

Arboricultural Method Statement – V2[©]

Site: Wick Hill Lodge, Finchampstead RG40 3SS Date: July 2024

Surveyor: Hugo Loudon & Nick Scally



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2.0 CONTACT DETAILS

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3.0 DOCUMENT DETAILS

This Arboricultural Method Statement (AMS) should be read in conjunction with the following information, which are included as separate documents:

- Tree Constraints Plan (TCP). Drawing no. HTS-TCP-01APH. Tree removal.
- Tree Protection Plan (TPP). Drawing no. HTS-TPP-01APH. Demolition phase.
- Tree Protection Plan (TPP). Drawing no. HTS-TPP-02APH. Construction phase.
- Tree Protection Plan (TPP). Drawing no. HTS-TPP-03BPH. Construction phase.

The above documents detail the locations of the existing tree population, trees for removal, trees for retention, and essential protection methods for retained trees. It is integral that this information is made available to onsite contractors throughout the development to ensure adherence to these guidelines.

4.0 SITE INTRODUCTION

The owners of these premises are applying for permission to demolish an existing swimming pool and construct a new pool house and shed.

The Arborists, Hugo Loudon and Nick Scally, visited the premises in April 2022, September 2022 and June 2024 to assess trees on site in order to compile an Arboricultural Method Statement to meet the British Standard 5837 (2012) 'Trees in Relation to Design, Demolition and Construction'. The document herein, must be available for all relevant site personnel and operatives to consult in order to understand that all essential tree protection constraints and safety measures are installed and upheld correctly during the duration of this project.

5.0 ARBORICULTURAL IMPLICATION ASSESSMENT (AIA)

5.1 Constraints exist in form of retained trees as plotted on the Tree Constraints Plan (TCP) showing specific locations and allowing the architect to work with retained trees taking into effect the following criteria:

- **Root Zone:** the enclosed tree survey ([section 18.0](#)) provides sacrosanct Root Protection Areas (RPAs) for existing trees, usually 12x the stem diameter at breast height, as defined by BS5837 (2012). Generally, roots will radiate outwards from the tree stem, seldom symmetrically, in to the surrounding ground. At the discretion of an arboriculturalist, the RPA can be offset if limitations/disturbances to the projected rooting zone exist (for example, from foundations of houses, garages, walls, presence of roads, notable level changes etc.).
- **Physical Contact of Trees:** parts of the tree that may come into contact with buildings, vehicles, walls, street lighting etc. This primarily involves the foliage, branches and stems of trees.
- **Shading:** the sun will rise to approximately 60° at midday in the summer months when trees are in leaf (ratio of approx. 16m vertical height to 10m horizontal distance). During the winter months, when deciduous trees are without leaves, the sun will only reach approx. 12°, therefore reducing shading.
- **Falling Leaves/Seeds/Detritus:** size and dominance of trees are to be considered when planning vision splays from habituated rooms, footpaths etc.
- **Subsidence/Heave/Root Pressures:** to be considered at the planning stages, i.e. retained tree roots absorbing water within banks, slopes, and near proposed foundations, in accordance with suitable soils types. In regards to this project, the soil type of the site is: *"Naturally wet very acid sandy and loamy soils"* as listed on the Cranfield Soil and Agrifood Institute – www.landis.org.uk
- **Amenity Value:** considerations will be given to the local area's infrastructure and landscape, including screening provided by trees, hedges and shrubs. Where appropriate, new landscaping proposals may be included.

- 5.2 Tree Protection Action Methodology - in order to protect retained trees on site a pre-works meeting will be required between the project manager and the nominated Arborist. The essential objective is to brief the contractor and ensure understanding of the guidelines provided. The contractor must also understand that failure to comply with tree protection measures is a breach of planning, which can lead to:
- Enforcement notice being issued by the local authority, with works being put on hold
 - Prosecution for irreversible and/or permanent damage to trees
- 5.3 Prior to demolition works, some trees are removal is required in order to facilitate the proposed development. The trees proposed for removal are shown on the Tree Constraints Plan (TCP), and are also listed below:
- T21 Birch (C2) – potential to be harmed during the demolition process. Remove tree in order to facilitate demolition and construction.
 - T22 Birch (B2) – potential to be harmed during the demolition process. Remove tree in order to facilitate demolition and construction.
 - TE Laburnum (B1) – remove tree in order to facilitate construction of pool house.
 - TF mixed species group (C2) – remove group in order to facilitate construction of pool house.
- 5.4 Site access for both demolition and construction phases will primarily be via the existing driveway. This will skirt past the garage and RPA of T44, heading north-east into the rear garden. In order to limit damage to the soft ground rooting zone of T44 whilst tracking machinery through for demolition and construction, ground protection boarding must be utilised within the RPA as shown on the Tree Protection Plan (TPP). These boards must be laid prior to any demolition activities and are to be retained until construction is complete. Tree protection fencing is also proposed to cordon off the RPA of T44 as much as possible, as indicated on the TPP.
- 5.5 Alternatively, site access for demolition and/or construction could follow round the eastern flank of the existing dwelling, as indicated on the TPP. Access through the RPA of TA Oak would be required, so ground protection boarding and tree protection fencing must be installed as indicated on the TPP.
- 5.6 In order to facilitate access through the eastern access point as described above, the canopy of TA Oak will require pruning back to avoid accidental contact with vehicular traffic during demolition and construction. The specification for pruning is listed below:
- TA Oak – reduce western aspect of canopy by up to 2.5m where overhanging the proposed access route, pruning back to suitable secondary growth points. Pruning wounds are not to exceed 50mm in diameter. These works must only be carried out by a competent arborist, conforming to the guidelines detailed within BS5837 (2012).
- 5.7 Caution must be taken when carrying out demolition of the existing swimming pool and surrounding paving within the RPA of T11, as well as the existing sheds and paving within the RPA of T27 and T28. Removal of hard surfacing is to be carried out carefully by use of hand tools where possible within the RPA, following the guidelines in [section 14.0](#).
- 5.8 It is unlikely that tree roots from T11 extend under the existing paving surrounding the swimming pool. This area of hard surface will be returned to soft ground during the construction phase, offering a slightly increased available rooting zone to T11.
- 5.9 Removal of fence panels and posts within the RPA of retained trees (primarily T11, T27 and T28) must be done by hand/with hand tools only. Use of machinery for this purpose is prohibited within the RPA in order to limit disruption.

