

FINAL TOWN WIDE FACILITIES PLAN

TOWN OF EXETER

SPACE NEEDS AND BUILDING ASSESSMENTS

EXETER, NEW HAMPSHIRE

DECEMBER 16, 2015



The H.L. Turner Group Inc.

ARCHITECTS ■ ENGINEERS ■ BUILDING SCIENTISTS

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EXECUTIVE SUMMARY

The H.L. Turner Group Inc. (TTG) along with its consulting team conducted both a general facility systems assessment and a space needs assessment for the Town of Exeter, New Hampshire. The building systems and components were observed and reviewed via drawings, review of existing reports, discussion with maintenance staff and on-site visits. The Department of Public Works provided the Towns' annual Maintenance Project List for 2014 which identified proposed projects for reference. This list is created for each budget cycle and is capped at \$125,000 annually.

In addition, TTG conducted site visits to each building and interviewed with staff using the various buildings to assess the space programming needs from the perspective of the actual occupants. We also spoke with the Facility Director for the SAU #16 School District.

The buildings which were reviewed include:

- Town Offices
- Town Hall
- Parks and Recreation:
 - Administration Building
 - Recreation Park – Hampton Road
- Public Works:
 - Highway
 - Maintenance
 - Water & Sewer
 - Technicians garage/workshop
 - Water Treatment Plant
 - Ground Water Treatment Plant
- Public Safety:
 - Police Department
 - Fire Department
- Library
- Senior Center
- 47 Front Street – Historical Society
- Storage Barns
- Schools – cursory review

Previous reports which were referenced include:

- 2014-2015 Recreation Needs Assessment and Planning Report, Town of Exeter NH, by UNH, March 2015.
- An Organizational, Effectiveness, and Efficiency Study of the Fire Department, Town of Exeter, NH, by MMA Consulting Group, Inc., August 2007.
- Exeter Public Library – Schematic Design Report, by SMP Architecture, March 27, 2015.
- Town Building Advisory Committee, Town Office Building Study Report, Town of Exeter, NH, by Town Advisory Committee, August 25, 2008. Volumes 1 and 2. SMRT consulted with Committee.
- Security Risk Assessment, September 2014, by Primex, NH Public Risk Management Exchange.
- Exeter Fire Department PowerPoint® Presentation, October 20, 2005.

Site and Building Issues

The assessment effort has revealed and confirmed several issues which will need to be addressed as the Town plans its development. Site issues at the various properties include parking, building access, building security, ADA access, vehicular circulation and storage.

Condition of the building's system components vary widely across the various building types. Some systems (boilers) are new where other components have reached the end of their useful life. It is apparent the Town has methodically been identifying, and for the most part, is keeping up with maintenance and equipment replacement/upgrades as permitted by the annual budget allocations. Mechanical, plumbing, fire protection, electrical, and life safety issues are identified in more detail in the summary of each building in the report.

Space Programming

The assessment confirmed some significant and immediate inadequacies with regard to current use of spaces and the need for the buildings to meet the minimum expectations and basic functional requirements. It has been observed that due to the inadequacies and/or lack of space, some of the Town departments are operating inefficiently, and in some cases cannot properly provide the required services.



In general terms, the building structures and spaces have adequately served their purpose, occupants and users, for years. The staff and users have done extremely well to make the best use of their facility. The original design and layout of some of the buildings was based on programming needs, department structures, number of staff, or services offered which has changed and evolved over time, and the physical building and layout has not necessarily kept pace with the changing needs and times.

Town Offices: 10 Front Street

Built in 1892 as a two-story records and deeds storage facility, it has been converted over time to an office building. The basement is approximately 3,320 SF, first floor is 4,700 SF, and second floor is 4,700 SF, for a total of 12,720 SF. The building's occupants include: the Town Manager, Town Clerk, Human Resources, Economic Development, Planning, Code Enforcement, Town IT Office, and Public Access TV. The Selectmen, along with any other groups, conduct their meetings in the Nowak Room. The remaining spaces which make-up the building include a clerk vault, conference rooms, storage, restrooms, basement archival storage, mechanical and electrical rooms. Current space needs include:

1. Relocation/or expansion of IT operations. The space is currently shared with Public Access TV where five to eight people may occupy the space at one time. Possible relocation to opposite side of Nowak Room. Current space doubles as an emergency safety space for selectmen.
2. Nowak Room too small to accommodate large public meetings. Need a larger accessible meeting room (200-400 people).
3. Need for smaller conference rooms to conduct confidential meetings for Human Services and other group meetings.
4. Employee room.
5. Need for regular and archival storage.
6. Public restrooms.
7. Improved entrance/egress.
8. Need for more controlled public access and upgrades to security.



Town Hall: 10 Front Street

The Town Hall was built in 1855 as a two-story meeting place for the Town and as a courthouse for Rockingham County. The basement is approximately 5,741 SF, the first floor is 5,741 SF, the mezzanine is 1,741 SF, and the second floor is 5,741 SF for a total of 18,964 SF. The building currently houses the Finance Department in the lower level facing Water Street. The second floor is occupied by a successful and well used Art Gallery. The main meeting room is used for a number of Town events and community organizations. Space needs which have been mentioned include:

1. Upgraded public ADA accessible restrooms on the lower level.
2. Rear egress stair renovation and upgrades.
3. Proposed relocation of Code Enforcement and Planning from Town Offices into vacant space next to the Town Finance Department on the lower level.

Parks and Recreation Administration Building: 32 Court Street

The facility at 32 Court Street was built in 1848 as a high school. In 1912, it was converted into an elementary school. In 1959, the building was converted into a Community Center. On or about 1985, the historic building was then occupied by the Parks and Recreation Department, and this continues to present day. The building is used throughout the year for various classes, toddler programs, aerobics, and summer camps that typically have up to 250 participants. Parks and Recreation initiated UNH to do a study which further details space and program needs. Part of the recommendations from the earlier study includes relocating the administrative operations to a central building at the recreation fields. Space needs which have been mentioned during this process include:

1. Lack of a gym space to accommodate recreation programs.
2. Lack of a fully handicap accessible building.
3. Severely inadequate sports equipment storage.
4. Grounds keeping equipment storage (currently temporary, not secure, inadequate).
5. Lack of a serving kitchen.

Recreation Park: 4 Hampton Road

The property was acquired in 1974, and is approximately 26 acres, with eight undeveloped acres. The property contains eight tennis courts, three soccer fields, two baseball fields, and one softball field. Planet playground is part of the facility and is located on leased land adjacent to the Town owned fields. The outdoor pool is located here along with a bath house and small concession stand. The pool house has had a few recent renovations including a new filter room, electrical room addition, and bathroom upgrades. Space needs which have been mentioned regarding this property include:

1. Antiquated playground – upgrades required.
2. Lack of adequate parking.
3. Need for a central administration building, central storage, and indoor multi-purpose space.
4. Expanded field space.
5. Accessible swimming pool.

Department of Public Works Office: 13 Newfields Road

The building was constructed in 2003 and is a single-story, 2,000 SF, slab-on-grade, wood framed structure. The building houses the Department of Public Works with 12 staff consisting of engineers, administration, director, and engineering technicians. Since the buildings completion, the functions and departments have evolved and grown, and now require additional space considerations. Expressed space needs include:

1. Larger conference meeting space.
2. Drawing/print plan room.
3. File storage, secure archival storage.
4. Larger waiting area.
5. Separate staff room.
6. IT room separated from water heater.
7. Secure access to public meeting room.

The Highway Department, Water/Sewer Department, and Maintenance Department occupy other separate buildings on the property. See the attached site plan.

A single-story, pre-engineered, metal sided building constructed in the 1970's, contains nine garage bays. Bays #1 thru #4 are used by the Highway Department. Bays #5 and #6 are maintenance areas. Bays #7 thru #9 are used for Highway equipment storage. Meeting rooms and offices are contained in the central section of the building with parts of the mezzanine storage space above. The building is approximately 14,400 SF.

A single-story, pre-engineered, metal sided building constructed in the 1970's is located on the site. This building is used by the Water/Sewer Department and contains five garage bays. One bay is used solely as a required wash-bay for the various Town vehicles. Consideration should be given to the appropriateness of the equipment wash-bay sharing space with the Water Department. The building is approximately 6,000 SF.

The existing Wastewater Treatment building is located on the site as well and was built in 1990. It is a single-story concrete block building housing pumps and controls. As part of the new WWT building project, the building is proposed to be renovated to house offices, new restrooms, conference room, and testing laboratory. The lower level basement area is designated to be used for storage and mechanical space.

Both pre-engineered metal buildings have reached the end of their useful life. Adjacencies of each building are not ideally arranged and reconfiguration/relocation of space should be considered and/or a new building. This would also improve efficiencies of work flow. A VAC truck occupies one of the bays which is better suited to move to the new proposed Wastewater Treatment Plant.

The new Wastewater Treatment Plant is being designed by another consultant. Consideration for future site needs as it relates to the existing departments on the adjacent site is necessary.

There is also a single-story concrete block building containing two garage bays. It is occupied by the Public Works carpentry, plumbing, and electrical technicians. Workshop and storage spaces are utilized in the building. The building is 1,225 SF.

Two storage containers are located at the end of the Highway Department garage and contain Police, Fire Department, and Public Works storage overflow.

The Town will be acquiring approximately four acres of land adjacent to their existing property. This space may be used for future needs of the Public Works, but needs further study to confirm its adequacy.

Expressed and observed needs for space for the above buildings include:

1. The need for six bays next to each other for the Highway Department.
2. Three bays for maintenance next to each other (currently only two bays).
3. Space to store equipment inside.
4. Addition of two garage bays on the Water/Sewer Department building.
5. Highway Department renovation/upgrades to employee area, restrooms, and locker spaces.
6. Seasonal equipment storage bay – now housed at the Simpson barn.

Public Safety: 20 Court Street

The Police Department and Fire Department share the two-story, brick and concrete block building built in 1979. The building is approximately 18,000 SF in total. The Police Department occupies 6,428 SF on the first and second floors. The Fire Department occupies 11,555 SF on the first and second floor. The building serves as Central Command during emergency events.

The Police Department's first floor space contains a sally port, four holding cells, booking area, lobby, reception, sergeant's room, evidence room, officer desk area, records room and small kitchen/staff area. Dispatch is located in the Police Department section of the building and is shared by both services.

Second floor space consists of a Chief's office, small meeting room, Deputy Chief, Detective offices, locker room, Prosecutor Office, and small conference room. Police Department space needs in the building include:

1. Patrol meeting space.
2. Detective's office space.
3. Locker room expansion.
4. Larger evidence room.
5. Secure window/public interaction.
6. Uniform/equipment storage.

7. Interview room.
8. Interior equipment storage for vehicles, ATV, trailer.
9. Shared training room, gym.
10. Upgraded shared communications room.
11. Improved, expanded parking.

The Fire Department first floor contains five equipment bays, hose tower, parts storage and mechanical space. The second floor consists of office space, Chief's office, Captain's office, training room (Emergency Command), dayroom, and six dormitory style bedrooms with a shared restroom. The Community Health Department is also located on the second floor. The Fire Department and MMA Consulting Group Inc., has completed an extensive analysis of the building and services and the results can be found in the report dated August 2007. Issues identified as a result of the study, current observations, and discussions include:

1. Shared training room, gym.
2. Interior storage for HazMat trailers, equipment.
3. Improved, expanded parking.
4. Upgraded shared communications room.
5. Garage bay height and length issues.

