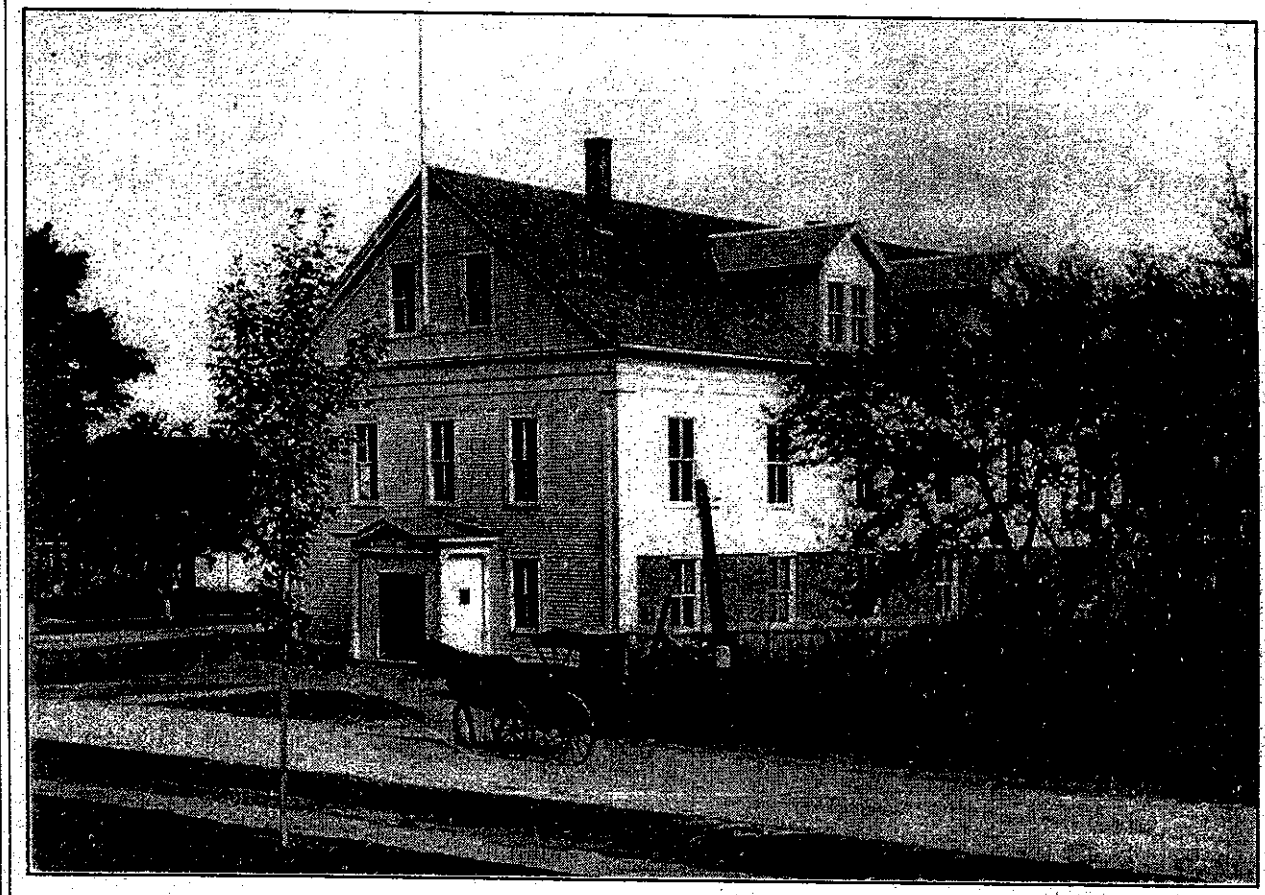
FEASIBILITY STUDY / COST ANALYSIS
RENOVATION & EXPANSION OF TOWN HALL

Town of Westminster, Massachusetts



Town Hall ca. 1900

McGinley Hart & Associates LLP
Architects & Preservation Planners
324 Broadway
Somerville, MA 02145

April 2002

TABLE OF CONTENTS

		Page
I.	EXECUTIVE SUMMARY	1
II.	SPACE NEEDS STUDY & BUILDING EVALUATION	
	A. Historical Background & Building Plans	3
	B. Evaluation & Analysis of Existing Building	
	1. Exterior Architectural Features	5
	2. Interior Architectural Layout & Features	7
	3. Structural Evaluation	21
	4. Systems Evaluation	22
	5. Accessibility	24
	6. Building Code Issues	25
	7. Site Suitability	26
	C. Space Needs Study of Town Hall	28
	1. Summary of Existing Uses	28
	2. Summary of Future Needs (20 years)	30
III.	CONCEPTUAL PLANS & COSTS	
	A. Option 1	31
	B. Option 2	32

Appendix

Structural Engineer's Report

Massachusetts Vault Requirements

Property Deed and Plan

I. EXECUTIVE SUMMARY

I. EXECUTIVE SUMMARY

This Feasibility Study/Cost Analysis for the renovation and expansion of Town Hall was undertaken between December 2001 and April 2002. The Town Hall Renovation Committee met with the consultant team at key intervals to review findings, issues and to make decisions relative to the development of space plans and alternatives.

During the initial investigation of the physical condition of the historic building, the consultants identified structural deflections in the upper floors and the exterior sidewalls. This led to an examination of the building's four interior roof trusses, which had insufficient capacity to handle loads that had been imposed on them. This caused stresses and deflections to wood members beyond their original design capacity. Three end connections between the bottom chords and the wall posts of two of the trusses had failed, resulting in spreading forces that created bulging of the exterior walls of the building and the potential for a collapse of these two trusses. With the support of the Board of Selectmen, structural designs were developed to repair the failed end connections with heavy steel plates and to re-establish the structural integrity of the two failed trusses by installing steel tension rods with assorted repairs of the wood posts at the three failed end connections. The bulging at the exterior walls disappeared as the tension rods were tightened and the trusses again were able to adequately carry their loads. These repairs will be completed shortly. The end posts at the remaining five truss end locations have also deflected but have not failed and can await a comprehensive renovation of the overall building.

The historic Town Hall has served the Town of Westminster for 163 years and also has been a center for various community and social events. Town Hall is a contributing property to the Westminster Village-Academy Hill Historic District, which has been listed on the National Register of Historic Places since 1983.

The Town Hall building retains its historical character and the overall exterior is in generally good condition. However, the interior spaces and layout require extensive renovation and upgrading to meet current codes and accessibility requirements. The systems are completely outmoded and life-safety facilities must be upgraded. The building also suffers from long-term deferred maintenance. This is a typical condition of many town halls throughout the Commonwealth. Many towns have recently taken significant action to renovate their historic town halls with great success by combining the best of their building's historic fabric with code compliant new offices and support spaces as well as new efficient electrical, mechanical and communication systems for today's computerized technology and information systems.

Westminster has an opportunity to renovate and expand its historic Town Hall for the next century. This study has defined the Town Hall's space needs for the next 20 years and presents two options with conceptual plans and costs to achieve the space needs in a renovated and expanded building. The plans would achieve a completely modern, efficient and code compliant building that retains its historic and architectural character. Option 1 would convert the second floor Meeting Room and Stage areas into modern town office space and would include a minimal new addition for stairs, elevator, bathroom facilities and storage. Option 2 would restore the original configuration of

the second floor Meeting Room and require a larger new addition to include additional office space. Option 1 is the most efficient and cost effective solution to the Town's space needs over the next 20 years.

It is estimated that an entirely new building to meet the spaces as defined in Options 1 and 2 would cost 20-25 percent more than the costs of the renovation options herein. In addition, a new site would have to be purchased, utilities may have to be brought to the site if unavailable, and site development costs would be substantially higher depending on the site terrain and subsoil conditions.

II. SPACE NEEDS STUDY & BUILDING EVALUATION

A. Historical Background & Building Plans

A. HISTORICAL BACKGROUND & BUILDING PLANS

The Town Hall is an early example of adaptive reuse of an historic building. It was originally constructed in 1839 as the Town House in the popular Greek Revival style of architecture. The building was a 1-1/2 story structure that served the Town's needs where a variety of community activities were held and celebrated, including the town library. The structure consisted of a wood-framed first floor (now the second floor) over a crawlspace with wood-framed exterior walls and timber posts that supported timber-framed roof trusses that remain today.

A sixth bay of framing was added to the south end of the building between 1839 and 1855. During our investigation we located the former exterior wall at the third floor level, approximately 12 feet north of the end wall of the 2-1/2 story building, aligned with the proscenium wall at the stage and the solid interior walls at the present first floor level and the present stone wall that is part of the building's foundation. The addition was constructed of Victorian-era dimensional lumber tie-gable framing.

By mid-century, the building was too small to meet the needs of the growing town. In 1855 the Town expanded the structure by raising the building one story and inserting a new brick-faced first floor over the existing foundation and crawlspace to create a 2-1/2 story structure. The upper floors are supported by the exterior brick masonry walls and interior columns.

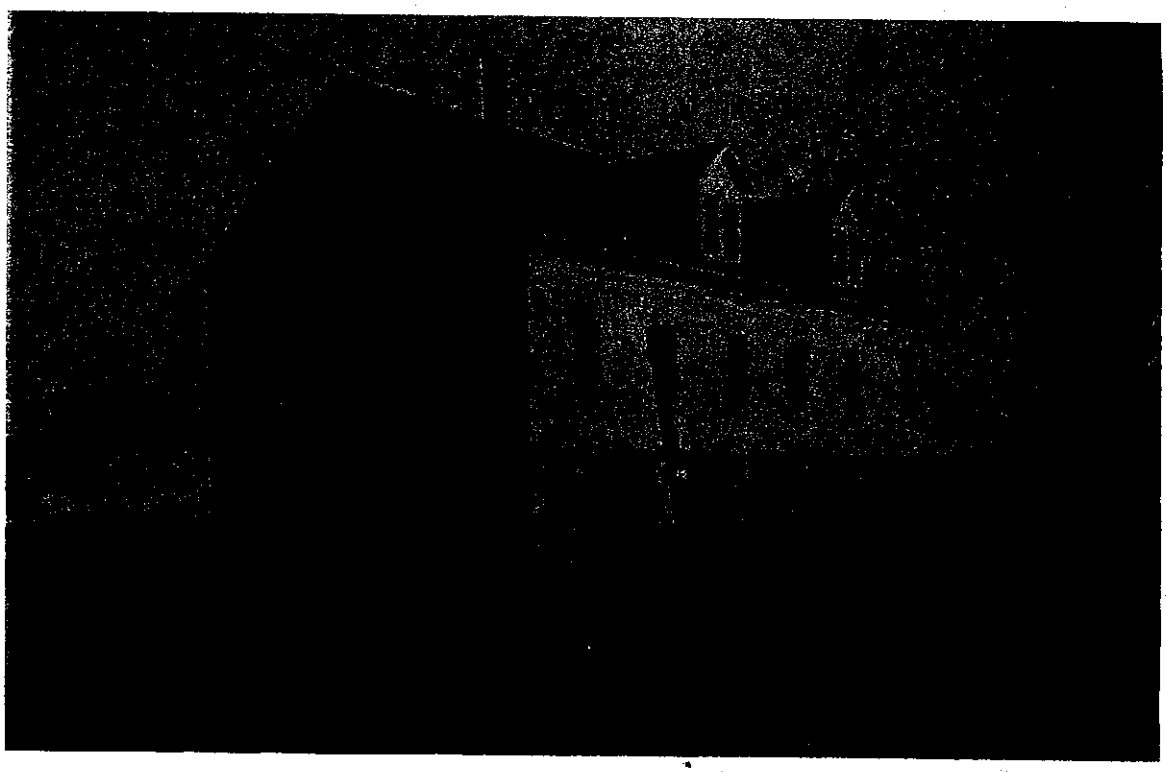
The 1-1/2 story, 20-foot long addition at the south end of the building, bounded on three sides with brick bearing walls below a wood-framed floor and tie-gable roof structure appears to have been constructed after 1855. This addition includes the present vault and boiler room, restrooms and storage spaces at the second floor level. A former privy is attached to the rear of this addition.

According to local residents, the first floor of Town Hall was open space until the 1950s when the space was enclosed with partitions to create the current town office layout. Recent additional offices have been created on the second floor by partitioning a portion of the Meeting Hall.

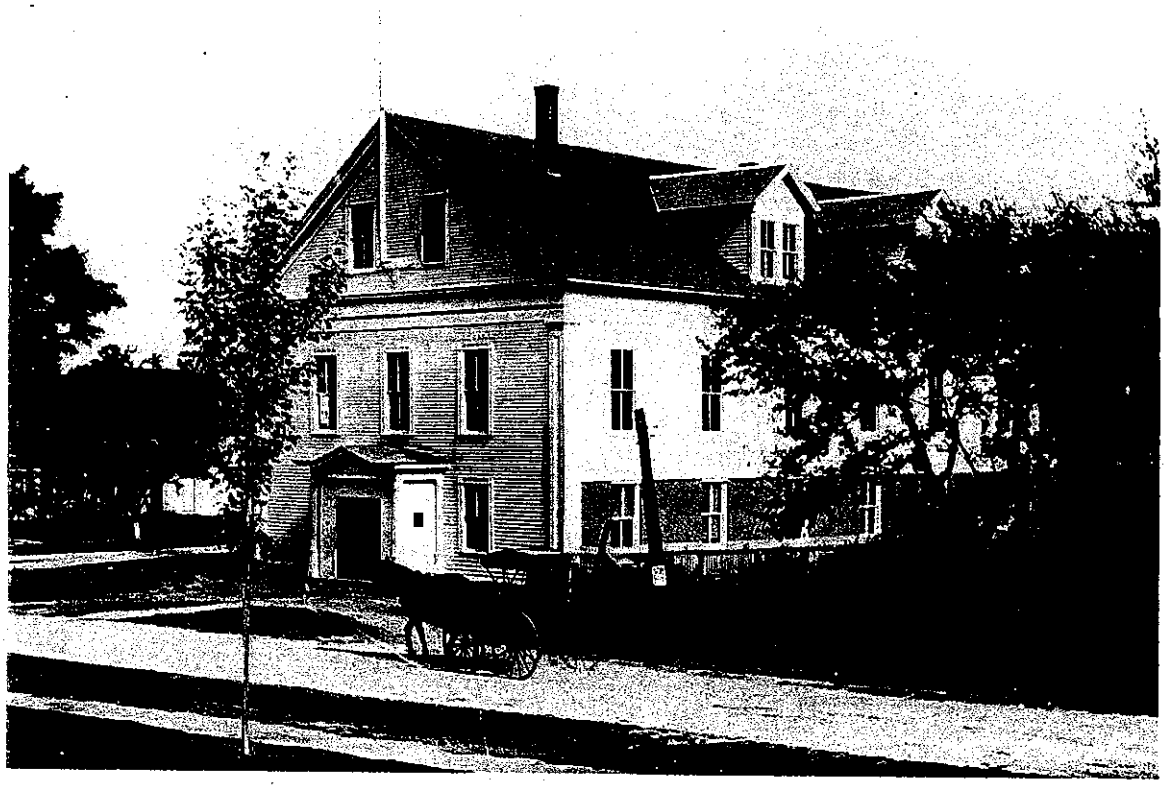
No original or later plans have been located. As an initial component of this study, the building was field measured and architectural drawings developed for all floors and spaces of the building.

The original site of Town Hall at the corner of Bacon and Pleasant streets was a 17,100 s.f. lot. In 1982, the Town purchased an adjacent vacant lot of 8,725 s.f. at the rear of the building on Pleasant Street, creating a total site of 25,825 s.f. The vacant portion of the site is level and can accommodate a building addition and/or off-street parking to serve the Town Hall.

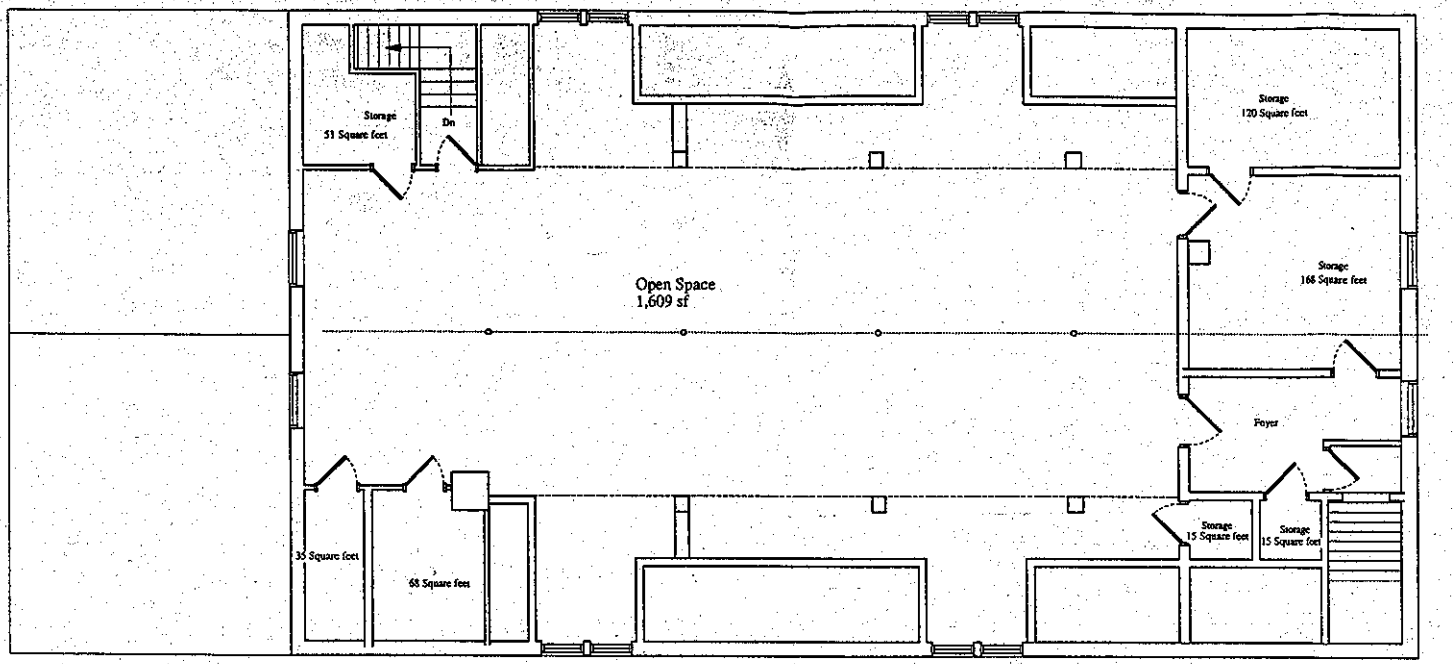
Plans were developed of the building and site and are on the following pages.



Town Hall ca.1900 without winter enclosure at front entrance.



Town Hall ca.1900 a little later with new tree and winter enclosure at front entrance.



