

PARAMESH WALL AT DAARUT TAUHIID MOSQUE, BATAM - KEPULAUAN RIAU BATAM, KEPULAUAN RIAU, INDONESIA

Ground Improvement

Problem

Due to rainfall, landslides occurred and caused some fractures in the existing retaining wall at Daarut Tauhid Mosque, Batam, Riau Islands. The landslide was eroded and made the foundation of the mosque exposed. The existing concrete retaining wall is 12 m high and located between the Daarut Tauhid Mosque at the top of the slope and the soccer field at the bottom of the slope. From the soil data obtained groundwater level at depth of 6m from the surface of the soil. Landslides endanger the activities of the people, so a solutive solution is needed.

Solution

Maccaferri Indonesia recommends the innovation of retaining wall structure using Paramesh Wall because of its ability on permeability, flexibility, durability, environmentally friendly, easy installation method, and provide more added values. Paramesh Wall using Terramesh system material as facing, ParaGrid HF 150 Geogrid as primary reinforcement, MacTex N2 50 as separator and filtration geotextile, and drainage composite to accommodate groundwater flow. Paramesh Wall is able to be an alternative solution to the concrete retaining wall, able to accommodate loads and good at draining groundwater so the structure can be stable.

Client: PT KISNA JAYA

Designer / Consultant: PT KISNA JAYA

Contractor: PT KISNA JAYA

Products used (Qty.)

- Terramesh	251 Units
- ParaGrid	5.776 sqm
- MacTex Non-woven Geotextile	3.000 sqm

Date of construction: 01/2021 - 08/2021



Before Construction



Under Construction



Facing



Facing



Finish Construction