below, together with the recommended relationship between the Site Agent (SA) and Arboricultural Supervisor (AS).

Table 3. Proposed Sequence of Operations Requiring Arboricultural Supervision

Stage	Action	Trees affected	Notes
1	Pre-commencement meeting	All	Site meeting with all relevant parties to agree protective measures prior to site work commencing
2	Permitted Tree works	6, 7	Contractor to carry out tree works as described in Table 1 above
3	Installation of fixed wire mesh protective fencing	All retained trees	PRIOR to any ground works
4	Construction phases	6, 7	AS to monitor tree protection at agreed and suitable intervals
5	Remove tree protection	All retained trees	No tree protection to be removed without prior agreement with the AS

5.2 **Tree Protection Fencing and Construction Exclusion Zone (CEZ):** Protective fencing will be erected in accordance with the Tree Protection Plan (TPP1_CW_25 at **Appendix 2**) to create a **CEZ** prior to the commencement of any site works, i.e before any materials or machinery is brought on site. Wire mesh type 'Heras' fencing is recommended at this site, the specification for which is attached at **Appendix 3**. After installation of the protective fencing the CEZ must be considered sacrosanct and off limits for any access or construction activity without the formal consent of the LPA or otherwise detailed on the TPP. No materials are to be stored within the CEZ. The protective fencing may only be removed following completion of all construction works or with the formal agreement of the LPA. Any alterations to its position or construction during development must also be approved by the Arboricultural Supervisor and subsequently agreed by the LPA.

5.3 **Construction Route and Ground Protection:** A suggested route for construction activities has been provided upon the TPP at **Appendix 2**, avoiding the RPA's of retained trees. Therefore, in my opinion, it will not be necessary to install ground protection during this project in relation to protection of trees, although this may be prudent to avoid excessive damage to the lawn.

6.0 Site Monitoring and Supervision

6.1 In order to ensure that tree protection measures are implemented effectively, a ***Pre-Commencement Site Meeting**, usually involving the site agent (SA), arboricultural supervisor (AS) and LPA representative should be undertaken to establish the

principal timings and actions. All tree protection measures described within this report are to be discussed; namely, installation of the tree protection fencing, and it will be the site manager's responsibility to ensure that all personnel working on site are aware and adhere to the tree protection measures. A copy of this report and TPP is to be retained on site for the duration of the build process together with a scaled, colour copy of the Tree Protection Plan.

7.0 General Site Care

1. No fires will be lit on site.
2. No access will be permitted to within the fenced or otherwise protected areas (unless for site accommodation or Authorised agreement) at any stage during construction.
3. No materials, equipment or debris will be stored within the fenced areas unless agreed with the arboricultural supervisor.
4. Areas for mixing are to be located beyond RPAs of trees and contained to prevent leaching into the soil.
5. A copy of this report and the Tree Protection Plan is to remain on site at all times.

I trust that the information provided above is clear and helpful but if I can be of any further assistance, please do not hesitate to contact me.



James COX BSc. (Hons), Tech. Cert. Arb (AA), M.Arbor.A

Date: 20th May 2025

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The survey and report are concerned with the arboricultural aspects of the site only. This report is primarily concerned with the condition of existing trees and the application of current guidance for their retention. No documented information has been provided regarding any site-specific history of ground disturbance, root damage or severance, changes in soil levels, previous utility installations or any changes in site conditions.

Trees are large dynamic organisms whose health and condition can change rapidly, therefore due to the changing nature of trees and other site considerations, this report and any recommendations made are only valid for the 12-month period following the site survey.

Subsidence Risk Assessment: Any discussion of soil characteristics is only presented where this may have a direct effect on tree growth. This report does not seek to address the specific area of subsidence risk assessment.

Foundation Design: The design and construction of foundations should be informed by appropriate soil sampling and laboratory testing in accordance with NHBC Chapter 4.2. This report does not specifically relate to risks associated with subsidence, heave or other forms of disturbance associated with tree root growth or tree removal.

Please note that all relevant planning approvals and approval to planning conditions must first have been issued by the relevant planning authority in order for this report to become effective. We strongly advise that you consult your planning advisors before implementing any recommendations set out in this report.

