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Project: 23_5837_10_73
Site: Twistgates Farm , Upottery, Honiton, EX14 9PE
Client: Duncan Gray

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Document Title:	Tree Survey & Arboricultural Impact Assessment
Document Author:	Peter Haine FDSc Arb, MArborA
Project Title:	Twistgates Farm, Upottery, Honiton, EX14 9PE

Revision History.

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SurveyType:	Lifecycle:	Re-surveyDate:
BS5837:2012	Planning Only	n/a

FAO: Duncan Gray

eMail: contact@ duncangray.com

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Summary:

This is a BS5837 compliant arboricultural assessment report providing detailed and sufficient information for the Local Planning Authority to be able to consider the effect of the proposed development on local character and amenity from a tree perspective.

Our brief has been to obtain details of the tree population on site with a view to assessing any arboricultural constraints.

This report was commissioned in relation to the proposed development at Twistgates Farm, Upottery, Honiton, EX14 9PE.

The report details all trees over 75mm at 15m above ground level that are relevant to the siting of the proposed development. The position of the trees on the site is illustrated on the tree constraints plan and information about the tree stock and its current condition is given within the arboricultural data tables.

It will assist the planning process by discussing the impact that the proposals will have on the existing tree stock.

An Arboricultural Impact Assessment is included at Section 4 which details the constraints placed on the proposed development from the rooting area of the trees below ground and above ground by virtue of their size and position.

Report Author.

ROAVR (ROAVR Group) was formed in 2010 and since then has carried out arboricultural consultancy Nationwide with directly employed consultants. Our consultants are all individual members of the Arboricultural Association and the report author is listed in the document control sheet.

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Validation Statement for the Local Planning Authority.

This report includes the following for LPA validation purposes:

- A **tree survey and tree constraints plan** showing the existing trees, their category rating and above and below ground constraints shown on an OS extract OR a topographical survey
- An **arboricultural impact assessment** which describes how the development will affect local character from a tree perspective
- An **arboricultural method statement** describing tree protection measures and implementation strategy
- An **appendices** highlighting tree related information including the **arboricultural data tables**

Customer Action Points.

- ☐ Reporting complete - send to your Local Planning Authority
- ☐ On planning award contact us with your decision notice

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Tree Survey & Arboricultural Impact Assessment to BS 5837 2012 of trees at:

Twistgates Farm, Upottery, Honiton, EX14 9PE.

1 Scope

1.1 We have recently been instructed to undertake an appraisal of mature tree cover at Twistgates Farm, Upottery, Honiton, EX14 9PE.

1.2 The data was collected to the British Standard BS5837 'Trees in Relation to Design, Demolition and Construction - Recommendations' 2012.

1.3 The survey has been commissioned to offer guidance on the arboricultural constraints with a view to the future development of the site.

1.4 The trees were inspected on the 22nd November 2023 following the guidance in the British Standard by ROAVR. The crowns and stems were inspected from the ground using the 'Visual Tree Assessment (VTA)' method; non invasive techniques were used at this stage. Although a sounding hammer was used to determine the presence of any decay.

1.5 The site was assessed and data was collected on all woody vegetation falling within the scope of the British Standard. Trees were grouped or designated woodlands as per the allowance in the British Standard when the area in question was uniform in terms of species, age or geography.

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Photographic Plates.

Photographic plate showing existing car park area. [ROAVR GROUP, 2023]

Photographic plate showing existing pedestrian gateway into the plot to the east of Twistgates Farm. [ROAVR GROUP, 2023]

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Photographic plate showing existing vehicle gateway into the field from the north. [ROAVR GROUP, 2023]

Photographic plate showing woodland to the east. [ROAVR GROUP, 2023]

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Photographic plate showing T15 adjacent to the southern boundary. [ROAVR GROUP, 2023]

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2. Site Conditions & Site Surroundings

2.1 The site is situated in Honiton in the East Devon District Council control area. The site is located on the north side of the town and has a rural feel.

2.2 The site is home to a improved farming field with associated hard and soft landscape.

2.3 The wider locality is predominantly rural in nature. The site is accessed via a Twistgates Farm.

2.4 A desktop assessment has highlighted that site is not within a Conservation Area but failed to establish whether any of the trees on or adjacent are covered by TPO's.

2.5 All desktop assessment data was cross checked and validated on the 30/11/2023 using the web portal provided by the local planning authority.

https://eastdevon.gov.uk/planning/planning-applications-and-information/is-my-property-in-a-conservation-area-or-an-area-of-outstanding-natural-beauty/?UPRN=010000265318

https://eastdevon.gov.uk/trees/tree-preservation-orders-and-trees-protected-in-conservation-areas/tree-preservation-order-tpo/tpo-and-conservation-area/?x=324567.1500&y=91505.5000&uprn=100040191762

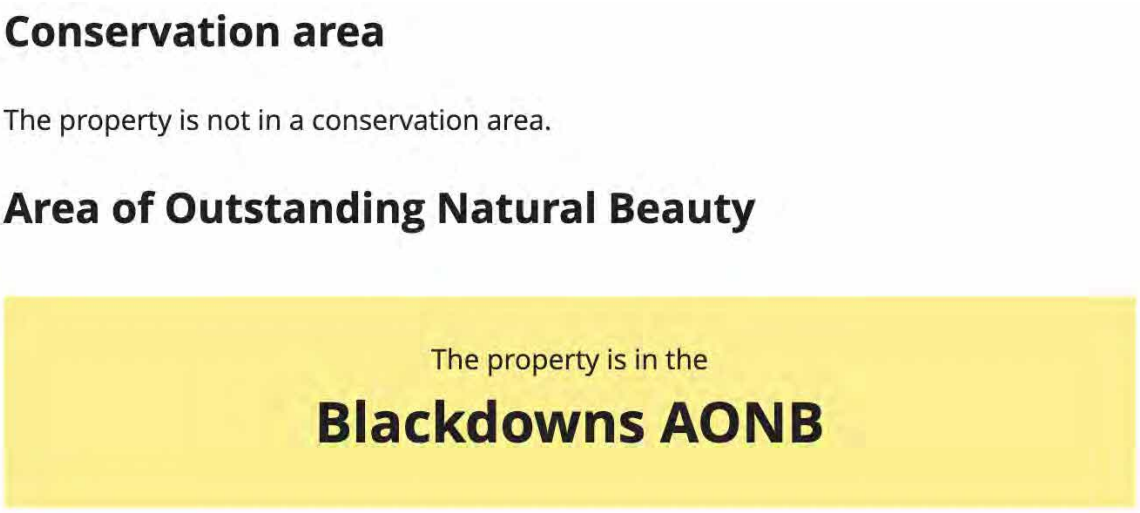

Image plate showing the desktop analysis results of the surveyed plot. [East Devon District Council]

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2.6 Works to protected trees require consent from the local planning authority. In the case of TPO's an application must be made. In the case of conservation areas a notification must be made. TPO applications take up to eight weeks, conservation area notifications take six weeks.

2.7 Certain exemptions apply; for example the removal of deadwood. In the case of dangerous trees 5-days written notice should be given to the local authority (in the cases of immediate danger the work should proceed, but the local authority contacted as soon as possible afterwards) with the works evidenced by photographs and video where possible. You should also check to ensure the works are exempt from the requirements of a felling licence.

https://www.legislation.gov.uk/uksi/2012/605/regulation/14/made

2.8 It should be noted that planning consent overrides protected trees, where the works or removal are necessary for development to proceed and have been highlighted in the tree survey documents.

2.9 Bats. Under current legislation it is an offence to 'intentionally or recklessly disturb a bat' or 'damage, destroy or block access to the resting place of any bat'. For further details consultation must be made with the Statutory Nature Conservancy Organisation. Where relevant any current ecological surveys for the site will take precedence in this matter. Trees provide numerous 'potential roosting features' for a wide range of bat species. It is therefore crucial that any trees proposed for removal are checked by an appropriately competent person before any felling or ivy stripping works commence.

https://www.bats.org.uk/advice/bats-and-the-law

2.10 Birds. It is an offence to kill, injure or take any wild bird; or take, damage or destroy the nest of any wild bird while it is in use or being built. Therefore work likely to disturb nesting birds must be avoided from late March to August. All birds, their nest and eggs are protected by law.

https://www.rspb.org.uk/birds-and-wildlife/advice/wildlife-and-the-law/wildlife-and-countryside-act/

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3. Drawings

3.1 Appended to this report is a tree constraints plan, tree assessment plan and a tree protection plan.

3.2 The tree constraints plan has been produced using an OS supplied .dwg (AutoCAD) base plan as no topographical survey was available. Tree positions and data have been applied using our survey handset as an onsite exercise with the constraints plan being produced as a PDF through Auto CAD.

