



Beechdown
Tree Consultancy

Tree survey & report

24 Palmers Road, Emsworth, Chichester
PO10 7DL

Report Ref: B/0670/26

Client: Hebden Design Studio

Date: 24th June 2026



Beechdown
Tree Consultancy

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Appendices:

1- Tree survey schedule. 2 - Definition of terms. 3 - BS 5837 grading categories. 4 - Tree constraints plan. 5 - Development proposal plan. 6 - Tree protection plan. 7 - Site visit and arboricultural supervision record.

SUMMARY

- The quality of five trees within influence of a development proposal was assessed;
- an arboricultural impact assessment of the development proposal was prepared;
- the proposal is for construction of an additional industrial unit and covered lean-to storage space;
- implementation of the development proposal will require the removal of one dead Category U elder but the overall arboricultural characteristics of the area will remain unchanged;
- basic precautionary measures will be required to protect the retained trees throughout the development process.

Details

- Date of survey - 23rd June 2026
- Present at survey - Jonathan Rodwell Cert Arb L4(ABC); TechArborA
- Date of report - 24th June 2026

Contact Details

<u>Local Planning Authority</u>	Havant Borough Council	Tel – 02392 446530 Email – planning.development@havant.gov.uk
<u>Architects</u>	Hebden Design Studio	Tel – 01243 974969 Email – hello@hebdendesignstudio.com

References

Roberts, J. Jackson, N. Smith, M. (2006). *Tree Roots in the Built Environment*. The Stationery Office
BSI British Standards (2012) BS 5837:2012 *Trees in relation to demolition and construction – Recommendations, Fourth (Present) Edition*. BSI

1.0 Introduction

1.1 I have received instruction from Ela Vermolen, of Hebden Design Studio, to report on arboricultural matters in relation to proposed development at 24 Palmers Road, Emsworth, Chichester PO10 7DL.

1.2 The purpose of the instruction was to:

- Assess the quality of any trees that could be affected by the proposed development.
- Prepare an arboricultural impact assessment evaluating the effects of the development proposal.
- Prepare a method statement and tree protection plan.

1.3 The survey was conducted and the report prepared with reference to the guidelines detailed in BS 5837:2012 "Trees in relation to design, demolition and construction – Recommendations" and according to good arboricultural practice.

1.4 Contents of the report are exclusively for the use of the client; liability does not extend to any third party without our written consent.

1.5 **Qualifications and experience** – I am a qualified arboriculturist and Technician Member of the Arboricultural Association with more than 35 years' experience working with trees. I have a National Certificate in Arboriculture, the ABC Level 4 Certificate in arboriculture and the LANTRA Professional Tree Inspection Certificate along with certificates of training/attendance including arboricultural consultancy & report writing, veteranisation/microhabitat creation, valuing & managing veteran trees, subsidence investigation, assessment of tree forks, instrumental tree assessment, mortgage reports and risk assessment for commercial arboriculture.

2.0 Documents Provided

2.1 CAD file provided by Hebden Design Studio:

- **1006 survey info (1).dwg**

3.0 Survey Format

- 3.1 Trees included in the survey were those with the potential to be affected by the development proposal and with a stem diameter, at 1.5m high, greater than 75mm. The trees were inspected from the ground only and no specialist decay detection was undertaken. Trees were assessed from within the site or from public areas.
- 3.2 The tree identification numbers used are for the purpose of this report and may not reflect numbering used in previous surveys or inspections.
- 3.3 Data was recorded digitally; the individual trees plotted via GPS and their positions marked on the 1:200 @ A3 tree constraints plan (Appendix 4).
- 3.4 A detailed tree survey sheet is shown as Appendix 1 with an explanation of the terms and categories covered as Appendix 2.
- 3.5 The extent of the survey was limited to collecting sufficient data to inform upon the feasibility of the proposed development, it was not a detailed tree hazard or risk assessment and, unless specified, no guarantee, expressed or implied, can be given regarding the safety of the trees or their suitability for safe long-term retention.

4.0 Grading Categories

- 4.1 The quality of the surveyed trees was assessed and they were categorised to reflect the criteria recommended in Table 1 of BS 5837:2012 as detailed at Appendix 3.
- 4.2 The following is a breakdown of the number of trees in each BS category.