- 5.10 The proposed shed is to be constructed using a raft slab type foundation. This should offer reduced ground impact to the rooting zone of nearby trees in comparison to a typical standard concrete foundation.
- 5.11 Tree protection fencing is to be installed prior to any demolition activities and retained throughout the project as shown on TPP. Once demolition is completed, the tree protection fencing can be relocated to allow for the construction phase of works, as shown on the TPP. [See section 10.0](#)
- 5.12 Placement of ground protection boards are as shown on TPP. Ground protection boards should be installed prior to any demolition works, and are to be retained for the duration of the demolition phase. Additional boarding is required for the construction phase (as shown on the TPP), and should be placed before construction commences. These boards will grant access to the RPA of retained trees whilst also protecting the rooting zone against any potential damages that may occur (e.g. compaction, toxins leeching into soil etc.). [See section 11.0.](#)
- 5.13 It is not anticipated that trees require pruning to facilitate demolition or construction. Under all circumstances, any proposed tree works must be agreed beforehand with the local authority, and should be carried out by suitably qualified Arborists, conforming to the guidelines set out in BS3998 (2010) and [section 13.0.](#)
- 5.14 Any new underground service runs for the pool house can hook up to the existing dwelling, and are to be located outside of all retained tree RPAs. should hook up to existing service runs/be sited where approved via air spade. [See section 15.0](#)
- 5.15 Contractor's parking can be located on the existing driveway, outside of any retained tree RPA and/or on areas of existing hard surfacing.
- 5.16 Building materials storage can be located as shown on the TPP, outside of any retained tree RPA or located on areas of existing hard surfacing. There is ample space for this during both demolition and construction phases, as shown on the TPP. Under no circumstances should materials be stored anywhere within the exclusion zones created by the tree protection fencing. Further information on restrictions within the RPA can be found within [section 9.0.](#)

6.0 TREES AND THEIR CONSIDERATIONS

- Trees may possibly outlive construction so it is vital to ensure the proposed development is suitably integrated in harmony with existing trees;
- Any conflicting or adverse effects the structural development may impose upon each trees' long term healthy existence;
- Healthy trees can be retained for visual screening, wind breaks, defining boundaries, complimenting buildings, future amenity value, and overall benefit to the sites character and enhancement;
- Retention of large, mature, veteran trees may suffer trauma or detrimental growth restrictions following developmental construction;
- Competition for solar gain and space for physical growth in more densely wooded sites;
- Certain healthy arboricultural specimens may be considered worthy of relocating within a design in an attempt to save and prolong life expectancy; the Arboriculturist can advise;
- Autumn leaves falling from deciduous species causing problems with guttering, or fruit making pathway surfaces slippery;
- The Root Protection Area (RPA) of each tree and its proximity to planned developmental foundations, boundaries, borders, roads and driveways, and future growth towards, or even into, drainage, services or water supplies;
- Impaction of soil, encroaching upon healthy root areas, by installation of permanent new surfacing on drives and pathways, e.g. paving slabs or tarmac areas;
- The canopy spread of each tree and limb movement throughout high winds; it's future growth potential, taking into consideration any light restriction through windows and glass panels; overhead cabling or lighting schemes and the ease of future pruning;
- The effect the development would have on each specimen's ability to gain light or create shade, depending on the individual species and its ideal growing habitat;
- Ground level areas to be raised or lowered near to, or within, the protected zones;
- Existing relevant features like streams, trenches, boundary fencing and the location of adjacent trees that may have some impact upon the development;
- Construction activity, paying attention to site access and nearby trees en route;
- Phasing of works;
- Future planting schemes to be incorporated;
- Wildlife habitat in existing trees

7.0 THE PROCESS AND MONITORING DEVELOPMENT

7.1 The following implementations are subject to operational constraints, so they are liable to change. The project Arborist must be notified should procedural changes occur and an inspection made to ensure compliance is being met.

- **Pre-development stage:**

- On-site meeting between client, Local Authority, Project Manager and Arborist
- Tree removal and pruning of trees directly impacted by development (where specified)
- Tree removal and pruning of trees indirectly impacted by development (where specified)
- Installation of tree protection fencing
- Installation of ground protection boarding

- **Development stage:**

- Site safely compounded and signage in place
- Ensure site access available to construction traffic
- Storage area for building materials, skips, etc. allocated, as shown on Tree Protection Plan (TPP)
- Demolition
- Adjustment of tree protection fencing and ground protection boarding post demolition phase to suit the construction phase (see TPP)
- Installation of services and ground works (where required)
- Development of project
- Completion and Arborist's inspection

- **Post-development stage:**

- Removal of tree protection fencing
- Removal of ground protection boarding
- Hard and soft landscaping (where applicable)

7.2 Site visits will be made by the Arborist to observe the constraints procedures are being upheld. Compliance forms will be completed by the Arborist and signed-off with the Project Manager and Local Authority where necessary.

