

Fire Department Presentation

Part I. Staffing

Part II. Reorganization of Fire Stations

Part I: Staffing

Current Staffing Level

Career Firefighters

12 Career FF / EMT's (3 firefighters on duty per 24 hour shift)

1 Career Chief

1 Additional budgeted firefighter 2019

14 Total career firefighters

Current Staffing Level

Volunteer Firefighters

- 1 Volunteer assistant chief
- 1 Volunteer lieutenant
- 6 Interior volunteer firefighters*
- 10 Exterior volunteer firefighters
- 6 Volunteer fire police

24 Total

*Only six interior volunteers firefighters are qualified to enter building during a fire

Two of the six interior volunteers are on the county civil service to possibly be hired in 2019

Current Active Volunteer Staffing Level

By Fire Station

Beacon Engine

- 1 Interior
- 2 Exterior

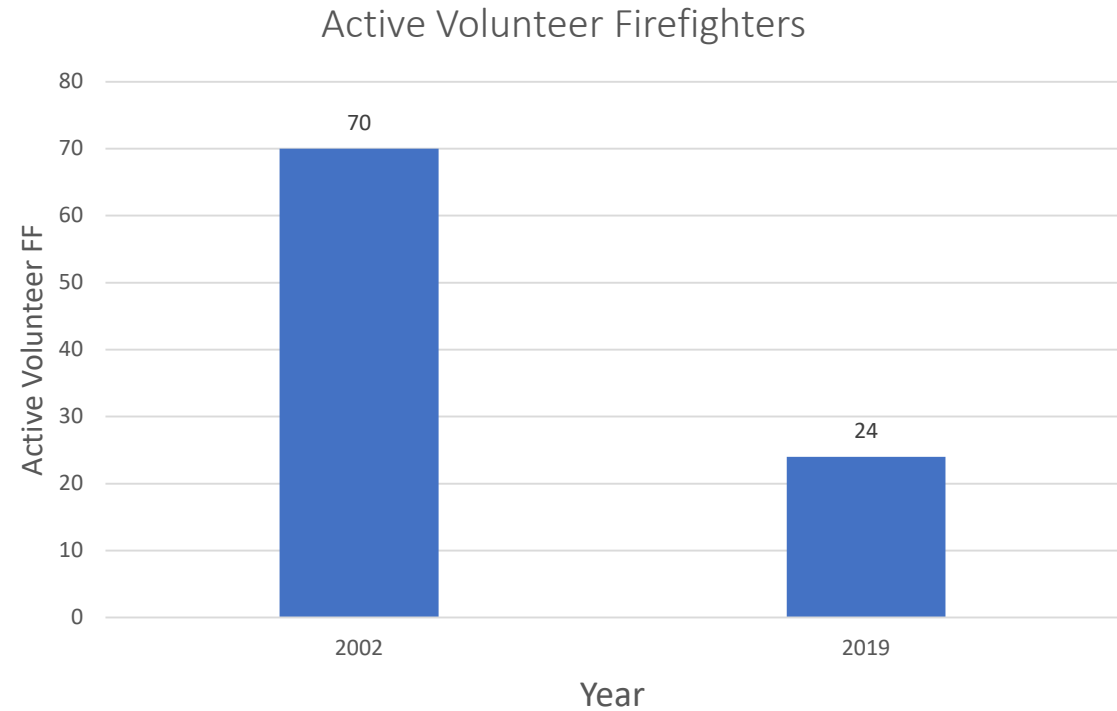
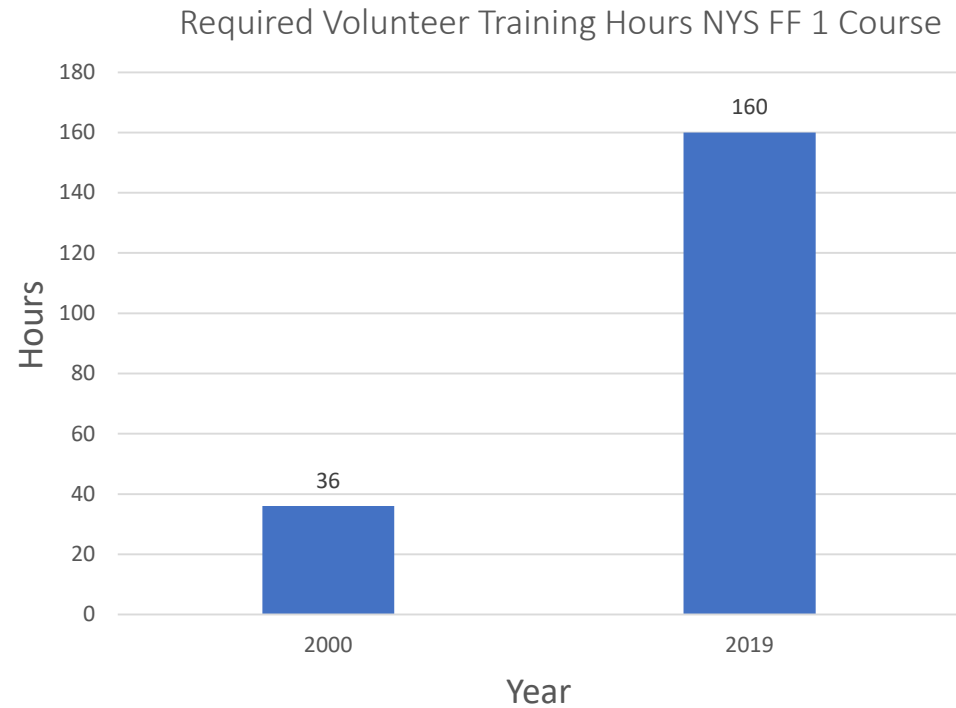
Mase Hook and Ladder