Category U	0 trees
Category A	0 trees
Category B	1 tree
Category C	4 trees

5.0 Legislation

- 5.1 **Tree Preservation Orders & Conservation Areas** - Local Planning Authority online mapping confirmed that the application site is not within a designated conservation area and although the mapping showed an individual tree preservation order (**TPO 1081**) just beyond the southern boundary no tree was



identified. The group of willow, sycamore & other species (**G3 of TPO/0871/1975**) further still to the south was well beyond influence of the development proposal.

- 5.2 **Ancient Semi-Natural Woodland (ASNW)** – Local Planning Policy – consistent with the National Planning Policy Framework - will typically refuse planning applications that result in the loss or deterioration of irreplaceable habitats such as ancient woodland or veteran trees. The application site has no veteran trees and the nearest ASNW is to the north-west of Westbourne.
- 5.3 **Wildlife legislation** – under Part 1 of the Wildlife and Countryside Act (1981), with only a few exceptions, it is an offence to intentionally take, damage or destroy the nest of any wild bird while the nest is in use or being built. Bat species are protected under Section 39 of the 1994 Conservation (Natural Habitats etc.) Regulations (as amended), the 1981 Wildlife and Countryside Act (as amended) and the 2000 Countryside and Rights of Way Act. It is illegal to damage or destroy any bat roost, whether occupied or not, or disturb or harm a bat. Further specialist investigation may be required before undertaking any recommended works.

6.0 Development Proposal

- 6.1 The proposal is for the construction of an additional industrial unit and covered lean-to storage space.

7.0 Site Description

- 7.1 The application site consists of a detached industrial unit in a secure fenced compound of concrete hardstanding with three shipping containers in the south-east corner. Access to the site from Palmers Road is via the parking area and locked gates in the north-west corner. Double gates in the southern boundary fence lead to the industrial units beyond.
- 7.2 The application site is at the edge of the urban extent in an area of housing, industrial units and a car-park with the River Ems and Lumley Meadow to the east. The wider landscape includes individual trees or small groups as roadside trees, in domestic settings, small copses and in hedgerows bordering farmland.
- 7.3 The British Geological Survey records the site geology as London Clay Formation clay, silt & sand sedimentary bedrock while the superficial geology is described by the UK Soil Observatory (www.ukso.org) as a loamy soil with naturally high groundwater. No detailed analysis of the soil structure, composition or pH was undertaken and these details should not be relied on for design purposes.



8.0 Tree Survey

- 8.1 The recorded trees were within the application site, in the yard beyond the northern boundary fence or on the bank above the River Ems to the east. Trees & shrubs too small to be recorded or beyond influence of the proposal included bramble-covered bay, goat willow regeneration & buddleia immediately beyond the eastern boundary fence; establishing ash regeneration on the boundary with the industrial units to the south; the belt of sycamores beyond T5 to the south-east and the stand of mature willows beyond the River Ems.

9.0 Tree Appraisal

- 9.1 Details and comments of individual trees and groups are listed in the appended BS 5837 survey schedule detailed at Appendix 1.

ARBORICULTURAL IMPACT ASSESSMENT

10.0 Below Ground Constraints – Root Protection Area (RPA)

- 10.1 Section 3.7 of BS 5837: 2012 states that – *“The Root Protection Area (RPA) is a layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. ”*
- 10.2 The RPA calculations have been produced using the information gathered from the tree survey and section 4.6.1 of BS 5837:2012. This indicates the RPA in m² and the minimum required all round radial distances for rooting zone protection and allows a view to be taken as to whether the trees can be retained safely without undue damage to their root systems. The RPA calculations are detailed in the appended tree survey and the initial dimensions marked on the 1:200 @ A3 tree constraints plan (Appendix 4).
- 10.3 Tree root morphology can be affected by numerous factors; availability of water, aeration, soil type, temperature and structure, compacted or impervious surfaces and proximity to buildings and other structures all affect the way roots develop and although the RPAs are marked on the plan as uniform polygons the actual root systems will be far more irregular. Root mapping or hand excavation under arboricultural supervision could determine whether structural roots or root masses & likely mycorrhizal associations extend beyond the RPAs and require greater protection in relation to construction or whether it may be possible to develop within the RPA without a significant impact on the rooting environment.
- 10.4 The recorded trees have the concrete hardstanding on one side and unsurfaced ground on the other; root development is possibly more extensive in the unsurfaced ground off-site but as a design layout tool the nominal RPAs shown are a fair representation and indicate areas of potential concern during construction.