7.3 The Arborists visit ensures continual protection, but should any remedial changes be required, advice can be speedily given to all parties and recorded in the comments for the Local Authority to view.

7.4 Supervision can be given by the Arborist at crucial stages of development, to oversee approved methodology is adhered to and to ensure arboricultural objectives are met.

7.5 If the task is prolonged and the Arborist is satisfied that criteria is being met, telephone supervision between the Project Manager and the Arborist may suffice. The Local Authority is to have free access to the site and may pass recommendations directly to the Arborist.

7.6 Remedial tree works and any site clearance should be carried out prior to installation of tree protection fencing. However, it may be helpful to mark out where the protective fencing is to be erected (e.g. with tape or spray-paint), in order to assist with site clearance and vegetation trimming.

7.7 Removal of hard surfacing, may require adjustments to the protective fencing. This must be discussed with, and approved by, the Local Authority prior to any alterations commencing.

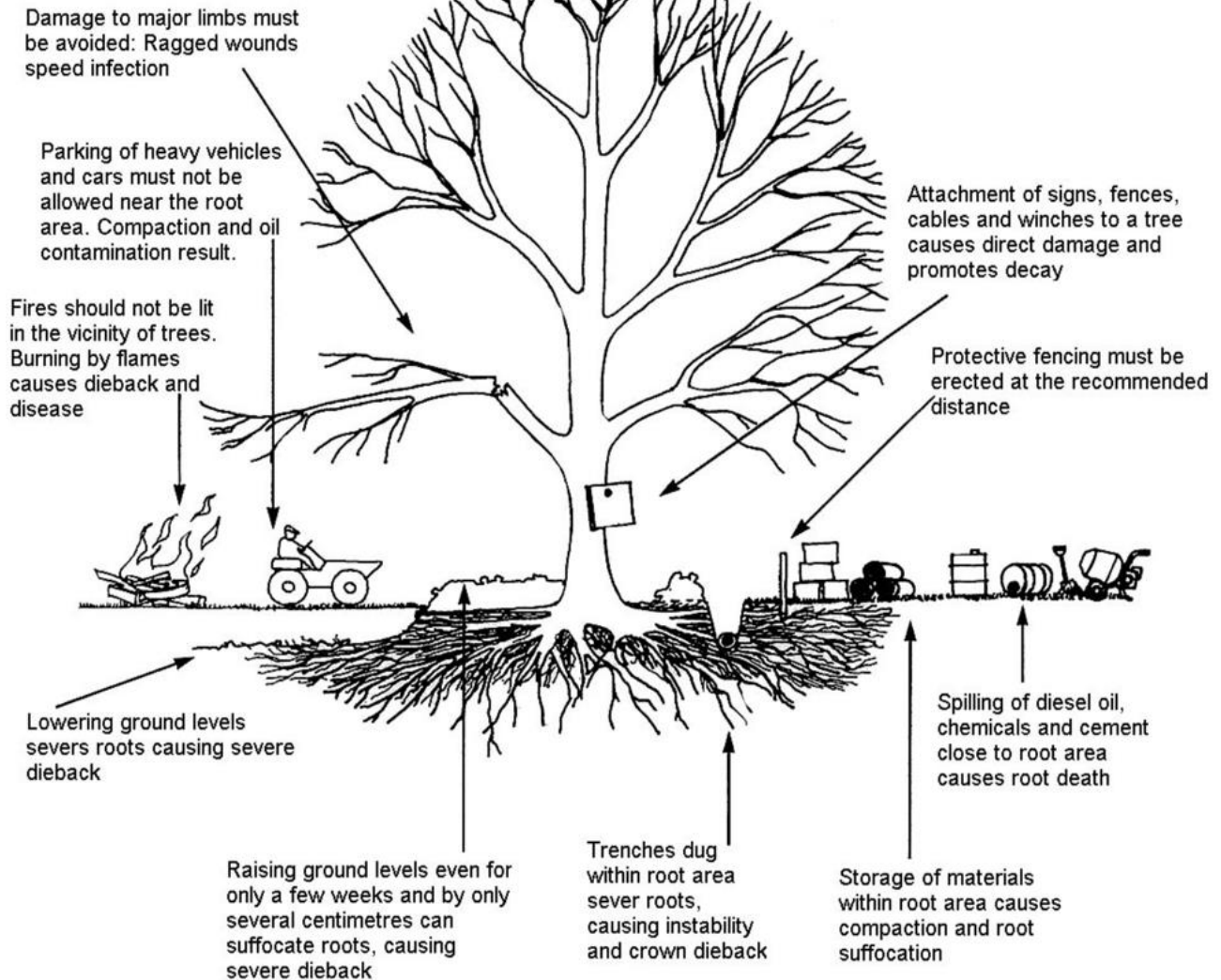
8.0 ROOT PROTECTION AREA - RPA

- 8.1 Data is collected by the Arborist and recorded in the Tree Survey, which, in accordance with BS5837 (2012), gives us the calculations to determine the Root Protection Area (RPA). This measurement is designed to protect the minimal root mass in order to ensure trees survive the construction process.
- 8.2 All parties must respect the RPA and observe necessary precautions within and adjacent to them, noting all considerations as itemised in section 6.0 and restrictions listed in section 9.0.

