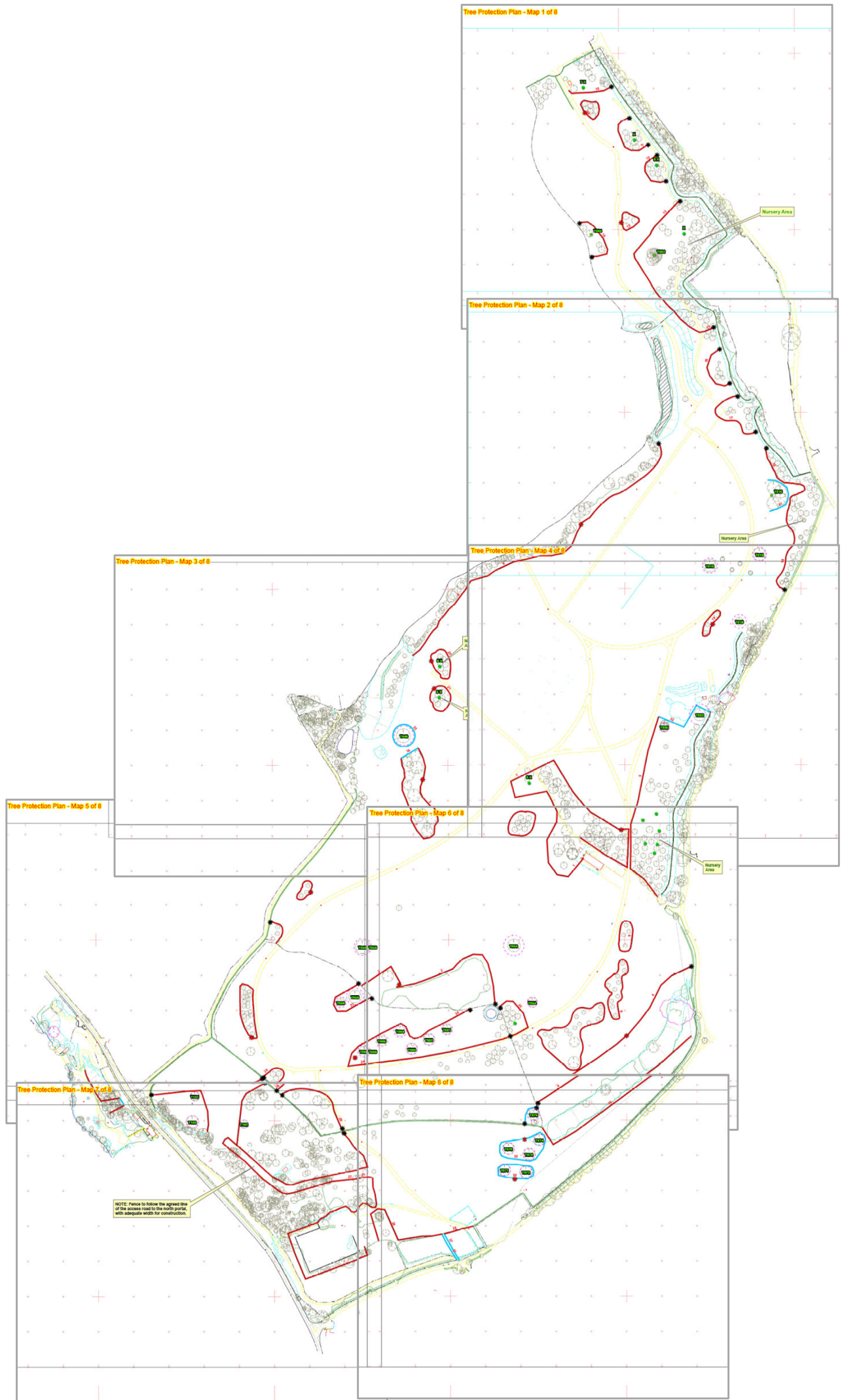


APPENDIX 1
TPP Key Plan



APPENDIX 2

FDA Method and Protection Extracts including Proposed EMB protection fencing and No Dig Method



