



## **Lower Cape Fear Stewardship Development Award Winners**

### **Significant Achievement**

#### **Surf City Dental – Surf City/Hampstead, NC**

Surf City Dental is set in a town on the headwaters of a coastal estuary. It was important to the owners that the office be soothing to patients while also minimizing environmental impact. Even though the property is an outparcel of a larger development designed with traditional stormwater controls, the owners made it a priority to decrease the environmental impact of the building even further by going green in several areas.

Rain chains were installed to collect rainfall to re-water the lawn. Regional plants that require less water and fertilization were used in the landscaping. The parking area was designed and constructed using semi-pervious materials to reduce stormwater runoff even more.

Inside the building the office is fully digital, another green initiative. Cloth hand towels are used instead of paper to minimize waste. Live potted plants and succulents are used to add serenity to the space, as well as enhance the indoor air quality.

#### **South Front II – Wilmington, NC**

Tribute Properties was proud to invest in the South Side of Wilmington in their revitalization of the old Nesbitt Court Public House Site, now South Front Apartments. It was only natural that they took the old Block Shirt Company and rehabilitated and repurposed the building for additional residential units called to further the revitalization efforts.

During the sustainable redevelopment of the building from commercial to residential, great care was taken to retain the integrity and rich history of the original structure as well as to recycle any unused materials. Vaulted ceilings, exposed hardwood beams and vintage sprinkler pipes were maintained with added skylights and floor-to-ceiling windows for natural light. Energy rated appliances and HVAC systems were utilized to maintain a "green" build, as well as low-flow plumbing systems and low energy lighting fixtures.

Prior to redevelopment, storm water management consisted of piping or sheet flow from all impervious surfaces directly to an off-site ditch which flows to the Cape Fear River. During the design, gutters and down flow spouts were incorporated to capture storm water and reroute it. The newly constructed parking areas were designed with large stone trench basins and pervious concrete surfaces to keep potential run-off to a minimum. A small rain garden was designed on site that utilizes rain flow from the roofs and gutters.

During construction all significant trees that remained on site were protected. The landscape design incorporated sustainable criteria which included indigenous trees and shrubs that would match the look and feel of South Front I Apartments for true community connectivity. Drought tolerant plantings were utilized in the landscape design and the irrigation system was designed with zone timers and rain sensors to reduce waste.

### **The Terraces on Sir Tyler – Wilmington, NC**

The Terraces on Sir Tyler is owned and maintained with pride by the Wilmington Regional Association of Realtors. The project was designed as a 3-story building rather than a 2-story building to minimize sprawl on the site. A tree survey was completed and trees were protected at all possible locations. During construction the project balanced cut and fill avoiding major haul in or haul out of the site while maintaining existing drainage patterns.

The buildings stormwater runoff drains first into landscaping beds. The existing hard compacted sandy loam soils were drilled at each landscape location to allow surface water to penetrate it and allow the site to absorb more water. Pervious pavement was also utilized in several locations of the parking lot to further reduce stormwater leaving the site.

The building itself is unique, designed with a natural and organic feel with its large tree like copper structures supporting patios and green colors that blend into the surrounding environment. Several of the green building aspects of the building include:

- More efficient aluminum clad wood windows with argon filled low E-Argon filled glass allowing less heat transfer than standard storefront.
- Copper cladding was used for recycled content and is very durable with long life spans and low maintenance.
- A green roof compliant TPO flat roof was installed for future plantings.
- Aluminum railings were installed on the balcony with up to 75% recycled content.

### **Outstanding Recognition**

#### **Sunset Beach Park – Sunset Beach, NC**

Sunset Beach Town Park is a public park located adjacent to the Atlantic Intracoastal Waterway and Mary's Creek in Sunset Beach. What was originally planned to be a multi-unit high density development was purchased by the town and a park emerged as the best and highest use of the property. The purpose of the park is to provide the public an opportunity to relax and enjoy the natural setting with the emphasis on protection of the adjacent sensitive environment.

The park layout was centered on providing passive recreation opportunities for the public without any disturbance to fragile adjacent waterways. Public parking and pedestrian walkways were constructed using pervious pavers which allow stormwater to infiltrate into the underlying sandy soils. Pedestrian walkways located closer than 30 feet from Mary's Creek were constructed using slightly elevated wooden structures preventing stormwater runoff. No wetlands were disturbed.

Native birds, shellfish, insects, small animals and plant life continue to thrive on the property. Located adjacent to public roads the park is easily accessible by car, golf cart or bicycle. The park also provides public water and sewer facilities. Solar tubes were used in the public

restrooms, allowing natural light to replace the dependence on electric lighting. Public trash receptacles located around the park compact trash and notify town personnel when they need to be emptied.

The Town of Sunset Beach provides the commitment of long term management and maintenance of the park. The Town along with private partners intend to provide community outreach and education programs to the public regarding methods which have been shown to protect both native flora and fauna. The addition of education kiosks that identify native plant species may also be considered as well in the future.

### **Blockade Runner Beach Resort Clean Water & Sustainability Project – Wrightsville Beach, NC**

The owners of the Blockade Runner have long recognized the importance of a clean and healthy coastal environment. As part of the strong commitment to their community as stewards and advocates for their coastal environment they created an environmental resources department in 2015 with the goal of creating a culture of sustainability throughout the resort.

The Blockade Runner "Green Team" was created to facilitate this sustainability program. Volunteer-based, the Green Team performs environmental waste audits at the resort, and works to reduce energy consumption, plastic pollution, and water usage among other things. Most recently, the Blockade Runner partnered with the North Carolina Coastal Federation in 2016 to complete the installation of an innovative stormwater reduction project on the resort grounds.

The Blockade Runner Beach Resort Clean Water & Sustainability Project involved the construction of an underground 150 feet perforated pipe/infiltration system that re-directs the stormwater runoff that originally flowed untreated directly into Banks Channel from two outfall pipes on the property. The system is designed to receive drainage from the Blockade Runner's property which is 80% impervious and treat a minimum of 85% of the runoff from a 1-year rain event. Additional storage was also added by installing a 2,100-gallon cistern and irrigation system that captures not only the stormwater in the system, but also the condensate from the hotel's HVAC systems.

Preliminary data shows that the project has been successful. There have been less swimming advisories recently as compared to previous years and the dependence on the public water utility has been reduced by as much as 90%.