

Boxborough Fire Station Building Committee

Site Selection Phase 1



December 4, 2024

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

Purpose of this Presentation

Review Fire Station site selection process

Update on Phase 1 results of site selection process

Share next steps

Address questions

Site Selection Process To Date

Sites Prior Committee Assessed and Dropped (1 of 2)

Site	Background	Issues
Campanelli Campus	Former Cisco Beaver Brook campus now Campanelli's "The Park" development	Location considered too remote for fire station
Land behind new DPW at 873 Mass Ave	Picnic Trust municipal land	Steep grade at back of DPW; Concerns on Mass Ave sight lines for fire apparatus, and sharing steep DPW driveway
866 Mass Ave	Corner lot at Hughes Land and Mass Ave, across from new DPW	Heavy ledge
Land adjoining Town Hall	Would require apparatus approaches from both Mass Ave and Middle Road, acquisition of all or portions of adjoining private residences	Sharp drop off from town hall parking lot to adjoining parcel not favorable for through-circulation of apparatus from Mass Ave; Overlapping protection zones of nearby PWS; Concerns expressed by Chief White
Land abutting old DPW (593 Mass Ave)	Wanted to see if feasible to make use of old DPW combined with adjoining parcel	Wetlands and buffer zone issues reviewed by Town Planner; Appeared infeasible due to wetlands and limited upland

Sites Prior Committee Assessed and Dropped (1 of 2)

Site	Background	Issues
Land between Blanchard School and Sargent Library	Municipal Land (Hager)	Stream and wetlands issues; would require sharing Library driveway with emergency apparatus; Sight line issues
Hager Land	Municipal land behind Library	Grade too steep; would require sharing Library driveway with emergency apparatus. Sight line issues
126 Mass Ave	Corner of Mass Ave and Summer Rd	Extensive wetlands
871 Mass Ave	Old Tree Masters site next to new DPW	1.9 acre lot too deep and narrow for apparatus movement
1300 Mass Ave	Commercial property corner of Mass Ave and Burroughs Rd. BBC evaluated in 2019 for feasibility of converting to PS building.	Evaluation conducted by HKT Architects and Pare Structural Engineers. Building is aging, needs renovation. WW system leach field to east on Mass Ave, nearing end of life. Estimated renovation would likely exceed costs of new construction

Sites Current Committee Has Assessed and Dropped

1320 Mass Ave

- Owner not willing to sell under conditions the Town is willing to approve
- Dropped from consideration 9/12/24

975 Mass Ave

- Owner indicated price as \$3.5 million for the land
- Land has significant ledge – neighboring lot removed 24 tons of ledge for a 6,000 square foot building; cost to remove estimated at \$2.5 million
- Dropped from consideration 10/10/24

Sites Reviewed in Phase 1



502 Mass Ave

Pros

- Town already owns land, no acquisition costs
- Clear sight lines
- Placement on site would allow for dual access for apparatus
- Could site within current wetland boundaries; need to study further
- Site history is known
- Few neighbors and they are already used to this site for the fire station
- Could impact police department expansion but trying to consider ways to minimize the impact
- Permitting would require MA DOT, but since it's the current site, this may ease the process
- Close to town center, provides municipal street presence
- Would need new septic but there is an existing well and other utilities

Cons

- Lot is tight with wetlands which constrains siting of building and may affect program layout as well as traffic flow and truck turnaround space
- Would require temporary operations during construction with associated costs for swing space

72 Stow Rd

Pros

- Good sight lines, but there is a stonewall that could affect sight lines somewhat
- Site is large allowing for design that maximizes program needs, parking, circulation, landscaped areas
- No need for temporary operations during construction
- Size of lot supports program layout and dual access for apparatus
- Site does not have wetlands where building would be sited and site is fairly level
- Town plan calls for a community center on property, which could restrict placement of fire station somewhat but not significantly
- No special permitting anticipated at this time
- Would need new septic and well, but other utilities available

Cons

- Land acquisition cost is \$1.2 million
- No history of the site has been provided, so there could be unknowns underground; site also has an old residence on it
- Over 300 neighbors and some concerned about siting within the neighborhood
- Site is off of Mass Ave, so less of a municipal/town center presence

700 Mass Ave

Pros

- No need for temporary operations during construction
- Placement on site would allow for dual access for apparatus
- There are neighbors but they don't seem concerned about location
- Does not affect long-range town planning
- Would be close to town center, providing municipal street presence
- Would need new well and septic, but other utilities available

Cons

- Land acquisition cost is \$1.5 million
- Hills and curves hinder sight lines
- Lot is tight with wetlands and other restrictions so constrains siting of building and may affect program layout
- Zoning by-law restricts square footage of building on lot to 8,000 to 15,000 square feet; by-law also doubles square footage over 12 feet, which affects apparatus bay
- Legal opinion from land use attorney states that Boxborough unlikely to meet hardship restrictions that would allow our building

