

# MIAMI-DADE COUNTY AVIATION DEPARTMENT - OPA-LOCKA AIRPORT – WATER & SEWER SYSTEM EVALUATION STUDY AND MASTER PLAN

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**Client Name:** *Miami-Dade County Aviation Department*

**Type of Service:** *Opa-Locka Airport – Water & Sewer System Master Plan*

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Milian, Swain & Associates, Inc. (MSA) prepared an evaluation of the Opa-Locka Airport's existing water distribution system for the Miami-Dade County Aviation Department.

The services provided included an analysis of current operating conditions, quantification of existing/historical water demands, estimation of existing – build out conditions to evaluate the required current average and peak water demand flow conditions and an inventory of the entire water distribution system's components. During this study, water system flow/pressure and head loss tests were performed for use in the hydraulic modeling of the system, along with the analysis of

the existing deficiency of the water systems. This study served as the basis for the airports present land use planning and water system improvements.

The Water System Master Plan was prepared to evaluate the impacts of the future improvements and expansions to the Airport's water system stemming from the planned expansions and renovations to the on-site aviation facilities. The services provided included water system flow projections to the year 2015, the collection of data relative to the Airport's planned expansions/renovations, development of a design criteria manual for future aviation developer water service provision, preparation of a conceptual design/layout of the future water distribution system, computer modeling of future demands for the determination of necessary system upgrades/expansions, and development of an Engineer's Estimate of Probable Construction Costs.

In addition, MSA performed an evaluation of Opa-Locka Airport's existing wastewater collection system and developed a Wastewater System Master Plan for the Miami-Dade County Aviation Department utilizing the Sewer-Cad model. The services provided included the technical investigations to identify the existing components of the wastewater collection and transmission system and the existing operating conditions of the system's pump stations. Also, included in this study was the quantification of historical, existing, and future sewer flow demands through the year 2015, incorporation of the Airport's future aviation facility expansions/renovations, development of a design criteria manual for future aviation developer sewer service provisions, preparation of a conceptual design/layout of the future wastewater collection/transmission system, computer modeling of future demands for the determination of necessary system upgrades/expansions, and development of an Engineer's Estimate of Probable Construction Costs.

