TRI-TECH
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1785 S. Metro Parkway
Centerville, OH 45459

"Established in 1977"

Sinclair Community College Building 7 Fan Coil Unit Replacement

Dayton, OH

Construction Completion: 2018

Construction Cost: $600,000

Tri-Tech Services: PME Engineering

Note: Project is currently under design. Photos shown are prior to construction

Project Description

Building 7 at Sinclair Community College is equipped with perimeter fan coil units to offset the building heating and cooling skin load. Each unit is provided with make-up air through a central air distribution system. This project is intended to replace all of the fan coil units in the building, many of which had reached the end of their useful life, along with ductwork and piping which supply the fan coil units, and controls for the fan coil units.

At the beginning of the project, Tri-Tech performed a feasibility analysis of the project scope and anticipated construction costs. As a result of this analysis, it was determined that the preliminary budget allocated for the project would not be sufficient. This led to separation of the project into three phases to replace the fan coil units throughout the building. Tri-Tech worked closely with Sinclair to determine the most effective phasing strategies to ensure success of the overall project.

The fan coil system consists of two-pipe fan coil units providing either heating or cooling, depending on the setting of the central system. Make-up air is provided by a dedicated outside air unit with ductwork serving the fain coil units. Over the course of the project, the branch ductwork and piping will be replaced, along with the fan coil units themselves, and the controls will be upgraded to place the units on the existing building DDC system. Additionally, modifications are being made to the system to account for revised building loads from the original design conditions.