- 2 Interior
- 4 Exterior
- 1 Fire Police

Tompkins Hose

- 4 Interior
- 4 Exterior
- 5 Fire Police

Why low number of volunteers?



Beacon Fire Department 2018 Incidents

1,657 total incidents

1,002 priority one/two EMS incidents

654 all other incidents (57 fire incidents)

2018 Incidents Reports by Incident Types

as Reported by the Dutchess County Emergency Management Center

100	Fire, other	1
111	Building fire	12
112	Fires in structures other than in a building	1
113	Cooking fire, confined to container	20
114	Chimney or flue fire, confined to chimney or flue	2
116	Fuel burner/boiler malfunction, fire confined	1
118	Trash or rubbish fire, contained	2
120	Fire in mobile prop. used as a fixed struc., other	1
131	Passenger vehicle fire	3
140	Natural vegetation fire, other	2
141	Forest, woods or wildland fire	1
142	Brush, or brush and grass mixture fire	1
151	Outside rubbish, trash or waste fire	3
152	Garbage dump or sanitary landfill fire	1
153	Construction or demolition landfill fire	1
154	Dumpster or other outside trash receptacle fire	2
155	Outside stationary compactor/compacted trash fire	1
160	Special outside fire, other	1
162	Outside equipment fire	1
221	Overpressure rupture of air or gas pipe/pipeline	1
243	Fireworks explosion (no fire)	1
251	Excessive heat, scorch burns with no ignition	2

...incident reports continued

300	Rescue, emergency medical call (EMS) call, other	10
311	Medical assist, assist EMS crew	110
320	Emergency medical service incident, other	23
321	EMS call, excluding vehicle accident with injury	870
322	Vehicle accident with injuries	29
323	Motor vehicle/pedestrian accident (MV Ped)	11
324	Motor vehicle accident with no injuries	22
331	Lock-in (if lock out , use 511)	6
341	Search for person on land	1
342	Search for person in water	2
350	Extrication, rescue, other	3
352	Extrication of victim(s) from vehicle	3
353	Removal of victim(s) from stalled elevator	8
361	Swimming/recreational water areas rescue	1
400	Hazardous condition, other	6
410	Flammable gas or liquid condition, other	1
412	Gas leak (natural gas or LPG)	34
422	Chemical spill or leak	2
424	Carbon monoxide incident	16
440	Electrical wiring/equipment problem, other	5
442	Overheated motor	2
443	Light ballast breakdown	1
444	Power line down	16
445	Arcing, shorted electrical equipment	4
451	Biological Hazardous, confirmed or suspected	1
461	Building or structure weakened or collapsed	2

