

ST. KATHERINE DREXEL CATHOLIC CHURCH - CIVIL ENGINEERING SERVICES

Client Name: *The Archdiocese of Miami/Trelles Architects, Inc. (Prime)*

Type of Service: *Civil Engineering*

Milian, Swain & Associates, Inc. (MSA) is assisting The Archdiocese of Miami with civil engineering services related to the design of St. Katherine Drexel Catholic Church, located in South Post Road, City of Weston, Florida. MSA's scope of services includes:

Preliminary Engineering

- Assisted with master site plan development issues related to civil infrastructure. Perform preliminary stormwater management calculations to validate the proposed onsite pervious/impervious areas. In addition, MSA analyzed the feasibility of various methods for drainage/stormwater management systems and recommend the most feasible method based on site, construction costs and regulatory constraints.
- Prepared preliminary civil infrastructure design to support site plan approval through the City of Weston. MSA prepared and submitted conceptual water distribution, sanitary sewer, paving, grading, drainage drawings/exhibits and pertinent engineering calculations.
- Prepared the stormwater management portions of a conceptual Environment Resource Permit (E.R.P.) for the entire approved master planned site, coordinated with the client's selected environmental engineering consultant/scientist, compiled and submitted the necessary application packages to the pertinent regulatory agencies (SFWMD, FDEP, USACE, BCEPD) for review and approval.
- Respond to Request for Additional Information (R.A.I.) from the regulatory agencies related to stormwater management/drainage system.

Final Design & Permitting

- MSA prepared final construction drawings for the onsite paving, grading, drainage, traffic signage and pavement markings systems for the proposed Phase 1 development in accordance with the requirements of the City of Weston Public Works Department, Indian Trace Drainage District and consistent with the stormwater management system parameters, general and specific conditions stipulated in the approved Conceptual E.R.P. Permit obtained.
- Prepared final construction drawings for the "ON-SITE" Water Distribution System (i.e.: watermain extensions, fire line, domestic, irrigation meters, backflow preventors, water service lines) to satisfy domestic and fire flow demands from the proposed Phase 1 development with appropriate stub-outs to serve future Phase 2 development. The water distribution system was designed following the requirements of the City of Weston Utilities & Fire departments, Broward County Health Department.
- Prepared final construction drawings for the sanitary sewer system (i.e. onsite gravity sewer mains, onsite service laterals and onsite private sewage lift station) required to

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serve the proposed Phase 1 development. Prepared construction drawings for the extension of an offsite sewage forcemain from the onsite lift station, along and within South post Road Right of Way and connecting to an existing 16-inch forcemain located downstream of existing pump station #204 (Approx. 4,500 LF).

- MSA will be assisting in obtaining approvals for the construction of the PHASE 1 civil infrastructure improvements from the regulatory agencies having jurisdiction over the civil infrastructure systems.

Construction Services: MSA will provide limited assistance during the construction phase of the project as follows:

- Attend pre-construction meeting with the client and selected Contractor.
- Review and approve civil shop drawings.
- Perform site visits to observe the general progress and quality of the civil work and prepare site visit reports.
- Review as-built drawings certified by the Contractor's registered land surveyor.
- Prepare and submit certifications of the civil infrastructure systems as required by the regulatory agencies having jurisdiction.