

## SLOPE PROTECTION AND ROAD WIDENING AT JALAN ARING KUALA BERANG, TERENGANNU REGION, MALAYSIA

### Basal Reinforcement

#### Problem

Jalan Aring, Terengganu is an alternative route which connects Gua Musang to Kuala Berang and often used by heavy duty vehicles such as logging trucks and many more.

Land slide often occurs along this area due to the surroundings of hills and mountains. The Ministry of works has decided to enhance and rectify the issue by widening the route of 10KM in stretch and enhance the protection on slopes.

#### Solution

Consultant has proposed to use gabions as an embankment reinforced with geosynthetics. The 3 metre high gabion is used to prevent any form of debris from falling onto the road. Maccaferri supplied 100 rolls of WR15i Macgrid as reinforcement to reduce surficial differential settlement on the pavement.

Maccaferri also supplied several rolls of MXC20 non-woven geotextiles to work as a separator for the gabions. It took approximately 1 year before it is being open to public for usage.

**Client:** Public Works Department

**Designer / Consultant:** IKRAM Consulting

**Contractor:** Kayangan Emas Sdn Bhd

**Products used (Qty.)**

- MacTex W2 100 rolls

**Date of construction:** 12/2013 - 06/2014



During Construction



Woven Geotextiles used as reinforcements for the road widening



During Construction



Woven Geotextiles used as reinforcements for the road widening