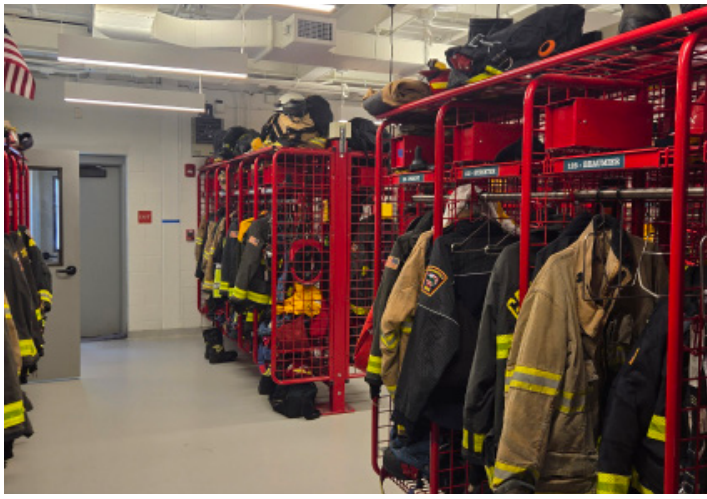
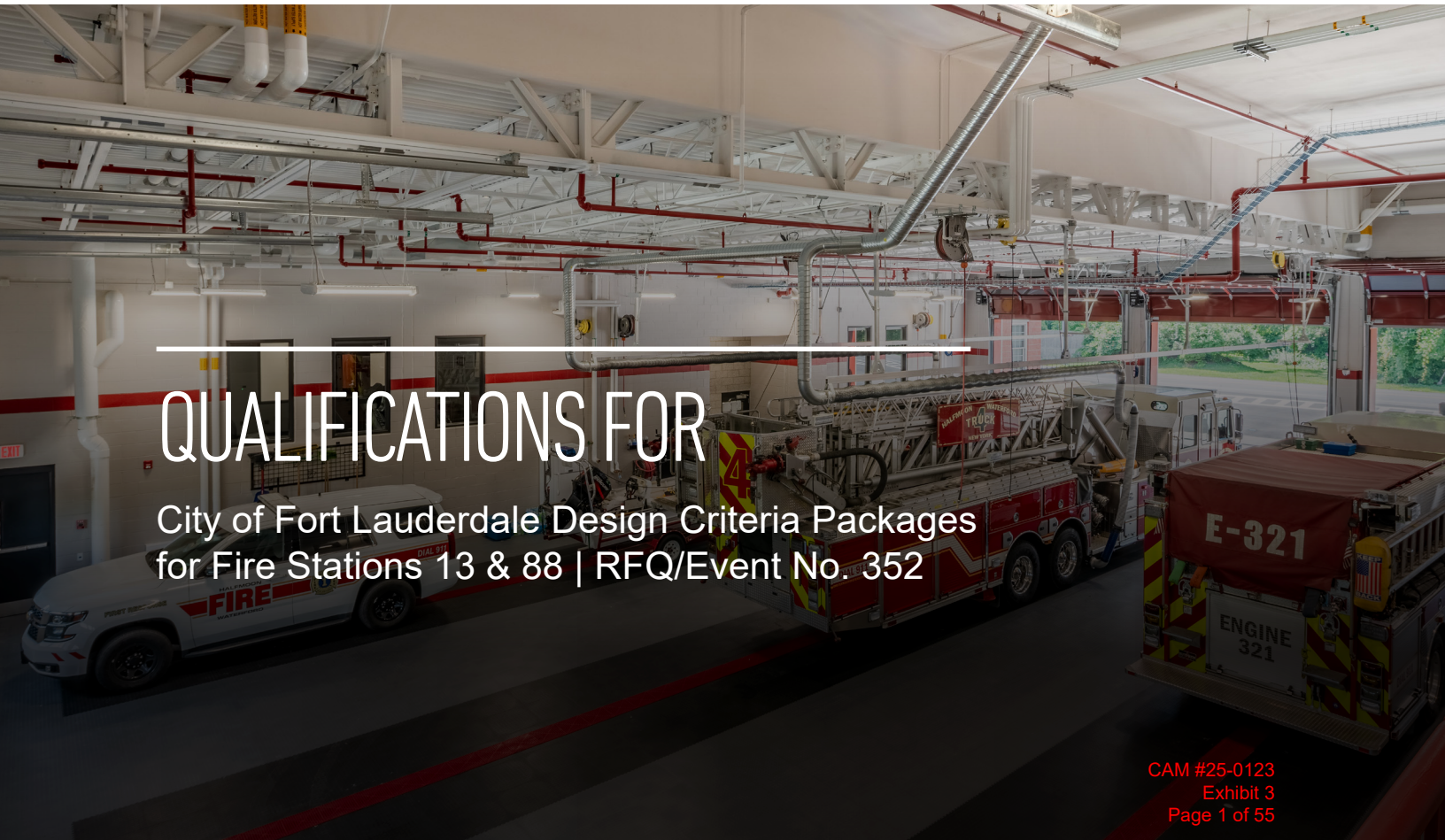
H2M architects + engineers





QUALIFICATIONS FOR

City of Fort Lauderdale Design Criteria Packages
for Fire Stations 13 & 88 | RFQ/Event No. 352

Qualifications for

City of Fort Lauderdale
Design Criteria Packages for Fire Stations 13 & 88
RFQ/Event No. 352

09.11.2024

Contact

David J. Pacheco, AIA
Senior Vice President,
Director of Operations

H2M Architects & Engineers, Inc.
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866.970.6535 ext. 2031

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→ **Uploaded Separately: Required Forms**

September 11, 2024

City of Fort Lauderdale, Procurement Services Division
Attn: Michelle Lemire, Procurement Administrator
101 NE 3rd Avenue, Suite 1650
Fort Lauderdale, FL 33301

RE: Qualifications for City of Fort Lauderdale Design Criteria Packages for Fire Stations 13 & 88 | RFQ/Event No. 352

Dear Ms. Lemire:

Since 1912, the City of Fort Lauderdale Fire Rescue has been delivering exceptional emergency response services to protect the residents, businesses, and property of Fort Lauderdale. As years have passed, the City has grown, new technologies have emerged, and it is time for stations 13 and 88 to be replaced to meet current standards. The first step in this design-build process will be the completion of two design criteria packages. At **H2M Architects & Engineers, Inc. (H2M),** we believe that the City of Fort Lauderdale is undertaking a critical step to safeguard the future of its residents, businesses, and visitors. As such, the City deserves the most qualified team to help achieve this goal. Why trust this important project to H2M?

- ***Qualifications & Relevant Project Experience:*** We will utilize our extensive experience to help you succeed by bringing real-world proficiency, current industry trends, and out-of-the-box ideas to the table. H2M has completed more than 300 fire and EMS design projects and 150+ studies across the country. From the feasibility through the design phases, we have made professional recommendations; developed accurate budgets; prepared schematic designs; advised on materials that are storm-resilient, sustainable, durable, and low maintenance; and guided our clients to the critical decisions concerning addition(s), renovation, repair, or pursuing new construction to optimize their response services. We will work with the City to develop design criteria packages that meet the needs of the City's responders for years to come.

- ***Project Team:*** Leading our team as Project Manager via our Boca Raton, FL, office is David J. Pacheco, AIA. He brings 30+ years of architectural experience and has studied and/or overseen the design of over 200 emergency response facilities. Additionally, he developed national standards that altered how emergency services facilities are designed across the country and serves as an ASTM homeland security technical sub-committee member. Mr. Pacheco splits his time between Melbourne, FL, and Upstate New York. Your project will benefit from a streamlined approach and clear direction due to Mr. Pacheco's leadership and organizational skills. He has demonstrated financial competence on public safety projects, with the ability to monitor and meet budgets. He will provide a detail-oriented, thorough management of this project from inception to closeout. Mr. Pacheco will work closely with Lead Architect Katrina N. Pacheco, AIA, NCARB, LEED AP, to develop comprehensive design criteria. In addition to our team proposed in this package, H2M has 550+ dedicated in-house professionals with a vast amount of architectural, engineering, and specialized knowledge and experience that the City can rely upon for help.

- ***MWBE Utilization:*** Though H2M is not an MBE- or WBE-certified firm, we have made a concerted effort to utilize local minority- and women-owned business on this project with assigned key roles. Our team includes CES Consultants, Inc. (MBE), for site/civil engineering and permitting; Fernandez Beraud, Inc. (WBE), for landscape architecture; Longitude Surveyors, LLC (MBE), for land surveying; TSF Geo (MBE), who will be responsible for geotechnical engineering; and Trophy Point, LLC, for cost estimating. Our leadership team commits to making every effort to maximize their participation on this project.

What defines a successful project? Awards, accolades, profit, innovation? We believe a successful project is one that functionally fulfills the needs, objectives, and vision of the City and meets the needs of the end users and community. We look forward to creating a mutually beneficial relationship with the City of Fort Lauderdale for a truly successful project. Please feel free to contact our proposed Project Manager at (866) 970-6535 ext. 2031, via email at dpacheco@h2m.com, or fax at (631) 694-4122. Thank you for your consideration.

Very truly yours,

H2M Architects & Engineers, Inc.

Joseph M. Mottola, AIA
Executive Vice President, Chief Operating Officer

TAB 1

★ About H2M | Building Communities Since 1933

H2M is a multi-disciplined professional consulting and design firm headquartered in Melville, NY with offices across the country, including West Palm Beach, Miami, and Tampa, FL. With a long history of client service, we consistently meet tough architectural, engineering, and environmental challenges head on. From treatment facilities to firehouses, from land surveying to road reconstruction, and from site assessment to remediation, our firm has helped design and build many communities. Our connection to the community is rooted in our humble beginnings. We have a tradition of solving problems and we remain passionate and unrelenting as we embrace the ever-changing challenges of the sustainable built environment.

Executive Summary

H2M Architects & Engineers, Inc. (H2M), appreciates the opportunity to submit our qualifications in connection with the Design Criteria Packages for Fire Stations 13 and 88. Below, we provide the key reasons for selecting our team for this important project, which are detailed in the further sections of our submittal.

► Qualifications of Firm & Team

No one understands the needs of first responders and emergency service personnel better than a dedicated team with over 100 years combined experience serving their industry. H2M brings significant experience to the City, most importantly expertise in fire station design. Our team includes several first responders that understand firsthand the challenges and needs of emergency response. The team also includes leaders and organizers of the Firehouse Preconference Design Symposium; co-founders and instructors for the critically acclaimed, One-on-1, Station Design Seminar; as well as an Executive Board Member on the NFPA AEBO (Architects, Engineers, Building Officials) Board. Most recently, H2M was tasked by the FDIC International Conference to design and "The Fire and Rescue Station of the Future".

Leading our team as Project Manager via our Boca Raton, FL, office is David J. Pacheco, AIA. He brings 30+ years of architectural experience and has studied and/or overseen the design of over 200 emergency response facilities. Additionally, he developed national standards that altered how emergency services facilities are designed across the country and serves as an ASTM homeland security technical sub-committee member.

► Experience & Past Performance with Fire Station Design

H2M has completed more than 300 fire and EMS design projects and 150+ studies across the country. Our facility designs focus on the health, well-being, and safety of employees, responders, and the public. Additionally, H2M is continually at the leading-edge of cross-contamination control, gender equity, sleep deprivation mitigation, and built-in state-of-the-art active and classroom training.

► Approach to Scope of Work

Our approach to preparing design criteria packages is methodical and client-focused. We recognize the unique challenges of fire station design, including accommodating operational requirements, safety regulations, and sustainable practices. The work will begin with operations-based programming. Our programming for any emergency response facility delves into response, operations, health, safety, well-being, resiliency, sustainability, and flexibility to adapt to an ever-changing mission. It is organized by space and includes each space anticipated for the facility and covers requirements/needs of items from equipment (current and planned), systems, infrastructure, personnel, codes, mechanical, electrical, and plumbing needs, materials and finishes, security, IT, communications, alerting, and more. The program is a "living" document and becomes the basis for design. This comprehensive information is used to develop a space analysis that can quantify the proposed facility size and initial conceptual construction budget. The entire design team will utilize the program, space analysis, and initial budget throughout the design criteria process.

► Workload of the Firm

H2M has multiple fire station projects in various stages of development at this time. In preparation for this RFQ response, H2M has reviewed the information provided by the City regarding the required capabilities for this project. As part of this assessment, H2M reviewed our monthly project detail reports, staff utilization reports, and financial management

and resource planning software. Based on this review, H2M identified no deficiencies that would prevent an expedited response for any services to be tendered to the City. As H2M has more than 550 technical and support personnel, we have all the resources necessary to successfully meet the needs of the City.

Within Tab 2, the City can find several of our recently completed projects (from within the past five years). In addition, please note some of our onoing ("on the boards") projects below:

- Friendship Engine & Hose Fire Company, NY New Fire Station
- City of New Brunswick Fire Department, NJ New Fire Station
- Borough of Metuchen Fire Department, NJ New Fire Station
- Town of East Windsor, CT New Combination Fire/Police Station
- Town of Hamden Fire Department, CT New Fire Station and Training Facility
- City of Scranton Fire Department, PA New Fire Training Facility and EOC
- Town of Davie Police Department, FL Emergency Generators/Storm Hardening
- City of West Hartford, MA New Public Safety Facility

TAB 2

H2M was organized in 1933 and founded on the principles of professional excellence, hard work, and integrity.

Practical Approach. Creative Results.

H2M is a multi-disciplined professional consulting and design firm, proud of our long history of client service and consistent ability to meet tough architectural, engineering, and environmental challenges head-on. Since 1933, H2M has helped plan, design, and build many of our local communities: from firehouses to water treatment facilities, schools to road reconstruction, and Environmental Site Assessments (ESAs) to groundwater remediation. Since our early roots, our focus has remained steadfast: to provide quality service with sound judgment and serve our clients as an honest and professional resource. We offer a practical approach with creative results.

Our Staff

H2M prides itself on the breadth of its comprehensive in-house service capabilities. With a diverse staff of more than 550 architects, engineers, surveyors, scientists, planners, landscape architects, and technical support specialists, we offer our clients the benefit of a full "under one roof" consulting network.

- **71** Registered Architects
- **117** Professional Engineers
- **02** Registered Landscape Architects
- **06** Professional Geologists
- **04** Professional Planners
- **03** Professional Land Surveyors
- **36** LEED Accredited Professionals
- **11** LEED Green Associates
- **05** Licensed Site Remediation Professionals

OPERATING PHILOSOPHY

MISSION

Our People
We commit to developing our people and rewarding hard work with growth opportunities in an inclusive professional environment.

Our Clients
We commit to being trusted advisors for our clients and delivering problem solving value and quality on every project.

Our Communities
We commit to creating thriving and healthy communities by giving of ourselves and developing sustainable solutions that benefit everyone.

VISION

We exist to improve the quality of life for everyone in our reach by empowering our diverse talent to sustainably solve the challenges of the built environment.

VALUES

We Stand as One H2M
Inclusive. Supportive. Collaborative. No matter where you are.

We Challenge One Another
We show up curious and push boundaries.

We Do the Right Thing
Our character is built on doing what is right and ethical.

We Work Safely
We care for the lives of our people and their families.

We Own it
We hold ourselves accountable for team success and personal achievement.

We Embrace Diversity
We acknowledge and honor the fundamental value and dignity of all individuals.

Architecture

- Architectural design
- Comprehensive grant programs
- LEED design processes
- Interior design
- Removal of barriers to the handicapped
- Master plans and revisions
- Needs assessments
- Planning studies
- Building conditions surveys
- Restoration of historic structures
- Restaurant and kitchen design
- Zoning ordinance review
- Educational facilities design
- Assisted living facilities design

Civil/Site & Structural Engineering

- Roadway reconstruction and resurfacing
- Site plan design
- Street lighting
- Flood control and drainage
- Irrigation systems
- Sidewalks and curbs
- Storm drainage systems
- Water mains
- Local roadway study and design
- Subdivision design
- Streetscape design and improvements
- Parks, playgrounds, athletic fields
- Parking fields
- Highway planning studies
- Intersection design and improvements
- Visual impact analyses
- Resident engineering inspections
- Geographic Information Systems (GIS)
- Green infrastructure design
- Structural conditions assessments
- Structural building design
- Structural renovations/alterations
- Cause and origin investigations
- Retaining walls, bulkhead, and culvert design
- Storm hardening/resiliency
- Expert testimony

Construction Phase Services

- Construction observation
- Shop drawing review
- Scheduling
- Construction administration
- Site safety plans
- Grant administration
- MWBE/SDVOB compliance
- Startup
- Commissioning
- Drone progress photos and video
- O&M manuals
- Utility coordination
- Response to RFIs
- Job progress meetings
- Prepare punch list
- Project closeout
- Record drawings

Environmental Services

- Air and water pollution control
- Hazardous waste management
- Hazardous materials storage design
- Waste minimization
- Environmental Impact Statements (EISs)
- Wetland delineation
- Environmental Site Assessments (ESAs)
- Environmental compliance audits
- Environmental permitting
- Site investigations
- Brownfield assessments
- Remedial investigations/feasibility studies
- Risk assessments
- Above and underground tank management
- Soil and groundwater remediation
- Soil vapor intrusion studies
- Regulatory compliance programs
- Industrial hygiene
- Indoor air quality
- CM/LBP/mold inspections and abatement
- Computer modeling
- Asbestos investigation and removal
- Geographic Information Systems (GIS)

Land Surveying

- Boundary and title surveys
- Topographical surveys
- Horizontal and vertical control surveys
- Hydrographic surveys
- Route surveys
- Subdivision planning
- Sanitary and drainage study maps
- Legal descriptions
- Construction layout services
- As-built surveys
- Architectural surveys
- Structural surveys
- Under-construction inspection surveys
- Easement survey and description

Landscape Architecture

- Tree inventory and assessment
- Tree mitigation
- Landscape design and restoration
- Conceptual site design
- Landscape planning
- Illustrative renderings
- Landscape architectural detailing
- Streetscape and urban design
- Parks and playgrounds design
- Campus landscape design
- Private estate and residential design
- Planting design
- Wetlands mitigation
- Green infrastructure

MEP Services

- Electrical systems design
- Feasibility and implementation studies
- Power supply
- Exterior and interior building services
- Closed-circuit television security systems
- Emergency power generation
- Site/systems and load evaluations
- Energy studies
- Site lighting design
- Fire and security systems
- SCADA systems
- Utility company rebates and incentives
- HVAC systems design
- Heat and cooling load analysis
- Steam systems
- Hydronics
- Heat recovery systems
- Chillers and cooling towers
- Laboratory ventilation systems
- Site/systems evaluations
- Feasibility/implementation studies
- Energy conservation
- Cost/benefit analysis
- Commissioning/testing