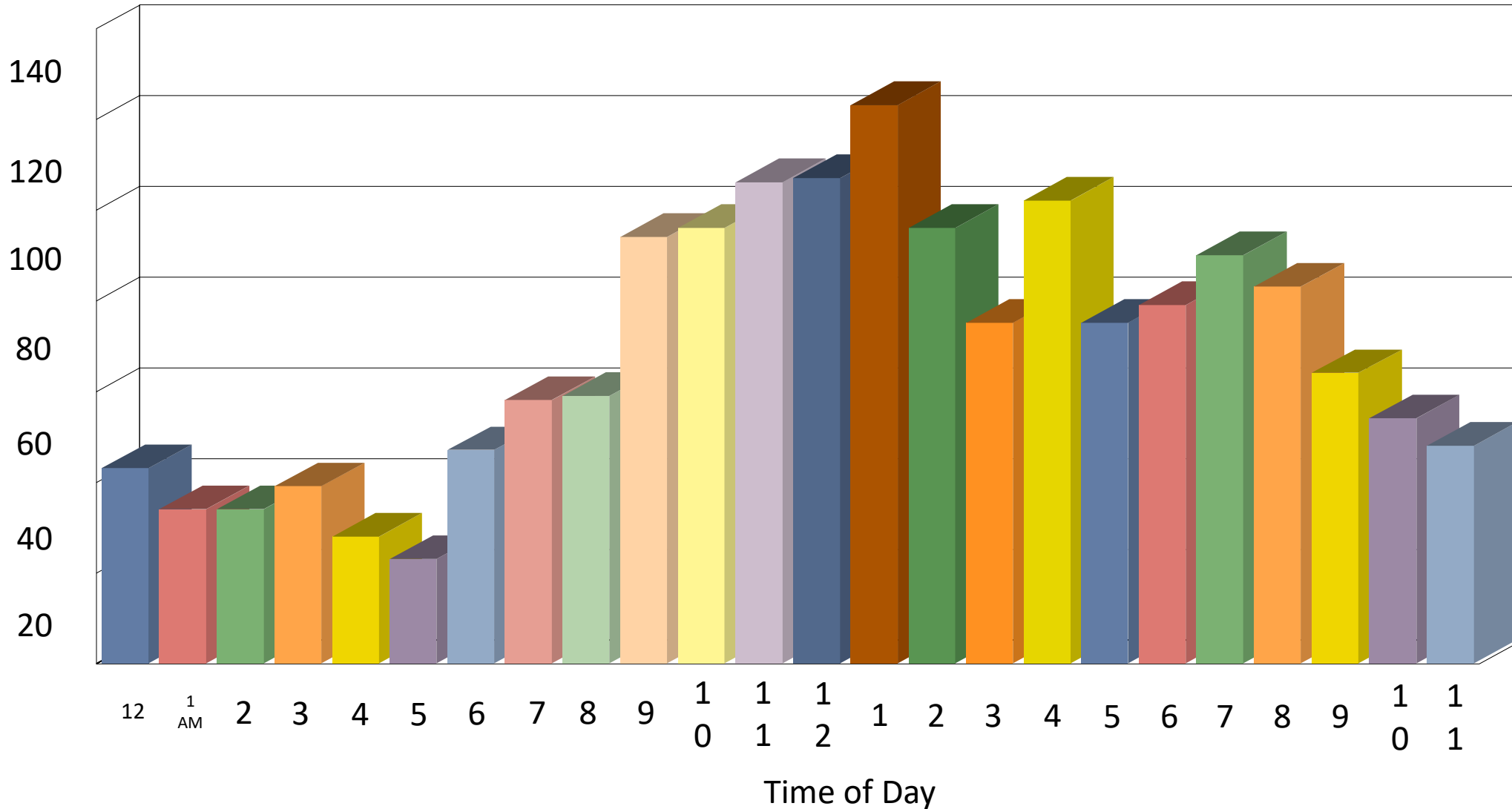
...incident reports continued

463	Vehicle accident, general cleanup	1
510	Person in distress, other	2
511	Lock-out	4
520	Water problem, other	1
521	Water evacuation	5
522	Water or steam leak	8
531	Smoke or odor removal	1
550	Public service assistance, other	5
551	Assist police or other governmental agency	1
552	Police matter	1
553	Public service	6
554	Assist invalid	6
555	Defective elevator, no occupants	2
561	Unauthorized burning	1
600	Good intent call, other	32
611	Dispatched & canceled en route	18
622	No incident found on arrival at dispatch address	3
631	Authorized controlled burning	1
651	Smoke scare, odor of smoke	6
652	Steam, vapor, fog or dust thought to be smoke	2
661	EMS call, party transported by non-fire agency	2
671	Hazmat release investigation w/ no hazmat	5

...incident reports continued

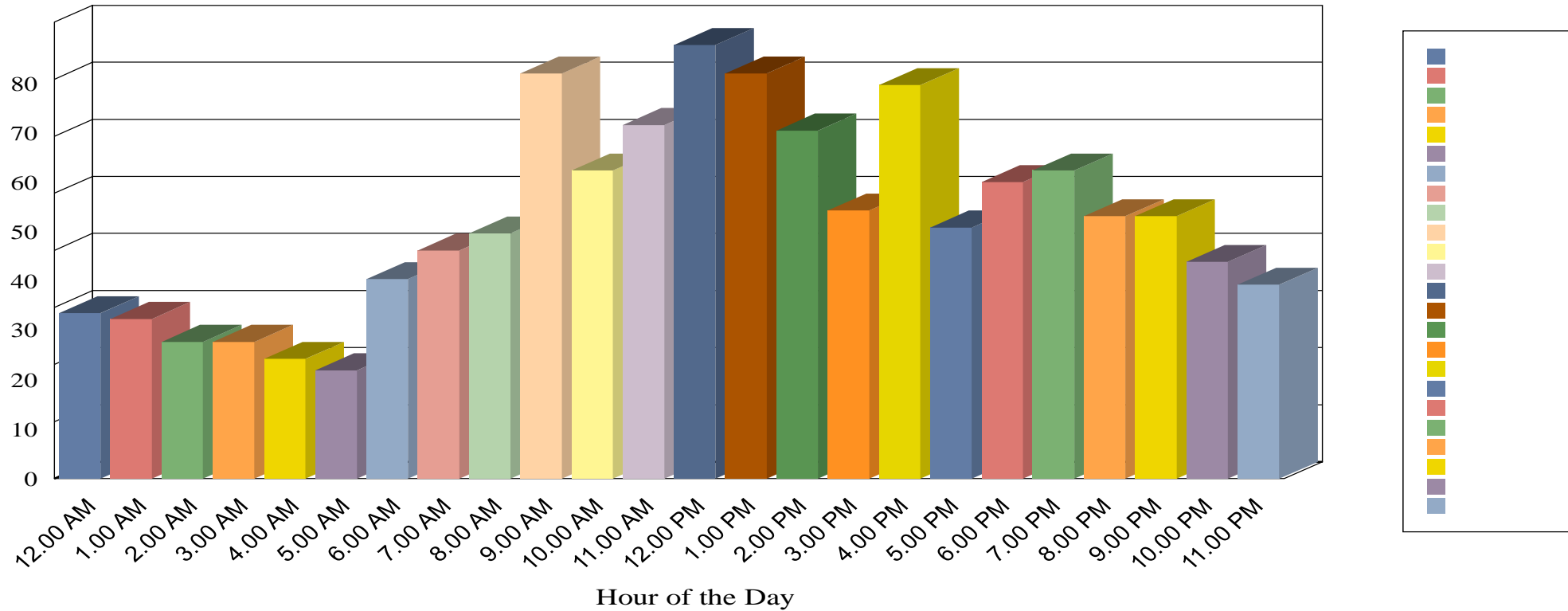
700	False alarm or false call, other	14
710	Malicious, mischievous false call, other	1
711	Municipal alarm system, malicious false alarm	1
714	Central station, malicious false alarm	2
730	System malfunction, other	16
731	Sprinkler activation due to malfunction	1
733	Smoke detector activation due to malfunction	28
734	Heat detector activation due to malfunction	1
735	Alarm system sounded due to malfunction	21
736	CO detector activation due to malfunction	10
740	Unintentional transmission of alarm, other	19
741	Sprinkler activation, no fire - unintentional	2
743	Smoke detector activation, no fire - unintentional	94
744	Detector activation, no fire - unintentional	4
745	Alarm system sounded, no fire - unintentional	21
746	Carbon monoxide detector activation, no CO	8
813	Wind storm, tornado/hurricane assessment	14
9001	Fire Prevention	3
9002	Public Relations	2
9003	Lock Box Maintenance	13
9004	Training/Drill	18
911	Citizen complaint	1
	Total Number of Incidents:	1,657
	Total Number of Incident Types:	92

