

ARCH BRIDGE DESIGN

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ABSTRACT

This report is basically giving an introduction to the analysis and design of an arch system. It serves as a manual of arch design and analysis method for any beginning student. For the beginning of a few chapters, methods of analyzing 2-hinges arch, 3-hinges arch and fox arch will be shown in detail. These methods emphasis on analyzing the moment, horizontal thrust and vertical shear that generated the magnitude for all these reactions. Since I will proceed with the design of a fix arch bridge design, emphasis will be given to analyze this structure. Two methods are used for this purpose. The 1st one is using existing formula and the 2nd method is using numerical method. The 2nd choice will be adopted in this report for the design of the bridge.