ON THE EAST END OF LONG ISLAND, in the Hamptons, fabled or distinguished houses, including some by Norman Jaffe, the architect famed for using the area’s vernacular language of potato barn and saltbox to create modernist masterpieces, are bulldozed at an ever increasing rate or disfigured by hair-raisingly inappropriate additions. Stephen and Sandy Perl-binder’s 1969 Jaffe house in Sagaponack is still standing after almost half a century but has been raised like a phoenix from disaster after disaster.

In 1970, Architectural Record named it a “Record House,” igniting Jaffe’s career. Seen from the nearest road, now as then, its boxy profile stands distantly against a blank horizon. Beyond lies the Atlantic. The intervening 27 acres of cornfield, pond, meadow, and dunes are the inspired work of the landscape architect Christopher LaGuardia, ASLA, who has worked on this landscape since 1998, when two fierce winter nor’easters chewed out the then-legal beach bulkhead and the dune that the house originally stood on in less than 24 hours. In 2013, ASLA recognized LaGuardia’s work with the coveted Award of Excellence for residential design.
Implicit in the award, and driving the appropriateness of LaGuardia’s work in its Long Island setting, are a deeper recognition of the Atlantic Ocean’s power and the failure of multiple strategies over many decades to contain it and prevent the destruction of a prized shoreline. The wide beaches of pale, fine quartz sand that line the coast from Montauk Point west for 126 miles to Coney Island draw a crucial tourist trade as well as masters of the universe who have built palatial houses fronting the surf. The ASLA Award of Excellence acknowledged not only the supremely beautiful and intelligent landscape sculpted behind that beach, but also what may be a winning strategy: Yield but rebuild. Study and replicate natural process and patterns when possible. Punt extravagantly when it’s not.

About the traumatic events of 1998, Sandy Perlbindner, a filmmaker, says with cinematic flair, “The neighbor’s house was destroyed by the ocean and wind. You could see their English teacups floating out to sea.” The Perlbinders’ own cherished house stood intact, upright, balanced precariously on stilts—the pilings that had anchored it deep in the dune. Together she and her husband, Steve, a now-retired New York City real estate developer, made the bold move to pull the house to safety—the only possible move, given the circumstances, if the house wasn’t going to be torn down. “Officials of Southampton Town met with us as the dune and bulkhead were being washed away and offered to ‘fast track’ a permit to move the house landward if we would not try to maintain the house in its original location,” says Steve.

Within four days of the disaster, the house had been dragged back some 400 feet from the brink on I-beams greased with Ivory soap into what was then a potato field. The existing pool, which once lay 100 feet northeast of the house on the land side, now lies seaward, some 250 feet southwest of the new house location, marking a landscape perpetually in flux. About the choice of landscape architect, Steve says, “After deciding to move the house, we didn’t know who to get. We interviewed several people and had not yet met the perfect choice. A deliberative approach would have been agony for us. We wanted to get going. Emotionally, we needed to start yesterday.” Sandy adds that they needed someone who would replicate the close collaborative relationship they had shared with Norman Jaffe.

This they would find with LaGuardia and his firm, LaGuardia Design Landscape Architects. He had worked for Jaffe for six years in the early 1980s and describes his stint as a long-term apprenticeship. “He was my mentor and master,” LaGuardia says. “For him, architecture and landscape were inseparable. He once said ‘Every building does violence to the landscape.’” LaGuardia was already grounded in modernism, after graduat-
ing from the University of Georgia College of Environmental Design, where John Linley and Catherine Howett, FASLA, introduced him to the modernist pantheon: Halprin, Friedberg, Kiley, Eckbo, and Rose. An internship with M. Paul Friedberg, FASLA, sharpened his skills with pen and ink, and to this day LaGuardia’s fluid drawings are what shape his own designs and drive his practice.

LaGuardia began work immediately while the Perlbinders’ son-in-law, Cristian Sabellarosa, an architect embarking on his career in New York City, drew up plans to enlarge and modernize the 30-year-old dwelling, doubling its original 3,600 square feet with a pair of wings clothed in a silky mahogany and polycarbonate lattice shell. Sabellarosa respected but didn’t imitate Jaffe’s rougher-hewn, cedar-clad vertical masterpiece. Steve notes that throughout the process Sabellarosa “thought of his additions as part of the landscape.” The delicately defined horizontal wings and their outcropping decks have weathered to the color of the surrounding beach grass plantings, nestling into LaGuardia’s masterful grading around them.