Library: 4 Chestnut Street

The building was constructed in 1987 and is a three-story brick and concrete block structure. The ground floor (entry level) consists of a children's area, small group meeting, story room, offices, circulation desk and support offices. Second floor (main level) consists of stack space, circulation desk, open reading area, and support offices, along with accessible roof terraces. The mezzanine level contains small study and meeting rooms. The total square footage of the building is approximately 20,046 SF. The library in general needs upgrades to the existing systems of the building since most have reached the end of their useful life and are inefficient. These systems include HVAC, windows, lighting, roof, and finishes. Space needs observed and discussed include:

1. Larger meeting room and support spaces.
2. Enlarged teen room.
3. Reconfigured children's room.
4. Expanded stack space to accommodate future collection growth.
5. New entry/security.

6. Restroom/ADA upgrades.
7. Small group study rooms.

Senior Center: 30 Court Street

Building was constructed in 1841 as a Town Hall and has housed the Rockingham County Meals on Wheels program since 1985. Prior to 1985, the building was the Town Fire Station and a side garage bay is still used for storage of an antique piece of fire equipment in the Fire Museum. The Senior Center is used by numerous community groups today. Recent renovations include bathroom upgrades. Space needs which have been identified for this building include:

1. Interior partitions for a separate office space.
2. Separation of the serving and prep kitchen.
3. Lockable storage space for the various groups which use the function room.

47 Front Street: Historical Society

The building was originally the Town Library and has since been occupied by the Historical Society. The building houses archives, small meeting hall, offices, and has a lower level museum. The building is masonry with a brick exterior and slate roof. Several upgrades and renovations have been done including new attic insulation, new boiler flue, new slate roof, new granite steps, and entry door repairs.

The space needs include:

1. ADA restroom upgrades.
2. ADA building access.
3. Climate controlled archive storage.
4. Reconfigured office space.

Simpson Storage Barn: Route 111

The 24 x 120, single-story, wood framed barn is located on the Town Transfer Station property and was evaluated by a structural engineer in June of 2005. The barn is used to store seasonal Town owned equipment. The report states the barn is not safe for storage or occupants due to multiple structural issues. The area in and around the barn is used for

storage of additional items from various organizations including Parks and Recreation, Highway and Water. The Fire Department parks several emergency trailers on the property as well. The structure is not safe for use. The recommendation is to demolish the structure.

Space needs as a result of proposed demolition include:

1. Provisions for a permanent seasonal equipment storage building.
2. Indoor space or secure storage space for Fire Department equipment trailers.

General Information

Public Schools

The Exeter School Board owns Main Street Elementary School which is a K-2 school, Lincoln Street School which is a grade 3-5 school, and the School Street property which houses special education programs. The buildings are managed and operated by SAU #16. There is a six town Co-op that manages the middle school and the high school.

Parks and Recreation programs run many of their programs in the schools throughout the year. Recent addition of parking areas at the Main Street School has eliminated another baseball field used by Town youth organizations. The Town currently suffers from not having enough baseball fields.

Conclusions

There are some general observations that are worth noting as a result of our discussions and observations during the space planning study. It is our understanding that, in theory, all Town owned buildings and properties fall under the management of the Department of Public Works.

Each year there is a Project List and a Maintenance List, created by Public Works, which identifies both infrastructure and space needs for each Town organization. The list is typically generated by an informal request or observation made by an individual department of staff of Public Works. The Town Planner and Director of Public Works are involved in the development of the list to some extent. The lists are dynamic and ever changing during the course of a fiscal cycle.

For a more significant project to be funded (over \$25,000), there is a C.I.P. application developed and submitted to the Planning Board for review. Essentially, this Board are the “gatekeepers” of the Capital Improvement Program. Usually, the Town Manager will take a cursory look at the application before or simultaneously with the Board. Public meetings may be held to discuss the proposed projects. The Planning Board then forwards their recommendations to the Selectmen. The Select Board upon approval, will create a warrant article for each project for public voter approval.

Currently, there is a limited system in place which rationally and logically prioritizes the list of needs for the Town. The lists are based on life safety, code issues, and systems operations, but there are many competing interests. It appears decisions on which project to do is based on emotion, or who has the loudest voice. Several of the Town organizations have on their own initiated renovation, building upgrade projects, or studies, with sometimes limited participation by Public Works or the Town Planner.

Decisions to spend or not spend money on the buildings have been made in the past without the full picture of the overall Town needs and may have resulted in inefficiencies and unintended consequences with deferred problems or less than perfect working environments. Doing business this way typically results in overspending, underspending, poor planning, safety issues, dissatisfied staff and community members, and operational inefficiencies. Management off a list of projects is more reactionary versus a thoughtful, well supported, proactive approach.

There is no question that each department in town provides valuable, vital and appreciated services to the community. The dedicated staff continues to work to provide the best for the Town despite some significant spatial and facility challenges. Each department, when observed as a stand-alone entity, can present a legitimate case for space needs and facility improvements. The reality is such that all Departments have to be considered within the framework of the existing governing and budgetary structure.

In order to improve the process and decision making regarding the building and infrastructure of Exeter, it is our recommendation to create a *Comprehensive Planning Committee or Advisory Committee*. The charge of the *Advisory Committee*, working under and reporting to Public Works, would be to assess, analyze, and through an agreed to criteria, prioritize the space and facility needs of the Town. This effort would keep in mind the Town’s exceptional history and any current or future Master Planning or Economic Development goals. All building projects would be submitted and presented for



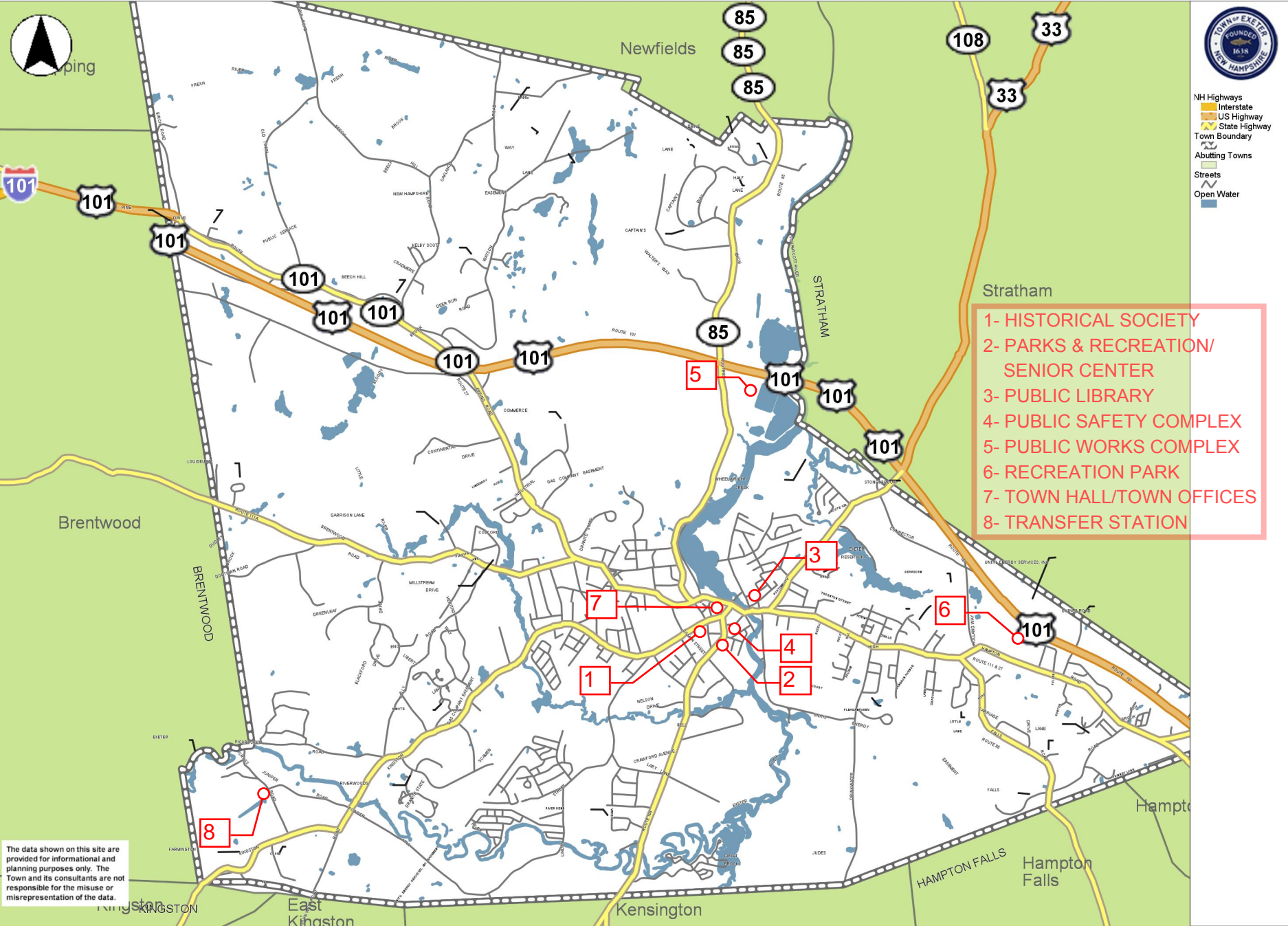
consideration on an annual basis. The impartial committee, made up of qualified members knowledgeable about the Town and building space and building systems, would fairly and responsibly identify the order of projects. Furthermore, they could assist in the management of the solicitation process with regards to selecting and working with outside consultants depending on the scope of the project. It would be assumed that recommendations from this group would be valued and trusted, acknowledging their intimate understanding of each project.

It is our opinion; the Town should consider a more formal approach to management of their facilities and reduce the separate competing efforts of each department. This way, the Town of Exeter could enhance the use and conditions of their buildings and continue to provide exemplary services to the community now and in the future.





- NH Highways
- Interstate
- US Highway
- State Highway
- Town Boundary
- Abutting Towns
- Streets
- Open Water



- 1- HISTORICAL SOCIETY
- 2- PARKS & RECREATION/
SENIOR CENTER
- 3- PUBLIC LIBRARY
- 4- PUBLIC SAFETY COMPLEX
- 5- PUBLIC WORKS COMPLEX
- 6- RECREATION PARK
- 7- TOWN HALL/TOWN OFFICES
- 8- TRANSFER STATION

The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.



OBSERVATIONS/RECOMMENDATIONS/COST

Observations

TTG conducted site visits at each building with a team of architects and engineers. General observations regarding the existing building conditions and systems were conducted. In addition, existing space use/occupancy was reviewed. Existing building plans and proposed plans, if available, were reviewed. Measuring of existing conditions was not part of this scope of work.

Interviews were conducted with the primary building occupants and department administrators. Several meetings were conducted to review the progress of the work and to provide important feedback as the information was organized and reported.

Noted costs are based on several factors. Some of the costs are generated by known construction costs which have been identified by the Town for work which may be already under consideration, or which the Town has received preliminary bids from contractors for a particular scope of work.

Costs are also developed from information outlined in previous studies completed by the various departments. If costs seemed reasonable, they were transferred to this report. If costs seemed low or did not appear current, then TTG made some adjustments.

Understanding most proposed space or infrastructure improvements have not been fully designed/engineered, the costs then must be based on general square foot rates found in the current market for each building type. Square footage quantities were derived from existing building plans, information from previous studies, or Turner's general professional knowledge of best practices with regard to space design requirements.

Furthermore, space needs and infrastructure improvements were and are governed by agencies having jurisdiction, International Building Codes, Life Safety Codes, ADA regulations, and other similar regulatory agencies. While some of the following information is based on occupant perceptions and opinions, much of what has been expressed can be supported and substantiated through industry standards and governing bodies.



