



IAIN TAVENDALE F.Arbor.A.

ARBORICULTURAL CONSULTANT

**DEVELOPMENT ON LAND ADJACENT TO
18 THE ORCHARDS, LADY LANE, BINGLEY.**

METHOD STATEMENT – PROPOSED GARAGE AND ACCESS

METHOD STATEMENT FOR PROTECTION OF TREES DURING DEVELOPMENT

ABOUT THE METHOD STATEMENT

This method statement has been prepared to ensure that the trees indicated for retention are properly protected throughout the development of the site, and continue to represent a visual amenity in the future. It is intended to instruct all contractors on methods which will help to avoid damage to the trees.

The method statement recommends all development within influencing distance of trees is to BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations. Any pruning works must be to BS3998:2010 Tree Work - Recommendations and be undertaken by an approved arboricultural contractor. Any development affecting trees must be supervised by an approved arboricultural consultant.

GUIDELINES FOR FILLING IN THE METHOD STATEMENT

The method statement identifies: the order in which works are undertaken and the roles of various people involved; the contacts and others responsible for protection of trees; relevant plans and approvals; detailed methods of tree protection and details for monitoring site supervision.

The following information is submitted with this Statement or has been submitted as part of the application bundle:

- Proposed site layout drawings including Tree protection Plan
- Details of tree retention/ removal & management.
- Indicative sign to be attached to protective fencing.
- Sheet for monitoring site supervision.

- Groundtrax Groundmatz product information.
- Tree Root Protection Method Statement –Cooper Clarke

This method statement has been prepared in respect of planning conditions that are expected to be attached to the approved works. Failure to adhere to the agreed methods for development may result in a Breach of Condition Notice being served.

2.

METHOD STATEMENT

The people listed below are those with a responsibility for tree protection on the site and from the Local Authority. The relevant people should be contacted in the event of a problem.

SITE NAME Land adjacent to 18 The Orchards,
Lady Lane, Bingley.

DEVELOPER TBC

ADDRESS TBC

TELEPHONE NUMBER TBC

APPLICATION NUMBER TBC

PLANNING CONDITION NUMBER TBC

AGREEMENT TO PROTECT TREES

The developer has agreed to undertake tree protection to the standard advised in the method statement.

PROTECTED AREA

The trees are protected within fencing erected as identified in the attached notes. To avoid damage **the following points MUST apply within the protected area:**

1. No material should be stored.
2. No cement, diesel or oil should be stored.
3. No vehicles should pass or be parked.
4. No ropes, cables, services or notice boards should be fixed to existing trees.
5. No levels should be changed.
6. No fires should be started with 5m of the protected area.
7. No services should be laid without prior approval and proper supervision.

METHOD STATEMENT

ORDER OF WORKS

	WORKS TO BE UNDERTAKEN	DATE APPROVED	ACTIONS BY
1	Method statement received and approved by Local Authority		Developer Local Authority Tree Officer.
2	Any remaining pruning works as indicated in the submitted plans and approved by the Local Planning Authority to be implemented.		Arb Contractor Arb Consultant Local Authority Tree Officer
3	Protective fencing erected in accordance with Tree Protection Plan – Phase 1.		Developer.
4	Fencing approved by Local Authority Tree Officer.		Local Authority Tree Officer
5	Site / Toolbox meeting to go through Method Statement and ensure that all parties are fully conversant with all procedures and methodologies, clarify any queries and establish contacts.		Developer, Local Authority Tree Officer, Arb Consultant & Architect.
6	Development to proceed.		Developer
7	On completion of Phase 1 or at a suitable time tree protection fencing across garage footprint to be removed to permit Phase 2 to proceed.		Developer Arboricultural Consultant
8	Neoweb or similar 3D cellular confinement system to be utilised across the grass verge crossing and into the site following the methodology specified within the attached Cooper Clarke Tree Root Protection Method Statement.		Developer
9	Groundtrax Groundmatz or similar (details appended) to be laid across footprint of garage and to either side of access drive for ground protection. 3D CCS to be extended across garage footprint if Groundmatz unsuitable.		Developer
10	Piles to be inserted.		Developer

