



BEDFORD VILLAGE FIRE DISTRICT

Serving Our Community Since 1923

New Firehouse
Public Informational Meeting

April 10th, 2019

Bedford Village Fire District

Board of Fire Commissioners

Heather Feldman, Chair (2023)
Kyle Carleton, Deputy Chair (2020)
John Barry (2019)
Keith Branche (2022)
Robert Mazurak (2021)

Joseph Perez, Treasurer
Angela Sour, Secretary

Dan Hollis, Attorney

Meeting Agenda

- Introduction of Team Members
- Overview of Fire Department and Fire District
- Why is a New Firehouse Needed?
- Conceptual Plans for New Firehouse
- Site Plan
- Environmental Considerations
- Financial Information
- Questions/Comments – Please hold questions until the end of the presentation

Team Members

Professional Partners

Shamberg Marwell Hollis Andreycak & Laidlaw, P.C.

P. Daniel Hollis, III, Esq.

H2M architects + engineers

Joseph Mottola, AIA, Executive VP | Chief Operating Officer

Patrick Stone, RA, Market Specialist | Emergency Services

Constance Vavilis, Senior Environmental Planner

Timothy Hazlett, Ph.D. | Hydrogeology + Water Resources Practice Leader

Naderman Land Planning & Engineering

Barry G. Naderman, P.E. | Principal

Professional Partners

IQ Landscape Architects PC

John Imbiano | Principal

Maser Consultants - Traffic Engineering

John Collins | Principal

Ronald P. Rieman | Project Manager

Chazen Engineering, Land Surveying & Landscape Architecture DPC

Steven J. Alex, PLS | Sr. Principal, Vice President

Barbara Beall, PWS, LEED AP | Principal, Director of Natural Resource Services

Professional Partners

Hawkins Delafield & Wood, LLP

Daniel G. Birmingham, Esq.

Munistat Services, Inc.

Michael Loguercio, CIPMA, President

Public Informational Meetings

Already Held

- Additional Public Information Meetings with questions and answer periods were also held by the Fire District on the following dates:

- June 28, 2017
- September 27, 2018
- November 28, 2018
- February 26, 2019



Overview of Department and District

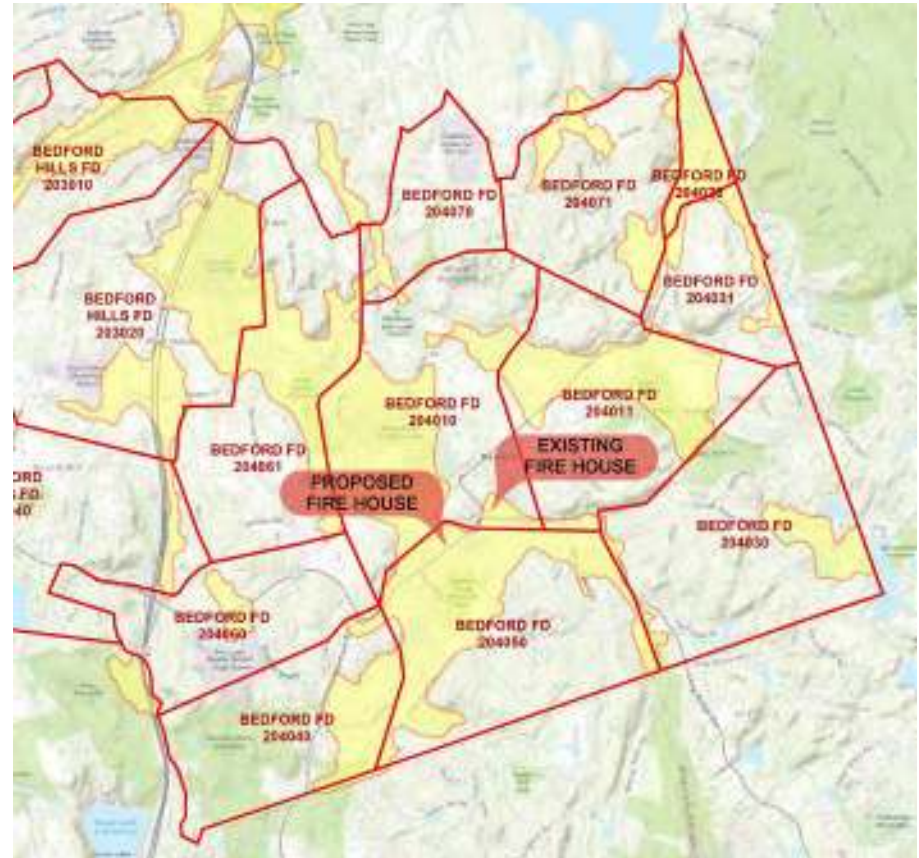
Our Mission



<https://pix11.com/2019/03/11/pix11-honors-the-bedford-fire-department/>

District Service Area

- 16.1 square miles
- 70.7 miles of road and highway
- 8 schools: over 3,520 students daily
- 4 group homes
- 4 churches and temples
- 1045 acres of nature preserve
- 1 reservoir, numerous lakes & rivers
- 4 large horse farms
- Numerous riding and hiking trails



A photograph of a two-story brick firehouse with white shutters and a large open bay door. Two red fire trucks are parked inside the bay. The text 'BEDFORD FIRE DEPARTMENT' is visible on the wall above the trucks. The image is overlaid with a semi-transparent blue filter.

