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Arverne by the Sea



Arverne by the Sea is a planned residential community that features both multifamily condominiums and attached homes sold as two-family stacked units, one for the owner to live in and the second unit for the owner to rent.

PROJECT SUMMARY

Arverne by the Sea is a 120-acre planned community on a previously vacant redevelopment site located adjacent to the Atlantic Ocean on the Rockaway Peninsula of Queens in New York City. The community is situated next to an A-train transit station and will include 2,296 residential units in a variety of building types, including both multifamily condominium buildings and attached two- and three-story structures; many of the units are designed and sold as two-family stacked units—one for the owner to live in and the other for the owner to rent. The community was designed to be resilient in the face of increasing hurricane risks and rising sea levels. The developers brought in more than 500,000 cubic yards of fill to raise the level of the entire site by an average of eight feet, developed a special drainage system to reduce flooding risk, and used a variety of construction materials and design techniques to improve the resilience of the buildings.

QUICK FACTS

Location

Arverne by the Sea
Queens Borough
New York, New York

Project type

Planned community

Site size

120 acres

Land uses

Attached residential, multifamily residential, retail, restaurants, supermarket, parks, parking, YMCA health/fitness center, school (not yet built), transit plaza

Keywords/special features

Resilient design, two-family owner/renter units, affordable housing, workforce housing, transit-oriented development, oceanfront site, beachfront, healthy place features

Website

www.arvernebythesea.com

Project address

6306 Beach Front Road
Arverne, New York 11692

Developer

Arverne by the Sea LLC
Arverne, New York

Development partners

The Benjamin Companies
Garden City, New York
516-745-0150
www.benjamindevco.com

The Beechwood Organization

Jericho, New York
516-935-5555
www.beechwoodhomes.com

Architects and planners

EE&K Architects, a Perkins Eastman company
New York, New York
www.eekarchitects.com
www.perkinseastman.com

Meltzer/Costa & Associates
Great Neck, New York
www.meltzercosta.com

When Hurricane Sandy ripped through the New York area in October 2012, Arverne by the Sea on the Rockaway Peninsula of Queens was about half completed. Located directly adjacent to the Atlantic Ocean, the Rockaway Peninsula was hit hard, and the developers of Arverne returned to the site after the hurricane with considerable trepidation, wondering whether their well-laid plans for the project had been enough to withstand the onslaught. But they also approached the site with some confidence, knowing that they had prepared the development for such an event. In fact, they discovered that Arverne had survived the hurricane largely unscathed, with minimal water and wind damage and no fire damage. The community and building designs and the systems they had put in place, together with strong dunes and a boardwalk along the oceanfront, had allowed the majority of the project to escape the destruction that affected other nearby areas.

But Arverne by the Sea is not just a story about resilience in the face of storms and climate change; it is also a fascinating example of a planned community, an urban redevelopment effort, a transit-oriented development, a healthy place, and an innovative two-family home concept that allows homebuyers to be both residents and landlords. The result is a compellingly attractive and unusual environment for New York City that has attracted many new buyers to the neighborhood.

The Site and the Idea

The 11-mile-long Rockaway Peninsula is a narrow spit of land along the Atlantic Ocean within the borough of Queens in the city of New York, separated from the rest of Queens and from Brooklyn by Jamaica Bay, a large body of water on the southeastern side of New York City. Road access to the peninsula is limited, including access from the west via the Marine Parkway Bridge from Brooklyn; from the north via the Cross Bay Boulevard and Bridge, also from Brooklyn; and from the east via Rockaway Freeway, Rockaway Beach Boulevard, and various other roads from Queens. John F. Kennedy International Airport is directly across Jamaica Bay to the northeast. The site is also served by the New York City A-train transit line to Manhattan, which is only 11 miles to the northwest, as well as by bus and ferry service to Manhattan.

The 120-acre Arverne site is located between the A-train transit line and the Atlantic beaches on the Rockaway Peninsula, about one mile east of where the Cross Bay Bridge connects to the peninsula. The site was largely vacant for many years, and the transit station was little used, as there were few nearby destinations to access from the station. The site is bisected east to west by Rockaway Beach Boulevard, and north to south by three public streets—67th Street, 69th Street, and 73rd Street. The site is longer on the north side of Rockaway Boulevard; it is bordered on the east

by 62nd Street and on the west by 81st Street north of Rockaway, and 74th Street south of Rockaway. The surrounding area includes a number of high-rise affordable housing buildings to the west, older single-family homes to the east, and commercial streets to the north. New low-rise affordable housing has also been developed directly to the east of the site.

