

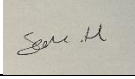
12 Portsdown Hill Road, Havant

Tree Survey Report



19th August 2026

Document control

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Declaration	I confirm that the information provided in this document is truthful and accurate at the time of completion.	
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Executive summary	
Purpose of report	<ul style="list-style-type: none"> To provide a tree survey report, in line with BS 5837, of trees which may be impacted by development on the site.
Context of report	<p>The Site was comprised of a family home, a garage, two outbuildings, a residential garden and a belt of woodland. The proposed development and alterations to the site are as follows:</p> <ul style="list-style-type: none"> Removal of the conservatory attached to the main building Removal of the two outbuildings Construction of two new dwellings Division of the current gardens and driveways to accommodate for new residential buildings Construction of a pedestrian access route
Methodology	<ul style="list-style-type: none"> Individual trees and groups of trees on site, and those which may be impacted by the proposed development were numbered and assessed. These included measurements of trunk diameter and each tree was given a retention category. A root protection area (RPA) has been assigned to each tree, based on these data.
Conclusions	<ul style="list-style-type: none"> The project design had the potential to negatively impact the RPAs of one hedgerow, one group of trees and to remove one tree, T2. Adoption of the recommended mitigation measures will result in a negligible impact to any of the RPAs of trees within the site boundary.

1. Introduction

1.1. Background

1.1.1. In June 2024, Wessex Ecology Ltd were commissioned by Mr V Patel to complete a Tree Survey for 12 Portsdown Hill Road, Havant. This was following a preliminary ecological appraisal (PEA) conducted on the 30th July 2026.

1.1.2. The planning reference for this project is TBC.

1.1.3. The purpose of this report was to:

- Provide a tree survey report, in line with BS 5837: 2012 'Trees in Relation to Design, Demolition & Construction - Recommendations', of trees which may be impacted by development on the site.

1.2. Site Description

1.2.1. 12 Portsdown Hill Road and its grounds, hereafter referred to as 'the Site', measured approximately 0.19ha and was situated on Portsdown Hill Road, which ran to the north of the Site (approximate OS grid reference: SU 69887 06554), see Figures 1 & 2 below.

1.2.2. The Site was comprised of a family home, a garage, two outbuildings, a residential garden and a belt of woodland.

1.2.3. At the time of writing, the proposed developments and alterations to the Site were as follows:

- Removal of the conservatory attached to the main building
- Removal of the two outbuildings
- Construction of two new dwellings
- Division of the current gardens and driveways to accommodate for new residential buildings
- Construction of a pedestrian access route

1.2.4. All ecological surveys are led by Ecologists who are members of the Chartered Institute of Ecology and Environmental Management (CIEEM) at the appropriate level. By joining the CIEEM staff sign up to a professional code of conduct.

