



Case Study

Piper Unified School District 203

Phase II
Kansas City, KS



PROJECT HIGHLIGHTS

Environmental Benefits

218 tons of harmful greenhouse gas emissions reduced annually

Equivalent to:

- Preserving 1.4 acres of forest from deforestation* or
- Conserving 460 barrels of oil*

Capital Costs

\$2,646,336

Annual Savings

Energy:	\$27,258
Non-Energy:	\$47,847
Utility Cost Reduction:	23%

* Sources:

- Leonardo Academy's Cleaner & GreenerSM Emissions Reduction Calculator
http://www.cleanerandgreener.org/resources/emission_reductions.htm
- U.S. Environmental Protection Agency, Greenhouse Gas Equivalencies Calculator
<http://www.epa.gov/cleanenergy/energy-resources/calculator.html>

PROJECT DESCRIPTION

Energy Savings Performance Contract

Challenge: Piper Unified School District was having challenges meeting the needs of growing enrollment. The school district needed to add new facilities to accommodate growth while maintaining the integrity of aging facilities. The district was challenged with renovating their high school which included the demolition and rebuilding of a 30,000 square foot wing.

PROJECT SCOPE

Solution: ConEdison Solutions, through its subsidiary, Custom Energy Services, worked with the school district to develop a comprehensive phase I and II plan that addressed all of these issues. Under the Kansas Facility Conservation Improvement Program, we were able to implement needed facility upgrades, meet growing technology challenges, and improve sports facilities in the existing buildings. As a result of this project, the school district reserved their bond money to help fund the building of new facilities.

Having the ability to obtain \$11 million in funding from a bond issue, the energy performance contract provided nearly 25% in additional funding to meet needed improvements. The energy performance contract was closely tied to the renovation project with shared engineering and construction management roles.

Contact:

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Construction Start Date:

December 2008–Phase II

Construction End Date:

Phase I: September 2008
Phase II: September 2009

ENERGY CONSERVATION MEASURES

Lighting

- High efficiency lighting
- LED exit signs
- Occupancy sensors

Building Controls

- Energy management system

Heating and Cooling

- Hot water variable air volume
- Rooftop units

Building Envelope

- Roof

Water

- Low-flow water fixtures

Additional Upgrades

- Voice-over Internet protocol
- Security system
- Football field and 8-lane running track