

# City of Beacon Fire Headquarters Design Services Schematic and Design Development Phases

May 1, 2017

## Project Understanding

- The City of Beacon (City) has determined that a new fire headquarters should be built at the Memorial Park, in Beacon, on Fishkill Avenue near Delevan Avenue.
- As part of locating at Memorial park, the City will relocate the current dog park to land adjacent the proposed fire station, and will provide some improvements over the current facility.
- The City has reviewed the building program that has been developed by Mitchell Associates Architects (MA) working with the City's Fire Chief, which calls for a station of approximately 24,300 square feet of space. Further review and finalization will occur as part of the work of this agreement.
- Using funds provided by Dutchess County, the City wishes to have the design process progress to approximately 50% complete.
- To this end, MA will provide Schematic Design and Design Development services as described below.
- MA's services will include the provision of the following sub-consultants:
  - Lanc & Tully will provide a topographic survey, and metes and bounds description.
  - Geotechnical Engineer to provide borings and geotechnical analysis of the site
  - Civil engineer to provide a schematic site design and design development details.
  - Structural Engineer to provide schematic framing plans and design development details.
  - Mechanical/Electrical/Plumbing/Fire Protection (MEP) Engineer to provide schematic MEP plans and design development details.
  - Estimator to provide schematic and design development estimates.
- MA will work closely with the Fire Chief, and all related committee stakeholders during this work.
- The City is subject to the bidding requirements of General Municipal Law Article 101-5A (Wicks Law) and NYS Labor Department wage rate guidelines.
- This project may be subject to City Planning Board review.

## Services to Be Provided

- **Site Assessment** – A geotechnical report using soil borings and a topographic property survey will be required. Both the report and survey are critical for schematic design, cost estimating and financing. Preliminary site planning and layout will identify geotechnical test locations.
  - MA will prepare thorough checklists to guide the execution of the survey and geotechnical analysis.
  - MA will work with a surveyor of your choice or help you identify qualified alternative.
- **Schematic Building Drawings** – Schematic floor plans and elevations for the project will be created that satisfy the requirements developed in the Program. The elevations will show how the building will utilize durable materials to create a minimum 50 to 75-year building life.
  - Schematic floor plans will be created for a structure that integrates with the topography of the Memorial Park Site. Particular attention will be given to the creative utilization of the interior space to make it both efficient and responsive to your needs.
  - The elevations will depict the materials and massing that are important to convey the role of this building as a gateway to the City. Materials will reflect longevity and low – no maintenance requirements.
  - A Preliminary Section will be developed to assist understanding the building for both the City and the estimator.
  - The relevant codes including NFPA and the ADA will be reviewed in their relationship to the site and building design. MA will utilize the NYS Version of the International Building and Energy Codes and pertinent local regulations.
- **Schematic Site Design** – Working with our civil engineer, we will develop a **site design** that will identify major site improvements while addressing program needs. The **site plan** will denote features such as structures, entry/egress roads, aprons, access, parking, drives, significant landscaping and other site features.
  - MA will utilize the SEQRA short for this project.
  - We will evaluate ingress/egress, drive-through potential, emergency response safety, first responder access, outdoor training and public vehicle/pedestrian use. During the site design process we will evaluate potential additional uses for the entire site.
  - We will negotiate on your behalf with NYSDOT with regard to necessary curb cuts. The proposed water and electrical service requirements will be conceptually defined through meetings with the appropriate agencies.
- **Design Review and Approval** – We meet with you during the entire design, regulatory approval, and budget process.
  - We will advise you of important programming, cost, schedule, budget, and value engineering considerations. This proposal assumes four design review meetings with the City during this phase of the work of this project with additional internet based meetings.

- **Mechanical Systems Description** – In order to support the estimate of probable construction cost, the mechanical engineer will provide the following:
  - A narrative description of the heating, cooling plumbing and electrical systems.
  - Copies of drawings of other “similar” buildings to further clarify the systems and details.
- **Conceptual Structural System Design** – The structural engineer will provide a preliminary “one-line” structural design to assist the estimator.
- **Estimate and Budget Analysis** – Utilizing the program, space usage analysis, the schematic floor plans, elevations and site plan:
  - We will work with our professional estimating consultant to develop a hard cost estimate based on the CSI breakdown of construction divisions. This hard cost estimate is the basis for the hard and soft cost budget analysis described below.
  - We will provide the estimator with sample construction details from other buildings to allow the estimator greater insight into the building.
  - We will develop, and periodically update, a hard and soft cost budget analysis to show the total anticipated costs involved in this project. Soft costs can include professional fees, survey, geotechnical report, fixtures, furnishings and equipment (FF&E) firematic equipment, security, communications, etc.
  - If the output of the hard cost estimate results in a determination that modifications are needed in order to move forward into Design Development, tis proposal assumes a single, comprehensive revision to the program and schematic design to achieve the necessary cost adjustment.
- **Value Engineering** – This is a detailed systematic procedure intended to seek out optimum value for both the initial and long-term investments of a construction project. This includes the utilization of durable materials and evaluating their initial cost versus long-term value.
  - This procedure is an integral part of the programming and design process. Our goal is to eliminate or modify features that add cost to a facility but do not add to its quality, useful life, utility or aesthetics.
  - Using a non-adversarial, problem-solving approach, we look at trade-offs among design concepts, construction techniques, materials, systems, and operations in order to meet your budget. We utilize value engineering as a mechanism to furnish you with the information you need to choose among design alternatives.
  - From 1973 until 1986 the sole focus of our design practice was solar and energy efficient design. We bring a deep understanding of energy use to the value engineering of our projects.
- **Rendering** - We will provide a perspective rendering of the type and character shown here. This will include one mounted at 24” x 36”, 20 un-mounted color copies at 11” x 17”, and digital files for your use.