3rd Floor

Gross square footage	2,959 sf
Exterior walls	208 sf
Total interior sf	2751 sf

Open Storage	1,609 sf
Other Storage	474 sf
Stairs/Circulation	188 sf
Interior walls / Inacessable	480 sf
Total interior sf	2,751 sf

North

0 4 8 16 24

Westminster Town Hall

Westminster, Mass

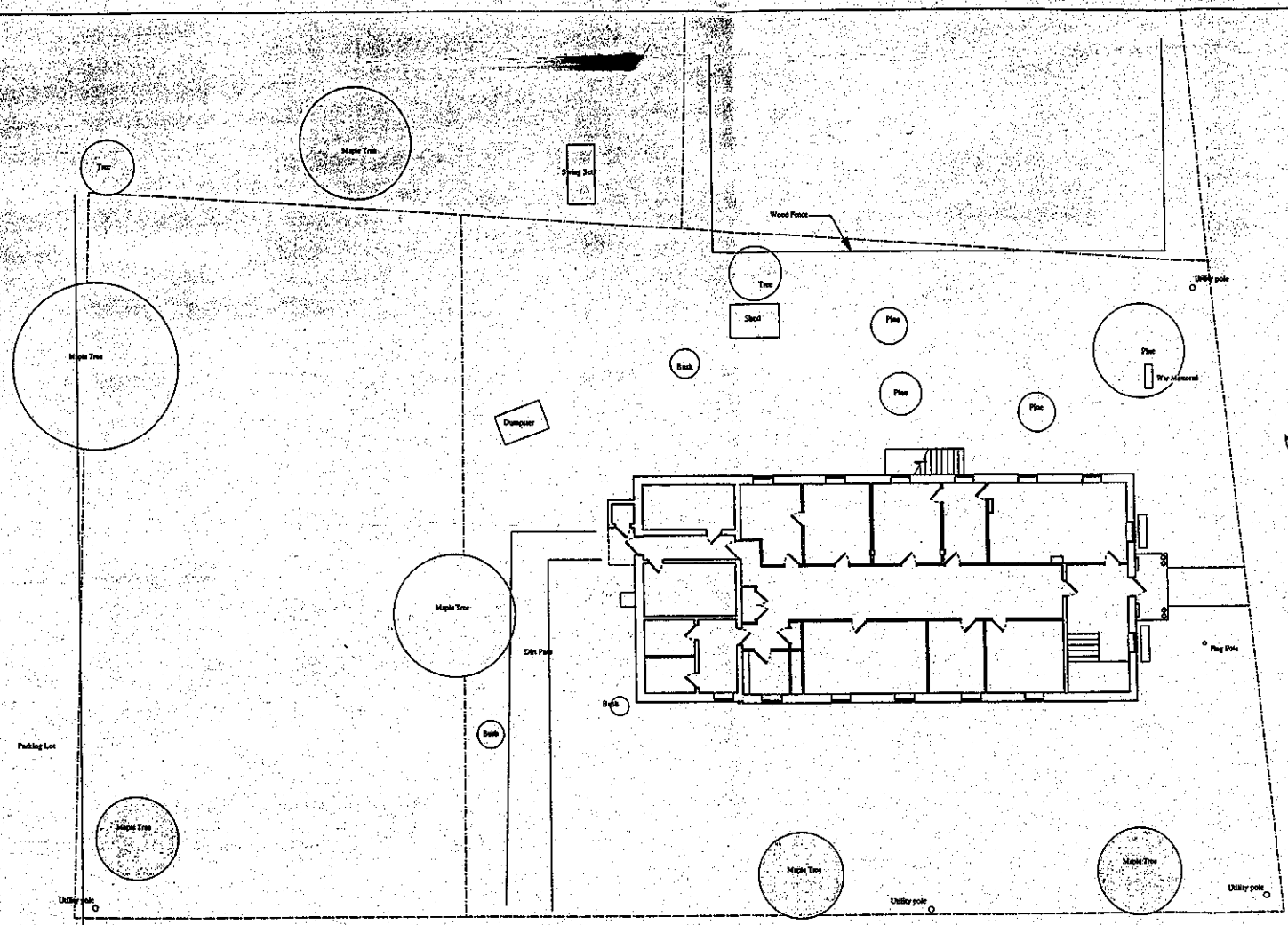
Space Planning Study

Existing Third Floor

Scale: 1/8" = 1'-0"
Date: January 28, 2002
Drawn By: ENF
Checked by: WG

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A4



Existing Site Plan

Westminster Town Hall

Westminster, Mass

Space Planning Study

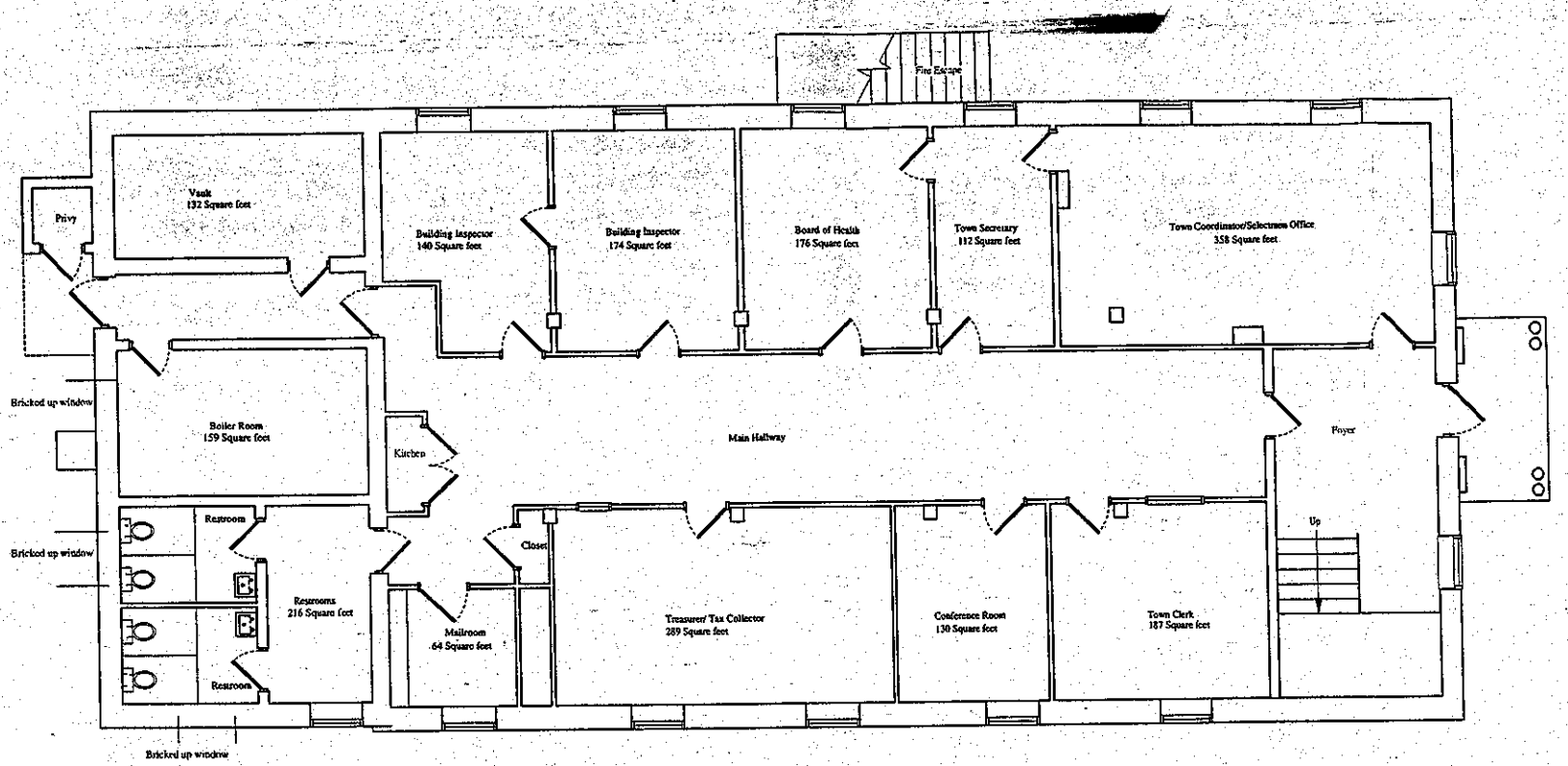
Existing Site Plan

Scale: 1"=20'-0"
Date: January 28, 2002
Drawn By: ENF
Checked by: WGK

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A1



Existing Square Footages

1st Floor

Gross square footage	3,712 sf
Exterior walls	399 sf
Total interior sf	3,313 sf

Office spaces	1,437sf
Stairs/Circulation	1,021sf
Meeting Room	130 sf
Mailroom	64 sf
Vault	132 sf
Storage/ Kitchen/ Misc	170 sf
Boiler room	159 sf
Interior walls	200 sf
Total interior sf	3,313 sf

2nd Floor

Gross square footage	3,712 sf
Exterior walls	262 sf
Total interior sf	3,450 sf

Office Spaces	741 sf
Stairs/Circulation	456 sf
Meeting Room	1,223 sf
Stage	305 sf
Storage	428 sf
Misc	161 sf
Interior walls	136 sf
Total interior sf	3,450 sf

3rd Floor

Gross square footage	2,959 sf
Exterior walls	208 sf
Total interior sf	2751 sf

Open Storage	1,609 sf
Other Storage	474 sf
Stairs/Circulation	188 sf
Interior walls / Inacessable	480 sf
Total interior sf	2,751 sf

Total

Gross square footage	10,383 sf
Exterior walls	869 sf
Total interior sf	9,514 sf

North

0 4 8 16 24

Westminster Town Hall

Westminster, Mass

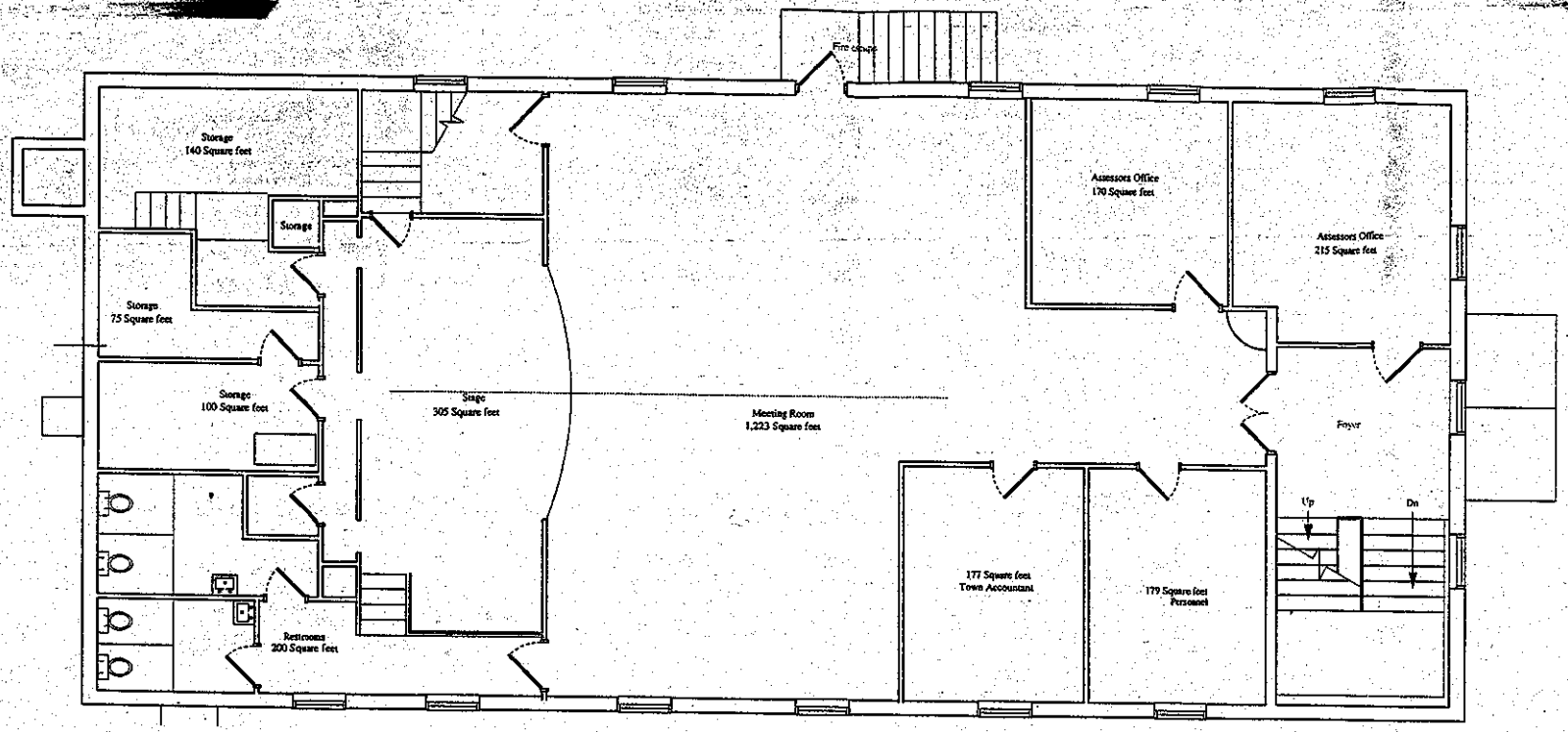
Space Planning Study

Existing First Floor

Scale: 1/8"=1'-0"
Date: January 28, 2002
Drawn By: ENF
Checked by: WCK

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A2



Second Floor

Gross square footage	3,712 sf
Exterior walls	262 sf
Total interior sf	3,450 sf

Office Spaces	741 sf
Stairs/Circulation	456 sf
Meeting Room	1,223 sf
Stage	305 sf
Storage	428 sf
Misc	161 sf
Interior walls	136 sf
Total interior sf	3,450 sf

Note: Original Second Floor Hall, Stage and Side Space = 1,829 sf

North

0 4 8 16 24

Westminster Town Hall

Westminster, Mass

Space Planning Study

Existing Second Floor

Scale: 1/8"=1'-0"
Date: January 25, 2012
Drawn By: BNF
Checked by: WCK

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A3

B. Evaluation & Analysis of Existing Building

B. EVALUATION & ANALYSIS OF EXISTING BUILDING

During December, 2001, a field inspection was conducted to define all features and spaces of the building and site to determine their physical condition,m historical elements and space uses. An evaluation of these features and spaces was then conducted to define existing deficiencies, code and life-safety issues and potentials for future use or reuse of the existing facility. A summary of findings is presented below:

1. Exterior Architectural Features

The 1839 original upper 1-1/2 stories (raised in 1855) were designed in the Greek Revival style popular at that time. This included a three-bay, pedimented front facade with corner pilasters and clapboarded walls. The 1855 new first floor is comprised of brick masonry walls on the original granite foundation, except for the front facade, which is clapboard with a center entrance and a wood-columned portico. The sloped roof contains two double window dormers on each side of the roof, giving natural light to the third floor.

The exterior building fabric is in relatively good condition, except for noted structural deformation of the two side walls, resulting from the outward protrusions from the failed roof trusses (See Structural Engineer's Report in the Appendix). As a result of the initial findings of this study, emergency repairs to this problem have been designed and the Town authorized structural repairs which are now being completed to rectify this problem.

The roof has been recently re-shingled with asphalt shingles and is in good condition. The exterior wood walls, windows and trim have been recently scraped and painted and are also in generally good condition. The first floor brick masonry is in relatively good condition and requires only minor repair and repointing. Two-over-two wood windows contain aluminum storm sash on the first two floors. The front lawn on each side of the front entrance is at a higher elevation than the building's wood siding and presents a potential moisture condition that will promote wood rot and insect damage to the building.

Westminster Town Hall



Town Hall ca.1950's with front shutters, side awnings and War Memorial at right.



Town Hall December 2001 with little change (door, flagpole, planters) in 100 years.

2. Interior Architectural Layout & Features

a. First Floor

The main entrance at the front door enters into a foyer that contains the stairway to the second floor and a doorway to the main hallway that extends the entire length of the 2-1/2 story section of the building. The 11-foot wide main hallway provides direct access to all first floor town offices except the Town Coordinator's office, which is entered directly from the foyer. The hallway is slightly off-center of the building so that offices on the south side are slightly deeper than those on the north side.

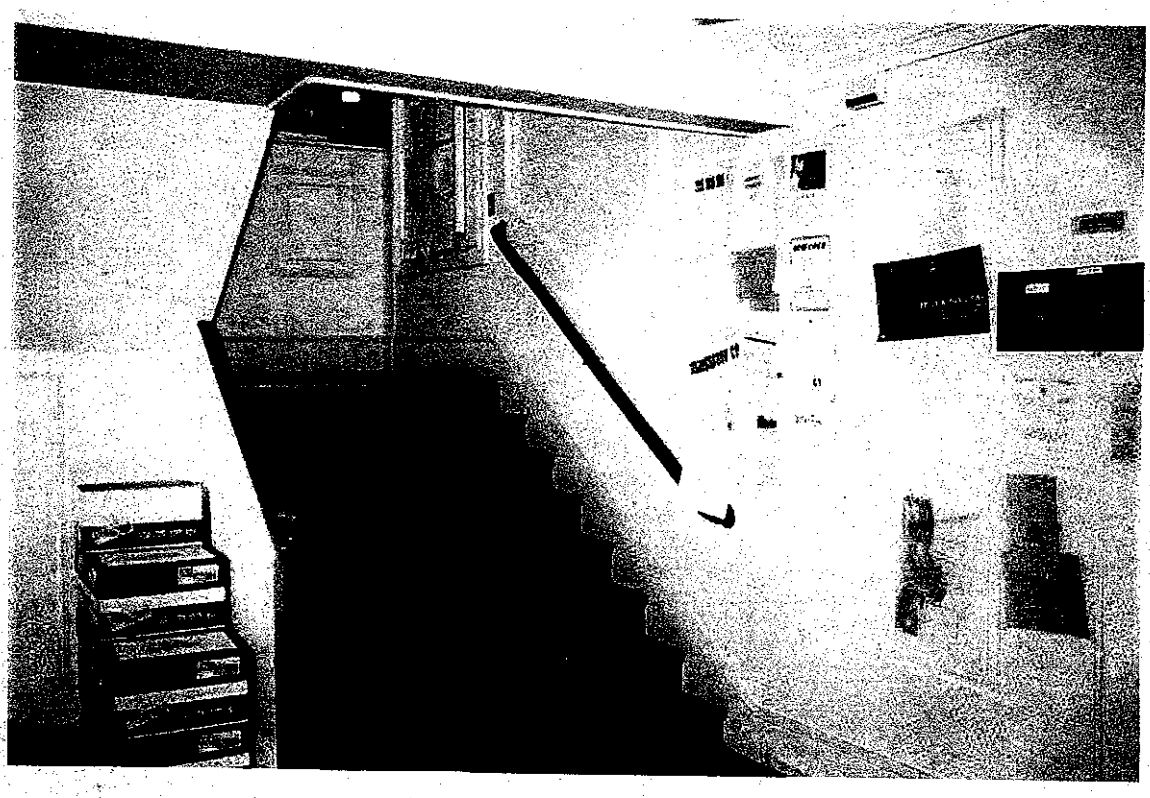
A breakdown of first floor areas is as follows:

Use	Square Feet
Office Spaces	1,437
Stairs/Circulation/Hallway	1,021
Meeting/Conference Room	130
Mail Room	64
Vault	132
Storage/Kitchenette	170
Boiler Room	159
Interior Walls	200
Total First Floor interior area	3,313

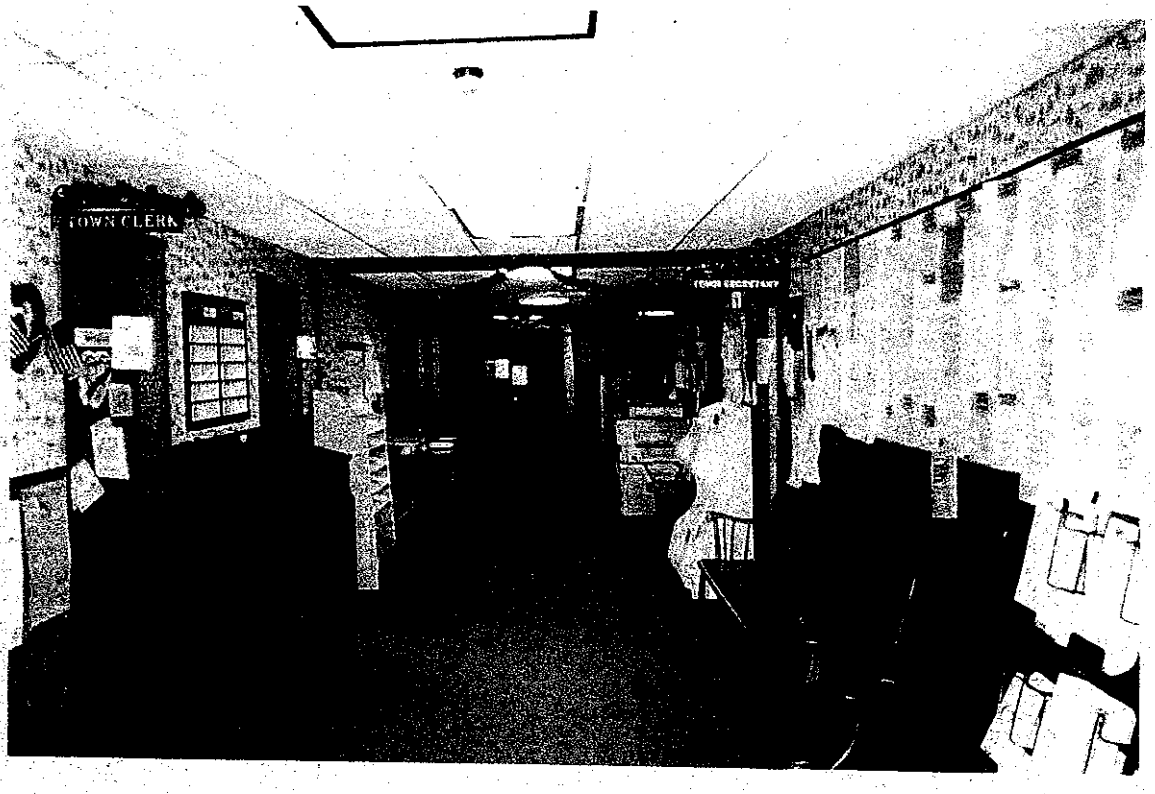
The first floor exhibits structural sag and distress and should be reinforced. (See Structural Engineer's report in the Appendix) The hallway and foyer floors are covered with outdoor artificial carpeting while other floors are generally tiled.