The additions help the original structure hunker down. Perhaps not surprising, the other Jaffe project that has meant the most to LaGuardia is the 1971 Harold Becker house, set in a potato field a mile and a half away that overlooks the pristine Wainscott inlet and salt marsh. There, a long enclosing wall running off the upright main block bears the same anchoring relationship to the land as Sabellarosa’s additions to the Perlinder dunes and meadow, although Becker’s poetic, rarely mown mead is now a minigolf course and shaved lawn. Sabellarosa’s doors on the beachfront open into small courtyards below the dune elevation. LaGuardia’s paths of finely crushed indigenous stone lead through the dune to the pool and then to the beach below.

LaGuardia says his aim was to “fabricate a self-sustaining landscape that would develop a natural resistance to the aggressions of the environment.” He explains that “in order to re-create the protective primary dune system that had been washed away, we needed 30,000 cubic yards of soil” to raise the house by 17 feet. Sabellarosa’s first floor terraces were designed to meet the Jaffe house at the original height of the vanished dune. Instead of hauling soil in, LaGuardia found it on site, excavating the cornfield north of the house for its sand and soil mix, which he had graded and separated. “The size and depth of the
The ocean left the house on its pilings. The house was moved back 400 feet.

A $25 million beach replenishment project runs for six miles from Water Mill to Wainscott.

The house stands high between the old swimming pool and the new freshwater pond, anchored by 30,000 yards of soil.
LANDSCAPE AND DRIVE

CLOSE-UP ELEVATION: 1998
pond are directly related to this amount," he says. "We used some for the new house elevation, but most was contoured into low, rolling berms running east–west in an overlapping alignment. We conceived of the site grading as a series of waves rolling in from the sea."

He explains that they had too much soil and not enough sand to create proper duneland. "We swapped some of the topsoil from the site for sand that a local excavating company brought from its own stockpile." The sand that was mined from the pond excavation along with the soil has a brown-gold color and is inorganic. "That's why we capped the berms with white dredged sand from Mecox Bay that is dredged every year for navigation purposes. Not only does it match the beach sand better, it also contains organic material from seaweed and the remains of sea creatures, shells, and other invertebrates. Microbial decomposition continues and provides nutrients for the beach grass without the need for artificial fertilizers."

The rolling horizontal land forms of the meadow, fortified by chevrons of mostly native planting, impose an ancient and sensual stillness on this landscape. "Hamp," as in "-hampton," derives from the Saxon word *hamm*, meaning "water meadow" or "riverside enclosure." When 17th-century English colonists arrived on the East End, they didn't have to clear much of the land because it was already treeless. Those seaside "hamps" in Southampton, Bridgehampton, and East Hampton, which gave the settlements their names, were prized common land used for grazing livestock. Alex Bluedorn, ASLA, a senior associate with LaGuardia's firm and an East Hampton native, calls the Perlbinder project "a refinement of what's here," meaning what's left of that native landscape.

One eminent juror in a competition faulted the landscape because "it took too long" to create. So how long does it take to make a meadow like this? On a walk through the property, along the mowed path that rims the pond, LaGuardia answers calmly, "Oh, about three to four years. First you have to establish a fescue base (*Festuca rubra*). That takes a year to two years. Then the little bluestem (*Schizachyrium scoparium*) takes two years to grow." He has stuck to using only the two grasses. The beauty of the design
lies in its leanness and severity, and LaGuardia hews to that idea in other meadows he has planted. The inconspicuous yellow blooms of the grasses in summer are the only flowers. “Clients ask, ‘how about some cosmos?’ and I tell them, ‘not here.’”

The only formal intervention in the meadow design is an inset lawn panel flanking the path to the main entrance. A flat, silvery rectangle of bent grass (*Agrostis* spp.) is edged with a narrow band of red fescue (*Festuca rubra*), mowed weekly, that creates a transition into the meadow. “Like polishing rough granite” is how LaGuardia describes the transition from the wide, rough meadow to this smooth panel. He views the process as “taming the meadow as it comes toward the house,” the reverse of the figure–ground relationship usually perceived as an outward expansion from a structure into the landscape. The meadow is his main focus. A choice specimen Canadian serviceberry (*Amelanchier canadensis*) by the door is underplanted with black sedge (*Carex nigra*). Lily turf (*Liriope muscari ‘Big Blue’*) runs between the path and the wall of the house. Both the subtle contrast of differing grassy forms and the mowing heights that vary by as little as an inch contribute to the tensile strength and minimalist atmosphere.

