

PREPARED FOR
Nuttall Property Investments Ltd

SITE LOCATION
Chapel Farm, Windley Lane, Windley

ARBORICULTURAL IMPACT ASSESSMENT

February 2026

#WEAREINNOVATORS

Document Control

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Site Summary

	Description	
Site Name/Address	Chapel Farm, Windley Lane, Windley, Derbyshire	
Site Ordnance Survey National Grid Reference	SK 30732 44949	
Local Planning Authority	Amber Valley Borough Council	
Planning Application Reference Number	NA.	
Statutory Constraints	Tree Preservation Order/s	Conservation Area
	No	No

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Arboricultural ASSOCIATION Professional Member

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1. Introduction

1.1 Terms of instruction

1.1.1 Nuttall Property Investments Ltd (hereafter the 'Client') commissioned Arb Innovators Ltd ('Arb Innovators') to prepare an Arboricultural Impact Assessment (AIA) at Chapel Farm, Windley Lane, Windley, Derbyshire (hereafter referred to as the 'Site') in accordance with *BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations* (The British Standards Institution, 2012), hereafter referred to as 'BS5837:2012'.

1.1.2 This assessment has been prepared by Callum Throw *(N. Dip Arb, MArborA, PTI)* Managing Director and Principal Arboricultural Consultant at Arb Innovators. Callum is an experienced Arboricultural Consultant possessing over 15 years' experience with specialism in Urban Forestry and trees in relation to development.

1.2 Purpose of this Arboricultural Assessment

1.2.1 The information provided is compliant with BS5837:2012 (Table B.1), national standard planning application validation requirements, and is prepared to accompany a Full planning application to Local Planning Authority (LPA), Amber Valley Borough Council (AVBC).

1.2.2 This report describes the findings of a walkover survey, a desktop assessment of statutory constraints, the known and anticipated effects that granting planning permission would have on the existing trees, and subsequent recommendations and mitigation measures that should be incorporated in the Proposed Development.

1.3 Scope of this Arboricultural Assessment

1.3.1 Trees may form a constraint to the Proposed Development and therefore the methodology as set out in BS5837:2012 has been adhered to. This report broadly comprises four stages:

1. Undertake a survey of trees on the Site and those within the Study Area (a 15m buffer or "influencing distance" based on the surveyor's discretion) to fulfil the requirements of BS5837:2012.
2. Provide a Tree Constraints Plan (TCP) demonstrating the above and below-ground constraints; including canopy extents and Root Protection Areas (RPA), of those trees recorded.
3. Provide an AIA which includes a Tree Retention and Removals Plan (TRRP) to assess the impacts and effects which are likely to arise from the Proposed Development and identify mitigation for retained trees, where necessary.
4. Provide an Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP) setting out how retained trees will be protected and managed during on-site demolition and construction activities.

1.3.2 The results and recommendations in this report are valid for a maximum of 12 months from the date of the survey.

2. The Site and Proposed Development Description

2.1 Site Overview and Description

2.1.1 Table 1 provides a description of the Site and arboricultural Study Area, which is denoted by a red line presented on the TCP provided at Appendix 3.

Table 1 Site Location, Description and General Overview

	Description
Site Description	Chapel Farm is located on Windley lane with the Site encompassing the farmhouse, associated traditional barns and hardstanding yards, with access taken directly from Windley Lane via an internal farm drive. It is surrounded by fields to the rear and both sides, with the east boundary of the site bounded by a stream. To the west is Brook farm, which has converted a barn building to form Brookley Barn holiday cottage. To the east is Windley Hall, a grade II listed building. The site also has a bridle path, which leads towards Mugginton, and can also be used to access Brewers Carr, a local nature conservation site.
Date of walkover Tree Survey	04 November 2025

2.2 Proposed Development Description

2.2.1 Table 2 provides a description of the Proposed Development which is shown on the TRRP at Appendix 3.

Table 2 Proposed Development Description and General Overview

	Description
Proposed Development Description	Conversion of the existing cattle barn for use as a commercial property, with both holiday accommodation and a training centre providing coaching and training sessions. The proposal will include demolition of the existing corrugated metal hayloft, as well as the single storey southern portion of the barn, and the construction of a small 2 storey extension at the rear, as well as conversion of the remainder of the existing barn building.

3. Summary of Relevant Legislation and Planning Policy

3.1.1 This report has been compiled with reference to the following legislation and both national and local planning policy.

3.2 Legislation Relevant to Arboriculture

- The Town and Country Planning Act 1990.
- The Town and Country Planning (Tree Preservation) (England) Regulations 2012.
- The Forestry Act 1967
- The Occupiers Liability Act (1957 and 1984)

3.2.1 Other legislation that affords a lesser or indirect level of protection to trees includes the following:

- The Wildlife & Countryside Act 1981 (as amended).
- Conservation of Species and Habitat Regulations 2017 (as amended).
- Natural Environment and Rural Communities Act 2006 (Section 41 England and Section 42 Wales).
- Hedgerow Regulations (1997).

3.3 National Planning Policy

- National Planning Policy Framework (NPPF), 2024[1]

3.4 Local Planning Policy Relevant to Arboriculture

Table 3 Relevant Planning Policy Documents

Description	Status/Coverage	Key Policies / Provisions	Implications for Arboriculture in New Development
Amber Valley Borough Local Plan 2006 (Adopted 12 April 2006)		Policy EN8 and Policy EN9	Planning permission will not be granted for development that would damage or destroy significant trees, woodlands, hedgerows and only be granted where the loss or damage to existing features, or the impact on the landscape can be offset by the provision of alternative, replacement or additional features within the site or on other land in the ownership of the applicant.

[1] National Planning Policy Framework (2024) [Online]. Available at < https://assets.publishing.service.gov.uk/media/65a11af7e8f5ec000f1f8c46/NPPF_December_2023.pdf > (Last Accessed January 2026).

4. Baseline Arboricultural Data

4.1 Arboricultural Desk Study

4.1.1 A Desk Study has been undertaken as a means of identifying if any statutory and non-statutory constraints or designations are present within the Site and Study Area. This Desk Study includes consideration of the following environmental constraints:

- Tree Preservation Orders (TPO).
- Conservation Areas.
- Ancient Woodland.
- Ancient, Veteran, or Notable trees.

4.1.2 An assessment of statutory and non-statutory constraints has been carried out using publicly accessible third-party information and aerial imagery. While this is deemed to be broadly accurate, in some instances no specific date is given for the information and images used and Arb Innovators cannot and will not accept liability for any deficiencies in third-party information.

Presence of Tree Preservation Orders and Conservation Areas

4.1.3 At the time of writing this assessment, the Amber Valley Borough Council online, interactive GIS map[2] confirmed that there are no TPOs or Conservation Areas attributed to the Site or any of the trees recorded.

4.1.4 It should be noted that online interactive mapping is provided for reference only and is not intended to be definitive. Provisional Tree Preservation Orders (TPO) may be made whenever a local planning authority deems it appropriate and a TPO can be made at any time. The LPA should be contacted prior to commencement of any tree works or tree removals specified within this report.

Presence of Ancient Woodland

4.1.5 The presence of ancient woodland designation within or bordering the Site was checked using Natural England's Multi Agency Geographical Information for the Countryside (MAGIC) map[3] on 04 November 2025. In accordance with NPPF, an ancient woodland is an area in England that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites.

4.1.6 The site does not contain Ancient and Semi-Natural Woodland (ANSW) nor Plantation on Ancient Woodland Site (PAWS). The Site was absent of these statutory designations and it therefore not necessary to consider the requirements of paragraph 193(c)(d) of the NPPF.

Presence of Ancient, Veteran and Notable trees

The presence of Ancient, Veteran, or Notable trees[4] associated with the Site were checked using Woodland Trust's Ancient Tree Inventory on 04 November 2025. It should be noted that this inventory is based on volunteer-submitted records, and its limitations should be acknowledged. The Site was absent of this designation and it therefore not necessary to consider the requirements of paragraph 193(c)(d) of the NPPF.

[2] Amber Valley Borough Council, My Property [Online]. Available at: < https://www.ambervalley.gov.uk/my-property/ > (Last Accessed 14 November 2025).
[3] Magic (DEFRA), 2018. Multi Agency Geographic Information for the Countryside [Online]. Available at: < https://magic.defra.gov.uk/MagicMap.aspx > (Last Accessed 14 November 2025).
[4] Ancient Tree Inventory, 2018. Ancient Tree Inventory [Online]. Available at: < https://ati.woodlandtrust.org.uk > (Last Accessed 14 November 2025).

5. Arboricultural Walkover Survey

5.1 Brief BS5837:2012 Methodology

5.1.1 A survey of trees on the Site and those within influencing distance (15m beyond the Site based on the surveyor's discretion) was undertaken on 04 November 2025 in accordance with BS5837:2012. The tree numbers associated with each recorded feature are cross-referenced within the BS5837:2012 Tree Survey Schedule and arboricultural plans at Appendix 2 and Appendix 3, respectively.

5.1.2 The survey recorded all arboricultural features with a stem diameter greater than 75mm either as individual specimens, groups, or hedges. The differentiation between individual trees and groups of trees was made where these trees were aerodynamically, culturally, or visually important as groups. Where a tree in a group has characteristics that distinguish it from the rest of the group e.g. veteran trees, trees with significant defects, and specimen trees that stand out within the feature, they are generally recorded as an individual tree.

5.1.3 A hedge or hedgerow has been defined as any boundary line of trees or woody shrubs typically over 10m long and less than 5m in width. It may include banks, walls, ditches, herbaceous vegetation, or climbing plants.

5.1.4 Full details of the BS5837:2012 tree survey methodology and definitions used are provided in Appendix 1 and Appendix 2.

BS5837:2012 Quality Assessment

5.1.5 Trees were categorised by quality in accordance with BS5837:2012, section 4.5, using the quality categories A, B, C, and U. The objective of the tree categorisation method is to identify the quality and value (in a non-financial sense) of the arboricultural features recorded to make an informed decision about which features should be removed or retained if development occurs.

- Category A - Trees that are particularly good examples of their species, especially if rare or unusual. High quality trees with an estimated remaining life expectancy of at least 40 years.
- Category B - Downgraded from category A because of impaired condition or lacking the quality necessary to merit category A. Moderate quality trees with an estimated remaining life expectancy of at least 20 years.
- Category C - Unremarkable trees of limited merit which could be retained but are not a significant constraint. Low quality trees with an estimated remaining life expectancy of at least 10 years, or young trees with stem diameters below 150mm.
- Category U - Trees in such an impaired condition that they should be removed and cannot realistically be retained as living trees for longer than 10 years.

5.1.6 The quality of each arboricultural feature is defined based on its sub-category. Sub-categories carry equal weight and should not be used to influence retention priority. Sub-categories 1, 2 and 3 are intended to reflect arboricultural, landscape and cultural values, respectively.

5.1.7 It should be noted that Table 1 of BS5837:2012 only includes suggestions for the remaining years. A tree may have a longer remaining life than stated, but it is nevertheless classified as a lower category due to its maturity, condition, or overall influence on the application site.

Ancient and Veteran Trees

5.1.8 BS5837:2012 does not reference a methodology for identifying and recording ancient, veteran, or notable trees. While 'Veteran' is defined in paragraph 3.12 of BS5837:2012, neither 'Ancient' nor 'Notable' are mentioned and owing to the complexity and subjectivity of this subject, there are various methods for defining and classifying Ancient, Veteran, and Notable trees. The terms 'ancient' and 'veteran' are sometimes used interchangeably but it is important to understand that although all ancient trees are considered veteran trees, not all veteran trees are ancient.

5.1.9 For this BS5837:2012 assessment, the methodology for defining and classifying these irreplaceable trees as set out by the Woodland Trust (n.d.) (2024) *Recognising and categorising ancient and other veteran trees* has been adopted.

- **Ancient trees** *'have developed beyond maturity into the ancient life phase and/or are chronologically old in comparison to other trees of the same species.'*
- **Veteran trees** *'are mature trees which, due to their life or environment, have significant decay features (a physical attribute they share with ancient trees) but are neither developmentally nor chronologically ancient.'*

5.2 Arboricultural Walkover Survey Summary

5.2.1 A summary of the 10no. arboricultural features recorded has been provided in Table 3 and in the following paragraphs. The BS5837:2012 Tree Survey Schedule provides specific details for each feature recorded, including height, stem diameter, crown spread, crown clearance, age class, physiological and structural conditions, and recommendations for preliminary management, where relevant.

