# *Building a* GREEN HOME

IN NEED OF AN AREA THAT PROVIDES A BETTER TRANSITION BETWEEN INDOOR AND OUTDOOR SPACES, A CITY COUPLE MODERNIZED THEIR 125-YEAR-OLD HOME BY THINKING GREEN.

WRITTEN BY SUE LONG //// PHOTOGRAPHS BY ERIC FORBERGER

**In need of an area that provides a better transition between indoor and outdoor spaces, city residents Kristin and Trace Oberholtzer worked with Jesse Pellman and Mike Stoner of Longview Structures to create a green addition that gives them access to the rear of the house via a mudroom.**

LIVING IN ITALY helped to convince Trace and Kristin Oberholtzer that bigger isn't necessarily better. While small-scale living was a completely different way of life for them, they soon came to appreciate its benefits. "Until Italy, we were not city people," Kristin notes. Their positive experience led them to decide to become urban dwellers when they returned home. Their search for a house in Lancaster centered on finding something that would not need a lot of work and had rental potential, since returning to Italy was a possibility.

They ultimately found a quaint, 15-foot-wide townhouse on a quiet street in the city's Historic District. They made yet another commitment toward living the green life by agreeing to buy only one car – Trace commutes to his job near Lititz by bicycle, plus they walk as much as possible, traveling by foot to market and downtown shops and restaurants.

After moving in, the couple also began to slowly make changes to their three-story house, including converting the attic into living space. "The longer you live in a place, dreams start coming," Kristin notes. Deciding they were here to stay, their most ambitious dream centered on adding a transitional area to the rear of the house.

The addition they envisioned would solve two problems – the first floor lacked a bathroom and the back door opened directly into the small kitchen. The latter isn't that much of an issue unless, like the Oberholtzers, you have two large dogs. Kristin sheepishly admits that the project was indeed "dog-driven," adding that the dogs' coming and going left an undesirable footprint – depending upon the weather, the kitchen floor was always dotted with muddy or dusty paw prints.

THEIR IDEAS PERCOLATED for years. Kristin even cut out a newspaper article about a new green-minded construction company in the county – Longview Structures – and kept it posted in the kitchen, where it eventually yellowed with age. "We were drawn to the company because of what they're about," Kristin says.

Finally, they turned to architect Landon Proffitt, who had worked with them on the attic project, for some guidance. Their primary concern centered on whether an addition was even feasible. "We wanted to know the logistics that were involved," Kristin explains. "And, we didn't want to overstep any boundaries," Trace says, referring to the impact construction would have on the narrow, quiet street. Working within their parameters – preserving daylight, two kitchen windows and a backyard tree – Proffitt came up with a preliminary design that demonstrated their ideas were doable. It was up to them to take it to the next level.

THE NOW-YELLOWED ARTICLE concerned two young men – Jesse Pellman and Mike Stoner – who had launched a construction company that is driven by green building principles. Jesse can't recall a time when he didn't know Mike. "We grew up together," he explains. "Our families even vacationed together." After high school, the two began working for Mike's father, who operated a framing company. Jesse views the opportunity to work with the company as eye-opening. "We were exposed to a lot of high-end projects and got to see great building being done, but at the same time we saw plenty of wasteful practices."

Jesse and Mike launched their green-minded company in 2008, which wasn't the most opportune time to strike out on your own, as the economy was going into a freefall. "We told each other it would either be the stupidest or smartest thing we'd ever do," Jesse recalls. "We had one job lined up and it was for a family friend. But, then we got another call and since then, we've been going non-stop. It's been outrageous! We're very fortunate."

The company's name – Longview Structures – echoes Jesse and Mike's philosophy of "taking the long view" as to how sustainable materials and old-school principles can make a structure environmentally sound, now and in the future. "Hopefully, the kind of things we're doing will become code. It's an education process," Jesse says

Jesse Pellman (left) and Mike Stoner launched their business in 2008. Opposite: A living roof is one of the green elements of the addition.

of the products that are now available to make less of an impact on the environment. And, according to him, the economic gap is steadily closing on cost differences. As for the consumer, he adds that little things can make a big difference, pointing to such practices as being diligent about recycling, using low-VOC paint and opting for LED light bulbs.

