

WORKING FOR THE COMMON GOOD

# Creating affordable, sustainable housing

PHOTOS PROVIDED



## Architecture grad aims to remake an industry

CAROL C. BRADLEY, NDWORKS

*If the Great Recession has taught us anything, it is that the formulas we use to define wealth and value are not set in stone. As awful as the last couple of years have been, they present an opportunity to reflect and press reset on a system that has not worked. Much of what went wrong centered around my profession, the home building industry. My hope is that in working together for the common good, we can learn from where things went wrong to build a better tomorrow.* —Marianne Cusato '97.

After Hurricane Katrina, architect **Marianne Cusato '97** was invited to the Gulf Coast by her mentor Andres Duany to be part of a group of architects looking at how houses fit into the community, and how communities fit together to form coastlines.

"We were broken up into teams, and the challenge was to come up with a dignified alternative to the FEMA trailer," says Cusato.

Cusato designed the first Katrina Cottage, conceived as a small, permanent home that would provide affordable housing for displaced residents and emergency workers.

Today Cusato's Katrina Cottages ([cusatocottages.com](http://cusatocottages.com)), which range from 308 to 1,807 square feet, are

sold nationwide by Lowe's. The affordable, compact and easy-to-build plans have been featured in USA Today, The Wall Street Journal, The New York Times, CNN and other major news outlets.

"This is a smart way of building," she says. "There's a use beyond disasters."

The cottages were designed at the peak of the housing bubble, she says, "When homes were getting bigger, overblown and overstuffed. The cottages represent a simplicity that is refreshing."

In 2005, she notes, we were at the height of the housing bubble, with 2 million houses going up every year. This year, the figure is 300,000.

Still, she says, this is the most optimistic time for housing in 50 years.

"We never should have been building two million houses a year. Why don't we design for what we want, not for what the next owner might want? Instead of adding a little patch of stucco or stone, why

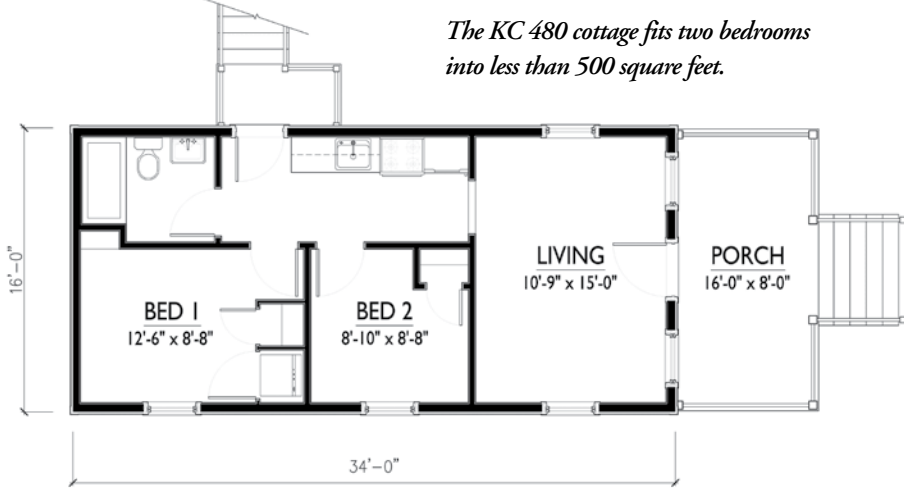


Cusato

not build a front porch you can actually use? Austerity isn't ugly—it's putting your money where it matters. To make a difference in the global economy, we need to put our personal economies in order. If we all do a little bit, it will make a big difference."

Ideas like these will make our country stronger, she adds. "There's nothing more sustainable than a building you want to take care of."

The KC 480 cottage fits two bedrooms into less than 500 square feet.



# Construction administrators work behind the scenes

## Enormous impact on campus

BY COLLEEN O'CONNOR FOR NDWORKS

They are not movie stars, but they have their own trailers on site. Their workweek is not 40 hours, but whatever time is needed to get the job done—and sometimes that means literally working around the clock and around the calendar, including Christmas.

They are Notre Dame's construction administrators, **Butch Layman**, **Ray Phillips** and **Chuck Hums**, who together with their boss, **Doug Schlagel**, director of construction and quality assurance, all work out of the Office of the University Architect. Together, they're responsible for the timely and precise completion of all campus construction projects, including facilities, roads and sidewalks.

It's difficult to find the right person for the job, said Schlagel. "It's tough to find the right experience, the right temperament, and the willingness to do something a little differently, as the work of the construction administrator at Notre Dame is about managing a process and coordinating the efforts of several campus units as opposed to managing people. I could not be more pleased with my staff." Between Layman, Phillips and Hums, they have 130 years of relevant job experience.

PHOTOS: CAROL C. BRADLEY



Layman

Typically, a project starts with design documents, which can take months to develop, and in some cases, be quite voluminous. For example, the design documents for the new ice arena are more than 400 pages in total. All stakeholders of a project, for example, Athletics, OIT, Fire Safety, Food Services, etc., are asked to review the construction documents pertaining to their operation and sign off on them. The Office of the University Architect must convey up front what the project will look like at the end. "We can't have someone say, 'This is not what I expected,'" said Schlagel.

At the same time the drawings are created, a master schedule is prepared. According to Layman, "the schedule is very important at Notre Dame; many times, the academic schedule drives the construction schedule."

"The end date controls the start date," said Phillips. All campus projects MUST meet deadlines.

Once the documents have been



Phillips

fully approved by all concerned, and the Office of the University Architect is comfortable with every aspect, they are sent out to bid. "There are basically three forms of construction project delivery," said Schlagel. General Lump Sum Bid is the oldest form of contract delivery. Essentially, the owner (Notre Dame) separately manages an architectural firm and a contractor. With Construction Management at Risk delivery, the owner hires an architectural firm and a construction manager who work together during the design phase to refine the project design and confirm the construction budget.

The construction manager assumes the risk, guaranteeing a price and budget before the project even begins. With the third form, Design/Build, the owner selects a single entity responsible for the architecture, engineering and construction. This is the fastest method, as construction can begin before designing is complete. Notre Dame has utilized all



Hums

three forms of delivery.

According to Schlagel, "the construction administrator is a traffic cop at an intersection with 10 roads." He is a conduit between the contractor, the service providers and the user. It is about quality assurance, or as Schlagel says, "making sure we get what we paid for."

Additionally, all four agree that safety throughout the process is a primary concern. "Nothing is worth a person's life," said Phillips.

The busiest, most compact time of the year is between the Monday after Commencement and Orientation day in August. There is not a minute to spare. Since May 17 this year, Layman, Phillips and Hums have individually overseen multiple student-related projects, such as the renovation of Stanford and Keenan residence halls. Crews are literally working 24 hours a day to complete interior bathroom renovation, new student room lighting as well as roofing repairs and window



Schlagel

replacement.

Other summer projects include Lewis Hall interior work, Legends interior work, expansion of the Endowed Chair memorial, ground breaking for the new building for the Alliance for Catholic Education (ACE), road milling and paving as well as stadium repairs.

According to Layman, "There has been a job in the stadium every year for the past 14 years that must be completed before opening the season." Additionally, they are overseeing the ongoing construction of the new ice arena; renovation of the old Joyce Center Ticket Office for the Student Athlete Welfare and Development Office; renovation of the Grace Hall Development Office; Geddes Hall fourth floor build-out; and Harper Hall Cancer Research Center in conjunction with I.U. Projects they completed this year include Stinson-Remick Hall, Purcell Pavilion, Biolchini Hall and Ryan Hall.