11	Piles linked by ground beams and beam and block floor formed. Groundmatz to be removed as floor is formed. 3D CCS retained if laid.		Developer
12	Fencing and ground protection monitored on a weekly basis, record sheet completed.		Developer
13	Fence monitored and repaired if necessary to full specification.		Developer
14	If encroachment within the protected rootzone is required for scaffolding or similar, access <u>may</u> be permitted subject to as suitable methodology being submitted and approved by the LPA.		Local Authority Tree Officer, Arb. Consultant.
15	Consultant or Local Authority Tree Officer to be contacted should any problems/complications arise. Work in vicinity of trees to cease until issues are resolved and agreed works confirmed to Local Planning Authority.		Arb Consultant Local Authority Tree Officer Developer
16	When all construction works have been completed and machinery removed form site, tree protection fencing and Groundmatz may be removed and surcharge drawn back off 3D cellular confinement surface system.		Developer Arb Consultant.
17	Site resurveyed once development approaches completion, any necessary amendments made to survey.		Arb Consultant
18	If necessary application submitted to Local Authority for consent for any additional works, and agreement obtained.		Arb Consultant Local Authority Tree Officer
19	Tree works undertaken.		Arb Contractor
20	Final site inspection.		Developer Local Authority Tree Officer Arb Consultant

METHOD STATEMENT

CONTACTS

POSITION	NAME	ADDRESS	TELEPHONE NO.
Developer	. TBA		
Site Manager	TBA		
Arboricultural Consultant	Iain Tavendale	High Bank Farm, Earby, Lancs BB18 6LD	01282 853333
Arboricultural Contractor	TBA		
Local Authority Tree Officer	Mr Simon Keenan	Bradford City Council	01274 434297
Landscape Contractor.	TBA		
Architects	Mr Peter Brooksbank	Harden, Bingley, BD16 1JF	01535 275053



IAIN TAVENDALE F.Arbor.A.

ARBORICULTURAL CONSULTANT

18 The Orchards, Bingley

Proposed Garage and Access – Description and Discussion

Introduction

Proposals have been prepared for a revised dwelling at the above site together with a garage and site access from The Orchards located between Beech T58 and Lime T59.

Such proposals necessitate construction across expected root protection areas and the following notes consider such issues and indicate methodologies required all of which will be specified in an Arboricultural Method Statement.

Proposals

Drawings prepared by Peter Brooksbank – Building Design and Planning Services indicate that the construction will be in two phases.

The initial and main construction operations for the proposed dwelling will access the site via the existing hard surfaced drive immediately adjacent to the gable of No18.

All services, drainage and similar will also utilise this existing access and service routes.

The second phase will entail the construction of the garage and drive which will be formed on a pile and beam foundation, all as indicated on the submitted plans.

Discussion

Use of the existing access and indicated tree protection fencing will permit construction of the main structure to proceed without impacting upon existing root protection areas.

The provision of existing and proposed service routes will afford similar protection to retained items.

When Phase 2 commences, the protection fencing to the approximate rear of the garage will be removed, to afford access to the garage site.

The 'footprint' of the garage will either be covered with ground protection boards (Groundmatz or Zappmat) or if the piling rig requires a more stable base/weather conditions dictate, a 3d ground cellular confinement system will be laid (Neoweb or Geocell).

In either instance adequate ground protection can be afforded to avoid compaction and/or damage to expected root protection areas.

To either side of the garage 'footprint' and to afford reasonable access again either ground protection boards can be utilised or a more basic system as specified in BS5837 Section 6.2.3.3.

All construction can then proceed as indicated without causing harm to expected root protection areas.

If ground protection mats are utilised these can be readily lifted for re-use as the surfacing/foundations are formed. If a 3D cellular confinement system is utilised this can either be removed or simply retained under the garage footprint.

To construct the drive, this will be formed utilising a traditional 3D cellular confinement system linking from the highway to the front of the garage.

The turf layer beneath the drive will be removed and the Neoweb or similar laid across with granular fill inserted all as indicated in the Arboricultural Method Statement.

A sacrificial layer may be provided during construction of the garage depending on the level of activity required and if applied will be removed upon completion of construction.

If considered desirable the width of the Neoweb can be extended when laid so that the dwarf dry stone retaining wall can be constructed upon it.

The completed surfacing will, in accordance with all good guidance provide appropriate protection to any roots within the expected root protection areas of retained trees.

The surfacing will also provide adequate porosity for moisture and gaseous exchanges.

