



GripplE supplied its Terra-Lock® system to this new development in Doncaster, South Yorkshire in order to provide erosion control support to a new award-winning housing and commercial development covering over 600 acres. The Terra-Lock system is a time and labour saving method of geotechnical engineering for erosion control, soil retention and slope reinforcement and uses TL-A4 ground anchors that can achieve up to 32.5kN.

### Project Summary

<b>Location</b>	Doncaster, UK
<b>Contractor</b>	Peter Duffy Ltd
<b>System Used</b>	Terra-Lock
<b>Products Used</b>	TL-406, TL-A4

### Featured Products

TL-406



TL-A4



"Using the GripplE TL-A4 ground anchors in conjunction with erosion control matting and gabion mesh supplied by Salix, we were able to sculpt and stabilize the ground far more efficiently when compared to traditional methods."

- Martin Gilbert, GripplE Civil Construction Manager -



### PROJECT DETAILS

Gripple were selected by main contractor, Peter Duffy Ltd, to provide an erosion control solution to this site in Doncaster, South Yorkshire. Unity is a new award-winning development covering an area of approximately 618 acres of land, and will provide space for over 3,000 new homes, a new town centre, an offline marina, a school and a transport hub.

Initially, this scheme was going to utilise significant amounts of geogrid to build the slopes. However, this proved to be inefficient in terms of labour and material costs. Gripple were approached by Peter Duffy Ltd to propose an alternative solution to the labour intensive traditional methods of stabilising slopes.

Gripple carried out visits to the site in order to carry out initial surveys and provide design recommendations based on core engineering principles and soil conditions. Several slope stability calculations were carried out for the slope profiles to ensure the correct and most cost-effective system, depth and spacing was selected to meet the requirements of the project.

After consultation, Gripple's TL-406 top termination plates and TL-A4 ground anchors were proposed to retain the slopes. Terra-Lock is an innovative method of geotechnical engineering for heavy erosion and slope stability that

creates sustainable and durable green structures by reinforcing nature via facilitating vegetation growth.

Not only does the Terra-Lock system provide a resilient and versatile solution to alternative methods, it also provides a reduction in embodied carbon. The TL-A4 ground anchors can achieve up to 32.5kN of load resistance to movement. In order to achieve the equivalent load with a traditional installation method, at least 3,250 kg of material would have been required on-site.

Gripple Civil Construction Manager, Martin Gilbert, stated: "The clients' initial design for this scheme involved substantial amounts of geogrid to build the slopes. From a material and labour point of view this made the scheme prohibitive. We were approached to propose an alternative solution. Using the Gripple TL-A4 ground anchors in conjunction with erosion control matting and gabion mesh supplied by Salix, we were able to sculpt and stabilize the ground far more efficiently when compared to traditional methods.

Another bonus we found on-site was the efficiency in which the contractor was able to install the anchors. They took to Gripple products quickly and found installation to be very easy."

