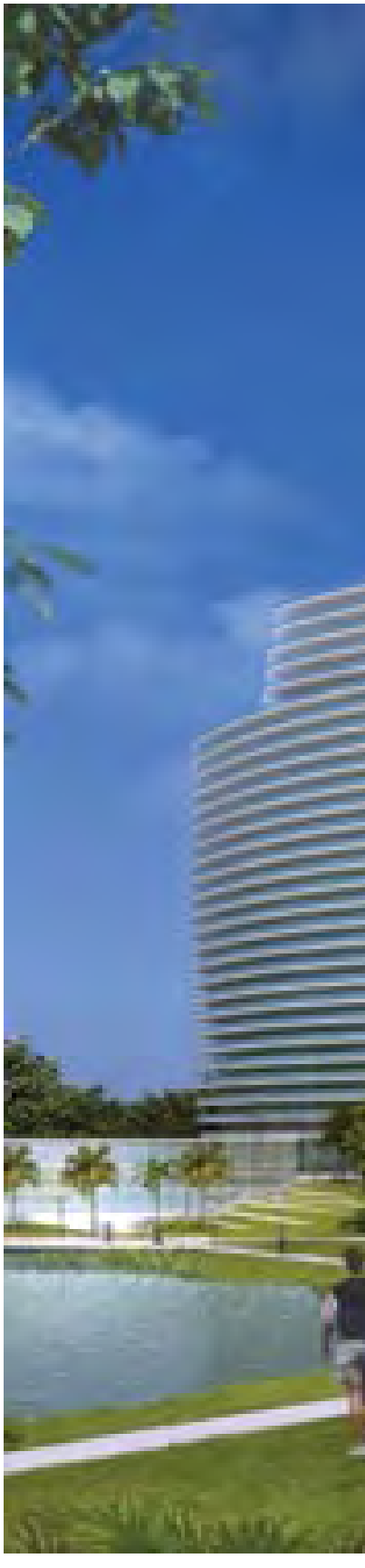
LEED – sustainable design

The Leadership in Energy and Environmental Design (LEED) system was created by the nonprofit U.S. Green Building Council in Washington, D.C. (USGBC), as a voluntary system to provide a standardized means of accrediting projects that have integrated the principles of smart growth, green building and improved user comfort in the pursuit of sustainable design. The LEED rating system for buildings focuses on six principles of sustainable design:

- Sustainable Sites: Sites which minimize and/or reduce the impact of development on the surrounding and natural environments by reducing dependence on vehicular traffic (promoting pedestrian/bike activity, utilizing mass transportation) and promoting self-containment (of stormwater, heat and light reflectivity).
- Water Efficiency: Projects which minimize the need for potable water within the building and for landscaping by utilizing efficient plumbing fixtures, re-using project produced water for non-potable uses and having landscaping that is native to the area and therefore requires minimal irrigation.
- Energy & Atmosphere: Projects that minimize the use of man-made energy sources (orientation/shading to maximize light and minimize heat gain, energy efficient equipment, etc.) and/or utilize renewable energy (ie. solar, wind, etc.).
- Materials & Resources: Projects that incorporate materials that minimize energy use and don¡œt deplete natural resources (materials sourced and/or manufactured locally which reduces energy for transportation, re-using existing buildings and/or materials, recycled materials, minimizing construction waste which minimizes landfill use, materials that naturally replenish quickly and are not exotic).
- Indoor Environmental Quality: Projects which promote a healthy interior environment for the building¡œs users through better ventilation, non-toxic materials, natural lighting, views and control of environmental comfort.
- Innovation & Design Process: This category is for unique project design features that promote the principles of LEED design (ie. integrated public education of sustainable designs, exemplary design that exceeds the requirements of one of the standard LEED credits and having at least one LEED Accredited Professional on the project).

Biscayne Landing



Arquitectonica is the architect for the Town Center portion of Biscayne Landing, North Miami, which comprises a total of 1,684 residential units in 10 buildings of varying heights (5 to 25 stories); approximately 300,000 square feet of commercial space (retail/restaurant/fitness/ cinema) and 180,000 square feet of office space as well as residential amenity decks and four parking garages for all of these uses. As per the client¡œs directive all of the 12 buildings that make up the Town Center are to have a minimum of LEED Silver certification. There are a variety of LEED categories, two of which apply to the Town Center buildings: LEED-NC (New Construction) and LEED-CS (Core and Shell).

