

## Piper Unified School District 203

### Energy Savings Performance Contract (ESPC)



Piper Unified School District needed to meet the challenge of growing enrollment by adding new facilities while maintaining the integrity of aging facilities. The district faced the challenge of renovating its high school, including the demolition and rebuilding of a 30,000 square foot wing.

RWE Clean Energy through its subsidiary, Custom Energy Services, worked with the 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 district reserved 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.

#### ENERGY CONSERVATION MEASURES

##### Lighting and Lighting Controls

- High efficiency lighting
- LED exit signs
- Occupancy sensors

##### Building Controls

- Energy management system

##### Heating and Cooling

- Variable air volume rooftop units

##### Building Envelope

- Roof

##### Water Conservation

- Low-flow water fixtures

##### Additional Upgrades

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



#### PROJECT DATA

##### LOCATION

Kansas City, KS

##### CONSTRUCTION DATES

Completed on time

##### CAPITAL COSTS

\$7,512,727

##### ANNUAL SAVINGS

\$304,348

##### 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\*

\*Sources:

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