# Supplementary Arboricultural Information, Land at The Old Vicarage

## AVA/2025/0505, comprising AIA, TPP and AMS



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**March 2026**

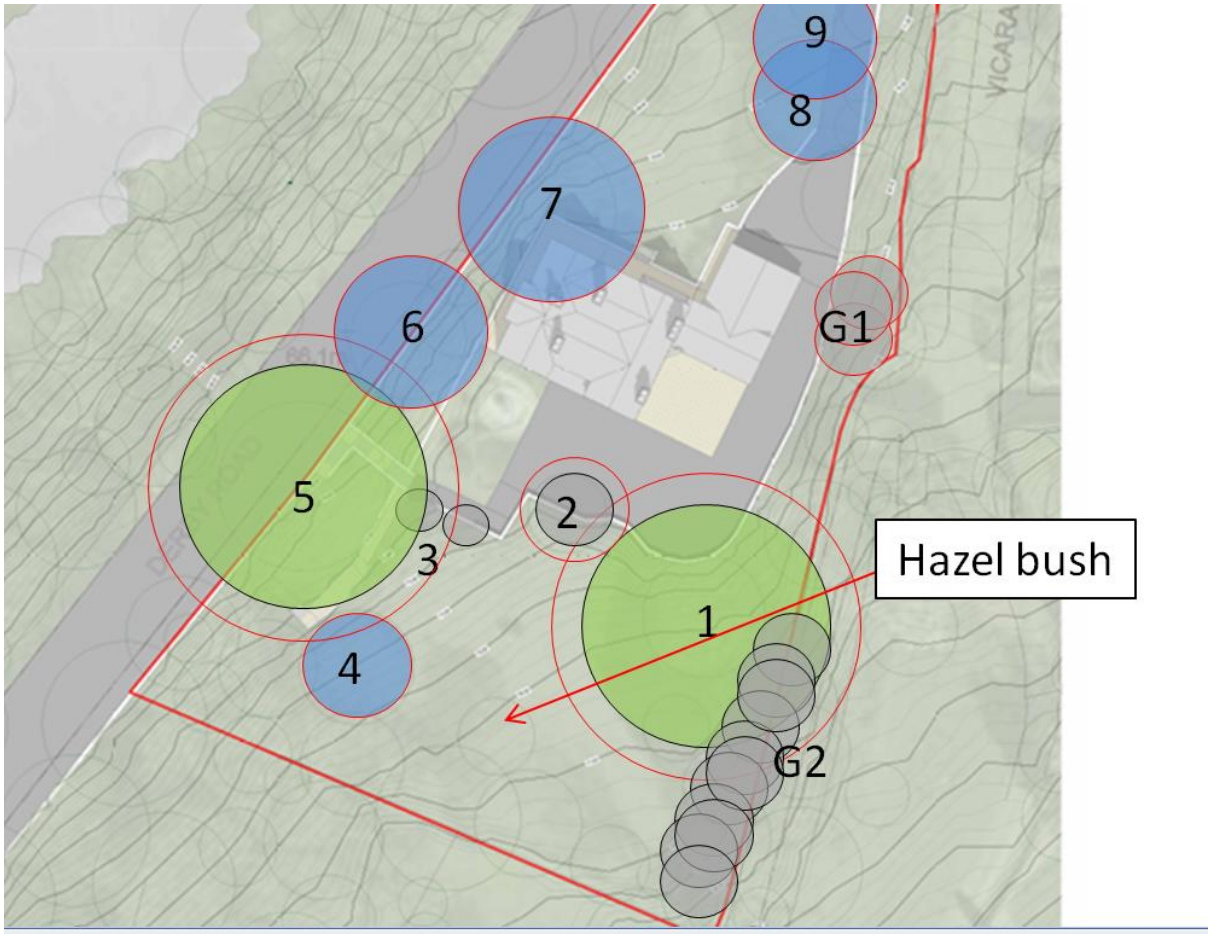
**Report to: Aliks Galstjans**

**Summary:**

This Report aims to provide the level of arboricultural information required for the following planning development AVA/2025/0505(Extensions and alterations)

**1.0 Existing tree information:**

The latest arboricultural information, comes from the BS5837 Arboricultural Report by Dr. Stefan Bodnar undertaken in 2025 which covers the site. The tree plan and schedule is shown below, which indicated the RPZ's of each individual tree.



| Tree no. | Species | Stem diam (mm) DBH | Crown N (m) | Crown S (m) | Crown E (m) | Crown W (m) | Height (m) | Age Class | Estimated remaining contribution (years) | Physiological and Structural Condition | Category | Radius of nominal circle | Root Protection area ($m^2$) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Common lime | 1500 | 12 | 12 | 12 | 12 | 20+ | Mature | 40+ | Important landscape tree | A2 | 15 | 707 |
| 2 | Spruce | 350 | 3 | 3 | 3 | 2 | 12 | EM | 10-15 | | C1 | 4.2 | 55 |
| 3 | 2 x Cypress | 200 | 1 | 1 | 1 | 1 | 6 | Y | 10-15 | | C1 | 2.4 | 18 |
| 4 | Silver birch | 325 | 4 | 4 | 4 | 4 | 9 | EM | 20+ | | B1 | 3.9 | 48 |
| 5 | Beech | 1500 | 15 | 15 | 15 | 15 | 20+ | Mature | 40+ | Important landscape tree | A2 | 15 | 707 |
| 6 | Purple plum | 750 | 7 | 7 | 7 | 7 | 10 | Mature | 20+ | | B2 | 7.8 | 191 |
| 7 | Ash | 750 | 9 | 9 | 9 | 9 | 20 | Mature | 20+ | | B2 | 9 | 255 |
| 8 | Yew | 500 | 6 | 6 | 6 | 6 | 11 | EM | 20+ | | B1 | 6 | 113 |
| 9 | Holly | 400 | 5 | 5 | 5 | 5 | 11 | EM | 20+ | | B1 | 4.8 | 72 |
| G1 (3 trees) | Blue fir and Cypress | 275 | 3 | 3 | 3 | 3 | 10 | EM | 10-15 | | C1 | 3.3 | 34 |
| G2 (11 trees) | Leyland cypress | 300 | 3 | 3 | 3 | 3 | 11 | Outgrown hedge | 10-15 | | C2 | 3.6 | 41 |

