

TREE SURVEY, ARBORICULTURAL IMPACT ASSESSMENT AND ARBORICULTURAL METHOD STATEMENT

A report to accompany a planning application for the creation of an eco-pod glamping site and access road on land at Applegarth Farm, Farm, Grayshott, Hampshire, GU26 6JL.

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On the instructions of Urban Wilderness

26th February 2021

MDA reference N81



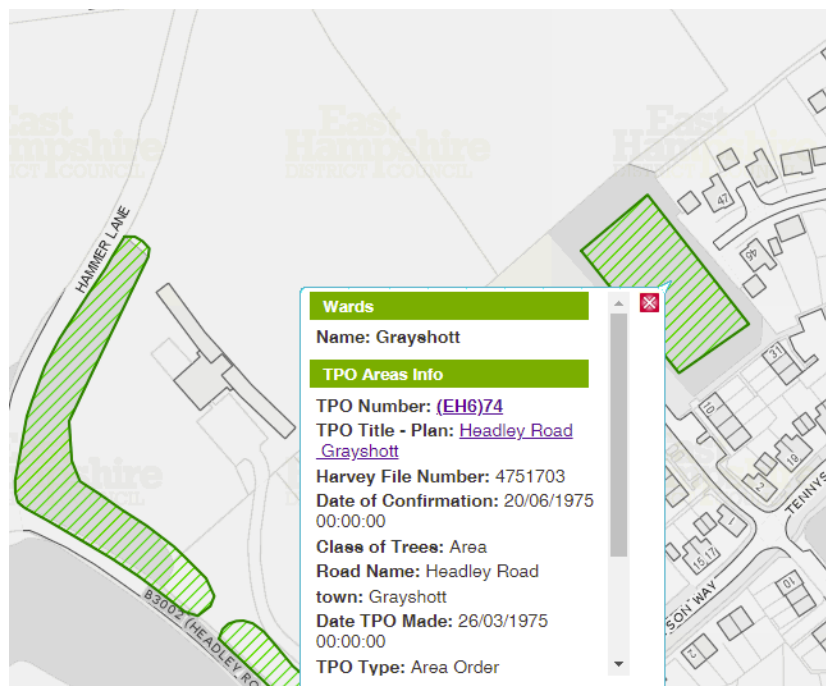
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1. Introduction

- 1.1 Martin Dobson Associates Ltd (MDA) were instructed by Urban Wilderness on 14th December 2020 to carry out a survey of trees adjacent to fields to the northwest of Applegarth Farm Shop, Grayshott, Hampshire, GU26 6JL. The purpose of the survey is to inform architects of potential tree-related constraints on the site and to provide advice on tree protection during the proposed construction of an eco-pod glamping site and associated access road.
- 1.2 The British Standard 5837: 2012 *Trees in relation to design, demolition and construction – Recommendations* provides a framework for considering trees in the planning process. It gives guidance on categorising the qualities of trees in order to enable decisions to be made as to which trees are appropriate for retention within a development. It then advises on options for protecting trees to be retained during the development (at all stages including demolition, construction and hard landscaping), and the means of incorporating trees into the developed landscape. This report complies with the recommendations of BS5837: 2012.
- 1.3 The site is not within a Conservation Area and no trees on the site are protected by a Tree Preservation Order. A block of woodland adjacent to the site is protected by a Tree Preservation Order (TPO). TPO (EH6)74 protects, amongst other trees, an area A3 consisting mainly of limes, beech and oak with a few conifers. All trees covered by a TPO benefit from statutory protection and no work can be carried out to them (including cutting roots or branches or felling) without an application to the local planning authority. A3 is more than 20m away from the boundary of the proposed development site.

Figure 1. Plan taken from EHDC website showing locations of TPOs (green hatching) near to Applegarth.



- 1.4 One group of alder trees (G2) was surveyed which forms a boundary line between fields. Four individual trees within G2 (T64 – T67) are located at the proposed entrance to the site where a gate has been erected and these will need to be removed to enable the gate to be used.
- 1.5 A landscaping scheme prepared by Urban Wilderness involves the planting of a large number of new trees which will serve to mitigate the loss of the trees proposed for removal and enhance the site. The retained trees will be protected during development. Details of tree protection are contained in this report.

