

## **PART II** **EXISTING CONDITION**

### + Demographics, Geography, Character

As of the 2010 Census, Chester, Vermont's population was 3,154, about equal numbers females and males with a median age of about 48 years.

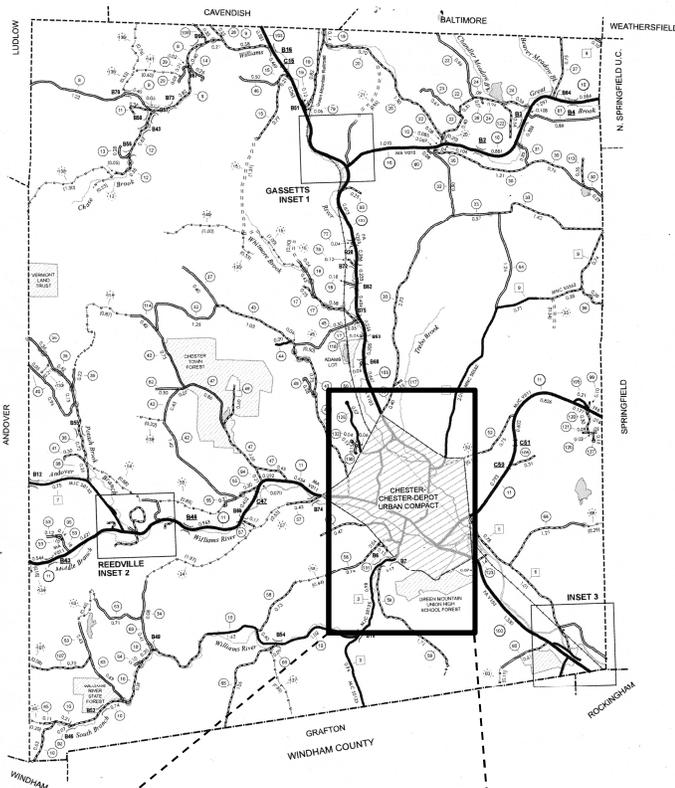
Racial distribution in descending order of numbers/percentages was (2010):

White alone:	96.8%
Hispanic:	1.1%
2 or more races:	0.9%
American Indian alone	0.5%
Asian alone:	0.5%
Black alone	0.2%

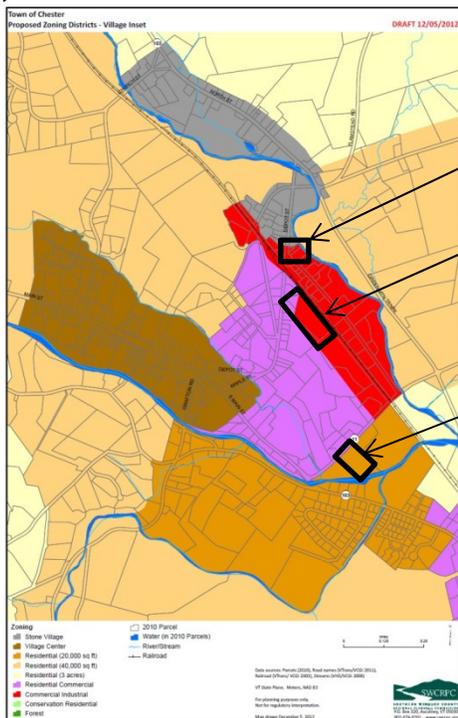
It's enjoyed a longer history than most American communities, having been chartered in 1761, before the founding of the United States.

Chester, Vermont is a New England community situated in Windsor County, in the southeastern portion of the state. The town itself is in a valley in the approximate southeast center of the township.

# CHESTER TOWNSHIP



# CHESTER VILLAGE



- Town Hall
- Exg. Elm St.; Rt. 103 Town property
- Exg. Pleasant St.; Rt. 11 Town property

(See map in Appendix II p.2)

The topography is a combination of classic New England rural farm land and small villages. The predominant architectural style of late 19th and early 20th century gable houses and farm buildings predominate. A notable mixture of late 18th and 19th century styles – sometimes combined – characterize the Chester Town center, dominated by “The Green” which is seen as a central element in the village townscape.

Chester is well known for a handful of unique architectural features. While it is outside the scope of attention for this Study to detail all the community’s unique elements, a handful of its key features are relevant to consider for a Design Team addressing massing and aesthetic issues in the course of the project.

The large collection of period residential architecture in a contiguous, unbroken grouping along Main Street is unique, even by New England standards.

The Yosemite Firehouse, located on Rt. 103 north, has been both a beloved and controversial building in the throes of preservation efforts and apparent transfer of ownership into the Town’s hands at the time this Study was published. It is now an inactive building storing historic artifacts and vehicles of past fire department use. Its unique form is composed of a simple 2-level



Yosemite Fire House. (CV A)



Detail of Unitarian Universalist Church snecked ashlar masonry in Chester's Stone Village. (CV A)

gable barn structure with clapboard siding and two unequal height towers rising distinctly above the roof's peak. It is highly visible to those driving south on Rt. 103. As recent intensity in Select Board meetings attest, it remains one of the community's most beloved icons.

- - -

The "Stone Village" is a unique aspect of the community, composed of a full collection of buildings, on both sides of North Street/Rt 103, completed in the early-mid 19<sup>th</sup> century. Most of the structures are residential in scale and function and characterized by an irregular, flush faced "snecked ashlar" stone masonry, providing a powerful and engaging street ambience.

*[It should be mentioned, here, that this stone treatment is recognized as a major identifier of the Chester community. As an indication of its significance in this regard, CV A has incorporated it as a proposed feature in the development of the new Town Wayfinding Signage gateway designs, now under development.]*

The above mentioned architectural features of the community notwithstanding, the "center" of the community is generally perceived as being located at "The Green", which is indeed composed of a central lawn and trees with some seating areas. It is surrounded by some of the

town's most distinctive 19<sup>th</sup> and early 20<sup>th</sup> century architecture and remains the hallmark of the community's built environment. Any Design Team working to familiarize themselves with the "feel" of the town in advance of creating worthy structures for this project and representative of the community's priorities would do well to become very familiar with this region of the community.



