

RICARDO ACOSTA, PE,CFM
Water Resource Engineer



racosta@johnsoneng.com
239.461.3324

Years Experience

16 years

Licensing & Registration

Florida Professional Engineer,
License No. 69121

Association of State
Floodplain Managers,
Certified Floodplain Manager,
Certificate No. US-13-Q710

Education/Training

B.S. Civil Engineering (1998),
Universidad Nacional de
Colombia

Rick joined Johnson Engineering in 2006. He is a project manager in the firm's surface water management department. He has designed and permitted surface water management systems for roadway, site development and assorted environmental projects through the South Florida and Southwest Florida Water Management Districts. Rick is a Certified Floodplain Manager and is accomplished in backwater profile modeling for adjustments to FEMA FIRMs. His modeling experience also analyzes water quality for treatment facilities related to municipalities achieving their obligations under the TMDL program.

Relevant Experience

- **High School MMM** - Designed the surface water management system for the new High School in Gateway, including improvements to Griffin Dr and obtained Environmental Resource Permits through the South Florida Water Management District.
- **Bonita Springs High School** - Designed the surface water management system for the school and obtained Environmental Resource Permit through the South Florida Water Management District.
- **North Fort Myers and Bonita Springs Libraries** – Designed the surface water management systems and obtained Environmental Resource Permit through the South Florida Water Management District for both sites. The North Fort Myers site required also a Drainage Connection Permit through the Florida Department of Transportation
- **Peace River Manasota Regional Water Supply Authority** – Analyzed the capacity of the intake channels to determine if sufficient channel capacity exists to convey the maximum pump capacity through the channel during a low tide event, i.e. a worst-case scenario. Topographic information of the river bottom at and near the Peace River Regional Water Supply Facility Intake Pump Station was obtained from field data collected by Johnson Engineering, and also topographic data was obtained from the SWFWMD. Rick used the HEC-RAS (Hydrologic Engineering Center River Analysis System, US Army Corps of Engineers, 2010) to evaluate one-dimensional steady river flow in the intake channel to determine water surface profiles.
- **Powell Creek Preserve Filter Marsh** - This project will provide pollutant removal and reduction of existing impairments to the Powell Creek watershed by pumping flows into a created 20-acre filter marsh system. Also, the trails adjacent to the marsh will provide educational opportunities. Our team performed a wide variety of design and permitting activities, including wetland delineation, protected species surveys, mitigation design, environmental permitting and modeling and design of the surface water management system and permitting through SFWMD, ACOE, FWC and Lee County.
- **State Road 739 Bridge Alteration, Conalvias, USA, City of Fort Myers** - Provided modeling to allow a bridge to be replaced with a land fill within MSE walls within a FEMA floodway.
- **Fort Myers Country Club, City of Fort Myers** - Provide design of a storm water treatment system to improve onsite and offsite water quality for areas currently without treatment to meet requirements of BMAP and SFWMD.
- **City of Naples Basin III Stormwater Improvements** - Assisted in the design and permitting of storm water improvements serving approximately 480 ac in the downtown Naples area. This project involves installation of pipes and construction of detention areas along approximately 1.5 miles of roadways
- **State Road 31, Lee and Charlotte Counties** - Assisted in the design and permitting of the surface water management system for the approximately four-mile roadway expansion project
- **Spanish Creek Preserve Hydrologic Restoration - Lee County** - Analyzed hydrology and hydraulics within approximately 5,000 ac of land that serves as headwaters for a 243-acre parcel in Lee County. The goals were to determine the existing capacity of the Spanish Creek and the quantity of water that could be diverted into the Spanish Creek Preserve to improve the hydroperiod.
- **City of Cape Coral North Water Treatment Plant, City of Cape Coral** - Assisted with the design and permitting of the surface water management system serving a 66-

acre treatment plant