

# Feasibility Study

For The

**Departments of  
EMS, Fire, Police  
and  
Public Works  
of Chester, Vermont**

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Commissioned by **the Town of Chester, Vermont**

Submitted for publication 16 January, 2018









## COMPACT SUMMATION

Our firm was commissioned in 2017 by the Town of Chester, Vermont to conduct a Feasibility Study to assist the Town in addressing the issues impacting possible new facility designs for the four Town services: **EMS**, **Fire**, **Police** and **Public Works**. After researching the pertinent items impacting the Study we are recommending that:

**EMS** Department should be incorporated with the Fire Department, under the same roof of a new structure, operating separately.

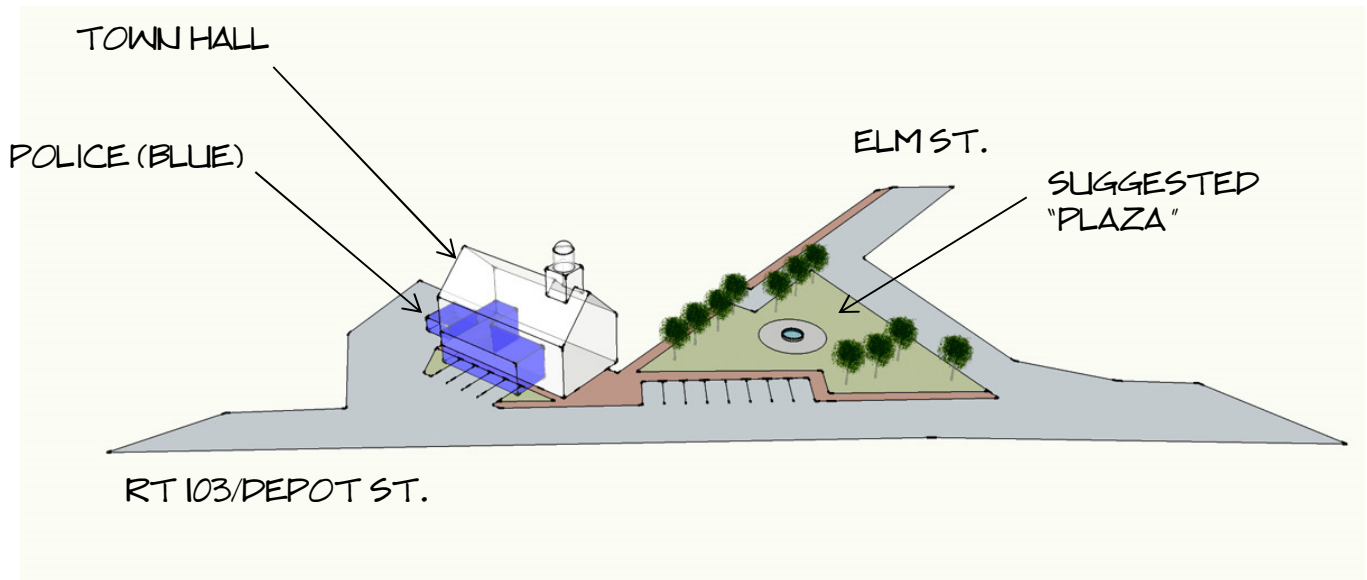
**Fire** Department (*with EMS – per above*) should relocate to the north portion of the current Town property on Depot Street in a new, more efficient, safe and presentable structure.

**Police** Department should be wholly renovated into a more spacious, efficient and presentable workspace while remaining at Town Hall for the reasons described herein.