Appendix 1

Tree Survey Schedule- TSS

Site: Costells Wood, Lewes Road, Scaynes Hill, RH17 7PN
Date: 15th May 2025

Surveyor: James Cox
Ref: tss1/costellswood

Tree No.	English Name	Height (m)	Radial Crown Spread (m)	Ground Clearance (m)	Age	Stem Diameter (mm)	Protection Multiplier	R.P.R	Growth Vitality	Structural Condition	Landscape Contribution	B.S. Cat	Sub Cat	Useful Life	General Observations
1	Liquidamber	14	3,3,3,3	2/N2	Mature	300	12	3.6	Normal	Good	Medium	B	1, 2	20-40	No apparent defects One of a pair
2	Liquidamber	12	4,4,4,4	2/S2	Mature	250	12	2.8	Normal	Good	Medium	B	1, 2	20-40	No apparent defects One of a pair
3	Aspen	20	3,7,3,3	8/E8	Mature	350e	12	4.2	Normal	Fair	Medium	B	2	20-40	Located off-site Woodland tree group One-sided form- suppressed
4	Aspen	20	4,5,4,3	7/S7	Mature	400e	12	4.8	Normal	Good	Medium	B	2	20-40	Located off-site Woodland tree group No apparent defects
5	Aspen	20	4,2,4,4	7/S7	Mature	350e	12	4.2	Normal	Good	Medium	B	2	20-40	Located off-site Woodland tree group No apparent defects
6	Rhododendron	4	3,3,3,3	1/N1	Mature	350	12	4.2	Moderate	Good	Low	C	1, 2	10-20	Woody shrub Sparser than normal canopy One of a pair
7	Chinese Osmanthus	5	3,3,3,3	1/N1	Mature	400	12	4.8	Poor	Good	Low	C	1, 2	10-20	Woody shrub Sparser than normal canopy One of a pair
8	English Oak	22	8,10,8,6	4/N5	Mature	800e	12	9.6	Normal	Good	High	A	1, 2	>40	Located off-site Woodland tree group No apparent defects
9	Copper Beech	17	5,4,4,4	3/N3	Middle Aged	400	12	4.8	Normal	Good	High	B	1, 2	20-40	No apparent defects Good quality specimen

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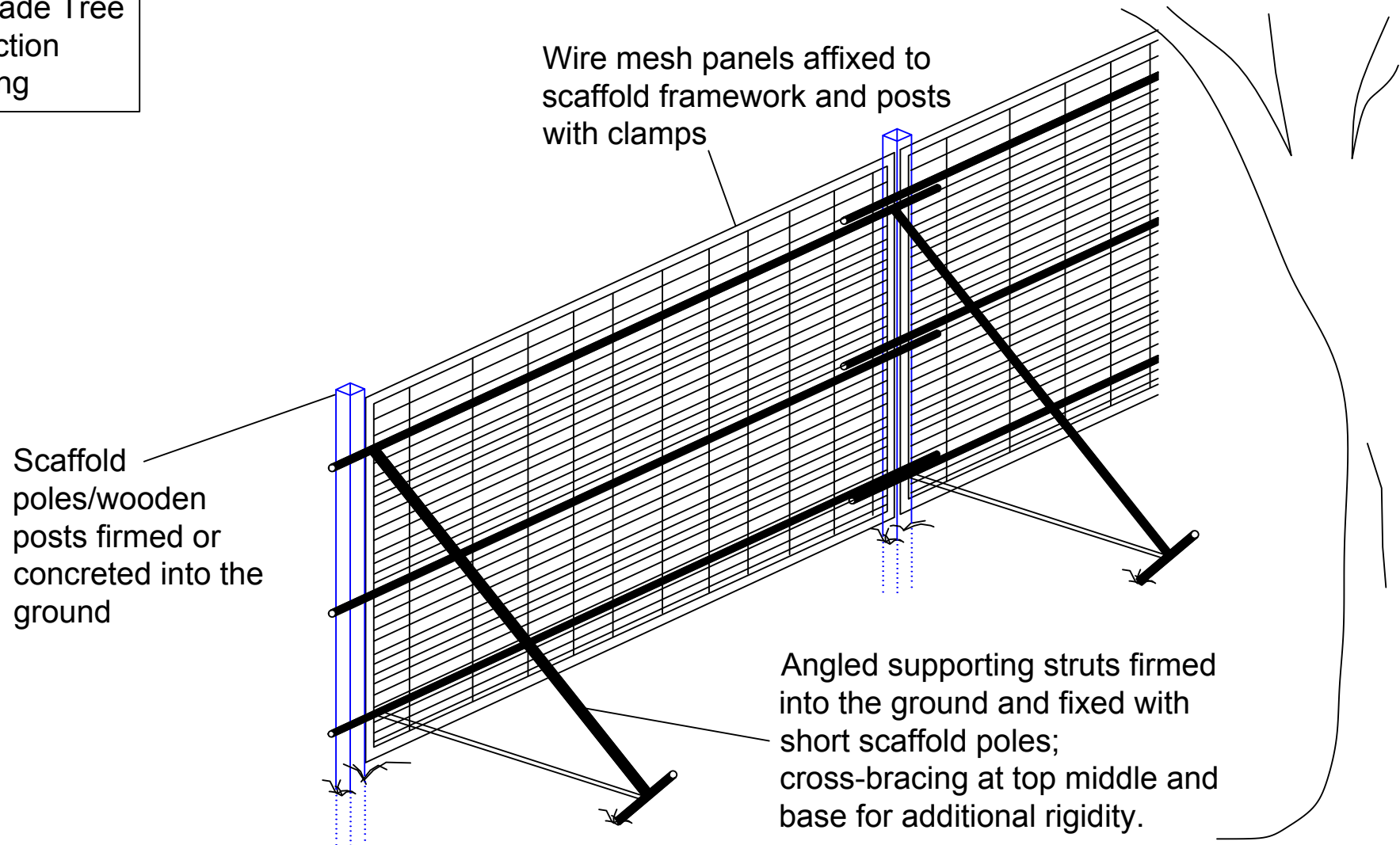
Notes:

- 1. Height describes the approximate height of the tree in meters from ground level.
- 2. Radial Crown Spread refers to the average crown spread in meters from the stem centre. The dimension is estimated.
- 3. Ground Clearance is the height in meters of crown clearance above adjacent ground level together with the height and direction of the lowest branch
- 4. Stem Diameter is the diameter of the stem measured in millimetres at 1.5m from ground level. The diameter may be estimated (e), where access is restricted.
An average (a) may be taken for tree groups. A full inspection is always recommended.
- 5. Protection Multiplier is 12 for single-stemmed trees; for multi-stemmed a cross-sectional area is calculated to derive the DBH, which in turn is multiplied by 12.
- 6. Protection Radius is a radial distance measured from the trunk centre and is used to calculate the BS RPA.
- 7. Growth Vitality - Normal growth, Moderate (below normal), Poor (sparse/weak), Dead (dead or dying tree).
- 8. Structural Condition - Good (no or only minor defects), Fair (remediable defects), Poor - Major defects present or suspected.
- 9. Landscape Contribution - High (prominent landscape feature), Medium (visible in landscape), Low (secluded/among other trees).
- 10. B.S. Cat. refers to British Standard 5837:2012 Table 1 category and refers to tree/group quality and value; 'A' - High, 'B' - Moderate, 'C' - Low, 'U' - Remove or very poor quality.
- 11. Sub Cat refers to the retention criteria values where 1 is Arboricultural, 2 is Landscape and 3 is Cultural including Conservation/ecological, historic and commemorative.
- 12. Useful Life is the tree's estimated remaining effective contribution in years.

Appendix 2

Appendix 3

BS-grade Tree Protection Fencing



Tree Protection Fencing- 'wire mesh' type



Specifications:

- 2.4m Hoarding
- 3.0m 100 X 100mm square wooden posts
- 3 X 38 X 87mm wooden rails affixed to posts
- 2.4m X 1200 outside grade ply panels (12mm) affixed to rails/posts.
- 50 X 100mm angled supporting struts affixed internally (quantity as required).

Supporting posts fixed into position using concrete. All post holes to be manually excavated, retaining all roots of protected trees of 25mm diameter and above. All post holes are to be lined with 1mm gauge polythene before pouring concrete (heavy-duty rubble bags are suitable liners). Post holes to be no larger than 300 X 300mm.

'Heras' (Style) Fencing

'Heras' fencing describes the 2.4m galvanised steel mesh panelled fencing normally supplied with block bases and block trays. **Block bases are to be used in conjunction with angled scaffold struts only. The use of blocks only is not effective.** For extra barrier vertical stability, scaffold poles set at a 45° angle upon the 'tree-side' of the barrier and fixed to the ground at the end of each panel. Upright supporting posts will be braced at the top and the base for added support.

Appendix 4

Site Monitoring Record

Site Address:		Client:		Inspector:		Site Agent:	
Date	Activity	Comments	Actions	By whom	Signed (on behalf of Southern Beeches)	Signed (on behalf of client)	
	Protective Fencing						
	Construction Exclusion Zone						
	Ground Protection						
	Remedial Works						

Notes: