

## USE OF MICRO PILES IN BRIDGE FOUNDATION IN LEH-LADDAKH REGION

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**C**onstruction of foundation of bridges in remote hilly terrain, in adverse climatic condition, is very difficult due to the limited working period and unavailability of transportation of machinery and equipments as in Leh-Ladakh region of India. In such situations regular pile foundation is not feasible. The study was taken up with to carry out experimental design for bridge and ascertain the applicability of micro-piles as bridge foundation under such adverse conditions. The methodology included field and lab tests for soil and sub-soil investigation, vertical and lateral load tests on micro-piles. The design of micro-pile foundation and sub structure is based on success results of the tests i.e. the safe load capacity achieved in these tests. Based upon experimental success results, confirmation for using micro piles was accorded. In future, micro-piles can prove to be a better solution in where river bed is laden with boulders and other similar difficult situations

### Biography

Er. Shubham Srivastava is working as Asst. Prof. in the Faculty of Civil Engineering Department, Shri Ramswaroop Memorial University. He has been associated with various research and consultancy works, worked as Faculty coordinator for foreign tour(AIT, Bangkok, Thailand) and guided both PG thesis and graduation project works. His current research interests include bacterial concrete, self compacting concrete, structural design, retrofitting and seismic analysis of buildings. Mr. Srivastava is member of Institution of Civil Engineers (India). He was also engaged as interview expert panel member for JE (Civil), Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. and he is a reviewer of various International journals JETIR and IJCRT. He has authored various papers and has been actively participating in various conference (both national and international). Currently he is pursuing Ph. D. from IIT BHU (Indian Institute of Technology, Banaras Hindu University).

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