

# Outlook

"Your project. Our passion."

## CELEBRATING THE LEGACY OF ARCHIE T. GRANT JR., P.E., P.S.M.

*It is with a heavy heart that we must say goodbye to Archie T. Grant Jr., P.E., P.S.M., our company's second president and most influential person in the continued success of Johnson Engineering, Inc.*

Archie T. Grant, P.E., P.S.M., the company's second president, passed away January 12, 2017. The best way we believe we can honor him is to pay tribute in recognizing the legacy he left behind and the impact he made on each of us and Johnson Engineering.

Without Archie Grant, there would be no Johnson Engineering today. In 1968, illness forced company founder Carl Johnson to seek a successor for the company. Finding someone with the same sense for quality, integrity, and business was needed for the company to survive. The man who answered the call was Archie Grant, a Forest Engineer with the U.S. Forest Service. Archie met with Carl and reached an agreement to buy the company. Archie packed up his wife and three children and moved to Fort Myers.

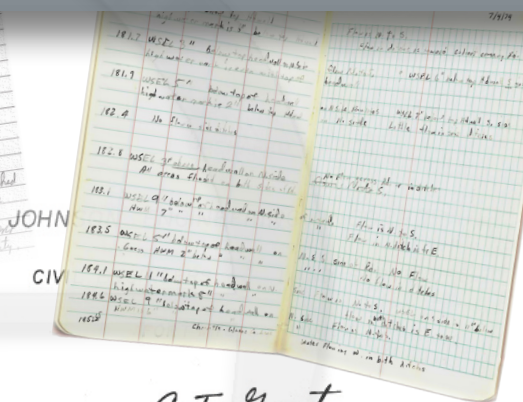
As the new president, Archie was presented with a challenge, as he found that one of Carl's best traits, his dedication and reputation, was also a financial detriment as Carl would often finish projects on his word even if underbid. Archie wanted the same principles of dedication, reputation, persistence, and pride to continue to be the company's cornerstones, while establishing company security. He initially established three primary objectives to help achieve this goal: 1) Obtain financial stability, 2) Secure a responsible vice president, and 3) Establish new and improved office facilities.

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Johnson Engineering's second president, Archie T. Grant, P.E., P.S.M. (1936-2017), and his beloved wife Ruby.

The local laws from... suggested Archie... who was working with the P.S. Service... Archie... who was working with the P.S. Service... Archie... who was working with the P.S. Service...



*A.T. Grant*  
**A. T. GRANT**  
Registered Professional Engineer  
Florida Certificate No. 13621

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The Call of Duty



## PEOPLE & PROJECTS: ON THE MOVE



**Mark Lerch, RLA**  
has joined our Planning & Landscape Architecture team. He earned his MBA in Landscape Architecture, is a registered Landscape Architect, as well as Certified Arborist.



**Maha Nusrat**  
has joined our environmental team, as a botanist. She will be assisting with several projects that require her botanical expertise, including projects involving pine rocklands.



Establishing financial stability was objective number one. Archie worked tirelessly to get things back in order and the company's financial future quickly began to look brighter.

Archie's second strategy to secure a capable vice president brought Forrest Banks to the team. Having worked together previously at the U.S. Forest Service, Archie knew Forrest would be a valuable asset to the team as he was highly intelligent and a great public speaker.

As the company began to grow, the third objective was achieved in 1972 as the team was now ready to move to a new larger location less than a mile away on Johnson Street. Oddly enough, the name Johnson Street was a mere coincidence, but added a nice touch to the location. Wanting to stay in the heart of Fort Myers, the company bought a group of old buildings, one being an old dilapidated motel called The Town House. The site where those old buildings once stood is still home to our corporate office more than four decades later.

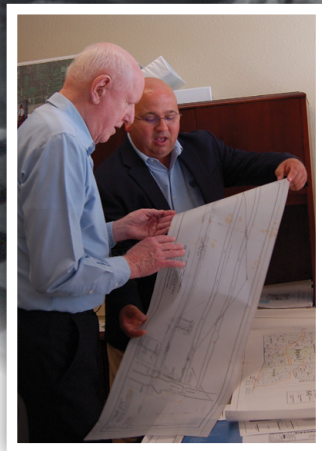


Throughout the last 70 years, Johnson Engineering has known only five presidents. Founder Carl E. Johnson (1946-1968), Archie T. Grant (1968-1979), Forrest H. Banks (1979-1997), Steven K. Morrison (1997-2012), and Lonnie V. Howard (2012- present).



One of the last projects of Archie's career was for an FDEP funded stormwater runoff discharge research project in Lee County. He helped with several aspects of this project, including hydraulic flow calculations, operation, and behaviors of control structures. The project team above was conducting their annual status update meeting, reviewing the project, observing lake water levels, stormwater discharge structures, and discussing aspects of the project. The results of this study were used by FDEP to develop new stormwater regulations.

When Archie T. Grant, P.E., P.S.M., purchased Johnson Engineering in 1968, he established a strategic plan to ensure the company's future success.



It was not uncommon for Archie to frequent the office. His memory was always as sharp as a tack.