The company's website elaborates on that train of thought: "We were and continue to be dedicated to the idea that big impacts don't need to have big footprints, nor does a first-class home mean degradation to the surrounding environment."

Jesse puts it more succinctly: "The way we live has ramifications beyond ourselves." Kristin agrees, noting that the remnants of those of those who formerly lived in the house drives home the notion that we're just caretakers and it's our duty to sustain a house, the environment and ultimately, the earth.

THE OBERHOLTZERS CALLED Jesse and Mike. As both are passionate about incorporating green practices into urban areas, they jumped at the opportunity to work on such a project. The goal was to incorporate modern-day living into a 19th-century home and in doing so, be as environmentally responsible as possible, yet keep within a budget. Jesse, who is a LEED Accredited Professional, tweaked the design to make it more sustainable.

For this job, Jesse and Mike would have two additional team members – Kristin and Trace. Kristin conducted a lot of research and came up with products such as the stainless-steel siding that covers the structure. She also salvaged and refinished the old-fashioned sink

**While the addition added only 125 square feet of living space, it made a decided difference, as there's now a definitive transition area between the rear of the house and the kitchen (at the top of the stairs).**

## GOING GREEN: HOW IT WAS ACHIEVED

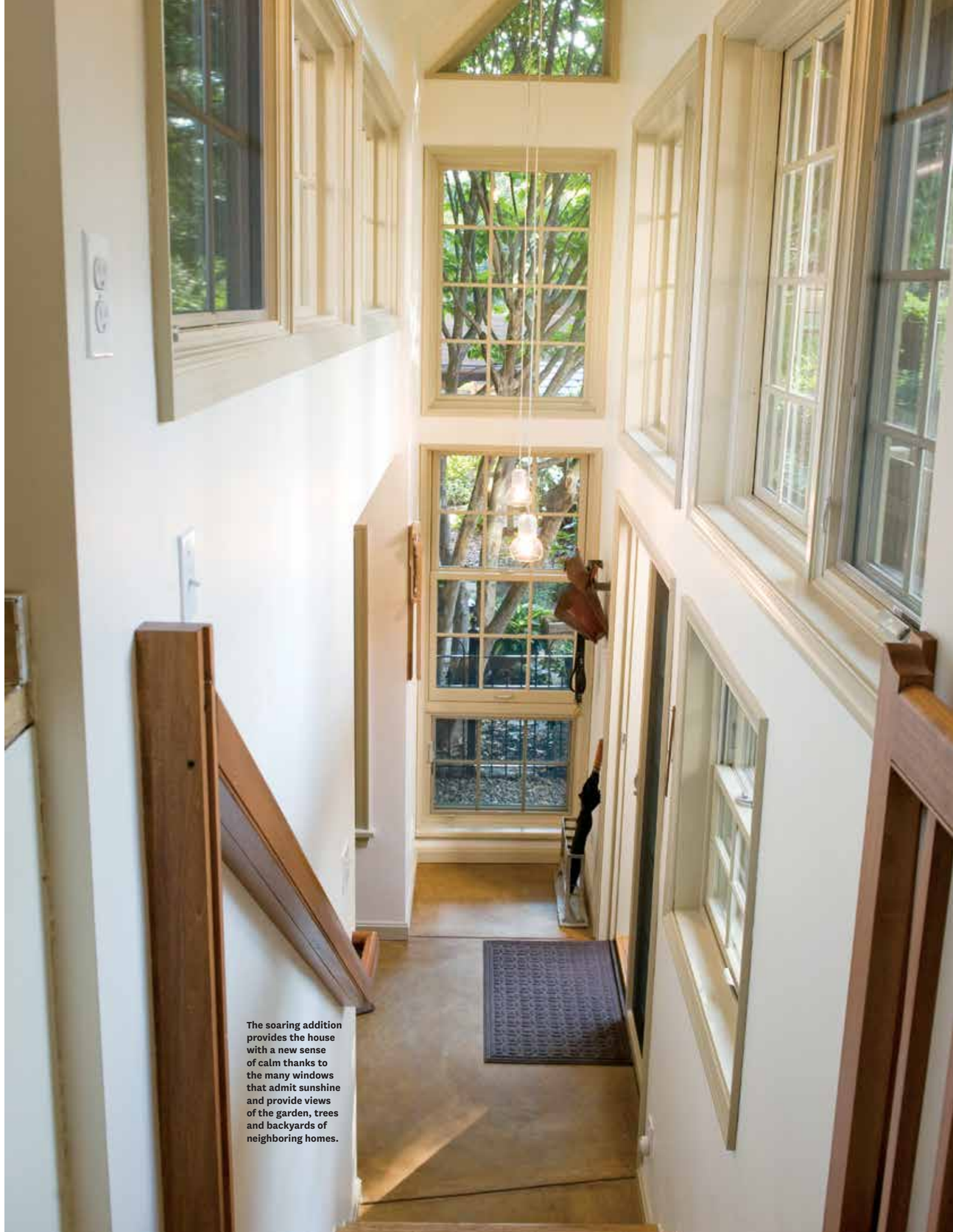
**■ STAINLESS STEEL SIDING**
While Jesse and Mike had never worked with it, they were anxious to do so. The installation process was time-consuming - the pieces snap into place on all four sides, plus a lot of custom cuts were needed. The Oberholtzers like the look - the changing light causes it to take on a new hue at various times of the day. Another plus: there's zero waste - it can be recycled.