3.3 An autoCAD .dwg file of the tree constraints is available on request for project stakeholders to utilise.

3.4 The *Tree Constraints Plan* shows the existing layout. For each tree the stem location is indicated and scaled according to its diameter, the canopy is indicated according to measurements taken along the four cardinal points of the compass. Root protection areas (RPAs) are indicated which are calculated according to the guidelines within BS 5837 (2012).

3.5 Where appropriate, the shapes of the RPAs have been amended to reflect actual site conditions or where trees have been heavily pruned. The 'original' RPAs are indicated as a dashed line whereas the amended RPAs are indicated as a solid line. Any variation to this approach will be highlighted on the appropriate plans.

3.6 The *Tree Assessment Plan / Arboricultural Impact Assessment* indicates the tree constraints with the proposals overlaid. Where applicable, this plan shows where works are proposed in Root Protection Areas and which trees are to be pruned or removed. This plan accompanies the Impact Assessment which is to be found in Section 4.

3.7 The *Tree Protection Plan* shows the protection measures that are to be installed during the construction phase. This plan accompanies the Method Statement which is appended to this tree survey and AIA.

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4. Arboricultural Impact Assessment - Site Specific

Tree Quality Statement.

The tree cover at Twistgates Farm consists mainly of field edge and hedgerow trees with some scattered standard trees and an area of mixed broadleaf woodland. The tree population has good amenity and ecological value.

4.1 Description of The Proposed Development

The drawings listed in the table below were used by ROAVR to produce the Arboricultural drawings referenced in this report. If your plans change (either before or after planning submission), then the tree drawings will require updating. This report cannot be submitted in support of a scheme that varies from the drawing reference number shown in box one below as the Impact Assessment (Section 4) will not be valid.

Drawing Name / No.	Date Issued To ROAVR	ROAVR Drawings Issue Date:
Site Plan A142_P02	27/10/2023	05/12/2023
TWI-PO2-Site Plan	21/02/2024	21/02/2024

4.11 It is proposed to construct three guest accommodation units, along with footpaths to each unit, and a pond. Construction access will be via the existing field gate to the north of the plot, no construction access will be permitted via the existing driveway to the west of the plot.

4.12. The table below summarises the potential impact on trees due to various activities.

Trees Potentially Affected:

Tree or Tree Group	Impacts
Tree T1	Removed subsequent to survey due to declining condition and the presence of honey fungus.
Tree T2	In conflict with parking space as drawn on site plans. Recommend modifying parking space layout to avoid conflict.
Trees T3, T4, T7, T9, T10	No direct impacts from proposals, can be retained and protected
Trees T5, T6, T8, T10	Proposed footpath within Root Protection Area - recommend geoweb and no dig method. See section 4.6.1
Trees T12-T14, Group G1	Proposed construction access route within Root Protection Area, will require temporary protective fencing and ground protection boarding to be installed.
Trees T15-T17	No direct impacts, can be retained and protected

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Tree T18	No direct or indirect impacts
Hedgerow H1	No direct impacts, can be retained and protected
Woodland W1	No direct impacts, can be retained and protected where construction is close to woodland edge

4.1.3. The appended AMS specifies the measures proposed to minimise all possible potential risks of damage to the retained trees.

4.2. Tree Removal.

4.2.1 No trees are to be removed to facilitate the proposals. T1 was removed subsequent to the survey due to the presence of honey fungus and it's declining condition.

4.3. Mitigation Planting.

4.3.1 No mitigation planting is considered necessary. However, there is ample scope to plant more trees within the site to mitigate against tree loss and contribute to biodiversity net gain.

4.4. Impact on Tree Canopies.

4.4.1 No pruning works are required to facilitate the proposed development.

4.5. Impact on Tree Roots.

4.5.1 Trees close to construction activities will require temporary protective measures to be installed for the duration of the construction works. These measures are specified in the appended Arboricultural Method Statement.

4.6. New Surfaces.

4.6.1 New pedestrian paths are proposed within the Root Protection Areas of T10 and T11. It is recommended that these be constructed using a no dig method, and include a 75 mm deep geoweb system in the sub base, filled with clean angular gravel to allow air and water to reach the soil below the footpath and reduce ground compaction to an acceptable level.

4.7. Underground Services.

4.7.1 No details of new underground services have been provided for assessment.

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4.8 Changes in Ground Levels.

4.8.1No details of existing or finished levels have been provided for assessment, it is assumed that levels will remain as existing for the purposes of this assessment. Spoil from excavation of the pond must not be stored temporarily or permanently within the Root Protection Areas of any trees. The spoil is to be removed from site.

4.9 Soil Compaction.

4.9.1 The majority of tree roots lie within the upper soil horizons. This is because the availability of oxygen decreases with depth and roots need to breathe to stay alive. In addition, nutrients are more readily available in the form of organic matter close to the soil surface.

4.9.2. Healthy soils contain about 25% air space between solid particles. Increased loading of the soils caused by construction activity causes air to be squeezed out as the soil becomes compacted preventing roots from breathing. Even an increase in pedestrian activity may cause some soil compaction.

4.9.3 It is important therefore that ground compaction and soil disturbance over Root Protection Areas should be avoided during the construction phase. This may be done by installing protective fencing and ground protection measures as recommended within a tree protection plan.

4.10 Demolition Activities.

4.10.1 The tree protection measures specified within a TPP should be installed prior to the commencement of all demolition activities (including soil stripping) to prevent any detrimental impact on tree health. Where this is not practicable, demolition of structures within Construction Exclusion Zones shall be undertaken very early on in the demolition phase and the protective barriers installed immediately thereafter.

4.11 Hazardous Materials.

4.11.1All hazardous materials (including cement and petrochemical products) will need to be controlled according to COSHH regulations in order to ensure there is no detrimental impact on tree health. Provision shall need to be made to ensure that cement and cement run-off are contained outside of all Root Protection Areas.

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4.12. Temporary Cabins and Site Facilities.

4.12.1. Consideration should be given to the location of any site welfare facilities in terms of potential impact on trees. Where it is proposed to install cabins or site facilities in Root Protection Areas, the appointed arborist should be consulted and approval obtained from the local authority.

4.13. Boundary Treatments.

4.13.1. No changes are proposed to the existing boundary features that might impact on trees.

4.14. Impact of Retained Trees on the Development.

4.14.1. Adequate space has been allowed between all retained trees and the proposed development works. Consequently the proposal shall not result in increased pressure to remove or prune any of the retained trees.

4.15. Summary.

4.15.1. Three cabins are proposed, which will be accessed via footpaths from the existing parking area. A pond is also proposed.

The only direct impact on trees will be from the footpaths, these can be constructed with minimal impacts provided a geoweb system is used. A method statement for this is included in the appended Arboricultural Method Statement.

The method statement also includes details of how the trees are to be protected throughout the construction process.

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Appendix: BS 5837: 2012 – Guidance Notes

This Standard prescribes the principles to be applied to achieve a satisfactory juxtaposition of trees and structures. It sets out to assist those concerned with trees in relation to design, demolition and construction to form balanced judgements.

It acknowledges the positive contribution trees may offer to a site, as well as the negative aspects of retaining inappropriate trees. It addresses the negative impacts that construction activity may have upon trees and offers mitigation strategies to minimise these impacts.

The Standard suggests a three stage approach to ensure best practice is followed when developing close to trees:

Stage 1: Survey Details and Notes

A ground level visual survey was undertaken. No climbing inspections or specialist decay detection were undertaken. Only trees with a stem diameter over 75mm, which lie within the site boundary or relatively close to it, were included.

Where applicable, trees with significant defects have been highlighted and appropriate remedial works have been recommended. However, this report should not be seen as a substitute for a full Safety Survey or Management Plan which are specifically designed to minimise risk and liability associated with responsibility for trees.

Wherever practicable dimensions were obtained using diameter tapes, logger's tapes, distometers and clinometers. Where obstacles prevent accurate measurement, dimensions are estimated. Trees of privately owned third parties are surveyed from the best available vantage point and observations relating to the condition of these trees should be treated accordingly. All height measurements should be regarded as approximate.

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Stage 2: Arboricultural Impact Assessment

After the initial survey and the production of the Tree Constraints Plan, arborists and designers are encouraged to work together to establish a design proposal with minimal impact on the high quality trees. An assessment should be made of all possible impacts including the impact that the trees may have upon the proposal.

The arborist may recommend mitigation strategies to minimise these impacts and help achieve a more harmonious juxtaposition between buildings and trees and will offer advice in relation to the best chances of success at planning.