11.0 Above Ground Constraints

- 11.1 Consideration should be given to the effects that the current tree size, future growth potential, shade levels and leaf and fruit nuisance may have on the proposed development. Tree height and crown spread measurements are detailed in the appended tree survey; the crown spread of the trees and the shadow pattern through the main part of the day is indicated on the 1:200 @ A3 tree constraints plan (Appendix 4).

12.0 Comment

- 12.1 The 1:200 @ A3 proposed development plan (Appendix 5) shows that construction of the new industrial unit dwelling impacts directly on the nominal RPA of the off-site hawthorn (T3) by around 8%. The existing concrete surface of the yard is likely to have limited the extent of root development at the site of the new building; however, the use of concrete pad foundations at that point should acknowledge that roots may be present and initial excavation work must be carried out under arboricultural supervision to establish the extent of rooting and potential risk of construction related damage to the tree.
- 12.2 Branch tips on the west side of the hawthorn (T3) & sycamore (T4) extend over the site at 3m-4m above ground level. Minor pruning to shorten branch tips or increase height clearance may be required to create space for the buildings but will have little overall impact on tree condition.
- 12.3 Delivery of materials and removal of waste will be via the yard and existing access point.

13.0 Conclusion

- 13.1 With the exception of the dead elder (T2) implementation of the development proposal does not require the removal of any trees and the overall arboricultural characteristics of the site remain unchanged. I do not consider current or future growth of the recorded trees to have any greater impact on the development proposal than on the existing industrial unit and yard. Basic precautionary measures will prevent construction related damage to the trees.

ARBORICULTURAL METHOD STATEMENT

- This method statement sets out the procedures to be followed for general construction practices around trees.
- The purpose is to ensure that works are undertaken in a manner that prevents unacceptable damage to tree roots, soil structure and overall tree health.
- The development process must follow a sequence that results in the least risk to the retained trees.
- The arboricultural method statement includes the following tree protection plans.

Appendix 6 <i>tree protection plan</i>	1:200@A3	<ul style="list-style-type: none"> • Tree protection plan.
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14.0 Responsibilities

- 14.1 **Site manager/main contractor** – responsible for implementing method statement, ensuring all operatives are briefed and that relevant works are carried out under arboricultural supervision.
- 14.2 **Project arboriculturalist** – to be present during any relevant works that impact directly on the RPA, to document compliance and monitor.
- 14.3 **Site operatives** – comply with method statement and follow root protection procedures.
- 14.4 Sequence of events, tree protection and precautionary measures in relation to phases of development.

Pre-construction:

- Site manager, project arboriculturalist and main contractor to review method statement.

Construction:

- Arboricultural supervision of initial excavation for the pad foundations closest to the hawthorn (T3).

15.0 Protective Barriers & Construction Exclusion Zone

- 15.1 Typically, prior to the commencement of construction work and before any machinery or materials are brought onto site, protective barriers would be erected, around the vulnerable Root Protection Area (RPA) to create a construction exclusion zone beyond the working area. In this case, the security fence surrounding the yard prevents access to any retained trees with the concrete hardstanding covering the accessible RPA so no additional temporary protective fencing or ground protection is required.

16.0 Tree work

- 16.1 Before site work commences felling & pruning, as detailed below, should be undertaken by qualified and insured contractors working with reference to current industry guidelines detailed in *BS 3998:2010 British Standards Tree Work – Recommendations* and with the approval of the LPA.

<u>Tree ID</u>	<u>Species</u>	<u>Work required</u>	<u>Reasons</u>
T2	Elder	Remove dead tree.	For site layout & construction access.