The following people were interviewed:

Kevin Smart	Maintenance Superintendent	Department of Public Works
Jennifer R. Perry, P.E.	Director	Department of Public Works
Michael Jeffers	Water Sewer Engineer	Department of Public Works
Michael Favreau	Director	Parks and Recreation
Greg Bisson	Assistant Director	Parks and Recreation
Richard Kane	Chief of Police	Police Department
Brian Comeau	Fire Chief	Fire Department
Barbara Rimkunas	Curator	Historical Society
Andrew Morrill, P.E.	Project Engineer	Wright-Pierce Engineering
Russell Dean	Town Manager	Town of Exeter
Andy Swanson	IT Director	Town of Exeter
Julie Gilman	Selectwoman - Chair	Town of Exeter
Hope Godino	Director	Library
Richard Wendell	Facilities Director	SAU #16
Paul Roy	Head Operator	Exeter Water Treatment
Jay Perkins	Highway Superintendent	Department of Public Works
Jason Rucker	Highway General Foreman	Department of Public Works

Town Office

Built in 1892 as a two-story records and deeds storage, the Town Hall has been converted over time to an office building. The basement is approximately 3,320 SF, first floor is 4,700 SF, and second floor is 4,700 SF for a total of 12,720 SF. The first floor houses the Town Clerk, Assessor, Economic Development, Tax Collector, Human Services (Welfare), and Human Resources. In addition, there is the main lobby/stairs, elevator, employee break



room, records storage, restrooms, and small meeting room. The second floor of the building contains the Town Manager, Assistant Town Manager, Human Services, Town Planner, Building Inspector, Electrical Inspector, Planning Administrative Assistant, IT Department, and Public Access TV Station. In addition, the Nowak meeting room is located on the second floor. The remaining spaces which make-up the building include basement archival storage, mechanical, and electrical rooms.

Functions of the Town office which are not located in the building but occupy space in the Town Hall across the street include the Finance Director and Accounting. At the moment, the arrangement appears to work.

The building has been renovated in previous years, but is very difficult to renovate/modify due to the thick masonry vault walls of the original construction. As a result, the flexibility of the interior space is significantly limited with regard to space planning options.

The Town office layout has an accessible, ADA compliant, entrance on the Front Street (east) side, and an entrance via exterior steps on the parking lot side (west) of the property. This creates some issues of general space organization due to the generous space for the original hallway and main stairs. The Planning Department is located on the second floor which requires the public to traverse through the building to access these services. Multiple entrances and department locations reduce the ability to control public versus service (employee) areas, and presents security issues.

The Nowak room is the Town meeting room and Selectmen's meeting room. It is flanked by the IT and Public Access TV Station. Since its design, the Town has grown exponentially and the space is no longer able to adequately accommodate larger meeting events.

The space is 720 square feet. According to the International Building Code (IBC 2009), for an assembly space with chairs only, the space should accommodate 7 SF/occupant. This puts the occupancy at 102 people which requires a second means of egress. There is currently only one main egress from the space. This would most likely be solved by the addition of new stairs on the parking lot side (west) of the building. Consideration should be given to the addition of a new larger meeting room on this side of the building as well, which could hold up to 300-400 people. The property is limited in dimension and has a right-of-way on this west side of the building, which could be eliminated as an option.



The IT and TV Station is crammed into 288 SF on the second floor and is often occupied by up to five to eight people at one time. There is consistently two full-time staff in the room. The space also serves as a “safety room” for the Selectmen, should there be a dangerous event during a meeting. The department receives numerous deliveries of computers and other types of equipment which makes it challenging to access and store. Work space to set-up machines is limited. The building structure also significantly limits the ability to update wiring and technology. Portions of the basement are used by IT for overflow of equipment. It is understood the TV Station needs to remain adjacent to the Nowak room to broadcast public meetings.

The current location of the Town Clerk, Tax Collector, and Assessor on the first floor works well. The Economic Development Director currently occupies the first floor, northwest corner space. The office is larger than required, but is a function of the structural layout of the building. The Economic Development office contains one full-time person and receives administrative support from the manager, and therefore, needs to be in the same vicinity of the building. Future staff needs for this department are suggested to be one additional person.

The assistant to the Town Manager occupies space outside the manager’s office and requires some reconfiguration to facilitate better communication and workflow. At the same time, existing restroom space could be upgraded to better service the public attending meetings.

Additional spaces which are needed for the Town Office include at least one smaller conference room to accommodate the client confidentiality of Human Services, as well as the general need for additional, useful meeting space. An adequate staff break room, not located in a closet under the stairs, and accessible ADA men’s and women’s restrooms are also needed.

A 2008 study suggested a new stair and storage space off the east side of the building with first floor public restrooms and a new entrance. Some of the suggested interior changes have been completed with respect to the clerk’s area.

It is our opinion; the building space has been creatively maximized to the greatest extent possible, but is limited to fully accommodate the current and future needs of the Town.



Some interior renovations without expansion are possible, but would only partially solve the space issues.

As part of the 2008 study, other Town Office options were considered and evaluated. One variation considered was the selling of the Town Offices for a “to be named” future use and the construction of a new Town Office building with a combined, revenue generating parking garage located in the Town parking lot behind the offices. A new building could be designed to include all the Town departments securely under one roof. Other Town organizations could also occupy the building such as the Parks and Recreation and Senior Center, thus consolidating services while still having a central downtown presence. The building would be flexible for future needs and be designed with highly energy efficient systems and building enclosure, thus further reducing operational costs. It is our opinion, this option or similar idea is worth considering for the Town.

Costs

Interior Office Relocation/Renovations.....	\$ 50,000
Addition/Renovation: Meeting Room, Stair, Storage, Restrooms: 3,825 SF x \$200/SF.....	\$ 765,000
New Building: 18,000 SF x \$250/SF.....	\$ 4.5 million

(Does not include site costs, parking garage, land acquisition, professional fees)

Town Hall

The Town Hall was built in 1855 as a two-story meeting place for the Town and as a courthouse for Rockingham County. The basement is 5,741 SF, the first floor is 5,741 SF, the mezzanine is 1,741 SF, and the second floor is 5,741 SF for a total of 18,964 SF. The building currently houses the Finance Department in the lower level facing Water Street. The second floor is occupied by a successful and well used Art Gallery. The main floor meeting room with a stage is used for a number of Town events and community organizations. There is a mezzanine level that wraps the main hall which is 1,741 SF.

The Finance Department is made up of three full-time staff and occupies three offices, small meeting room, and storage area. The space is noted to be adequate.



There is vacant space (approximately 960 SF) adjacent to the Finance Department which is available for the Town. It is space that is easily accessible for customers should another Town department consider relocation.

There are public restrooms on the lower level as well, but need to be renovated and upgraded to ADA standards.

There is a plan in place as well to improve the egress stair and exit sequence/fire separation from the upstairs art gallery space. This would also result in the removal of the exterior fire escape. Overall the building has been maintained by the Town and functions well under its current use. Projects that have been completed over the past few years include elevator installation, roof truss structural upgrades, window upgrades, boiler upgrades, roof renovation and masonry repointing.

It is our opinion, that the vacant space should be utilized by the Town. The stair project should be completed and restrooms upgraded for public use.

Costs

Stair Project	\$ 100,000
Renovation of Lower level Space into Additional Town Department Offices 960 SF x \$120/SF	\$ 115,200
Renovation of Public Restrooms.....	\$ 30,000

Parks and Recreation Administration Building: 32 Court Street

The facility at 32 Court Street was built in 1848 as a high school. In 1912, it was converted into an elementary school. In 1959, the building was converted into a Community Center. On or about 1985, the historic building was then occupied by the Parks and Recreation Department, and this continues to present day. The building is used throughout the year for various classes, toddler programs, aerobics, and summer camps that typically have up to 250 participants. Parks and Recreation completed a study which further details space and program needs.

The group now uses a second floor space to store a lot of their equipment which is limited in size and accessibility. The meeting room on the second floor is used for many activities



but is also limited in size and accessibility, and prevents the scheduling of senior citizens programs. There is only one functioning restroom on the first floor for the entire building. The department also conducts ceramic classes, a music program, and general meetings in the same meeting room on the first floor. A small kitchen area is available within the room as well.

A small office area on the first floor is used by the Department of Veterans. This office is occupied usually one day per week.

The basement space was once used for functions, but is no longer, due to indoor air quality issues, safety, and accessibility.

Equipment storage (mowers, mulch, etc.) is located to the rear of the building under temporary conditions. The space is inadequate in size to properly store or work on equipment.

The department conducts many of their programs in the local school gymnasiums. They are subject to the school calendar and availability of space is dependent on school functions which always take priority. The relationship appears to work now and will most likely continue into the future based on the current success of the recreation programs.

It is clear Parks and Recreation needs to acquire new space. The historical building does not adequately provide for the space/functional requirements of the organization. The building presents accessibility issues, as well as lack of a gym, no large meeting room/multi-purpose room, and inappropriate equipment storage (indoor sports equipment and outdoor grounds equipment).

We do not recommend renovating the existing building due to the limitations of the age, structure, location and configuration of the building and the current needs and operational/program requirements of the Parks and Recreation Department.

Recreation Park: 4 Hampton Road

The property was acquired in 1974, and is approximately 26 acres, with eight undeveloped acres. The property contains eight tennis courts, three soccer fields, two baseball fields, and one softball field. The 15-year old Planet playground is part of the facility and is located on leased land adjacent to the Town owned fields. The outdoor pool is located here along with a bath house and small concession stand. The pool house has had a few recent renovations: including a new filter room, electrical room addition, and bathroom upgrades.



The property sees significant use during its normal operations. The parking lot does not have the capacity to accommodate spectators and participants, and can be a safety issue during popular events. The Town has seen a reduction in baseball fields due to projects occurring on other school properties. The Hampton Road Facility and Town would benefit from the expansion of playing fields (soccer, baseball) at this location. Furthermore, the property could be developed to include a new Recreation Building that centrally houses the departments operations. A full size, indoor, multi-purpose space along with offices, restrooms, storage rooms, garage storage, meeting rooms, and other ancillary spaces would provide the needed environment to continue the success of the organization well into the future. Coupled with upgrades to the outdoor pool and playground would greatly enhance the property. While there is some question on access to a new building on the property, this should not be a deterrent to pursuing this idea.

The Town has recently seen the construction of a 33,000 SF YMCA building. This building contains a gymnasium, locker rooms, community room, teen room, wellness center, fitness studios, indoor track, and administrative spaces. The organization is membership based and appeals to a certain demographic. The opinion at this time is the services are complimentary to Parks and Recreation and the plan is to develop a synergistic working relationship between the organizations.

Costs

New 20,000 SF building on-site: 20,000 SF x \$250/SF..... \$ 5,000,000+
(Does not include site work, added fields, reconfiguration of site features, professional fees)

Department of Public Works Office

The building was constructed in 2003 and is a single-story, 2,000 SF, slab-on-grade, wood framed structure. The building houses the Department of Public Works with 12 staff made up of engineers, administration, director, support staff, and engineering technicians.

Through our observations and discussions with the staff, we have identified several space needs for the department.

The main conference room has been reduced in size to create another office space, so the room capacity is limited and does not allow for required full staff meetings. Large meetings are crammed into the space or take place in the Highway garage across the parking lot.



The file room, plan room, and file storage have reached their capacity. Public Works is required to retain some documents forever and they currently do not have a secure, centrally accessible, and climate controlled environment for these records. There is minimal layout area for plans, plotters and project documents.

