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NY

RESIDENTIAL

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Top Engineering Firm 2009

MG Engineering, P.C.

MG Engineering, PC: (left to right) Peter Gerazounis , P.E., LEED AP,
Michael Marino , LEED AP, Bruce W. Jaffe, Michael Gerazounis , P.E., LEED AP
Location: One Madison Park

An aerial photograph of a city skyline, likely New York City, featuring numerous skyscrapers and buildings. A semi-transparent blue grid is overlaid on the entire image. The text 'TOP ENGINEERING FIRM 2009' is positioned at the top left in a bold, dark grey font. The company name 'MORNING, P.C.' is written vertically in large, white, semi-transparent letters across the center of the image.

TOP ENGINEERING FIRM 2009

There is no doubt after looking at the vast variety of residential, hospitality, retail, corporate, educational and base building infrastructure projects MG Engineering has undertaken that this New York-based engineering firm is a cutting-edge leader in its field. Providing comprehensive engineering services while embracing architectural aesthetics, this 70-person consulting firm managed by the principals Michael Gerazounis, P.E., LEED AP and Peter Gerazounis, P.E., LEED AP and the senior executive directors Michael Marino, LEED AP and Bruce W. Jaffe continues to provide superior quality services not only on schedule, but within budget.

“We approach every project from the perspective of the client. We take ownership from the inception and diligently seek to produce the highest quality outcome in the most cost efficient manner to result in a resounding success that is a source of pride for both ourselves and our clients.”

*Peter Gerazounis, P.E., LEED AP
Principal*

RESIDENTIAL

The firm's success in doing so is highlighted in its work at **One Madison Park**. Currently under construction at 22 East 23rd Street, this 50-story, 180,400 square foot residential condominium tower, having few buildings that match its size in the area, will offer breathtaking views in all directions to most of its residents.

One of the many challenges for the MEP design was the coordination of the utility infrastructure into the cellar of a building with such a small footprint and vertically through a slender high rise floor-plate while maintaining maximum useable areas on each floor.

The developer, Slazer Enterprises, set a high standard for the design and construction team that included CetraRuddy (architect) and Bovis Lend Lease (construction manager) who together with MG Engineering met all of the programmatic requirements.

MG Engineering provided additional engineering services for the individual unit owners and their interior designers/architects to accommodate various customizations within the units, such as altering kitchen and bathroom locations within the homes, while often combining two units on one floor to create a large full-floor condominium home.

Working closely with MGE, MGJ Information Technologies, Inc. designed the IT infrastructure including a state of the art home network environment in each living unit.

Outside of the New York area, MGE recently worked on a joint development project between Extell Development Company and Equity Residential in the construction of an 800,000 square-foot residential complex at **303 Third Street in Cambridge, MA**. Consisting of two eight-story buildings over common below-grade parking levels, the facility occupies an entire city block. Challenges to this project included the engineering for two distinctive buildings over a common parking garage. The bulk of the mechanical systems were placed at rooftop penthouses to maximize parking and minimize excavation along with the associated soil remediation and removal costs.

The complex includes a full range of luxury amenities including private health club, indoor swimming pool, media room, as well as landscaped courtyard.

The design applied many aspects of the International Building Code that New York City has only recently adopted in its new Construction Code and will soon be applied to all high-rise residential developments.

“MG Engineering has consistently provided innovative and precise solutions to meet our consulting needs, while maintaining the professionalism and confidentiality they deserve. Best of all, MGE is capable of providing detailed assessments suited to any condition, within the deadline specified. Our experience in working with MGE has been nothing short of exceptional.”

Edward V. Piccinich
Executive Vice President
SL Green Realty Corp.



“There are many possible approaches to each engineering assignment. We strive to identify and implement the optimal engineering solution that would best suit our clients' needs.”

Michael Marino, LEED AP
Senior Executive Director



HOSPITALITY

The **VU Hotel**, located at 653 11th Avenue was recently converted from a factory building into a new luxury boutique 135,000-square-foot hotel with 222 guestrooms, a 5,000-square-foot restaurant with rooftop bar and lounge, rooftop garden terrace and a reflecting pool and spa area.

A key aspect of the project's design was reutilizing and upgrading the existing building infrastructure while coordinating the design scheme with M.J. Macaluso & Associates (executive architect), Rockwell Group (interior architect) and Carlos Zapata Studio (core and shell architect). The engineering design and installation creatively accommodated upgrade of the building's gas and electric utility services, access for which was quite limited due to the project's unique location.

The project included a hospitality management system to control the guestroom HVAC system based on occupancy.

The unique program requirements of the rooftop bar, which required preservation of the extraordinary 270 degree Manhattan and Hudson River views, made the coordination and installation of equipment supporting the building's infrastructure especially challenging.

EDUCATION

The **Harlem Village Academy High School**, located on West 125th Street will be one of the city's newest charter schools.

This 5 story, 60,000 square foot project developed by Civic Builders and designed by Cooper, Robertson & Partners (project architect) is expected to obtain Silver level LEED certification thanks to a combination of innovative energy efficient and water conserving systems that helped improve the overall energy performance and sustainable aspects of the building. Included in MGE's design were energy recovery coils for the rooftop air conditioning units, high efficiency condensing boilers along with energy efficient building controls tailored for the program and scheduling of the building. The energy modeling for the building resulted in a remarkable performance 22.91% better than the baseline prescribed in ASHRAE 90.1

With the project located in a predominantly residential area, MGE kept a keen eye on the location and selection of rooftop equipment to comply with sound criteria established in the NYC Building Code.

