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A quarterly publication by:

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Service Award

FGCU TRANSFORMING HEALTH PROFESSIONS EDUCATION

The new avant-garde health professions building at Florida Gulf Coast University (FGCU) will undoubtedly attract students seeking a career in the healthcare industry to Southwest Florida and will better prepare graduates for managing real world scenarios.

The beautiful, mild weather in Southwest Florida draws many to our area for tourism, retirement or as seasonal residents. With this influx comes a need for more healthcare professionals to care for these individuals. What better place than FGCU, located in the heart of Southwest Florida, to pursue superior education, and achieve a career in healthcare.

The brand new home of the College of Health Professions officially opened in March 2012, houses incredible technologically advanced equipment to assist in the education of students. Simulatedbased healthcare education is revolutionizing the quality of training students receive, making them exceptionally prepared to enter the healthcare industry.



A realistic adult SimMAN lays in the FGCU intensive-care simulation room ready for students to rehearse realistic emergency scenarios, while instructors and classmates observe and discuss in an adjacent room.

The health professions building bears the name 'Marieb Hall' after Dr. Elaine Marieb, an internationally renowned author of numerous anatomy and physiology textbooks, who wanted to give back by pledging a generous \$5 million to FGCU, so students would have the best tools possible to explore and practice healthcare management.

This revolutionary educational facility is like nothing Southwest Florida has seen. The School of Nursing is equipped with a fully functional simulated intensive-care unit, labor and delivery room, operating room, and hospital rooms, each complete with computer simulated mannequins that respond to student's care. Instructors and classmates can observe and

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Thomas, E.I. joins our Utilities team. Mark has a Masters in Environmental Engineering. His seven years previous experience includes designing wastewater, irrigation, and potable water systems.



Coral Creek Airport Expansion

Senior Ecologist John Curtis obtained an FWC Permit and led efforts to safely excavate and relocate 15 State Threatened gopher tortoises from the Coral Creek Airport expansion project, to an FWC certified recipient site. The survey, permitting, and relocation was completed in under 60 days, successfully keeping the project on schedule.

discuss actions from adjacent classrooms, viewing the simulation on split screen monitors showing real-time care and reactive vital signs.

Students majoring in other areas also benefit from this high-tech facility. Those majoring in Athletic Training, Exercise Science, Clinical Laboratory Sciences, and Physical and Occupational Therapy also have unique handson tools and laboratories available to help students understand what patients endure to restore their quality of life. What might look like a typical classroom

> on one side, reveals a detailed apartment on the other side, including a completely

decorated and furnished bedroom, kitchen, and bathroom. Walking into the sports medicine lab, you get the feeling you've walked into a true NFL locker room, outfitted with yet another computer-controlled athlete simulation mannequin and observation room. The human performance lab comes fully equipped,

including housing a state-of-the-art Bod Pod body

composition analysis machine and a unique NASA-developed antigravity treadmill.

The facility would not be

complete without the large hydrotherapy pool, featuring an underwater treadmill built into its floor, allowing students to work through aquatic rehabilitation simulations. These laboratories are highly beneficial in providing students practical training in the challenges and obstacles patients may face in their daily routines and activities during their rehabilitation.

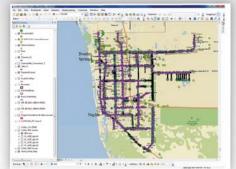
Marieb Hall was the final piece of the puzzle in connecting the core of academic buildings around the spaciously designed student courtyard in the heart of campus. Johnson Engineering has worked closely with the University since its inception, helping it take shape as it grows and educates our future generations. Our involvement isn't commonly seen, as civil engineering is one of the building blocks that give form and foundation when building the village. With each completed building, come layers of planning and site design criteria, drainage and water management, and additional parking considerations to accommodate the increased traffic.

As we provide FGCU with the groundwork they need to build their village, they will continue to provide a foundation of knowledge for students who may eventually live and work here, ultimately, boosting our community with highly trained professionals with goal oriented plans.



GIS MAPPING STORMWATER INFRASTRUCTURE

In today's business world, using reliable information is crucial when making decisions and understanding how systems work. Virtually all data have a spatial component and our GIS team can help turn your raw data into tangible information that is easily accessible. By way of GPS, conventional surveying, and subsurface utility locations, our team can provide GIS utility or environmental mapping, to collect this raw data, helping you manage your assets.