Planning

- Comprehensive Master Planning
- Parks, Open Space and Recreation Planning
- Environmental and Natural Resource Planning
- SEQRA and EIS Documentation and Process Support
- Community Visioning
- Zoning Ordinances and Analysis
- Redevelopment Studies and Plans
- Geographic Information Systems (GIS)
- Urban Design
- Design Guidelines
- Renderings
- Feasibility Studies and Conceptual Plans
- Downtown Revitalization
- Expert Private Testimony
- Municipal Board Representation

Wastewater Engineering

- Characterization/quantification of waste
- Treatment facility evaluation
- Scavenger waste facility design
- Outfalls and leaching systems design
- Chemical feed systems design
- Monitoring and control systems
- Nutrient removal treatment systems design
- Facility planning studies
- Wastewater treatment studies
- Wastewater treatment plant design
- Wastewater reuse design
- Standby power systems
- Sludge thickening, dewatering
- Sludge treatment, disposal
- Odor control
- UV and chemical disinfection systems
- Sewer system extension planning
- User cost analysis
- Sanitary sewer design
- Sewer rehabilitation studies and design
- Infiltration/Inflow evaluation
- Pump station evaluations and design
- Sewer flow modeling
- Security systems
- Geographic Information Systems (GIS)
- Discharge monitoring reports
- Plant performance monitoring
- Preparation of O&M manuals
- Facility start-up and operations
- Groundwater/effluent monitoring programs
- Operator training
- Industrial pretreatment programs
- Prepare/revise sewer use ordinance

Water Engineering

- Supply well design
- Plant rehabilitation design
- Water treatment systems
- Water filtration systems design
- VOC removal treatment systems design
- Distribution system analysis and design
- Distribution hydraulic modeling
- Automated mapping/facilities mapping
- Storage tank rehabilitation/repainting
- Storage tank design
- Tank and coatings inspection
- Instrumentation and computer control designs
- Comprehensive groundwater modeling
- Geographic Information Systems (GIS)
- Aquatics and park design
- Public swimming pool design
- O&M programs
- Training programs
- Asset management

Proposal Contact

David J. Pacheco, AIA
Senior Vice President, Director of Operations
H2M Architects & Engineers, Inc.
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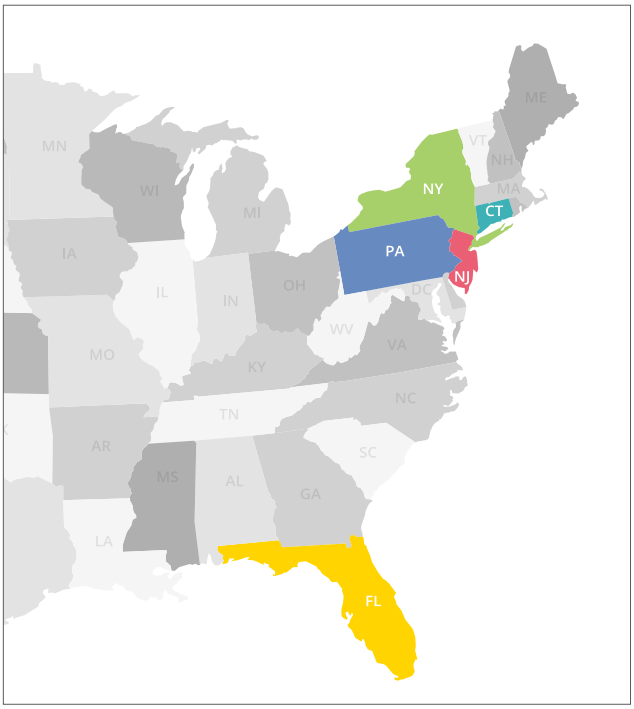
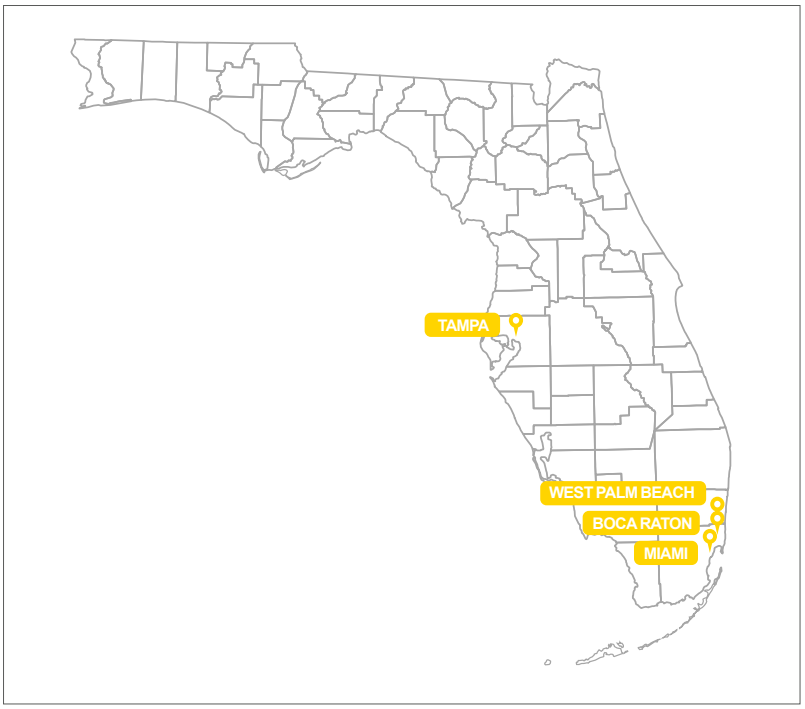
H2M Office Locations | Florida Offices





538 Broad Hollow Road, 4th Floor East
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230 West 38th Street, 14th Floor
New York, NY 10018

737 Roanoke Avenue
Riverhead, NY 11701

2 Executive Boulevard, Suite 401
Suffern, NY 10901

1133 Westchester Avenue, Suite N-210
White Plains, NY 10605

433 River Street, Suite 8002
Troy, NY 12180

119 Cherry Hill Road, Suite 110
Parsippany, NJ 07054

4810 Belmar Boulevard
Wall Township, NJ 07753

360 Bloomfield Avenue, Suite 406
Windsor, CT 06095

951 Yamato Road, Suite 202
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2054 Vista Parkway, Suite 421
West Palm Beach, FL 33411

100 S. Ashley Drive
Tampa, FL 33602

333 SE 2nd Avenue
Miami, FL 33131

301 Grant Street, Suite 270
Pittsburgh, PA 15219

"H2M" refers to H2M Architects, Engineers, Land Surveying and Landscape Architecture, D.P.C. and/or its subsidiary H2M Associates, Inc., and/or its affiliate H2M Architects & Engineers, Inc., as appropriate to the context. Each company's professional resources are available to the others to the maximum extent permitted by applicable state laws. H2M will not practice, and should not be interpreted to be offering to practice, any professional service for which it and its cognizant employees are not properly licensed.

H2M Architects, Engineers, Land Surveying and Landscape Architecture, DPC (dba: H2M architects + engineers) is a NYS Design Professional Corporation. It maintains New York Certificates of Authorization to provide professional architecture, engineering, land surveying, and landscape architecture services.

H2M Associates, Inc. is a New Jersey business corporation. It is a wholly owned subsidiary of the parent company. It maintains New Jersey Certificates of Authorization to provide professional engineering, land surveying, and landscape architecture services.

H2M Architects & Engineers, Inc. is a New Jersey business corporation. It is an affiliate of the parent company, being under the ownership and control of a group of appropriately licensed officers of the parent company. It maintains New Jersey Certificates of Authorization to provide architecture and professional engineering services. It is also appropriately structured to maintain certificates of authority to provide architecture and professional engineering services in Connecticut, Delaware, Florida, Louisiana, Massachusetts, Pennsylvania, and Virginia.

The Core of Excellence is an H2M exclusive initiative that sets us apart from the competition with a focus on excellence and quality as a core element of our services. It's a firm-wide commitment to deliver excellence through innovative and best-in-class service to our clients, colleagues, and ourselves. H2M's Core of Excellence is comprised of four key components:

QA/QC

We demonstrate our commitment to ensuring quality at the corporate level through our appointment of a full-time Director of Corporate QA/QC to lead the development, implementation, and oversight of H2M's Quality Management System (QMS). This commitment is further reinforced by established quality assurance team members who, independent of the project design team, assure that H2M's components of quality are incorporated. H2M's QMS is comprised of a combination of processes, tools and resources available to all H2M staff. These include Quality Control Checklists, established QA/QC communication channels, and templates all made accessible thorough H2M's comprehensive Project Management Framework.

SCHEDULING

We recognize the importance of timely project delivery and take great pride in our ability to quickly mobilize, assign staff, and complete projects on time. H2M developed a custom scheduling interface allowing for consistent data inputs from the entire firm on a bi-weekly basis. This is transitioning to a centralized scheduling database that allows real-time total team scheduling updates and awareness, allowing H2M to actively adapt our resources to meet the needs of even the most demanding project schedules. We can share detailed, easy to read graphic schedules with our clients, allowing them to always have their finger on the pulse of their project's timeline.

SPECIFICATIONS

Our focus and commitment to excellence and quality is further reflected in our Master CSI-based Specifications Library. A dedicated, full-time Specifications Manager oversees the continual development, standardization, and maintenance of our Master Specifications. H2M utilizes a cloud-based specification software platform that allows all users direct access to our Master Specifications Library to develop project-specific spec books. This process ensures that our project specifications include the latest updates in product data and reference standards.

BIM/CAD

Building Information Modeling (BIM) has revolutionized the A/E/C industry. By using intelligent 3-D digital models to generate our designs, H2M can achieve a higher level of quality, consistency, and efficiency in our production process, minimizing the potential for change orders during construction. We employ a full-time, dedicated, and independent team comprised of design professionals and BIM-CAD specialists whose primary responsibilities are to create, deploy, and maintain company-wide standards, templates, procedures, and workflows. Our adoption of BIM has been the single most important change in how we design and manage our projects.

SAFETY

Safety is essential at H2M. We employ a dedicated corporate health and safety manager within the Core of Excellence. H2M has established mandatory safety training and is actively implementing the Plan-Do-Check-Act methodology. By incorporating safety into our overall quality management systems, we ensure that all of our staff can get home safely each day and that we proactively respond to our clients' health and safety requirements.

CLIENT BENEFITS

- ★ **Well-coordinated construction documents that reduce project change orders and minimize cost overruns**
- ★ **Consistent quality and proven performance**
- ★ **Optimized resource allocation to meet project demands**
- ★ **Increased compliance with the latest industry and regulatory standards**
- ★ **Enhanced project visualization via 3D modeling**
- ★ **Improved collaboration among all project stakeholders**

H2M's Qualifications & Minimum Requirements

H2M's Qualifications

Many of H2M's projects involve creating new facilities, adding onto existing facilities, and restoring, rehabilitating, or repurposing existing facilities. Our services include assisting clients in meeting the recommendations of the National Fire Protection Association's (NFPA), relevant codes, and industry recommendations. We often assist and lead the process for regulatory approvals, budgeting, systems and specialty equipment selections, and value analysis. Our designs focus on the health, well-being, and safety of responders and the public. H2M is continually at the leading-edge of cross-contamination control, gender equity, sleep deprivation mitigation, and built-in state-of-the-art active and classroom training.

Every design and project starts with operations-based programming. Our programming for any emergency response facility delves into response, operations, health, safety, well-being, resiliency, sustainability, and flexibility to adapt to an ever-changing mission. It is organized by space and includes each space anticipated for the facility and covers requirements/needs of items from equipment (current and planned), systems, infrastructure, personnel, codes, mechanical, electrical, and plumbing needs, materials and finishes, security, IT, communications, alerting, and more. The program is a "living" document and becomes the basis for design. This comprehensive information is used to develop a space analysis that can quantify the proposed facility size and initial conceptual construction budget. The entire design team will utilize the program, space analysis, and initial budget throughout the design process.

To meet today's energy needs and see that your project continues to work efficiently well into the future, the entire project team utilizes the most up-to-date knowledge and best practices for both storm resiliency and sustainability. Our designs and recommendations often go beyond just energy efficiency to include Net Zero projects.

Whatever type of project, its size, budget, or complexity, we have taken them all on with the same approach and understanding. Each is equally important and receives our best efforts and full attention. This approach is how we have built our reputation in emergency response facilities and all other markets. We have demonstrated in our work a dedicated approach and commitment to every project and have established a reputation of cutting-edge industry knowledge, design excellence, and client satisfaction.

Minimum Requirements

H2M confirms we meet all minimum requirements associated with this RFQ:

- **2.8.1 -** H2M has provided professional services for more than 90 years and has designed fire stations for more than three decades. Our Project Manager, David J. Pacheco, AIA, brings 30+ years of experience overseeing the design of public safety projects.
- **2.8.2 -** H2M understands that the City reserves the right to require we submit evidence of our financial, technical, and other qualifications and abilities of our firm prior to award.
- **2.8.3 -** H2M and its principals have no record of judgments or pending lawsuits against the City or criminal activities involving moral turpitude. We confirm we have no conflicts of interest.
- **2.8.4 -** Neither H2M, nor any principal, officer, or stockholder is in arrears or in default of any debt or contract involving the City. H2M has never worked for the City of Fort Lauderdale.
- **2.8.5 -** H2M is licensed to practice architecture and engineering in Florida. The firm's licenses are included with our separately uploaded forms.

New Fire Station

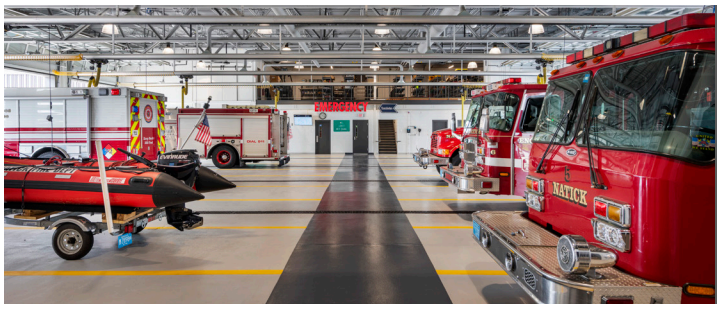
Town of Natick

Natick, MA

Construction Cost: $14.3 million

SERVICES PROVIDED

- Programming
- Conceptual Design
- Site Layouts
- Community Support Assistance
- Schematic Design
- Contract Documents
- Construction Administration Assistance



AWARDS

- ♦ Firehouse Station Design Awards – Gold Award
- ♦ F.I.E.R.O. Station Design Awards – Gold Award
- ♦ AIA Long Island Archi Design Awards – Sustainable Design Award

H2M provided firematic expertise to update the Town's fire station, which could no longer meet their needs.

The Town's population growth required a new 25,000 square foot station on the existing station's site. A pocket park transitions into the adjacent neighborhood, using an outlying portion of the parcel. To ease the odd site configuration, the Town "swapped" a like-sized piece of property with the adjacent mall to benefit both.

The station design focuses on camaraderie, controlling cross-contamination, and responder health and well-being. Interior finishes utilize color, textures, and forms to create a relaxing atmosphere. Informal meeting spaces adjacent to the bunk suite and kitchen/dining enable responders to assemble quickly and comfortably for communications and training. A triage room in the lobby and bike/jogging path promotes health and well-being.

Living quarters are protected from street noise and pollution but have straightforward access to the bays. Ceiling soffits, sound absorbing materials, and triple pane windows further reduce sound. Windows are configured to maximize natural sunlight and ventilation. Bunk rooms can be shaded to accommodate sleeping schedules and protect circadian rhythms. Two mezzanines for on-site training have manholes, rappelling, bailout windows, a confidence maze, and tower for full-gear stair evolutions. Advanced communications connect the station with other emergency services providers during crises and major events.

The station was designed to LEED Silver-equivalent standards and includes roof-mounted solar panels, high-performance thermal building envelope, enhanced window and door performance values, in-floor radiant heat in the firematic areas utilizing high efficiency wall-mounted boilers, and LED interior and exterior lighting. This all-electric facility exceeds the MASS "Stretch" code standard by 30% for energy consumption.

Architect of Record: Tecton architects, P.C.
Firematic Design: H2M architects + engineers

New Station Design

Cortez Fire Protection District

Cortez, CO

Construction Cost: $4.08 million

SERVICES PROVIDED

- Programming
- Space Analysis
- Assistance with DOLA Grant
- Budgeting
- Regulatory Approvals
- Schematic Design
- Design Development
- Bid Phase
- Construction Administration
- Construction Documents
- LEED Documentation

AWARDS

♦ U.S. Green Building Council (USGBC) - LEED Silver

The design team worked with local partners to design a new fire station on a challenging site.

The design team included a prominent Colorado architect and several local consulting engineers. The team created a new station on a small, tight, urban corner site with numerous constraints, including setbacks, storm water regulations, landscape constraints, and LEED requirements. The team worked with the Fire Department, City, and first responders to develop multiple response and return routes and balance stakeholder desires. The scope of work also included abating hazardous materials, demolition, meeting DOLA grant requirements, and achieving LEED Silver certification.

As many training regimens as possible were developed for the building. Regimes include:

- Bailout
- Stair Evolution Training
- Exterior Rope Training
- Confined Space
- Rappelling Points
- Window Evacuation
- Ladder and Floor-to-Floor Transfer Training
- Manhole
- State of the Art Classroom Training

To maintain the budget, we controlled the size and scope of the facility throughout the process and analyzed every aspect of the project through value-engineering.

Architect of Record: Pacheco Ross Architects, P.C.
(Pacheco Ross was acquired by H2M in 2016)

New Fire Station Headquarters

City of Greenfield

Greenfield, MA

Construction Cost: $10 million

SERVICES PROVIDED

- Architecture
- Bid Services
- Programming
- Preliminary/Schematic Design
- Design Development
- Construction Documents
- Construction Administration
- Energy Analysis
- Solar Ready
- Zoning and Code Analysis
- Public Presentations
- Civil Engineering
- Structural Engineering
- MEP Engineering
- Sustainability/Resiliency

The City of Greenfield, MA selected H2M to design a new fire station headquarters to replace the existing structure.

H2M has been working with the City of Greenfield for over a decade on numerous sites and project configurations. The project began as a fire station design, grew to a full public safety complex, and is now back to a 20,000 square foot fire station on a new compact urban site at the entrance to the City on Main Street.

