

Progress Report: Phase 2

Planning and Design Process
for proposed improvements for the:

Norwich Public Safety Facility

Norwich, Vermont

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The Town of Norwich, Vermont

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I. INTRODUCTION:

The following report documents the status of planning for improvements to the Public Safety Facilities for the Town of Norwich as of April 2008. The study provides an opportunity for both the Police and Fire departments to identify the space and facility needs to better serve the community, with a safer and more efficient physical plant. Central issues such as employee and volunteer staff safety, compliance with current safety codes, and the expectations and requirements of a 21st century emergency service are defined in this report. As the community discusses these needs, and considers its readiness to embark on a significant public investment in police/fire and emergency services, it is hoped that the information within this report can assist in bond vote deliberations, grant applications, capital - funding allocations or other forms of creative financing options.

Previous Studies:

To date, there have been two phases of this process:

- An initial scoping and screening process was conducted in 2004-2005 and resulted in an interim report that clarified the property status of the downtown Police/fire department site defined several initial site development options and a range of space needs based upon varied program assumptions, and resulted in a report presented to the Selectboard in 2005 and a neighborhood meeting held at the Norwich Public Library in 2005. That document is provided as an appendix to this report.
- This report – the second phase of study completed between 2007-2008, has focused on creating a project that deals with community concerns about project feasibility, scale, and cost – so that the program of improvements matches the community's ability and willingness to pay for facility improvements. Space allocations were reduced to make a smaller and less expensive building, soil tests were completed to ensure that the site could accommodate the increased septic demands, and a greater percentage of shared space for department and community spaces within the facility has been defined. This report has also benefited from the community assessment of police services, which validated a community - supported staff level for the police force, and the town decision to hire a new full time fire chief.

The Planning Process: What was asked?

The original charge from the Selectboard for this study was to define a Master Plan for improvements to the town's Public Safety Facilities. There were no preconditions placed upon the project team, except to prepare an unbiased assessment of the existing facilities and future needs. The project team was asked:

- determine the viability of the existing buildings to serve the growing demands of the police and fire departments; and adequately but not excessively accommodate the needs of the departments.
- assess the feasibility for renovation vs. new construction,
- consider short and long term costs and weigh against prudent assumptions for public investment;
- make responsible decisions about how much space was needed for public safety departments.
- Feedback from progress meetings with the Selectboard also indicated a desire to have the facility be compatible visually with the town and the village environs,

Because of the complexity of the services provided by the police and fire departments, and the opportunity to plan for a future Emergency Operations Center in the case of community/regional crisis, much of the consideration of space needs has been dealt with by town staff most familiar with operational needs. Those challenges having been reviewed, this report has been assembled for community review and discussion.

2. THE BUILDING PROGRAM

How much space do the Norwich Police and fire Departments need?

The process of programming for new facilities has been iterative – starting with ideal space allowances and then looking for efficiency reductions based upon shared space, then looking for further trimming to just “get it right” to a scale that fits Norwich. The first steps of a facility plan deal with the potential programming of the facility’s use. Adding up the uses, staffing and equipment needs, and looking analytically at how they create a total required space in a new or renovated facility. A programming process with town officials the project team has affirmed that maximizing shared facilities between the Fire and Police Departments will save on up front construction costs and long term operational costs.

Tables enumerating the space needs of the departments are provided on the following pages:

What about the existing buildings? Are they repairable - or should new facilities be built?

The existing buildings that have housed the police and fire departments for several decades have deteriorated severely. Their structural integrity, code compliance, and space capacity cannot perform to the needs of a modern public safety facility without some form of improvements.

