

MIAMI-DADE COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES MANAGEMENT - N.W. 22ND AVENUE WATER QUALITY IMPROVEMENTS

Client Name: *Miami-Dade County Department of Environmental Resources Management*

Type of Service: *Civil Engineering Drainage Design – N.W. 22nd Ave. - Water Quality Improvements*

Milian, Swain & Associates, Inc. (MSA) was retained by the Miami-Dade Department of Environmental Resources Management (DERM) to prepare the construction documents for storm water quality improvements to Sub-Basin C802-204, located within the C-8 Drainage Basin. MSA provided the following professional services:

Topographic Survey – MSA provided review and comments on the preliminary survey submitted by DERM's surveyor to determine sufficiency of the topographic data provided.

Drainage Testing – MSA prepared a Drainage Test Location Map depicting the location of percolation tests to be performed for the project.

Data Collection & Coordination – MSA submitted requests for utility information to the appropriate utility agencies including requesting paving and drainage as-builts from the Miami-Dade Pubic Works Department (MDPWD). MSA reviewed and analyzed the utility information received for inclusion, along with the topographic survey, in the preparation of the engineering base map required for final design. MSA also reviewed and coordinated the collection of data previously gathered and developed by DERM for the project.

Analysis and Design – MSA prepared the construction drawings, technical specification, and Engineer's Opinion of Probable Construction Costs. MSA's services included the design of diversion control structures to divert stormwater runoff from an existing reinforced concrete outfall pipe ranging in size from 36-inches to 42-inches in diameter. The diversion structures diverted the first inch of runoff to an exfiltration trench system for treatment. After the stormwater was treated, the runoff was reintroduced into the existing reinforced concrete outfall pipe. MSA prepared the design documents for stormwater system improvements and submitted design drawings at the 30%, 60%, 90%, and 100% completion stages. A traffic control plan was also developed for the project.

Meetings Coordination – MSA attended several meetings during all phases of the project. MSA prepared meeting minutes that summarized pertinent decisions reached and responsibilities delegated. Copies of the minutes were distributed to all meeting attendees.

Construction Services – MSA provided assistance during the construction phase of the project. MSA reviewed shop drawings of drainage structures and pipe; reviewed, evaluated, and determined the acceptability of substitute materials submitted by the Contractor; and responded to Requests for Information submitted by the Contractor.