

Geotechnical Engineering Fundamentals

E4241

Assignment 6 (November 16, 2006)
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Question:

Following the collapse of the 100-year old retaining wall at the Castle Village, a proposal is made to reconstruct the site using the modern reinforced soil technology.

Given a required wall height of 25 m, determine the slope angle (the steeper the better as more space will be secured), and the reinforcement spacing and length. The unit weight and angle of internal friction of the backfill soil are 16.5 kN/m^3 and 35° , respectively.

Recommend the reinforcement (such as manufacturer, material and specifications) to be used for the project.