Table 4 Arboricultural features recorded and their quality categories in accordance with BS5837:2012

	Category A	Category B	Category C	Category U
Trees	0	4	3	0
Hedges	0	0	3	0
Total	**0**	**4**	**6**	**0**

5.2.2 7no. individual trees (T1–T7) and 3no. hedges (H1–H3) were recorded. No groups or woodlands were identified. Individual trees are dominated by silver birch (*Betula pendula* T2, T3, T4, T5, T6), with 1no. hawthorn (*Crataegus monogyna*) and Damson (T7). Hedges comprise Leyland cypress (H1) and mixed blackthorn and hawthorn (H2, H3).

5.3 Tree Constraints Plan (TCP)

5.3.1 The location of each arboricultural feature and their associated constraints are illustrated on the TCP at Appendix 3. The purpose of the TCP is to visually identify the current above and below-ground constraints imposed by existing arboricultural features in terms of stem, crown, and roots, along with any other notable constraints or Site features. When determining future land use or compiling an outline or detailed scheme design, this information must be considered.

5.3.2 All tree constraints were mapped using Quantum Geographic Information System (QGIS) and Qfield in the field, where a combination of on-site GPS, OS VectorMap (.dwg) and aerial imagery has been used to plot the location of trees and their surrounding context. No Topographical Survey was provided and tree positions are approximate only.

Root Protection Areas (RPA)

5.3.3 A theoretical RPA has been calculated for all arboricultural features in accordance with BS5837:2012 and are demonstrated as pink dashed circles on the TCP provided at Appendix 3. With reference to BS5837:2012, an RPA is defined as *"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 should be treated as a priority"*.

5.3.4 Numerical RPA data (radius and area in m^2) is tabulated in the Tree Schedule at Appendix 2. All stem diameters were measured in accordance with BS5837:2012 Annex C, with RPA delineation guided by Annex D.

5.3.5 For single-stemmed trees, the RPA is calculated as a circle with a radius of 12× the stem diameter (measured at 1.5m above ground level). Multi-stemmed trees require one of two approaches:

- Dominant stem method: Use the diameter of the largest stem.
- Aggregate method: Sum the diameters of all stems exceeding 25mm.

5.3.6 In other cases, root growth could have been impeded by existing, poor growing environments, built form comprising foundations, grey infrastructure such as retaining walls, or ditches and water courses, meaning that a simple circular root protection area may not be appropriate.

5.3.7 Paragraph 4.6.2 of BS5837:2012 states that, *"where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced"* noting *that "modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution"*.

5.3.8 Existing incursions and compaction associated with highway/farm access affects several trees notional RPAs (trees T1, T2, T3, T4, and T7) and whilst still shown as a circle on the TCP and TRRP, is likely to have modified the shape of the RPA.

6. Arboricultural Impact Assessment (AIA)

6.1.1 This AIA is undertaken with reference to BS5837:2012 and considers the nature of the Proposed Development.

6.2 Purpose of the AIA

6.2.1 The purpose of the AIA is to assess the anticipated direct and indirect impacts and effects associated with construction of the Proposed Development on existing trees, as described and to the best of our knowledge with the information provided at the time of writing. Section 7.0 of this AIA also includes details on necessary protection, mitigation, and compensation measures where these are deemed appropriate.

6.2.2 A TRRP is provided at Appendix 3 which illustrates the relationship between the above and below-ground constraints, including the RPAs of retained trees, and the direct and indirect impacts of the Proposed Development.

6.2.3 For ease of interpretation, the key discussion points and recommendations have been split into sub-headings.

6.3 Reference Documents

6.3.1 As background information, the documentation listed in Table 5 below has been cited. This report should be read in conjunction with the reference materials listed.

Table 5 Reference Document and Plans Provided

Document/Drawing Description	Reference No.	Prepared By	Date
Existing Site Plan	2551 Nuttall Windley - 001 Existing Site Plan_B	Julian Owen Associates Architects	June 2025
Proposed Site Plan	2551 Nuttall Windley - 203 Proposed Site Plans_G	Julian Owen Associates Architects	12 December 2025

6.4 Assumptions and Limitations of the AIA

6.4.1 This AIA has been compiled based on the following assumptions and limitations:

Assumptions

- Except for T1 and H3, it is assumed that all trees and hedges recorded are under the ownership of the client. No tree or hedge removal on third party land will be required to facilitate the Proposed Development.
- All proposed demolition and construction activities will be restricted to the immediate application area and not into areas of third-party land.
- Earthworks including significant changes to ground levels across the extent of the Site will not be necessary to facilitate the Proposed Development.
- The storage of plant, machinery, and materials will be located outside of RPAs and away from tree crowns, soft verges, and grassed areas. Existing hard surfacing at the front of the Site will be used whenever possible for plant movement and material storage.

- The installation of new underground utilities, services, and surface water drains, as well as details on enabling works, such as the installation or diversion of services and utilities by statutory undertakers, is unlikely to be required within the perceived RPAs of retained trees.
- If deemed necessary, the methodology for the installation, maintenance or removal of any services within an RPA will be in accordance with *Street Works UK Publications Volume 4 – Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees (Issue 3, 2026).*

Limitations

- Foundation design, excavation requirements, changes in ground levels or the extent of earthworks have not been shared in detail.
- The assessment relies heavily on the accuracy and completeness of the information provided at the time of writing. Any discrepancies or omissions in this information could affect the validity of the assessment.
- This AIA has been prepared for the area of the Proposed Development to the north of the Site only (as indicated by the Arboricultural Study Area show on the TCP and TRRP). Impacts to existing trees beyond this area has not been considered.
- This AIA does not consider the impacts, mitigation, or compensation measures for trees affected by other current or previous planning applications. It is recommended to cross-reference with such applications, where relevant, to assess any cumulative impacts on the site's arboricultural resources.

6.5 Anticipated Arboricultural Impacts from the Proposed Development

6.5.1 A magnitude of impact has been assigned as per the definitions in Table 6, which balances the magnitude of physical change (e.g. tree loss, RPA incursion, canopy, amenity, and perceived biodiversity loss) with the sensitivity and public value of the affected trees. Any residual effects are evaluated after mitigation in line with BS5837:2012 and current industry best practice. This assessment is provided to assist LPAs with considering the impact of any potential loss against both national and local planning policy.

Table 6 Arboricultural and Landscape Impact Scale

Magnitude	Definition	Typical Residual Effect*	Illustrative triggers**
Neutral	No loss or material impact to any arboricultural feature or material changes in tree health, structure or the character of public/private views.	None.	Removal of Category U feature or understory shrubs with no street-scene contribution may be appropriate.
Negligible	Minor material changes unlikely to be at detriment to tree health, structure or the character of public/private views.	None.	Removal of several low-quality (C1, C2, C3) features/understory tree or shrub with no or limited public amenity value.

Magnitude	Definition	Typical Residual Effect*	Illustrative triggers**
Low	Canopy or roots impacts which do not meet the definitions of 'high' or 'moderate' and are unlikely to have a long-term impact on the condition of the arboricultural feature/s, with only a localised reduction in visual amenity.	< 5 yrs with normal management; mitigation feasible to limit impacts, no reduction in BS5837:2012 category. Compensatory planting recommended.	≤20% RPA incursion by low-impact surfacing or excavation to a low-quality feature; removal of visually prominent low quality C1 (individual) features and/or complete loss or >40% canopy loss from low quality groups or woodlands (C2, C3).
Moderate	Substantial canopy or root impacts that could lower retention value of the feature or result in the loss of arboricultural and biodiversity resource.	Mid-term (15+ years) but ultimately recoverable deficit if recommended mitigation succeeds. Compensatory planting essential.	≤20% RPA incursion by low-impact surfacing or excavation to moderate-quality features (B1, B2, B3); loss of Category B1, B2, B3 features screened from wider public views.
High	Major adverse change impacting long-term viability or pronounced degradation of arboricultural, amenity and biodiversity value. Irreversible loss of key arboricultural assets (Category B1, B2, B3 and A1, A2, A3) that conflicts with national and local planning policy objectives or statutory conservation designations.	Long-term (25+ years) deficit even with best-practice mitigation and compensation; could be grounds for refusal.	>20% RPA incursion to a retained feature requiring extensive mitigation measures; removal of several visually prominent Category B1, B2, B3 features; removal of one or more Category A1, A2, A3 features.

**Residual effect = condition/amenity level after the mitigation specified (replacement planting, no-dig cellular-confinement paths, etc.). **Indicative only.*

Arboricultural Features to be Removed and Retained

6.5.2 It is recommended that 1no. low quality (Category C) hedge (H1) is removed to facilitate the Proposed Development. The loss of H1 is necessary to accommodate the new parking bays and soft landscaping provision.

6.5.3 H1 is a planted hedge encircling an existing LPG-tank, positioned within the Site and obscured from view. The impact on visual amenity from its removal is assessed as ***negligible***, owing to its relatively small size, and as such, would not be considered a significant impact of the Proposed Development. The loss of H1 can be effectively mitigated through replacement planting within a relatively short timeframe. The Proposed Site Plan demonstrates that new native hawthorn hedgerow mix planting will be incorporated into the scheme, along with new tree planting.

6.6 Direct Impacts to RPAs of Retained Arboricultural Features

Installation of New Car Parking Bays

6.6.1 The default position under BS5837:2012 is for all permanent and temporary structures to be positioned outside the RPAs of trees to be retained. This extends to earthworks, including cut-and-fill operations, excavation and trenching works. Where incursion is unavoidable its extent shall be reduced to the lowest practicable level (para. 5.3.1). BS5837:2012 further states that such incursion *"should not exceed 20% of any existing unsurfaced ground within the RPA"*. In general, in general, excavation of soils within an RPA should be avoided as this poses the greatest risk to root severance.

6.6.2 The principal arboricultural impact arising from the Proposed Development relates to localised construction of new car parking bays within the calculated RPAs of moderate-quality trees T4 and T5. These bays will extend into the RPAs by <3% of the total RPA area. Most of the water and nutrient uptake occurs via fine, non-woody (<25mm fibrous) roots and associated mycorrhizae, which are sensitive to changes in soil structure, moisture and aeration. Traditional groundworks including construction of new hard surfacing which involves excavation of soils for a subbase, will likely encounter roots of varying diameters and the presence of woody roots of arboricultural significance (*syn. Structural roots >25mm diameter*)[5] cannot be entirely discounted.

6.6.3 To reduce the risk of avoidable root damage and associated physiological or structural effects on T4 and T5 and mitigate compaction of soils, the new parking bays within RPAs shall be constructed using a no-dig methodology in accordance with the principles set out in BS5837:2012. This will comprise a load-distributing cellular confinement system (e.g. three-dimensional grid or similar) installed above existing ground levels, thereby avoiding excavation and preserving soil structure and root integrity.

6.6.4 This type of construction will:

- Be installed on top of a geotextile membrane laid directly onto existing ground.
- Avoid reduction in existing soil levels.
- Utilise permeable, clean angular aggregate infill to maintain soil aeration and water infiltration.
- Include edge restraint solutions that do not require intrusive foundations/footings within the RPA.
- Be finished with a permeable wearing course.

6.6.5 A site-specific Arboricultural Method Statement (AMS) has been provided at Section 7.0. Subject to these controls, the risk of significant harm to T4 and T5 is assessed as ***moderate to low.***

Installation of Fence and Gateposts within RPAs

6.6.6 Proposed gateposts required for the 1500mm timber double cross field gate within the RPA of T2 will be required. In line with BS5837:2012 Clauses 6.2.4 and 7.2, post-holes are to be dug by hand using hand tools only (spades, trowels or, where the ground is compacted, an air-spade). Each hole should be no wider than 225mm and approximately 600mm deep; if a single root >25mm is encountered the hole must be relocated, and the root retained intact with a clean, flush pruning cut only where relocation is not possible.

[5] Hirons, Andrew D. Thomas, Peter A., 1957 (2018). Applied Tree Biology. West Sussex: John Wiley & Sons Ltd. 411. Pg. 146

6.6.7 Concrete footings are to be poured as a dry mix to limit leachate. Mix additives containing plasticisers or sulphates are prohibited, and concrete must be kept a minimum of 100mm clear of any cut root faces; where closer proximity is unavoidable, a damp-proof membrane shall be inserted as a barrier.

Installation of New Underground Services and Utilities

6.6.8 No detailed service plans have been shared, nor do the referenced drawings demonstrate any new services or utilities. Where possible, new services should be placed beyond RPAs of retained trees and hedges. It is worth noting that no trenching is currently shown to be routed through RPAs and the arboricultural impacts arising from this are considered ***negligible.***

6.6.9 If it becomes apparent that services are required inside the perceived RPAs of retained trees, a more thorough study of the arboricultural impacts will be necessary and the AMS at Section 7.0 will be subject to revision.