MGJ-IT provided IT and cabling design services for the project once again exemplifying the synergy with MGE.



RESTAURANT

The **Aureole Restaurant**, relocating to One Bryant Park, will become re-established as one of Charlie Palmer's many fine dining experiences. Satisfying the aesthetic requirements of renowned interior designer Adam Tahani, MGE successfully navigated the task of tailoring the complex MEP systems serving the 10,000 square foot high end restaurant while maintaining tight budget constraints.

Adding to the complexity of the project was its proximity above a sensitive mission critical area at the floor below. The design team which included Laurence G. Jones Architects implemented a raised floor in the kitchen for the intricate routing of water and grease management systems (drainage) to help protect the valuable real estate while satisfying the kitchen program.



"Every job has its inherent challenges, but taking a smart, proactive approach upfront to provide immediate solutions ensures a successful project outcome and therefore a satisfied client."

Bruce W. Jaffe
Senior Executive Director

RETAIL

Putting a hair salon at the 11th floor of a high rise office building is something not normally done or easily achieved. For the **Rita Hazan Salon** at 720 Fifth Avenue, MGE was challenged with maximizing the salon's ceiling heights and window views by strategically locating the mechanical equipment in the center of the floor in an MER that worked best with the natural circulation and flow of the space. To offset the excessive cooling loads and hours of operations that extended beyond that of the base building systems, MGE designed a water cooled air conditioning system with dry cooler mounted on the roof, five floors above. The system was designed with waterside economizer for free cooling to maximize efficiency and minimize louver requirements leaving more

available window area. The space was formerly a standard office space without nearly the electrical capacity required for the lighting and equipment that serves a salon. To accommodate the load, MGE reconfigured the base building electrical switchgear room and coordinated the route for power conduits from the basement to the 11th floor. The building's managing agent, Trigon Equities, was very accommodating throughout the course of design and installation for these essential building modifications to support the salon's requirements. The outcome was the result of an extensive coordination between Studios GO (project designer) and MGE, creating a full-service beauty salon in which the MEP infrastructure worked well with the high-end aesthetics of the design.

CORPORATE

For over the past 10 years **Sullivan & Cromwell LLP**, a prominent NYC-based law firm has retained MGE for many of their expansion and renovation projects. Their recently constructed conference center on the 37th floor of 125 Broad Street, boasts 27 conference rooms, state-of-the-art AV systems and full service kitchen in its 36,000-square-foot floor plate. Working with the Loffredo Brooks Architects (project architect) the design goal was to ensure essential comfort, ambiance and aesthetics while installing creative duct work distribution to provide supplemental cooling to all rooms satisfying individual temperature control requirements. Satisfying the infrastructure requirements of a full-service kitchen was a challenge on its own in an older building without existing provisions to the floor.

“Teamwork is essential. Whether it’s putting our heads together with the client, working together in-house, coordinating with the other design consultants or rolling up our sleeves with the contractors in the field, we take the team approach to engineering success!”

Michael Gerazounis, PE., LEED AP
Principal

BASE BUILDING INFRASTRUCTURE

When **SL Green Realty Corp.** determined it was time to replace and upgrade the base building cooling towers at 555 West 57th Street they chose MG Engineering to design the project due to the sensitive nature of such a critical component of the building’s infrastructure.

MGE having provided engineering services to SL Green for the past 15 years and over 30 properties understands the responsibilities and obligations of the building owner/manager to maintain the premium level service their reputation is built on. The replacement of the 4,500-ton cooling tower was completed in four phases in order to keep the tenant condenser water for supplemental air conditioning operating 24 hours a day, 7 days a week with no interruption.

The first phase required the installation of a temporary piping system which connected to the tower on the end of the nine cooling tower cells. Once the connection of the new temporary piping was done, the isolation valves were opened to allow the tenant pumps to draw from this tower, while some new isolation valves allowed the other eight tower cells to be isolated during the next phase. During the second phase, the remaining eight cooling towers were demolished. During the third phase, one of the new towers was piped and valved to provide tenant condenser water. Once this switchover was completed, the rest of the towers were made operational for base building heat rejection serving the chillers. In the final phase, the existing tower was isolated from the system, drained and demolished.



TRADING

For **GFI Group** located at 55 Water Street, MGE successfully supplied engineering services for the firm’s headquarters build-out. The project’s specific challenges related to the location and concealment of all the support equipment needed to serve the Trader desks and Data Center equipment without having adverse affects on the aesthetics of the space designed by Ted Moudis Associates (project architect) and the ability to maintain as open a space as possible. The quantity of conduits, piping, ductwork and cabling presented challenges to the design team and Unity Construction (project construction manager) who made the difficult task seem effortless upon completion of the project.

SURPASSING EXPECTATIONS

It is perhaps most clear that MG Engineering’s success in meeting any challenge is the result of the firm’s ability to incorporate a level of technical expertise that surpasses expectations. It is their visualization of what can be done, despite obstacles, that has clearly enabled this firm to be a pioneer delivering a unique level of unmatched quality to each project they undertake. ■



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