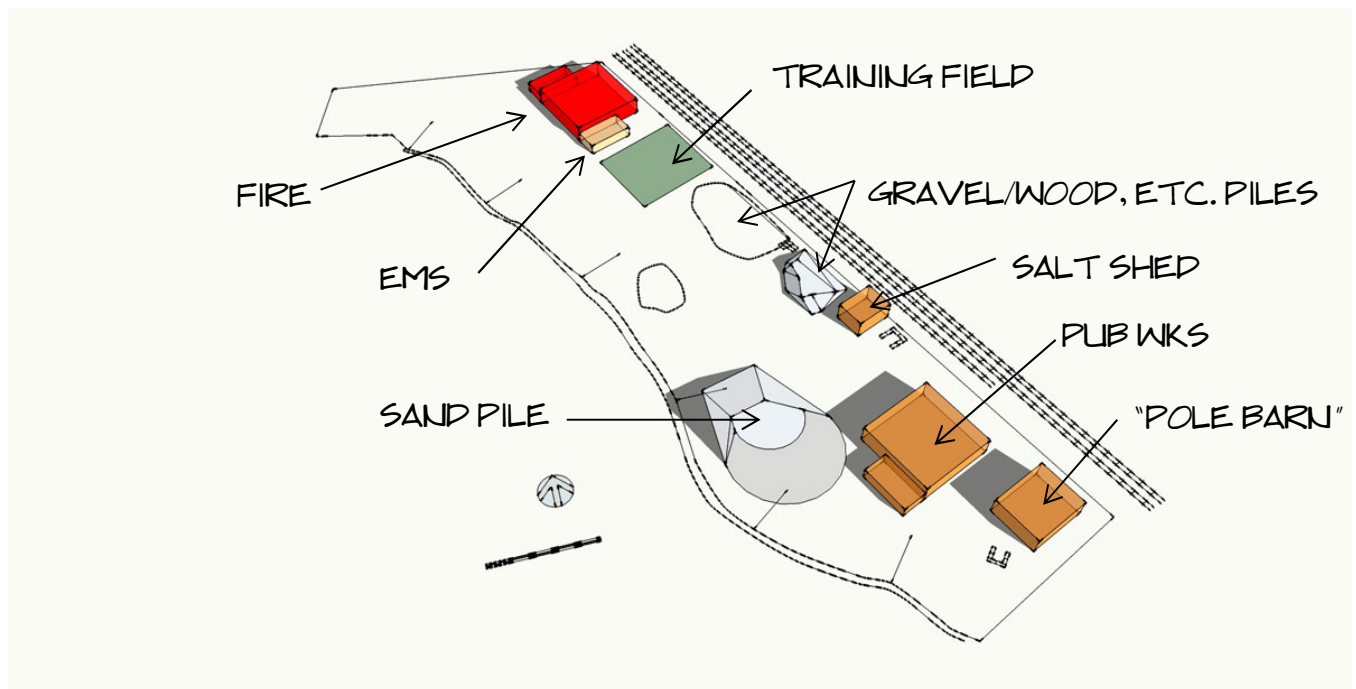
**Public Works** Department should relocate to its own structure to the south of the Elm Street property, allowing it to have more site room to function, store gravel plies and operate more freely and efficiently. The existing supports in the “Town Garage” building may be considered for reuse in the construction of the Pole Barn storage structure.

Cost of Construction (CoC) range of:

~**\$4.4m – \$7.3m**. not considering expected inflation concerns.



Town Hall with suggested plaza concept to accommodate additional parking and public gathering; Police renovation area in blue.



Depot St/RT 103 Town property showing that all proposed uses/spaces, if even single story, will fit and function on the existing site. This is *not* a suggested site design, but only an indication that sufficient space for all operations exists.

## ACKNOWLEDGEMENTS

### Participants in the Study:

This Study was commissioned by the Town Office of Chester, Vermont in the summer of 2017 to address the departments described. In creating this Study I wish to thank Robert Buchan, AIA for his constant support and consistently helpful perspectives both in content and methodology. We – Robert Buchan and I - also deeply appreciate our continued feedback from Town Manager David Pisha and Executive Assistant, Julie Hance, who helped guide the definition and priorities of focus in this Study. We deeply thank the Select Board members who were the “bottom line” individuals who kept the deadlines and key concerns in the forefront of our efforts: Chair Arunas "Arne" Jonynas, Vice Chair Heather Chase, Ben Whalen (*who was also very helpful in his input for the Fire Dept. needs*), Dan Cote and Lee Gustafson for their helpful questions at our updating Select Board meetings.

We also extend our grateful appreciation for the Department Heads: Daniel Cook (*Ambulance/EMS*), Chief Matt Wilson (*Fire*), Graham Kennedy (*Public Works*), and Chief Richard Cloud (*Police*) for their critically important input, without which this Study would be little more than a theoretical exercise. They and their dedicated staff members are the ones who put serious “meat on the bone” in the



content of this effort. We also extend a special thanks to Jeffery C. Holden, Water Superintendent, for his additional input regarding site water conditions.

