

## Fales Elementary School – Westborough, MA

Fales Elementary School in Westborough achieved the title of a Net-Positive building, being the first MSBA-funded school in Massachusetts to do so. This designation is helping the Town of Westborough meet its goal of being carbon-emissions free by 2035.

According to the state “A zero net energy building (ZNEB) is one that is optimally efficient, and over the course of a year, generates energy onsite, using clean renewable resources, in a quantity equal to or greater than the total amount of energy consumed onsite.” This is accomplished through renewable energy, sustainable design elements, reduced or recycled materials, and resourceful thinking. The new Fales Elementary School has exceeded these requirements with the building using less than two-thirds of the energy consumption of that of a code compliant building. On an annual basis, the school will be able to generate an additional 10% energy surplus that the town will return to the grid.

Samiotes' site design was illustrated in phasing to allow for the continued use of the existing school while construction was ongoing on this steep, hillside campus. This work included providing temporary and permanent site utilities, grading layout, stormwater management while supplying a survey and plot plan for the site. The grounds also hold new rain garden plantings, slope stabilization plantings, and forest restoration plantings to encourage and ensure proper drainage of the site. The improved site includes new drop-off areas and outdoor classrooms. Environmental permitting to support the geothermal wells and design to settle out the unique suspended sediments (requiring mechanical flock tanks and multiple sediment basins) from the existing soils were uniquely persistent site challenges.

**Completion Date** | 2022

**Architect** | HMFH Architects, Inc.

**Construction Cost** | \$56,000,000

**Services** | Civil Engineering, Land Surveying, Environmental Permitting

**Awards & Recognitions** | Net-Positive Building, Seeking LEED Gold + LEED Zero

# LEED Zero



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