Existing Firehouse

CHALLENGES

Our Challenge

- The existing Fire House was built in 1929 and is currently 90 years old. It has exceeded its useful life
 - Last renovation/addition-1957 (62 years ago)
- The existing Fire House does not efficiently meet the current needs for safety & functionality.
- In recent years, the Bedford Village Fire District has researched its options for upgrading, replacing, or adding to their existing facility
- It has been determined that utilizing the existing facility moving forward is no longer an option

Existing Firehouse

The existing building does not meet the following:

- ADA Regulations / 2015 International Plumbing Code
 - Overall accessibility throughout Station
 - Proper quantity of plumbing fixtures for building occupants (male & female)
- OSHA Regulations
 - Firehouse safety – clearances and access
- NFPA Recommendations
 - Bunker gear storage – proper and safe clearances
 - Firefighter Health and Safety Guidelines (NFPA 1581)
 - Decontamination standards
 - Training and Education – dedicated areas for classroom training
 - Facility Safety – clearances and access
 - Fire Department Administration – policy, records and committees
- FEMA Recommendations
 - Safety and Health Considerations for the Design of Fire and Emergency Medical Services Stations (FEMA FA168)

Firefighters and Cancer

*“Firefighting is a dangerous profession, and a growing body of research and data shows the contributions that job-related exposures have in chronic illnesses, such as cancer and heart disease. The National Institute for Occupational Safety and Health (NIOSH) recently undertook two large studies focused on firefighter cancer and concluded that **firefighters face a 9 percent increase in cancer diagnoses, and a 14 percent increase in cancer-related deaths**, compared to the general population in the U.S.”*



Existing Firehouse

- Existing apparatus bay depth is too shallow to permit safe access around vehicles
- A clearance of 5 feet is recommended (OSHA/Best Practice) for safe ingress and egress of responders



Apparatus front to back (zero clearance)



Apparatus against rear wall (zero clearance)

Existing Firehouse

- Existing Apparatus bays are not large enough to allow vehicle doors to open.
- Equipment can not be inspected or cleaned properly, and responders cannot mount the apparatus safely



Not enough space to open vehicle doors



Not enough space to open equipment and maintain/clean properly

Existing Firehouse

- The existing bay doors are not tall enough to accommodate modern fire apparatus. An extremely unsafe condition is created at this pinch point



Fire District is limited to custom apparatus that increase costs in order to fit within existing building



This pinch point is extremely dangerous, as anything/anyone on top of apparatus will hit the building and cause damage or severe injury

Why Not Renovate or Add-On?

- Any significant renovation and/or addition will trigger Section 1600 of the NYS Building Code to upgrade the structure to an **Essential Facility**.
 - The entire masonry façade would likely need to be braced and significant structure added. The cost would outweigh the benefits
- There is little or no space to increase footprint and no cost-effective way to do so
 - What little parking in the rear would disappear
 - Bulk Zoning Regulations will restrict the small amount of space to build
 - Access to the rear with Apparatus is illogical and a safety hazard
- Any significant renovation and/or addition will trigger the full force of the ADA
 - Corridors, doors, spaces, etc. would need to be completely reconfigured
 - Neither cost-effective nor possible
- The only practical way to re-use the existing site is to completely demolish the existing station and re-build
 - The result would be a far too small and inadequate station in its place

New Firehouse

PROJECT DESCRIPTION

Considerations & Goals

- Provide a facility that promotes the following:
- Safe, functional and properly designed layout for responders
 - Vehicle clearances / truck layout
 - Improved bunker gear access / areas
 - Lighting & Ventilation
- Efficient response to calls
- Appropriate space for existing and future replacement apparatus
- Adequate facilities for Department meetings and training exercises
- Adequate facilities for administration requirements of the Department and District
- Adequate Parking