The Rockaway area includes numerous affluent neighborhoods to the west, but it also includes many low-income residents and public housing developments and suffered greatly during the crack cocaine epidemic of the 1980s.

The peninsula and the site are very much exposed to severe weather and hurricanes. The Rockaway Peninsula was devastated by Hurricane Sandy, which brought not only water and wind damage but also fires, which burned some 135 homes. The Rockaway beach area includes a boardwalk that runs continuously along much of the beachfront; as of 2014, both the beach and the boardwalk were being rebuilt after Hurricane Sandy. The beaches are especially attractive to surfers.

The idea behind the project was to redevelop this underappreciated parcel of land, located directly between a transit station and the ocean, and to create a middle-income residential community, including retail and amenities, using a two-family home concept that had been commonly used in other parts of New York City for many years. To accomplish that goal, the developers and designers sought to create an iconic design for the project that would distinguish it as a distinctive new place on the peninsula, a new beginning for the neighborhood. Notes Peter Cavaluzzi, principal with EE&K, a Perkins Eastman company, “[We sought] to use a conventional New York City housing prototype as the basis for the design of a unique beachfront architecture that takes advantage of the dramatic setting.”

Development Background and Team

The Rockaway Peninsula has evolved over the years from an early resort area for New Yorkers to an urban renewal area with superblocks and high-rise housing, often low-income housing. In 1968, 310 acres on the peninsula that encompass the Arverne site were designated as an urban renewal area. The city subsequently acquired the property in 1973 and demolished the existing buildings with the intent to redevelop the property.



The community is located on the Rockaway Peninsula, part of Long Island but in New York City, in Queens. The Rockaway Peninsula was severely affected by Hurricane Sandy, but Arverne by the Sea suffered limited damage because of a variety of resilient design features.

However, the 1973 financial crisis put a stop to that, and thereafter the area became an urban wasteland for many years. In the 1980s, the city tried to restart the redevelopment process and brought in developers with plans, which in the end were not well received by the community and eventually died. The city went back to the drawing board, and the area continued to languish and suffer from drug problems throughout the 1980s. Various plans were proposed, including casinos, sports arenas, and “technodomes,” but nothing was started.

Then in the late 1990s, the New York City Department of Housing Preservation and Development began a new redevelopment process, issuing a request for proposals in 2000 that drew new interest from developers. Eight proposals were received, and the proposal from the Beechwood Organization and the Benjamin Companies won out.

The two developers formed a joint venture, Arverne by the Sea LLC, to undertake the development. The Benjamin Companies of New York is a development and management company—founded in the early 1960s and currently employing about 200 people—that develops both residential and commercial properties in the New York region, including New Jersey and Pennsylvania, as well as in Florida. The Beechwood Organization, founded in the early 1980s, is a residential developer focused on Long Island that has developed 55 communities and more than 6,000 homes. The two developers have worked cooperatively on other ventures and came together again for the Arverne by the Sea project.

Gerry Ronski, representing the development team and the development executive in charge of the project, believes that the storm-protection measures and the transit-oriented design were instrumental features of their winning proposal. In addition, Beechwood had relevant experience with oceanfront property in Florida with Hurricane Andrew, and the plan incorporated ideas drawn from that experience. The city also saw the benefit of working with local developers who were familiar with the area.

Though the site and the Rockaway Peninsula had already seen their share of problems over recent decades, more problems were on the way after the request for proposals was released. The events of September 11, 2001, directly affected the Rockaway area in that many

police officers, firefighters, and World Trade Center workers who were killed in that tragedy were residents of the Rockaway Peninsula. The crash of American Airlines Flight 587 into one of the Rockaway neighborhoods in November 2001 brought additional tragedy to the peninsula. However, those tragic events also spurred interest in helping the Rockaway community.

Other ongoing problems were increasingly evident in the years to follow, and new proposals to address them were brought forward during the redevelopment process. For example, according to the New York City Department of City Planning’s report *Going to Market: New York City’s Neighborhood Grocery Store and Supermarket Shortage*, released in 2008, the Rockaway area was one of numerous locations within the city that was underserved by supermarkets offering fresh food. That problem was subsequently addressed in the redevelopment plan.

Approval Process

To proceed with the plan the developers had in mind required navigating a lengthy environmental and public-approval process. To make the plan work, the street network on the site had to be “de-mapped,” as the developers were planning a whole new street system, with fewer through-streets and better orientation to the transit station.

