

THE MODERN ESTATE

NEW YORK / CONNECTICUT EDITION

A MIDSUMMER NIGHT'S DREAM

SHADES OF GREEN | GETTING YOUR FEET WET | CLASSIC AMERICAN SHINGLE | MASTERPIECE MANSIONS



2007 Summer Issue \$6.95



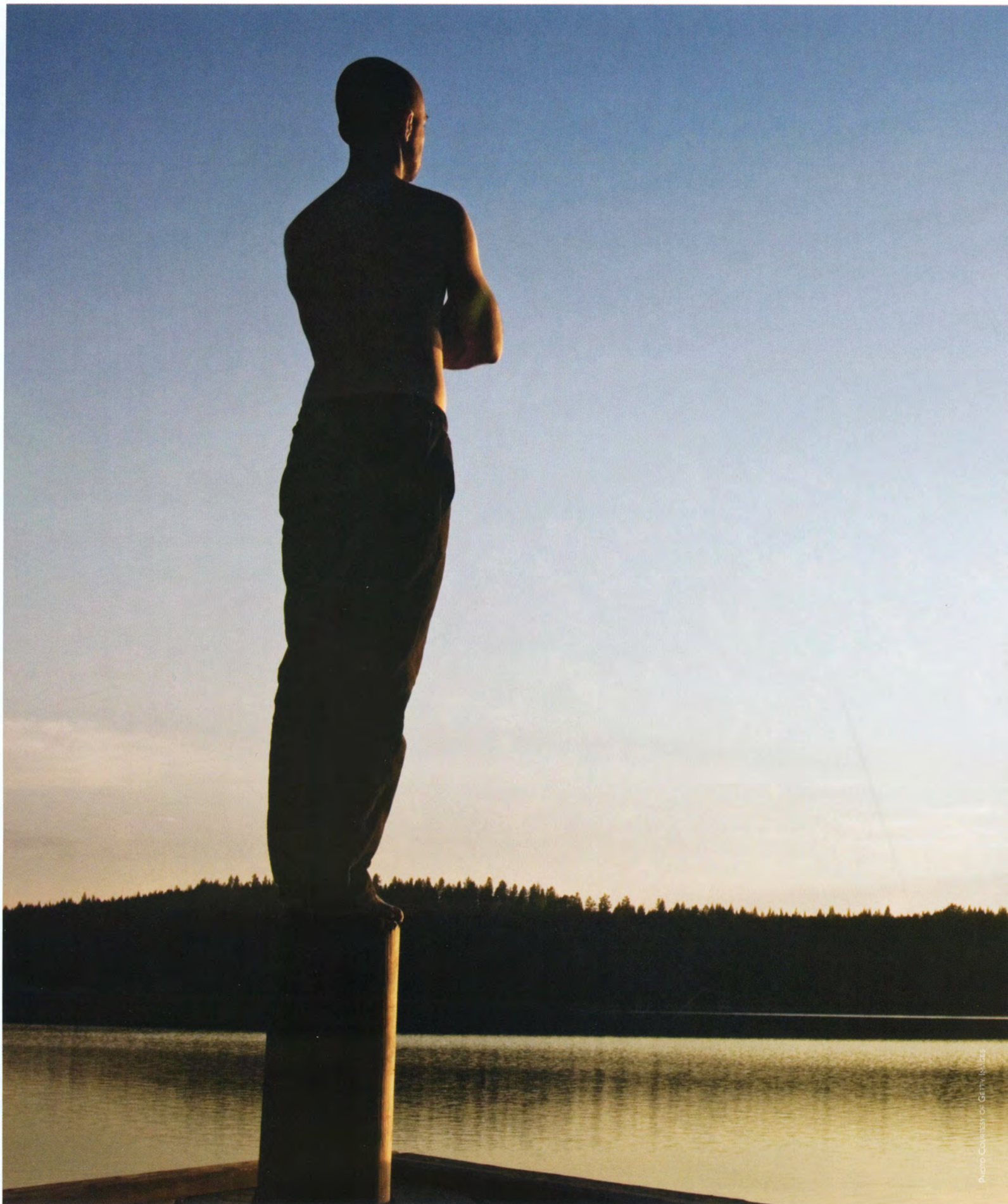


PHOTO COURTESY OF GETTY IMAGES

GETTING YOUR FEET WET

Dream of building on the waterfront? Don't dive in impulsively—inch in wisely, or the costs and intricate restrictions may drown you

