Silver Medal Winner

Via Verde–The Green Way

Bronx, New York

David Sundberg / Esto

This is an expert from:

Inspiring Change

The 2013 Rudy Bruner Award for Urban Excellence

BRUNER FOUNDATION, INC.
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Overview

Submitted by: Phipps Houses and Jonathan Rose Companies
Completed: 2012
Total Development Cost: $98.8 million

Submitted by Phipps Houses and Jonathan Rose Companies, Via Verde (the "Green Way") is a 222-unit affordable housing development in the Melrose section of the South Bronx. The project, completed in 2012, was designed as a model for healthy and sustainable urban living.

Via Verde grew out of two international design competitions that were part of the New Housing New York (NHNY) Legacy Project to create a new standard for affordable housing design. The 2004 NHNY Design Ideas Competition, sponsored by American Institute of Architects New York (AIANY) in partnership with New York City Council and the City University of New York, solicited design concepts for three sites. An exhibit and public programming supported by the National Endowment for the Arts, showcased selected entries at AIANY's Center for Architecture.

Response to this initiative sparked the subsequent New Housing New York Legacy Project, the first juried architect-developer design competition for affordable housing and sustainable development in the city, which addressed a difficult 60,000 square-foot triangular

"THE PROJECT ADDRESSES THE SCALE OF URBAN HOUSING NEEDS WITH A LARGE-SCALE INTERVENTION ALONG WITH A COMMITMENT TO ACTIVE, HEALTHY LIVING." *– 2013 Selection Committee*

brownfield site near the South Bronx's Third Avenue commercial corridor. The NHNY steering committee—comprised of architects, developers, educators, and representatives of city agencies—led the project in partnership with AIANY, the NYC Department of Housing Preservation and Development, the New York State Energy Research Development Authority (NYSERDA), and Enterprise Community Partners. Of 32 submissions, five— including the eventual winning team of Phipps/Rose/Dattner/Grimshaw —were invited to submit more detailed designs. Criteria for final selection included innovative design, economic and environmental sustainability, replicable financing, and ownership models and effective public private partnerships.

The final design by Dattner Architects and Grimshaw Architects includes 222 units of affordable housing (151 rental units and 71 co-op units), and 7,500 square feet of ground level commercial retail and community space. Housing is divided into three linked structures that rise from two to twenty stories and wrap around a central, landscaped courtyard. An entrance on one side provides a secure point of access to the complex and gated courtyard.

The complex features 40,000 square feet of green roof space designed by Lee Weintraub Landscape Architects. A series of interconnected rooftop terraces step up from the courtyard and include a grove of evergreen trees, an apple orchard, and vegetable gardens. A resident-led gardening group managed by GrowNYC meets monthly and offers classes on healthy cooking using produce grown in the garden.

The LEED Gold certified project includes photovoltaic solar panels on the rooftops and south-facing facades. Residential units have large windows, ceiling fans, and multiple exposures for cross ventilation. Day-lit stairways, created using NYC Active Design Guidelines, a fitness center, and exterior gardens encourage physical activity. A *Living Green Guide* with information on energy optimization and healthy living is given to residents when they move into the building.

Via Verde is part of Mayor Michael Bloomberg's New Housing Marketplace Plan and complements other city investment along the Third Avenue commercial corridor. The city's administration helped the development team overcome complex development challenges and fund construction costs. The city convened a joint review committee including key agency representatives that met monthly to address and resolve issues associated with development review and approvals.

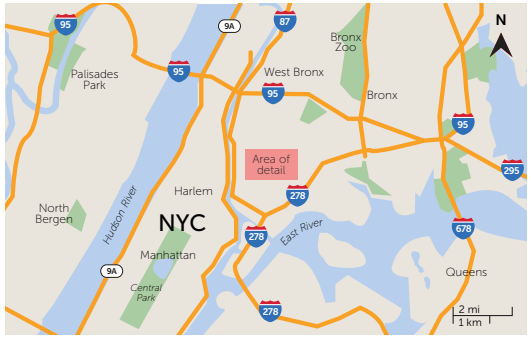
Financing for the $98.8 million project was provided by tax bonds and subsidies that enable the rental units to be affordable to households earning 30% to 80% of average median income (AMI) and the co-op units to be affordable to households earning 70% to 175% AMI.

Via Verde, with its cascading roof gardens and distinctive facade, stands out among the other brick buildings and towers in the neighborhood. It is also an example of a creative approach to the process of affordable housing design and development in New York, one that many hope will portend well for the future.

Photos: David Sundberg / Esto; Ruggero Vanni

Project-at-a-Glance

- The product of a design competition intended to change the way affordable housing is created and perceived in New York City and beyond, by producing housing that was "affordable, sustainable, and replicable."
- A housing complex of 222 units in the Melrose section of the South Bronx that took a difficult parcel and created a series of open green spaces connecting multiple residential buildings.
- An attempt to provide sustainable design for affordable housing that supports and improves the social conditions and health of residents, by promoting physical activity.
- 277,000 square feet of affordable residential space housing an unusual mixture of owned and rental units (71 workforce housing co-operatives, and 151 low-income rentals) within a 20-story tower, 6- to 13-story mid-rise duplex apartments, and 2- to 4-story townhouses.
- Redevelopment of a brownfield site that required significant environmental remediation.
- 7,500 square feet of retail space that contains a Montefiore Medical Center and accompanying pharmacy.



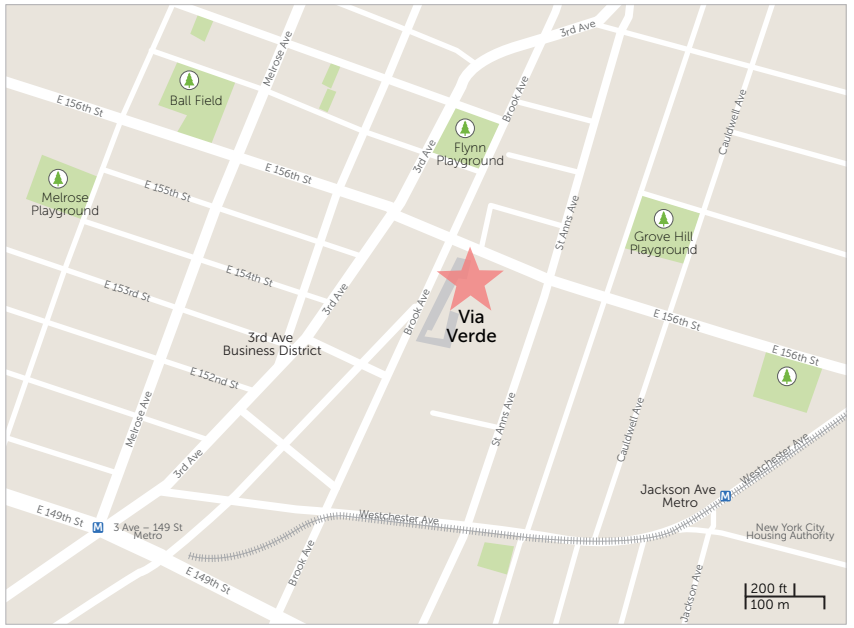


Photo by Ruggero Vanni

David Sundberg / Esto

Project Goals

- Demonstrate the ability to provide creative, innovative design for affordable housing.
- Provide truly sustainable design within affordable housing budgetary constraints.
- Reintroduce urban density to this area of the South Bronx.
- Fill empty space in the local urban fabric, knitting together sections of the community.
- Demonstrate the ability of design competitions to raise the bar in affordable housing design.
- Show that city bureaucracies can work together to support development.

Chronology

Phipps/Rose/Dattner/Grimshaw

NHNY Steering Committee

1960s The Bronx, a historically strong middle, working class and immigrant community, suffers striking decline including abandonment, demolition and destruction of property, and loss of population.

1968 Melrose area designated as part of the original South Bronx Model Cities Urban Renewal Plan. The site is part of what is now the Bronxchester Urban Renewal Area.

1972 The triangular site at the intersection of Brook and 159th condemned as part of urban renewal plan.

2003 The New York Central rail line leading into triangular project site officially declared abandoned by the Surface Transportation Board.

City of New York announces the New Housing Marketplace Plan as part of Mayor Bloomberg's Housing Plan to create 165,000 units in response to severe shortage of affordable housing.

2004 New Housing New York (NHNY) Design Ideas Competition – sponsored by New York City Council, AIA New York and City University of New York - draws 160 entries, with winners announced on February 9, 2004.