- Town records show that the Hutchins House was built in approximately 1957, and purchased by the Town in 1990. The Norwich Police moved to the building between 1992-1994. The current ranch house that houses the Police Department is very limited space-wise and has extensive structural deterioration in the form of rot, leaks, structural system and insect infestation. Originally built as an inexpensive residence over 30 years ago, the use of the house was regarded as “temporary” at the time, since the Police Department was displaced from Tracy Hall. The project team’s review of the structure deemed the building beyond economical repair, and the amount of new space needed far exceeds the residual value of the existing structure. Even with significant resources invested, the department needs more space to effectively do its job as a community resource for public safety and law enforcement, and the assets of the existing structure are minimal.
- The initial fire station was a two - bay wood frame garage at the current fire station location that was purchased in 1925. Sometime around or before 1964, an additional bay was added. The current fire station was built in 1980. The current fire station shell is virtually impossible to upgrade to modern specifications for a 21st century Fire facility. The building fails to comply with most of the modern fire and life safety infrastructure required by the same life safety codes required for all Norwich structures, the lack of ventilation for diesel engine exhaust, absence of sprinklers, and a structure of low energy inefficiency in either the heating system and the insulated shell, makes the building essentially a warehouse. The space needs for organization and storage of firefighting materiel are inadequate. The facility also lacks space for the regular skills and physical training that the volunteer fire department is required to undergo. The metal frame however has the potential for other adaptive ruse for other town needs, and that has been considered.

Choices for facility improvements in the form of either rehab/additions or all new construction have been reviewed. The usual test of efficacy for most public investments is the question: “Should the facility improvement as planned be viable for a minimal life span of the bonded or capital funded period – typically a 20-25 year period. At the end of that payoff period, is the facility likely to be a viable public facility – or will it have deteriorated again to need major investment? With that though in mind - it is the consensus of the project team and town staff that attempts to rehab. and add-to the existing buildings and would be a shortsighted misuse the town’s funds.

Assessments of space need:

The spreadsheets at the end of this report illustrate the estimation of space required for the proper functioning of the Police Department, Fire Department, and Emergency Operation Center as a part of the building space needs to guide the projects development.

What about staffing?

The town has recently completed an assessment of the extent of police department staffing. The building program does not presume any significant changes in staffing or management. However, adaptability for future changing needs should be in the minds of all parties, so that future fire and police staffing can be met. The fire department program has not been designed to facilitate the changeover from a volunteer department to a paid department, but there is space for overnighting of Police or Fire Department staff due to inclement weather.

Facility Deficiencies:

Fire Department

The current fire department building was originally a garage built in 1925 as a wood frame building and was rebuilt in 1980 with a steel frame garage and brick façade, and a wood - framed training/social room. Much of that work was completed by the department staff as volunteers. The building is heated marginally and has no ventilation or exhaust system and planned vehicle replacements will overtax the structure. Facilities within the building both for the physical requirements of modern firefighting, secured areas for safety and proper storage and sanitary/safety accommodations for staff are virtually nonexistent. The building has no modern fire protection systems and is not structurally fireproofed. The current building has been identified with the following deficiencies:

1. No secure or clean storage for FAST Squad supplies and meds
2. No secure storage space for fire/rescue supplies
3. No decontamination room
4. No hose drying facilities
5. Inadequate (in both terms of size and available facilities) training room
6. No office space for officers or for pre-fire planning or code review
7. Inadequate parking and dangerous circulation for vehicles and staff.
8. Apparatus room cannot hold all vehicles
9. No clean work area for servicing SCBA and refilling air bottles
10. Inadequate insulation - not energy efficient
11. No exhaust system for apparatus
12. The building is not sprinkled.

Police Department

The current Police Department office was built as a private residence in 1957. When the police department moved before the Tracy Hall renovations the move was envisioned as a relatively short term - 5-10 year plan. The plywood sheathed ranch style house on a slab was never designed to house the complex requirements of a modern Police department, and with minimal maintenance over the past 25 years, the building has structural and insect problems, deferred maintenance on all counts, and accessibility limitations. Spatially, there are no accommodations within the small spaces for the

requirements of staff, security for personnel or materiel, or the public. The current building has been identified with the following deficiencies:

1. No secure interview room
2. No secure processing room for detainees
3. Makeshift locker room for both male and female officers
4. There is no public lobby,
5. The building is not ADA accessible.
6. There are two bathrooms for male and female officer and none for public use.
7. Insufficient space and protection for secure record storage
8. No secure storage space for evidence
9. Insufficient space to maintain equipment or wash vehicles in winter months
10. No private space for conference or interviews when officers are working, nor a chief's office for private conferences or meetings with staff or the public.
11. Current facility has significant pest issues and annual cost for carpenter ants.
12. Building has insufficient and or poor lighting

Conclusions:

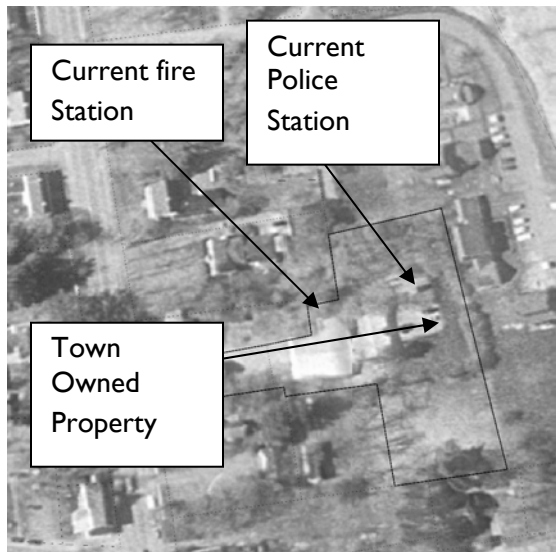
Both the Norwich Police and Fire Departments are located in buildings which have reached the end of their useful life as Public Safety facilities. In addition to needing maintenance, there are deficiencies of space, code compliance, handicap access, and technology.

1. The current Police and Fire Department buildings have significant space, structural, and code compliance inadequacies to meet the modern demands of these services.
2. The poor conditions of both the existing buildings do not lend themselves to cost or space efficient renovations. The buildings have outlived their functional life, despite some effort to devise creative ways to renovate them. There may be adaptive reuse options for the steel garage of the fire station, but the existing police department has little residual value for a future facility.

In looking at the buildings for these municipal services as viable long-term community investments, we believe that Norwich will best be served by the development of a new combined Police and Fire Public Safety facility. The Departments will benefit from the sharing of common spaces, building systems and maintenance. Although the site is tight, improvements can be made to better facilitate access, circulation, and parking. It is fortunate that this site, central to Norwich, can provide an opportunity for Public Safety facilities to remain in the village core.

Taking the next steps of further conceptual site plan and building design will provide the tools for Norwich to inform the public as to the direction being considered and to warn for a bond vote.

3. THE CURRENT VILLAGE CENTER SITE

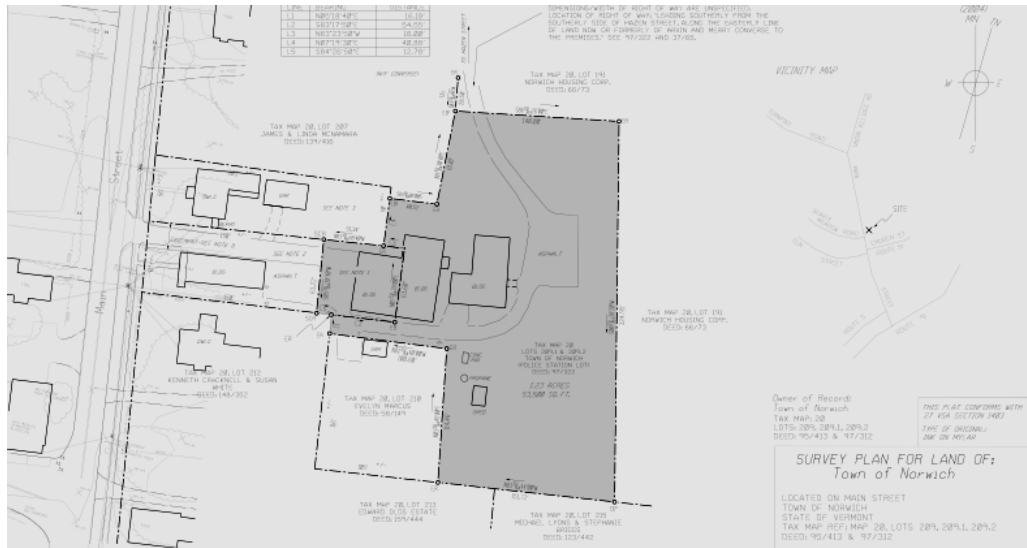


Location:

Both phases of this study have elected to affirm the continued use of the town property for the public safety facilities. There are cost - driven aspects to this approach as well as operational and policy issues:

- I. The decision to work with the existing town - owned site is reasonable and practical because it is cost effective. All parties that have reviewed progress of this study through the NORCAP report have indicated the concern about project costs. Use of the town owned land would save on expensive land purchase costs elsewhere at other town locations, (perhaps as much as \$.5 - 1M which would add significant cost to the project.)
2. The existing site is central to town-wide access points of the village, the Rt 10A corridor, and the spokes of primary road access to rural lands of Beaver Meadow, Turnpike Road, Union Village Road and Rt 5 north and south. A major change in facility location would change response times to these locations, and could have hidden secondary effects of changing fire insurance rates to private homeowners in the towns rural areas, as well as change the town's ability to equally serve the rural residents of the community.
3. Removal of the Police/Fire Station from the center of town would detach the facility from the center of the community at a time when the community desires better integration and personal contact of these departments. Retention of the facility in the town center will continue a long - standing tradition of the facility as a part of village life, notwithstanding that it also creates some impacts.
4. The existing site has adequate septic capacity for an improved facility, and other municipal infrastructure is immediately available. Just the cost of a water system for a new facility to meet sprinkling requirements for pressure and water volume could cause significant additional costs out of the fire district.
5. The question has been posed – can the site be sold for such a use as workforce housing and the proceeds used to buy a site elsewhere? The value of the two town owned lots has been assessed at \$675,800 by the Lister's Office, and a 1.29-acre lot the towns zoning would only allow three units on the site. Alternative uses of the village site would place far higher demands on the site for septic, and the relatively small acreage does not yield enough units under current town zoning to develop an economically viable affordable housing program to cover replacement land cost, notwithstanding that workforce housing may be a highly desirable village landuse.

Other site considerations:



The existing property owned by the town has been surveyed to verify the boundary information and locations of existing structures. It is 1.29 acres in size.

1. **Septic:** The existing drywell septic system is designed for minimal use by PD staff and the FD kitchen. It is also located too close to the buildings and does not comply with any current septic design standards. If the facilities are renovated/expanded, a new modern septic system elsewhere on the site will be required. Analysis of the sites soils has identified areas of suitable soils for a new leachfield system. Due to the sites relatively small size, the leachfield may need to be placed under one of the parking areas, which would require some additional expense.
2. **Other infrastructure:** Water is available on Main street and new water service to the site is an anticipated cost under all redevelopment scenarios. Electric and data is also valuable on Main Street to support an improved facility. Stormwater will be treated in bioretention swales and infiltrated into the highly permeable soils. A state stormwater plan will not likely be required with the acreage of impervious coverage under 1 acre.
3. **Access:** The constrained space for fire vehicles exiting the facility onto Main Street will remain, but it is hoped that the driveway to the rear of the site connecting to Hazen Street could be modestly upgraded for access and parking by the Fire Department. Because the facilities uses are a continuation of a historic use – no measurable traffic increases are anticipated.
4. **Parking:** There are approximately 6-8 parking spaces on the premises for PD staff and public uses. FD staff have difficulty entering the site during a call for lack of access/egress and safety reasons. Parking for fire calls is along Main Street, and can result in staff running for an inconvenient distance to the station. Additional parking has been included in the project program to address this problem.
5. **Neighbors:** There is close proximity of PD/FD and longstanding neighbors, the project should be designed to respect setbacks and other village attributes to retain a scale and character of the site and the building.

4. BUILDING AND SITE DESIGN DEVELOPMENT:

Plans for the combined Public Safety building are currently at a conceptual schematic level of development. Several rounds of plan options have been investigated and reviewed with the committee. The attached floor plans were developed after recent site and septic investigations. The plans have been extensively reviewed and revised with input from the committee of department heads with the project team.