**■ A LIVING ROOF**
Without the hardy-sedum plantings on the roof that's visible from the kitchen sink, the view would be deadly boring. Now, the roof garden provides a habitat for insects and birds, plus the occasional squirrel. "In a perfect world, it will fill in and become denser," Jesse says of the plants. The rooftop is not only beautiful, it's efficient. The plants and soil help with rainwater retention and thus control runoff. They also provide a cooling effect. "Black roofs give off heat, which is part of the reason why cities always have higher temperatures than outlying areas," Jesse explains.

**■ CONCRETE**
The low-maintenance floor of the addition is laid with fly-ash-content concrete (fly-ash is a waste byproduct of coal-burning power plants that dramatically reduces the carbon footprint of the concrete and the CO2 emissions that result from its production). Jesse maintains that fly-ash actually increases the strength and quality of the concrete. Color was achieved by staining it with a soy-based product. Radiant heat warms the space. The concrete staircase adds to the airiness of the space as it provides a floating illusion. The original foundation is visible through the steps.

**■ PASSIVE SOLAR**
New windows are highly insulated. Depending on the time of the year and the sun's arc in the sky, the overhang helps to heat or cool the addition. Hops are being trained to climb a trellis in order to shade the large kitchen window in the heat of summer. A series of overhead wash lines allow for items to be dried by the sun.

**■ CONTROLLING STORM RUNOFF**
Jesse maintains that it's critical to take runoff issues into consideration when urban properties are modernized, as the watershed is ultimately affected. It's especially



**The soaring addition provides the house with a new sense of calm thanks to the many windows that admit sunshine and provide views of the garden, trees and backyards of neighboring homes.**

The exterior of the addition is covered with stainless-steel siding, while the underside of the overhang is lined with low-maintenance cedar. Stone that comprises the walkway was reused.

that highlights the bath. And, she and Trace took on the responsibility of hand-digging the drywell in the backyard, hanging the drywall and painting the interior and exterior of what is fondly called the "cathedral mudroom." As Jesse points out, "It's taller than it is wide. It only added 125 square feet, but measure it by the cubic foot and it's fantastic!"