*G = Group H = Hedge T = Tree*

### 1.1 The Development:

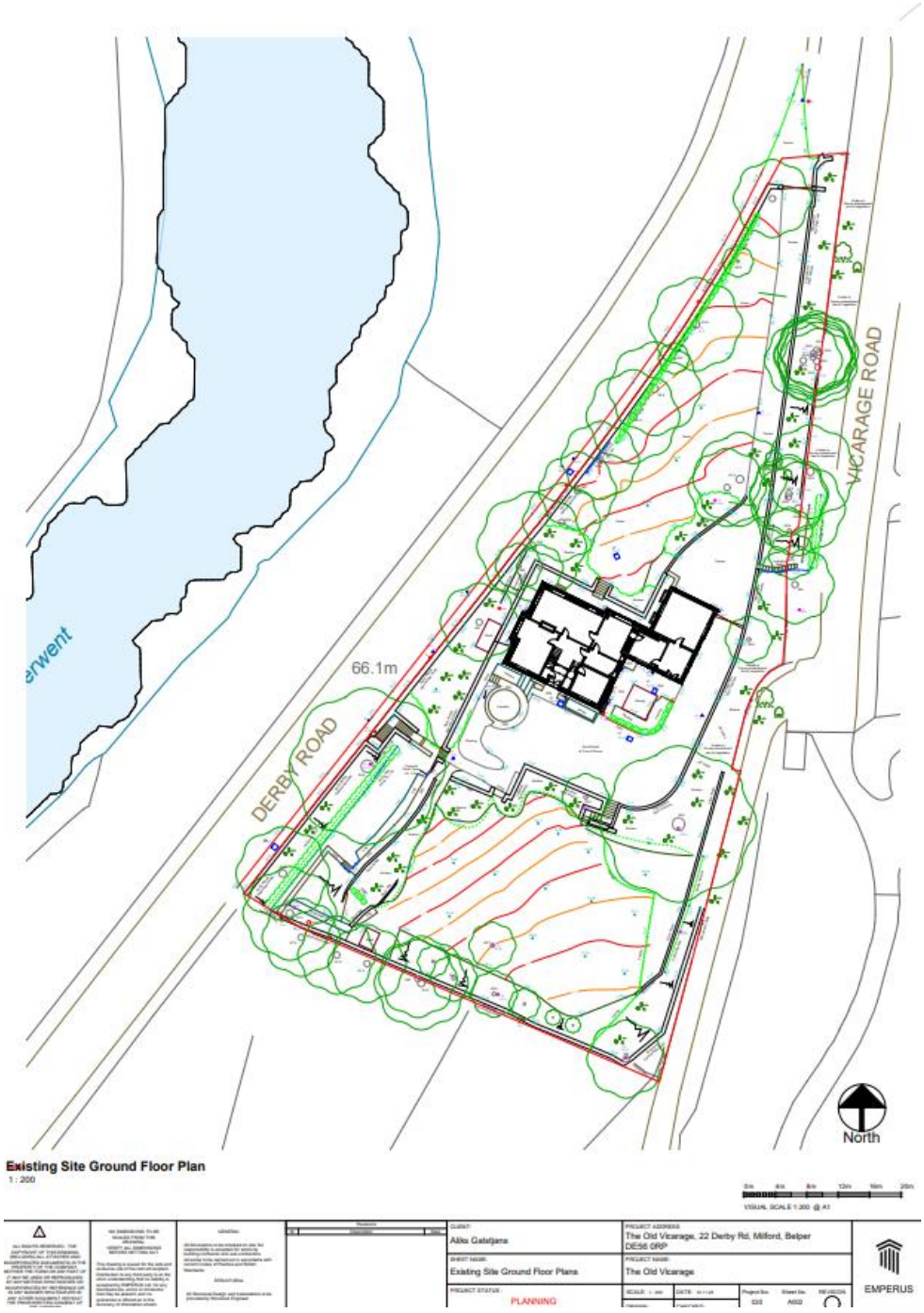
The development which requires additional arboricultural information is shown on the following plans. Aerial photograph below:

### 1.2 Layout and Aerial photograph below:



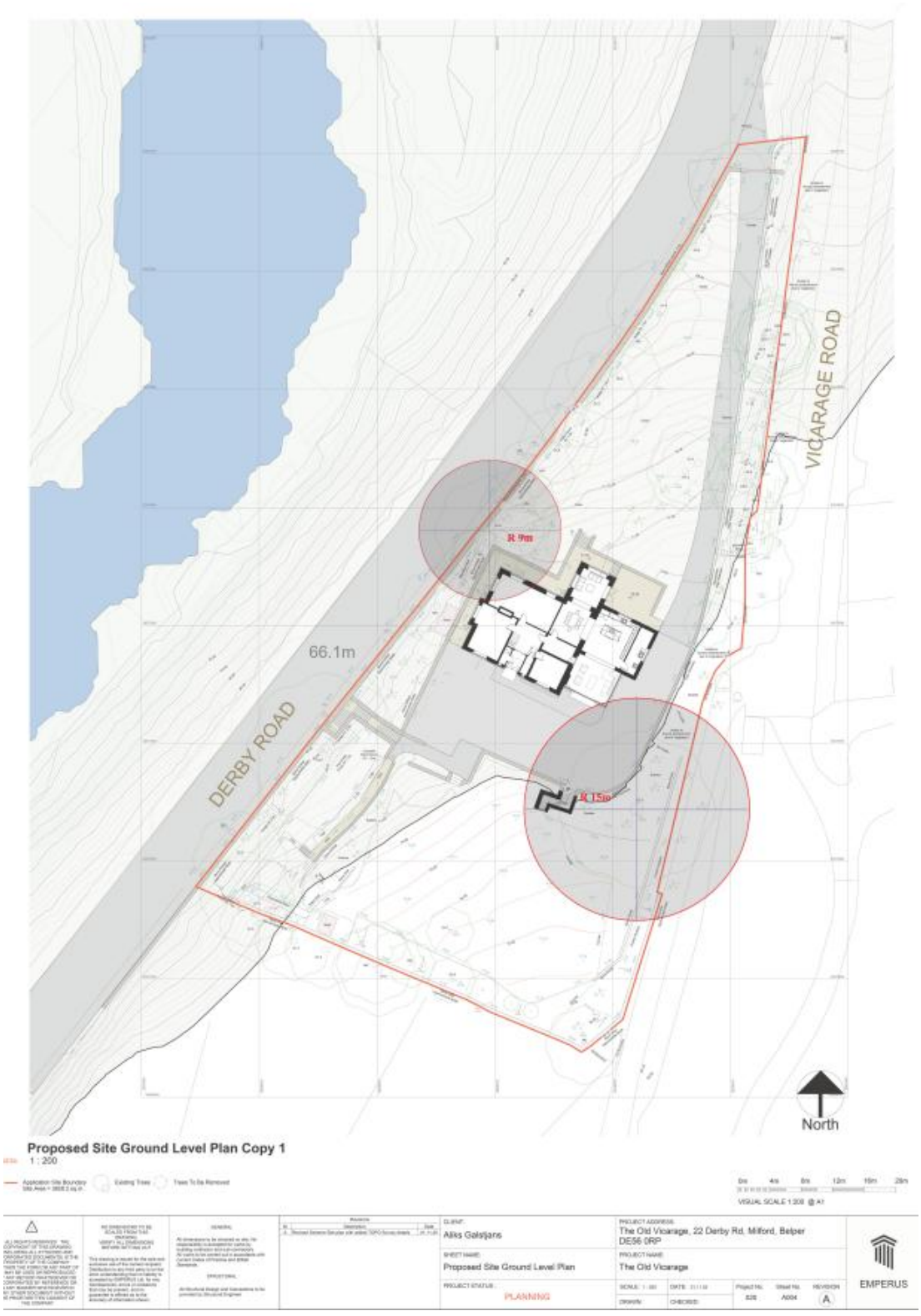

*Map data 2025 © Google.*

**Works proposed: The plans below show the works proposed:**




**Existing shown above**

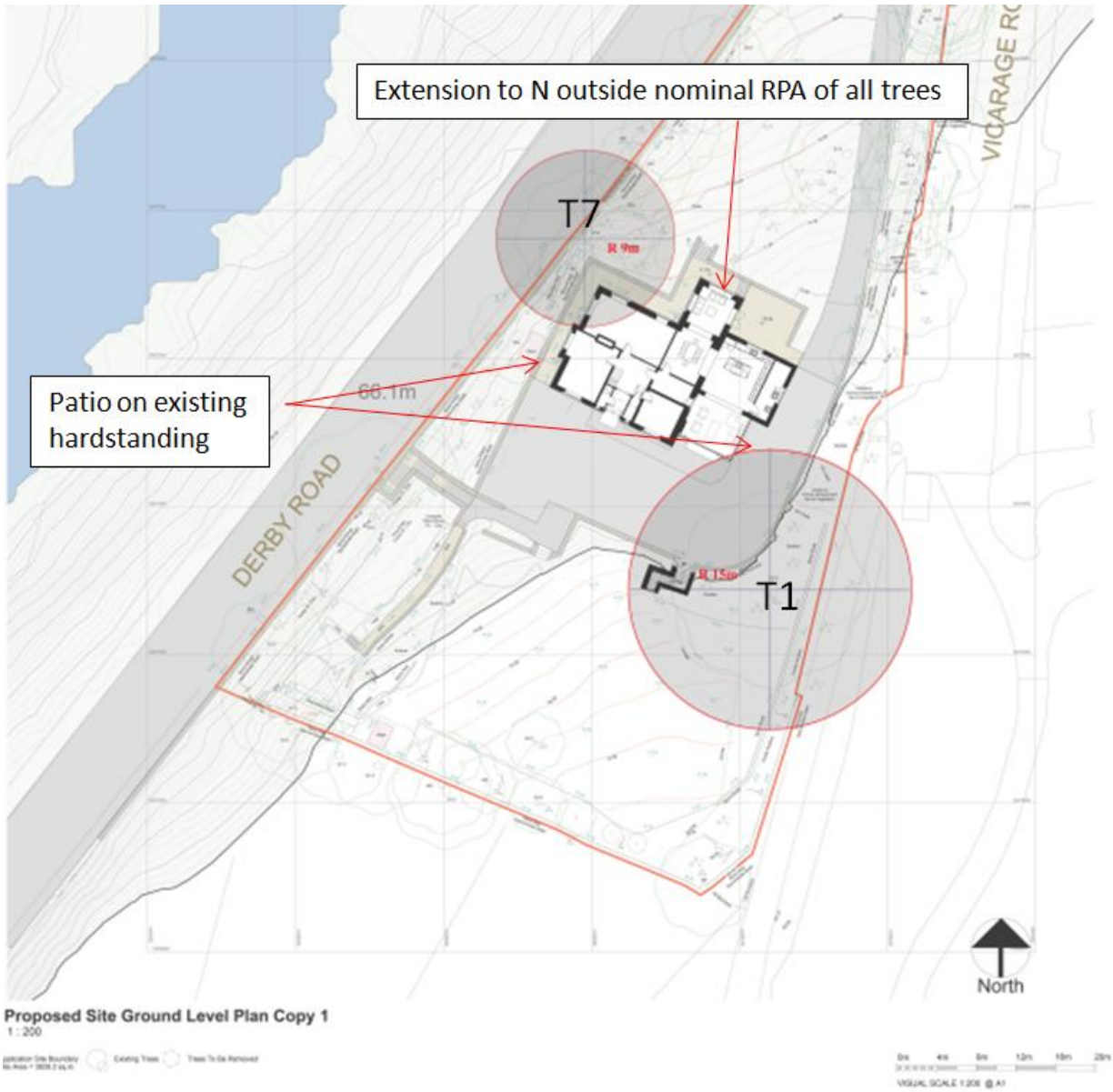
**Proposed below:**



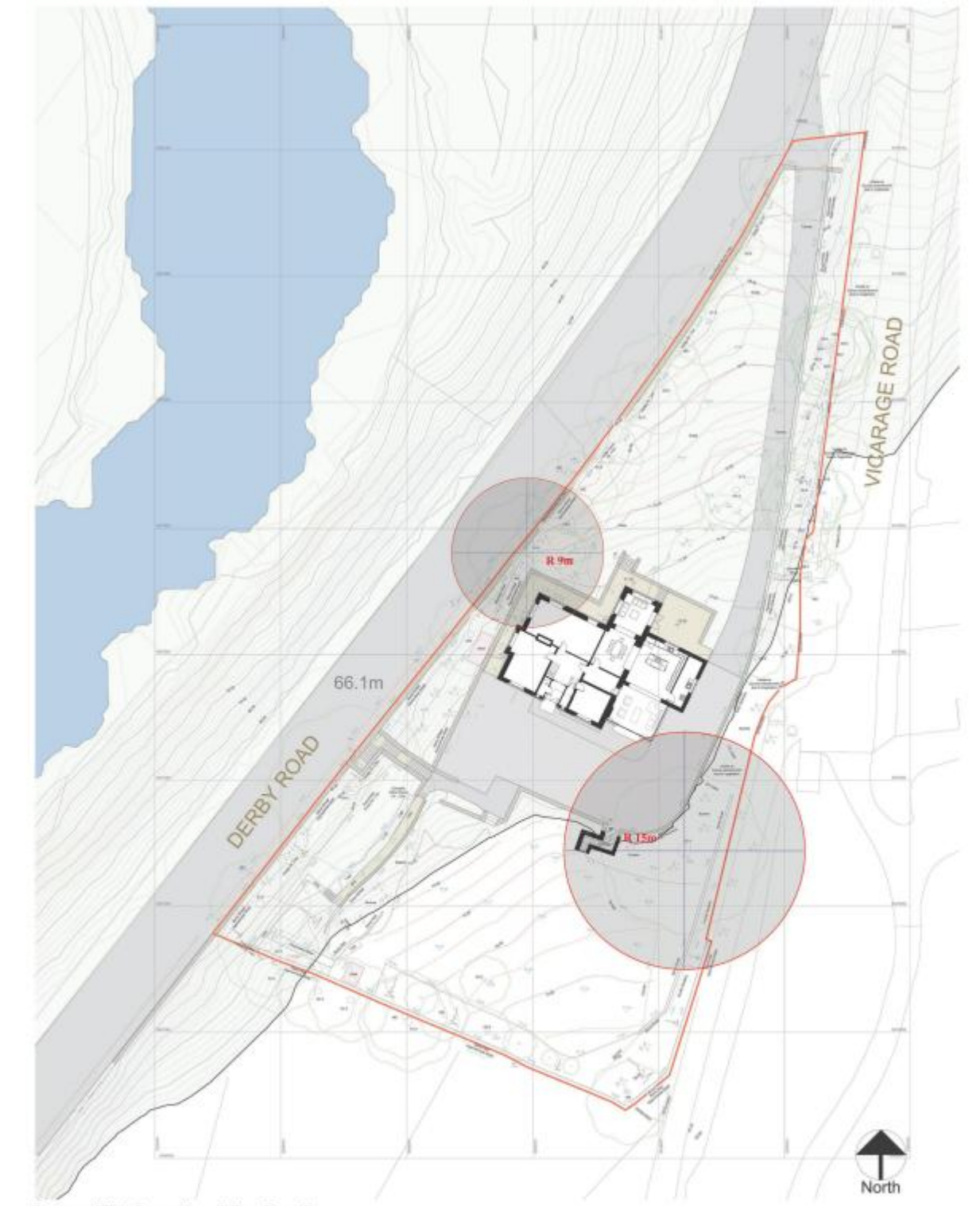

**2. Tree Protection Plan and Arboricultural Method Statement**

Impacts of works:

Comparison of existing trees and proposal indicate that there is retention of all trees. The development to the south is single storey on existing hardstanding, the nearest part of the build reaching 15m from the tree centre of T1, for T7 the new build and any new hardstanding are nearest point 9m, which lies at the extent of the RPA of the tree. Other hardstanding shown is on existing hardstanding areas. See below:




See dimensioned plan below:




**Proposed Site Ground Level Plan Copy 1**
1 : 200

Application Site Boundary
Site Area = 3938.2 sq m
Existing Trees
Trees To Be Removed

0m 4m 8m 12m 16m 20m
VISUAL SCALE 1:200 @ A1

| | | | |
|---|---|---|---|
| CLIENT: Aleks Galsjans | PROJECT ADDRESS: The Old Vicarage, 22 Derby Rd, Milford, Belper DE56 0RP | | |
| SHEET NAME: Proposed Site Ground Level Plan | PROJECT NAME: The Old Vicarage | | |
| PROJECT STATUS: PLANNING | SCALE: 1 : 200 | DATE: 21/11/23 | Project No. 828 / Sheet No. A004 / REVISION A |
| | DRAWN: | CHECKED: | |

EMPERUS

Whilst T1 and T5 are significant and very large landscape trees, in good health and structure and with a significant lifespan, they are considered neither ancient nor veteran.