By Charles F. Hilton



Water! It engages our imagination and all our senses. Who can deny the invigorating emotional charge of a ferry ride to a favorite island destination—the magnification and dance of sunlight off the water, the mystery in the shroud of fog, the fishy smell, the taste of salt on the lips, the cooling breeze across the face, the sound of gulls, the crash of the waves? In fact, simply being around water can affect us physiologically: Waves and waterfalls not only stimulate us visually but also exhilarate us by means of the oxygenated, ion-charged particles they toss into the air.

Humans have sought out waterfront sites as dwelling places throughout recorded history. In America, homes by the water vary dramatically in style—influenced greatly by their regional environment. First came the cabins of the colonists, built from floated logs and river stones, then the simple, cedar-shingle-clad houses of the early New England settlers. Prosperity brought grander residences: the rambling, Shingle Style houses of the Victorian era; Low Country Southern bungalows, with their elevated living floors, wide verandas, and low-pitched roofs; and more formal styles, influenced by European architectural traditions.

Sea captains and wealthy merchants commissioned the wood-framed Greek Revival homes still seen from Bath, Maine, to Savannah, Georgia; industrialists constructed classically inspired, palatial waterfront “cottages” in resort communities like Newport, Rhode Island; the plantation owners of the mid-Atlantic built homes in Georgian and Neoclassical styles; homeowners in Charleston, South Carolina, constructed narrow, ornate, classically inspired three-story waterfront homes with large, double-tier verandas on tight lots. On our southernmost coasts, which were free from winter freezing but exposed to frequent



COMPLIANCE COMPLEXITIES: Building on waterfront sites like that of this new Georgian, in Greenwich, Connecticut, usually requires long and complex approval processes. Even though this home is set on a generous (more than 4-acre) site, meeting the requirements for setbacks for zoning, utilities (gas, phone, electric and water, sewer lines, etc.), site drainage, and geothermal wells was very challenging. Projects like this can take four to eight months or more for approvals.



