

Kuwait University

Kuwait



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TYPE OF PROJECT

Reinforced Soil Walls And
Slope Reinforcement

YEAR OF CONSTRUCTION

2023

CLIENT

Kuwait University

CONTRACTOR

Shapoorji Pallonji
International

DESIGNER

Maccaferri

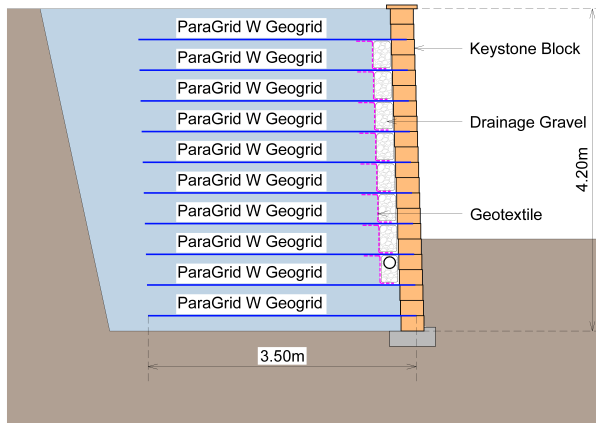
PROD. RELATED

MACWALL (5000 M2)

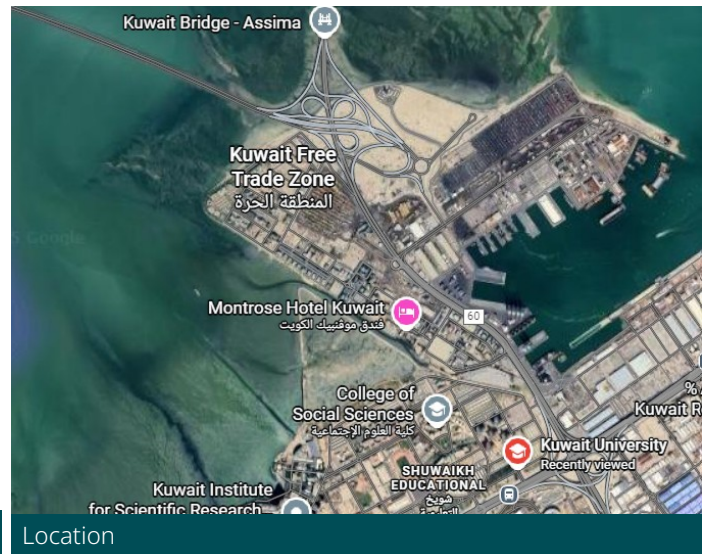
Challenge

Kuwait University premises underwent extensive infrastructure development, encompassing landscaping, roads, and building structures. Some areas required retaining walls as high as 5 to 6 meters to accommodate the challenging terrain. Being located at center of city, the retaining walls needed to be aesthetically pleasing to complement the surrounding environment. Additionally, certain sites posed

significant engineering challenges due to restricted space and weak foundation soil, necessitating the use of a Mechanically Stabilized Earth (MSE) wall for its proven structural and cost advantages. The primary challenge was to design and construct an MSE wall system that could adapt to these space-constrained areas, where existing interferences complicated the installation process.



Section



Location

Solution

Maccaferri's MacWall system was selected as the ideal MSE wall solution for this project, given its architectural appeal, technical efficiency, and flexibility in addressing site-specific constraints. The MacWall system featured segmental concrete blocks (Keystone), BBA-certified Paragrid geogrid soil reinforcement, and fiberglass pins for mechanical connections, ensuring durability and reliability. For most sections, standard MSE wall construction was employed, utilizing geogrid lengths equivalent to at least 70% of the wall height to achieve

structural stability. This adaptation minimized excavation needs while maintaining wall integrity. Maccaferri Middle East played a pivotal role in the project, providing comprehensive services, including the design, supply, and construction assistance for the MacWall system. By employing innovative design approaches and high quality materials, the solution effectively addressed both the spatial and geotechnical challenges of the project, delivering a robust, visually appealing retaining wall system.



During Construction



After Construction



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