The Great Outdoors Can Improve Overall LEED Certification Points

Adding green landscaping considerably ups the sustainability ante

By April Gonzales

Last year, when the principals at Farrell Building Company, the Bridgehampton-based luxury house builders, approached Lear Landscape Associates to help them achieve Leadership in Energy and Environmental Design (LEED) status on two new homes that they were planning on building, landscape architect Brian Mahoney said he was delighted to help them add some green flair to their projects.

The properties, one on Halsey Lane South in Southampton and the other on Bay Lane in Water Mill, were happy challenges for Southampton-based Lear Landscape Associates, according to the environmentally-conscious landscape architect and his partner, Elizabeth Lear.

The LEED point system is used to design and build energy-conscious and environmentally-friendly living and working environments. The points system addresses a wide array of elements that come into focus when building a new home. Including the landscape in the process can improve not only how well the house functions, but its impact on the local environment.

A well-designed project makes all the difference, and in looking at the completed projects, the two new homes that are a result of this collaboration are not only green, but they do not look any different from the surrounding East End shingle-style residences.

Since diminishing the environmental impact is a large part of the LEED design process, this concept covers a lot of territory and was one of Mr. Mahoney's main goals in designing the landscapes at both properties. But also maintain-

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Lear Landscape Associates and Farrell Building Company partnered for the LEED-certification of this Southampton house.

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GREEN: *Reduce Impact from Outside In*

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ing a look consistent with the typical Hamptons luxury home was important.

The Bay Lane house, for example-appears to be a typical post-modern construction; a lovely new home surrounded by lush lawn, and overlooking a field of wildflowers.

"You would never guess that this was any different from any other Hamptons landscape," Ms. Lear explained. "But it has all this design in it that makes it function more efficiently."

To Farrell Building Corporation's credit, the most important first step in the project was that the builders asked Lear to join the projects when the houses were being designed, not after they were built, according to Mr. Mahoney.

Whether it was alleviating site damage during construction by relocating existing trees and protecting topsoil, minimizing the amount of hardscaping, specifying native plant materials, addressing drainage or providing energy-reducing shade trees around the homes, Mr. Mahoney said he enjoyed the challenge of building a healthy, balanced and functional landscape based on 21st century principles.

Avoiding soil erosion was mandatory at both sites. And keeping all the runoff on the flat surface of the Bay Lane property in particular was tough, especially with a large parking area. But proper drainage designed by Lear Landscape would earn both projects a lot of LEED points.

Mr. Mahoney said he was able to eliminate runoff during construction (and afterward) at the Bay Lane project by using erosion control measures during building. At both locations, he specified that all water stay on site, so semi-permeable pavers and driveway surfacing were used to allow water to drain into the soil, versus being directed into a dry well as runoff.

Lear Landscape also planned to recirculate water and use cisterns—plastic holding tanks that are gravity fed—which were originally included in the Halsey Lane design. For maximum LEED points these elements must be above grade—say on the roof in an urban area—to avoid the energy needed by using a pump in one that is located underground. This part of the project was organized with the irrigation company.

It is difficult to tell that these lawns are not typical bluegrass.

Some day, Mr. Mahoney and Ms. Lear said, they would love to design for landscapes that do not require any irrigation at all. For now, they said that they find there is always a way to negotiate green principals at the first meeting before the house is built.

Budget can affect what part of, and when, a plan gets done. But some things cannot be compromised—like soil protection, Mr. Mahoney said.

The existing soil was contained on site at the Halsey Lane home. None was removed. During construction, the soil was held or warehoused and everyone was allowed to park on site. Then the good topsoil was redistributed once the subsoil was excavated to alleviate hardpans.

At Halsey Lane, local compost was added to create the final grade. This one measure won a lot of LEEDS points and saved the future owner aggravation and additional expense by eliminating severe compaction issues so typical on new construction projects.

Hardscape choices garnered LEED points for different reasons for the two projects.

To maximize LEED points, sandstone instead of bluestone was used for the patio areas at the Bay Lane residence since it was quarried from fewer than 500 miles away (fewer miles equals better for the environment) and it was also less reflective.

