

Ridgewood School Addition and Renovation

Springfield, OH

Construction Completion: Est. 2018
Construction Cost: \$1,700,000
Size: 15,400 SF Reno.
 5,300 SF Add'n
Professional Services: SPME Engineering

Project Description

Ridgewood School is a private primary school in Springfield, OH which provides education for grades K-6. Due to age of the facility, along with the desire to expand their offerings to include pre-school classes, the school made the decision to undergo an addition and renovation project to modernize the existing facility and provide additional classrooms and administrative offices.

Tri-Tech provided structural, plumbing, mechanical, and electrical engineering for the project. Structural engineering efforts included modifications to existing interior CMU walls to accommodate new doors and windows in the existing facility and addition of new CMU walls for new space layout. The addition to the facility required new foundations and roof structure support, including canopies and multiple roof levels. Also, the structural connection to the existing building was designed including an evaluation of the existing building roof to accommodate new loading due to snow drift caused by the addition.

Plumbing, mechanical, and electrical renovations within the existing building included light fixture replacement to new LED lighting, replacement of aging panelboards, addition of new smart board equipment in the classrooms, and a new computer lab. Two existing restrooms were also renovated to create new ADA restrooms. The existing mechanical equipment and distribution serving the stage and auditorium/gymnasium was modified to reduce sound from the equipment, to better facilitate classroom and performances. This resulted in a decrease in sound transmitted into the space, along with improved air distribution throughout the space to provide increased comfort. Existing building mechanical equipment was also analyzed for capacity, condition, and energy-efficiency to evaluate if it required replacement.

The new addition required a new 400A panelboard which was fed from the existing building electrical distribution. Split system heat pumps were used for the mechanical equipment, to provide the most energy-efficient system possible along with the zoning requirements for the space.



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

Tri-Tech Team Members

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