Wall partitions were installed during the 1950s to create individual town offices. Wall surfaces are covered with thin plywood panels, some residential-type wallpaper, dropped ceilings and hollow-core doors. All finishes are of low quality and are incompatible with the architectural character of the historic building.

At the rear of the building in the 1-1/2 story portion, there are support spaces including non-handicapped restrooms, the boiler room and the Town Clerk's vault that is shared with various other departments. The vault is totally inadequate to store important documents; it harbors moisture and mold, leaks, is unhealthy and is actually accelerating the destruction of the historical documents that it is intended to preserve and protect. The rear portion of the building also provides secondary means of egress but does not meet code requirements. Immediately outside the rear door but attached to the building is the former privy, now used for storage.



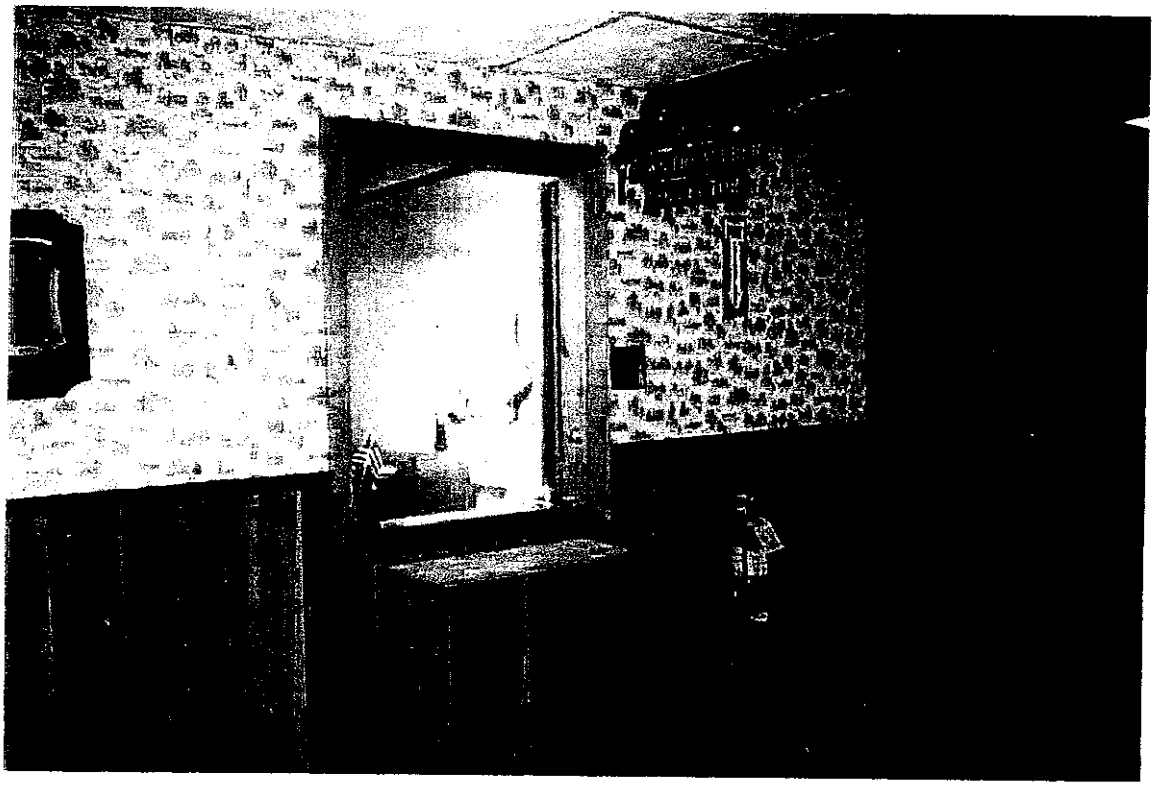
Town Hall - Front Foyer and Stairs to Second Floor.



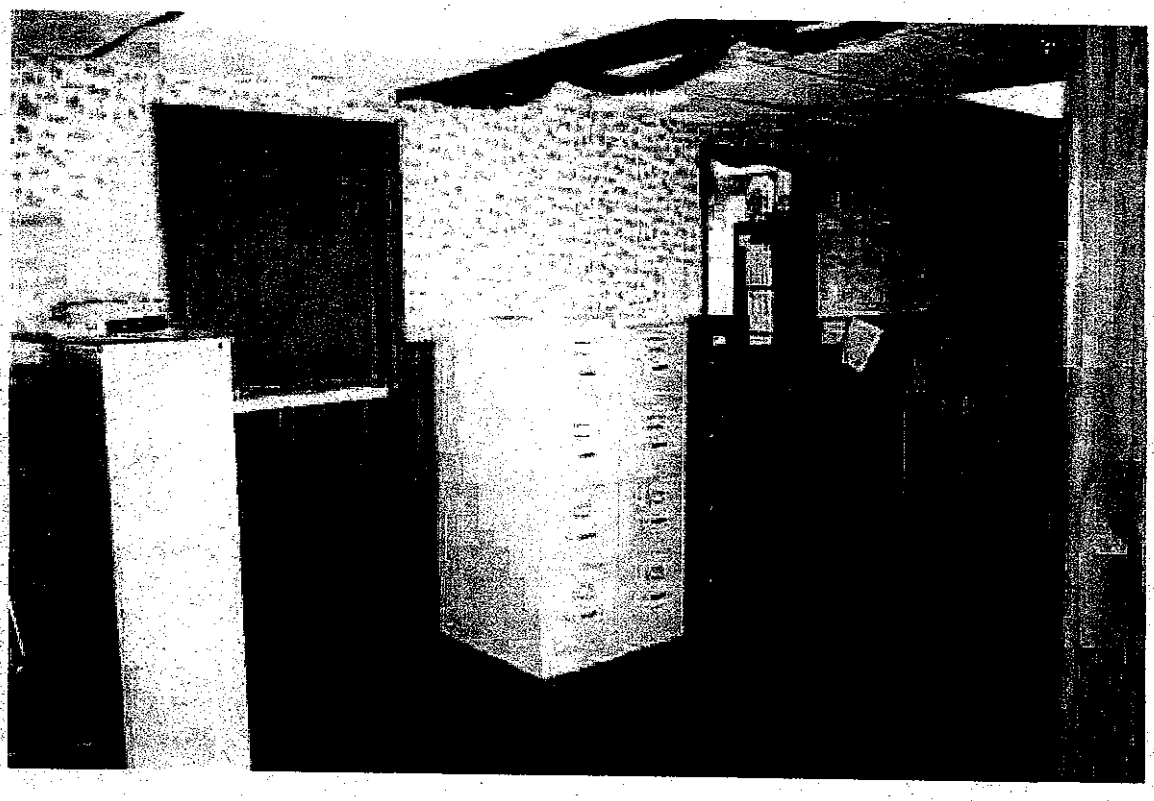
Town Hall – First Floor Main Hallway looking to Rear.



Town Hall First Floor Main Hallway looking to Front Door.



Town Hall First Floor Hallway at Treasurer/Collector's Office.



Town Hall – First Floor Main Hallway with File Cabinets and Copier.



Town Hall – First Floor Typical Office.



Town Hall – First Floor Selectmen/Town Coordinator's Office.



Town Hall – First Floor Typical Office and Fixtures.



Town Hall – First Floor Conference Room with Town Board's Record Storage.



Town Hall – First Floor Main Hallway view of Kitchenette and Mail Room.

b. Second Floor

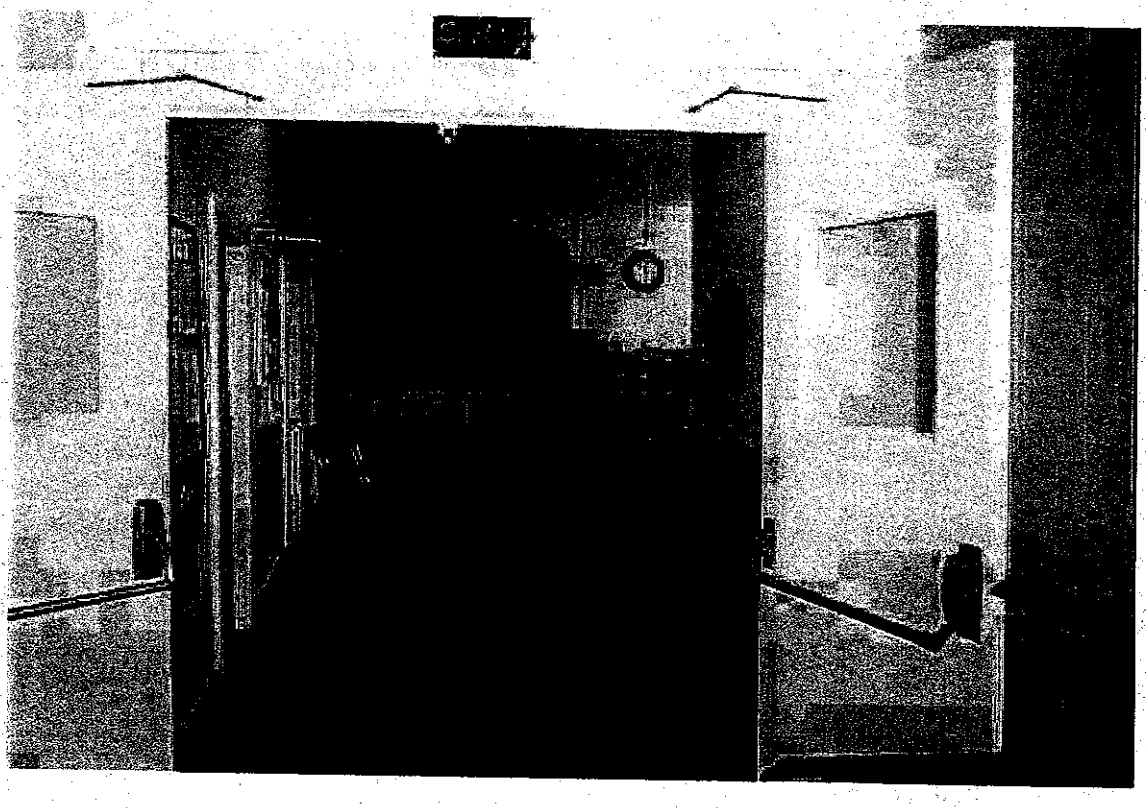
The second floor foyer is accessed by the open, wood staircase from the first floor foyer at the front door. Immediately accessible from the foyer is the Assessor's office and the entrance to the Meeting Room. Originally, the clear-span Meeting Room and Stage encompassed most of the second floor. In recent years three offices (Accountant, Personnel and an additional room for the Assessors) have been carved out of the Meeting Room, reducing its size and spatial configuration.

The Meeting Room is now used for large meetings and storage, although the entire second floor is not architecturally accessible. The Stage is unused except for storage and cannot be used unless it can comply with accessibility regulations which is unlikely unless a lift is installed. Areas behind the Stage include restroom facilities, storage and a stairway to the third floor.

A secondary means of egress for the second and third floors is an outside metal fire escape at the south wall of the Meeting Room. Original wall and ceiling finishes are plaster and wood, while new offices are sheetrock and wood without architectural distinction.

A breakdown of second floor areas is as follows:

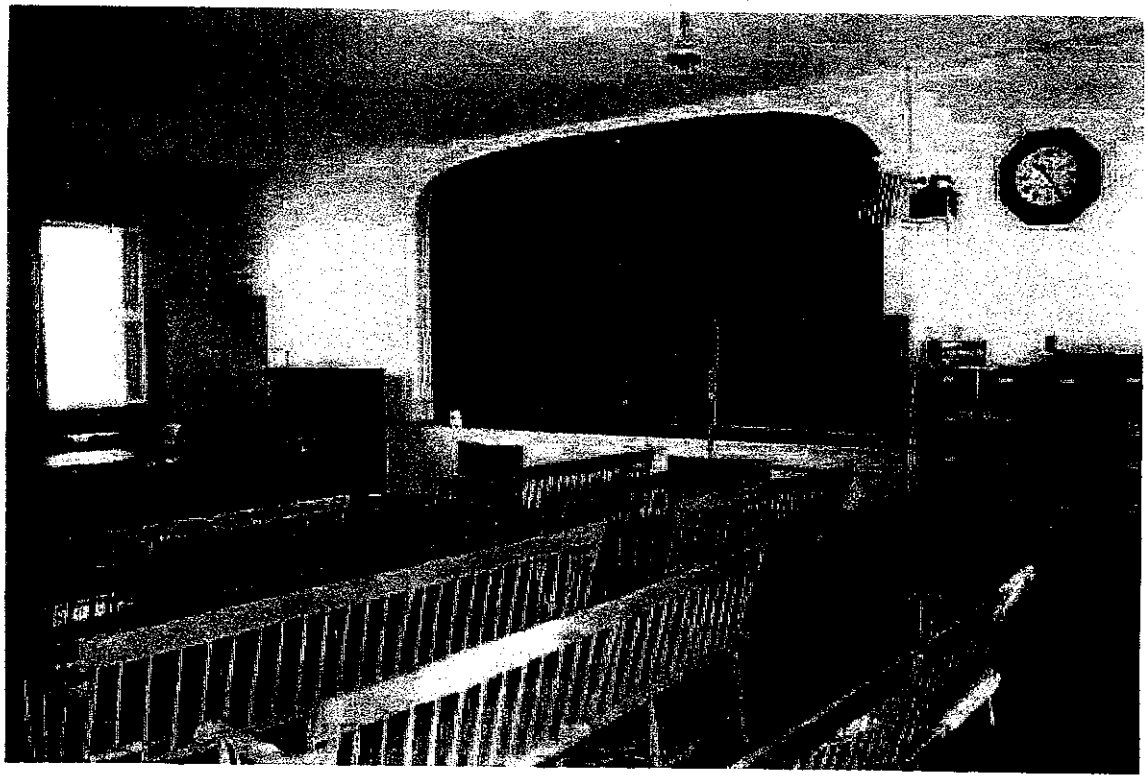
Use	Square Feet
Office spaces	741
Stairs/Circulation	456
Meeting Room	1,223
Stage	305
Storage	428
Miscellaneous	161
Interior walls	136
Total Second Floor interior area	3,450



Town Hall – Second Floor Entrance to Offices and Large Meeting Room.



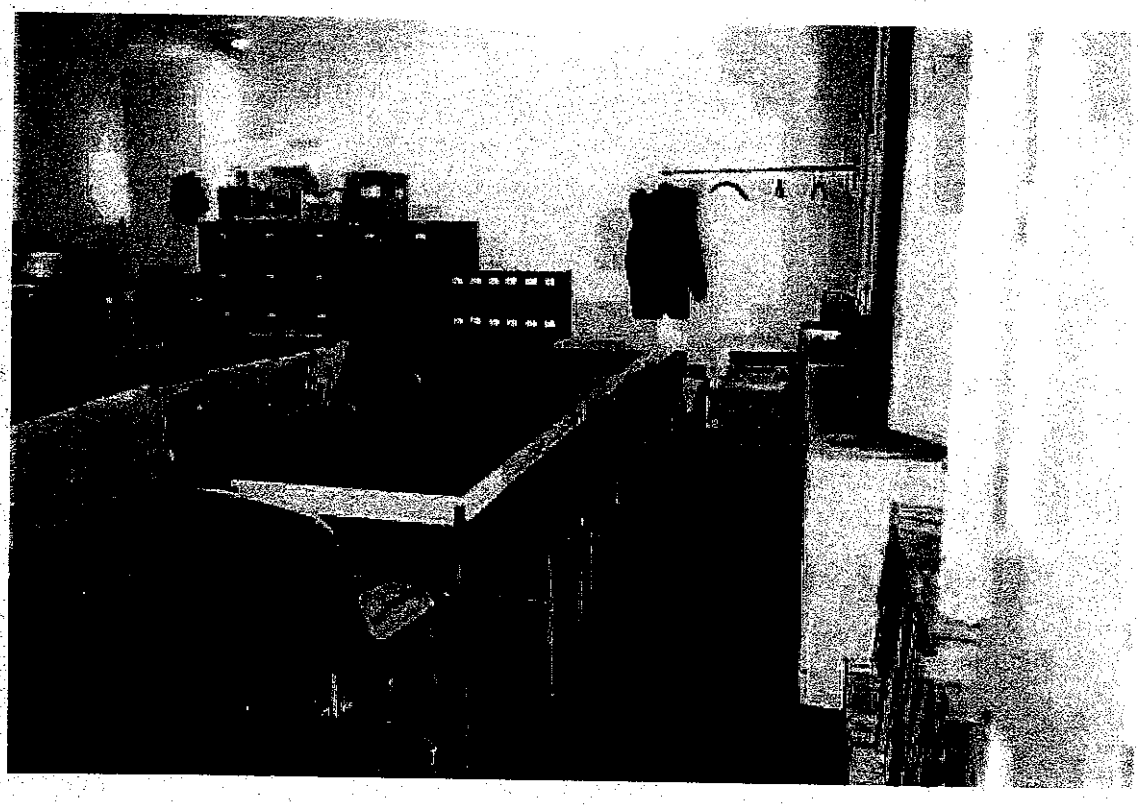
Town Hall – Second Floor New Office Created from Original Meeting Room.



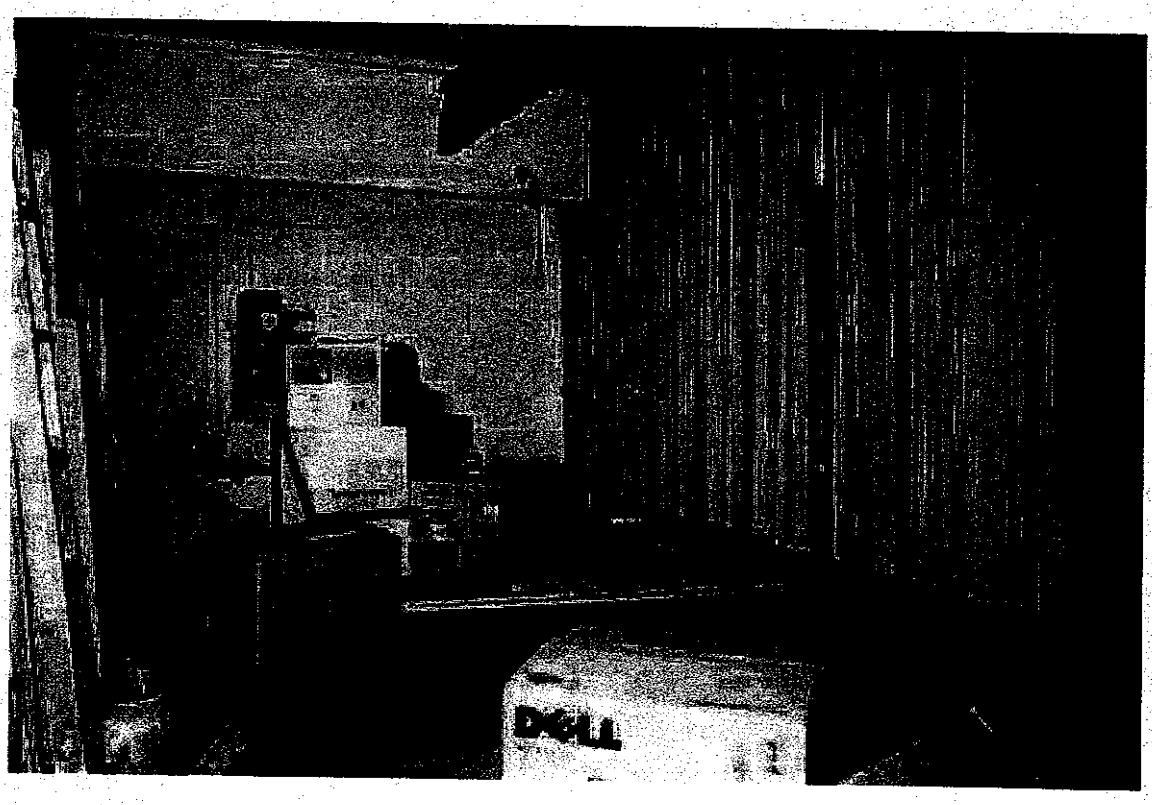
Town Hall – Second Floor Stage and Current Meeting Room.