Veteran trees are (UK gov guidance):

A veteran tree may not be very old, but it has significant decay features, such as branch death and hollowing. These features contribute to its exceptional biodiversity, cultural and heritage value.

All ancient trees are veteran trees, but not all veteran trees are ancient. The age at which a tree becomes ancient or veteran will vary by species because each species ages at a different rate.

An ancient tree is exceptionally valuable. Attributes can include its:

- great age
- size
- condition
- biodiversity value as a result of significant wood decay and the habitat created from the ageing process
- cultural and heritage value

Very few trees of any species become ancient.

**Lime trees over 5m girth (circumference) are considered potential ancient trees, the girth of T1 the Lime tree here is 4.71m. Age estimate between 153 and 217 years.**

**Copper beech trees over 4.5m girth (circumference) are considered potential ancient trees, the girth of T5 Copper beech here is 4.71m. Estimated age 177-197 years old.**

**Age estimation: Ref** Wokingham District Veteran Tree Association www.wdvta.org.uk.

The following table show more detailed calculations of the ages of certain species. An extended version is on the WDVTA Yahoo site. Additional species included in that version are: Austrian Pine, Beech, Black Mulberry, Cedar of Lebanon, Monkey Puzzle, Robinia, Tulip Tree, Turkey Oak and Walnut. ['Most large trees' calculated from Mitchell's generalisation described above. Specific species calculated from White's epidemiologically derived formulae. Although the age-girth relationship is not linear, a linear approximation exists over half metre ranges and so it is valid to extrapolate (within half-metre ranges) on a pro-rata basis. Eg: approximate age of an oak, growing in average conditions, with a girth of 2.75m is (115+143)/2 = 129 yrs.]

References:

Mitchell, Alan (1974) "A Field Guide to the Trees of Britain and Northern Europe" pub Collins ISBN 0 00 212035 6

Rural Development Service (2006) "Environmental Stewardship: Farm Environment Plan Guidance 009"

White, John (1998) "Estimating the Age of Large and Veteran Trees in Britain" Information Note 12 pub Forestry Commission129

## Estimates of age for certain tree species with girth 2.5m - 5.0m

| | Girth (m) | 2.5 | 3.0 | 3.5 | 4.0 | 4.5 | 5.0 |
|---|---|---|---|---|---|---|---|
| | | Estimated age (years) | | | | | |
| **Most large trees** | Growing in good conditions | 98 | 118 | 138 | 157 | 177 | 197 |
| broad-leaved & coniferous | Growing in an avenue | 153 | 184 | 215 | 245 | 276 | 307 |
| | Growing in a wood | 205 | 246 | 287 | 328 | 369 | 410 |
| | | | | | | | |
| **Coppiced trees** | Oak, Lime, Ash, Hazel | 270 | 320 | 370 | 430 | 480 | 530 |
| | Field Maple | 220 | 270 | 310 | 360 | 400 | 450 |
| | Sweet chestnut, Sycamore | 110 | 130 | 160 | 180 | 200 | 220 |
| | | | | | | | |
| **English and Sessile Oak** | Champion tree potential (ideal site conditions) | 80 | 100 | 124 | 151 | 182 | 217 |
| *Quercus robur* | Good site, open grown, sheltered | 102 | 129 | 162 | 199 | 241 | 289 |
| *Quercus petraea* | Average site, garden, parkland | 115 | 143 | 177 | 216 | 260 | 310 |
| | Poor ground and/or some exposure | 133 | 166 | 204 | 248 | 298 | 354 |
| | Woodland boundary pollard, or open woodland | 115 | 143 | 177 | 216 | 260 | 310 |
| | Inside woodland | 217 | 297 | 392 | 501 | 625 | 764 |
| **Ash** | Good site, open grown, sheltered | 89 | 117 | 150 | 188 | 232 | 281 |
| *Fraxinus excelsior* | Average site, garden, parkland | 106 | 137 | 174 | 217 | 265 | 319 |
| | Woodland boundary pollard, or open woodland | 172 | 244 | 328 | 425 | 536 | 659 |
| | Inside woodland | 138 | 177 | 223 | 276 | 336 | 403 |
| **Austrian Pine** | Champion tree potential (ideal site conditions) | 67 | 83 | 102 | 124 | 149 | 178 |
| *Pinus nigra ssp nigra* | Good site, open grown, sheltered | 80 | 100 | 124 | 151 | 182 | 217 |
| | Average site, garden, parkland | 80 | 100 | 124 | 151 | 182 | 217 |
| | Poor ground and/or some exposure | 83 | 106 | 134 | 166 | 202 | 243 |
| **Black Mulberry** | Good site, open grown, sheltered | 242 | 340 | 456 | 590 | 741 | 910 |
| *Morus nigra* | Average site, garden, parkland | 313 | 444 | 599 | 778 | 981 | 1207 |
| **Common Lime** | Champion tree potential (ideal site conditions) | 82 | 96 | 112 | 131 | 153 | 177 |
| *Tilia x europaea* | Good site, open grown, sheltered | 80 | 97 | 118 | 142 | 169 | 199 |
| | Average site, garden, parkland | 80 | 100 | 124 | 151 | 182 | 217 |
| | Churchyard | 80 | 97 | 118 | 142 | 169 | 199 |
| **Deodar Cedar** | Champion tree potential (ideal site conditions) | 51 | 65 | 81 | 100 | 121 | 145 |
| *Cedrus deodara* | Good site, open grown, sheltered | 57 | 72 | 89 | 108 | 130 | 155 |
| | Average site, garden, parkland | 69 | 89 | 112 | 138 | 169 | 202 |
| **Holly** | Inside woodland | 113 | 149 | 193 | 243 | 299 | 362 |
| *Ilex aquifolium* | | | | | | | |
| **Horse Chestnut** | Good site, open grown, sheltered | 89 | 117 | 150 | 188 | 232 | 281 |
| *Aesculus hippocastanum* | Average site, garden, parkland | 100 | 135 | 177 | 225 | 279 | 340 |
| | Churchyard | 89 | 117 | 150 | 188 | 232 | 281 |
| **Plane** | Champion tree potential (ideal site conditions) | 72 | 82 | 93 | 106 | 121 | 138 |
| *Platanus sp.* | Good site, open grown, sheltered | 67 | 83 | 102 | 124 | 149 | 178 |
| | Average site, garden, parkland | 80 | 100 | 124 | 151 | 182 | 217 |
| | Churchyard | 80 | 100 | 124 | 151 | 182 | 217 |
| **Red Oak** | Champion tree potential (ideal site conditions) | 67 | 83 | 102 | 124 | 149 | 178 |
| *Quercus rubra* | Good site, open grown, sheltered | 80 | 100 | 124 | 151 | 182 | 217 |
| | Average site, garden, parkland | 102 | 129 | 162 | 199 | 241 | 289 |
| **Sweet Chestnut** | Good site, open grown, sheltered | 80 | 100 | 124 | 151 | 182 | 217 |
| *Castanea sativa* | Average site, garden, parkland | 83 | 106 | 134 | 166 | 202 | 243 |
| | Poor ground and/or some exposure | 100 | 135 | 177 | 225 | 279 | 340 |
| **Sycamore** | Good site, open grown, sheltered | 67 | 80 | 94 | 111 | 129 | 150 |
| *Acer pseudoplatanus* | Average site, garden, parkland | 67 | 83 | 102 | 124 | 149 | 178 |
| | Churchyard | 67 | 83 | 102 | 124 | 149 | 178 |
| | Poor ground and/or some exposure | 83 | 106 | 134 | 166 | 202 | 243 |
| **Yew** | Average site, garden, parkland | 113 | 149 | 193 | 243 | 299 | 362 |
| *Taxus sp.* | Churchyard | 189 | 260 | 344 | 440 | 550 | 673 |
| | Poor ground and/or some exposure | 242 | 340 | 456 | 590 | 741 | 910 |