All Incident Totals by Hour



Highest
number of
calls are
from 10
AM to 4
PM

EMS Incident Totals by Hour



Highest Number of Priority One EMS Incidents are from 9 AM to 4 PM

The City of Beacon Fire Department is below adequate staffing levels

Today:

13 career firefighters

Recommending hiring three additional career firefighters for a total of 16. This will allow us to operate with four career firefighters per shift.

OSHA (Occupational Safety and Health Administration) Two-in Two-out Policy

In firefighting, the policy of **two-in, two-out** refers to United States Occupational Safety and Health Administration (OSHA) policy 29 CFR 1910.134(g)(4)(i)^[1] that mandates that firefighters never go into a dangerous situation in a fire or rescue incident alone, and that there be two firefighters outside the hazard area to initiate a rescue of the firefighters inside, should they become in trouble, during the initial stages of the incident where only one crew is operating in the hazard area.

How can this be accomplished?

Option 1: Apply for three additional firefighters through the *Staffing for Adequate Fire and Emergency Response* (SAFER) Grant with the support of Council

Option 2: Budget three additional career firefighters for 2020

CITY OF BEACON				
FIREFIGHTER NEW HIRE ANALYSIS				
	# OF HIRES			
	1	2	3	4
Salary & Fringe Items				
2019 Salary - base	55,496	110,992	166,488	221,984
Clothing allowance	600	1,200	1,800	2,400
Training Certification	2,000	4,000	6,000	8,000
FICA Taxes (2019)	4,444	8,889	13,333	17,777
MTA Taxes (2019)	198	395	593	790
Health Ins Cost Net - family	23,395	46,790	70,185	93,580
Dental	262	524	786	1,048
Retirement tier 6 (14.8%)	8,598	17,196	25,795	34,393
Workers comp, disability etc (8.0%)	4,440	8,879	13,319	17,759
Total Fringe	41,337	82,673	124,010	165,347
Total	96,833	193,665	290,498	387,331

Staffing Request

Council support to add three career firefighters. This would allow for four firefighters per shift.



Part II: Reorganization of Fire Stations from Three Fire Stations to Two

Beacon Engine Company



Mase Hook and Ladder Company



Lewis Tompkins Hose Company



Closing Beacon Engine Company



Consideration and Input from Firefighters

The volunteers' memorabilia in all three stations will be taken into account during the closure of Beacon Engine Fire Station.

- Trophies, awards, uniforms, pictures, furniture, appliances are owned by the volunteers.

Recommendation:

Receive input from career and volunteer members on this plan.

Why Close Beacon Engine Company?

- The City only owns 1/3 of the station
- Built in 1886, the oldest of the three stations
- Smallest apparatus bay in area and height
- No apparatus ramp at station
- No room on the site for necessary expansions

City of Beacon only owns one third of Beacon Engine Company



City of Beacon



Beacon Engine Company

Placement of Fire Apparatus with the closing of the Beacon Engine Station

- Move Beacon Engine 33-11 to the Mase Station
- Move Mase Ladder Truck 33-45 to the Tompkins Hose Station
- Move the reserve Engine 33-13 from Tompkins Hose and store in the Beacon Engine apparatus bay that the City owns

Mase Hook and Ladder Company



Proposal to Modify Mase Fire Station for Safe Operation and Accommodation

Add an addition onto Mase.

