



# PACHECO ROSS ARCHITECTS, P.C.

## EMERGENCY RESPONSE FACILITIES

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### Chilmark Fire Department Feasibility and Site Study New Fire Station December 9, 2015

**Project Scope** – proposes the following scope of services will lead the Town of Chilmark through Programming, site assessment and block diagram layout(s) for its fire station and proposed site. This work product can be applied to the schematic and final design if the Town proceeds with site acquisition and design.

#### Proposed Services:

- **Programming** – An operations based programs explaining your requirements for a fire station
- **Space Analysis** – Spreadsheet of square footage that summarizes the Program's requirements
- **Site Evaluation** – Review site attributes, size, suitability, pro and cons
- **Site Layout** – Block diagram concept design for the site using the programmed building
- **Letter Report** – Professional recommendation(s) based on the work product and our findings
- **Review and Approval** – Meetings and interaction during our visit

**Operations Based Programs** – A Program, (space needs integrated with detailed operational assessment) will be developed from an in-depth meeting(s) with the Fire Department to create a dynamic tool that can account for flexibility and changing requirements over time. We will:

- Determine the scope and operations of each department by employing tools and techniques developed by PRA specifically for emergency response facilities. The programs will anticipate additional needs, changing operations over time and the flexibility to accommodate these needs.
- Describe critical functions, specific requirements and activities within the building and on the site.
- Identify crucial operations, priorities, security/public protocols, important response issues and operational efficiencies.
- Account for the local cultural environment, climate conditions and aesthetics.
- Examine current operations and potential for flexibility and change over the foreseeable future. As response and operations transform over time, both interior and exterior flexibility will offer the Department opportunities to manage change.
- Pay particular attention to public interactions, procedures, tourist walk-off needs, apparatus, and security issues. It will examine the requirements for gender equity, bunking, first responder access and the unique living environment for the responders.
- Examine current and future technologies and assess the possibility for integrated training regimens for both active and classroom training.
- Address energy use and sustainability issues as they pertain to operations, scope, response and long-term viability.
- Based on the Program, a **Space Analysis** spreadsheet will be created to specify probable room and building size for the facility. This document is based on design criteria of hundreds of fire stations and anticipates current and future requirements.
- We will develop a probable **Conceptual Budget** (per sq. ft. cost) for construction that utilizes the Space Analysis and includes site work on a potential buildable site.

**The Program and Space Analysis are critical in order to make meaningful decisions and recommendations about viable options for the site.**

**Site Assessment** – The Town proposes to purchase a site for the new station. Prior to acquisition, the Town and Fire Department want to know that the programmed facility will fit on the site, be operational correct (properly sized drive apron for example) and there are no detrimental features that would preclude siting the station. We will:

- Develop detailed guidelines for the execution of both the topographic survey and the geotechnical report. The International Building Code (IBC) has defined public safety facilities as “Essential Services Facilities.” These buildings are designed, built and observed during construction to a high standard. The Geotechnical report is critical to determine that the soil conditions are feasible for a fire stations in this structural category
- Evaluate the site in terms of layout(s), response and return, land use, and safety
- Review maps, surveys, flood zones, etc. We rely on the Town to supply maps and any available site information
- Appraise physical land characteristics including parcel size, road frontage, access, topography, available utilities and known (mapped) flood plain or flood inundation zones
- Develop block diagram site layout(s) to determine how the facility will utilize the parcel
- Address pedestrian access, utilities, parking, ingress/egress and operational standards for response

**Codes, Requirements and Regulations** – PRA will discuss local codes and zoning requirements as they affect the parcel. We will discuss pertinent codes and regulations and their application to a fire station.

- The current International Building Code 2009 (IBC), National Fire Protection Association (NFPA) such as NFPA 1581; recommendations for health and infection control and NFPA 1720; “Standards for the Organization and Deployment... by Volunteer Fire Departments,” FEMA FA-168 “Safety and Health Considerations for the Design of Fire and Emergency Medical Services Stations,” Americans with Disabilities Act (ADA), 521 CMR Architectural Access Board (AAB) requirements and the requirements of Massachusetts General Law Chapter 149, especially as it applies to public bidding and filed sub-bids.

**Letter Report and Meetings** – PRA will provide its professional recommendations in a letter report.

- The report will contain the work product of this scope.
- The deliverables will be usable for a future design of the fire station if it progresses.
- The Town and Fire Department will be available during our visit for programming, updates and meetings.
- PRA will deliver a verbal recommendation before we leave Chilmark.

**Fee for Services** – We will work at our current hourly rates. Partner: \$150/hr., staff \$80/hr. The Town will only be billed for actual time spent.

**Notes to Compensation:**

- Reimbursable expenses for all related travel will be at cost. Partner’s hourly rate will be billed at 50% for all travel related time.
- A PRA Partner will visit Chilmark for a 2-3 day period to complete the Programming, Site Assessment and Meetings. PRA will schedule its visit the first week of January, 2016, based on weather and the ferry.
- The written report will be delivered no later than 1/13/16, however, the Town will have a verbal recommendation during our visit.
- The fee does not include any consultants or engineers.
- The project is public and subject to MA bid laws and wage rate construction.
- Services for off-site design, hazardous materials, environmental studies, traffic studies and other services are not included in our proposal.
- For layout and budgeting purposes we assume that all soil is International Code seismic classification of ‘C’ or better. The Geotechnical Report will clarify this assumption.
- PRA will use the MA State Building Code requirement for fire stations as “essential service facilities” in our recommendations for the design and budgeting of the facility
- This proposal is valid for thirty (30) days

**Quality Response Deserves Quality Design™**