Minning the field left a gaping 60,000-square-foot hole that LaGuardia proposed making into a pond. Too big, said the Perlbinders, so LaGuardia began to think how to create the illusion of something smaller. He created an undulating shoreline, drawing out a peninsula here, creating an inlet there to conceal the true size of the expanse, using the turning radius of his Ford Explorer to lay out the curves. “Then I flagged the ruts,” he adds.

The depth of the pond, which was lined with a vinyl waterproof fabric and a foot-deep layer of clean sand, varies from six inches to 11 feet, offering enough volume and surface for natural immersion, a process required to maintain a clean and healthy body of fresh water. Native fish were introduced and are thriving. Emergent and submergent plants were placed in and around the pond to develop a naturalized and sustainable ecosystem. Long Island abounds in what are called “kettle holes,” spring-fed freshwater ponds whose depressions were made by icebergs left behind by the last glaciers that gouged the earth and then melted away. This is a man-made kettle hole, perfectly appropriate to the topography of the area.

Thickets of native shrubs and trees planted to screen views of nearby houses and provide habitat for local fauna (yes, including deer) have grown into billows. The bayberry planted at two feet is now a 12-foot forest. Beach plum, swamp azalea, winterberry, highbush blueberry, and other natives provide food for birds, possums, raccoons, and other animals.

This is not a maintenance-free landscape, however. “The meadow doesn’t want to stay meadow,” LaGuardia says. “The high organic content of Sagaponack’s sandy soil does not lend itself to a sustainable grassland, so the tendency is for pioneer species—bayberry, eastern red cedar—to sprout up right away. We mow the meadow once a year to control this natural succession, baling the hay for use at a local equestrian center.” The Japanese black pines (*Pinus thunbergii*), favored as Eastern Long Island’s perfect oceanfront landscape plant for the past half century, are stressed by soils...
sandier than that of their native habitat and are therefore prone to a fungus carried by turpentine beetles that clogs the pines’ circulation system. “No cure,” says LaGuardia. Torulosa juniper *Juniperus chinensis* ‘Kaizuka’ is the latest evergreen plant now being used for screening as the pines’ replacement. The wiry, dramatic, and hardy native wild black cherry *Prunus serotina* spp., recently back in style and more available in the trade now, also finds a place.

PLANT LIST

**TREES**
- *Acer rubrum* (Red maple)
- *Amelanchier canadensis* (Canadian serviceberry)
- *Crataegus viridis* ‘Winter King’ (‘Winter King’ hawthorn)
- *Juniperus chinensis* ‘Kaizuka’ (Torulosa juniper)
- *Juniperus virginiana* (Eastern red cedar)
- *Malus sargentii* (Sargent crabapple)
- *Nyssa sylvatica* (Black tupelo)
- *Pinus mugo* (Mugo pine)
- *Pinus thunbergii* (Japanese black pine)

**SHRUBS**
- *Clethra alnifolia* (Summersweet)
- *Ilex glabra* (Inkberry)
- *Ilex verticillata* (Winterberry)
- *Myrica pensylvanica* (Northern bayberry)
- *Prunus maritima* (Beach plum)
- *Rhododendron viscosum* (Swamp azalea)
- *Vaccinium corymbosum* (Highbush blueberry)

**GROUND COVERS, GRASSES, PERENNIALS**
- *Agrostis* spp. (Bent grass)
- *Althaea officinalis* (Common marshmallow)
- *Ammophila breviligulata* (American beach grass)
- *Arctostaphylos alpina* (Bearberry)
- *Carex nigra* (Black sedge)
- *Carex pensylvanica* (Pennsylvania sedge)
- *Eutrochium purpureum* (Joe-pye weed)
- *Festuca rubra* (Red fescue)
- *Liriope muscari* ‘Big Blue’ (Big Blue lily turf)
- *Nymphaea odorata* (White water lily)
- *Osmunda cinnamomea* (Cinnamon fern)
- * Panicum virgatum* (Switchgrass)
- *Pennisetum setaceum* (Fountain grass)
- *Pontederia cordata* (Pickerel weed)
- *Schizachyrium scoparium* (Little bluestem)
- *Sedum kamtschaticum* (Stonecrop)

