

Boxborough Fire Station Building Committee

Boxborough Firehouse Needs



April 7, 2025

This Presentation Will Discuss:

Why does Boxborough need a new firehouse?

How did the Town decide on the location for the new firehouse?

How did the Town determine the size of the new firehouse?

What does the conceptual design look like at 72 Stow Rd?

Why Does Boxborough Need a New Firehouse?

Current Firehouse, Built from 1958-1962, is 63+ Years Old & Does Not Meet Fire Department's Requirements

We have grown from a small volunteer force to:

- 10 full-time employees
- 24/7 staffing

Our Fire Department services include:

- Fire suppression
- Emergency medical services
- Hazardous materials mitigation
- Fire prevention
- Public education
- Other emergency services


The current space does not meet our needs:

- Our apparatus bay cannot house all of our expensive equipment
- Due to lack of public water we must use and house pumper trucks, which tend to be larger
- The dormitories do not separate men's and women's spaces
- We do not meet current code, standards and best practices


How Did the Town Decide on the
Location for the New Firehouse?

Boxborough Select Board Appointed a 7-Member Committee to Select the Best Site

Fire Station Building Committee (FSBC) worked with an architecture firm (Context) and Owner's Project Manager (OPM) (Vertex) to study potential sites



FSBC reviewed 10 sites studied by previous Boxborough Building Committee and agreed to drop these sites due to extensive limitations



FSBC focused on 5 sites in two phases to identify the best option

502 Mass Ave
(current firehouse site)

72 Stow Rd

700 Mass Ave

975 Mass Ave

1320 Mass Ave

FSBC Studied Key Characteristics of Sites in 2 Phases

- Phase 1 included features such as how well a firehouse could fit on the lot and support the needs of the fire department, topography, sight lines, land acquisition costs, and proximity to neighbors
- Based on these criteria, FSBC voted to move 502 Mass Ave and 72 Stow Rd to the Phase 2 assessment
 - 1320 Massachusetts Ave was dropped from consideration as the property owner was not willing to sell under conditions acceptable to the Town
 - 975 Massachusetts Ave fell out of consideration due to the high cost of purchase and land preparation required, specifically blasting of ledge
 - 700 Massachusetts Ave was not moved to Phase II because of wetlands, creek, well and zoning setbacks, topography, and a zoning bylaw for Town Center zoning that restricts the size of a building to less than 15,000 sq ft and the risk and challenge, including delays, that the Town could face in getting a variance for the proposed firehouse, which is greater than 15K sq ft

Phase 2 Assessment

	502 Mass Ave	72 Stow Rd
Criteria	Weighted Score	Weighted Score
Well Water	25	15
Percolation Test for Septic	40	50
Response Time	50	40
Supports FD Program	30	50
Conceptual Estimated Total Cost	10	50
Wetlands	16	40
Sustainability	16	32
Special Site Conditions	15	20
Zoning	15	5
Communications	10	8
Tied Items	126	126
Total Score	353	436

FSBC Selected 72 Stow Rd for the New Firehouse

The total estimated conceptual cost of the project at 72 Stow Rd was more than \$6 million less than at 502 Mass Ave

The FSBC felt that the \$3.9 million needed for temporary space during building at 502 Mass Ave had no long-term value for the town

The \$1.2 million purchase cost for 72 Stow Rd was seen as an investment in the Town since this payment would be used for affordable housing in town

The FSBC was concerned about encroaching wetlands on the 502 Mass Ave site

The 72 Stow Rd site would better support the functions of the Fire Department

Building 502 Mass Ave we would have impacted any future expansion for the police department

How Did the Town Determine the
Size of the New Firehouse?

Town Worked with Consultants to Estimate Program Requirements and Size

- Program requirements and size assessed three times over past 10 years
- Program requirements considered:
 - Current and future staffing needs
 - Equipment and storage needs
 - Space for staff training, emergency operations and large group meetings
 - Boxborough has only station that must meet all needs; many other communities have a central headquarters and substations
 - Parking requirements
- Needs assessment suggested need for a 24,000 GSF Firehouse
- Conceptual design work has space down to 20,800 GSF (13% reduction)
- More specific design could reduce size further

Firehouse Conceptual Design Spaces

Firehouse Spaces	Concept Design GSF	% of Design
Apparatus Bays	8,827	54%
Gear Storage and Decontamination	1,089	7%
BERC Storage	243	1%
Equipment and Other Storage	1,167	7%
Building Mechanicals	726	4%
FD Office Space	1,121	7%
FD Staff Conference Room	222	1%
Public Entry & Triage Space	376	2%
Emergency Operations Center/Training Room	896	5%
Firefighter Living Quarters	1,208	7%
Fitness Room	590	4%
Net Sq. Feet	16,465	
Grossing Factor	26.33%	
Gross Sq. Feet	20,800	