Stage 3: Arboricultural Method Statement

Thistypeofreportspecifiesthemeasuresnecessarytoprotecttreesagainst damagefrom construction activity.TheMethod Statementshould bewritten in a mannerthatitmaybeconditioned and enforced bythelocalauthorityupon granting ofplanning permission.Manytreesgetdamaged on developmentsites duetotheAMSbeing overlycomplicated orunreadablefrom theperspectiveof practicalimplementation.

Thesitemanagermustbefamiliarwith allaspectsoftheMethod Statementand should ensurethatallpersonsworking on thesiteareawareofthoseaspects which arerelevanttotheirwork.Thisincludesserviceinstallation engineersand operatorsofplantmachinery.

Appendix: Survey Methodology

Ground levelvisualsurveys are carried out using the VisualTree Assessment technique described by Mattheck and Broeler (1994) and endorsed by the ArboriculturalAssociation (LANTRA ProfessionalTreeInspection course,2007).

Structuralcondition is assessed by inspecting the stem and scaffold branches from all angles looking for weak branch junctions or symptoms of decay. Particularattention ispaid to the stem-base.Cavitiesare explored using a metal probe in orderto assess the extentofany decay.Ifthis is notpossible further inspection is recommended in the form of a climbing inspection or using specialistdecaydetection equipment.

The physiologicalcondition is assessed by inspecting the stem,branches and foliage forsymptom sofdisease.The overallvigourofthe tree isalso taken into account.

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Where significant defects are observed, recommendations are made according to a scale of priority in order to reduce the likelihood of structural failure. The position of the tree and its potential targets are taken into account.

Measurements are obtained using a diameter tape, clinometer, distometer and loggers tape.

Where this is not practical measurements are estimated.

Some trees are surveyed as groups, though this is usually avoided close to areas likely to be developed.

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Document Title:	Arboricultural Method Statement
Document Author	Peter Haine FDSc Arb, MArborA
Customer Name:	Duncan Gray
Project Title:	Twistgates Farm , Upottery, Honiton, EX14 9PE

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05/12/2023	10	First Draft
23/02/2024	11	Final Issue

Distribution.

Approved by:	Signature	Date:	Version:
Duncan Gray	DG	23/02/2024	11
Matt Harmsworth	MWH	23/02/2024	11
			Peer reviewed Internally.

THIS DOCUMENT IS AN ARBORICULTURAL METHOD STATEMENT AND IS SUPPORTED BY A TREE PROTECTION PLAN. IT IS A WORKING DOCUMENT & MUST BE BRIEFED ON SITE TO THE SITE MANAGER BEFORE ANY WORKS COMMENCE. OFTEN AN AMS IS CONDITIONED ON PLANNING CONSENT AND BECOMES A LEGALLY BINDING DOCUMENT.

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1. Method Statement [Introduction and Overview]

Restrictions on Activities – Specific Zones

Restrictions on Activities – Throughout the Site

2. Site Inspection

Example ACoW sheet.

3. Tree Works Schedule

Tree Works Specification

4. Tree Protection Barriers Detailed Specification

Tree Protection Fencing

Plywood Boxes. [If Shown On TPP]

5. Ground Protection Measures Detailed Specification

6. New Surfaces Detailed Specification

Resurfacing an Existing Hard Surface

7. Limitations

Appendix 1– Site Location

Appendix 2 – Arboricultural Data Tables

Appendix 3 – Arboricultural Plans

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1. Method Statement [Introduction and Overview]

1.1. Definition of Terms

Some terms used within the Arboricultural Method Statement have very specific meanings. These are defined below:

Root Protection Area (RPA). This is a theoretical area of ground around a tree where the roots are likely to proliferate. Ground disturbance in this area should be minimised in order to avoid significant impact on tree health. RPAs are indicated on all plans accompanying this report as a red or pink line.

Construction Exclusion Zone (CEZ). These zones are created to protect roots and canopies from inadvertent damage by construction activity. They are usually fenced off by protective barriers throughout the entire construction phase. No works are permitted in these zones other than minor landscaping works which do not require a change in ground level. Where practicable the entire Root Protection Area and the area beneath the tree canopy shall be treated as a Construction Exclusion Zone. These zones are shown on the Tree Protection Plan.

Restricted Activity Zone (RAZ). It is not always possible to create a Construction Exclusion Zone over the entire RPA. This is because access may be required or some works may be proposed within the RPA. In such circumstances a Restricted Activity Zone is created where limitations are placed on construction activity. Ground protection measures may be specified or the Restricted Activity Zone may be fenced off throughout part of the construction phase. See the legend on the Tree Protection Plan to identify these zones.

1.2. Tree Protection Barriers - Overview

The Tree Protection Plan indicates the location of all proposed tree protection barriers.

The barriers shall be installed prior to the commencement of any localised construction activity including soil stripping and delivery of materials. A detailed specification of the barriers can be found in sections below.

The tree protection plan also indicates where ground protection measures shall be installed / maintained as specified in sections 17 onwards (Restricted Activity Zones).

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1.3. Planning Status

Tree protection measures specified within this report should be agreed with the local authority so that they may be conditioned upon planning consent.

The site manager must be familiar with all aspects of this Method Statement and should liaise with the author of this report for clarification, or regarding any unforeseen issues where trees may be impacted upon.

A copy of this Method Statement shall be available on-site at all times. All personnel working on the site shall be made aware of any sections appertaining to their work. This includes short term contractors and persons responsible for deliveries and installation of services.

14. Overview of Protection Measures

Below is a list of potential arboricultural impacts and a summary of the proposed protection measures:

Tree no.	Protection Measures	Timeline
T2,T3,T4,T T9,T10	Retain and protectwith existing hard surface	Pre-start
T5,T6,T8,T11	Retain and protect with existing hard surface and geoweb where footpath is to be installed inside Root Protection Area	Pre-start
Trees T12-T14, G1	Retain and protect with HERAS fencing and ground protection boarding suitable forthe size and weightc machinerytobeused	Pre-start
T15, T16, T17, H1	Retain and protectwith HERASfencing	Pre-start
W1 (section as shown on TPP)	Retain and protectwith HERASfencing	Pre-start

The above measuresare described in more detailthroughoutthe remainderof thissection.

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1.5. Timing of Operations

Activity within the site shall be phased according to the following chronology:

Order Phase Activity	Phase Name	Works required
1st Phase	Pre-construction phase	Undertake a pre-start meeting with the builder, client and ACoW
2nd Phase	Protection phase	Install HERAS tree protection fencing and signage as highlighted on the TPP
3rd Phase	Ground Protection	Install any specified ground protection boarding as highlighted on the TPP
4th Phase	Construction phase	Construction works commence with regular ACoW visits
5th Phase	Post Construction Phase	Remove tree protection measures and carryout any remedial works such as alleviation and radial mulching

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Restrictions on Activities – Specific Zones

1.6. Construction Exclusion Zones

Within Construction Exclusion Zones (shaded purple on the Tree Protection Plan) the following restrictions shall apply:

Tree Protection Barriers shall be erected and maintained throughout the entire project as indicated on the Tree Protection Plan and specified in Section 4 - Tree Protection Barriers.

No construction activity whatsoever shall occur.

No vehicles or plant machinery shall be driven or parked.

No tree works, other than those specified in this report shall be undertaken.

No alterations of ground levels or conditions.

No chemicals or cement washings permitted.

No excavation whatsoever shall occur.

No temporary structures.

No spoil shall be stored.

No fires shall be permitted.

All hazardous materials (including non-essential cement products) shall be forbidden.

Where hard surfaces are to be removed, this shall be done using hand tools or mechanical excavators operating from outside the Construction Exclusion Zone and marshalled by the appointed arborist.

Any structures shall be removed manually and without mechanical excavation.

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1.7. Restricted Activity Zone A

Within these zones (indicated on the Tree Protection Plan) tree roots are likely to be present. Access will be required to facilitate construction and some resurfacing works may be required. The following restrictions shall apply:

Any resurfacing shall be done strictly in accordance with the Guidelines in APN12 New Surfaces.

Removal of existing structures such as walls, steps and hard surfaces shall be undertaken using hand tools or a mechanical excavator operating from outside the Restricted Activity Zone and carefully marshalled by an appointed arborist.

A suitable load spreading surface shall be installed and/or maintained as specified in Section 5 – Ground Protection Measures. This shall remain in place throughout the entire construction phase.

No excavation shall occur in this zone without consulting the appointed arborist and obtaining approval from the local authority.

Storage of materials shall be limited to that which is required for the task in hand. Heavy materials that require storage for more than two days shall be stored outside the Restricted Zone.

No spoil shall be stored.

No fires shall be permitted.

All hazardous materials (including non-essential cement products) shall be forbidden.

1.8. Restricted Activity Zone B

Within this zone (indicated on the Tree Protection Plan) it is proposed to construct a footpath to the proposed units.

