

MERSTHAM CUTTING, CROYDON

Client: Laing Railtrack Partnership
Main Contractor: Fondedile
Geogrid installation: HRS Services
Duckbill installation: WT Specialist Contracts

Requirements

A 120m long section of the steep Merstham Cutting, on the main London to Brighton railway line, needed stabilising to ensure that no debris could become loose and fall onto the tracks below.

Due to the height, gradient and restricted access to the cutting, installation of a rock fall netting geogrid and securing it with ground anchors posed certain logistical problems.



Solution

Duckbill mechanical ground anchors were specified by HRS Services and approved by Fondedile and the Laing Railtrack Partnership. With their speed and ease of installation, by means of hand-held portable equipment, Duckbills were ideal for securing the protective blanket of Maccaferri rockfall netting suspended and stitched by HRS Services



Due to the severely limited access and severe slope on the 25m high cutting, installation of the 146 stainless steel MR3 Duckbills was undertaken using abseiling techniques by Anchorsqister company, WT Specialist Contracts,

Each of the 3m long Duckbill anchors with 12mm stainless steel bar was driven through the surface soils and into the underlying chalk before being set to a working load of 30kN. This new geogrid will allow the growth of significant vegetation and reduce the risk of any spoil falling onto the tracks below.