"The Green" North elevation profile, Chester, Vermont (CV A) - See also larger image; Appendix II, p. 8.

Generally, we would wish to persuade any Design Team embarking on research for this effort to take into consideration the scale, materials, features, forms and proportions exhibited by the buildings in the central portion of the community, the vast majority of which are listed in the national- and State Register of Historic Places.





+ **EMS, Fire, Public Works**  
**Existing Facility Condition**  
**(aka “Town Garage”)**

The existing “Town Garage” site is a product of numerous years of casual; “making do”, ad hoc construction and improvisational common sense accommodation of equipment storage, casual parking, exposed facilities and scab construction, some of which has been identified by State Fire & Safety as in violation of code. Two inspections – one in **July, 2016** and a second in **March, 2017** - revealed numerous State Code violations. The Town soon after was



informed that noticeable progress needed to be observed to avoid State intervention and further imposed requirements to address the inadequate accommodations for three of the four Town Services: EMS, Fire and Public Works. These are the three departments currently housed in what has come to be known, generally and locally, as the “Town Garage”

building, situated at the Elm Street Town Property, illustrated in this document.

The one, universal concern regarding the current conditions of the facilities now shared by EMS/Fire/Public Works is that of an inadequacy of space. It would not be an exaggeration to state that the majority of issues recorded during the initial review and survey of existing conditions would be solved outright by a simple increase in allotted space for the tasks performed by the respective Departments.

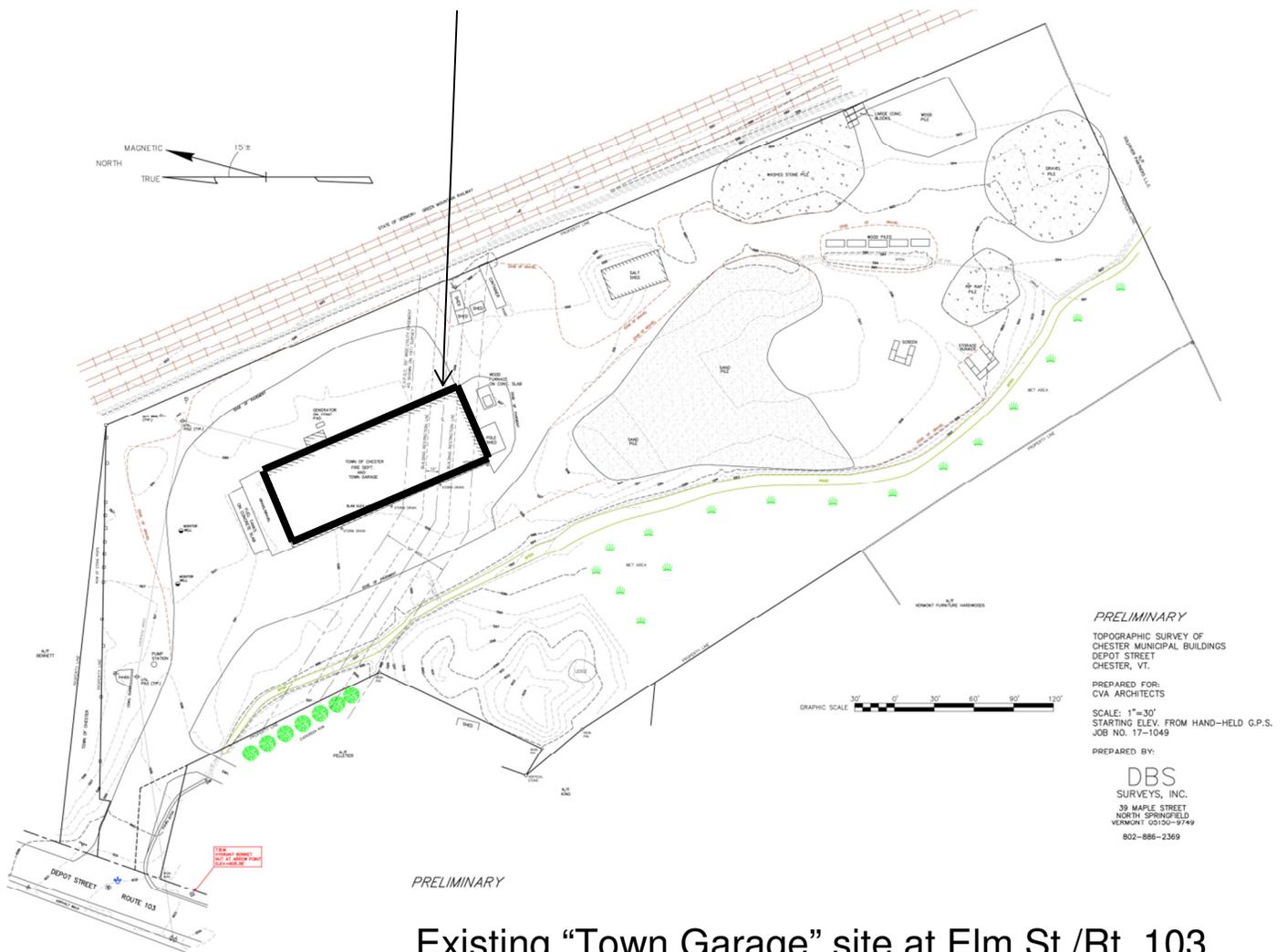
The above said, perhaps the greatest variable with the potential to bring joy to all concerned will be basic, coordinated design and site distribution of buildings and support facilities. This variable applies to all four departments.

The operation of the three Departments – EMS/Fire/Public Works – under one roof has for many years caused friction and strained performance by the members of each Department. Acoustic conflicts during training, sanitation, storage, and lack of basic design of optimal room locations and proximity relationships between spaces has taken a deep toll on the morale and performance of these most critical Departments.