Fulford-Dobson Associates Ltd
ARBORICULTURAL CONSULTANCY

REVISED TREE PROTECTION SCHEME

FOR DEVELOPMENT WORK AT

STROWDES ESTATE

CONTENTS

1. Introduction	3
2. The order of tree protection measures	4
3. Tree pruning and felling	5
4. Tree protection zones	5
5. Tree protection fencing	6
6. Temporary ground guards	8
7. Underground services, utilities and drainage	8
8. Remediation and contingency	8
9. General precautions and principles (re-cap)	9
Appendix I Tree protection plan 01 Superseded	10
Appendix II Tree protection plan 02 Superseded	11
Appendix III Tree protection plan 03 Superseded	12
Appendix IV Supplementary Addendum to the Estate Management Building Block Plan	13
Appendix V No-dig construction installation guide	14

Author	Jasper Fulford-Dobson
Project no.	FDA1242.2
Client	Abelo Estates Ltd
Revision/draft	02
Date of issue	17.11.22

1. Introduction

1.1 General

This tree protection scheme describes how development activities that have the potential to affect the trees at Strowdes Estate trees should be carried out to minimise any adverse effect on them.

The details of timelines and how the site will be managed are contractual matters and dependent on construction practicalities and financial realities. These details can only be agreed at the post-consent / pre-commencement stage (RIBA Plan of Work stage 4 Technical Design), i.e. reserved matters.

The tree protection measures and associated costs of implementation and compliance are ultimately the responsibility of the applicant and their appointed contractors. Enforcement is the responsibility of Wokingham Borough Council's planning (enforcement) department.

This document is not a contract for the provision of compliance of its contents nor a guarantee of compliance with the planning condition to which it relates.

If the client wishes to secure the retention and services of Fulford-Dobson Associates Ltd for implementation, supervision and monitoring, it must be agreed under contract prior to commencement of any project-related site work.

1.2 Reserved matters

If planning permission is granted the arboricultural-related issues that are likely to require further explanation and finalised agreement on this site include: -

- Project timeline and the order of work (to be provided by the project/site manager)
- The name of the appointed arboriculturist
- The precise alignment and specification for the no-dig construction around the Estate Management Building (access and parking areas).
- The precise treatment of the double lime avenue (T014) and subsequent alignment of the tree protection fencing around it.

2. The order of tree protection measures

PHASE 1

Pre-commencement of **any** site work (including ground levelling or demolition)

- Project arboriculturist to mark-up trees for removal (see section 3)
- Access facilitation tree removal and/or pruning (see section 3)
- Marking out locations and installing tree protection fencing barriers and ground guards as necessary (see section 4)
- Project arboriculturist to checking tree work and protection measures
- Installing no-dig access drive and parking area at the Estate Management Building with load-bearing cellular confinement system as specified in appendix III (and the manufacturers guidelines). Partly supervised by the project arboriculturist.
- Project arboriculturist completes log book and submits to Wokingham Borough Council's planning team for "signing-off" ready for PHASE 2

PHASE 2

Site work can now commence

- Weekly checks by the site manager and monthly visits by the project arboriculturist to monitor condition and functionality of tree protection measures.
- Project arboriculturist to provide supervision of activities that fall within the protected areas, such as: -
 - level changes for the ha ha & amphitheatre (close to T035)
 - demolition of the brick piers by Pillar Lodge
 - trenching for any drainage & underground services, including electric gates, posts and electric cable trenching within RPAs near the Estate Management Building
- Project arboriculturist completes log book and submits to Wokingham Borough Council's planning team for "signing-off" ready for PHASE 3

PHASE 3

Soft landscaping and post-construction tree inspection for final sign-off

- Supervised scaling back of tree protection measures to allow access into areas for new planting and soft landscaping.
- Supervision of activities that fall within the protected areas such as ground levelling for laying new lawns and digging trenches for irrigation or garden lighting.
- Inspecting retained trees and their rooting areas for any damage or compaction sustained during the demolition or construction phases and overseeing remedial or special mitigating work.
- Project arboriculturist completes log book and submits to Wokingham Borough Council's planning team for "signing-off" the relevant planning conditions.

3. Tree pruning and felling work

All tree work will be carried out in accordance with BS 3998 (2010) Tree work – recommendations by suitably insured and competent contractors.

Three trees/groups need to be removed as follows: -

T008: group of three semi-mature trees (x2 alders and x1 elm) **TBC**

T020: only one semi-mature oak (trunk diameter c200mm) within this group (located close to the north edge of the existing access drive). This tree will be marked up with a tag or red paint for identification prior to the contractor's arrival.

