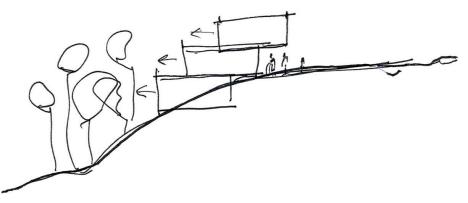
Cresthaven Elementary School | Silver Spring, MD Category: Institutional Architecture



"We have a drop-dead gorgeous, magnificent, state-of-the-art...school that tops anything anyone else has in the county. We couldn't be happier!" - Principal, Kafi Berry

The architect's major challenge in designing the new Cresthaven Elementary School was in how to accommodate the client's program for a new 500-student facility on a steeply sloping, irregularly shaped, 10-acre site. Instead of allowing the difficult topography to the west of the site to become a barrier, the architect employed a creative and thoughtful approach derived from the geometry and constraints of the existing site. The resulting reimagined site plan simultaneously maximizes site utilization, program efficiency, and sustainable design goals and provides a dramatically improved learning environment, solidly based in environmental stewardship and technology.

The new 74,000 SF school undulates along the edge of the wooded slope, which has the effect of increasing building efficiency to conserve financial resources, heightening visibility for student and staff security purposes, and providing outdoor circulation to encourage joint community use of the facility. This design allows all program elements to be accommodated comfortably on the site and is planned to accommodate future additions.

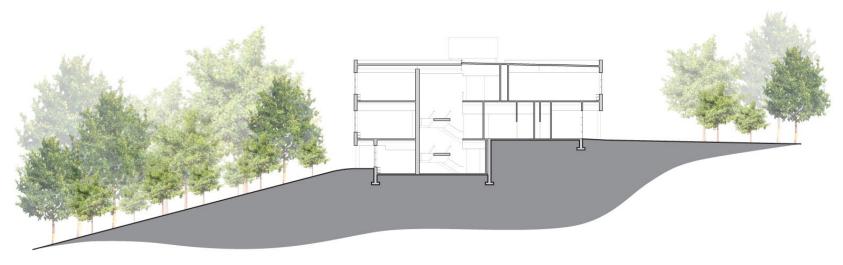
The organization of the building program itself encourages a flexible approach that accommodates the educational programs and greater connectivity to the surrounding physical environment. The floor plan is organized as a double-loaded corridor, or Main Street, with public-use spaces, including the gymnasium, multi-purpose room, instructional media center, and administrative suite, located on the main floor and academic classrooms on the upper and lower floors. The large academic program is accommodated by building three stories into the slope at the rear of the site, while the front of the school appears as a two-story form, so as not to overpower its low-scale residential neighborhood context.

The most dramatic effect of the design is the way in which it positively affects the learning environment of the school, instead of only focusing on minimizing the environmental impact of the building. The design creates increased natural lighting in interior spaces, and teachers often conduct their classes with the lights off to take full advantage of the forested views from classrooms. The building's new orientation is also optimal for shading to prevent solar gain throughout the year. The importance of this strategy is also reflected in the selection of materials and the mechanical and electrical systems utilized. The new Cresthaven Elementary School is the first LEED Gold Elementary School constructed in Montgomery County, Maryland.





Site Plan



Building Section