One acute conflict raised numerous times over the course of the research on this effort is that of

dust and dirt perpetually impacting operations at the Fire and EMS Departments. This appears to be the outcome of two factors: lack of paved drive/parking areas at the current Town Garage site, and the high volume of Public Works truck traffic in direct proximity to the Fire/EMS garage bays. The result is a constant deposit of layers of dust on Fire Department and EMS vehicles which has the potential to impact equipment performance.

### EXISTING TOWN GARAGE LOCATION



PRELIMINARY

**Existing “Town Garage” site at Elm St./Rt. 103**  
– see, also, larger format Site Plan in Appendix II, p.3 & 4.  
(Original drawing by DBS Surveys, Inc.)

PRELIMINARY  
 TOPOGRAPHIC SURVEY OF  
 CHESTER MUNICIPAL BUILDINGS  
 DEPOT STREET  
 CHESTER, VT.  
 PREPARED FOR:  
 CVA ARCHITECTS  
 SCALE: 1"=30'  
 STARTING ELEV. FROM HAND-HELD G.P.S.  
 JOB NO. 17-1049  
 PREPARED BY:  
**DBS**  
 SURVEYS, INC.  
 39 MAPLE STREET  
 NORTH SPRINGFIELD  
 VERMONT 05150-9749  
 802-886-2369

In the following pages, as we describe specific existing conditions at the Town Garage, the reader will note a number of repetitive call-outs in different space photographs. This goes to the concern of the key issues as described above in general, and in the pages ahead in particular, regarding adequacy of space, efficiency and sanitation.

**“We used to hang out here all the time, even off-duty, and help keep things running, clean and repair equipment, and all that. Now most just go home....” – Current User**

EXTERIOR

Greeting those who enter the current grounds is a Town vehicle fuel tank on a concrete slab, engaged in a concrete collar.

There are numerous positions to take regarding the image of Town services in any community, but one that is widespread is that the appearance of such facilities exhibits the symbolic pride the community holds for its services and, by implication, for itself.

This discussion is more appropriately held between the eventual design team and the Town decision-makers regarding the priority they may wish to attach to this aspect of the project. Meanwhile the images of the existing facility say much as to the current image portrayed to the visitor or potential company scout seeking a New England community in which to establish a branch location. So, at day's end, there is more than just emotional pride that could be at stake with such an issue.





The stenciled lettering on the service-type door entryway is the only presentation to those entering the property of the presence of a fire department. The entry is often flanked by Public Works equipment, which can be an impediment in snowy conditions.

The placement of such equipment obviously diminishes the character of the entryway.

The lack of proper storage for Public Works equipment also exposes that equipment to harsher exterior conditions which, in turn, increases the need for maintenance, repairs and may shorten the equipment's working life. All this reduces the financial efficiency of the Public Works Department's operations.





The Garage configuration now does not include any separating partitions between bays. This allows for rapid vacating of warm air in winter when any of the doors are opened, thus lowering the energy efficiency of the building dramatically. This also exposes those who may be working in the garage bays for extended periods to very cold temperatures in colder months.

This is an issue more for the Public Works Dept., where considerable work is done in fabricating road hardware and elements in winter, when their bay doors tend to be opened and closed frequently and so are much more vulnerable to loss of ambient heat in those bays.

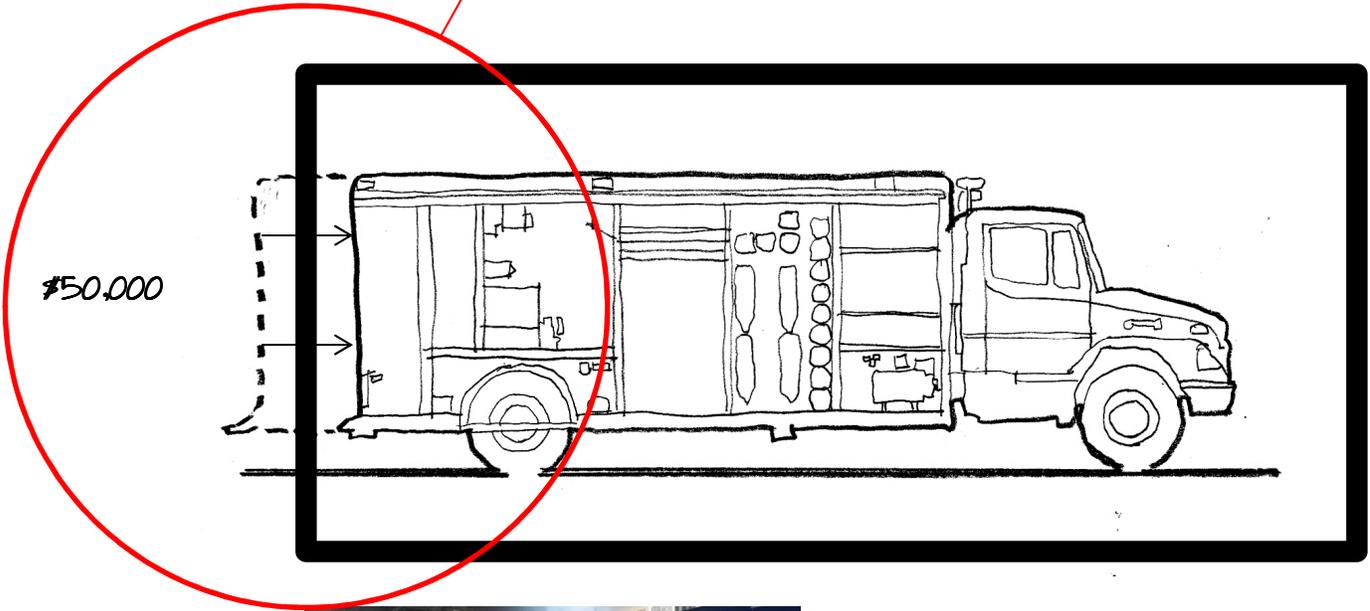
Fire Dept. and EMS benefit from ease in vehicle access from their quarters when a call arrives. Those Departments thus enjoy a greater advantage in having open bays. These departments – unlike Public Works - tend, however, to benefit from their bay doors remaining closed on off times, so in a new structure may retain heat to a higher degree of efficiency. This will be a notable design issue to address for the Design team.