At the Halsey Lane project, Mr. Mahoney specified "blue ice" bluestone, which has no solar reflection and therefore doesn't heat up the way thermal bluestone does. The blue ice stone is not only more comfortable for bare feet, but also better for the local ecology. Additionally, Mr. Mahoney reduced the overall hardscaping by building a smaller parking area and a slightly smaller tennis court. That reduction proved to score big LEED points but will not affect anyone's game.

The lawns at both new homes look like the typical East End swath of green carpet, but the grass seed mix is different. Instead of the standard sods made up of bluegrass, Lear Landscaping installed rebel turf fescue, which grows slower, is more drought-tolerant and needs to be mowed less often. Rebel turf fescue is also a tougher grass that holds up better than bluegrass, has fewer disease and pesticide issues and can withstand more foot traffic.

To the naked eye, it is difficult to tell that these lawns are not typical bluegrass, but the lower maintenance costs helped contribute points to the LEED certification.

At the Bay Lane house, creeping red fescue—which grows to only 10 inches and needs to be mowed only twice a year—was also seeded in, according to Mr. Mahoney. He added that he is excitedly expecting to receive a sample of micro clover, which never needs to be mowed, so he can try that out on future projects.

Lear Landscape's experimentation with new materials as part of the LEED design process not only reduced the environmental impact during construction but continues into the lifetime of the home, which Mr. Mahoney explained, gives him a real lift as a designer.

"My favorite part is that it gives me a good feeling, a humbling feeling, that a lot of thought is going into the design," he said. We are conservative designers and I do think less is more. Paring down is a great exercise."

Reducing energy use is a big part of the design concept. But how does one do it? Not everyone wants solar panels on the roof or to make expensive changes to the structure of their residence. But working with landscape design, such as using drought-tolerant native trees like white oak and amelanchier—planted on the southeastern side of the Bay Lane

EXPENSIVE: *East End Properties Still Rate as the Most Desirable*

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rounders, swells to about 2,000 during the summer season. The median home sale price there is $1.6 million, making the Long Island Sound locale number 24 on the list. The median household income there is just under $51,000.

Other East End locales that made the list included: Quogue ($1.5 million median home sale price, down nearly 5 percent from 2008) at number 30; Northwest Harbor ($1.5 million median home sale price, up almost 7 percent) at number 32; East Hampton (over $1.3 million median home sale price, which is up a whopping 14 percent from 2008 figures) at number 42; and North Haven (over $1.2 median home sale price, down nearly 17 percent) rounding out the list at number 48.

Other locales rating high on the list include: Jupiter Island, Florida ($3.6 million median home sale price), at number two; Hunts Point, Washington ($2.9 million median home sale price), at number three; Los Altos Hills, California ($2.6 million median home sale price), at number four; and Fairbanks Ranch, California ($2.5 million median home sale price), at number five.

Even from the back view, this Halsey Lane house in Southampton looks just like any other, except it's a whole lot more energy-efficient on the inside and the outside.
DAWN WATSON PHOTOS

house to create shade help to reduce summer air conditioning needs—is a great way to lead a greener lifestyle.

This is not a new idea. Shade trees can be found surrounding old farmhouses in the area in much the same way.

At the Halsey Lane house, a low-energy pool, spa and pool house are backed by an evergreen screening of existing plantings that were relocated prior to construction. Old Norway maples and spruces remained in undisturbed areas of the property.

It may not sound significant, but reusing plant material on a site is a part of the LEED point system because it requires less effort and cost than tearing out the existing landscaping, trucking out the debris and then bringing in all new material. Additionally, covering 70 percent of the property with vegetative material, which does not have to be just lawn, is also a sound LEED point strategy.

Each small part of the LEED landscaping project contributes to building a modern, durable, environmentally- and energy-conscious elegant home that fits well into the existing landscape and neighborhood. Both the Bay Lane and Halsey Lane homes are stylish and have all the amenities of modern life.

April Gonzales, *an affiliated member of the ASLA, has worked with both landscape architects and property owners in designing, installing and maintaining landscapes on the East End of Long Island for over 20 years.*

Elizabeth Lear and Brian Mahoney discuss the finer points of rebel turf fescue.