2005 NHNY Steering Committee formed to develop a plan for follow-up to 2003 competition.

NYC Department of Housing Preservation and Development offers Melrose site for follow-up competition.

Community meetings & workshops are held in the South Bronx (March-September) to discuss the development of the site identified for the NHNY Legacy competition, including preliminary public workshop sponsored by Bronx Community Board 1 (CB1).

NHNY Steering Committee

Phipps/Rose/Dattner/Grimshaw (tendril image courtesy PD Photo.org)

David Sundberg / Esto

2006 Group of organizations–including the National Endowment for the Arts (NEA), New York State Energy Research and Development Authority (NYSERDA), Enterprise, Citibank, JPMorgan Chase and AIA 150 Blueprint–provide support to AIANY for exhibition to showcase of the NHNY Legacy Project.

NHNY Legacy Project initiates two-step competition process starting with a Request For Qualifications (RFQ), officially launched at a press conference in June. A kick-off event held at the Center for Architecture is attended by more than 300 architects and developers.

Five finalists are chosen in July after detailed review of 32 responses and asked to submit more detailed proposals by December.

A second workshop is held in South Bronx in September, sponsored by CB1, shortly after the five finalist teams are selected.

2007 Phipps-Rose-Dattner-Grimshaw (PRDG) named winning architect-developer team. "POWERHOUSE: New Housing New York" exhibited at the Center for Architecture.

2010 Construction begins.

2011 Certificate of Completion (COC) issued by the New York State Department of Environmental Conservation for environmental remediation.

2012 Ribbon cutting with Mayor Bloomberg.

Tenants move in.

Project Description

Neighborhood context

"Via Verde (the "Green Way") is a 222-unit affordable housing development in South Bronx, New York, designed as a model for healthy, sustainable and affordable urban living. Via Verde grew out of two international design and combines subsidized and market rate housing in rental and coop-units, along with 7,500 square feet of ground level commercial retail and community space. Housing is divided into three linked structures that rise from 2 to 20 stories and wrap around a central, landscaped courtyard, with a series of interconnected, cascading rooftop terraces that step up from the courtyard and include a grove of evergreen trees, an apple orchard, and raised vegetable gardens. This LEED gold development was the first new site using NYC Active Design Guidelines for healthier living.

HISTORY AND VISION

At the turn of the 21st century the need for affordable housing in New York City was large and growing but there was little response from local architecture firms, in part because of their resistance to working within the City's convoluted development and approvals process, as well as the limited budgets that constrained creative designs. Via Verde is the product of a series of design competitions which attempted to bring creativity and innovation back into the process and provide a model for future designs. The vision was to create housing that fit its community and urban context, integrated sustainable features into affordable design, and was replicable in plan, construction and cost.

Via Verde's design was all the more difficult because of its site – a narrow, triangular lot incorporating a significant change in grade. The designers' vision was to wrap a series of buildings ascending in height around a central courtyard and to use the top of each building as a

green roof, providing a stepped path of outdoor space and living plant life leading a resident from the ground level up to the seventh floor.

Local political leaders and planners see Via Verde as a model for future development, particularly with its atypical mix of rental and co-op units in the same development. New ownership units are in short supply in the South Bronx. Moreover, Via Verde's density is seen as an important feature. Given the extreme shortage of affordable housing in New York City, public and private developers recognize the need to focus on larger and denser developments. Via Verde represents an attempt to demonstrate that such density can be accomplished in a mixed-income development, using high quality design to overcome some of the problems of the past.

CONTEXT

The Bronx

The Bronx, the northern-most of New York City's boroughs, has been a part of New York City since the middle of the 19th century. It is one of the most densely populated counties in the country, even though almost a quarter of it is open space, including places such as the Bronx Zoo and Botanical Gardens. Since its evolution from a rural area to an urban community in the late 19th and early 20th centuries, the Bronx has always been home to immigrant groups – first European, then African-American and Latino – especially Puerto Rican, Dominican and Jamaican. According to the 2000 census almost one third of the population of the Bronx was foreign born.

In the last three decades the Bronx, and the South Bronx in particular, has been viewed as a poster-child for urban problems and blight. It was a site for many classic 1960's and '70's urban development and renewal projects, as it was sliced and segregated by highways and dotted with massive public housing projects. In the 1970's the Bronx was plagued by a wave of arson and the phrase "the Bronx is burning" was etched into the minds of many New Yorkers

While the Bronx has improved since those days, in many ways it is still in difficult shape. The Bronx has the lowest rate of homeownership of any of the five boroughs, or of any county in the state, and is one of the poorest counties in the country. Moreover, it is in many ways experiencing a public health disaster, named in 2010 the unhealthiest county in New York State, as it undergoes an epidemic of obesity, asthma and diabetes, especially among its youth.

Melrose

The Melrose area developed in the late 19th and early 20th centuries as a working class enclave but suffered significantly during the borough's decline in the 1960's and '70's. Its population reached

Typical recent residential development in the area

50,000 in the 1920's but declined to 21,000 in the 1950's. During the fires and abandonment of 1960's and 70's, it dropped below 10,000. Population levels have grown along with the development of new housing units in the past ten years, reaching about 30,000 people by 2013. According to the New Housing New York Offering Package, residents are largely Hispanic (71%) and African-American (26%) with a median household income of $17,050 – just over half that of the Bronx as a whole. The borough continues to be a popular site for immigrants, as about a quarter of its population is foreign born.

The neighborhood surrounding the Via Verde site is at the convergence of three urban renewal areas. Over the last ten years a significant number of affordable housing units have been constructed in and around Melrose – including some LEED certified projects – resulting in an increase of almost 4,000 units, mostly on properties that the city took over through tax defaults in the 1970's and 1980's. Additional sites are being considered for mixed-income developments. In their more optimistic moments, area leaders consider the last twenty years of development and gentrification in Harlem as a possible model. However, for the time being, no new housing is being built in the South Bronx without significant subsidies, other than a few small-scale exceptions, and almost all new housing developments include a significant affordable component.

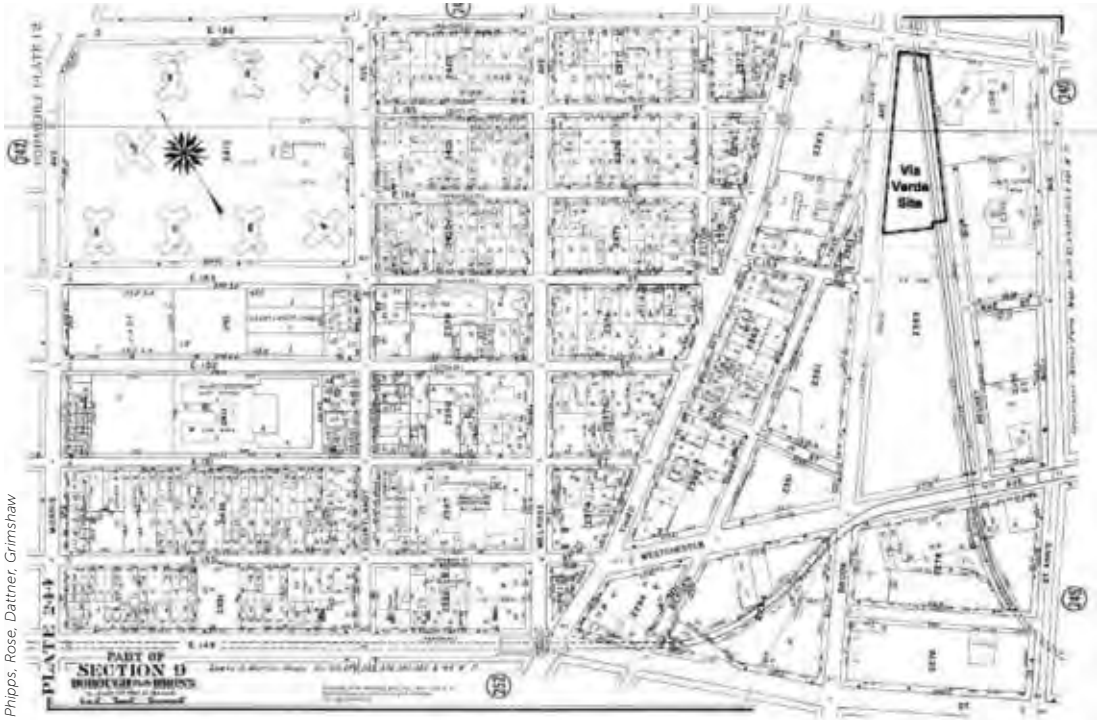
While the neighborhood has experienced decades of deterioration and depression, it also has strengths. Yankee Stadium and the Bronx Courthouse are within walking distance. The HUB – a vibrant retail district that has remained strong for decades – is just a few blocks away. The city has made investments in reviving retail on 3rd Avenue, one block west of Via Verde. While a large number of new affordable housing units have already been built nearby, land costs remain relatively inexpensive.