17.0 Foundation Construction

- 17.1 Foundation depth will be determined by the architect or a structural engineer and with reference to NHBC Chapter 4.2 – Building near trees.
- 17.2 Removal of a section of the existing concrete surface, together with excavation and construction of the pad foundation nearest the hawthorn (T3), presents a relatively low risk of encountering tree roots. However, supervision of the initial hand excavation will confirm the extent of any root development, and if roots are encountered during the works:
- Careful use of hand tools will avoid bark damage of retained roots at the edge of the foundation if present;
 - exposed roots or fibrous root masses that are to be retained should be immediately covered – with hessian or similar - to prevent drying;
 - individual roots less than 25mm diameter that need to be removed should be cleanly severed, with secateurs or a pruning saw, far enough back



- from the edge of the foundation (>100mm) that the effects of uncured cement do not impact tree health;
- the project arboriculturalist will determine whether it is possible to sever roots greater than 25mm diameter, whether bridging with a lintel may be possible or if an alternative foundation type is necessary;
- use of impermeable membranes to line the excavations before the concrete is poured will help prevent damage by the alkaline properties of cement.

18.0 Infrastructure Requirements

- 18.1 Any service trenches, drainage runs & soakaways must be located outside the RPA with connections to existing drains and services also made beyond the RPA.
- 18.2 Undisclosed siting of service runs, above ground services, CCTV cameras, electrical sub-stations, refuse stores, lighting and other infrastructure requirements can lead to unnecessary tree pruning or root loss during or post development. Should any infrastructure requirements become necessary post planning their design should be discussed with the project arboriculturalist and, if necessary, the permission of the local planning authority obtained.

19.0 Additional Precautions

- 19.1 No storage or mixing of materials to take place within the construction exclusion zone or in the ground protected RPA.
- 19.2 No storage or mixing of materials will take place in any location where they may leak into the construction exclusion zone, RPA or buffer zone.
- 19.3 Materials which may contaminate the soil will not be discharged within 10m of the tree stems or mixed in any location where gradients allow contaminants to run towards RPAs or the buffer zone.

20.0 Supervision and Monitoring

- 20.1 It will be the responsibility of the main contractor to ensure that any conditions attached to the planning consent are adhered to at all times and that a monitoring regime with regard to tree protection on site is adopted.
- 20.2 An arboriculturalist should be appointed to monitor tree protection measures and address any arboricultural issues that may arise.

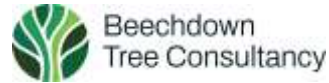


- 20.3 A copy of a site visit and arboricultural supervision record is shown at Appendix 7.
 - 20.4 The scale of the project with no access to the unsurfaced RPA and low risk of construction related tree damage means that following initial supervision of excavation near T3 there will be no need for further arboricultural monitoring.
 - 20.5 The main contractor will be responsible for ensuring subcontractors comply with the arboricultural method statement and do not undertake any operation that is likely to impact adversely upon any tree on site.
 - 20.6 The main contractor will ensure that the build sequence is appropriate to ensure that no damage occurs to the trees during the development process.
-

BS5837:2012 Tree Survey

Beechdown Tree Consultancy

Client: Hebden Design Group
 Project: 24 Palmers Road
 Survey Date: 23/06/2026
 Surveyor: Jonathan Rodwell Cert Arb L4(ABC); TechArborA



Club Cottage, Top Road
 Slindon
 Arundel
 West Sussex
 BN18 0RP
 Phone: 01243 814740

Tree and Tag No Species		Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations			Cat ERC	
			No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment				
T1												Estimated Measurements			
Ash <i>Fraxinus excelsior</i>		8	2	200 (Eq)	N	3	0.5	SM	A: 18.1 R: 2.4	Good	C: Good S: Fair B: Fair	C.1 10 to 20 yrs			
T2												Estimated Measurements			
Elder <i>Sambucas nigra</i>		5	3	197 (Eq)	N	2	3	Dead	A: 17.6 R: 2.36	Dead	C: Poor S: Poor B: Poor	U n/a			
					E	2	2								
					S	2	3								
					W	1.5	3								
T3												Estimated Measurements			
Hawthorn <i>Crataegus monogyna</i>		6	6	367 (Eq)	N	5	2	M	A: 61.1 R: 4.41	Fair	C: Fair S: Ivy B:	C.1 10 to 20 yrs			
T4												Estimated Measurements			
Sycamore <i>Acer pseudoplatanus</i>		11	1	150	N	3	4	SM	A: 10.2 R: 1.8	Good	C: Good S: Good B:	C.1 20 to 40 yrs			
					E	2	2.3					Beyond boundary fence behind shipping containers - limited access to inspect.			
					S	2	2								
					W	4	4								
Age Classifications:		N	Newly planted	EM	Early Mature		Condition:		C	Crown	Stems:		Ø	Diameter	
		Y	Young	M	Mature				S	Stem			(Eq)	Equivalent stem diameter using BS5837:2012 definition	
		SM	Semi-mature	OM	Over Mature				B	Basal area	ERC:		Estimated Remaining Contributio		