- No interruption in emergency services during modifications.
- Run a fly car out of Mase.
- The addition for storage, living accommodations, lockers, bathroom, and shower.

Requesting

Requesting council assistance to seek professional services to determine the cost of modifications to Mase Fire Station with input from career and volunteer firefighters.

Lewis Tompkins Hose Company



Proposal to Modify Tompkins Hose Station for Safer Operation and Accommodation

Add an addition onto Tompkins.

- No interruption in emergency services during modifications.
- 2. Allow for safer operations on the apparatus floor

Currently operating at a minimum of operating space around fire apparatus between the wall and the apparatus

- Allow for safe storage of first aid equipment

Current facility does not allow for climate controlled storage of first aid materials

- Remove expensive (tens of thousands of dollars) equipment from apparatus floor

The air compressor / cascade system alone costs \$40,000

- Allow for the implementation of vital health safety equipment

Eye shower equipment, required by law for the apparatus floor

Requesting

Requesting council assistance to seek professional services to determine the cost of modifications to Mase Fire Station with input from career and volunteer firefighters.



CAUTION
HIGH
PRESSURE
BREATHING
AIR





CAUTION
HIGH
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AIR



Here is a description of the scope of services required for a study as Mitchell Associates Architects see it.

Beacon Firehouse Reduction Study

Project Understanding:

Mitchell Associates Architects PLLC (MAA) proposes to do an analysis to determine the best approach to consolidate Beacon Engine Company #1, Mase Hook & Ladder and Lewis Tompkins Hose Company #1 (3 stations) into the Mase & Tompkins stations (2 stations). This will require that improvements be made to both the Mase & Tompkins stations. The analysis will be based on the following assumptions:

- The City intends to maintain this 2-station arrangement for a minimum of twenty years, requiring the proposed improvements to anticipate, and allow for probable growth in the department over that time period.
- The improvements will include preparing the building systems to be viable for at least 20 years (the repairs done in 2016-17 were intended for a 5-10 year useful life, to last until the new headquarters would be built).
- The improvements may trigger the requirement to bring one or both buildings up to current codes and standards.
- The City wants to address the issue of firefighter safety and health, and reducing the role that the stations play in exposing the firefighters to cancer causing compounds.
- The City will assign a committee to work with MAA to make decisions that are in the City's best interests.

The tasks that MAA will perform will be:

1. Review & update the drawings of the existing conditions at Mase & Tompkins that MAA developed in 2006.
2. Review the mechanical, plumbing & electrical/fire alarm systems and make recommendations for any improvements to allow a 20-year minimum useful life.
3. Review the building envelopes and make recommendations for any improvements to allow a 20-year minimum useful life.
4. Review the program that MAA developed with the City's fire station design committee in 2016 to determine what components of the program will be implemented, and how to divide them between Mase & Tompkins.
5. Based on the City's acceptance of the results of Task 4, prepare schematic floor plans.
6. Based on the City's acceptance of the results of Task 5, prepare schematic elevations.
7. Based on the City's acceptance of the results of Task 6, prepare a project budget.
8. Report results to the City

Project schedule:

If the City authorizes this work by the end of February 2019, MAA will complete the work within 3 months of authorization.

Project Team:

- Mitchell Associates
- Dan Nichols, P.E. (code specialist) – Code issues with a particular focus on the IEBC
- NLG Engineering (MEP engineer) – Evaluation of existing MEP, recommendations for improvements, recommendations to serve any additions, and budget #'s for improvements
- Craig Maloney (structural engineer) – Walk the buildings & comment. Identify any needed physical testing (testing would be added scope), respond to Dan Nichols comments.
- NASCO (estimator) – Basic budget #'s.

Presentation Summary

- Requesting three career firefighters
- Requesting Council assistance to seek professional services to determine the cost of fire stations modifications