

## From Fort Apache to “The Green Way”

By Richard J. Izzo, CPG

CA RICH Consultants, Inc.

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I recently attended a reception and tour at the newly constructed Via Verde residential development on Brook Avenue in the South Bronx, NY. As I walked through the beautifully revitalized property, I was reminded of the Metro North train rides into Manhattan that I took as a teenager in the late 1970s along with my band-mates, on our way to the music stores along 48<sup>th</sup> Street. What stands out in my mind is the portion of the trip through the South Bronx, specifically the area near the infamous “Fort Apache” 41<sup>st</sup> police precinct, which was so-named back then because the officers there felt like they were stationed at a remote hostile outpost. I recall the apartment buildings we passed, many of which displayed lovely curtains and flowers in the windows. Unfortunately, those curtains and flowers were just pictures painted on plywood that was used to board up the gaping windows of decrepit burned-out building shells. By 1980, as many as 40% of the buildings in the Bronx were burned or abandoned. Even today, many vacant, underutilized, or blighted properties plague the area.

Via Verde (Spanish for “The Green Way”) located just a few blocks from the notorious Fort Apache was originally developed circa 1908 as part of the New York Central and Hudson River Railroad Company’s freight yard. Circa 1927, the Site was further developed with a provisions facility and later a gasoline station that operated from 1935 through the late 1970’s. In the early 1980’s, the provisions facility closed. The former site usage is the reason why CA RICH Consultants, Inc.’s (CA RICH) expertise was called upon by the New York City Department of Housing Preservation and Development (HPD) and then, subsequently, by the development team of Phipps Houses and Jonathan Rose Companies, to characterize and remediate the Site through the New York State Brownfield Clean-up Program (BCP) under the auspices of both the New York State Department of Environmental Conservation (NYSDEC) and the New York State Department of Health (NYSDOH).

Remedial action performed at the Site included: (1) Excavation and proper off-site disposal of soil/fill exceeding agreed-upon Site Specific Soil Action Levels; (2) Construction and maintenance of an engineered composite cover consisting of a two-foot clean fill buffer in all landscaped/non-capped areas along with concrete building foundations, sidewalks/pathways and asphalt roadways covered by a paving system or concrete at least four inches thick in non-landscaped areas; (3) Removal of six USTs, one hydraulic lift, and associated petroleum contaminated soil in accordance with applicable regulations; (4) In-situ Chemical Oxidation of shallow groundwater in the northern portion of the Site along with on-going post-remedial groundwater quality monitoring; (5) A vapor barrier and active sub-slab depressurization (SSD) system incorporated into the building’s foundation; (6) Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site, and; (7) Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement.

Via Verde is now a 151 rental and 71 co-op residential development designed and constructed to exceed the United States Green Building Council’s LEED® Gold standard (as well as the standards of the New York State Energy Research and Development Authority’s (NYSERDA’s) Multifamily Performance Program and the Enterprise Green Community) for environmentally responsible and energy-efficient building design. Some examples of the development’s green features are: photovoltaic solar panels to power common areas and exterior lights; harvesting of rainwater to irrigate raised-bed vegetable and fruit gardens; cross-ventilation and solar shading for efficient cooling during summer months; motion-activated lighting in stairways and corridors conserve electricity; energy efficient appliances in the residences; water conserving fixtures; low VOC materials; and, 34,000 square feet of planted green roofs to create “sky gardens” and help reduce the ‘heat island effect’ associated with conventional buildings.

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In addition, the Developers converted a fifth-floor green roof into a community garden for residents. The garden was planted this spring with everything from kohlrabi to kale by GrowNYC, a hands-on nonprofit organization that encourages environmental programs. Green aspects were also incorporated into the remediation as over 20% recycled materials used in construction; over 20% of building materials were locally manufactured, minimizing transportation energy and supporting the local economy; and over 80% of construction and demolition waste was recycled. These sustainability attributes were recognized by the New York City Brownfield Partnership and the Via Verde Development Team was recently the recipient of the Partnership's coveted 2012 Big Apple Brownfield Award for Green Building.

Via Verde contains both low-income and middle income value housing components and consists of a 20-story tower, a mid-rise duplex as well as townhome-type units and is designed to use 31% less energy than comparable traditionally-designed buildings. The Green Way is arguably the jewel in the proverbial crown of New York City's New Housing Marketplace Plan to create and preserve 165,000 units of affordable housing by 2013; and its completion marked the achievement of the City's 100,000<sup>th</sup> affordable housing unit. CA RICH is proud to be a member of the Via Verde Development Team and to have participated in the site preparation and construction for this environmentally cutting-edge development of historical importance to the City of New York. It is gratifying to know that when we look up and see the curtains (solar shading) and flowers (sky gardens), not only will we know they're real, but also that they are providing real energy savings as part of a sustainable building design.

