

PETRA GATE & EQLA'A TIWAL ROAD

Jordan



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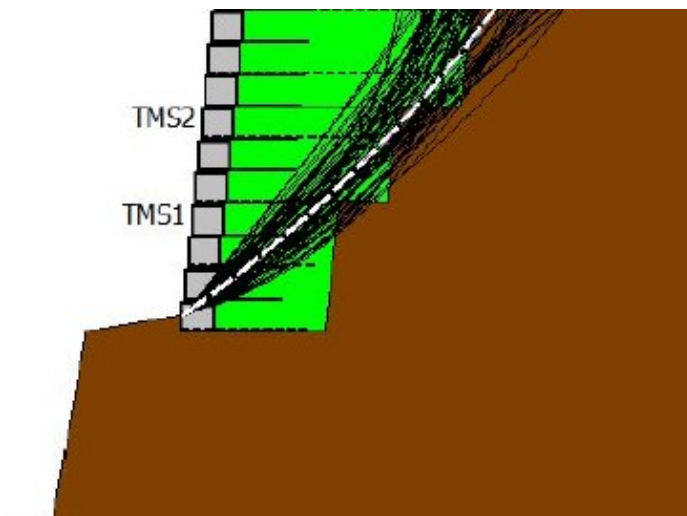
TYPE OF PROJECT Reinforced Soil Walls And Slope Reinforcement	YEAR OF CONSTRUCTION 2018	CLIENT THE PETRA DEVELOPMENT AND TOURISM REGION AUTHORITY	CONTRACTOR ISSA JARAD TARAWNEH & SONS CO FOR CONTRACTING	DESIGNER MACCAFERRI
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PROD. RELATED
TerraMesh (5,000 M2)

Challenge

Petra is a famous archaeological site in Jordan's southwestern desert. Dating to around 300 B.C., it was the capital of the Nabatean Kingdom. Accessed via a narrow canyon called Al Siq, it contains tombs & temples carved into pink sandstone cliffs, earning its nickname, the "Rose City." Petra Gate is a symbol of Jordan, as well as Jordan's most visited tourist attraction, along the way to the Petra Gate, is the EQLA'A TIWAL road which requires a road widening & a new retaining wall. The client wanted an alternative & durable retaining wall solution that will look similar to the existing masonry wall, which in turn blends well

with the lime stone. At the same time, the retaining wall has to be environmental friendly (being a UNESCO heritage location) and economical. Among the various retaining wall options available, MSE walls are found to be the most economical, in comparison to conventional retaining walls like concrete walls or masonry wall. However, the popular type of MSE walls in Jordan till date were concrete facia, which doesn't comply to the requirement of matching with surroundings. Thus, the consultant recommended Maccaferri Middle East for a better retaining wall solution which meets the requirements of the project's end client.



Section



Before Construction

Solution

Maccaferri Middle East proposed a 11m height of retaining wall with 1m embedment using Terramesh system wall, which meets the requirements of the client. A double twisted steel wire mesh unit which forms the facia with the aesthetics of gabion but also a secondary soil reinforcement and ParaGrid 200, a high

strength polyester geogrid with a 2 meter vertical spacing which acts as primary reinforcement of the wall. The Petra Gate project engineers were very pleased with the outcome which blends with the surroundings and in particular the speed of installation of Terramesh System to finish the project.



During Construction



After Construction



OPEN GOOGLE MAPS



OPEN GOOGLE EARTH