From: Paul Bond <paul.bond13@btinternet.com>
Sent: 05 March 2024 20:17
To: Stephen.Astles
Cc: 'Lance Tucker'
Subject: RE: DC/23/2255 - 176 Crawley Road
Attachments: GeoTrax-GC-Product-Sheet-Rev-3.0.pdf; GeoTrax GC - Installation Guide Rev 2.0.pdf

Stephen

Thank you for your email and advice. We are currently in touch with Geo Trax regarding the attached product which has been used before on another project. We are awaiting specific depth of make up for the project and will advise upon receipt but would ask if the data and installation information can be added to the application details please?

Kind regards

Paul.

From: Stephen.Astles <Steve.Astles@horsham.gov.uk>
Sent: Tuesday, February 27, 2024 10:01 AM
To: Paul Bond <paul.bond13@btinternet.com>
Subject: FW: DC/23/2255 - 176 Crawley Road

Dear Paul,

Thankyou for your email.
I forwarded your email details to the HDC Arboriculture Team to provide reconsultation comments/advice.
As stated below by HDC Arboriculture it is recommended to submit a site specific solution for approval prior to determination of the application.

Kind regards

Steve Astles
Planning Officer

Telephone: 01403 215174
Email: Steve.Astles@horsham.gov.uk

Horsham District Council

Horsham District Council, Parkside, Chart Way, Horsham, West Sussex RH12 1RL
Telephone: 01403 215100 (calls may be recorded) www.horsham.gov.uk Chief Executive: Jane Eaton

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From: Andrew.Clout <Andrew.Clout@horsham.gov.uk>
Sent: 27 February 2024 09:53
To: Stephen.Astles <Steve.Astles@horsham.gov.uk>
Cc: Trees <trees@horsham.gov.uk>
Subject: RE: DC/23/2255 - 176 Crawley Road

Hi Steve,

Thanks for contacting me on this. As I outlined, we require a site specific solution to be submitted for approval prior to determination.

Thanks and regards

Andy

Andrew Clout
Assistant Arboricultural Officer (Tues and Weds only)

Telephone: 01403 215524
Email: Andrew.Clout@horsham.gov.uk

Horsham District Council

Horsham District Council, Parkside, Chart Way, Horsham, West Sussex RH12 1RL
Telephone: 01403 215100 (calls may be recorded) www.horsham.gov.uk Chief Executive: Jane Eaton

From: Paul Bond <paul.bond13@btinternet.com>
Sent: 20 February 2024 20:30
To: Planning <planning@horsham.gov.uk>
Cc: 'Lance Tucker' <lancemtucker@hotmail.co.uk>
Subject: DC/23/2255

Message for Steve Astles – Ref 176A Crawley Road, Horsham

Steve, noting some of the comments on the above application we noted one from the arboriculturist regarding the access into the property and reference to Guidance Note 12 for cellular confinement systems. The application does make reference to a root protection requirement but was not specific enough prompting the comment. We are happy with the suggested method and would welcome liaison with the council arboriculturist when works are undertaken. The note refers to a condition being used in any permission and we are happy for this route or would you prefer updated information to be submitted as part of the application?

Your advice would be appreciated.

Kind regards

Paul

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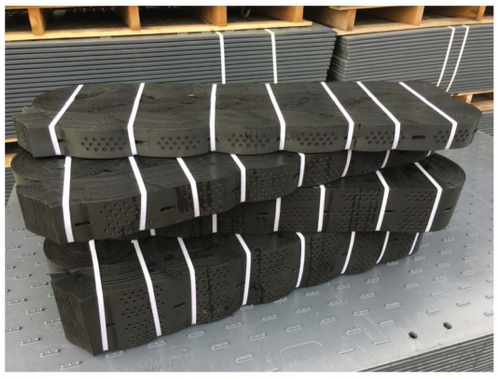
GEOTRAX GC 75/100/150/200
CELLULAR CONFINEMENT SYSTEM

Geotrax GC is an expandable cellular confinement system that can be filled with sand, soil, gravel or other site materials for use in the construction of three dimensional load spreading or containment systems. Constructed from 1.6mm perforated and textured HDPE and available in 75mm, 100mm, 150mm and 200mm deep variants.

