

Arboricultural Impact and Mitigation

Statement for Outline Development Proposals at:

Birchwood Gardens
Hedge End
Southampton
SO30 2AR

Proposal: Erection of a 2-bed bungalow for independent disabled living

Prepared for: Home Living Housing Ltd

Report Ref: WT 069-24 AIA

Report Date: 22 December 2025



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1. INTRODUCTION

1.1 **Instruction:** This report was instructed by Home Living Housing Ltd to inspect the relevant trees and prepare information to accompany the planning submission for 2 bed detached bungalow for independent disabled living at Birchwood Gardens, Hedge End, Southampton, SO30 2AR. The report details all trees that are relevant to the siting of the proposed development and their positions are illustrated on the separately provided tree protection plan attachment WTP1 in Appendix 1.

1.2 **Site visit:** The site visit was undertaken on 13th September 2024. The trees were surveyed visually, externally and from ground level only. No detailed investigations were undertaken, samples, or internal decay detection readings taken for further analysis. All dimensions have been estimated unless stated otherwise. Weather conditions at the time of the survey were clear, still and dry, with good visibility.

Statutory tree protection: After contacting the LPA it was established that the trees within the property are protected by an Area TPO (Image 1). Therefore, it will be necessary to consult with the LPA before any works other than certain exemptions can be carried out. The property is not in a conservation area.

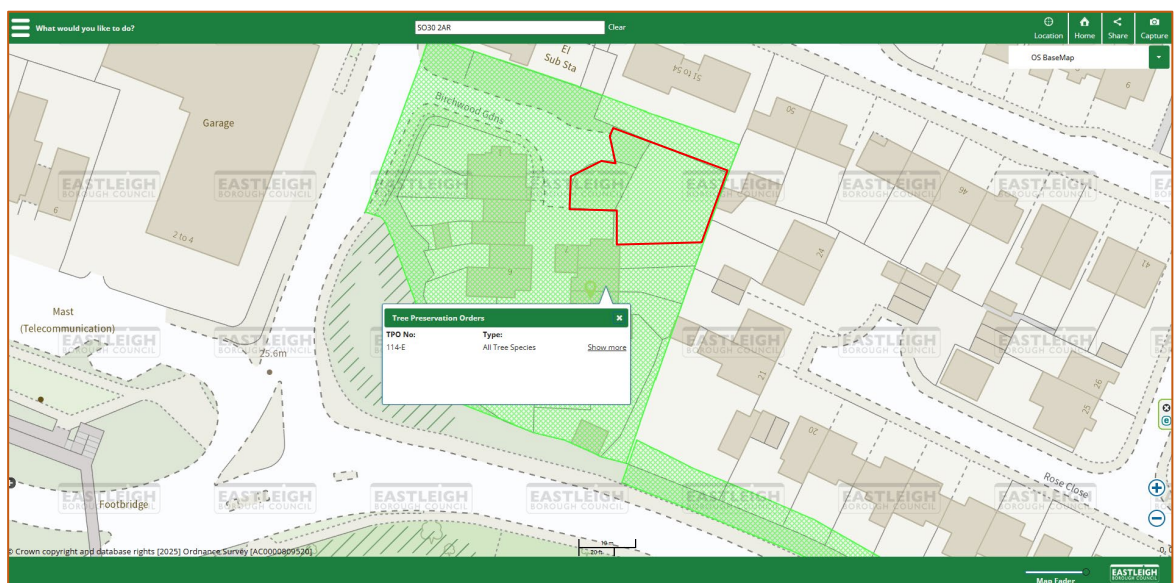


Image 1: TPO extract taken from the Eastleigh Borough mapping system. The proposal site boundary is approximately indicated by the red boundary outline.

1.3 **Limitations of this report:** The following limitations apply to this report:

1.3.1 **Archaeology:** Although trees can grow in archaeologically sensitive locations, I have no specialist expertise in this discipline and this report does not consider this aspect.

1.3.2 **Ecology:** The Wildlife and Countryside Act 1981, as amended by the Countryside and Rights of Way Act 2000, provides statutory protection to birds, bats and other species that inhabit trees. These could impose significant constraints on the use and timing of access to the site in addition to any of the tree constraints set out in this report. These issues are



beyond my area of expertise, and I advise that you seek the advice from an ecologist on whether any such constraints apply to this site.

- 1.3.3 **Tree assessment and management advice:** The comments made about the health and stability of the trees within this report were correct at the time of inspection. It should be recognised that trees are dynamic structures that can never be completely predictable and may become unstable or partially unstable even in average weather conditions. Changes can occur not only to environmental triggers but also in response to biological or mechanical events. For these reasons, the tree assessment advice only remains valid for one year from the date that the trees were last inspected. No tree is ever safe due to the unpredictable laws and forces of nature.

The inspection was carried out from ground level. Where there was restricted access to the base of a tree, its attributes were assessed from the nearest point of access. Binoculars were used to observe features higher in the canopies such as foliage, extension growth and/or bud proliferation. No soil or tissue samples were taken during this inspection and no invasive diagnostic equipment was used to detect decay. If ivy covered, I probed and tapped the wood from ground level to establish if there were any obscured features that were relevant to the assessment. This did not extend to removing all the ivy or probing beyond what could be reached from ground level. Where trees have thick ivy, it would be impractical in every case to remove it or climb into the crown to have a closer look. However, where I suspect there are obvious visible significant outward health problems or structural defects visible under the ivy, I may recommend its removal for a further assessment.

- 1.3.4 **Soil assessment:** British Standard (BS) 5837:2012 Trees in relation to design, demolition and construction – Recommendations advocates that a soil assessment should be carried out to inform decisions relating to Root Protection Areas (RPAs), tree protection, new planting and foundation design. I have consulted the British Geological Survey (BGS) website and their Geology Viewer, and this advises that the bedrock geology for the site is **Earnley Sand Formation-Sand, silt and clay**. I have not been supplied with any detailed site soil analysis or been engaged to undertake such investigations by our client. A site-specific soil assessment may inform decisions relating to the root protection area (RPA), tree protection, new planting design and foundation design to take account of retained, removed and new trees. As and when such information becomes available results should be forwarded to the project arboricultural consultant and other relevant professionals involved in site layout, planning and design (e.g. structural engineer, landscape architect).