Archie's vision and the strong team supporting him provided the stability the company needed, yet he always looked for that unique niche they could fill. His adventurous mind knew that if you learn something that no one else knows, you make yourself the expert and the go-to firm. Archie decided this niche would be surface water levels and information. Archie knew if he followed all the rainfall events and cataloged them he would have something no one else had. For years if it rained 2" he was out taking pictures and making measurements, often times in the middle of the night. If it was really wet he would fly all day taking aerial camera shots. With that information we could design drainage systems for anything and our clients knew it would work. Thus began Johnson Engineering's Water Resources department. Archie's dedication to recording rain events, tracking how many inches it rained, where the water flowed, making observations, taking pictures, etc. gave our company immeasurable amounts of data that no one else had. In 1978, Andy Tilton joined the team and worked closely with Archie who sent him crawling through storm drains to observe and record water flow patterns throughout Southwest Florida. With Archie as his mentor, Andy got a head start and was instrumental in pioneering the company's water management database system which contains five decades of water resources data.

In 1979, Archie turned the helm over to Forrest Banks, yet remained on the Board of Directors and concentrated on water resources projects. Not many companies have the privilege of such invaluable historical resources available to their employees. Although officially retiring in 2001, Archie would frequent the office to work on projects, enjoying them even more because he could hand pick the ones he wanted to work on. For the company's engineers, Archie was an invaluable resource who knew first-hand the water flow of any area you'd ask him about. He's the one who took the pictures and helped develop the water management plans in our file libraries. With nearly a half century of Southwest Florida water and Johnson Engineering coursing through his veins, Archie Grant was a man who truly valued hard work and led by example. He treasured this company and was proud of what it became.

As we say farewell, we remember this great man who left a huge impact in our hearts and in this company. We will do our part to continue the legacy he entrusted to the future generations of our company as we move forward into new specialties, niches, and fields of study, while keeping our dedication, integrity, pride, and reputation. ■

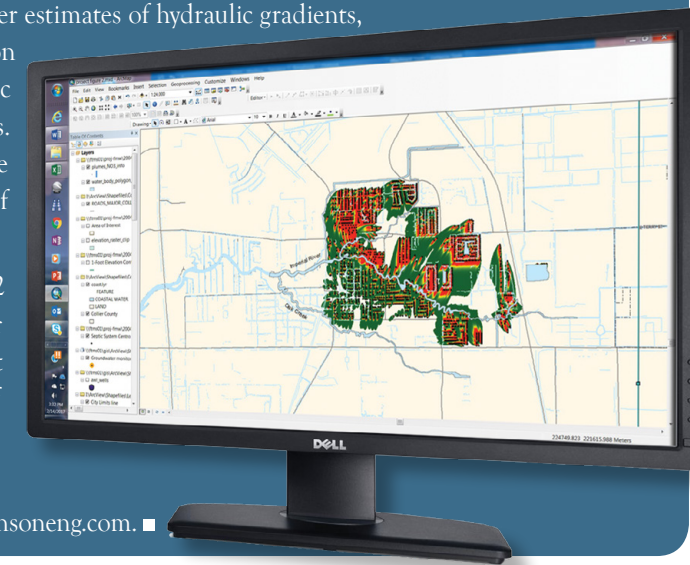
## JOHNSON ENGINEERING TEAM PIONEERS MODEL TO GET WATER QUALITY CREDITS

Florida's Department of Environmental Protection (FDEP) has a Total Maximum Daily Loads (TMDLs) program to improve water quality to State or federally-identified impaired waterbodies, including the Caloosahatchee Estuary and Imperial River. The FDEP requires local governments to participate in mandated Best Management Action Plans (BMAPs) to reduce TMDLs to these waterbodies. The cities of Bonita Springs and Cape Coral participate in BMAPs, and selected Johnson Engineering to calculate how much nutrient load was removed from their impaired waterbodies by the elimination of septic systems in areas within their city limits. The cities plan to submit the findings to FDEP in order to gain credits towards meeting their TMDL goals.

Johnson Engineering used recently developed GIS-based ArcNLET software to evaluate nutrient loading from the cities' septic systems, and is one of the first private organizations to use the software. In addition, this marks one of the first uses of the software in south Florida. Application of the model to areas characterized by low hydraulic gradients with numerous canals and surface water features posed a challenge. Flow rates, denitrification decay coefficients and initial nutrient loads are the primary factors for determining loads reaching a waterbody. To create a model that better represented the study areas, Johnson Engineering recommended modification of selected default model parameters. Andy Tilton, Paul Lohr, and Terry Bengtsson worked closely with City, FDEP and software creators/authors to develop innovative approaches to model set-up. This included use of MODFLOW groundwater flow models to generate better estimates of hydraulic gradients, as opposed to approximation of a water surface based on a Digital Elevation Model (DEM). Groundwater velocities and flow directions driven by hydraulic gradients strongly influence the ultimate fate of nutrients from septic systems. Use of MODFLOW models, along with other model parameters more appropriate for areas with water tables near land surface, resulted in improved estimates of nutrient load reductions.