The public visits the building for various Town services and the waiting area is small. The security measures in place between staff and the public is limited and should be improved.

There is no designated separate staff room, but is just an area in the hallway. There should be a small separate break room for the staff. Currently, the IT Room shares a space with the water heater, and for practical purposes should be in separate spaces.

There is space available on the site to extend the building to the east or rear of the building approximately 800 SF. This addition, in combination with selective reconfiguration of the existing interior layout, could adequately solve the space needs of the building. We would recommend an addition/renovation to the building.

Costs

Renovation/Addition to Building: 800 SF x \$250/SF..... \$ 200,000

Department of Public Works – Highway Department, Maintenance Department, and Water/Sewer Department

A single-story, pre-engineered, metal sided building constructed in the 1970’s, contains nine garage bays. Bays #1 thru #4 are used by the Highway Department. Bays #5 and #6 are maintenance areas/parts storage. Bays #7 thru #9 are used for Highway equipment storage. Meeting rooms and offices are contained in the central section of the building with a parts mezzanine storage/space above. The building is approximately 14,400 SF.

A single-story, pre-engineered, metal sided building constructed in the 1970’s is located on the site. This building is used by the Water/Sewer Department and contains five garage bays. One bay is used solely as a required wash-bay for the various Town vehicles. Consideration should be given to the appropriateness of the equipment wash-bay sharing space with the Water Department. The building is approximately 6,000 SF.

The existing Wastewater Treatment building is located towards the northeast end of the site as well, and was built in 1990. It is a single-story, concrete block building housing pumps and controls. As part of the new WWT building project, the building is proposed to



be renovated to house offices, new restrooms, conference room, and testing laboratory. The lower level basement area is designated to be used for storage and mechanical space.

Both pre-engineered metal buildings have reached their useful life. Adjacencies of each building are not ideally arranged and reconfiguration/relocation of space is almost a must. The safety of the employees is compromised during winter operations where there is no acceptable space to work around the equipment because of lack of travel lanes. Workflow is compromised based on the current garage bay designations and therefore efficiencies are not fully realized. The preference is for wider, taller, drive-thru bays that will meet the current space needs and work environment. The meeting room and office arrangement is not ideal and the quality of the indoor environment is questionable (IAQ issues). The staff needs a central staging area during emergency or long winter events, and the available space is limited. The locker room for staff is not adequate for employee storage needs. The front entry continues to leak and cause inefficiencies with thermal comfort.

It is anticipated that additional staff will be added to the Maintenance Department to address the quantity of work required. This would also allow for Fire Department equipment service, which is currently outsourced, to be brought back under the Town Maintenance Department. The assumption is there will be a cost savings, increased quality control, and scheduling.

The age of each structure would also indicate that they do not meet the current snow loads as noted in the building code. Upgrades to the existing structures may prove to be too complicated and consideration should be given to new pre-engineered building structure(s).

A VAC truck occupies one of the bays which is better suited to be moved to the new proposed Wastewater Treatment Plant.

Much of the Town's larger equipment is stored inside (dump trucks, backhoes), but there is a quantity (millions of dollars) of vehicles and equipment that should be stored inside or under cover, but is not due to space limitations. Furthermore, the equipment is located on multiple sites in Town and does not promote centrally located fleet efficiencies. Unprotected equipment simply does not last as long, if left to the elements. An alternative can be to leave the equipment outside, but designed concrete aprons need to be in place to capture any spillage and meet the regulations. Additionally, diesel heaters can be implemented, but the longevity of the equipment is not realized under this scenario.



There is also a single-story concrete block building containing two garage bays. This building was originally constructed by volunteers to house fire department antique equipment. It is now occupied by the Public Works carpentry, plumbing, and electrical technicians. Workshop and storage spaces are utilized in the building. The building is 1,225 SF.

Two storage containers are located at the end of the Highway Department garage and contain Police, Fire Department, and Public Works storage overflow.

Town vehicle gas pumps are also located on-site and have been updated to meet regulations. A salt shed is located on the Public Works property and is not in need of any upgrades at this time.

The Town will be acquiring approximately four acres of land adjacent to their existing property. This space should be used for additional equipment storage and/or new multi-bay garages. There is a definite need for two additional Highway Department bays (total of six), two additional Water/Sewer Department bays (total of five), and two additional Maintenance bays (total of four).

We do not recommend renovation to the Highway/Maintenance buildings due to their current space configuration, age, and perceived structural limitations. Further structural assessment is suggested to analyze the load capacity of the pre-engineered structure.

An addition to the Water/Sewer building appears to be feasible, but deserves a structural analysis to determine the practicality of an addition versus a new building.

Costs

Addition of (two) Highway Bays: 576 SF x \$200/SF	\$ 115,200
Addition of (two) Water/Sewer Department Bays: 576 SF x \$200/SF	\$ 115,200
Addition of (two) Maintenance Bays: 576 SF x \$200/SF	\$ 115,200
New Highway/Maintenance Building: 15,000 SF x \$250/SF	\$ 3.75 million
Wastewater Treatment Building Renovation:	\$ 50,000
(Based on initial concepts shown on Town consultants drawings)	



Water Treatment Plant

The original building is a single-story, full wythe, brick masonry building with a pitched slate roof constructed in 1886. There is a five garage bay wing extending off the main building. The building originally served as the main pump house to direct water from the reservoir or river to the center of town. It is used now for mostly storage of materials and general maintenance functions. Two other buildings are located on the site which is adjacent to the Town reservoir/dam. There is a single-story, low sloped roof, brick and concrete block Filter Building with an original 1920's section and a 1972 addition. This building contains offices, lab, and filter chambers with a sub-basement containing pumps and storage tanks. There is also a single-story, metal sided, steel structure Clarifier Building built in 1972.

There are four staff operators that occupy the facility and typically two are on duty at any one time.

There is a Systems Maintenance Program in place that annually addresses the physical plant needs of the facility. Pumps and controls are on schedule for upgrades. Manway access into one of the 5,000 gallon tanks does not work, upgrades will be required, and are often driven by the regulatory environment.

Spillway and dam upgrades were completed around 2006.

There are no apparent space need requirements at this time for the facility.

Ground Water Treatment Plant

This facility was constructed in 2015 and at the time of this report was about to come "on-line". The building is a single-story, pre-engineered, metal building with metal siding and sloped metal roof. The building contains storage/treatment tanks, chemical room, office, restroom, lab, and mezzanine storage area.

The brand new building does not have any space needs.

New Wastewater Treatment Plant

The EPA has issued an Administrative Order to the Town requiring the facility to meet certain water quality standards set forth by state and federal legislation including the Clean Water Act. In order to be in compliance with the regulations, the Town is required to design and build an updated treatment plant. This facility includes a new pump station, force main upgrades, water main upgrades, and lagoon decommissioning. The Town has retained Wright-Pierce; Portsmouth NH to design the projected \$51.8 million facility. Development of this facility has a direct effect on the adjacent DPW site and considerations should be given to road design, snow removal, and general access. More detailed information can be obtained from the DPW regarding the project.

Public Safety Building

The Police Department and Fire Department share the two-story, brick and concrete block building built in 1979. The building is approximately 18,000 SF in total. The Police Department occupies 6,428 SF on the first and second floors. The Fire Department occupies 11,555 SF on the first and second floors. The building serves as Central Command during emergency events.

The Police Department first floor space contains a sally port, four holding cells, booking area, lobby, reception, Sergeant's room, evidence room, officer desk area, records room, small kitchen, and staff area. Dispatch is located in the Police Department section of the building and is shared by both services.

Second floor space consists of a Chief's Office, small meeting room, Captain's Office, Detective offices, locker room, Prosecutor Office, and small conference room.

There are many space issues at the Police Department. The Department has 30 employees which are made up of 23 full-time officers, one part-time officer, secretaries, and dispatch personnel. There is no meeting space for office/roll call. Officers now gather in the hall with a few standing in the Sergeant's Office or Chief's Office for meetings. Meetings conducted in this manner then disturb the administrative staff sharing the same open space. There is a lack of a first floor interview room for confidential meetings or interrogations. The locker room on the second floor is too small and does not provide the necessary space for officer uniforms and equipment. The windowless Detectives room was created in the 1980's, by infilling space under an unused portion of the roof and is shared by



five staff. The records storage room has reached its capacity and should be in a less public area of the building.

The vestibule/waiting area is too small and the separation between the public and staff at the service window should be upgraded to provide better security/protection. Adjacent to the lobby is the mechanical space which contains the communication system for the building. The system has been added to over the years and should be revamped for better service and maintenance.

The evidence room is too small. Larger evidence is stored off-site at the Highway Department. Employee lunch room is a small alcove and the patrol officers have two open work stations on the first floor, which do not allow for privacy or efficient work. Overall equipment storage is inadequate.

The building does not have any training room or gym which could be shared between departments.

The department has 13 vehicles which are all stored outside and/or off-site. The existing property does not have adequate parking and is shared with the Fire Department. Additionally, the Police have a speed trailer, ATV, motorcycle and bicycles.

The Emergency Management team uses the Fire Department “training” room for central operations. According to the staff, it barely works now and should be a bigger space.

The Police Department does not anticipate any increase in staff for the foreseeable future.

The central location of the Public Safety building within the Town is appropriate. The Police prefer to be with the Fire Department in order to share dispatch, and share training room/gym facilities. The idea of a Police sub-station was discussed and is not a practical solution for the department. The existing building and site is restrictive in expansion options and requires further study to determine possible addition options. In order to maintain a downtown presence and solve the space issues of the department, the Town will have to acquire additional land adjacent to the property. There is a proposed project to resolve roof/drainage issues, but it will not result in any space improvements. The building needs to be expanded/renovated to solve the noted space needs of the Police Department.



Fire Department

The Fire Department first floor contains five equipment bays, hose tower, parts storage and mechanical space. The second floor consists of office space, Chief's Office, Captain's Office, training room (Emergency Command), dayroom, and six dormitory style bedrooms with a shared restroom. The Community Health Department is also located on the second floor. The Fire Department and MMA Consulting Group Inc., has completed an extensive analysis of the building, and services and the results can be found in the report dated August 2007.

In summary, the study found and reconfirmed the need for a sub-station for the Town. The primary reason is to provide shorter response times to calls and be able to address the increase in number of calls due to increased population and demographic changes for the department. Furthermore, it begins to improve the requirements of regional needs for surrounding towns. The proposed 8,400 SF sub-station includes three apparatus bays, operations area, living quarters, fitness area, and ancillary support spaces. It is understood the Town has already purchased land for the purpose of this project.

Space needs at the existing building are similar in nature as the Police Department. The site and parking lot is inadequate and does not provide enough space for parking. Some department equipment is also stored outside in the lot, and is also stored off-site at other Town owned properties, which is not ideal.

The building presents height challenges for the fire trucks. Due to the height and length of the existing (five) garage bays, the trucks have to be custom made to fit into the space. Some modifications to the bay doors have been done, but are only a partial solution.

The current "training" room is small on the second floor, and serves as the Emergency Management command center. A larger, first floor, multi-purpose training room along with an adjacent gym could serve both departments.

Renovation/addition to the building could allow for some space reconfiguration, but is contingent on adjacent land acquisition by the Town. Fire Department operations can still function effectively at this location, but a renovation/addition would not address the response time concerns identified by the department.