- 1.4 **Technical references:** This arboricultural impact assessment and arboricultural method statement is based on the following primary technical references:

- British Standards Institution (2012) BS 5837: Trees in relation to design, demolition and construction – Recommendations
- National Planning Policy Framework (NPPF) revised in 2023 setting out the Governments planning policies for England and how these should be applied.



- 1.5 **Drawings and documents provided:** Several plans and documents were provided as part of the current planning proposal. My drawings and reports have been developed in context with the following provided information:
- Land survey reference TOPO - Birchwood Gardens, received by email on 8th September 2024
 - Layout, reference 1775 extract copy site plan and dwelling 23oct25, received by email on 23rd October 2025
- 1.6 **Qualifications and experience:** This report is based on my site observations and the provided information, interpreted in the context of my experience. I have experience and qualifications in arboriculture that can be reviewed at <https://wadeytrees.co.uk/wp-content/uploads/2020/03/CV-Mark-J-Wadey-2.pdf>.



2. SITE VISIT AND COLLECTION OF DATA

- 2.1 **Brief description of site and surrounding tree cover:** The proposal site is in a residential part of Durrington on undeveloped land adjacent to several existing private dwellings (Image 2). There are three oak trees associated with the development, which offer good visual benefits to the surrounding area and can be seen from several public viewpoints (Image 3).



Image 2: The site boundaries are approximately indicated by the yellow outline

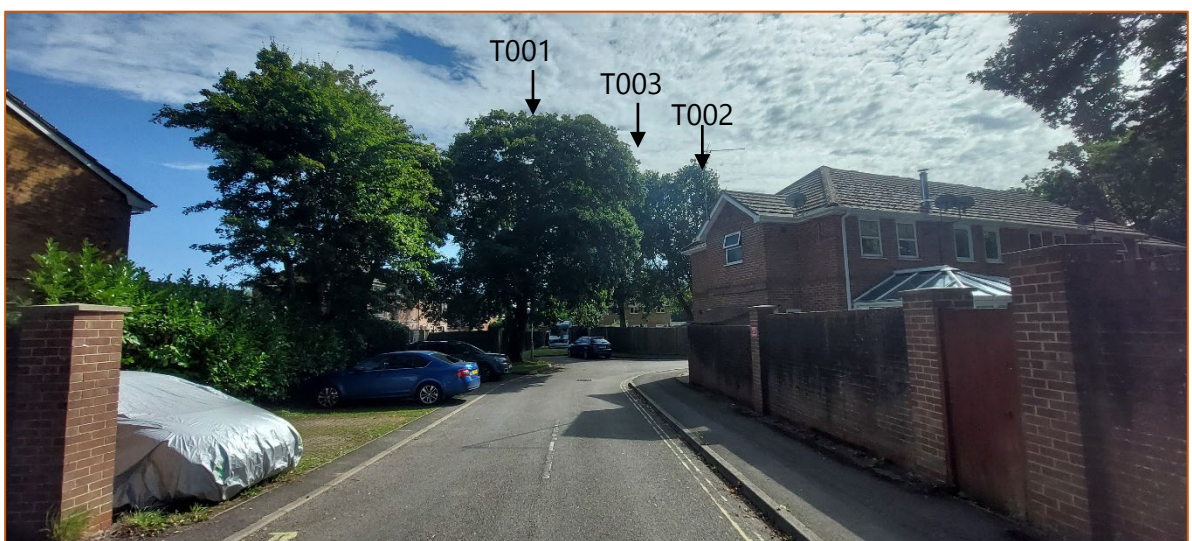


Image 3: Viewed from Shamblehurst Lane, the trees are seen in the wider landscape



2.2 **Tree assessment method:** The existing tree stock has been identified and graded in line with the current British Standard BS 5837 2012: Trees in relation to design, demolition and construction - Recommendations to enable informed decisions to be made regarding tree retention. The report also details methods of protection to be implemented to safeguard the retained trees.

2.3 **Independent assessment of trees:** I inspected each tree and have indicated the numbering on the tree protection plan (WTP1) in Appendix 1. For each tree, I collected information on species, height, diameter, maturity and potential for contribution to amenity in a development context. As advocated in BS 5837, each tree was then allocated to one of four categories which reflected its suitability as a material constraint on development:

- **Category A:** Trees of high quality and value
- **Category B:** Trees of moderate quality and value
- **Category C:** Trees of low quality and value
- **Category U:** Trees unsuitable for retention, usually to be removed

This information is recorded in the tree schedule included as Appendix 2, with further explanatory notes.

2.4 **The root protection areas and location of tree protection:** BS5837:2012 paragraph 4.6.1 gives recommendations for the areas of root protection to be the equivalent to the area of a circle centred on the single stem tree with a radius of at least 12 times the trunk diameter. For trees with more than one stem, the recommended formulas were used to arrive at the combined stem diameter calculation. The calculated RPA for each tree was capped to 707m². This distance is given for guidance to each tree or group in the schedule. In practice, the siting of the specific protection measures may be different. The implication of this notional root protection area (RPA) is that no significant disturbance should occur within it if the trees are to be successfully retained. As advocated in paragraph 4.6.3 of that document, where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon or equivalent area has been produced. Any modifications to the shape of the RPA have reflected our interpretation of a reasonable and likely root distribution.

3. **WORKING WITH THE DESIGN PROPOSAL**

General background

3.1 **Tree constraints as part of the design layout:** As recommended in section 5 of BS5837, the constraints posed by existing trees were identified to inform the site layout design. The collected information was used to provide relevant guidance to the architect so that the below ground (RPAs) and above ground (canopy) constraints have been fully considered as part of this design process. In this context, I have analysed these constraints to properly inform the planning process and minimise any negative impact on the existing tree stock. Retaining the most important trees in this way means that this proposal will maintain a sustainable tree canopy that will be in harmony with its new surrounding buildings and landscape; thereby enhancing any overall impact on the wider local amenity.



- 3.2 **Relevant Planning Policy taken account during the design stage:** The requirements of the British Standard 5837 and National Planning Policy Framework (NPPF) can be met using planning conditions to require the mitigation measures set out in this report. These proposals comply with the NPPF in terms of achieving sustainable development, good design and conserving the natural environment by retaining all of the important trees adjacent the site. Paragraphs 55 and 56 of the NPPF deal with planning conditions. In this respect, sufficient detail has been provided so an enforceable planning condition requiring the trees to be protected can be based on the accompanying arboricultural method statement (AMS) and associated tree protection plan WTP1.



