Problem
The main contractor contacted Maccaferri in December 2012 requesting our services and technical advice for a residential gated community development in Kemensah, Gombak.

The location of the development is at a hilly terrain, surrounded by high-end residency area. Problem emerged when the access road leading to the development area could not be constructed within the specified time frame. To construct the access road, retaining walls at variable heights (4.0m till 11.2m) need to be built to achieve the proposed road platform level. The contractor had considered reinforced earth wall but it was deemed not the best solution because of its longer construction time and higher cost in its granular wall backfilling material.

Solution
Maccaferri proposed a combination system of mechanically stabilized earth wall using Terramesh® and Green Terramesh®. From the toe, 4 layers of Terramesh® was constructed, angled at 84 degree. The remaining heights of the wall was topped with Green Terramesh® with 70 degree inclination. Suitable earth soil was used as backfill, which was readily available at site. Total wall length constructed was 78 meters. It took only 4 months to complete, while meeting stringent requirements by Majlis Perbandaran Ampang Jaya (MPAJ) for development at hilly area.

Throughout the project, Maccaferri was a constant partner with all parties involved. We are glad that in the end, the technical, time and cost aspects met the project requirement.
Project section

Date: March 2013

Terramesh® at the bottom layer

Green Terramesh® at the top layer