6.7 Anticipated Indirect Impacts from the Proposed Development

Removal of LPG Tank/Oil Concrete Subbase

6.7.1 The uplift of any existing concrete subbase/footings used as staging for the existing tank poses a risk of damaging the rooting environment of T7 if it is not carried out sympathetically, using hand-tools only. Further, the breaking out of concrete risks contaminating the RPAs of retained trees and hedges (included perceived rooting areas within the CEZ and soils beyond). Spilt solid or liquid chemicals that reach RPAs can kill existing roots and will result in long-term and potentially irreversible damage or death of trees. It is essential that measures are in place to minimise the risk of soil contamination.

6.7.2 The AMS at Section 7.0 sets out an appropriate working methodology to be adhered to throughout demolition (site clearance) and construction.

Demolition of the Existing Hayloft

6.7.3 Prior to the demolition of the existing hayloft, it is recommended that Tree Protection Fencing (TPP) is erected in the positions shown on the TPP at Appendix 3. The existing access and driveway to the northeast of the Site (adjacent to T7) should be used for construction traffic and passage of materials.

6.8 Above Ground Constraints and Considerations

6.8.1 The above ground constraints predominantly refer to the impact of the crown or canopy of any retained tree/s and hedges on the Site either by size and form, shading, and nuisance factors. The above ground constraints imposed by trees should be considered in relation to the following:

- The crown's extent and its relationship to any structures. The primary consideration should be whether there will be enough space to prevent branches from damaging structures, post-construction, or increase the likelihood of unnecessary tree pruning to abate a nuisance.
- The proportion of open space beneath the crown and if this will obstruct construction access or on-site activities and is it adequate for the passage of both vehicles and pedestrians.
- Seasonal nuisance (e.g., leaf fall blocking gutters, fruit fall creating slippery patches and honey dew dripping on vehicles and surfaces).

6.8.2 The principal tree shadow constraints are shown on the TCP at Appendix 3. These shade arcs have been plotted in accordance with BS5837:2012, using a radius equivalent to the current height of the trees to represent the area shaded from North-West to East. These arcs identify where the availability of natural light may be restricted, informing the sustainable orientation and design of the Proposed Development, mitigating potential future pressure for tree removal or heavy pruning due to excessive shading.

6.8.3 Shade cast from retained trees poses little impact to the Proposed Development with the buildings and main inhabited spaces lying south of the trees. As such, shade influence wouldn't be seen as a significant constraint to any development, nor would it be recommended that further tree losses are incurred to negate the level of shade cast.

6.8.4 Further, while shade is identified as a constraint, the potential for shading should be balanced against the significant microclimatic benefits provided by the canopy. In accordance with BS5837:2012 (Para 5.3.4, Note 1), tree shade can be functionally advantageous, reducing the requirement for mechanical cooling in buildings, whilst providing essential sheltered "cool spots" during peak summer temperatures.

6.8.5 Alongside considering the effects from retained trees, the Proposed Development needs to also consider new tree planting which will form an integral part of any new development. Proposals for new tree planting should be appropriate for the future use of the site and not just aim to improve the existing tree population. Careful consideration would need to be given to the following:

- Ultimate height and canopy spread
- Tree form and habit
- Density of the crown
- Potential shading effect
- Foliage colour
- Water demand in relation to soil types
- Ongoing maintenance requirements

6.8.6 It may be appropriate on certain built elements (properties, buildings, garages, etc) of the development to use gutter guards, or otherwise enclosed gutters, to minimise the potential for leaf fall to cause blockage and an ongoing nuisance, therefore mitigating future pressures to prune or unnecessarily remove trees.

Tree Surgery and Tree Works (Preliminary Specification)

6.8.7 1no. hedge is recommended for removal. No facilitation pruning is considered necessary to facilitate the Proposed Development. A preliminary specification of tree works is provided in Table 7.

Table 7 Preliminary Tree Works Specification

Tree Reference No.	Description of Tree Works	Reason	BS5837:2012 Category	Statutory Constraints
H1	Fell to ground level and remove stumps.	To facilitate the construction of the Proposed Development.	C2	None

6.8.8 All tree works undertaken must comply with *British Standard 3998:2010 – Tree Work Recommendations* and should therefore be carried out by skilled tree surgery contractors, ideally Arboricultural Association Approved Contractors.

6.8.9 Pruning should be restricted to essential works only to minimise the creation of open wounds, which serve as primary entry points for decay-causing pathogens and fungal spores. Ideally, works should be scheduled during the winter dormancy period or mid-summer. Pruning during autumn is discouraged, owing to increased fungal spore counts and reduced wound-closure activity which increase the risk of infection.

6.8.10 All vegetation and, particularly, woody vegetation proposed for clearance, must be removed outside of the bird-breeding season (March - September inclusive). Birds are protected under the Wildlife and Countryside Act, 1981 (as amended) whilst on the nest. If this is not practicable, a qualified Ecologist should inspect the vegetation to be removed or pruned for the presence of nesting birds. An ecological consultant should be consulted to ensure correct procedures are followed.

6.8.11 Consideration should also be given to roosting bats which are protected by Regulation 43 of The Conservation of Habitats and Species Regulations 2017 (as amended). Reference should be made to any ecological reports commissioned and where bat roosting potential has been identified within the trees within the Site, an ecological consultant should be consulted.

6.9 Landscaping and Green Infrastructure Provision

Hard and Soft Landscaping

6.9.1 No formal proposal for soft landscaping has been provided at the time of writing this assessment. However, the Proposed Site Plan demonstrates several new trees, wildflower meadow areas, and new hedges. These proposals will help to enhance landscape amenity, increase tree and canopy cover in the local treescape, and enhance biodiversity of the Site.

6.9.2 It is recommended that a planned and coordinated approach to the management and upkeep of the development's soft landscape elements is formalised. This will guarantee the successful establishment of new vegetation and tree cover and, where practical, the integration of the existing trees into the surrounding landscape.

6.9.3 Along with native planting, additional ornamental species are proposed. These species will enhance the urban environment by increasing biodiversity while also adding visual amenity. The careful selection of diverse trees will provide benefits such as seasonal colour, wildlife encouragement, enhanced screening of vistas or structures from adjoining public highways and reinforcing others.

6.9.4 New trees must be sited to ensure that they do not encroach upon or obstruct overhead power lines and telecommunications cables. To prevent future infrastructure conflicts, any underground apparatus should be ducted or otherwise protected at the time of construction to enable trees to be planted without resulting in future conflicts.

6.9.5 Any new trees to be planted should be specified according to the recommendations in *BS 8545 (2014) Trees: from nursery to independence in the landscape –Recommendations*.

7. Arboricultural Method Statement (AMS)

7.1.1 This AMS describes the arboricultural protection measures identified as necessary for the protection of retained trees as part of the Proposed Development. It presents, in principle, the arboricultural protection measures which are appropriate to the intensity of the works, and which will be applied during demolition and construction. Reference should be made to the TPP provided at Appendix 3.

7.2 Scope of this Arboricultural Assessment

7.2.1 The scope and level of detail included within this AMS is as follows:

- Provide an AMS outlining how retained trees will be protected and managed during on-site construction activities.
- Provide a detailed TPP that illustrates details and specifications on tree protection measures.

7.3 Implementation, Commitments and Limitations of the AMS

Key Project Contacts

7.3.1 Table 7 provides details of the names and roles of individuals involved in this project.

Table 8 Key Contacts from the Project Team

Contact Name	Company	Role	Contact Number
Callum Throw	Arb Innovators Ltd	AMS Principal Author	07837 794373
Pip Smith	Julian Owen Associates Architects	Architect	0115 922 9831
Nuttall Property Investments Ltd		Client	TBC

Construction Commitments

7.3.2 The details and requirements of this AMS include commitments to complete the construction phase in a specific manner. This AMS will inform the production of all relevant tender documents and/or contractor instructions. These commitments are essential to ensure the planning conditions can be discharged in full.

7.3.3 Failure to follow the correct sequence, manner, methods, and timing of operations outlined in this AMS may result in irreversible tree damage and eventual death, of retained trees protected by planning law. Irresponsible tree damage or removal may result in a stop notice or prosecution by the LPA.

Client and appointed Principal Contractor Responsibilities

7.3.4 The Client and their appointed Principal Contractor are responsible for ensuring that the Site works, and subsequent construction of the Proposed Development follow the measures detailed within this AMS.

7.3.5 The Client is to appoint a suitably qualified arboriculturist to act as an ACoW. The ACoW will be engaged to monitor and oversee the implementation of protection measures and supervision of works within RPAs, where deemed necessary, as set out in this AMS.

7.3.6 The Client and Principal Contractor have a responsibility to ensure that works at the Site comply with current legislation in respect of protected trees, as well as to ensure that works at the Site comply with any planning obligations/conditions given.

7.3.7 The Principal Contractor will be responsible for ensuring that all site personnel are made aware of the requirements of this AMS and that any future amendments are known and understood. The purpose of tree protection measures should be understood and well-considered from the start. They are enforced to protect trees to be retained within and adjacent to the Site while allowing adequate access for the implementation of the Proposed Development.

7.3.8 This AMS and the accompanying TPP should be printed in full colour. Copies of the approved AMS will be available onsite, the requirements of which will be incorporated into all relevant site management documents and site induction procedures.

7.4 Limitations of the AMS

7.4.1 The AMS is for the sole use of the Client and its reproduction or use by anyone else is forbidden unless written consent is given by the author.

7.4.2 This AMS is only concerned with arboricultural issues pertaining to the referenced location, development and referenced documentation outlined in Table 5 at Section 6.3.

7.4.3 The TPP has been produced without reference to a Topographical Survey. The positions of all trees are approximate only.

7.4.4 The correct sequence, manner, methods, and timing of operations outlined in this AMS are not absolute. The timetables outlined in Table 8 of this AMS are subject to change and are based on all preliminary information available at the time of writing. As a result, the AMS processes may need to be reviewed and modified as needed.

7.4.5 Any changes in ground level or excavations near tree roots that are not specified in this AMS may have a negative impact on the stability and physical condition of the retained trees, necessitating additional assessments and protection measures.

7.4.6 This is an AMS and as such no reliance should be given to comments relating to buildings, engineering, or soil. Further, this report does not consider ecological or archaeological issues, or any other matter beyond the assessment of the trees.

7.5 Sequence of Works

7.5.1 Effective tree protection can only be achieved by adherence to a logical sequence of works combined with effective arboricultural monitoring. It is anticipated that arboricultural tree protection measures will require a degree of pre-planning so that conflicts with earthworks and construction activities can be avoided.

7.5.2 The sequence of works will need to remain dynamic throughout the project to respond to resource availability and external factors beyond the control of all parties. For this site, arboricultural input will be needed for the operations outlined in Table 8.

Table 9 Anticipated Phase of Works and Tree Protection Methodology

Phase/Timing	Trees and hedges Affected	Brief Summary of Works	Section/Appendix to Reference
PRE-COMMENCEMENT Prior to any demolition works commencing		Pre-commencement Site meeting between the Client, and the appointed ACoW to agree protective measures, as described in this AMS. Implement reporting process for all unforeseen arboricultural incidents and implement use of progress sheet to build up evidence base of good practice on-site.	7.6
PRE-COMMENCEMENT Prior to any Site works commencing	H1	**Fell, remove stumps and arising**. Precise timing to be agreed.	6.8.7
PRE-COMMENCEMENT Prior to any Site works commencing	All retained trees subject to this assessment	**Installation of barriers to act as Tree Protection Fencing (TPF),** as specified within this AMS. TPF is to be installed prior to work commencing. Precise timing for installation to be agreed as part of a pre-commencement Site meeting with the appointed Contractor. The appointed ACoW will request photographic evidence to ensure that all protection measures are in place as per the AMS.	7.8.4
DURING CONSTRUCTION Installation of no-dig, above ground construction	T4, T5	Installation of new parking bays. A methodology for this is provided at the relevant section of this AMS. The ACoW should be on hand to oversee the installation, where deemed necessary.	7.10 7.6

Phase/Timing	Trees and hedges Affected	Brief Summary of Works	Section/Appendix to Reference
DURING CONSTRUCTION Uplift of concrete footings (LPG tank)	T7	Cautious approach to construction to be adhered to.	7.9
DURING CONSTRUCTION Installation of new timber fencing/gateposts	T2	Hand tools and hand-digging only to erect the fencing within RPAs of retained trees. The use of machinery within the indicated CEZ is prohibited. A methodology for this is provided at the relevant section of this AMS.	7.11
POST CONSTRUCTION	All protected trees	**Remove TPF once construction works have been completed and there is no risk of damage to retained trees.** Annual post-construction tree inspection for a period of no less than 2 years.	7.8

7.6 Arboricultural Clerk of Works (ACoW)

The Role of an ACoW

7.6.1 The Client or Principal Contractor will appoint a suitably qualified arboriculturist to act as an ACoW. The ACoW will be engaged to monitor and oversee the implementation of the works required. The ACoW will:

- Be aware of their arboricultural responsibilities.
- Have the authority to stop any work that is causing or has the potential to cause harm to any retained tree.
- Be responsible for ensuring that all site operatives are aware of their responsibilities toward retained trees and the consequences of any failure to observe those responsibilities.

