

# Sipprelle Field House

## Project Description

The new LEED Gold Certified Sipprelle Field House at St. Andrew's School adds 52,000 sf of space to support the school's mission of allowing all students to participate equally without compromise to their schedule. In its expanded form, the first LEED for Schools certified project in Delaware houses ten squash courts, a 5,000 sf weight and fitness area, a 20,000 sf field house, an exhibition basketball court, wrestling room, and multipurpose studio for yoga, along with locker rooms, laundry, and equipment storage.

St. Andrew's believes that individuals grow through amateur athletics by experiencing the values of teamwork, resilience, discipline, sportsmanship, and poise under pressure. The existing, insufficient athletic facilities were comprised of separate, closed off rooms which proved challenging for supervision and segregated student athletes based on ability. Though this has been a traditional model at many schools, the new field house employs an open floor plan to create a new model for school campuses. Collaborating with the school's athletic director allowed Voith & Mactavish Architects (VMA) to comprehensively plan the open fitness floor and map out fitness zones based on the amount of supervision required. The new spaces resolve to allow all students to develop their skills in a shared space that fosters support.

As the first building visible upon arriving on campus, the design response for the field house was to keep the scale small to respect existing buildings. VMA chose to depress the floor of the field house fifteen feet below grade to maintain sight lines of the historic gymnasium tower, while concurrently taking advantage of the earth's fifty five degree temperature. The reduced perimeter exposure assists in both heating and cooling the large volume.

From the main entrance, clear sight lines allow views to the jogging track and fitness floor, as well as to the submerged basketball courts. The athletic trainer's office is located adjacent to this entrance, and is easily accessible with windows on all sides of his office to increase visibility. A jogging track makes use of glazing to allow 100% natural lighting during the day and provides athletes with impressive views of campus. Northern facing windows allow sunlight to wash through the space, reducing the need for artificial lights. To prevent glare on the basketball courts, motorized shades can be lowered.

Key strategies for the LEED Gold certified facility include the use of the local and regional materials, and daylight for 100% of the gym spaces in the Field House and 83% of other regularly occupied spaces, mostly offices. 99% of all regularly occupied spaces provide views to outside, excluding the wood floor basketball courts where views and glazing would be distracting. There is a 42% reduction in wastewater usage from average toilets, sinks, and other fixtures by using more efficient fixtures. The yearly cost for energy in the building is less than that of an average building and the team was able to divert 75% of construction waste.