



# VERSAILLES BOARD OF EDUCATION

## DESIGN BUILD HVAC RENOVATION PROJECT

### Project Details

**Client: Versailles Exempted Village Schools  
Board of Education Building**

**Design Professional: Smith-Boughan and  
Garmann/Miller & Associates**

**Services Provided: Design Build Renovation of HVAC  
and Building Automation System**

**Market: Pre K-12 Educational**

**Location: Versailles, Ohio**

Versailles Schools' selection of Smith-Boughan for HVAC work at our board offices has turned into a great partnership. From the beginning, Smith-Boughan worked with our district personnel and representatives to meet the needs of the building. All steps in planning, work and finalizing the project were communicated well during the process. The installers were personable and cooperative to ensure the offices were not affected during the project. Due to the entire positive experience, we are having Smith-Boughan take over our maintenance operations.

Sincerely,

**Aaron Moran  
Versailles EVSD  
Superintendent**

### Project Summary

Versailles Exempted Village Schools Board of Education Building houses the district's administrative offices as well as an Auxiliary Gymnasium, Locker Rooms, Athletic Trainers facility, Transportation offices and Bus Repair garage.

The buildings' steam piping system was original to the 1952 building construction and the boiler plant was approximately 30 years old, both were failing and had exceeded their useful life. The district needed a new heating system for this facility and chose to employ the Ohio Facility Construction Commission (OFCC) approved Design Build delivery method.

Smith-Boughan was selected to develop a system upgrade design that provided the district with a sustainable, reliable and energy efficient solution. An ultra high efficiency hot water heating system was selected to replace both the failing boiler plant and piping system. The existing boiler plant equipment and piping were removed from the mechanical room and the new boiler equipment was designed and installed, employing a primary/secondary variable flow piping system to provide optimal system efficiency and performance. A new secondary hot water piping system was installed throughout the building to serve the existing administration offices. The installation of a new air handling unit was installed in the gymnasium and hot water unit heaters and fan coil units were installed in locker rooms, entry ways, athletic facilities and transportation services areas of the building.

An expansion and upgrade of the existing TREND™ Building Automation System (BAS) was also performed as part of this project. The BAS controls now perform complete automation of all heating and cooling systems within the building. The control system employs energy efficiency control strategies and provides complete automation of these systems. The TREND™ BAS controls provide the Facilities Director with a full graphical interface and remote access through any web based device.

This project resulted in a state of the art HVAC system in the 63 year old facility. The Design Build delivery method allowed the District to implement this transformation economically and to fast track the project through the design to final implementation phases in just a little over three months.

**SB Mechanical Design Build Project Benefits: Lower Initial Project Cost, Turn Key Responsibility, Quicker Project Completion, Optimal Energy Performance**