The project is being designed to net zero energy ready (targeting an Energy Use Intensity (EUI) of 35 or below). This target allows the City to secure the highest utility incentives, lowest operating costs, and will result in 0 to <1% in additional construction costs to be recouped in savings on building operation within the first few years.

With a natural gas moratorium, the project will be all electric with some propane backup for the emergency generator. The low carbon footprint building will utilize a PV array on the roof.

The existing fire station currently sits on City property that will be utilized for a new City library project. As such, the Fire Department must move out prior to completion of the new headquarters and into temporary facilities. The temporary will be located on a City owned parking lot and consist of living quarters in trailers and 2 separate “tent” like structures for bay space.

Hazardous waste was identified on the proposed site for the new fire station. H2M worked with the civil and environmental engineers on the project to develop a coordinated Phase 2 testing regimen. H2M, the OPM, and the City worked extensively with the property sellers to accommodate moving their tenants so the buildings on site could be tested and demolished.

H2M worked with the City to maximize grant funding. The project received a $1 million grant for the EOC and COVID-based design solutions.

Substation Replacement

East Northport Fire District

East Northport, NY

Construction Cost: $4.25 million

SERVICES PROVIDED

- Architectural Design
- Civil/Site Engineering
- MEP Services
- Structural Engineering
- Construction Administration
- Sustainable Features

Originally constructed as a 1920s potato barn, the East Northport Fire District's Clay Pitts Road Substation was no longer meeting functional or spatial needs, offering very little in administrative spaces.

Seeking an entirely new building on the same lot, the Fire District wanted to add program spaces to the site including a training room, new gym, ready room, a full coverage generator, an additional bay for their antique truck to be housed, and modern HVAC, electrical and plumbing systems.

In order to accomplish all of this on a 100'x200' lot, we went vertical with our design complete with a full basement under the apparatus room. This provided the firehouse with more storage space. The new facility provides increased response capability with a single 12-foot-wide vehicle being replaced with two 12-foot-wide doors, enhanced firefighter safety, improved traffic flow in and around the site, improved/more efficient building systems, as well as serving to mitigate a host of existing substandard conditions.

Design features include a glass wall and open stair which brought natural light into the basement gym. Although a tight building, we put the generator indoors so as to not impose on the surrounding residential neighborhood. The styles, colors and interiors were all designed to fit into the style of the surrounding neighborhood as well.

New Combined Fire/EMS Station

Massapequa Fire District

Massapequa Park, NY

Construction Cost: $9.8 million

SERVICES PROVIDED

- Budgeting & Programming
- Bond Referendum Services
- Public Support Campaign
- Architectural Design
- Civil, MEP/FP, Structural, & Environmental Engineering
- Schematic Design
- Public Bidding
- Construction Administration
- Construction Observation

H2M designed a new combined fire and EMS substation to better fit the needs of a modern fire district.

The Massapequa Fire District Board of Commissioners spent multiple years evaluating its facilities to determine the best course of action for its existing Park House Station. The station, built in 1953 with multiple additions over the years, was not compliant with current building codes or well-suited for modern firefighting practices, including preventing carcinogenic cross-contamination. H2M reviewed the feasibility of renovation vs. new construction and found that a major renovation would be necessary to cater to the community's growing needs and the first responders to serve it. The Board of Fire Commissioners selected H2M to design the new station but required the firm to adapt and re-use the original hose drying tower as a prominent feature in the new design. H2M also provided temporary power and critical infrastructure to maintain the operation of the existing 110-foot radio monopole throughout demolition and construction.

The new 21,600-square-foot station comprises seven bays, including one drive-through; integrated hands-on training for confined space, bailout, and standpipe training; decontamination spaces with a focus on hot-zone design and responder flow; and company offices, fitness facilities, training room, rehab support closet, and large multipurpose room with a folding partition for increased flexibility.

The site is nestled in a residential neighborhood, but the programmatic requirements for the new station nearly doubled the existing square footage. H2M responded to the surrounding community's requests by designing the station to match the local streetscape. The façade blends a traditional masonry station with softer residential elements, such as fiber cement siding, colonial windows, and sloped-shingle roofs with dormers. A split-level second floor reduces the apparent overall building height and doubles as an outdoor wellness patio. False mansard roofs conceal commercial-sized mechanical equipment from view and eliminate the need for ground-level equipment.

New Fire Station

City of Norwalk

Norwalk, CT

Construction Cost: $13.5 million

SERVICES PROVIDED

- Feasibility
- Public Support Campaign
- Regulatory Approvals
- Programming
- Schematic Design
- Budgeting
- Contract Documents
- Public Bidding
- Construction Administration
- Project Closeout

AWARDS

- 2016 Connecticut Green Building Council Honor Award
- LEED Gold 2014
- 2015 Firehouse Station Design Awards Gold Winner
- F.I.E.R.O. Fire Station Design Awards 2016 Gold Winner
- F.I.E.R.O. Fire Station Design Awards 2016 People's Choice
- Build Connecticut 2014 Construction New Construction Award

The City of Norwalk wanted its Fire Department to reuse its existing, very narrow site between U.S. Route 1 and I-95 to build its new headquarters and Federally funded EOC. Due to the site's location and narrow dimensions, it was extremely important to factor in controlling noise pollution, extreme traffic conditions, and air quality throughout the design process.

Pacheco Ross Architects (PRA), a division of H2M, helped obtain a $1 million grant from federally funded EOC and designed a four-story facility with a large mezzanine to add space within the high bays. Corridors, walls, and roofs were successfully utilized to protect the living spaces from noise and pollution. The large mezzanine spaces were designed adjacent to the bays and classroom. The mezzanine was designed to incorporate numerous active training regimens including a chargeable standpipe, interior rope training, rappelling points, windows, maze, bail out, smoke, blackout, ladder evolutions, floor-to-floor transfer, confined space, rescue hatch, and ability to create additional regimens. The new building achieved LEED Gold Certification by reusing the brownfield site, utilizing daylighting, passive solar gain, state-of-the-art HVAC energy saving systems, noise abatement, and continuous soy-based insulation, recycled materials, and bamboo flooring.

PRA/H2M faced significant challenges on this project, specifically as it related to the site's narrow width. To manage this challenge, PRA/H2M coordinated the CM, City and Fire Department to acquire additional State owned land through negotiations with State and local DOT, City, and State agencies. The design allowed PRA/H2M to accommodate training facilities, firematic support, public areas, firematic offices, a highly secure city-wide IT center, apparatus bays, administrative spaces and the regional EOC within the new building.

Architect of Record: Pacheco Ross Architects, P.C. (Pacheco Ross was acquired by H2M in 2016)

Photo Credit: David R. Miller

New Fire Headquarters

City of Lethbridge

Lethbridge, AB

Construction Cost: $10 million

SERVICES PROVIDED

- Schematic Design
- Construction
- Administration Design and Programming Budgeting
- Feasibility Study and Site Selection
- Detailed PSAP Equipment Specification and Bidding

AWARDS

♦ Fire Chief Gold Award 2012 - Award Winner

The City of Lethbridge wanted to combine its very busy Fire Department with the Regional EOC, 911 call answering point, city-wide IT center, fire marshall fire headquarters, and city fitness facility in one location.

The firm teamed with prominent local architect Ferrary Westwood Babits Architects and local consulting engineers to create the strongest possible design team to solve numerous challenges that came along with the integration of city departments. Designed as Green Globes Sustainable, an emphasis was placed on energy efficiency, daylighting, selecting sustainable materials, and regional sourcing. Fully sprinklered, the facility is 48% more energy efficient than required and incorporates lighting management, LED lighting, vehicle exhaust, individual zone controls, air quality monitoring, HVAC management, electronic auditable occupant access station alerting, in-floor radiant heating with high-efficiency tankless boilers for bays, and building-wide on-site emergency power. The facility was designed on a small downtown corner that defines entrance to the City Center. It was designed to maximize safe response and protect entry and balcony from unusually strong prevailing winds. The team worked closely with the City and local businesses to maintain proper response, pedestrian walkways, parking, streetscape, and view corridors.

Architect of Record: Pacheco Ross Architects, P.C.
(Pacheco Ross was acquired by H2M in 2022)

New Rescue Station

Princeton First Aid & Rescue Squad, Inc.
Princeton, NJ

Construction Cost: Confidential

SERVICES PROVIDED

- Multiple Property Searches
- Programming
- Existing Building Condition Assessment
- Site Assessment
- Schematic Design
- Design Development
- Contract Documents
- Regulatory Approvals
- Bidding
- Contract Administration

Photo by: Don Pearse Photographers

AWARDS

- NJ Alliance for Action: 2023 Distinguished Engineering Award
- Firehouse Station Design Awards: 2020 Silver Award
- Associated Builders & Contractors: 2020 PA Excellence in Construction Award 1st Place
- AIA Eastern New York Chapter Institutional Award of Merit

H2M worked with Princeton First Aid & Rescue Squad, Inc. to design a new station.

We have worked for over 15 years with Princeton First Aid & Rescue Squad, Inc., (PFARS) to find the right location and design their new station. The successful completion of the new station represents the firm's achievement overcoming major design challenges and obstacles over the course of many years, PFARS' persistence and continued focus and the strong collaboration of all involved parties.

PFARS outgrew their original facility completely by 2000, so they began searching for other locations. The Town's Department of Public Works (DPW) building site was suggested, but it needed significant remediation and had serious complications due to Town/Village relocation of the existing DPW. H2M and PFARS proposed several other sites and designs, but none proved feasible due to approvals, cost or community support. In 2015, due to the Town and Village merging, DPW could be relocated and the current site, directly across from Town Hall and nearby the fire station, became the preferred location.

The DPW building and site not only needed remediation but had several site constraints that made the design challenging. For starters, the fueling station at the site had to be kept intact and the street that served as a shortcut for the community had to be permanently closed to accommodate the regulatory requirements for the site. Furthermore, H2M had to install aggressive protection adjacent to a 24-inch water main with a 30-foot easement running through the site to ensure that any possible leakage would not compromise the building. The road closure, water main and other municipal requirements warranted close collaboration with the Town Engineer and the Site Plan Review Advisory Board to coordinate for all the necessary site constraints.

H2M collaborated extensively with the Community, Municipality and the Owner for the design and site layout of the new station. Both the Owner and Community wanted the new facility to be a centerpiece of sustainable architecture, so H2M designed the station with sustainable elements including: site sensitive raingardens; protection and maintaining existing trees; permeable paving materials; reduction of PVC; low or no VOC materials; future solar arrays on main roofs; daylighting to reduce artificial lighting; acoustical treatment along Rt. 206; strategic placement of bunkers quarters for privacy; low maintenance materials and finishes; energy conservation throughout and high levels of insulation to name a few.

The station layout, internal movement and living spaces specifically promote interaction and camaraderie among the end users; younger members, students and seasoned veterans. This was a major design tenet from the Owner as this interaction and camaraderie promotes learning and trust. The facility includes four-fold apparatus bay doors for quick response; carefully thought-out personnel response pathways that follow industry guidelines for responder safety; secure, quiet, separated bunking suite; hot zone transition areas; family style great room with kitchen and dining, separate study room; and integrated training features located on the mezzanine directly off the bays.

The differentiating factor throughout the project was not just the impeccable design as shown in the finished product, but the ability to adapt through collaboration with multiple parties. The acceptance of the new station by the Owner, responders, Community and Municipality was overwhelming and fulfilled their desire as a centerpiece of Princeton.

New Main Fire Station

Mill Creek Fire Company, Inc.

Marshallton, DE

Construction Cost: $5.3 million

SERVICES PROVIDED

- Feasibility Study
- Existing Facilities Assessments
- Site Evaluation
- Membership Support Campaign
- Schematic Design
- Construction Administration
- Program Design
- Bidder Interview and Selection
- Project Management

Mill Creek Fire Company Inc. required a new fire station that would replace its existing facility on a small and difficult site.

The firm completed an assessment and budget eport with professional recommendations to vacate the existing facility, and conducted forums and meetings with stakeholders and responders to present findings and alternatives. We also brought the community, membership, and Fire Company Board of Trustees together for input on the design and concerns. We utilized programming and schematic design to engage the diverse group of stakeholders and fulfill their needs. In designing the new station, we participated in and led presentation and informative meetings to create unanimous buy-in on the project. We developed sub-committees to work on various spaces such as bays, kitchen, bunks, and administration in order to create a design that best met the Company's needs.

New Fire and Rescue Station

River Oaks Fire and Rescue Squad

Woodbridge, VA

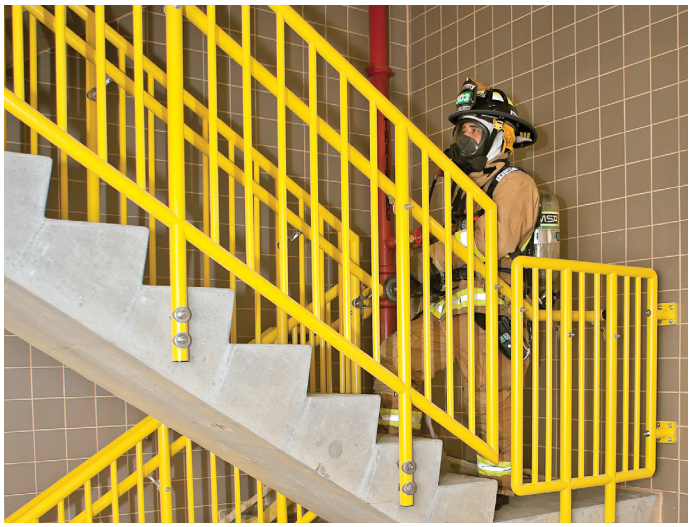
Construction Cost: $8.6 million

SERVICES PROVIDED

- Land Search/Evaluation
- Budgeting
- Extensive County Approvals
- Schematic Design
- Construction Administration
- Project Management

Dumfries Triangle Volunteer Rescue Squad needed to create a new fire and rescue station to combine a Rescue Squad, Career Fire Department, and Volunteer Fire Company into a single facility. The Rescue Squad not only needed to create a building that would provide ample services to the community, but it also needed to acquire land suitable for emergency response to meet the County Master Plan and Zoning Regulations.

Pacheco Ross Architects (PRA), a division of H2M, implemented a unique site location analysis to identify the parcel that would best serve the Department. The site did present numerous constraints including an extreme slope, utility easements, setbacks, stormwater drainage issues, and zoning requirements. H2M worked closely with consultants to coordinate the design to take advantage or avoid the site constraints in a cost-effective manner. The three departments needed a facility that would provide ample training to the volunteer and career members. H2M developed as many training regimens into the building as possible by combining a training/hose tower and mezzanine with direct access to the bays. The training regimens include a five-flight tower stair; chargeable standpipe/Siamese connection; exterior rope training; rappelling points; window evacuation; ladder and floor-to-floor transfer training; confined space; rescue hatch; and state-of-the-art classroom training.



TAB 3

Qualifications of Key Personnel & Capabilities

In any business endeavor, effective leadership helps create confidence among participants and encourages a professional and positive environment. We have hand-selected a team of public safety facilities experts to lead development of the design criteria packages for the City of Fort Lauderdale. They will leverage their lessons learned on similar projects to make this project a success.

Below, we have identified the leadership team dedicated to the success of this project. Should additional resources be needed, H2M has more than 550 technical and support personnel spanning all disciplines that the City can rely on for help

Joseph M. Mottola, AIA | Principal-in-Charge

Mr. Mottola has nearly 40 years of experience in the field of architecture, design, and construction, specializing in public safety projects. As an active member of the volunteer fire service for more than 40 years, he has demonstrated a long commitment and passion to serving and protecting the public. As Principal-in-Charge, Mr. Mottola has the authority to commit and apply the resources necessary to meet the City's technical requirements and schedule.

Percentage of Time Dedicated: As Needed
Relevant Experience: See attached resume
Education: Bachelor of Architecture
Active Registration: Registered Architect: FL

David J. Pacheco, AIA | Project Manager

Mr. Pacheco has more than 30 years of architectural experience and is H2M's Director of Operations. He has personally designed and/or evaluated 200+ emergency response facilities and received numerous accolades for his practical and aesthetically pleasing creations that respond sensitively to client needs, budget, codes, the environment, and the community. As Project Manager, he will be responsible for technical and administration project oversight. He will supervise the overall project, delegate specific tasks to the appropriate members of the H2M team, and manage staff resources to keep the project on schedule and within the City's budget.

Percentage of Time Dedicated: 15-20%
Relevant Experience: See attached resume
Education: Bachelor of Architecture; Bachelor of Science
Active Registration: Registered Architect: FL

Patrick O. Stone R.A., LEED AP | QA/QC Manager

Mr. Stone has 17+ years of experience in developing and managing various emergency facility projects. He has focused on public works projects, specifically in the design of fire stations, and takes great pride in engaging in community driven projects. Mr. Stone is an active thought leader in the industry and actively contributes through teaching, writing, and educating. He is currently an SME for the National Fire Academy and works with FEMA to develop firematic training programs at the academy. In the community, he is a 20-year member of the fire service. His passion for the fire service is what drives his design and focus in the Public Safety Market. As our proposed QA/QC Manager, Mr. Stone will provide internal QA/QC and peer review of all design documents before submission to the City. He will also be engaged in the Programming and Schematic Design phases of this project

Percentage of Time Dedicated: 5-10%
Relevant Experience: See attached resume
Education: Bachelor of Architecture; Master of Science
Active Registration: Registered Architect: Outside FL

Dennis A. Ross, AIA | Subject Matter Expert

Mr. Ross has 45+ years of experience in architectural design, focusing on emergency response facilities. With additional experience in construction management, feasibility studies, and land evaluations, Mr. Ross is able to assess projects from multiple points of view. He leverages his expertise and experience through teaching, writing, and speaking at numerous national engagements. Mr. Ross is one of the leaders and co-founder of the critically acclaimed 1-on-One™ Fire Station Design Symposium. He will be a Subject Matter Expert and provide design advice to the team during each stage.

Percentage of Time Dedicated: 10-15%
Relevant Experience: See attached resume
Education: Bachelor of Architecture; Bachelor of Science
Active Registration: Registered Architect: Outside FL

Specialty Subconsultants

Though H2M is a full-service firm capable of performing a wide variety of services in-house, to expand our depth of local resources and meet M/WBE procurement goals under Florida Statutes 287.09451, we have teamed with the following specialty subconsultants who will support this project:

- CES Consultants, Inc. (MBE) - Site/Civil Engineering and Permitting
- Fernandez Beraud Inc. (WBE) - Landscape Architecture
- Longitude Surveyors, LLC (MBE) - Land Surveying
- Trophy Point, LLC - Cost Estimating
- TSFGeo (MBE) - Geotechnical Engineering

As is the case for all our projects with blended teams, a senior member of H2M will closely supervise and review the work of our subconsultant before final submission to the City. Highlights of our subconsultants' qualifications can be found in Tab 7.