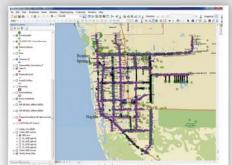
We have recently developed a standardized

GIS stormwater geodatabase for Collier County, populated with stormwater facilities constructed in conjunction with County roadway projects. The geodatabase was developed to fit standardized criteria already in place being used internally by Collier County staff and to help meet NPDES requirements for the County. Locations of stormwater facilities are taken from hardcopy and electronic documents, and assembled into a GIS geodatabase. Mapping includes over 770,000 LF of piped conveyances, over 4,900 inlets and junction boxes, over 200 individual water control discharge structures, as well as associated swales, ponds, and detention areas. Data gaps were filled in by our survey teams using GPS data collection methods, where plan sets were not available.

Information can then be extracted from the geodatabase in report or spreadsheet format and utilized to meet a variety of needs including operations and maintenance, hazardous spill response, and facilities management, in addition to NPDES reporting. Various documents are linked to the individually mapped features, like photographs, field notes, and PDF construction plan sets, making the geodatabase a central location for managing the stormwater infrastructure.

The geodatabase data acquisition model developed by Johnson Engineering can be readily adapted to other municipalities or airport FAA GIS requirements and can handle multiple data types in addition to stormwater, such as potable water, raw water, irrigation supply, gravity sewer, force mains, and gas mains.

For more information on GIS mapping, contact Michael Lohr, P.S.M at 239.461.2404 or mlohr@johnsoneng.com. ■



January 1, 2014. Written notification to the agencies by December 31, 2012 is required, identifying the specific authorization for which the holder intends to use the extension and the anticipated timeframe for

acting on the authorization.

NEW PERMIT EXTENSIONS

House Bill 503 passed and has been signed by

the governor, allowing for a two year extension

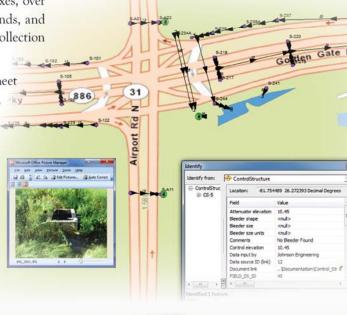
of any building permit, and any permit issued

by the Department of Environmental Protection

or by a water management district which has an

expiration date from January 1, 2012, through

For more information contact Patricia Bell, P.E., at pbell@johnsoneng.com or 239.461.2402 ■



JOHNSON ENGINEERING RECEIVES COMMUNITY SERVICE AWARD FROM THE CITY OF FORT MYERS

Johnson Engineering received first place recognition from the City of Fort Myers for the successful efforts cleaning Carrell Canal through the City's Adopt-A-Canal program. Throughout the last two years employee volunteers participated in quarterly cleanings and removed 29 cubic yards of trash and debris from the canal, the most removed by the seven other firms participating in the program.

This initiative began as a way to decrease the amount of litter from 10 canals throughout the City's stormwater system, ultimately helping to improve the water quality of the Caloosahatchee River.



GRANT FUNDING HELPS REDEVELOP THE DOWNTOWN FORT MYERS RIVERFRONT

Imagine heightening water quality standards, an impaired water body designation, and total maximum daily loads, all converging on a dense urban downtown setting in the midst of a Great Recession...what is a City to do? The City of Fort Myers had the answer. In 2009 they competitively selected Acquest Realty Advisors and its consultant team to launch a Riverfront Development planning effort, the main feature being a stormwater improvement project that benefits the environment, stimulates economic growth, spurs redevelopment, honors community history, and enhances quality of the public realm.

Since adopting the Riverfront Development Plan and incorporating it in the Downtown Master Plan, the City has methodically pursued the design, permitting, and funding for the 1.4-acre Downtown Detention Basin project central to the Plan. Johnson Engineering assisted in key aspects of the project to bring about the construction that can be seen downtown today. In addition to engineering design and permitting, we helped the City obtain what it needed most: money.





Teamed with Acquest, we helped the City identify, apply for, and obtain funding for planning, design, and construction. We first landed State Revolving Fund Loans for planning and construction, followed by awards in the amount of \$898,000 from the Florida Department of Environmental Protection and the Total Maximum Daily Load (TMDL) Grant program. Thanks to the grants and the budget available after completion of the Downtown Streetscape Project, the City could forgo tapping into the loans. With construction underway, we continue working to help the City as we identify dollars for educational signage, pathways, and other elements of the project.

For more information, contact Laura DeJohn at 239.280.4331 or ldejohn@johnsoneng.com.

Illustrations courtesy of Populous, Inc., www.cityftmyers.com



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