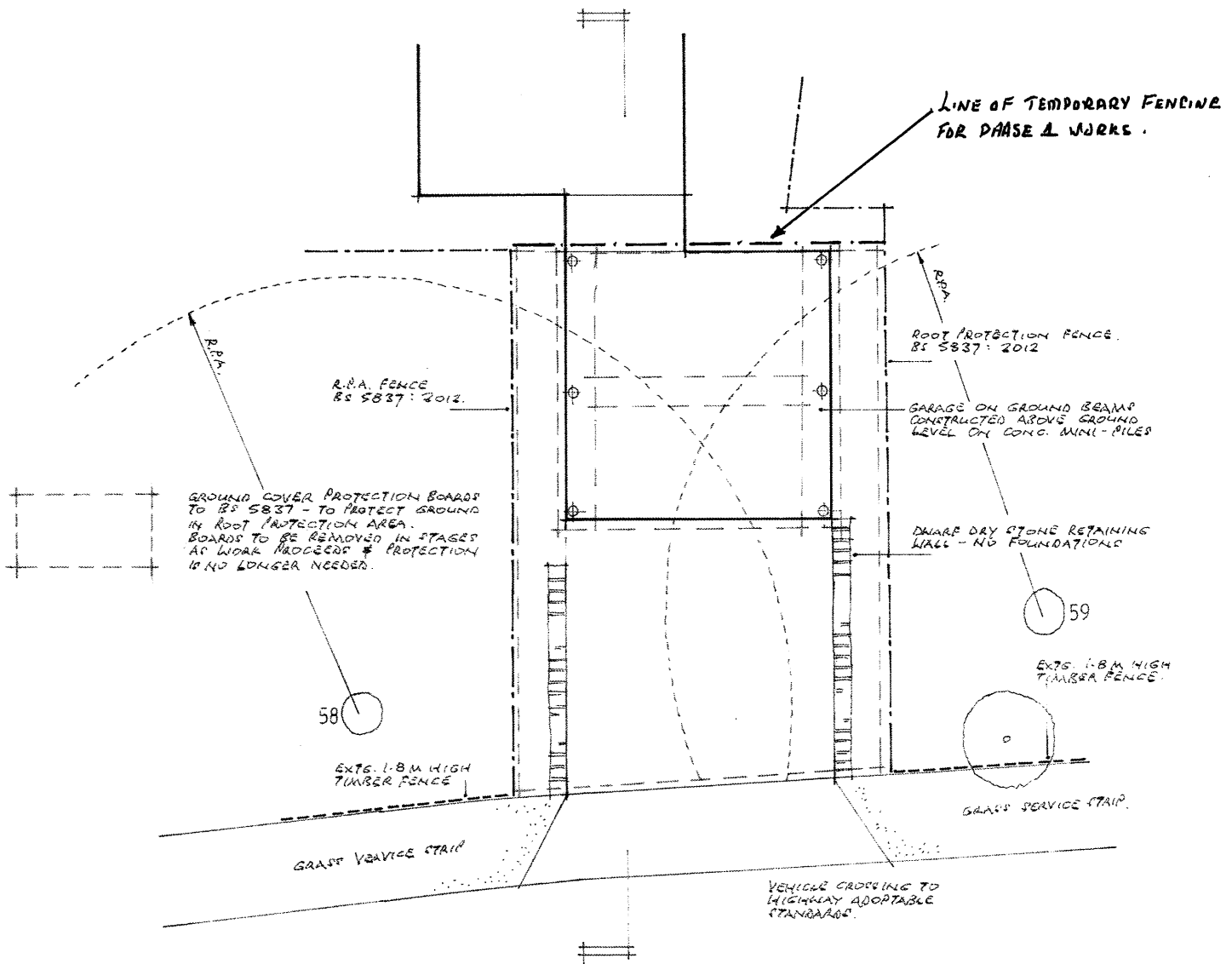
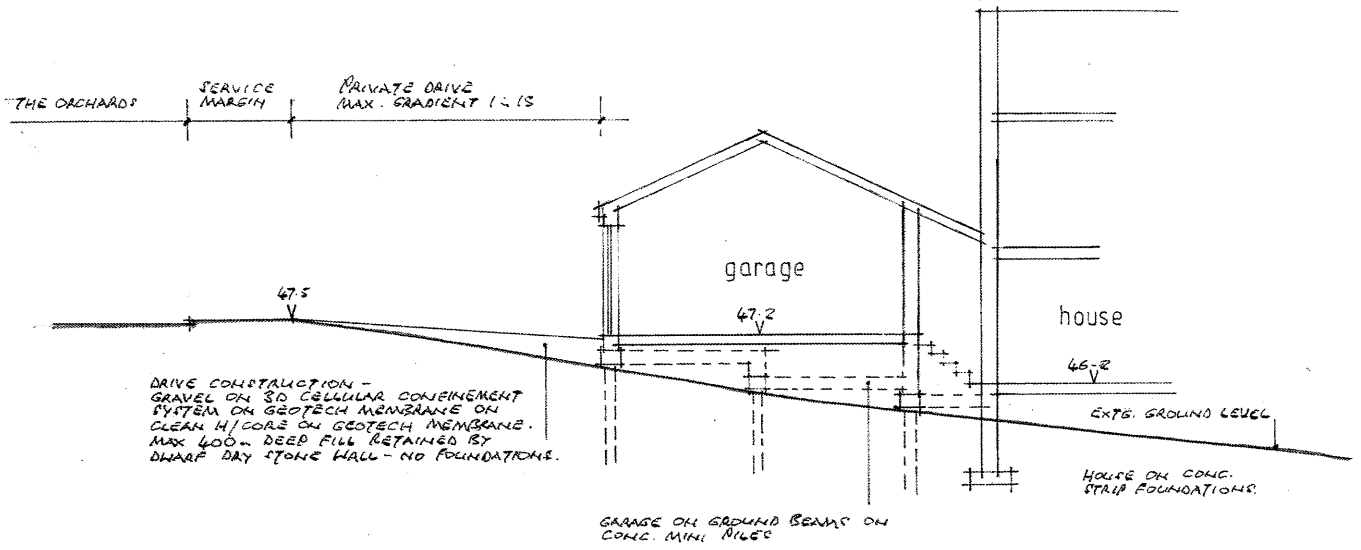
Conclusions