Town Hall – Second Floor Group photo of Grange on Stage ca.1940.



Town Hall – Second Floor Meeting Room and Storage.



Town Hall – Second Floor Stage behind Curtain.

c. Third Floor

The third floor is accessed by an open wood stair from the second floor foyer to the third floor foyer, which provides access to the large Open Space and to a variety of storage rooms and closets. A secondary stair provides egress from the rear of Open Space to the second floor adjacent to the Stage area below.

The Open Space is one of the most interesting and architecturally significant spaces within the historic building. The ceiling is coved and together with the exposed truss posts and large dormers, creates an interesting and unique spatial arrangement. Within this space, four roof trusses support the roof and also the floor by means of the four exposed iron suspension rods that hold up the Open Space floor and provide the clear-span for the Meeting Room on the second floor below. Portions of the vertical posts of the roof trusses are evident in the Open Space while others are hidden within closets and enclosed areas under the sloping roof.

During the investigative stage of this study, it was determined that three ends of two of the roof trusses had substantial cracks, and connections between bottom chords and wall posts had failed and these posts had split at their centers. One of the middle trusses had pull-out failures at both ends, the other middle truss had a pull-out failure at one end, and both trusses were in danger of total failure. These conditions are responsible for bulging of the exterior walls and for severe stresses and some of the building's settlement issues. Town officials were immediately notified, designs for emergency repairs were generated, and emergency repairs to the two seriously defective trusses were authorized. Competitive bids were procured and the low bidder was authorized to make the repairs, which are now being completed. Additional details are contained in the Structural Engineering Report in the Appendix.

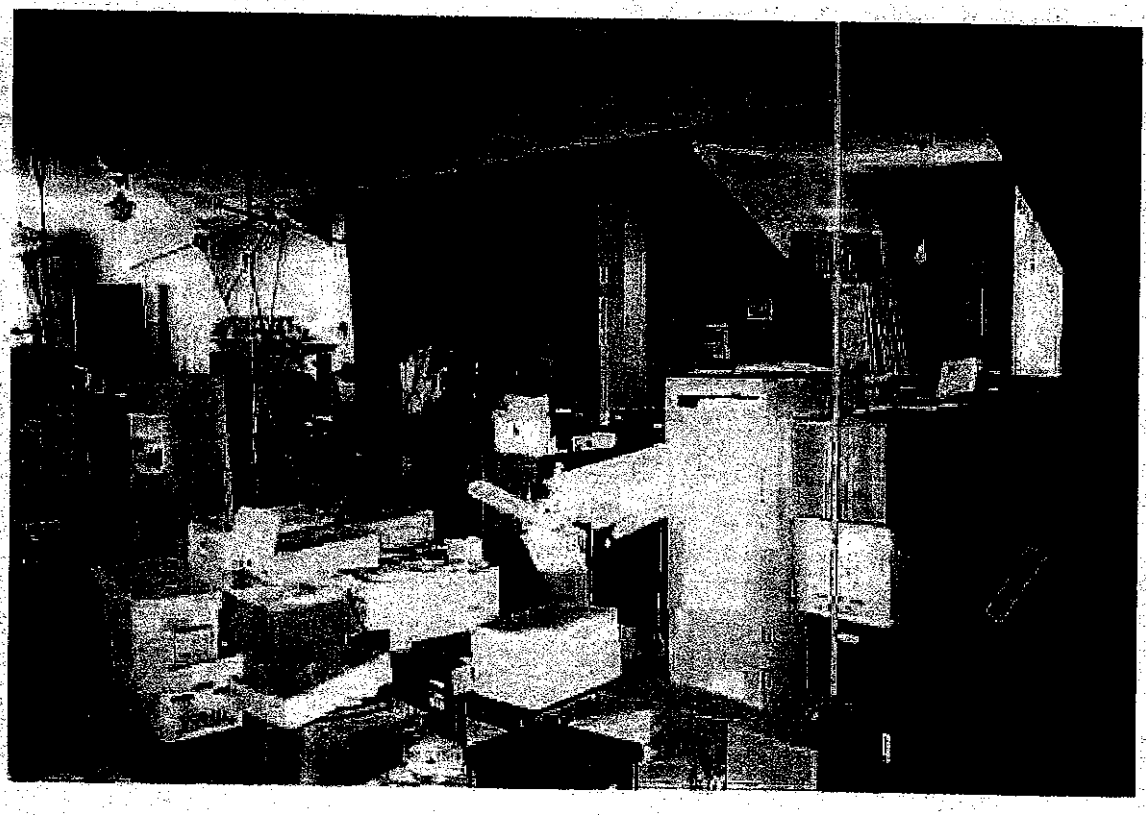
Prior to the detection of this severe structural problem, the third floor was filled with various historical artifacts of importance to Westminster in what can be described as a 'Grandma's attic', along with extensive dead storage of old Town Hall department files, obsolete equipment and various materials. The live load of this collection was a contributing factor to the structural problem as well as a fire hazard. All of this material was evaluated by Town officials, catalogued and removed from the building so that the emergency repairs could be undertaken.

An inventory of third floor areas at the beginning of this study was as follows:

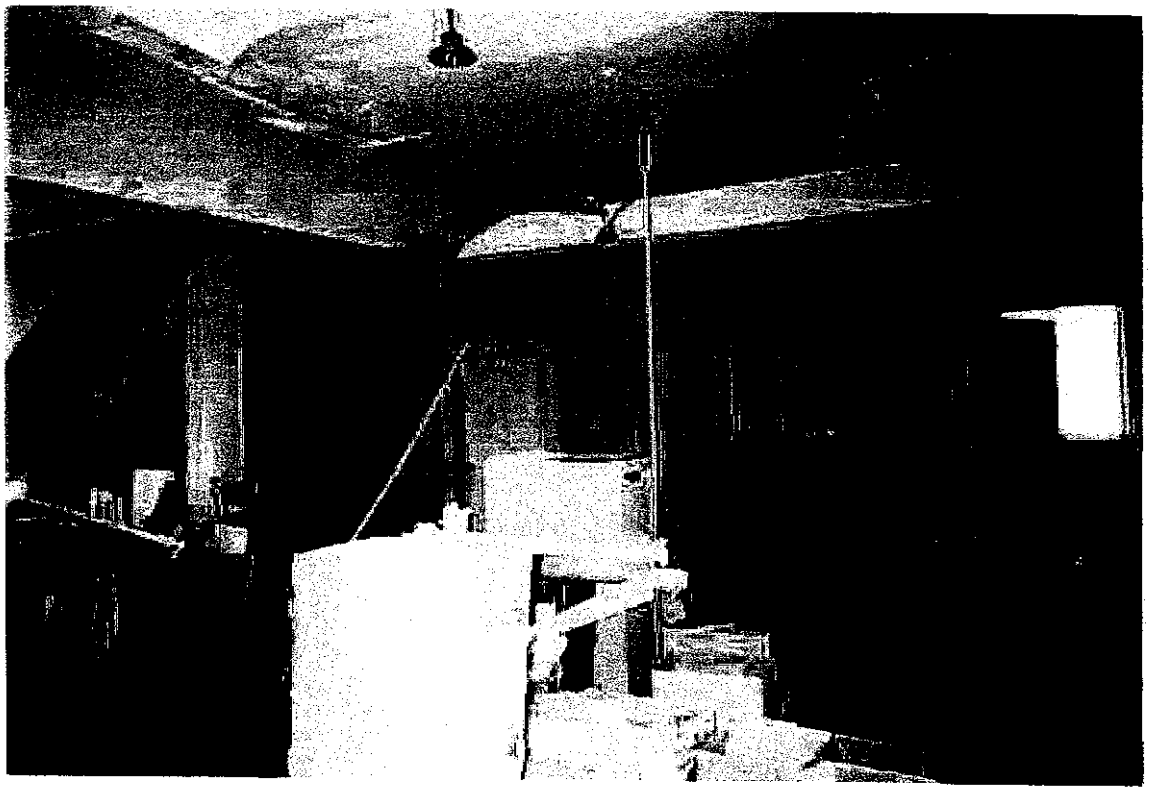
Use	Square Feet
Stairs/Circulation	188
Open Storage	1,609
Other Storage	474
Interior Walls / Inaccessible	480
Total Third Floor interior area	2,751



Town Hall – Third Floor Cove Ceiling and Light Fixtures.
(All Artifacts have been Catalogued and Removed.)



Town Hall – Third Floor Tie-Rods and Roof Truss Members being Repaired.



Town Hall – Third Floor Past Water Damage and Structural System are Visible.



Town Hall – Third Floor Additional Artifacts and Storage, now Removed.

Summary of Existing Town Hall Spaces

Floor / Use	Interior (Square Feet)		Exterior (Square Feet)
First Floor:			
Office Spaces	1,437		
Stairs / Circulation	1,021		
Meeting Room	130		
Mail Room	64		
Vault	132		
Storage / Kitchen	170		
Boiler Room	159		
Interior Walls	200		
Total Interior S.F.	3,313		
		Total Interior	3,313
		Exterior Walls	399
		Total Gross S.F.	3,712
Second Floor:			
Office Spaces	741		
Stairs / Circulation	456		
Meeting Room	1,223		
Stage	305		
Storage	428		
Miscellaneous	161		
Interior Walls	136		
Total Interior S.F.	3,450		
		Total Interior	3,450
		Exterior Walls	262
		Total Gross S.F.	3,712
Third Floor:			
Stairs / Circulation	188		
Open Storage	1,609		
Other Storage	474		
Interior Walls	480		
Total Interior S.F.	2,751		
		Total Interior	2,751
		Exterior Walls	208
		Total Gross S.F.	2,959
Total Building Spaces:			
		Percent	
Office Space	2,177	23	
Stairs / Circulation	1,665	17	
Meeting Rooms	1,353	14	
Mail Room	64	1	
Vault	132	1	
Stage	305	3	
Storage	2,681	28	
Miscellaneous	161	2	
Boiler Room	159	2	
Interior Walls	816	9	
Total Building Interiors	9,513 S.F.	100%	
		Total Interiors	9,513
		Exterior Walls	869

TOTAL BUILDING GROSS AREA S.F. 10,382

3. Structural Evaluation

Structurally, the Westminster Town Hall is in need of considerable rehabilitation.

While the perimeter foundations require routine patching and restoration, many of the interior foundations and piers have settled and tilted, causing the first and second floors to move. In addition, the sizes and conditions of the framing members of the first floor as well as the way they sit on the interior foundation piers have proven insufficient for the potentially heavy loads that can be placed on this floor. Many of the timbers have compressed at their supports. Because of this, a significant amount of re-structuring and reinforcement of the first floor and interior foundations is recommended. This is a relatively simple problem to resolve during a major renovation.

A visual inspection of the second floor did not observe any conditions that would suggest anything other than normal behavior for a wooden structure of its age. This framing would typically be exposed, inspected and repaired where needed as part of an overall building rehabilitation program. There are other localized items of concern that must be addressed at the first and second floors. These include moisture and resultant wood-rot fungus decay under the first floor that should be addressed during a renovation program. The suspended ceiling soffit in the Assessors Office sags abruptly in the southeast corner and should be checked and re-attached. At the second floor there are diagonal cracks in many of the interior walls that appear to be related to sagging and possible settlement of the floor structure. Cracks in the proscenium wall at the stage are related to the fact that this once was the exterior wall of the building and continues to support floor loads. Cracks in the second floor exterior walls are most notable in the Assembly Hall and are related to the roof truss failure above.

The original trusses that support the roof and third floor structure have undergone an initially slow and then rapidly accelerating structural failure, which was caused by a detailing flaw as part of their original design. This condition was discovered during our survey and has, since the Structural Report was written, begun to be addressed with the implementation of a permanent stabilization system, which has been designed for both current and anticipated future loads. The current structural work being done by Consigli Construction will repair the two failed trusses (the other two have not failed), returning the building to a safe condition. However, the other truss locations, as well as the second floor proscenium wall, which supports the third floor and is showing signs of movement, will eventually need to be addressed as part of a comprehensive renovation of the building.

Other items that are noted in the Structural Report, are more routine for a building of this age and construction and can be considered a normal part of the building's lifelong maintenance cycle.

The complete Structural Engineers Report is located at the end of this report in the Appendix.

4. Systems Evaluation

a. Electrical – Power and Branch Circuits

The Town Hall has a 200 amp. single-phase electrical service with various wiring types including knob-and-tube as well as frequent use of Romex wiring. A 200 amp. service is now typical for a large single family house. All existing wiring methods are currently not acceptable for a public building having a place of assembly.

A typical electrical service for a town hall the size of Westminster's Town Hall would be a 400 amp. three-phase service. This service should be approximately four times the capacity of the existing service. We recommend that the electrical service and all branch wiring be completely replaced with a new service and new MC cable branch wiring. A three-phase service is needed for modern central air conditioning and an elevator. The number of duplex outlets should be dramatically increased to accommodate the needs of a modern office. In addition, a contemporary communications system is essential for an efficient town hall in today's highly computerized society.

b. Lighting

The existing lighting is a combination of relatively recent fluorescent and quite old incandescent fixtures. The fluorescent fixtures are typically recessed in suspended acoustical ceilings. In general, they provide adequate illumination, but are below contemporary standards for efficient office use. In some hallways, as well as on the second and third floor, old incandescent fixtures remain. Some of these fixtures are missing their original glass diffusers. In general, these fixtures provide relatively low levels of illumination and are well beyond their normal service life.

There is a very limited number of emergency lights and no illuminated exit signs. These important safety systems should be upgraded to meet current building code requirements.

c. Heating Ventilating and Air Conditioning

The Town Hall is currently heated by a cast-iron steam boiler piped to cast-iron radiators. The building appears to have only one zone so that there is no way to accommodate differing heating requirements, on different floors or on different sides (exposures) of the building, throughout the day.

The existing heating system design is typically reliable; however, it provides only marginal user comfort since controls and balancing is very primitive for a building this size and with the varied uses of a Town Hall.

There is no mechanical ventilation or air conditioning in the Town Hall. Mechanical ventilation is important throughout the year as is air conditioning during hot summer months. If office employees are not comfortable, they cannot perform their functions as efficiently as in a well heated and air conditioned office space. These are both important systems for a modern and efficient town hall.

d. Plumbing

The existing bathrooms are obsolete and are not wheelchair accessible. New, fully accessible, bathrooms will be required when any significant work is performed at the Town Hall.

e. Fire Alarm System

The Town Hall is protected by a limited number of heat detectors. Heat detectors do not provide the level of protection or sensitivity that a modern smoke detection system provides. Installation of a modern, zoned and monitored fire alarm system should be a top priority in terms of protecting the public, staff and this historic building.

f. Sprinkler System

There is no sprinkler or standpipe system in the Town Hall. Town water service is reportedly adequate to support a sprinkler system to protect a 2-1/2 story building. The addition of a sprinkler system would be required by a substantial renovation or by new construction of a comparably sized town hall. A modern fire alarm system is the primary life safety system for building occupants, while a sprinkler system provides the best protection for the building itself.

5. Accessibility

The Westminster Town Hall must comply with both AAB (Massachusetts Architectural Access Board) regulations and federal ADA requirements (Americans with Disabilities Act). The AAB is state accessibility legislation while the ADA is federal civil rights legislation. AAB regulations date from 1975 while the ADA became effective in 1992.

The ADA focuses primarily on program accessibility and places of employment. The AAB is triggered by construction alterations, remodeling, additions or changes in use. The goal of both regulations is to provide fully accessible facilities.

The Westminster Town Hall has the following deficiencies that should be corrected:

a. Building Entrance:	The building entrance is generally accessible, however changes are needed in both door hardware and at the door sill.
b. Door Hardware:	Door hardware throughout the building needs to be changed to lever handles, and in some cases thresholds changed to match slope and height requirements.
c. Accessible Bathrooms:	Accessible bathrooms need to be provided for both the public and employees.
d. All Occupied Floors:	An elevator needs to be added to make all floors accessible.
e. Customer Counters:	The offices with counters on the main corridor need to have a 3' wide section of counter not higher than 36" to allow for wheelchair use.
f. Drinking Fountain:	A high/low drinking fountain should be provided.
g. Signage:	Signage throughout the building needs to comply with signage standards.
h. Parking:	A certain percentage of Town Hall parking spaces need to be designated for HP use.

There are many additional detail requirements, which need to be conformed with to make Town Hall fully accessible. These detail requirements include the following:

- if a public telephone is to be provided, it must be an accessible public telephone,
- specific dimensional requirements must be adhered to for stairs, elevators, doors, floor surfaces, alarms and light fixtures,
- curb cuts must be provided at all new or repaired walks or curbs.

6. Building Code Issues

Chapter 34 of the Massachusetts State Building Code addresses the "Repair, Alteration and Change of Use of Existing Buildings." The intent of this chapter is to "maintain or increase public safety, health and general welfare in existing buildings by permitting repair, alteration, addition and/or change of use without requiring full compliance with the code for new construction." Specifically, Article 3404 addresses continuation of an existing use group which applies to the Town Hall.

The following are building code items that will need to be addressed in the renovation of the Town Hall:

a. Installation of a comprehensive fire detection and fire alarm system meeting requirements for new buildings.

b. The installation of a sprinkler system is required for substantial renovation of a building the size of Town Hall by a provision of the State Building Code that has been adopted by the Town. A sprinkler system is very valuable in protecting a large wooden building like the historic Town Hall in the event of a fire. The lowest cost of installation would be during a major renovation project.

c. Installation of exit signs and emergency lighting.

d. The existing front stair will need to be enclosed with self-closing, tight-fitting doors which have approved hardware.

e. The continued use of the exterior fire escape stair will need to be reviewed with the Building Inspector when basic building plans are developed since he has discretion to accept or reject the stair. The construction of an interior, fully enclosed stairway is recommended.

f. New building systems such as: fire alarm, sprinklers, emergency lighting and exit signs, heating, air conditioning and electrical must conform to new building requirements.

7. Site Suitability

The Town Hall site encompasses 25,800 s.f. of relatively flat land at the intersection of Bacon and Pleasant streets in the center of Westminster. The property is located in and is a contributing element to the Westminster Village-Academy Hill Historic District, which is listed on the National Register of Historic Places.

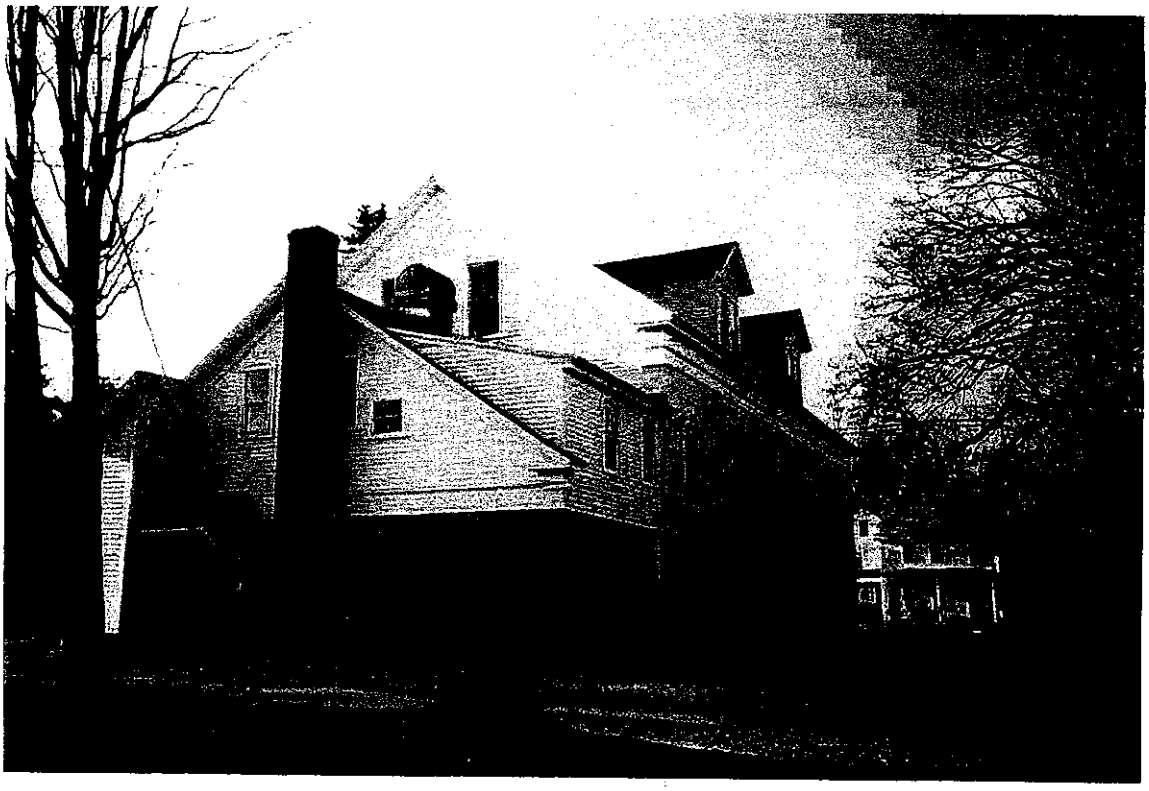
The site is proximate to the Town's central business district and across Bacon Street from the Town's newly renovated and expanded Forbush Memorial Library, convenient for shared and supportive facilities.