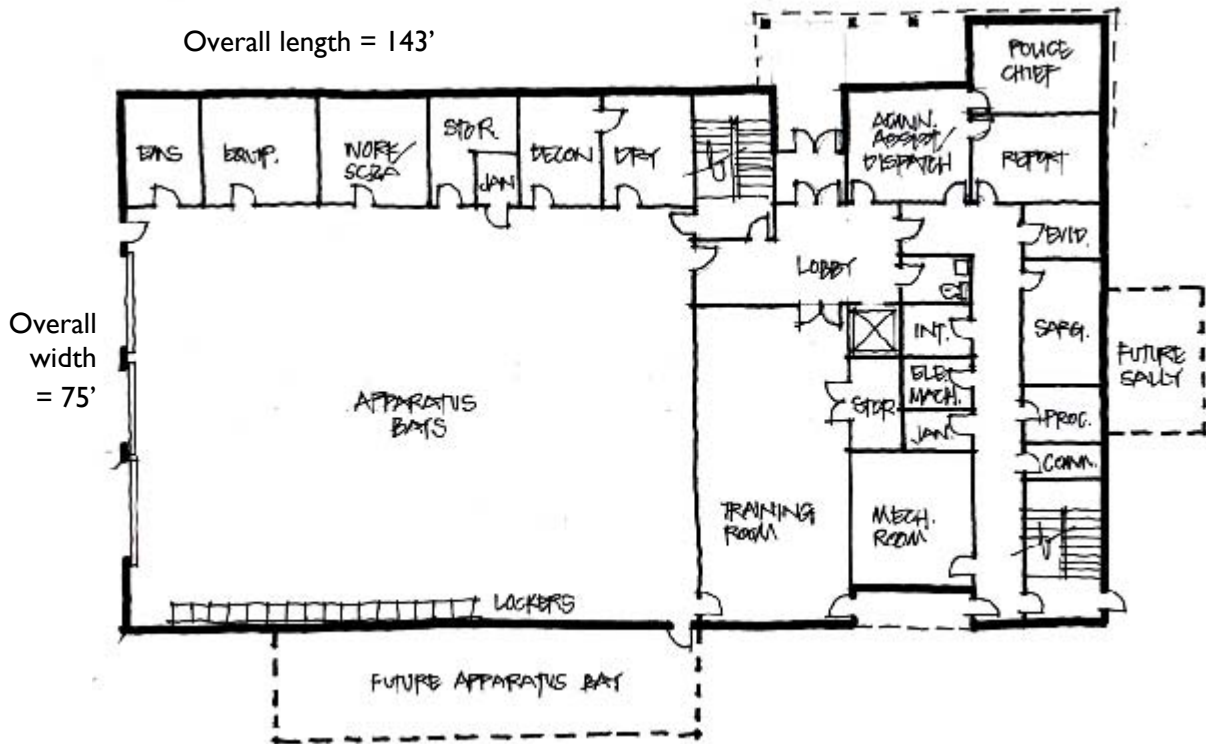
The needs of the facility are in balance with the ability of the site to accommodate them. With a relatively small site and the desire for a building to be in scale with the surroundings, as many uses as can reasonably be placed in second floor space have been considered.

The following is an area summary of the spaces to be accomplished in a new facility:

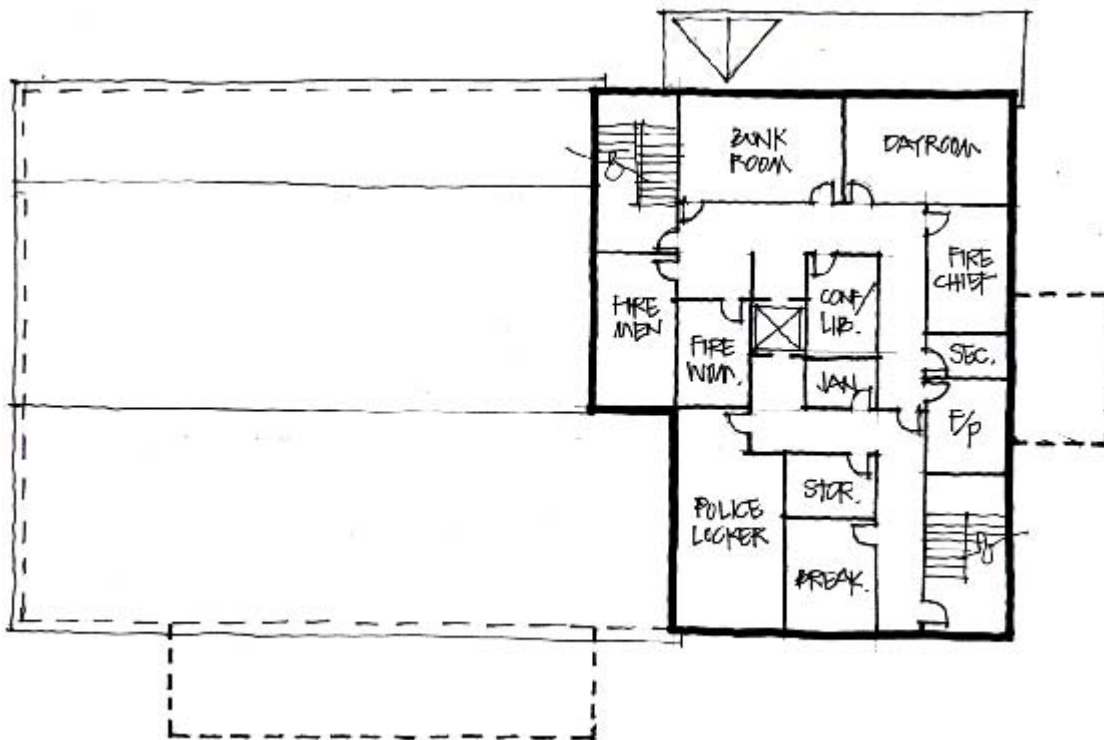
Department:	existing SF	proposed SF	bare bones SF allocation
Police:	2234	6139	3890
Fire:	6538	15,841	11,783