Overall the South Bronx, and Melrose in particular, have been among the areas most affected by the Bloomberg administration's New Housing Marketplace Plan. Introduced in 2003, the plan established a goal of preserving or creating 165,000 units of affordable housing by 2014 in response to the projected growth of city population, much of which consists of new immigrants.

The Site

The property on which Via Verde was built was originally developed with three buildings in 1908, and was part of the New York Central and Hudson River Railroad Company's freight yard. It also had a gasoline station through the 1970's and a provisions facility. It was vacant for almost thirty years until cleanup and construction began for Via Verde. Brook Avenue is largely lined with buildings that are the back end of stores fronting on 3rd Avenue.

Looking towards Via Verde from 3rd Avenue (left), residential development



Phipps, Rose, Dattner, Grimshaw

Google maps

NYC Department of Housing Preservation & Development

Clockwise from top: Brook Avenue, Sanborn map illustrating site, before/after photographs of site, map illustrating nearby businesses and transit stops

PROJECT HISTORY

Two Competitions

Via Verde is the product of two architectural competitions that were a response to declining federal support for housing at the onset of the 21st century, which contributed to a significant shortage of affordable units in New York City. The first New Housing New York (NHNY) Design Ideas Competition was sponsored by the NYC City Council, AIA NY and City University of New York (CUNY) in 2004. It sought ideas to raise the profile of affordable housing design, focusing on three sites in New York City. One hundred and sixty submissions were received and nine winners were selected (first, second and third place for each of the three sites), judged on quality, coherence, innovation, sustainability, transferability, viability and economic efficiency.

This competition was viewed as successful – perhaps too successful– in that it generated not only excitement but also expectations that these proposals would be built, followed by disappointment at the recognition that they were concepts not intended for construction. In response to the heightened interest in affordable housing that it generated, however, efforts began for a follow-up competition that would involve a real site and a serious intention for completion. In 2005 a NHNY (New Housing New York) Steering Committee formed, which developed plans for a Legacy project to carry forward ideas from the 2004 competition as criteria for affordable housing projects that would be implemented.

The process this committee created was considered innovative in several ways. To reduce the time and expense of competing, the committee instituted a two-step process for the competition, beginning with an open Request for Qualifications (RFQ) to allow many entries to be submitted and reviewed at minimal cost and effort. A short list of finalists would be selected to receive a Request for Proposals (RFP) that required submission of a more detailed design proposal along with a $10,000 stipend for each finalist team. The RFP was unusually flexible and non-prescriptive, to encourage the most creative responses.

The RFQ was issued in spring 2006. Thirty-two teams responded and a group of five finalists were selected to respond to the RFP. This process was made real by the availability of the Melrose site provided by NYC HPD. The site was seen as difficult, with environmental issues resulting from its past use by a manufacturing foundry, railroads and a gas station. Additionally, it had a significant slope down to a below grade abandoned rail site and a narrow triangular shape which, in the language of the committee "offered a variety of exciting design parameters." The New York State Department of Environmental Conservation (DEC) provided a Brownfield Assessment Grant to identify the level of environmental issues and remediation needed.

The goal of this competition was to not only develop a design that could be built, but also one that could fundamentally change expectations for affordable housing in the eyes of the general public and, more specifically, the New York City Department of Housing Preservation and Development. They hoped that the winning project would have a design worthy of serving as a model for the next generation of social housing in New York City.

Once the five finalists were chosen in July 2006, Bronx Community Board 1 (CB1) organized community meetings that allowed the designers to hear from local residents about what they hoped to see in this significant new neighborhood project. CB1 managed this function in

an area that lacked community-based organizations and in lieu of an actual tenant group, since residents would likely come from all over New York City, and would not necessarily be from this neighborhood.

Nevertheless, the consensus of those involved – including CB1 – was that these meetings were thoughtful and valuable. Cedric Loftin, president of CB1, was excited by the level of sophistication of the comments, the cooperation among city agencies, and the communication with the developers and designers which, he said, continued throughout the project. Among the items noted by residents in these meetings was the need to provide ownership options so that young people who achieve success would not be forced to move away from the neighborhood, while at the same time noting a desire to make units available to very low income people. They also asked for mixed income housing that offered a variety of amenities and services, and for green and sustainable features, including alternate power generation and open, green space.

One focus of the Request for Proposal (RFP) was to create housing that had a density considered more appropriate for an urban site. Most recently completed HPD projects were of a much lower density, more like townhouses or brownstones in scale, and planners felt that low density ran counter to the urban character of New York City. Moreover, the majority of easily developed sites were already occupied, leaving the most challenging ones. The site in question was considered very difficult, even unworkable, in part because of a very narrow footprint, limited even further by setback rules, allowing very little space to work with.

NHNY Steering Committee

Unlike most earlier housing RFP's issued by the city agencies which were highly prescriptive about design requirements, this competition only identified a specific site along with a general set of values and goals.

Final design proposals were evaluated by a jury that included architects, social scientists and city officials, two of whom, Shaun Donovan and Adolfo Carrion, went on to become cabinet members in the Obama administration. The criteria for selection included affordability, sustainability, design excellence and ability to be replicated. The jury discussed concerns such as the density and aesthetics of the design within the context of this neighborhood and community. Several subcommittees reviewed specific aspects of the design in more detail. The review process ultimately led to the selection of the architect/developer team of Phipps/Rose/Dattner/Grimshaw as the winning entry.

ORGANIZATIONAL HISTORY AND LEADERSHIP

Via Verde is the product of an ad hoc collaboration of the Jonathan Rose Companies, a for-profit development company, and Phipps Houses, a 100-year old non-profit housing developer. These organizations responded to a design competition for the site that was sponsored by American Institute of Architects New York (AIA NY) and New York City Department of Housing Preservation and Development (NYC HPD), and had support from the highest levels of New York City's administration as well as from political leadership in the Bronx.

Jonathan Rose Companies was founded on the notion of merging green and affordable design. They describe their mission as one of leading "transformative change by creating green urban solutions as replicable models of environmentally, socially and economically responsible plans, communities, buildings and investments." Jonathan Rose Companies sought Phipps Houses as a partner in the development of the proposal for the competition because of the respect the organization engenders from decades of involvement in affordable housing as "the oldest and largest not-for-profit developer, owner, and manager of affordable housing in New York City." Jonathan Rose had a previous relationship with Dattner Architects and brought in Grimshaw Architects because of their reputation for innovative green design in Europe. Lee Weintraub Landscape Architecture was added to the design team because of the centrality of open space design to the project.

A key innovation aimed at easing the process by which the developers would work with city agencies was the creation of the Joint Review Committee (JRC). The JRC was made up of representatives of the Competition Steering Committee, developers, designers and a number

Phipps/Rose/Dattner/Grimshaw; tendril image courtesy PD Photo.org

The concept of a plant "tendril" growing up towards the sun formed the basis for the design

of city agencies – including HPD, NYSERDA, and the Department of Buildings – so that needed approvals, variances, and interpretations could be reviewed and acted upon quickly. The JRC successfully lowered frustration levels and reduced turnaround times for decisions from city agencies from weeks or more to hours. This group has not continued to meet since Via Verde was completed, although people from some of the departments say that the personal relationships that were developed in these meetings have continued and have made communication easier among departments about similar issues.

DESIGN AND DEVELOPMENT

Building and Site

The central design metaphor of the winning Rose/Phipps submission which resonated with the jury compared the building to a tendril of a living plant winding around and climbing upwards from the street towards the sun. That concept, which was largely maintained throughout the development of the design and construction of the project, was translated into a series of connected structures that wound around a central courtyard and stepped up from low- through mid-rise to high-rise buildings, with each step providing open space for a green roof.