The approval process involved New York’s Uniform Land Use Review Procedure, which sets requirements and time frames for public participation. It also involved an environmental impact statement process, where the endangered piping plover bird species was discovered on site, requiring a plan for preservation that resulted in the creation of the Piping Plover Protection Fund, to which the homeowners associations and commercial businesses must regularly contribute.

In addition, rezoning and designation as an Urban Development Action Area Project site were required. Approvals included certification of the environmental impact statement by the U.S. Fish and Wildlife Service, as well as approval by the local community board; the borough president’s office; the city planning commission; the city council, which required the addition of 256 affordable homes; and the mayor’s office, which gave final approval in December 2003.

The land conveyance agreement was negotiated and finalized in May 2004, followed by

a ribbon-cutting ceremony attended by Shaun Donovan, former secretary of housing and urban development, who was the commissioner of the Department of Housing Preservation and Development at the time.

Development Finance

The site was acquired by the Arverne by the Sea LLC joint venture in phases starting in 2004, allowing the developer to minimize the land carrying costs during the planning phases. The entire site was acquired for \$8.5 million.

The project was financed and built in phases using both developer equity and construction loans from several banks, including Fleet Bank, Chase Bank, M&T Bank, and TD Bank. The total development cost is expected to be around \$969,950,000 at completion; approximately \$678,335,000 had been expended as of summer 2014.

The Super Stop & Shop supermarket received \$3.5 million in tax-exempt financing as part of the New York City Recovery Zone Program. The retail transit plaza was also financed with \$7.5 million in Recovery Zone Bond funds, which were obtained via the American Recovery and Reinvestment Act in February 2009. The YMCA facility is a joint venture between the developer, the city, and the YMCA, with the developer providing about 60 percent of the financing.

Wells Fargo and the Real Estate Mortgage Network are two preferred lenders that offer home loans on site.

Planning and Design

Arverne by the Sea is an unusual set of buildings for the Rockaway Peninsula. It is located in a community that features both high-rise block buildings of brick and steel and older single-family detached homes lined up on streets perpendicular to the oceanfront. Arverne by the Sea consists of low-rise, largely gray and beige two-family houses, with mixed-use mid-rise residential buildings to the west and along Ocean Way, the new main street planned for the last phase. The street pattern offers a strong orientation to the transit plaza and also affords better views of the ocean for more of the units. Notes Peter Cavaluzzi, “We wanted to create an iconic place. That is what makes places successful. One of the key features of the plan was to create direct

visual and pedestrian connections to both the transit station and the beaches.”

Master plan. The site and the plan are bisected by Rockaway Beach Boulevard, one of the main arterials on the peninsula that angles through the site. As part of the redevelopment plan, the city realigned the road, pushing it closer to the rail line and creating larger blocks of land on the beach side of the road.

On the north side of Rockaway Boulevard is the retail transit plaza, located adjacent to the train station on a sliver of land between the train line and Rockaway Boulevard. To the east of the transit plaza is the new Super Stop & Shop supermarket, with surface parking on both sides of the building. To the east of the supermarket is the YMCA building with playing fields behind. And farthest to the east is the Palmer’s Landing townhouse neighborhood, which includes 121 two-family homes (242 total residential units), and the Ocean Breeze mid-rise condominium

buildings, which include 256 units. All of those units are sold out.

On the south side of Rockaway Boulevard are four distinct neighborhoods separated by three streets that align with the existing grid and that run perpendicular to the beach: Beach 73rd Street, Beach 69th Street, and Beach 67th Street. All of the other previously existing numbered streets within the project were demapped and no longer exist, and new angled streets were laid out within each of the four neighborhoods.

The very first phase that was developed at Arverne was on the western side of the southern oceanfront area. The Sands, located on a small rectangular block, between 73rd and 74th streets, includes 46 two-family townhouses (92 total units) facing the numbered streets on both sides. The Sands is the smallest phase in the project. The neighborhood also housed the initial sales center. Notes Cavaluzzi, “The Sands provided the roadmap and DNA for the entire design of Arverne by the Sea.” The Sands was

the only part of the entire site that did not have to go through an approvals process. This first phase established the template for the houses, the open spaces, the architectural design, the landscape, and the overall beachfront atmosphere that would be extended throughout the rest of the site once approvals were obtained for the balance of the development.

Immediately adjacent to the Sands to the east is the Breakers neighborhood, a much larger neighborhood of 133 two-family townhouses (266 total units) on a diamond-shaped block that is bisected by an angled internal street that runs from the southwest corner to the northeast corner of the block, passing around a central green at the center of the block. The street provides a direct line to the transit station. Pocket parks are arranged at both ends of the street that serve as important entry features and also discourage cut-through traffic. Several other shorter internal streets provide seven additional access points into the block from all sides. This

SITE PLAN



neighborhood is also directly across from the Super Stop & Shop supermarket.