Tree and Tag No Species	Hght (m)	Stems		Crown		Age	RP A (m²) R (m)	Phys Condition	Structural Condition	Preliminary Recommendations		Cat ERC
		No	Ø (mm)	Spread (m)	Clear (m)					Survey Comment		
T5											Estimated Measurements	
Sycamore <i>Acer pseudoplatanus</i>	14	1	300	N	4	1	M	A: 40.7	Good	C: Good		B.1
				E	5	1.5		R: 3.59		S: Good	Northern tree in group of sycamores beyond the boundary fence of industrial unit to the south.	20 to 40 yrs
				S	4					B:		
				W	4	2.5						



Appendix 2 – tree survey definition of terms

<u>Tree ID/tag -</u>	Identification number and/or tree tag number.	
<u>Species -</u>	Common and/or scientific name.	
<u>Height (m) -</u>	To the nearest 0.5m below 10m; to the nearest 1m above 10m.	
<u>Ø (mm)/No. of stems -</u>	Stem diameter measured at 1.5m or equivalent with reference to Annex C of BS5837:2012.	
<u>First branch -</u>	Height above ground level and direction of first significant branch.	
<u>Crown spread (m) -</u>	Measured at the cardinal points.	
<u>Canopy height/clearance -</u>	Crown clearance in metres above ground level at the cardinal points.	
<u>RPA -</u>	Root protection area (m ²) and length of radial protection (m).	
<u>Age class:</u>	<i>Young -</i>	Less than approximately 10 years old.
	<i>Semi-Mature -</i>	Less than 1/5 of typical life expectancy.
	<i>Mature -</i>	Between 1/5 and 5/5 of typical life expectancy.
	<i>Over-Mature -</i>	Tree having reached its maximum life span and declining in health and size.
	<i>Veteran -</i>	A tree that is of interest biologically, aesthetically or culturally because of its age, size or condition.
<u>Structural/physiological condition:</u>	General condition of tree crown, stem and basal area structure and form - assessed as:	
	<i>Good -</i>	Good form, structure and vitality; no apparent signs of decay, structural weakness, decline in health, pests or diseases.
	<i>Fair -</i>	Moderate form and structure.
	<i>Poor -</i>	Poor form or structure; significant decay, structural weakness or decline in vitality.
<u>BS 5837 category -</u>	BS grading category detailed at Appendix 3.	
<u>ERC -</u>	Estimated remaining contribution.	