Subject to appropriate planning conditions, site management and input from the project arboriculturalist, the proposed design and tree protection will ensure no harm is caused to retained trees and that their future viability will be assured.

We trust that this information is of assistance to you and that the matter can now be progressed. Should there be any queries, or if clarification of any points is necessary, please do not hesitate to call.

Iain Tavendale F.Arbor.A

June 2016



Phase 2 - GARAGE & DRIVE CONSTRUCTION & GROUND PROTECTION — TREE CONSTRAINTS PLAN

DETACHED HOUSE AT 18 THE ORCHARDS BINGLEY BD16 4AZ

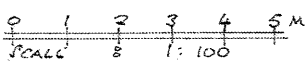
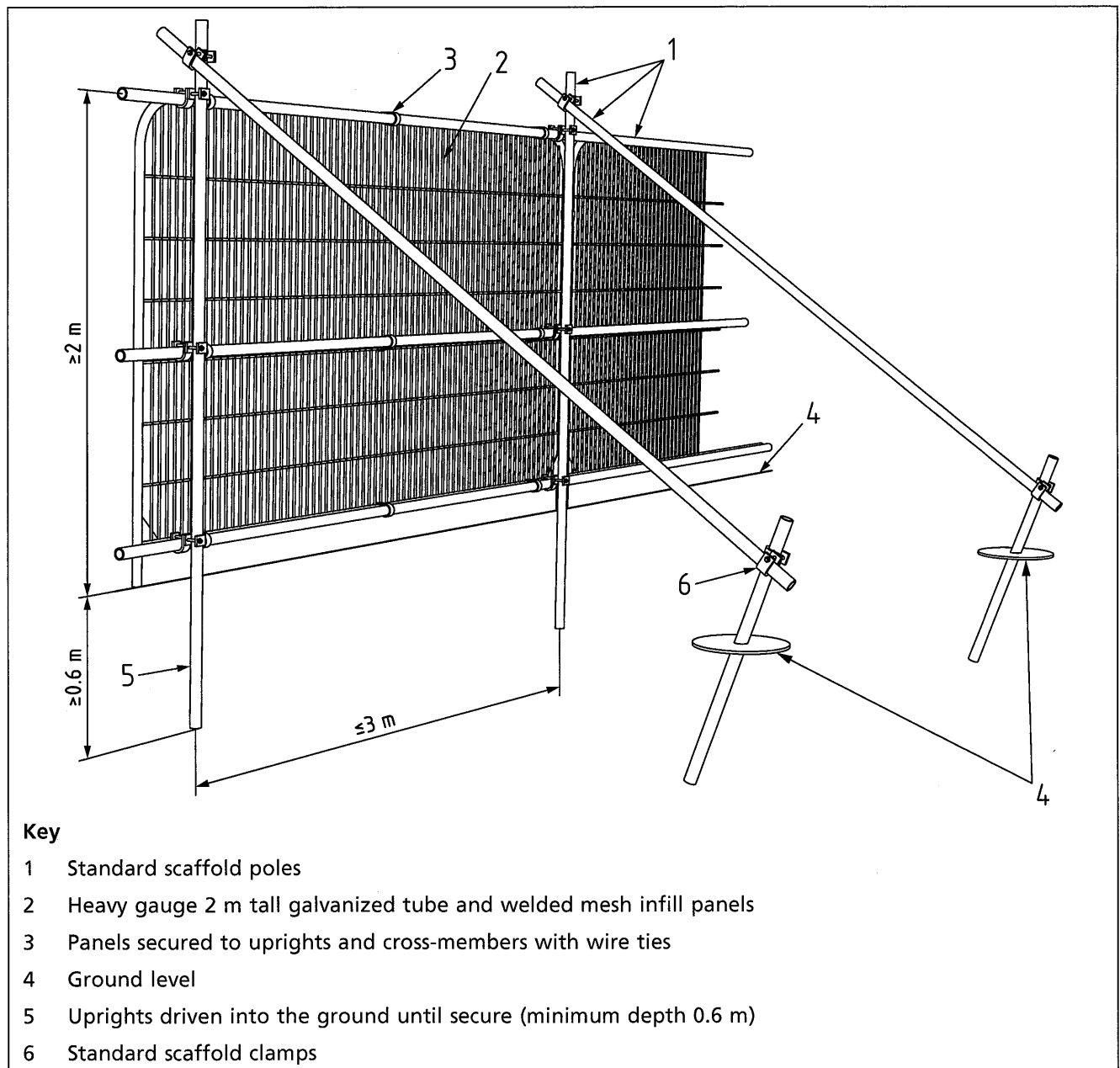


Figure 2 Default specification for protective barrier





**PROTECTIVE FENCING. THIS
FENCING MUST BE
MAINTAINED IN ACCORDANCE
WITH THE APPROVED PLANS
AND DRAWINGS FOR THIS
DEVELOPMENT.**



**TREE PROTECTION AREA
KEEP OUT !**

(TOWN & COUNTRY PLANNING ACT 1990)

**TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY
PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A
TREE PRESERVATION ORDER.**

**CONTRAVENTION OF A TREE PRESERVATION ORDER MAY
LEAD TO CRIMINAL PROSECUTION**

**ANY INCURSION INTO THE PROTECTED AREA MUST BE
WITH THE WRITTEN PERMISSION OF THE LOCAL
PLANNING AUTHORITY**

Method Statement

Title: TREE ROOT PROTECTION METHOD STATEMENT	Contract & MS No.:
	Issue No: 06
	Date: 13.02.08

Prepared by: Cooper Clarke	Approved by:
Distribution: Site Manager, Client Representative, Site Operatives	

	Action
<p>1.0 Introduction</p> <p>This method statement describes the procedure required to undertake the construction of an access-way whilst exerting no adverse effects on underlying roots to neighbouring trees. The proprietary Neoweb product is employed to create a structurally sound layer which dissipates loads efficiently and permits the use of free draining aggregates. This document is offered for guidance only and must be incorporated into the specific documents pertaining to the site in question.</p>	
<p>2.0 References</p> <p>British Standards Institution BS 5837: 2012 Trees in relation to Design, Demolition and Construction – Recommendations..</p>	
<p>3.0 Labour , Plant and Materials</p> <p>3.1 Labour (minimum)</p> <ul style="list-style-type: none"> • 1 No Site Supervisor / Engineer • 2 No Site Operatives • 1 No Mini Excavator Operator • 1 No Tree Officer / Arborculturst <p>3.2 Plant</p> <ul style="list-style-type: none"> • 1 No Mini Excavator • 1 No CAT Scanner • Hand Tools (shovels, spades, wrecking bars, hammers, spirit level, drill, craft knife) <p>3.3 Materials</p> <ul style="list-style-type: none"> • PPE as required by Site Supervisor • Neoweb Cellular Confinement System • Stapler and Staples • Staking Pins • G4 Separation Geotextile • Edge Restraints • Infill Aggregate (normally 40 – 20mm no fines) • Wearing Course as required by Client / Architect / Arborculturst 	