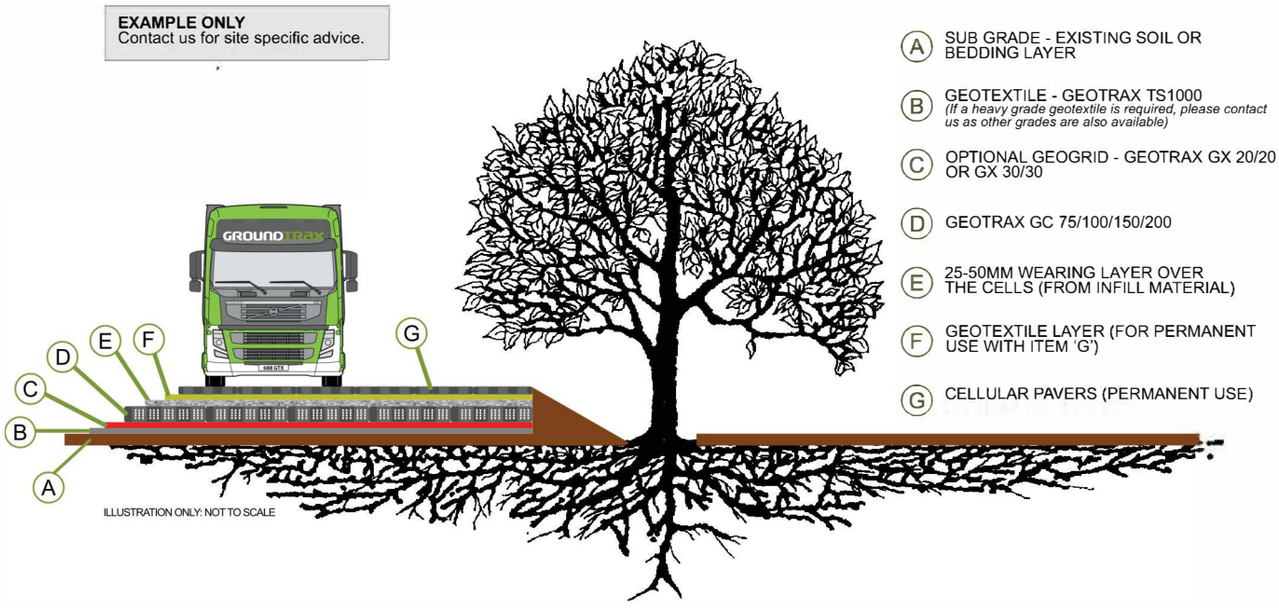




Typical uses include tree root protection, erosion control, retaining structures and temporary or permanent track and compound construction when a no-dig system has been specified. They can also be used to reduce the overall construction depth thereby reducing the cost of the infill material.

Geotrax Geocells work by confining the infill material and ensuring that the downward forces from traffic are spread laterally, thereby greatly reducing the pressure on the sub base by distributing the load over a wider area.

Example Tree Root Protection installation detail:



The cells arrive flat packed on pallets and are expanded on site to form a honeycomb like structure. The supplied steel pins and plastic caps are used to hold the cells open prior to filling. For erosion control and bank stabilization or other applications on sloping ground, our CellGrip fixings should be used for improved performance (up to 9 times the pull out force versus rebar pins). CellGrip fixings are simply clipped through the existing perforations in the side wall of the cells and fixed down with Terra-Lock pins. Adjacent panels are connected with plastic connectors (29no. connectors are included with each panel)