9.0 RESTRICTIONS WITHIN THE RPA

- 9.1 The area inside the tree protection fencing is called the Construction Exclusion Zone (CEZ) where:
- No mechanical excavation is permitted
 - No excavation allowed by any means without Arborist supervision
 - No hand-digging without approved Method Statement from Arborist
 - No lowering of ground levels (except to cut-back tall grasses with hand-tools)
 - No storage of plant, machinery, tools or materials
 - No dumping of waste materials including mortar washings
 - No bonfires or fire lighting allowed
 - No parking of any vehicle
- 9.2 In addition, the following exclusions apply outside the Construction Exclusion Zone:
- To prevent harmful toxins accessing tree roots, no fuel, oil, bitumen, mortar washings or other chemicals are to be tipped within a further 10m from the tree protection fencing. This area is not to be used for storage of ballast, builder's sand or concrete.
 - No fires are to be lit within a 20m radius of the tree since heat could damage limbs and cause die-back of bark, ultimately leading to tree death.

The use of properly positioned protective fencing can prevent tree deaths occurring.



10.0 TREE PROTECTION FENCING

10.1 The Tree Protection Plan (TPP) shows the correct positioning of Tree Protection Fencing, which must be installed as instructed prior to any of the following:

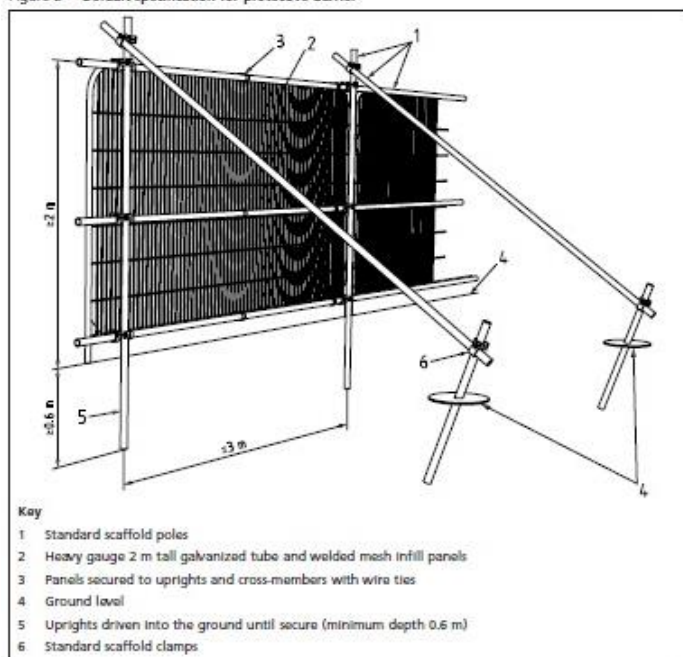
- Plant machinery delivery
- Building materials delivery
- Demolition
- Soil stripping
- Construction works
- Landscaping

10.2 Once erected, it is imperative that all Tree Protection Fencing will not be altered or moved without prior consent from the nominated Arborist with approval from the Local Authority.

10.3 The Tree Protection Fencing will be constructed using 'Heras' welded mesh panels set onto a scaffolding framework, which is then braced and firmly secured into the ground to resist impact. Rubber feet or concrete blocks are not acceptable as the fencing panels are easily moved. Should alternative Protective Fencing be required, suitability and efficiency must be discussed with the Arborist and consent given by the Local Authority.

10.4 The all-weather signage (see below example) must be attached to the fencing for public display and not attached directly to the tree stems. Once the Construction Exclusion Zone (CEZ) is clearly defined by the Tree Protection Fencing, construction can commence.

Figure 2 Default specification for protective barrier



11.0 GROUND PROTECTION BOARDING

11.1 Any ground protection required, as shown on the Tree Protection Plan (TPP), must be capable of supporting loads evenly without causing ruts, divots or soil compaction, which will inhibit the uptake of vital nutrients and moisture by tree roots.

11.2 To protect the ground from pedestrian loads when working within the Root Protection Area (RPA), the following method is advised, as it will continue to provide oxygen and moisture to reach roots:

- Install a Geotextile membrane over the area
- Top with a layer of bark chippings
- Place scaffold boards on top of chippings, ensuring boards are firmly butted up close to one another
- Further scaffolding levels will give the construction team access to higher levels if needed

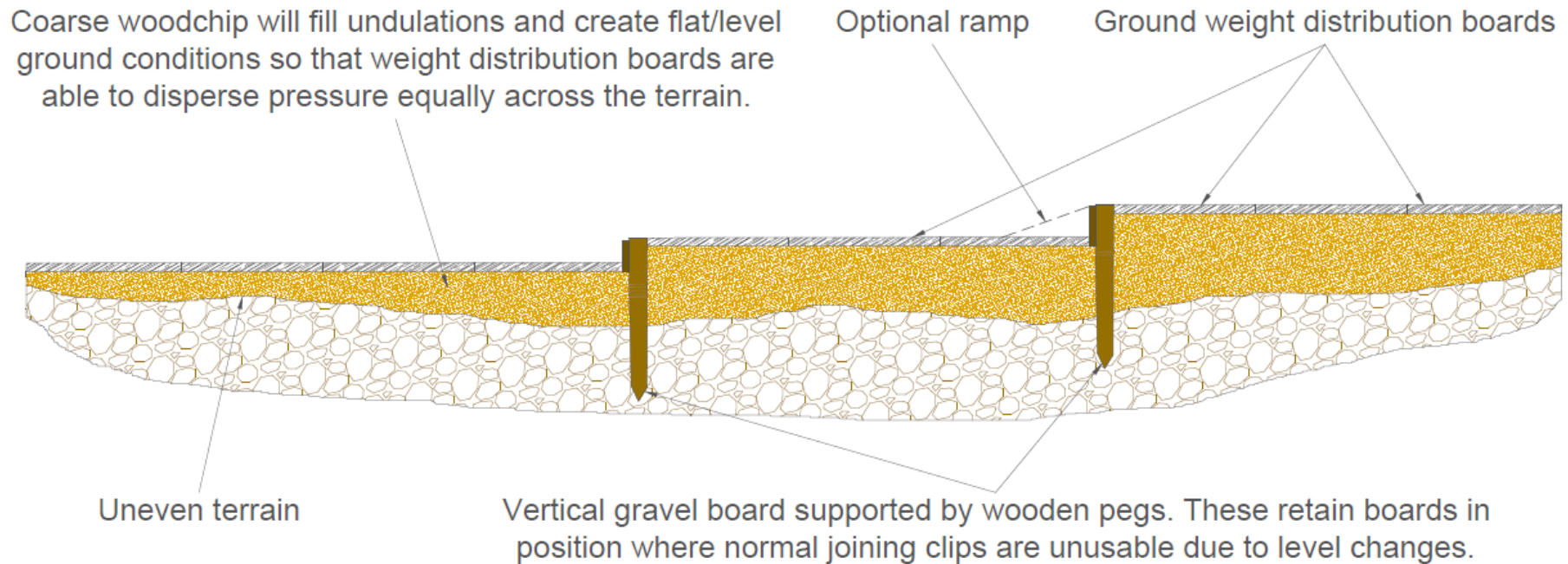
11.3 The ground protection must remain in place until completion of construction.