All required utilities (water, sanitary sewer, gas, electric power and telephone) are readily available in the adjacent streets to meet the needs of a renovated and expanded Town Hall facility at this site. The deed and plot plan of the vacant lot that the Town purchased is contained in the Appendix.

The acquired vacant lot that was added to the rear of the site is ideal for accommodating an immediate addition to the Town Hall and for future long-term expansion. Although subsoil investigation was beyond the scope of this study, there appear to be no known obstacles or constraints to expansion and development of the site. The site is suitable for off-street parking; however, the amount and configuration of parking spaces are dependant on the location and size of a Town Hall addition. Care should be taken to maintain adequate visual protection and buffering of parking from nearby historic residential properties and to maintain the environmental character of the historic district of which the Town Hall is an important component.



Town Hall – Rear View across Vacant Lot. Replacement of the 1 1/2 story Addition with a New Larger Addition could provide Badly Needed Space.



Town Hall – Rear View North. New Addition in place of 1 1/2 Story Element could include New Accessible Entrance and Elevator.



Town Hall – View Northeast Shows Vacant Lot Suitable for New Addition and Sensitively Designed Off-Street Parking.

C. Space Needs Study of Town Hall

C. SPACE NEEDS STUDY OF TOWN HALL

The purpose of this study was to define and evaluate existing and future space needs of Town Hall so that the existing Town Hall building could be evaluated as to its capability to meet both immediate and long-range (15-20 years) needs of the growing community at this location.

An inventory and evaluation of all Town Hall spaces was undertaken as defined in the preceding section B of this report. Each Town Hall department was inspected and interviewed to ascertain existing conditions, personnel and equipment, current problems and needs and their anticipated long-terms needs of additional personnel and equipment. The consultants then conducted an independent evaluation of each department's future space needs for the 15-20 year term and reviewed their evaluation with the Town Hall Renovation Committee and the Town Coordinator.

1. Summary of Existing Uses

At the present time, the active town offices and support space that provide daily public services occupy 2,503 square feet on the first and second floors of Town Hall as follows:

First Floor – Offices	Square Feet	
Selectmen's Office /Town Coordinator	358	
Town Secretary	112	
Board of Health	176	
Building Department	314	
Town Clerk	187	
Treasurer/Tax Collector	289	
Total First Floor Offices	1,436	
Second Floor – Offices	**Square Feet**	
Assessors	385	
Accountant	177	
Personnel Department	179	
Total Second Floor Offices	741	
TOTAL OFFICES		**2,177**
Support Spaces	**Square Feet**	
First floor Conference Room	130	
Copy/Supply/Mail Room	64	
Town Vault	132	
TOTAL SUPPORT SPACES		**326**
TOTAL OFFICE SPACES		**2,503**

2. Summary of Future Needs (20 years)

During the inventory of spaces and meetings with Town departments, each department was asked to estimate their additional equipment and personnel growth needs for the next 15-20 years. The consultants also evaluated each department's space and equipment needs and reviewed the Town's Organizational Chart of Personnel and future 'hires' to estimate the space-needs of each department and the overall space needs of an efficient and contemporary town hall facility for the next 20 years.

It is estimated that to operate efficiently, the basic town offices will grow from the present 2,177 s.f. to approximately 3,000 s.f. (a 38% increase) over the next 20 years.

Basic support and other spaces (meeting rooms, vault, work room, janitorial room and secondary storage space) will require an additional 1,670 s.f.

It was assumed that the 2,083 s.f. comprising the third floor will be used for a formal display of town historical materials and artifacts, including facilities and storage for the Historical Commission.

Total Town Hall space needs are approximately 6,750 s.f., not including circulation areas, hallways, restroom facilities and mechanical/electrical system space.

The two conceptual design options that were developed as a key component of this study are contained in the next section. The two options respond directly to the forecasted space-needs of the Town for the next 20 years and were developed in a manner that could readily accommodate another future addition beyond this 20 year period.

The attached Matrix-Analysis of Space Needs provides a detailed breakdown and analysis of each department and support spaces for both existing conditions and the 20-year forecasted needs and their percentage of change.

All offices operate under adverse physical conditions. Inadequate space and obsolete office layouts and systems severely impact the efficiency of staff to perform their daily operations. The lack of adequate space and equipment requires make-shift storage of records and supplies in every office. It is only the dedication, creativity and friendly attitude of town employees that allow the town offices to operate under such conditions and to continue to provide public services to residents and taxpayers.

Storage of current and old records that must be maintained by various departments by law are in respective departments and in the second floor Meeting Room, the stage, and closets and throughout the third floor until recently removed to permit the emergency roof truss repairs. All of these records are stored under adverse conditions, including those in the town vault and many constitute a safety and fire hazard. The storage problem will continually increase over time as many departments are required by statute to maintain public records, sometimes forever.

While many old records could be "dead filed", there is presently no adequate and secure storage space in Town Hall.

The results are presented in the attached Matrix-Analysis of Space Needs. The results were then utilized to develop conceptual plans and costs to evaluate the feasibility of renovating and expanding the existing Town Hall building.

McGinley Hart & Associates LLP
Architects and Planners
Somerville, MA

ANALYSIS OF SPACE NEEDS
WESTMINSTER TOWN HALL
April 2002

Town Hall Renovation Committee
Town of Westminster
Westminster, MA

Department/Facility	Existing Personnel	Additional Future Personnel	Existing Equipment	Additional Future Equipment	Existing Area (s.f.)	Future Area (s.f.)	Percent Change
• **Town Coordinator**	1 – full time	(Town Secretary needs to serve Town Coordinator & Selectmen only)	2 – 4 drawer file cabinets 2 – 5 drawer file cabinets conference table & chairs 1 – computer & printer	additional file cabinets	358	400	12%
• **Town Secretary** (Gate Keeper) (support person to Town Coord.)	1 – full time (must be next to Town Coord.)		1 – computer & printer 1 – typewriter	more storage	112	175	56%
• **Board of Health** (needs to be near Bldg. Dept)	1 – full time (shares Town Secretary)	1 – full time	8 – 4 drawer file cabinets 1 – 2 drawer file cabinet 1 – computer & printer	1 – file cabinet 1 – basic refrigerator 1 – additional work station w/computer for new person more storage need 100 S.F. of dead storage	176	275	56%
• **Building Department**	2 – full time 2 – part time	1 – full time (land use planner) 1 – part time to become full time	15 – 4 drawer file cabinets (6 are on 2nd floor) 3 computers & 3 printers	table for plan layout plan flat files 2 – file cabinets 2 – additional work stations w/computers for new personnel more storage	314	550	75%
• **Town Clerk**	1 – full time 2 – part time	1 – part time becomes full time	1 – 4 drawer file cabinet 2 – 2 drawer file cabinets 3 – computers 1 – printer 1 – copy machine	1 – 2 new file cabinets space for public to review records private office space/Town Clerk, proximity/direct control of vault more storage	187	350	87%
• **Treasurer/Tax Collector**	1 – full time 2 – 1/2 time (overlap during tax season - 1 month, twice/year)	1 – part time to become full time	2 – 4 drawer file cabinets 2 – 2 drawer file cabinets (one is fire resistant) 3 – computers & printer VIP – 1/2 door/window counter have 7' counter-gate	Director's Office shall be semi-private or private space more storage 4 – 2-drawer cabinets w/counter and overhead cabinets 1 – additional work station	289	375	30%
• **Assessors**	1 full time 1 part time - 10 hrs/25%	1 – part time to become full time 3 assessors need hearing room for 5-6 people; could be shared. Area for public to inspect tax maps.	6 – 4 drawer file cabinets 1 – lateral file 1 – flat file for plans	2 – 4-drawer files 2 – flat files for plans/tax maps	385	425	10%

McGinley Hart & Associates LLP
Architects and Planners
Somerville, MA

ANALYSIS OF SPACE NEEDS
WESTMINSTER TOWN HALL
April 2002

Town Hall Renovation Committee
Town of Westminster
Westminster, MA

Department/Facility	Existing Personnel	Additional Future Personnel	Existing Equipment	Additional Future Equipment	Existing Area (s.f.)	Future Area (s.f.)	Percent Change
• Town Accountant	1 – full time 1 – part time - 10 hrs/25% (ideal to be on 2nd floor)	1 – part time to become full time	8 – 4 drawer file cabinets 1 – voucher case @ 60" (needs to keep records long-term)	additional storage additional work station w/computer	177	250	69%
• Personnel	1 – full time 1 – part time/33% (services elderly, retired and Town employees)		3 – 4 drawer file cabinets 1 – 2 drawer fire resistant Items now in Town vault could be kept in office w/new cabinets. (need to keep records long-term)	need 3 more fire resistant cabinets	179	200	12%
SUBTOTAL, BASIC TOWN OFFICES (Does not include meeting rooms, stairways, circulation and hallways, restroom facilities, mechanical, storage and support spaces)					**2,177**	**3,000**	**38%**
Support & Other Spaces:							
• Conference/Meeting Rooms				1 small @ 220 s.f. - 8/10 persons	1 @ 130	1 @ 220	69%
				1 large @ 400 s.f. - 25 persons	1 @ 1,223	1 @ 400	(-67%)
• Copy/Supply/Mail Room					64	120	88%
• Work/Lunch Room						150	new
• Vault/Town Clerk					132	200	52%
• Janitorial Room					0	80	new
• Secondary Storage Room					0	500	new
• Stage					305	0	–
• Conservation Commission • Planning Board			Existing storage file cabinets and plan files should be located in Building Department w/new land use planner.		0	0	–
• Zoning Board of Appeals & • Liquor Commission			Existing storage should be located in Town Clerk's office.		0	0 1670	– 10%
SUBTOTAL, SUPPORT & OTHER SPACES					**1,854**	**1,670**	**(-10%)**
TOTAL, BASIC TOWN OFFFICES AND SUPPORT SPACES (Does not include stairways, circulation, hallways, restroom facilities and mechanical spaces)					**4,031**	**4,670**	**+16%**
Historical Display/Artifacts (Third Floor)			Have extensive and significant historical artifacts. Interpret and develop appropriate Town historical displays. Include facilities and storage for Historical Commission records.		2,083	2,083	0
TOTAL TOWN SPACE NEEDS (Does not include stairways, circulation, hallways, restroom facilities and mechanical spaces)					**6,114**	**6,753**	**10%**

NOTE: Original Second Floor Hall, Stage & Stage Side Spaces = 1,829 S.F.

B. Option 2

This option basically restores the second floor large Meeting Room and Stage to their original configuration and condition as a Town meeting space. The Meeting Room and Stage occupy approximately 2,300 square feet of space. It should be noted that the stage is not handicap accessible, which precludes its active use for public activities.

The restoration of the Meeting Room and Stage requires a larger new addition than Option 1 in order to meet the Town's space needs as defined in this study. The new addition would contain approximately 1,600 feet of new office space as well as the core facilities as outlined in Option 1. The new addition of Option 2 contains approximately 6,258 square feet of space or approximately twice the space of the addition in Option 1.

The estimated costs for Option 2 are as follows:

Westminster Town Hall
April, 2002
Conceptual Level Cost Estimate

Option 2

	Area	$/S.F.	Cost
1. HazMat	—	allowance	25,000
2. Demolish 1 1/2-story addition	1,440	20	28,800
3. Renovate original Town Hall (1st & 2nd floor)	5,984	140	837,760
4. Renovate 3rd floor for Town Museum (add)	2,959	55	162,745
5. Addition (1st & 2nd floor) including vault	4,172	180	750,960
6. Addition (basement)	2,086	50	104,300
7. Elevator (4-stop elevator)		lump sum	150,000
8. Site Work & Utilities		lump sum	75,000
		Sub-Total	$2,134,565
9. 15% Estimating & Construction Contingency and inflation to 1st quarter 2003			$320,185
		Sub-Total	$2,454,750
10. Design & Contract Administration Fees (12%)			$294,570
		TOTAL	$2,749,320

III. CONCEPTUAL PLANS AND COSTS

Based on the results of the Space Needs Study and the investigation of the physical conditions of the Town Hall building, the consultants developed conceptual plans for two options:

A. Option 1

This option maximizes reuse of the existing building for town offices within the 2-1/2 story portion of the structure by filling in the second floor large Meeting Room and Stage areas with efficient office spaces. It proposes to demolish the 1-1/2 story present addition on the rear of Town Hall and to build a new two-story addition-utility core for restroom facilities, stairs and elevator to serve all levels, a new vault, a new handicapped entrance and a basement level for storage and a new boiler room.

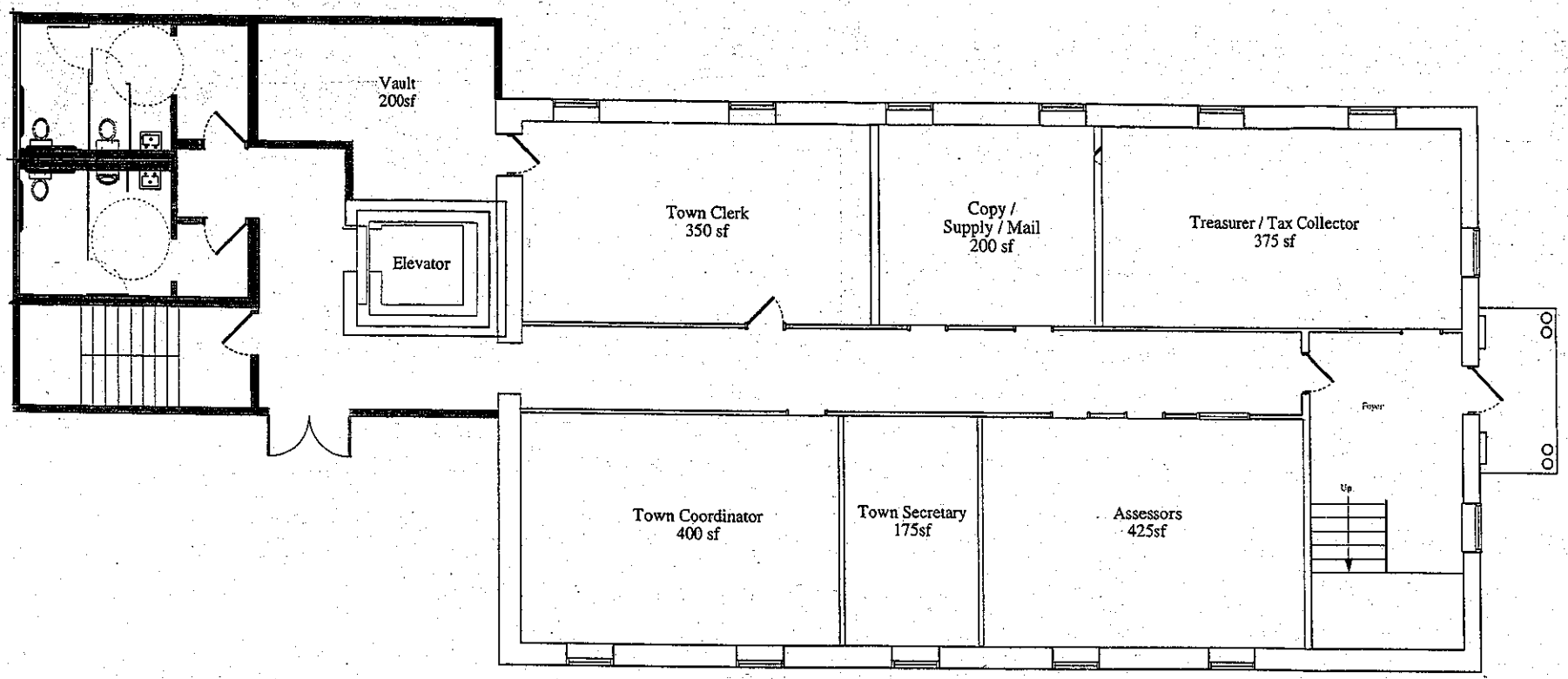
This addition contains approximately 3,150 square feet and could be added onto for any additional future office space beyond the 20-year forecast.

The estimated costs for Option 1 are as follows:

Westminster Town Hall
April, 2002
Conceptual Level Cost Estimate

Option 1	Area	$/S.F.	Cost
1. HazMat	—	allowance	25,000
2. Demolish 1 1/2-story addition	1,440	20	28,800
3. Renovate original Town Hall (1st & 2nd floor)	5,984	140	837,760
4. Renovate 3rd floor for Town Museum (add)	2,959	55	162,745
5. Addition (1st & 2nd floor) including vault	2,100	180	378,000
6. Addition (basement)	1,050	50	52,500
7. Elevator (4-stop elevator)		lump sum	150,000
8. Site Work & Utilities		lump sum	75,000
		Sub-Total	$1,709,805
9. 15% Estimating & Construction Contingency and inflation to 1st quarter 2003			$256,471
		Sub-Total	$1,966,276
10. Design & Contract Administration Fees (12%)			$235,953
		TOTAL	$2,202,229

III. CONCEPTUAL PLANS & COSTS



Option 1 : First Floor Plan

Westminster Town Hall

Westminster, Mass

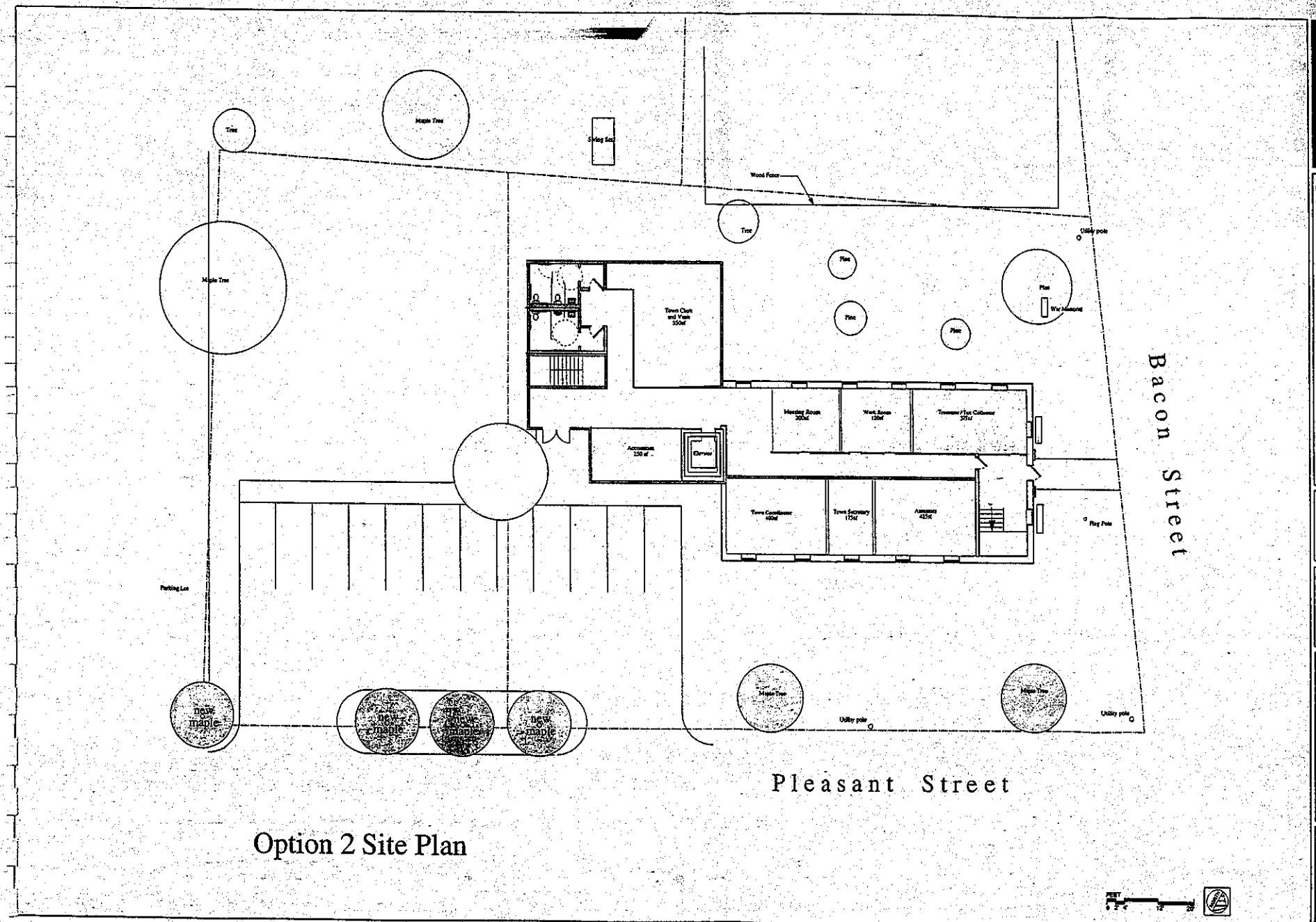
Space Planning Study

Scale: 1/8"=1'-0"
Date: April, 2002
Drawn By: ENF
Checked by: WCK

McGinley Hart & Associates LLP

524 Broadway
Somerville, MA 02145
Telephone • 617 625-8901
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Option 2 Site Plan

Westminster Town Hall

Westminster, Mass.