The length of Fire Department parking bays is now not sufficient to accommodate stock emergency vehicles, requiring an added Town expense at the time of **each** filed vehicle order of approximately \$50,000 simply for altering the truck length prior to delivery to the Fire Department.

Over just a decade or two (*depending on configuration; design*) the savings in avoiding this additional effort may well pay for the additional cost of longer department parking bays.

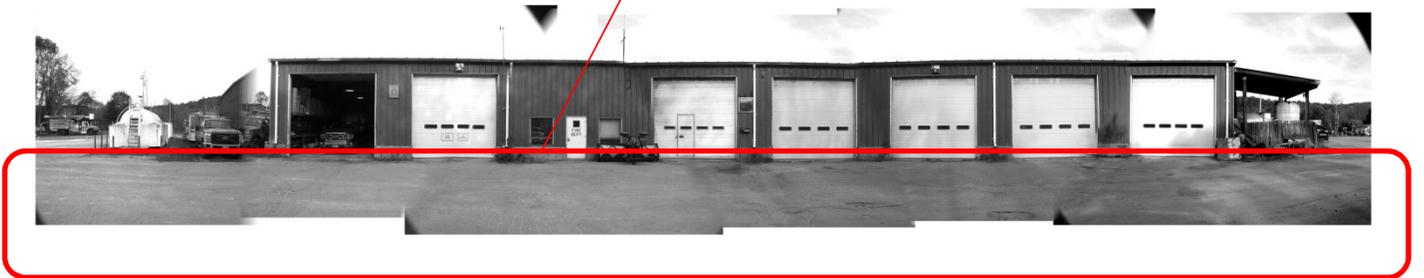
← EXISTING, ALLOTTED PARKING BAY LENGTH →



Vehicle length must be adjusted to fit exg. Bays.

A major concern expressed by Fire Dept. staff is the perpetual frustration of dust accumulation on vehicles and equipment. This appears to be due to traffic flow outside the garage bays and the frequent opening of the garage bay doors.

The current condition of the traveled driveways allows for dust to be lifted and to travel throughout the site. The unpaved drive is also situated to the west and north, thus being vulnerable to prevailing winds conveying the dust into and around the current garage.



The south face of the current Town garage structure has scabbed to its side an ad hoc storage overhang for miscellaneous equipment, supplies, etc. Despite the overhang, the items in question remain clearly exposed to the elements, likely hastening their deterioration.

This also contributes to the extreme unsightliness of the property. To many this may not be an issue if their sole priority is “function”; however, there are those in all Departments who have – in confidence - expressed at least a degree of frustration at the site’s appearance and thus it’s projection of the various Departments’ apparent efficiency.



### WOOD BURNING FURNACE

Imbedded in the stored items at the south façade is the primary heat source for colder months, a wood burning furnace which requires manual attention at all times it is in use.

The fuel supply appears to be always ample and in nearby storage on-site.



On-site wood storage, south of Town garage.

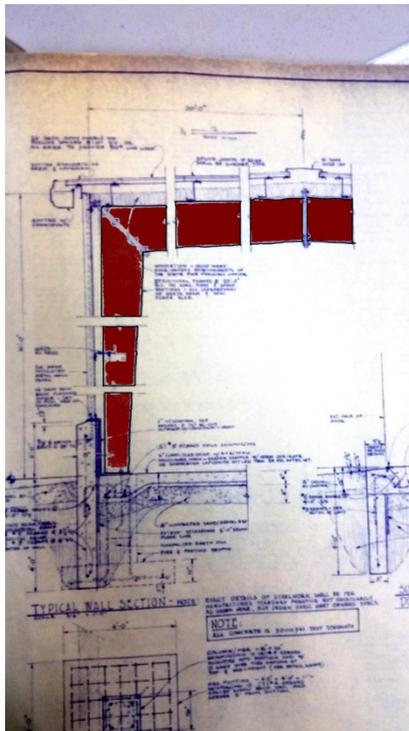


## STRUCTURAL ELEMENT RE-USE

Moving to the interior of the structure, it's observed that the primary structural elements appear to be in sound condition and thus we would recommend the design team consider their re-use for the "Pole barn" storage facility under request by Public Works. This will allow for a considerable savings of cost in construction, requiring only certification by a licensed structural engineer prior to re-installation.



2017 image of actual column-beam intersection in existing "Town Garage" structure. (CV A)



Segmented elevation view of the existing, prefabricated support column/beams.

These appear to be in good condition and may be considered for re-use in supporting "Pole Barn" storage structure. (CV A image of original WD print – shaded areas added for emphasis)



Current Fire Department Lockers

## STORAGE

Fire Department locker storage is insufficient. Over the past couple decades equipment has increased in bulk and while the current lockers, recently installed, are able to hold the firefighter's equipment, there is insufficient space to don the clothing and equipment required to respond to a call, especially with more than a couple of firefighters so engaged in the same space and time. ***This condition may be negatively impacting; increasing call response time.***

## DRYING HOSES

Hoses are obviously key elements of the firefighter's tools used to extinguish fires. Upon return they are wet and dirty and need to be prepared for the next call.



Hose drying rack

Currently, the hoses are dried on a horizontal rack. This enjoys the advantage of allowing moisture to evaporate evenly along the length of the hose and, based on the interviews with the current users, is preferred over a tower drying system. This also makes inspection and any repair a much easier task. The floor area consumed by the long racks is only marginally greater than the square footage needed for a tower footprint, but certainly less expensive to construct.



Current Training Room at head of stairs, below. Inadequate lighting, No second means of egress; no exterior light or view.



Single means of egress from Training Room and EMS offices/storage area to the right at head of stairs.

