

ARCHDIOCESES OF MIAMI – OUR LADY OF GUADALUPE PHASE-I IMPROVEMENTS

Client Name: *Archdioceses of Miami/Robert Chisholm Architects (Prime)*

Type of Service: *Civil Engineering Services*

Milian, Swain & Associates, Inc. (MSA) provided Civil Engineering Design, Permitting and Construction Services for Phase-1 Improvements for Our Lady of Guadalupe project. The following were MSA's scope of services associated with this project:

Data Collection - MSA requested as-built plans from the existing utilities providing service in the area. MSA conducted a site visit, document the visit with photographs and made appropriate notations for consideration during the design and permitting phase. In addition, coordinated with the client's surveyor to identify the survey data required for design and permitting of the Civil Engineering plans. MSA also coordinated with the client's Geotechnical Engineer to identify the geotechnical data required for design and permitting of the water management and drainage system.

Onsite Paving, Grading and Drainage - MSA prepared onsite paving, grading and drainage (PG&D) plans in accordance with the Miami-Dade County Department of Environmental Resources Management (DERM) and the Miami-Dade County Public Works Department (MDCPW) criteria. Water management calculations were prepared considering a 10 year-24 hour, 25 year-72 hour and 100 year-72 hour design storm event. MSA advised the client and the project site planner/architect regarding the water management area required to service the previously mentioned storm events. Secondary drainage system calculations were prepared considering a 5 year-24 hour storm event. MSA prepared paving, grading and drainage plans. The grading plans contain elevation call outs at roadway centerline high points and low points, at the corresponding edge of pavements and sidewalks as well as proposed finished floor elevations. The plans depicted typical sections of the roadways, parking areas and water management features. Onsite pavement marking and signage plans in accordance with the Miami-Dade County Public Works criteria were included in the set of Civil Engineering plans. Drainage details were provided such as exfiltration trenches and pollution retardant baffles. Sufficient grading will be provided to permit the entire site through the South Florida Water Management District (SFWMD) Joint Environmental Resource Permit (ERP) process.

Water Distribution System - MSA prepared onsite water distribution system plans in accordance with the Miami-Dade Water and Sewer Department (MDWASD), Miami-Dade County Fire Department (MDCFD), Miami-Dade County Department of Environmental Resources Management and the Miami-Dade County Health Department (HRS) criteria. Prepare onsite water distribution system plans depicting an 8" diameter water main and associated valving as required by the MDWASD. The proposed water mains were placed within a MDWASD water easement. Plan and profile of the proposed on-site water distribution system was depicted on the plans. The plans depicted a sub-aqueous crossing of the existing canal abutting the property along NW 25 Street. The plans identified the location of all water service lines and meter locations as well as fire hydrant locations, fire lines and associated double detector back flow preventors and fire department connections for proposed buildings.

Sanitary Sewer Collection and Transmission System - MSA prepared onsite gravity sanitary sewer collection system plans in accordance with the MDWASD and DERM criteria. The plans

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depicted 8” minimum diameter gravity sanitary sewers and associated manholes as required by the MDWASD and DERM. The plans identified the location of all sanitary sewer service lines and depicted plan and profile of the proposed sanitary sewer system. In addition, MSA designed an on-site private sanitary sewer pumping station and associated force main. The plans depicted a sub-aqueous crossing of the existing canal abutting the property along NW 25 Street. MSA designed a 20” diameter sanitary force main extension along NW 25 Street a distance of approximately 900 feet.

Permitting Services - MSA assisted in the preparation and processing of permit applications through agencies having regulatory jurisdiction over this project. Prepare the application and process the plans through the following agencies:

- DERM Water Control Section (Class-III Permit)
- South Florida Water Management District (ERP Permit)
- DERM Wetland Section (Class-IV Permit)
- MDCPWD
- MDWASD
- Miami-Dade County Fire Department
- Miami-Dade County Health Department
- DERM Water Supply Section
- DERM Wastewater Section
- DERM Wastewater Section (Pump Station Operations Manual)
- FDOT Drainage Connection Permit

Construction Phase Services - MSA provided Construction Phase Services. Coordinated and attended a pre-construction meeting, conduct construction observations at 50% completion and 100% completion, review shop drawings, review as-built plans and prepare the DEP Certificate of Completion forms for the water distribution and the sanitary sewer collection system. Also, attended meetings with the contractor during the Construction Phase of this project.

Utility Negotiations and Meetings - MSA prepared the request and negotiate with MDWASD regarding the Developer Connection Agreement.

Additional Services - MSA reviewed existing information regarding the Our Lady of Mercy SFWMD ERP Permit, US Army Corp of Engineers (USACOE) Dredge and Fill Permit and DERM Cut and Fill Permit. Also reviewed existing Our Lady of Mercy Cemetery water management calculations and determined if the existing system can accept the proposed site plan. MSA modified the existing Our Lady of Mercy Cemetery water management calculations and prepare plans depicting the revisions for inclusion in the ERP permit modification and DERM Cut and Fill permit modification.