Space Planning Study

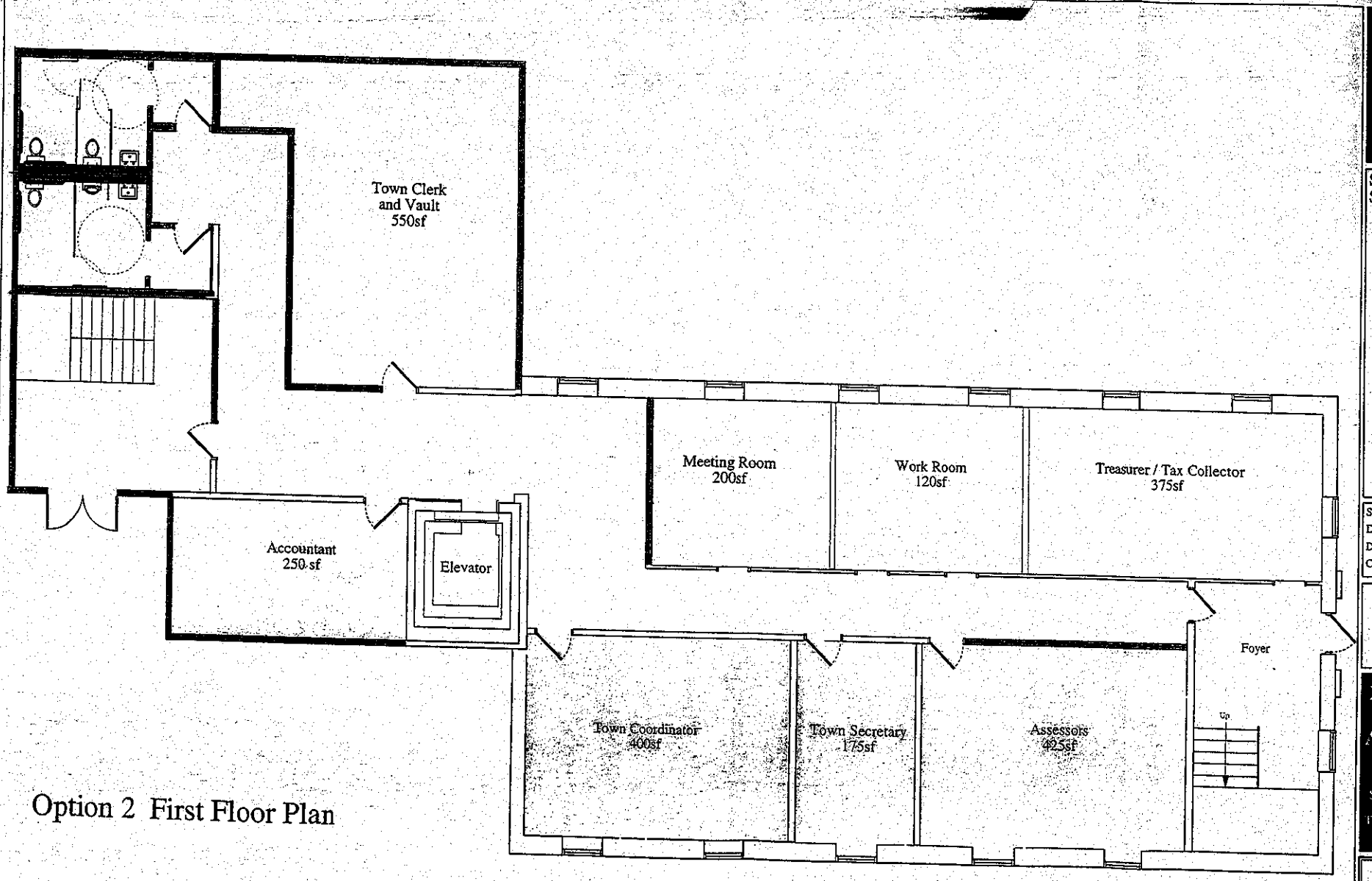
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Date: April, 2002
Drawn By: ENF
Checked by: WCH

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Option 2 First Floor Plan

Westminster Town Hall

Westminster, Mass

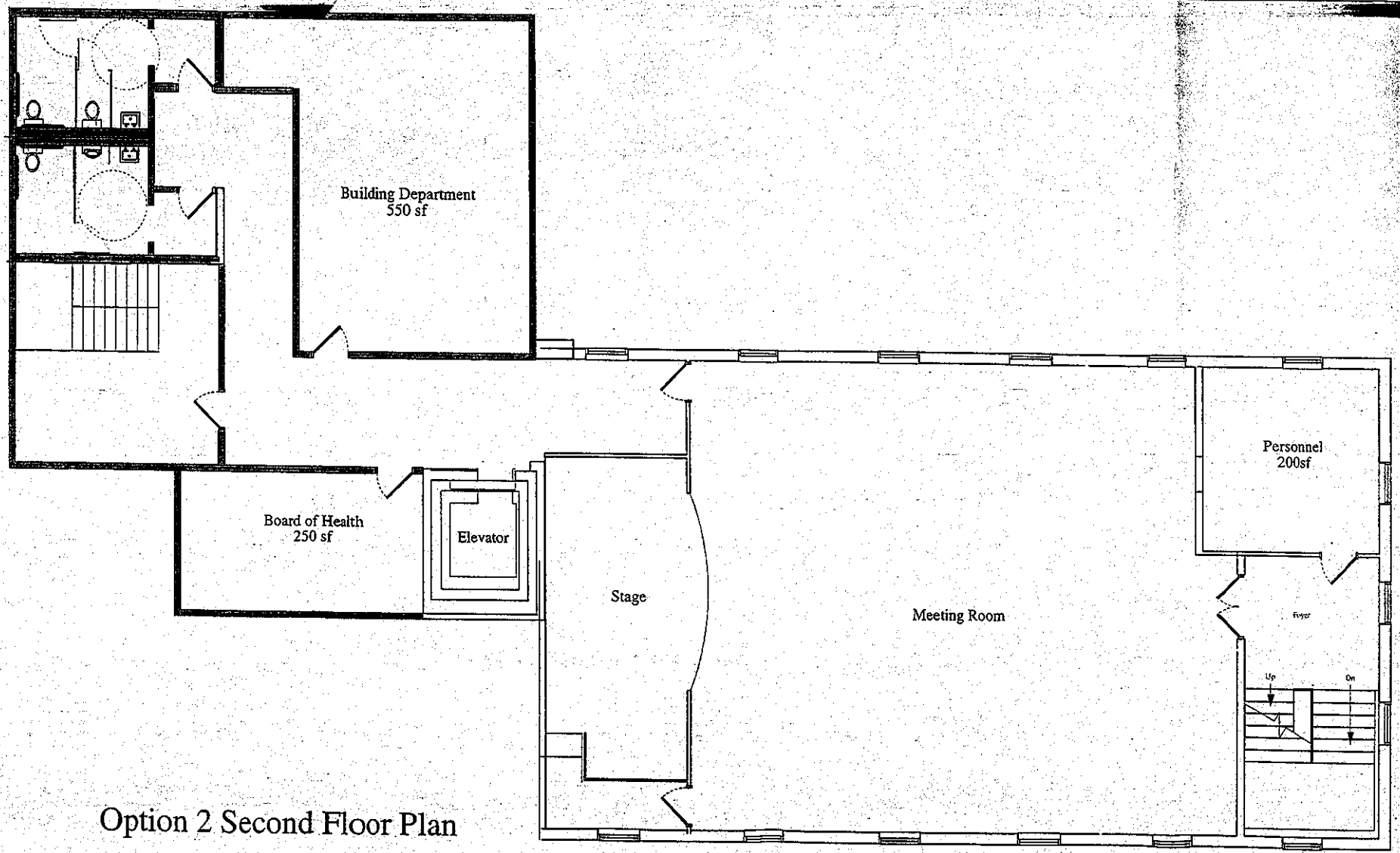
Space Planning Study

Scale: 1/8"=1'-0"
Date: April, 2002
Drawn By: ENF
Checked by: WCK

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Option 2 Second Floor Plan

Westminster Town Hall

Westminster, Mass

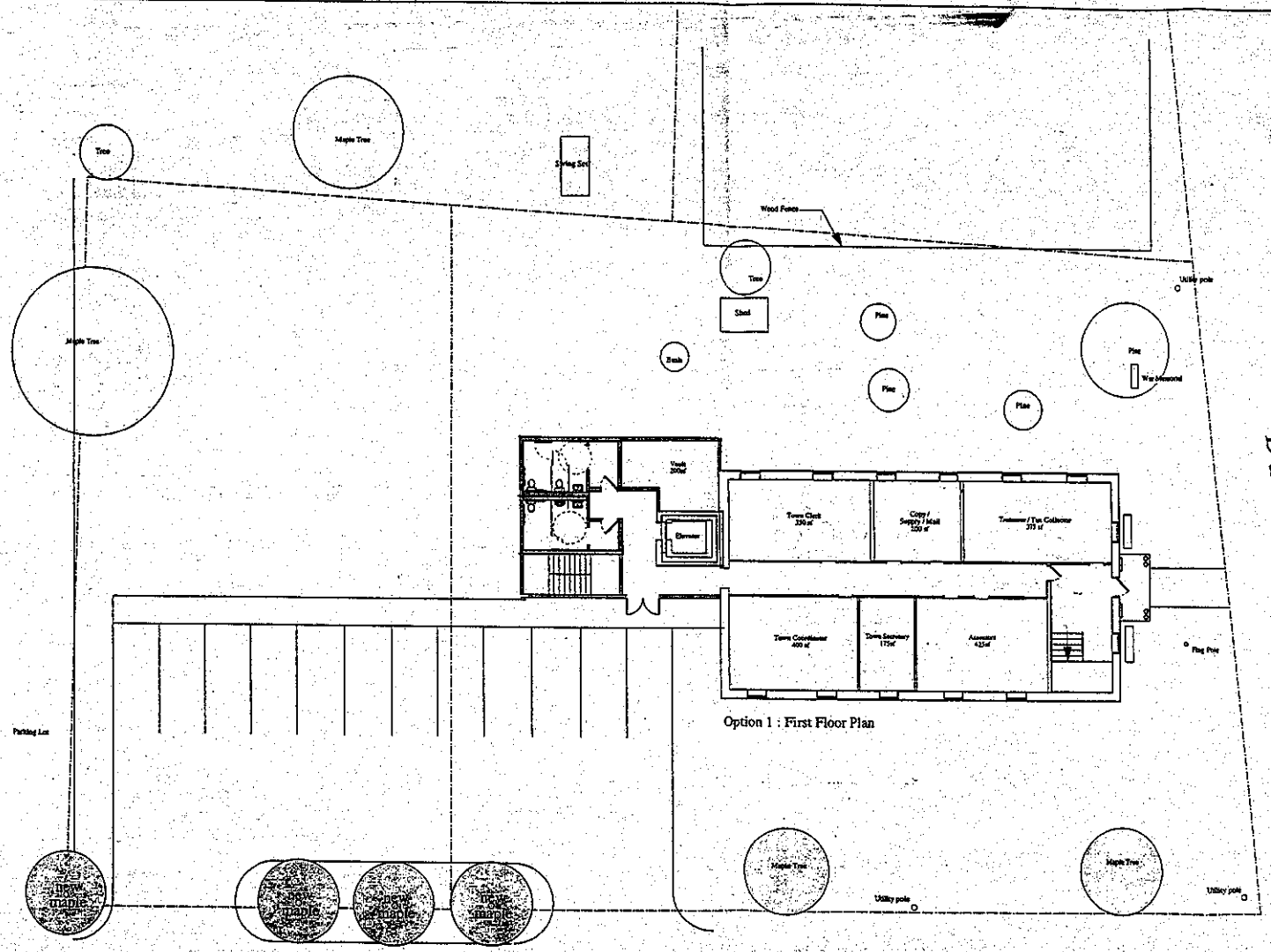
Space Planning Study

Scale: 1/8" = 1'-0"
Date: April, 2002
Drawn By: ENF
Checked by: WCK

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Option 1 : First Floor Plan

Option 1 Site Plan

FEET 0 2 4 12 20

Westminster Town Hall

Westminster, Mass

Space Planning Study

Scale: 1"=20'-0"
Date: April, 2002
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Checked by: WCK

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STRUCTURES NORTH
CONSULTING ENGINEERS, INC.

January 28, 2002

McGinley Hart & Associates
324 Broadway PO Box 45248
Somerville, MA 02145-2803

Attention: Mr. Paul McGinley

Reference: Westminster Town Hall
Westminster, MA

Dear Paul:

On Friday, December 28, 2001, I visited the Westminster Town Hall to perform a general structural inspection. The following is a summary of my findings and recommendations:

General Description

The Westminster Town Hall was originally constructed ca. 1839 as a 1 1/2-story wooden, Greek Revival style structure sitting on a dry laid fieldstone foundation. The structure consisted of a wood-framed first floor (which is now the second floor) over a crawlspace with wood framed exterior walls and timber posts that supported four timber-framed trusses spaced at approximately 13 feet on center and which remain today. The trusses continue to support five bays of rough-sawn third floor joists that span in the north-south direction between the trusses and the north and south walls of the building, along with purlins (beams) at the roof level that support rafters that run up and down the ridge.

As they presently exist, the four trusses themselves are basically modified "A-frames", with the top chords creating the sides of "A" (and following the rooflines) and the bottom chords creating the base of the "A" (and falling within the third floor structure). The bottom chords directly support the joists of the third floor and are suspended from the top chord intersections at the peak of the roof with tension rods. The top chords directly support the tension rods through "truss action", along with longitudinal purlins that carry the roof rafters at the approximate mid-point of each roof surface. The rafters along the roof ridge are supported by their own triangular geometry, which relies on horizontal restraint that is provided by bending in the purlins and roof sheathing which rely on the trusses, and to a lesser extent by the third floor ceiling furring. The net result is that large spreading forces are developed at the bases of the top chords and are resisted by tension-tying action

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www.structures-north.com

APPENDIX

Structural Engineer's Report
Mass. Vault Requirements
Property Deed and Plan

between the ends of the bottom chords.

Subsequent to the original construction, several additions and modifications were made to the structure. These included (in likely order):

1. The addition of a sixth bay of framing to the south end of the building between 1839 and 1855. In our investigation we found a hidden former exterior wall of the structure in the third floor that is approximately 12 feet from the present south end of the roof and aligns with proscenium wall around the stage, solid interior walls at the present first floor of the structure and a presently un-used stone wall that is part of the building's foundation. The addition was constructed of Victorian-era, dimensional lumber tied-gable framing.

2. The raising of the structure by one level and construction of the present first floor with brick masonry walls along the south, east and west sides of the elongated building ca. 1855. This included the addition of columns within the floor plan to support the timber beams that one sat on the foundation piers now frame the second floor, making the structure now 2 ½-stories.

3. The construction of what appears to be a 1 ½-story, 20-foot long addition at the south end of the building, bounded on three sides with brick bearing walls below a wood-framed third floor and tie-gable roof structure after 1855. This addition includes the present vault and boiler room, restrooms and third floor spaces at the second floor level.

The combined structure that presently exists is in need of a moderate amount of repair for a structure of its age. Some of this repair, which is of an urgent nature and involves the roof trusses, is currently under design as of this writing.

Wood samples of the truss chords were determined to be Eastern Hemlock and Eastern Spruce and the end posts that support the trusses were found to be Chestnut.

Noted Conditions and Recommendations

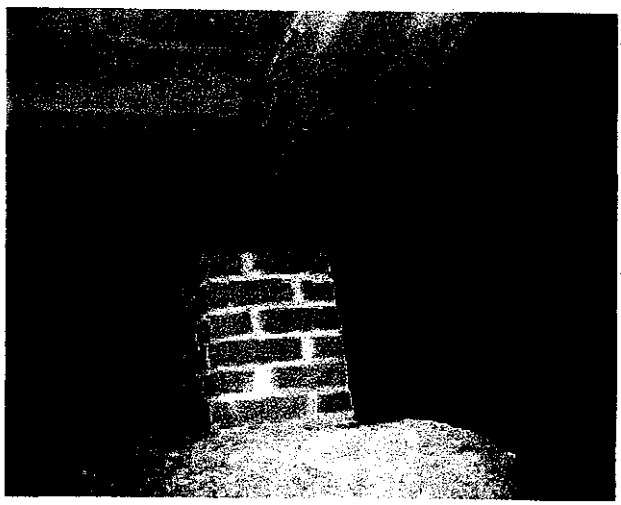
I noted the following structural deficiencies during the Town Hall Survey and have the following recommendations. "(Item #'s)" have been assigned to each of the remedial items for cost estimating and cross-referencing purposes.

Crawlspace and Foundation-

- There were signs of significant dampness when I explored the crawlspace during the fall, which is traditionally the driest part of the year. There was mushroom growth on the crawlspace's dirt floor and signs of mildew and fungus on the floor framing. The most humid conditions would normally be in the summertime when the cold crawlspace draws moisture out of the warm, humid summer air and deposits it on the structural members and foundation surfaces. *A positive dehumidification system is needed in the crawlspace to dry the dampened air. Structural repairs to affected members will also be required (see item #1F-1, below).*

- There were many holes in the foundation that would allow rodent and/or water entry, further diminishing the environment of the crawlspace. *These holes should be patched with mortar (item #CF-1).*

- The brick piers that support the first floor framing and columns of the second floor appear to be constructed atop large stones of various sizes that were set upon the ground surface of the crawlspace. Several of the piers are leaning and there are signs of settlement in the floor structure above. It is possible that the stones were originally intended to support only the loads of the first floor framing (which is now the second floor) and the loads were doubled with the raising of the structure and the addition of a new first floor below it. *The stone piers should be reviewed on a case-by-case basis and replaced with new, properly sized concrete spread footings and piers where appropriate (item #CF-2).*



- There are wooden bearing pads atop the brick piers that spread the concentrated loads from the wooden floor beams and posts onto the piers to avoid crushing the brick (which is of a lower strength than the wood). Several of these pads have softened due to the early stages of wood rot, along with the beams that bear on them, and have compressed and curled. *The compressed pads should be replaced (item #CF-3). The beam-ends should be repaired where possible and preservative-treated, or the beams should be replaced (see item #1F-2, below).*

First and Second Floor Structures-

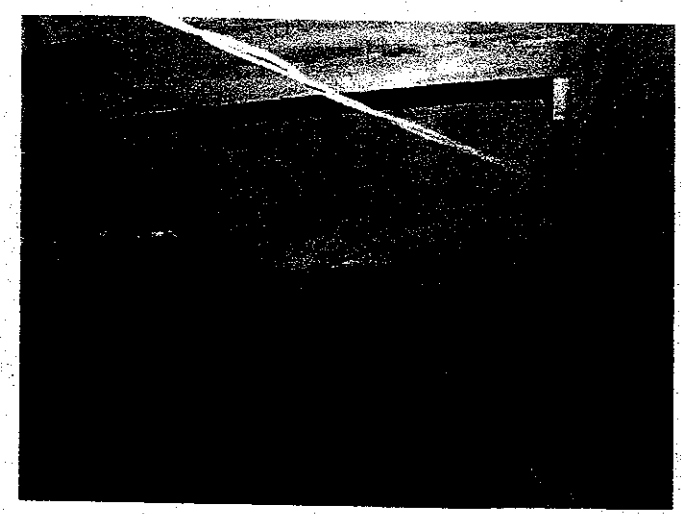
- The first and second floors have repetitive low points and high points (undulations) that follow the general framing plan of the structure, where the joists that frame the floor naturally sags between the lines of beams that support them. To a great extent, this is a normal and typically occurring feature of wood construction, where the wood tends to sag (creep) during its service life and in the case of the "flush-framed" second floor, cross-grain shrinkage (from drying) causes the ends of the joists to shrink downward into the mortises (pockets) in the beams that support them. As long as the structural capacities of the floors are of a useful range and the framing condition is adequate; creep deflections should not be of concern.