The City of Bonita Springs has received approval by the FDEP for a credit of 912 pounds of nitrogen removal against the needs of the BMAP for the freshwater portion of the Imperial River. The City has estimated nitrogen removal costs at about \$650 per pound based on several previous projects. This equates to savings of more than a half a million dollars of taxpayer money based on work already funded by residents through the Bonita Springs Utilities construction program.

For more information, contact Andy Tilton, P.E. at (863) 612-4055 or atilton@johnsoneng.com. ■



## LEE HEALTH EXPANDS SOUTHWEST FLORIDA REGIONAL CANCER CENTER

In true Lee Health fashion, the promise of providing patient oriented service is evident yet again with the expansion of the Southwest Florida Regional Cancer Center (RCC) to better accommodate patient care. Lee Health recognized that when someone is ill, the last thing they should be doing is running around town to receive various treatments. With that in mind, in 2008 Lee Health opened the RCC, which partnered with private cancer-care practices including, Florida Cancer Specialists, 21st Century Oncology, and Florida Gynecologic Oncology, to provide a comprehensive center allowing patients to receive multiple health services in one location.

Sadly, the sharp increase in cancer diagnoses throughout the last nine years has pushed the RCC to its maximum capacity, compelling Lee Health to expand the facility. Careful thought was put into every aspect of the new 24,000 sq. ft. space gearing it towards patient comfort and ease of access.

Expected to be completed in 2018, the expansion will provide additional research space for cutting edge diagnosis, more specialized medical staff, expanded cancer treatment services, and a new pharmacy. The transformation should also attract new physicians to the area who are eager to be part of a leading edge facility.

As the civil engineer for this project, our role is to design the site, drainage, landscape architecture, utilities, and parking, while also working closely with the design team to incorporate innovative recommendations to remain consistent with their overall vision. This teamwork can be seen throughout the project, but the most identifiable may be the required utility easement running through the middle of the property. Rather than a stark open space, it will be transformed into a therapeutic garden area for all to enjoy. In initial design meetings, Lee Health also requested we add more than the required number of handicap spaces and valet parking, which is just another example of their continued commitment to providing patient-centered care with respect and compassion.

For more information, contact Dana Hume, P.E. at (239) 461-2471 or dhume@johnsoneng.com.





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ENGINEERING



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## Office Locations

**Corporate Headquarters**  
2122 Johnson Street  
Fort Myers, FL 33901

251 W. Hickpochee Avenue  
LaBelle, FL 33935

2350 Stanford Court  
Naples, FL 34112

9200 US Hwy 27 South, Suite A  
Sebring, FL 33876

18501 Murdock Circle, Suite 404  
Port Charlotte, FL 33948

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

17900 Hunting Bow Circle  
Suite 101, Lutz, FL 33558

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

609 Mid Florida Drive, Suite 4  
Lakeland, FL 33813

1031 Ives Dairy Road, Suite 228  
Miami, FL 33179

Comments, questions or to receive future newsletters electronically, e-mail [mkt@johnsoneng.com](mailto:mkt@johnsoneng.com).  
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## THE CALL OF DUTY

On any given day Robert Flynn could be found helping conduct a boundary survey at the Babcock Ranch in Florida, and the next he could be sitting in the gunner seat of an armored vehicle trekking through the sands of the Middle East.

Rob, an instrumentman on our surveying team, enlisted in the United States Army Reserves in 2008 while still a junior in high school. Shortly after graduating, he was off to Advanced Individual Training (AIT), where new soldiers receive specific training in their chosen military occupational specialty (MOS). For Rob, that was a 88N/H or Transportation Management Coordinator, where he was assigned to the 1st Cavalry division in Florida.

It wasn't long before his unit was deployed to Afghanistan as part of Operation Enduring Freedom. In 2011, Rob had to leave his wife Julie and infant son Hunter behind, spending the next 14 total months living in B-Hut with seven other soldiers. During his deployment, he endured dangerous combat situations and was fortunate to make it home safely. He attained the rank of E5 becoming the Sergeant in command of his detachment. Rob also successfully completed a Spur Ride passing a series of physical and mental tests, earning him a Stetson and Spurs, which is a prestigious honor within the Cavalry.

Rob joined Johnson Engineering in 2014 and has been working on a field crew in our surveying and mapping group. In 2016, Rob was called back to active duty, this time he was deployed to Kuwait as part of the 623rd Inland Cargo Unit, then was forward-deployed and cross leveled to a Combat Sustainment Battalion and Special Purpose Marine Air & Ground Task Force (SPMAGTF) in Iraq. Again, Rob was placed in the line of fire, experiencing combat and withstanding the sounds of war, this time for nine months.

Back stateside again, it's only a matter of time before Rob could possibly get deployed yet again. Through his experience, he was able to meet some interesting people along the way, working with allied troops from countries such as Spain, Denmark, Britain, and Australia. He has also made lifelong friends of those soldiers who stood side-by-side with him on the front lines.

We are thankful that he has made it home safe and want to take this time to truly thank him for his service in protecting our freedom. From all of us at Johnson Engineering, Rob, thank you. ■

