

Reinventing the



An architect uses the site itself to guide his take on a traditional style

BY ROB WHITTEN

Rimmed on the north by a mixed forest, the wide grassy field fell gently to the south, toward the road we'd taken to where we now stood. As a home site, the field in front of us promised the best solar gain you could ask for in this part of Maine, along with ample drainage, protection from north winds, and stunning views. It was a site that couldn't miss—whether you were a 19th-century farmer or a 21st-century architect.

I happen to be the latter. But when I laid out my plans for the site to Steve and Deb—the potential clients whom I had met that day in the field—I spoke as if I were that farmer. My firm would design their house on the slope toward the north, not the center, of that beautiful meadow. The tall side would face south, and the driveway would snake off into the trees to the northeast, because no self-respecting farmer would cut a road through the middle of a good field.

In a more timeless sense, what I was saying was that you don't place your house on the best land—you place it adjacent to the best land, to establish a relationship with it. This application of centuries of local wisdom appealed to Steve and Deb, and our conversation that day was just the beginning of

Farmhouse



SPECS

Bedrooms: 3

Bathrooms: 2½

Size: 2500 sq. ft.

Cost: \$275 per sq. ft.

Completed: 2013

Location: Freeport, Maine

Architect: Whitten Architects,
Portland, Maine;
whittenarchitects.com

Builder: Rousseau Builders,
rousseaubuilders.com

Interior designer: Krista
Stokes, kristastokes.com

A farmhouse evolves

From the right site ...

It's typical today to plop a home directly in the center of a site, but a more traditional—and wiser—approach is to consider solar orientation, wind direction, drainage, and the desirability of preserving the best land (for farming in the past, for the view in the present). Those factors led the author to position this contemporary farmhouse in the far northeast corner of the site, near the top of a rise. While the house faces south toward the sun, the barnlike garage is angled to allow the driveway to curve off into the trees at the edge of the site, preserving the meadow and the view.



On higher ground. Positioning the house on an elevated corner of the property preserved the character of the large parcel of land and enhanced the owners' southern views over the undulating terrain.



a dialogue about how best to incorporate that knowledge into the building of their comfortable, durable, and contemporary farmhouse.

Downsizing done right

When they first decided to downsize, Steve and Deb considered buying an old house. But then a piece of land they had admired for years came on the market. They started assembling a virtual catalog of what they liked and didn't like in a house, and they reached out to a few local design-build firms and a few architects, myself included.

In true Yankee tradition, Steve and Deb were looking for straightforward answers and good value in the design of their new home.

The traditional approach I described that morning appealed to them, so with a clear understanding of their budget and their design goals, I got the job. As the design developed, I was joined by Whitten Architects team member Will Fellis, who comes from a long line of Maine builders and has both an innate and a trained understanding of local building traditions.

The second step I always take before designing a new home is to visit the clients' current house. This accomplishes two things. First, it reveals why the first house doesn't work. Second, it enables me to design spaces that will accommodate the clients' furniture and lifestyle. My visit revealed why Steve and Deb had struggled with their last



From yard to door. The so-called dooryard area that stretches from the front of the barn toward the house is the starting point for arrival and influences the position of the mudroom, the back entry, and the kitchen.

house. Although 2900 sq. ft., it was poorly organized, so much of the space was unused. Steve and Deb were clear that they wanted a house of no more than 2500 sq. ft., with a first-floor master, a hardworking mudroom, and a home office that would be, in Sarah Susanka's language, an "away space." They wanted this to be their lifetime house.

