

Finding Space: A Field Guide for Incorporating LID into Military Historic Districts

Project # 14-752

Background:

The DoD has been tasked by the Energy Independence and Security Act of 2007 and EO 13514-Federal Leadership in Environmental, Energy, and Economic Performance to conserve and protect water resources through increased efficiency, reuse, and management. As a result, sustainable stormwater management strategies are being incorporated throughout the military's built environment to manage stormwater in ways that work with natural hydrologic systems. Collectively, those strategies are called Low Impact Development (LID). Incorporating LID technologies, in designated historic districts requires advanced planning, site analysis, compliance with federal regulations, and coordination between diverse stakeholders.

Objective:

The objective of this project was to explain the complex interaction between regulatory requirements and the physical environment to assist cultural resource managers in coordinating with all stakeholders to successfully plan and implement sustainable stormwater management systems in historic districts.

Summary of Approach:

The project approach outlined the characteristics of common Best Management Practices (BMPs) used in LID and described how they manage stormwater. Each LID BMP is explained according to its hydrologic functioning and then the guide identifies how that technology can be integrated with the character of a historic district. Because of the variety of historic districts at military facilities and the potential for unique management issues, the field guide discusses historic districts according to general land use types. For example, the landscapes of Antebellum, WWI, Interwar, and WWII sites can be generally described as clusters of administrative, residential, utilitarian, recreational, and ceremonial land use areas. The scale and extent of specific LID BMPs directs where they will blend into a historic district land use type. After a site has been identified for a LID BMP, the significant time period of a historic district informs the design and material choices used to construct the LID BMP.

Benefit:

Located strategically, LID BMPs can make a significant contribution to the water quality discharging from a site. Incorporating hydrologic planning on a large-scale and integrating LID BMPs into smaller projects provides environmental, economic, and social benefits. Because historic districts are established built environments, employing both non-structural and structural LID practices provide benefits. Developing an overall hydrologic master plan that leverages non-structural LID practices is an important component that helps guide the placement of future structural BMPs. However, as developed sites, historic districts will gain the most positive impacts from well-sited and integrated structural BMPs.

Accomplishments:

A report, "Finding Space: A Field Guide for Incorporating LID into Military Historic Districts" was completed in September 2015.

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