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Design And Optimization The Drilling And Blasting Pattern Of Qomrood Water Transfer Tunnel (Part 1&2)

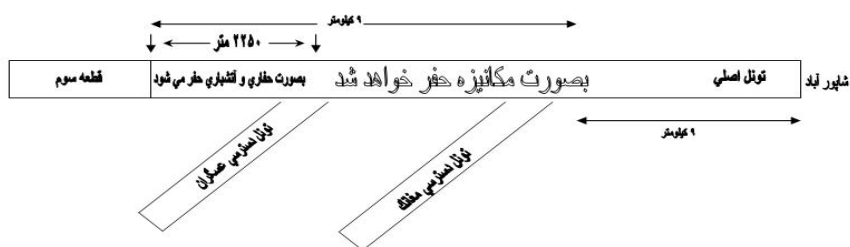
H. Fattahi, H. Farhadian, A. Maleki

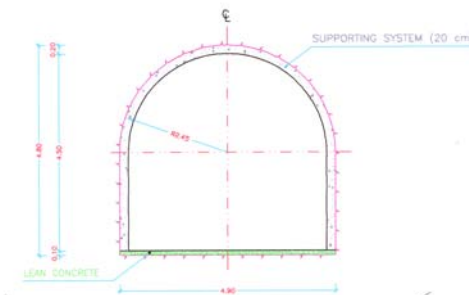
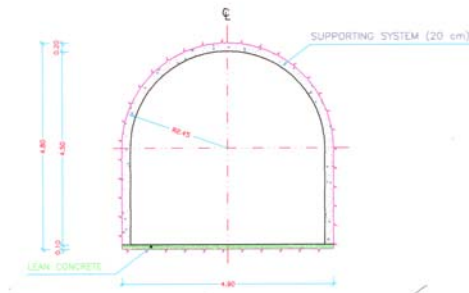
Abstract

To water transfer from main branches of Dez River to central of Iran, Qomrood project (part 1&2) have been designed and carried out. Qomrood project is located about 28 kilometer of Aligoodarz province and it is about construction of water transfer tunnel with preconstructed concrete segments. Most of tunnel would be excavated by TBM. But the rest of it (about 2250 meter) would be excavated by drilling and blasting pattern which is our main concern. Due to the fact that most of rocks of Qomrood tunnel are made of slit and dolomite shiest, two different blasting patterns based on parallel long hole cutting and parallel four sectional cutting are proposed. Finally, the better pattern is compared with the current pattern.

Keywords: drilling and blasting pattern, parallel long hole cutting, parallel four sectional cutting, Qomrood water transfer tunnel.

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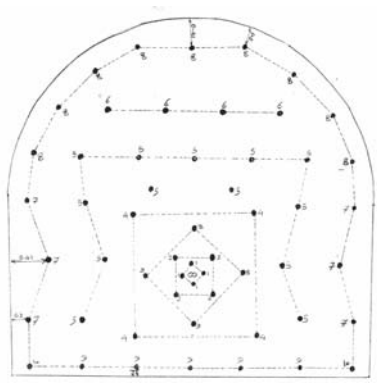
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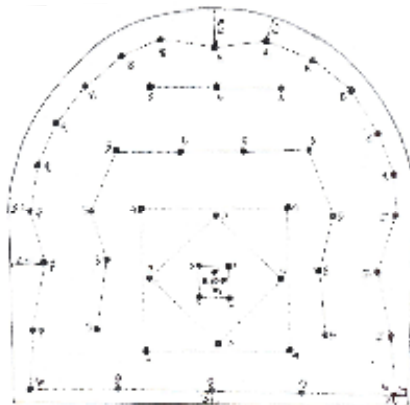
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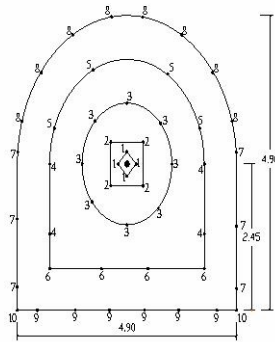
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[6] Stigo olofsson ;1985; *Applied explosives technology for construction and mining.*

[7] Carlos and Emilio lopez jeminio ;1995; *Drilling and blasting of rocks*