

"Your project. Our passion."

In This Issue:

Summer 2013

**USSC/SCFE New Railroad Expansion** 

A guarterly publication by:

**JOHNS** ENGINEERING



**Our New Pembroke Pines** Office Opens



**Fort Myers Downtown Basin** Wins More Awards



**Lester Bulson** 



**Our Experts** are Getting **Published** 

**PEOPLE & PROJECTS:** ON THE MOVE







Remembering Surveyor

# **NEW RAIL LINE CONNECTS A FAMILY OF AGRIBUSINESSES**

The newest expansion of the South Central Florida Express (SCFE) railroad in Hendry County will now connect the United States Sugar Corporation (USSC) Clewiston Sugar Factory with a new care loading platform on C.R. 833 and to the Southern Gardens Citrus processing plant, making it easier to transport sugar and juices to Florida residents and beyond.

USSC moved forward with plans to connect their Southern Garden Citrus processing plant in Hendry County to the existing railroad system used for their sugar operations. The new railroad will reduce the large truck traffic currently transporting juice products to and from the citrus plant, while also providing a more efficient delivery of sugar cane to be processed and refined at the Clewiston Sugar Factory.

Johnson Engineering was chosen to provide the surveying and mapping, environmental, water resources and construction inspection for the 11.4 miles of proposed rail within a nearly nine mile long

corridor through sugar cane and citrus groves.



The new railroad shown above in red will connect the USSC Clewiston Sugar Factory with a new cane loading platform and to the Southern Gardens Citrus processing plant.

alignment, our surveyors conducted the field locations and staking needed to assess if the proposed route would work as designed. Utilizing our state-of-the-art GPS software, our team acquired digital horizontal and vertical data and performed a detailed topographic survey along the entire route. They identified every roadway, canal, and ditch crossing the route, including gathering the precise height of several overhead electric transmission and service lines to verify the trains would clear them. Each week, the electronic survey data was sent to the railway engineer in order to produce the final construction plans.

In the fall of 2011, equipped with the railway engineers' preliminary

CONTINUED ON PAGE 2

Terry Bengtsson, P.G. joined our water resources team as a hydrogeologist. He worked for both the SFWMD and SWFWMD, bringing more than 28 years experience in hydrogeologic investigations and groundwater modeling



Chris Beers, P.E., P.S.M. branch manager, with close to 20 years of experience, has been named as a new shareholder of Johnson Engineering.



Kevin Winter, P.E. has recently been named "Engineer of the Year" by the Florida Engineering Society's (FES) Calusa chapter.

Within two months, all survey field work concluded that portions of the alignment needed to be relocated so it would be more conducive to farming operations. Our survey team provided a topographical survey of the revised portions of the route, again quickly collecting and providing data for preparing the construction plans. After two route modifications, the final route and necessary data to produce the construction plans was completed in the spring of 2012.

In addition to survey, our water resources and environmental teams were tasked with helping to obtain the necessary permits to construct this large undertaking. This project required simultaneously permitting and modifying six separate permits for different entities, all owned by USSC. This allowed the railroad to be the accessory use and utilize the existing water management system in each permit. One area did not have a permit controlled by USSC, but had its own water detention designed specifically for the portion of the railroad passing through it. Our team assisted in acquiring





a water use permit to dewater this area in order to allow installation of culverts and to demuck small portions of the project area.

Our ecologists conducted wetland jurisdictional determinations and prepared protected species surveys in support of the permitting of the project. Formal consultation with the U.S. Fish and Wildlife Service for the project's effect on the Florida panther was required for the project, which typically takes well over a year to accomplish. Our environmental team implemented an approach to streamline the process and was able to secure the federal permit and biological opinion from the U.S. Fish and Wildlife Service only eight months after the Public Notice for the project was advertised, keeping the project ahead of schedule.

Construction of the railroad began in late 2012. Our construction engineering inspection (CEI) team worked closely with the contractor to provide on-site monitoring, inspection, testing, and

> reporting. Our inspectors took daily density tests of rock materials being used along the rail route to ensure permanent compaction. This work included pulling sample rock to be lab tested to verify they met certain specifications to allow proper drainage. Our team also produced weekly construction inspection reports for the Stormwater Pollution Prevention Plan as part of our National Pollutant Discharge Elimination System (NPDES) monitoring.

> In May of 2013, our surveying team was called back in to perform the remainder of construction staking needed to keep the project on schedule Within one week our field crew had the clearing limits staked for the remainder of the route and have begun working on final alignment stakes and grades.

> Overall this has been a unique project that has allowed each of our market groups to work consecutively and simultaneously together to successfully see this project through from beginning to end. ■

# **NEW OFFICE OPENS ON FLORIDA'S** SOUTHEAST COAST We are excited to announce the expansion of our east coast

operations, with the opening of our Pembroke Pines branch office. This new office located at 6941 SW 196th Avenue, Suite 32, Pembroke Pines, FL 33332, will allow us to easily serve our clients in Broward, Dade, Palm Beach, and along the eastern coast of the state while providing our complete host of services.

