



## Sustainable Site Design Minimizes Impact on Natural Environment

As planned, the Hershey Center for Applied Research (HCAR) in Hershey, PA will eventually incorporate 12 buildings totaling 1.2 million square feet. The site development principles specify protecting natural resources and minimizing negative impact on the environment. The guidelines specifically address stormwater management objectives, including utilization of Best Management Practices.

The 165-acre parcel incorporates a restored stream, protection of the associated floodplain habitat, native vegetation enhancement, and extensive implementation of Stormwater Best Management Practices. The development did not disturb areas within the 100-year floodplain and maintained a minimum buffer of 200 feet from the tributary. Center employees and visitor have the option of alternative transportation, as it is within a quarter-mile of two bus routes and a free shuttle to HCAR. The site also includes a connection to the Jonathon Eshenhour Memorial Bike Trail located on the property.

The stormwater management plan limits the peak discharge rate by promoting infiltration and controlling discharge rates from the two stormwater basins. Stormwater runoff is treated by utilization of rain gardens, vegetated swales, and bio-swales, and is minimized by the use of vegetated pervious pavement for fire lanes. The parking lot is divided by linear landscaped bio-swales that collect runoff. Small dams spaced in the swales slow the flow of rainwater, promoting infiltration and allowing solids to settle out prior to entering the inlet at the end of the swale.

