

Joe DelaCruz, P.E.

PROFESSIONAL SUMMARY

Mr. DelaCruz is a licensed civil engineer with experience in the project management and oversight of a diverse range of projects, including design, permitting, construction administration, site inspection and certifications, and quality assurance/control. Mr. DelaCruz is also experienced in utility infrastructure sizing using hydraulic model software such as WaterCAD for water distribution and SewerCAD for wastewater systems and lift stations. He has been involved with both public and private sector projects including wastewater, water, distribution systems design and hydraulic modeling, master utility plans, pump stations, lift stations, and septic systems.

EDUCATION

- B.S., Civil Engineering, University of North Florida (2000-2003)

LICENSES AND CERTIFICATIONS

- Registered Professional Engineer in the State of Florida – P.E. License No. 69295

PROFESSIONAL EXPERIENCE

Omega Forensic Engineering, Inc., Parkland, FL (2021 – Present)

Forensic Engineer

- Performs forensic evaluations of buildings and structures to evaluate cause and origin of distressed conditions. Evaluations typically include inspections, documentation, and engineering reports.

Truss Property Solutions, LLC, Jacksonville, FL (2013 – Present)

Co-founder/Co-owner

- A residential real estate solutions and investment company in Jacksonville, FL specializing in improving communities and neighborhoods by buying distressed properties, renovating/remodeling them, and putting them back on the market for potential home buyers. Company also wholesales/assigns contracts to other investors. I am responsible for the overall financial aspects of the company including accounting and coding using QuickBooks and structuring financial terms with private investors funding the deals. I also analyze the profitability of a deal by using detailed spreadsheets to justify our offers, renovation budget, and after repair value (ARV). During the renovation process, I am responsible for making sure our renovation costs along with change orders are still within our budget and profit margins.

Applied Technology & Management, Inc. (Nov 2008 – Present)

Civil Engineer

- Responsible for project management and oversight of a diverse range of projects, including design, permitting, construction administration, site inspection and certifications, and quality assurance/control.

Northbeach Engineering, Inc/DRMP (Jan 2003 – Oct 2008)

Engineer Intern (EI)

- I served as a Project Engineer. My work covered various environmental engineering projects related to commercial site development, water and wastewater projects, commercial and water park design.

ENGINEERING PROJECTS

Clay County Utility Authority, Fleming Island Repair Dock, Fleming Island, FL

- Project manager responsible for repairing the existing destroyed Fleming Island outfall dock. Engineer responsible for preparing construction drawing, technical specifications, and cost estimate.

Gumbo Limbo Pump Station and Seawater Intake Design, Boca Raton, FL

- Design engineer responsible for the design and construction plans for a new pumping station on the east side of A1A to adequately supply enough seawater to meet the demands for the current tank capacity and future expansions. The project consisted of pump modeling, preparation of construction drawings, and technical specification documents.

Clay County Utility Authority, Black Creek Utility Relocation, Middleburg, FL

- Project engineer responsible for evaluating options for relocating water main and force main on CR-218 at Black Creek due to proposed expansion of new bridge. Project included developing options and cost estimates for aerial pipe crossing and horizontal directional drilling under Black Creek.

Ichetucknee Trace Pump Modeling, Lake City, FL

- Engineer responsible for pump modeling several storm ponds connecting to a force main manifold to decrease local flooding. Project included coordination with pump manufacturers and Columbia County.

Dune Walkover Conditions Assessment, Jacksonville Beach, FL

- Engineer responsible for conducting field inspections of the 49 public dune walkovers located in Jacksonville Beach. A conditions assessment was tasked to identify aging structures and storm damaged caused by Hurricane Matthew. A conditions assessment report was prepared which provided recommendations for rehabilitation and providing an opinion of probable repair costs. The report was submitted to City of Jacksonville Beach.

Spencer's Crossing WWTP Expansion, Orange Park, Clay County, FL

- Engineer responsible for designing and permitting expansion of existing plant from 2.0-mgd to 4.0-mgd. Project includes headworks with mechanical screening, grit separation, 1.75-Mgal biological treatment unit utilizing the Eimco Carrousel ® process, 82-foot diameter secondary clarifier, one traveling bridge sand filter, one chlorine contact chamber with two runs, additional effluent transfer pump to the existing effluent pump station and a return activated sludge (RAS) pumping station with two RAS pumps. This project required coordination between the Clay County Utility Authority and FDEP.