T039 – holly

T040 – hawthorn

Some access facilitation pruning in the form of selective crown lifting and light branch tip-reduction will be required as follows to ensure adequate height clearances over access routes: -

T005: prune to ensure 3.5m height clearances over the access drive.

T014: as above (**TBC** - see section 1.2)

T020: as above

T021: as above

T025: as above

T026: as above

T032: as above

4. Tree protection zones

The **purple dashed lines** on the tree protection plan defines the temporary tree protection fencing (TPF).

There will be no vehicle access, parking, turning, material storage etc... within the fenced-off areas.

The TPF will be installed in accordance with the specification on page 6 and the plan(s) in the appendices before any vehicle access, groundwork, material delivery, or construction takes place.

The project arboriculturist will carry out monthly site visits to ensure it is maintained fit for purpose for the duration of the project.

The site manager will be responsible for weekly checks.

5. Tree protection fencing

The fencing will be installed in accordance with the following specification and in the locations shown on the plans in the appendices. Spot fixing and alignment will be supervised by the project arboriculturist.

Ref. BS 5837 Trees in relation to design, demolition and construction recommendations (2012).

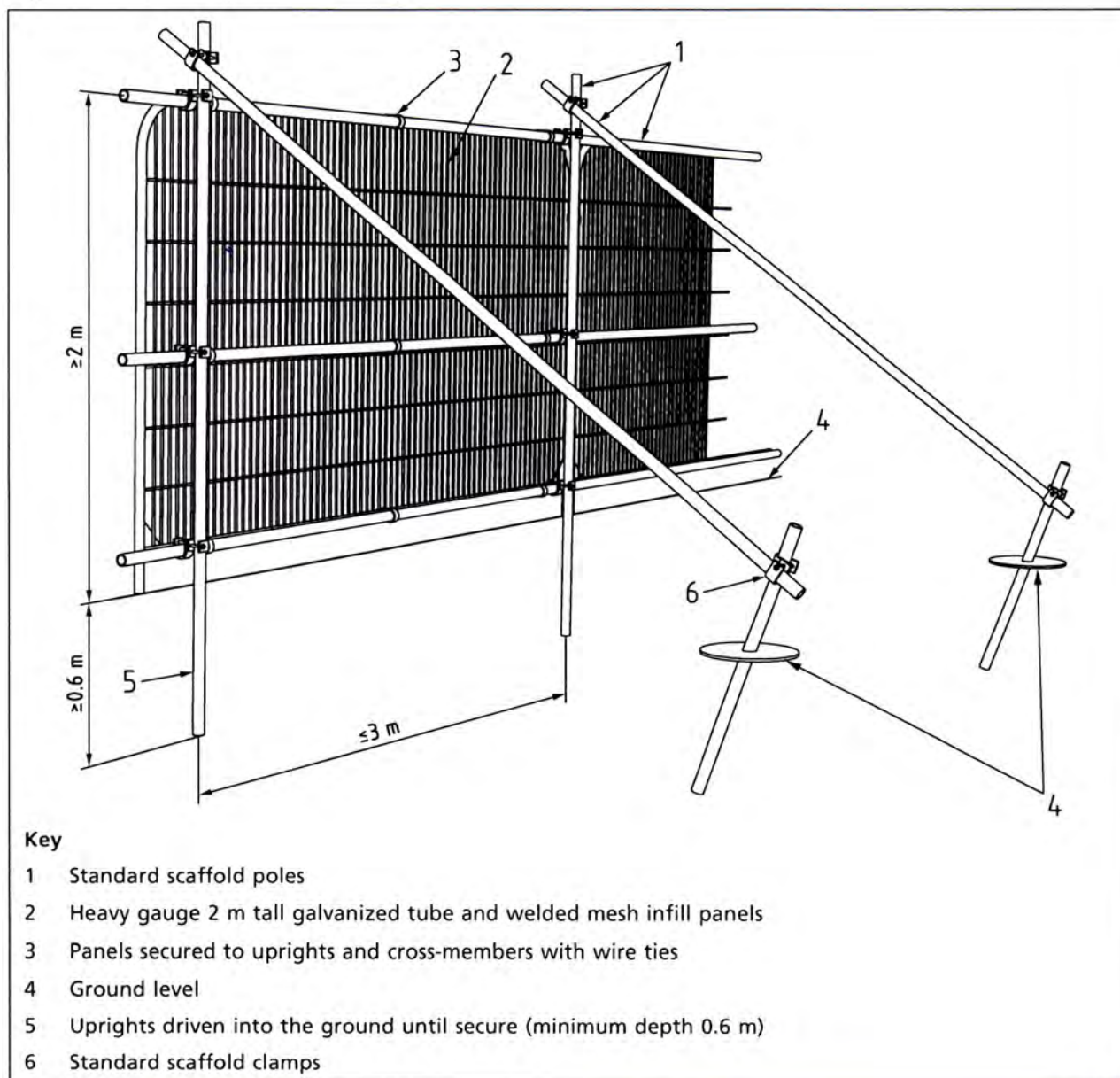


Image © British Standards Institute 2012

All-weather signs such as the example below will be placed at c6m intervals on the fencing panels



6. Temporary ground guards

In the event the TPF needs to be temporarily set-back to enable the approved development, this will be done under supervision by the project arboriculturist.

Temporary ground protection (TGP) will be installed as necessary to protect the roots of the nearby trees, where the work is within their rooting zone. The TGP will be made up of either heavy duty plastic or sheet metal trackway (where machinery and heavy plant is being used) or single thickness scaffold boards placed on top of a compression-resistance layer of 100mm depth woodchip, laid on to a horticultural geotextile membrane (where pedestrian loads are expected).

7. Underground services, utilities and drainage

Positioning of any new underground services, utilities and drainage is shown on the approved plans.

If any trenching has to take place within the TPF, it will be carried out under supervision of the project arboriculturist in accordance with National Joint Utility Group. Volume 4. *Guidelines for the Planning, Installation and Maintenance of Utility Services in Proximity to Trees* (2007).

8. Remediation and contingency

Development sites are live and fluid environments where the reality is that most site operatives and delivery drivers have little understanding of tree protection issues. Things can go wrong quickly and once damage has been sustained it can sometimes be irreversible.