Further to the east, at the center of the project directly across from the transit station, is the Tides neighborhood that is yet to be developed and will be the last and most urban phase of the project. Current plans call for a higher-density residential product for the neighborhood, including 900 mid-rise condominiums. However, the developer is still working out the details and may reduce the density and number of units, in part to reduce the construction costs associated with the higher densities, which may not pencil out financially. The neighborhood will have its own central street connecting the retail transit plaza with the ocean, featuring approximately 135,000 square feet of retail and restaurant uses along the streetfront.

The Dunes neighborhood, just to the east of the Tides, is the largest land parcel in the community. As of summer 2014, it was nearing completion, with sales well underway. The neighborhood includes 270 two-family homes (540 total units) arranged in a pattern similar to that seen in the Breakers neighborhood. However, in this case, the central green space is accessible only via sidewalks and is surrounded by townhouses on both sides, not streets. A central street meanders from the northwest corner to the southeast corner, aligning with the transit station, similar to the arrangement on the Breakers parcel. There are nine access points into the block from all four sides. In the northwest section of the parcel is a site reserved for a future charter school.

The development is bordered on the south by a new Beach Front Road, dunes, and a boardwalk and wide beach that were being rebuilt and restored, respectively, as of summer 2014.

At buildout, the community will include 2,296 units: 1,156 multifamily condominiums, 570 owner units in two-family homes, and 570 rental units in two-family homes.

Resilient design features. The first line of defense against storms for the community has been and will continue to be the wide beach, the boardwalk, and the dunes. These three features bore the brunt of Hurricane Sandy and provided considerable protection for Arverne. The developers have worked with the city, both before and after Sandy, to strengthen and build up the dunes along the entire oceanfront of the property. Behind the boardwalk and the dunes, the



ARVERNE BY THE SEA LLC

The Breakers neighborhood includes 133 two-family homes (266 total units) organized around a central park with a playground.

roadway itself also provides storm and flooding protection and includes a sizable stormwater drainage line beneath.

Beyond fortifying those natural and infrastructure barriers, the most important step the developers took to protect the community from storms was to raise the grade of the site. More than a half million cubic yards of fill dirt was brought in to raise the entire site by an average of eight feet, raising most of the site well above the 100-year floodplain. That feature was critical. Because of the relationship to surrounding neighborhoods and existing streets, the Palmer's Landing area on the bay side of the project was not raised as much and was tied into the existing infrastructure, not the new infrastructure, and that is the area that suffered from flooding damage during Hurricane Sandy.

Second, since most of the infrastructure was to be new on the site, the infrastructure was designed and built with hurricanes and storms in mind, including the street plan itself. The streets were set at angles from the beach to reduce the wind's impact on homes during storms. All utilities, including electrical, have been placed underground. The electrical infrastructure includes accessible waterproof transformers, which proved crucial. The electrical systems within the Arverne community were undamaged during Hurricane Sandy, and electricity was restored in the community after power was brought back to the area, well before most other homes in the Rockaway area were back on line. Indeed, the Super Stop & Shop was open shortly after Sandy

and was the only open supermarket on the peninsula for over six months.

In addition, each two-family unit has a storm drain in both the frontyard and the backyard that is connected to an underground drainage system, including on-site retention and large storm drains on each property, and larger storm drains under the streets that lead to an outflow location to the east in Jamaica Bay.

Third, the homes themselves are designed to be weather resistant. Home foundations include wooden pilings that are driven 20 to 30 feet below grade, on which rests an eight-inch poured reinforced concrete slab. With the foundation in place, each home is approximately three feet above the street level. In many cases, the construction team met with materials manufacturers to customize the home construction products to ensure that they would work optimally during severe storms. Double-glazed, low-emissivity, vinyl, single-hung windows (Silver Line Andersen windows) were installed, including glass with a design pressure rating of 50 (standard windows typically have a design pressure rating of 35). Steel framing materials were added for the exterior walls, creating a stronger structure than all-wood-frame structures. HardiPlank siding, including a specially designed system that better secures the siding to the steel frame, was installed. Wind-resistant shingles were installed on the roof, and the developer worked with Owens Corning to determine the best nailing pattern for high-wind conditions. Walls were constructed in panels on site and then tilted into place, resulting

in a much higher quality product, with more efficient production as well. In addition, most units have fire sprinklers for resident protection. Fires were a major source of home destruction in the Rockaways following Hurricane Sandy.