Appendix 3 – BS 5837 grading categories

Trees Unsuitable for Retention

Category U	Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years – shown in dark red on plans.
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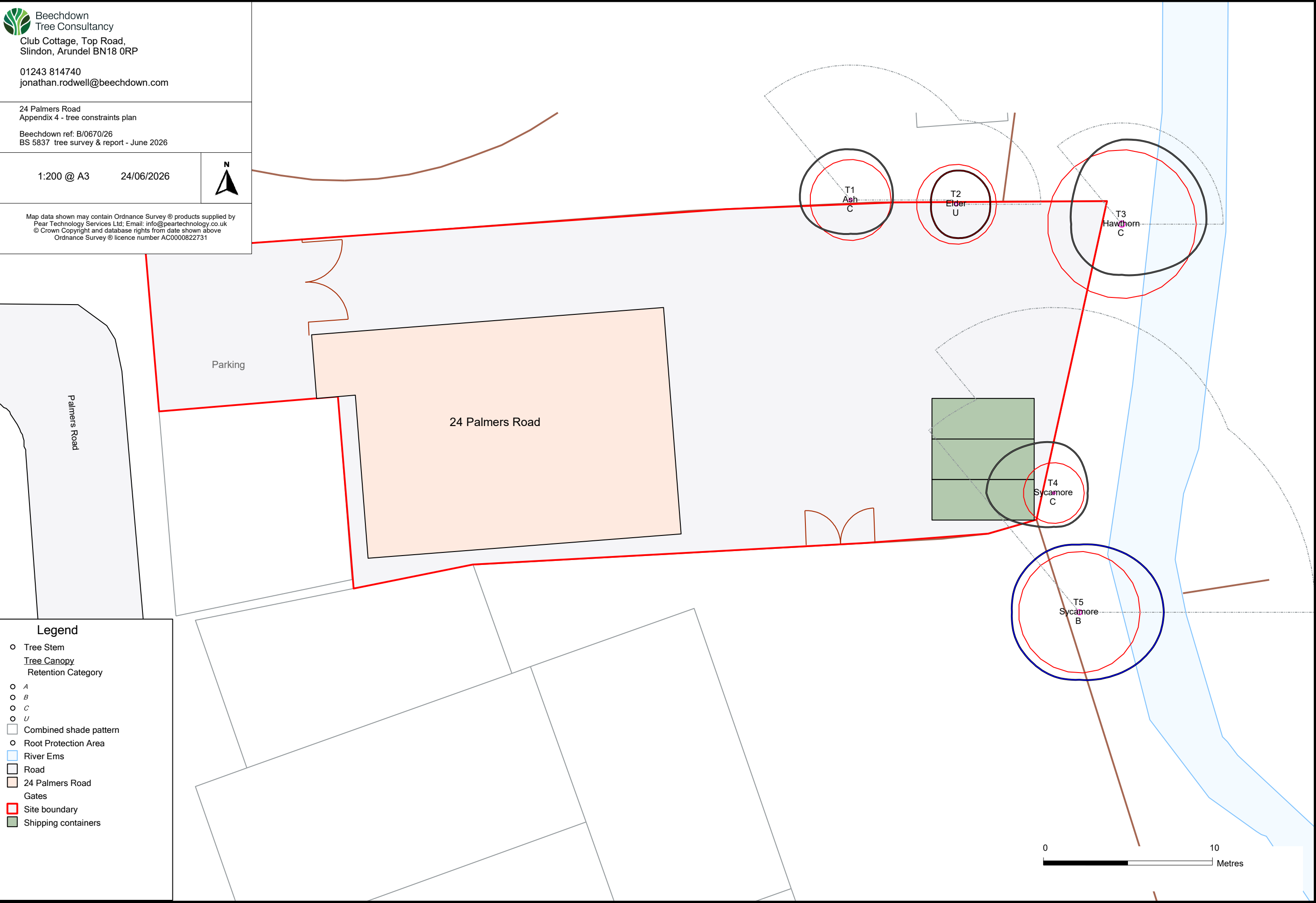
Trees To Be Considered for Retention

Category A	Trees of high quality with an estimated remaining life expectancy of at least 40 years - shown in light green on plans.
	<u>1 - Mainly arboricultural qualities</u> – trees that are good examples of their species, especially if rare or unusual; or those that are essential components of groups, formal or semi-formal arboricultural features.
	<u>2 - Mainly landscape qualities</u> – trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.
	<u>3 - Mainly cultural values, including conservation</u> – trees, groups or woodlands of significant conservation, historical, commemorative or other value.
Category B	Trees of moderate quality with an estimated life expectancy of at least 20 years - shown in mid blue on plans.
	<u>1 - Mainly arboricultural qualities</u> – trees that might be included in category A but are downgraded because of impaired condition (e.g. presence of significant but remediable defects) to the extent that they are unlikely to be suitable for retention beyond 40 years; or trees lacking the particular quality necessary for category A designation.
	<u>2 - Mainly landscape qualities</u> – trees present in numbers, usually growing as groups or woodlands, that attract a higher collective rating than they might as individuals; or groups of trees situated so as to make little visual contribution to the wider locality.
	<u>3 - Mainly cultural values, including conservation</u> – trees with material conservation or other cultural values.



Appendix 3 – BS 5837 grading categories

Category C	Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter under 150mm - shown in grey on plans.
	<u>1 - Mainly arboricultural qualities</u> – unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
	<u>2 - Mainly landscape qualities</u> – trees present in groups or woodlands but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary landscape benefits.
	<u>3 - Mainly cultural values, including conservation</u> – trees with no material conservation or other cultural values.