Some of the trees at Strowdes are protected by Tree Preservation Orders, others are within Ancient Semi Natural Woodland. Anyone found guilty of wilfully causing or permitting damage to protected trees is liable, if convicted in the magistrates' court, to a fine of up to £20,000 (TPOs). In serious cases a person may be committed for trial in the Crown Court and, if convicted, is liable to an unlimited fine.

The project arboriculturist will therefore be retained to carry out any ad-hoc visits (in addition to the monthly monitoring visits) to advise on tree issues should the project team have any concerns (subject to contract).

If any damage is sustained, the site manager will consult the appointed arboriculturist and appropriate remediation will be implemented at the landowner's expense (and/or their appointed contractors) with written agreement from Wokingham Borough Council.

Such remediation for this project might be in the form of ground repair and soil decompaction around specified trees, remedial pruning and/or replacement tree planting.

9. General precautions and principals (re-cap)

The temporary fencing and ground protection will remain in place until completion of the construction and hard landscaping phase and shall not be altered in any way without the prior agreement of the project arboriculturist and/or Wokingham Borough Council's planning team.

No materials, chemicals, machinery or vehicles or site huts will be stored within the fenced off areas shown on the plan.

Damage caused to protective fencing must be reported to the project manager and/or project arboriculturist to ensure appropriate repair.

Any damage to the retained trees must be reported without delay to the project arboriculturist so that appropriate remedial work can be specified and permitted via Wokingham Borough Council's planning team.

No materials that are likely to have an adverse effect on tree health such as oil, bitumen or cement will be stored or discharged within 10 metres of the trunk of the retained trees. In the event of any accident of spillage in or adjacent to the protected trees the contractor is to immediately stop work in the vicinity and inform the project arboriculturist. Any remedial action required is to be undertaken only following the approval by the project arboriculturist. In the event of spillage, the area is to be secured with sandbags on the line of the tree protection area and measures taken to drain/soak any spillage away from the protected area.

No fires will be lit within the fenced off areas. Notice boards or any other signage or services are not to be attached to any part of the retained trees.

Temporary structures can define part of the protective fencing where adequate space allows. Where they are proposed in this manner, their location is to be agreed with the project arboriculturist.

APPENDIX IV

TREE PROTECTION PLAN 04 (Supplementary addendum to the Estate Management Building Block Plan)

Supplementary addendum to the Estate Management Building Block Plan (Drwg no. 0002, issue PL1. Oct 2017)
Revised protection measures around retained trees.