Massing diagrams and elevations are work to be done in the future as the project moves to greater resolution, and the town is willing to make a commitment to a space plan for the facilities. The selection of materials, design of facade, massing of rooflines and elevations, landscaping and site features have yet to be determined.

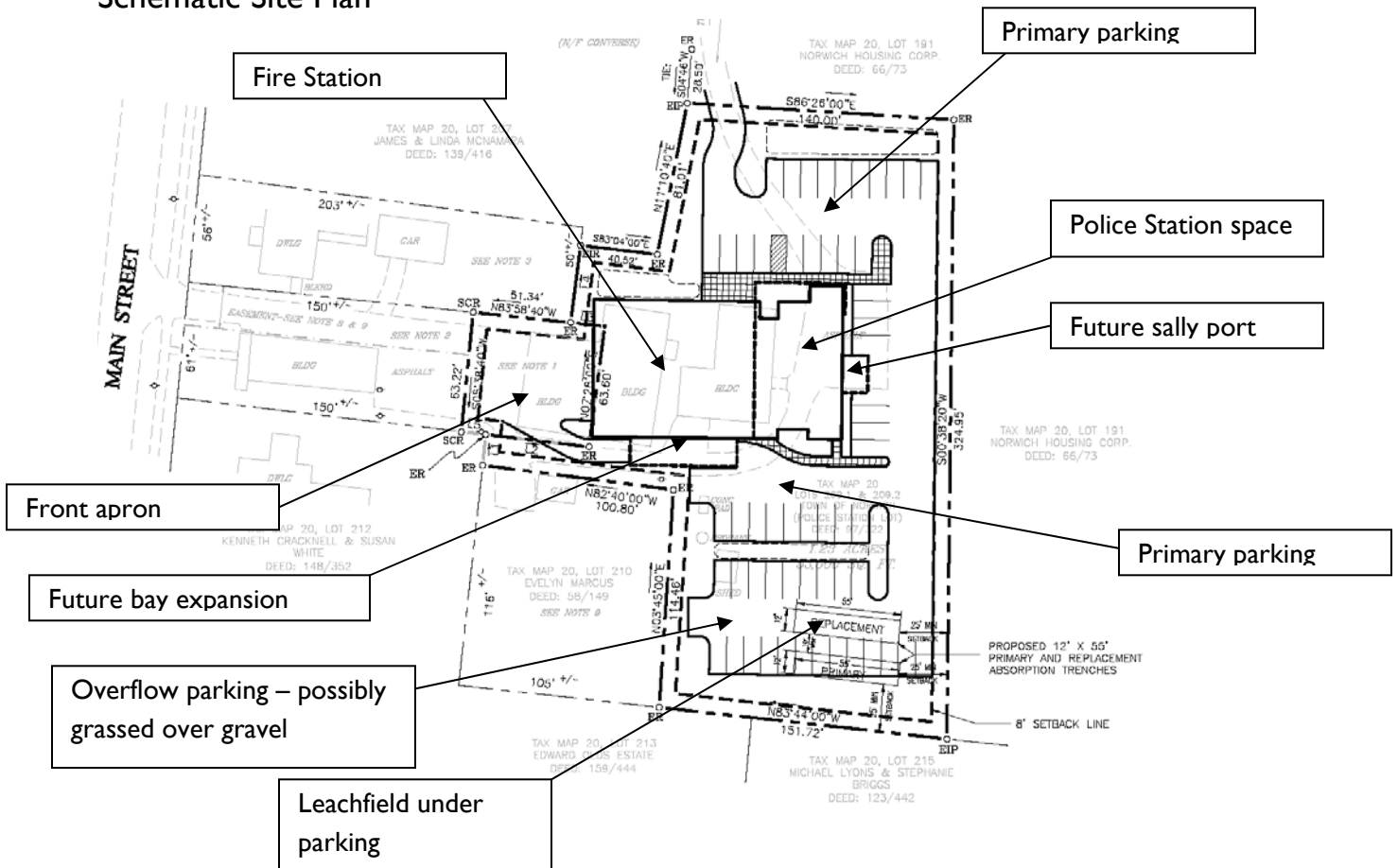
First Floor Schematic Plan



Second Floor Schematic Plan



Schematic Site Plan



Site Planning:

1. A new and/or renovated bldg. for Fire/Police/EC will require replacement of the sites septic system, water system, and other utilities. The location of future water service has been discussed with the Fire District. Test pits were completed in August 2007 with the assistance of town PWD staff and machinery. Excellent septic soils were found in several locations. With the required setbacks to structures and property lines it is anticipated that an innovative PRESBY system under the parking area will be required for the project. An alternative to this would be to acquire additional property for a traditional leach field. The site plan below reserves a footprint for a leachfield sized accordingly to the needs of the police and fire departments.
2. The building on the site plan below is the same as the floor plans on previous pages, and conforms to town setback requirements.
3. Access to the facility will continue to be through the Grange Property driveway and through the driveway from Hazen Street.
4. Other uses have been suggested such as affordable/workforce housing. Given the relatively small lot size, concern about traffic, and other impacts, this has not been pursued at this time.

5. IMPLEMENTATION:

Project costs:

The NORCAP proposed budget for this project was based upon 2005 estimated costs of approximately 2.75 M. \$2m. for the Fire Dept. building and \$750,000 for the Police, although shared spaces make a complete segregation difficult.

