

FIRST :: PUBLIC WORKS/INFRASTRUCTURE/TRANSPORTATION :: \$15.1 - \$50 MILLION PORTLAND PUBLIC SCHOOLS SOLAR, SEISMIC AND ROOFING

SUBMITTED BY: GERDING EDLEN DEVELOPMENT



PROJECT TEAM + STATS:

Project Location: Portland, Oregon

Project Cost: \$17 million

Start Date: June 2009

Completion Date: August 2009

Owner/Developer: Portland Public Schools

Project manager:

Gerding Edlen Sustainable Solutions

Architects: BBL Architects, McBride Architects

General Contractor: Snyder Roofing

Other associates: Frahler Electric, NW Solar Solutions

With the school year starting in September, Snyder Roofing, Gerding Edlen Sustainable Solutions and the rest of the project team had just a three-month summer break in June 2009 to install 500,000 square feet of new roofing, perform seismic upgrades and add a 757-kilowatt solar array at nine of Portland's public schools.

When the project was finished, one school was generating more power than was being used, and electricity was fed back to the grid. Overall, 18 percent of the nine schools' energy consumption needs will be provided on an annual basis.

Gerding Edlen Sustainable Solutions secured a third-party investor to finance the solar installation, secured all of the tax credits and utility incentives, and provided Portland Public Schools with the opportunity to own the solar array in eight years. The project was completed under budget and the savings were returned to the school district.

"We always seek ways to leverage those capital budgets and this was successful, which was exciting," said Christina Skellenger, development manager for Gerding Edlen Sustainable Solutions. "Initially, they were going to use the \$11.3 million just for the roofing. With that \$11.3 million, we were able to do the solar array and the roofing."

Skellenger noted that it's one of the largest solar arrays in any school district across the United States.

"It was a really ambitious effort for the school district and for us as well," she said. "For me, an added benefit was that it was like a

public-private partnership. We worked together to figure out how this project was going to work."

Among the challenges on the project, Skellenger said, it was difficult to find qualified roofers to satisfy the district's MWESB requirement. Even so, 18 percent of construction costs were awarded to MWESB firms.

Rick Gehrts, vice president of Snyder Roofing, said the tight schedule also added to the project's complexity. In order to complete the work on time, the roofing companies – who usually are competitors – collaborated throughout the project and sometimes shared their workers.

"Our goal was to have all of the solar portion installed before school started, so that cut down the roofing schedule by about three weeks and put a lot more pressure on everyone to perform," Gehrts said

The project – one of the largest and most complex infrastructure projects undertaken by Portland Public Schools in the last 20 years – is anticipated to provide dry classrooms, stronger buildings and clean energy for Portland's students for many years to come.

The schools included in the project were Atkinson Elementary, Creston Elementary, Jackson Middle School, Lane Middle School, Lent Elementary, Roseway Heights Elementary, Scott Elementary, Pioneer-Columbia and Woodstock Elementary.

PGE, Pacific Power and Energy Trust of Oregon contributed to educational kiosks for students to increase their awareness of the solar infrastructure and clean energy provisions at their schools.



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