Phase 1 Assessment and Results

Site Selection: Phase 1

BOXBOROUGH FIRE STATION - SITE SELECTION MATRIX - ROUND 1 FINAL

Date:		FSBC Scoring									
11/21/2024		502 Mass Ave		72 Stow Road				700 Mass Ave			
EVALUATION CRITERIA	Definitions	Weight %	New Bldg	Weighted Score	Notes	New Bldg	Weighted Score	Notes	New Bldg	Weighted Score	Notes
Initial Review Round 1 No Testing Required											
Land Acquisition Cost	Cost to acquire the site.	10	5	50	Owned	1	10	\$1.2M	1	10	\$1.5M
Sight Lines - Visual only	Observation of clear sight lines for fire apparatus entering onto street based on visual review only. No traffic study.	10	5	50	Clear	4	40	Stone wall	2	20	Hills curves
Test Fit/Lot Size	How well the footprint of the conceptual design, based on the Space Needs Study, fits onto the site including parking, landscaped areas and circulation.	10	3	30	Apron length, PD	5	50	Large area	3	30	Tight
Temporary Operations During Construction	Whether site requires temporary facilities during construction; increase to overall Total Project Cost. Least cost is best.	10	1	10	Cost TBD	5	50	NA	5	50	NA
Supports Program/Dual Access	Delivers the type, quantity, size and layout of spaces, as well as site features required by the program. Provides for dual access to FS	10	4	40	Dual access	5	50	Dual access	4	40	Dual access
Topographics/Wetlands/Streams	Grade of site and presence of wetlands/streams. Visual only.	8	4	32	Wetlands	5	40	Majority level	2	16	Wetlands; well zones
Site History	Provided history of site including former uses which may impact soils or unknown/latent conditions; historic value.	8	4	32	Known history	3	24	No history provided. Residence	3	24	No history provided. Residence
Proximity of Neighbors	Relative distance of neighboring structures from property line and building site. Neighbor opposition.	7	5	35	None	2	14	Yes neighbors	4	28	Enclave
Long Range Town Planning - Master Plan	Impact of the proposed use of the site on other current or future planning initiatives within the community and development opportunities.	7	4	28	Slight PD expansion impact	4	28	Community Center site	5	35	None
Permitting	Requires "atypical" permitting, above and beyond typical (e.g., MassDOT).	6	4	24	MA DOT	5	30	Normal	1	6	MA DOT; ZBA
Municipal Presence/Visibility	Located near Town center or other Town facilities. Allows for a municipal street presence and clear wayfinding to public entry.	6	5	30	Fully	3	18	Off Mass Ave	5	30	Mass Ave
Available Utilities	Required building utilities proximate to the site (i.e. water, power, sewer, gas, fiber, cable).	2	5	10	Existing well; septic	4	8	Need new well, septic	4	8	Need new well, septic
SCORE		94	49	371		46	362		39	297	



Lowest Score/Worst

Highest Score/Best

Phase 1 Site Selection Results

FSBC voted to move the following sites to Phase 2:

502 Mass
Ave

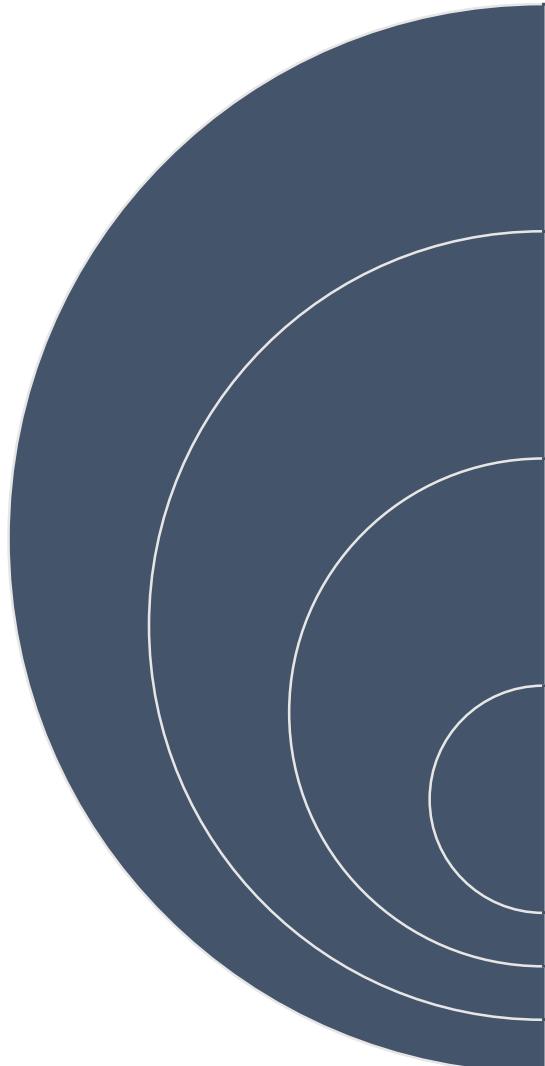
72 Stow
Road

Next Steps

Site Selection Criteria - Phase 2

- Well Water
- Percolation Test for Septic
- Geotech Survey Borings
- Response Time
- Community Support
- Neighbor Impact - Operations
- Wetlands/Survey
- Traffic Study/Vehicle Access/Sight Lines
- Special Site Conditions
- Zoning
- Neighbor Impact - Construction
- Communications
- Abatement/Demo Existing Buildings
- Conceptual Estimated Total Cost

FSBC Next Steps



Conduct Phase 2 site analysis for
502 Mass Ave and 72 Stow Road

When data available,
complete site selection matrix for Phase 2

Select a site

Develop estimate for design phase and bring to
STM in March 2025

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>