Figure 1. Site location with red line boundary

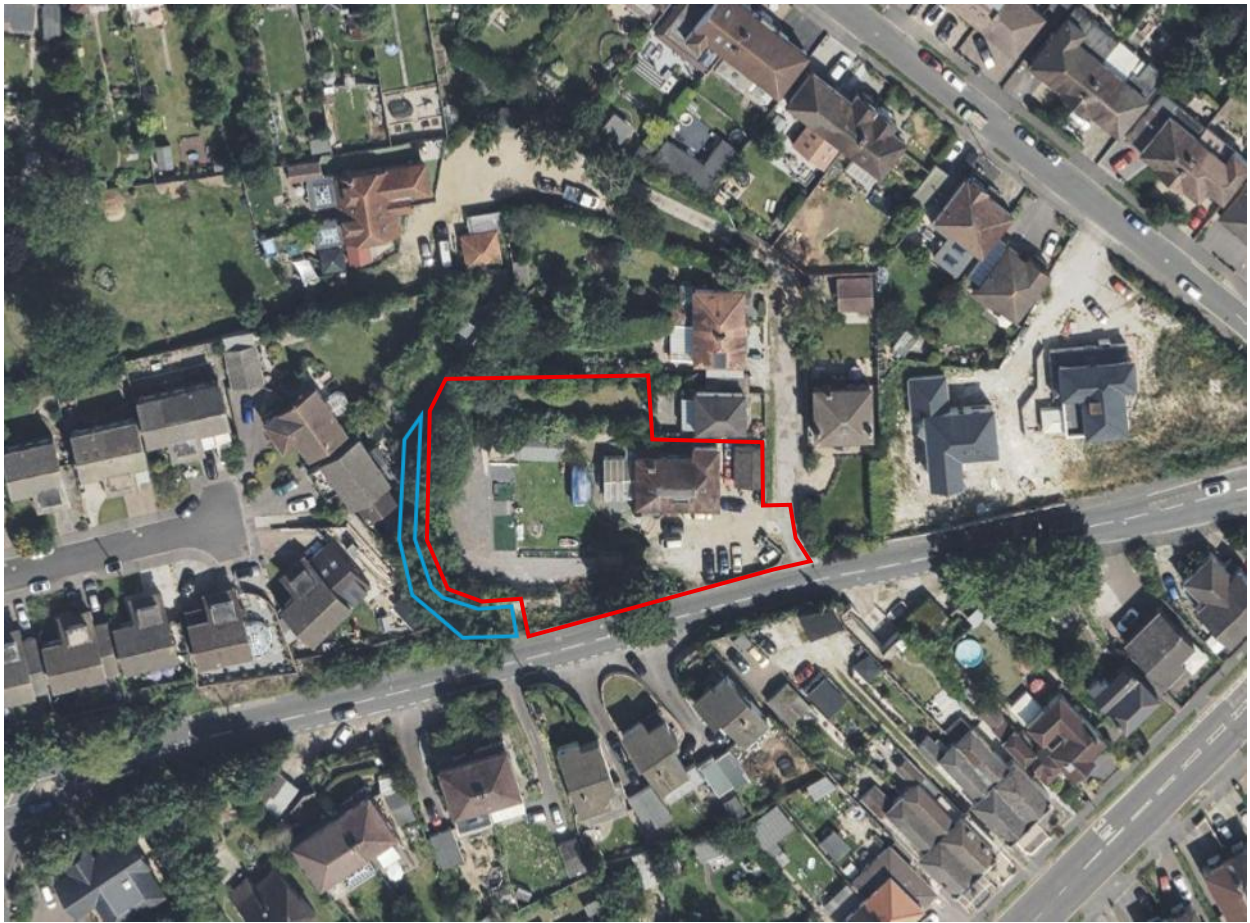


Figure 2. Landscape surrounding site of proposed development



2. Personnel

2.1. Report authors

- 2.1.1. Samuel Horner is an ecologist who leads preliminary roost assessments, supports bat emergence surveys and has experience with a range of field survey techniques. He is an experienced bat surveyor who works as an accredited agent under the Natural England Class 2 Licence 2025-86241-CL18-BAT.

2.2. Field surveys

- 2.2.1. The field survey was carried out by Samuel Horner, see above credentials.

3. Planning and Legislation

3.1. Planning policies

- 3.1.1. This report is prepared with reference to the National Planning Policy Framework 2024.

3.2. Legislation

- 3.2.1. The following legislation informed the survey approach and considerations.
- Environment Act 2021
 - Natural Environment and Rural Communities Act 2006

4. Methodology

4.1. Tree survey

- 4.1.1. All trees on the site which may be impacted by a proposed development were assessed using the recommendations, as detailed in British Standard 5837: 2012 'Trees in relation to Design, Demolition & Construction Recommendations'. This provides a Retention Category, which is on a scale of A-U, for each tree.
- 4.1.2. A Root Protection Area (RPA) has been assigned to each tree, based on its stem diameter and in some cases crown extent, which has then been used to produce the Tree Constraints/Protection Plans.
- 4.1.3. All surveyed trees or groups of trees have been given a notional reference number i.e., T1 – T23, or a group number when clustered together, the location for each of these trees can be seen on the topographical surveys attached in the appendices.

4.2. Limitations

- 4.2.1. All trees on the site were inspected from ground level only. The conclusions and recommendations contained in this report relate to the trees at the time of inspection. This is due to the fact trees are living organisms whose condition can change due to internal health and external weather conditions.
- 4.2.2. The ecological surveys reviewed for this Site provide a snapshot of conditions at the time of surveys and some species may not have been present on the day due to time of year, conditions etc.
- 4.2.3. The details within this report will remain valid for a period of 12 months from the date of issue.
- 4.2.4. The belt of woodland on site which contained G2 was located upon a steep chalk ridge. The measurements and quality assessment of trees within the group was limited to those accessible on the exterior. The root protection area of G2 is also difficult to map accurately due to the topography. The typical BS5837: 2012 'Trees in relation to Design, Demolition & Construction Recommendations' root protection area calculation is not appropriate and has had to be adjusted to accommodate for a lack of soil to the east of the woodland. The cliff/ridge is considered a barrier to root growth.

