

Federal mandates favor LID Stormwater measures

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Water conservation and stormwater runoff in urban and developing areas are key components of two Presidential Executive Orders (13423 and 13514) developed in an effort to address environmental issues and promote sustainable solutions to infrastructure challenges across the nation. These Executive Orders provide a set of guidelines to maintain pre-development site hydrology and reduce water consumption intensity through the use of Low Impact Development Best Management Practices. The award-winning Samuel Hadley Public Services Building in Lexington, Mass. serves as a model of successful "green infrastructure" implementation.

This project, located on a former brownfield site, was implemented in response to municipal mandates that mirror the Bush and Obama Executive Orders, requiring new construction measures to restore the site to pre-development runoff conditions. To achieve this goal, Bioengineering Group provided integrated science, engineering, and landscape architecture treatments.

Bioengineering Group's approach to using hydrology to meet stormwater requirements and achieve water-quality goals and enhanced landscape and habitat values proved to be both a cost-effective and sustainable solution. The building, which opened on schedule in 2009, was certified by the United States Green Building Council as a LEED Silver facilityâ€"the first public works building to hold this designation in the Commonwealth of Massachusetts. In an effort to meet President Obama's challenge to federal agencies to "lead by example" in the implementation of sustainable site development approaches, US Army Corps of Engineers led a group of Department of Defense personnel to tour the project site to see compliant stormwater and water conservation methods in action.

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