## EGRESS CODE VIOLATION ISSUE

One of the more concerning current conditions and which secured the attention of building inspectors is the prior conversion of what was designated as an attic storage space into a training room and kitchen area.

The concern is that the entryway is at the head of a stairway and the only entry into the space. The EMS storage and office areas are also at the top of the single stairway approach. This is clearly a serious fire hazard, ironically in a fire department building, that represents a key example of the ad hoc approach that has been taken in the past to accommodate expansion of Town service's needs.

## VENTILATION

As the illustration makes clear at left, HVAC is effectively absent from the current building. There is an efficient heating system in the form of the wood burning furnace, described above, which heats the entire structure in colder months. However, according to the current users, summer heat can be difficult with the lack of air circulation, as is now the case.



Ad hoc “ventilation system”

**“...it is more the need for an improved design configuration than an actual lack of space that is the core issue to be addressed in all departments.” –  
CV A**

## STORAGE



“Storage arrangement” – a common configuration throughout Town garage, due primarily to no significant accommodation in original “design”.

One of the clear issues a Design team will need to consider in the Program will be specific storage needs throughout all departments. The original structure was designed in a largely arbitrary manner and seems not to have taken account, in any serious manner, the future likely storage requirements for all departments. As we describe elsewhere in this document, this also applies to the Police Department needs in Town Hall. In all these cases it is more the need for an improved design configuration than an actual lack of space that is the core issue to be addressed in all departments. The staff has improvised, created their own storage arrangements or taken a “just put things over there, for now...” – approach. The improvement in efficiency, morale and appearance would all be marked with just straightforward design approaches based on what the users have described.



Existing FD washroom, which is accessible to the public.



FD Laundry and hose storage  
located along vehicle parking bay  
wall

Fire Department storage of equipment is largely placed along the perimeter walls of the current vehicle parking bays. This makes for direct access and workability with respect to supplying emergency vehicles. A key point called for by the current users was to prefer a “closed” back wall for the vehicles; equipment; that backing into the bays was not considered an issue and would allow for a great deal more storage wall space.



Bulletin board on wall at head of single-egress stair.

The call for a venue to display the history, character and current activities of each of the departments we recommend as being of high priority. Institutions enjoy a level of self-identity no less than individuals do. Properly displaying historical images and artifacts can have a profound impact on staff morale and inform the visiting public as to the significance of the department's relationship to the community.

In light of these points, we strongly recommend the project Design Team considers the inclusion of such venues in each department as the users may describe.



EMS medical supply storage.



Current EMS staff office.



Current EMS staff office.

## EMS

This department is the smallest of the four in staff numbers and vehicles and, thus, in space demands. This allows for options to incorporate or pair up with – typically, in most communities – either police or fire departments.

By necessity, EMS medical supply storage currently displays a relatively high degree of efficiency, but the upstairs installation appears to include inadequate; uneven lighting.

It should be noted that while all departments will benefit from more formal storage planning, Police and EMS will see some of the greatest space use improvement of all departments.

Perhaps the most inadequate space in the EMS department at this time is the staff office. It was created by simply building wallboard walls and a door in an upstairs corner of the storage area. There is no natural lighting, and the fluorescent fixture used causes foreshadow on the staff members work area. In short, this makes for a wholly inadequate work space.

In the new facility we'd strongly recommend application of even basic ASID/ADA work area standards, none of which are in place in the current workspace.





Chester Town Hall - Looking north.



Chester Town Hall - looking northeast; Police Dept. on ground floor left/rear in this image.



Chester Town Hall - looking southwest; Police Dept. exterior entry seen at center.

## **Police Department** **Existing Facility Conditions**

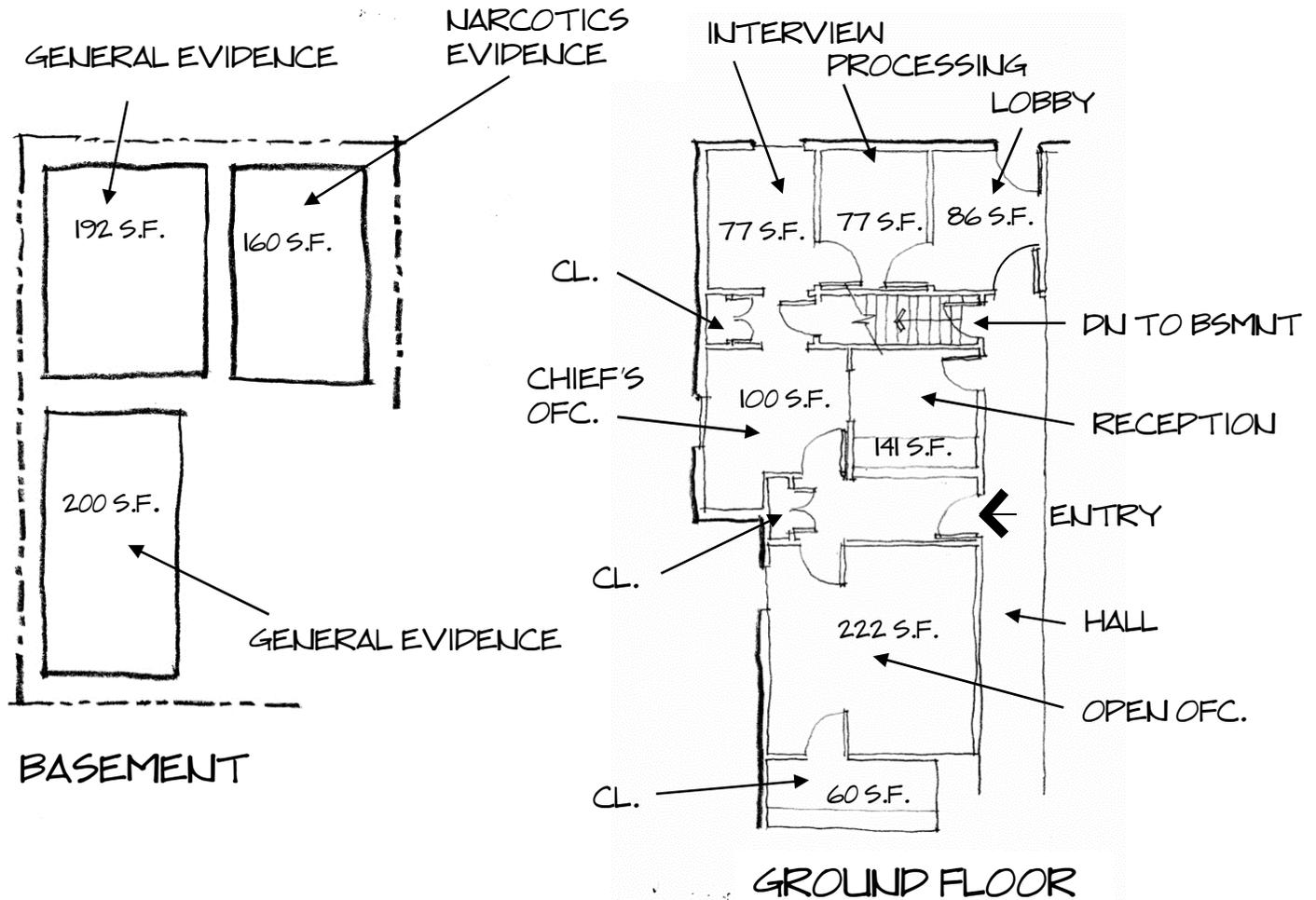
The nature of the Police Department design challenges are quite different than the existing EMS/Fire/Public Works departments in that the existing facility is lacking efficiency and an optimal design layout. For these reasons we elected to display the issues in a different format than that of the prior three departments.