7.6.2 The following occasions are where the ACoW will be required:

- **Initial meeting** (usually referred to as the pre-commencement meeting) to discuss any required amendments with the Contractor and representatives of the Project Team. This will be held virtually.

- **Audit the implementation and installation of tree protection measures** as outlined in this AMS and as indicated on the TPP provided.
- **Provide supervision of works, where necessary, during the installation of no-dig construction** within the RPAs of T4 and T5. At a minimum, request photographic evidence of compliance with the AMS.
- **Provide ad hoc arboricultural support** for all unforeseen arboricultural incidents.

7.6.3 The ACoW will also be the first contact for arboricultural advice for any issues that arise that are not detailed in this AMS, such as additional tree works, work required within the RPA of the retained trees on-site, any damage that has occurred to any of the retained trees, or any breach of the tree protection measures on-site.

Pre-commencement Site Meeting

7.6.4 A Pre-commencement Site Meeting will be undertaken with the client, appointed Principal Contractor, and the ACoW prior to any on-site works commencing. The purpose of this meeting will be to ensure that all aspects of the tree protection measures are clear and understood and that any future sequencing and supervisory arrangements are agreed.

7.6.5 The key matters to be addressed include:

- Identification of persons present and exchange of contact information.
- Familiarisation with all aspects of the AMS.
- Familiarisation with the Site in relation to the AMS.
- Installation of TPF.
- Installation of no-dig, above ground construction.

7.6.6 The details and key discussion points from this meeting will be recorded in writing so it can be circulated to all interested parties and provided upon request to the LPA Tree Officer as evidence that the meeting has occurred and that specified matters have been addressed.

Ongoing Toolbox Talks

7.6.7 The Principal Contractor will be responsible for providing a toolbox talk to any on-site operatives following the meeting. The purpose of this toolbox talk will be to inform the operatives of how to ensure protection of all retained trees.

7.6.8 The toolbox will be repeated by the Principal Contractor when new external trades/contractors commence work on site. The toolbox talk shall focus on informing contractors on the following topics:

- The protection of trees is a requirement of planning approval and failure to comply could result in in stop notices being applied or fines.
- How trees can be harmed on development sites.
- Discussion on methods of working near the trees as outlined in this Method Statement.
- How to report an issue before it becomes a problem.

7.6.9 Evidence of the toolbox being carried out shall be recorded.

Progress Reporting

7.6.10 During the construction, a record of completion for the various tree protection measures will be kept between the Principal Contractor and ACoW. This may include phone and email contact with the Principal Contractor, Site visits and direct monitoring of sensitive works, where required.

7.6.11 Where requested, these reports will be provided to the Local Planning Authority with sufficient evidence to demonstrate that all practicable steps have been taken to prevent damage to the trees, thereby ensuring compliance to the Planning Approval/Conditions.

7.7 General Tree Protection Guidance

General Requirements and Protection Measures for Retained Trees

7.7.1 During construction, retained trees within influencing distance of the proposed works must be adequately protected. The tree-protection measures will adhere to the recommendations in BS5837:2012.

7.7.2 Typically, this protection will include the installation of mandatory tree protection barriers at the extent of the calculated RPAs. When barriers are installed, the enclosed area is designated as a Construction Exclusion Zone. Barriers will be erected prior to the start of any demolition and/or construction work unless they already exist.

Site Compounds, Portakabins, Containers, and other Temporary Structures

7.7.3 Site compounds, Portakabins, Containers, and other temporary structures must be sited away from trees.

7.7.4 Where spatial working room is limited, site compounds, portakabins, containers, and other temporary structures may be used in root protection areas if prior consent is obtained from the acting local planning authority. Prior to installation, the method for installing the buildings and an assessment of whether temporary ground protection is required must be agreed upon and specified with the project ACoW.

Ongoing Arboricultural Monitoring of Retained Trees

7.7.5 Any trees that are to be retained and have the potential to be impacted by construction works should be routinely monitored both during and after construction.

7.7.6 The goal of arboricultural monitoring is to ensure that all tree protection measures are fit for purpose, that they are implemented in accordance with any approved details, and that any previously unforeseen arboricultural issues are quickly identified and appropriately addressed. This is particularly relevant where there is public access, as recommended in *section 8.8.3 of BS5837:2012 - Post Development Management of Existing Trees*, to satisfy the landowner's duty of care.

7.8 Project Specific Tree Protection Measures and Requirements

Tree Protection Fencing (TPF)

7.8.1 TPF and barriers are used to protect trees to be retained. The TPF will be robust enough to restrict being breached from the type of demolition and construction activity taking place on Site and suitable for the degree and proximity of works to retained trees.

7.8.2 Once erected, the TPF will remain in-situ until all construction activities are complete. Barriers to be installed must be periodically inspected to ensure that they remain fit for purpose and, where required, maintained, or improved throughout the duration of demolition and construction activities on Site.

Establishing a Construction Exclusion Zone (CEZ)

7.8.3 For this project, the CEZ is defined as the areas of the RPAs beyond the working area which are to be fenced off or the areas of ground where existing incursions are to be left unaltered. The following must be carefully followed when planning site operations:

- No materials, machinery, temporary structures, chemicals, or fuel shall be stored within the CEZ.
- Unless explicitly outlined in this AMS, excavations or increases in soil level are not permitted within the CEZ without prior written approval from the ACoW and acting LPA.
- It is critical to avoid injurious contact with retained trees with wide or tall loads or plants equipped with booms, jibs, and counterweights. Any plant transit or traverse near trees should be supervised by a banksman or similar, to ensure adequate clearance from trees is always maintained.
- No parking/use of tracked or wheeled machinery or vehicles of any description.
- Concrete mixing, diesel oil, and vehicle washing are examples of materials that should not be discharged within 10 metres of tree stems (see Section 7.8).
- Fires must not be lit in such a way that their flames can reach within 5m of foliage, branches, or a trunk/stem. Consideration should be given to the size of the fire and the direction of the wind.

TPF Specification

7.8.4 To protect retained, a rigid wire mesh, metal fencing panel (Heras™ HSG151) as shown in Figure 1 should be used. It is considered appropriate to use rubberised feet/blocks pinned into the ground with metal rebar, or similar, over vertical poles driven into the ground. Line marking spray should be used to mark the position of the rubber feet making it easier to identify if the TPF has moved from its agreed position.

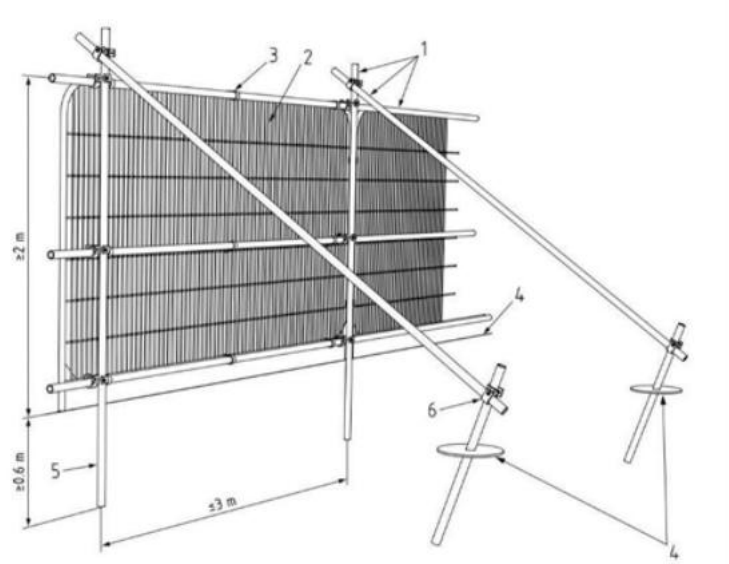


Figure 1 Protective fencing recommendations taken from figure 2 of BS5837:2012

7.8.5 The fencing should be affixed with visible, all-weather signs (provided as part of this AMS) to the protective fencing with the following "Construction Exclusion Zone - No Access". These signs shall be laminated to ensure they last the duration of the construction works and shall be fixed to the fencing panels every 5-10m along its length. A copy of appropriate signage has been provided to the client.

Removing Tree Protection Fencing and Temporary Ground Protection

7.8.6 Following the completion of construction works (post-development), the TPF will be carefully removed to avoid causing root disturbance. It is imperative that the RPAs are still respected, and that no machinery is used to remove or transport the TPF away from the immediate area.

7.9 Uplift of Grey Infrastructure (Subbases) and Concrete Footings

Working Methodology

1. Toolbox talk to all contractors as part of site inductions.
2. Commence with breaking out the concrete subbase and concrete footings for the tank using powered hand tools only.

   Note a. Any tree roots encountered which measure **<25mm diameter** may be cut cleanly using hand tools only (secateurs) and only where necessary. The ACoW will provide guidance. Roots should be pruned to a suitable side shoot. Wherever possible, as much rooting density as possible must be retained.

   If tree roots are encountered that are **>25mm diameter** and with potential to be broken, stop excavation and consult the ACoW. Any roots with a **diameter >25mm encountered, shall be left in situ** and should be immediately wrapped with wet hessian whilst the excavation is open to mitigate against root desiccation. The contractor will photograph the nature and extent of the damage and contact the ACoW for advice.

   Note b. Where the ACoW deems that roots >25mm diameter cannot be severed, an alternative approach will be required, and the AMS will be amended. All conversations will be recorded for audit and compliance.

7.9.1 Soil contamination which could alter the physiological conditions and/or stability of retained trees and hedges is to be avoided. Throughout the process, pollution control measures should be mandated.

7.10 Installation of CellWeb® TRP cellular confinement system

7.10.1 New car parking bays will be installed within the RPAs of T4 and T5. These bays will be constructed using a no-dig construction, as demonstrated by a pink, honeycomb hatched area on the TPP at Appendix 3.

7.10.2 A no-dig construction methodology has been outlined for the CellWeb® TRP cellular confinement system, finished with a permeable surface suitable for light-vehicle loading. It is prepared in accordance with BS5837:2012 Section 7.4.2 Note 1 and Arboricultural Practice Note 12 (APN 12).

Recommended Materials and Equipment

- CellWeb® TRP panels: HDPE geo-cellular confinement modules (100mm depth).
- Non-woven geotextile ("Treetex" or equivalent): separation and filtration layer.
- Clean angular stone infill: 20–40mm graded, free-draining crushed aggregate.

- Permeable surface (asphalt, block paver, etc) to be agreed upon.
- Laying course: 5mm clean grit, BS882 compliant.
- Edge restraints: 50 × 150mm concrete channel units (BS 7263 Type EF) with C20 concrete bed & haunch.
- Hand-operated compaction plate to lightly tamp aggregate (no mechanical rollers within the RPA).

Methodology

7.10.3 All work is to be undertaken using hand-tools and low-load-bearing Micro Diggers sat atop existing areas of hardstanding or beyond the RPA of retained trees, using a pull-back technique. It is also appropriate to use larger high reach plant machinery with extendable booms if positioned outside of the RPA on the sections of driveway which are to be unmodified.

7.10.4 The following methodology should be used as a guideline and may need to be adapted as the work progresses.

3. Toolbox talk to all contractors as part of site inductions.
4. Carefully remove existing grassed areas/turf and surface vegetation by hand, storing topsoil outside the RPAs of retained trees.
5. Level surface by hand-digging to the depth of the chosen CellWeb® TRP module.

Note a. Any tree roots encountered which measure **<25mm diameter** may be cut cleanly using hand tools only (secateurs) and only where necessary. The ACoW will provide guidance. Roots should be pruned to a suitable side shoot. Wherever possible, as much rooting density as possible must be retained.