LEED-NC is for those buildings that are built for specific tenants/residents, which includes the hotel/condo tower in Block A South; the three 25 story condominium towers in Blocks A North, B and C; and the six mid-rise condominium buildings in Block A North, B and C. The design of these buildings includes the following features that contribute to attaining the minimum 33 points (out of a total possible 69 points) for LEED-NC Silver Certification:

- Tinted Low-E laminated glazing that minimizes solar heat gain and maximizes views to the exterior
- Low water use plumbing fixtures and appliances (toilets, faucets, dishwashers, washing machines)
- Energy Star low energy use appliances (refrigerators, cooktops, ovens, dryers)
- Capturing warm air produced by the building to be utilized for mechanical equipment needs (avoiding having to heat the air, thereby reducing energy use)
- Energy efficient mechanical equipment
- Energy efficient elevators that have regenerative motors that store energy they create for re-use
- Cisterns on the amenity decks that capture rainwater and re-use it to irrigate the landscaping
- Energy efficient lighting for the common areas
- Motion-activated and/or timer-controlled lighting so that areas are only lit when occupied
- Promote bike use with easily accessible and secure bike racks

LEED-CS is for those buildings that are built for future tenants such as the office building and the retail spaces in all four blocks. The retail spaces are being designed for LEED-CS Silver Certification. The office building, at the center of Town Center, is being designed to the highest standard, LEED-CS Platinum Certification. The retail spaces will have the glazing shaded by the arcade and building above and have a Tenant Guideline that specifies the use of energy-efficient lighting, mechanical equipment, appliances; as well as low-water use plumbing fixtures. The office building has been designed with the following features that contribute to attaining the minimum 45 points (out of a total possible 61 points):

- Insulated, tinted, Low-E laminated glazing that achieves a low solar heat gain as specified by the national ASHRAE 90.1 standard.? Insulated glazing is not typically used in South Florida due to its cost but its use significantly reduces the heat gain for the building so that the energy costs of operating the building are so much lower that the cost of the glass is paid back within years of the building¡œs operation.? This means multiple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LANDING

benefits over the long term life of the building for the building¡œs occupants who have increase comfort, for the building¡œs owners who have lowered energy bills as well as for the larger community who have cleaner air due to the reduced energy output of the power plants.

- Low water use plumbing fixtures (toilets, faucets, showers) that reduce the building¡œs dependence on local potable water. This is an especially important feature, along with the water re-use features, considering the increasing low water supply of the South Florida aquifers.
- Re-using water from the restroom lavatories for flushing the restroom toilets
- Energy efficient mechanical equipment
- Energy efficient elevators that have regenerative motors that store energy they create for re-use
- Cisterns that capture rainwater and condensate water and re-use it to irrigate the landscaping
- Energy efficient lighting for the common areas
- Motion-activated and/or timer-controlled lighting so that areas are only lit when occupied
- Promote bike use with easily accessible and secure bike racks and providing showers for bike riders use
- Tenant guidelines that specify the use of energy-efficient lighting and mechanical equipment in the tenant¡œs office space and passive design features that capture heat at the exterior wall to increase thermal comfort of the overall office space.

In addition to the individual buildings of the Town Center being designed to be LEED certified, Arquitectonica is leading the effort to have the majority of Biscayne Landing project (167 acres, which excludes the Phase 1 portion) be LEED-ND (Neighborhood Development) certified. Biscayne Landing is one of the largest projects nationwide participating in the LEED-ND pilot program to rate new communities as to how they integrate the principles of smart growth, urbanism, and green building into the first national standard for neighborhood design. By participating in the LEED-ND program, Biscayne Landing will earn an eventual certification giving independent, third-party verification that the new community meets the highest standards for environmentally responsible, sustainable development. The LEED-ND certification focuses on four categories:

- Location & Linkage: Projects that are located in smart areas, utilizing existing infrastructure (utilities, roadways, schools, jobs, mass transportation), minimizing and/or reducing the impact on the natural and surrounding areas, reducing dependence on vehicular traffic (promoting pedestrian/bike activity, utilizing mass transportation) and promoting self-containment (of stormwater, heat and light reflectivity).
- Neighborhood Pattern & Design: Projects which create vibrant neighborhoods that

have diverse uses in close proximity to each other (via foot or bike); promote diverse populations (varied housing types and building uses such as office, retail, entertainment, etc.); minimize parking footprints in order to maximize pedestrian friendly streets and open spaces for a variety of activities and promote integration of the planned community with the existing surrounding communities.