The present Police Department offices are located in the Town Office Building on Depot Street, just northwest of the Town Garage property.

The current space from which the Department functions is still insufficient for optimal functioning, despite a recent minimal renovation of the existing spaces.

This has an impact on potential security and daily efficiency of functions. Circulation – visitor flow as well as detainee sequencing and evidence storage - is lacking in supporting the Department's critical requirements for security and daily administrative functions. This, we feel, may be as much about arrangement/design of the existing space as it is a need for additional space/s. This, in turn, suggests that with minimal investment, the Police Department may enjoy a substantially improved configuration.

A lack of basic office supply and filing storage space contributes to the deteriorated office work environment. In the pages ahead, we illustrate the current status of the layout and then indicate options if the Town decides to upgrade the Police Department in situ.



Existing (schematic) Basement + Ground Floor - Floor Plan indicating areas. See also Appendix large scale 3D perspective of existing and potential expansion areas. (Robert Buchan/CV A)

NO ACCESS TO OTHER SPACES IN DEPT EXCEPT BY EXITING TO PUBLIC HALLWAY AND RETURNING.

In addressing some of the key concerns in the existing Police Department configuration calling for priority remedies, the following were observed:

The existing Reception area is awkwardly configured such that the Receptionist must exit to the public hallway and then back into the Department to interact with the rest of Staff.

RECEPTION/ADMINISTRATION

NORTH ENTRY OFF CENTRAL HALLWAY IN TOWN HALL



SECOND ENTRY, ALSO OFF CENTRAL HALLWAY: ONLY EXIT FROM RECEPTION/ADMINISTRATION

This poses grave potential security and safety concerns in the event of incidents with difficult suspects or others displaying threatening behavior.

While the current window between Chief's Office and main entry provides a degree of oversight/safety, it also creates a somewhat

awkward visual relationship between the two spaces.

The second major extension of the entry security concern is the flow of spaces as regards their function. The (so-called) Lobby is really a utility and suspect entry which is adjacent a public hallway – another potential security concern.

Simultaneously, the Chief's office is, in effect, located in a circulation hallway, filled with file storage. In general acoustic and visual privacy are lacking throughout.

To reiterate as we have throughout the Study, while additional space may indeed benefit, there is much greater need for the exercise of efficient design.

ENTRY TO  
INTERVIEW ROOM

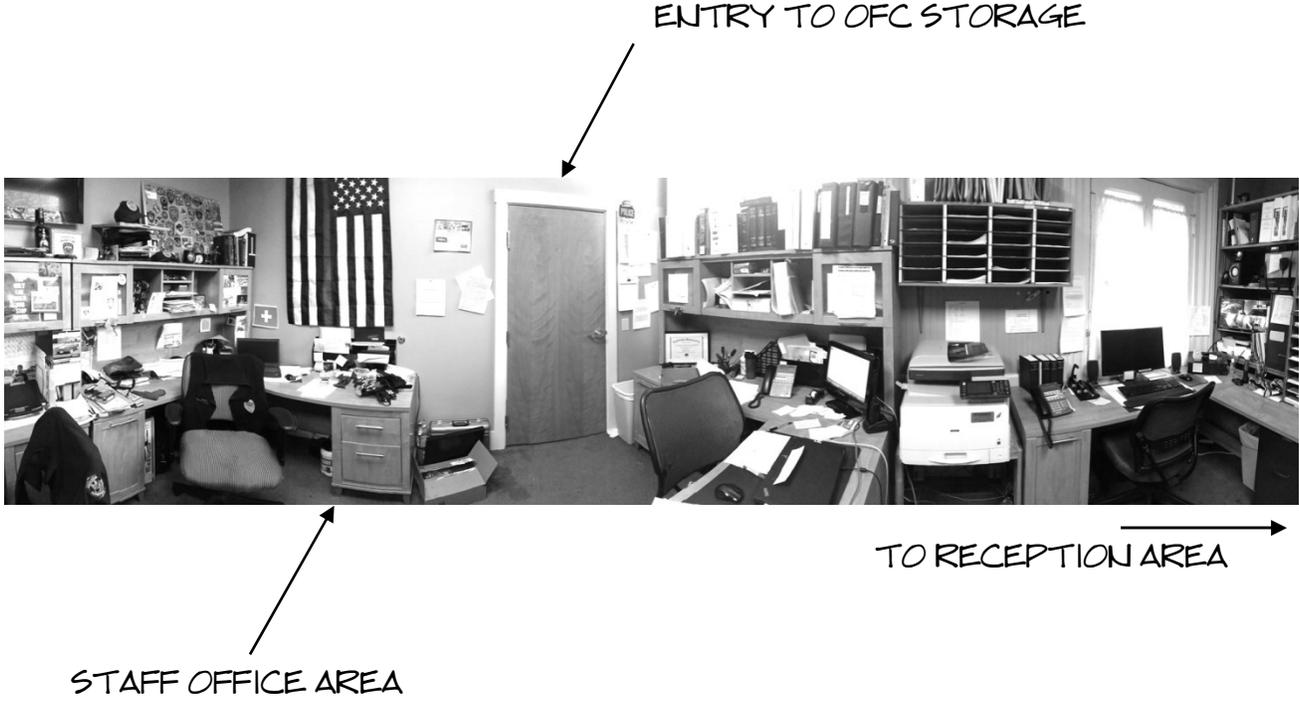
FRONT ENTRY OFF CENTRAL  
HALLWAY IN TOWN HALL

