

Secutex® Soft Rock - Subang Skypark Rail Project - Malaysia

River embankment protection

- **Project Name**
Subang Skypark Rail Project, Malaysia
- **Client**
Keretapi Tanah Melayu Berhad (KTMB)
- **Consultant**
KL Consult Associates Sdn. Bhd.
- **Main contractor**
Konsortium Skypark Link – Lion Pacific Sdn. Bhd.
- **Sub-contractor**
Huls Engineering Sdn. Bhd.
- **Product**
Secutex® Soft Rock R601
Secugrid® 40/40 Q1





The electrified double tracking project between the city of Subang Jaya and Skypark Terminal in Malaysia was funded by the Government through Ministry of Transport. The aim was to provide rail-based public transport to connect the Sultan Abdul Aziz Shah (SAAS) Airport Terminal 3 (Skypark Terminal) and its vicinity with the existing railway network.

The project consists of two main sections: the grade section in between Subang Jaya and Sri Subang (4.09km) on the existing railway reserve and the elevated section in between Sri Subang and Skypark Terminal (4.067km), which is along the existing Sungai Damansara river reserve.

Challenge

As the elevated section is traversing through the reserve of Department of Irrigation & Drainage (JPS) along Sungai Damansara River, it was crucial to further reinforce and upgrade the existing riverbank.

Solution

Naue worked closely with the key consultant and proposed the application of Secutex® Soft Rock. Sometimes the space between the crest of the riverbank and the site boundary is limited and does not allow the formation of a slope gradient gentler or equal to 45°. In that case, Secutex® Soft Rock sand containers reinforced with Secugrid® geogrids are a great solution to replace the RC retaining wall as they allow a steeper gradient. Approximately 70,000 Secutex® Soft Rock sandbags were installed in this project making it the biggest ever supply of Secutex® Soft Rock for a single project in Malaysia.

Added Value

The Authority was very receptive to this proposal as this is in-line with JPS' philosophy of having a green environment as opposed to concrete structures. The design proposed by Naue completely ruled out the use of any form of conventional concrete reinforcing element. The system blends into the natural environment without compromising on technical design. Most importantly, the system eradicates the scouring problem, which has been apparent in most conventional approaches.