MIAMI-DADE COUNTY PARK AND RECREATION DEPARTMENT – TREE ISLAND PARK PROJECT

Client Name: *Miami-Dade County Parks and Recreation Department*
Type of Service: *Civil & Environmental Permitting Services*

Milian, Swain and Associates, Inc. (MSA) is providing civil and environmental engineering services to the Miami-Dade County Parks and Recreation Department (PARD). This Department requires assistance to prepare and process the environmental permits required to develop the Tree Island Park located south of SW 10th Street between SW 149th Avenue and SW 147th Avenue. MSA scope of services includes:

MSA is assisting PARD with the environmental permit process for the Tree Island Park Project

Data Collection and Coordination - MSA coordinated and attended a kick-off meeting with PARD staff and the Landscape Architect, EDAW. EDAW presented the preliminary site plan to the project team. MSA prepared a survey and geotechnical testing scope and submitted it to the PARD project manager. After receiving the survey, MSA reviewed it for sufficiency and submitted comments in writing to the PARD project manager. As part of this task MSA and its subconsultant, CH2M Hill, conducted a site visit to become familiar with the project site and surrounding areas. In addition, identified the utility companies providing service in the project area and requested as-built plans as well as the points of connection for potable water and sanitary sewer service from the Miami-Dade Water and Sewer Department.

Schematic Site Plan Development - MSA assisted the landscape architect in developing a Schematic Site Plan by providing preliminary engineering assistance with the overall strategy for stormwater management, leading to a preliminary sizing of all retention facilities (lakes or dry retention areas). As part of this task MSA engaged in a preliminary review of the Landscape Architect's preliminary site plan and identified suggested modifications as they pertain to the Civil Engineering Discipline. Once they addressed the suggested modifications and provided MSA with an electronic copy of the revised site plan, MSA identified the pervious and impervious areas of the plan and prepared water management routing calculations to determine the available storage and peak stages for the design storm events. MSA coordinated all additional site plan modifications required to create additional storage to ensure that the site can service the design storm events. We ensured that the preliminary water management design of the site was in compliance with DERM's Bird Drive Basin criteria. MSA considered impacts to existing wetlands and tree islands in the coordination process with the Landscape Architect.

Wetland Delineation and Environmental Permitting - The MSA Team delineated the project wetlands using the currently accepted methodologies accepted by the US Army Corp of Engineers (COE), the South Florida Water Management District (SFWMD) and the Miami-Dade County Department of Environmental Resources Management (DERM). Tree Island delineations were based on DERM-EEL criteria that were to be submitted to each regulatory agency for consent prior to field work The Team's biologist utilized colored flagging to delineate the jurisdictional wetland boundary. The wetland delineations were marked on an available County

aerial or topographic survey. Other field information including the completion of COE Wetland Determination Data Sheets and a Uniform Mitigation Assessment Method (UMAM) was also performed for the wet prairie wetlands and Tree Islands. Additionally Team biologist located three seasonal high water (SHW) elevations within the tree islands and wet prairie areas for hydrologic restoration purposes. A preliminary wildlife survey was conducted during the wetland delineation to determine presence of any listed plant or animal species. The Team biologist met on-site one time with the SFWMD and COE to verify the delineated wetland and Tree Island boundaries.

Aerial view of Tree Island Park

MSA coordinated as necessary with PARD's survey personnel following field verification by COE and SFWMD regarding locations of flagged wetland areas and Tree Island boundaries, SHW and review the resulting delineation survey for accuracy prior to agency submittal. MSA developed a mitigation plan based on the final site design and anticipated impacts to wetlands and Tree Islands for on-site mitigation and/or purchase of credits from an approved offsite mitigation bank.

The MSA project Team prepared the Joint Environmental Resource permit application and the DERM Class-IV permit application. The applications included appropriate exhibits and calculations.

Preparation of Design Development Plans - Upon receipt of the final site plan and the topographic and cadastral survey, MSA prepared final water management calculations, paving, grading and drainage plans and drainage calculations. These plans were included in the Environmental permit applications described above. The plans included the location of drainage catch basins, exfiltration trenches, the site grading scheme, typical section along proposed internal roadways, parking areas and wet/dry retention areas as well as at the perimeter of the property.

Environmental Quality Control Board Variance (Optional) - Due to the potential impacts to Tree Island No. 2, the Environmental Quality Control Board (EQCB) may have to be petitioned for a variance from the requirements of Chapter 24 of the Miami-Dade County Administrative Code. MSA will coordinate with the Environmentally Endangered Lands Program (EEL), PARD and DERM to prepare an EQCB Application. MSA will assist and represent PARD at the EQCB Public Hearing.