Throughout this document readers will see the survey drawing of DBS Surveys. Their exacting and reliable work has supported our design efforts consistently for which we will be perpetually thankful.

We wish to express our deep appreciation to three special parties here: Timothy F. McCormick, Soil and Wetland Scientist of Pathways Consulting, LLC, who was so thorough and reliable throughout our resolution of the Wetlands question in the latter stages of this process. Connected to that effort, of course, was Rebecca Chalmers, District Wetlands Ecologist for the State of Vermont. Without her timely attention and response to our need for her input, this Study may well have been delayed well into 2018. We wish to express our very deep “thank you” to her for the rapid attention to this effort.

Two of those key to forwarding the progress of this Study must receive special thanks: Rick Oberkirch, Permit Specialist at the Environmental Assistance Office. And the key, fall back individual who has consistently supported our firm in navigating numerous past projects through the statutory landscape to help

ensure safety and integrity, Landon Wheeler, now Vermont Assistant State Fire Marshal and Plan Reviewer.

One last expression of appreciation is absolutely necessary: some came to our office unannounced, some phoned; some stopped to speak on the street, at the local grocer, Lisai's, or Post Office. They were the residents of Chester. Reassured their input would remain anonymous, they educated this architect about aspects surrounding this effort which are simultaneously intangible yet critical to the relationship a town's services sustain beyond the physical attention to extinguishing fires, repairing infrastructure, saving a heart attack victim or apprehending a real threat to the community. They related the need for symbolism, frugality, reliability, and beauty of such a large project. We, here, thank all of you for your input.

Claudio Veliz, AIA CV A  
Robert Buchan, AIA CV A

15 January, 2018

### Notes + Disclaimers

The items and issues described and imaged in the following pages are highlights of key aspects of the current working conditions calling for clear remedy in any new design for the four departments described in this Study. They are based on site walk-throughs, user interviews, professional reference documents, publications, case studies, colleague discussions and other research and observations established and conducted by our team.

This Study does not presume to address all aspects of this potential project which can only be determined by a Design Team conducting a thorough review of the Study herein, as well its own user needs reviews, investigations and etc. to be included in a defining Program in the early stages of the design process..

The future, selected Design Team **must**, in our view, conduct thorough user interviews and develop a complete design program addressing all required and desired concerns for any new design concept.

Any mention of a company, corporate entity, service, publication or product does not constitute endorsement of said reference by **CV A**. Citations to websites external to **CV A** do not constitute **CV A** endorsement of the sponsoring organizations or their programs or products. **CV A** also is not responsible for the content of these websites and all Web addresses referenced in this Study were accessible as of the publication date.

None of the issues and recommendations addressed in this Study should be accepted only per the descriptions here provided. All must be reviewed in detail during the Programming Phase of the Design Process by the eventual Design Team tasked with creating the design solution for the challenges here described. Depending on changes in priorities and scheduling, many subjects of discussion here addressed may have changed, in some cases substantially by the time a Design team commences with their responsibilities.

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**Part I – 8-1/2x11” format**

**Part II – 11x17” format**

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# **PART I**

## **EXECUTIVE SUMMARY**

### **Summation of the Study**

The current **Chester Fire/EMS/Public Services (PS) Building** (aka "*Town Garage*") while managing to shelter some of the vehicles and equipment in its inventory, is otherwise in substantial need of replacement and reconfiguration in one or more structures; on its current site or on a nearby, Town-owned site.

The functions of all these Departments now either interfere with one another and/or are inadequate in space and layout for optimal service to the community of Chester. The type of construction and its location and configuration on the existing town site, which may have appeared just adequate for the needs at the time of the original construction, now actually interfere with call response time and support operations and do not make full functional use of the current Town Garage site. Visually, due to its largely ad hoc accumulation of buildings, unsheltered storage of equipment and hardware and effectively unpaved, dust generating drives, it is to some a source of shame, rather than pride for the Town.

Separately, the **Chester Police Department**, now sharing Town Office space and which enjoyed a minimal reconfiguration recently,

requires storage and operations space increases to meet the current security needs of the Chester Township. This bulge in facility requirement is in part due to regional growth in call volume and the Northeast's increase in opioid related activity.