**The age estimates suggest that both trees are from between 175 and 200 years old and likely planted around the same time, in the early to mid 19th Century. Both species are relatively fast growing in good conditions and they have developed to be old and important landscape trees but neither veteran or ancient. In that case the nominal RPA calculated in the original BS5837 Tree report is accurate (rather than an enlarged RPA that is considered for ancient and veteran trees).**

**Tree Protection Plan**

This is shown below:




**In addition to these measures, the following is included as it will be necessary to protect the on-site retained trees:**

It is essential to safeguard a pre-determined volume of soil around the base of the retained trees to ensure that then ongoing biological functioning of the root system along with the interaction with the soil is not impaired. This requires, that prior to the commencement of development activity on site that a robust protective barrier is erected.

The specifications for this barrier should be as per the British Standard 5837 of 2012 (Trees in Relation to Construction – recommendations). In brief, this consists of 2.3m high panels attached to an adequately braced scaffold structure to deter un-authorized dismantling and robust enough to rebut physical impacts from site plant and machinery. In practice Heras, weld-mesh type panels perform well when attached to the above mentioned scaffold structure.

Bird breeding season: All tree works should ideally take place outside of the peak bird breeding season. Peak bird breeding season is between mid March and mid July, although certain species can breed outside these months and if breeding birds are found then work should cease and the advice of an ecologist sought. If clearance is undertaken within the peak bird breeding season then all site features should preferably be checked immediately prior to clearance by a suitably qualified ecologist.