5. Results

5.1. Trees

5.1.1. A total of one individual tree and two groups of trees (one of which was a hedgerow) were surveyed. A summary of the numbers of the trees in each retention category can be seen in the Table 1 below.

Table 1. Tree retention categories

Retention Category	Number of trees
A (High quality)	0
B (Moderate quality)	2
C (Low quality)	1
U (Unsuitable for retention)	0
Totals	3

5.1.2. All retention category A & B trees should be, where possible, retained on development sites, and should ideally influence and inform the design, site layout, and in some cases the specific construction methods used. The root protection area (RPA) and crown spread of these trees will generally form a construction exclusion zone, although under certain circumstances it may be possible to build or operate within these areas when appropriate measures and mitigations have been formally agreed between the local planning authority, the consulting ecologist and the developer/client.

5.1.3. Regarding the retention of category C trees, it may not always be possible or even desirable to retain low quality trees within the context of a proposed development, unless in such a location that they do not represent a significant constraint on the design brief. Young trees, and those with a stem diameter of less than 0.15m, will normally be placed in the C category, unless it is considered rare species, or a tree of ideal character, in which case they may be upgraded.

5.1.4. All retention category U trees should be removed for reasons of sound arboriculture practice or health & safety, irrespective of any development proposals.

5.1.5. Tree retention categorisation according to The British Standards Institution (2012) BS 5837 Trees in relation to design, demolition and construction categorises trees can be found in Appendix 2.

Table 2. Summary of potential impacts to trees resulting from the proposed development.

Impact	Reason	Tree quality assessment category				Total
		A	B	C	U	
Trees or groups proposed for removal	<ul style="list-style-type: none"> Under development footprint 	None	T2		None	1
Retained trees at risk of damage	<ul style="list-style-type: none"> Development footprint within RPA Development footprint within crown spread Located close to the proposal 	None	G1	G2,	None	2
Nearby retained trees unaffected by the development	<ul style="list-style-type: none"> Outside proposed work areas 	None	None	None	None	0
Trees removed pre survey	<ul style="list-style-type: none"> Trees mapped on the topography survey that have already been removed 	N/A	T1	N/A	N/A	1

6.1.3. The impact assessment for the proposed development records that one category B tree, T2 will be removed. One category B group of trees and one category C group of trees may be damaged by the proposed development. G1 is at risk of root damage associated with soil erosion and accidental damage of the chalk ridge. To the north of the site the ridge is reduced in height, and the root protection area therefore extends further into the gardens. A mature Yew tree, within G1, located at the end of the ridge will be at risk of root compaction during building removal and construction.

6.1.4. One tree has been removed from the site before the survey began. T1, this tree was of unknown species and quality. The felled tree should be used to create a log pile within the proposed design to retain some ecological value.

6.1.5. All other trees and groups of trees on Site will be unaffected by the proposed development.

7. Mitigation

7.1. Mitigation measures

7.1.1. Recommendations regarding ground boarding, hard surfacing, foundations design, hard surfacing installation and multi-dimensional confinement systems can be found in Appendix 3. These are measures taken from the BSI Standards Publication Trees in relation to design, demolition and construction – recommendations (BS 5837:2012).

7.1.2. The tree survey recorded the RPAs of one tree, and five hedgerows may be impacted by the proposed development.

7.1.3. A project mitigation strategy can be found in Table 3, below.

Table 3. A summary of mitigation measures required.