If tree roots are encountered that are **>25mm diameter** and with potential to be broken, stop excavation and consult the ACoW. Any roots with a **diameter >25mm encountered, shall be left in situ** and should be immediately wrapped with wet hessian whilst the excavation is open to mitigate against root desiccation. The ACoW will photograph the nature and extent of the damage and then prune back any torn ends using a sharp tool (such as secateurs/pruning saw) removing as little as possible and leaving a neat cut that is as small as possible.

Note b. Where it is deemed that roots >25mm diameter cannot be severed, an alternative approach will be required.

Additional Guidance: Levelling Minor Undulations

4. Use a clean, coarse “sharp” sand or grit (e.g. BS EN 13139-compliant 2–5mm aggregate) rather than fine masonry sand. This ensures good drainage and avoids creating a mortar like layer.
5. Limit the bedding layer to 25mm maximum. Thicker fills risk smothering roots and may lead to differential settlement.
6. Scatter the sharp sand evenly over the prepared soil (or geotextile, if already laid), focusing on hollows and low spots.
7. Use a straight edge (screeding bar or straight timber) to strike off the sand, working in one direction to achieve a uniform plane. Tamp very lightly by hand (not with powered plate) to bed in the sand without compaction of the underlying soil.

8. Once the surface is level, continue with geotextile placement, CellWeb® module installation and granular infill.
9. Lay Treetex non-woven geotextile across the prepared area, with a 300mm overlap between sheets, extending 500mm beyond the outermost modules. Secure overlaps with staples at 500mm centres.
10. Unroll panels to full length (8.1 m) and width (2.56 m), securing each corner and junction with J-pins at 500mm centres to create cells of 259 × 224mm fully tensioned.
11. Staple adjacent panels at every cell wall junction to prevent movement.

    Note c. For curved alignments, cut panels when flat, ensuring each remaining cell is complete.
12. Deposit 20–40mm clean angular stone directly into each cell, allowing free-fall to minimise disturbance below.
13. Overfill cells by 10mm to allow finishing; lightly tamp with a hand-operated plate until flush with surrounding geotextile. No mechanical compaction equipment shall enter the RPA.
14. Lay a 50mm bed of 5mm clean grit over the compacted CellWeb® TRP surface.
15. Install edge restraints: use timber boards or set concrete channel blocks on C20 concrete bed & haunch; embed geogrid ends 250mm into the concrete to lock the pavers.
16. Finish with the agreed upon porous wearing course.

7.11 Digging of Fence Post Holes within RPAs of Retained Trees

7.11.1 In line with BS 5837:2012 Clauses 6.2.4 and 7.2, post-holes are to be dug by hand using hand tools only (spades, trowels or, where the ground is compacted, an air-spade). Each hole should be no wider than 225mm and approximately 600mm deep; if a single root ≥ 25mm is encountered the hole must be relocated, and the root retained intact with a clean, flush pruning cut only where relocation is not possible.

Concrete footings are to be poured as a dry mix to limit leachate. Mix additives containing plasticisers or sulphates are prohibited, and concrete must be kept a minimum of 100mm clear of any cut root faces; where closer proximity is unavoidable, a damp-proof membrane shall be inserted as a barrier.

7.12 Ongoing Arboricultural Monitoring of Retained Trees

7.12.1 Any trees that are to be retained and have the potential to be impacted by construction works should be routinely monitored both during and after construction.

7.12.2 The goal of arboricultural monitoring is to ensure that all tree protection measures are fit for purpose, that they are implemented in accordance with any approved details, and that any previously unforeseen arboricultural issues are quickly identified and appropriately addressed. This is particularly relevant where there is public access, as recommended in section 8.8.3 of BS5837:2012 - Post Development Management of Existing Trees, to satisfy the landowner's duty of care.

8. Conclusions and Recommendations

8.1.1 This Arboricultural Impact Assessment (AIA) has been prepared for a Proposed Development at Chapel Farm, Windley Lane, Windley, Derbyshire in accordance with *BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations* (The British Standards Institution, 2012).

8.1.2 A survey of trees on the Site, including those within influencing distance, was undertaken on 04 November 2025 by Callum Throw of Arb Innovators to fulfil the requirements of BS5837:2012.

8.1.3 7no. individual trees (T1–T7) and 3no. hedges (H1–H3) were recorded. No groups or woodlands were identified and none of the recorded features were considered of high quality (Category A). Individual trees are dominated by silver birch (*Betula pendula* T2, T3, T4, T5, T6), with 1no. hawthorn (*Crataegus monogyna*) and Damson (T7). Hedges comprise Leyland cypress (H1) and mixed blackthorn and hawthorn (H2, H3).

8.1.4 It is recommended that 1no. low quality (Category C) hedge (H1) is removed to facilitate the Proposed Development. The loss of H1 is necessary to accommodate the new parking bays and soft landscaping provision. The impact on visual amenity from its removal is assessed as ***negligible***, owing to its relatively small size, and as such, would not be considered a significant impact of the Proposed Development.

8.1.5 The greatest constraint to the Proposed Development is presented by the nominal RPAs of moderate quality trees T4 and T5. To avoid unnecessary tree losses and minimise impacts to their RPAs, proposed car parking bays will be constructed using porous surfacing laid on top of a no-dig, “tree-friendly”, aboveground construction utilising a cellular confinement system.

8.1.6 The tree protection measures required specific to the development have been formally set out within the AMS at Section 7.0.



ARR INNOVATORS

TREE SURVEY METHODOLOGY

APPENDIX 1

#WEAREINNOVATORS

ARR INNOVATORS

TREE SURVEY
METHODOLOGY

BS5837:2012 Methodology

The tree survey was carried out with reference to the methodology set out in BS5837:2012 *'Trees in relation to design, demolition and construction – Recommendations'*.

The trees on the Site were originally surveyed without reference to site layout as detailed in paragraph 4.4.1.1 of BS5837:2012. However, for the purposes of the Arboricultural Impact Assessment the Proposed Development for the Site has been considered.

The survey includes all trees with an estimated stem diameter of 75mm or more measured at 1.5m above ground level that are located within the Site or that overhang the Site.

Trees were surveyed individually or as groups where it was considered that they had grown together to form cohesive arboricultural features either aerodynamically (trees that provide companion shelter), visually (e.g. avenues or screens) or culturally (including for biodiversity). However, where it was considered that there was an arboricultural need to differentiate between attributes trees within groups and / or woodlands were also surveyed as individuals.

Within the Tree Survey Schedule, each surveyed TREE (T), GROUP (G), HEDGEROW (H), WOODLAND (W). The tree numbers associated with each tree are cross referenced within the schedule and plans at Appendix 2 and 3 respectively. Metal tags have not been used for this survey as identification on-site does not require this.

Full details of the dimensions and measurements recorded including detailed definitions, can be found at Appendix 2.

Tree condition, health and structural integrity were inspected in accordance with the Visual Tree Assessment (VTA) method (Mattheck 2007), which provides a systematic framework for formal tree inspection, as summarised:

- VTA Stage 1 - Inspection of the tree for visual evidence of internal defects.
- VTA Stage 2 – Confirmation of defects and measuring their extent.
- VTA Stage 3 – Assessment of defects and estimation of residual strength.

Ancient Woodland, Ancient, Veteran and Notable trees

BS5837:2012 does not reference a methodology for identifying and recording ancient, veteran, or notable trees. While 'Veteran' is defined in paragraph 3.12 of BS5837:2012, neither 'Ancient' nor 'Notable' are mentioned. Due to the complexity and subjectivity of this subject, there are various methods for defining and classifying Ancient, Veteran, and Notable trees.

For this BS5837:2012 assessment, the methodology set out by the Woodland Trust (n.d.) (2024) Recognising and categorising ancient and other veteran trees has been adopted.

ARR INNOVATORS

TREE SURVEY
METHODOLOGY

BS5837:2012 Methodology

The Forestry Commission (FC) and Natural England (NE) have published guidance and recommendations to safeguard Ancient Woodland, Ancient, and Veteran trees against development. In summary this guidance advises on the use of semi-natural buffer zones as a means of protection with minimum distances identified as:

- Fifteen metres between any development and ancient woodland.
- Fifteen times the diameter of its stem or 5m from the edge of its canopy, if that's greater, around any ancient or veteran tree.

Stage 1: Tree Constraints & Feasibility Study - for most planning applications where there are trees on or adjacent to a site, an initial assessment of the tree population and tree constraints will be required. This should be instructed as early as possible in the planning process and includes:

- Tree Survey Schedule: Presents data collected during the tree survey which is made to identify & categorise all trees that may be impacted by a proposal.
- Tree Constraints Plan: Tree locations, retention categories and consideration of associated above and below ground constraints.
- Tree Constraints and Opportunities Assessment: A preliminary report written to inform the design and layout of future development of the site.

Stage 2: Arboricultural Impact Assessment & Outline Mitigation Measures. This will normally be required following a Stage 1 survey and report. Components will vary depending on design complexity, but may include:

- Arboricultural Impact Assessment (AIA): An assessment of the anticipated impact of the proposed development on the tree population (existing & proposed).
- Draft Tree Protection Plan (where appropriate): Indicative plan of tree protection measures.
- 'Heads of Terms' Arboricultural Method Statement: Outlines principles of the methodology required to mitigate impact on existing trees.

BS5837:2012 outlines guidance on how to assess an arboricultural feature's quality and advises on assessing both direct and indirect impacts. Neither a methodology for defining impacts nor specific criteria for determining an arboricultural feature's perceived sensitivity are provided.

Stage 3: Detailed Tree Protection & Discharge of Conditions. This is sometimes required following a Stage 2 report if the tree protection requirements are complex; or if there is a planning condition or reserved matters requirement to do so. The stage three report may include the following components:

- Detailed Tree Protection Plan (TPP).
- Arboricultural Method Statement (AMS): detailed methodology to include arboricultural supervision and site monitoring schedule (if required).

BS5837:2012 Methodology and RIBA Design Guidance

Stage 4: Arboricultural Supervision & Post-Construction. This may include:

- Written report as evidence of arboricultural supervision, site monitoring, reinstatement, and planting and aftercare (as required).

RIBA Design Guidance

The process is broken down to coordinate broadly with the key elements within both the RIBA Plan of Work (2013) and British Standard 5837:2012 as set out in the table below:

Information Stage	RIBA Stage	BS5837:2012
Stage 1: Tree Survey	2: Concept	4: Feasibility
Stage 2: Arboricultural Impact Assessment	3: Developed Design	5: Proposals
Sage 3: Arboricultural Method Statement and Tree Protection Plan	4: Technical Design	6: Technical Design
Arboricultural Supervision & Post-Construction.	5: Construction	7: Demolition and construction

A hierarchical methodology is implemented to optimise the utilisation of the site and the placement of built structures. The process is as follows:

Avoid: The initial step in Site layout design should seek to avoid the RPA of retained trees and ensure adequate clearance from above-ground constraints such as tree canopies.

Mitigate: Where intrusion within the RPA is unavoidable then its impact on the tree can be mitigated by specialist measures e.g. foundations that avoid trenching (screw piles, suspended floor slabs or casting at ground level for lightweight structures).

Compensate: replacement planting helps maintain continuous tree cover in cases where tree removal is necessary or preferred. In certain situations, off-site planting may be acceptable.



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BS5837 TREE SURVEY SCHEDULE

APPENDIX 2

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CORE SURVEY MEASUREMENTS

The core measurements taken and the standardised categories used to classify a tree's age, health and structural integrity are demonstrated below.



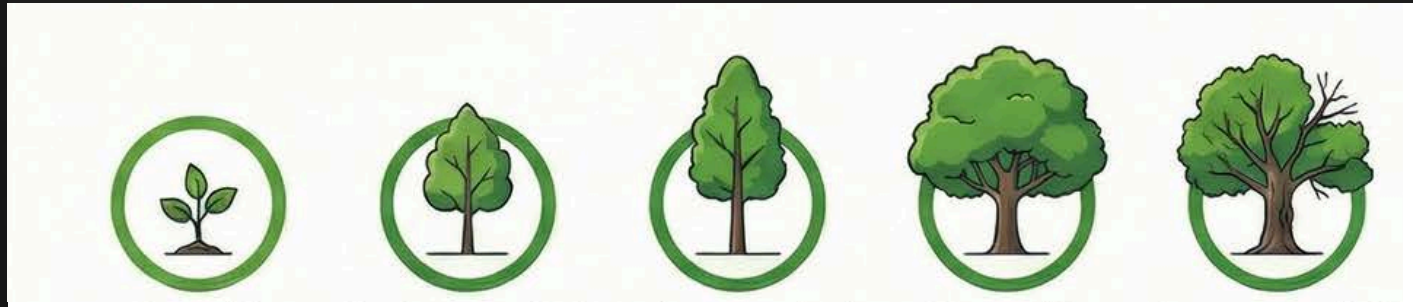
Tree Species
Common name (where available) followed by Scientific name.