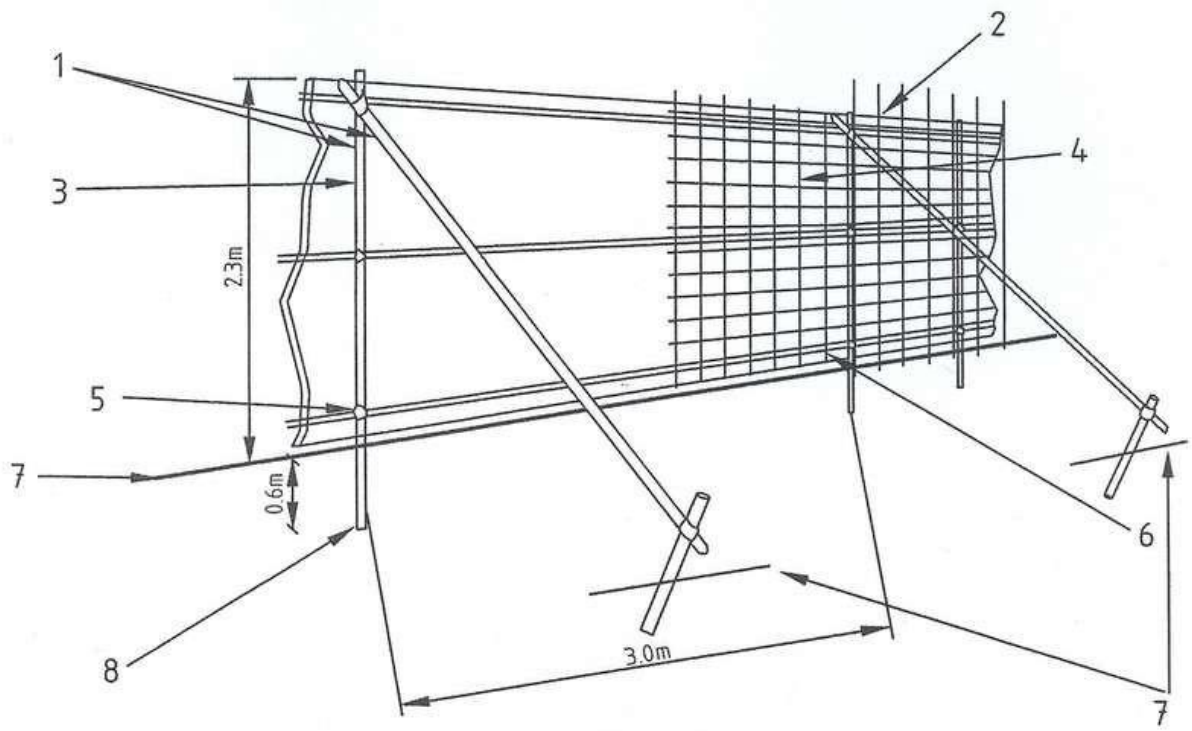
**Tree Protection & Ground Protection**

All trees that are being retained on site are to be protected by barriers and/or ground protection before any materials or machinery are brought onto the site, and before any demolition, development or stripping of soil commences. Where all activity can be excluded from the RPA, vertical barriers are to be erected to create a construction exclusion zone. The default barrier specification is to be in accordance with Figure 2. Of BS 5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations' as illustrated below.

The protected area is to be regarded as sacrosanct, and, once installed, barriers and ground protection is not to be removed or altered without prior recommendation by the project arboriculturist and, where necessary, approval from the local planning authority.

All weather tree protection posters (an example is detailed below) are to be securely fixed to the tree protection fencing in plain view.




1 Standard scaffold poles
2 Uprights to be driven into the ground
3 Panels secured to uprights with wire ties and, where necessary, standard scaffold clamps
4 Weldmesh wired to the uprights and horizontals
5 Standard clamps
6 Wire twisted and secured on inside face of fencing to avoid easy dismantling
7 Ground level
8 Approx. 0.6m driven into the ground

**Figure 2. – Protective fencing for RPA**

The tree protection fencing to the retained trees is to be erected as detailed above.

Care is to be exercised when locating the vertical poles to avoid underground services and, in the case of the bracing poles, also to avoid contact with structural roots. If the presence of underground services precludes the use of driven poles, an alternative specification that provides an equal level of protection is to be prepared in conjunction with the project arboriculturist as illustrated within Figure 2 above.

Where the set-back of the tree protection barrier exposes unmade ground to construction damage, temporary ground protection is to be installed as part of the implementation of physical tree protection measures prior to work starting on site.

Temporary ground protection is to be capable of supporting any traffic entering or using the site without being distorted or causing compaction of underlying soil. Detail is shown in Figure 3 below: Scaffolding and root protection within the RPA.

a) for pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression- resistant layer (e.g. 100 mm depth of woodchip), laid onto a geotextile membrane;

b) for pedestrian-operated plant up to a gross weight of 2t, proprietary, inter-linked ground

protection boards placed on top of a compression resistant layer (e.g. 150 mm depth of woodchip), laid onto a geotextile membrane;

c) for wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g. proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subjected.