Tree/ Group	Tree quality assessment	Percentage of RPA impacted pre mitigation	Impact significance pre mitigation	Mitigation measure	Impact significance post mitigation
T1	Unk	100%	Major negative	Plant three native trees. The material of the felled tree should be kept on site to create a log pile.	Negligible
T2	B	100%	Major negative	Plant three native trees	Negligible
G1	B	~10%	Moderate negative	Ground protection area. Exclusion fencing. Construction in accordance with guidance.	Negligible
G2	C	~20%	Moderate negative	Exclusion fencing.	Negligible

7.2. Statutory obligations

- 7.2.1. Works to trees which are covered by Tree Preservation Orders (TPOs) or are within a Conservation Area require permission or consent from the Local Planning Authority (LPA).
- 7.2.2. It is necessary to obtain formal approval only where pre-emptive tree works are to be actioned. If full planning consent is granted, it will override the need for a separate application, providing that the details of all tree works were included in the submission and subsequently approved by the local authority.
- 7.2.3. It is a criminal offence under normal circumstances to disturb or destroy - whether intentional or unintentional - the nesting sites of wild birds or the roost sites of bats, under the 'Wildlife & Countryside Act 1981, the 'Countryside and Rights of Way Act 2000' and the 'Conservation of Habitats & Species Regulations 2017'. Therefore, avoid carrying out significant tree works during the bird nesting season (mid-March to mid-August) and ensure that trees are professionally surveyed for signs of bat roosts and/or bat activity before starting any significant tree work, such as felling or heavy crown reduction.
- 7.2.4. Further advice on how to proceed should bat occupation be suspected can be obtained from your local office of Natural England or a Natural England licenced ecologist.

8. Conclusions

8.1. Tree survey conclusion and recommendations

- 8.1.1. The project design had the potential to negatively impact the RPAs of one hedgerow, one group of trees and to remove one tree, T2.
- 8.1.2. Adoption of the recommended mitigation measures will result in a negligible impact to any of the RPAs of trees within the site boundary.

9. References

British Standards Institution (2012) BS 5837 Trees in relation to design, demolition and construction (<https://www.bsigroup.com/>)

British Standards Institution (2012) BS 5837 Trees in relation to design, demolition and construction Appendix A
(<https://docs.planning.org.uk/20210203/211/QNN5B6KGGCB00/n0le0fhkm3pb9gyg.pdf>)

UKHab Ltd (2023) UK Habitat Classification Version 2.0 (<https://www.ukhab.org/>)

Wessex Ecology Ltd (2026) 12 Portsdown Hill Road, Havant: Preliminary Ecological Appraisal Survey Report. Tidworth: Wessex Ecology Ltd.

11. Appendix 2 – Tree retention categories

The British Standards Institution (2012) BS 5837 Trees in relation to design, demolition and construction categorises trees to be considered for retention as follows:

Category A		Those of high quality with an estimated remaining life expectancy of at least 40 years.
Criteria subcategories		
1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation
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 of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).
To be indicated on plan: Light Green		

Category B		Those of moderate quality with an estimated remaining life expectancy of at least 20 years.
Criteria subcategories		
1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation
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), such that they are unlikely to be suitable for retention beyond 40yrs; or trees lacking the special quality necessary to merit the category A designation.	Trees present in large number, usually as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural benefits.
To be indicated on plan: Mid Blue		

Category C	Those of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm	
Criteria subcategories		
1 Mainly arboricultural values	2 Mainly landscape values	3 Mainly cultural values, including conservation
Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater landscape value; and/or trees offering low or only temporary/transient landscape benefit.	Trees with material conservation or other cultural value.
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.		
To be indicated on plan: Grey		

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.
Criteria	
Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become inviable after removal of other U 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 health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.	
Note: Category U trees can have existing or potential conservation value which might be desirable to preserve.	
To be indicated on plan: Dark red	

12. Appendix 3 – Recommendations from BS 5837:2012

For more in detail recommendations for tree surveys, please see BSI Standards Publication Trees in relation to design, demolition and construction – recommendations BS 5837:2012

12.1. Ground boarding

- 12.1.1. New temporary ground protection will be capable of supporting any traffic entering or using the site without being distorted or causing compaction of the underlying soil.
- 12.1.2. Where it is determined by the project engineer that any hard surfacing is not adequate protection from any expected loading, ground boarding is to be installed to the engineer's specification on top of the hard surfacing within the root protection areas of retained trees.
- 12.1.3. Where machinery will be stored or used from the ground boarding within the RPAs of the retained trees an impervious barrier and or bunding to prevent oils, fuel or chemicals is to be installed to prevent leaching into the soil within or adjacent to the RPAs.
- 12.1.4. Note The ground protection might comprise one of the following:
- a) For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, as to form a suspended walkway, or on top of a compression-resistant layer (e.g. 100mm depth of woodchip), laid onto a geotextile membrane;
 - b) For pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane;
 - c) For wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g. proprietary system or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.
- 12.1.5. For any situations other than those described in a) or b) (as above), the ground boarding is to be designed by a suitably qualified person to an engineering specification in conjunction with arboricultural advice, to be suitable of supporting the expected loading to be placed upon it. In all cases, the objective of the ground boarding is to avoid compaction of the soil beneath, so that tree root functions remain unimpaired.