BROOK AVE

BERGEN AVE

Phipps/Rose/Dattner/Grimshaw

Via Verde – The Green Way

Phipps Rose Dattner Grimshaw

Floor Plan – Level 4

Maps by Phipps/Rose/Dattner/Grimshaw

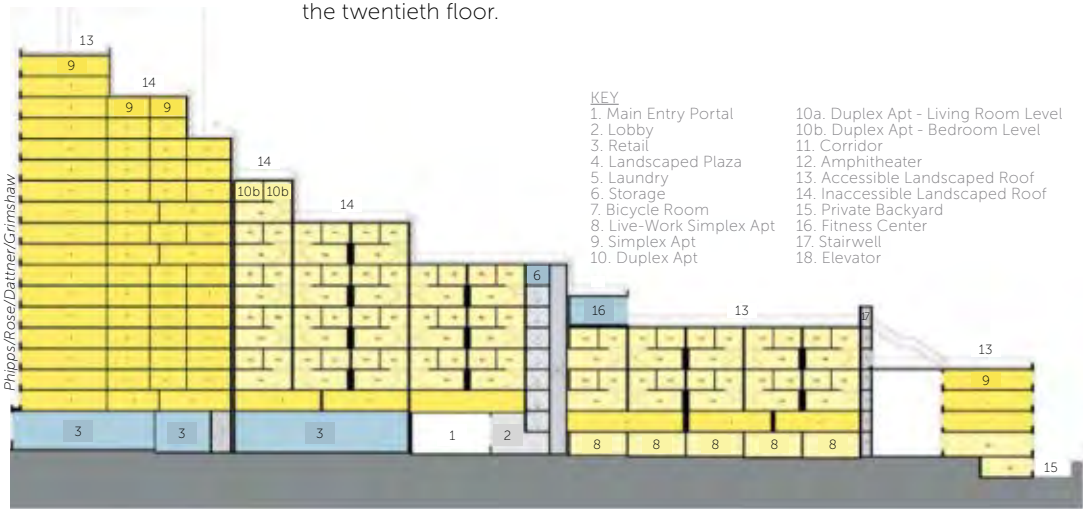
Via Verde – The Green Way

Floor Plan – Level 1

Phipps Rose Dattner Grimshaw

Via Verde was designed to increase overall density to a level seen as appropriate for an intensely urban neighborhood, while at the same time increasing the quantity and quality of outdoor spaces that would be available to residents. The massing of the project responds to the buildings surrounding the site, such as the low-rise buildings along Brook Avenue and 3rd Avenue and the 18-story tower of the New York City Housing Authority's Bronxchester Houses immediately to the east. Hence Via Verde's tower is similar in scale and placed closest to the tower at the north end of the site.

The green roofs incorporate a series of connected, habitable garden spaces that step up from the courtyard to the seventh floor and are designed and programmed for a variety of uses. They include an amphitheater, fir (evergreen) tree grove, an orchard with apple and pear trees, a vegetable garden and a landscaped terrace adjacent to the fitness room. An additional terrace provides outdoor access from the twentieth floor.



Phipps/Rose/Dattner/Grimshaw

Clockwise from top: community garden, fir tree grove and fruit tree orchard, fitness garden, building section

Designers envisioned the rooftop gardens serving some of the same function as the traditional "tar beach" of roofs and older brownstones and apartments in the area, while the doorways and exterior stairs leading up to the second and third floor walkups of co-op units were seen as reminiscent of classic New York City apartments stoops. On some of the higher rooftop gardens railings were increased in height and pulled back from the building edge with a wide parapet to make users feel safer.

A paved, interior courtyard connects the buildings and includes a small play area for children with a rubberized surface and a terraced, outdoor amphitheater with steps leading to the first roof terrace that includes the evergreen grove.

The entry was placed at the midpoint in the building along Brook Avenue where it would serve both owners and renters. All residents enter through a common security office in the center of the block on Brook Avenue. Residents use security cards for entry, while guests need to register with the security guard. From there, rental tenants turn left, exiting the lobby to walk through a covered walkway to the tower lobby. Shareowners turn right to the elevators or walk outside through the courtyard to doors to their units or to exterior stairways leading up to entries.

The entrance and courtyard are designed to allow access for a ladder fire truck. A metal gate alongside the building lobby spans the broad open entry between Brook Avenue and the courtyard. The gate, which is kept locked, illustrates the conflict between the need for security in the South Bronx and the desire to provide visual and physical access to the surrounding community.

Clockwise from top: Courtyard view looking towards amphitheater, Brook Avenue building entrance, locked gate, view across courtyard to tower, building entrance

Unit Design

To make the most of the site's narrow footprint, the designers utilized a variety of unit types, including single floor apartments, two-story duplexes units and townhouses. Duplex units in the mid-rise building facing Brook Avenue are entered off an internal, double loaded corridor. The entry level floor of each unit has one exposure and contains an open living room/dining room/kitchen area and powder room. Stairs lead to the upper level that contains bedrooms and a full bathroom and spans the building block, providing two exposures. There are 74 two-bedroom and 17 three-bedroom apartments.

The residential units include several features that are unusual for HPD projects. These include open living areas, with no wall separating the kitchen from the living room. The open kitchen, which required approval by the JRC, is intended to make the room look larger and better fit modern expectations and living styles.

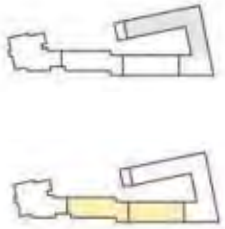
Most units have at least two exposures for natural ventilation; none contain air-conditioning units, per specifications in the RFP. The architects hoped to minimize the need for air-conditioning by providing improved ventilation, through the use of cross ventilation, higher than normal ceiling heights and ceiling fans. Trickle vents at the windows provide fresh make-up air during the heating season. Each unit is provided with a floor level opening in the living room wall where a window air conditioning unit can be installed. These openings are covered with interior insulated boxes to minimize heat loss.

Top: Living room and interior stair in co-op duplex unit
Next page: Co-op unit kitchen and bedroom
Floorplans by Phipps/Rose/Dattner/Grimshaw; Photos by Ruggero Vanni

2 Bedroom Simplex

Upper Floors

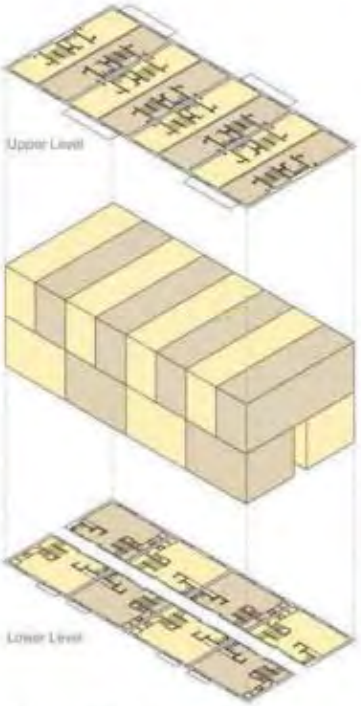
Upper Floor Level



Lower Floor Level

2 Bedroom Duplex

Upper Floor Level



Diagrammatic Axon

The larger rental units have washer/dryers in the unit. The remaining studio and 1-bedroom rental apartments make use the first floor laundry room. All co-op units have washer/dryers as well as upgraded stainless steel appliances.

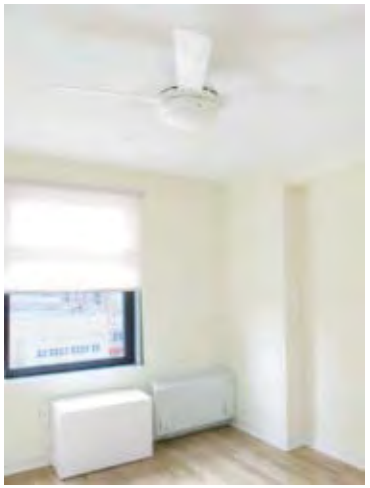
Construction

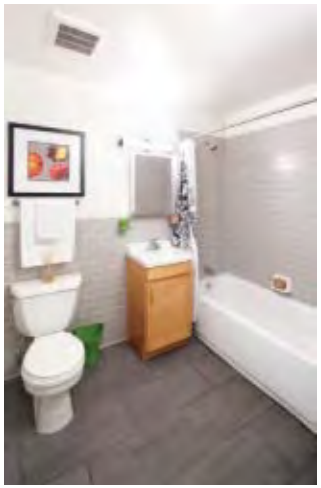
Via Verde incorporates a variety of construction methods. The high-rise residential tower uses conventional cast-in-place concrete construction. The low and mid-rise buildings use a block-and-plank structural system. In the mid-rise structure the masonry, load-bearing walls were turned ninety degrees so that they are perpendicular to the street, in order to create a more open façade with larger windows.

