

Role of the Calculated Risk in Earthwork and Foundation Engineering

by Arthur Casagrande,

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Abstract:

The meaning of the term calculated risk is first explored and the terms unknown risk and human risk are introduced. Several case histories are then reviewed for the purpose of demonstrating the importance of risks in earthwork and foundation engineering. The final section deals with the question of how to cope with risks, with emphasis on the use and abuse of Boards of Consultants for projects involving great hazards to life and property.

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The state earthwork methods were calculated using the analysis tool which allowed for analysis and comparisons to be made. Finally, from observations of the research and an evaluation of the results of the case study allowed for conclusions to be made based on the findings. It appears that earthwork is left at the risk of the contractor. 5. Application of swell percentages was inconsistent among the various DOT earthwork calculation methods. 6. The inclusion and definition of rock (drillable rock or at auger refusal) has a large impact on earthwork calculations using the southeastern DOT earthwork methods. iii. Acknowledgments. Risk in earthwork calculations results from borrow or waste material on a project that was not budgeted for prior to construction. 2. Excavation in earthwork for hard soil/ hard rock for a lead distance of 1km for following depths: a) Up to 1.5m. b) 1.5m to 3m. c) 3m to 4.5m. In the above examples of excavation, more number of descriptions are possible with different lead distance and type of soil. During tendering of civil engineering works, all the possible combinations are presented for quotations depending on the project requirements and site conditions. Rate Analysis of Excavation: Following points to be noted before starting rate analysis of soil