We have established a strong presence working on a variety of environmental projects in the Tri-County and surrounding areas. We felt this was the perfect time to expand in order to further establish our local presence and provide our high level of expertise and short response time to our clients.



# **OUR ENVIRONMENTAL TEAM** IS NOW MSHA CERTIFIED

The director of our environmental team Church Roberts and his two lead ecologists, John Curtis and Laura Herrero, recently attended new miner safety training and received their MSHA (Mine Safety and Health Administration) certifications.



### CITY OF FORT MYERS DOWNTOWN BASIN PROJECT WINS MORE AWARDS

When the City of Fort Myers downtown basin opened in late 2012, it was apparent it was an award winning space combining a unique mix of waterfront pathways, aesthetically appealing architecture and landscaping, while inconspicuously improving water quality before draining into the Caloosahatchee River.

Not only did this project win the Engineering Excellence award from the Florida Institute o Consulting Engineers last year, it was just announced that it won the Outstanding Redevelopment award from the Florida Planning and Zoning Association (FPZA), the Excellence Award for Stormwater Programs and Projects from the Florida Stormwater Association (FSA), and earned the title of Public Works Project

of the Year from the American Public Works Association (APWA).

This is just the beginning of what's to become an exciting downtown gathering space with Phase 2 of the Riverfront Development plan slated to include adding waterfront restaurants, shops and hotels. This project will bring a much needed economic boost to the City of Fort Myers while bringing its residents and visitors together. These awards recognize our teams' exceptional efforts on this truly exceptional project.



**BEFORE** 



# LES BULSON - REMEMBERING A MAN WHO HELPED WEAVE OUR COMPANY HISTORY

Mr. Lester L. Bulson, Sr., one of Johnson Engineering's original stockholders and surveyors, passed away April 30, 2013 at the age of 87. Les' infectious laughter will forever linger in the halls of Johnson Engineering, as will his survey seal found on thousands of plats in our archives.

Les was one of the few who had the pleasure of working directly with our company founder Carl Johnson. Without Les, Johnson Engineering would not be what it is today. Back in the late 1960's, when the company was in transition from Carl Johnson to Archie Grant, Les was the only registered professional surveyor working for the company at that time, which kept us moving forward.

Les moved to Fort Myers from New York, and his friends remember that he would often make fun of the surveying methods used on these flatlands,

since he was use to surveying up and down mountainous terrains. Known best for his practical jokes, which today would probably have him sitting in the HR office, Les was always up for a good laugh.

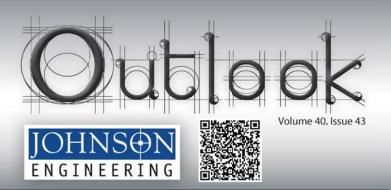
He was an avid fisherman, moving around the state just to get closer to his favorite

fishing spots. During his time here, he gathered more topographic land knowledge of the barrier islands along the entire Southwest Florida coast than nearly anyone, yet ironically probably couldn't find it on foot without his maps in hand. Les was also a pilot and would fly aerial reconnaissance for the company in the 1970's and 80's. He captured rare images of flooding that would later help our team develop water management master plans.

We owe Les a great deal of respect for getting Johnson Engineering to where we are today.



I hereby certify that this plat is a true and correct representation of a recent survey made and platted under my direction.



### Office Locations

Corporate Headquarters 2122 Johnson Street Fort Myers, FL 33901 239.334.0046

2350 Stanford Court Naples, FL 34112 239.434.0333

18501 Murdock Circle, Suite 404 Port Charlotte, FL 33948 941.625.9919

17221 Camelot Court, Suite 101 Land O'Lakes, FL 34638 813.909.8099 251 W. Hickpochee Avenue LaBelle, FL 33935 863.612.0594

9200 US Hwy 27 South, Suite A Sebring, FL 33870 863.655.0490

201 S. Berner Road #3 Clewiston, FL 33440 863.805.0707

6941 SW 196<sup>th</sup> Avenue, Suite 32 Pembroke Pines, FL 33332 954.626.0123

Comments, questions or to receive future newsletters electronically, e-mail mkt@johnsoneng.com.
© 2009 by Johnson Engineering, Inc. All rights reserved. No materials or photographs in this publication may be reproduced without written permission from Johnson Engineering.