How have this iconic house and landscape fared and what is their future? In recent years, travel to distant parts of the world has made the Perlbinders, thoughtful people and inveterate globetrotters, ponder climate change. “Climate change was not part of our vocabulary,” Sandy recollects. Her husband adds, “But now we have seen the rising sea levels around the world and we’ve seen what is happening to other islands.” He mentions Indonesia in particular.

Natural coastal defense on the Atlantic is made up of a succession of dunes. The ramparts of primary dunes stand next to the beach and are built and retained by the root structure and sand-trapping capability of grasses. Secondary and tertiary dunes, the ones beachgoers hike through (to the detriment of the dunes) to reach the strand, are protected by the primary dunes. Secondary dunes are colonized by shrubs such as beach plum, bayberry, and rugosa rose. Those farthest back from the beach, the tertiary dunes, host larger plants, even small trees, which shelter the smaller plants in their vicinity.

The beach in front of the Perlbinders’ house stretched 150 feet in 1996, according to the architecture critic Alastair Gordon, who wrote the definitive monograph on Jaffe, *Romantic Modernist: The Life and Work of Norman Jaffe, Architect, 1932–1993*. The beach narrowed to less than 100 feet in the intervening decades, and the vital offshore sandbar, in constant motion throughout the year, thinned and opened. “All storm tides routinely reached the dune and caused erosion damage,” Steve says.
According to Stephen J. Kotz, an East End journalist who has chronicled the battle to save the Long Island beaches for many years, a thicket of lawsuits and conflicting opinions had grown up around the wisdom of beach groins and bulkheads by 1996. A plan first conceived in 1962 proposed more than 50 groins along the 83-mile stretch of coastline from Montauk Point to Fire Island. The movement of sand regularly runs from east to west along the coast, so the beaches west of the first groins thinned as the sand that should have drifted to them was captured by the groins.

Property owners used bulkheads to protect their shorelines against future storms. Neighbors, whose first imperative traditionally has been to create an imagined solitude, fought individually to retain their beaches with piles of boulders, rock revetments, concrete and steel bulkheads, gigantic sand-filled tubes, steel plates, and wooden pilings. They fought each other and they fought their municipal governments. They lost.

Recent research indicates that a property with 100 feet of frontage along the beach has been losing an estimated 400 to 500 cubic yards a year over the past several decades. This is equivalent to about 30 large dump trucks of sand removed each year in front of each house. At this loss rate, the seaward dune vegetation line is expected to migrate 80 feet inland over the next 20 years. Properties that have less than 40 feet of vegetation between the beach and structures are most susceptible to storm damage in the next decade.

One BECD advisory board member estimated that the beach-building project will cost beachfront property owners on average an additional $10,000 a year in taxes for every 100 feet of beachfront property. The lion’s share, all but about $1.5 million, which will be covered by Southampton Town, will be paid through a 10-year bond by the owners of beachfront land in the two erosion-control tax districts.

Writing in January 2014 in the East Hampton Star, Kotz reported that oceanfront residents are footing the bill for the $25 million restoration project for the two districts, which lie in separate towns. They have worked together for cost savings, and because, as Aram Terchunian of First Coastal says, “Beaches do not recognize political boundaries.” He notes another significant benefit: “Recent data suggests that project longevity is related to the square of the project length—in this case a six-mile-long project will last four times longer than two three-mile-long projects separated by an unprotected stretch of beach.”

The Perlbinders have been working closely with First Coastal since 1998. Terchunian has been thinking about sand all his life, since he was a
“little surf rat,” and wrote his senior thesis at Lehigh University on nearby Long Island’s Moriches Bay. “Ah, there’s just nothing like sand on a beach,” he says mistily.