The aesthetics of the façade were important, given that one of the goals was to change the look and perception of what was possible in public housing. Designers tout the exterior rain screen that clads all the buildings as innovative for affordable housing. The panelized system which includes insulation, moisture proofing and windows along with the cladding, was factory-built and delivered to the site in modular sections. Cladding is mostly metal, with subtle variations in color, which gives Via Verde a modern and reflective appearance. The brick base, horizontal bands of matte-finish concrete with colorful wood accents at the windows, further enliven the facade. Of the many thousands of units built and managed by Phipps, this is the only building without a brick façade. The rain screen façade lends an interesting and varied visual perspective that changes appearance depending on lighting conditions.

Additional façade features include balconies and sun screens. Balconies largely face the interior courtyard and in some cases were used to provide an additional egress as required by fire code. Additional street-facing balconies were included in the original design to provide sunshading, but these were eliminated in the final design, replaced by small projecting metal sunscreens to provide shading during the summer season.

Via Verde would not have been possible without variances and exclusions from codes and rules. The most critical variance provided relief from the required 30 foot setback to the next property line. The waiver allowed the designers to reduce this setback to 15 feet – requiring a 30 foot distance between Via Verde and the next adjacent structure instead of the property line. This provided the square footage needed for the building's unique footprint and tendril-like design. The developers also asked for and received a variance on the maximum density allowed, as the proposed design exceeded HPD rules. The JRC





Photos by Ruggero Vanni

Left to right: work space in living room/dining room/kitchen, insulated box for owner supplied air conditioning unit, bathroom (all co-op units)

David Sundberg / Esto

indicated early on that such an increase in density could be approved. In addition, Mayoral approval was provided to eliminate the requirement for on-site parking for residents, which was seen as a cost-saving and sustainability issue. No resident parking spaces are provided.

Developers and architects set themselves a goal of keeping the final plan as close as possible to that which was submitted and awarded in the competition. There were some changes, such as switching some roof space from actively programmed to holding photovoltaic panels, but the unique racking system helped them to increase the number of panels with little impact on usability of the roofs.

Other than some tradeoffs in materials due to costs–such as more use of metal and less of wood on the exterior panels, the designers feel that they accomplished most of their goals, particularly with respect to the major design decisions, and avoided the significant loss of design features that often come with value engineering, in part because of the strong support for this project from HPD.

David Sundberg / Esto

Clockwise from top: Brook Avenue entrance and facade, looking across building towards Manhattan, courtyard view

Sustainable Design

From the start, there was an intention to create a sustainability plan that was fully integrated into the design, rather than aimed at gaining LEED points. To that end Bright Power was brought in as an energy consultant early in the design process to help plan the photovoltaic systems, analyzing potential savings of design features, and assessing requirements for LEED, ASHRAE and Enterprise Green Community programs. Bright Power was impressed by the level of green features that were proposed within the budget constraints of an affordable housing project, and by the degree to which the final design adhered to those goals.

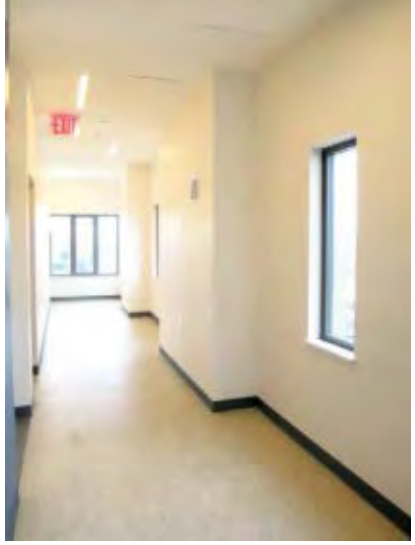
The project received LEED Gold certification and includes: the following noteworthy features:

Brownfield remediation. The below grade site suffered environmental problems from its previous use as a gas station as well as from the immediately adjacent rail line. Analysis found "elevated concentrations of organic solvents and petroleum-related compounds... detected in the soil, soil vapor, and/or groundwater" related to its use as a gasoline station. There was also evidence of polychlorinated biphenyl ("PCB"), heavy metals, and semi-volatile organic compounds ("SVOCs") that could be related to the rail yard usage. The remediation strategy entailed excavating and disposing of soil from the site; using clean fill, barriers and caps to keep other materials in place; and using chemicals to oxidize shallow ground water sites.

Green roofs. As noted earlier, the green roofs were core to the initial design concept and became a central organizing feature of Via Verde's design. An important goal was to maximize open and green space on site by creating a courtyard and by using the roofs of the building as green space. This approach provided the multiple benefits of added rooftop insulation, rainwater recapture, space for photovoltaic panels, green space for several kinds of plant life – including a grove of fir trees, an orchard with apple and pear trees and a vegetable garden – and outdoor walking and sitting space.

Photovoltaic panels. Mid- and high-rise towers are often poor choices for photovoltaic panels, since the available roof surface is relatively small compared to interior living space. Via Verde was able to maximize the number of panels installed by using the stepped, multiple roof design which added horizontal and vertical surfaces. Moreover, it made use of an innovative and custom built rack system for the panels that allowed them to be hung at angles that were optimal for electrical power generation while minimizing the degree to which the panels shaded each other. Several more panels were added late in the design process to reach the 2.5% of total power usage required for LEED points, accounting for 15 to 20% of all common area power needs. Use of solar energy is supported by the unobstructed views to the south, in the direction of a high school football field. There are 288 total panels on various horizontal and vertical surfaces producing a maximum 66 kw of electricity, which is estimated to save $12,000 annually in electrical costs at 2013 rates.

Indoor Air Quality (IAQ). Improved IAQ relies on a smoke-free environment, extremely low use of VOC emitting materials, good ventilation, and tight seals in the building and individual residential units. Public spaces have active air exchange systems with heat recapture.



Clockwise from top left: Rooftop photovoltaic panels, day-lit hallway, entrance lobby monitor displaying solar energy production and use, rain water collection

Rainwater Capture. Rainwater is channeled from roofs and harvested in barrels for use in rooftop plantings except for the vegetable garden.

Active Living by Design. Via Verde was one of the first buildings in New York to make use of the *Active Design Guidelines*, "a manual of strategies for creating healthier buildings, streets, and urban spaces, based on the latest academic research and best practices in the field," published by the New York City Department of Health and Mental Hygiene in 2010. The purpose is to use design to support increased levels of physical activity, in response to very high levels of related diseases including obesity and diabetes, both of which are a major problem in the South Bronx. These guidelines encourage the use of stairs over elevators by making stairways open, attractive and well-lit with electrical lights and daylight, and by placing them in prominent positions where they are encountered before elevators. They also encourage providing space and paths to increase walking. All of these techniques were put in place in Via Verde and secured LEED points for "innovation". Examples include the paths up to and through the green roofs and courtyards, with the fitness room serving as an endpoint "punctuation" to the climb up to the seventh level of the roof gardens. The laundry room for the high-rise tower units was placed at ground level, rather than in the basement, specifically in response to community comments and suggestions, with direct access to the courtyard space, to encourage activity and socializing while clothes are washing and drying.

Temperature Sensors. All areas in the building, including each apartment, have temperature sensors that provide feedback to the heating system so that heat is supplied as a response to actual conditions and not just preset times, as is common in large housing projects. Residents do not pay for heat, which is supplied by a central, gas-fired hydronic system, but do pay for their own electricity use. Blower door tests showed the building enclosure to be very tight.

City officials see the green, sustainable development aspects of Via Verde as spectacular and believe they provide a welcome setting for residents of affordable housing. The usable interior stairways represent a positive demonstration of concept. The ability for people to move their way up the roofs, enjoying changing views and providing new perspectives, is unparalleled.

ACTIVITIES AND PROGRAMMING

The most significant community activity at Via Verde involves gardening. The gardens are envisioned as taking on the tradition of the classical community garden or casita that was common in this neighborhood, and are viewed as a place where people from the different kinds of housing can meet. The garden club, in its initial year, included 20 families – both parents and children – and participation is increasing. Gardening activities are managed by GrowNYC, which seeks to establish green spaces, provide social opportunities, and educate and interest residents in the benefits, joys, and techniques of gardening. Via Verde, with GrowNYC, manages a blog about the gardening club and coordinates a variety of activities and events that make use of the green roofs throughout the seasons. These include planning the vegetable garden, planting and harvesting, demonstrating ways to cook the harvested items (such as kale slaw), and trimming the evergreens in the fir tree grove in December. GrowNYC consultants plan to expand efforts to connect growing and cooking.

While not strictly organic, the gardens are meant to be sustainable. The managers demonstrate organic techniques and encourage the residents not to use pesticides. Plant materials that are not eaten are placed in a tumbler compost bin in order to return nutrients to the soil.