ENTRY TO STAFF  
OFFICE AREA



WAITING AREA NEXT  
TO FILES

CHIEF'S OFFICE





INTERVIEW ROOM

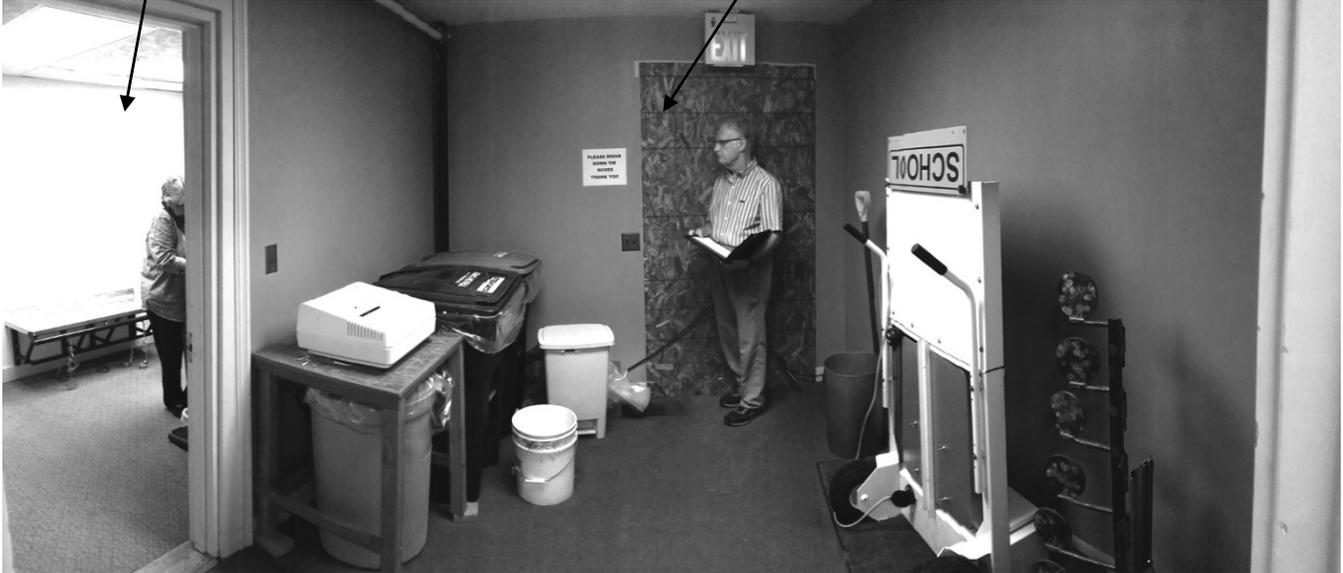
ENTRY TO CLOSET AND  
CHIEF'S OFFICE

PROCESSING ROOM



PROCESSING ROOM

NORTH EXTERIOR ENTRY



"LOBBY"



+ Water + Sewer at  
Candidate Town Sites

A meeting with Jeff Holden was held at Town Office on 8/8/17 at 10.15 am.

Present:

JH Jeff Holden, Town of Chester

RB Robert Buchan AIA, CV A PLLC

***There are no readily available water/ sewer maps or Allocation Letter to excerpt for the Feasibility Report.***

1. Existing connections for the Town Garage lot at Depot Street:
  - a. Existing 4" cast-iron water service pipe is in poor condition, needs replacing.
  - b. Existing sewer pump station (close to power pole) is worn out and needs replacing.
  - c. Existing water main in street is 8", fed from both directions.
  - d. There is a hydrant on Depot Street close to the site entrance.
  - e. Existing sewer in street is adequate.
  
2. Location and size of existing service lines on the empty lot on RT 11/Pleasant Street:



- a. Existing 8" water stub and MH were installed to provide for previous Emergency Services Building project.
- b. Manhole is visible close to SW corner of lot, water stub is concealed.
- c. Existing small culvert drains SW corner of lot into swale running SW parallel to street.
- d. Existing water main in street is 8", fed from both directions.



## SITE ISSUES

A Pre-Proposal, Field Visit was conducted 7/19/2017 at 9.30 am.

Weather: fair, warm.

### Present:

GK Graham Kennedy, Town of Chester

CH Cliff Harper, PG Harper Environmental Associates, Inc.

CV Claudio Veliz AIA, CV A PLLC

RB Robert Buchan AIA, CV A PLLC,

1. CV A noted that State of VT records only indicate that underground tanks were removed and remediated in +/- 1991, so we do not know of any current environmental hazards.

2. Existing floor drains are known to discharge to sumps that are periodically pumped out.

**There are no oil separators.** Current condition and content not known. CH noted that where vehicle maintenance involving fluids is proposed in future alterations or new buildings, spills are easier to manage in a dedicated bay with a bund-wall or curb and drainage to a dedicated tank.