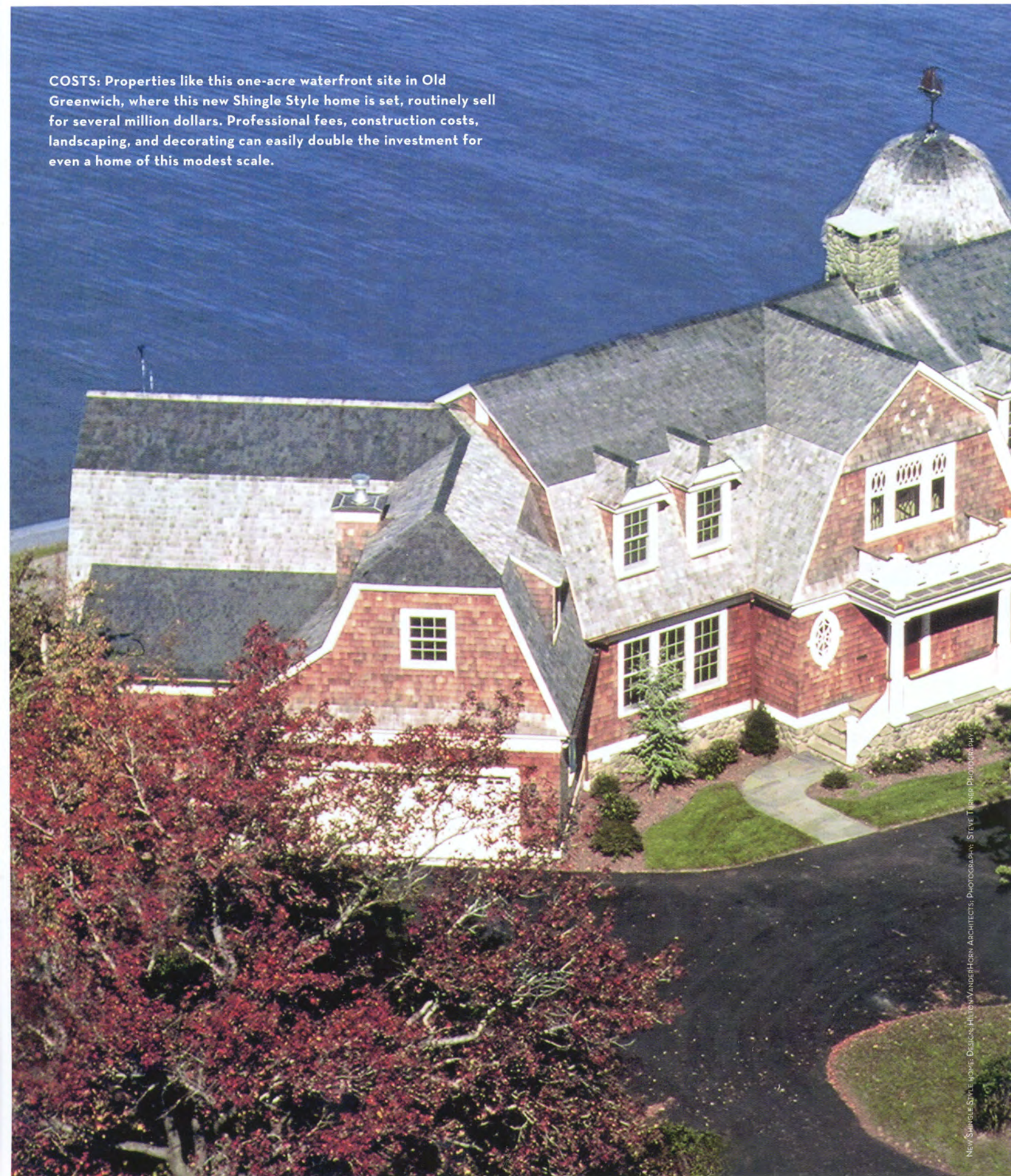
DESIGN: HILTON VANDERHOOF ARCHITECTS; IMAGING (RIGHT): HYPERTEXTURE; PHOTOGRAPHY (LEFT): STEVE TURNER

"Man is not an aquatic animal, but from the time we stand in youthful wonder beside a spring brook till we sit in old age and watch the endless roll of the sea, we feel a strong kinship with the waters of this world."

—Hal Borland, *Sundial of the Seasons*, 1964



COSTS: Properties like this one-acre waterfront site in Old Greenwich, where this new Shingle Style home is set, routinely sell for several million dollars. Professional fees, construction costs, landscaping, and decorating can easily double the investment for even a home of this modest scale.



NEW SHINGLE STYLE HOME: DESIGN, HILTON VAUGHN ARCHITECTS; PHOTOGRAPHY, STEVE T. JENSEN PHOTOGRAPHY



PROPERTY ACQUISITION: Even remote lakefront properties like this (top)—an unspoiled site in Lovell, Maine—can be difficult to acquire. Recent additions to this Shingle Style cabin, which has been enjoyed by four generations of the same family, included the screened porch dining bay (center), a new master-bedroom wing (left) turned to orient toward the primary lakefront views, and outdoor decks.

PLANNING INTRICACIES: Planned renovations and additions to this Mediterranean home in Greenwich (above) include many features designed to enhance the enjoyment of this dramatic waterfront site. The basement spaces under the outdoor terraces were converted into entertainment rooms; a fully glazed breakfast room was added (on the first floor, right); a covered waterside pergola was created (see the first floor, left center), and multiple outdoor balconies and terraces were added. All roofs, siding, and fenestration will be replaced, as shown, to produce this dramatic Mediterranean exterior.

hurricanes, homeowners built heavy masonry homes with tile roofs in the Spanish and Mediterranean styles.