As noted, during Sandy, some flooding occurred in the bayside neighborhoods of Palmer's Landing and Ocean Breeze, with water entering those communities from Jamaica Bay rather than the ocean. The YMCA was under construction at the time and sustained some flooding and wind damage as well, leading the developers to rework some of the building's electrical systems to provide more resilient features.

Residential space. Apart from the mid-rise condo buildings, most of the residential units are arranged as two- and three-level townhouses in buildings with two to five attached units. However, the interesting twist is that most units are two-family units consisting of an owner unit, usually on the first and second levels, and a rental unit, usually on the second or third level. Each two-family unit has two entrances—one for the owner and the other for the tenant; tenants access their spaces via a private stairway. A terrace/deck level is also offered on the third or fourth level, depending on the height of the unit. Frequently, that level also includes a den, and access to that level can be arranged such that access is open to both owner and tenant, or restricted to either the owner or tenant, depending on the design and the owner's preference.

For example, in the most recent phase, the Dunes neighborhood, the 2,233-square-foot two-level Bermuda model includes a three-bedroom owner's residence on the first and



The community is oriented toward the retail/transit plaza, which includes 21,600 square feet of retail space, with an elevated transit station directly behind it.

second levels and a rental unit on the second level. The 2,958-square-foot three-level East Hampton model has the three-bedroom owner unit on the first and second levels and a two-bedroom rental unit on the second and third levels. And the 2,865-square-foot three-level Freeport unit has the three-bedroom owner's unit on the first two levels and a two-bedroom rental unit on the third level. Most units feature nine-foot ceilings on the first floor.

The units are clad in durable HardiPlank fiber cement siding in shades of gray, beige, and taupe. Many units combine traditional double-pitched roofs with single-pitched roofs; the latter allow for open outside terraces. Three basic prefabricated truss systems were used for the roofs and were trucked onto the site.

Covered front porches are offered on most units, as well as single-car private garages.

"The design for the homes," notes Cavaluzzi, "was inspired by the renowned modern precedent Sea Ranch [in Sonoma County, California, developed in the 1960s] with its angled-roof profiles and natural feel. The goal was to create a modern architectural character that felt like it belonged at the beach, inspired by traditional bungalow character used in a more contemporary way." EE&K deliberately avoided more traditional home typologies typically used in new urbanist communities and traditional neighborhood developments.

Roof decks were included in many but not all of the early models, and that feature proved to be very popular. In the final phase, the Dunes, roof decks are included in nearly all of the models.



The community design includes a variety of storm-resistant elements and features, including storm drains in front- and backyards of each two-family unit. Over a half million cubic yards of fill dirt were brought in to raise the grade of the site.

Each two-family unit includes two separate entrances—one for owners and the other for tenants. This attached structure includes four two-family units, with eight entrances.



ARVERNE BY THE SEA LLC

All units feature weather-resistant HardiPlank siding, and many include roof decks with views of the ocean.



The floor plan for the East Hampton unit in the Dunes. The owner's unit is on the second and third levels, and the rental unit is on the first and second levels.

Retail space. At present, the retail space consists of two adjacent parcels on the north side of Rockaway Beach Boulevard. The transit plaza is a 21,600-square-foot shopping plaza located directly adjacent to the transit station along a narrow piece of land between the rail line and Rockaway Beach Boulevard. The design team sought to use the retail to create the appearance of a fully developed new transit station. The retail building forms a curving plaza that leads to the existing sub-

way entrance as if it were designed as part of the station.

Because of the road and rail alignments, the building features relatively deep retail spaces on the west side and increasingly more shallow depths to the east. The plaza is divided in the middle by a walkway and open space, offering transit users easy access from the train station, as well as providing access from parking spaces behind the plaza. Atop the length of the building, the name Arverne by the Sea is spelled out in large letters. Attractive landscaping is arranged along the front of the plaza, which has a slightly concave shape. The building serves not only as a retail center but also as a signature landmark for the project.

Because of the plaza's proximity to the transit station, minimal parking has been provided on site. Parking is located on the street in front of the building, as well as behind the building under the train tracks, which are elevated.

Directly adjacent to the transit plaza to the west along Rockaway Beach Boulevard is the 55,000-square-foot Super Stop & Shop, a freestanding store on its own site with parking on both sides. The building features a reflective white roof and daylighting via skylights and windows to reduce both energy consumption and carbon emissions and thus global warming.

An additional 135,000 square feet of specialty retail and restaurant space is planned for the street frontage in the still-to-be-developed Tides neighborhood, which will feature higher-density condominium housing directly across from the transit plaza.