It is proposed that the geoweb be installed as ground protection in these areas prior to the commencement of construction activity.

A full method statement for the installation of the geoweb is included in section 6.

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1.9. Restricted Activity Zone C (Groundworks and Pond Excavation)

Within this zone (indicated on the Tree Protection Plan) access for groundworks plant and machinery is required.

A suitable load spreading surface shall be installed and/or maintained as specified in Section 5 – Ground Protection Measures. This shall remain in place throughout the groundworks phase.

Restrictions on Activities – Throughout the Site

1.10. Canopy Protection

In order to protect tree canopies the following restrictions shall apply throughout the site:

No machinery shall pass beneath the crowns of trees without being carefully marshalled in order to ensure that no branches are damaged.

If materials require installation or delivery beneath tree canopies, this shall be done without the use of overhead cranes.

If materials are to be installed or delivered close to tree canopies (but not beneath them) and a crane is required, they shall be carefully marshalled in order to ensure that branches are not accidentally damaged.

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1.11. Fencing.

Where fence posts are to be installed within Root Protection Areas, the following restrictions shall apply:

All post holes shall be excavated by hand and kept as narrow as possible (maximum diameter 300mm).

Exploratory post holes shall be dug before committing to post/panel positions. If any roots in excess of 25mm are encountered they are to remain intact and the post hole shall be relocated slightly. The fencing system must permit such flexibility (i.e. where fixed panel widths are used, all post holes must be excavated before committing to the final location).

Any roots in excess of 10mm which are severed shall be neatly pruned back with secateurs. This will encourage healing and reduce the likelihood of infection.

Hedges may be planted within Root Protection Areas using hand tools to minimise excavation.

1.12. Demolition and Initial Ground Works

No demolition, removal of surfaces, or soil stripping shall commence until the protective fencing and ground protection measures are installed to the satisfaction of the local authority.

1.13. Underground Services

No underground services (including soak-aways) shall be located in any part of the Construction Exclusion Zones or Restricted Activity Zones unless done so in a manner detailed in a specific Method Statement and approved by the local authority.

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1.14. Lighting, Bollards, CCTV and associated Cables

If any of the above are to be installed close to tree canopies or within Root Protection Areas of retained trees, installation methods shall be detailed in a specific Method Statement and approved by the local authority. Consideration should be given to the following:

Pruning of branches to enable sufficient clearance for light and views. Branches should be removed to the branch collar as per British Standard 3998 (2010).

Postholes must be excavated by hand or using an appropriate sized auger. No other form of mechanical excavation may be used.

Wherever possible, cables should be routed in a direction directly away from the tree stem rather than tangentially across the rooting zone. The location of all such cables shall be determined after consultation with the appointed arborist and approval by the local authority.

1.15. Use of Heavy Plant

All machinery operatives are to be made aware of any Construction Exclusion Zones and Restricted Activity Zones that apply to this site (see the Tree Protection Plan).

All machinery operatives are to respect these zones and ensure that no damage occurs to trees due to the careless use of machinery.

Mechanical excavators should have tracks rather than wheels to help spread their load. They should be carefully marshalled when working close to tree canopies.

1.16. Scaffolding

If scaffolding is required in areas containing ground protection measures, the protective boards shall need to remain in-situ and be strengthened and stabilised to bear the weight of scaffold poles.

Prior to the installation of any scaffolding within 0.5m of any tree branches, the appointed arborist shall be consulted to specify any pruning works that may be required.

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1.17. Siting of Cabins and Storage of Materials

Cabins and heavy building materials may be located or stored anywhere outside of Construction Exclusion Zones and Restricted Activity Zones.

Any proposal to install cabins or materials within these zones shall be agreed in writing with the local authority prior to installation.

It may be acceptable to locate site cabins such that they act as a tree protection barrier and replace the specified protective fencing. Where this is being considered, written approval must be sought from the local authority.

1.18. Pedestrian Paving

If it is proposed to install new pedestrian surfaces over Root Protection Areas, excavation shall be limited to the removal of existing turf/vegetation plus an additional 50mm. Excavation shall be undertaken using hand tools only. Porous materials are preferred but not essential if the new surface covers less than 10% of the Root Protection Area. Paving with a thickness of 50mm bedded on mortar, or sand, bearing directly onto the ground, with a finished surface level with existing ground levels will be acceptable. No retaining kerbs shall be used.

1.19. Hazardous Materials

Any mixing of cement based materials shall take place outside the Construction Exclusion Zones and Restricted Activity Zones. Where cement is to be mixed on sturdy plastic sheeting e.g 1200 gauge DPM considerable distances from trees and water run-off cannot enter Root Protection Areas.

All other chemicals hazardous to tree health, including petrol and diesel, shall be stored in suitable containers as specified by current COSHH Regulations, and kept away from Root Protection Areas.

1.20. Removal of Tree Protection Barriers

This will be done after all major construction work is complete. Vehicular access will not be permitted within the Construction Exclusion Zones.

The local authority tree officer shall be made aware that the fencing is to be removed.

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2. Site Inspection

2.1. Inspection Schedule

In order to ensure that the trees are adequately protected it shall be necessary to periodically monitor the works. This will be done by the local authority tree officer or an appointed arborist (Arboricultural Clerk of Works) who will provide the tree officer with a copy of inspection details.

Order Phase Activity	Phase Name	Works required
1st Phase	Pre-construction phase	Pre-start ACoW visit with all interested stakeholders
2nd Phase	Protection phase	ACoW visit to sign off tree protection measures
3rd Phase	Ground Protection	ACoW visit to sign off tree protection measures
4th Phase	Construction phase	Monthly ACoW visits
5th Phase	Post Construction Phase	ACoW visit to supervise removal of protection measures and final site sign off.

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Exam ple ACoW sheet.

ROAVR | GROUP

Woodland Solutions (Northern) Ltd t/a ROAVR Group
The Green House
Beechwood Business Park North
Inverness
IV2 3BL
www.roavr-group.co.uk
T: 01463 667302

SITE SUPERVISION FORM - ARBORICULTURAL CLERK OF WORKS

DATE	
CLIENT	
TELEPHONE NUMBER	
E-MAIL	

TERMS AND CONDITIONS FOR THE PROVISION OF ARBORICULTURAL CONSULTANCY

Site:	
Inspected by:	
Site Manager:	
Date of Inspection:	

Tree Protection Fencing.
Comments/Actions:
Ground Protection.
Comments/Actions:
Additional Comments.
Remarks:

I am aware of the tree protection requirements for this site and understand no retained trees must be damaged.

Signed:	Dated:
Name:	Company:

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3. Tree Works Schedule

Tree Works Specification

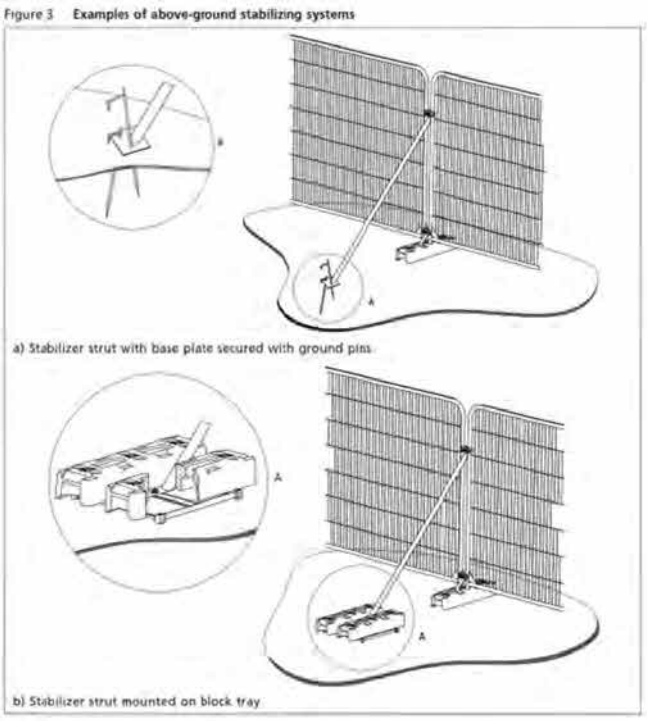
3.1.1. No tree works are required prior to the commencement of construction activity.

4. Tree Protection Barriers Detailed Specification

Tree Protection Fencing

The purpose of tree protection barriers is to keep construction activity away from Restricted Activity Zones or Construction Exclusion Zones. They should be appropriate to the nature and proximity of activity within the site. The barriers should be erected prior to the commencement of all activity including demolition, soil stripping and delivery of materials and demolition (except where existing structures require demolition to enable the barriers to be installed).

Barrier systems are specified below and should be installed according to the legend on the Tree Protection Plan.