11.4 Should wheeled or tracked machinery be required within the RPAs of retained trees, Temporary Track Road Systems or Ground Protection Boards are required. These comprise of interlocking solid polythene sheets measuring 244cm x 122cm (made from 90% recycled materials) capable of effectively dispersing weight. These boards are lifted and taken away upon completion of the project. See further information here: MultiTrack Ground Protection Guards (<https://www.greentech.co.uk/ground-reinforcement/ground-guards/multitrack-ground-protection-guards>)



Generic example of how to install ground weight distribution boards on uneven ground within a Root Protection Area (RPA) - Cross-sectional view

(Please refer to Section 10 of the Arboricultural Method Statement)



12.0 AVOIDING DAMAGE TO BRANCHES AND STEMS

- 12.1 The proximity of retained trees must be considered when planning site operations with wide or tall loads, or movement of excavators and cranes with wide booms. If limbs or trunks are damaged, pathogens may enter wounds leaving the tree unsafe for retention.
- 12.2 Where plant machinery manoeuvres are required on site, a banksman must oversee proceedings to ensure trees remain unharmed. In some cases, the barest minimum selective pruning works called 'Access Facilitation Pruning' may be advised by the Arborist. Under no circumstances should the construction personnel carry out any access facilitation pruning work. This should be left to the qualified Arborist and his team only.

13.0 RECOMMENDED TREE WORKS

- 13.1 Under no circumstances will a tree carrying a Tree Preservation Order (TPO) or listed within a conservation area be worked upon without prior local authority permission.
- 13.2 Any tree requiring pruning or actual tree removal will be carried out in strict accordance to BS3998 (2010) – *'Recommendations for Tree Work'*. All works will be competently carried out by a competent and qualified Arborist.
- 13.3 During tree works within the project, safety signage must be displayed and only employees of the tree surgery company may enter the work zone. If works are on or alongside the public highway, then relevant signage and traffic management will be required in accordance to *'Chapter 8 Signage, Lighting and Guidance'*.
- 13.4 Should overhanging trees encroach across site boundaries, all efforts to receive permission must be sought from the relevant land owners prior to any pruning works. Trespassing and unauthorised pruning works is not permitted.
- 13.5 The 'Wildlife and Countryside Act (1981)' and the 'Countryside and Rights of Way Act (2000)' must be adhered to at all times. Should any bat activity, or empty roosts be suspected, advice must be sought by the Local Authority.
- 13.6 Tree stumps in the Construction Exclusion Zone (CEZ) must not be mechanically dug or winched out, but removed by:
 - Cutting flush to ground level, or
 - Dug out using low ground disturbance grinding machinery (e.g. stump grinder)
- 13.7 Where resultant debris from tree surgery operations is to be removed from site, this should be done by a registered member practicing the Environment Agency Policies.

14.0 REMOVAL OF HARD SURFACING WITHIN THE ROOT PROTECTION AREA

- 14.1 Bespoke specific arboricultural tree protection measures should be agreed by the nominated arboriculturalist prior to works commencing. Please note that damage to tree roots can be irreversible.
- 14.2 The initial break up is to be carried out by hand where possible, or low impact pneumatic hand-held tools. The use of breakers on diggers (no bigger than a 2.5 tonne machine) requires a specific pre-works plan, assessing the depth and width of specific root morphology that may be impregnated elements of hard surfacing infrastructure.
- 14.3 Removal of the hard surface should proceed in 2m wide strips to avoid unnecessary root damage and good quality topsoil should be laid as progress is made to 'make good' the remaining ground. This process also avoids the need to travel over exposed soil.
- 14.4 Subsequent removal of hard surface pieces should be carried out by hand. If this is not possible, a small 2.5 tonne excavator will be allowed within Root Protection Area (RPA), onto existing hard standing or weight distribution boards, under the provision that teeth on the bucket do not dig into the ground, expose roots or disturb soil underneath by dragging pieces across exposed soil. Once the remaining pieces are of a manageable size, hand clearance can continue.
- 14.5 No reduction of soil levels of the underlying surface are permitted.
- 14.6 Should levelling be required, good quality topsoil may be laid and dispersed by hand.
- 14.7 Should any tree roots above 25mm diameter be uncovered, guidance and approval must be sought from the Arborist and Local Authority.
- 14.8 Protective fencing must be correctly reinstalled immediately, in order to continue to protect trees before new surfacing is installed or soft landscaping is completed.