Crown Spread
Given as an average diameter or measured using a distometer. North (N), east (E), south (S) and west (W).



Tree Height
Tree heights measured using a clinometer unless stated (*). Tree heights are given in metres (m) to the nearest half metre.



Young (Y)
Fast growth rate, apical dominance. < 1/3rd estimated life expectancy.

Semi-mature (SM)
Established specimen approaching 1/3 life expectancy.

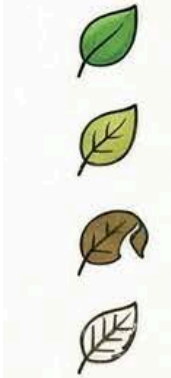
Early-mature (EM)
1/3 – 2/3 life expectancy, still increasing in height.

Mature (M)
Over 2/3 life expectancy. Full expected height, crown still spreading.

Over-mature (OM)
Increasing girth and hollowing, developing an irregular, complex crown structure.

Ancient (AT)
Centuries-long life stage, significant canopy retrenchment and increasing hollowing of bole

PHYSIOLOGICAL CONDITION (HEALTH AND VITALITY)



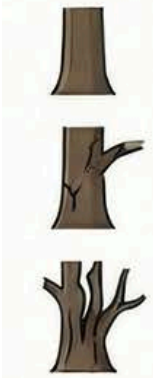
Good Generally in good vitality, characteristic of the species.

Fair Reasonable vitality with few signs or symptoms associated with ill-health, decline or fungal presence.

Poor Trees exhibiting symptoms of reduced vitality, ill-health or decline which are irremediable.

Dead Tree/s are dead, with no live growth.

STRUCTURAL CONDITION (INTEGRITY)



Good No obvious risk features or those of little overall significance.

Fair Identifiable but may remediable risk features. Possible confirmed presence of fungal fruiting bodies.

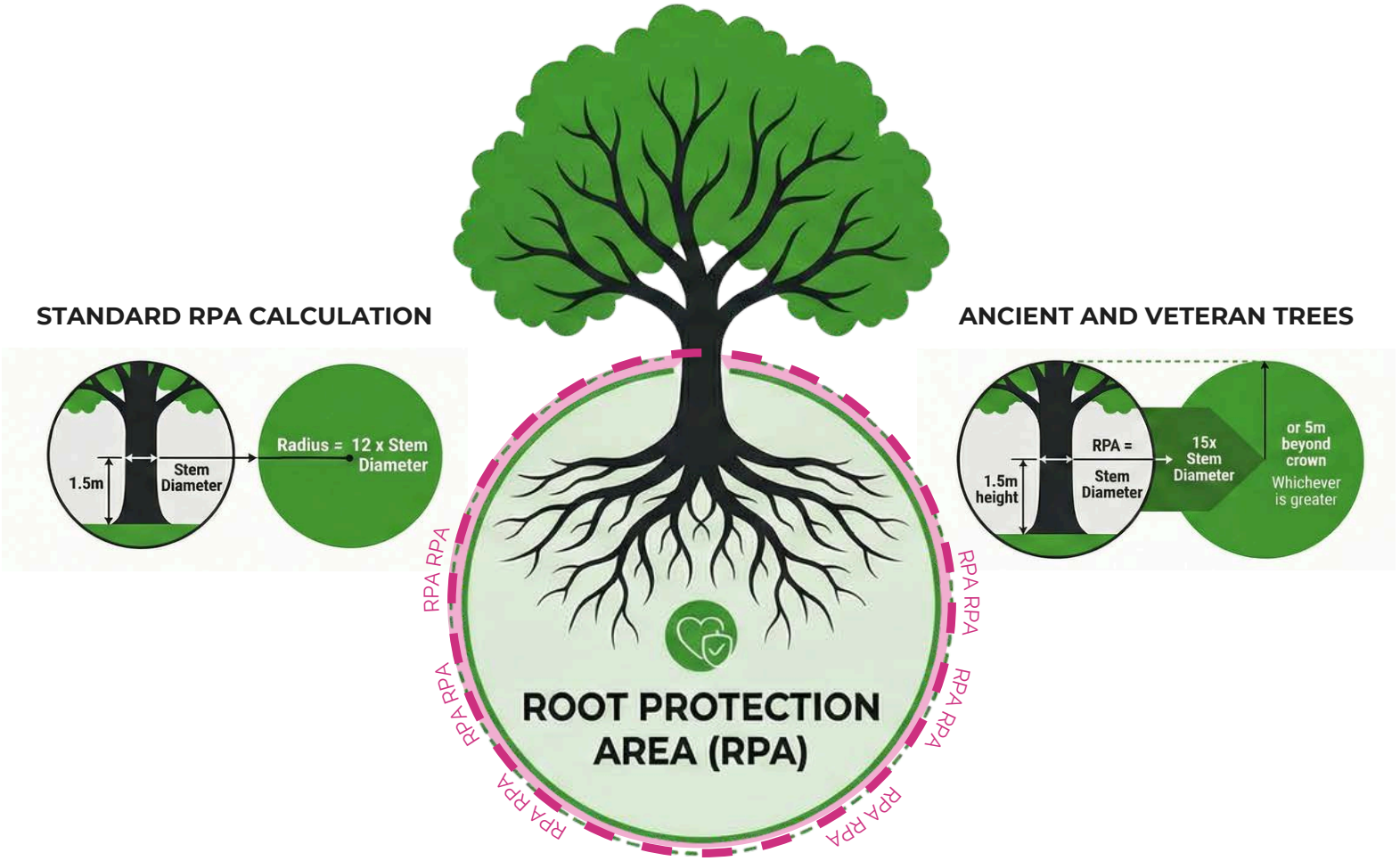
Poor Major risk feature of significance. Confirmed pathogenic decay fungi indicating presence of internal decay.

Dead Tree/s are dead, dying and have a severely compromised structural integrity.

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ROOT PROTECTION AREA (RPA) AND NOTES

A critical zone for protecting a tree's rooting environment during construction, as defined by BS5837:2012. For trees with more than one stem, one of two calculation methods should be used. In all cases, the stem diameter(s) should be measured in accordance with Annex C, and the RPA should be guided from Annex D of BS5837:2012.



Where veteran trees have been identified the RPA has been calculated in accordance with Natural England guidance i.e. 15x the stem diameter or 5m beyond the crown whichever is greater. An average stem diameter is provided for tree groups, wooded areas and hedges.

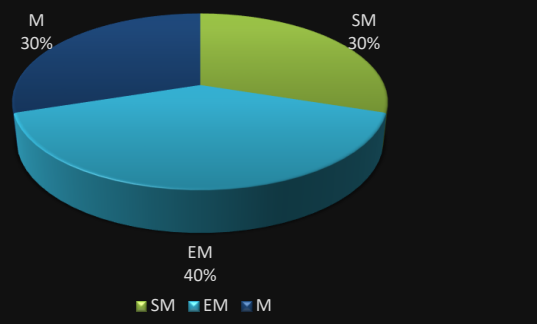
Both RPA radius in metres from the main stem and total area for the RPA as square metres are provided.

BS5837:2012 TREE SURVEY SCHEDULE

Survey Date: 04.11.2025

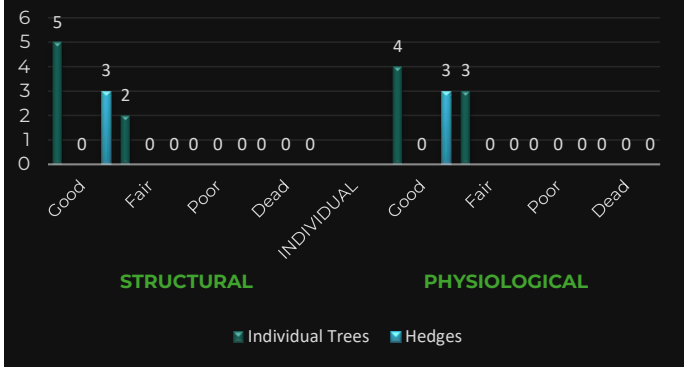
Age Distribution of the Tree Population.

The distribution of the tree populations age is useful for understanding expected longevity whch can help inform the BS5837 useful life expectancy, and help homeowners or property managers to make informed decisions on mitigation, tree management and replacement.



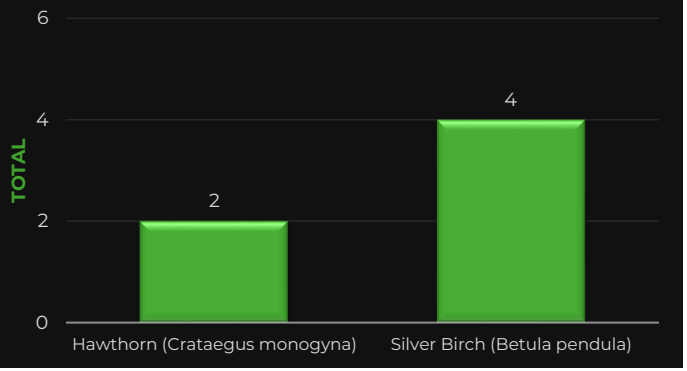
Distribution of Physiological and Structural Conditions across the Tree Population.

Physiological condition provides an indication of the vitality of the tree. Structural condition is related to the presence of defects that can lead to failures.



Species Composition of the Individual Tree Population.

The proportions of any given family, genus, species, and cultivar which make up the total individually recorded tree population across the Site.



Ancient Woodland and Ancient, Veteran and Notable Trees

Ancient Tree - A tree that has passed beyond maturity and is old, or aged, in comparison with trees of the same species. Characterised by biological, cultural, or aesthetic features of interest.

Ancient Woodland - Any wooded area that has been continuously wooded since 1600 AD

Veteran Tree - Exhibiting features of biological, cultural, or aesthetic value characteristic of species surviving beyond the typical age range.

Notable Tree - mature trees which may stand out in the local environment because they are large in comparison with other trees around them.

Forestry Commission and Natural England Guidance for the protection of ancient woodland, ancient trees and veteran trees from development and the use of semi-natural buffer zones:

- Fifteen metres between any development and ancient woodland.
- Fifteen times the diameter of its stem or 5m from the edge of its canopy, if that's greater, around any ancient or veteran tree.

ANCIENT WOODLAND	ANCIENT TREES	VETERAN TREES	NOTABLE TREES
0	0	0	0

ARR INNOVATORS

BS5837:2012 TREE SURVEY SCHEDULE

CATEGORY A	CATEGORY B	CATEGORY C	CATEGORY U
Trees with an estimated remaining contribution of at least 40 years. Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features.	Trees with an estimated remaining life expectancy of at least 20 years. Trees that might be included in category A, but are downgraded because of impaired condition or trees lacking the special quality necessary to merit the category A designation.	Trees with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm. Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	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.
Sub-categories	Mainly arboricultural value **1**	Mainly landscape value **2**	Mainly cultural or conservation value **3**

Summary of Individual trees, Groups, Woodlands and Hedges			
	T2, T3, T4, T5	T1, T6, T7, H1, H2, H3	
0	**4**	**6**	**0**

Estimated Remaining Contribution (ERC)			
> 40 years	**> 20 years**	**< 20 years**	**< 10 years**

Breakdown of Arboricultural Features for each BS5837:2012 Category							
Trees	**0**	Trees	**4**	Trees	**3**	Trees	**0**
Groups	**0**	Groups	**0**	Groups	**0**	Groups	**0**
Woodlands	**0**	Woodlands	**0**	Woodlands	**0**	Woodlands	**0**
Hedgerows	**0**	Hedgerows	**0**	Hedgerows	**3**	Hedgerows	**0**
Percentage of tree population	**0.0%**	Percentage of tree population	**40.0%**	Percentage of tree population	**60.0%**	Percentage of tree population	**0.0%**

In assigning the BS5837:2012 Category, particular consideration has been given to the presence of any structural defects for each feature, the size and form of each feature, its suitability within the context of a proposed development, and the location of each feature relative to existing site features e.g. its screening value or landscape amenity value.