4. **DEVELOPMENT INFLUENCE ON TREE COVER AND PROPOSED MITIGATION**

4.1 **Tree protection plan WTP1:** Plan WTP1 in Appendix 1 has been prepared based on the latest layout and is intended to provide a preliminary indication of the tree issues. It shows the existing trees numbered, with their assessed categories in the respective colours as set out in paragraph 2.3 above. A preliminary location for protective fencing is illustrated with black post and rail annotation and the RPA to be protected behind is shown with the black diagonal hatching. Any ground protection is shown with a blue cross hatch annotation, and any precautionary areas are shown with a yellow filled area. I stress that this plan is intended to provide an overview of how the tree protection will work and may require more detailed adjustments for the final submission in the context of any Planning feedback. From my site observations and the information provided, I have set out the necessary mitigation options required below where trees may be implicated to minimise harm and comply with BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.

4.2 **Tree pruning to facilitate access/working space or future amenity space:** The closest trees (T002 and T003) have been reduced in the recent past (Image 4), so at this stage no pruning requirements are anticipated to accommodate these proposals. If this changes for any reason, I advise that these matters are considered at an early stage and agreed with the LPA prior to the work commencing. If it is decided that some pruning is required to facilitate the proposal, this should be done in accordance with BS3998: 2010 '*Tree Work Recommendations*', without harming the health or appearance of nearby trees.



Image 4: Trees T002 and T003 have been reduced in the past so their canopies have been contained around the edges of the site

4.3 **Site access, storage and movement of materials:** Building materials can be delivered to site using the existing road and stored outside the fenced areas on existing hard surfaces (see plan WTP1). It is entirely feasible to move materials to the working areas by hand or using small low ground-effect plant, with no significant harm to trees. Provided that protective measures are installed/retained correctly, there is unlikely to be any adverse effects on trees from construction traffic moving in and out of the site.



- 4.4 **Ground protection:** The protective barriers around the trees will need to be set back to provide suitable space for the movement of materials and personnel during the construction works. The protective barrier positions around trees are shown on the plan WTP1 in Appendix 1. The RPAs that are outside of the barriers will be covered in ground protection and this will need to be installed after the erection of the barriers, but before any clearance or construction work starts on site. The provision of ground protection to allow pedestrian access within RPAs is supported in paragraph 6.2.3 of BS 5837:2012 and I do not perceive this to be a particular problem provided it is implemented correctly and remains in situ during the construction phase of the project.
- 4.5 **Proposed new dwelling:** The footprint of the proposed new dwelling encroaches into the root protection areas of the adjacent oaks (T002 and T003). However, less than 20% of their overall RPAs is likely to be affected so, if the works are done with care, the structure can be installed using a low impact foundation design (as supported by BS5837:2012 - clause 7.5.3) to minimise harm. In this case, it is proposed to use a mini pile system such as the one proposed by the project structural engineer (AD Civil and Structural Engineers) in Image 5 below and illustrated (to a readable scale) on the tree protection plan WTP1. The use of this type of suspended slab formation minimises excavation using small diameter mini piles (as opposed to excavation for normal strip or trench fill foundations). To further avoid physical damage to roots it is proposed to undertake any ground preparation works in the RPAs by following BS5837:2012 recommendations (hand digging clauses 7.2.1- 7.2.4). Installation of the piles will need to be carried out using specialist equipment (for instance a shallow piling rig with a remote power unit which has less weight on the ground at the point of piling) and/or working from a platform/piling mat protecting the ground to minimise impact on the RPAs.
- 4.6 An air gap beneath the suspended structure will be required to allow for exchange of air to the soil with a suitable rainfall capture system. The flow of rainwater and the routing of the rainfall under the proposed structure will need to maintain the free flow of air and water, to feed the roots. In summary, the suspended slab must include:
- Minimal excavation for the piles
 - Minimised compaction through use of specialised equipment and ground protection measures
 - Maintenance of access to water by the tree roots through either routing the rainwater under the structure or via flow from adjacent soil and
 - Maintenance of access to air through utilising a suspended slab with air gap between the ground level and the underside of the slab
- 4.7 Generally, any required changes in topography will be accomplished by hand digging to minimise harm to the health of the tree. The removal of the top layer of vegetation to a depth of 50mm (to provide a flat surface for the installation) is unlikely to encounter or damage any tree roots. Any additional excavation will need to be assessed by an arboriculturist, in consultation with the LPA's Tree Officer. However, if roots do need to be cut, the hand digging guidance in Appendix 3 should be followed.