YMCA and other healthy place features.

Directly adjacent to the Super Stop & Shop, to the west, sits one of the major amenities of the project, a new 44,000-square-foot YMCA facility that includes two indoor pools, a full-court gymnasium, a fitness center, a yoga/dance room, outdoor recreational fields, and a community multipurpose space for youth and family programs. A host of need-based programs is provided, including after-school and college readiness programs, youth employment and job training, child care, and adult learning. All homeowners, and their tenants, receive a free one-year membership to the facility.

Other key healthy place features in the project include the following:

- The community is transit oriented and designed as a walkable neighborhood.
- Numerous attractive parks are featured throughout the project, including a playground for children.
- The beach, boardwalk, and ocean are right next door, offering highly accessible opportunities for recreational activities, including walking, running, biking, swimming, and surfing.
- The Super Stop & Shop supermarket features an array of healthy fresh fruits, vegetables, and other foods that were not generally available previously on the Rockaway Peninsula, an area that had been referred to as a food desert.
- The project has improved safety in the neighborhood and has stimulated revitalization in surrounding areas.

Marketing, Leasing, and Management

Notes Romski, "Arverne was positioned as market-rate housing for middle-income New Yorkers."

It was specifically positioned to appeal to buyers who also wanted to own a rental property that could help pay the mortgage. That latter feature has been used successfully in other parts of the New York City area and has proved to be successful here as well, as the units have been selling at a steady pace, and prices have increased as the market recovers from the recent recession.

The project's name was originally proposed for a community on the site that was developed around 1900, by a man named Remington Vernam. The word "Arverne" was derived and shortened from the signature he frequently used—R. Vernam—and the name Arverne has been used to refer to the area since that time.

Residential sales and marketing. The project is marketed as a beach community that also offers an easy commute to Manhattan and other nearby employment centers. The project marketing uses the tag lines "New York City's Favorite Beachfront Community" and "Love Where You Live." Marketing also emphasizes that the project offers "2-Family Homes with Income-Producing Potential."

The first two-family homes in the project sold for \$395,000 to \$495,000 in 2004. The first two-family phases to sell were the Sands and Palmer's Landing. More recent units are

priced from \$559,000 for a 2,233-square-foot two-family unit (the Bermuda) up to \$1.2 million for the 3,357-square-foot Jamaica unit, with unobstructed views of the ocean.

As noted, most of the residences are two-family units, generally with the larger owner unit located on the lower floors and the rental unit located on the upper floors of the three- and four-level units. This product type is not for everyone, but the developers were able to market the units successfully by emphasizing that the rental unit could generate income to pay the mortgage on the entire unit—an attractive feature for many of the middle-income buyers. The relative affordability of the units in the expensive New York City market was an important feature as well. Buyers in the community include a diversity of ethnic and racial backgrounds. Although many of the buyers work in Manhattan, a number also work in Brooklyn and at nearby JFK Airport.

The community's location on the beach, directly adjacent to a train station connecting to Manhattan, and its incorporation of a new supermarket, retail, and a YMCA with one-year free memberships have also been strong selling points. Another feature emphasized in the marketing was the tax abatement program. The New York City–sponsored Tax Abatement Program for Urban Development Action Area Projects offers ten years of tax abatement on all two-family homes, as well as a graduated tax abatement for another ten years thereafter, excluding the land. The program was needed to help with the redevelopment of an area that had lain fallow for over 40 years.

The project did see sales slow during the financial crisis, but it experienced very few foreclosures during that time. After Hurricane Sandy, sales also slowed but continued, and sales have picked up considerably over the past year. Prices have also risen, with homes that initially sold for \$559,000 now selling for prices in the \$650,000s.

All of the rental units are managed and leased individually by the unit owners.

Homeowners associations. Each neighborhood has its own homeowners association that provides such services as snow removal for streets and sidewalks and lawn care and landscape maintenance for the front of homes and the common areas/parks, as well as common-area insurance and repairs. The homeowners



A 44,000-square-foot YMCA facility features swimming pools, a gymnasium, a ball field, and other recreational amenities.

associations also enforce strict architectural guidelines and homeowner rules. Homeowner fees are approximately \$135 per month. There is no master homeowners association.

Retail tenants. The lead retail tenant in the community is the freestanding 55,000-square-foot Super Stop & Shop, which is located on a ground lease parcel. Within the adjacent transit plaza, tenants include a Chase Bank branch, Dunkin' Donuts, Baskin-Robbins, Subway, Checkers, Mickey's Dry Cleaning, Thai Kitchen, Impressions Salon and Nail, Rockaway Pizza, Breakwater Surf Shop, and a Bank of America ATM. Rents are typically in the range of \$25 to \$45 per square foot.