INDIVIDUAL TREES																	
TREE NO.	TAG NO.	SPECIES (COMMON & SCIENTIFIC NAME)	HEIGHT (m)	NO. OF STEMS	STEM DIA (mm)	CROWN SPREAD (m) N	E	S	W	CROWN CLEAR (m)	AGE CLASS	PHYS COND	STRUC COND	ASSESSMENT OBSERVATIONS AND PRELIMINARY RECOMMENDATIONS	ESTIMATED REMAINING CONTRIBUTION (erc)	BS5837 CATEGORY	RPA (m^2)	RPA RADIUS (m)
T1	0	Hawthorn (Crataegus monogyna)	5	1	330	2	1	1.5	2	3.5	EM	Fair	Fair	Offsite tree, ditch at base, dead ivy attached to the stem. ; Compacted ground at the base, Measurements approximated, Sparse and/or thinning crown.	10+	C1	49.3	4.0
T2	0	Silver Birch (Betula pendula)	16	1	425	4	5.5	5	5	2	M	Good	Good	Compacted ground to the west from the existing farm access. ; Bark wounds noted, Compacted ground at the base, Light ivy cover, Low crown form, No major defects were noted.	20+	B1	81.7	5.1
T3	0	Silver Birch (Betula pendula)	9	1	145	2.5	2	1	2.5	1.5	SM	Good	Good	Exposed surface roots. Compacted ground to the west, existing farm access. ; No major defects were noted.	20+	B1	9.5	1.7
T4	0	Silver Birch (Betula pendula)	17	1	460	6	5.5	5.5	4	2	M	Good	Good	Compacted ground to the north from the highway. ; Characteristic for species, Compacted ground at the base, No major defects were noted.	20+	B1	95.7	5.5
T5	0	Silver Birch (Betula pendula)	11	1	300	3.5	4	4	2.5	1	SM	Good	Good	Existing highway to the north. ; Characteristic for species, Low crown form, No major defects were noted.	20+	B1	40.7	3.6
T6	0	Damson	0	7	75	3	3	3	1	0.5	EM	Good	Fair	Small tree. ; Measurements approximated, Multi leadered form from crown break.	10+	C1	2.5	0.9
T7	0	Hawthorn (Crataegus monogyna)	5.5	1	360	2	2	1	1.5	2	M	Fair	Fair	Compaction to the north and east from the existing access. ; Dense ivy cover on main stem impeded inspection, Established ivy cover.	10+	C1	58.6	4.3

HEDGES																	
TREE NO.	TAG NO.	SPECIES (COMMON & SCIENTIFIC NAME)	MIN HEIGHT (m)	MAX HEIGHT (m)	NO. OF STEMS	STEM DIA (mm)	CROWN SPREAD (m) N	E	S	W	CROWN CLEAR (m)	AGE CLASS	PHYS COND	STRUC COND	ASSESSMENT OBSERVATIONS AND PRELIMINARY RECOMMENDATIONS	ESTIMATED REMAINING CONTRIBUTION (erc)	BS5837 CATEGORY	RPA (m^2)	RPA RADIUS (m)
H1	0	Leyland Cypress (X Cuprocyparis leylandii)	2	2	1	50	0.5	0.5	0.5	0.5	0	SM	Good	Good	Characteristic for species. Maintained hedge.	10+	**C2**	1.1	0.6
H2	0	Blackthorn (Prunus spinosa), Hawthorn (Crataegus monogyna)	1	1	1	50	0.5	0.5	0.5	0.5	0	EM	Good	Good	Maintained hedgerow. Characteristic of the species.	10+	**C2**	1.1	0.6
H3	0	Blackthorn (Prunus spinosa), Hawthorn (Crataegus monogyna)	1	1.5	1	50	0.5	0.5	0.5	1	0	EM	Good	Good	Maintained hedgerow. Characteristic of the species.	10+	**C2**	1.1	0.6

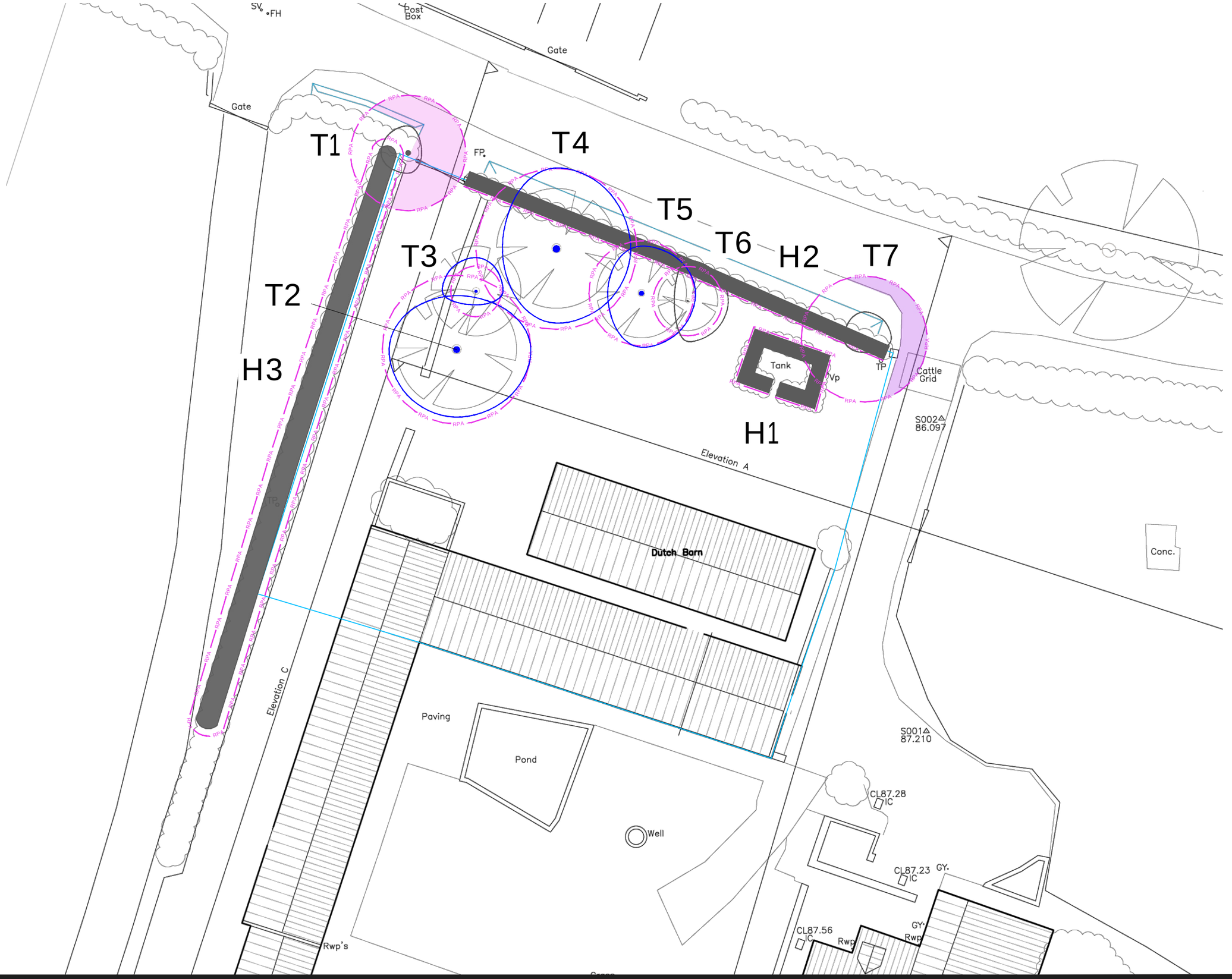


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ARBORICULTURAL PLANS

APPENDIX 3

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CLIENT.
Nuttall Property Investments Ltd

PROJECT NAME.
Chapel Farm, Windley Lane, Windley

PROJECT NO.
1155

NOTES.

This TCP is created as a design tool and does not make an assessment of the impacts or subsequent effects of the Proposed Development to trees. Therefore, the TCP must not be submitted solely to inform the planning application. This drawing should be viewed in conjunction with the accompanying BS5837:2012 Tree Survey Schedule.

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. This drawing was produced in colour - a monochrome copy should not be relied upon. This drawing was produced digitally using a combination of GIS, GPS and Topographical base mapping (.dxf) where provided. Arb Innovators Ltd cannot be held responsible for inaccuracies in the base drawing in which this plan is based.

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DRAWING TITLE.
Tree Constraints Plan

DRAWING NO.
251114 ARBI 1155 TCP V1

REVISION NO.
1

ARB INNOVATORS

DRAWN BY. CTT
DRAWN.

APPROVED BY. CTT
14.11.2025

SCALE AND BEARING.

N

Scale 1:250 @ A3

0 5 10 15m

BS5837:2012 CATEGORIES

In accordance with Table 1 – Cascade chart for tree quality assessment

Category B (Moderate Quality)
Category C (Low Quality)

SITE FEATURES AND EXISTING CONSTRAINTS

Arboricultural Study Area
Existing RPA Incursions

ARBORICULTURAL FEATURES.

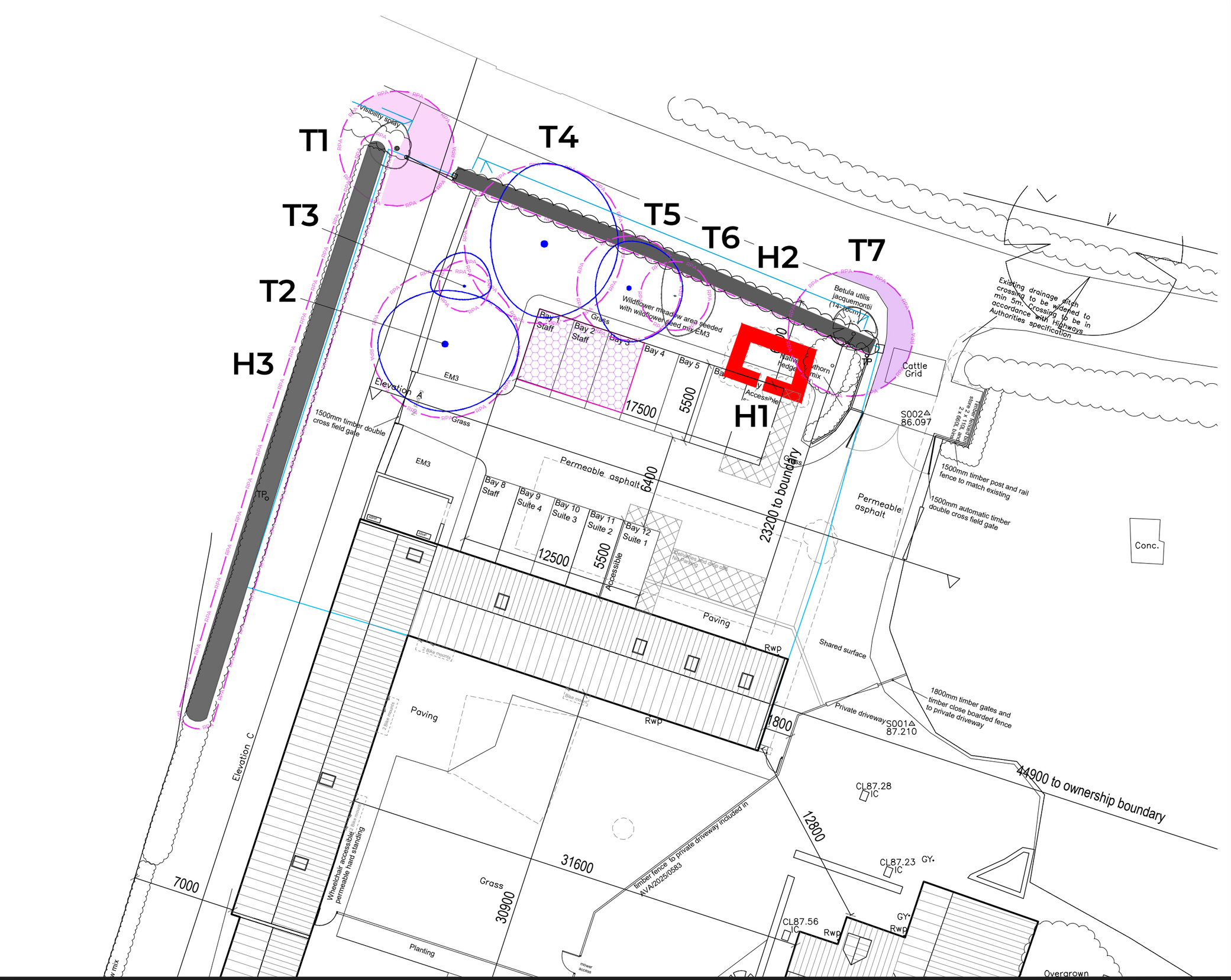
*Crown colour in accordance with BS5837:2012 Category. *In accordance with Ancient and other Veteran Trees: Further Guidance on Management.*

Individual Trees ("T" Prefix)

Indicative shade
Crown spread
Tree Stem
Root Protection Area (RPA)

Hedges ("H" Prefix)

Crown extents
Root Protection Area (RPA)



CLIENT. Nuttall Property Investments Ltd

PROJECT NAME. Chapel Farm, Windley Lane, Windley

PROJECT NO. 1155

NOTES.