Proposed Fire Station

Concept Rendering



Proposed Front Entry

Concept Rendering

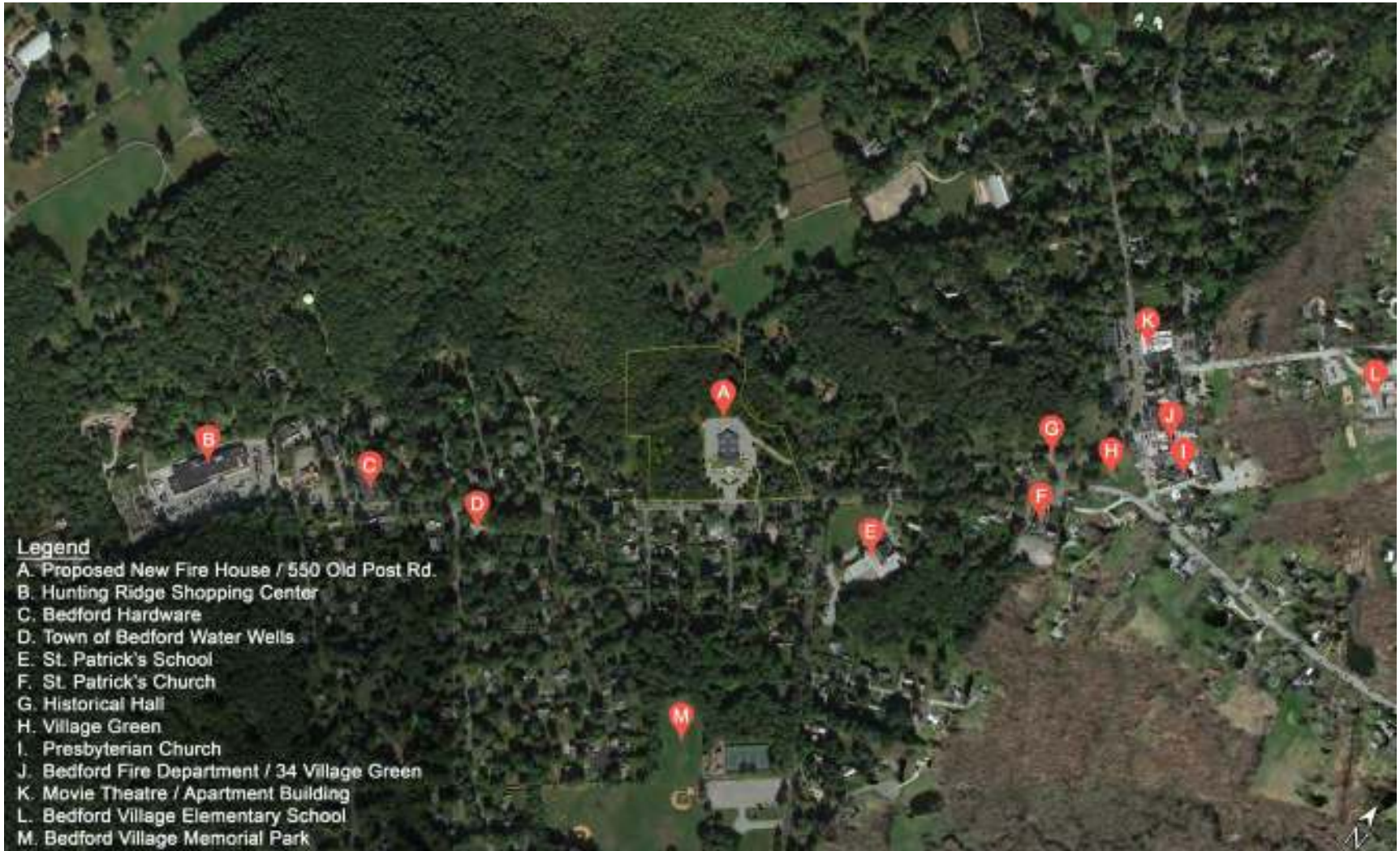


Land Acquisition

Other Properties Considered

- Expansion of existing Firehouse at 34 Village Green
- Corner of Seminary Road and Pound Ridge Road
- Corner of Old Post and South Bedford Roads (across from Shell)
- Lot North of Playhouse building
- 640 Old Post Road
- Corner of Old Post and Crusher Road
- **550 Old Post Road**

