

# **CODE BLUE: MOCK-HOSPITAL TO HELP REVIVE COMMUNITY STAT**

Johnson Engineering is proud to be part of history as Edison State College constructs its unique stateof-the-art nursing facility and expands its nursing program to attract students to Southwest Florida, meeting the demand for medical services in our community.

With a fragile economy in the forefront of people's minds, many are thinking of ways to bring in revenue for Southwest Florida. Edison State College has found their niche, as more students will soon flock to Lee County to be a part of the new state-of the art, real-time nursing facility currently under construction.

Scheduled to open this fall semester, a fully operational mock hospital including nurses' stations, emergency room, intensive care unit, operating room, maternity ward and pediatric ward will supplement traditional classrooms allowing students real world, hands-on training. No live volunteer patients here, but realistic anatomical mannequins, computer simulated specifically to emulate heart attacks, strokes, constricted airway, birth, and a variety of other medical situations. The mannequins



The two-story, 58,000 square foot nursing building is scheduled to be operational for the fall 2010 school semester.

are designed to provide feedback on how they feel, based on the care they receive, providing a tremendous learning opportunity for students. Under the watchful eye of their professor via video monitoring, students will operate the nurses' stations and care for ten patient beds. Students will review charts, take vitals, and tend to realistic situations similar to those that arise on a typical hospital day. Following each simulation, professors meet with their students for a video debriefing session, which allows them to review their performance handling each situation.

Attracting students is one thing, keeping them here is another. Lee Memorial Health System supports the growth of Edison's A quarterly publication by:



Spring 2010

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**Edison State College Nursing** Facility



**EPA Numeric Nutrient Criteria** 



**Sustainable** Initiatives



Local Agency Program (LAP) Services





Rendering of the future Edison State College Nursing facility, courtesy of BSSW Architects.

#### **PEOPLE & PROJECTS:** ON THE MOVE



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Erik Howard, P.E., LEED AP Utilities group, has been appointed to serve on the Charlotte County Construction Industry Licensing Board, representing the 'professional engineer' category.



Laura Brady Herrero Environmental team ecologist, has been appointed to sit on the City of Fort Myers Planning Board. The board consists of eleven members, each serving three year terms.

nursing program and provides an environment for students to complete their residencies during the last year of study. With such a hands-on learning environment, students are well prepared to enter the workforce where currently more than 80% of the graduates end up living and working here in Southwest Florida.

> This retention is vital since Lee County's population is anticipated to grow as baby boomers move toward retirement. Edison is proactive in their thinking to train highly qualified professionals who will be ready to fulfill this need in our community. Currently, there are 700 students enrolled and more than 300 graduate annually. The Edison nursing program was established in 1967 and has continued to rank among the top 15 programs in the nation. In addition to the registered nursing (RN) program, the college now offers a 15-month completion program, allowing RN's to earn their bachelor of science in nursing degree (BSN).

Not only will this nursing building and its programs enhance the lives of students and their future patients, but the building itself will support our community's movement for more sustainable design and is slated to become the first Leadership in Energy and Environmental Design (LEED) certified building on campus. Striving for Gold LEED Certification, our Johnson Engineering team worked to receive the following credits:

- ¬ Pollution prevention plan following NPDES requirements
- ¬ Site selection criteria

The nursing building will feature interactive, real-time clinical suites, a state-of-the-art

classrooms, a multi-purpose community room and a medical history museum. Rendering

science lab, two computer labs, general

courtesy of BSSW Architects.

- ¬ Development density and community connectivity
- ¬ Alternative transportation and parking capacity
- ¬ Maximizing open space working with site development
- ¬ Stormwater design providing quantity and quality control

" Master planning at ESC is a critical strategic step. Understanding the impact of where future buildings and parking lots will be located in the Master plan gives the college an opportunity to work with companies like Johnson Engineering to anticipate and pre-permit critical future projects. This was certainly the case for the nursing building and the new classroom building coming early next year. Johnson Engineering certainly works like a partner with us in this process.

> ¬ Mr. Steve Nice, Edison State College Facilities Planning & Management District Director

Behind every newly constructed building are layers of responsibility and months of planning and construction. For more than 20 years our team has been one of the integral layers that has helped Edison grow by providing civil engineering, including site design, surface water management design, utilities, roads, parking, construction observation, certification and permitting. This work has helped us recognize innovative ways we can save the college money. One such way is reducing permitting timelines, therefore, expediting future development. Using Edison's existing development master plan, our team provided conceptual permitting and construction plans on how to manage stormwater runoff in other areas of the campus. Having a South Florida Water Management District (SFWMD) conceptual water management plan already in place when future buildings are constructed has the potential to reduce the permitting timeline and allow actual construction to commence on an accelerated schedule.