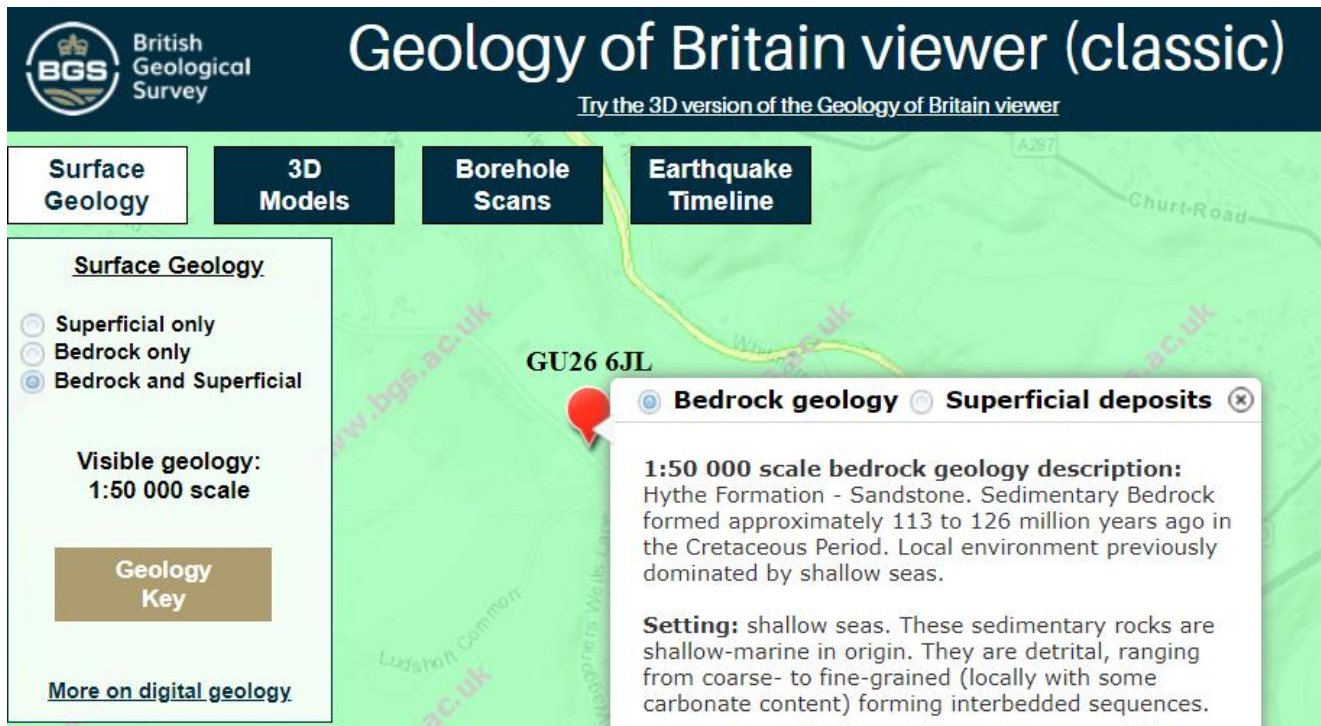
2. Tree survey

- 2.1 The tree survey was carried out by Martin Dobson on 31st December 2020.
- 2.2 Appended at **MD1** is the tree survey schedule which provides details of one group of alders (G2) and a subset of four trees within that group (T64 – T67) at the proposed new entrance to the site.
- 2.3 The TPO trees in area A3 are remote from the development as they are more than 20m outside the boundary fence. They have not been included in the survey. Likewise, the other boundaries are marked by maintained hedges, outside the boundary fence, and trees are located beyond this but sufficiently far away not to be included in the survey.
- 2.4 The site survey drawing appended at **MD2**, based on a supplied topographical survey, shows the positions of the surveyed trees and gives a reasonable indication of their comparative branch spreads. The drawing has been colour coded as follows:
- | | |
|--|-------------|
| A trees (high quality and value, minimum 40 years useful life) | LIGHT GREEN |
| B trees (moderate quality and value, minimum 20 years useful life) | MID BLUE |
| C trees (low quality and value, minimum 10 years useful life) | GREY |
| U trees (unsuitable or dead/dying/dangerous, less than 10 years useful life) | RED |
- 2.5 It should be understood that no individual safety inspection has been carried out on any tree. Similarly, any suggestions for tree work should not be taken as a specification for tree works.
- 2.6 Adequate protection, both above and below ground, is essential for trees that are to be retained as part of a development. The British Standard BS5837: 2012 *Trees in relation to design, demolition and construction - Recommendations* advises that there should be a root protection area (RPA) around trees which is kept free of construction activities by means of an exclusion zone enforced by protective fencing and/or ground protection. The RPA is calculated as the area equivalent to a circle with a radius of 12 times the trunk diameter at a height of 1.5 m above ground level. Based on the tree survey data root protection areas (and radial distances from the trunk to be protected) have been calculated and these are shown as circles around the trees on the tree constraints plan at **MD2** and are tabulated at **MD3**.

3. Soil assessment

- 3.1 BS5837: 2012 advises that soil properties should be considered as part of a tree survey report. This is necessary because trees can cause damage to structures founded on soils that shrink and swell with changes in moisture content (principally clays). Such movement is exacerbated by the influence of trees and therefore if a shrinkable soil is suspected foundations should be designed to extend below the likely zone of seasonal moisture change.
- 3.2 The British Geological Survey 1: 50,000 scale map indicates that the underlying geology of the site is Hythe Formation - Sandstone (Figure 1) and therefore no special precautions are required.

Figure 1. British Geological Survey 1: 50,000 scale map showing that the site is underlain by the Hythe Formation – Sandstone.



4. Arboricultural impact assessment

- 4.1 The purpose of an arboricultural impact assessment (AIA) is to evaluate the direct and indirect effects of proposed development on trees and, where necessary, to consider appropriate mitigation. It should set out which, if any, trees are to be removed to facilitate the development and should consider the possible effects on retained trees of potentially damaging activities on the site (for example changes in ground level and installation of below ground services). Requirements for access around trees should be considered and potential conflicts identified, for example, where branches overhang the development area and may require pruning.
- 4.2 Mitigation for any issues identified should be proposed and addressed in the arboricultural method statement (AMS).

Tree removals

- 4.3 The proposed development requires the removal of three category C trees (T64, T66 and T67) and one category U tree. The trees are part of a line of alders which form a boundary between fields. Alders tend to have a short life expectancy as they are fast growing and have soft wood that is prone to infection and decay. There is evidence that a number of trees are infected with bleeding canker caused by *Phytophthora alni* and some have died. Others have lost individual branches or limbs. It is likely that many of the trees will need to be removed in the next 10 or so years. The loss of four trees in a declining population is not considered to be significant. The tree removals plan is shown at **MD4**.

| Summary of the fifteen trees to be removed | | |
|--|------------------------|------------|
| Category B | Category C | Category U |
| | T64, T66 and T67 alder | T65 alder |

Figure 2. Photograph of proposed access into the development site through G2. The four trees at the centre of the photograph are to be removed (T64 – T67).