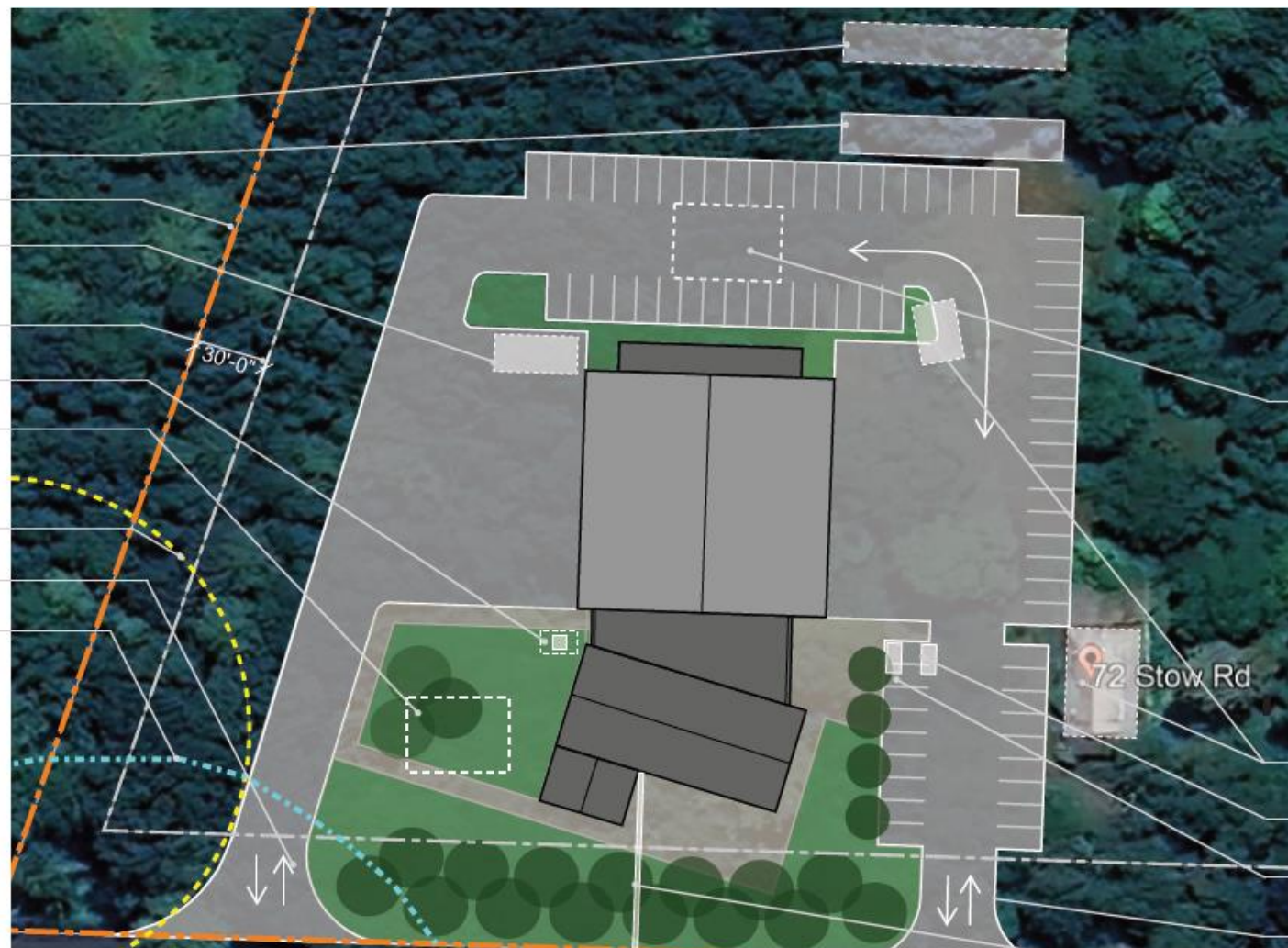
What Does the Conceptual
Design Look Like at 72 Stow Rd?



context
ARCHITECTURE

MARCH 18, 2025

LEACHING RESERVE AREA
 LEACHING FIELD
 PROPERTY LINE
 UNDERGROUND FIRE
 PROTECTION CISTERN
 BUILDING SETBACK LIMIT
 TRANSFORMER
 STORM WATER
 INFILTRATION
 PROTECTIVE WELL RADIUS
 FIRE DEPT. ACCESS
 WETLANDS SETBACK



