

A83 Rest and Be Thankful Shallow Landslide and Debris Flow Barriers

Client :
Transport Scotland

Main Contractor :
Transerv Scotland

Location :
Scotland

Barrier Supplier :
Geobrugg AG

Date :
2010



The A83 at Rest and be Thankful in Argyll and Bute has been subject to a number of landslide events that have caused major disruption to the traffic that regularly uses this key trunk road. The road was closed or several weeks in October 2007 when around 400 tonnes of material were deposited on the road when one such event occurred. Then in September 2009 the road was again closed for 48 hours after 1,070 tonnes of material was deposited after a more significant event.

The A83 has been the subject of intensive investigation as it was identified as one of the highest risk sites for debris flow events in a report carried out by Transport Scotland, the Scottish Road Network Landslides Study, the implementation report for which was published in 2008. – a fact confirmed by the events that have occurred.

Following the latest event a requirement was identified for up-slope protection. BAM Ritchies, working closely with Geobrugg and Scotland Transerv, developed a solution of an eighty metres long four metre high shallow landslide barrier and a fifteen metre wide VX 'in-channel' barrier nearby. Both are debris flow barriers although the shallow landslide barriers is for use on un-channelised slopes. These were installed by BAM Ritchies in the winter of early 2010.

Anchors used included Geobrugg cable anchors, 35mm + 40mm and 50mm galvanised GEWI bars installed to depths of between 3.00m and 12.00m.

Drilling was carried out by a Tirfor supported Ripamonti drilling rig using a down the hole hammer (DTH). The barriers were erected by specially trained BAM Ritchies personnel. A 360° telehandler was used to lift plant and equipment up slope, reducing the requirement for manual handling.

BAM Ritchies
Glasgow Road, Kilsyth
Glasgow G65 9BL

Tel: 01236 467000
E-mail: ritchies@bamnuttall.co.uk
www.bamritchies.org.uk