From site to spaces

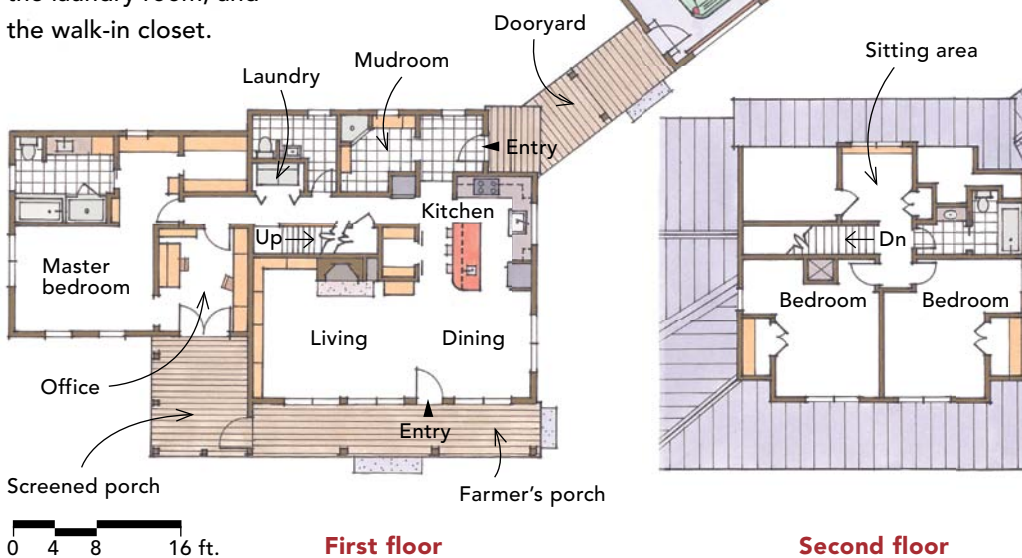
When I design a house, I start with the site plan. I use that to develop the floor plan, which in turn shapes the house's overall form. In a sense, this follows the tradition of New England farmhouses, which are essentially simple, efficient boxes encasing a floor plan suited to

... to the arrival sequence ...

How one approaches the house—from the driveway, into the dooryard, and then inside—informs the organization of doors, service areas, and ultimately, the floor plan. A farmhouse is an informal country home; to enter and exit, everyone uses the back door and the mudroom entry. The front door is used to access the front porch and is placed in the ceremonial, front-and-center location.

... to the floor plans ...

The arrival sequence continues inside the house, determining the layout of the first floor and then the second while also taking into account the house's orientation. Utility spaces are located on the darker north side, which is separated from the south-facing living and dining spaces (photos facing page) by the hall and the stairway. Although located on the main floor, the master bedroom is buffered from public spaces by the home office, the laundry room, and the walk-in closet.



their site. In choosing that site, 19th-century builders thought first about the sun, then about the wind, and then about proper drainage. Their time and effort were not put into making a palace, but a house that worked with the land.

In those days, building on a slope was favored because it meant less digging, which was done by hand. We took a similar approach, tucking the house into the land in a traditional manner. Building this way also allows runoff to drain away from the foundation—in this case, aided by a perimeter-drain system we installed uphill from the house.

Like those old farmers, our goal was a house of modest scale. The modern-day challenge, however, is that once you attach a garage, you end up with a huge appendage that represents almost a third of your footprint. The answer is to move the two apart. In Maine, a sheltered outdoor space between the house and garage or barn where you do your work is referred to as a *dooryard*. There is a tradition in Maine of dooryard visits, in which neighbors pull up to the house and roll down the window to chat with whoever is working there.

Following this arrival sequence—from the car, to the mudroom, to the service spaces, to living and dining areas, and finally, to more private spaces—enables the floor plan to evolve naturally. To make the most of 2500 sq. ft., we turned to an open plan in which public spaces were shared. I always begin by laying out the first floor, which tells me where the stair wants to be, which in turn brings me to the

second floor. I want the second-floor bedrooms to be facing the sun, so they fall into place next. I also like the bedrooms to have windows on two walls for ample light and cross ventilation.

A form unfolds

With the interior spaces in place, the form of the house begins to reveal itself. It is shaped by the rooms inside and by the character of the area. Steve and Deb's home site is located just outside the village of Freeport. The area is full of smaller-scale houses built from the 1780s to 1900, offering a traditional frame of reference.