AREA:
 16,800 SF FIRST FLOOR
 4,000 SF SECOND FLOOR
 20,800 SF TOTAL

PARKING:
 74 CARS

STORM WATER INFILTRATION

EXISTING BUILDINGS

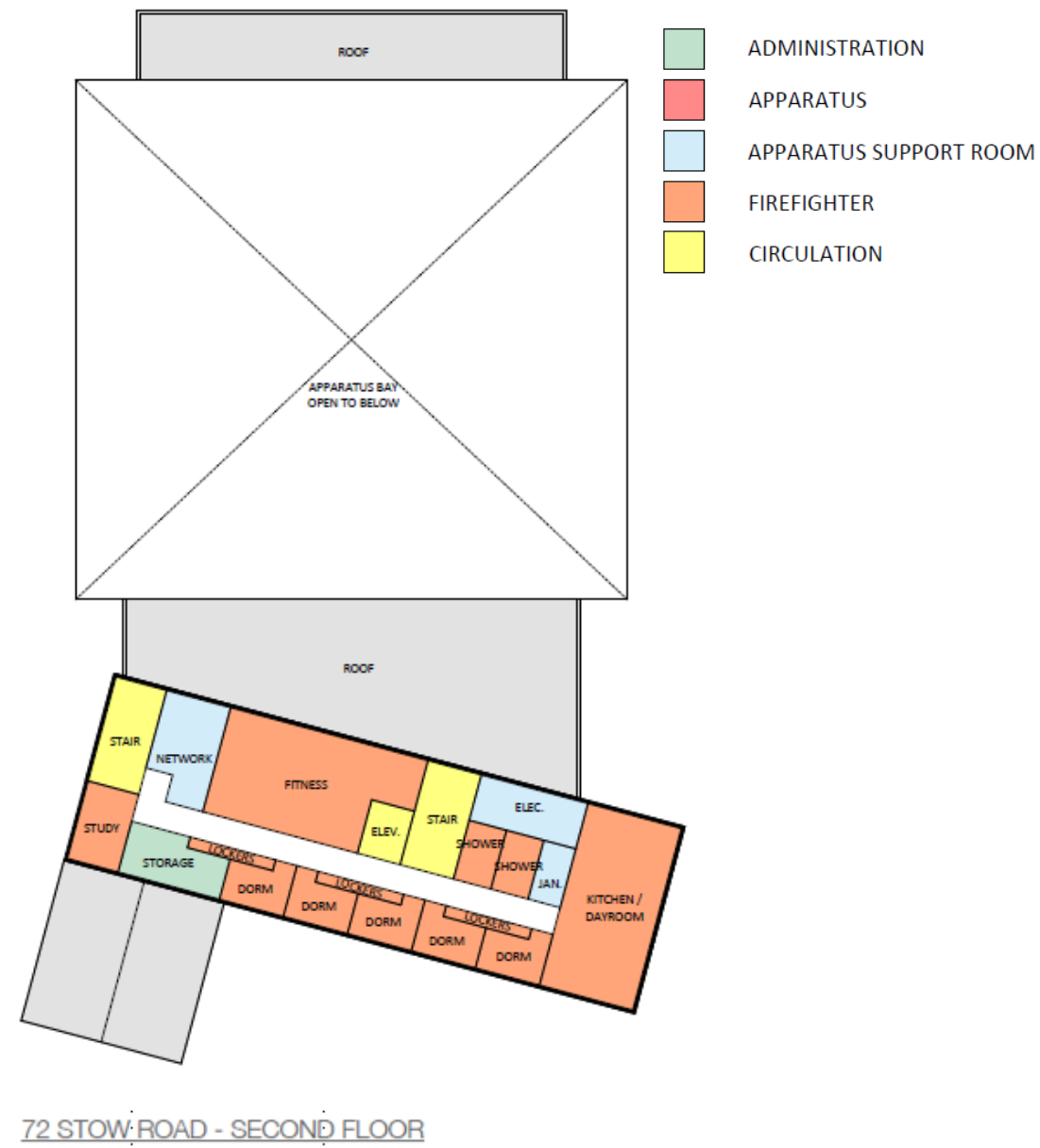
PUMP CHAMBER

SEPTIC TANK

PUBLIC ACCESS

PROPOSED GAS SERVICE TO
 CONNECT FROM EXISTING MAIN
 WITHIN STOW ROAD

BOXBOROUGH FIRE HQ - CONCEPTUAL SITE PLAN - 72 STOW ROAD



BOXBOROUGH FIRE HQ - CONCEPTUAL SITE PLAN - 72 STOW ROAD

Questions?

Fire Station Building Committee

- Mary Brolin, Chair
- Mac Reid, Vice Chair
- Sara Lavado, Clerk
- Alan Ford
- Larry Grossman
- Maria Neyland - Finance Committee Representative
- Priya Sundaram - Select Board Representative
- Town Administrator Michael Johns - exofficio
- Fire Chief John Kivlan - exofficio

For questions please contact the Fire Station Building Committee at
fsbc@boxborough-ma.gov

For more information please go to: <https://www.boxborough-ma.gov/727/Fire-Station-Building-Committee>