ROCKFALL
Product: Double Twist Wire Mesh Cable Nets

During the winter of 2016 to 2017, heavy rains plagued California. As a result of these heavy storms, landslides occurred along Highway 41, which runs Northeast to Southwest, between Atascadero and Morro Bay, California, through parts of the Los Padres National Forest. These landslides triggered more than a month’s long closure of the nearly 17 mile long stretch. Caltrans Engineers elected to utilize Maccaferri’s Black PVC coated Double Twist Wire Mesh Cable Nets because of Maccaferri’s ability to expedite the materials to the site.

Problem
The heavy rains that impacted much of southern California caused lead to landslides along a 17 mile stretch of Highway 41 located just north of San Luis Obispo. The area was protected with a previously installed drapery/attenuator system that held up during heavy weather events past. However, due to the substantial amount of rain during the 2016/2017 season, a mass movement upslope caused a large landslide on July 2016.

Client:
CALTRANS DISTRICT 5

Main Contractor:
ACCESS LIMITED CONSTRUCTION

Designer:
CALTRANS GEOTECHNICAL DESIGN WEST

Products used:
DTWM CABLE NETS

Date of Construction:
DECEMBER 2016 - JANUARY 2017
January 6, 2017. This event caused the heavily traveled stretch of roadway to be closed for more than a month as Caltran’s engineers got to work designing a sustainable solution that would provide increased protection through future periods of inclement weather.

Solution
Maccaferri provided 104,000 sqft of PVC coated Double Twist Wire Mesh to help ensure protection from future landslides. Caltrans considered this project one of their top priorities and as such materials were needed on-site within two weeks of the initial landslide being cleared.

Availability of material was key. Access Limited Construction placed the order on January 16, 2017 and the entire order was delivered, on-time, by February 1, 2017. Caltrans elected to use black PVC to blend. In some instances, dark brown PVC mesh was substituted, which blends almost seamlessly with the black. This substitution allowed the proper quantities of materials to ship on-time in order to accommodate the project’s expedited schedule. The mixtures of PVC Coating allowed the system to blend with roadcut colors, while the heavier mesh conforms to roadcut contours and keeps loose materials contained.

Installation of the system took about six days, after the removal of loose material and re-contour roadcut. Coupled with the readily available material, the ease of installation of the Maccaferri system, allowed Access Limited Construction to stay ahead during this emergency response.

Click here to contact our technical department for assistance on your project.