It is noted however, that construction costs have been in considerable fluctuation in recent history, and contractor bid prices are dependent upon the materials involved and the bidding environment at the time. Shortages of steel, copper, plywood, and in some cases, unpredictable subcontractor estimates have affected pricing outcomes.

Upon completion of the schematic site plan, floor plans, elevations and building systems, the project team and town officials will work with a professional cost estimator to develop a detailed cost estimate upon which a bond vote amount can be accurately based

The spreadsheet blow illustrates an attempt at the building costs allocations, and does not include site costs.

Public Safety Facility Area Summary

Function	Existing	Proposed	Delta	% Change	Bare Bones	Delta	% Change
Fire	4,304	9,702	5,398	225%	7,893	3,589	183%
Police	2,234	6,139	3,905	275%	3,890	1,656	174%
Total	6,538	15,841	9,303	242%	11,783	5,245	180%

per sq ft \$170

Proposed \$2,692,969

Bare
 Bones \$2,003,054

Savings \$689,915

Future Planning:

Acquisition of adjacent parcels were considered to afford additional space for the project. Both the Marcus and Dupuis Property's have been suggested, but at this time no detailed discussions with those families have taken place.

The assessed values of the abutting properties are: Dupuis - \$359,000, and Marcus, \$202,000. It is highly recommended that town capital budget planning consider the future acquisition of these parcels and allocate funds in the event of their offer for sale.

Future access to Carpenter Street should also be considered for improved access and egress to the facility. Purchase of an easement should be considered.

6. APPENDIX:

SPACE NEEDS ASSESSMENT SPREADSHEETS

SEPTIC ANALYSIS MATERIALS

WATER/OIL SEPARATOR SYSTEM

PHASE I STUDY