

GLEN ALLEN HIGH SCHOOL HENRICO COUNTY, VIRGINIA

LEED Gold for Henrico's New High School



Size: 256,000 SF
Budget: \$62,500,000
Bid: \$58,600,000
Completion: August 2010

The new Glen Allen High School is designed to accommodate approximately 1,850 students and 200 staff. The facility earned LEED Gold certification with the U.S. Green Building Council in 2011. Sustainable design elements implemented in the project include:

- the daylight flooded building is modeled to require 28 percent less energy than code with efficient HVAC, insulation, glazing, and an air barrier system;
- the facility was sensitively sited around existing wetlands and stormwater management practices reduce the quantity and improve the quality of stormwater discharge;
- over 60 percent of the site will be preserved as open space for recreational and instructional purposes;
- a 50,000-gallon cistern collects stormwater and reuses it for flushing;
- low-flow plumbing fixtures and stormwater reuse result in an 80 percent water use reduction compared to the same school with standard plumbing systems;
- a high-efficiency irrigation system will maintain athletic fields with less than half the normal water usage;
- over 90 percent of construction waste was diverted from landfills by salvage or recycling;
- building materials contain about 36 percent recycled content and 31 percent regionally extracted, processed, and manufactured materials;
- lighting and thermal comfort systems offer a high level of occupant controllability; and
- indoor air quality was protected through the use of low-emitting materials such as paints, adhesives, carpet, and composite wood.