Percentage of Time Dedicated: As needed
Relevant Experience: Varies, see attached subconsultant resumes
Education: Varies, see attached subconsultant resumes
Active Registration: Varies, see attached subconsultant resumes

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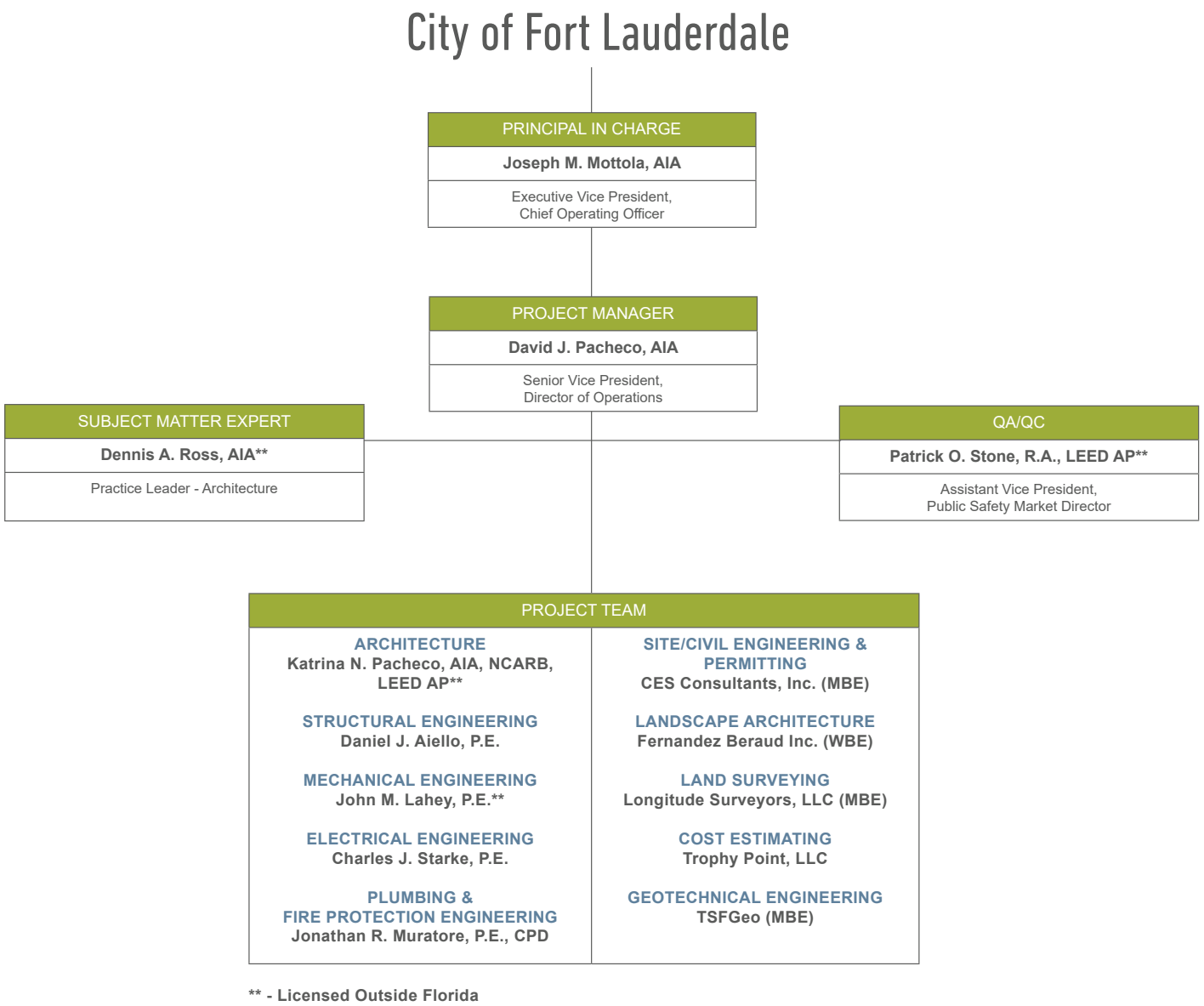
► Qualifications of the Project Team

The successful completion of a project of this nature requires a diverse pool of experienced personnel capable of performing tasks within their area of expertise. We are also aware that the success of this project is dependent upon the close cooperation required between the H2M team and the project personnel of the City of Fort Lauderdale.



** - Licensed Outside Florida

Resumes for the above referenced key personnel are provided following this page.

Joseph M. Mottola AIA

Executive Vice President | Chief Operating Officer

Mr. Mottola has more than 35 years of experience in the field of architecture, design, and construction, specializing in public works projects in the New York metropolitan area. As Chief Operating Officer, Mr. Mottola is responsible for working with the CEO and the executive management team in leading the firm's technical operations and managing the successful implementation of strategic initiatives; such as monitoring or creating new systems and processes to improve efficiency and the quality of the work product.

Prior to assuming the position of COO, Mr. Mottola served as the Director of Architecture and Structural Engineering for the firm. Mr. Mottola managed three architectural studios which specialized in municipal work, educational work and private sector work. He also managed the firm's architectural studio in White Plains, Albany, and NYC; and managed the firm's structural engineering division. As part of the overall management and supervision of these five groups, Mr. Mottola was responsible for overall department performance, providing department leadership, client service and satisfaction, business development and the pursuit of new clients, staff oversight and mentoring, promoting outstanding communication, ensuring that department guidelines, policies and procedures are in place so that business expectations of the company are being met, and ensuring that employees have the opportunity to grow and be given the opportunity for upward mobility and growth within the department.

Mr. Mottola is actively involved in assisting in the public safety market. Being an active member of the volunteer fire service for more than 40 years, Mr. Mottola has demonstrated a long commitment and passion to serving and protecting the public. As a result, Mr. Mottola has built his professional career on providing service excellence to the firm's public safety clients.

Selected client experience within the Public Safety Market:

- Baldwin Fire District
- Bellmore Fire District
- Elmont Fire District
- Lehighton (PA) Fire Department
- Rockville Centre Fire Department
- Roslyn Rescue Fire Company
- Setauket Fire District
- Manhasset-Lakeville Fire Department
- Massapequa Fire District
- Garden City Park Water/Fire District
- Hicksville Fire District
- Central Islip Fire District
- Exchange Ambulance of the Islips
- Patchogue Fire Department
- Copiague Fire District
- Oceanside Fire District
- Riverhead Fire District

Mr. Mottola understands the need for balancing the inherent conflicts of the design process and utilizes sound decision making that promotes good design, project scoping, scheduling, budgeting, quality and outstanding client service, resulting in overall client satisfaction.

Education

B.Arch.; New York Institute of Technology

A.A.S., Civil Technology; Nassau County Community College

Licenses/ Certifications

Registered Architect: FL, NY, NJ, PA, CT, DE, OH, MA, VA, KY, SC

NCARB Certified

Offices Held

Nassau County Firefighters Museum and Education Center, Board Member

NYIT School of Architecture and Design, Dean's Advisory Board

Memberships

American Institute of Architects

Construction Specifications Institute

Massapequa Fire Department, Ladder Company 2

Nassau and Suffolk Association of Fire Districts

National Fire Protection Association

Fire Department Safety Officer Association

Honors/Awards

Outstanding Community Service, Island Harvest

AIA Community Service Award

H2M Employee Excellence Award

Firefighter's Leadership Award

Firefighter's Humanitarian Award

David J. Pacheco AIA

Senior Vice President, Director of Operations

Mr. Pacheco has more than 30 years of architectural experience, with 28 years of specialized knowledge in the design of emergency services facilities, and is Senior Vice President and Director of Operations at H2M. He oversees teams responsible for the development of project design, establishment of project schedules and budgets, the development of construction documents, submissions to government agencies, and all construction phase services administering architectural projects from their inception to completion. Mr. Pacheco leads the company's Core of Excellence – a select group of individuals across the company that together focus on ensuring H2M offers best-in-class services and deliverables to our clients. In this role, he oversees, establishes, and launches systems that are integrated across the company's markets, disciplines, and office locations to see that these company-wide goals are met.

Mr. Pacheco is a Professor of Professional Practice at Rensselaer Polytechnic Institute as well as a Fire Commissioner of Niskayuna Fire District, No. 1. Having studied and/or overseen the design of over 200 emergency response facilities, he extends his practical knowledge to the students he teaches and into the professional literature he writes for architecture and emergency services publications, while providing counsel regarding all aspects of the architectural design of public safety facilities. Mr. Pacheco has lent his proficiency to the development of national standards that altered how emergency services facilities are designed across the country, serves as a Director of the American Institute of Architects for the eastern New York chapter, is an ASTM homeland security technical sub-committee member, and has received major architecture design awards and professional recognition.

Selected project experience

- Stanford Heights Fire District New Station; Colonie, NY: Design Architect for the assessment, feasibility, and design of a new two-story 23,000 square foot fire station to replace the District's outdated existing station. The new station will be built behind the existing station, allowing for continued response during construction. An extensive community support campaign resulted in a 2:1 positive bond referendum vote.
- Halfmoon-Waterford Fire District New Station; Waterford, NY: Client Contact and Design Architect for the design of a new fire station for the District. A temporary station was built to house emergency response and operations during demolition and construction of the new facility. A new 18,000 square foot facility was constructed in its place. The station includes a training room and space to accommodate the department's larger fire trucks.
- Seven Corners Fire Station #28; Seven Corners, Fairfax County, VA: Firematic Consultant for the Seven Corners Fire Station #28 facility replacement project. Explored multiple master plan options for replacing and modernizing the existing facility to meet codes and programmatic requirements. Worked as a subconsultant to BKV Group, Architect of Record.
- Town of Natick Fire Department New Station #4; Natick, MA: Firematic Consultant and Designer responsible for the design of a new fire station for the Natick Fire Department. The station includes living quarters, training rooms, and tower for shared use with other districts; five double-deep apparatus bays; and rooftop solar panels. Worked as a subconsultant to Tecton Architects, Architect of Record.
- Cortez Fire Protection District New Station; Cortez, CO: Design Team Member for a new station design utilizing a very tight, small urban corner site with numerous constraints including setbacks, stormwater regulations, and landscape requirements. Worked closely with the owner to coordinate the design to utilize multiple response and return routes. Instrumental in assisting the District to obtain a $2 million grant for the project. The project achieved LEED Silver certification.*
- City of Norwalk Fire Headquarters; Norwalk, CT: Principal and Design Architect for the design of a new fire headquarters, which includes City-wide IT and the Fire Marshal. Helped to obtain a $1 million grant for a federally funded Emergency Operations Center (EOC) and designed a four-story facility with a large mezzanine to add training space within the high bays. Corridors, walls, and roofs were successfully utilized to protect the living spaces from noise and pollution. The large mezzanine spaces were designed adjacent to the bays and classroom. The mezzanine was designed to incorporate numerous active training regimens, including a chargeable standpipe, interior rope training, rappelling points, windows, maze, bail out, smoke, blackout, ladder evolutions, floor-to-floor transfer, confined space, rescue hatch, and ability to create additional regimens. The building achieved LEED Gold certification.*

** Architect of Record: Pacheco Ross Architects, P.C.*

Education

B.Arch.; Rensselaer Polytechnic Institute

BS, Building Science; Rensselaer Polytechnic Institute

Licenses/Certifications

Registered Architect: FL, CA, CT, DE, MA, NJ, NY, NC, PA, RI, TN, VT, TX, VA

Certified: National Council of Architectural Registration Boards (NCARB)

Memberships

Fire Commissioner, Niskayuna Fire District No.1

ASTM Homeland Security Committee-Emergency Operations Center (EOC) Standards

American Institute of Architects (AIA)

Trustee: Rensselaer Newman Foundation

Past President, AIA Eastern New York – 2007-2009

Director AIA Eastern New York – 2012-2013 and 2019-2024

Director, AIA New York State – 2009-2010

Honorary Member: Grand Boulevard Fire Co. (NY) & Kingston Fire Department (PA)

Publications

"Air Quality in Your Fire Station," Firehouse Magazine, May 2020

"Design for the Times," Fire Chief Magazine, March 2013

"Questions to Ask When Choosing an Architect," Fire Chief Magazine, March 2010

"Fire Station: Architectural Insight to Planning, Design, and Construction," IAFC Foundation, 2010

"Anatomy of a Training Tower," Fire Chief Magazine, April 2006

"Chief Fire Officer's Desk Reference," Jones & Bartlett Publishers in conjunction with IAFC, 2005

"ASTM E2668-10 Standard Guide for Emergency Operations Center (EOC) Development," ASTM 2010

Patrick O. Stone R.A., LEED AP

Assistant Vice President, Public Safety Market Director

Mr. Stone has 17+ years of experience in architectural planning and design, with a focus on fire, police, ambulance, and other emergency response facilities. As H2M's Public Safety Market Director, he serves as a client manager and manages the identification and pursuit of new engineering and architectural opportunities across the country. Mr. Stone's areas of expertise include pre-bond strategy development, planning, public engagement and presentation; project budgeting; development of preliminary designs and oversight of integrated design development approaches; oversight in the development of construction documents, contracts and specifications, and coordination of the respective project engineering disciplines; obtaining governmental and agency approvals; and construction administration through occupancy. Mr. Stone is a frequent presenter at national conferences, including the FIERO Station Design Symposium, FDIC International, Station Design Conference, and others. Notably, Mr. Stone led the planning and design of the "The Fire and Rescue Station of the Future" at FDIC International, which was built full-scale inside Lucas Oil Stadium and visited by more than 16,000 attendees. During this event, he led tours, answered questions, and explained the innovations within the station. This honor is the result of developing a reputation for innovative design, strong leadership, and depth of expertise. Mr. Stone's passion for public safety extends to his community — he is a 20-year member of the fire service.

Education

M.S., Construction Management;
New York University

B.S., Architectural Technology,
Minor in Construction Management;
New York Institute of Technology

Licenses/ Certifications

Registered Architect: NY

LEED Accredited Professional, USGBC

Project Management, Polytechnic Institute of New York University

NYCDOB 40-Hour Site Safety Manager

OSHA 10-hour Construction Safety & Health

H2M Project Management Training

Memberships

American Institute of Architects (AIA)

Construction Specifications Institute, Long Island Chapter

U.S. Green Building Council

Massapequa Fire Department Volunteer Firefighter

National Fire Academy, Subject Matter Expert

Honors/Awards

Building, Design + Construction 40 under 40

H2M Employee Excellence Award

Selected project experience

- Thiells-Roseville Fire District New Headquarters; Garnerville, NY: Design of a proposed headquarters facility that will be approximately 23,000 square feet and two stories. There are five apparatus bays in total with two of those bays being drive through and double loaded. The program will include a public meeting hall, fitness center, commercial kitchen, offices and meeting spaces, in addition to the firematic program.

- Borough of Metuchen New Fire Station and Storage Building; Metuchen, NJ: Design of a new fire station and separate storage building. The station is single story with mezzanines, totaling approximately 14,000 square feet. The single-story storage building totals 3,800 square feet. The site layout and circulation are critical in this overall design as well as separating the hot zone from cold zones of the station.

- City of Greenfield New Fire Headquarters; Greenfield, MA: Designed a 20,000 square foot fire station on a compact urban site. The project was designed to net zero energy ready (targeting an Energy Use Intensity (EUI) of 35 or below). This target allows the City to secure the highest utility incentives, lowest operating costs, and will result in 0 to <1% in additional construction costs to be recouped in savings on building operation within the first few years. Worked with the City to maximize grant funding. The project received a $1 million grant for the EOC and COVID-based design solutions.

- Village of Mineola New Headquarters; Mineola, NY: Planning, design, and construction administration services for a new three-story, 28,000 square foot fire headquarters. The bay facility replaced the Village's more than 100-year-old station. This building has been designed for the future. Apparatus bays include state-of-the-art IT, including monitors for chauffeurs with heads up displays. Electrical infrastructure has been strategically placed to support the newly formed drone unit. Anticipation of future electric apparatus and equipment fueled many decisions in the design of this space. Integrated training within the bays provide props for bail-out, mask confidence, standpipe, confined space, and other trainings.

- Massapequa Fire District New Combined Fire/EMS Station; Massapequa Park, NY: Designed a new 21,600 square foot station containing seven bays, including one drive-through bay, that houses both a fire company and a rescue company; integrated hands-on training; transition zones between bays and the administration sides; company offices; fitness facilities; training classrooms; and public meeting spaces. Maintaining the character of the surrounding neighborhood while nearly doubling the existing square footage posed great challenges. The site is nestled into a quaint residential neighborhood, so careful consideration was taken for softening the exterior facade.

- Seaford Fire District Headquarters Addition and Alterations Feasibility Study; Seaford, NY: Led a feasibility study for proposed upgrades to the District's headquarters. Prepared a report with recommendations and cost opinions.

- Hanover Township Fire District No. 3 Feasibility Study; Hanover, NJ: Led a study to evaluate the feasibility of additions and alterations to an existing fire station or building a new station. Prepared a report with recommendations and cost opinions.

Dennis A. Ross AIA

Practice Leader - Architecture

Mr. Ross has 45+ years of experience in architectural design, focusing on emergency response facilities: fire, police, EMS, EOC, PSAP, and public safety. With experience in construction management, real estate development, feasibility studies, and land evaluations, Mr. Ross assesses projects from multiple points of view. He leverages his expertise and experience through teaching, writing, and speaking at professional conferences and symposiums. Mr. Ross is one of the leaders and co-founders of the critically acclaimed One-on-One™ Fire Station Design Symposium.

Earning his Bachelor of Architecture degree from Rensselaer Polytechnic Institute, Mr. Ross went on to become licensed in 15 states, NCARB certified, a board of governors member for the Phi Kappa Tau Rho Chapter Fraternity, and an honorary member of the Kingston, PA Fire Department. Mr. Ross has earned several awards including the NYS Small Business Advocate of the Year award in 2001 from the Business Council of New York State and NFIB. He is currently serving on the NFPA Technical Committee on "Emergency Responders Occupational Health". The Committee has been tasked to develop a new Standard for Contamination Control, NFPA 1585, which just went live. He led the task group for Chapter 5, Emergency Services Organization Facilities. In addition, Mr. Ross accepted a position as Executive Board Member on the NFPA AEBO (Architects, Engineers, Building Officials) Board.