- **Design Development** – Based on the approved schematic design and schematic estimate, the design will be further developed to define the building structure, systems, and materials. This will include detailed plans, elevations, sections, wall sections and typical construction details. Building loads will be determined. Diagrammatic layouts will be provided for mechanical, electrical, plumbing, fire protection, and sprinkler systems. The technical sections of the Project Manual will be developed to a preliminary level that will identify major materials and systems and establish in general their quality levels.
  - We will lead meetings that permit the consultants to develop a program for their systems that is based on your needs.
  - Drawings will be provided by each of the consultants.
  - Site plans will be further developed to include additional details of grading, ingress/egress, utilities, and landscaping.
  - Negotiations will continue with regulatory agencies as needed.
  - We will meet with the City during this phase to review the progress of the documents, to collect additional information and answer questions.
  - Plans and specifications required for relocation of the dog park will be provided.
  - This proposal includes up to two presentations to the Planning Board.
  - Our estimating consultant will update the estimate of the Probable Cost of the Work.

The Architect shall submit the Design Development documents to the City and advise of any adjustments to the estimate of the Probable Cost of the Work, and request the City's approval.

## Project Deliverables

- **Topographic Survey** – Professional Land Surveyor hired by MA
- **Geotechnical Report** – Geotechnical Engineering Consultant hired by MA
- **Schematic Building Design** – Floor plans, building elevations and a code review
- **Diagrammatic Site Design** – A site plan depicting major features
- **Mechanical Systems Description** – A description of the HVAC plumbing and electrical systems
- **Conceptual Structural System Design** – a preliminary “one-line” structural design
- **Estimate of Probable Construction Cost** – A breakdown in the standard CSI divisions of construction cost
- **Soft Cost Budget Analysis** – A forecast of possible costs of fees, fit-up, etc.
- **Value Engineering** – Systematic procedure to seek value
- **Rendering** – One 24” x 36” mounted rendering, 11” x 17” prints, and digital files for your use
- **MEP Systems Programming** – Meetings will occur with the City and each of the consultants to evaluate and approve of the proposed building systems
- **Design Development Documents** – Detailed plans, elevations, sections, wall sections and typical construction details.
- **Project Manual** – Technical sections of the Project Manual will be developed to a preliminary level
- **Design Review and Approval** – Four Schematic and four Design Development design review meetings in Beacon with internet based follow up meetings
- **Dog Park Relocation** – Plans and specifications required for relocation of the dog park will be provided
- **Design Presentation** – Presentations to the City Council as needed for them to understand the project

## Project Schedule

MA can begin the work in May 2017. The work of this proposal should take approximately 4 – 6 months based upon your ability to respond to our work product and delays that may be introduced by outside agencies.

## Fee for Services

Mitchell Associates Architects has never entered into an agreement for services based on a percentage fee. We strongly believe that a professional must commit to the performance of a given scope of work for a given fee. We are opposed to the use of fee structures that financially reward a professional for failing to maintain the client's budget.

Based on the above proposal, Mitchell Associates Architects will furnish the scope of services for a lump sum of **Two Hundred and Thirty-Four Thousand Dollars (\$234,000.00)**.

## Additional Services Hourly Rates

- \* \$185.00/Hour, Principal
- \* \$175.00/Hour, Architect
- \* \$145.00/Hour, Project Manager
- \* \$135.00/Hour, Senior Technician
- \* \$125.00/Hour, Draftsperson
- \* \$115.00/Hour, Support Staff
- \* Consultant -110% of Invoice

Hourly rates will increase automatically on January 1, 2018 and each January thereafter at a rate of \$5.00/ hour for each category listed.

## City Responsibilities

The City will designate a committee to work with MA.

## Terms and Conditions

The fee is based solely on the services proposed. These services will be defined in a standard American Institute of Architects Contract for Architectural Services. Additional services not provided for in this proposal will be billed at our hourly rates. Special printing, renderings, models, or photography will be billed at 115% of cost. Travel and food will be billed at cost. Mileage will be billed at the current federally recognized rate. Reimbursements for regularly repeated expenses are computed at 5% of the total contract amount. Billing will be monthly, based on the amount of work completed. Payment of invoice will be net 30 days.

Mitchell Associates Architects carries \$1 million of professional liability insurance. The contract will include our limit of liability clause.