

1.0 **Executive Summary:**

The purpose of this report is to summarize the existing building mechanical systems found in the Montgomery County Conference Center and Hotel in Rockville, MD. The mechanical design objectives and requirements will be studied, ultimately conveying the fact that the building owners had much influence over MCCCH's final mechanical design. Energy sources and rates for the building's site will be obtained and reported along with other factors that influenced the design, like cost and building site constraints. Outdoor and indoor design conditions and design heating/cooling loads will be calculated. Schedules of major mechanical equipment and schematics of their use will be presented for further comprehension of the building's mechanical systems. Finally, a description of the mechanical system's operation will be discussed and followed by an overall critique of MCCCH's mechanical system.

The building is currently under construction and it set to open on any day. However, because of this factor, actual building utility bills and energy consumption data could not be acquired for use throughout this report. All information that could be obtained was included. Missing information will become available soon and will be implemented throughout all future work.



Architectural renderings compliments of RTKL Associates