Method Statement

Title: TREE ROOT PROTECTION METHOD STATEMENT	Contract & MS No.:	
	Issue No:	06
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4.0 Method of Working**4.1 Responsibilities**

- The Site Supervisor shall be responsible for the overall implementation of this method statement.
- The Site Supervisor shall be responsible for ensuring the work area has been CAT scanned and services identified on the ground by a responsible person using equipment within calibration. All relevant service drawings will be checked and any necessary trial holes will be excavated.
- The Arboriculturist shall determine the permitted depth of removal of any grass sward – expected 50mm.
- The Site Supervisor shall be responsible for the safe handling and distribution of materials around the site.
- The Site Supervisor shall be responsible for providing a completed Quality Assurance document at the conclusion of the scheme.

4.2 Method Preparation

- The Site Supervisor will determine the exact location of the area to receive the Neoweb product, and any removal of grass sward / surface vegetation. This will be presented to the Client or his representative for approval. Once approved the area will be CAT scanned to identify any services.
- Following the CAT scan, the Site Supervisor will direct the manual removal of any material.
- The Site Supervisor shall ensure the prepared surface meets the necessary strength requirements prior to following works.
- The Site Supervisor shall provide the setting out of any edging requirements.

Edge Supports

- The excavation needed for the placement of kerbs, edgings and their associated foundations and haunching can damage tree roots, Within the Root Protection Area (RPA), this should be avoided either by the use of alternative methods of edge support or by not using supports at all.
- Kerbing for light structures, such as footpaths peg and board edging will be acceptable and will be utilised in this instance.

Graded Soil

- Sufficient spoil / retained grass sward shall be placed along the edge of the area to receive Neoweb, suitably located away from the works in order that it may be utilised at a later date. This eliminates the need to transport soil over the finished surface.
- The spoil shall be graded into the finished structure at the end of the scheme.

Construction

- Lay G4 Geotextile over prepared surface between edgings, ensuring overlaps of 300mm minimum. Temporarily retain G4 Geotextile with either stakes or weights.
- Install 8 Number 12mm diameter steel pins across the area to be covered by one

Neoweb Method Statement Tree Root Protection System – GMS Rev.4

Method Statement

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<p>panel of Neoweb. The pins shall be orientated in order that an expanded panel of Neoweb may be laid over and remain in an expanded state.</p> <ul style="list-style-type: none"> • Install Neoweb over steel pins; where necessary, remove surplus Neoweb with a craft knife. • Immediately adjacent panels of Neoweb shall be connected by providing four staples at each overlap. • The expanded Neoweb panels shall be infilled with the appropriate aggregate by the Mini Excavator Operator, under the direction of the Site Supervisor. The Neoweb shall be overfilled by 50mm to create a surcharge over the product which protects the leading edges of the cells. The Mini Excavator may track over areas of infilled Neoweb only. • The infilled aggregate shall be rolled by the Mini Excavator to ensure compaction. <p><u>Finishes if required.</u></p> <ul style="list-style-type: none"> • Gravel • The Site Supervisor shall conduct a visual inspection of the finished road structure prior to application of any wearing course. • The Mini Excavator Operator shall distribute a 75mm layer of desired gravel over the exposed infill aggregate. • The Neoweb must have a surcharge of gravel on the top and this must be maintained at all times to prevent rutting or migration and exposure the Neoweb. If this does happens the polyethylene structure will wear away and the stability of the sub base would be in question. Neoweb is designed to take sub-base stresses not abrasive surface wear. Alternatively, you could use Ecoblock 50mm Gravel Retention System. • If required, a resin bonding agent may be applied to the surface of the gravel wearing course to prevent displacement of the aggregate due to trafficking. This shall be undertaken by a specialist contractor. • Paving Slabs and Block Pavers • Paving Slabs and block pavers are available with built in infiltration spaces between the slabs or blocks. These are ideal, though they should be laid dry-jointed on a sharp sand foundation to allow air and moisture to penetrate to the rooting area. • Grass • The Site Supervisor shall conduct a visual inspection of the finished road structure prior to application of any wearing course. • Lay G4 Geotextile over exposed infilled aggregate, ensuring overlaps of 300mm minimum. Pull the Geotextile tight and temporarily retain G4 Geotextile with either stakes or weights. • The Mini Excavator Operator shall distribute a 45mm layer of slightly damp sharp sand over the desired area. The Site Operator shall level sand with a straight edge tamp and spirit level. • The Site Operative shall compact the sand layer to approximately 30mm with a whacker plate. • The Site Operative shall lay 4 interlocked units of Ecoblock per square metre, and secure the connection between blocks with 24number pins per square metre. The Ecoblock shall be consumed from random pallets to ensure even distribution of colour, and staggered in formation to ensure even distribution of load. 	
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Neoweb Method Statement Tree Root Protection System – GMS Rev.4

