

MIAMI-DADE COUNTY PUBLIC SCHOOLS – JORGE MAS CANOSA YY-1 MIDDLE SCHOOL

Client Name: *Miami-Dade County Public Schools / PJB Architects (Prime)*

Type of Service: *Civil Engineering – Design & Permitting & Construction Management Services*

The Miami Dade County School System (MDCPS) selected MCM – Engineers & General Contractors (MCM) as the General Contractor to construct a new YY1 Middle School using Design/Build as the delivery method. The new school is situated within a former vacant ~12 acre parcel located at the NW quadrant of the intersection between SW 157th Avenue and SW 144th Street. Milian, Swain & Associates, Inc. (MSA) worked with MCM and performed Civil Infrastructure Designs and Civil Infrastructure Concept plans. MSA's scope of services included:



Design & Permitting: Prepared Phase II, Phase III constructions drawings, technical specifications and regulatory process assistance for:

- **Water Distribution System**

- MSA prepared design drawings for a new onsite 12-inch watermain extension and related appurtenances (i.e. firelines, water services, backflow preventers, domestic and irrigation meters) to serve the domestic and site fire demands from the proposed buildings. The new 12-inch main was looped onsite and connected to existing 12-inch stub outs on SW 144th Street and SW 157th Avenue.
- MSA coordinated with the mechanical/plumbing consultant for required diameter and exact location of the water services and firelines at the face of each building.
- Provided assistance in obtaining approvals for the Water Distribution System from MDCPS, Miami Dade Public Works Dept., Miami-Dade Water and Sewer Department, Fire Department, DERM-Water Supply and Health Departments.

- **Gravity Sewer System**

- Designed new onsite sanitary sewer main extension including service laterals to serve the proposed buildings and connecting to an existing public manhole located on SW 144th Street at the intersection with SW 157th Path.
- Provided assistance in obtaining approvals for the sanitary sewer system from MDCPS, Miami-Dade Water and Sewer Department and DERM-WasteWater Section.

- **Paving, Grading, Drainage, Traffic Signage & Pavement Markings**

On-Site

- MSA prepared onsite paving, grading, drainage, traffic signage, markings plans and pertinent details for the proposed parking areas, Bus and Parent Drop-off driveways with driveway connections to SW 144th Street and SW 157th Avenue. In addition, MSA provided grading and drainage design for the proposed athletic fields, landscaped and courtyard areas.

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- Prepared drainage calculations required for the proposed drainage improvements per Miami Dade County DERM – Water Control criteria.

Off-Site

- MSA prepared Paving, Grading Drainage, Traffic Signage and Pavement Markings plans for



proposed roadway improvements on the road segments of SW 144th Street and SW 157th Avenue directly abutting the project site including:

- **SW 157th Avenue:** Designed modifications to existing sodded median required to accommodate new turning lanes and median openings for adequate ingress and egress to the new site's Parent and Bus Drop-off driveways, respectively.
- **SW 144th Street:** Designed modifications to the existing roadway cross-section and alignment, including roadway widening, new sidewalk construction, drainage system modifications and fire hydrant relocation.
- MSA provided assistance in obtaining approvals for the **ONSITE** and **OFFSITE** roadway improvements from MDCPS, Miami Dade Public Works Dept. – Drainage & Roadway Sections and Miami Dade County DERM – Water Control Section.

Construction Phase Services: MSA assisted during the Construction phase of the project:

- Attended Pre-Construction meeting with MDCPS, MCM and civil contractor.
- Reviewed and approved civil infrastructure shop drawings.
- Performed periodic construction observations to monitor the general status and progress of the work.
- Provided minor design revisions and clarification of the construction documents, when required per actual field conditions encountered.
- Performed a Substantial Completion Construction observation of the proposed improvements, to ensure that the work completed met the minimum requirements for substantial completion in accordance with the Contract Documents.
- Performed a Final Construction Observation.
- Reviewed as-built drawings prepared by contractor's surveying consultant for compliance with the approved construction documents.
- Prepared and submitted water main completion of construction certifications to Dade County DERM - Water Supply Section and Dade County Health Department.
- Prepared and submitted the Sanitary Sewer System Completion of Construction Certification to Dade County DERM - Wastewater Section.