Education

B.Arch.; Rensselaer Polytechnic Institute
BS, Building Science; Rensselaer Polytechnic Institute
Exchange Student, Polytechnic of Central London

Licenses/ Certifications

Registered Architect: CO, CT, MD, MA, ME, MI, MO, NE, NJ, NY, OH, PA, TN, VA, WV
National Council of Architectural Registration Board Certified (NCARB)

Memberships

American Institute of Architects (AIA)
National Council of Architectural Registration Boards (NCARB)
Business Council for Small and Independent Business of New York State, Former Chairman
National Fire Protection Association (NFPA)
Board of Governors for Phi Kappa Tau Rho Chapter Fraternity
Honorary Member – Kingston Fire Department, PA

Publications

"GIS May Be Key To The Future Of Emergency Response," Firehouse Magazine, 2021
"Air Quality in Your Fire Station," Firehouse Magazine, 2020
"Get it Done! 10 Strategies for Success," Fire Chief Magazine, 2019
"Design of the Times," Fire Chief Magazine, 2013
"Gear at the Ready," Fire Chief Magazine, 2009
Fire Station: Architectural Insight to Planning, Design, and Construction, Co-Author, IAFC Foundation, 2010
"Chief Fire Officer's Desk Reference," Jones & Bartlett Publishers in conjunction with IAFC, 2005

Selected project experience

- Thiells-Roseville Fire District New Headquarters; Garnerville, NY: Design development and construction document preparation for a new headquarters facility, which will be approximately 23,000 square feet and two stories. There are five apparatus bays in total with two of those bays being drive through and double loaded. The program will include a public meeting hall, fitness center, commercial kitchen, offices and meeting spaces, in addition to the firematic program.
- Borough of Metuchen Fire Department; Metuchen, NJ: Project Designer for a new station for the Metuchen Fire Department. Worked with the Borough to vet several potential sites, including the existing station property, and designed the new station on an existing Borough property as well as a small adjacent residential property for sale. The proposed station is a one-story, approximately 11,000 square foot, combined fire and EMS facility with an outbuilding to hold two to three additional apparatus. There are several major utility easements that must be avoided, which necessitated the need for the outbuilding; to control the size of the overall building footprint.
- City of Greenfield New Fire Headquarters; Greenfield, MA: Project Executive for the design of a new fire headquarters. The facility is a 20,000 square foot fire station on a new compact urban site. Worked extensively with the City to explore several sites, develop a P3 to pursue the project, and secure a site to create a temporary facility to maintain operations during demolition and construction of the new headquarters.
- Y-12 National Security Complex Fire Station; Oak Ridge, TN: Project Executive and Designer for the design of a new fire station at the Y-12 National Security Complex in Oak Ridge, TN. The station supports emergency functions such as fire and ambulance response, rescue, and hazardous material response. Worked as a subconsultant to BKV Group, Architect of Record.
- Seven Corners Fire Station #28; Seven Corners, Fairfax County VA: Firematic Consultant for the Seven Corners Fire Station 28 facility replacement project. Explored multiple master plan options for replacing and modernizing the existing facility to meet codes and programmatic requirements. Worked as a subconsultant to BKV Group, Architect of Record.
- City of Norwalk Fire Headquarters; Norwalk, CT: Project Executive and Co-Designer for the design of a new fire headquarters, which includes City-wide IT and Fire Marshal. Helped to obtain a $1 million grant for a federally funded EOC and designed a four-story facility with a large mezzanine to add training space within the high bays. Corridors, walls, and roofs were successfully utilized to protect the living spaces from noise and pollution. The large mezzanine spaces were designed adjacent to the bays and classroom. The mezzanine was designed to incorporate numerous active training regimens including a chargeable standpipe, interior rope training, rappelling points, windows, maze, bail out, smoke, blackout, ladder evolutions, floor-to-floor transfer, confined space, rescue hatch, and ability to create additional regimens. The building achieved LEED Gold certification.*

** Architect of Record: Pacheco Ross Architects, P.C.*

Katrina N. Pacheco AIA, NCARB, LEED AP, MCPPO

Assistant Vice President,
Studio Director

Ms. Pacheco has more than 30 years of architectural design experience and focuses on standardization within design projects and specializes in CAD/BIM integration to bring tangible value to the firm's clients. Focusing on the design of public safety buildings for over 25 years, she has been involved in the production, evaluation, and construction administration of over 100 such facilities. Her responsibilities include client management, document coordination, materials research and selection, shop drawing review, bidding services, construction administration, and all other phases of project management.

Ms. Pacheco serves in a voluntary capacity on the Building Committee for Niskayuna Fire District No. 1 where she is an honorary member of the Grand Boulevard Fire Company. She is an Adjunct Professor at Rensselaer Polytechnic Institute and teaches Professional Practice to both undergraduate and graduate students. Her experience with sustainable practices and public safety project expertise has enabled her to advise clients on various aspects of public safety facilities. Ms. Pacheco has served as a 1-on-One advisor at the Fire Chief Magazine's "Station Style Design Conference" and presented a seminar entitled "Tactical LEED for Fire Stations" in Kansas City, MO to a national audience.

Education

B.Arch.; Rensselaer Polytechnic Institute

B.S., Building Science; Rensselaer Polytechnic Institute

Licenses/Certifications

Registered Architect: NY, MA

National Council of Architectural Registration Board Certified (NCARB)

LEED Accredited Professional (AP)

Massachusetts Certified Public Purchasing Official (MCPPO)

Memberships

American Institute of Architects (AIA)

RPI: Guest Studio Reviewer, 2018-2023; Blast Off Career Talk; Portfolio Reviews 2016-2018

AIAENY: Design Award Committee Chair 2019-2021

St Francis de Sales, Troy: Parish Council/ Pastoral Planning Committee, Christian Education Committee, Catechist Building Renovation Consultant 2005-2009

Hillside Elementary School PTO, Niskayuna: Fall Frolic Committee, Playground Committee & Community-Build Installer

Bicycle & Pedestrian Task Force for Capital District Transportation Committee

Niskayuna Fire District Building Committee

Honorary Member: Grand Boulevard Fire Co. (NY)

Presentations

1-on-One Pre-Conference: Phoenix, AZ, Denver, CO and Overland Park, KS 2006-2013

Selected project experience

- Halfmoon-Waterford Fire District New Station; Waterford, NY: Project Manager and Architect for the design of a new fire station for the District. A temporary station was built on-site to house emergency response and operations during demolition and construction of the new facility and was later converted for company use. A new 18,000 square foot facility was constructed in its place. The station includes a training room and has space to accommodate the department's larger fire trucks and is configured for a potential addition for future flexibility. This project received an American Council of Engineering Companies (ACEC) award.

- Town of Natick Fire Department New Station #4; Natick, MA: Project Captain responsible for overseeing the design of a new fire station for the Natick Fire Department. The station includes living quarters, training rooms and tower for shared use with other districts, five double-deep apparatus bays and rooftop solar panels. Worked as a subconsultant to Tecton Architects, Architect of Record.

- Cortez Fire Protection District New Station; Cortez, CO: Project Manager and Designer for a new station utilizing a very tight, small urban corner site with numerous constraints including setbacks, stormwater regulations, and landscape requirements. Worked closely with the owner to coordinate the design to utilize multiple response and return routes. Instrumental in assisting the District to obtain a $2 million grant for the project. The project achieved LEED Silver certification.*

- Municipality of Bethel Park Volunteer Fire Company New Station; Bethel Park, PA: Project Captain during the design and construction of a new fire station. This facility was designed on a site with numerous constraints including extreme slope, a stream traversing the site, buried utilities adjacent to the existing building, and tight sideyard setbacks. The project included a training tower with numerous active training regimens.*

- Guilderland Fire District Station Renovation/Addition; Guilderland, NY: Project Manager and Designer for an addition to the District's existing fire station. The addition is composed of three double-deep drive-thru bays, firematic and support facilities, public meeting space, and administrative and community facilities, with attention to walkable neighborhood initiatives.*

- City of Norwalk Fire Headquarters; Norwalk, CT: Project Captain, Designer, and LEED Project Administrator for a new fire headquarters, which includes City-wide IT Data Center and the Fire Marshal. Helped to obtain a $1 million grant for a federally funded EOC and designed a four-story facility with a large mezzanine to add training space within the high bays. Corridors, walls, and roofs were successfully utilized to protect the living spaces from noise and pollution. The large mezzanine spaces were designed adjacent to the bays and classroom. The mezzanine was designed to incorporate numerous active training regimens including a chargeable standpipe, interior rope training, rappelling points, windows, maze, bail out, smoke, blackout, ladder evolutions, floor-to-floor transfer, confined space, rescue hatch, and ability to create additional regimens. The building achieved LEED Gold certification.*

** Architect of Record: Pacheco Ross Architects, P.C.*

Daniel J. Aiello P.E.

Department Manager - Structural Engineering

Mr. Aiello is a structural engineer with 10 years of experience in the assessment and design of multi-story residential/commercial buildings, schools, storage facilities, barge bulkheads, and more. He serves as H2M's Department Manager of Structural Engineering in charge of the real estate, public safety, higher education, public agency, and energy market projects. Mr. Aiello has effectively implemented his experience with steel, concrete, masonry, wood, and cold-formed design in all his projects. He applies his background in geotechnical engineering to design various foundation systems and retaining structures.

Education

M. Eng., Structural Engineering;
Syracuse University

B.A., Civil Engineering;
Syracuse University

Licenses/ Certifications

Professional Engineer: FL, NY, NJ, CT

Selected project experience

- Manhasset-Lakeville Fire District New Ambulance Building; Great Neck, NY: Structural design services for a new 10,000 square foot, two-story, four-bay ambulance building, including kitchen, lounge area, bunk rooms, meeting room, and offices. The District owns the existing site and has two existing buildings located on the rear of the site that H2M designed 10+ years ago.
- Copiague Fire District New Storage Building; Copiague, NY: Preparation of structural plans and specifications for a proposed storage building for the District. Design for this pre-engineered structure includes foundations, slab on grade, and interior mezzanine.
- Friendship Engine and Hose Co. New Fire Station; Merrick, NY: Responsible for the structural design of a new fire station to be built in Merrick, NY
- Massapequa Fire District New Combined Fire/EMS Station; Massapequa Park, NY: Structural design for a new 21,600 square foot station containing seven bays, including one drive-through bay, that houses both a fire company and a rescue company; integrated hands-on training; transition zones between bays and the administration sides; company offices; fitness facilities; training classrooms; and public meeting spaces.
- North Massapequa Fire District Headquarters Additions and Alterations; North Massapequa, NY: Prepared structural plans and specifications for a two-story addition composed of an apparatus bay, storage mezzanine, and storage space above the new apparatus bay.
- Centereach Fire District Station 2 Addition and Alterations; Lake Grove, NY: Prepared structural drawings and specifications for the renovation and 9,100 square foot addition to Station 2 of the Centereach Fire District.
- National Grid Greenpoint Campus Demolition; Brooklyn, NY: Developed existing plans for a structure to be demolished at the National Grid campus in Brooklyn. Visited site and assessed whether the building could be safely demolished if existing shoring were to be removed.
- Westchester County Daniel P. Thomas Material Recovery Facility Tipping Floor Slab Repair; Yonkers, NY: Engineering services to address structural deficiencies in the tipping floor slab located at the Westchester County Daniel P. Thomas Material Recovery Facility.
- Westchester County Daniel P. Thomas Material Recovery Facility Roof, HVAC, and Electrical Upgrades; Yonkers, NY: Structural engineering services in connection with the preparation of plans and specifications for the replacement of the existing roofing system and HVAC and electrical upgrades at a series of four buildings at the Daniel P. Thomas Material Recovery Facility.
- Town of Brookhaven Archived Records Center; North Bellport, NY: Provided structural engineering services for the development of construction documents for a renovated and expanded regional Archives data center. The facility will meet NYS Archival Standards, including temperature and humidity controls, and serve as a central scanning repository.
- Mastic Moriches Shirley Community Library Moriches Annex; Moriches, NY: Led a team of structural engineers for the design of a one-story wood and steel-framed building with a raised floor system and shallow foundation. Managed a team of structural engineers during the design process and coordinated the structural scope with the architects and mechanical engineers.

John M. Lahey P.E.

Senior Project Engineer - Mechanical Engineering

Mr. Lahey has more than 10 years of experience in the engineering industry, where he is well versed in all areas of HVAC experience across multiple sectors. Specifically, he has worked within local and foreign commercial and residential spaces and education spaces. Additionally, Mr. Lahey has five years of military experience with the United States Marine Corps including one year of deployment.

Education

B.S., Mechanical Engineering;
Hofstra University

Licenses/ Certifications

Professional Engineer: NY, NJ

OSHA 10-Hour Construction Safety & Health

H2M Project Management Certification Program Graduate, Project Manager

Memberships

American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)

Selected project experience

- Inc. Village of Mineola New Fire Headquarters; Mineola, NY: Provided mechanical engineering services as part of the design of a new fire headquarters for the Village of Mineola. Designed VRF hyper heat system with a roof-mounted DOAS system serving the first and second floor office spaces. Provided three single-zone VAV rooftop units serving the third floor company rooms and meeting room. Designed hot water boiler plant and unit heaters serving apparatus bay. An apparatus bay was also provided with a gas detection system, general exhaust fan, vehicle exhaust system, and several high-volume low-velocity fans to de-stratisfy the space.
- Centereach Fire District Station 2 Addition and Renovation; Lake Grove, NY: Responsible for mechanical engineering design associated with the addition and alterations to Station 2. A new BMS was provided, as well as new HVAC systems throughout the entire building.
- United States Marine Corps; Camp Pendleton, Oceanside, CA: Managed Camp Pendleton's only helicopter engine test facility. Earned dual qualification as a Quality Assurance Representative on the test facility and T-700 helicopter engines. Supervised maintenance on the engines within the test facility and certified that engine performance evaluations procedures were followed. Ensured the test facility was always mission capable and that engines below acceptable standards were not issued for use in helicopters. There were no injuries, mishaps, or engine recalls during supervision.
- Patchogue-Medford Library New Library Branch Building; Medford, NY: Provided mechanical engineering design for the new 5,500 square foot Medford Branch Library. Designed a 20-ton air-cooled VRF system and 1,600 CFM split gas-fired DOAS unit as part of a base bid. As an alternate, designed a 28-ton geothermal water cooled VRF system and 2,000 CFM DOAS unit with a 750 MBH boiler plant for space heat and condenser water injection. The geothermal systems were sized to accommodate future space fit-outs.
- Garden City Public Library Children's Room Renovation; Garden City, NY: Responsible for HVAC modifications to the existing HVAC system serving the Library's children's room including revising/ adding additional ductwork, diffuser locations, and return grills to accommodate the approved layout. Coordinated with vendors to provide updated controls and thermostat locations within the space. Upgrades were integrated with the existing BMS system.
- New York State Department of Transportation (NYSDOT) Republic Airport Boiler Replacement; Farmingdale, NY: Responsible for mechanical engineering design services associated with the replacement of two gas-fired, hydroponic boilers at the main terminal of Republic Airport. Also responsible for bidding and construction administration.
- Brooklyn Navy Yard Development Corporation (BNYDC) Building 270 Rehabilitation; Brooklyn, NY: Providing mechanical engineering services for the rehabilitation of Building 270 at Brooklyn Navy Yard. Hurricane Sandy caused extensive damage to the Brooklyn Navy Yard. The saltwater caused extensive permanent damage to electrical components. As a result, the FEMA and State of New York have obligated funds toward recovery and mitigation of facilities under the FEMA Public Assistance (PA) Program for Disaster DR-4085. Mechanical work involves designing a new boiler system to replace the existing boiler system of the same size, elevating the new boiler to an elevation above the design flood elevation (DFE), and designing a new fuel tank with flood mitigations measures.
- Dormitory Authority of the State of New York (DASNY) Steam PRV Replacement; Brentwood, NY: Replaced existing one stage pressure reducing valve station (PRV) that was approximately 15 feet above deck and inaccessible with a two-stage electronic controlled PRV mounted at grade. The new 4,000 LB/HR PRV station reduces steam from 40 to 5 PSI. PRV station is designed for stand-alone operation but has capabilities for future BMS integration. Provided a dedicated medium pressure steam (MPS) take off from campus steam distribution to serve as the building domestic water heat exchanger and provide individual isolation for domestic hot water and building heat systems. Provided flash tank for MPS systems. Relocated all isolation valves that were inaccessible to approximately 7' in elevation.

Charles J. Starke P.E.

Senior Associate, Assistant Department Manager - Electrical Engineering

Mr. Starke is an electrical engineer with 15 years of experience providing electrical design for water, wastewater, and industrial projects. As H2M's Assistant Department Manager of Electrical Engineering, he is responsible for leading a team of staff in the execution of high-quality electrical designs. Mr. Starke's areas of expertise include power distribution design, new electrical services and service upgrades, motor control centers, programmable logic controls (PLC), emergency generators and systems, interior and exterior lighting, fire alarm systems, CCTV and access control systems, and security alarm systems.

Education

B.S., Electrical and Computer Engineering; New York Institute of Technology

Licenses/ Certifications

Professional Engineer: FL, NY, NJ

Dale Carnegie Training Program

H2M Project Management Training Program

Selected project experience

- Town of Davie Police Department Emergency Generator; Davie, FL: Engineer of Record for the installation of a new exterior emergency generator at the Town's Police Headquarters. Due to failure of the generator during Hurricane Irma, the existing 750kw interior generator will be replaced by a new 750kw exterior generator. The existing generator is fueled by an existing 8,000-gallon underground storage tank and day tank. It will provide full back-up power for the Police Headquarters building and adjacent Fire Department Station 65 building.
- Exchange Ambulance of the Islips New Headquarters; East Islip, NY: Senior Project Engineer for the electrical systems of a new facility for the Exchange Ambulance of the Islips to improve the responders' operations and workflow, living environment, and health and safety; enabling smoother operations and an improved work environment for first responders.
- Massapequa Fire District Park House Fire Station Addition and Renovation; Massapequa, NY: Senior Project Engineer for electrical systems for the addition and renovation of an existing fire station for the Massapequa Fire District. The project included power distribution design, emergency generator design, interior and site lighting, and IT/AV/CCTV systems coordination.
- Village of Rockville Centre Police Station Renovation; Rockville Centre, NY: Provided electrical engineering services for the adaptive reuse of the Village of Rockville Centre's water district maintenance garage to house their Police Department, Fire Chief/Council Suite, and Water Department. The new Police Headquarters facility includes a 24/7 climate-controlled communication/dispatch center with numerous advanced monitors and CCTVs for constant surveillance. This facility also incorporated uninterrupted power supply, and full building generator and a control center.
- Inc. Village of Mineola New Fire Headquarters; Mineola, NY: Senior Project Engineer responsible for electrical engineering design for the Village's new state-of-the-art fire headquarters, which replaced the original headquarters built in 1913. Responsibilities included power distribution, lighting, emergency generator, and IT/AV/CCTV design.
- Centereach Fire District Headquarters Renovations; Centereach, NY: Senior Project Engineer responsible for electrical engineering design for upgrades to the District's headquarters, including meeting rooms, bathrooms, and communication console renovations. The scope also included elevator upgrades. Designed new LED lighting and electrical equipment throughout.
- Roslyn Rescue Fire Company New Fire Station; Greenvale, NY: Project Engineer responsible for electrical engineering design for a proposed new fire station on Locust Street for the Roslyn Rescue Fire Company. Responsibilities included power distribution, lighting, and generator design.
- Town of Brookhaven Mastic Volunteer Ambulance Company Headquarters Addition and Alteration; Mastic, NY: Project Engineer responsible for electrical design for an addition and renovation to this volunteer ambulance headquarters. There are many sustainable features, including photovoltaic roof panels; daylight harvesting; low flow plumbing fixtures; a geothermal HVAC system; a white roof with a high solar reflectance index; building commissioning; and low-emitting materials. The facility achieved LEED Gold certification.
- Hicksville Fire District Station 4 HVAC Upgrades; Hicksville, NY: Staff Engineer responsible for the design of electrical and mechanical improvements at Station 4. The project entailed the replacement of the station's split system air handlers.

