

### WASHINGTON DOT HIGHWAY US12 LEWIS COUNTY, WASHINGTON, USA

#### ROCKFALL MITIGATION

##### Product: HEA Panels, Double Twist Mesh

###### Introduction

Highway US 12 is a main route from the Seattle area to many ski resorts on the eastern portion of Washington State. A 12 mile section of the highway has always been a major rock fall area and a hazard concern for WSDOT. It is important to the state economy to keep this and similar highways open and safe for travelers.

###### Problem

The rock slopes along highway US12 between mile markers 142.99 and 146.99 in Lewis County, Washington, consist of slightly weathered to highly weathered, fine grained, locally vesicular, basaltic andesite rock and blocky dacite. Slope inclination in this area ranges from 25 degrees to 70 degrees. The majority of the rock fall produced from these slopes is composed of blocks up to six feet in diameter that result from topping or raveling-type failures on highly weathered or fractured surfaces. Rock fall is most common during the onset of wet weather in the fall and during the spring thaw.

###### Solution

Janod used a combination of scaling, rockbolts, Maccaferri HEA panels attached to Maccaferri double twist mesh, anchors and tag lines to minimize the amount and size of rocks that could potentially break away from the slope cause a hazardous situation for US12 at White Pass, WA. The HEA cable panel is a steel cable netting made of unique knots that allow superior junction and energy absorption. This knotted system is blending with the environment.



Installation of Maccaferri HEA Panels



Maccaferri HEA Panels Installed



Maccaferri HEA Panels

###### Client

WASHINGTON DEPARTMENT OF TRANSPORTATION

###### Main Contractor

JANOD CONTRACTORS

###### Designer

WASHINGTON DEPARTMENT OF TRANSPORTATION

###### Products Used

MACCAFERRI HEA PANELS AND DT MESH PVC COATED

###### Date of Construction

JULY - OCTOBER 2011