Proximity to Existing Station

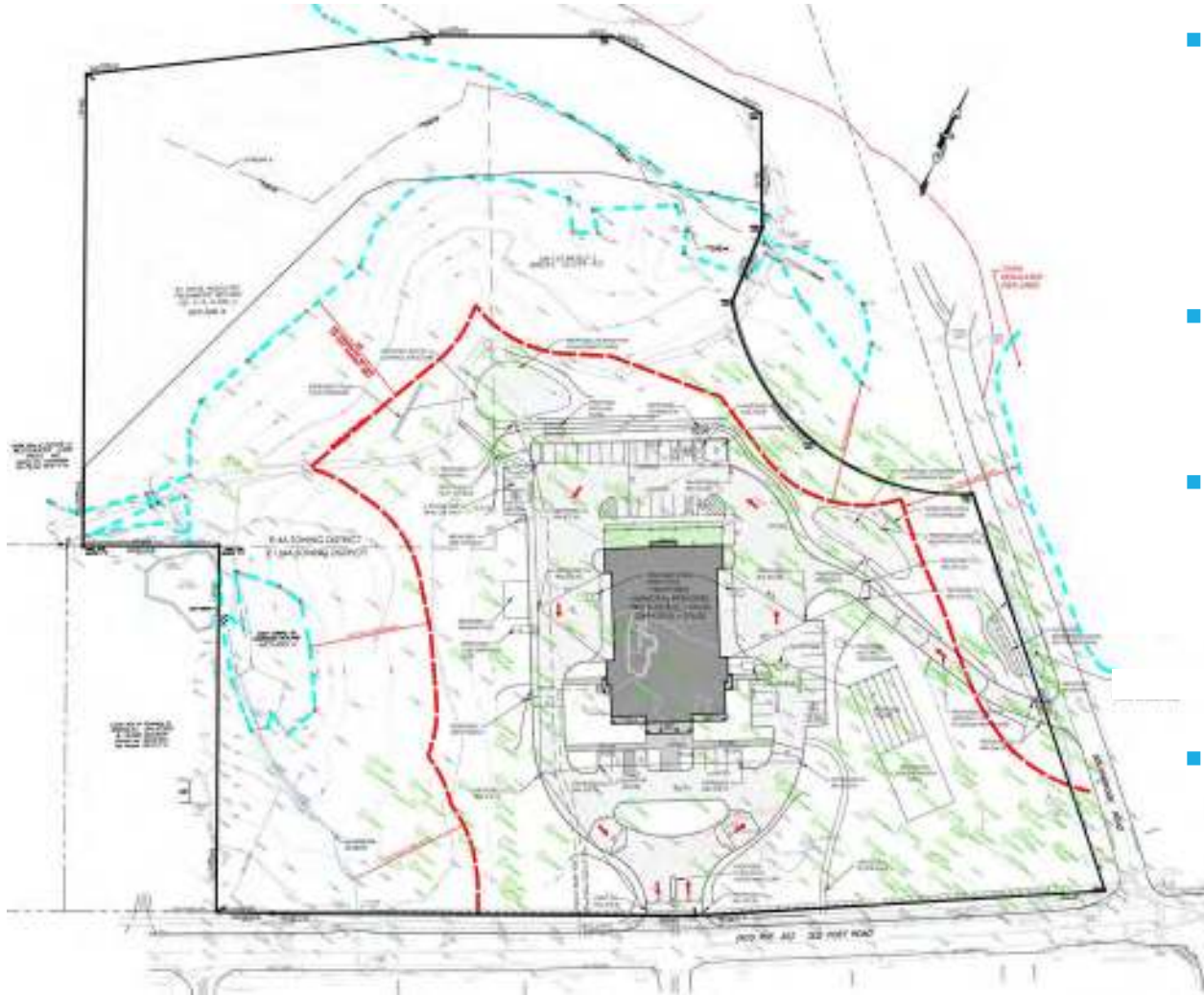


Aerial View



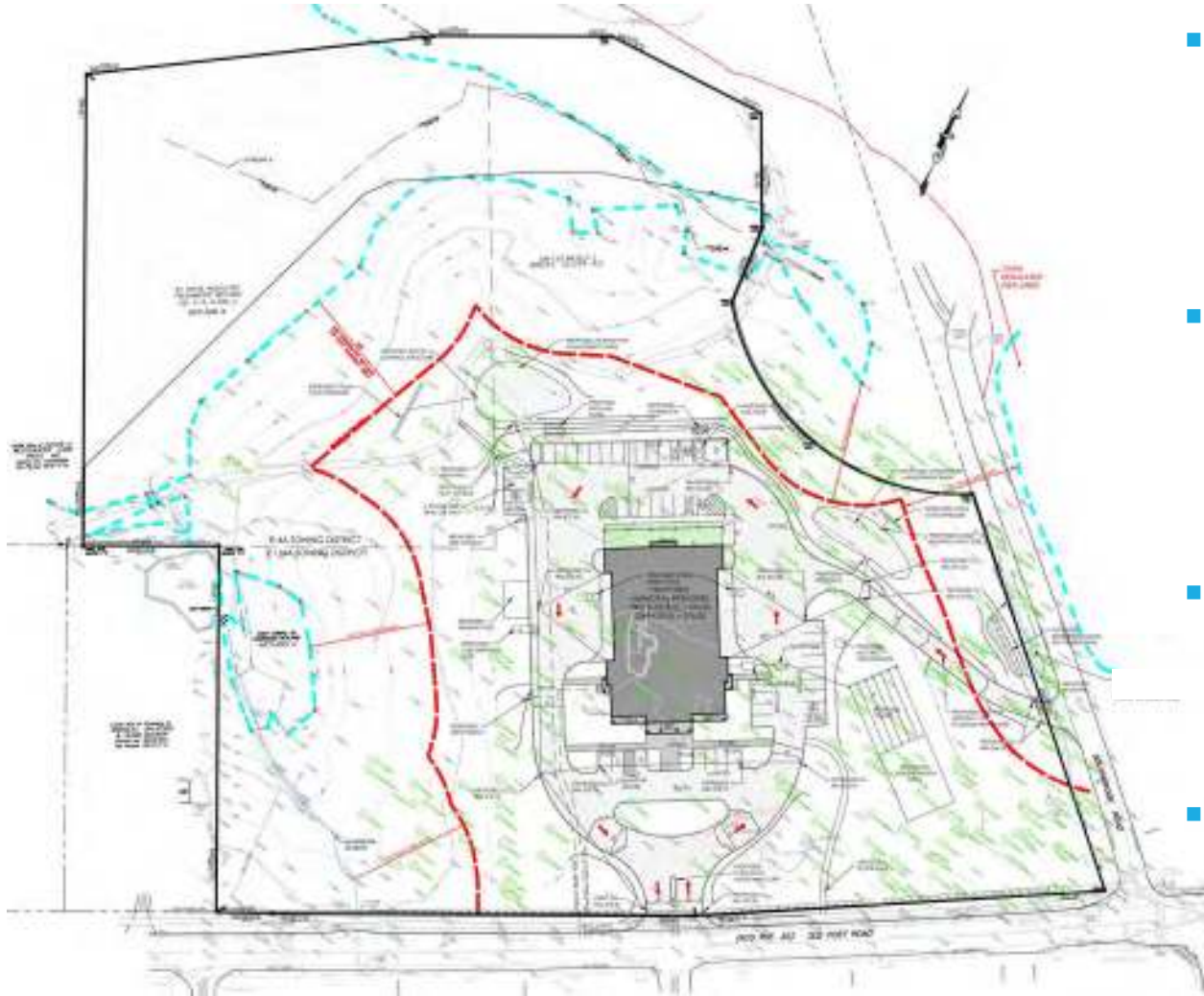
- 10 Acre Wooded Site
- Approx. 3 acre Limit of Disturbance during Construction
- Approx. 1.5 acres revegetated
- Approx. 8.5 acres of 10 acre site remains vegetated