Because this house was situated outside the village, I believed that a farmhouse form would be most appropriate. We were drawn to the Cape style, with a raised dormer facing the sun and an unbroken roof slanted against the north winds. To me, this represented a type of small and simple house with the economical patterns we wanted. I used pitches of 11-in-12 on the main roof and a gentler 5-in-12 on the roofs of the porch, the breezeway, and the dormer. The pitch of the master wing falls between them at 8-in-12 and is offset 2 ft. from the north wall of the house. It adds character and scale, and it suggests that the master wing was a later addition by the "farmer."

Now it was time to think about windows. We confined our windows to four types, the most prominent being two-over-one double hungs and four-lite casements. Each of the upper lites matches the



Arriving at home. The mudroom entrance, used by family and friends alike, leads into the kitchen, which is also positioned with a view toward the driveway.



Traditional touch. In the living room, the modified Rumford fireplace is taller and more efficient than a typical fireplace. The built-in firewood box offers a historic reference to a traditional New England beehive oven, but with more functionality.



Smooth landing. At the top of the stairs, a small landing becomes a private space for guests, who also use the upstairs bedrooms.



proportion of the window overall, creating a harmony to the way the pieces come together that's both spare and refined at the same time.

With windows and doors in place, we moved outside to add the transitional spaces—porches, patios, and shelters—that complete the connection between what's inside and what's outside. Those include a covered walkway to protect the route from the garage to the mudroom, and a 6-ft.-wide farmer's porch to shelter the front door and to provide protected, outdoor living space. Beyond the porch, we planned a fieldstone wall to enclose a stone terrace and fire pit.

Steve and Deb already had stretched their budget, so we wanted to keep the exterior simple. Steve and Deb also valued low maintenance, so we invested in a standing-seam Galvalume roof, prefinished Mai-

bec white-cedar shingles (installed over a drainage gap), and prefinished board-and-batten siding for the garage. Trim and corner details are thin and Shaker-like, which helped keep material costs in check.

High performance, then and now

Built to relate to the land, sun, and climate, a traditional farmhouse was the high-performance, low-cost house of its day. We used those wonderful vernacular lessons because they work, but we also included some more recent technologies to boost this house's efficiency.

We used Zip System sheathing over 2x6 walls insulated with 4 in. of closed-cell spray foam (R-30); rafter bays under the Zip-sheathed roof are insulated to R-49 with 8 in. of closed-cell spray foam. (Closed-cell



... to the final form

Once the interior spaces are organized, transitional spaces linking them with the outdoors can be established. Those include a wide farmer's porch, a screened porch off the home office, a terrace and fire pit just off the farmer's porch, and a covered walkway connecting the house to the garage.



Covered connection. A sheltered walkway links the house's back entrance with the garage, about 20 ft. away. LVLs held up by tapered columns support the roof.

foam is derived from petrochemicals, but we decided that its ability to lower the home's energy demand balanced out the environmental penalty involved in its manufacture.) The outside of the foundation and the underside of the basement slab are insulated with 2 in. of rigid foam (R-10). Our last blower-door test put airtightness at 0.36 ACH50, thanks to carefully detailed wall and roof assemblies, taped sheathing, spray foam, and a meticulous framing crew. Tight houses need a source of fresh air, so Steve chose a heat-recovery ventilation system that exhausts from the bathroom and kitchen area, with supplies to the first-floor bedroom and living spaces.

Harboring a Yankee bias against overdependence on someone else, Steve settled on a closed-loop geothermal heating system utilizing a

Bosch two-stage ground-source heat pump and a desuperheater with electric backup for domestic hot water. We also built a chase through the house that will enable Steve and Deb to install photovoltaics on the master-suite roof when their budget allows.

As the house neared completion, we received emails and comments from neighbors and passersby telling us how much they loved the way it looked in the field. It was gratifying to know that we were being seen not only as good neighbors but as responsible stewards of a very special piece of land. □

Rob Whitten founded Whitten Architects in 1986. Photos by Rob Karosis.