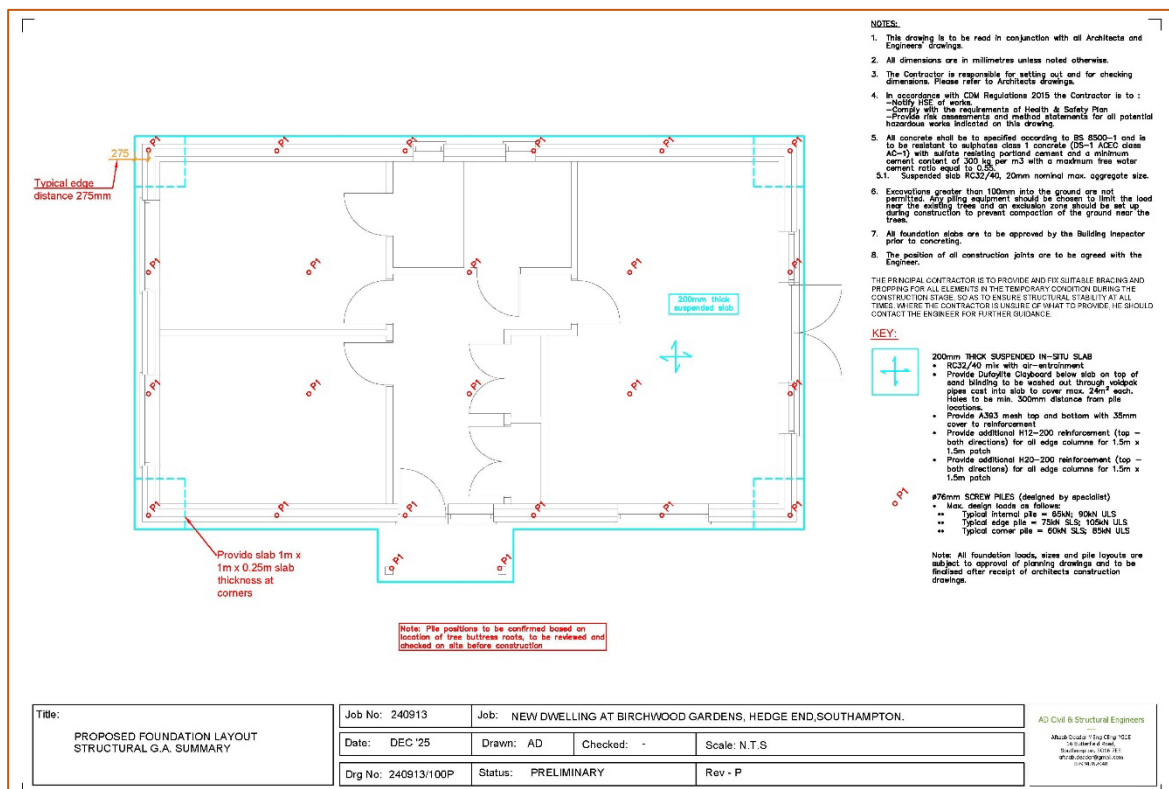


Image 5: The proposed foundation layout provided by the project structural engineer (AD Civil and Structural Engineers)

4.8 **Drainage and other services:** Drainage runs, soakaways and the installation of other services can cause disruption to RPAs and result in important trees being damaged. I advise that these matters are considered at an early stage and agreed with the LPA as part of any reserved matters and/or prior to the development phase commencing.

4.9 **Post occupancy pressures on trees:** The location and character of the proposal have been achieved in consideration of all the site factors, including the presence of trees. In reference to BS5837:2012 recommendations paragraph 5.3.4 and its sub paragraphs, any issues relating to shading, privacy and screening, direct damage, future pressure for removal and seasonal nuisance have been factored into the design to minimise any post occupancy pressure on trees. In this regard, I summarise the main points relating to this proposal below:

- **Daylight and sunlight report:** It has been generally accepted on this site that there will be some shading and limited sunlight due to the proximity of trees T002 and T003. However, the daylight assessment provided by Rogan Lyons Ltd (dated 17th November 2025) shows that 'all rooms requiring study and the external amenity space associated with the proposed development will achieve appropriate levels of natural light' in accordance with British Research Establishment (BRE) guidance. It also passes the test for exposure to daylight and sunlight, with all rooms receiving adequate levels based on the BRE requirements. Whilst the assessments show there is a reduction in sunlight access with the trees in full leaf, all rooms will comply with the BRE Report



guidelines for both scenarios. As such, the sunlight amenity is considered to exceed expectations. In terms of the overshadowing to garden and open space, the results show that whilst some restriction to sunlight access is noted in March (assuming trees are in full leaf), a significant proportion of the space will see at least 2 hours of sunlight. The summer assessment shows full compliance with the BRE Report guidance targets. The sun-on-ground studies show that, whilst below the 2 hours guidance, a significant area of the space will still see good (i.e., above 60 minutes) sunlight access. Given that the March testing shows that even with the trees considered in full leaf, significant sunlight access is achieved, the sunlight amenity to the garden is considered to meet expectations and that daylight and sunlight amenity will be appropriate for the accommodation type and its location. Whilst some restrictions to daylight are noted for the bedrooms in the summer months the main living space will achieve good daylight all year. The overall sunlight assessment of the amenity space shows that the area will see areas of dappled shade and areas with full sunlight access. Overall, it is the opinion of the expert that the daylight and sunlight amenity of the proposed development will meet the expectations of the BRE Report guidance, National Policy and Local Policy/Supplemental Guidance, providing future occupiers with adequate levels of natural light.

- **Adequate space for the proposed dwelling:** It appears that consent has been given in the past to reduce trees T002 and T003 (Image 4), so the principle of some crown management has already been accepted by the LPA. On this basis, it is reasonable to assume that any potential future pruning management would be acceptable provided it in accordance with BS3998: 2010 '*Tree Work Recommendations*'. In this context, the trees are healthy so this could be easily done on a regular basis without adversely affecting their health or appearance.
- **Designing around the natural light constraints:** After discussions with the architect, it was confirmed the internal arrangement of the dwelling and its position within the plot will allow the new occupants normal and reasonable access to natural levels of light. Nevertheless, due to the minor light restrictions to the bedrooms (identified in the daylight assessment), further consideration will be given to design the roof to provide further natural light into the dwelling with tunnelled skylights. On balance, it is reasonable to consider that the trees will provide useful canopy cover between the adjacent properties, and it will be in the interests of new occupants to retain them for the shade benefits, seclusion and shelter they provide.
- **Future tree work applications:** The trees are protected by a tree preservation order, so if there are any unreasonable applications in the future to severely prune or fell them, the LPA will have the opportunity to enforce any necessary measures as part of the tree work application process. In the event of any future appeals, it is my experience that the government robustly supports LPAs' efforts to retain trees and it is unlikely that further tree loss of retained protected trees would occur. However, should it be necessary, the contents of the daylight report and its conclusion (underlined above) can be presented to robustly support the LPAs case at appeal.



This will allow them to demonstrate that the site has been tested in this regard and found to have acceptable levels of daylight available to residents, and therefore it would be unnecessary to remove or significantly prune the adjacent trees.

- **Maintenance from debris fall:** The structure will be beneath several parts of the tree canopy so there is potential for debris fall on the roof, gutters and windows. However, this is a single storey structure that will be easy to reach for general maintenance purposes, and if required, it should be entirely feasible to install easy maintenance measures such as gutter guards and self-cleaning glass to help reduce any of these concerns.

In the context of all these points, I believe that the development proposal is unlikely to bring new significant pressures on these trees.