Proposed Site Plan



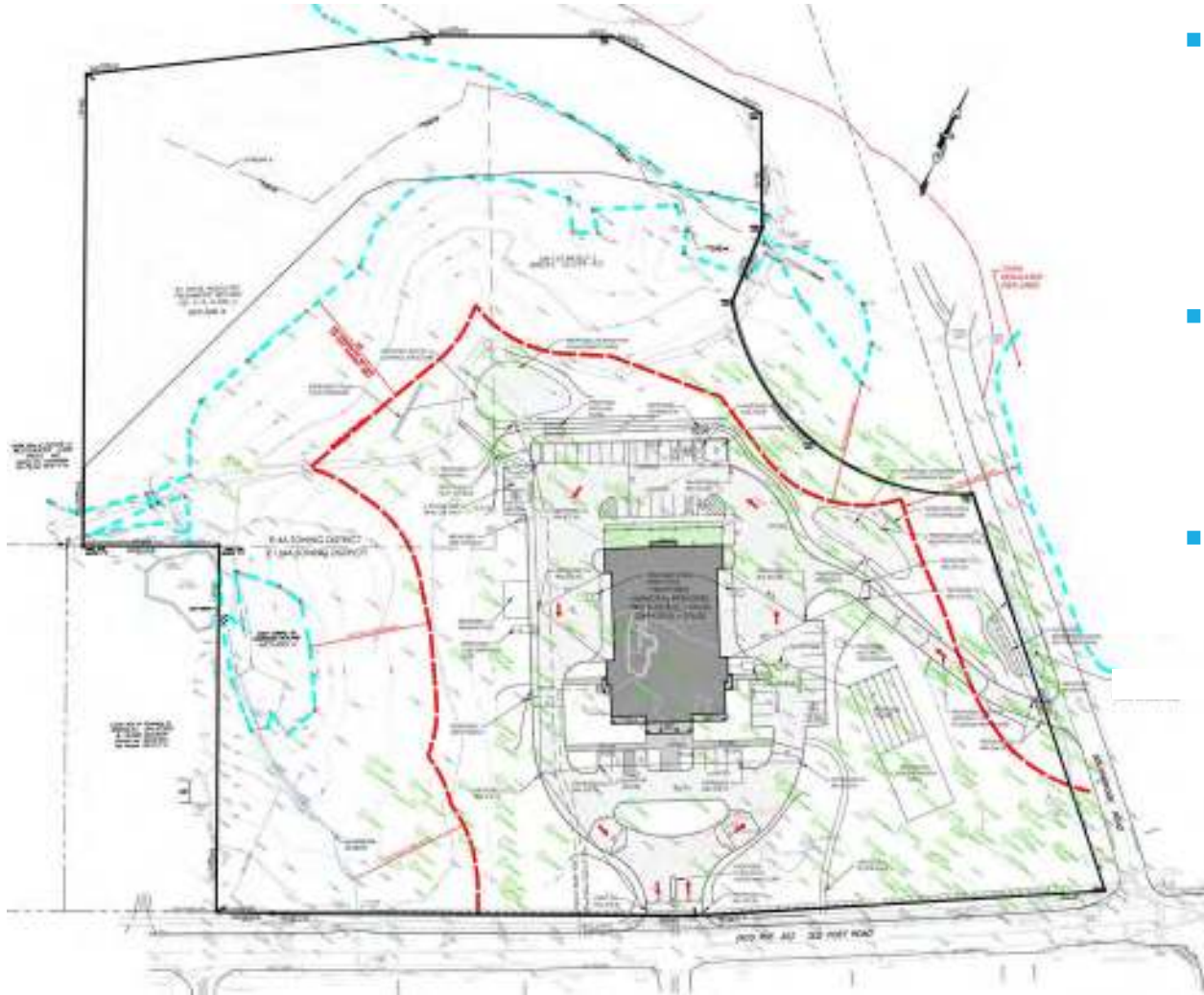
- Site development within level portion of site and nearly entirely beyond all wetland buffers
- Main access off Old Post Road (Route 22)
- One-way secondary access off South Brook Road for inbound Emergency Responders
- Building set back over 150' from Route 22

Proposed Site Plan



- Narrow portion of building faces towards Route 22 with Apparatus bays facing sides
- Secondary access off South Brook Rd is angled to eliminate direct line of sight to Apparatus Bays
- Responder parking at nearest entry to gear room
- Emergency vehicles exiting bays have a clear path of main driveway to Route 22

Proposed Site Plan



- Visitor/Handicap parking at front of building and not within path of Emergency Vehicles
- Additional parking in rear for member training and meetings
- (4) Four spaces provided for public access to existing BRLA Trail and Westchester County Land Trust Property

Proposed Landscaping Plan



- All disturbed areas will be landscaped and re-vegetated
- Screening provided to reduce visibility of building along Route 22 and secondary access but not obscure line of sight for exiting emergency vehicles
- Front planted island includes hedgerow to screen front parking area from Route 22

Environmental Considerations

HIGHLIGHTS OF ISSUES UNDER CONSIDERATION
AND MATTERS RAISED BY PUBLIC COMMENT

Regulatory Compliance

The construction of the firehouse will be conducted in accordance with applicable state and local regulations.

Agency	Permit or Approval Type
New York State Department of Environmental Conservation (NYSDEC)	Stormwater Pollution Prevention Plan (SWPPP)
New York State Department of Transportation (NYSDOT)	Perm 33 – Driveway Access Permit
Westchester County Department of Health (WCDHS)	Tank Registration and Wastewater Permit
New York City Department of Environmental Protection (NYCDEP)	Stormwater and Wastewater Review

In addition to the agencies above, the Fire District has been working closely with the Town of Bedford including the Town Planning Board, Wetlands Control Commission and Conservation Commission, and Town of Bedford Building Department. The District has also coordinated with the New York State Historic Preservation Office.

No Fire Horn

We will NOT have a horn that sounds with every call



Current Horn Notification



Proposed Mass Notification System

A Mass Notification (Voice/Siren) System will only be utilized during natural disasters (Ex. Tornado, Hurricane or Major Threat) or should we have a complete failure of the pager alert system



Current Pull Box for Emergency Assistance (3 rounds of 5 blast)



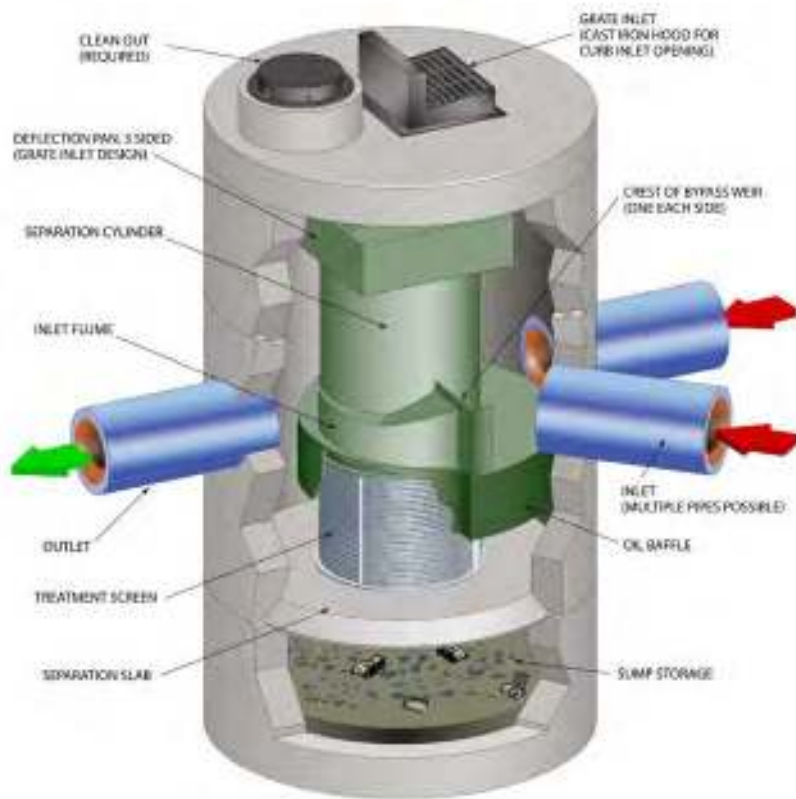
Proposed Call Box for Emergency assistance (will dial 911)