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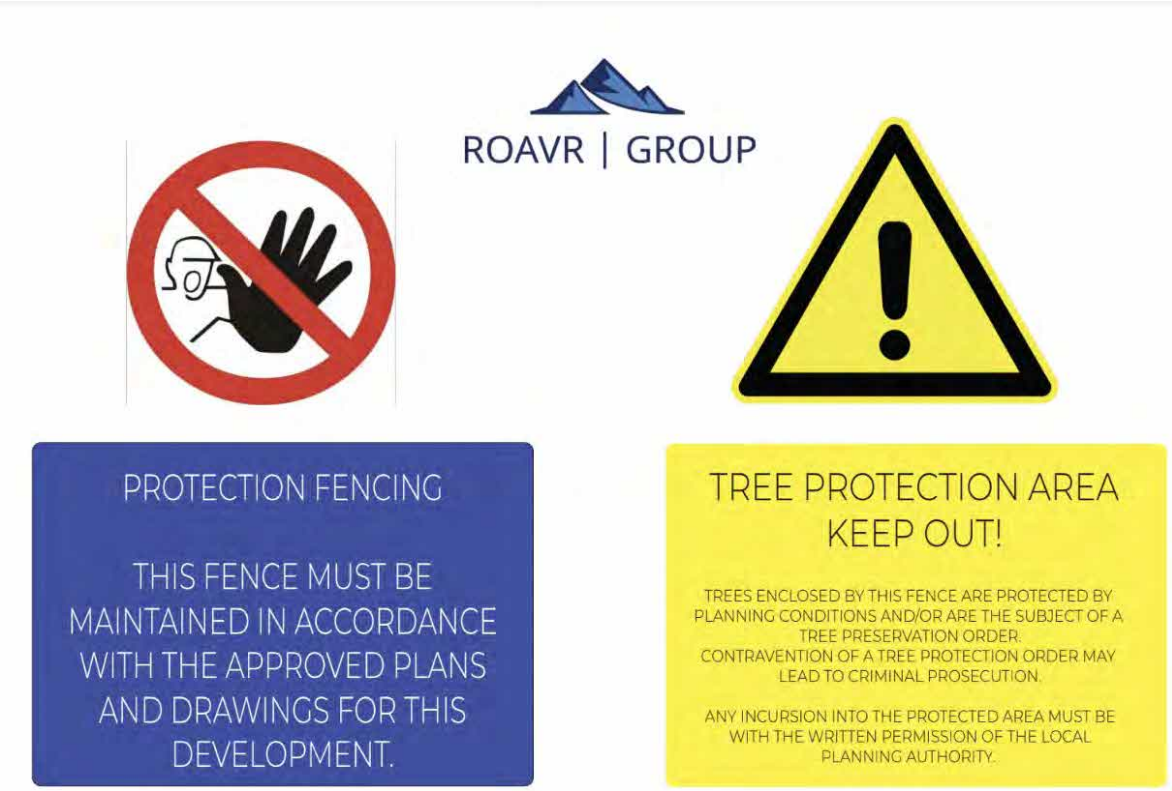
Suitable weather-proof notices should be displayed to identify tree protection zones. They should state the purpose of the fencing and that it should not be moved, or traversed, other than by authorised personnel.



Example signage.

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Plywood Boxes. [If Shown On TPP]

The CEZ or Construction Exclusion Zone offers protection to the stems of most of the trees on development sites.

However often there is an existing hard surface in place OR placing HERAS panels is complicated due to the trees location.

Trees closest to the development project or areas where contractors may access / park / deliver materials may require additional protection in the form of a timber box to be constructed around the tree's stem to prevent the risk of accidental damage caused by collision or abrasion.

Protective boxes should be constructed from sheets of 20mm marine plywood on suitable bearers of pressure treated softwood.

The box must not in any way be secured to the tree it is designed to protect. Tyres or polystyrene boarding can be placed between the tree's stem and the ply box to provide additional impact protection.

The sheets of ply should be closely 'butted' to avoid gaps that could be exploited and the box must be installed pre-start and not removed until all construction works are completed and the site is cleared. Access and egress is often the time that retained trees are struck and damaged.

Used correctly this form of protection is extremely effective.

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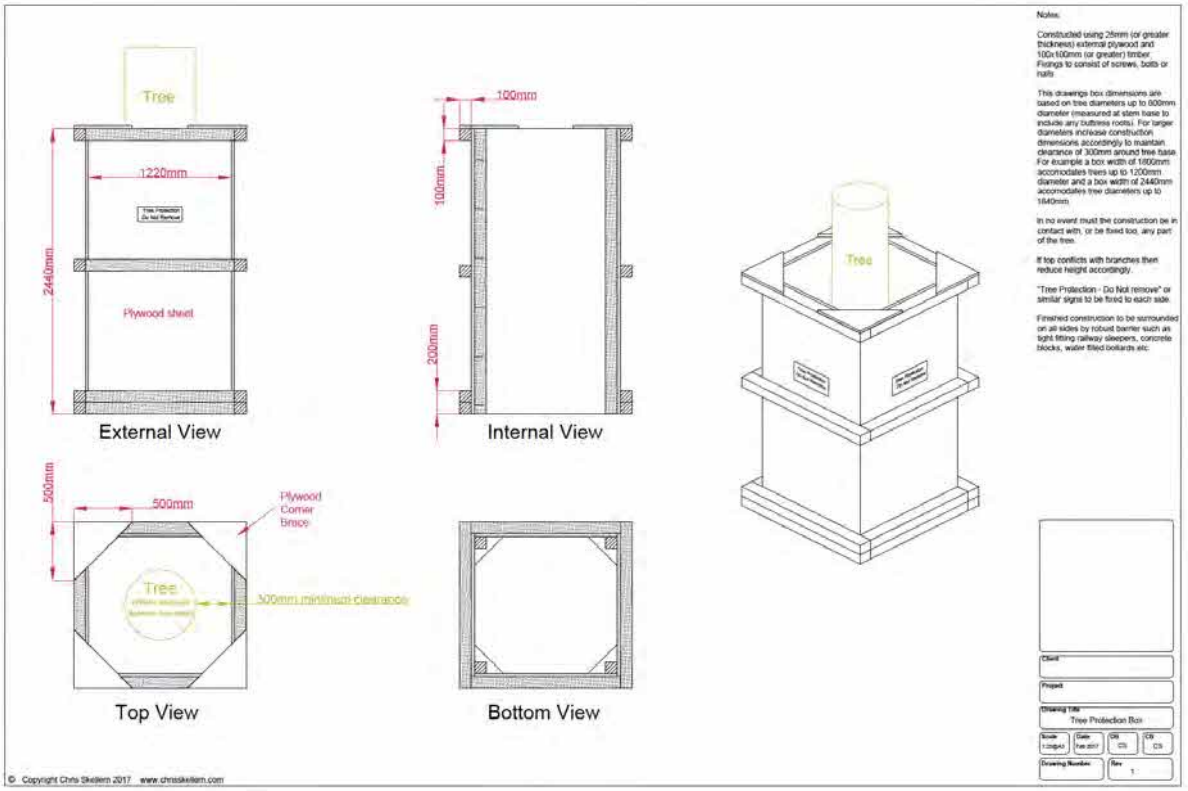

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5. Ground Protection Measures Detailed Specification

Where indicated on the Tree Protection Plan (Restricted Activity Zone A), the soil may contain tree roots, and ground protection measures should be implemented. Where Root Protection Areas are outside of the Construction Exclusion Zone, the soil may be subject to compaction due to general construction activity (including pedestrian activity and use of plant machinery).

In order to minimise compaction, it is proposed to ensure that a suitable load-spreading surface is in place at all times.

Any existing hard surfacing may be retained and reinforced (where Construction activity is applicable and adequate), otherwise suitable new ground protection fencing measures shall be installed. The ground protection shall need to be able to adequately spread the load of construction traffic. Where existing hard surfacing is to be retained, it shall not be necessary to install additional ground protection measures. However, the hard surfacing must be firm enough to spread the load of any traffic passing overhead.

Where only pedestrian traffic will occur, the ground protection measures may be as simple as timber boards, or scaffold planks installed directly onto a geotextile fabric on the ground. The ground should first be made even by raking, or by adding a few centimetres of sand or woodchip. Alternatively the boards may be supported by a scaffold framework. The scaffold may be founded on poles driven into the ground and/or onto blocks (to raise the scaffold) with additional couplings to make the framework secure.

Where only light vehicles are to operate (e.g. barrows, trolleys or occasional cars), thick wooden boards or scaffold planks should also suffice, though at least 150m of compressible woodchip will need to be installed first to help spread the load. Sturdier systems are specified below:

Where cars will regularly park or heavier vehicles/plant machinery will occasionally operate, sturdier ground protection measures will be required such as metal road plates, or purpose built synthetic road mats over a compression resistant layer such as 150mm of woodchip or 100mm of a 3D cellular confinement system in-filled with 7–40mm angular gravel (e.g. Cellweb™).