- According to the analysis of a previous Structural Engineer (please see attached letter), the live loading capacity of the first floor is in the range of 30 pounds per square foot (psf), with the timber beams that support the joists governing the capacity. *The timber beams should be reinforced or additionally supported from below (item #1F-1) to increase the capacity to at least that of the joists.*

- The Structural Engineer's analysis had determined the floor joists to have a capacity of 58 psf with the assumption that the floor joists were of a relatively high grade Southern Pine. From samples of the first floor joist framing that we have examined, we have determined the wood joists to be of Chestnut, which is not as strong as the Southern Pine that was assumed in the previous analysis, although it is better than average species for floor framing. *A visual grading of the joists will need to be done to determine their allowable bending stress categories (stress grades) as part of the overall evaluation and repairs needed for this floor structure (see item #1F-2, below).*

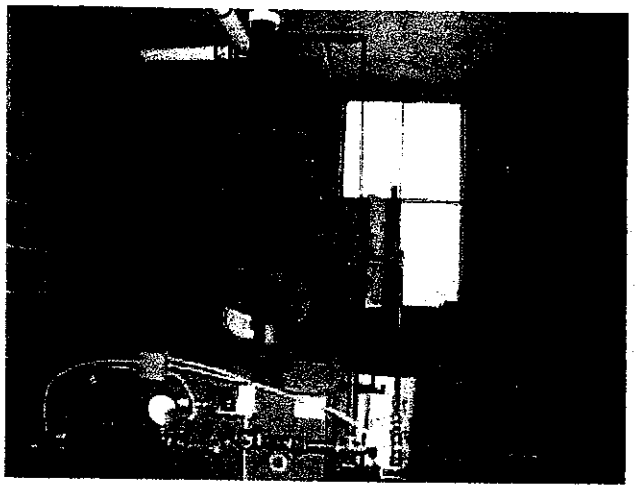
- We have had no access to the framing of the second floor and could therefore not determine its live load capacity.

- Some of the undulation in the first and second floor structures is also due to the compression of the wooden bearing pads and beam ends at the interior piers (see item #CF-3, above) and to the vertical settlement of the piers themselves (see item #CF-2, above).



- Other than for the first floor's low capacity and the crushing of the bearing blocks over the brick piers (see item #CF-3, above), there are few visible signs of structural overload or failure of the first floor's framing members. I did find outward signs of incipient, wood-rot fungus decay in many of the beams and joists, and in some cases cubical brown rot infestation within members that did not look damaged from the outside. Wood rot fungus can significantly weaken the structure by reducing the cellular strength of the wood fibers. *A thorough investigation of the members should be made after the space has been moisture controlled and the moisture contents of the members has fallen to consistently below 20%. This investigation should include probing of a representative number of members to determine the extent, if any, of damage and all necessary sistering and strengthening should be done (item #1F-2), along with at least three applications of boric acid solution. Consideration might be given to the use of another floor system in the proposed renovations.*

- There is a vertical crack in the concrete block (CMU) south wall of the boiler room at the first floor, which is probably due to minor settlement of the structure and of little structural concern.



- There is efflorescence in the inside surface of the brick west wall of the boiler room, which is an exterior wall, suggesting water or moisture migration inward from the exterior. *The exterior brickwork should be pointed to stop this intrusion (see item #EX-2), below).*

- The suspended ceiling soffit in the assessor's room sags abruptly at the southeast corner. *The hanger(s) should be checked and re-attached before the ceiling moves any further (item #1F-3).*

- At the second floor, there are diagonal cracks in many of the interior walls. Typically, these are related to the sagging and possible settlement of the floor structure as described above. The cracks in the proscenium wall (at the stage) are also related to the fact that this wall was once and exterior wall and continues to support floor loads at what was once the south end of the building. The attachment of the southerly addition and the opening of the stage involved many modifications to this wall. *The way that these modifications were done should be checked as part of the renovation work and some reinforcement or repair might be necessary (item #2F-1).*

- There are cracks and lateral shifts in the east and west exterior walls, which are most noticeable in the assembly hall. *These movements are directly related to truss movements and failures at the third floor level and will be corrected as part of the truss work (see item RT-1, below).*

- There is a second floor storage room below the southeast stairs to the third floor that is filled with a large amount of papers. *The load on this floor should be reduced, as the floor was probably not constructed to support so much stacked paper (item #2F-2).*



- There are water stains on the ceiling of the second floor ladies room at the southeast corner of the building. *This may be indicative of a roof leak and should be checked.*

- There is a second floor storage room at the rear of the stage that has a wood board ceiling. This ceiling has sagged in the direction of the rear extension and probably relates to some minor deflection or foundation settlement of the extension.

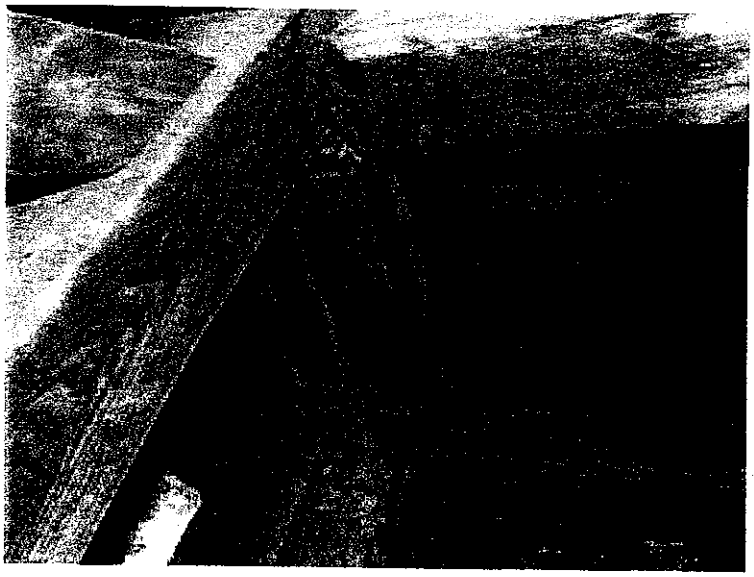
Third Floor and Roof Structure-

- The most severe and critical structural issue in the Town Hall is the deficiency of the roof truss construction. The four interior trusses were built with insufficient capacity for the transfer of top chord spreading forces to the bottom chords, which resist them. This transfer is accomplished primarily by direct attachment of the bottom chord ends to the wall posts that cantilever upward to support the top chord ends and secondarily via timber tension struts that engage the chord ends and vertical inner struts that run between the top chords and the bottom chords and act as bending members. While the basic theory of this attachment is sound, the actual members and their connections were insufficient for their loads.



  At three of the eight truss ends, the connections between the bottom chords and the wall posts

have failed, with the posts having split at their centers. At several of the truss ends, wrought iron straps between the bottom chords and the posts that would prevent or reduce the chance of this failure, appear to have been added shortly after the building was constructed, suggesting that our forebears were aware of some movement or early signs of failure occurring within the structure.

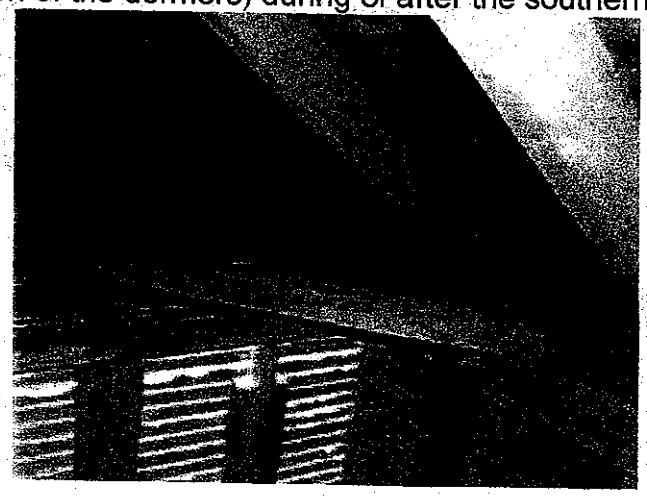


At the third truss from the front of the building, pull-out failure has occurred at both ends. This failure has caused all of the top chord spreading forces to now be resisted by the timber tension ties and vertical inner struts, one of which has been split for most of its length by the increased lateral loads that shifted unto it and is presently in danger of total failure.

We have analyzed the trusses in their original conditions and in their failed conditions and have determined that the introduction of a new, post-tensioned tie-member between the top of each outer post (at the top chord end) and the bottom of each inner strut (at the bottom chord) would relieve the stresses that have caused the connection failures. These ties would have the ability to make-up for all of the load capacity that was lost in the connection failures and could be additionally tensioned to slowly work the trusses back to their original geometries. *Due to the urgent nature of this condition, we have been authorized and funded as of this writing to proceed with a design for the tension ties and associated post repairs for the three failed locations that will be implemented this winter. The building is presently on "emergency snow-watch" and we have installed crack gages that are being monitored by the town until the repairs are complete. All of the stored materials that had previously loaded the third floor have been removed.*

- The end posts at the remaining five truss ends locations are deflecting and showing early signs of damage but have not yet failed like the first three locations. *The emergency repairs will provide additional redundancy to the structure until these locations can be reinforced, which should happen as part of the proposed building renovations (item #RT-1).*

- There were once pairs of horizontal knee-braces between all of the truss' horizontal timber tension struts and the top wall plates, many of which were removed in order to provide clearance for the walls and dormer alcoves that presently exist. This combined with the fact that the *third floor* finishes run continuously through the single bay addition at the south, along with the fact that the dormers are arranged for a reasonable degree of symmetry with the expanded *third floor* plan (and would have looked extremely out of place with the original, smaller plan), would suggest that the *third floor* was extensively renovated (including addition of the dormers) during or after the southern bay was added. The *third floor* likely served as a semi-finished loft until that time, suggesting that the truss builders may never have anticipated the finished space that currently exists.



- It should be noted that a portion of the bottom chord was removed at the east end of the northernmost interior truss to make room for the front corner stairway. *The removed section of chord should be reviewed as part of the truss end reinforcement work (see item #RT-1)*

- In order to create an open *third floor* plan, the rafters at the south end of the original roof were assumed to act as trusses after the supporting wall below them was removed and a tension tie was suspended from their apex to help support the top floor. There is a crack in the plaster ceiling finishes between the old part of the third floor and the southern-added bay that has been caused by minor movements along this line. *The support of the added bay should be checked as part of the proposed renovations (see item #2F-1).*

- We exposed three of the inner-strut-to-bottom-chord truss connections at the two partially failed trusses as part of our design work and found that metal straps were added to stop a lateral tension splitting failure at one of these connections, probably due to *third floor* loads that are supported by beam-action of the bottom chord. *These connections as well as the center tension-rod connections to the bottom chord should be checked and repaired where necessary (item #RT-2). The connections as well as the chords will need to be upgraded to support proposed future loads that are greater than the members' current 30 to 35 pound per square foot (psf) floor live load capacity.*

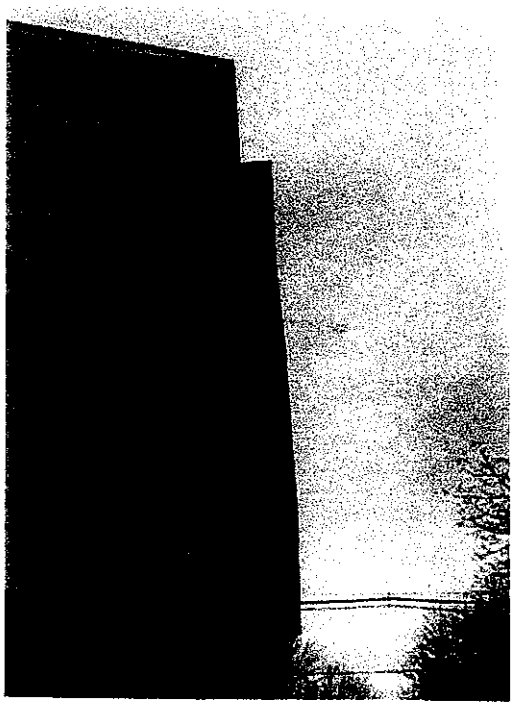
- There are gaps between the flooring and portions of the east and west walls as well as gaps in the interior bead-board wainscoting and cracks in the plaster, much of which have been caused by the truss movements. The *third floor* sags toward the center of the room, another result of the truss movements. Additional sagging has been caused by the normal deflection of the floor joists, between the trusses. *These members will need to be sistered if their capacities are to be raised beyond their current 40 to 45 psf floor live load capacity (item #AF-1).*



- There are areas where the ceiling plaster has fallen to the floor, presumably from roof leaks that weakened the plaster. *These leaks should be repaired if they have not been already.*

Exterior-

- The exterior woodwork of the Town Hall appeared to be well maintained and in generally good condition. The most notable concern regarding the wooden exterior is the large amount of deformation that is evident in the walls and, to the same extent, the roof. The outward protrusions at the center of the east and west walls of more than 2" along with the more than 3" apparent dips in the roof are attributable to the truss movements that have taken place and will be corrected *(see item #RT-1).*



- The lawn at each side of the front entrance is at a higher elevation than the woodwork, creating potential moisture conditions that could promote wood rot fungus or insect damage. *The grade should be pulled away from the structure or the wall's sill and woodwork should be raised with a*

masonry or concrete curb to provide proper separation from grade (item #EX-1).

- The exterior masonry around the first floor of the structure as well as that of the chimneys is in relatively good condition, mostly needing only sporadic, spot repointing. *In addition to the spot repointing, there is an open joint at the east wall between the south extension and the earlier construction that needs to be filled with a soft, malleable high-lime mortar and weathered areas along the bases of the east and west walls and much of the south extension's west and south walls that must be repointed (item #EX-2).*



- The metal railings of the fire escape are twisted and damaged, possibly from impacting ice that slides from the roof or from falling tree limbs. The anchors that connect the fire escape to the supporting masonry wall are rusted and should be checked and reinforced if needed. *Repairs to the railings and anchors, if necessary, should be made as soon as possible, along with some minor touch-up painting (item #EX-3). There is a gap in the second floor trim to the south of the fire escape that should be repaired as well.*



I trust that the preceding report will be helpful in understanding the structural rehabilitation needs of the Town Hall. Please contact me if you have any questions.

Respectfully yours,

John M. Wathne, PE, President
Structures North Consulting Engineers, Inc.



The Commonwealth of Massachusetts
William Francis Galvin, Secretary of the Commonwealth
Archives Division

PERFORMANCE STANDARDS FOR SAFES AND VAULTS

ISSUED BY THE SUPERVISOR OF PUBLIC RECORDS

MAY 18, 1995

220 Morrissey Boulevard, Boston, Massachusetts 02125 · (617) 727-2816

P 6/17/02

STRUCTURES NORTH

CONSULTING ENGINEERS, INC.

June 6, 2002

Town of Westminster
PO Box 456
Westminster, MA 01473
Fax: 978-874-7411

Attention: Mr. Bob Thorell
Building Inspector

Reference: Town Hall

Dear Bob:

On Friday, May 31, I visited the Westminster Town Hall to perform my final inspection of the truss reinforcement work.

From this and previous inspections and communications that I have had with the contractor, I am satisfied that the emergency stabilization work has been completed in general accordance with the requirements of the contract documents, approved shop drawings, and subsequent field instructions with only the following qualification:

- We had sought to upgrade the turnbuckles used at the tension rods (during shop drawing review) from standard 1" diameter hardware to 1 ¼" standard turnbuckles (reamed for the 1" high strength steel rods) in order to get more capacity out of the design for future loads. We have received certifications for the turnbuckles describing them as 1"x6" hardware, not the 1 ¼" nominal size that was requested. While the standard allowable load from the 1" nominal turnbuckles is sufficient for the present, restricted use, it will be one of several limiting factors for future re-use of the third floor space. If actual load capacity data for this casting and heat of steel can be obtained (beyond the metallurgical data we have received), it would be very helpful.

I am satisfied that with respect to the roof and third floor stability it is safe for the Town Hall to be re-occupied as it was previous to the truss damage except that the use of the third floor must be limited to less than a 20 pound per square foot live load (equivalent to an "uninhabitable attic") and that access to this space be restricted. A sign must be clearly posted at the top of each stairway to this effect. This limitation can be lifted at such a time that additional truss and floor strengthening is completed and that the turnbuckles have either been further evaluated or supplemented. This letter should be retained for future reference.

It has been a pleasure working with you all.

Respectfully yours,

John M. Wathne, PE, President
Structures North Consulting Engineers, Inc.

COMMONWEALTH OF MASSACHUSETTS
JOHN M. WATHNE
STRUCTURAL
No. 34420
REGISTERED
PROFESSIONAL ENGINEER

CC: Karen Murphy (F: 978-874-7411), Paul McGinley (F: 617-625-8902), Claude Levesque (F: 978-473-3588)

P.O. Box 8560 / 60 Washington Street, Suite 401 • Salem, Massachusetts 01971
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VITAL RECORDS MANAGEMENT

Within any organization, there is a small percentage of information that is crucial to its successful functioning and without which operations cannot be carried out. This information is known as the organization's vital records. Although these records typically constitute only about 3-5% of the organization's total information stock and may have only short-term value, they are essential for the operation of the organization, the resumption or continuation of operations following a disaster, the re-establishment of the legal, financial and functional status of the organization, and the determination and protection of the rights and obligations of the employees and citizens of the governmental unit.

Loss of this information can result in vulnerability to litigation, exposure to unplanned financial losses due to financial settlements or revenue loss, disruption of continuity of operations and loss of efficiency, and damage to the interests of the citizens and employees of the organization.

The objective of vital records management is to minimize the risk to this vital information in the most efficient and economic manner possible. In the public sector, vital records programs protect the public interest, ensure the maintenance of individual rights, and preserve a public trust.

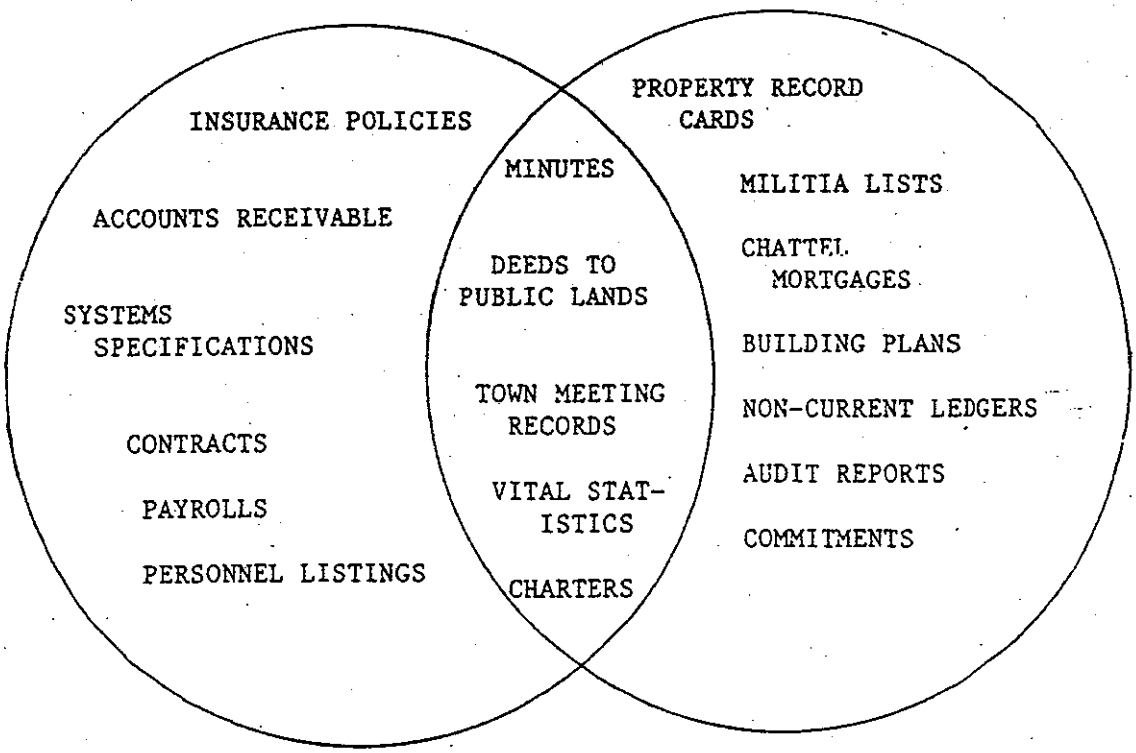
Establishing a Vital Records Program.

