



## *ACEGrid® a Debris Flow Disaster Restoration Project*

*Location : Miaoli, Taiwan*

*Application : Reinforced Embankment*

### **Problem :**

Huoyanshan tunnel in Miaoli was constructed to lead debris flow across traffic road. As a result of the debris flow from mountain towards the vehicles, local people's safety was seated in risk. Due to length of tunnel was not sufficient, debris flow still obstructed traffic and created the inconvenience of life.



### **Solution :**

Taking into account the disasters caused by the weather, it was necessary to find a solution to the problem. In order to reserve the nature of Huoyanshan, the design adopted reinforced embankment to lead the amount of debris to rock detention pond to ensure safety of people and vehicles. Additionally, the reinforced embankment facilitated maintains work of the tunnel for transportation of stone which obstructed the way of tunnel. It has been completion of the project in February 2008. During this period over 15 typhoons and heavy rain invaded the area, nevertheless the disasters did not affected the structural stability, moreover it can be seen a very good effect of vegetation. The overall condition of vegetation has been integrated and created an ecologically-friendly environment.