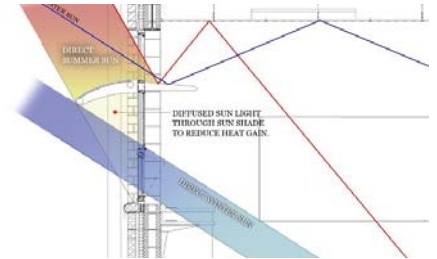


Maplewood Elementary School



The new Maplewood Elementary School replaces a 1920s three story K-5 facility that was in deteriorating condition, lacked accessibility, was undersized in total and was expensive to maintain and operate. Its presence in the community and the neighborhood closely knit around it, was going to be truly missed in terms of its scale and articulated historical design. The new facility had to fill this void and replace it with a new presence, twice the size, that still respected scale, community and function along with being highly efficient in terms of energy costs and operation.

This criteria influenced a very efficient heating and cooling system, incorporating a field of geothermal wells under the sport fields in conjunction with a high level of individual control at the heat pumps serving the individual classrooms and spaces throughout the building. All classrooms and occupied spaces were provided with daylight views. Advantage was taken of south-faced glazing for maximizing daylighting in these classrooms with automated control of artificial light. The extensive list of valued added sustainable features is noted below.

The building aesthetically drew upon the cues from the community and the existing building. Elements included rebuilding stone pineapple reliefs replicated from the old building and the incorporation of colors and materials from the original.

Sustainable Value Based Design

- High efficiency lighting system and integrated daylighting control
- Daylighting / views from all occupiable spaces
- Operable windows
- Anti-microbial finishes and low VOC materials and sustainable floor finishes
- Sustainable site concepts with storm water control / detention systems
- Geothermal well field with locally controlled heat pump zones
- White membrane / reflective roof surface
- Durable low maintenance finishes

size 63,000 SF

location Sylvania, Ohio

highlights

- Automated control of artificial lighting
- Water conservation system
- Replicated elements of original historic building in design