Method Statement

Title: TREE ROOT PROTECTION METHOD STATEMENT	Contract & MS No.:
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<ul style="list-style-type: none"> The Site Operative shall fill the Ecoblock cells with a predetermined root zone and rake to a finish level with the top of the Ecoblock. The Site Operative shall apply grass seed to the finished soil, to the satisfaction of the Client or his representative. <p><u>Signing Off</u></p> <ul style="list-style-type: none"> The Site Supervisor shall ensure all waste material is removed from site. The Site Supervisor shall provide the associated Quality Assurance document to the Client. <p>Cooper Clarke Civils & Lintels has an on-going programme of product research for product performance and development therefore we reserve the right to introduce improvements and design changes to specifications without prior notice.</p> <p>We have endeavoured to ensure that information contained herein is accurate, however we would strongly recommend that specific advice is sought by individual application to our Neoweb Sales Department.</p>	

Ground Protection Mat

introduction

GroundMatz – Quick and easy to deploy, GroundMatz ground protection mats are the most cost effective ground protection and temporary road system available today. With a unique anti-slip traction pattern and pleasing green colour our mats will help prevent costly damage and re-instatement costs to grassed or sensitive areas.

Our mats are in daily use throughout the UK across a wide range of industries including civil engineering, landscaping, golf course and sports field maintenance, holiday home parks, heritage and archaeological sites and a multitude of other applications. All these users are benefiting from the use of our ground protection mats by providing more efficient and safer working conditions whilst at the same time promoting a more professional image to their own clients and customers.

temporary trackway

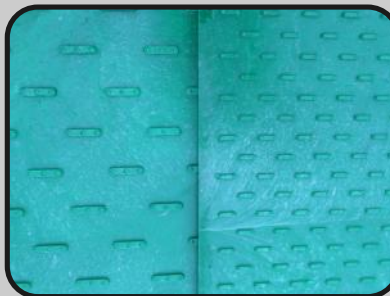
AVOID THIS



BY USING THESE



easy-to-use and install



BUY OR HIRE

Full details are on our website
www.groundtrax.com

For all enquiries contact Groundtrax Systems Ltd today:
E-Mail: info@groundtrax.com | Telephone: 08456 800008 | Fax: 08456 800208

GROUNDTRAX
Ground Protection and Reinforcement

Ground Protection Mat

features

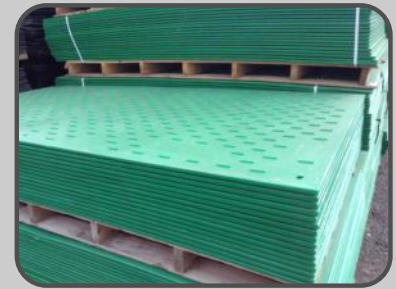
- Easily handled and laid by two men – no need for expensive crane wagons
- Dual purpose - traffic and pedestrian sides
- Lay as two parallel tracks or a single roadway
- Extremely durable to withstand vehicle weights up to 40 tonnes*
- Easily cleaned due to less aggressive lug pattern
- Link together with steel joiners, HD cable ties or plastic links
- 'U' joiners available for use on sloping or cambered ground
- Use over and over – lasts for many years
- Tested in extremes of hot and cold climates

*subject to the bearing pressure of the underlying ground

specifications

Material	High density polyethylene
Length/Width	2470mm x 1235mm
Thickness	14mm
Weight	38kg
Colour	Green

delivery



Pleased to supply the following organisations



BUY OR HIRE

Full details are on our website
www.groundtrax.com

For all enquiries contact Groundtrax Systems Ltd today:
 E-Mail: info@groundtrax.com | Telephone: 08456 800008 | Fax: 08456 800208

GROUNDTRAX
 Ground Protection and Reinforcement