Costs

Renovation/Addition to Building: 2,000 SF/floor x two floors = 4,000 SF x \$250/SF
..... \$ 1 million
(Does not include site work, land acquisition, professional fees)
New Fire Department Sub-Station \$ 2.4 million
New Public Safety Building: 20,000 SF x \$250/SF..... \$ 5 million+
(Does not include site work, land acquisition, professional fees)

Library

The building was constructed in 1987 and is a three-story brick and concrete block structure. The ground floor (entry level) consists of a children’s area, small group meeting, story room, offices, circulation desk and support offices. The second floor (main level) consists of stack space, circulation desk, open reading area, and support offices, along with accessible roof terraces. The mezzanine level contains small study and meeting rooms. The total square footage of the building is approximately 20,046 SF. The Library in general needs upgrades to the existing systems of the building since most have reached their useful life and are inefficient.

The Library has also completed a report by SMP Architecture dated March 27, 2015. The report briefly touches on shelving space requirements and then includes an assessment of the mechanical, electrical, and plumbing systems along with an energy analysis. The report suggests an addition of 9,295 SF. Proposed work includes a renovated main entry and young adult room. Level one work includes the creation of a small reading room off the children’s area and a craft/story room. The proposal notes a connected, but freestanding, two-story addition containing a meeting room, small kitchen, and second floor collection space. The existing building is noted to have newly defined small group meeting rooms and roof infill along with upgrades to the various building systems.

It is understood the Library space needs include the renovation of the main entry to create a better sequence of entry and exit, as well as to improve security. The current children’s room is too small and is often overcrowded with children and parents. The Library is in need of small group study rooms/meeting rooms as their visitor needs change with the way modern day libraries are used. Additional collection space (shelf space) is required to



accommodate the expanding resources and offer flexibility as the Library use evolves with new technology and ways to present media and information.

Systems upgrades should be considered to increase control and efficiencies, and thus reduce operational costs of the building. As part of this upgrade, the restrooms should be renovated as the conditions of the finishes and fixtures have reached their useful life.

Costs

Addition: 9,295 SF x \$250/SF \$ 2.3 million
Renovation to Existing Building: 2,000 SF (estimated) x \$200/SF \$ 400,000
(Part of proposed addition work)

Senior Center

The building was constructed in 1841 as a Town Hall and has housed the Rockingham County Meals on Wheels program since 1985. Prior to 1985, the building was the Town Fire Station and a side garage bay is still used for storage of antique fire equipment in the Fire Museum. The Senior Center is used by numerous community groups (boy scouts, girl scouts, AA) today and the scheduling of the space is managed by the Parks and Recreation Department.

The first floor has a large open meeting room with a kitchen prep area which is used by the tenant, Meals on Wheels, on a daily basis. This service is a County function.

Recent renovations include bathroom upgrades. There was a desire to create a private office on the first floor. The second floor is just a half-story and an attic space that appears to not be used. Should this building continue with the same use, then consideration should be given to separating the cooking/kitchen area from the main meeting room.

Should Parks and Recreation move or obtain their own building, then it would be logical to provide space for the senior citizen population of the Town. Meals on Wheels could be conducted within the context of a Senior Center, but may also wish to consider possible local church options to remain in a central downtown area.

We do not recommend renovating the space at this time because the need at this time is limited. Furthermore, the Senior Center activities are tied to Parks and Recreation at this



time and should their location change, then it would behoove the Town to consider the location of the Senior Center.

Historical Society

The building was originally the Town Library and has since been occupied by and leased to the Historical Society. The building houses archives, small meeting hall, an office, and has a lower level museum. The building is masonry with a brick exterior and slate roof. Several upgrades and renovations have been done including new attic insulation, new boiler flue, new slate roof, new granite steps, and entry door repairs. The current property shares an easement with the adjacent Baptist Church on the driveway side which would limit an expansion in this direction.

Overall, the space is adequate for the Society. Interior renovations and upgrades are planned to address some basic functional needs, which include ADA restrooms, ADA building access, climate control archive storage, and reconfigured office space.

Costs

Restroom Upgrade, Office Reconfiguration, Wood Floor Refinish, Archive Climate Control:
..... \$ 22,000

Simpson Storage Barn

The 24 x 120, single-story, wood framed barn is located on the Town Transfer Station property and was evaluated by a structural engineer in June of 2005. The barn is used to store seasonal Town owned equipment. The report states the barn is not safe for storage or occupants due to multiple structural issues. The area in and around the barn is used for storage of additional items from various organizations including Parks and Recreation, Highway and Water. The Fire Department stores several emergency trailers on the property as well. The property is shared with a Town owned residential home that is currently occupied by the Fire Chief.

The barn should be demolished and a new pre-engineered steel storage building be erected in its place. The Town has conceptually developed a building that would have four to six bays designated for the Highway Department, Police/Fire, and Parks and Recreation. Consideration should be given to centrally storing Town equipment on the same site which



may suggest a new storage building located at the Department of Public Works, if space allows.

Costs

Six Bay, Pre-Engineered, Metal Building: 1,440 SF x \$200/SF\$ 288,000
(Does not include site work, land acquisition, professional fees)

Public Schools

The Exeter School Board owns Main Street Elementary school which is a K-2 school, Lincoln Street School which is a grade 3-5 school, and the School Street property which houses special education and preschool programs. The buildings are managed and operated by SAU #16. There is a six town Co-op that manages the middle school and the high school.

Parks and Recreation programs run many of their programs in the schools throughout the year. Recent addition of parking areas at the Main Street School has eliminated another baseball field used by Town youth organizations. The Town currently suffers from not having enough baseball fields.

The School District is considering full day kindergarten at the Main Street School. It is understood the District is also considering an expansion/renovation at the middle school where cost would be shared by the six town Co-op.

The School District and Town should create or continue an open line of communication with respect to the status of the school buildings. Should District needs change, it may provide an opportunity for the Town to evaluate the possible options for acquiring additional space.



TOWN OF EXETER

SPACE NEEDS ASSESSMENT & PRIORITIES

**Town of Exeter
Space Needs Assessment**

Proposed criteria for prioritizing space needs.

1. Code Issues/Life Safety

Building space issues related to not meeting code or ADA requirements. Issues could be around life safety, security, emergency egress. Issue presents immediate or short-term problem. A low score in this category would suggest direct space issues as a result of code violations.

2. Department's Ability to Function/Provide Services

Space requirements are limiting the ability of the department to provide adequate service to the public. Space configuration is creating or prohibiting staff from being efficient in workflow. Adjacency of related departments is compromised.

3. Community Benefit

Space is not contributing to the public, but is rather inhibiting programming, delivery of services, or access to services. Community perception is the space has not kept pace with community needs.

4. Sustainability Aspect

Space is inefficient with regards to energy efficiency, occupant comfort. Space is creating higher costs to operate, maintain and function.

5. Facility Systems

Assessment of actual building systems (HVAC, Communications, Electrical, Structural) require renovation or upgrades which translates to reconfigured space or new space. Systems and related space has reached their useful life.



Scoring

- 5 = Great
- 4 = Good
- 3 = Adequate
- 2 = Marginal
- 1 = Poor
- 0 = Not applicable

Example:

<u>Town Office (Meeting Room)</u>	<u>Score</u>
1. Code Issues/Life Safety	2
2. Department's Ability to Function/Provide Services	1
3. Community Benefit	2
4. Sustainability Aspect	1
5. Facility Systems	<u>3</u>
Total:	9

- Score of 20-25: High score = low need. Building spaces good. Use of building is working and efficient.
- Score of 10-15: Medium score. Building spaces are generally adequate. Building is being used as designed and is functioning to the greatest extent possible.
- Score 5-10: Low score = high need. Building/spaces are poor; inefficient. Space is lacking or is detrimental to the function of the occupants and/or use of the building.



Town of Exeter
Space Planning Criteria Score Sheet
December 17, 2015

Building	Code Issue/Life Safety	Dept. Function	Community Benefit	Sustainability	Facility Systems	Total
Town Offices	2	3	2	1	2	10
Town Hall	3	4	4	3	4	18
Parks & Recreation:						
Administrative Offices	2	2	2	1	1	8
Recreation Park	4	2	2	3	3	14
Department of Public Works:						
Administrative Offices	5	2	3	4	4	18
Highway/Maintenance	2	2	2	1	1	8
Sewer/Water Department	2	2	2	1	1	8
Waste Water Treatment	4	3	0	3	3	13
Public Safety:						
Police Department	3	1	2	2	3	11
Fire Department	3	2	3	2	3	13
Library	4	2	3	2	1	12
Senior Center	3	3	3	1	1	11
47 Front St - Historical Society	2	4	4	3	3	16
Simpson Storage Barn	1	1	1	1	1	5
Water Treatment Plant	4	4	4	3	3	18
Ground Water Treatment Plant	5	5	5	5	5	25
Points:						
5=Great, 4=Good, 3=Adequate, 2=Marginal, 1=Poor, 0=Not Applicable						
Score 20-25: High score = low need. Space is good.						
Score 10-15: Medium score = Space is adequate.						
Score 5-10: Low score = high need. Space is poor.						

Based on the above scoring - Buildings listed in order of priority from most in need of space to least in need of space/renovation/upgrades/addition.

Building	Score	NOTES:
Simpson Storage Barn	5	
Parks & Recreation Administrative Offices	8	
DPW Highway/Maintenance Garage	8	
Sewer/Water Department	8	
Town Offices	10	
Police Department	11	
Senior Center	11	
Library	12	
Fire Department	13	
Waste Water Treatment Plant	13	
Recreation Park	14	
47 Front Street - Historical Society	16	
Town Hall	18	
Water Treatment Plant	25	

Town of Exeter							
Opinion of Costs							
Budget Summary							
Building	Costs	Rating					
Town Offices	\$50,000	5					
	\$756,000						
Town Hall	\$100,000	13					
	\$115,200						
	\$30,000						
Parks & Recreation		2					
New building	\$5,000,000						
Senior Center		7					
Recreation Park		11					
Department of Public Works							
Adminstration building	\$200,000						
Highway	\$115,200	3					
Water/Sewer	\$115,200	4					
Maintenance	\$115,200	8					
Waste water treatment building	\$50,000	10					
Public Safety Building		6 Police	9 Fire				
Renovation/addition	\$1,000,000						
Fire Dept Substation	\$2,400,000						
Library		8					
Addition	\$2,300,000						
Renovation	\$400,000						
47 Front St - Historical Society		12					
Renovation	\$22,000						
Simpson Storage Barn		1					
New pre-engineered storage building	\$288,000						
Budget Summary Total:	\$13,056,800						
Not included:							
New highway/maintenance building	\$3,750,000						
New town office building	\$4,500,000						
Water treatment Plant - new	\$51,870,000	14					
Notes:							
Costs are based on square footage and suggested building project design information found in previous reports.							
Costs are based on square footages derived from Turner's opinion of space needs							
Costs are based on general square footage costs. No building or addition has been completely designed, therefore the costs are based on a broad concept.							
Soft costs, site work costs, land acquisition, moving, storage costs are generally not included.							

FACILITIES AND MECHANICAL SYSTEMS ASSESSMENTS

DEPARTMENT OF PUBLIC WORKS – ADMINISTRATION BUILDING

1.0 OBSERVATIONS

The Administration Building for the Department of Public Works was constructed in 2003. It is located within the DPW's yard at 13 Newfield's Road. It is a slab-on-grade, wood-framed structure that is approximately 3,300 square feet and measures 58-feet by 58-feet. The building is sided with vinyl and the trim is composite PVC trim. With the exception of a missing piece of vinyl on the south side of the building and a small hole in one of the lower pieces of siding, the building siding is in good condition. We did observe moisture condensed on the vinyl siding on the east side of the building, perhaps indicating heat loss through the walls. The composite trim all around the building is in good condition as well. The 12-year old fiberglass roof shingles are in good condition and we did not observe any loose or missing shingles. Most of the windows are double hung wood with insulated glass, and all appear to be in good condition. The main entrance door is an insulated steel door with a large glass lite, and there is a solid metal insulated pass door at the rear of the building. Both doors are in good condition. There is a semi-circular portico trimmed in PVC, covering a concrete slab at the building's main entrance. The main entrance is ADA compliant, as there is a small ramp from the parking lot to the concrete slab under the portico.

