

# MUSICAL FOUNTAIN ON SWIMMING POOL

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## ABSTRACT

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The project report focuses on design a musical fountain on swimming pool. In other words, the project aims to incorporate a fountain into the existing swimming pool design without destroying the aesthetic features of the current design. In this report, construction of the water fountain, water fountain design and control of the musical fountain will be presented. For the construction of the water fountain, the team has to make sure the installation of water fountain is not going to affect the existing swimming pool. Besides, design and construct sliding doors is necessary in order to cover up the musical fountain. On the other hand, the water fountain design consists of selection of nozzle, piping system, pumping system and water feature pattern design. A study on the hydraulic flow and head loss due to the friction in the pipe is needed for the purpose of selecting pump. The musical fountain control system has two particular parts which are the control of inverter and control of solenoid valve. Inverter is specifically used to control the frequency of the pump. In addition, the solenoid valve is dueling with the low rate of nozzle.