Jonathan R. Muratore P.E., CPD

Senior Associate, Department Manager - Plumbing and Fire Protection Engineering

Mr. Muratore has more than 10 years of experience in plumbing and fire protection design and engineering for a wide variety of projects, including laboratories, higher education facilities, fire stations, municipal and state buildings, and public and private residences. He is knowledgeable in domestic water service and distribution systems, backflow prevention design and permitting, sanitary, waste and vent systems, grease interceptors, gas pipe sizing, double wall process waste piping, waste treatment, compressed air systems, fuel pumping stations, and fire sprinkler and standpipe systems. Mr. Muratore is skilled in AutoCAD and Revit MEP 3D design.

Education

B.S., Mechanical Engineering: State University of New York at Buffalo

Licenses/ Certifications

Professional Engineer: FL, NY, NJ, CT, MA, VA

Certified in Plumbing Design (CPD), ASPE

H2M Project Management Certification

Memberships

American Society of Plumbing Engineers (ASPE)

National Fire Protection Agency (NFPA)

Selected project experience

- Stanford Heights Fire District New Fire Station; Schenectady, NY: Plumbing and Fire Sprinkler Design Reviewer for a proposed new 24,000 square foot fire station.
- Inc. Village of Mineola Fire District New Headquarters; Mineola, NY: Plumbing and Fire Sprinkler Design Reviewer for a new 25,000 square foot fire district headquarters. The plumbing and fire protection design included evaluation of existing water service, new fire service, domestic and sanitary design, backflow prevention, gas service upgrade, and drainage and collection systems in the apparatus bay.
- Massapequa Fire Department Alterations and Addition; Massapequa Park, NY: Plumbing and Fire Sprinkler Design Reviewer responsible for the design of plumbing support systems for the bathrooms, showers, kitchen, and apparatus bay. The addition adds approximately 9,000 square feet of space to the existing building.
- Setauket Fire Department Headquarters Additions and Renovations; East Setauket, NY: Plumbing and Fire Sprinkler Design Engineer responsible for plumbing and fire protection design as part of a major renovation and new addition to the Setauket Fire Department headquarters building. The completed facility features additional and properly sized apparatus bays, improved access for all responders, a meeting room, training room, and adequate administrative and storage spaces.
- Wading River Fire Department Headquarters Fuel Storage and Dispensing Upgrades; Wading River, NY: Plumbing Design Engineer for the proposed fuel storage and dispensing system upgrades at the Wading River Fire District Headquarters.
- Westhampton Beach Fire District New Headquarters Facility; Westhampton Beach, NY: Plumbing and Fire Sprinkler Design Engineer for the new 30,000 square foot building that includes five drive-thru apparatus bays, bunker gear and apparatus support spaces, District and Department offices, training room, large multipurpose/meeting room with kitchen, fitness center, and lounge/recreation space. The facility achieved LEED Gold certification.
- North Babylon Public Library Addition; North Babylon, NY: Design of all plumbing and fire protection systems for a new building addition to accommodate an accessible meeting room, additional staff offices, lounge area, and toilet rooms.
- Oceanside Library Addition; Oceanside, NY: Design of all plumbing and fire protection systems for a new building addition to accommodate an accessible meeting room, additional staff offices, lounge area, and toilet rooms.
- Gold Coast Public Library New Library; Glen Head, NY: Responsible for the plumbing and fire protection design for the new Gold Coast Library in Glen Head, NY. The full-service library will include community rooms, study rooms, offices, and bathrooms.
- Westhampton Free Library Interior Renovation; Westhampton Beach, NY: Design of the plumbing and fire protection systems for the interior renovation to expand library services on the top floor. The design included intricate sanitary routing through the accessible attic with varied attic floor heights.
- Town of Hempstead Point Lookout Bathhouse; Point Lookout, NY: Plumbing Design Engineer for the replacement of two bathhouses destroyed by Hurricane Sandy. The scope of work included the creation of a single bathhouse on an elevated foundation. The new building contains lockers, toilet rooms, lifeguard space, and exterior showers.

DAVID HOOT, PE

Sr. Vice President; Technical Advisor & QA/QC

YEARS EXPERIENCE

48

EDUCATION

BS, Civil Engineering, Environmental Engineering & Water Resources, Michigan Tech University, 1976

REGISTRATIONS & CERTIFICATIONS

Florida Professional Engineer #35970, 1985

Georgia Professional Engineer #13518, 1982

PROFESSIONAL AFFILIATIONS

American Management Association

American Water Works Association

American Water Resources Association

Ducks Unlimited, Wetland Conservation

Florida Engineering Society

Solid Waste Association of North America

Water Environment Federation

SPECIAL TRAINING

OSHA 40-Hour Hazmat/Health & Safety Training

OSHA 8-Hr. Hazmat Supervisor/ Mgmt. Training

Wetlands Identification & Permitting

Environmental & Wetlands Permitting

Solid & Hazardous Waste Mgmt. Short Course

Mr. David Hoot is a skilled professional with 48 years of experience. David has successfully functioned in many leadership and operational roles and has an extensive background in civil and environmental engineering. He has significant experience in project management and direction of civil/environmental engineering design and plan preparation involving neighborhood improvement; sustainability and resiliency; site development and pre-development services; roadway and transportation-related design; utilities and infrastructure improvements; water and wastewater transmission, collection and treatment systems; stormwater pipe/culvert design, environmental permitting and stormwater management; environmental impact studies and assessments; and CEI and construction management. David has directed, managed, designed, or provided quality control for various multi-disciplined water, wastewater, stormwater and water resource systems/projects throughout his career; and has provided professional/consulting services related to wastewater and stormwater system evaluation, technical support and design of various types and sizes of pump/lift stations and collection and FM systems, including reuse, and environmental restoration improvements and sustainability projects in the public and private sectors in Florida and the Southeast US.

Experience Includes:

City of Miami Office of Capital Projects Program/Project Management Services Continuing Service Contract, Miami, FL: Senior Program Manager supporting the City with both Project and Program Management oversight and coordination, acting as agents of the City of Miami to assist with the undertaking of primarily Miami Forever Bond-funded projects, including roadways and right of ways, parks, municipal facilities, public facilities, public safety facilities, environmental, and sea-level rise, and flood prevention infrastructure projects, as well as other capital project as assigned by the City's Office of Capital Improvements (OCI). David is providing project management services for the following projects: I-395 Open Space & Mobility Connector; I-395 Underdeck/Miami-Overtown Heritage Trail Development; I-395 Baywalk Pedestrian & Bikeway Bridge; NW 17th Street from NW 27th Ave. to NW 32nd Ave. Roadway & Drainage Improvements; NW 17th Street from NW 32nd Ave. to NW 37th Ave. Roadway & Drainage Improvements; and the Dinner Key Marina Breakwaters Project.

NW 13th Street 30-inch Force Main Replacement, Fort Lauderdale, FL: Sr. Engineer for the design, permitting, construction, testing and startup of a new 30" force main along NW 13th Street in an urban area of Fort Lauderdale, including connections to the existing pipe and reconnection of Pump Stations A-28 and A-29. The project also included the design, permitting, construction, and installation of a new plug valve and piping near NE 14th Avenue and 11th Street to replace the existing inoperable valve and provide isolation to perform the required tie-in work.

West Avenue North & South D/B Neighborhood Utility & Resiliency Improvements, Miami Beach, FL: Project Director for the 600-acre, Design-Build project to develop a stormwater model, water/ sewer/utility and roadway design, permitting and infrastructure construction of 2.2 miles of roadway to address sea level rise in the West Avenue Basin. This resiliency project will provide the community protection from flooding during storm events and high seasonal tides. Modeling using AdICPR4 and upsizing and design of all curb inlets and yard inlets followed by significant upsizing and modifications of two pump stations is required. The project includes 16,000 LF of water main, 7,050 LF of sanitary gravity sewer, 12,800 LF of storm sewer, a 120,000 GPM stormwater pump station and outfall, and water meter service conversions from the rear of private properties to new water lines and connections in the right-of-way.

VANESA M. MAHONEY, PE

Assistant Vice President; Project Manager & Engineer

YEARS EXPERIENCE

8

EDUCATION

BS, Civil Engineering, Florida State University, 2015

REGISTRATIONS & CERTIFICATIONS

Florida Professional Engineer #91017, 2021

PROFESSIONAL AFFILIATIONS & AWARDS

Women In Healthcare, Florida Chapter, Founding Member; Executive Board Member; Secretary (2019-Present)

KHA Employee Recognition Award Outstanding Dedication, 2018

KHA Employee Recognition Award Outstanding Analyst, 2016

SOFTWARE

Civil 3D

ICPR 3 & ICPR4: Interconnected Channel & Pond Routing Modeling

Sea, Lake, and Overland Surges From Hurricanes (SLOSH) Modeling

Microsoft Office

Ms. Vanesa Mahoney is a Florida-licensed Professional Civil Engineer with eight years of professional experience in civil land development, including water, wastewater, and stormwater/drainage design, and project management with various public and private entities. She is adept at managing projects of all sizes from inception to completion, is an effective communicator, managing project teams to meet deadlines and budgets efficiently, and has managed more than 35 projects from the design stage to the final certification stage. Vanesa is experienced in permitting land development projects in Palm Beach, Broward, and Miami-Dade Counties and has effectively coordinated with various permitting agencies to ensure the timely delivery of permits prior to construction.

Experience includes:

The Landing Water Taxi Terminal, Ft. Lauderdale, FL: Project Manager and Site Civil Engineer for the Landing Water Taxi Terminal, a $10 million project that boasts an impressive 8,600 SF building spanning four levels. The building's dynamic design includes a ground-floor ticketing and visitors' center for the Water Taxi, seamlessly transitioning to a second and third level featuring a restaurant and bar, the fourth level will include a rooftop event space. CES is providing water, sewer, and drainage design services for the project. With groundbreaking anticipated in late 2024, the project is slated to open its doors to the public by early 2026.

One Stop Shop, Ft. Lauderdale, FL: Project Manager and Site Civil Engineer for development a vacant parcel located at 301 North Andrews Avenue in Fort Lauderdale, Florida. The project includes a four-story marketplace type building, a three-story cultural center, and a public open space and recreational area. CES is providing professional engineering services to develop the utility, drainage, and overall site/civil design for the project.

Emergency Generator at Police Department, Davie, FL: Project Manager and Site Civil Engineer for the Town of Davie's project to install a new exterior emergency generator at the Police Headquarters. Due to failure of the generator during Hurricane Irma, the existing 750kw interior generator will be replaced by a new 750kw exterior generator. The existing generator is fueled by an existing 8,000-gallon underground storage tank and day tank. It will provide full back-up power for the Police Headquarters building and adjacent Fire Department Station 65 building. CES is providing design services for the paving, grading, and drainage improvements of the project, as well as the relocation of existing fire infrastructure that falls within the footprint of the new generator.

HCA Florida University Hospital, Davie, FL: Project Manager for a $360 million project that entailed the addition of a 200-bed hospital, a 1,500 space parking garage, and a medical office building on Nova Southeastern University's campus. The project included the design of an underground vault system in the proposed parking garage to achieve the amount of stormwater storage required on site. The design incorporated a proposed water main loop and gravity sewer main along the spine road of the campus, as well as a network of pipes, inlets and exfiltration trench that ultimately conveyed stormwater into the garage's stormwater vault system. The project required extensive coordination with local agencies and various members of the design and construction team.

JFK North Behavioral Health & Emergency Department Addition, West Palm Beach, FL: Project Manager who led the site design for an Emergency Department and Behavioral Health addition to JFK Medical Center's North Campus. The design involved the relocation of the existing drainage system and the addition of water and sewer mains to service each building. In addition to the engineering design, construction phase services were provided.

Leticia Fernandez-Beraud has been a Registered Landscape Architect in the State of Florida since 2003, with over 30 years of experience designing and developing Landscape projects in both public and private sectors. Ms. Fernandez, as the founding principal of the firm, incorporated in the year 2004 in the state of Florida, has guided the company's creative and technical expertise toward a primary focus upon the design of public parks, municipalities, streetscapes, roadways and transportation projects.

Ms. Fernandez serves as Principal-in-Charge, Project Manager, and Landscape Architect of Record (LAOR) for the duration of projects assigned to the firm; she provides professional leadership, management, and coordination in all aspects of contract requirements, project design and production of associated project tasks.

Leticia **Fernandez-Beraud**

RELEVANT EXPERIENCE

Dolphin Linear Park, Miami Gardens, FL, Owner: Miami-Dade County - Parks, Recreation and Open Spaces (MDC-PROS). Role: Principal, Prime Project Manager and Lead Designer, LAOR. Project involves the development of 6 Fitness (exercise) Equipment Stations, a Cooling Station and security lighting within an existing, linear, 1.5-mile county park. Project scope included documentation and disposition of 450+ existing trees and palms; Conceptual, Schematic, Design Development, Cost Estimating and Construction Documentation. Fernandez-Beraud serves as Prime Consultant, administrating project design, and the coordination and production of Civil, Structural, Electrical and Plumbing Engineering consultants. 2022 - present.

Relocation of Atlantic Boulevard at Higgs Beach Park, City of Key West, Monroe County, Florida, Owner: City of Key West, Role: Principal and Lead Designer, LAOR. Design development and construction documents for the project's landscape components: a unique historic waterfront park, inclusive of landscape and hardscape designs including complete street enhancements, recreational facilities, dog parks, bike path, beach areas and shoreline, archaeological elements, and site renovations. 2015 - 2019.

Miami Dade College: Kendall Campus and North Campus Gateways, Streetscapes and Landscape Enhancement, Campuses located in Miami-Dade County, FL, Owner: Miami Dade College, Role: Principal and Lead Designer. Design of enhancements for the main entry gateways to the Miami Dade College Kendall and North Campuses. Conceptual, Schematic, Design Development and Construction Documentation. 2014 - 2015.

Sunkist Pineland Park, Miami-Dade County, FL, Owner: Miami-Dade County - Parks, Recreation and Open Spaces. Role: Principal, Project Manager and Lead Designer, LAOR. Project involved the planning of a 1-acre park, founded in the PROS Master Plan; envisioned as a "walk-to" neighborhood park where children explore and engage in creative play informed by the site's Pine Rockland habitat. Design emphasis was given to ecosystem restoration. Project scope included research and planning, Conceptual and Schematic Design, Plant Palette, Preliminary Cost Estimating, and production of a Park Program Plan booklet illustrating due diligence. 2008.

Margaret Pace Park, Miami, FL, Owner: City of Miami, Role: Landscape Designer. In charge of conceptual master plan, schematic design and the preparation of construction documentation for all phases of a 6-acre urban park on the Biscayne Bay waterfront. The project included the installation of a complete fitness set, with security lighting throughout the complete site. 2003.

Coral Nook Circle: Traffic Calming, Intersection of SW 31st Avenue & SW 5th Street, Miami, Florida, Owner: City of Miami, Role: Principal and Lead Designer, LAOR; Tree Disposition and Mitigation planning; Landscape and Hardscape design of a small round-about community park, including the local streetscape. City of Miami: Capital Improvements Program. 2020 - present.

REGISTRATIONS:
Florida Registered Landscape Architect LA 6666730 **(2003)**

EDUCATION:
Master of Landscape Architecture, CAP, Ball State University (BSU), Muncie, Indiana, 1992.

Master of Architecture, CAP, BSU, Muncie, IN, 1991.

Architecture, Professional Degree/Licensure, School of Science and Technology, Catholic University, Asuncion, Paraguay, 1988.

CERTIFICATIONS:
LEED Green Associate, U.S. Green Building Council, 2014 - present.

CPTED, Crime Prevention Through Environmental Design (Practitioner Certification), 2011 - present.

AFFILIATIONS:
ISA, International Society of Arboriculture 2003 - present.

USGBC, 2010 - present.

YEARS OF EXPERIENCE
TOTAL: 32
WITH FBInc: 20

Eduardo (Eddie) Suarez, PSM, is an accomplished Chief Surveyor with an illustrious career spanning 39 years in the surveying industry. As the Principal of Longitude Surveyors, he has demonstrated unparalleled expertise in leading and managing surveying projects of varying scales, ensuring precision and excellence in every endeavor. Recognized for his exceptional leadership, technical proficiency, and commitment to delivering top-tier surveying services, he has successfully navigated complex projects in diverse sectors, including commercial, residential, transportation, and infrastructure developments. Having established a reputation for quality, integrity, and client satisfaction, Eddie has built and nurtured strong professional relationships. His collaborative approach ensures seamless coordination between multidisciplinary teams, driving projects toward successful outcomes.

Western Fire Station No. 109, located at 11601 W. Hillsboro Blvd., City of Parkland, Parkland, FL - Longitude Surveyors conducted and prepared boundary, topographic, and as-built surveys, construction stakeouts, and sketches to accompany legal descriptions.

Fire Station No. 1, 1045 Jefferson Ave, City of Miami Beach, Miami Beach, FL
Longitude Surveyors (LS) conducted a boundary analysis, identifying rights-of-way by computing field evidence, plats, deeds, and other relevant documentation. All lot and ownership lines within the survey limits were graphically depicted. LS also performed Quality Level "B" SUE Designation services per ASCE standards, using Electromagnetic Locators and Ground Penetrating Radar (GPR) to locate and document underground utility lines.