Clockwise from top left: community room, fitness center, bike storage, laundry room, tenant garden club sign-up forms and recipes

While most of the green spaces in Via Verde are watered with captured roof runoff, the gardens are watered with hoses using city water as per New York City health codes.

A thousand pounds of vegetables were harvested in the first growing season of 2012, which was seen as a significant success by the garden managers. They note that plantings have changed, and will continue to be modified in response to growing knowledge of the particular microclimate of the gardens. For instance, parts of the roof gardens are particularly hot and windy, affecting what can and will grow well. Peanut plants, a recent addition, have taken nicely to the setting. One aspect of the garden that was considered somewhat experimental was the decision to create community beds as opposed to allotting small plots to individuals. This was done because there was not enough space for individual plots for all or even most who would have wanted them. Gardeners seem to come from both the owner and the rental sides. Townhouse residents have begun asking if gardens could be set up on the small green patches in front of their units.

Original plans indicated that Via Verde's courtyard would be used for a green market or organic food co-operative. In its place GrowNYC is managing a CSA (Community Supported Agriculture) that produces food boxes for residents for $10, supplementing produce produced by the vegetable garden.

The involvement of GrowNYC has been intense in the first year but is expected to taper off as resident members of the gardening club take on more responsibility. The garden managers note that leaders from the resident community are emerging to take responsibility for the garden.

The exercise room, which opens out onto a green roof on the seventh floor, is available to all Via Verde tenants and shareholders for a $25 per year fee. There is also fee for use of a bike storage room in the basement. The property managers argue that the fee is less important for the income generated than for helping create a sense of ownership and caretaking of the space. There has been very little difficulty or damage in either of the spaces in part, they believe, due to this policy.

There were some changes in community programming from the initial project proposal. Instead of ground floor community facilities there is a community room on the 20th floor of the tower. Original plans included a homework center on the second floor which was not included in the final design. The initial proposal also listed a primary care and health education center, case management and wellness services for seniors. There are no Via Verde offices or staff for these services, but developers expect some health services to emerge from the Montefiore Medical Center which opened in the onsite retail space in 2013.

COMMUNITY

Via Verde is considered to be a community in and of itself, organized around shared common spaces and activities taking place in the courtyard and green roofs (such as the Christmas Tree trimming event). However, it is also intended to support the external community, in part by generating foot traffic to activate Brook Avenue, providing street views to the interior courtyard and offering neighborhood-serving businesses –such as the Montefiore clinic– in retail space on the ground floor. The project is seen as filling an important gap in Melrose, in an area near the very busy Hub.

Via Verde was almost completely occupied by mid-2012. The rental side filled very quickly and there is a long waiting list. This is not surprising, given the shortage of affordable housing everywhere New York, but the demand may be even greater here because the units are so desirable. The co-op units took longer to fill because of the slow and difficult process of obtaining and processing banks loans at the time of the construction. The communal spaces–including the gardens, the fitness area and the courtyard, hallways and lobbies–are owned by Via Verde and managed by Phipps Houses.

The 151 rental tenants were chosen by lottery from a pool of over 7,000 applicants from all over New York City. As of spring 2013, the management received at least ten inquiries a day from people wanting to live in Via Verde, all of whom are referred to the waiting list. There has been no turnover in the initial two years since the building was open. The management reported that this is unusual for affordable units in which difficult and unstable personal situations often lead to change.

HPD is a principal partner (with Columbia University and the New York City Department of Health and Mental Hygiene) in a multi-million dollar, multi-year study of the health impacts of improved and sustainably designed housing. Via Verde is just one of a number of buildings involved in the study, which is comparing 1,500 residents of HPD housing with another 1,500 who are in a waiting list control group. This is a long-term study with significant funding from both federal and private sources. The study is not complete, but there are some early indications of positive effects on asthma and other outcome variables.

Via Verde received very strong support from two successive Bronx Borough Presidents, who provided $1.5 million of Borough President discretionary funds. Borough Presidents also lent support through the long and often difficult local review known as the Uniform Land Use Review Process (ULURP). Via Verde is not the only LEED certified housing project to be built in the South Bronx in the last several years (a LEED platinum affordable housing complex was built in another neighborhood), but it is certainly the highest profile one. By building high density housing on this previously abandoned site, Via Verde was expected to knit together important pieces of the community.

FINANCING

Via Verde's unusual mix of rental and co-op units increased the number of available funding options while introducing a greater degree of complexity due to the number of entities involved. The nearly $100 million project cost was divided as two-thirds rental (151 units at a cost of $66.852 million) and one-third owned (71 units at a cost of $31.963 million). Refer to Tables 1 and 2 for additional details.

Funds for the project came from a broad range of public and private sources. Rental unit financing made use of Low Income Tax Credits through New York State Homes and Community Renewal (NYS HCR) and HPD taxable bonds through New York State Housing Development Corporation (NYS HDC), as well as subsidies from New York City Housing Development Corporation (NYC HDC), New York City Housing Preservation and Development (NYC HPD), Federal Home Loan Bank Affordable Housing Program (FHLBNY AHP), and New York State Energy Research and Development Authority (NYSERDA). The co-op units were financed through taxable bonds from NYC

TABLE 1: SOURCES AND USES – COOP UNITS

Sources

Construction Sources	Total	Percentage	PDU (Per Dwelling Unit)
HDC 1B:Taxable HDC Bonds w/ LOC	$1,210,000	3.8%	$17
HDC 1A:Taxable HDC Bonds w/ LOC	$6,230,000	19.5%	$87,746
HDC Subsidy	$4,615,000	14.4%	$65,000
Subordinate Financing	$2,500,000	7.8%	$35,211
Developer Loan	$550,589	1.7%	$7,755
AHC	$2,117,500	6.6%	$29,824
HPD Subsidy	$9,093,470	25.4%	$128,077
HPD HOME Funds	$712,630	2.2%	$10,037
Bronx BP/Council	$1,500,000	4.7%	$21,127
Developer Equity	$1,675,000	5.2%	$23,592
NYSERDA	$187,331	0.6%	$2,638
Deferred Developer Fees 100&	$1,500,000	4.7%	$21,127
Developer Dev Loan Interest (Placeholder)	$71,576		
Total	**$31,963,096**		**$449,176**

Permanent Sources	Total	Percentage	PDU (Per Dwelling Unit)
HDC 1B:Taxable Bond Proceeds	$1,210,000	3.8%	$17,042
HDC 2nd HDC Subsidy	$4,615,000	14.4%	$65,000
AHC	$2,117,500	6.6%	$29,824
HPD Subsidy	$9,093,470	28.4%	$128,077
HPD Home Funds	$712,630	2.2%	$10,037
Bronx BP/Council	$1,500,000	4.7%	$21,127
Sales Proceeds - Tier 1	$7,729,058	24.2%	$108,860
Sales Proceeds - Tier 2	$3,123,107	9.8%	$43,987
Developer Equity (BCP)	$1,675,000	5.2%	$23,592
NYSERDA	$187,331	0.6%	$2,638
Developer Dev Loan Interest (Placeholder)			
Total	**$31,963,096**		**$450,184**

Uses

	Total	Percentage	PDU (Per Dwelling Unit)
Acquisition	$48,873	0.2%	$688
Hard Costs	$24,261,401	75.9%	$341,710
Soft Costs	$6,152,822	19.2%	$86,659
Development Fee	$1,500,000	4.7%	$21,127
Total	**$31,963,096**		**$450,184**

TABLE 2: SOURCES AND USES - RENTAL UNITS

Sources

Construction Sources		Percentage	Total	Per Unit	Per GSF
HDC First Mortgage	$29,320,000	50.4%	$33,690,000	$223,113	$167.77
LIHC/SLIHC Equity		0.0%	$0	$0	$0.00
HDC Subsidy		19.2%	$12,835,000	$85,000	$64.68
HPD - NYC HTF		0.0%	$0	$0	$0.00
HPD - MIRP - CAPITAL		14.6%	$97,677,756	$64,687	$49.22
HPD - MIRP - HOME		3.8%	$2,516,580	$16,666	$12.68
FHLB AHP		2.8%	$1,900,000	$12,583	$9.57
Phipps Loan (NYSERDA MPP)		0.6%	$380,000	$2,517	$1.91
Remediation Sources (TBD)		1.5%	$1,000,000	$6,623	$5.04
156th St Bridge Sources (HPD)		0.0%	$0	$0	$0.00
Deferred Developer Fee		7.1%	$4,763,651	$31,547	$24.00
	Total Construction Sources of Funds	100.0%	$66,852,987	$442,735	$336.88
	Financing Gap / (Surplus) - Construction	0.0%	$0	$0	$0.00

