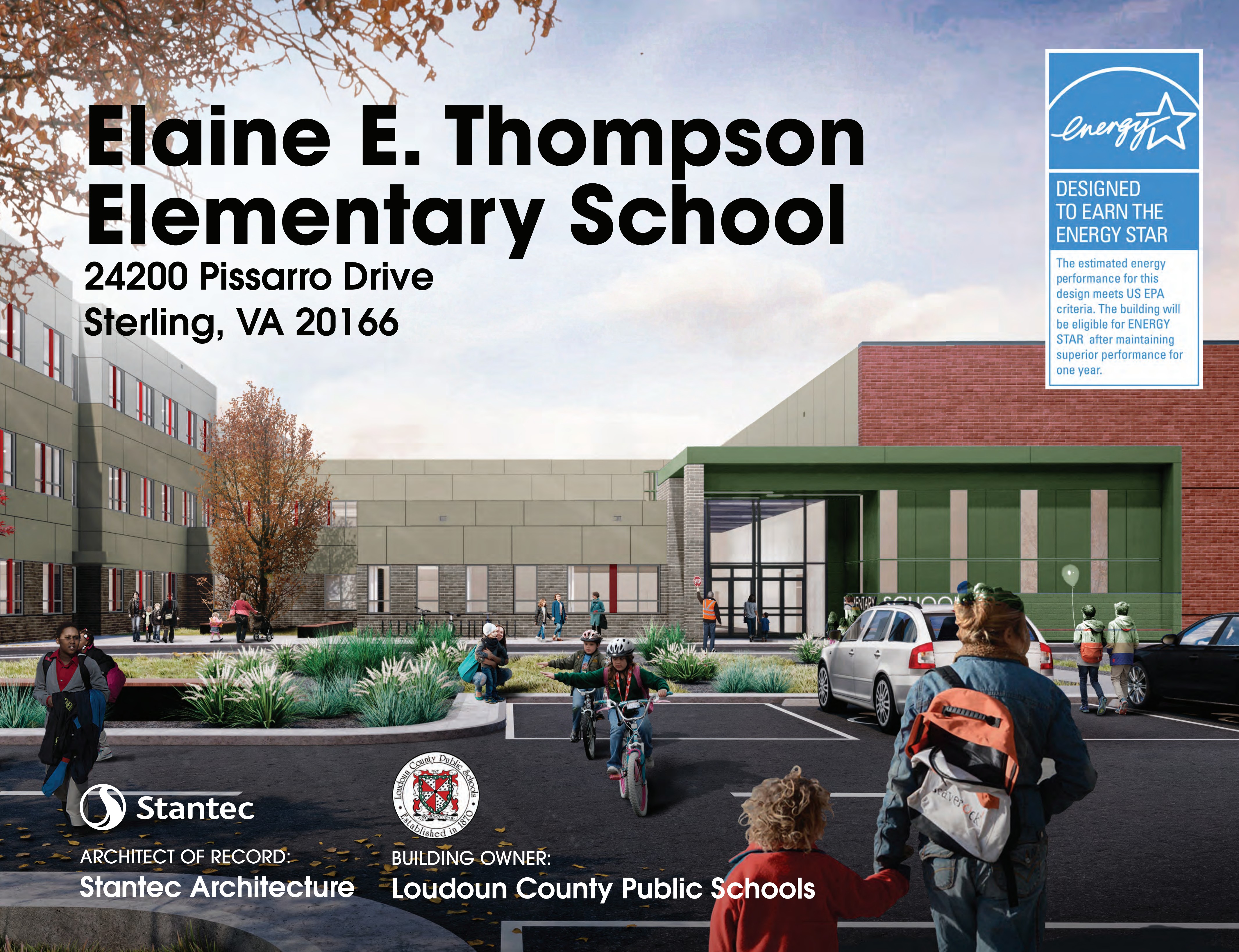


# Elaine E. Thompson Elementary School

24200 Pissarro Drive  
Sterling, VA 20166



ARCHITECT OF RECORD:  
**Stantec Architecture**



BUILDING OWNER:  
**Loudoun County Public Schools**

## Why We Chose ENERGY STAR:

- Elaine E. Thompson Elementary School achieved Designed to Earn the ENERGY STAR certification by meeting EPA criteria for reducing energy and CO<sub>2</sub> emissions.
- It was important that Elaine E. Thompson Elementary School achieved Designed to Earn the ENERGY STAR because it signals to the market that the project is intended to perform in the top 25% of the nation's most energy efficient buildings.
- Stantec Architecture is also helping the environment by delivering an energy efficient design to our client because ENERGY STAR buildings have a proven track record and yield an average of 30 percent annual energy savings and CO<sub>2</sub> reductions.
- Elaine E. Thompson Elementary School is recognized for achieving Designed to Earn the ENERGY STAR for potential future financial benefits from reduced energy costs and CO<sub>2</sub> emissions over the life of the building.
- Stantec Architecture found Target Finder/Portfolio Manager tool was helpful in evaluating how various design strategies will affect the energy estimates for the project.

ENERGY STAR DESIGN SCORE

**99**

ESTIMATED ENERGY USE INTENSITY

**28**

kBtu/FT/YR

PERCENT ENERGY AND CO<sub>2</sub> REDUCTION

**65.5%**



## Energy Efficient Design Strategies:

- The projected annual energy and CO<sub>2</sub> savings of the design is 65.5% as compared to the median building.
- The estimated total annual energy savings for this project is 6,174,788 kBtu/yr with an estimated cost savings of \$65,553/yr.
- This project is intended to have a 65.5% reduced carbon footprint because of energy conscious decisions made during the design process and renewable energy.
- Sustainable strategies include solar photovoltaic array that offsets utility costs, increased natural daylighting and views to the outside through additional windows, a high efficiency HVAC system with enhanced air filtration to provide excellent indoor air quality and LED lighting throughout the school.