Current pull box operates the horn and the proposed will be a telephone line to 911

Air Quality Protection

- No waste incineration on site.
- Minimal emissions on site are associated mostly with boilers and emergency generators.
 - Fume exhaust system will be installed for the apparatus bay; this is critical for the health and safety of the volunteers and complies with International Mechanical Code for stack height to minimize any effect to local air quality.
 - Boilers proposed are up to four tankless high efficiently water boilers; these are similar to ones used for hot water in residential homes and newer schools.
 - Emergency generator will only operate during emergencies / unplanned power outages as well as a weekly test (required). Generators are required for “Essential Facilities” as stated in FEMA FA168 and other published guidelines.

Stormwater Mitigation



STORMWATER WATER
QUALITY TREATMENT STRUCTURE

- Site Plan development has been coordinated with NYCDEP and Town of Bedford Conservation Board
- All pavement and roof runoff will contribute to water quality treatment structures prior to discharge to Biofiltration Basins
- Stormwater design discharge points maintain hydrology to adjoining wetland resources

Stormwater Mitigation



- The Stormwater Pollution Protection Plan (SWPPP) will mitigate and manage erosion and sedimentation during construction
- All drainage and SWPPP is in full compliance with New York State Department of Environmental Conservation (NYSDEC) requirements
- The Town of Bedford and NYCDEP will be conducting inspections throughout construction to ensure compliance with the approved SWPPP and to provide a final sign-off upon completion of construction

Natural Resource Preservation

- Project includes the removal of invasive species of vines and other plants throughout the site
- Development requires approximately 3 acres of disturbance
- Approximately 1.5 acres of disturbance will be revegetated with native species and additional deciduous trees will be planted
- Approximately 8.5 acres of the 10 acre site will remain vegetated
- A vegetation maintenance plan will be implemented to ensure the success of the site vegetative resources
- The Fire District will act as a responsible steward of the site



Aquifer Overlay – Aerial



Environmental Concerns

“The area of newly paved and built-over impervious surfaces will reduce aquifer recharge due to the diversion of rainfall away from the site and the underlying ground water system”

Response: *The new Firehouse will not result in significant adverse impacts to the water quality of the aquifer or reduce recharge in any significant way. The new Firehouse development plan incorporates several features that will be protective of the environment including measures to manage both the quality and quantify of stormwater and will continue to infiltrate this water on-site. Importantly, the new Firehouse is not inconsistent with thousands of other developments that are sited over the Town of Bedford aquifer and drinking water aquifers across the country.*

However, because it will be complying with environmental regulations that are stricter than many those older developments were built to, and because it has been carefully designed in accordance with cutting edge environmental technologies which includes stormwater treatment structures for all paved and roof areas it will not result in significant adverse impacts to water quality or the environment. Below, in the point by point information that follows, this fact is further explained.

Environmental Concerns

“Even if rainwater is redirected to unpaved ground elsewhere onsite, it will be far less effective in reaching the underlying aquifer due to increased runoff. At present rainfall is evenly distributed over a broader area”

Response: *The new Firehouse will not reduce the ability of the underlying aquifer to recharge in any significant way. As discussed in the answer to Question 2 above, stormwater bioretention basins will retain and infiltrate all stormwater generated on the site into the basins and from them it will be released to underlying soils and the aquifer. These basins are geographically dispersed on the site - one is on the eastern border of the site, closer to Southbrook Road and the other is on the northern portion of the site, north west of the new Firehouse building footprint. Currently, stormwater runoff on the site feeds the wetlands located there, and the bioretention basins will maintain this hydrologic input as well.*

It may be helpful to note that in 1985, the Town of Bedford had an aquifer study prepared which estimated the average groundwater recharge budget within the Town of about 20 million gallons per day. This is a significant figure that results from town-wide infiltration. The NYSDEC and NYCDEP regulations that the Firehouse will conform to apply to similar projects and serve to help maintain appropriate quality and infiltration of stormwater Town-wide.

Reference: Leggette, Brashears & Graham, Inc. (1985). Groundwater Assessment for the Town of Bedford

Environmental Concerns

“Extensive compaction of unpaved surfaces adjacent to the firehouse during construction will permanently reduce percolation of rainwater into the subsurface, thus reducing aquifer recharge and increasing runoff”

Response: *The work on the new Firehouse will neither compact soils site wide nor increase runoff from the site. The new Firehouse will disturb a total of 3.1-acres of a 10- acre site. Of this 3.1-acres, 1.5-acres of new impervious area will be in place when construction is completed and 1.6-acres will be restored, utilizing native vegetation that is consistent with the surrounding environs and has greater habitat value than landscaped species. The 1.5-acre impervious area will no longer infiltrate stormwater, however, the bioretention basins will manage the stormwater from that area, retaining it on site and allowing it to infiltrate*

Environmental Concerns

“The massive foundations needed for the firehouse structure will require extensive disturbance of the subsurface at significant depth. This will permanently disrupt the groundwater and subsurface water flow direction that is presently critical to aquifer recharge”

Response: *The design of the foundations for the new Firehouse has not been finalized and estimates of their cost and nature have been developed to the conceptual level only to facilitate conservative cost estimation. However, no foundational elements appropriate for a building this size would result in a subsurface structure large enough to significantly alter the underlying aquifer conditions.*

The depth of any foundation structures below grade will be of little consequence to groundwater flow. The proposed structure is at the top of a hill, along a groundwater flow divide. The groundwater will continue to flow downhill and around the selected foundation structures.