Permanent Sources		Percentage	Total	Per Unit	Per GSF
HDC First Mortgage		6.5%	$4,370,000	$28,940	$22.02
LIHC/SLIHC Equity		48.0%	$32,083,651	$212,475	$161.67
HDC Subsidy	$27,399,336	19.2%	$12,835,000	$85,000	$64.68
HPD - NYC HTF		0.0%	$0	$0	$0.00
HPD - MIRP - CAPITAL		14.6%	$9,767,756	$64,687	$49.22
HPD - MIRP - HOME		3.8%	$2,516,580	$16,666	$12.68
FHLB AHP		2.8%	$1,900,000	$12,583	$9.57
Phipps Loan (NYSERDA MPP)		0.6%	$380,000	$2,517	$1.91
Remediation Sources (TBD)		1.5%	$1,000,000	$6,623	$5.04
156th St Bridge Sources (HPD)		0.0%	$0	$0	$0.00
Deferred Developer Fee		3.0%	$2,000,000	$13,245	$10.08
	Total Permanent Sources of Funds	100.0%	$66,852,987	$442,735	$336.88
	Financing Gap / (Surplus) - Construction	0.0%	$0	$0	$0.00

Total HPD Subsidy	18.4%	$12,284,336	$81,353	$61.90
Maximum HPD Subsidy - Approved CP	18.4%	$12,284,336	$81,353	$61.90
Shortfall / (Excess) of Max HPD Subsidy		$0		

Uses	Percentage	Total	Per Unit	Per GSF
Acquisition	0.3%	$177,880	$1,178	$0.90
Remediation (Included In Hard Costs)	0.0%	$0	$0	$0.00
Hard Costs (Including Contingency)	73.8%	$49,364,599	$325,918	$248.75
Soft Costs	18.1%	$12,110,508	$80,202	$61.03
Developer Fee	7.8%	$5,200,000	$34,437	$26.20
Total Uses	**100.0%**	**$66,852,987**	**$442,735**	**$336.88**

HDC, along with subsidies from the NYC HDC, NYC HPD, the Bronx Borough President's discretionary fund, New York City Council funds, New York State Affordable Housing Corporation (AHC) and NYSERDA (see Table 1). Tax credits represented $32 million (or almost half) of the permanent financing for the rental units. New York State Department of Environmental Conservation provided a $145,000 environmental remediation grant.

Seventeen of the rental units are reserved for the lowest level of income-vouchers for homeless at 30% to 60% Average Median Income (AMI) in the Bronx. While the AMI in 2011 for New York City was $56,951 in 2011 and for a Bronx family was $34,744, the Melrose-Morrisania section has the lowest AMI in the city at $8,694, according to the 2010 census. The funding, which came from the affordable housing program, required units accepting people with as low as 30% of median income.

Monthly rents vary by AMI, ranging from as low as $349/month for a one bedroom unit at 30% AMI, up to $1087 for a three-bedroom unit at 60% AMI (see Table 4). The rental rates can be adjusted to market value after 30 years. Subsidies for the co-op units allow them to be sold at prices ranging from $134,585 for a 1-bedroom unit on one floor up to $192,750 for a 3-bedroom duplex. While these prices represent what the market will bear for purchases in Melrose, they cover only about half of the construction costs. Because of the range of subsidies from HDC and HPD that lower these costs to buyers, there are resale restrictions that require reimbursement of subsidies for sales in excess of the original purchase price, diminishing from 100% in the first years to zero over the term of the original mortgage.

The individual unit cost of building Via Verde is more expensive than that of most recent affordable housing projects in the area. The additional cost (estimated at about 5%) is justified by the city funders by its value as a model and demonstration project. Some public housing advocates have disagreed, suggesting all funds should go directly into creation of additional units. There are some ways in which Via Verde achieved efficiencies that reduced construction and operating costs, such as eliminating all on-site parking and its energy-efficient design which should reduce future operating expenses. HPD initially hoped to limit the subsidy to $65,000 per unit, but eventually increased it up to $100,000 per unit because the agency saw a special value in being able to get many more units than initially anticipated onto this site.

The integration of rental and owned units is unusual and may have, along with the recession, extended the time it took to close on the financing for Via Verde. Tax credits, which represented a large portion of the financing, were purchased by Chase Bank. It is the largest purchaser of such credits (and one of the few doing such deals in the years following the 2008 housing bubble collapse), although the value of the Via Verde credits was a particularly large amount even for Chase. Assuming this higher degree of risk, we were told, was made feasible by the history and strength of the players – including Phipps Houses, which has a long and solid reputation for building and managing nonprofit housing in the New York area, and Jonathan Rose Companies, which also has a long track record for developing quality projects and considerable resources. The bank's interest was reinforced by the quality of the design and intense pent-up demand for affordable units, as well as strong support from the city agency partners in the project. Chase Bank saw this project, with its green design and mix of owned and rented units, as transformative for affordable housing.

TABLE 3: ANNUAL MAINTENANCE AND OPERATING EXPENSES

Expenses	Amount	PER room (rm)/ dwelling unit (du)
Supplies/Cleaning/Exterminating	$18,590	$65/rm
Heating	$85,800	$300/rm
Gas & Electricity	$24,310	$85/rm
Cooking Gas	$7,668	$108/du
Repairs/Replacement	$28,400	$400/du
Legal	$8,165	$115/du
Accounting	$10,000	$10,000/project
Painting	$11,440	$40/rm
Doorman/Security	$35,040	$494/du
Maintenance Staff	$130,204	$1,834/du
Elevator Maintenance & Repairs	$10,000	$5,000/elev.
Management Fee	$49,700	$700/du
Water & Sewer	$31,460	$110/rm
Fire and Liability Insurance	$49,700	$700/du
Other Expenses		0
Franchise Taxes		0
M & O Before Taxes and Debt Service	**$500,477**	**$7,049/du**
Bldg Reserve	$17,750	$250/du
Real Estate Taxes 421a	$17,000	$35/rm
Total Expenses	**$535,227**	**$7,538/du**
		$1,871/rm

The bank felt that their faith in the project as a safe investment was justified by the fact that by spring 2012 the co-op units were sold and all the rental units were full, and were not experiencing the kind of turnover that was common to affordable rentals.

A little more than half (51%) of Via Verde was financed with tax-free bonds. The $32 million of tax credit financing was significant compared to other projects. Jonathan Rose Companies and Phipps Houses shared developer equity fifty-fifty, and deferred fees during construction and initial occupancy to support the viability of the project. Bridge funding came from the Calvert Foundation to fill the gap between construction and sale of the co-op units.

Sources for the financing of the rental portion of Via Verde were fairly typical, whereas the co-op financing was more difficult because of changes in state and city programs. One in particular, New York City's co-op program, ended several years prior to the project because of a minor scandal. Via Verde was one of the last projects to receive New York State AHC (Affordable Housing Corporation) funding which has since been discontinued. Via Verde received $2.68 million in Brown-field Cleanup Program equity, from the New York State Department of Environmental Conservation. Environmental remediation costs were 12% of the entire project costs.

IMPACT

Via Verde has clearly succeeded in transforming a site that might never have been seriously or intensely used, least of all for housing, into a desirable urban residential community. Moreover, it did so with an architectural style that is much admired, and in a way that inventively

TABLE 4: UNITS, AFFORDABILITY AND COSTS

Affordable Rental Units

Number of Units	Income Restrictions	Income	Monthly Rate			
		(Family of Four)	Studio	1-Bedroom	2-Bedroom	3-Bedroom
17	<30% AMI	$23,040		$349	$423	$489
13	<40% AMI	$30,720	$461	$493	$596	$688
120	<60% AMI	$46,080	$731	$781	$942	$1,087

Cooperative Ownership Units

Number of Units	Income Restrictions	Income	Purchase Price			
		(Family of Four)	Studio	1-Bedroom	2-Bedroom	3-Bedroom
5	<80% AMI	$61,450		$134,585		
39	<150% AMI	$115,200			$146,032	
26	<175% AMI	$134,400				$192,750

Data taken from HUD Public Affairs Notice 12-105, 18 June 2012

created opportunities for open and green space. In that sense the project may have changed the conversation about the design of affordable housing in New York City. Shaun Donovan, Secretary of the Department of Housing and Urban Development, said that Via Verde will "serve as a prototype for future affordable housing developments built nationally and internationally." Research is being conducted at Via Verde and other buildings to evaluate the degree to which new and green housing provides physical and psychological benefits to residents. Initial indicators are promising.