Because I believe, with anthropologist Loren Eiseley, that “if there is magic on the planet, it is contained in the water,” I have chosen to make designing waterfront homes a personal specialty. Whatever the site—on a brook in the woods, on a northern lake, on Long Island Sound, or beside the open ocean—for an architect, the element of water is both inspiring and challenging. While this article is framed by my experience in designing homes on America’s east coast, the issues are similar in most waterfront locations.



BUILDING MATERIALS: The materials used in this highly exposed waterfront project (above and right), a Georgian home in Riverside, Connecticut, are specified to be exceptionally durable. They include slate roofing with a full membrane underlayment and extensive flashing, a granite façade, mahogany windows and doors with laminated glazing to resist high wind and UV penetration, mahogany exterior trim, bronze ornamental railings, and many other quality material choices.

"The face of the water, in time, became a wonderful book—a book that was a dead language to the uneducated passenger, but which told its mind to me without reserve, delivering its most cherished secrets as clearly as if it uttered them with a voice. And it was not a book to be read once and thrown aside, for it had a new story to tell every day."—Mark Twain, *Life on the Mississippi*, 1883

If you hope to build your dream home on the waterfront, be prepared to face five major challenges. Property acquisition, regulation compliance, planning, specification of appropriate materials and construction methods, and cost containment will be far more complex for you than if you were building an inland home.

Nice site, if you can get it. Waterfront properties have always been highly valued, so securing a prime setting usually involves patience, significant financial means, and luck. When they are available, waterfront sites frequently sell for two or three times (or more) the price of nearby inland real estate.

Compliance complexities. As for regulations, waterfront properties almost always face more scrutiny than inland locations. The quantity of regulations, conflicts between applicable codes, and difficulty in the sequencing of approvals all add complication, time, and cost to waterfront projects.

- Zoning laws often seek to keep house sizes smaller by limiting a building's height, size, and setbacks; these regulations often conflict with flood regulations that mandate that new construction be located high and out of the flood plain.
- Many waterfront sites are in historic areas, on lots that predate current zoning and are nonconforming with current regulations. Development of these sites typically incurs some regulatory size, height, and/or setback penalty that is more stringent than homeowners would incur in developing conforming lots.
- Properties in officially recognized local, state, or federal "historic" zones usually have additional controls on development. For example, in an effort to protect its community character, Nantucket, Massachusetts, has strict limits on building size, exterior materials, and even landscape elements.
- Building codes are stricter in many waterfront locations, mandating better-performing structural systems and mechanical components and requiring more weather-resistant materials and installation assemblies.
- Almost every aspect of construction in flood or coastal velocity zones (where there is potential for wave action in a storm) is highly regulated. Inland wetland and coastal management agencies regulate how drainage is collected and released to minimize erosion, limit thermal discharge, and curtail pollutants that are released back into the environment.
- Fresh-water wells and septic systems have significant setback requirements from both fresh- and salt-water resources. Unique waterfront amenities like docks, bridges, and boathouses are also highly regulated. Even non-building issues such as wildlife management are frequently controlled.

Planning intricacies. Unlike most homes, which have a primary (frequently formal) front elevation and secondary (usually less formal) back and side elevations, waterfront homes typically have at least two primary elevations: one addressing the street, accommodating vehicular access, and one or more oriented to the water, accommodating waterfront access. (Perfect examples of this are the historic plantation homes along the James River in Virginia, where the waterside entrances were considered the "front door.") Such dual-focus floor plans need modified circulation patterns, larger openings between rooms, and increased waterside fenestration to capture important views.



“Water is a good servant, but it is a cruel master.”