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24 Palmers Road
Appendix 5 - development poposal plan

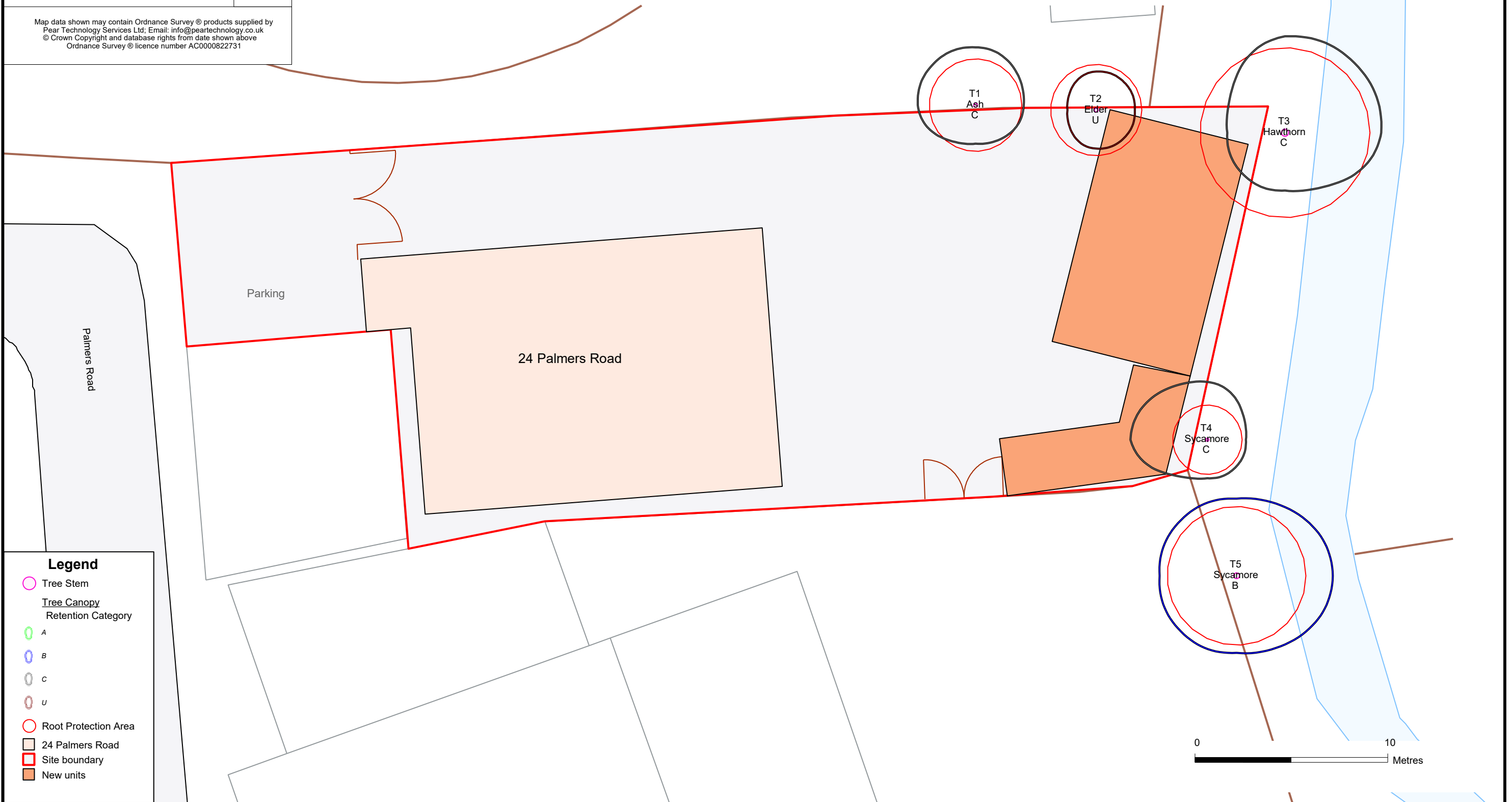
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24/06/2026