Kristin and Trace appreciated the fact that Jesse and Mike were enthusiastic about their ideas and open to their involvement. Kristin says the collaborative effort produced "good energy," although Trace interjects that drywalling the peak of the structure in the heat of July "nearly ruined our marriage."

GROUND WAS BROKEN in April 2010. Luckily, the neighbors permitted use of their driveway, which facilitated material delivery; otherwise, the only access to the rear of the property was through the baker's alley that separates the house from the adjoining property. Jesse also made it a point to knock on every door on the street and explain what would be taking place, asking neighbors to call him and not the Oberholtzers with concerns and/or complaints.

With the exception of a few finishing touches, the project was completed in five months. Mike was typically on-site to oversee the project. "His attention to detail was amazing," Kristin says.

The Oberholtzers like how the addition has changed the feel of the kitchen, which comes courtesy of the vegetated rooftop that is visible through the window over the sink and the expanse of windows in the mudroom that provides views of the backyard garden, towering trees on neighboring properties and rooflines of adjacent streets. Kristin calls the new vibe "very calming."

Outdoors, the structure provides an interesting transition from the street to the backyard. The lighting makes taking the dogs outside after dark much safer, while the overhang provides shelter from rain and snow when the foursome returns from walks. "I know it's a bit of a luxury, but people will be able to enjoy it long after we're gone," Kristin says. Jesse agrees: "That stainless siding isn't going anywhere!"

critical in Lancaster – hard rains can cause the sewers to overflow and dump raw sewage into the Contestoga River and ultimately, the Chesapeake Bay. In addition to the living roof, gutters and spouting direct runoff into the large drywell that was dug in the backyard.

**■ RULING OUT COMPOSITES**
All materials used fell into the category of wood or metal. For example, trim and the underside of the roof are composed of cedar, which is easy to maintain. The banisters are all wood, as well. Downspouts and gutters are copper. Natural materials won't end up in landfills, as they can be reused, recycled and salvaged.

**■ ADAPTIVE REUSE**
In addition to the bathroom sink, old doors and hardware were salvaged for use in the mudroom. Foundation stones were also reused. The exterior stone steps and walkway were also reused. While the exterior lighting fixtures – from American Period Lighting – are new, their period look fits right in with the design.

For more information about Longview Structures, visit longviewstructures.com.

Visit lancastercountymag.com for more photos of this project.

# OTHER PROJECTS BY LONGVIEW STRUCTURES

## 1. MA(I)SON, AN URBAN COOKERY

When Taylor and Leanne Mason took over a shuttered city restaurant, they wanted the interior of their urban cookery to complement their farm-driven menu. They turned to Jesse and Mike for help. The rustic but refined tone is established at the front door, where a weathered-looking wooden sign welcomes guests. Inside, the walls of the intimate dining room are lined with salvaged barn wood. And, the unique lighting fixtures in the bathrooms – created from Mason jars – not only relate to the last name of the restaurant's owners, they echo a newfound appreciation for the art of preserving what we grow.

## 3. LEED GOLD

This home in Lititz was the first to set the standard for gold LEED certification in the county. Points were earned for such features as insulating materials, solar panels, a geothermal heat pump, rain-water harvesting and completely permeable paving. Conversely, points were also scored for the use of old-school "technology," including a passive use of sunlight and natural insulators.

## 2. THE CARRIAGE HOUSE MAN CAVE

This project features a broad Pennsylvania-limestone foundation and flagstone sill, stucco wall finishes and standing-seam metal roofing with snowbirds. Inside, heavy mortise & tenon timber framing defines rustic styling, while soy-based foam insulation and no-VOC paint provide a green statement.

## 4. MODERN-DAY BARN

Design features include timber-frame construction done with mortise & tenon joinery and oak peg fasteners. An antique brick foundation (salvaged from local barns) and vertical siding (in traditional red) hearken to barns of old. Custom-designed doors that both swing and slide were made using timbers from an old saw mill and are hung on hand-wrought, custom-designed hardware.