GROUNDTRAX

GEOTRAX GC 75/100/150/200

CELLULAR CONFINEMENT SYSTEM



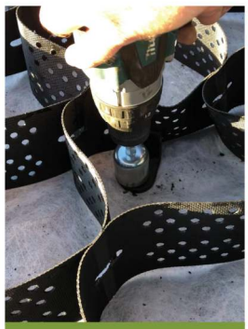
GeoTrax Steel Pins



GeoTrax Plastic Pin Caps



CellGrip Fixing Clip



Install with Electric Drill



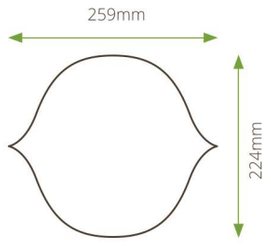
Finished Fixing

Panel Size (expanded)	2.71m x 7.41m (20.08m^2)	
Cell Depth Options	75mm 100mm 150mm 200mm	
Colour	Black	
Cell Size	224mm x 259mm	
Material	1.6mm HDPE	
Cell Wall	Perforated and Textured	
Seam Weld Strength	75mm deep cells	900N
	100mm deep cells	1200N
	150mm deep	1800N
	200mm deep	2400N
Tensile Strength	Longitudinal	18.4 MPa
	Transverse	19.5 MPa
Stress Crack Resistance	>3000 hours	
Panel Weight	75mm	18.0 Kg
	100mm deep	24.5 kg
	150mm deep	36.0 kg
	200mm deep	48.5 kg

Accessories Available:

GeoTrax GT Geotextile
GeoTrax GX GeoGrid
GeoTrax Steel Pins
CellGrip & Terra-Lock Fixings

Cell Size:



ENVIRONMENTAL MANAGEMENT SYSTEM
ISO 14001

For more information, contact us today or visit our website:

www.groundtrax.com

GROUNDTRAX
Ground Protection and Reinforcement
Telephone: 03456 800008 | Fax: 03456 800208
E-Mail: info@groundtrax.com | Website: www.groundtrax.com



GeoTrax GC® Installation Guidence

This field guide is provided as an aid to installation in commonly encountered site conditions. Groundtrax accepts no responsibility for any loss or damage resulting from the use of this guide.

1. Prepare the Surface

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

2. Lay out the TRP4000™ Non-Woven Geotextile

- Lay out the TRP4000™ over the prepared area, overlaying the edges of the required area by 300mm.
- Overlap any joins by 300mm minimum or more, depending on soil structure (see Note 2).

3. Lay out the Geotrax GC® TRP Cellular Confinement System

- Lay out the collapsed Geotrax GC® TRP on-top of the TRP4000™.
- Place one of the supplied steel re-bar pins into the centre cell at the end of the panel and secure into the ground.
- Pull out the Geotrax GC® TRP to its full 7.41m length and secure its length with another pin.
- Now measure its width to 2.71m and secure in each of the corners with the pins.
- Use 10 pins per panel to create a panel measuring 7.41m x 2.71m.
- This will produce a cell size of 259mm x 224mm which is the required cell aperture. Each cell must be fully extended and under tension.
- Connect adjacent panels together at each cell.

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 Geotrax GC® TRP cells with the clean angular stone, working towards the tree and using the infilled panels as a platform.
- Minimum 25mm overfill of clean angular stone when used in conjunction with a hard surface.
- No compaction is required of the infill. Do not use a whacker plate or other means of compaction.
- Encourage settlement of the stone with the use of a light roller or with 2-3 passes of the construction plant used for installation.
- If the clean angular stone is being used as the final surface; regular maintenance will be required to ensure a minimum overfill of 50mm.

5. Edge Restraints

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

6. Surface Options

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

NOTES

1. Herbicide: According to BS5837:2012 "The use of herbicides in the vicinity of existing trees should be appropriate for the type of vegetation to be killed, and all instructions, warnings and other relevant information from the manufacturers should be strictly observed and followed. Care should be taken to avoid any damaging effects upon existing plants and trees to be retained, species to be introduced, and existing sensitive habitats, particularly those associated with aquatic or drainage features."

2. Geotextile: We recommend the installation of a TRP4000™ under the Geotrax GC® TRP, or under the sub-base, if installed. The overlapping between adjacent rolls of Geotextile should be: CBR > 3%: 300mm minimum, CBR between 1% and 3%: 500mm minimum. CBR ≤ 1%: 750mm minimum.

3. Connectors: Number of connectors per panel = 29

4. Granular Fill: Open graded sub-base, clean angular stone Type 4/20 or Type 20/40. Please refer to BS7533-13:2009

The information contained herein is, to the best of our knowledge, accurate in all material respects. However, since the circumstances and conditions in which such information and the products mentioned herein can be used may vary and are beyond our control, no representation or warranty, express or implied, of any nature whatsoever is or will be made and no responsibility or liability is or will be accepted by us, any of our affiliates or our or their respective directors, officers, employees or agents in relation to the accuracy or completeness or use of the information contained herein or of any such products and any such liability is hereby expressly excluded to the maximum extent permitted by law.