CONSERVATION AND RESTORATION PROJECT FOR BUENG TAKENG, BANG RAKAM

PHITSANULOK - THAILAND - Thailand



TYPE OF PROJECT	YEAR OF CONSTRUCTION	CLIENT	CONTRACTOR	DESIGNER
Reinforced Soil Walls And Slope Reinforcement	**2024**	**Department Of Water Resources**	**Construction Section**	**Department Of Water Resources**

PROD. RELATED

Gabions (4400), Reno Mattress Plus (400), MonoAxial GeoGrids (85000)

Challenge

Bueng TaKeng is a big freshwater area located in Bang Rakam district having the potential to store water of around 14.0 million cubic meters and before this project, the potential for water reservation was lost by around 50%. If the study of the potential of this project for restoration to improve the efficiency of restoration by get the inlet from KhaoRang Canal, Pho Canal and Tamo Canal this can be reducing the drought problem during the dry season and mitigating flooding issues during the Monsoon season. Moreover, the main issue in the area is the collapse of riverbanks due to erosion caused by water flow, which leads to instability and sloping. Therefore, it is necessary to address this problem properly and sustainably to accommodate the water diversion from the mentioned canals.

MACCAFERRI (THAILAND) CO., LTD
121/75 RS Tower Floor 24th Rachadaphisek Rd., Din Deang, Bangkok 10400
Tel:+66 (0)2 642 3307 Email: info.th@maccaferri.com Line: @macthai



CONSERVATION AND RESTORATION PROJECT FOR BUENG



CONSERVATION AND RESTORATION PROJECT FOR BUENG

Solution

Maccaferri designed solutions with technicians from the Water Resources Department by surveying and gathering data such as Water level, Average precipitation, Soil Profile and Contour line for designing and presenting proper solution. Maccaferri present soil compaction with gabion facing to create a scour protection from rivers flux, this solution consists of gabion with special coating by Maccaferri, known as 'GalMac' together with geogrid to be a strong reinforce soil structure with the following details. 1. GalMac Gabion size 2x1x0.5 considerably use at height 0 to 7 meters with 1.5m embedded to layer compaction in accordance with the use of MacGrid WG with lengths of 13 meters and 9 meters. While GalMac Gabion size 2x1x1 are used at height of 7 to 12 meters for using accordance with MacGrid WG length of 5 m. 2. Geotextile are used to lay behind gabion box to let water goes to and Filter soil particles to prevent them from escaping the soil compaction system to enhance load-bearing capacity in the retainin

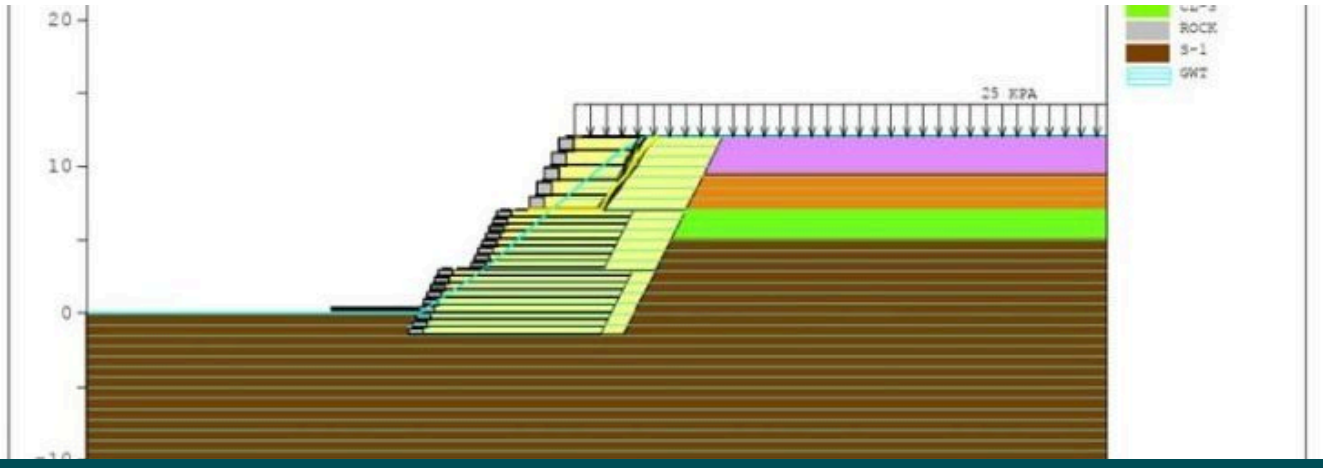


CONSERVATION AND RESTORATION PROJECT FOR BUENG



CONSERVATION AND RESTORATION PROJECT FOR BUENG

MACCAFERRI (THAILAND) CO., LTD
121/75 RS Tower Floor 24th Rachadaphisek Rd., Din Deang, Bangkok 10400
Tel:+66 (0)2 642 3307 Email: info.th@maccaferri.com Line: @macthai



CONSERVATION AND RESTORATION PROJECT FOR BUENG TAKENG, BANG RAKAM_4

MACCAFERRI (THAILAND) CO., LTD
121/75 RS Tower Floor 24th Rachadaphisek Rd., Din Deang, Bangkok 10400
Tel:+66 (0)2 642 3307 Email: info.th@maccaferri.com Line: @macthai

OPEN GOOGLE MAPS

OPEN GOOGLE EARTH

MACCAFERRI (THAILAND) CO., LTD.
121/75 RS Tower Floor 24th Rachadaphisek Rd., Din Deang, Bangkok 10400
Tel:+66 (0)2 642 3307 Email: info.th@maccaferri.com Line: @macthai