

Green site design for green buildings

A truly “sustainable” project takes a holistic approach

Tom Mortensen

Everywhere you look, people are thinking, talking and building “green.” The discussion very frequently places the focus on what is most obvious: the building itself.

There is much to herald about constructing a green building that minimizes the impact on the environment through its design, materials and construction methods. However, there is a vital, but often overlooked, element that deserves careful consideration, because it’s the essence of what green building is all about.

It’s the earth itself. In a holistic view, green building is all about the earth. It’s about reducing our impact on the earth. The structure, obviously, has a great environmental impact. But where you place the structure and what you do — or don’t do — to the site, is in many aspects, the essence of green building.

Is a “green building” truly a green building if the site on which it is located is not treated with the equal and thoughtful consideration that is provided the building?

To gain a better understanding of how the site design and building interact with the earth you must go below the surface to further examine how a green project comes together.

A truly green or “sustainable” project takes a holistic approach that closely examines all aspects of the development, including water conservation, building materials, waste management, energy efficiency, indoor air quality, site design, paving, transportation, stormwater management and well-planned natural landscapes.

Sustainable design demands a team of professionals who understand how to bring the natural and built environments together and to work collaboratively to achieve the desired results. It’s really a thought process that gets everyone from the developer to the local government authority, the architect, engineer, landscape architect and the contractors all thinking on the same page throughout the entire process.

Making early decisions as a team truly reflects the benefits of a sustainable development. These benefits include real cost savings for the property owner and developer, less maintenance, a higher quality of life for the end user and preservation of the environment for current and future generations. The rewards of much less maintenance and ongoing costs will be realized by the owners of the project.

Experience has demonstrated that the biggest obstacle to successful sustainable design is a non-participatory attitude on the part of the key players. Resistance is a by-product of unawareness and unfamiliarity that are attached to trying something new. However, many of the green or “sustainable” site design concepts are not new. They are as old as the earth itself.

Sustainable site designs are no longer viewed as “messy, weedy and expensive” because the methods have been proven to be effective and appealing when properly designed and managed.

A strong case in point is how stormwater is handled. Stormwater is treated as a resource in sustainable design rather than a waste product by examining different strategies that allow rain water to infiltrate into the ground and be used by plants. This is the preferred alternative over piping it immediately to a pond. This is not to say that ponds can be eliminated for stormwater management, but they should be viewed as the last line of defense rather than the first. This makes for a much more stable and aesthetically pleasing hydrologic environment.

Sustainable development is very site-specific. It’s all about getting the site and building to work with nature, not against it. Using various elements such as permeable pavers, bio-infiltration swales, depressed parking islands, green roofs and vegetation that is tolerant of specific conditions are just a few of the techniques worthy of exploration. And in some cases, that requires municipal officials to look differently at the way codes are structured. That is why government officials need to be a part of the collaborative effort early, along with the design team.

The meaning of green will and should continue to evolve. That means understanding the key role the site design plays in a truly green building project. Individuals involved in the built environment must continue to come together in the holistic approach of designing the building and site. This collaboration will lead to more projects that are truly sustainable, and ultimately, an increased acceptance and use of these methods. As time goes on, more and more people will embrace real sustainability that includes the site and building because the methods will be proven. **MP**



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