5. **CONCLUSIONS**

- 5.1 **Overall summary:** The table (on page 1) provides a summary of the relevant changes and potential impacts arising from this development proposal. No trees will be lost because of this proposal and if adequate precautions to protect the three oak trees closest to the site are implemented as recommended in this report, and as may reasonably be required by consent conditions, the overall impact of the proposal on local amenity will be low and limited to the short term only. The proposals take proper account of potential pressures for pruning and felling post-occupancy and where formal tree protection measures apply, it is reasonable for the LPA to refuse inappropriate works and could be expected to have support at appeal. Overall, this submission has demonstrated that it is reasonably practicable to develop the scheme without significant harm to retained trees. Any additional information required for reassurance, can be provided as part of any reserved matters or by way of conditions attached to the planning permission. The scheme accords with the principles set out in the National Planning Policy Framework and is technically compliant with BS5837:2012 and the way in which that Standard has been applied. Therefore, I do not believe there are supportable or reasonable grounds for refusing permission in terms of the trees.

6. **RECOMMENDATIONS TO PROTECT TREES DURING DEVELOPMENT**

- 6.1 **Arboricultural method statement (heads of terms):** The recommendation in BS5837:2012 is that where details might need to be submitted to allow for changes that might occur after planning permission has been granted, heads of terms for an arboricultural method statement (AMS) would be appropriate. That is appropriate for sites with a range of arboricultural protection measures and methods to be determined. From my preliminary appraisal, issues that are likely to need clarification and considered as part of any reserved matters or with direct reference in a planning condition include:

1. Pre-commencement meeting
2. Installation of tree protective fencing
3. Installation of ground protection



4. Installation of the new bungalow structure
5. Installation of new services
6. Installation of new landscaping
7. Programming of tree protection
8. Arboricultural supervision

6.2 **Provision of a construction method statement:** Providing construction information (that may directly influence tree protection requirements) A construction method statement is a description of how operations that may affect trees will be carried out to minimise any adverse impact on them. The details of how the site will be managed are construction and contractual matters that can only be finalised once the post-consent detailed planning begins. For that reason, at this stage in the planning process, it is only possible to list a summary of the issues that will require more detailed consideration once consent is issued. The issues that may require further clarification on this site include:

- The order of work on site, including building work
- Who will be responsible for protecting the trees on site
- Detailed proposals for inspecting and supervising the tree protection
- The parking arrangements for workers and visitors
- A schedule of emergency contact numbers
- Areas for loading and unloading of materials and storage of materials and plant
- Where site facilities will be located and when will they be installed
- How machinery and equipment (such as excavators, concrete pumps and piling rigs) will enter, move on, work on and leave the site
- Wheel washing facilities near trees
- Measures to control the emission of dust and dirt during construction near trees
- Recycling and storage of waste near trees
- Details of upgrading/removing/replacing existing surfacing and areas where this will happen, including detailed and precise cross-sections where no-dig surfacing is to be installed
- Details of piling operations
- Precise services locations, including the method of installation when near trees

Note: It is not my role as arboricultural consultants to detail the timing and implementation of these measures, although I can input into the process and will need to confirm that the final proposals will not adversely affect retained trees



Mark Wadey ND Arb CUEW MArborA RCarborA MICFor
Arboricultural Consultant



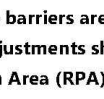
Institute of
Chartered Foresters
Registered Consultant

Appendices:

- 1 The tree protection plan WTP1
- 2 Data collection – Tree schedule & explanatory notes

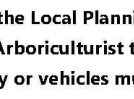
Appendix 1 – The Tree Protection Plan: Illustrating tree protection and management proposals – WTP1

Content: 1 x A1 plan @ scale 1:200

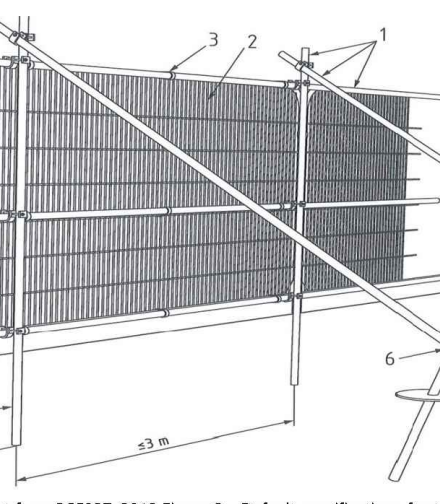


Tree Protection Examples

Examples of Standard Barriers



Extract from BS5837: 2012 Figure 2 – Default specifications for tree protective fencing.



KEY

1. Standard scaffold poles
2. Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3. Panels secured to uprights and cross-members with wire ties
4. Ground level
5. Uprights driven into the ground until secure (minimum depth 0.6m)
6. Standard scaffold clamps

