



# CASE STUDY

EROSION CONTROL

Saving  
**84%**  
Embodied  
Carbon

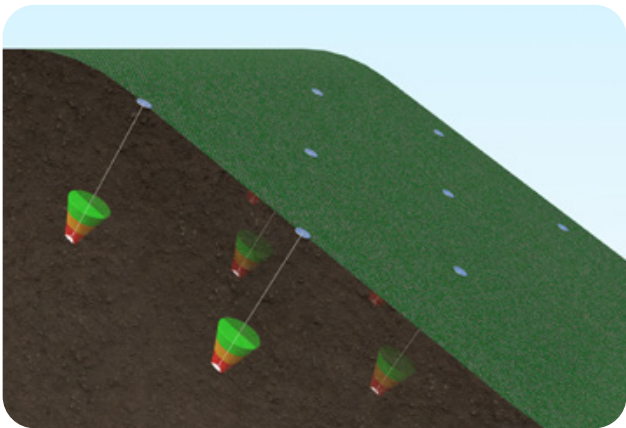


LOW CARBON ANCHORING SOLUTION **LCAS**

Farnborough Cutting,  
Hampshire - UK

## OVERVIEW

Along this 140m long and 40m high stretch of railway cutting, movement was detected by slope monitors. A speed restriction of 20mph was implemented, requiring an immediate solution to prevent further movement of the slope. Following the successful completion of phase 1, the second phase would stabilise this section of the cutting against erosion and future failures.



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# SOLUTION

Throughout work on the cutting the line below remained open to railway traffic, meaning access was only possible via the crest of the slope. Rope access was used to install the reinforced geomat and ground anchors on the 45° to 70° gradient slope face. A total of 770 Platipus anchors were installed to secure 4000m<sup>2</sup> of geomat. Initially the geomat was anchored in a trench at the crest of the slope before teams abseiled down with handheld equipment to install the anchors. Each anchor was driven to a depth of 3m before being tensioned to a working load of 20kN, providing immediately verifiable performance and creating intimate contact with the slope face to encourage vegetation growth.

By using the **Platipus solution only 2.7 tonnes of Embodied Carbon** was emitted. Comparatively, the originally proposed drilled and grouted solution would have emitted 16.9 tonnes of Embodied Carbon. An overall **saving of 14.1 tonnes of CO<sub>2</sub>e, or 84%**, was achieved by using the Platipus Low Carbon Anchoring Solution (LCAS<sup>®</sup>).



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