The substantial growth of vehicle and equipment needs, in response to the increase in Fire/EMS/Police calls, and close proximity of conflicting aspects of some Departments, calls for a comprehensive reconsideration of the Town's facility needs for these Departments.

This situation described above is impacting operations and the internal response time to emergencies. The apparatus bays are insufficiently sized to accommodate all of the current Fire Department's vehicles. The circulation space between the apparatus is causing numerous bottlenecks and safety hazards for the responding emergency service crews. The support spaces, storage rooms, lockers, washrooms, offices, dispatch room, & etc., are all now inadequate for each of the respective Departments.

The facility layout on the existing Town Garage site shows little sign of having been designed originally in any manner that would adequately consider future needs and potential expansion.

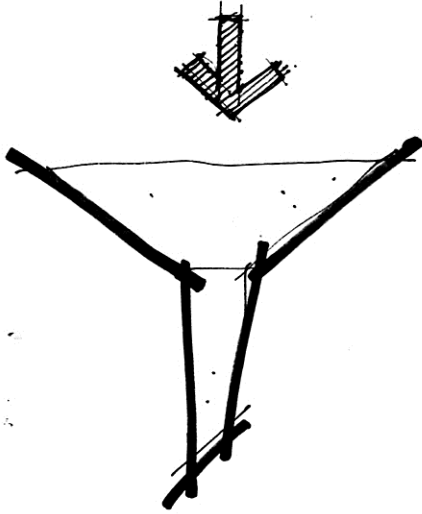
Hardware, vehicles, equipment and stored

materials are placed in a manner that falls short of optimal space use on the grounds, to state it mildly. The potential for the current location to accommodate a more efficient site layout suggests that all Town Departments could co-exist more cost-effectively and efficiently if configured in a more efficient manner at that location.

Given continued technological advances in vehicles, methods and equipment, the expansion of the Departments' current and future services and the possibility for additional staff in the future, means the existing – and future - buildings' limitations diminish the various departments' ability to carry out their missions safely and efficiently.

Based on the Town Garage evaluations conducted over the course of this Feasibility Study, and the programmatic needs of all the Departments now located at that site, the department structure needs to be replaced and reconfigured on the existing Town site or sites as we describe in the following pages.

## The Design Process: “What’s Next?”



The Design Process is a way to decide what to build. It is much like moving down a funnel: It starts with broad, straightforward observations of what’s needed and progresses towards the complex and technical decisions required for the assembly and placement of construction materials and finishes resulting in a built structure and environment in which people live and work.

Options are considered, narrowed and one selected. Then that is detailed and built.

More specifically, this Feasibility Study is the first step intended to discuss the issues that are thought to impact the future disposition of the Town’s public support facilities and to consider the various possible built solutions.

The next step, with this Study in hand, is for the Town to review the content and other influences, such as other projects in the Town which may be underway, budget considerations, grant opportunities, other funding and political aspects which may intertwine with some of the factors discussed here. The Town will decide what general course of action to take which will be in the best interests of the community. Upon declaring the general solution type, whether it be that recommended in this Study, a version

**“A Design Team is selected or appointed and they create the design solution for review and approval by the Town.”**

thereof, or a completely different scheme, the question is put to review and decision by the voters.

Once approved, the process then moves to Design. A Design Team is selected or appointed to create the design solution for review and approval by the Town.