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A temporary concrete slab may also be considered as a suitable load spreading platform. Where a pile driver needs to operate, a concrete slab may be the preferred option.

Where existing structures need to be removed, this shall be done with temporary ground protection measures in place to enable this to be achieved without compacting soils.

The ground protection measures shall be installed and approved before commencement of demolition and construction activity and before the arrival of plant machinery or materials. They shall remain in place until all heavy construction activity is complete or until they are due to be replaced with a new hard surface.

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6. New Surfaces Detailed Specification

Resurfacing an Existing Hard Surface

If it is becomes necessary to replace an existing hard surface over Root Protection Areas the following restrictions shall apply:

The existing hard surfacing shall remain in place throughout the entire construction project or until it is due to be replaced with a new surface. If the hard surfacing is removed for any reason it shall immediately be replaced by ground protection measures as specified until a permanent hard surface is installed. No vehicle shall pass over this zone unless a permanent hard surface or ground protection is in place.

No excavation in excess of the existing sub-base shall occur. The existing sub-base may be retained undisturbed and incorporated into the new structure.

Hand operated tools shall be used to lift existing surfaces. Mechanical excavators may be used so long as they operate from outside Root Protection Areas and are carefully marshalled by the appointed arborist or local authority tree officer.

Any exposed roots in excess of 25mm are to be retained. Before the new surface is installed, 25mm of soil (or river sand) and a geotextile membrane shall be laid over the root. Until such times, the root shall be adequately protected from pedestrian damage using timber and sand.

Any new sub-base shall not contain fine particles. Coarse sand or larger particles shall be acceptable. 7-14mm gravel is ideal.

A 3 dimensional cellular confinement system may be incorporated into the sub-base and is encouraged. However, this is not considered compulsory since the resurfacing operation shall not cause a deterioration of rooting conditions beneath the existing driveway.

No salt or lime based products are to be incorporated within the sub-base.

Where the existing surface is porous, it shall be replaced with a new surface which is equally as porous. Where the existing surface is impermeable (e.g. concrete or asphalt), replacement with a porous surface is encouraged but not compulsory.

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Installation of Geoweb Footpaths

Stage 1- Ground Preparation.

Remove surface vegetation or treat with suitable herbicide to level – under the supervision of the project Arborist.

Fill any hollows in the exposed ground with no fines 4/20mm clean angular stone.

Place TRP4000 geotextile over the area to be protected ensuring a minimum overlap of 300mm.

Allow adequate drainage as a separation layer between soft subgrade and GEOWEB® infill material

Mark out the area to be protected with edging detail.

Stage 2 – Installation of Geoweb

Roll out TRP4000 geotextile to cover the area to be protected

Insert x 4 equally spaced steel pins along the width of the first panel

Expand Geoweb sections over the area to be protected and use temporary stakes or weights to hold sections open to prevent movement during infilling

Pin along the length of the panel and along each side to achieve this

If full panels are not being used, then ensure the cells have been expanded to their full dimension.

The Geoweb panels can be cut to shape if required with a heavy-duty Stanley Knife

Connect adjacent sections using ATRA® Keys or zip ties. Position the sections so the slots are aligned, insert the key, and turn 90 degrees locking the panels together. ATRA® Keys provide a long-term connection that is safer,quicker, and stronger than staples or cable ties.

Stage 3 - Filling the Geoweb.

Using 4/20mm or 40/20mm clean angular stone to Bs EN 13242 and 12620 (depending on cell depth being used)

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For permeability, infill the fully connected Geoweb system with a well graded, angular stone such as a 4/20mm or 40/20mm clean angular stone.

Allow 30mm overfill for any settlement of the stone into the cells during installation

If the area is to be trafficked immediately, slightly increase the amount of surcharge overfill to a max 50mm over the Geoweb with 4/20mm or 40/20mm clean angular stone

Consolidate the fill material with conventional plant or non-vibratory plant when required. Fill should be maintained above the Geoweb system by a minimum of 10mm at all times or a permanent wearing course of blocks, porous asphalt or gravel installed.

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Appendix: Further Information

Building Near Trees – General

National Joint Utilities Group publication # 10 (1995), Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees. Downloadable at www.njug.demon.co.uk/pdf/NJUG%20Publication10.pdf

NHBC Standards Chapter 4.2., Trees and Buildings.

Horticulture LINK project 212. (University of Cambridge, 2004), Controlling Water Use of Trees to Alleviate Subsidence Risk. Tree Planting and aftercare see www.trees.org.uk/leaflets.php# for downloadable leaflets on selecting a garden tree, planting, aftercare and veteran tree management.

British Standards BS 5837: 2012. Trees in Relation to Design, Demolition and Construction – Recommendations. Bs 3998: 2010.

Recommendations for Tree Work. BS 3936: 1992. Nursery Stock. Part 1: Specification for Trees and Shrubs. BS 3936: 1992. Nursery Stock. Part 10:

Specification for Ground Cover Plants. BS 4043: 1989. Transplanting Root-balled Trees. BS 8004: 1986. Foundations. BS 8103: 1995.

Structural design of Low-Rise Buildings. BS 8206: 1992. Lighting for Buildings.

BS 8545:2014. Trees: From nursery to independence in the landscape – Recommendations

BS 3882: 2007. Topsoil. BS 4428: 1989. General Landscaping Operations (excluding hard surfaces). Permission to do Works to Protected Trees / Tree Law
Forestry Commission (Edinburgh, 2003), Tree Felling – Getting Permission. Country Services Division - Forestry Commission. Downloadable at www.forestry.gov.uk/website/pdf.nsf/pdf/wgsfell.pdf/$FILE/wgsfell.pdf

Transport and the Regions (Department of the Environment, 2000), Tree Preservation Orders, A Guide to the Law and Good Practice. Downloadable at www.communities.gov.uk/publications/planningandbuilding/tposguide

C. Mynors, The Law of Trees, Forests and Hedgerows (Sweet and Maxwell, London, 2002)

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Communities and Local Government website with numerous downloadable documents, from:

http://www.communities.gov.uk/planningandbuilding/planning/treeshighhedges/ Lighting Levels

P.J. Littlefair, B.R.E. 209: Site layout planning for daylight and sunlight A guide to good practice. B.R.E. Bookshop, London.

British Standards Institution. Code of practice for daylighting. British Standard BS 8206: Part 2 (1992).

Chartered Institution of Building Services Engineers. Applications manual: Window Design (London, 1987).

NBA Tectonics. A study of passive solar housing estate layout. ETSU Report S-1126. Harwell, Energy Technology Support Unit (1988).

I.P. Duncan; D. Hawkes, Passive solar design in non-domestic buildings. ETSU Report S-1110. Harwell, Energy Technology. P. J. Littlefair, Measuring Daylight, BRE Information Paper 23/93 f3.50. (Advises on measuring daylight under the real sky or an artificial sky, allowing for the changing nature of sky light).

High Hedges Communities and Local Government website with numerous downloadable documents, from:
http://www.communities.gov.uk/planningandbuilding/planning/treeshighhedges/ Tree Specific

Websites

www.trees.org.uk Arboricultural Association www.rfs.co.uk Royal Forestry Society of England, Wales and N. Ireland

www.treehelp.Info The Tree Advice Trust

www.woodland-trust.org.uk The Woodland Trust www.treecouncil.org.uk The Tree Council

www.go-roavr.co.uk - portal for booking tree surveys UK wide.

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7. Limitations

7.1 ROAVR has prepared this Report for the sole use of the above named Client/Agent in accordance with our terms of business, under which our services were performed. No other warranty, expressed or implied, is made as to the professional advice included in this Report or any other services provided by us.

7.2 This Report may not be relied upon by any other party without the prior and express written agreement of ROAVR. The assessments made assume that the land use will continue for their current purpose without significant change. ROAVR has not independently verified information obtained from third parties.

7.3 This report, video walkthrough, data tables and raw data remain the copyright of ROAVR until such time as any monies owed are settled in full and the report may be withdrawn at any time.

7.4 This report, site visit, plans and conclusions are proportional to the proposals and in some cases a simple plan based impact assessment may be all that is required.

7.5 Important - to ensure fair allocation of resources, we allow you ten working days to review the report and issue any feedback, beyond that changes are chargeable.

Should you require any further information, please do not hesitate to contact us at any time.