Edison State College has created a way for all health students to enrich their career path and see, feel, hear and touch what it truly means to work in the medical community. With our rich history of working with Edison since the early 80's, we are privileged to be a part of this thriving educational community.



In addition to providing the civil site design for the nursing building, Johnson Engineering also designed the parking area to the east as part of the overall project.



Johnson Engineering performed a development density and community connectivity study a half mile around the nursing building site, as part of the credit requirements to achieve LEED certification

#### NUMERIC NUTRIENT CRITERIA

There have been many articles written since 2009 about numeric nutrient criteria. The Environmental Protection Agency (EPA) is currently in the process of setting numeric limits for the State of Florida, replacing the current narrative format. The draft rules were published in January of this year in the Federal Register. There are considerable differences in the limits throughout the state. Although it answers some questions, it raises others.

One of the more challenging parts is the definition of streams and lakes. Streams include many canals around the state, some are used to transport water to treatment facilities. According to the new draft rule, the water quality in these canals would have to meet the same requirements as streams. This means before water can enter the canal heading toward the treatment facility, it will have to be treated first. Likewise, the definition of lake could include stormwater treatment ponds that exist to meet state attenuation and treatment requirements. If left as written, treatment facilities could be required to treat water prior to it reaching the stormwater ponds.

Public meetings will be held in April and the comment period has been extended to April 28, 2010. For more information on ways to submit comments, visit www.regulations.gov, search by Docket ID No. EPA-HQ4 OW-2009-0596. The final ruling is currently scheduled for October 2010. For additional information on how these rules could affect you, please contact Andy Tilton at 863.612.4055 or atilton@johnsoneng.com. 🗖

# **UNITING WITH CHARLOTTE COUNTY & FGCU FOR SUSTAINABLE INITATIVE**

Supporting Charlotte County's vision of this region to become known as the 'Green Coast'

In recent years, we've seen a rapid increase in the movement to lifetime, planting 23 Cypress trees would continually capture and reduce harmful greenhouse gas emissions and promote sustainability sequester equal amounts of carbon from the atmosphere. in our area. Taking these initiatives and actually applying them to Keeping the carbon offsets in this region, Johnson Engineering recommended purchasing the trees from a Charlotte County nursery, and then planting them at Florida Gulf Coast University (FGCU). While continuing our longstanding relationship with the University, this initiative also supports FGCU's mission to practice and promote The purpose of the event was to spark discussion and information environmental sustainability, nurture community partnerships, and value public service.

tangible events and projects is what our team strives to accomplish. The first annual Southwest Florida Green Futures Expo and Energy Options Conference was just the event needed for our professionals to put their skills into practice. exchange on the importance of renewable and alternative energy and demonstrate how the industry is poised to redefine economic

A morning ceremony brought together Johnson Engineering team development for the state and the nation in the near future. members, Charlotte County Economic Development and Charlotte The multi-day event was attracting worldwide interest with more than County Building Construction Services staff, Charlotte County 2,230 participants and it was clear the carbon emissions generated Commissioner Dick Loftus, FGCU's Vice President of Administrative Services Dr. Joe Shepard, FGCU staff and student volunteers from would be counterproductive to its intent. Jaime Boswell, Johnson Engineering Environmental Scientist, saw this as an opportunity to the Anthropology Club. All assisted in planting the Cypress trees in offer her expertise in greenhouse gas accounting by way of sponsorship the hand-selected FGCU wetland area, the intended site of a future nature trail similar to those existing throughout the campus. for the event.

Using the data collected through her survey, Jaime determined the For information on how Johnson Engineering can assist with your event's total emissions were close to 30 metric tons of carbon dioxide greenhouse gas accounting, contact Jaime Boswell at 239.461.2449 or (MtCO2). To offset these emissions and promote the event as being jboswell@johnsoneng.com. carbon neutral, Jaime's calculations determined that, over their





# **ARE YOU PREPARED TO RECEIVE FEDERAL FUNDS?**

Has your agency been approved to receive FDOT Local Agency Program (LAP) funding? Is your team prepared to administer your project(s) to ensure strict conformance to the LAP requirements? After a project has been LAP qualified, the project must adhere to rigorous reporting processes throughout construction to ensure funding. The LAP process includes complying with EEO/AA, wage rate and DBE requirements, amongst many others. The process is intricate, time consuming and takes a dedicated team to manage the meticulous details.

We have successfully administered LAP projects from bid package assembly through final inspection, ensuring projects were in compliance to receive their LAP funding. Our construction engineering and inspection (CEI) team has been assisting local municipalities in construction project administration for more than 30 years. We have experience in LAP funded projects and know their specific requirements.

We can help your agency through this complex process and assist in securing these much-needed funds for our community. For more information, contact James "Vee" Lofton at 239.461.2406 or jlofton@johnsoneng.com.









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