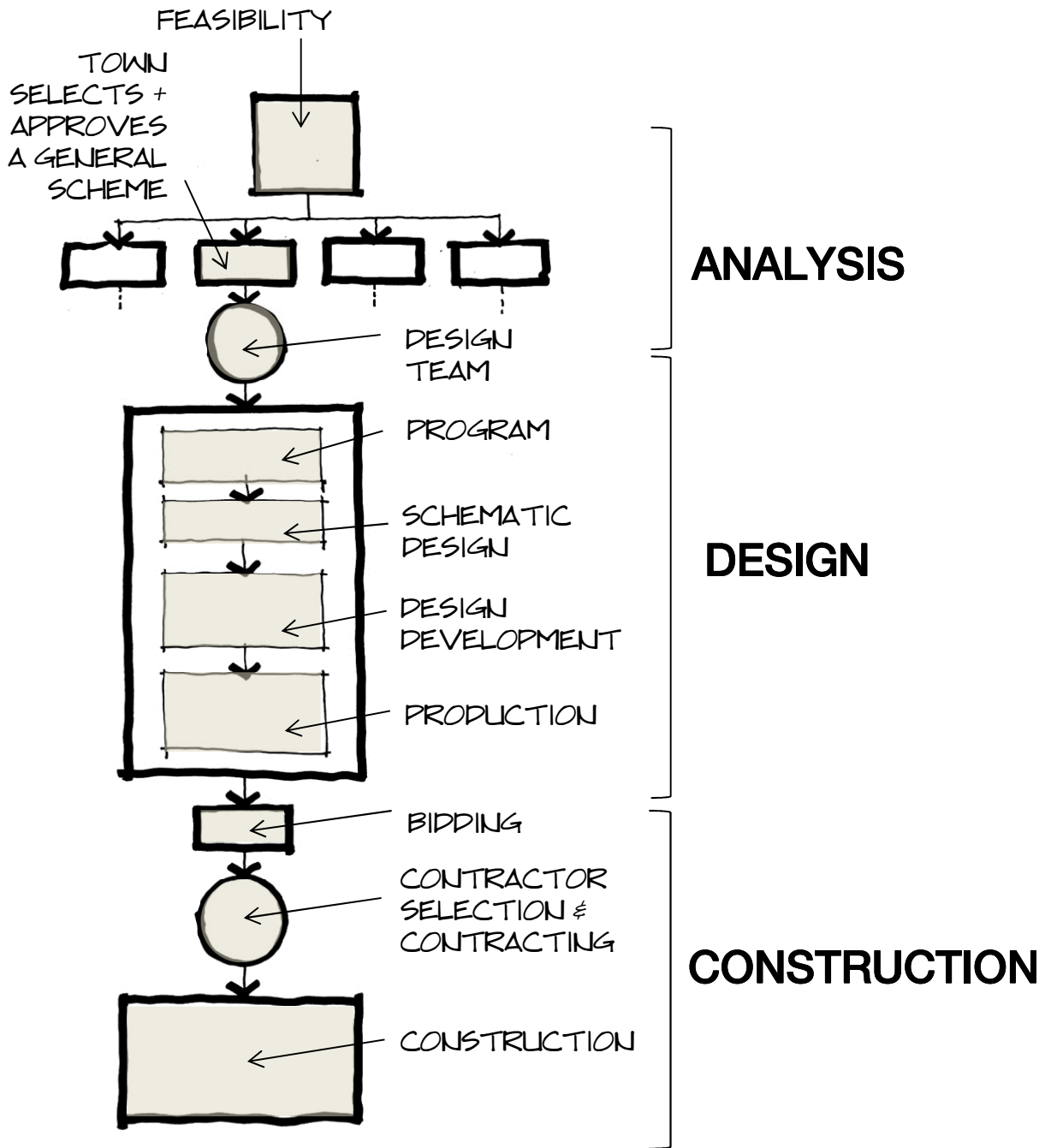
The process can actually take a number of courses at this point.

One option would be to contract only through the Schematic Design or Preliminary Design Development phase. A few advantages are enjoyed by all with such an approach. The Town is not committed contractually to a full design contract. But more importantly, at this early stage in the creation of a design, a much better sense of the layout, interior configuration and...cost of the project becomes known. It may be argued that economic issues should more responsibly be addressed at this stage for a far higher level of reliability in a final Cost of Construction (CoC).

Once so approved, bids are let and a contractor is selected to construct the designed solution. If a Design-Build contract was established, construction commences immediately after design completion and, in some cases, as the participants may wish, construction can commence before design is complete. This is



sometimes referred to as “Fast Track” Designing, where Working Drawings of the first elements to be constructed (site work, foundations, etc.) are completed first, while such decisions as interior wall finishes, finish



plumbing and lighting and other later aspects of the project are addressed in logical sequence later on.

The other types of considerations are whether to assemble an advisory committee, the specifics of funding, selection by the architects of consultants, approvals of subcontractors, and many other parts of the process.

The exact details of the procedure ultimately undertaken to address the needs of this particular Project will be determined by the Town, the Design Team and an Advisory Committee, if one is created.