Tree pruning

4.4 Work will be required to tidy up G2 by removal of dead trees and dead branches.

Tree protection

- 4.5 The trees to be retained will be protected from mechanical damage to their trunk, branches and roots by fencing, already in place, creating a construction exclusion zone (CEZ) which will exclude site workers, machinery and storage of materials. There is sufficient space outside the CEZ for all construction activities to take place without creating pressure on tree protection.
- 4.6 The RPAs of alders in G2 marginally overlap with the proposed new access road. It is therefore proposed that a section of the road will be installed with an above-ground no-dig construction using a cellular confinement system such as Cellweb with a permeable final surface. This will minimise soil compaction and create a physical barrier above the soil which will prevent inadvertent damage to soil and roots.

5. Arboricultural method statement and tree protection plan

- 5.1 Trees can very easily be damaged during construction activities through their branches being broken by construction traffic passing close to the canopy or by root severance during the digging of foundation or service trenches. The majority of roots are to be found in the upper 600mm of soil and so even relatively shallow trenches can sever a significant number of roots growing across the direction of the trench. Similarly, the diameter of tree roots tapers sharply within a few metres of the trunk of a tree, so that what might seem to an uninitiated site worker to be an insignificant root (perhaps only a few centimetres in diameter) may actually be highly important.
- 5.2 Tree roots can also be damaged indirectly, often inadvertently, through soil compaction, which disrupts soil structure and can lead to root death through the development of anaerobic soil conditions. Spillage of toxic materials (e.g. oil or diesel) can also result in root damage and ultimately the death of a tree. Protection of the soil around trees by means of a construction exclusion zone (CEZ) is therefore vitally important in order to preserve roots undamaged.

Protective fencing

- 5.3 Tree protection will comprise of permanent fencing which has already been installed adjacent to G2, as shown in Figure 3. The fencing will exclude any construction activity.

Figure 3. Photograph confirming that fencing has been erected adjacent to G2 and will delineate a construction exclusion zone.



Above-ground no-dig surfaces

- 5.4 The sequence of events to be followed for installation of the above-ground no-dig surface for the access road (shaded blue at **MD5**) is as detailed below (and explained in detail at **MD6**) and will be installed as a preliminary to the main works so that it will form a ground protection layer.
- 5.5 Turf and no more than 100 mm of topsoil will be removed from within the area to be surfaced using hand tools and the area will be approximately levelled using hand tools only. Tracked or wheeled vehicles will not be used on unprotected ground.

- 5.6 Once soil has been levelled a layer of geotextile (e.g. Terram 2000 or Treetex) will be laid over the ground.
- 5.7 A cellular confinement system such as Geocell¹ or Geosynthetics Cellweb² up to approximately 100-200 mm thick (specific thickness to be designed to support expected loads by engineer) will be laid out and pegged in place. Wooden or concrete edging laid above ground will be used and may be anchored by the use of wooden or metal pegs driven into the ground.
- 5.8 The cellular confinement system will be filled with clean angular stone (20 - 40 mm to BSEN1342 or BSEN12620). The no fines material is to ensure high ratio void space which corresponds with ideal soil void ratios for tree root health. Crushed gravel is not permitted. Filling will take place working from outside the root protection area inwards so that any machinery required works on filled rather than empty cells (Figures 4 and 5). Banked soil may be used outside the construction to mask retaining boards.

Figure 4. Schematic diagram illustrating cellular confinement system used to form an above-ground no-dig driveway.

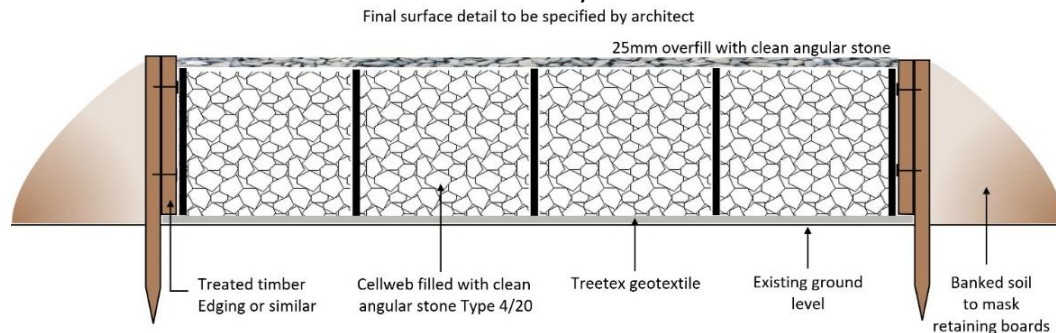


Figure 5. Photographs illustrating cellular confinement system used to form an above-ground no-dig surface.



- 5.9 A temporary wearing surface covering the cellular confinement system may be required for the duration of the works and this can comprise of plywood, metal or heavy duty plastic road plates or sacrificial gravel. Once construction works have been completed on the site the temporary

¹ <http://www.terram.com/products/geocells/tree-root-protection-geocell.html>

² http://www.geosyn.co.uk/products/cellweb-trees.asp?product_id=21

wearing surface may be removed and can be replaced with a final surface of a porous material such as permeable tarmac, gravel or block pavements bedded on sharp sand above a geotextile.

Arboricultural supervision

5.10 It is recommended that a project arboricultural consultant is appointed to oversee tree protection for the duration of the construction contract. The project arboriculturist will be consulted on any issues that may arise concerning trees and will visit the site as often as necessary to ensure that trees are protected and/or at the following key stages:

- Prior to contractors commencing works on site in order to meet with the supervising architect and/or the contractor's nominated site manager to ensure that the principles of tree protection are understood and the procedure, timescale and materials for installation of tree protection are agreed;
- Following installation of tree protection but prior to any works commencing on site to confirm that it is fit for purpose;
- During installation of cellular confinement system;
- At any time that there are potential conflicts with tree protection.