The interior of the office is divided into separate office spaces and some open areas have half height walls forming office cubicles. The office is finished with gypsum wallboard, vinyl floors and cove base, solid wood doors and drop ceilings throughout. Most of the finishes are in good condition. The bathrooms are ADA compliant and there is a small kitchenette in the rear of the building with a sink, microwave, and refrigerator. There is a pull-down set of stairs to access the attic. The roof is framed with pre-manufactured wood trusses at 2-feet on center. Insulation is fiberglass batt-type placed in the ceiling. The attic space houses mechanical units for heating and cooling the building. In general, the administration building structure and finishes are in good condition. The office appears at capacity and some spaces seem overcrowded with little room for making prints and copies. There appears to be little to no space for record and drawing storage other than in individual offices. The Assistant Director of Public Works noted that the area directly outside the Administration Office is used during the winter as one of the Town's snow dumps. Heavy equipment working to move and pile snow has caused considerable vibration throughout the building. It is reported that these vibrations have led to some of the internal doors cracking and some hairline cracking in the walls.



HVAC

The building systems are original from 2003. The building assemblies and windows are of standard thickness typical of residential or light construction. The attic floor insulation is reduced from 12" to 6" where there are walkway planks, and is disturbed or missing in some locations. The attic is separated from the conditioned space by a layer of type X gypsum board on strapping with a poly vapor retarder.

The central heating system consists of two Rheem gas-fired, hot air furnaces with DX cooling coils, mounted horizontally on the floor of the attic. These furnaces are standard efficiency, approximately 80%. The furnaces are vented with single-wall metal ducts to share a single type B vent through the roof. The furnaces lie on pink foam insulation boards in metal drain pans. The drain pan and the cooling coil drain are piped down into the heated space. Ventilation air appears to be a fixed amount (no economizer cooling) ducted from intake jacks on the roof. Filters on-site are 1-inch Airex pleated.

Cooling is provided by two Rheem four-ton condensing units built in 2002 with the now-phased-out R22 refrigerant, mounted on a concrete pad on-grade. These appear in good condition. The refrigerant suction piping is insulated with Rubatex, but the outdoor piping is not protected and is deteriorated.

The HVAC return lacks grilles in the smaller rooms including the entry vestibule. Air must transfer under doors to reach central return grilles in the larger rooms. This can cause flow and pressure issues, or privacy issues, if doors are undercut. The IT closet has only a supply diffuser. During our visit, the door was left open to encourage supply flow and relieve the IT system heat. The large drawing plotter in an open area is under a return grille, so any odors return to the main system. Code requires 0.5 cfm/sf exhaust to outdoors. The copier room doesn't have any return or exhaust. The toilet room exhaust fans are switched by the lights' occupancy sensors. This may affect building pressure and ventilation.

In the attic, ducts that are bare are not sealed (may apply to insulated ducts), condensate piping is not insulated to prevent sweating, and some duct insulation is disturbed or missing. Access to the furnaces is tight, with roof trusses in the way, though the plywood walkway planks are in some areas.



Control of HVAC is by simple programmable wall thermostats in central areas. A Veeder-Root monitoring panel for the site's underground fuel tanks is in the lobby.

PLUMBING

The water supply includes a 1-inch copper line from under the slab to a large hydro-pneumatic "well" tank. The tank has a relief valve, but no floor drain was observed. There is no pressure switch to control a well pump, but there is a plugged tee where one could mount. This system shares its closet with the phone panel and the IT server rack. There is no backflow preventer or meter or filter.

Piping seen is not insulated. Cold water piping at the water tank is bare. Vent piping in the cold attic lacks insulation to reduce frost build-up inside. The natural gas service supplies the heating furnaces and an outdoor electric generator. The outdoor piping is generally unpainted and rusting. The entrance flat roof canopy drains by scuppers at the edges.

The plumbing fixtures in the single-user Men's and Women's toilet rooms are in good condition, and appear to comply with ADA, except that the Women's water closet flush handle is on the wrong side. The Men's room water closet has a Niagara Toilet Tank Bank in the tank, in an apparent attempt to use less water. The water closet is a Kohler with water-saving 1.6 gallons per flush. The Men's room water closet has water-damaged and lifted floor tiles. The break room single-bowl sink is not ADA compliant. It has a standard-depth bowl, closed base cabinet, and faucet with short lever handles.

FIRE PROTECTION

There is no sprinkler system.

2.0 RECOMMENDATIONS

Other than routine maintenance and upkeep, we do not believe that any other major upgrades to the finishes or building components are warranted at this time. Since space seems tight, an addition off the rear (east) side of the building would be logical to provide more work space and storage, which seems to be badly lacking at this facility.



HVAC

Furnaces: Check the installation manual for clearances to combustibles such as the foam support blocks and the flue venting; repair as needed. Ventilation Air: Balance the system to ensure proper outside air per Code is supplied, provide control dampers to close off outside air in unoccupied hours, and provide exhaust at copier and plotter. Duct Sealing: Seal duct seams, joints, and penetrations where accessible. Return Air: Provide transfer ducts to allow small rooms to vent better. Insulation: Repair and/or provide duct, pipe, and attic floor insulation; replace at condensing units and protect with PVC jackets. Seal insulation and piping ends for a complete vapor barrier. Replacements: Anticipate replacing furnaces and condensing units within 10-15 years.

PLUMBING

Replace break room sink for accessibility. Protect IT equipment from potential leaks. Check Men's water closet for sweating or leaking. Change Women's water closet so handle is on proper side. Consider dual-flush water closets as a water-saving measure. Paint outdoor gas piping.



DPW Administration Office main entrance.



South side of building.



Condensation formed early morning on south side of building.



Typical finishes inside DPW Office Building.



Kitchenette for staff use.



Office overview. Note plan sets on racks and rolled in vertical storage rack.



Typical attic space above office.

DEPARTMENT OF PUBLIC WORKS – MAINTENANCE GARAGE AND OFFICES

1.0 OBSERVATIONS

The Department of Public Works Maintenance Garage and Offices are located within the main yard at 13 Newfield's Road. The garage was constructed around 1969 and is a typical pre-engineered metal building, built on a concrete slab-on-grade, supported by a perimeter frost wall. The building is approximately 15,000 square feet measuring 250-feet by 60-feet. There are a total of nine overhead doors, four truck bay doors to the west of a central office space, and five doors to the east of the central office space. The two bays to the east of the central office area are typically used for maintenance of Town vehicles. Most of the seals around the doors were in fair to poor condition and did not do an adequate job in closing air gaps around the doors. Generally, the building is comprised of steel bents spaced at 20-feet on center with 8-inch deep roof purlins spaced approximately 4-feet on center between the bents. The building has been expanded over the years, but the addition is of the same vintage as the original building. The building is clad with a metal roof and siding. In addition to the nine overhead doors, there are two steel pass doors, one on the west end of the building and one along the front at the east side. There is also a full glass storefront type door in the center of the building for use accessing the offices. The pass doors are in fair condition with signs of rust at the bottom of the doors and the lower section of the door jambs. The office area has two sets of sliding aluminum windows in the front wall of the building. There is a continuous gutter system along the front edge of the roof with four downspouts. Water from the downspouts exits directly onto the concrete apron that runs along the front of the building. There are no gutters along the rear or north side of the building. There are dents, dings, and several holes around the door openings and along the bottom sections of the perimeter siding. The siding on the central office area is painted blue and is badly faded.

The building is minimally insulated as is typical of most pre-engineered metal buildings, so heating the space during the winter can be a struggle. Occupants report that the heaters in the truck bays run continually during the winter due to the lack of insulation, along with leaks around the door frames. The situation can usually be improved by adding insulation, but the more insulation that is added means more snow will accumulate on the roof. Without analyzing the structure, it is a safe to assume that the original structure was not sized for current code required snow loads. So insulation will help to conserve heat but will also contribute to more snow on the roof and the possibility of overloading the roof. There are floor drains in the floor at each bay and the floor slab is in generally good condition.



The interior sections of the building consist of repair areas, storage bays for trucks and equipment, mezzanine spaces for tools, parts, and material storage, mezzanine space for plan storage, equipment storage, and space for mechanical units, a parts room, offices, break room and conference room, a small locker room, as well as men's and women's bathroom facilities. The bathroom facilities are generally in compliance with ADA requirements, but many of the fixtures and finishes are old and outdated. The offices, conference room, and break room areas are finished with vinyl tile on the floors, drop ceilings, and dark paneling on the walls. All of the finishes are old and outdated. Spaces are poorly laid out with small, dimly lit corridors. The break room has a working cook stove, but there is no ventilation hood over the stove.

Mezzanine spaces were haphazard storage spaces for numerous miscellaneous pieces of equipment, plan sets, tools, old obsolete parts, road signs, etc. We did not observe any signs on the mezzanines with rated capacities noted.

In general, the building's overall structure is in good condition, however as mentioned above, based on the age of the building it is probably safe to assume that it is not designed for current code required snow loads. The building's siding and roofing is showing its age and the roof will most likely need replacement in the near future. The office spaces, conference area, break room and bathrooms are all in need of a major upgrade.

HVAC

The building is of metal panel construction. Exposed insulation in walls and roof. Wall insulation poly barriers have some damage and tears. Tools are stored against the front (south) walls and damage the insulation. Some rear and end walls have protective panels on lower portions. Louver opening in vehicle service bay has open edges of poly barrier on the wall insulation. Outside of building supports, the vent pipes for underground fuel tanks. Ventilation hoods on the back (north) side of the building are rusted and damaged by ice and snow sliding off the sloped metal roof. Gas chimneys and vents variously run through back or end walls or through roof.

Heating in west garage bay is a single gas-fired unit heater. Heating in east garage bay is primarily a single gas-fired unit heater; there is also a Reznor power-vented, waste-oil-fired furnace on a raised steel stand with base tank; the base tank is refilled from three floor-mounted waste motor-oil tanks, by a manually-activated, compressed-air-powered transfer pump which has a dedicated air compressor. Heating in vehicle maintenance bay is one gas-fired unit heater, and two overhead gas-fired infrared heaters. Cooling in garages and vehicle service bays are ceiling paddle fans to move the air.



Garage ventilation (outside air or exhaust): The east garage bay has none. The vehicle service bay has a fresh air make-up system on the back wall, a general area exhaust fan on the back wall, a roof intake hood, and a vehicle exhaust system with hose reels. The west garage bay has a fresh air make-up system on the back wall.

Office Area Heating and Cooling: Carrier high-efficiency, gas-fired condensing furnace located on the office mezzanine, with a DX cooling coil and PVC venting, set on concrete blocks on a raised steel pan which is hung from the roof. The furnace filters are Flanders Pre-Pleat 40 with MERV 8A efficiency, plus an electronic air cleaner at the furnace return end. The outside air is ducted to the roof. The supply, return, and outside air ducts are well-insulated in the air handler room, except a portion near the roof penetration. The supply air has three zone dampers controlled by room thermostats. Diffusers are dirty. The office area also has some supplemental electric heat including the corridor and locker room.

