

Performance Contracting

Project: Upper Merion School District



A two-phase, \$11.6M project encompassing a comprehensive HVAC and Building Automation System upgrade across seven schools.

Background

Located in Montgomery County Pennsylvania just outside Philadelphia, Upper Merion School District serves 4700 students from grades K-12.

The District consists of a High School, Middle School and five elementary schools – all of which were challenged by aging HVAC and BAS infrastructure. Addressing this situation was one of the first priorities for new Facilities Director, Bob Malkowski, who identified significant disparity in age and performance between the buildings and sought to quickly remedy the situation.

The District partnered with CM3 for an initial project involving three of the elementary schools, then later added a phase 2 project to address issues at the middle school, as well as various lighting, parking and water concerns throughout the District's buildings.

Program Overview

Phase 1:

- **Cost:** \$6.2 Million
- **Financing:** Capital Budget
- **Energy Savings:** \$28K/YR
- **Operational Savings:** \$328K/YR
- **Contract Terms:** 15 Years

Phase 2:

- **Cost:** \$5.4 Million
- **Financing:** Capital Budget
- **Energy Savings:** \$97K/YR
- **Operational Savings:** \$300K/YR
- **Contract Terms:** 15 Years

Both phases completed on time.



Phase 1

- Boiler Replacements
- Domestic Hot Water Replacement
- Stage Air Handling Units Replacement
- DDC Controls
- Generator Relocation, Upgrade to 200kw and Installation
- Chiller Replacements
- Make-up Air Unit Replacement
- Refrigeration Units Replacement
- Oil Fired Furnace Replacement
- Electric Demand Hot Water Heater Replacement
- Auditorium Lighting LED with Dimmer Panel Upgrade
- Additional LED Lighting Upgrades

Phase 2

- Two separate Boiler Plant Replacements
- Chiller Plant Replacement
- Cooling Tower Replacement
- Water Softener Systems Added (7 Buildings)
- Parking Lot Resealing (3 Buildings)
- Control Upgrade from Legacy Siemens to New Siemens

MUA Exhaust Units (Middle School)



Boilers (Middle School)



Water Softeners (All Schools)