Observations and Lessons Learned

The investments made by the developers to make the community storm resistant and resilient are the clear and compelling story line for Arverne by the Sea. If not for those investments in resilience, many of the existing homes could have been lost or badly damaged. That in turn would have called into question the viability of continuing with the remainder of the project. Notes Nicholas Masem, senior construction manager for the project, "[In oceanfront settings,] build to the highest standards you can afford."

Although the investments in resilience were clearly beneficial for the community, the infrastructure costs for the project turned out to be much higher than anticipated, which created some financial challenges. One reason was due

to infrastructure approvals required from city agencies. Thus, another lesson is that redevelopment projects involving development agreements should be carefully written such that unforeseen or additional infrastructure costs resulting from government actions can be shared equitably by the developer and government agencies.

Fortunately, in the early stages of development, the developers also experienced stronger price increases than they anticipated. Critical to the success of a large long-term project like Arverne is a measured phasing and infrastructure development strategy that can align infrastructure investments with sales and income. It is also essential for the developers to have the financial staying power to reach the last phase, where much of the profits are made. The development partnership between two experienced developers provided such financial strength, which helped the project survive the financial crisis. In addition, starting with a small and achievable first phase that set a strong architectural identity was a successful first step in launching this large-scale undertaking.

When building to higher standards than normal, it is important to work closely with engineers, contractors, and technical experts before and during construction to ensure that plans are workable and optimal for the site and the project. The developer must seek to anticipate problems that may result from special situations. For example, the combination of HardiPlank siding and the metal studs required a special fastening technique that had to be agreed on.



ARVERNE BY THE SEA, LLC

The developer's investment in resilient and storm-resistant features proved to be both prudent and essential to the project's success.

With redevelopment projects that require public/private cooperation and a long approval process, it is essential to work closely with the community to get its buy-in and support for the plan and the concept. If the community does not support the plan, the approval process can be infinitely more difficult or impossible to navigate or complete in a reasonable time frame. In

addition, the developer considers the city to be a partner in the development and has worked closely with the city and the mayor's team to ensure the project's success.

One aspect that could have been better coordinated was the integration of the transit station and the transit plaza. The renovation of the transit station was largely undertaken independently from the transit plaza development, due in part to the fact that the MTA did not want to reconfigure the station, which would have triggered additional requirements. The designers were able to extend and enhance the train station with the new retail plaza, but a bit more coordination between the public and private sectors might have resulted in an even better design.

The two-family unit concept was an innovative way to create workforce housing for both owners and renters, providing an attractive and relatively imperceptible mix of the two housing types. The concept also allowed the project to achieve a higher level of uniform density using a townhouse configuration. The overall result is a relatively unique residential environment for New York City that has proved to be resilient from both an environmental perspective and a market perspective. And the final phase, with mid-rise condominiums and additional retail and restaurants, should further solidify the strong sense of place that has already been established for the community.



ARVERNE BY THE SEA, LLC

The Dunes neighborhood is the most recently developed and includes 270 two-family homes (540 total units) and a site reserved for a new school.



ARVERNE BY THE SEA, LLC

A bedroom in one of the Grand Bahama units, featuring views of the ocean.

CONSULTANTS AND CONTRACTORS

Civil engineer

Wohl & O'Mara
Staten Island, New York

Infrastructure contractor

C.A.C. Industries Inc.
Long Island City, New York

OTHER RESOURCES

Video

www.youtube.com/user/ULITV

PROJECT INFORMATION

Development timeline

	Year
Development RFP issued	2000
Arverne by the Sea LLC selected as developer	2001
Planning started	2002
EIS certified	2003
Site purchased	2004
Construction started	2004
Phase I completed	2006
Phase II completed	2007
Transit plaza opened	2010
Super Stop & Shop opened	2010
YMCA opened	2014
Expected project completion	2017

Land use plan

Use	Site area (acres)*	Percentage of site
Residential areas	62	51.7
Landscaping/open space	27	22.5
Streets/surface parking	21.9	18.3
Super Stop & Shop	5.5	4.6
YMCA	2.6	2.2
Retail transit plaza	1	0.7
Total	120	100.0

* Approximate measurements.