Cooling in the office area is provided by an outdoor Carrier condensing unit built in 1999 with the now-phased-out R22 refrigerant, on a concrete pad with a shed roof to protect it from sliding ice and snow. The shed roof is on a frame of 4x4 pressure treated poles which are set on concrete pavers on-grade, with some light steel angle bracing to the building wall. The refrigerant suction piping insulation lacks protection and is deteriorating.

The toilet room exhaust fans are switched by the lights' occupancy sensors. This may affect building pressure and ventilation. The break room electric range lacks ventilation and has no fire protection. The large photocopier in an open room lacks exhaust. The office mezzanine has rooms served by a zone of the office area furnace. There are many construction drawings stored unprotected in these rooms.

PLUMBING

The water supply includes a 1-inch plastic line from under the slab to a hydro-pneumatic "well" tank in a closet in the office area. The tank fittings includes a relief valve, and a pump pressure switch. The pump power control with lightning arrestor is in this closet. There are a testable dual-check backflow preventer and water filter in the main. There is a valved purge line with open end which may be for pump start-up and underground line flushing.

Domestic hot water is provided by a Westinghouse electric tank-type heater in the water supply closet. The heater appears well worn. The hot and cold water piping is uninsulated. There doesn't appear to be any hot water recirculation or heat trace to maintain hot piping temperature. There



isn't a tempering valve to allow the heater to run at a germ-safe temperature above the safe distribution temperature.

Front (south) of building has gutters and downspouts at edge of sloped roof to protect overhead doors. Vehicle repair bay has several trench drains at the middle line of the room. Garage bays have central trench drains. Trench drains are presumed to run through an oil separator outside the building (see Civil). A safety station shower/eyewash is in the vehicle service bay. It drains to the floor, and appears to have only cold water supply. Plastic laundry tubs in the vehicle service bay and the office areas are well used.

The single-user Ladies' room is also marked as the unisex accessible toilet room; the wall-hung lavatory could meet ADA; the water closet is an unusual type with electric supply and minimal tank. Grab bars are lacking. The multi-user Men's room is not accessible; the fixtures are in working condition; the lavatories are countertop type; the urinals are older type with exposed drain piping and manual flush valves, and are both at non-accessible height; the two tank-type water closets are different ages. The break room sink is not accessible.

Outdoor cold water hose bibb at the vehicle service bay is not freeze protected and lacks a vacuum breaker. Shop air compressor on the storage mezzanine in the east garage area is piped to air drops in vehicle service bay and the west garage bay. Lubricating oil is piped to hose reels in the vehicle service bay. The natural gas service supplies the heating units, office furnace, and outdoor electric generator; the outdoor piping and indoor piping is generally painted yellow; secondary regulators at the equipment served suggest the piping is sized for high pressure.

FIRE PROTECTION

There is no sprinkler system.



2.0 RECOMMENDATIONS

GENERAL

Overall the building is showing its age. Although the structure is still in good condition, the design capacity with respect to snow, wind and/or seismic loading most likely do not meet current code requirements. Insulation is lacking; although the garage space and areas for maintenance and storage appear to be at capacity. Many of the offices are too small and the layout and circulation is poor. The siding is starting to rust along the lower edges, as are some of the doors; both pass doors and overhead doors.

Until such time as the Town decides to construct an up-to-date, modern DPW garage to meet the needs of the department into the future, the current building will continue to meet the needs of the Town with some relatively minor upgrades and repairs.

Some of the items that should be addressed include:

- Improve the environment of the office, restrooms, locker room and common areas by upgrading wall, ceiling and floor finishes.
- Clean-up and organize the mezzanine over the office area and utilize the area for a plan room and document storage.
- Purge the garage and mezzanine storage areas of all obsolete equipment, parts and materials that are no longer needed thereby freeing up needed space.
- All mezzanine spaces should be analyzed and properly load rated. The load rating should be on a placard placed in a prominent location.
- The large metal shelves in the storage bays should be posted with a load rating and all shelves should be firmly anchored to the floor to prevent overturning during a seismic event. No heavy loads should be placed on upper levels of the shelves.
- Improve overhead door seals to help prevent air infiltration.
- Perform calculations to determine if additional insulation can be added to the roof. Additional insulation means additional snow will accumulate on the roof. It must be determined if the additional snow will overstress the structure. Should insulation be added, shoveling is an option should the snow get too deep on the roof; or when the roof is ready for replacement, additional purlins can be added to the roof structure provided the main support bents are not overloaded.

HVAC

- Clean the office area diffusers. Clean the ductwork as needed.
- Consider a hood for the break room range.
- Consider general exhaust for the break room countertop microwave and coffee maker to remove odors.
- Consider better storage for construction drawings on the mezzanine.
- Insulation: Replace at condensing unit and protect with PVC jacket.

PLUMBING

- Replace break room sink with ADA installation.
- Replace outdoor hose bibb with freezeproof type (with vacuum breaker).
- Provide tempered water to the safety station.
- Replace the water heater.

FIRE PROTECTION

- Consider a sprinkler system. Verify whether construction and use of the office mezzanine meets current Code without sprinklers.



DPW Maintenance and Storage Garage looking east.



DPW Garage looking west at four truck bays.



Main entrance to DPW Offices.



Corrosion at bottom of door and siding at entrance to offices.



Damage to door jamb at one of the truck bays.



Little used pass door at west side of building.



View along the rear of the DPW Garage and Storage Building.



Two bays used for vehicle repairs.



Conference/meeting room.



Break room. Note stove with no vent hood.



Locker Room.



Parts Room.



ADA accessible women's bathroom.



Mezzanine used for parts and materials storage.



Storage Mezzanine. Note lack of proper handrail.



Mezzanine space over offices used for plan and document storage.



Shelving in equipment bays for storage of supplies.

DEPARTMENT OF PUBLIC WORKS – WATER DEPARTMENT GARAGE

1.0 OBSERVATIONS

The Water Department Garage is located in the Department of Public Works yard at 13 Newfield's Road. The garage was constructed around 1969 and is a typical pre-engineered, metal building, built on a concrete slab-on-grade supported by a perimeter frost wall. The building is approximately 6,000 square feet measuring 100-feet by 60-feet. There are five 20-foot wide bays, each with an overhead door. The bay on the east side of the building serves as a wash-bay. The wash-bay is drive-thru and therefore has an overhead door at each side of the building. The building is comprised of steel bents spaced at 20-feet on center with roof purlins spaced approximately 4-feet on center between the bents. The building is clad with a metal roof and siding. In addition to the five overhead doors, there are two steel pass doors, one on each end of the building. The pass doors are in good condition. At the front of the building over the overhead doors, there is a continuous gutter system along the eave with two downspouts. Water from the downspouts exits directly onto the concrete apron that runs along the front of the building. There are several areas along the apron where the concrete has spalled. There are dents and dings around the door openings and along the bottom sections of the perimeter siding. The building is showing its age, but for the most part it is still serviceable and functions quite well as a garage/repair facility.

The building is minimally insulated as is typical of most pre-engineered, metal buildings, so heating the space during the winter can be a struggle. There are floor drains in the floor at each bay. With the exception of a longitudinal crack in the floor along the line of the floor drains, the slab is in decent condition. There are no bathroom facilities in the building and there are no offices or mezzanine space. Supplies and tools are stored on shelf units along the back wall of the building. The wash-bay at the east end of the building is used to clean and wash the trucks and equipment. The space is heated with infrared units mounted along the ceiling so the bay can be used during the winter. There was quite a bit of debris on the floor, and around and in the floor drains. Water enters the drains and flows to an oil-water separator, so it is best if most of this debris can be kept out of the drainage system. From there it enters the sewer system and flows to the sewer treatment plant.



HVAC

The building is of metal panel construction. Exposed insulation in walls and roof. The truck wash-bay has the same unprotected roof insulation, but the walls have FRP protective panels. Outside of building supports the vent pipes for underground fuel tanks.

Heating in main garage bays is one gas-fired unit heater; flue is vented out back of building to a metal chimney; control is a wall-mounted programmable thermostat; there is no redundancy to protect water piping in case the heater fails. Heating in wash-bay (east end of building) is two overhead gas-fired, infrared heaters, which are fairly rusty from water spray and age; control is by two separate remote-bulb thermostats at worker level, with simple open sheet metal bulb guards. Cooling in main garage bays are two ceiling paddle fans to move the air.

Ventilation (outside air or exhaust): None. The garage bay may be adequately ventilated by the overhead doors. However, the wash-bay has moisture damage to rusted surfaces, moldy spots on walls, and stains on the roof insulation poly barrier.

PLUMBING

Front (north) of building has gutters and downspouts at edge of sloped roof to protect overhead doors. Main garage bay has several short trench drains at midline of the room. Wash-bay has one large floor drain basin with cast iron grate; the grate has some damage and there is much debris in the basin and on the floor. Floor and trench drains are presumed to run through an oil separator outside the building (see Civil).

The water supply includes a 1-inch copper line from under the slab to a hydro-pneumatic “well” tank. The tank fittings include a relief valve, and a plugged tee where a pump pressure switch could mount. There is a testable backflow preventer in the main, but no meter or filter.

Wash-bay’s pressurized water heating and storage system is mounted in the main garage bay. Its flue is vented out the back of the building to a metal chimney. Hot water is piped from the system to a truck undercarriage washer on the wash-bay floor, and to two overhead swiveling manual wash hose arms with hand-held spray wands. One of the hose arms appears disabled. The hoses lack storage racks, and one of the wands is being hung on a thermostat guard. There is a remote control panel in the wash-bay.

The natural gas service supplies the heating units and wash-bay water heater. The outdoor piping is generally unpainted and rusting.



FIRE PROTECTION

There is no sprinkler system.

2.0 RECOMMENDATIONS

With regard to structure and/or architectural issues, there are no immediate recommendations for this building, with the exception of adding more insulation to help reduce the cost of heating the building.

HVAC

- Provide a second heater in the garage bay.
- Provide ventilation in the wash-bay.
- Replacements: Anticipate replacing the wash-bay heaters in a few years.

PLUMBING

- Paint outdoor gas piping.
- Repair and clean floor drain in wash-bay.
- Provide storage racks for the wash-bay hoses and spray wands.



Front of Water Department Garage.



Front of Water Department Garage.



Pass door on west side of building.



Typical metal framing.



Wash-bay on east side of Water Department Garage. Note Infrared heating units on the wall.



Wash-bay wall.



Wash-bay catch basin and accumulation of debris.

PARKS AND RECREATION BUILDING

1.0 OBSERVATIONS

The Parks and Recreation Building is located at 32 Court Street. The building occupies a footprint of approximately 4,700 square feet and there are two levels for a total gross area of 9,400 square feet. The structure was originally built in 1848 and served as the Town's first high school. Recent renovations completed in 1999 converted the old school into a center for the Parks and Recreation Department. The renovations included the creation of offices and other upgrades with regard to ADA accessibility, as well as upgrades to the bathrooms. In 2002, the ADA accessible ramp to the main entrance on the Court Street side of the building was reconstructed, and in 2005 a new shingled roof was added.

The building has a granite stone foundation. Originally the basement was used for equipment and supply storage, but excessive moisture created mold issues. All materials were removed from the basement, the area was cleaned-up, and dehumidification was added to dry out the basement. This seemed to solve the moisture issue in the basement, but other than the mechanical and electrical equipment, including the boiler, nothing else occupies this space.