The way in which Via Verde came about, from the two competitions to the establishment of the Joint Review Committee (JRC), represented a different approach of doing business for affordable housing in New York. The JRC, in particular, provided a way to address some of the thorniest issues that plague developers and cost time, money and generate frustration. It is not clear to what degree this model served to change the way these city agencies will operate in the future. The JRC has not become institutionalized a permanent committee, and the personal and helpful relationships formed there among agency

staffers might not last beyond the Bloomberg administration or their respective terms of office. Competition sponsors, however, note that the fact that four of the five finalists went on to do work for HPD reflects the success of this effort in changing attitudes and approaches to affordable housing development in the city.

Via Verde has also succeeded in providing a more fully articulated set of sustainable design features than are present in most other affordable housing projects. As such, within the protected sphere of the building's perimeter, residents enjoy far greater access to open spaces, trees and plant life, and opportunities for walking and physical activity than is common in affordable housing.

HPD sees these sustainable features as a success and now requires all new construction to meet Enterprise Green Community standards, and demonstrate at least a 15% improvement in energy efficiency over a base case (ASHRAE 2007 standard) building, half of what Via Verde achieved. With high density, sustainable design, mixed income and the presence of rental and owned units, Via Verde is believed to have tapped into best practices that HPD wants to emulate and promote.

Although some of the community-related services described in the original plans and response to the RFP – such as services for the elderly, homework support, and health care – were not realized, residents within Via Verde and the surrounding neighborhood may benefit from services offered by the Montefiore facility, which opened in spring 2013.

Clockwise from top left: Lance Jay Brown, Paul Freitag and Karen Kubey; Ted Weinstein and Eric Enderlin; Via Verde residents

There have been suggestions of ripple effects from Via Verde that are having a positive impact in the immediate Melrose area. One lender noted that another project would not have been able to lease out its street-level retail space without the presence of Via Verde, although the area where the property is located, only several blocks away, looks essentially unchanged. Other new developments are being planned immediately adjacent to Via Verde. HPD, for instance, issued an RFP clearly influenced by the success of Via Verde for a neighboring site in 2013. It is for a smaller, though still dense, new affordable housing project with integrated green space on open land immediately to the southwest of the site. Other changes may require more time to manifest and detect.

Via Verde won a number of awards in 2012, including the American Institute of Architecture's New York Chapter Andrew J. Thomas Award; the Urban Land Institute Jack Kemp Workforce Housing Models of Excellence Award; the Big Apple Brownfield Green Building Award; and the Society for Marketing Professional Services, NY Industry Award.

CURRENT PROJECTS AND FUTURE PLANS

Via Verde is a place that represents an attempt at an architectural solution to affordable housing problems, rather than a process or an organization. As such, it is fully realized and 100% occupied. In the future, the developers hope to expand garden activities and eventually have the care of the vegetable plots completely managed by residents. Managers expect that the presence of the medical facility, which opened in the spring of 2013, will further encourage healthy behavior among residents and may expand programs aimed largely at Via Verde's population.

Beyond that, future activity will largely emanate from city agencies and developers seeking to expand on this project and ensure that more affordable housing incorporates green and thoughtful, innovative design. The recent HPD RFP for a project adjacent to Via Verde is indicative of the impact Via Verde is having on HPD expectations as well as plans for this neighborhood.

New York City is on the verge of achieving the goal of 165,000 affordable units preserved or built that was established ten years ago. Via Verde's developers and architects are encouraged by its success and are conceiving other new developments. Grimshaw Architects, for instance, started seeking housing projects that it may have previously passed over.

NHNY Steering Committee

Assessing Success

- Demonstrate ability to provide creative, innovative design for affordable housing.

Via Verde has caught the imagination of the design community in New York City and presented an innovative design model for future housing developments. How much of the process can be replicated without matching levels of support and commitment remains an open question.

- Provide truly sustainable design within affordable housing budgetary constraints.

Via Verde offers more sustainable features than most green, affordable housing developments. Its use of the building wrapping around

a central courtyard and stepped, green roofs to create open space is the foundation of the design and its most innovative and functionally important feature.

• Reintroduce urban density to this area of the South Bronx.

This project succeeded in creating greater density in this site than many thought possible, while at the same time creating additional open space for resident use.

• Fill empty space in local urban fabric, knitting together sections of the community.

Via Verde makes good and productive use of an unlikely site. Its long-term effect on the immediate neighborhood is unclear, although related and compatible projects are being planned in the immediate area.

• Demonstrate the ability of design competitions to raise the bar in affordable housing design.

The competitions that led to Via Verde are viewed as successful and have been discussed as models for future planning efforts in New York City and elsewhere. The two-step model utilizing a less prescriptive RFP encouraged multiple entries and creativity in design.

• Show that city bureaucracies can work together to support development.

The extraordinary level of commitment to Via Verde created motivation and opened channels for communication that are rare in New York City. There is potential for modeling and replicating this process, but at this point it is unclear how much structural change will occur in the way the city does business as a result of the project.

SELECTION COMMITTEE DISCUSSION

The Selection Committee was excited about Via Verde because of the project's goals, its realization, and its potential to serve as a model. The goals – including producing housing that was "affordable, sustainable, and replicable" – were viewed as critical given the scale of urban housing needs.

Recognizing the number of affordable units needed, in New York as well as nationally, the Selection Committee felt that small-scale housing projects (with a few units a piece) alone are unlikely to be sufficient and that solutions must focus on bigger interventions. However, the long history of problems with large public housing projects supports the need for careful attention to scale and design, which is part of what made Via Verde so attractive to the Committee. The development – the product of two design competitions – indicated that architecture for affordable housing was viewed as important and was being taken seriously by the city, developers and the design community. The Selection Committee applauded the partnership between Phipps Houses and Jonathan Rose Companies, two developers with great track records in affordable housing. They also commented that the confluence of policy, people, and organizations working together in a project of this scale could be game changing for the future of affordable housing in the city and elsewhere.

The Selection Committee felt that the design exceeded expectations, in part due to the unusual mix of owned and rented units. They also appreciated the design for its ability to achieve the necessary density of units within a carefully crafted building that responds to the adjoining context in massing and scale, and offers a diversity of spaces and unit types. All this was achieved within a small and oddly shaped site that

David Sundberg / Esto

required significant remediation, while providing unusually high levels of access to outdoor space and vegetation. The Selection Committee also admired the health-related aspects of this facility's design. They agreed that the project's commitment to sustainable design and active living helped to provide human dignity within an inner-city sanctuary for its residents and demonstrated "a new, comprehensive approach to sustainable design." The Committee noted that offering a peaceful, quiet and safe green space – a place of refuge in a dense urban setting – was rare and important, especially in the South Bronx. Moreover, the Committee was optimistic that Via Verde was serving as an economic catalyst for this still depressed area of the city.

The Selection Committee hoped that the competition process and final design might serve as a model for other developments locally and around the country. They were concerned, however, about the apparent loss of some of the originally proposed health and social programs between the initial design and final product. The lack of designated space for the health education center, case management and wellness services for seniors, and student homework were seen as detrimental to the overall program goals and desires for creating ways that residents of owned and rented units could meet and come together. It is not clear at this point how interaction between the two populations takes place, even within the courtyard and roof terraces, as the latter are not as easily accessed by tower residents. The Selection Committee was also unclear as to what degree there was interaction between residents of the surrounding community and the building, as Via Verde's gate provides views to, but not access, to its courtyard and green spaces.

Resources

INTERVIEWS*

Competition Committee:
Lance Jay Brown, FAIA, City College of New York, New Housing New York Steering Committee
Karen Kubey, Founding Co-Chair, New Housing New York Steering Committee
Setha Low, Professor of Environmental Psychology and Anthropology, City University of New York Graduate Center

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Ted Weinstein, NYC Department of Housing Preservation and Development
Eric Enderlin, NYC Department of Housing Preservation and Development
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On-Site Staff, Program Managers and Tenants:
Max Ruperti, Phipps Houses on-site Property Manager
Gerard Lordahl, Greening Director, GrowNYC
Jackie Richardson, Manager Montefiore Medical Center at Via Verde

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ENDNOTES

[1] Press release from AIANY, 1, 17, 2007 http://www.aiany.org/NHNY/Legacy_Press.html

Opposite page: view from 20th floor dining terrace

Photo by Bruner Foundation