Before a comprehensive plan to safeguard vital records can be implemented, a through study of all the organization's records must be made. This study should include a determination of records classification, physical volume by class, storage space requirements, costs of the loss of each class, protection needed, and handling procedures.

Records Classification. Records are generally classified in one of four groups in a scheme suggested by the National Fire Prevention Association:

CLASS	DEFINITION	EXAMPLE	RECOMMENDED PROTECTION
ass I tal	Records *essential* to the continued life of the organization. These records are irreplaceable because they give evidence of legal and financial status, and of the rights and obligations of the organization. Vital records are generally housed in active storage.	Accounts receivable, contracts, charters, minutes, payroll, ordinances and resolutions, master personnel listings, all documentation needed to run and read electronic records systems.	Fire resistant vaults and safes, dispersal.

Class II Important	Records *necessary* to the continued life of the organization. While there records can be replaced or reproduced, this can ly be done at con- rable cost in time a money. These records may be housed in either active or inactive storage.	Accounts payable, tax lists, directives.	Fire resistant safes, vaults or file rooms.
Class III Useful	Records *useful* to the continued life of the organization. These records may be replace although their loss would cause temporary inconvenience.	Bank statements, correspondence.	Fire resistant safes, file rooms, filing devices.
Class IV Nonessential	Records which have no present value and should be destroyed.	Requests answered, advertisements, announcements.	Use, then destroy.



Although there is a tendency to equate vital records with those that are historic or archival, this is not the case. The life span of a vital record may be very brief, and in inverse proportion to its importance to the functioning of the organization. Archival records, on the other hand, while of enduring interest, may not be relevant to the continued functioning of the governmental unit. Thus, documentation of computer systems, accounts receivable and insurance policy information are essential to restoring operations following a disaster even though this information may have only a very brief usable life or retention period. On the other hand, records such as militia lists, Civil War records, and pre-1870 correspondence have historical interest and are considered to warrant permanent retention, but they are not essential to the resumption or maintenance of government operations. Obviously, these categories are not mutually exclusive, and records are quite often both vital and archival. Since the protection of vital records should take precedence over that of other records, great care should be taken in determining what records are designated as vital.

Protection Methods. Estimating the severity of a disaster which could destroy the organizations's records is the basic step in determining the most appropriate level of protection for vital records. This projection, along with an examination of costs of protection and budgetary levels, provides the basis for choosing protection.

There are two means of protection available to local governments in Massachusetts: on-site storage and duplication and dispersal.

1. *On-site storage.* On-site vital records storage considerations include the analysis and improvement of buildings or facilities, equipment and supplies, as well as the establishment of procedural controls.
   a. **Building considerations** include establishing the adequacy of floor-load capacity, lighting and ventilation, fire ratings of walls and doors, smoke and fire alarms, fire suppression systems, and eliminating such hazards as leakage and infestations by vermin.
   b. **Equipment considerations** include the construction of fire resistant vaults and the acquisition of safes and storage devices that meet or exceed Underwriters' Laboratories specifications.

      Underwriters' Laboratories tests and rates storage and filing equipment on the basis of impact resistance and internal fire and humidity levels during various lengths of exposure to fire. As a general rule, paper begins to deteriorate at 350°F., and magnetic media and photographs at over 150°F. Storage devices for magnetic media must also be able to maintain an internal relative humidity of below 85%.
   c. **Procedural considerations** include routinely updating vital records, prohibiting food, beverages and smoking in records

areas, segregating combustible materials, and conducting periodic electrical, building and fire inspections.

Another important procedure is the periodic testing of the vital records program through simulations to ensure adequate functioning in the event of a genuine emergency.

Exclusive reliance on on-site storage, however, may not be a sufficient safeguard because of the potential for total or near total destruction of a single location in a disaster.

2. *Duplication and Dispersal.* Off-site storage of original, record copies of public records is forbidden under Massachusetts statutes. Many records, however, can be adequately protected when they are duplicated and the copies dispersed to locations remote from the central or primary government office. This strategy is most effective when it is applied to records which have been microfilmed or which are being maintained in electronic format.

Microfilm is particularly suitable for this type of protection because of the stringent environmental requirements for the storage of master negatives; it is likely that most local governments will already have stored them at a remote location dedicated to the storage of microfilm. These storage facilities are operated by private vendors and, free of charge, by the Massachusetts State Records Center. In the event of a disaster at the government office, these facilities can rapidly retrieve the master negatives for copying.

Electronic records should be backed up at frequent intervals and the back-up media removed from the building housing the working offices. Reciprocal arrangements between offices should be made to store each other's data. Electronic archiving may also be investigated as a security measure. In all events, all programs and other relevant data needed to retrieve and read the stored data should also be secured at the off-site location. Officers should make themselves aware of other organizations using similar hard- and software so that, in the event of the loss of their own computing equipment, they may make arrangements to borrow time from their counterparts elsewhere.

In all cases, the dispersed records should be retained for their full retention periods and be made available to the appropriate officers.

Program Staff

The Vital Records Coordinator. For those offices already having a comprehensive records management program, the records manager is the most appropriate person to coordinate any special vital records protection program.

When no comprehensive records management program exists, it is advisable to appoint a coordinator from an existing office with experience in managing records, such as a staff member of the

Clerk's office. It is essential, however, that all persons in the organization recognize that the coordinator acts not in the name of his/her office of origin, but rather of the organization's administration with authority over all departments.

Most local governments have established emergency response procedures for dealing with disasters. Public safety, public works and other personnel are all assigned a role in safeguarding lives and property. Too often, however, these procedures do not involve long-term planning designed to preserve information and restore severly disrupted operations other than physical services (water, electricity, public safety). A vital records program designed to preserve information essential to governmental functions should be made a part of the emergency response program and the vital records coordinator made a part of the overall emergency planning process.

The Vital Records Team. An important part of a successful vital records program is the appointment of appropriate officials to assist the program coordinator. The major function of team members is to aid the coordinator in determining which functions and supporting records are vital to the organization and to ensure that they are properly safeguarded. Experience in administration, finance, law, information systems, and records management should be considered in appointing team members.

Communications.

All officials must be made aware of the importance of their vital records to the functioning of the organization. In larger organizations, a vital records manual may be desirable, while in smaller ones a simple master list may be sufficient. Because of the importance of this program, it is essential that it be understood as a management policy.

Summary.

Vital records management programs are instituted to prevent the loss of information critical to the daily operations of government organizations, to permit the organizations to continue functioning during a calamity or to reestablish services afterward.

A vital records management program begins by conducting a records inventory to gain knowledge of record holdings. Records identifies should be classified into one of four categories: vital, important, useful or nonessential. Appropriate protection methods should then be chosen to safeguard vital records.

The Records Management Unit is available to aid government officials and their staffs with vital records management. The unit provides assistance to offices without charge. Analysts are available to visit offices for on-site consultations. For more information call (617) 727-4062.

Performance Standards for Safes and Vaults

Authority. C.66 s.11 MGL requires the officers in charge of state departments, county commissioners, city councils or selectmen to provide fire resistant rooms, safes or vaults for the safekeeping of the public records of their governmental unit (2 Op. Atty. Gen. 1899, p.48). Pursuant to s.1 of this statute, the Supervisor of Public Records is authorized to promulgate standards for the construction and use of these vaults, rooms and safes (8 Op. Atty. Gen. 1929, p.594).

Effective date. These performance standards become effective on May 18, 1995.

General. All vaults for the storage of public records shall provide the minimum level of protection specified hereunder. The Supervisor of Public Records does not specify any particular materials or technique for the construction of public records vaults. The Supervisor will approve vaults for the storage of public records upon receipt of the certification of licensed or registered fire protection and structural engineers that the proposed construction will have a fire resistance and structural integrity equivalent to or greater than that specified in the following performance criteria.

Size. A vault size of 5,000 cubic feet or less is considered optimal. Where large volumes of records must be protected it is permissible to construct a vault with a capacity of up to 25,000 cubic feet. It must be realized that, because of the volume of combustible materials stored within it, this larger structure is at greater risk of fire and should be equipped with a fire suppression system.

Media protection. All vaults intended for the storage of paper records shall be so constructed that, when fitted with the 6-hour door required hereunder shall, in the event of fire in the surrounding structure, maintain an internal temperature of 350° or below for a period of not less than 6 hours. These standards provide the maximum available level of fire protection for paper records, but cannot safeguard film or magnetic media against either heat or humidity. If magnetic media have not been copied and dispersed or otherwise duplicated for protection, vaults or portions thereof used for the storage of this media must be equipped with data safes or an inner core designed to minimize temperature rise and moisture intrusion and shall be so constructed or equipped that, in the event of fire in the surrounding structure, the internal temperature and relative humidity shall remain below 125°F. and 80%, respectively for a period of at least 6 hours. It is the responsibility of the records custodian to provide all media with the level of protection specified above and

to provide the Supervisor with the engineer's certification to that effect.

Construction. Except in Type I or Type II-222 fire resistive construction as defined by NFPA 220, *Standard on Types of Building Construction*, all vaults shall be ground-supported and structurally independent of surrounding structures. Supporting structures for vaults shall be sufficient to support the full weight of the vault structure and its contents.

Since shrinkage or volume change stresses may result in hairline cracking that will be detrimental to the vault structure, all concrete members should have a minimum reinforcing as specified in the ACI Code, and all masonary walls should have a minimum reinforcing as specified in Paragraph 1113.5.3 of the Commonwealth of Massachusetts State Building Code.

All building members supporting the vault shall be noncombustible. All structural materials used in the construction of a vault shall have a fire resistancy rating of 6 hours. All interior fittings and finish shall be noncombustible.

If connected to the building in any manner, the connection shall be made so that in the event of the collapse of the building, the surrounding building members may move or fall without affecting the fire-resistive qualities of the vault. All beams or bearing members adjoining the vault shall be designed to release freely in case of failure. Vault construction shall not be used as a support or bearing for the structural members of the building. Walls shall have sufficient lateral strength to withstand impact of collapsing building members, or toppling machinery or equipment.

Construction of vaults below grade level should be avoided whenever possible because of the dangers posed by the "cooking" effect of fallen debris, flooding from natural causes or fire fighting efforts, and the difficulties of maintaining proper environmental control.

In non-fire resistive buildings, the vault roof shall be designed to accommodate a minimum live load of 350 pounds per square foot. In all cases, ample accommodation should be made for protection against impact loading by falling equipment or building members and against accumulations of burning debris.

Watertightness. Walls, roofs and floors shall be effectively waterproofed. No combustible membrane or coating shall be used except on a roof exposed to the weather.

Provision shall be made to prevent the entry of water at door openings.

Ample drainage shall be provided to prevent rain or firefighting water accumulating on the roof.

Penetration. Wall penetrations shall be allowed only for access, HVAC systems, sprinkler systems, electric lighting and limited energy circuits. Wall openings shall be as small as possible and shall be sealed with approved or listed fire-rated materials and devices to prevent smoke, heat, flame, or water penetration. Conduit, if used, shall be sealed inside and outside.

Roofs shall not be pierced for any purpose.

Floors shall not be pierced, except that floors of vaults constructed on grade may be pierced to allow the passage of sprinkler piping or HVAC ducts.

Vault Doors. All vault doors shall be Underwriters' Laboratories Class 350 rated 6 hours or equivalent. **ORDINARY FIRE DOORS SUCH AS HOLLOW METAL, TINCLAD, SHEET METAL, OR METALCLAD TYPES; STEEL PLATE TYPE AND FILE ROOM DOORS ARE NOT ACCEPTABLE AS VAULT DOORS.**

Vault doors shall be equipped with combination-type locks with an Underwriters' Laboratories approved relocking device designed to hold the door in case of mechanical, explosive or torch attack on the door. The lock mechanism shall be of the type enabling a person locked inside the vault to open the door easily from the inside. All day gates shall be similarly equipped.

Vault doors shall be equipped with smoke- or heat-actuated release mechanisms to close them in case of fire.

Environmental Control. For paper and magnetic media, a stable environment with an average temperature of 70°F. or below and an average relative humidity of 30-50% shall be maintained. A temperature below 70°F., and a relative humidity of 40-45%, with fluctuations limited to no more than ±2°F. and ±3%RH, is considered optimal. Storage facilities for first-generation silver halide microfilm shall maintain a constant temperature of below 70° and relative humidity of between 20 and 30%. If it is not possible to meet these optima, minimization of temperature and humidity fluctuations shall be the guiding concern. These parameters should be accomplished by controlling the external environment surrounding the storage space. Where this is not feasible, the storage space may be equipped with a heating/ventilation/air conditioning system. All equipment related to such a system shall be located outside the storage space.

Fire Detection Systems. Automatic fire detection systems shall be installed in accordance with NFPA 71, *Signaling Systems for Central Station Service;* NFPA 72, *Protective Signaling Systems;* and NFPA 72E, *Automatic Fire Detectors.* The systems shall be relied on only

when there is an assurance that the alarms will bring prompt response at all times.

Fire Suppression Systems. Vaults may be equipped with automatic sprinkler protection installed in accordance with NFPA 13, *Standard for the Installation of Sprinkler Systems.*

Class A fire extinguishers or a standpipe system with a small hose, suitable for use by the occupants of the building, shall be provided in a convenient location outside the vault door.

Wiring and Lighting. All wiring shall be in conformance with NFPA 70, *National Electrical Code.* Fixed lighting only shall be provided in the vault. Lighting shall be limited to explosion proof or vapor proof lamps and controlled only from a 2-pole switch located outside the vault.

Shelving. All shelving shall be of noncombustible construction and as fully enclosed as possible. All shelving shall be a minimum of 3 inches above the floor of the vault. Electrically powered mobile shelving shall not be installed.

Records and containers shall be separated by at least 6 inches from any piping or conduits within the vault. Where sprinklers have been installed, a clearance of 18 inches shall be maintained below sprinkler heads.

Safes and Record Containers. Safes and insulated record containers to be used for the storage of paper records shall be Underwriters' Laboratory Class 350, rated for 4 hours. Equipment for storage of magnetic and photographic media shall be Class 150 rated 4 hours. Combinations of equipment or the use of inserts or liners to achieve equivalent levels of protection are permitted. Ratings by recognized testing laboratories other than Underwriters' Laboratories shall be recognized.

Certification to Supervisor of Public Records. Prior to storage of public records in a newly constructed or renovated vault, the contracting agency shall provide the Supervisor of Public Records with signed and sealed certifications from all relevant engineers that the foregoing standards have been met or exceeded. No vaults which are not so certified may be used for the storage of public records.

WE, RAYMOND N. LEMIEUX and BRENDA L. LEMIEUX, Husband and Wife, both

of Westminster, Worcester County, Massachusetts

~~being unmarried~~, for consideration paid, and in full consideration of ELEVEN THOUSAND ($11,000.00) DOLLARS AND 00/100 ----------

grants to The Town of Westminster, a municipal corporation situated within the County

of Worcester, Massachusetts, for municipal purposes with quitclaim covenants

~~the land in~~

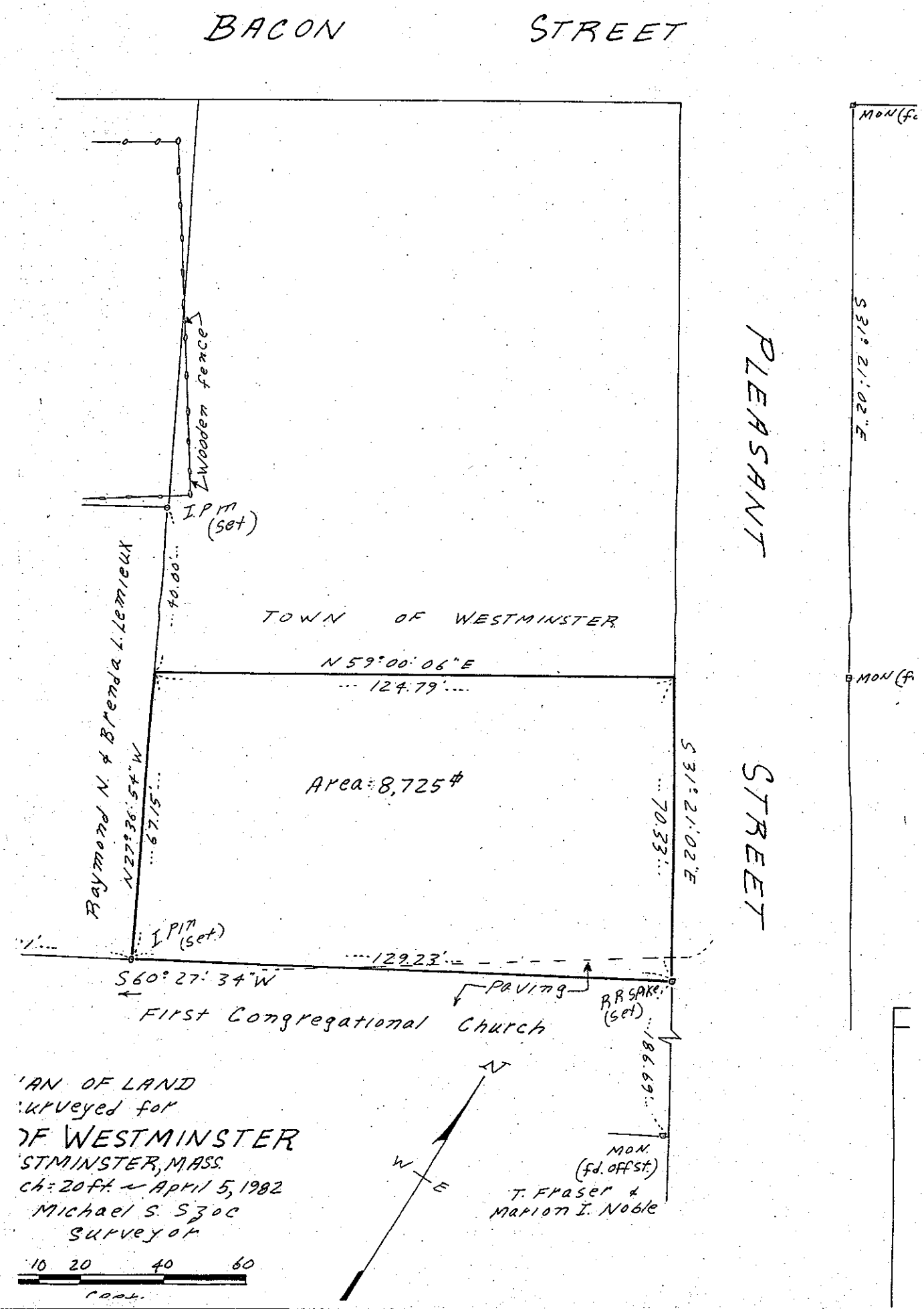
[Description and encumbrances, if any]

Address of Premises: w/s Pleasant Street, Westminster, Massachusetts 01473

A certain tract of land situated on the westerly side of Pleasant Street in Westminster, Worcester County, Massachusetts, containing approximately 8,725 square feet of land, and being depicted on a "Plan of Land surveyed for Town of Westminster," dated April 5, 1982 and recorded with Worcester Northern District Deeds in Plan Book 254 , Page 4 ; and being bounded and described as follows:

Beginning at the southeasterly corner thereof at a railroad spike set in the ground at the westerly sideline of Pleasant Street and at the northwesterly corner of land of the First Congregational Church; thence S. 60° 27' 34" W. by said Church land, 129.23 feet to an iron pin set in the ground at land of Raymond N. Lemieux et ux; thence N. 27° 36' 54" W. by said Lemieux land, 67.15 feet, to land of the Town of Westminster; thence, N. 59° 0' 06" E. by said Town land, 124.79 feet to the westerly sideline of said Pleasant Street, thence S. 31° 21' 02" E. by the westerly line of said Pleasant Street, 70.33 feet to the place of beginning.

Being a portion of the premises conveyed to us by deed of John M. Graves et al trustees, dated October 26, 1978 and recorded with Worcester Northern District Deeds in Book 1213, Page 10.



'AN OF LAND
:urveyed for
)F WESTMINSTER
'STMINSTER, MASS.
ch: 20ft. ~ April 5, 1982
Michael S. Szoc
Surveyor