5.11 A pre-start meeting should be held on site with the project arboriculturist and the contractor's representative(s) so that the precise details of the schedule of works together with details of installation of tree protection can be agreed and personnel induction carried out. The site manager/foreman will be fully briefed on tree protection measures and procedures before any workers or sub-contractors are permitted onto the site. Following induction, a copy of the Induction Sheet (**MD7**) will be provided to and be signed by the site manager/foreman in recognition of acceptance of their role in enforcing day to day tree protection.

5.12 All contractors involved in the project have a duty to comply with all the specified tree protection measures and all workers will be provided with induction by the site manager/foreman and be required to sign an Induction Sheet confirming they have understood the protection measures. Signed sheets will be kept on site for inspection.

5.13 No enabling works will take place until after the meeting has been held and tree protection has been installed, inspected and approved as fit for purpose.

5.14 Fencing and ground protection will not be removed under any circumstances during construction unless with the express approval of the local authority. If in any doubt the site manager must contact the project arboricultural consultant.

Burning of waste

5.15 No fires will be lit on site within 3 m of root protection areas, including the area of the no-dig access road, due to the danger of scorching of leaves and branches of overhanging trees.

Space for machinery, parking of vehicles, storage of materials and site huts

5.16 All machinery required on site will operate outside of root protection areas or from the road. Site accommodation and welfare will be located outside root protection areas.

5.17 Delivery vehicles will park in the road or parking areas and storage of materials will be outside root protection areas.

Services

5.18 The proposed layout of incoming (water, gas and electricity) and outgoing (foul sewer) services is not yet established but they will be installed outside root protection areas and before the installation of the cellular confinement system, if the route is to be along the access road. If it is necessary for a trench to be dug through an RPA a specific method statement will be required which will need to specify that the trench will be hand dug and that care will be taken to preserve all roots encountered which are larger than 25 mm diameter.

Tree works

5.19 Tree removals will be undertaken as preliminary works. This will be carried out by suitably qualified arboriculturists to the standards set out in BS3998: 2010 *Tree works – recommendations*.

Landscaping

5.20 Landscaping plans do not involve any changes in soil levels, digging of any trenches or construction of masonry or retaining walls within root protection areas.

5.21 A large number of new trees will be planted to mitigate the loss of the four alders to be removed.

6. Conclusions

- 6.1 A BS5837: 2012 survey of one group of alders (G2) and four individuals within G2 (T64 – T67) has been carried out on land to the north west of at Applegarth Farm shop, Grayshott, GU26 6JL. Group G2 is considered to be category C and of low value. T64 and T66 – T67 are also category C trees. T65 is category U and is in terminal decline.
- 6.2 The proposed development of an eco-pod glamping site requires the removal of alders T64 – T67.
- 6.3 A landscaping scheme prepared by Urban Wilderness involves the planting of many new trees which will serve to mitigate the loss of the trees proposed for removal and will significantly enhance the site.
- 6.4 The trees to be retained will be protected from damage and methods of protection have been proposed in the report.
- 6.5 It is considered that the proposed development will pose no threat to trees to be retained and is sympathetic to the rural character of the area.

APPENDIX MD1

Tree survey schedule (BS5837: 2012)

| Tree No. | Species | Height (m) | Trunk diameter (mm) | N (m) | E (m) | S (m) | W (m) | Height of crown clearance (m) | Age class | Structural condition | Useful life | BS5867 Grade | Comments |
|----------|---------|------------|---------------------|-------|-------|-------|-------|-------------------------------|-----------|----------------------|-------------|--------------|---|
| G2 | Alder | 12-13 | Up to 450 | 3 | 3 | 3 | 3 | 4 | M | Fair | 10- 20 | C | Forms boundary line. Frequent dieback and collapsing trees. |
| G2.T64 | Alder | 12 | 350 | 2 | 2 | 3 | 2 | 4 | M | Fair | 10- 20 | C | Probable infection with <i>Phytophthora</i> bleeding canker |
| G2.T65 | Alder | 11 | 200, 180, 180 | 3 | 2 | 3 | 2 | 4 | M | Poor | <10 | U | Dieback and branch disintegration, fell |
| G2.T66 | Alder | 16 | 300 | 3 | 3 | 3 | 3 | 4 | M | Fair | 10- 20 | C | Originally two main stems but one has snapped. |
| G2.T67 | Alder | 16 | 270, 200, 200 | 3.5 | 2 | 3.5 | 3 | 4 | M | Fair | 10- 20 | C | Multi-stemmed |

+ measured at base

* multi stem – aggregate trunk diameter calculated

NESW – radial crown spread in cardinal directions

Y - young (up to one third life expectancy)