Mr. Peter Haine FDSc Arb
Consultant Arborist

[redacted]

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Prepared by: Peter Haine
Checked by: Alexander Barnes

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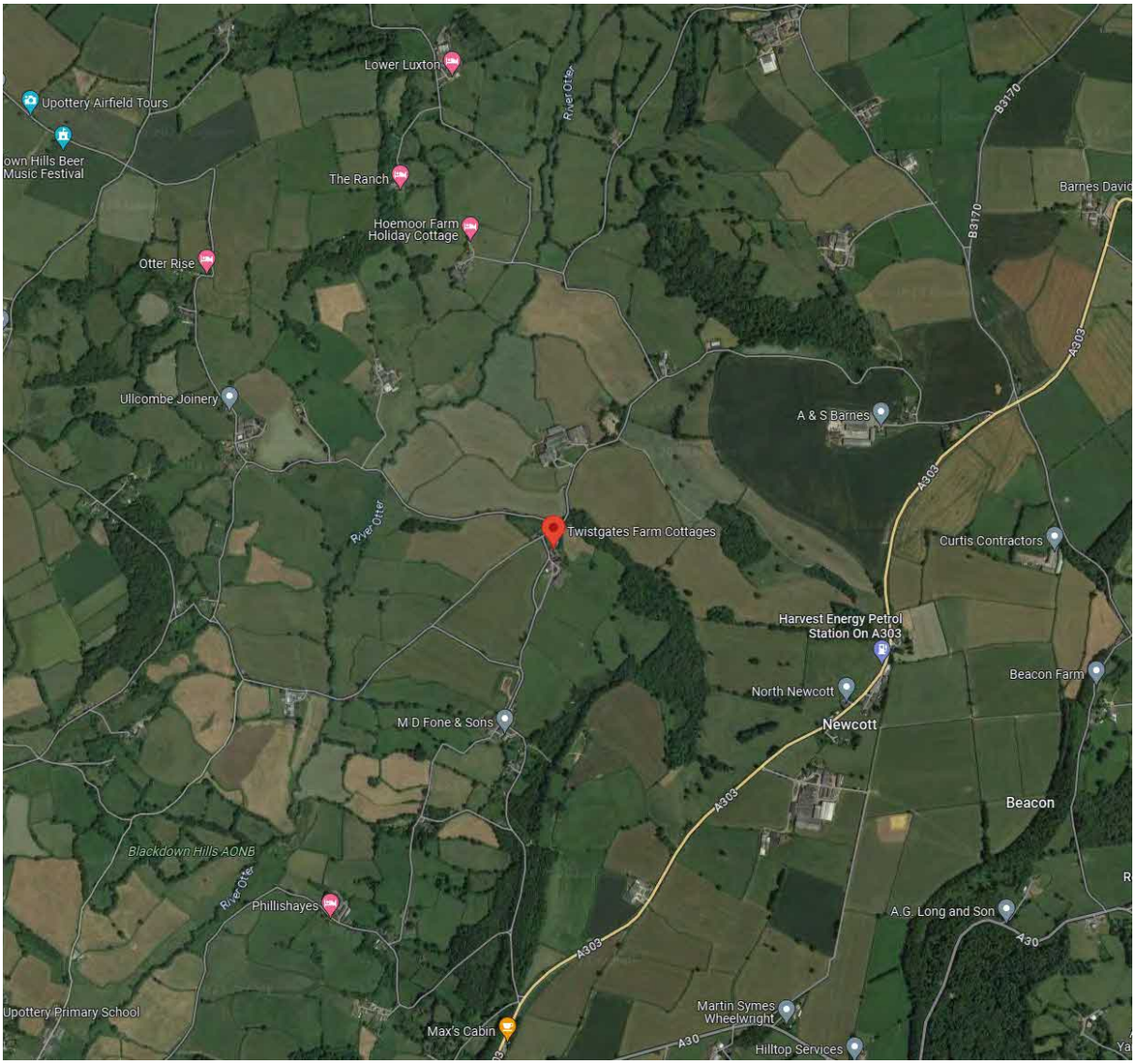
Appendix 1– Site Location



Google, 2023

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Appendix 2 – Arboricultural Data Tables

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Tree Number	Species	Age Class	DBH	Height (crown height)	N	E	S	W	Condition	Life Expectancy	Physical Description	Comments	Managment Recommendations	RPA offset from stem.	Category Rating
T1	Betula pendula (Silver Birch)	M	265	12(3)	2	2	2	3	Fair	10+	Tree located within hard surface area.	Signs of stress in crown, in between existing parking spaces..	/	3.18	C1
T2	Fagus sylvatica (Beech)	M	365	10.5(1)	4.5	4.5	4.5	4.5	Good	20+	Tree located within hard surface area.	Strimmer damage around base hard standing on the south and west of the base.	/	4.38	B1
T3	Sorbus intermedia (Swedish Whitebeam)	EM	185	9(2)	2.5	2.5	2.5	2.5	Fair	10+	Tree located within hard surface area. Broken branches in crown.	Hard standing on the western side of the base.	/	2.22	C1
T4	Acer campestre (Field Maple)	M	60,163,180	10.5(2)	5	4	1	4	Fair	10+	Poor shape & form. Low vitality. Tree located within hard surface area. Stem divides below 1.5m. Broken branches in crown.	Stress in crown, no flare around base, surrounded by compacted gravel, footpath entrance to proposed walk away.	/	3.49	C1
T5	Acer campestre (Field Maple)	M	255,235	10.5(2)	3	4.5	3	4.5	Fair	10+	Poor shape & form. Low vitality. Tree located within hard surface area. Stem divides below 1.5m. Broken branches in crown.	Stress in crown, no flare around base, surrounded by compacted gravel, footpath entrance to proposed walk away.	/	4.16	C1
T6	Acer campestre (Field Maple)	M	255	10.5(2)	1	5	1	1	Fair	10+	Poor shape & form. Low vitality. Tree located within hard surface area. Leaning East. Broken branches in crown.	Stress in crown, no flare around base.	/	3.06	C1
T7	Acer campestre (Field Maple)	M	265,235	10.5(2)	1	4.5	4.5	1	Good	20+	Tree located within hard surface area. Stem divides at ground level. Broken branches in crown.	Stress in crown.	/	4.25	B1
T8	Acer campestre (Field Maple)	M	00,305,290	11(2)	4	4	4	4	Good	20+	Tree located within hard surface area. Stem divides at ground level. Broken branches in crown.	Stress in crown, damage around base.	/	6.2	B1
T9	Quercus robur (Common Oak)	M	320	13(2)	4	4	4	4	Good	20+	Tree located within raised bed. Ivy on tree. Unable to inspect stem due to undergrowth.	/	/	3.84	B1
T10	Fraxinus excelsior (Ash)	M	350	15(3)	4	5.5	5.5	4	Fair	10+	Poor shape & form. Tree located within raised bed. Leaning East. Broken branches in crown.	Stress in crown.	/	4.2	C1
T11	Quercus robur (Common Oak)	M	320,300	10.5(2)	4.5	4.5	4.5	4.5	Good	20+	Tree located within raised bed. Ivy on tree. Unable to inspect stem due to undergrowth.	/	/	5.27	B1
T12	Quercus robur (Common Oak)	M	800	20(6)	6	2	2	6	Good	20+	Ivy on tree. Unable to inspect stem due to Ivy. Major deadwood in crown.	/	/	9.6	B1
T13	Quercus robur (Common Oak)	M	870	22(3.5)	3	8	8	8	Good	20+	Tree located within raised bed. Ivy on tree. Unable to inspect stem due to Ivy. Major deadwood in crown.	/	/	10.44	A1
G1	Ilex aquifolium (Holly)	SM	100,80, 65,75,70	5(0.5)	1	1	1	1	Fair	10+	Stems divide at ground level.	/	/	2.11	C2

Tree Number	Species	Age Class	DBH	Height (crown height)	N	E	S	W	Condition	Life Expectancy	Physical Description	Comments	Managment Recommendations	RPA offset from stem.	Category Rating
T14	Quercus robur (Common Oak)	M	650,300	20(2.5)	3	8	8	3	Good	20+	Tree located within raised bed. Leaning South. Ivy on tree. Major deadwood in crown.	/	/	8.59	A1
T15	Salix alba (White Willow)	EM	80,75,90	8(1)	3	3	3	3	Good	20+	Stem divides at ground level.	/	/	1.7	B1
T16	Fraxinus excelsior (Ash)	M	250	9(3)	3.5	3.5	3.5	3.5	Good	20+	Tree located within raised bed. Part of linear group. Unable to inspect stem due to undergrowth.	/	/	3	B1
H1	Quercus robur (Common Oak), Crataegus monogyna (Hawthorn),Corylus avellana (Hazel)	SM	100	5(0.5)	2	2	2	2	Fair	10+	/	/	/	1.2	C2
T17	Quercus robur (Common Oak)	OM	1000	17(2)	7	7	7	7	Good	40+	Unable to inspect stem due to undergrowth. Broken branches in crown.	/	/	12	A1
T18	Quercus robur (Common Oak)	M	450	16(2)	5	5	5	5	Good	40+	Unable to inspect stem due to undergrowth. Broken branches in crown.	/	/	5.4	A1
W1	Acer campestre (Field Maple),Fagus sylvatica (Beech),Quercus robur (Common Oak),Ilex aquifolium (Holly), Corylus avellana (Hazel),Crataegus monogyna (Hawthorn)	M	400	18(2)	4	4	4	4	Good	40+	Ivy on trees. Unable to inspect stems due to Ivy. Unable to inspect stems due to undergrowth. Broken branches in crowns.	Off site.	/	4.8	A2

Arboricultural Data Tables Terms.