15.0 INSTALLATION OF UNDERGROUND SERVICES

- 15.1 All services and inspection covers should avoid Root Protection Areas (RPA) wherever possible.
- 15.2 If new service trenching runs are required within an RPA, advice must be sought from the Arborist, who may then initiate air spading works utilising compressed air to move soil away from roots without causing unnecessary damage.
- 15.3 Trenchless technology (e.g. Thrust Boring) is also effective in some instances as it passes deeply underneath the tree, thus avoiding impact with the roots.
- 15.4 References can be made to the National Joint Utilities Group (NJUG) Volume 4 2007 '*Guidelines for the planning and installation and maintenance of utility apparatus in proximity to trees*' (<http://www.njug.org.uk>) but approval must be made by the Arborist and Local Authority.

16.0 SOFT LANDSCAPING WITHIN THE ROOT PROTECTION AREA

Sensitive ground preparation must be carried out in the Root Protection Areas (RPA) to ensure root damage is avoided. Heavy machinery (e.g. by a rotovator) is not permitted. Clearance of vegetation or turf by hand or a light mechanical turf stripper is acceptable.

- 16.1 Soil levelling must be carried out by hand. Should soil become compacted or have poor structure, which may hinder the development of new plantings, advice can be sought from the Arborist in regards to de-compaction works using Air Spade and Vertical Mulching techniques.
- 16.2 Trench planting should be avoided in the RPA to avoid damage to roots. Plants must be bedded individually.

17.0 ARBORICULTURAL CONCLUSION

With compliance to the tree protection measures by the contractor, as well as supervision and guidance from the nominated Arborist, the retained trees should not experience trauma, damage or a shortened expected lifespan.

18.0 TREE SURVEY, PHOTOS AND KEY – TREES SURVEYED APRIL 2022, WITH ADDITIONAL 6X TREES SURVEYED JUNE 2024 (T24, T25, TC, TD, TE, TF)

Tree or Group, Hedge, Shrub, Wood- land. '#' = offsite	Species Estimated measurements recorded using 'est.'	DBH recorded in mm	Tree Height in metres + First Branch in metres from ground level with cardinal direction	Branch Spread N E S W metres	Age Y SM EM M LM OM V A	SULE <10 10+ 20+ 40+	General Observations	Structural form Poor Fair Good Dead	Physiological form Poor Fair Good Dead	BS 5837 RC A B C U	BS 5837 RPA Radius recorded in metres m and m ²	Recommended Works
TA	Oak	460	H: 13m FB: 3m/W	N 5 E 5 S 4 W 6	M	40+	Will develop better with TB removed. Canopy bias to west.	Good	Good	A1	5.4m 92m ²	---
TB	Horse Chestnut	520	H: 12m FB: 4m/W	N 5 E 4 S 6 W 4	M	<10	Forming tri-dominance with south west stem historically failed. Progressive decay issues.	Poor	Fair	U	n/a	Consider removal and replanting.
T10	Sweet Chestnut	320	H: 8m FB: 3m/S	N 1 E 4 S 8 W 5	EM	20- 40	Suppressed by T11. Conditions are not conducive of a successful mature tree.	Fair	Good	C2	3.9m 48m ²	Prune back overall growth over tennis court by 2.5m.
T11	Sweet Chestnut	730 740 650	H: 19m FB: 3m/S	N 6 E 9 S 9 W 9	M	40+	Trifurcation with some inclusion (compression fork).	Fair	Good	A1	14.7m 679m ²	Fit 4-tonne dynamic brace system from north to south stem.
T12	Sweet Chestnut	330	H: 7m FB: 4m/S	N 0 E 4 S 8 W 5	EM	20- 40	Suppressed, understory to T11. Conditions are not conducive of a successful mature tree.	Fair	Fair	C2	3.9m 48m ²	Prune back overall growth over tennis court by 2.5m.

T20	Sweet Chestnut	890	H: 18m FB: 6m/E	N 10 E 6 S 5 W 3	M	40+	Suppressed to the south. Habitat hole at 8m to west and at 8m to east, which may be a structural compromise. Little justification for intervention. Currently located in area of little continuous use.	Fair	Fair	A2	10.8m 366m ²	Carry out aerial inspection within 48 months.
T21	Birch	310 350	H: 14m FB: 6m/W	N 4 E 3 S 4 W 6	M	20-40	Codominant stemmed. Raised soil around base.	Fair	Good	C2	5.7m 102m ²	Lower soil levels to maintain buttress flare.
T22	Birch	170 170 140 190	H: 13m FB: 6m/S	N 4 E 7 S 10 W 9	EM	40+	Quad-dominant stems.	Good	Good	B2	3.9m 48m ²	---
T23	Sycamore	1070	H: 18m FB: 2.5m/N	N 10 E 10 S 7 W 5	M	40+	Quad-dominant stems.	Fair	Good	A2	12.9m 519m ²	---
T26	Birch	280 200	H: 8m FB: 3m/W	N 4 E 1 S 0 W 2	SM	20+	Suppressed from the south, canopy bias to north.	Fair	Fair	C2	4.2m 55m ²	---
T27	Birch	390	H: 10m FB: 5m/S	N 4 E 3 S 5 W 4	M	20-40	Unable to inspect base as in thick Rhododendrons.	?	Good	B2	4.8m 72m ²	---
T28	Oak	820 620	H: 16m FB: 3m/S	N 4 E 7 S 10 W 9	M	40+	Codominant stems with strengthening wood forming at union.	Good	Good	A1	12.3m 475m ²	---

