ROCKFALL PROTECTION FOR NARINGGUL ACCESS ROAD WITH SIMPLE DRAPERY

NARINGGUL, CIANJUR, WEST JAVA, INDONESIA

Simple Drapery

Problem

This project located on the national road that connects Cianjur, Naringgul and Cidaun in West Java. The plan was to widen the existing road by cutting the slope that consists of heavily eroded rocks. The total length of the slope that needed to be protected was approximately 320 m, while the total height of the slope varied from 20 to 50 metres, with a an angle of up to 80°deg.

Solution

The client required two types of steel mesh with a certain specification. The first one was a high strength wire mesh, Zn-Al coated with 150 kN/m tensile strength equivalent to SteelGrid® HR 30 to protect the rock slope and standard wire mesh, Zn Coated with only 50 kN/m of tensile strength equivalent to DT mesh to cover the slope made up of smaller debris of rocks with coarse soil material. Both of the products were installed as a simple drapery system (using only top anchors) and a collecting ditch at the toe of the slope. All the SteelGrid® proved to be effective in protecting the road against rockfall.

Client: MINISTRY OF PUBLIC WORKS

Designer / Consultant: PT. MARATAMA CIPTA MANDIRI

Contractor: PT. BAHANA KRIDA NUSANTARA

Products used (Qty.)

- Steelgrid HR 4,575 sqm
- DT Mesh 3,600 sqm
- Date of construction: 10/2018 02/2019



EM as netting



Installation process of Steelgrid® HR 30 + MacMat® EM as netting





General view of installed drapery system





General view of installed drapery system

PT. Maccaferri Indonesia Aminta Plaza 2nd Floor, Suite 204 Jln. TB Simatupang Kav.10 Jakarta 12310 Ph: +62-21 750 6555 Fax: +62-21 750 6553 E-mail: info.id@maccaferri.com