

Active Risk Management in Geotechnical Engineering

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ABSTRACT: *Active risk management, (ARMTM), is a systematic process of identifying, analyzing, planning, monitoring and responding to project risk **over the life of the project**. It involves processes, tools, and techniques that help the project team minimize the probability and consequences of adverse events (threats) and maximize the probability and consequences of positive events (opportunities) throughout the life of the project. It is especially useful in projects with significant geotechnical risks. It provides the project team with more complete information on the risks they face in a format understandable to non-specialists – cost and schedule impacts. It identifies the uncertainties and potential events that create the most risk to the project and develops ways to minimize these uncertainties as they affect final project cost and schedule.*

The concept of Active Risk Management applied to civil engineering projects has been developed by the author on a variety of projects over 35 years. This paper lays out the steps of Active Risk Management and discusses how they are applied in geotechnical engineering. It illustrates the use of the method with a practical example that shows the value of obtaining additional geotechnical information to reduce risk.

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