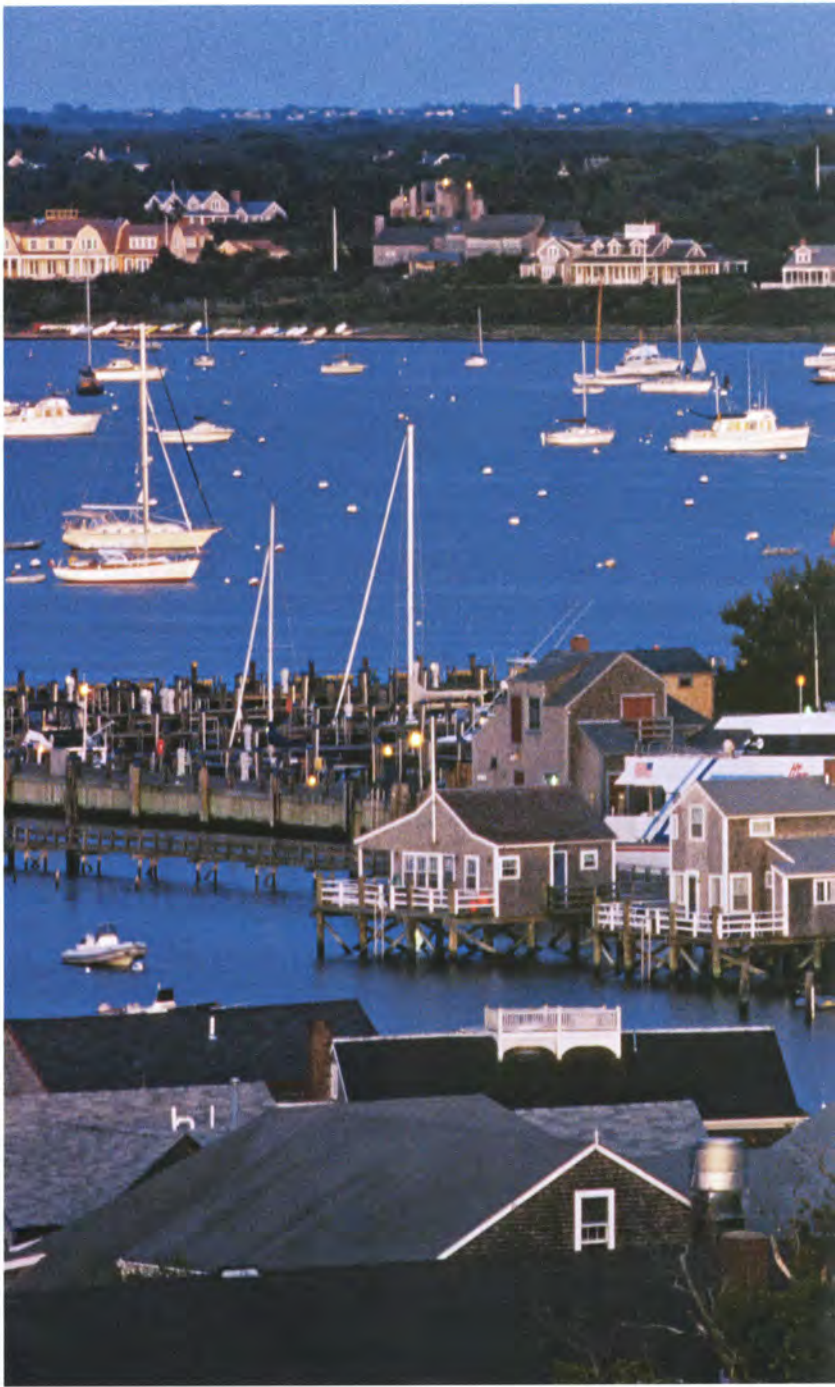
—John Bullein, 1562

Consider also the complexity of building a home in a flood zone. Such homes must have living space, mechanical equipment, and even finished storage areas above the flood plain, each competing for valuable floor space. Significant staircases are often required to access the raised living floors of the house. Incorporation of indoor/outdoor spaces such as porches, decks, sunrooms, and bay windows is important to the success of these plans. When composing exterior elevations, something as simple as choosing window muntin bar patterns is often challenging—the architect must balance historically sensitive exterior aesthetics with modern expectations of wide, unobstructed views. Even issues like the future impact of global warming are planning considerations.