Tree ID	Reference no. T1, T2 etc. for trees; H for hedgerows; G for Groups and W for woodlands.
Tag Number	If the tree has been tagged with an 'arbo' tag then the physical tag number is listed in this column.
TPO Number	If the tree is subject to a TPO and it is known to us this will be recorded here.
In Conservation Area	Y/N - If the tree is located within a Conservation Area we may confirm that here.
Tree Type	Beech, Oak etc.
Common Name	Common Beech, Evergreen Oak etc.
Latin Name	Fagus sylvatica; Quercus robur - Latin names.
Maturity	The estimated age class of the tree (relative to species) o Y - Young o SM - Semi-mature o EM - Early-mature o M - Mature o OM - Over-mature or V - Veteran
Potential for Bat Habitat	Y/N - if the tree has cracks, cavities or suitable bat habitat it may require further ecological surveys and form a constraint on development.
Measurements Estimated (Y/N)	Y/N - if the tree is off site, covered with ivy, or some other restriction the British Standard allows for measurements to be estimated.
Height	Height of the tree in metres.
Height & Direction of 1st Significant Branch	Recorded to consider access.
Number of Stems	Number of clear stems.
Diameter at Breast Height	Diameter of stem (mm) at breast height (1.5 metres above ground).
Crown Spread	The maximum spread of the tree's canopy measured from the stem in four directions (North, East, South, West).
Canopy Height	The height between ground level and the lowest part of the canopy when considering access.
Crown / stem / Basal Condition	Good, Fair, Poor condition comments.
Category	Tree categorisation based on section 4.5 of BS 5837 (2012) Trees in relation to design, demolition and construction –Recommendations. Four categories are used (A, B, C, U) with categories A, B & C being assigned one of three separate sub categories (1, 2 or 3): A –Trees of high quality with an estimated remaining life expectancy of at least 40 years. B –Trees of moderate quality with an estimated remaining life expectancy of at least 20 years. C –Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm
Life Expectancy	Estimated safe, usable life expectancy.

Sub-Category	Subcategories: 1: Mainly arboricultural & aesthetic qualities 2: Mainly landscape qualities 3: Mainly cultural values, including conservation U –Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years
Physical Condition	Good, Fair, Poor condition considering the tree structure, form and vitality.
Management Recommendations	Recommendations (regardless of the development proposals if available) for removal, retention and/or remedial arboricultural works.
Comments	A brief description of the tree which refers to tree form, condition, health and significant defects. Comments regarding environmental conditions affecting the tree (e.g. ground conditions) will also be included where relevant.

Arboricultural data tables are essentially an asset register of the trees and tree cover on and adjacent to a development site. The information included within the tables is used to produce a tree constraints plan (TCP) which shows in 2D the constraints and opportunities on a particular site.

Appendix 3 – Arboricultural Plans

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General Notes
Do not scale off drawing - refer to the tree data schedule for accurate crown spread measurements.
Depictions of tree canopies are based on measurements taken to four cardinal compass points.
No liability of any kind is accepted for any omissions or inaccuracies in respect of this plan.
The original of this drawing was produced in colour; a monochrome copy should not be relied upon.
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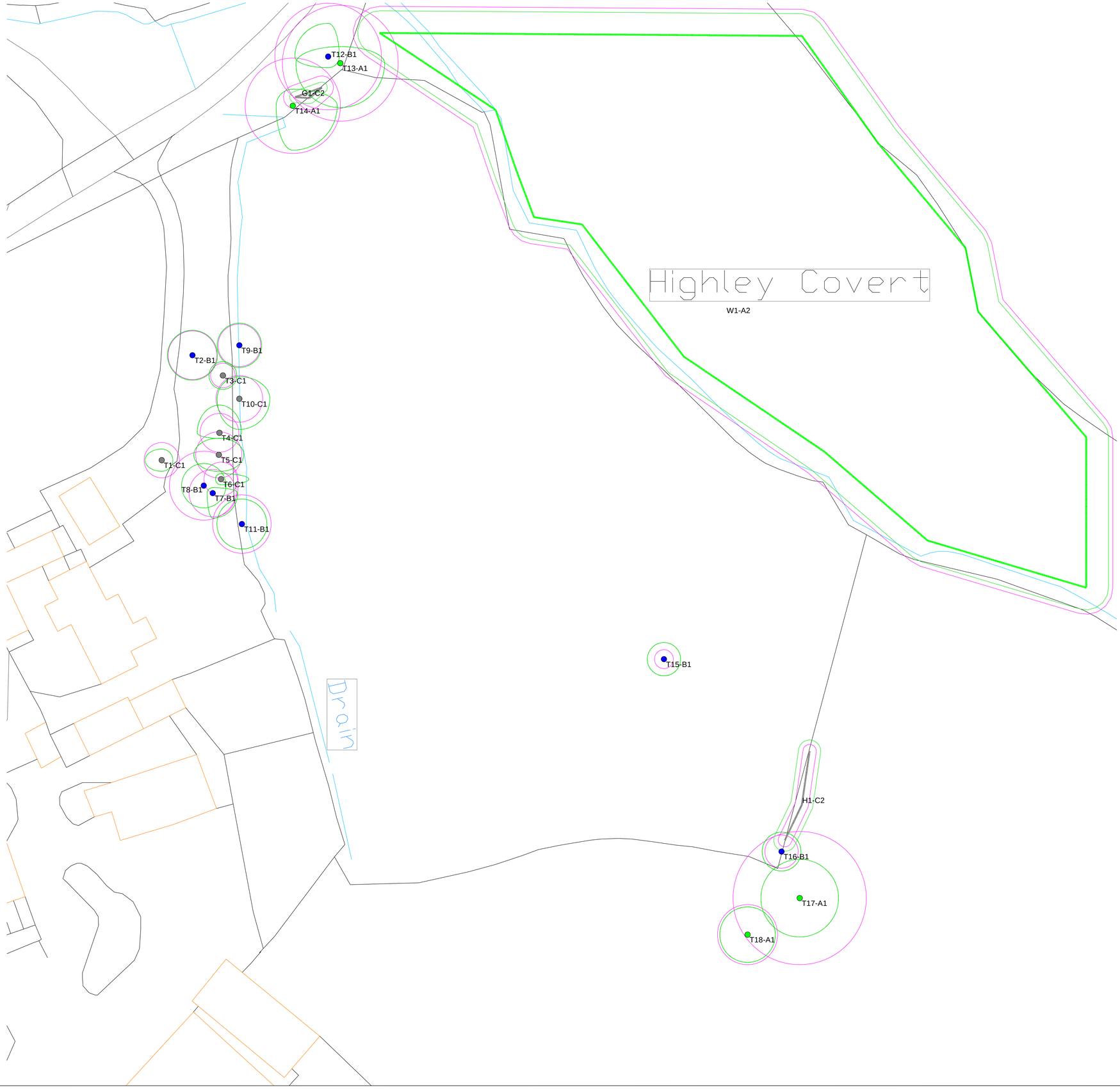

Key

Trees
Showing Canopy extents, category colour and tag number (with category).
T1-B

Category A
Trees of high quality with an estimated remaining life expectancy of at least 40 years.

Category B
Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

Category C
Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm.

Category U
Trees in such a condition that they can not realistically be retained as living trees in the context of the current land use for longer than 10 years.

BS 5837:2012 Root Protection Area

N

1:250
0 5 10m

Drawing Title: **Tree Constraints Plan**			
Client: Duncan Gray			
Site/Project: Twistgates Farm, Upottery, Honiton, EX14 9PE			
Scale/Sheet: 1:250 @ A0	Date: 04/12/2023		
Drawing No: 23_5837_10_73	Rev: 1	Drawn By: PH	Chked By: MH

ROAVR | GROUP
ROAVR Group, Marr House
Beechwood Business Park, Inverness, IV2 3BW
www.roavr-group.co.uk
support@roavr-group.co.uk
01463 667302