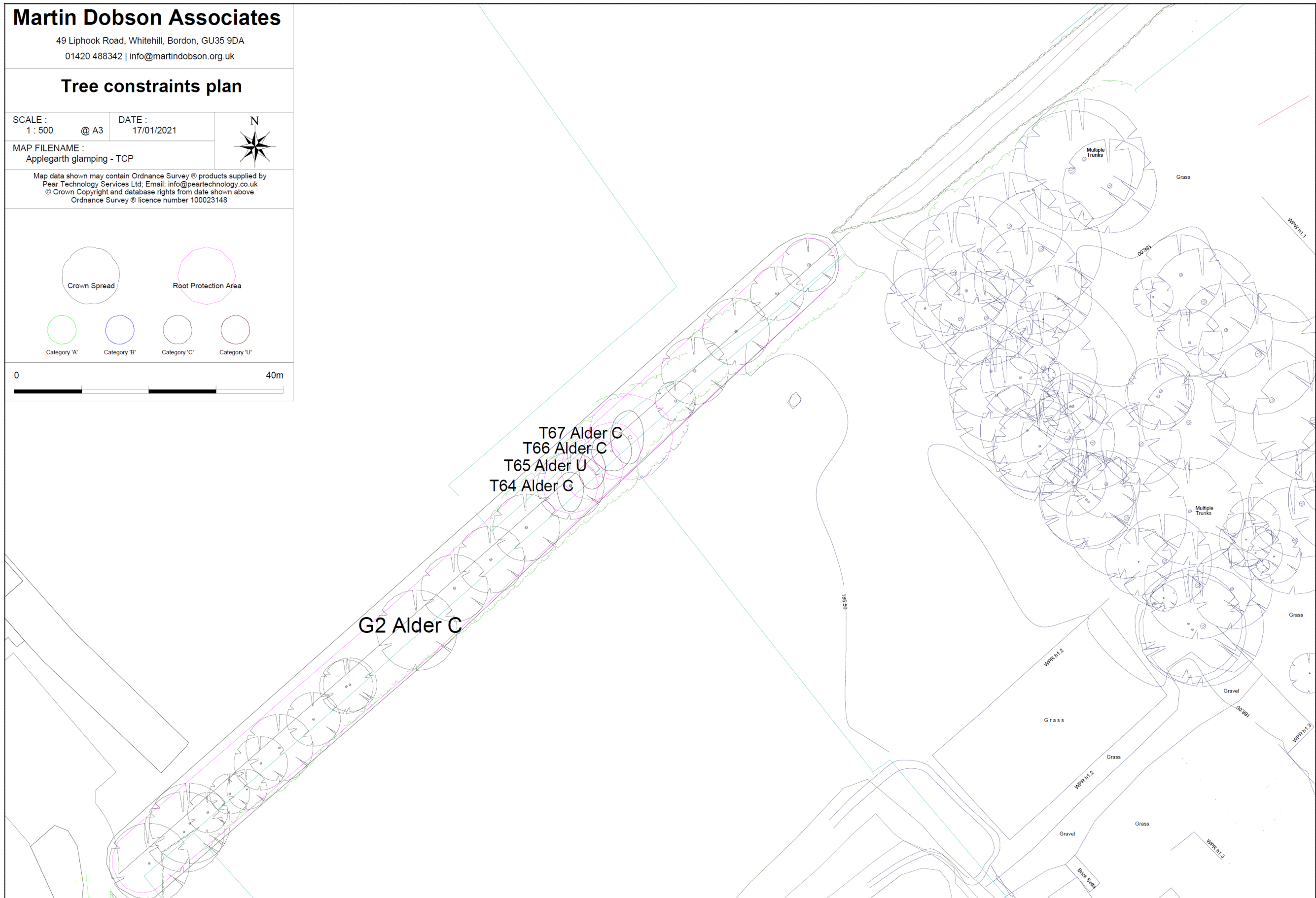
MA - mid aged (one third to two thirds life expectancy)

M - mature (more than two thirds of life expectancy)

OM - overmature

APPENDIX MD2

Tree constraints plan (TCP) showing existing plot layout with tree numbers, BS5837: 2012 colour codes (A – Green, B – Blue, C – Grey, U - Red) and root protection areas (dashed circles). The plan has been provided separately as a PDF at a scale of 1: 500 @ A3.



APPENDIX MD3

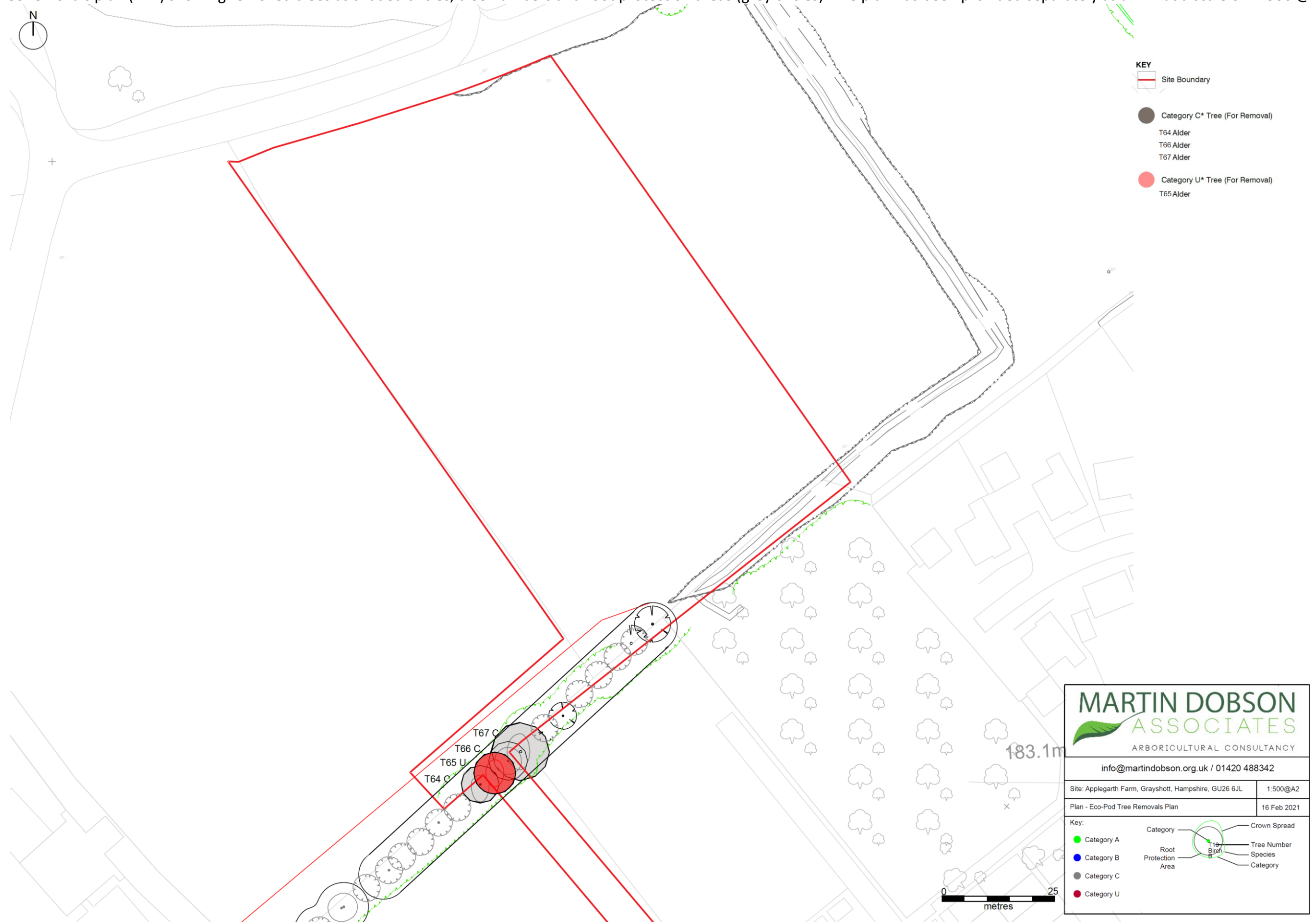
BS5837 schedule of root protection areas