3. A damaged exterior catch-basin grate was noted adjacent the entrance to the office bay. It



Existing catch-basin cover and water stop valve cover.

is not known where this discharges.

4. Within the building, fragments of asbestos remaining from a previous remediation project and flooring mastic that may contain asbestos were observed.

5. One empty fuel tank is slated to be removed from the yard for scrap. GK noted that hazardous materials are not known to be stored or to have been dumped on site. Upgrades to security and control should be made as part of future improvements to prevent unauthorized/ unidentified materials drop-offs.

6. CH will provide a proposal to cover:

- A. Investigations of potential hazards that would affect the cost of a future Project.
- B. Prices to remediate identified hazards that might be best addressed immediately.



Existing asbestos remaining in boiler room.



+ Existing Facility Status Under Vermont Fire & Building Safety Code

It is understood that premises were inspected by the VT Department of Public Safety on several occasions including 3/28/17 and 7/12/17, as a result of which emergency lighting, illuminated exit signs, and other items were installed pending a long term plan.

A copy of the Inspection Report was received 08/03/17.

The measures required in the Report appear to be an accommodation to circumstances. However, even if the requirements in the report are fully implemented, the facility would not be fully compliant with the code for existing buildings, nor would implementation necessarily absolve the Town of liability in case of fire or other life-safety event.

Items not addressed include, but would not necessarily be limited to, lack of a ventilation system of the type mandated to control vehicle exhaust, and issues with fire ratings and smoke containment.

**International Building Code 2015**

(excl. Chapters. 8, 10, 1, 13, 27, 28, 29 & 33)

*[This code governs new construction, but certain requirements apply to existing buildings and to alterations. These are noted, here]:*

**CH. 3 (USE GROUPS), 5 (GENERAL BUILDING HEIGHTS AND AREAS) AND 6 (TYPES OF CONSTRUCTION)**

The existing construction conforms to Type IIB: Colloquially, steel frame/ non-combustible (metal) roofing and cladding, approximately 9,660 sf. Two stories are permissible and the floor area is OK.

Incidentally, for a new commercial vehicle facility of the same size, a full automatic sprinkler system would be required under IBC-2015 Chapter 9.

Code references pertaining to existing structure:

1. For existing Construction Type IIB:
2. Table 504.4:

Note: The existing structure is considered “mixed use” because of the status of existing fire separations, so the most restrictive use governs. The Training Room is considered “Assembly”, but if assembly requirements governed, there would be multiple problems.

1. Table 506.2: The maximum area for Assembly A3 with no sprinklers is 9,500 sf
2. Therefore the Assembly area (training room) must meet requirements for an “accessory” use. The size and number of occupants must be restricted to meet the letter of the Code. Refer to notes on NFPA-101 Chapter 3 below.
  - A. Table 506.2: area limits for Storage S2 with no sprinkler system:
  - B. 17,000 sf: total size is not an issue.

## Ch. 9 FIRE PROTECTION SYSTEMS

***903.2.10.1 Commercial parking garages. An automatic sprinkler system shall be provided throughout buildings used for storage of commercial motor vehicles where the fire area exceeds 5,000 square feet (464 m<sup>2</sup>).***

As noted, existing facility exceeds 5,000 sf (approximately 9,660 sf), thus the level of safety that would be provided by new construction is not met.

## **NFPA-101 (2015)**

### Ch. 3 DEFINITIONS (ACCESSORY SPACES)

¶ 3.3.188.2: “..conference rooms ... and other areas incidental to, and under the control of the

management... fall under the 50 person limitation.” Thus the existing training room may not accommodate more than 50 persons.

#### Ch. 7 DEFINITIONS (ACCESSORY SPACES)

¶ 7.4 Number of means of Egress: Criteria for a single means of egress from the upper level are not met. The original drawings call out the existing Training Room as a mezzanine space, but it does not conform to the definition. The Division of Fire Safety Inspection Report 08/03/2017 (below) addresses this issue.

#### Ch. 42 STORAGE

DEFINITION: Used primarily for sheltering or storage of....vehicles.

¶ 42.1.5 HAZARD OF CONTENTS: from 6.2.2, parking is classified as “Ordinary” hazard. REF: NFPA-13 A5.3.1 Parking is Ordinary I hazard.

NOTIFICATION (Alarm), 42.3.4.3: occupant notification (audible and visual) required.

MEANS OF EGRESS governed by 42.8.2.5 & 42.8.2.6 for parking structures.

Egress travel max 200 ft. with sprinkler

Dead end corridor with sprinkler max 50 ft.

Common path of travel max 50 ft. with sprinkler

**42.8 MIXED Parking and Repair:**

Unless Parking and Repair areas are separated by 1 hr. construction, entire facility shall meet Chapter 40 INDUSTRIAL.

All floor openings protected by 1-hour partitions.

**NFPA-1 2015: FIRE CODE:****Ch. 29 PARKING GARAGES**

References NFPA-88A

**Ch. 30 REPAIR GARAGES**

Floor liquid-tight, with properly trapped floor drains.

Gas detection system

HVAC separated from rest of building

Fire-safe heating system

## **NFPA-88A 2015: STANDARD FOR PARKING STRUCTURES**

### Ch. 5: CONSTRUCTION

Parking space separated from rest of building (if this is more than 3000 sf) by 2-hour rated construction.

Parking space separated from adjacent accessory spaces less than 3000 sf by smoke-resistant construction.

### Ch. 6: SERVICES & FIRE PROTECTION

Fire-safe heating system required.

Mechanical ventilation system capable of 1 cu.ft./min per 1 sf of floor area required.

These systems are often controlled automatically.

Fire sprinkler system to NFPA-13 required

EXCEPT where both the mechanical ventilation system AND a full automatic detection fire alarm system are provided.

Floor liquid-tight, with properly trapped floor drains

Gas detection system

HVAC separated from rest of building

### **APPENDIX: Division of Fire Safety Inspection Report 08/03/2017**