Fire Station No. 6, 701 NW 36 Street, City of Miami, Miami, FL
Longitude Surveyors provided surveying and mapping services for a portion of the City of Miami Fire Station No. 6 located at 701 NW 36 Street Miami, FL 33127. Longitude collected the southern façade of the fire station building, sidewalk, curb and gutter, utilities, palm trees, etc. Longitude established the right-of-way and delineated on the survey.

Fire Station No. 9. 69 NE 62 Street, City of Miami, Miami, FL
Longitude Surveyors provided surveying and mapping services for a portion of the City of Miami Fire Station No. 9, located at 69 NE 62 Street. The team collected data on the southern façade of the fire station building, including the sidewalk, curb and gutter, utilities, palm trees, and other relevant features. Longitude also established the right-of-way and delineated it on the survey.

Fire Station No. 11, 5920 West Flagler Street, City of Miami, Miami, FL
Longitude Surveyors provided surveying and mapping services for a portion of the City of Miami Fire Station No. 6, located at 701 NW 36th Street, Miami, FL 33127. The team collected data on the southern façade of the fire station building, including the sidewalk, curb and gutter, utilities, palm trees, and other relevant features. Longitude also established the right-of-way and delineated it on the survey.

Fire Station No. 1, 1045 Jefferson Ave, City of Miami Beach, Miami Beach, FL - Longitude Surveyors (LS) performed a boundary analysis and showed rights-of-way computing field evidence, plats, deeds, and other documentation relative to the project.

NE 23 Avenue Drainage Improvements, City of Ft. Lauderdale, Ft. Lauderdale, FL Longitude Surveyors (LS) conducted a comprehensive topographic survey for the project area. The survey included right-of-way and property lines, property numbers, side lot lines, and adjacent properties, all shown graphically. LS mapped all above-ground improvements, such as utilities, sidewalks, roads, poles, and drainage structures construction.

Key Staff

Richard Chudzik

President & Owner –
Estimator & Project Manager

Background

Rich brings 23 years of leadership experience across organizations and teams of varying functions, sizes, and industries to Trophy Point. Rich has served as the Estimator-of-Record and Project Manager on several new-build and renovation projects.

Rich has worked as a Quantity Estimator, Project Manager, and Estimator-In-Charge. These projects have ranged from $75,000 to $2Bn in construction value. Prior to starting Trophy Point, Rich worked as an Estimator and Business Development Director for one of the Nation's most reputable Cost Consulting firms, Baer & Associates.

Prior to joining the Construction Industry, Rich worked in the Aerospace & Defense Industry where he served in several different capacities and at varying levels at Moog and General Dynamics Land Systems in General Management, Supply Chain, Business Development, and Operations. As a Veteran Infantry Officer who served in Iraq and Afghanistan, Rich has a passion for supporting our Veterans and their Spouses – something that served as an impetus behind the founding of Trophy Point. He is the recipient of a Bronze Star, Purple Heart and a graduate of several military schools, including Ranger, Airborne, Air Assault, Marine Corps Mountain Warfare, and SERE Level B schools.

Education

- *United States Military Academy, West Point, NY*
  B.S. – Political Science & Computer Science
- *Duke University, Durham, NC*
  M.B.A.
- *Cornell University, Ithaca, NY*
  M.Eng. – Systems Engineering

Project Experience

- Cairo Fire District – New Firehouse
- Metuchen Fire Department and Emergency Services Center
- Port Ewen Fire District – New Fire Station
- Schodack Valley Fire Department
- Stuyvesant Fire District #1 – Proposed Apparatus Building
- Tivoli Fire Company – Fire House
- West Falls Fire Hall – Renovation and Addition

RAJ KRISHNASAMY, P.E.

President, Principal Engineer

37 Years of Professional Experience

Education

MS in Geotechnical Engineering, University of Memphis 1995

BS in Civil Engineering, Christian Brothers University 1987

Diploma in Electronic Engineering, Malaysian Air Force Institute 1984

Professional Organization and Registration

Professional Engineer: Florida, 53567

Water Well Contractor, Florida, 11346

Certified OSHA Supervisor

Certified Environmental Consultant

Professional Experience

Mr. Raj Krishnasamy, P.E., President and Principal Engineer of TSFGeo, is a Florida Registered Professional Engineer with over 37 years of experience. Mr. Krishnasamy oversees the geotechnical engineering, construction materials testing, and inspection services operations. His experience consists of successfully completing over 5,000 public and private projects. He serves as Project Manager for continuing contracts with over 20 Florida public agencies. He has a history of repeatedly retaining those contracts through successful, cost-effective, and prompt execution of each task order. Mr. Krishnasamy's daily involvement with the in-house and field operations of the construction and geotechnical services departments provides him with "hands-on" experience and knowledge of current construction codes and construction practices throughout the State of Florida. Mr. Krishnasamy and his highly experienced team focus on providing the client with a consistently accurate, cost-effective quality product that is delivered on time and within budget.

Abbreviated Relevant Project Experience

- Fort Lauderdale Fire Station 54
- Weston Fire Station 21
- Margate Fire Station 2-58
- Southwest Ranches Fire Station
- Minto Westlake Fire Station 22
- Coral Springs Fire Station 80
- Westgate Fire Station 24
- Delray Beach Fire Station 3
- Delray Beach Fire Rescue Station 45
- Linton Fire Station
- Boynton Beach Fire Station 40
- Boynton Beach Fire and Rescue New Station 49
- Riviera Beach Fire Station 1
- West Palm Beach Fire Station 4
- West Palm Beach Fire Rescue Station 8
- West Palm Beach Fire Rescue Station 17
- West Palm Beach Fire Station 22
- West Palm Beach Fire Station 23
- West Palm Beach Fire Station 34
- Palm Beach Gardens Fire Station 6
- Lake Worth Fire Station 92
- Lake Worth Fire Station 48
- Loxahatchee Groves Fire Station 21
- Loxahatchee Groves Fire Station 22
- Historic Miramar Public Safety Complex
- Immokalee Seminole Tribe of Florida Medical and Mental Health Clinic and Public Safety Building
- Lake Worth Public Safety Training Center
- Palm Springs Public Safety Addition
- Palm Beach County Sheriff's Office
- West Palm Beach Main Detention Center
- Belle Glade West Detention Center

TAB 4

Introduction

We recognize that the success of this project will be dependent on the management and organizational approach utilized by our team. The successful completion of the proposed design criteria packages require a team that is characterized by strong project management, communication, technical excellence, and experience. As design professionals, H2M and our team strive to listen, assist, guide, and recommend solutions for our clients in all aspects of architecture and engineering. We have a long history of working with municipalities to develop the best solutions for their facility needs while maintaining their budgets. H2M's goal is to design projects using input directly from those that manage the facility and the end users, partnering with those individuals during the design process, so the final product is one that is visually appealing, organized, well-constructed, efficient, and economical. Through communication and teamwork, we propose to develop two state-of-the-art facilities for the City of Fort Lauderdale.

The team assigned to this project will be under the direction of Joseph M. Mottola, AIA, the Principal-in-Charge for this assignment. All logistical assignments will be coordinated through his authority. We are committed to integrating the right people, an explorative process, optimal communication, and detailed procedures to ensure the best possible design for these facilities. H2M's internal architectural and engineering staff and consultant partners are carefully selected based on their ability to place the City's needs foremost and to work together with mutual respect and total project ownership.

Several of H2M's key team members serve as educators and thought leaders in the industry and speak nationally on many critical topics related to your project. In particular, H2M's Public Safety Market Director, Patrick O. Stone, R.A., LEED AP, presents and educates on hardening of essential and mission critical facilities. We understand that essential facilities have been challenged with a consistent increase in high-risk, high-threat instances. Fire stations have been challenged more than ever before to support inclement weather events, incident management activities, and on-scene operations. The facilities coordinating emergency operations are critical, long-term investments ensuring our communities' well-being and the first responders who protect them. From an operations standpoint, these stations need to be flexible enough to meet the demands of future standards yet durable enough to withstand some of the most extreme conditions. They must also convey the core values of the personnel and the communities they serve.

In addition to our architectural staff and consultants, H2M has organized a specialized team of architects; engineers (geotechnical, civil, structural, and MEP); surveyors; cost estimators; and more. The team's organizational structure has been established based upon the dedicated structure that we have built within our firm and along the various disciplines that we anticipate will be required for this project. Each team member has a depth of knowledge and experience with this specific type of facility. The new stations are complicated and unique in their own way and will require technical knowledge from those executing the work. Our team members are uniquely qualified to provide that knowledge.

Our proposed Project Manager, David J. Pacheco, AIA, will hold project meetings with the various in-house and subconsultant disciplines to discuss project status and progress, address questions and issues related to the project, identify questions that need to be presented to the City, will allocate requisite resources, and maintain the project schedule. An overall project schedule will be maintained throughout all phases of the project and Mr. Pacheco will collaborate with the City, regulatory agencies, and ultimately the design-build contractors, as needed. Our experience working with governmental agencies within the public safety market has demonstrated our ability to complete assignments on time and on budget. This experience will be applied to the City's project to ensure success.

Operations-Based Programming

This facility will need to meet the national, regional, and local standards governing emergency operations along with the specific needs and procedures of the staff and community. We understand that the program and detailed functions of every station are different. Local jurisdictions establish these facilities to meet their unique requirements. They should be tailored to meet the personnel's specific jurisdictional needs. What works for one city may not necessarily meet the needs of another. For that reason, the design team must work directly with the staff assigned to these facilities to gain a better understanding of their daily responsibilities. The multi-functional nature of the mission requires a deep understanding of relationships associated with a wide range of program elements. Blending these elements while maintaining a focus on firefighter health and wellbeing, functionality, and security, requires a thoughtful design solution. We will organize and detail these elements to conform with emergency operation design standards and building codes.

H2M will start with the limited program items provided by the City in the RFQ, and will also conduct in-depth and detailed workshops with the team to create this operations-based program for each of the proposed facilities. Each program will ultimately be a space needs assessment integrated with detailed operational evaluations. Our team will create this dynamic tool that can account for flexibility and changing requirements over time. The program will, at a minimum:

- Determine the scope and operations of each station by employing tools and techniques developed by H2M specifically for public safety and mission critical facilities. The program will anticipate additional needs, changing operations over time, and the flexibility to accommodate these needs.
- Describe critical functions, specific requirements, and activities within the facilities and at each site.

- Identify crucial operations, priorities, security/public protocols, important response issues, and operational efficiencies.
- Obtain from the City and end-users the desired program spaces, number of personnel, and determine current and future needs.
- Examine current operations and potential for flexibility and change over the foreseeable future. As security and operations transform over time, both interior and exterior flexibility will offer opportunities to manage change.
- Identify special requirements required for a fully functional fire station.
- Pay particular attention to public interactions, procedures, public needs, and security issues.
- Examine the requirements for gender equity and the unique environment for the managers and staff as it relates to specific program spaces.
- Assess current and future technologies and how these can affect the various functions.
- Develop a strategy for facility hardening and mitigation as it relates to both natural and man-made disasters (critical infrastructure, redundant power, and communications, etc.).
- Discuss HVAC options to address individual comfort controls, while also providing systems that limit the transmission of airborne viruses.
- Address energy use and sustainability issues as they pertain to operations, scope, and long-term viability. In particular, determine the extent of and desire for sustainability goals, such as LEED or WELL.

Based on the program, a space analysis spreadsheet will be created for each station to specify early estimates for probable room and building size. We will develop a conceptual budget (per square footage cost) for construction that utilizes the program and space analysis and includes site work. The program and space analysis are critical to make meaningful decisions and recommendations about available options for the future. At this point, the City will possess a size, scope, and conceptual construction budget to determine if the projects are on target with their budget, vision, and goals.

Task 1 – Project Definition Documentation

H2M's services will include gathering all necessary information from the proposed sites. We believe in developing a highly experienced team with local experience and knowledge. Below you will find the various key members of this team and the tasks they will be performing:

- CES Consultants, Inc. (MBE) - Site/Civil Engineering and Permitting
- Fernandez Beraud, Inc. (WBE) - Landscape Architecture
- Longitude Surveyors, LLC (MBE) - Land Surveying
- Trophy Point, LLC - Cost Estimating
- TSFGeo (MBE) - Geotechnical Engineering

All existing record plans and information on the proposed sites will be procured and reviewed by the H2M team. These documents may include old surveys, regulatory agreements, and other historical documentation. Any specific anomalies, discrepancies, or areas of concern shall be brought to the attention of the City immediately. We will evaluate the proposed sites in terms of layout, current and future flexibility, parking, entry, emergency response, land use, and safety/security. This is a professional recommendation based on our direct observations and field-tested criteria. We will:

- Review and comment upon physical land characteristics, including parcel sizes, road frontage, access, topography, cut/fill, available utilities, stormwater drainage, detrimental natural features, demolition requirements, and training possibilities.
- Consider community issues, including on-site traffic movement, parking, and pedestrian movement.
- Assess security, buildability, sustainability requirements, safety, flexibility, expansion capability, and potential negative public reaction.

The topographic surveys and geotechnical reports (using soil borings) will be critical for design and cost estimating. Preliminary site planning and layout will identify geotechnical test boring locations. Geotechnical soil classification, bearing capacity, and other pertinent details for "essential facilities" will determine the seismic requirements and structural design. We will gather all data and locate all underground utilities.

► Permitting, Preliminary Code & Zoning Analysis

The International Building Code (IBC) has defined facilities of this nature as "essential facilities." These buildings are designed, built, and observed during construction to a high standard. We are adept and very familiar with the cost, schedule, and design implications of these requirements and will lead the City through the process of adapting to these codes. We will:

- Review the State Building Code for new construction to determine specific requirements for the projects and incorporate requirements into the design concepts.
- Set up an initial meeting with the local Authorities Having Jurisdiction (AHJ) to review schematic plans for zoning and potential variance requests.
- Perform zoning review to obtain course of action and establish the permitting process based on the schematic designs.
- Review all applicable National Fire Protection Agency (NFPA) and Federal Emergency Management Agency (FEMA) requirements to determine what is applicable to these projects and incorporate into the schematic designs of each facility.

- Should preliminary hearings be required with local AHJs, H2M will prepare for and present on behalf of the City.

Upon completion of Task 1, we will:

- Gather all existing information related to the project sites.
- Define permit requirements for each project.
- Meet with City staff and end-users to review location and design methods for each project.
- Compile documentation to be used as the basis for preparation of the design criteria packages.

Task 2 – Design Criteria Package

Following the work completed as part of Task 1 and approval from the City, our team will proceed with schematic design, and bring the documentation to an approximate 30% level of detail. As part of this phase, we will:

- Prepare up to three conceptual floor plan alternative, conceptual building elevations, and conceptual site plans that adhere to the project scope developed during programming. We will conduct workshops with the City to review the documents and procure feedback to further the design. Floor plans will indicate proposed room names, square footages, and overall building dimensions.
- Provide site plans indicating buildings and site structures, entry and egress, landscaping, curb cuts, parking, and pedestrian flow, and location of other site features requested.
- Develop a conceptual site utilities plan indicating intended locations of site utilities and their relationship to other site structures and obstructions.
- Provide building elevations indicating proposed building materials, floor to floor heights, and roof height/overall building height.
- Provide up to three conceptual rendering options of the exterior indicating intended material usage and physical samples.
- After the conceptual design is approved, conduct a workshop to present revised/updated floor plans, conceptual site plans, and exterior building elevations, incorporating comments gathered during the previous workshops.

► Creation of Design Criteria Package

- Preparation of drawings and specifications for the design criteria package will include advancing floor plans, elevations, and sections to an approximate 30% level of detail.
- Participate in planning workshops with the City to review and refine the design criteria package, as needed.
- Create preliminary furniture plans utilizing the City's standard office furniture templates to verify spaces will function properly for the needs of the end users. Furniture plans will further help determine a cost for the furniture, fixtures, and equipment (FFE) package. These costs will be included in the overall project budget.
- Work closely with Trophy Point, our professional cost estimator, to generate the information needed for an accurate opinion of probable construction cost. This will include:
  - Provide an itemized construction cost opinion for the conceptual design(s) and review cost opinion(s) with the City. Work with City to refine construction cost opinion(s) and project scope to meet project budget constraints. The construction cost opinion shall be based on current industry pricing for public works type projects.
  - Provide an opinion of probable construction costs based on the CSI MasterFormat.
  - Factors based on marketplace conditions, probable start date, labor rates, Florida bidding requirements, geographic location, municipal ownership, new construction, commercial contractors, bonding, insurance, and other detailed project information all bring accuracy to the budget.
  - Sustainability and energy efficiency costs will be accounted for in the estimate (especially if LEED or WELL certification is required)
  - Assist the City in developing a conceptual soft cost budget anticipated for the project. Soft costs are costs other than construction hard costs. These can include professional FFE, specialty equipment, security, communications, etc.
  - Consider value engineering practices to monitor and control costs.
  - A final summary of all costs will be prepared so a total project cost opinion(s) can be developed and used to determine the total project cost(s). The final project cost opinion will include total construction costs (hard costs), allowances, contingencies, and all soft costs, including professional fees, legal fees, permitting costs, reproduction costs, and the costs of any reports or investigations (asbestos testing and analysis reports, etc.).
  - Cost opinions will be delivered at key milestones (updates can be provided as requested by the City).

► Bidding & Permitting

As part of the preparation of design criteria bidding documents, we will:

- Prepare bid documents, including the legal description of the properties/sites, survey information, floor plans (depicting interior space requirements), site plan (depicting exterior site development requirements, provisions for utilities, stormwater retention requirements, and parking requirements), outline front end documents, and outline technical specifications (CSI format) to

depict material quality standards, cost and/or budgeting estimates, design and construction schedule, and any special provisions.

- Conduct a review of design requirements as set forth by Florida Statute §287.055 and refine the program and documentation so it is clear, concise and performance oriented. The drawings and specifications will furnish sufficient information to permit design-build teams to prepare a bid or response to the City.
- Coordination of bidding documents and other related deliverables, to ensure consistency of design-build bid documents.
- Review the design-build contract to make sure the general conditions, specifications, and agencies requirements all work in concert.
- Reply to bidders' questions and generate addenda, as needed.
- Conduct a project orientation meeting to familiarize City field staff with the projects and explain rationale for decisions made during design criteria preparation.
- Review proposed substitutions proposed by bidders and make recommendations.
- Conduct a scope review with the apparent low bidder to verify its interpretation and understanding of the requirements and extent of the work.
- Attend pre-bid meeting(s) at the sites and take meeting minutes to distribute.
- Identify and address any permit issues with applicable permitting agencies.
- Assist with the evaluation of the design-build proposals based on the price, technical, and design aspects of the construction projects, weighted for the project and assistance with the contract development (if requested by the City).
- Provide recommendations for design-build contractor selection, understanding that the City will have the final responsibility to deem bidders "qualified" (if requested by the City).