But the strategies he and the company have employed for the Perlinders have been stopgap so far: “They replaced the dune after the storms of 1998 in the spring after we lost the bulkhead; again in 2011 after Irene,” says Sandy Perlbinder. First Coastal arrived again after Hurricane Sandy, and “this third time around,” Terchunian says, “we re-engineered with a more resistant core to slow down the ocean’s onslaught.” That core is composed of what are called geo-sand cubes, each one three square feet, filled with quartz sand, and weighing a ton and a quarter. They are manufactured by a Long Island father–daughter company jauntily named Shorebag. Terchunian, who is a can-do kind of guy and is always warily optimistic, has high hopes for the geo-sand cubes, predicting the Perlbinder dune, and many others reconstructed like it along the six-mile stretch, “should be able to weather the mother of all storms.” Tested during Hurricane Sandy, they were effective in a number of locations.

How the cubes work when they are strapped together and sometimes anchored with cables into what remains of the natural dune is well explained on the Shorebag site. “Interaction with solid structures usually results in a net loss of sand. The energy in each wave is just redirected when it hits a solid structure like a jetty or a groin. One area may be safe, but the neighboring areas will suffer. The Shorebag is different. Instead of redirecting the energy of the wave, the Shorebag absorbs it. Once linked and stacked, their porous material and interior sand can absorb the force of the wave and provide shelter for your property behind them. The porous shell allows for the water to actually pass through without weakening the overall integrity of the stacked bag structure. Each diminished wave has less power to carry away your beach. The erosion process stops at the bag.”

Geo-sand cubes were originally conceived as a temporary holding action in disastrous storms. But First Coastal’s new thinking is that they should be kept permanently in place and covered with the replenishment sand. The federal government and the state are on board with that concept and have watched while similar strategies have been employed nationwide. The municipal governments of Southampton and East Hampton are moving slower and are wary, perhaps because so many previous schemes have failed. “[Hurricane] Sandy changed people’s dispositions in a big way,” Terchunian says. While projects similar to the one for the BECD once took up to five years to be approved, Terchunian says, it took only 18 months to get the town, state, and federal permits required.

According to First Coastal’s most recent monitoring report, the Perlbinder beach, with geo-sand cubes in place in the dune, and the replenishment scheme fully implemented, now measures 250 feet wide and is two feet higher to resist storm surge.
Offshore lies a newly augmented monster sand bar that will withstand ocean buffeting to a much greater extent. According to Kotz, Tim Kana, a coastal geologist and the president of Coastal Science & Engineering, said it was anybody’s guess just how much sand will remain in place after 10 years, but that he was confident the current operation will create a solid base on which to undertake future restoration efforts. A key component to the project, he said, is that most of the sand being hauled in will wind up just offshore. “The underwater part is more important than the sand on the shore,” he said, explaining that it provides the first line of defense in a storm.

Sandy Perlbinder says she feels safe now. “Irene and Sandy were more of a nuisance for us than a disaster. Both storms necessitated digging out and refinishing the pool and replacing the pool equipment, but the house was safe in 2011 and 2012.” Given the destruction of 1998, it is not surprising that she thinks this way, but not every homeowner would consider digging out and refinishing the pool and replacing the pool equipment to be just a nuisance. She and her husband are brave and determined people with deep pockets whose willingness to experiment may well pay off for all oceanfront dwellers. In the meantime, LaGuardia has healed the scars of rebuilding the dune this third time around, “massing beach plum and bayberry on the back of the dune in nice long drifts among the beach grass.”

“The shape of the dune is permissive, demanding a structure with a stance of its own,” Jaffe wrote about the house, implying, according to his biographer, Gordon, “an almost erotic relationship between site and architecture.” Again according to Gordon, “Steve Perlbinder put it less discreetly: ‘Norman wanted the house to “hump” the dune. That was his vision.’” But today in the most profound sense, the absorbing Perlbinder drama has ceased to be about the hubris of surmounting or conquering the dune, or about Jaffe himself—who tragically vanished into the ocean in 1993, leaving his pile of clothes on shore—the story is now about a chess match with nature, with all pieces in constant play.

What drew the players together—Jaffe, the Perlbinders, and LaGuardia—was their obsession with a single material. For Jaffe, it was cedar shingle on all exterior surfaces. For the Perlbinders, it is sand, heaped ingeniously and at great and continuing cost, to keep themselves and their family safe for a long while. For LaGuardia it is grass, whether beach grass, the salvation of the dunes, or fescue and little bluestem, clothing the rolling landscape like an ancient coastal plain.

**Project Credits**

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