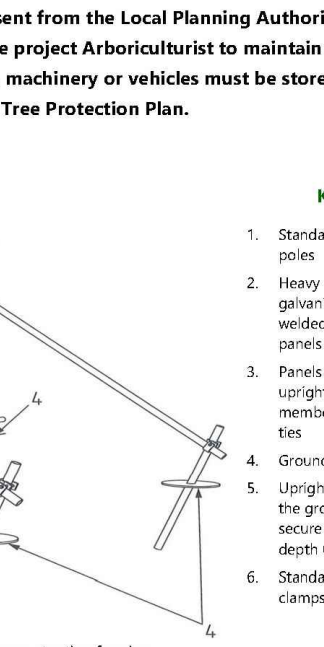
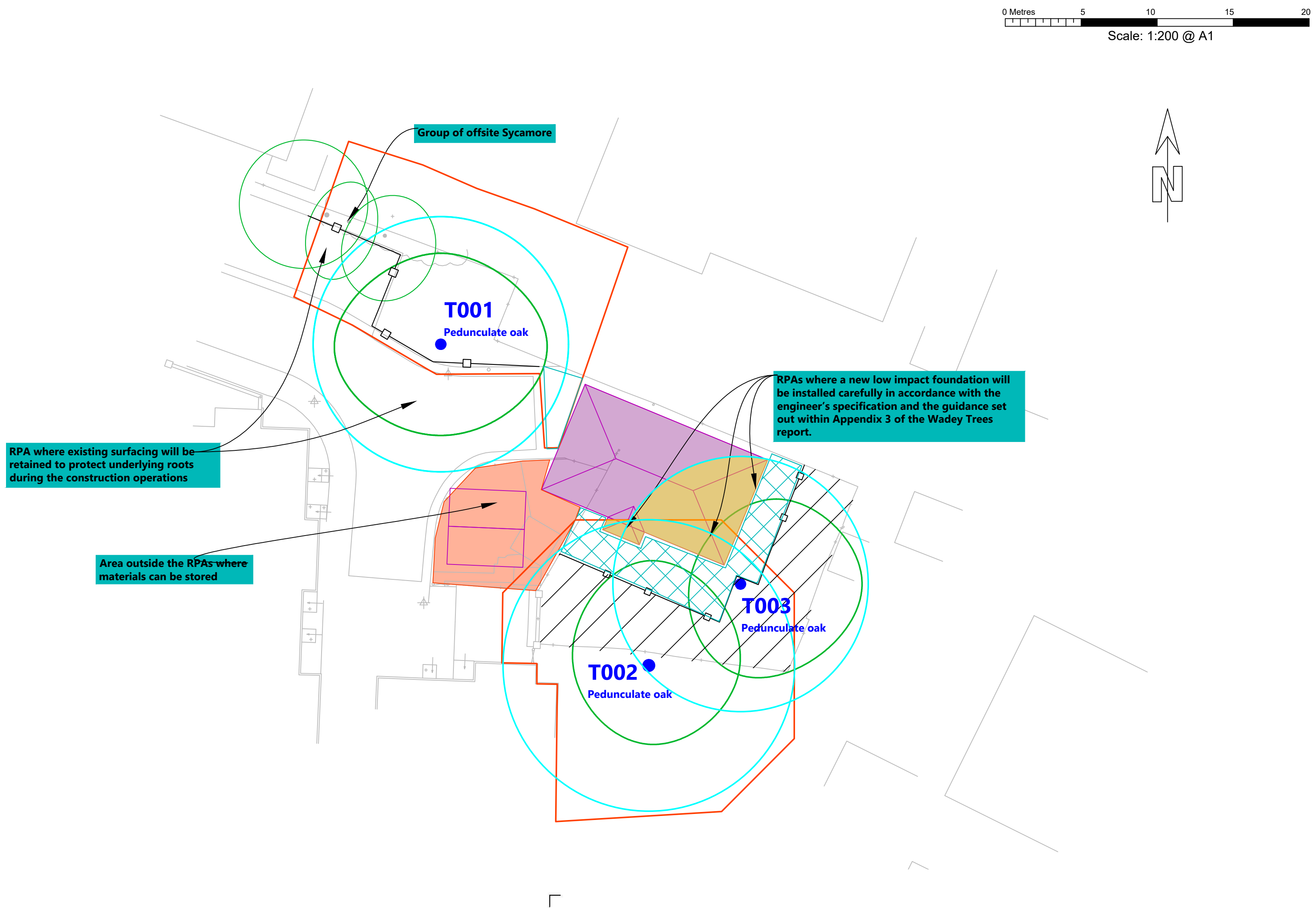


Image 1: Scaffold and Heras panels can provide standard protection that is fit for purpose.





Tree Protection Guidance



Ground Protection

In all cases, the objective should be to avoid compaction of the soil from the constant foot traffic and heavy vehicles, especially in wet conditions, so that tree root functions remain unimpaired. New temporary ground protection should be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil. Where construction working space or temporary construction access is justified within the RPA, this should be facilitated by a set-back in the alignment of the tree protection barrier. In such areas, suitable existing hard surfacing that is not proposed for re-use as part of the finished design should be retained to act as temporary ground protection during construction, rather than being removed during demolition. The suitability of such surfacing for this purpose should be evaluated by the project arboriculturist and an engineer, as appropriate.

Ground protection examples:

Image 1: Mulch underneath plywood boards can be adequate protection for foot traffic purposes.

Image 2: Bespoke boards designed to fit around the build area are sturdy and useful where small extensions are being installed, or access is required.

Tree protection and site monitoring

Planning, communication and preliminary timing of events

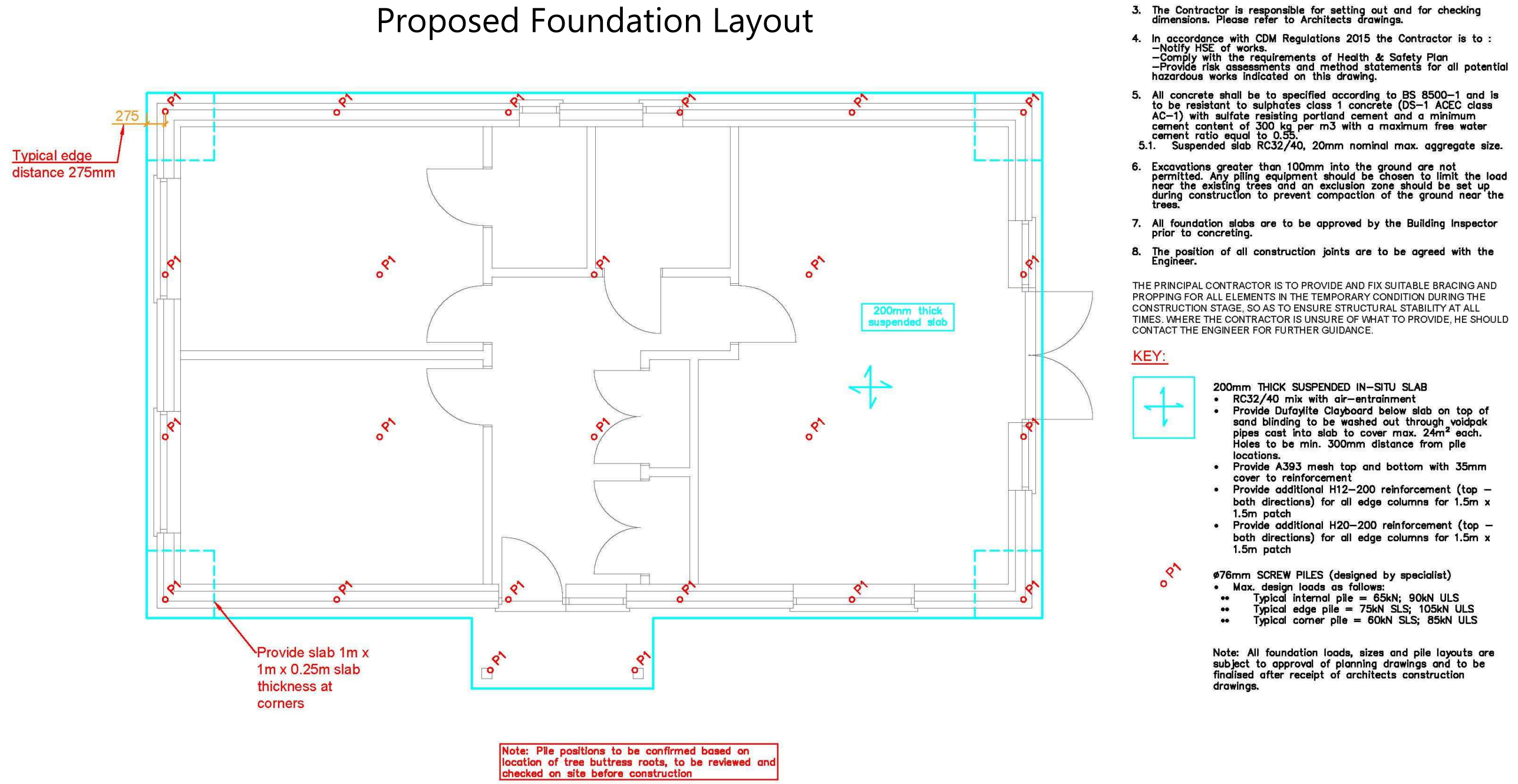
Site managers, clearance and construction teams are normally expected to deliver the tree protection requirements shown on this plan, so it will be important for these relevant parties to be involved at the earliest stages of site works. In this context, a pre-commencement site meeting is critical to understand the necessary tree protection requirements for this site to avoid unnecessary tree harm.