| Tree No. | Species | Trunk diameter (mm) | BS5837: 2012 Root protection area, RPA, (m ²) | BS5837: 2012 Radial protection distance (m) |
|----------|---------|---------------------|---|---|
| G2 | Alder | Up to 450 | 91.6 | 5.4 |
| G2.T64 | Alder | 350 | 55.4 | 4.2 |
| G2.T65 | Alder | 323 | 47.2 | 3.9 |
| G2.T66 | Alder | 300 | 40.7 | 3.6 |
| G2.T67 | Alder | 391 | 69.2 | 4.7 |

For multi-stemmed trees an aggregate trunk diameter has been calculated.

APPENDIX MD4

Tree removals plan (TRP) showing removed trees as shaded circles, tree numbers and root protection areas (grey circles). The plan has been provided separately as a PDF at a scale of 1: 500 @ A2.



KEY

- Site Boundary
- Category C* Tree (For Removal)
 - T64 Alder
 - T66 Alder
 - T67 Alder
- Category U* Tree (For Removal)
 - T65 Alder

MARTIN DOBSON ASSOCIATES
ARBORICULTURAL CONSULTANCY

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| | |
|---|-------------|
| Site: Applegarth Farm, Grayshott, Hampshire, GU26 6JL | 1:500@A2 |
| Plan - Eco-Pod Tree Removals Plan | 16 Feb 2021 |

Key:

- Category A
- Category B
- Category C
- Category U

Category: Crown Spread
Tree Number
Species
Category

Root Protection Area

APPENDIX MD5

Tree protection plan showing retained trees in G2 and position of above-ground no-dig surface (blue shading). The plan has been provided separately as a PDF at a scale of 1: 500 @ A2.



APPENDIX MD6

Installation guide for above-ground no-dig surfaces using Cellweb

PRODUCT DATA SHEET

Geosynthetics Limited Tel: 01455 617 139 Fax: 01455 617 140 Email: sales@geosyn.co.uk

Cellweb® TRP Installation Guide



Step 1: Prepare Surface



Step 2: Lay out Treetex™



Step 3: Lay out Cellweb® TRP

- Cellweb® TRP is a NO DIG tree root protection measure and it is recommended that no excavation be performed without prior approval and guidance from the Local Authority Arboricultural Officer.
- Soil compaction from vehicles, machinery and materials is to be strictly prohibited during construction within Root Protection Areas (RPAs).
- Approval must be obtained from the Local Authority that the design and the method of construction is acceptable.
- Further information is available from the following two documents;
 - British Standard BS5837: 'Trees in Relation to Design, Demolition and Construction' (2012).
 - Arboricultural Advisory and Information Service: Practice note 12 – 'Through the Trees to Development' (APN12).

Installation Method

1. Prepare the Surface

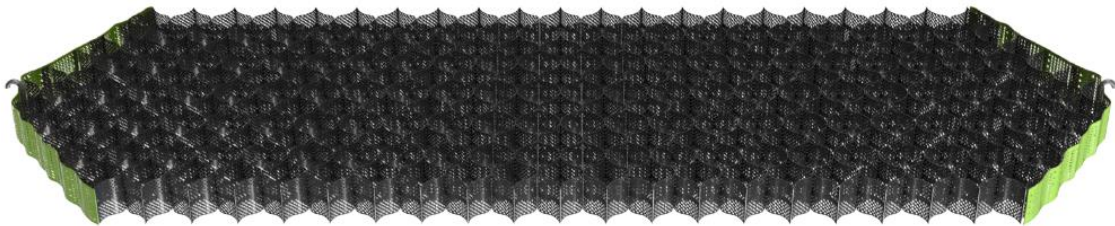
- Remove the surface vegetation using appropriate hand held tools or herbicide (see Note 1).
- Remove any surface rocks, debris and organic material.
- Create a level surface by filling any hollows with clean angular stone or sharp sand.
- Do not level off high spots or compact the soil through rolling.

2. Lay out the Treetex™ Non-Woven Geotextile

- Lay out the Treetex™ over the prepared area, overlaying the edges of the required area by 300mm.
- Overlap any joins by 300mm minimum or more, depending on soil structure (see Note 2).