- Green Construction & Technology: Those projects that include buildings that follow the LEED-NC and LEED-CS criteria (preferably certified buildings) so that the project reduces water, energy use, impact to the surrounding environment; and recycle and/or re-use materials in its construction and use.
- Innovation & Design Process: This category is for unique project design features that promote the principles of LEED design (ie. integrated public education of sustainable designs, exemplary design that exceeds the requirements of one of the standard LEED credits and having at least one LEED Accredited Professional on the project).

The LEED-ND certification for Biscayne Landing, and its participation in the LEED-ND Pilot Program, will demonstrate how Biscayne Landing has turned a site fully around from being an abandoned landfill to a vibrant community that will invigorate its surrounding community with its urbanism and promotion of sustainable design features.

The LEED certification process promotes an integrated design process that requires that everyone involved in the project be involved in making the project sustainable. The team players and their roles are as follows:

- Biscayne Landing/Boca Developers as the developer of the project are ultimately making the final decisions that balance the immediate costs of some of the sustainable features with the long-term cost, efficiency, comfort and moral benefits.
- Arquitectonica as the architect for the town center buildings and the leader of the LEED-ND certification process is coordinating with all the consultants to make sure that the various sustainable features are integrated and support the original design concept of an animated community that is pedestrian friendly and a vibrant addition to the surrounding region. The architectural design of the buildings (shape, envelope, layout) has a significant impact on the overall project design from the exterior appearance, the interior experience and the energy use.
- TLC as the m/e/p engineer and the LEED advisor are instrumental in designing the building systems that require, and can therefore save, much of the building¡œs energy use. They study the impact of the heat gain through the glazing and exterior skin along with the heat produced within the building by its occupants and equipment (lighting, cooling equipment, elevators, everything) to determine the optimal system that can ensure occupant comfort at the lowest energy use.
- Arquitectonica GEO as the landscape architect has been designing the exterior environment of the streetscape, the open spaces at street level and at the amenity deck levels as well as the main approach to Biscayne Landing from Biscayne Boulevard. Their approach to the landscape design is inspired by the nature reserve of mangroves adjacent to the site. Like the mangroves, the new landscaping will make the best use of rainy seasons to ensure a sustainable and attractive environment that survives through the dry seasons with minimal requirements for irrigation, pesticides and fertilizer.
- URS as the civil engineer and ES Consultants as the stormwater engineer are dealing with the unique aspects of the site in order to make them comply with the multiple environmental authorities.
- DeSiimone as the structural engineer is contributing towards the recycled and locally manufactured materials (concrete and reinforcement).
- Gryphon Construction as the general contractor has been participating in the design process to ensure the design decisions are viable and cost efficient and will be making all those decisions real while also contributing towards many of the LEED points needed for the projects to be certified.

FAST FACTS — BISCAYNE LANDING

Location	15045 Biscayne Boulevard, North Miami, Florida www.biscaynelanding.com
Residential	6,000 units