The table below summarises the important elements of site supervision/monitoring:-

Pre-commencement site meeting	<i>A pre-commencement meeting must be held on site before any of the site clearance/demolition or construction works start. This should be attended by the contractor's site manager or agent, the project arboriculturist and (if available) the tree officer. The methods of tree protection outlined in this report must be fully discussed at this meeting so that all aspects of their implementation and sequencing are made clear to all parties. Any clarifications or modifications must be recorded and circulated to all parties in writing.</i>
Arboriculturist's role	• Liaise with developer and LPA to ensure that appropriate protective measures are in place before any works start on site • Inspect the site to check that the arboricultural conditions have been complied with and advise where day to day tree problems arise • Advise on the issue of work instructions relating to arboricultural matters
Frequency of visits	• As agreed at the pre-commencement meeting
Reporting	• The site manager will be advised in writing at the time of the visit of any relevant points to be followed up with a formal letter of confirmation
Communication	• LPA and developer to be copied relevant correspondence

Site monitoring checklist: The following site monitoring checklist is an aide-mémoire for all pre-commencement and site supervision visits. After each visit, it, or something similar, should be circulated to all relevant parties and kept as a record to demonstrate that all site operations have been compliant with the approved tree protection requirements, and to satisfy the discharge of planning conditions.

Pre-commencement	Compliant Y/N	Action
Acceptable demolition/site clearance works		
Tree works undertaken/additional requirements		
Method statement/tree protection plan available on site		
Suitable locations for welfare and material storage etc.		
Suitable space available for vehicle access etc.		
Services/soakaway locations agreed		
Tree protection/precautions	Compliant Y/N	Action
Protective fencing		
Ground protection		
Temporary surfacing		
New surfacing/reinstatement of existing		
Structures in RPAs		
Hand digging to install services		
Soft/hard landscaping		
Soil amelioration requirements		
Any other precautionary measures required within RPAs		
Outcome of meeting	Y/N	Action
Can the development lawfully start/continue?		
Are changes required on site to comply with approved tree protection plan?		



Title: PROPOSED FOUNDATION LAYOUT STRUCTURAL G.A. SUMMARY	Job No: 240913	Job: NEW DWELLING AT BIRCHWOOD GARDENS, HEDGE END,SOUTHAMPTON.			AD Civil & Structural Engineers Abdul Aziz & Yousang Chng H224 24 Lutterell Road, Southampton, SO16 7TE abdul.aziz@adcew.com 07930760018
	Date: DEC '25	Drawn: AD	Checked: -	Scale: N.T.S	
	Dwg No: 240913/100P	Status: PRELIMINARY	Rev - P		

Key:	
	Trees - colour coded by BS 5837 Category
	BS category A Trees of high quality
	BS category B Trees of moderate quality
	BS category C Trees of low quality
	BS category U Trees unsuitable for retention
	Notional BS 5837 RPA boundaries
	Offset BS 5837 RPAs taking account of pre-existing barriers to root growth
	Tree canopies
	Existing layout
	Proposed layout
	Construction exclusion zone (CEZ) to be protected by fencing
	Ground protection
	Precedential area
	Areas available for storage of materials outside RPAs

For further information, refer to the WT tree planning procedure. Do not scale from this drawing (unless for planning purposes). Please check all dimensions on site, and notify us of any discrepancies. Wadey Trees Ltd cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based. © Wadey Trees Ltd 2020.

This drawing is designed to reflect only the principles of layout and/or design insofar as these relate to the protection of trees. It should NOT be read as a definitive engineering or construction method statement. Reference should be made to the architect or structural engineer, as appropriate, over any matters of construction detail or specification, or any engineering standards or regulatory requirements relating to proposed structures, hard surfaces or underground services.