Oakleaf Plantation Reclaimed Water Pumping Station and Potable Water Treatment Facility, Clay County, FL

- Utility Project engineer responsible for overseeing the master planning, permitting and design of a new reuse pump station and storage facility co-located with a new potable water facility. The potable water plant includes one 500,000-gallon glass fused steel storage tank, one high service pump building containing three 1467-gpm high service pumps, hypochlorite disinfection system, a 10,000-gpm stainless steel tower, one 10,000-gallon hydropneumatic tank and two production wells. The reclaimed pump station includes one 750,000-gallon glass fused steel ground storage tank, one high service pump building containing three 1700-gpm high service pumps, one 5000-gallon hydropneumatic tank and all piping to interconnect with the existing reclaimed water grid and high services pumping.

Reclaimed Water System, City of Neptune Beach, FL

- Engineer responsible for designing and permitting a reclaimed water system at the existing Neptune Beach WWTF. Project includes a new chlorine contact tank within an existing basin, a 30' by 30' reuse storage basin within an existing basin, three high service reuse pumps, a 2,000-gallon hydropneumatic tank, and a polymer feed system. Project required coordination between the structural engineer, electrical engineer, City of Neptune Beach, and permitting agency. Also provided construction administration.

SJCUD Reuse Disc Filter Evaluation, Ponte Vedra, FL

- Project Engineer responsible for the development of a technical report that evaluated the existing 1.0 MGD reuse disc filter at the Sawgrass WWTP and determined several options to replace and upgrade the disc filter. Technical report required coordination with several disc filter manufacturers, development of an engineer's opinion of probable cost for each option, and recommendations to St. Johns County Utility Department. The project went into design phase following the technical report. Design phase provided mechanical drawings for the installation of the pre-purchased disc filter. Also provided construction administration for the project.

City of Neptune Beach WWTP Improvement

- Engineer assisting and designing improvements to meeting TMDL requirements of the 1.5 MGD wastewater treatment plant. Project includes modifying and replumbing an existing 40-foot diameter contact tank and construction of a new partition wall within the tank, retrofitting an existing 43-foot diameter stabilization tank to include a 4-stage Bardenpho process which incorporated Integrated Fixed Film Activated Sludge (IFAS) technology for improving effluent quality, a 1.5 MGD stainless steel disc filter, and an intermediate pump station. Project required heavy coordination between the structural engineer, electrical engineer, City of Neptune Beach, and permitting agency. Construction is complete and WWTP is exceeding design criteria.

FDOC Lancaster CI WWTP Expansion. Trenton, Gilchrist Co, FL

- Project Engineer responsible for design and permitting of expansion of the existing WWTP at Lancaster CI from 0.120 MGD to 0.249 MGD. Project included upgrades to influent pump station, new 0.249 MGD treatment package plant, conversion of existing package plant to aerobic digesters and surge tanks, upgrades to existing chlorine contact tank system, conversion of existing ponds to lined effluent storage ponds, and construction of a new effluent spray irrigation system. Provided permitting services with FDEP and construction administration services.

Bob Sierra Family YMCA, Tampa, Hillsborough Co, FL

- Engineer responsible for hydraulic design and code compliance for a 5,691SF 207,500-gallon competition pool and a 2,873 SF 22,500-gallon activity pool with an activity play feature. Site design included layout of equipment area, collector tanks, and site plumbing plans.

Middleburg Bluffs Wastewater Treatment Facility Permit Renewal, Middleburg, FL

- Prepared all forms and reports necessary for permit renewal for the treatment facility including Form 1 and 2A, a Capacity Analysis Report, and an O&M Performance Report. The facility consists of a package WWTF, an influent pump station, and two percolation ponds.

North Point at Ponte Vedra Subdivision, Ponte Vedra, St. Johns Co, FL

- Utility project manager for a 28-unit single-family project including 967 LF of 8" SDR-35 gravity sewer, 10 manholes, 1,560 LF of PVC water main, 50 LF of 10" HDPE WM piping directionally drilled for tie-in to existing 8" water main piping, FDEP wastewater permitting, FDOT utility right-of-way permitting, JEA water permitting, and a utility owned lift station. This project involved heavy coordination with JEA who shall own and operate the onsite utilities.

The Spas at Ponte Vedra, Ponte Vedra Beach, St. Johns Co, FL

- Engineer responsible for hydraulic design, and mechanical layout of water filtration and treatment. Coordinated with clients, architects, other civil firms, and health department officials to complete design and permitting. Project included an outdoor 1,400 SF 36,630-gallon spa having 5 coves with different water feature in each cove, a men's indoor spa, and a women's indoor spa.