Environmental Concerns

“The large volumes of water required to support the ongoing needs of fire equipment at the new site will be drawn from the water table close to the surrounding residential areas. These areas are dependent upon the same finite water resources”

Response: *The new Firehouse will receive water from the Town water supply, not a private well, and therefore will be sourced from the Town wells. The current Firehouse currently uses a comparable volume of water and is also sourced from same Town wells making the increase on this supply from the new Firehouse minimal. The typical daily demand from the new Firehouse would be less than 200 gallons per day, which is a small number when compared to the daily demand on the Town wells. This typical daily usage is relatively low because the Firehouse will not be manned on a full-time basis. There are also times when the Firehouse will utilize more water per day than the average demand for the building. For example, during training exercises, the new Firehouse water demand is expected to peak about approximately 1,000-1200 gallons per day however, even this is still a small demand in relation to the Town’s available supply. For context, according to the United States Environmental Protection Agency, for typical residential use, each person uses about 80-100 gallons of water per day.*

Water is also used for firefighting; this use protects the lives and property of the residents of Bedford Village, and the criticality of being able to utilize water resources for this purpose cannot be overstated. Water for firefighting purposes is most often sourced from hydrants located at specific points throughout the Town; these are also fed from Town wells.

Lastly, it is important to note that all of the practices, exercises and water usage for firefighting currently take place at and in relation to the existing Firehouse and hydrant locations. The Firehouse water usage will simply take place in a new location down the road if the new Firehouse is constructed.

Environmental Concerns

“Potential groundwater contamination may result from the operation of what amounts to an industrial scale operation that will be located in what is now a pristine woodland”

Response: *The new Firehouse is a community facility providing an essential service to Bedford Village and there are no industrial operations planned. Most commonly the Firehouse will be utilized for emergency response operations, meetings, training and sporadically, for community events. Meetings include twice monthly trainings with 20-30 individuals, a monthly Fire Department meeting with 20-30 individuals and the monthly public Fire District meeting with approximately one dozen people. In addition, seasonal ad-hoc use by other not-for-profit groups in the Town of Bedford such as the Boy Scouts is likely to occur on a weekly basis and will most often entail site usage by a small number of individuals (typically less than 15 people). Special events, such as a Fire Department Pancake Breakfast, will be held on an ad-hoc and infrequent basis.*

The Site will be accessed for emergency calls at a rate of approximately two per day. Emergency response operations that require clean up of equipment will occur within the new Firehouse apparatus bays which are equipped with a special drainage system that discharges to a capture tank to be pumped and then treated off site. All equipment washing and decontamination, including gear and apparatus will be conducted within the area that discharges to this special system preventing the potential for significant adverse impacts from contamination from these sources.

Environmental Concerns

Response Cont'd: *The Firehouse site is within the NYSDEC Critical Environmental Area (CEA) that corresponds to the Town of Bedford Aquifer Protection Zone (APZ) and the Firehouse will be in compliance with the provisions of the Town of Bedford Aquifer Protection Ordinance. Importantly, the Firehouse wastewater generation will be well below what is allowed by the density standards of the Aquifer Protection Ordinance, which does not allow more than 300 gallons per wastewater per acre per day. This means that the 10-acre site would be permitted to use and discharge up to 3,000 gallons per day and be fully compliant with the Aquifer Protection Zone Regulations however the new Firehouse usage will be much lower. In addition, the Firehouse is not out of context with land uses that currently exist within the APZ. The CEA area of the APZ encompasses approximately 21% of the land area of the Town and includes a vast mix of land uses including commercial and industrial operations.*