T29	Lawson Cypress	280	H: 9m FB: 0m/S	N 3 E 3 S 3 W 3	SM	40+	Provides useful screening.	Good	Good	B2	3.3m 34m ²	---
T30	Sycamore	450 340 250 210	H: 16m FB: 3m/S	N 8 E 7 S 10 W 9	M	40+	Multistemmed, perhaps historic coppice stool.	Fair	Good	B2	7.8m 191m ²	---
T32	Birch #	380	H: 14m FB: 6m/W	N 3 E 3 S 4 W 4	M	20-40	Snapped out leader to west at 7m.	Fair	Fair	C2	4.5m 64m ²	---
T34	Sweet Chestnut	750	H: 19m FB: 7m/S	N 1 E 6 S 9 W 2	M	20+	Heavy historical pruning wounds to the north. Canopy bias (unbalanced) to the south.	Poor	Fair	B2	9.0m 255m ²	Carry out internal decay detection test.
T35	Birch	160	H: 12m FB: 5m/W	N 2 E 2 S 2 W 2	SM	20-40	Drawn form.	Fair	Good	A2	1.8m 10m ²	---
T37	Oak	510	H: 13m FB: 3m/E	N 3 E 6 S 5 W 1	M	40+	Forming communal canopy with T36. Slightly suppressed.	Fair	Fair	B2	6.0m 113m ²	---
T39 + T42	Holly x2	Multi-stem Max. DBH 280	H: 12m FB: 5m/W	N 1-2 E 1-2 S 1-2 W 1-2	SM	20-40	Understory, multistemmed form.	Fair	Good	B2	3.3m 34m ²	---
T41	Sweet Chestnut	260	H: 12m FB: 5m/W	N 3 E 2 S 2 W 4	SM	40+	Tall, drawn form.	Fair	Good	B2	3.0m 28m ²	---

T44	Sweet Chestnut	870	H: 19m FB: 4m/N	N 4 E 6 S 6 W 6	M	20+	Some bark necrosis on stem to a height of 4m. Historic evidence of pruning works in crown. Epicormic growth on south-west side of stem at ground level.	Good	Fair	A2	10.5m 346m ²	---
T45	Hazel	80	H: 8m FB: 2m/SW	N 2 E 2 S 2 W 2	SM	40+	Multi stem (8x stems). Crown dominated by larger more mature trees.	Fair	Good	C2	2.7m 23m ²	---
T46	Sweet Chestnut	230	H: 12m FB: 2.5m/W	N 2 E 3 S 5 W 4	EM	40+	Stem grown at slight angle to south-west, crown predominantly to south, east and west, dominated by larger mature trees.	Good	Good	B2	2.7m 23m ²	---
T47	Norway Maple	300	H: 16m FB: 1.8m/W	N 2 E 3.5 S 4 W 2	EM	20+	Drawn tree due to location (woodland area). Crown predominantly to the south and east due to suppression to north and west from other trees.	Good	Good	B2	3.6m 41m ²	---
T48	Spindle	100	H: 5m FB: 2m/W	N 2 E 2 S 2 W 2	Y	<10	Tree is dominated by more mature surrounding trees. This tree is in a state of slow decline.	Fair	Poor	C2	1.2m 5m ²	---
T49	Sycamore	580	H: 16m FB: 4m/SE	N 5 E 5 S 6 W 5	M	20+	No observations noted.	Good	Good	B2	6.9m 150m ²	---
T50	Sweet Chestnut	710	H: 18m FB: 6m/E	N 3 E 3 S 3 W 4	M	20+	Evidence of pruning work, on all major limbs. Failed suspended limb at 5m to north. Further deadwood in crown, dieback of crown in upper canopy extremities.	Fair	Fair	B2	8.4m 222m ²	---

T51	Sycamore	3x 160	H: 14m FB: 4m/SW	N 0 E 4 S 4 W 0	SM	10+	3x stemmed tree, trifurcation at 0.2m from ground level with included unions. Crown suppressed by surrounding trees to the north and west.	Fair	Fair	C2	3.3m 34m ²	---
T52	Oak	870	H: 25m FB: 4m/S	N 5 E 7 S 9 W 7	M	40+	Large buttress roots all around stem with hollow cavities through one side of the stem to the other with some exposed decaying heartwood. Bifurcation of stems at 2m with good union. Major deadwood in crown.	Good	Fair	A2	10.5m 346m ²	---
T53	Beech	310	H: 18m FB: 2m/SW	N 4 E 4.5 S 1 W 4	EM	40+	Tree crown dominated by adjacent mature Oak. No obvious defects noted.	Good	Good	B2	3.6m 41m ²	---
T54	Oak	690	H: 24m FB: 6m/S	N 8 E 6 S 9 W 8	M	40+	No obvious defects noted.	Good	Good	A2	8.4m 222m ²	---
T55	Oak	710	H: 23m FB: 10m/W	N 5 E 7 S 5 W 8	M	40+	No obvious defects noted.	Good	Good	A2	8.4m 222m ²	---
T24	Silver birch (<i>Betula pendula</i>)	Avg. 400 (x4 stems)	H: 16m FB: 2m/N	N 5 E 5 S 6 W 5.5	M	20+	Good overall Physiological and Structural condition.	Good	Good	A2	9.6m 290m ²	No action required.
T25	Silver birch (<i>Betula pendula</i>)	340	H: 16m FB: 1.5m/W	N 2.5 E 2 S 2 W 1.5	EM	20+	Good/Fair overall Physiological and Structural condition. Crown suppressed by adjacent trees	Good	Good	B2	4.1m 53m ²	No action required.