12.1.6. At this stage, no contractors have been approached so it is not possible to know exactly what equipment they have available and will be using.

12.2. Hard surfacing

12.2.1. Where it is required for hard surfacing is to be removed and or re-surfaced within the RPAs of retained trees it is to be undertaken under direct on-site arboricultural supervision, during the landscaping phase of the development.

12.2.2. The wearing course will be broken up using a handheld pneumatic breaker, hand tools and wheelbarrows to break up and remove the surfacing. Where is necessary to remove the subbase, this is to be undertaken using a fork to loosen the material and moved using shovels and wheelbarrows. In some situations, and at the discretion of the arborist it may be possible to use an excavator using a hydraulic breaker and a suitably sized toothless grading bucket. If an excavator is to be used it must be situated outside of the RPAs, on top of the hard surfacing working away from the RPAs or from ground boarding.

12.2.3. Whichever system is used there is to be NO disturbance of the soil beneath. If roots are found they are to be covered over with damp hessian and a layer of either sharp sand, wood chip or topsoil will be applied as soon as practicably possible to prevent desiccation.

12.2.4. Existing Underground Services Existing services within the site should be retained wherever possible. Where existing services within RPAs require upgrading, the utmost care must be taken to minimise disturbance, and where feasible trenchless techniques are to be employed, and only where necessary should open excavations be considered.

12.3. Foundations design

12.3.1. New foundations for buildings, structures and hard surfacing situated within the RPAs of retained trees are to be designed in conjunction with arboricultural advice to accommodate the likely loading of the structure. The foundations will be designed to limit the amount of excavation required within RPAs to retain significant roots as identified during the site investigations. The use of strip foundations within RPAs of retained trees can cause extensive root loss and as such are generally to be avoided.

12.3.2. In order to mitigate for the potential impacts of the proposed development on the RPAs of the G1 group of trees within the footprint of the proposed development a TREESAFE foundation system (<https://abbeypynford.co.uk/products/treesafe/>) will be used.

12.4. Hard surfacing installation

- 12.4.1. New hard surfacing to be situated within the RPAs of retained trees is to be designed in conjunction with arboricultural advice to accommodate the likely loading. The design will not require excavation however the removal of the turf layer or other surface vegetation may be acceptable if necessary, but ideally, the construction will be situated entirely above the existing ground level.
- 12.4.2. Before the installation of the hard surfacing within the RPAs vegetation may be removed using hand tools or sprayed with an approved non-residual herbicide such as 'Glyphosate'.
- 12.4.3. NOTE: The use of a multi-dimensional confinement system will affect the finished level of the hard surfacing by raising the levels and needs to be taken into consideration when designing foundations and setting the finished floor level of adjacent buildings.

12.5. Multi-dimensional confinement system

- 12.5.1. A multi-dimensional confinement system (such as CellWeb™ or similar) is to be used. It is to be laid entirely above the existing soil surface over a geotextile membrane and or a bi-axel geo-grid (such as Tensar TriAx).
- 12.5.2. Prior to this any small hollows on the surface may be filled with clean sharp sand (not builders' sand) to a maximum depth of 150mm. The 'CellWeb' is to be backfilled by hand with a no-fines aggregate of 20mm – 30mm. The use of an excavator/machinery to fill the confinement system may be possible at the discretion of the Project Arboriculturist. The area of 'CellWeb' shall be covered with permeable geotextile fabric and the finished wearing course laid on top. The wearing course shall be permeable to both water and air to comply with 'SUDS' regulations. Edge supports of an appropriate size and strength will be set above ground level and will be secured with either haunching or steel pins driven into the ground. The outer edge of the supports may be banked up with clean topsoil.

13. Appendix 4 – Photographs

Photo 1 – Yew at the north of G1. Photo facing south.



Photo 2 – T2 (wild cherry) on the left. G2 hedgerow on the right. G1 group of trees centre.



Photo 3 – Evidence of felled T1.



Photo 4 – G1 visible at the top of the ridge.