Unconventional construction methods. In buildings set near the water, structural components often must be stronger than they would inland. Wind, water, sun, and corrosive compounds like salt all accelerate building materials’ aging process. Therefore, homeowners must consider not only initial costs but life-cycle costs. Though there are many new materials and construction methods from which designers can now choose, history has proved some “breakthrough” products to be highly useful but others to be pending disasters. Often it’s difficult for even seasoned professionals to discern the difference. The prudent designer experiments with new products carefully, holding back on wide-scale application until long-term field-testing proves them successful.

Here, for the would-be waterfront-homeowner’s perusal, is a (doubtlessly daunting) list of materials and construction methods whose strength, quality, and superior moisture and corrosion resistance mandate their consideration for building by ocean, river, or lake: foundations or piles designed to support substantial weight in soft sands or highly organic or wet soils; floodproof utility installations; sodium-resistant concrete and epoxy-coated reinforcing bars for high-water, salt-laden environments; low-absorption masonry like granite, installed with good flashing, extra reinforcing, and tight joints; galvanic protection for exposed ferrous metals; use of brass, bronze, stainless steel, or certain other alloys for hardware and ornamental metalwork ...

In fact, there’s even more: windows and doors designed to withstand extreme moisture, wind (including hurricanes), concentrated UV rays, and corrosion; structural systems enhancements like rigid frames, sheer walls, or structural steel frames for wind and hurricanes (or stronger roof rafters for deep snow-loads in regions like the Great Lakes); carefully designed and integrated waterproofing, thermal insulation, underlayments, flashings, and caulks to keep running water, water vapor, drafts, and mold out; heating, ventilating, and air conditioning systems designed to deal with increased heat loss and gain, above-average air infiltration, unique zoning requirements, and flood protection; shading to control daytime sun glare; lighting systems designed to control things like interior nighttime reflections or exterior environmental impacts; and extremely rot- and insect-resistant woods (such as those pressure-treated for structural elements, wood species like mahogany or cedar, environmentally friendly wood substitutes such as IPE or Spanish cedar, or composite substitutes for finished trim and siding).



Overwhelmed yet?

Cost. The high price of land, the need for a knowledgeable and experienced design team, and the need to use upgraded materials combine to make building a waterside home an expensive proposition. Additional difficulties—increased transportation costs, limited construction access, and extreme weather conditions—can add incrementally to the more obvious expenses.

The savvy homeowner will make sure that every possible component of the project is thoroughly designed and specified and that the work is competitively bid before construction begins. Though this will add time and expense to the design budget, it should lead to considerable construction-cost savings through efficient design, competitive pricing, a consolidated construction schedule, and minimal change orders.

The history of man’s occupation of the waterfront is the story of a journey

PHOTO COURTESY OF CORBIS



written in wood, stone, and glass—in light and in shadow. Planning a waterfront home is not a voyage for the inexperienced but one best navigated with the assistance of a seasoned and experienced crew—architects, engineers, surveyors, landscape architects, environmentalists, historians, and attorneys who know the waters. Setting sail with an experienced crew is your best assurance that yours will be a well-navigated journey—that you will not be caught on the shoals in a stormy sea. **TME**

Charles F. Hilton, a partner at Hilton-VanderHorn Architects, based in Greenwich, Connecticut, specializes in designing authentically detailed custom traditional residences in Fairfield and Westchester counties and across the northeastern United States. He has designed a wide variety of traditional waterfront residences, in styles ranging from Cabin to Shingle to Georgian to Mediterranean. 203.862.9011; ch@hilton-vanderhorn.com.

THE IDEAL WATERFRONT: Nantucket, Massachusetts, is a magnificent example of centuries of waterfront development. Settled as a remote whaling village that evolved into a popular tourist destination, Nantucket strives to maintain a sense of its history and a balance with nature by controlling development with strict regulations and rigorous oversight. Through sensible individual planning and communal stewardship, destinations like this one can continue to be living examples of man's successful habitation of our planet's waterfronts.