WADEY TREES

Wadey Trees Ltd
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CLIENT:
Castle Street Investments

ARCHITECT
VL Architects Ltd

DRAWN: EJS	CHECKED: MJW	DATE: 17 Dec 25	REVISION:
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DRAWING NO. WTP1		DRAWING TITLE Tree Protection Plan	
SCALE 1:200	SHEET SIZE A1	SHEET NUMBER	
BY PROJECT NO. WT 069-24	STATUS PUBLISHED		
CLIENT PROVIDED PLAN REF: TOPO - Birchwood Gardens and 1775 extract copy site plan and dwelling 23oct25			

Appendix 2 – Data Collection: (In accordance with BS 5837 (2012), all tree schedule data has been collected based on the recommendations set out in subsection 4.4 of BS 5837)

NOTE: Colour annotation is A trees green background; B trees blue background; C trees grey background; U trees red background

Tree No.	Species	Height (m)	Stem diameter(s) (mm)	Spread	Physiological Cond	Structural Cond	Life Stage	Survey Notes	Rem. Contrib.	Retention Category	RPA	Recommendations
T001	Pedunculate oak (<i>Quercus robur</i>)	15	700	N:6 E:7 S:6 W:7	Good	Good	Mature	There are no obvious visible signs of poor health or structural/instability problems that would ordinarily indicate there is a significant risk associated with the tree. Existing road close to trunk.	30+ Years	B1,2	Radius: 8.4m. Area: 229 sq m.	
T002	Pedunculate oak (<i>Quercus robur</i>)	16	800	N:8 E:6 S:6 W:6	Good	Good	Mature	There are no obvious visible signs of poor health or structural/instability problems that would ordinarily indicate there is a significant risk associated with the tree. Pruning history - reduced in the past with new regrowth forming at old pruning points.	30+ Years	B1,2	Radius: 9.6m. Area: 305 sq m.	

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Tree No.	Species	Height (m)	Stem diameter(s) (mm)	Spread	Physiological Cond	Structural Cond	Life Stage	Survey Notes	Rem. Contrib.	Retention Category	RPA	Recommendations
T003	Pedunculate oak (<i>Quercus robur</i>)	18	700	N:6 E:8 S:6 W:5	Good	Good	Mature	There are no obvious visible signs of poor health or structural/instability problems that would ordinarily indicate there is a significant risk associated with the tree. Pruning history - reduced in the past with new regrowth forming at old pruning points.	30+ Years	B1,2	Radius: 8.4m. Area: 222 sq m.	

Appendix 2 - Data Collection Cont'd: Explanatory notes

The site data columns and abbreviations: The relevant tree data was collected and recorded as described in the table below:

Structure: The following categories are assigned appropriately to each landscape feature: T=(tree); G=(group); H=(hedge); C=(coppiced); M=(multi-stemmed); P=(pollard); Sh=(shrubs); S=(stump) or W=(woodland).

Species: Species identification is based on visual observations. Where there is some doubt over tree identity, sp is noted after the genus name in the botanical names section to indicate that the species cannot be reliably identified at the time of the survey. Where there is more than one species in a group, only the most frequent are noted and not all the species present may be listed. The tree botanical names surveyed on this site are listed in column 2.

Height: Height is estimated to provide an indication of the size of the tree.

Stem diameter: Stem or trunk diameter is estimated or measured and recorded in 2.5cm increments as advised in BS 5837 Table D1. It is measured with a diameter tape unless access is restricted, direct measurement is not possible because of ivy on the trunk or the tree is assessed as poor quality. The point of measurement and the adjustments for stem variations are as advised in Figure C1 of BS 5837. The RPAs given below have been used for single stem trees and the equivalent resultant combined stem diameter for multi-stemmed trees.

Branch height and crown spreads: Where crown accuracy varies from site observations and the original topographical survey, new measurements of the crown may be taken and illustrated on the plan as a crown amendment. These are taken in the context of the development proposal where it is considered there may be encroachment from the development. For example, it may only be necessary to record the measurement of one side of the canopy where it overhangs the site, or where there is likely to be some kind of impact to branches/crown of the tree from development proposals. If there are any significant trees missing from the original topographical survey, their positions are estimated and branch spread is taken as a minimum at the four cardinal points, to derive a representation of the crown. Also, where it is considered appropriate, existing height above ground level of: 1) first significant branch and direction of growth (e.g. 2.4-N); 2) canopy will be recorded to inform on ground clearance where access issues may be a concern.

Tree condition: The tree condition is represented by the surveyor's initial visual observations of its health and/or structural integrity. These are separated into the following subcategories:

Physiological condition (P)	Description
Good	Appears to be healthy and have good vitality.
Fair	Generally, in good health but with visible signs of decline or reduced vitality.
Poor	Obviously in poor health and significant decline.

Appendix 2 - Data Collection Cont'd: Explanatory notes

Dead	Dead, or very little live growth.
Structural condition (S)	Description
Good	No significant structural defects/weaknesses.
Fair	Some visible defects but no significant hazards/weaknesses.
Poor	Significant defects/weaknesses or dangerous/potentially dangerous condition.

Life stage: For the purposes of this report the following life stages are recorded as one of seven categories below. Age class is indicative and will vary between species:

LIFE STAGE	DEFINITION
Newly planted	Very young, newly planted trees at least within the last 5 years.
Young	Small establishing tree in its youngest years that could be transplanted with specialist equipment, i.e. less than 150mm in diameter at 1.5m.
Semi-mature	An established tree, but with some growth to make before reaching its potential maximum size. A tree within its first third of lifespan.
Early mature	A tree that is reaching its ultimate potential height, whose growth rate is slowing down but if healthy, will still increase in stem diameter and crown spread. A tree in the second third of life span.
Mature	A mature specimen with limited potential for any significant increase in size, even if healthy. A tree within its final third of expected lifespan.
Over mature	A senescent (declining/degradation) or moribund specimen of low vigour within its final third of expected lifespan. Possibly also containing sufficient structural defects with safety and/or duty of care implications.
Veteran	Specimens exhibiting features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.
Ancient	A tree which is remarkably old for its species.

General observations: Only relevant features such as tree physiology, structural condition, decay and crown or branch structure that may impact on the proposed development are recorded. If there are no notes, then the presumption should be that no relevant features were observed.

Remaining contribution: This is broadly interpreted as <10 years, 10+ years, 20+ years, or 40+ years to provide some indication of a tree's potential for future contribution to its locality.

Appendix 2 - Data Collection Cont'd: Explanatory notes

BS category: Each tree is placed into a relevant coloured category based on their quality and contribution they offer in terms of their arboricultural, landscape or cultural values. This assessment is based on the BS5837 Table 1 cascade chart for tree quality assessment which is summarised in paragraph 2.3 of this report.

RPA measurements: For single stem trees, the RPA is calculated as an area equivalent to a circle with a radius 12 times the stem diameter. For trees with more than one stem, one of the two calculation methods set out in paragraph 4.6 of BS5837 recommendations will be used. In all cases, the stem diameter(s) will be measured in accordance with Annex C and Annex D of that document. The calculated RPA for each tree will be capped to 707 m².