TC	Silver birch (<i>Betula pendula</i>)	320	H: 16m FB: 3m/SE	N 1.5 E 3.5 S 3.5 W 2	M	20+	Good overall Physiological and Structural condition.	Good	Good	B2	3.8m 45m ²	No action required.
TD	Silver birch (<i>Betula pendula</i>)	240	H: 13m FB: 1m/SE	N 4.5 E 3.5 S 0 W 1.5	EM	20+	Good/Fair overall Physiological and Structural condition. Leaning stem due to dominance of adjacent tree	Good	Good	B2	2.9m 26m ²	No action required.
TE	Laburnum (<i>Laburnum sp.</i>)	140	H: 3m FB: 2m/E	N 0.5 E 1 S 1 W 1	EM	20+	Good overall Physiological and Structural condition.	Good	Good	B1	1.7m 9m ²	No action required.
TF	Mixed species (<i>Mixed species</i>)	50	H: 2m	N 0.5 E 0.5 S 0.5 W 0.5	SM	10+	Fair overall Physiological and Structural condition.	Fair	Fair	C2	213m ²	No action required.

The survey, unless otherwise stipulated, is based on the qualified Arboriculturist making trained observations from ground level.

KEY	Explanation and Units
T, G, H, S or W	Tree/Group/Hedge/Shrub/Woodland numbers in tree survey and on enclosed plan. Offsite trees are suffixed with a # symbol.
Species	Defined in Common and/or Botanical names.
DBH	The Diameter at Breast Height (DBH) measures the girth of the stem in millimetres at 1.5metres above ground level in accordance with Forestry Commission specifications. Estimated dimensions (e.g. for off-site or otherwise inaccessible trees) are labelled with 'est.'
Height	Approx. Height of tree recorded in metres. Also first significant branch height and its cardinal direction.
Canopy Spread	Approx. Canopy Spread recorded in metres with cardinal growth direction given where appropriate; N, E, S, W.
Age	Y: Young tree less than fifteen years old and/or <1/3 fully grown. SM: Semi-Mature tree having attained 1/3 to 2/3 full stature and 1/3 to 1/2 estimated lifespan. EM: Early-Mature tree at 2/3 to virtually full size, and approx. halfway through its estimated lifespan M: Mature fully-grown tree LM: Late-Mature fully-grown tree, possibly declining in vigour yet many years of safe life expected. OM: Over-Mature fully-grown tree, often declining in vigour with possible historic or ecological value. V: Veteran tree, usually old and of significant historic, habitat or cultural value. A: Ancient tree, very old and of significant historic, habitat and cultural value.
SULE	Remaining Safe Useful Life Expectancy (SULE) recorded using the following statistics: <10 years, 10+, 20+ or 40+ years.
Observations	Root Condition: The visual assessment of the rooting area, taking into consideration any evidence of physical damage, soil compaction, heave, excavation work and/or drainage problems. Stem Condition: The visual assessment of the stem and main scaffold branches, observing any visible faults and wounds, and other exterior signs which may suggest possibility of internal compromise. If decay is suspected, a sounding hammer may be used. Leaf & Bud: The visual assessment of the amount and condition of foliage cover and/or bud development, when compared against the foliage of the surrounding trees of the same species.
Structural and Physiological Form	Good / Fair / Poor / Dead
BS:5837 Retention Category	Retention Category: Category A = High quality or value and a life expectancy of 40+ years Category B = Moderate quality or value and a life expectancy of 20+ years. Category C = Low quality or value with a life expectancy of 10+ years, or a stem diameter below 150mm Category U = Trees generally unsuitable for retention that are dead, dying, diseased and/or anticipated to fail. Usually with a life expectancy of less than 10 years. Sub division: Category 1 = Primarily arboricultural values, including significant, rare and good examples of specific species. Category 2 = Primarily landscape values, considered visually valuable either individually or in groups. Category 3 = Primarily conservation values, including habitat, historical and/or commemorative importance.
BS:5837 RPA	The Root Protection Area (RPA) is measured in metres (radius from tree stem), and metres squared (total area), specifically calculated using the Diameter at Breast Height (DBH).
Recommended Works	The Arborist's recommendations for any work.

19.0 GUIDELINES TO EMPLOYING ARBORICULTURAL CONTRACTORS



It is recommended that clients:

- Have more than one contractor supply a quote
- Check training and insurance certificates
- Be clear about procedures and enforceable protective constraints
- Ensure all contractors adhere to policy statements set down by the Arborist
- Communicate fully in order to achieve success with project
- Utilise a company who are approved by the Arboricultural Association

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Specific - Trees

All tree inspections, unless specified, have been undertaken from ground level and using non-invasive techniques. Comments contained within the report on the condition and risk associated with any tree relate to the condition of the tree at the date and time of survey. Please note that the condition of trees is subject to change. This change may occur, but is not limited to biological and non-biological factors as well as mechanical / physical changes to conditions in the proximity of the tree. Trees should be inspected at intervals relative to identified site risks and in accordance with relevant HSE and Central Government guidance. Heritage Tree Services Ltd can provide further information on this matter if required.

Please note no statutory control checks have been undertaken (unless specified). Where tree surgery works have been identified these works are based on the assumption that planning is approved. No tree works should be undertaken prior to determination of this application without up-to-date confirmation of the Tree Preservation Order / Conservation Area Status of the vegetation. All works should be undertaken in accordance with the appropriate Duty of Care. This should include, for example, site specific risk assessments and due diligence inspections for the presence of protected species.

Any comment relating to 3rd party trees has been made without full access to the tree(s). Should these trees have any impact on the proposed development we would advise you to instruct us to contact the 3rd party and undertake further inspection work.