Residential neighborhoods

	For-sale units	Rental units	Total units	Status
Ocean Breeze	256 mid-rise condos	0	256	Sold out
Palmer's Landing	121 two-family homes	121	242	Sold out
The Sands	46 two-family homes	46	92	Sold out
The Breakers	133 two-family homes	133	266	Sold out
The Dunes	270 two-family homes	270	540	Selling
The Tides	900 mid-rise condos	0	900	Future
Total	1,726 units	570	2,296	

Dunes neighborhood information

Unit name	Owner unit size* (sq ft)	Tenant unit size (sq ft)	Total unit size (sq ft)	Typical sales price
Bermuda	1,557	676	2,233	\$559,000–\$725,000
East Hampton	1,711	1,247	2,958	\$650,000–\$760,000
Freeport	1,882	983	2,865	\$640,000–\$810,000
Grand Bahama	1,566	659	2,225	\$630,000–\$790,000
The Antigua	2,071	1,069	3,140	\$760,000–\$825,000
The Hawaii	1,835	1,285	3,120	\$925,000
The Laguna	1,569	745	2,314	\$640,000
Jamaica	1,836	1,521	3,357	\$1,200,000

* Excluding garages and rooftop terraces.

PROJECT INFORMATION

Other uses/amenities

	Size
Retail transit plaza	21,600 sq ft
Super Stop & Shop	55,000 sq ft
YMCA/community center	44,000 sq ft
School	350-student capacity

Development cost information

Site acquisition cost	\$8,500,000
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Site improvement costs

Excavating/grading	\$8,500,000
Sewer/water/drainage	\$54,000,000
Paving/curbs/sidewalks	\$16,000,000
Landscaping/irrigation	\$11,000,000
Fees/general conditions	\$3,850,000
Total	\$93,350,000

Construction costs

Residential buildings	\$705,000,000
Retail buildings	\$21,600,000
Other uses/amenities	\$28,000,000
Total	\$754,600,000

Soft costs

Architecture/engineering	\$11,000,000
Project management/marketing	\$30,000,000
Legal/accounting	\$7,500,000
Taxes/insurance	\$25,000,000
Construction interest and fees	\$35,000,000
Other	\$5,000,000
Total	\$113,500,000

Total estimated development costs at completion \$969,950,000

Total estimated development cost to date \$678,335,000

Financing information

Debt capital	\$400,000,000
Equity capital	\$519,950,000
Public sector capital	\$50,000,000
Total	\$969,950,000



About the Urban Land Institute

The mission of the Urban Land Institute is to provide leadership in the responsible use of land and in creating and sustaining thriving communities worldwide.

Established in 1936, the Institute today has more than 32,000 members, representing the entire spectrum of land use and development disciplines. Professionals represented include developers, builders, property owners, investors, architects, planners, public officials, real estate brokers, appraisers, attorneys, engineers, financiers, academics, and students.

ULI is committed to

- Bringing together leaders from across the fields of real estate and land use policy to exchange best practices and serve community needs;
- Fostering collaboration within and beyond ULI's membership through mentoring, dialogue, and problem solving;
- Exploring issues of urbanization, conservation, regeneration, land use, capital formation, and sustainable development;
- Advancing land use policies and design practices that respect the uniqueness of both the built and natural environment;
- Sharing knowledge through education, applied research, publishing, and electronic media; and
- Sustaining a diverse global network of local practice and advisory efforts that address current and future challenges.

Patrick L. Phillips, Global Chief Executive Officer

The development of this case study was underwritten in part by the law firm Allen Matkins.



About Allen Matkins

Allen Matkins is a California-based law firm specializing in serving the real estate industry. The firm has more than 200 attorneys in four major metropolitan areas of California: Los Angeles, Orange County, San Diego, and San Francisco. Its core specialties include real estate, real estate and commercial finance, bankruptcy and creditors' rights, construction, land use, natural resources, environmental, corporate and securities, intellectual property, joint ventures, taxation, employment and labor law, and dispute resolution and litigation in all these matters.

Michael L. Matkins, Founding Partner

Michael C. Pruter, Partner

David Osias, Managing Partner

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ULI CASE STUDIES

The ULI Case Studies program highlights and showcases innovative approaches and best practices in real estate and urban development. Each case study provides detailed information regarding the ideas, plans, process, performance, and lessons learned for the development project. Each also includes project facts, timelines, financial data, site plans, photos, location maps, and online videos. For more information, visit the ULI Case Studies website at www.uli.org/casestudies.

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Executive Vice President and
Chief Content Officer

Dean Schwanke

Senior Vice President,
Case Studies and Publications and
Case Study Author

Adrienne Schmitz

Senior Director, Case Studies and Publications

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Online Communications

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