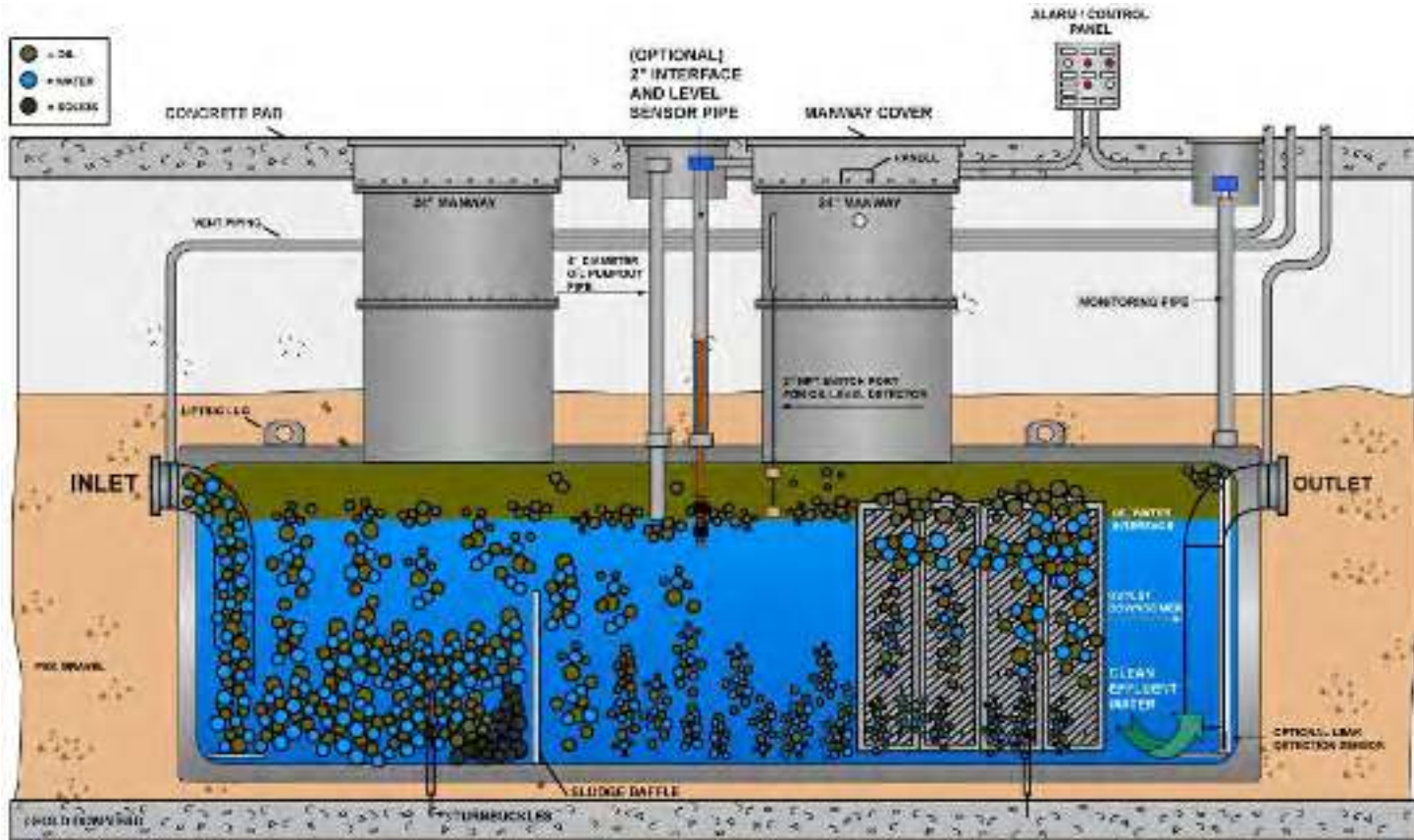
Further, the Firehouse includes design features that will avoid significant adverse impacts from the heating and cooling fuel on the site which include a storage tank for No.2 Fuel Oil to fuel an emergency generator. This will be installed and maintained in accordance with all Westchester County Chemical Bulk Storage Regulations. While the final storage tank model has not yet been selected, compliance with Westchester County Department of Health regulations will ensure that appropriate features to minimize risk from spills are present. These will include the selection of double-walled tanks with monitoring between the walls, and anti-syphon valves. The tank will be protected by bollards to prevent impact related damage and will be installed on a concrete pad with a curb to further prevent spillage.

Critical Environmental Areas

- Site is located in the Town of Bedford Aquifer Overlay
- Fuel Storage on Site:
 - No. 2 Fuel Oil - One, 1,000 gallon Aboveground Storage Tank (AST), installed on a concrete pad fitted with spill containment
 - Propane: Three, 1,000 gallon tanks, installed on concrete pad
- Site will include new septic system for wastewater built to all current standards and in compliance with density regulations of the Town of Bedford Aquifer Protection Zone
- The development of the property will be in strict compliance with the provisions of the Aquifer Protection Zone as required

Critical Environmental Areas

- Apparatus bays have drainage system that goes into special capture tank to be pumped for hauling off-site to an approved facility for treatment and disposal



Project Costs

Project Costs

Original Projected Bond Amount:	\$15,000,000
Sub-Surface Conditions:	\$ 2,500,000
Proposed Bond Amount:	\$17,500,000

Approximate addition to Fire Tax: **\$274.89**

**Approximate increase in fire tax, from 2% to 4% of property taxes, for an average home in Bedford Village (\$650K market value)*

Question: What if the Fire Department was Paid?

Answer: Approximate Fire Tax Costs for a paid force has been estimated by the Firemen's Association of the State of New York (FASNY) to be approximately an 8% increase in OVERALL property taxes in Westchester County. This would be BEFORE the cost of having to build a new facility...

Bond Information

Amount of Bond (millions)	Estimated Tax Rate Increase/\$1000	Estimated \$ Increase For a House Assessed at \$66,560 (FMV \$650k)
\$17,500,000	\$4.13	\$274.89

- Proposed Term: 30 years
- Proposed Bond Rating: AA
- Proposed Interest Rate: 3.5%
- Avg. Proposed Increase per month: \$22.91
- Avg. Proposed Increase per day: \$ 0.75
- Projected increases for each household will be available after the presentation

Public Bond Referendum

Tuesday

April 30th, 2019

6am-9pm

For More Information

Join us in the front room after this meeting to see:

- Conceptual drawings of the floor plans and the exterior elevations
- Conceptual Site Plan
- Conceptual Landscaping Plan and Planting Chart
- Tax Implication spreadsheet for all properties
- History of project including other options explored

See both websites for these documents and follow us on Facebook for updates:

www.bedfordfire.com

www.bedfordvillagefiredistrict.com

Questions/Comments

To ensure all those who want a chance to speak receive fair time, we request the following:

- Those who would like to speak must sign the Speaker Sign In Sheet and include their address for record.
- Each speaker is allocated 3 minutes to provide their comments.
- Questions may also be posed; speakers should confine themselves to two questions per speaker.
- Please be respectful of all commenters and maintain quiet as they speak.
- Please note that all proceedings are being recorded to ensure they are available for review and part of the District's public record for this project.