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Drainage-Related Risks for Operation and Maintenance of Tunnelling Projects: An Overview

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Abstract: *The importance of drainage-related risks associated with tunnelling projects requires special attention from tunnel operators to analyse and manage the risks. The optimal management of drainage-related risks in tunnelling projects involves multiple objectives such as flood management, maximisation of design capacity of drainage contamination and optimisation of overall drainage system. This paper focuses on identifying the key drainage-related risks that have great potential of occurring in highway tunnelling projects. The outcomes of this research are developed based on findings obtained from extensive literature review and several case studies that have been carried out by other researchers. The identified drainage-related risks will be reviewed in this paper. All these risks can be included as key information when drafting a new risk management plan or to be added into the existing risk management plan in order to enhance the operation and maintenance of tunnelling projects.*

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