Technical Considerations

► Mental Health & Wellness

The health and wellness of the building occupants has become an increasingly more important topic in the design of public safety facilities. Studies continue to identify cardiovascular disease and mental health as challenges within the service. The inclusion of natural daylight into the work environment is of the utmost importance. For public safety personnel, sleep deprivation is often linked to circadian rhythm disorder, which can cause stress, weight gain, and heart disease. Providing these individuals with ample natural daylight allows for their body to more naturally biologically link with the time of day.

Both natural and artificial lighting plays a large role in sustainability and public safety personnel health and wellness. As these individuals tend to work long shifts throughout their entire careers, it is easy for their body to lose the natural sleep-wake cycle. Ensuring that occupied portions of the building have plentiful access to natural daylight is a significant measure the project team can take to help regulate their circadian rhythm. Natural light is often provided to the interior of a building through windows, clerestory assemblies, skylights, and/or courtyards. Studies have also demonstrated that access to natural light improves morale and productivity. As such, the benefits of natural light cannot be overstated when it comes to combatting depression and mental health challenges. We must continue to stress the benefits of good design as public safety entities become increasingly more aware and vocal about mental health and PTSD.

► N+1 Redundancy

The nature of emergency services requires that a public safety facility be operationally prepared to respond to the surrounding community immediately following, and sometimes during, natural disasters. As such, public safety personnel must be able to rely on the essential systems that serve their facility. Stand-by emergency backup generators should ideally be installed for the project with a reliable fuel capacity to meet operational demands for a minimal operation time of 72 hours. Since generators require a start-up time period, an un-interruptable power supply (UPS) battery system should be provided for mission-critical systems such as computers, servers, communications equipment, access control systems, etc. The UPS will ensure continuity of operation and prevent loss of service during the brief period in which the facility is without power while the generator comes online. H2M is currently executing a project for the Town of Davie, FL, Police Department to upgrade their generators and bring them up to todays standards (in particular, NFPA 1221).

It is understood that the City of Fort Lauderdale has suffered debilitating damage as a result of natural disasters in the region. As a mission-critical facility, these stations should be designed to withstand the genuine risk of facing similar events. Ensuring that the fire stations remain functional, personnel is safe, and equipment prepared to serve the community is of the utmost importance. Our team suggests the City consider adopting standards such as FEMA 543 for this project. In addition to the above-referenced risk, this facility may require "N+1" systems redundancy to ensure uninterrupted continuity of system infrastructure during power outages and storms. The City may wish to consider dual service feeds to improve systems reliability. Our team may also suggest enclosing critical outdoor equipment such as chillers and generators. In this instance, equipment may be placed within ventilated storm hardened cages that will protect them from being damaged, and taken off-line, by windborne debris.

► Site Security

Best design practices for public safety facilities suggest a site and building that are married together functionally and cost-effectively to promote crime prevention through environmental design (CPTED). The relationship between architecture, site design, and security must be natural and symbiotic, not forced. Thoughtful architectural site planning will need to occur early in the design process. This approach will ensure that the technical requirements of the site are satisfied while simultaneously allowing staff and more robust emergency service vehicles and the public to circulate throughout the site safely and securely. The development of a fire station site often differentiates itself from other types of projects to achieve this objective.

► Facility Hardening

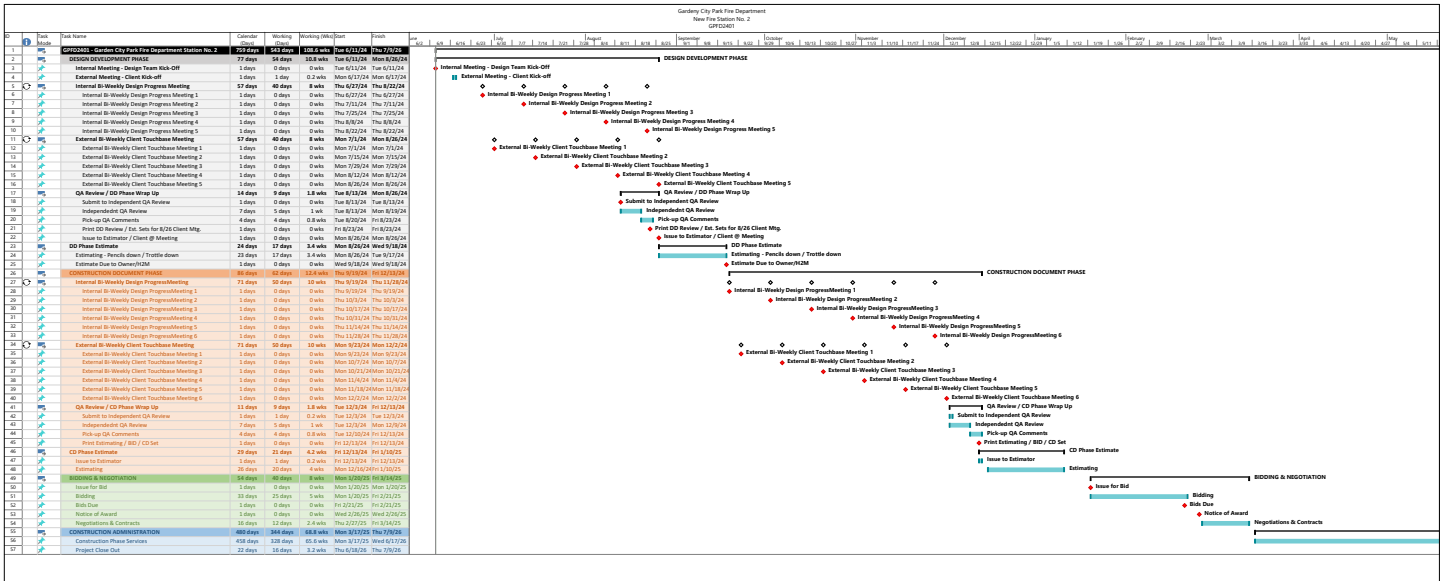
Conventional building codes such as IBC and NFPA are requirements that set the minimum standard of care regarding the protection of the life, safety, and wellbeing of the occupants of all types of buildings. When jurisdictions adopt these standards via legislative measures, they become law and establish the design protocols for what can be considered a minimum acceptable risk. These standards of care address a wide variety of building and construction types. And, while the umbrella of these codes certainly addresses the general use and occupancies, they do not address the many unique risks of your specific region or location. Standards such as the NFPA 1221 (when PSAP or EOC is included) and the UFC Anti-Terrorism and Force Protection Design Guidelines are authored by panels of experts with significant experience in the design, construction, and operations of similar facilities to that of the proposed fire stations. Given that the design and development of such buildings are more infrequent than others, it is uncommon for legislative bodies to adopt such standards when establishing building code requirements. These standards exist for specific reasons as there is a long history in this country of such facilities that have faced attack. These guidelines establish a standard of care protecting the occupants of an emergency services facility from low-frequency high-risk events.

Beyond the structural requirements established by IBC, conventional practices in essential facility design now strongly encourage careful consideration of ballistic protection from outside threats. Beyond the minimally mandated measures, a careful and thoughtful design must take place to ensure resiliency while controlling project costs. Additional and more stringent standards that may apply to mission critical facilities include but are not necessarily limited to FEMA 543, NEC 708, UFC 04-012-23. Compliance with these codes and standards often drive project costs beyond what one might expect with a traditional building typology.

In short, the term “hardening” can mean many different things depending upon which standards are applicable. Blast resistant, floodproofing, progressive collapse prevention and numerous other criteria are all further defined within each of these standards. Where multiple standards are applicable, the most stringent standards apply. Our team will assist in determining what requirements this project must subscribe to and which ones are elective best practices.

As part of our standard process, we meet with zoning, planning, permitting, and other approval agencies early and often throughout the design phases. This interaction allows the design team and agencies to identify and address any issues that may arise before the final submission. Like our consensus-building methodology, we utilize our technology and expertise to generate graphic tools for communication that ensure that the ideas we convey are clear and concise. Often our attention to detail fosters open communication between the design team and jurisdiction, setting the tone for the project discussions.

► Approach to Scope of Work



Schedule & Workload

► Methodology

At H2M, we have adopted and utilize a strict critical path scheduling methodology for our projects and internal and external resource scheduling. At the start of each project, a Project Plan is created by the Project Manager, which includes the proposed Master Project Schedule. That schedule is distributed amongst all parties and stakeholders for review. Upon approval by all parties, the schedule is adopted and strictly adhered to. An example of one of our critical path method (CPM) schedules has been provided above.

► Workload Management

In addition to utilizing a CPM schedule to manage this project, H2M will utilize its internal scheduling process, which utilizes "E-Resources" a tool provided by our accounting software, BST. Through this process, our Project Manager will schedule and utilize the appropriate resources for your project. When needed, this process allows the Project Manager to secure additional resources from our more than 550 professionals across the Eastern seaboard. The full depth of our resources and professionals are available to your project and will be scheduled and assigned as needed to meet or exceed the agreed upon schedule.

Naturally, the schedule will be contingent upon the ability of all stakeholders to respond and maintain the schedule as well. H2M is committed to streamlining the process as much as possible and accommodating the City and all stakeholders. Whether meetings must be in person, virtual, or a mix, we will accommodate. Depending on the experience level of the individuals involved in the process, H2M can provide guidance and educate team members. For example, in many cases stakeholders have rarely (or never) gone through the process of designing a new fire station. We understand this and will provide appropriate guidance and education to make the best decisions possible, and within the appropriate timeframe.

As H2M is a large firm, it would be extensive to provide a complete list/summary of our current projects, however a partial list of emergency services projects was provided in our Executive Summary. When H2M responds to requests for proposals/qualifications we ensure that our proposed key personnel will be available to work on the project. This is done by assessing our workload and verifying availability on our E-resource scheduling software. Note, should the City require more information regarding our current workload, it can be provided upon request.

► Technological Capabilities

H2M utilizes MS Project and Primavera for our CPM scheduling. In addition, we are adept with various other software offered within the construction industry such as Procore and others. At the start of the project, the Project Manager will determine which software is most appropriate with the team members and stakeholders. Training can be provided for those that may not be adept with the programs. In addition, H2M utilizes the full Microsoft Office Suite, including Teams, which provides an excellent opportunity to maintain communication and collaboration amongst the entire team. We also design and execute our projects utilizing Building Information Modeling (Autodesk Revit specifically). We will utilize work-sharing within the Autodesk Construction Cloud to make sure that all team members have appropriate access to BIM models and files.

Lastly, H2M utilizes BlueBeam Revu for enhanced review and collaboration. We create a Bluebeam Studio on our projects which provides an opportunity for all parties to work within the same document, comment, QA/QC, and address all questions/concerns. We find this software to be one of the best collaboration tools in our repertoire.

TAB 5

References

H2M has a reputation in the public safety industry as a leading fire station design firm. We encourage you to contact H2M's clients to verify our successful track record.

► Massapequa Fire District, NY

Contact: Thomas Fitzsimmons, Superintendent, Massapequa Fire District; 1 Brooklyn Avenue, Massapequa, NY 11758; (516) 798-9849; fitzsimmons-t@massfd.org

Description of Work & Status: H2M has been proud to work with the Massapequa Fire District for more than 30 years. We have worked on numerous projects with the District, ranging from new stations to small renovations. The firm is currently working with the District.

► City of Norwalk, CT

Contact: Denis McCarthy, Past Fire Chief, City of Norwalk (Current Chief in Fairfield, CT); 121 Connecticut Avenue, Norwalk, CT 06851; (203) 524-4173; dmccarthy@fairfieldct.org

Description of Work & Status: H2M designed the City of Norwalk's Fire Headquarters, which was constructed in 2013.

► Princeton First Aid & Rescue Squad, NJ

Contact: Mark Freda, President, Princeton First Aid & Rescue Squad and Mayor of Princeton; 2 Mount Lucas Road, Princeton, NJ 08540; (609) 924-3335; info@pfars.org

Description of Work & Status: H2M designed a new rescue station for the Princeton First Aid & Rescue Squad of Princeton, NJ. Construction concluded in 2020.

► Town of Avon, CT

Contact: Bruce Appell, Fire Marshal/Emergency Manager, Town of Avon; 60 West Main Street, Avon, CT 06001; (860) 221-5998; bappell@avonfd.org

Description of Work & Status: H2M is currently working with the Town of Avon on the design of a fire station.

► Niskayuna Fire District No. 1, NY

Contact: James Vena, Fire Chief, Niskayuna Fire District No. 1; 1079 Balltown Road, Niskayuna, NY 12309; (518) 374-8386

Description of Work & Status: H2M designed a renovation and addition to the District's fire station, which was constructed in 2011. As our proposed Project Manager David J. Pacheco, AIA, is Commissioner of the District, we are not currently providing services.

TAB 6

Minority/Women (M/WBE) Participation

H2M is not a certified minority business enterprise.

We understands the importance of meaningful Minority-Owned Business Enterprise (MBE) and Women-Owned Business Enterprise (WBE) participation on our projects and make every effort to integrate them into our project teams with assigned key roles. H2M maintains its own database of over 100 subconsultants and subcontractors with M/WBE and other certifications who have previously worked with, or are qualified to work with, H2M and our clients. This directory is regularly updated through use of the MyFloridaMarketPlace (MFMP) Directory and other M/WBE directories, along with participation in networking events designed to connect certified and prime firms. Additionally, any certified firms who may be interested in doing business with H2M are invited to connect with us via our website, where we can begin the process of vetting a firm's qualifications and connecting them with appropriate members of our project management team.

To comply with M/WBE procurement goals under Florida Statutes 287.09451, the H2M team includes multiple M/WBE-certified firms, including:

- CES Consultants, Inc. (MBE) - Site/Civil Engineering and Permitting
- Fernandez Beraud, Inc. (WBE) - Landscape Architecture
- Longitude Surveyors, LLC (MBE) - Land Surveying
- TSFGeo (MBE) - Geotechnical Engineering

TAB 7

Subconsultants

H2M's specialty subconsultants for this project include:

- CES Consultants, Inc. (MBE) - Site/Civil Engineering and Permitting
- Fernandez Beraud, Inc. (WBE) - Landscape Architecture
- Longitude Surveyors, LLC (MBE) - Land Surveying
- Trophy Point, LLC - Cost Estimating
- TSFGeo (MBE) - Geotechnical Engineering

Highlights of our subconsultants' qualifications are provided below.

► CES Consultants, Inc. (MBE)

880 SW 145th Ave, Suite106, Pembroke Pines, FL 33027
Contact: Vanesa Mahoney, P.E., (561) 227-6862, vmahoney@cesconsult.com

CES Consultants is a minority-owned, full-service engineering firm founded in 2001. The firm is headquartered in Broward County (Pembroke Pines), with additional offices in Miami, West Palm Beach, Tampa, Jacksonville, and Orlando. They deliver incomparable services using cutting-edge innovation while building lasting relationships with municipal, governmental, and private sector clients throughout Florida. Their diverse client base includes state agencies, counties, cities, water management districts, utilities, the Seminole Tribe, school districts, and private clients. CES is currently serving as a civil subconsultant to H2M for the Town of Davie Diesel Generator Replacement.

► Fernandez Beraud, Inc. (WBE)

717 Ponce de Leon Boulevard, Suite 223, Coral Gables, FL 33134
Contact: Leticia Fernandez-Beraud, RLA, (305) 310-1499, leticiaf@fernandez-beraud.com

Fernandez-Beraud, Inc. is a woman-owned landscape architecture firm established in Miami in 2004. They aim to offer personalized attention and commitment to their clients with the utmost level of professionalism. The firm's experience spans a broad range of public and private project types, of large and small scale, primarily located in South Florida. Fernandez-Beraud specializes in Florida landscape architecture and planning. The firm offers a wide range of services, including definition of the program, site analysis, conceptual design alternatives, preliminary and final master plans, design guidelines, design development, presentation renderings, permit drawings, construction documentation, construction and post-construction observation, opinions of probable cost, and bidding.

► Longitude Surveyors, LLC (MBE)

7700 North Kendall Drive, Suite 705, Miami, FL 33156
Contact: Eduardo Suarez, PSM, (305) 463-0912, esuarez@longitudefl.com

Longitude Surveyors, LLC, has been serving South Florida since 2004. The firm's services include a wide range of land surveys, construction surveys and support, 3-D laser scanning and building information modeling, subsurface utility engineering. Longitude is currently serving as a land surveying subconsultant to H2M for the Town of Davie Diesel Generator Replacement.

► Trophy Point, LLC

4588 South Park Ave, Blasdell, NY 14219
Contact: Richard Chudzik, (716) 823-0006, rchudzik@trophypoint.com

Trophy Point, LLC provides construction cost estimating, owner's representative, construction management, and construction consulting services. For decades, Trophy Point has provided construction cost estimating services, where required, in the pre-construction, construction, and post-construction phases of a project. In 2018, Trophy Point merged with Baer & Associates, a nationally-recognized cost consulting firm known for its estimating accuracy and thoroughness. The combination of Trophy Point's mission first approach with Baer & Associates' experienced staff and history enabled the organization to integrate best practices of both teams in a manner that resulted in tremendous synergistic benefits to the industry. Trophy Point has worked with H2M on cost estimates for multiple fire station projects.

► TSFGeo (MBE)

2765 Vista Parkway, Ste 10, West Palm Beach, FL 33411
Contact: Bonni Funt, (561) 687-8536, bfunt@tsfgeo.com

Tierra South Florida, Inc d/b/a TSFGeo, is a full-service consulting geotechnical engineering, construction materials testing, and inspections firm. Since 2000, their professional team has been committed to providing quality, responsive service while establishing a reputation for adhering to the highest ethical, technical and business standards. With headquarters in West Palm Beach and offices in Miami, Tampa, and Orlando, they own and maintain state-of-the art laboratories certified by Construction Materials Engineering Council (CMEC) for soil, concrete, and aggregate testing. Additionally, the firm's WPB laboratory is validated by the Florida Department of Transportation (FDOT) and United States Army Corps of Engineers (USACE). TSFGeo is currently serving as a geotechnical subconsultant to H2M for the Town of Davie Diesel Generator Replacement.

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construction environmental services
structural engineering interior design
sustainable design corrosion consulting
water resources engineering mapping
interior services
design landscape
mep civil inspection
gis water planning
mapping site civil
services surveying
corrosion structural
planning consulting
development construction environmental
landscape architecture community design
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