



“Gheorghe Asachi” Technical University of Iasi, Romania



SIMULATION STUDY ON ONE-TIME HOLE FORMING CONSTRUCTION OF BRIDGE PILE FOUNDATION UNDER COMPLEX GEOLOGICAL CONDITIONS

Linchang Yang*, Shaopeng Hou, Peng Jiang, Hong Cheng, Xianliang Fu, Lifa Wang

China Construction Seventh Bureau Installation Engineering Co., LTD., Zhengzhou 450000, China

Abstract

In order to improve the pore-forming efficiency and quality of bridge pile foundation under complex geological conditions, the simulation method of one-time pore-forming construction of bridge pile foundation under complex geological conditions is studied. The ideal elastoplastic model is used to determine the lateral soil friction of bridge pile foundation, and the hyperbolic model is used to determine the lateral friction of bridge pile foundation. The bearing capacity of bridge pile foundation under frozen soil and karst geological conditions is analyzed. Design one-time hole-forming construction simulation scheme of bridge pile foundation under complex geological conditions, pay attention to the installation of steel casing, to achieve one-time hole-forming construction simulation of bridge pile foundation under complex geological conditions. The final results show that the pore formation rate of the method is consistent with the ideal pore formation rate, which verifies the effectiveness of the method.

Key words: bridge pile foundation, complex geological conditions, construction simulation, hyperbolic model, primary pore forming

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* Author to whom all correspondence should be addressed: e-mail: yanglinchang@mjc-edu.cn