321 NORTH

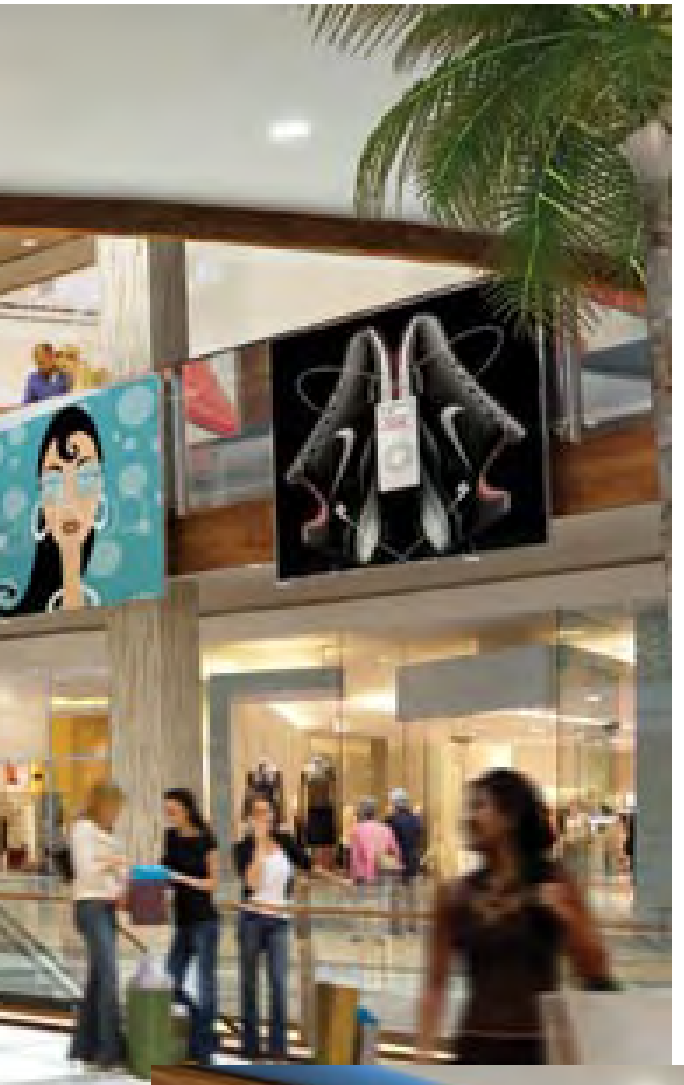
321 North will be among an elite group of projects involved in evaluating the standards set forth by LEED¡œs rating system. As a participant, 321 North can work towards future LEED certification for Neighborhood Development by demonstrating specific achievements. In addition to this LEED certification, the developers plan to pursue LEED certification for both the office and residential project components of their mixed-use development.

321 North will be located on a 33-acre site near the northwest intersection of Broward Boulevard and University Drive in Plantation, Florida. It will incorporate residential, office, shopping, dining and entertainment components and is an integral part of the City¡œs Master Plan to build an urban town center, called Plantation Midtown. In early 2007, formal plans for the US$350 million 321 North redevelopment project were submitted to the City of Plantation. The approval process is currently underway.

In addition to green building features such as highly efficient mechanical and plumbing systems and energy-efficient glazing, paints and finishes that enhance indoor air quality, the developers are planning to incorporate greenways, links to public transportation, open spaces, an onsite filtration pond, and a heavily vegetated parking structure that will help mitigate the heat of the sun. Landscaping, which includes making use of large canopy trees and native plants to shade pedestrian pathways, is also part of the green design.

The existing development on the property includes the largely vacant 650,000 square-foot enclosed retail mall, a 114,000 square-foot office pavilion, and a separately owned Sheraton Suites hotel, now completing its own major renovation. The redevelopment of 321 North will include demolition and reconstruction of significant portions of the enclosed mall with new retail that will face outward and open up onto a new main street; as well as the construction of additional new open-air retail and restaurants. Upon completion, 321 North will yield a total of approximately 525,000 square feet of retail; 300,000 to 400,000 square feet of new Class A office space in two new office buildings; and 600 residential units.

Leading the architectural design and development of the project is ADD Inc, a national award-winning design firm. Other team members include Sherif Ayad, of ID & Design International, EDAW, WET Design etc.



About the owner

321 North is developed by U.S. Capital Holdings, LLC. The company was founded in 2004, U.S. Capital Holdings is a leading private equity investor based in Plantation, Florida. The firm specializes in identifying and repositioning underperforming properties in advantageous locations and provides capital and real estate management services to institutions and personal investors overseas with a concentration in China. U.S. Capital is actively redeveloping the Plantation Fashion Mall into a high-end shopping and lifestyle destination. Web site: www.321north.com