This Tree Retention and Removals Plan (TRRP) is created as a design tool and makes an assessment of the impacts or subsequent effects of the Proposed Development to trees. This drawing should be viewed in conjunction with the accompanying BS58377:2012 Tree Survey Schedule and Arboricultural Impact Assessment (AIA) prepared by Arb Innovators Ltd.

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. This drawing was produced in colour - a monochrome copy should not be relied upon. This drawing was produced digitally using a combination of GIS, GPS and Topographical base mapping (.dwg) where provided. Arb Innovators Ltd cannot be held responsible for inaccuracies in the base drawing in which this plan is based.

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DRAWING TITLE. Tree Retention Removals Plan

DRAWING NO. 251114 ARBI 1155 TRRP V2

REVISION NO. 2

DRAWN BY. CTT **DRAWN.**

APPROVED BY. CTT 17.02.2026

SCALE AND BEARING.

N

Scale 1:250 @ A3

0 5 10 15m

BS5837:2012 CATEGORIES

In accordance with Table 1 – Cascade chart for tree quality assessment

- Category B (Moderate Quality)
- Category C (Low Quality)

SITE FEATURES AND EXISTING CONSTRAINTS

- Arboricultural Study Area
- Existing RPA Incursions

ARBORICULTURAL IMPACTS

- Features to be Removed
- New RPA Incursions
- Cellular Confinement Construction

ARBORICULTURAL FEATURES.

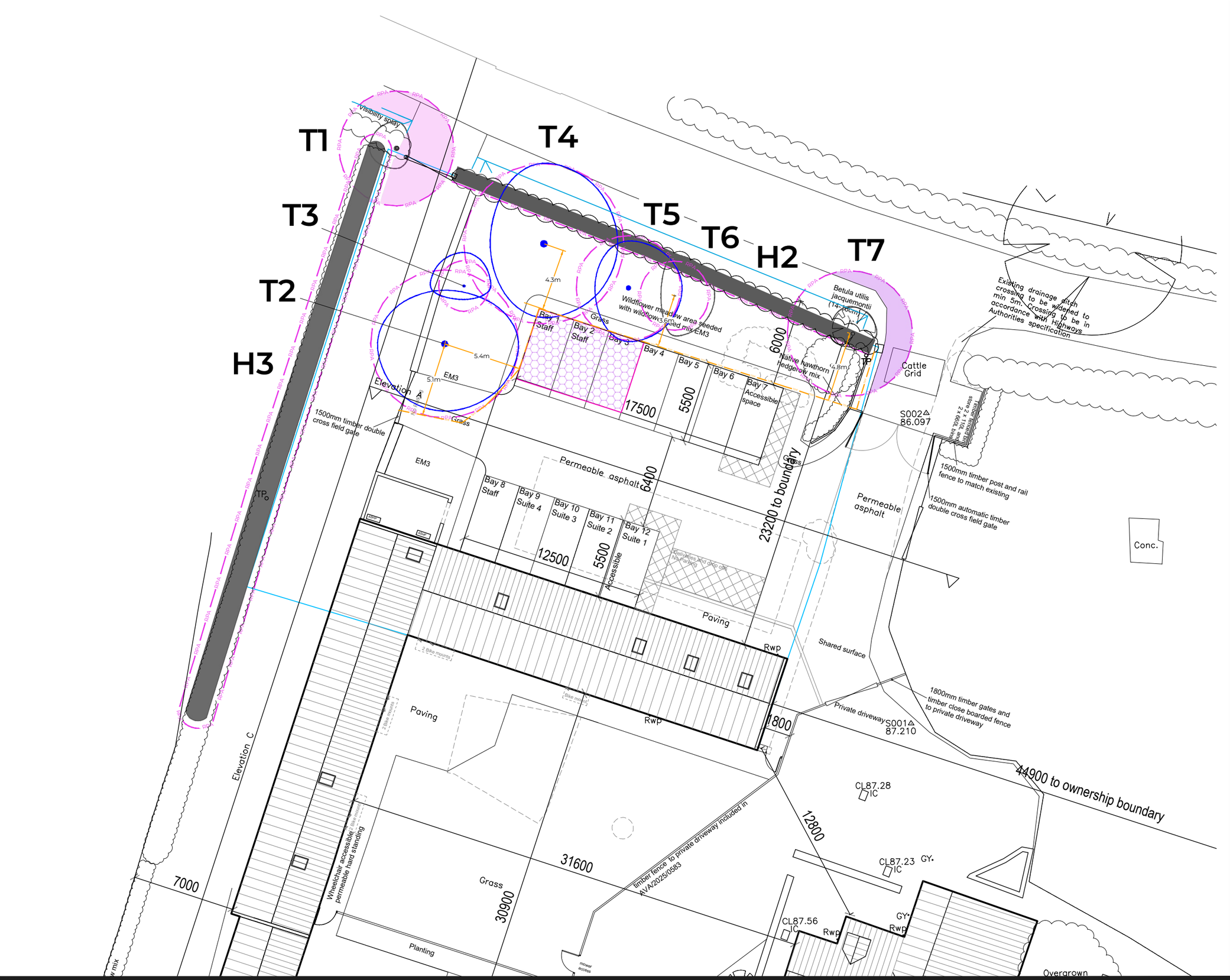
*Crown colour in accordance with BS5837:2012 Category. *In accordance with Ancient and other Veteran Trees: Further Guidance on Management.*

Individual Trees ("T" Prefix)

- Indicative shade
- Crown spread
- Tree Stem
- Root Protection Area (RPA)

Hedges ("H" Prefix)

- Crown extents
- Root Protection Area (RPA)



CLIENT. Nuttall Property Investments Ltd

PROJECT NAME. Chapel Farm, Windley Lane, Windley

PROJECT NO. 1155

NOTES.

This Tree Protection Plan (TPP) should be viewed in conjunction with the accompanying BS58372012 Tree Survey Schedule and Arboricultural Method Statement (AMS) prepared by Arb Innovators Ltd.

All dimensions should be checked on site. No dimensions are to be scaled from this drawing. This drawing was produced in colour - a monochrome copy should not be relied upon. This drawing was produced digitally using a combination of GIS, GPS and Topographical base mapping (.dxf) where provided. Arb Innovators Ltd cannot be held responsible for inaccuracies in the base drawing in which this plan is based.

DRAWING TITLE. Tree Protection Plan

DRAWING NO. 251114 ARBI 1155 TPP V2

REVISION NO. 2

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ARB INNOVATORS

DRAWN BY. CTT
DRAWN.

APPROVED BY. CTT
17.02.2026

SCALE AND BEARING.

N

Scale 1:250 @ A3

0 5 10 15m

BS5837:2012 CATEGORIES

In accordance with Table 1 – Cascade chart for tree quality assessment

- Category B (Moderate Quality)
- Category C (Low Quality)

SITE FEATURES AND EXISTING CONSTRAINTS

- Arboricultural Study Area
- Existing RPA Incursions

TREE PROTECTION AND MITIGATION

- Tree Protection Fencing (and annotation)
- Cellular Confinement Construction

ARBORICULTURAL FEATURES.

*Crown colour in accordance with BS5837:2012 Category. *In accordance with Ancient and other Veteran Trees: Further Guidance on Management.*

Individual Trees ("T" Prefix)

- Indicative shade
- Crown spread
- Tree Stem
- Root Protection Area (RPA)

Hedges ("H" Prefix)

- Crown extents
- Root Protection Area (RPA)



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CAVEATS, LIMITATIONS AND REFERENCES

APPENDIX 4

#WEAREINNOVATORS

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CAVEATS, LIMITATIONS AND REFERENCES

Caveats and Limitations

The contents of this report are valid for a period of one year (**12 months**) from the date cited.

Trees are growing dynamic structures. Whilst reasonable effort has been made to identify tree-risk features (defects) within the trees inspected, no guarantee can be given as to the absolute safety or otherwise of any individual tree. No tree is ever safe due to the unpredictable laws and forces of nature. As a result of this, natural failure of intact trees will occur; extreme climatic conditions can cause damage to even apparently healthy trees.

Arb Innovators have provided this report solely for the use of the recipient and accepts no liability to any third parties or any other party using or reviewing the report or any part thereof. Arb Innovators makes no warranties or guarantees, actual or implied, in relation to this report, or the ultimate commercial, technical, economic, or financial effect on the project to which it relates, and bears no responsibility or liability related to its use other than as set out within the scope of the contract under which it was supplied.

This is a report which should be used to accompany a planning application and provides no detail specifically in relation to the condition or quantification of risk posed by trees. This report in no way constitutes a tree risk-benefit survey nor should it be used exclusively to assign remedial management to trees.

This inspection was undertaken from ground level and in accordance with stage one VTA, involving the use of non-invasive methods to identify tree health issues and structural defects by visual observation. Should a more detailed inspection be required then this will be highlighted in the recommendations. This may involve the use of decay detection tools or aerial inspection (stage two VTA) and interpretation of findings to form a prognosis (stage three VTA).

The survey has only been undertaken from land within the Client's ownership, from public land or from areas where formal access has been arranged. Where trees have been captured beyond the Site boundary, all dimensions of trees and their associated parts are based on estimation unless otherwise stated.

This is an arboricultural report and as such no reliance should be given to comments relating to buildings, engineering, or soil. Trees and woody vegetation were not assessed for their potential impact upon future construction issues such as foundation designs (NHBC. 'Chapter 4.2-Building Near Trees'. NHBC Standards 2016. 2016).

Further, this report does not rely on ecological or archaeological data. If either is commented upon within the report further professional advice should be sought.

Technical References

This Arboricultural Assessment was prepared in accordance with or following the guidance contained within the following technical references:

- Town and Country Planning Act 1980
- National Planning Policy Framework (NPPF), 2023
- British Standards Institute. BS5837 (2012) *Trees in relation to design, demolition and construction - Recommendations,* London: BSI.
- British Standards Institution. (2010). British Standard 3998:2010, Tree Work - Recommendations. British Standards Institution, London.
- British Standards Institute. BS 8545 (2014) *Trees: from nursery to independence in the landscape - Recommendations,* BSI
- Royal Institute of British Architects, RIBA Plan of Work 2020 Overview, RIBA (2020).
- Fay, N., Dowson, D., Helliwell, R. (2005) Tree Surveys: A Guide to Good Practice, The Arboricultural Association
- Mattheck, C. (2007) Updated Field Guide for Visual Tree Assessment
- Mattheck, C & Breloer, H (2006) The Body Language of Trees: A Handbook for Failure Analysis. Research for Amenity Trees No. 4. DETR
- Weber, K., Mattheck, C. (2003) Manual of Wood Decays in Trees, The Arboricultural Association
- R.G. Strouts & T. G. Winter, Diagnosis of Ill- Health in Trees (7th Impression, TSO - 2013)
- Natural England and Forestry Commission. (2022). Guidance – Ancient woodland, ancient trees and veteran trees: advice for making planning decisions.
- Tree Council & Ancient Tree Forum Ancient Tree Forum, Lonsdale, D (ed.) (2013) Ancient and other Veteran Trees: Further Guidance on Management.
- Woodland Trust (n.d.) (2024) Recognising and categorising ancient and other veteran trees.
- National Joint Utilities Group (2007) Volume 4, Issue 2: Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees.



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TREE PROTECTION FENCING

SIGNAGE

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TREE PROTECTION AREA



NO ACCESS - TREE PROTECTION AREA

NO MATERIALS, MACHINERY, TEMPORARY STRUCTURES OR CHEMICALS SHALL ENTER OR BE STORED WITHIN THIS AREA. FENCING WILL NOT BE ALTERED OR MOVED WITHOUT PRIOR AGREEMENT OF THE PROJECT ARBORICULTURIST.



THIS FENCING MUST REMAIN IN PLACE AND BE MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS FOR THIS DEVELOPMENT.

TREES ENCLOSED ARE PROTECTED BY PLANNING CONDITIONS AND/OR TREE PRESERVATION ORDERS (TPO). CONTRAVENTION OF A TPO MAY LEAD TO CRIMINAL PROSECUTION.

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