

**THE GRAND BOHEMIAN HOTEL
GREENVILLE, SOUTH CAROLINA, U.S.A.**

Reinforced Soil Walls and Slope Reinforcement

Problem

The Grand Bohemian, a development by the Florida-based Kessler Collection, is an 187-room hotel set to be completed in 2021 in the vibrant downtown community of Greenville, SC. This luxurious establishment boasts various amenities, including 30 balcony suites, a high-end spa, a restaurant, a bar, and both indoor and outdoor event spaces. However, a critical challenge arose during the construction process. The area between the base of the hotel and the flood-prone Reedy River featured a 1:1 slope that required protection against erosion and potential shallow sliding. Failure to address this issue could result in the exposure of the rammed aggregate piers supporting the hotel, posing a significant risk.

Solution

Initially, the project specifications called for S8 Aluminum anchors to be driven to a depth of 16'. However, during the installation, numerous previously unidentified obstructions were encountered, revealing that the slope was filled with debris from an old textile mill. Consequently, a smaller Platipus S6 Cast Iron anchor, capable of penetrating the varying slope conditions more efficiently, was employed. These anchors were driven to a depth of 13', ensuring optimal stability. To stabilize the embankment effectively, all anchors were loaded with a weight ranging from 4,000 to 6,000 lbs, depending on the depth. This loading technique successfully secured MacMat R1, a double twist PVC coated wire mesh, along with erosion control matting. By implementing this comprehensive solution, the embankment's stability has been safeguarded, mitigating the risk of erosion and shallow sliding. The Grand Bohemian hotel can now confidently stand strong against the challenges posed by its surroundings, ensuring the safety and longevity of the establishment for years to come.

Client: Kessler Collection

Designer / Consultant: Platipus Earth Anchoring Systems

Contractor: GeoSpec, Inc.

Products used (Qty.)

- MacMat R 5000SF

Date of construction: 11/2018 - 12/2021

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Slope Overview



MacMat R Steel Slope Interaction



MacMat R Steel Slope