1.866.367.4400 www.johnsonengineering.com Engineers | Surveyors | Planners | Ecologists | Landscape Architects | Geologists | Scientists





## FLORIDA SCIENTIST JOURNAL PUBLISHES OUR FINDINGS

Our water resources team's project report findings were recently published in the spring 2013 issue of the Florida Scientist journal. Our article named "Using a Collaborative Partnership to Monitor Stormwater Best Management Practice Effectiveness: A Process and Project Summary" provided a summary of their public/private partnership monitoring the effectiveness of stormwater BMPs in Southwest Florida.

For the last eight years, Johnson Engineering has collaborated with FDEP, The Bonita Bay Group and, most recently, Florida Gulf Coast University's (FGCU) Inland Ecology Research Group, conducting various research projects to evaluate how effective these BMPs are in treating water quality. To date, we have performed multiple studies throughout Southwest Florida, including the Green Roof Study, Pervious/Impervious Pavement Study, Deep and Shallow Lake Aeration Study (Phase 1 and 2), and the Long Term Discharge Study, which included water quality and groundwater/surface water interaction components.



Florida Scientist

chance 76 Spring, 2013 8

Charlotte Harbor NEP Special Issue of Florida Scientist

Charlotte Harbor O'Der Wittersheeb and Enturies\*

Deducation and Acknowldgment

2011 Watershed Surement: The State of Our Watershed and Formation.

Challenge Line B. Book

Describes Challenge Line

2011 Westershol Sustaints: 101

Results of the Entrala Department of Environmental Protection, Chackene Blabe
Arpaine Processes Songman, Montroeing Program tion 1999—2009

Arpaine Proces

Bish A. Otlands, Pcier II. Discoving.

Description of the Bentine Macroim-resteeder. Communities of Fore Crocks Along the Fastern Stone of Charlette Rather.

(Yorks Along the Fastern Stone of Charlette Rather.

Albert S. Walson, Armifel L. Ashen, Christopher I. N. Reece M. Juffey, and Emil. C. Barrier.

And Advanced Vernicologies (Science, Natural Vernicologies).

for Vosses of the Stationard Changes
and Haraum-Uriven Changes
Edwis M. Evrikans, IB, David V. Ceiller, Dean A. Cue
Edwis M. Evrikans, B. David V. Ceiller, Dean A. Cue
Sans Titth, Charles Generals, Deh Dorson He
Sans Titth, Charles Generals, Deh Dorson He
Daniel E. VanNorman, Bergnin M. Wirmorn, and John E. C
Frechissater Fask Vermandalis and Habitat G. as it the Pance Revet, Frenchissater
Fask Vermandalis and Habitat G. as it the Pance Revet, Frenchissater
Fask Vermandalis and Habitat G. as it the Pance Revet, Frenchissater
Frechissater
Fask Vermandalis and Habitat G. as it the Pance Revet, Frenchissater
Frechissater
Frenchissater
French

Congraria Ecology of Encyhaline and Fondome Primares Congrariane Ecology of Encyhaline and Fondome Primares University and Maryland Congrariane Congrariane Conference on the Abendance on the Abendance Receptionally-deportant Vision in a Sudomyriad Foodylain Receptionally-deportant Vision in a Sudomyriad Foodylain Receptionally-deportant Vision in Sudomyriad Principal David A Ulicia and Philips William Congrariany Structure of Stream and Camin or Bobocck Rando.

thee Centrics, Physids

Lee Centrics, Physids

Blood W. Cellley, Laura Craby-Herrero, K.

Kory M. Ross, John A. Terlta, and Edwin M.

lolingstrad Sestences

USING A COLLABORATIVE PARTNERSHIP TO MONITOR STORMWATER BEST MANAGEMENT PRACTICE EFFECTIVENESS: A PROCESS AND PROJECT SUMMARY

MICHAEL LOIR! J. KIM ARNOLD! J. DANIO W. CELLEY J. Tor Discount III

"Weier Remoto Group, Johnson Engineering, 1/22 Johnson Stope, Ph. Myen Pl. 1300 Marine and Ecological Science, Flacida Gall Coast Diversity, 1050 FGCU Backward Son "Modile Ray Group, 1050 Crossett Res. J. 2000 Diversity Design Ray Group, 1050 Crossett Res. J. 2000

"Notality Bay German, 1980 (Control Road, Recent Springs, 1984) FGC V. Bashward Som "Notality Bay German, 1990 (Control Road, Recent Springs, FL, 341);5." I berida Experiment of 4-incremental of vincination, 2004 (Notation, 2004) (Notation, 2004). Compressing a uttor's contact. Alkahrajoshusumng australia.

described and A definition personally of path empire, prime mechanic, prime described and path of the Memorian mechanic prime and path of the Memorian mechanic prime and path of the Memorian path of

Ker Words: Stormwater, BMPs, public/private partnerships, green coof, monitoring

and purpose of that paper is to provide a immuny of the process and the process of the process of the process of the process of the state of the process of the subskipping purpose of the process of the

r anoth