APPENDIX V

NO-DIG CONSTRUCTION INSTALLATION GUIDE

Cellweb® TRP

Tree Root Protection

Cellweb® TRP is a 3D cellular confinement tree root protection system. The system provides a 'no dig' solution for the construction of new hard surfaces within root protection areas (RPAs). Cellweb® TRP has been designed and independently tested to comply with recommendations made in Arboricultural Practice Note 12 and BS 5837 2012 – Trees in relation to design, demolition and construction.



Cellweb® TRP Key Functions

Cellweb® is a 'no dig' solution which is constructed directly on the existing ground surface. This eliminates the requirement for excavation, preventing root severance.

Cellweb® is a completely porous system allowing continued water permeation and gas exchange between the rooting environment and atmosphere.

Cellweb® spreads point loads, minimising increases in soil compaction within the rooting environment. This maintains an open graded soil structure allowing continued root growth, water, gas and nutrient migration.

The Cellweb® TRP system comprises the following three components

Treetex™ Geotextile. Following minimal ground preparation the Treetex™ is laid onto the existing ground and top soil. This acts as a separation layer, separating the system above from the soil and rooting environment below. Treetex™ performs as a hydrocarbon pollution control measure in accordance with BS5837, holding 1.7lt of oil per square meter.

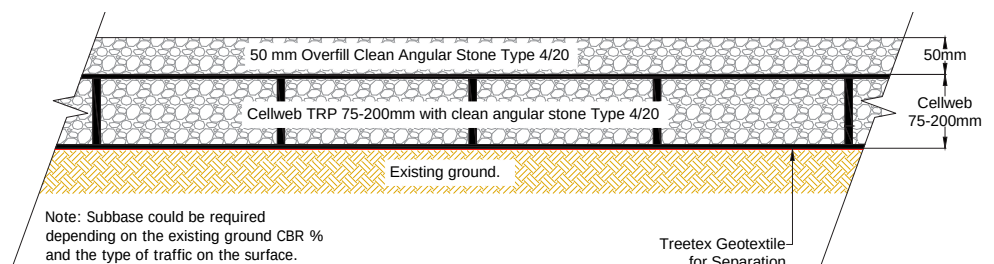
Cellweb® 3D Cellular Confinement. The Cellweb® is installed on top of the Treetex™ layer. This is fixed to the ground using ten steel J pins per panel. The panels can be cut to the required shape and adjoining panels can be connected using heavy duty staples or cell ties.

4-20mm Clean Angular Stone. The expanded Cellweb® is infilled with a 4-20mm clean angular stone. The confined angular stone locks together to produce a rigid stone mattress, while maintaining air pockets for continued water permeation and gas exchange. The low fines content of the stone prevents the Treetex™ layer from becoming blocked over time.

Which depth of Cellweb® TRP?

The Cellweb® System is provided in four different depths; 200mm, 150mm, 100mm and 75mm. The depth required is determined by the proposed traffic loadings and the site ground conditions. Geosynthetics in house engineering department can provide a free site specific technical recommendation. For free technical and engineering support please contact Geosynthetics Ltd 01455 617139 or the full installation guide can be found on our website www.geosyn.co.uk.

Indicative Cellweb with overfill



Cellweb® TRP Installation Guide

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

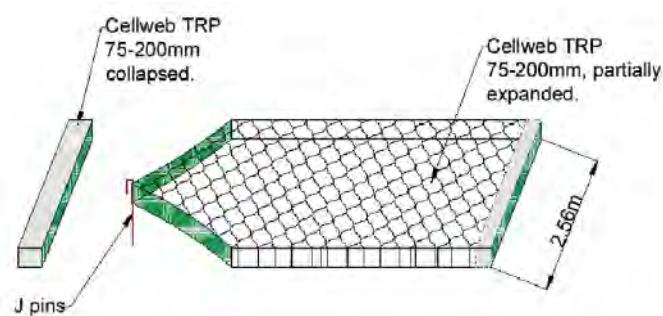
- Remove the surface vegetation using appropriate hand held tools or herbicide (see Note 1).
- Remove any surface rocks, debris and organic material.
- Create a level surface by filling any hollows with clean angular stone or sharp sand.
- Do not level off high spots or compact the soil through rolling.