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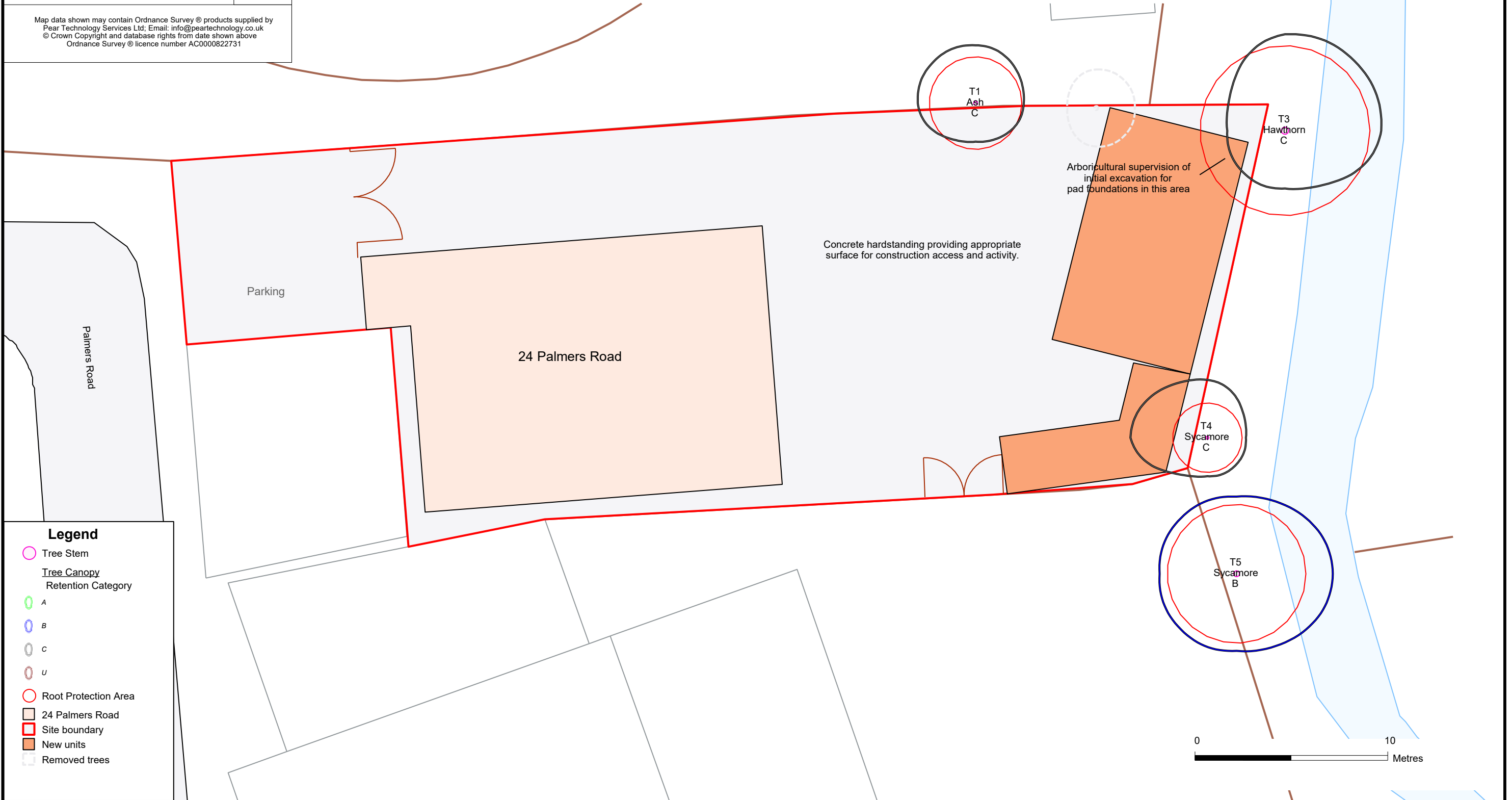
24 Palmers Road
Appendix 6 - tree protection plan

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BS 5837 tree survey & report - June 2026

1:200 @ A3 24/06/2026



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Appendix 7 - Record of Site Visits and Arboricultural Supervision

Client		Address	
Hebden Design Studio		24 Palmers Road, Emsworth, Chichester PO10 7DL	
Local planning authority	Havant Borough Council		
Planning application	-		
Development	Construction of an additional industrial unit and covered lean-to storage space.		

Stage of development	Action required
<u>Construction</u>	Supervision of initial excavation for pad foundation potentially impacting on nominal RPA of T3.

Notes	
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Arboriculturalist	
Signed	
Date	

NOTE - COPY OF COMPLETED FORM TO BE SCANNED AND SENT TO LPA ARBORICULTURAL OFFICER