3. Lay out the Cellweb® TRP Cellular Confinement System

- Lay out the collapsed Cellweb® TRP on-top of the Treetex™.
- Place one of the supplied J pins into the centre cell at the end of the panel and secure into the ground.



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Cellweb® TRP - Installation Guide

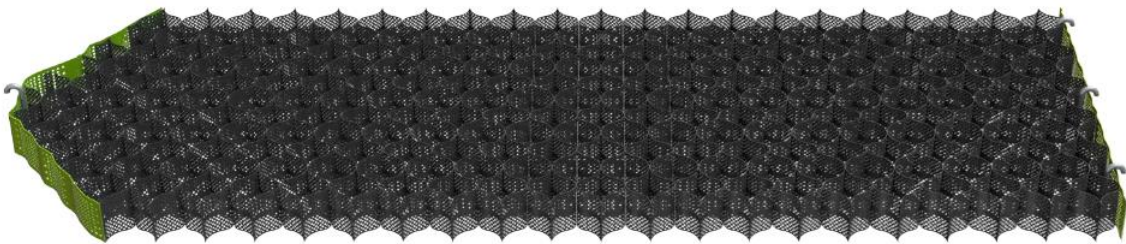


Step 3: Pinning Cellweb® TRP

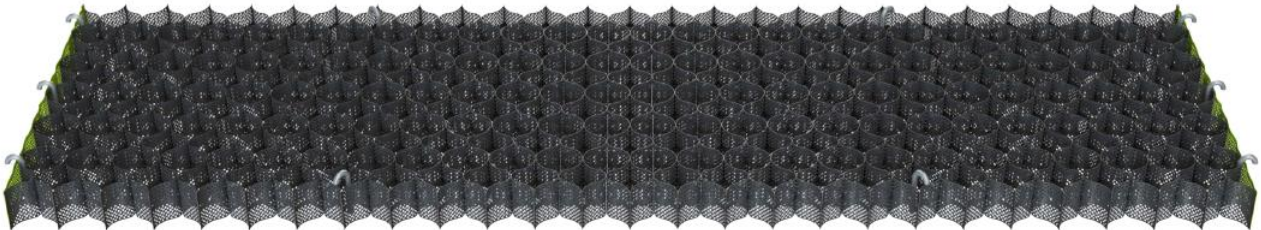


Step 3: Stapling Cellweb® TRP

- Pull out the Cellweb® TRP to its full 8.1m length and secure its length with another J pin.



- Now measure its width to 2.56m and secure in each of the corners with the J pins.
- Use 10 pins per panel to create a panel measuring 8.1m x 2.56m.



- This will produce a cell size of 259mm x 224mm which is the required cell diameter. Each cell must be fully extended and under tension.
- Staple adjacent panels together at each cell (see Note 3).
- If a curved path or shape is required, this should be cut when the Cellweb® TRP panel is pinned out to 8.1 x 2.56m, ensuring complete cells remain. Do not try to curve or bend the Cellweb® TRP panels into place.
- All cells must be fully opened to the required diameter.



Cellweb® TRP - Installation Guide



Step 4: Clean Angular Stone



Step 5: Edge Restraints



Step 6: Surface Options

4. Infill the Clean Angular Stone

- The infill material must be a clean angular stone, Type 4/20mm or Type 20/40mm (see Note 4).
- Do not use M.O.T type 1 or crushed stone with fines for tree root protection.
- Infill the Cellweb® TRP cells with the clean angular stone, working towards the tree and using the infilled panels as a platform.
- Minimum 25mm overfill of clean angular stone when used in conjunction with a hard surface.
- No compaction is required of the infill. Do not use a whacker plate or other means of compaction.
- Encourage settlement of the stone with the use of a light roller or with 2-3 passes of the construction plant used for installation.
- If the clean angular stone is being used as the final surface; regular maintenance will be required to ensure a minimum overfill of 50mm.

5. Edge restraints

- Excavations for kerbs and edgings should be avoided within the RPAs.
- Where edging is required for footpath and light structures, a peg and treated timber board edging is acceptable
- Other options include wooden sleepers, kerb edging constructed on-top of the Cellweb® TRP system, plastic and metal edging etc.

6. Surface options

- All surfaces in Root Protection Areas must be porous. Surfaces can include block paving, asphalt, loose gravel, grass and gravel retention systems (e.g Golpla), resin bound gravel, concrete etc.

NOTES

1. **Herbicide:** According to BS5837:2012 "The use of herbicides in the vicinity of existing trees should be appropriate for the type of vegetation to be killed, and all instructions, warnings and other relevant information from the manufacturers should be strictly observed and followed. Care should be taken to avoid any damaging effects upon existing plants and trees to be retained, species to be introduced, and existing sensitive habitats, particularly those associated with aquatic or drainage features."
2. **Geotextile:** We recommend the installation of a Treetex™ under the Cellweb® TRP, or under the sub-base, if installed. The overlapping between adjacent rolls of Geotextile should be: CBR > 3%: 300mm minimum, CBR between 1% and 3%: 500mm minimum. CBR ≤ 1%: 750mm minimum.
3. **Staples:** Number of staples per joint: 200mm: 5 staples. 150mm: 4 staples. 100mm: 3 staples. 75mm: 3 staples.
4. **Granular Fill:** Open graded sub-base, clean angular stone Type 4/20 or Type 20/40. Please refer to BS7533-13:2009 and to the Design Manual for Roads and Bridges (DMRB), Volume 4 Geotechnics and Drainage, Section 1 Earthworks, HA44/91, Volume 7 – IAN 73/06 Design Guidance for road pavement foundations and Manual of Contract Documents for Highway Works (MCHW), Volume 1 Specification for Highway Works for the construction and maintenance of the fill material.