2. Lay the Treetex® T-300 Non-Woven Geotextile

- Lay the Treetex® T-300 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 the Cellweb® TRP Cellular Confinement System

- Lay the collapsed Cellweb® TRP on-top of the Treetex® T-300.
- Place one of the supplied J pins into the centre cell at the end of the panel and secure into the ground.



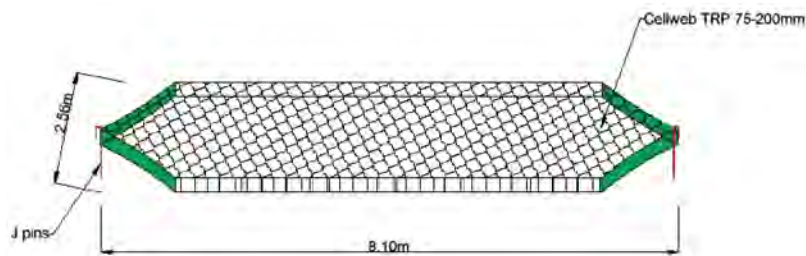


Step 3: Pinning Cellweb® TRP

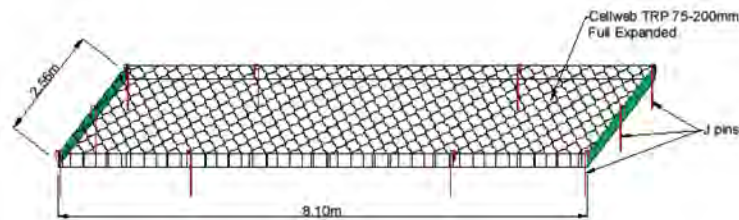


Step 3: Stapling Cellweb® TRP

- 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.



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.
- No compaction is required of the infill. Do not use a whacker plate or other means of compaction.

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

- Surfaces can include block paving, asphalt, loose gravel, grass and gravel retention systems (eg Golpla), resin bound gravel, concrete etc.
- For Root Protection Areas this surface must be porous.

NOTES

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.”

Geotextile: We recommend the installation of a Non-Woven Geotextile T300 under the Cellweb, 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. Staples: Number of staples per join: 200mm: 5 staples. 150mm: 4 staples. 100mm: 3 staples. 75mm: 3 staples.

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.

APPENDIX 3

Context Plan showing approved Masterplan



Drawing notes

- GL / 53.4 Proposed levels
- EX / 53.4 Existing levels
- 1 in 50 Falls indicator
- Application plot boundary
- Ownership boundary
- Existing landscape
 - Trees
 - Woodland / shrub bank
 - Hedges
 - Bund
 - Water bodies
- Proposed soft landscape
 - S01 Trees in solid ground
 - S3a Fagus hedging
 - S3a Yew hedging
 - S07a Lavender field
 - S07a Chalk meadow
 - S07b Semi-improved calcareous grassland
 - S08 Natural mounds
 - Long grass
- Furniture
 - F02 Barn Owl Boxes
- Water bodies
 - W01 Lake
 - Pond

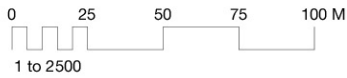
NOT FOR CONSTRUCTION

Rev	Date	Description	By	Chk
A	24/05/2025	for planning		
B	28/05/2025	Consent added, detail at Mansion and riverside added		
C	20/06/2025	Proposed mounds omitted, trees added		

Do not scale from this drawing – use written dimensions only. All Dimensions are in millimetres unless otherwise stated. All setting out, levels and dimensions to be checked and agreed on site. Order of construction and setting out to be agreed on site. Bradley-Hole Schoenach Landscape shall be notified of any discrepancies.

© All information contained in this drawing is copyright and may not be reproduced in whole or part without prior written permission of Bradley-Hole Schoenach Landscape.

This drawing is to be read in conjunction with the relevant specifications and detail drawings prepared by Bradley-Hole Schoenach Landscape and other consultants.



Bradley-Hole Schoenach Landscape

10 Storey Street
London
SE1 8AD
+44 (0)20 9809 1749
info@bhs.co.uk
www.bhs.co.uk

Project	Project Conway
Client	Private client
Scale	1:2500
Status	for Planning
Drawing title	Landscape Masterplan
Drawing nr	PC_BHS_ZZ_XX_DR_L_0100

C