



MCHENRY CHSD #156 PHASES 1 and 2

PHASE 1: East Campus
Energy Savings: HVAC and Controls, Lighting
Renovations: Ceilings, Parking Lot

CTS Group served as the Energy Service Company for McHenry CHSD #156 for implementation of energy upgrades to HVAC and lighting.

PROJECT HIGHLIGHTS – PHASE 1:

- HVAC Upgrades/Building Automation System
- Geothermal System with Loop Field
- Lighting Upgrades
- Parking Lot Resurfacing and Striping
- New Ceilings in Designated Areas

OVERVIEW

McHenry Community High School District 156 is a school district serving the communities of McHenry, Bull Valley, Wonder Lake, Lakemoor, and McCullom Lake in northwestern Illinois. There are two high schools serving over 2,300 students within the district: McHenry West and McHenry East. CTS Group, a Veregy Company, responded to a Request for Proposal for both Phase 1 and Phase 2. Each phase incorporated significant energy savings in HVAC system and lighting upgrades.

East Campus: CTS served as the Energy Service Company (ESCO) for the installation of an energy saving geothermal system for the extensive HVAC system. They also upgraded interior and exterior lighting throughout the building; installed new ceilings, and resurfaced and striped a 10,600 sq yard parking lot.

Geothermal, HVAC, and Building Automation System: As a comprehensive energy efficiency upgrade, McHenry School District decided to replace their aging HVAC system with new units for the East High School, along with a Building Automation System that controlled the temperature of each classroom, office, and hallway. To maximize energy efficiency, a geothermal loop was also installed. The energy cost savings per year is at least \$84,307 for HVAC alone.

LED Lighting: Lighting fixtures throughout the East Campus were upgraded to LED models. The annual energy cost savings is >\$21,693.

Project Cost- Phase 1:
\$8,305,000

Annual Savings:
\$106,000 in Energy
\$249,150 in Operations

Contract Term:
20 Year

Contract Type:
Guaranteed Performance

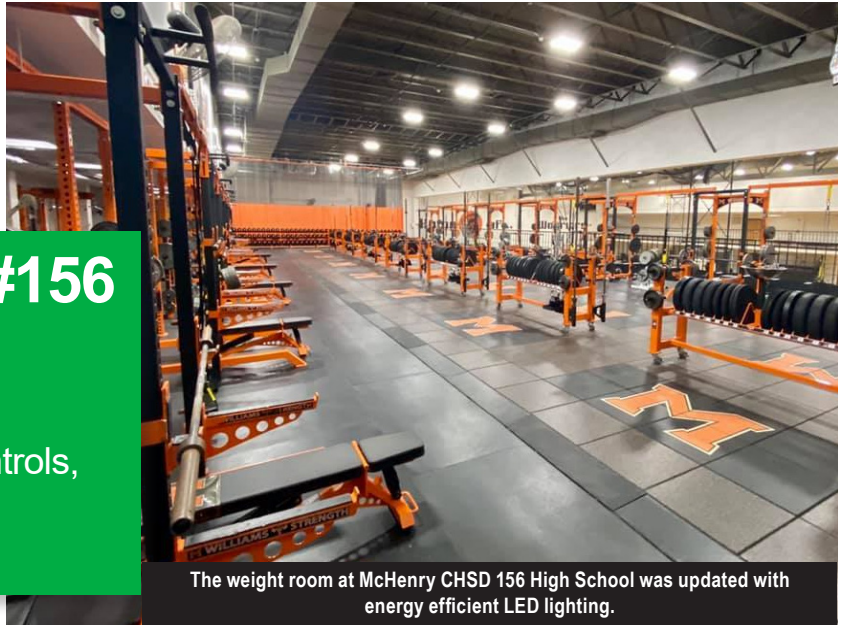
CTS Strength:
Completed upgrades
in 4 months

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Preparing to lift new roof top HVAC units onto the roof at McHenry East High School.



The weight room at McHenry CHSD 156 High School was updated with energy efficient LED lighting.

MCHENRY CHSD #156 PHASES 1 and 2

PHASE 2: West Campus
Energy Savings: HVAC and Controls,
Lighting

Project Cost: \$6,800,000	Annual Savings: \$86,000 in Energy \$204,600 in Operations
Contract Term: 20 Year	CTS Strength: Completed upgrades in 4 months
Contract Type: Guaranteed Performance	

PROJECT HIGHLIGHTS – PHASE 2:

- HVAC Upgrades/Building Automation System
- Geothermal System with Loop Field
- Lighting Upgrades

West Campus: CTS served as the Energy Service Company (ESCO) for the installation of an energy saving geothermal system for the extensive HVAC system. The project also upgraded interior and exterior lighting throughout the building.



Energy saving LED lighting was used throughout McHenry West High School.

Geothermal, HVAC, and Building Automation System: As a comprehensive energy efficiency upgrade, McHenry School District decided to replace their aging HVAC system with new units for the West High School, along with a Building Automation System that controlled the temperature of each classroom, office, and hallway. To maximize energy efficiency, a geothermal loop was also installed. The energy cost savings per year is at least \$51,768 for HVAC alone. The operational cost savings is over \$204,600 annually.

LED Lighting: Over 3,300 lighting fixtures throughout the West Campus were upgraded to LED models. The annual energy cost savings is >\$34,357 and the energy savings is over 365,500 kWh.



CTS Group designed renovations at McHenry West High School, installing an energy efficient HVAC system, geothermal loop system, and building automation system, saving over \$255,000 annually.