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentation. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge becomes available. Since we cannot anticipate all variations in actual end use conditions, Geosynthetics Limited makes no warranties and assumes no liabilities in connection with this information. Nothing in this publication is to be considered as a licence to operate under or a recommendation to infringe any patent right.

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APPENDIX MD7

TREE AWARENESS – SITE INDUCTION SHEET

SITE NAME: Applegarth Farm, Grayshott, GU26 6JL

Trees are an important part of this development and all trees noted on the Tree Protection Plan are protected by planning conditions and by virtue of being in a Conservation Area. Trees must not be damaged in any way, including indirectly through compaction/contamination of soil, so that they can fully integrate into the finished project and stay healthy well into the future. All persons working on this site have a responsibility to be aware of trees and to abide by tree protection procedures.

How can trees be damaged?

Above the ground – contacts and impacts with branches and trunk (for example by machine operations: piling rigs, high-sided vehicles, crane use, fixings to trunk, unauthorised cutting back of branches). Make sure there is adequate clearance under the tree canopy and don't stray close to the trunk. Damage to bark allows infections to enter the tree.

Below the ground – roots spread out from the trunk horizontally at shallow depth and are therefore easily damaged. Vehicle and pedestrian movements and storage of materials on unprotected ground causes compaction, especially in wet weather, and must be avoided. Soil stripping during site clearance or landscaping is prohibited in root protection areas. The effects of root damage may take some time to become obvious, but can result in disfiguring dieback of leaves and branches, or even death.

Tree protection procedures

Provided that the simple steps below are followed most tree protection is straightforward:

- Stay out of tree Construction Exclusion Zones (CEZs). These are the areas of ground surrounding retained trees that are protected by barriers and/or ground protection. If you need to go into a CEZ, you must first gain authorisation from the Site Manager.
- No construction activity of any description within CEZs, e.g. soil stripping, cement mixing, services installation, storage of materials etc.
- No fires within 20m of trunk of any retained tree.
- If authorised to work within a CEZ, for example, for installation of an above-ground no-dig driveway you must follow the procedures set out in the **Arboricultural Method Statement**.
- If damage occurs, you must inform the Site Manager who must, in turn, inform the project arboriculturist.

Planning Authority enforcement action needs to be avoided:

- 'Breach of Conditions' notices can prevent a site from being signed-off.
- 'Temporary Stop Notices' halt site operations and result in associated high costs.
- Wilful damage/destruction of TPO/Conservation Area trees can result in company and/or individual prosecutions - fines can be anything up to £20,000 (County Court fines are unlimited). Remember that fines may apply to the person committing the offence as well as the site owner and main contractors!

I have received site induction in tree awareness and tree protection procedures

PRINT NAME

SIGN

DATE

APPENDIX MD8

Qualifications and Experience

Dr Martin Dobson has been engaged in research and advisory work on trees since graduating in 1986 with a BSc (Hons) Degree in Biology. Subsequent postgraduate research led to the award of a Doctor of Philosophy (DPhil) Degree in Tree Physiology in 1990.

Postgraduate studies began in 1986 at the University of Ulster and continued in 1987 at the Forestry Commission's Research Station in Hampshire and focussed on the influence of air pollution on trees. Upon completion of this research in 1989 Dr Dobson was employed by the Forestry Commission and worked in both the Tree Pathology and Environmental Research Branches. During the next six years he was responsible for Department of Environment research contracts focussing on air pollution, climate change, de-icing salt damage to trees, woodland establishment on landfills and tree root research. He has authored two books: *De-icing Salt Damage to Trees and Shrubs* and *The Potential for Woodland Establishment on Landfill Sites*. He concluded his time at the Forestry Commission as Project Manager for research into the interaction between trees, roots and clay soils which included laboratory investigations, testing of root barriers and a three-year field-scale monitoring programme investigating the influence of woodland and grassland on the moisture status of clay soils.

In 1995 Martin joined the Arboricultural Advisory and Information Service as a senior Arboricultural Advisor. The AAIS advised the (then) Department of the Environment on matters concerning amenity trees and was the principal source of technical advice and information to the arboricultural profession as well as landscape architects, engineers, the horticultural industry and private individuals. A large proportion of advisory work focussed on issues relating to tree diseases and interactions between trees and buildings.

In 1997 Martin started an arboricultural consultancy practice specialising in subsidence and tree root claims, planning and development, tree safety and disease diagnosis. He was a local authority retained consultant providing expertise on tree protection practice and legislation from 1999 - 2006 and has dealt with several thousand Tree Preservation Order and Conservation Area applications.

He has extensive experience as an Expert Witness in the High Court, County Court and Magistrates Court. Notable recent cases he has been involved in include *Robbins v London Borough of Bexley* and *Khan v London Borough of Harrow* and *Kane*.

From 1995 to 2011 he was an examiner for the Professional Diploma in Arboriculture for the Royal Forestry Society/ABC Awards and he is currently the Lead Assessor for the Arboricultural Association's Registered Consultant scheme. He has been a guest lecturer for the Middlesex University Countryside Management MSc course and for Portsmouth University. Together with Dr Giles Biddle he has devised and teaches introductory and advanced courses on trees and subsidence and co-presents seminars on trees and climate change with Professor Andy Moffat for the Arboricultural Association.

In addition to over 30 publications in scientific and technical journals he is the author of *Arboriculture Research and Information Note 130/95/ARB Tree Root Systems*, and leading author of:

Driveways Close to Trees. Arboricultural Practice Note 1. AAIS, Farnham.

Trees in Dispute. Arboricultural Practice Note 3. AAIS, Farnham.

Root Barriers and Building Subsidence. Arboricultural Practice Note 4. AAIS, Farnham.

He is a Fellow and Registered Consultant of the Arboricultural Association and is a Member by examination of the Expert Witness Institute.