

Putting Performance in Landscape

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There are many initiatives being considered, or have been evaluated, regarding “Green Infrastructure.” The term has been widely accepted and is understood to mean dealing with stormwater management in a natural or environmentally friendly way. But, what is currently being designed or installed to satisfy the recent green infrastructure requirements?

Green Infrastructure by nature should perform as a system, relying on a variety of interconnected components to be successful. One cannot simply specify a native plant to say we have green infrastructure. The native plant has to be appropriate for the hydrologic conditions it will be subject to. It must also have the correct soils which provide the appropriate growing medium while allowing proper infiltration. This is also true for structures such as permeable surfaces. It is important to recognize that it needs to be determined where these surfaces drain, understand how the drainage is treated, how the infiltration functions, and how much infiltrates. These are great questions that need to be addressed from the beginning.

As defined by the EPA, Green Infrastructure is an approach to water management that protects, restores, or mimics the natural water cycle. Green infrastructure incorporates natural systems in engineered systems. As designers, we must be able to assure our clients of the effectiveness of our design solutions. When we are asked can we help determine, “green infrastructure” components for projects? We need to ask what are the performance goals and metrics we desire to achieve. Well-designed *green infrastructure* should be a **Performance Based Landscape**. As prescribed in the Sustainable Sites Initiatives, these solutions are interacting as a system, an eco-system. A system survives by its relationship with all its parts. A performance based landscape performs because it is not a piece, but rather, a whole system. We can determine or project a landscape performance if we understand how the related components will react with and work together to provide the solution. For more information or case study results, please contact Planning Resources Inc. at 630-668-3788.