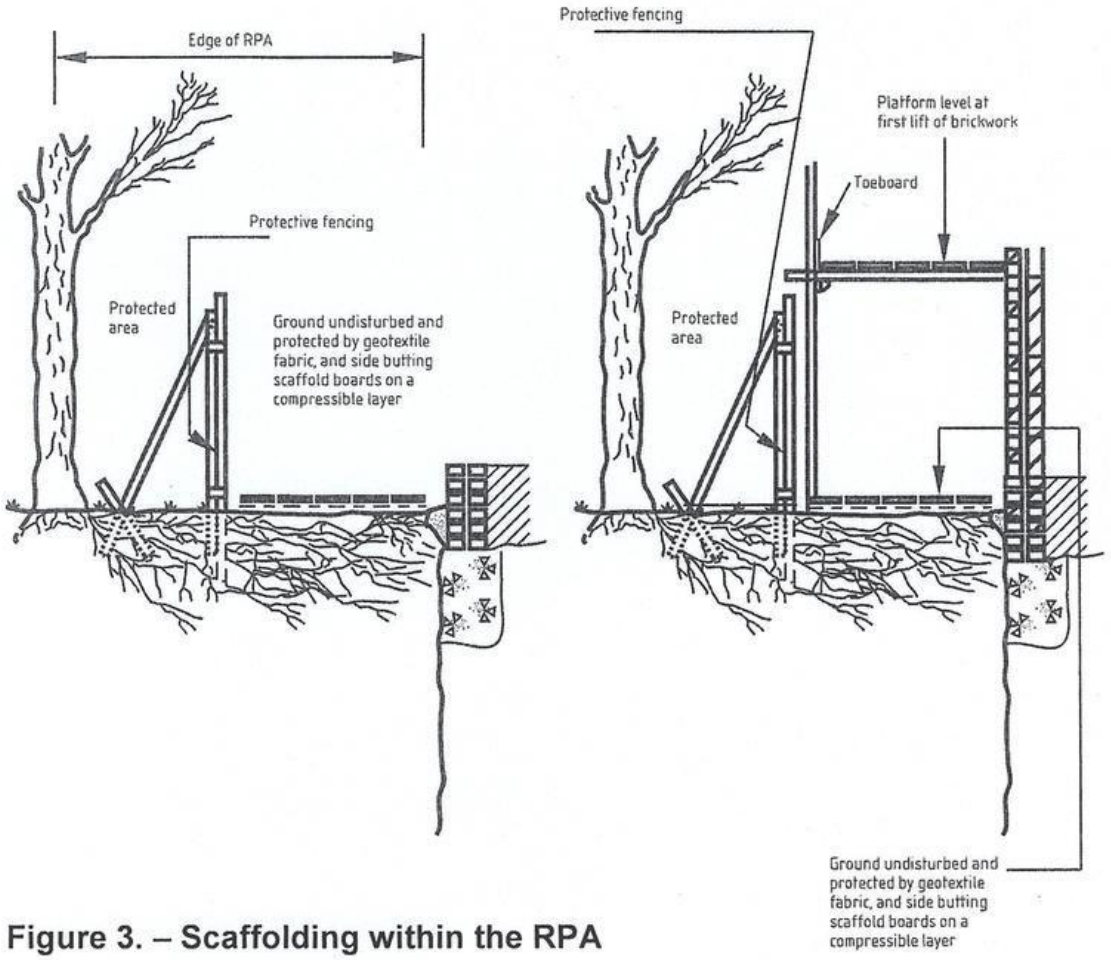



**Figure 3. – Scaffolding within the RPA**

Incoming services are routed away from the RPAs of all off site trees. In terms of the programme of works, this will be provided. If the services are routed along the new access road, this will require location of the services to the southern edge of the access route rather than in the centre of the road.

The following provides for the methods of working within the RPZ retained trees. In respect of the works, it is agreed that:

1. Location of services: these are to be outside the RPZs of retained trees

2. Landscaping and fencing within the RPZs of the retained trees to be minimal.

**4.0 Excavations within the RPA**

There are to be no excavations within the RPA's of existing trees on site, other than as shown for T1 where this is existing hardstanding that is to be replaced under a presented method statement.

**5.0 Site Compound and Working Area**

5.1 The works are to be restricted to within the site boundary which is to incorporate an area for the site compound, site offices and associated contractors staff parking.
5.2 The site compound, site offices and associated contractors staff parking areas are to be located outside of any RPA's of retained trees. The exact location for these facilities during the construction period is to be detailed by the contractor and approved prior to any site works commencing.

**6.0 Haul Routes**

6.1 The route for the haulage, site access and egress is to be via the existing site access driveway only. To limit offsite ground compaction and damage to the main drive, a temporary track way system is to be provided if weather conditions dictate, should these conditions occur during any resurfacing works. This should be agreed with the LPA tree officer if required.

6.2 The planning of site operations should take sufficient account of wide loads, tall loads and plant with booms, jibs and counterweights (including drilling rigs), in order that they can operate without coming into contact with retained trees. Any transit or traverse of plant in proximity to trees should be conducted under the supervision of a banksman, to ensure that adequate clearance from trees is maintained at all times. Access facilitation pruning is not required.

**7.0 Temporary Topsoil Storage**
7.1 The stripped topsoils are to be stored in temporary mounds outside of the construction exclusion zones of the retained areas within Tree protection fencing. In accordance with BS 4428 topsoil heaps should not exceed 3m in height.

**8.0 Underground Services**

**In general it is considered that all services will be routed away from the Root Protection Zones of retained trees. All underground service runs will be placed outside the RPA of the trees on or adjacent to the site, in particular tree 1, where services should be routed entirely outside the nominal RPA. This will require:**

8.1 There may be instances where the proposed underground services impact on the RPA's of existing trees and hedgerows (refer to the project engineer's services plan). Particular care should be taken in the routing and installation of all underground services.

8.2 Excavations for proposed services within or immediately adjacent to the RPA's of retained trees are to be excavated using hand-held tools or compressed air soil displacement in accordance with clause 7.2 of BS 5837:2012;
8.3 The installation of underground service routes within the RPA's of existing trees to be retained are to be installed using trenchless solutions such as micro-tunnelling, surface launched directional drilling or impact moling as per Table 3 within clause 7.7 of BS5837:2012, with entry and retrieval pits being sited outside of the RPA.
8.4 Shallow service runs are to be excavated using hand held tools being careful to protect and cause minimal damage to retained tree roots.
8.5 Where utility operations do not require planning permission, including those performed by statutory undertakers, they are still be undertaken in accordance with these principles. As a minimum standard, such operations are be undertaken in accordance with NJUG Volume 4, issue 2 [N1].

**9.0 Removal Of Existing Hard Surfacing**

9.1 Prior to the removal of the existing hard surfacing, appropriate tree protection fencing and ground protection is to be installed to protect the existing trees in accordance with BS 5837:2012.
9.2 Care is to be taken not to disturb tree roots that might be present beneath the existing surfacing. Handheld tools or appropriate pedestrian operated machinery is to be used (under arboricultural supervision) to remove the existing surface, working backwards over the area, so that the machine is not moving over the exposed ground.
9.3 Any exposed tree roots are to be treated in accordance with section 7.2 of BS5837:2012 and as detailed above.
9.4 Any sections of the existing hard surface construction that are within the RPA's of any tree to be retained and fall within the proposed parking / access roads areas are to be assessed for their suitability of reuse, thus negating the need for deep excavations. Such areas of existing hard surfacing that are suitable for reuse are to be reduced and additional base and wearing courses installed as necessary.

**10. Tree Surgeons Qualifications**

The tree surgery works detailed below are to be undertaken by a qualified Arboricultural Contractor who must be listed in the Arboricultural Association's Approved Contractors Directory (ref: www.trees.org.uk ).

- The Contractor shall hold NPTC (National Proficiency Training Council) Certification.

- The Contractor shall have Chapter 8 Traffic Management Certification.

- The Contractor shall demonstrate at the time of tendering an understanding of Health & Safety Site Specific Risk Assessments & Method Statements for Tree Work. This assessment shall be completed prior to appointment to undertake the works.

**11. Compensation for trees lost to accommodate the scheme:**

No loss of trees is shown and there will be no requirement for compensation planting.

**12 Facilitation pruning and Crown lifting:**

It is considered that this will not be required to implement the scheme.