



The Channel Protection Project in Taiwan

Location: Tainan County, Taiwan

Application: Channel Protection

Problem :

Due to the changing of intrinsic topography and hydrology shortened the time of rain concentration and increase the surface runoff. It also increased the load of draining capacity and made the impair draining. In order to broaden the draining channel to improve the capacity of discharge in this case, the way to build the vertical concrete retaining wall next to the channel side, but unfortunately, it also made flow rate faster than prior section to scour the unprotected channel and lead to the retaining wall and bottom erosion.



Solution :

In order to solve the problem of carrying the ooze at the bottom of channel away, the design was to apply ACEFormer[®] at the channel bed. ACEFormer[®] was formed as lattice structure and the single layer fabric was surrounded by double layer fabric lattice which could be filled with cement mortar.

Since the ACEFormer[®] used in this field and the shape is solid lattice. It can increase the Manning rough coefficient of the channel bed obviously and then decrease the velocity of flow. Especially at the area where the channel have curve, ACEFormer[®] can decrease the damage probability caused by the swift current.

Increased service life of the channel is another benefit of ACEFormer[®]. Currently, the channel is still in good condition even after many typhoons attacked.