



Loudoun County Schools

The Big Challenge

Installing state-of-the-art electrical lighting, power distribution and life systems.

Client
Holder
Construction
Group, LLC



Provide Electrical Infrastructure and Systems for a New STEM School

As one of the fastest-growing areas in the country, Loudoun County, Virginia, is constantly battling the need for more classrooms in its public schools. The school system recently took a major plunge into providing more technical, engineering and vocational training by building a new 300,000-square-foot facility to combine its program of career and technical education with its existing Academy of Science and Academy of Engineering and Technology programs – held now at two separate high schools.

The new school will offer a variety of labs and classes in disciplines from the culinary arts to automotive and welding classes. And all those disciplines will need power.

Power Solutions is installing two three-phase, 4,000-amp electrical service switchboards to bring in service; 277/480-volt distribution throughout the school; lighting and lighting controls; lightning protection; and life safety, including a 450-kW life safety backup generator to keep elevators and emergency lighting on-line during outages.

When complete, the new, fully handicapped-accessible school will provide capacity for 1,250 students in grades 9 through 12, and offer Loudoun County students opportunities to develop valuable, marketable skills after graduation.



By the Numbers

3K INTERIOR LIGHT FIXTURES

300 EXTERIOR LIGHT FIXTURES

190K FT. OF ELECTRICAL CONDUIT

262 MILES OF ELECTRICAL WIRE