The structure is wood framed with no obvious issues or concerns regarding its structural integrity. The exterior of the building is sided in clapboards with wood trim. The exterior siding and trim is in need of paint. The windows were recently replaced with new insulated glass, double hung units. The first floor of the building is used for offices for the Recreation Department. There is also separate instructional space for music lessons and a single office space for the Exeter Veteran's Affairs Office. The second floor has a large open space for activities and includes storage spaces for equipment and art supplies. Interior finishes include vinyl tile flooring, carpeting, painted gypsum walls, wood paneling, and drop ceilings. Most of the finishes are in fair to good condition, although some carpeting is worn and the original wood stairs need re-finishing.

HVAC

The building is very old and not well insulated. Windows are commercial-duty, aluminum, double-hung, with deep air space and half screens in sliding tracks. Siding is wood clapboards. Foundation is exposed granite blocks. The basement has a low ceiling, appears to be unoccupied, and used only for mechanical and electrical services.

Central heating is a fairly new Buderus Logano gas-fired, standard-efficiency boiler in the full basement, with breeching to the chimney, combustion air system through the outside wall, copper piping, and six zone pumps. Boiler is raised off the floor on concrete blocks. Air separator is



Spirotherm microbubble type. Heating piping is generally bare; some has thin, low-cost foam insulation.

Heating units are hot water baseboard in most rooms, including basement. Some baseboard in second floor public area is beat-up, and its thermostat has buttons to adjust the setpoint warmer or cooler. Cooling includes three window air conditioners serving only a few areas, one of which is on rusty metal braces. A Mitsubishi 2.5-ton ductless split system cools interior office areas; the condensing unit is mounted low on-grade, and water runoff has caused dirt to pile up onto it.

There is no general mechanical ventilation. The large operable windows may qualify as natural ventilation for some spaces. The inner office (reception) has a large transfer grille to the public lobby, which may be to get ventilation air or to allow some cooling from the air conditioner to reach the lobby. The inner office has a photocopier and a microwave oven without ventilation. The single-user toilet rooms in the public lobby and the office area have exhaust fan/lights which are run by the light switch; the fans could run continuously during occupancy to compensate for lack of general ventilation. The second floor ball storage room is unventilated and has a strong smell of the rubber balls. The basement has a propeller exhaust fan to outdoors.

PLUMBING

The Town water supply in the basement includes a 1" copper line through the floor; it reduces to 3/4" and an angle valve at inlet to the meter; in other words, this is a small water supply. There is no backflow preventer or filter. The water entrance is in the same small room as the electrical entrance and fire alarm panel.

Water heater in basement is Whirlpool electric type, in good condition; heater is raised off floor with bricks; there is a mixing/tempering valve in the hot supply. The basement has a sump pump in a pit formed from a plastic milk crate set into the floor, and an ejector basin and pump above the floor.

Plumbing unisex fixtures in single-user toilet rooms in a public lobby and office area are in good condition. These may meet accessibility requirements, except the lavatory piping is not insulated. The office toilet room has exposed piping that may reduce accessibility. The dual-height accessible water cooler in the lobby has an AquaPure filter in the basement, but does not have a bottle filler. Janitor's closet has laundry tub on legs.

FIRE PROTECTION

Fully sprinklered, with recessed and sidewall white sprinklers.



Sprinkler water entrance is separate from domestic water, 2" with dual-check backflow preventer. Fire Department inlet connection is Storz type and is mounted close to grade in an infilled basement window.

2.0 RECOMMENDATIONS

GENERAL

- Paint the exterior of the building.
- Paint the interior wood stairs and install non-skid treads.
- Improve the emergency exit stairwell from the second floor.

HVAC

- Provide ventilation, such as zoned heat-recovery ventilators with good air distribution.
- Provide exhaust for the photocopier.
- Insulate heating piping.

PLUMBING

- Provide backflow preventer.



Main entrance from parking lot.



Main entrance from parking lot. Note handicap parking, but entrance is not accessible.



Peeling paint on trim, typical on all sides of the building (including some of the siding).



Registration window on first floor.



Director's office.



Work station at registration desk.



ADA accessible bathroom on the first floor.



Wood stairs to second floor.



Large activity room on the second floor.



Emergency exit stairs from the second floor.



Basement area.

TOWN OF EXETER SAFETY COMPLEX

1.0 OBSERVATIONS

The Town of Exeter's Safety Complex main entrance is located at 1 Bow Street, while the Fire Department's main equipment doors are along Court Street. The facility houses the Exeter Police Department and the Exeter Fire Department. It was constructed in 1979. The two-story building is approximately 18,000 square feet consisting of roughly 5,500 square feet for the Police Department, 10,000 square feet for the Fire Department, and 2,500 square feet for a common area, lobby, mechanical and electrical service. The two-story structure is a slab-on-grade with walls of CMU block and a brick veneer. Some walls are metal studs with brick veneer. The brick facing is in good condition on all sides of the building. The windows are a combination of casement, fixed, and curtain wall style aluminum framed windows, and all appear to be in good condition. There are five apparatus bays. There are five overhead doors on the west side, or Court Street side of the building. The three overhead doors to the south are through bays with overhead doors on the opposite side of the building. The through bays are used for fire vehicles on the Court Street side and the Town's ambulances are on the back, or east side of the building. A single bay garage attached to the northeast corner of the building with a single overhead door serves as the sally port for the Police. The main entrance on the north side or Bow Street side of the building has glass storefront style doors with flanking glass, which enters into a secured lobby area. From the lobby, visitors can access an administrative clerk during the day and the dispatcher after hours. It was reported that the pitched roof design over the main entry was poorly conceived in that it is north facing and gets very little sunlight in the winter. Snow tends to pile up on the pitched roof against the face of the building and eventually turns to a solid ice dam.

The gable style roof is at a 5:12 pitch and is covered with three tab asphalt shingles. There is a continuous roof vent. The shingles were replaced several years ago and are in good condition. The edge trim is wood and appears to be in good condition. The roof is designed such that the central portion of the roof pitches toward the center of the structure. There are 40 to 45-foot long valleys running north to south, located roughly at the divide between the Police and Fire Departments. This central low point along the roof has led to a build-up of snow and ice which in turn has contributed to roof leaks in some of the offices on the second floor. The roof design does not appear to be very well suited for the Northern New England climate.

The finishes within the office portions of the Safety Complex include hard gypsum ceilings with gypsum wallboard, painted CMU block, and vinyl floor tile or carpet. Most of the finishes are in good condition, although some of the carpeting is worn, and some of the painted walls and ceilings need a fresh coat of paint. There are over 25 offices throughout the building on the first and



second floors. The layout seems less than ideal with overcrowding, shared office space, and narrow corridors which tend to constrict movement throughout the building. Although there are handicap accessible bathrooms on both levels, there is no handicap accessible access to the second floor. The building does not have an elevator. There are several locations in the building where the floor changes between adjacent areas. For example, on the first floor moving from the lobby to the workout area at the rear of the apparatus bay, a step down is required. It is poorly marked and can be a hazard if someone is not paying full attention when moving from one area to an adjacent space

The Fire Department computer center is located within the training room. It should be in a separate space or somehow segregated from the training area.

At the first floor on the south end of the apparatus bays near the hose tower, there is a room used for storage of oxygen tanks and breathing apparatus. It is also used as a filling station for replenishing air packs. On a mezzanine constructed of wood there is the heart of the communication system (radio) system for police and firefighters. There are many vital pieces of equipment kept in this room and the room seems to be used as a catch all for miscellaneous and extraneous equipment and supplies such as paint supplies, tools, etc.

HVAC

The building is mostly 1970s vintage, with modest insulation. The open area of the attic has added 12-inch deep, loose-fill insulation in most areas except walkways.

The heating system is generally in good condition. Most heating is by hot water, but there is some old electric heating (Fire Department break room).

The hot water boilers are gas-fired standard efficiency Lochinvar. They are scheduled to be replaced this fall, with high-efficiency condensing boilers. The piping is primary/secondary with boiler pumps and a pair of lead-lag main pumps. There is a centrifugal air separator and bladder expansion tank. Piping in the boiler room, and where seen elsewhere, is insulated. Air separator and many valves in the boiler room are bare.

The boiler room is kept clean.

The boiler room has an electric unit heater at the water/sprinkler area.

The boiler room combustion air is currently brought in by a wall louver with a motorized damper and filter.

Room heating is generally hot water baseboard in offices, unit heaters in truck bays. Lobby has aged flat-top cabinet heaters, with Dymo labels warning not to block the top air outlets.

Some rooms have central ducted air conditioning. Many of the smaller rooms on this system lack return grilles, so the air must transfer under doors to return at central grilles.

Fire Department sleeping rooms have ductless mini-splits.

Three central air conditioning/ventilating units are in the attic in the unconditioned space outside the ceiling insulation. There is hot water piping in this space, but we didn't determine whether this has antifreeze. Some pipe insulation is missing.

Air conditioning in some rooms is Mitsubishi ductless mini-split units. In a remote area of the Detectives' Office, the central AC is supplemented by a thru-wall unit.

AC outdoor condensing units are on grade for central AC, and on the wall for some mini-split systems. Most appear in good condition. The refrigerant piping is run exposed on the outside brick walls with insulation that mostly lacks protection.

The attic HVAC units appear to be at midlife. They are hung from the wood roof trusses by an odd system of channels and rods.

Ventilation air to the attic HVAC units appears to come in through roof jacks on the sloped roofs. See plumbing for comments on vents.

An above-ground fuel tank is for refilling vehicles.

The fire trucks have a Plymovent magnetic-release exhaust hose system.

A fire truck bay has an old make-up air unit with a hot water coil that appears to provide 100% outside air.

A fire truck bay also serves as a weight/workout room.

The Fire Department break room has a fairly new gas range with a hood. The hood is high quality but lacks exhaust to outdoors, instead recirculating to the room. The hood has no fire protection system.

The Fire Department's "Air Pack Repair/Hazmat Storage/Fire Alarm" room has many uses, but lacks ventilation and separation of uses.

Gas and charcoal grilles are stored outside near the generator, Hazmat trailer, and some portable propane cylinders.

PLUMBING

The water entrance in the boiler room has dual meters and RPZ backflow preventers. Vent piping through roofs is PVC with faded black paint. There are many vents, and some are close to HVAC roof ventilation jacks. Natural gas serves the boilers, and has a locked by-pass around the meter to allow continuous service. A separate gas service serves the electric generator and the Fire Department break room cooking range.

Domestic hot water is provided by a SuperStor indirect-fired tank heater which is heated by the boilers, with its own heating pump. There is a by-pass between hot and cold to valve this tank out of the domestic water loop. There is a recirculation line to the heater for temperature maintenance. Piping in the boiler room is well insulated.

Police first-floor kitchenette and second-floor shower/toilet rooms lack accessibility. Fire Department second floor lacks accessibility. Janitor's sink in boiler room is currently hard to access due to boiler flues.

An air compressor provides 150 psig air to the fire trucks to charge their air brakes. The fire truck bay has a commercial-type clothes washer. The Fire Department second floor has a stacked washer/dryer. The dryer's ducting appears correctly installed.

FIRE PROTECTION

Fully sprinkled, including the attic which has wood roof framing. The boiler room has a main header with two risers, one for wet system and one for dry system. Some pipe risers are exposed, possibly due to building additions.

2.0 RECOMMENDATIONS

- Reconfigure the roof over the main entry to alleviate ice build-up and dams.
- Reconfigure the roof over the main portion of the building to eliminate the valley at the center of the roof.
- Reconfigure some of the interior spaces to provide more office space.
- Consider an addition to provide more space laterally. For example, it may be feasible to relocate the emergency generator and add more space on the south side of the building or similarly on the opposite side of the apparatus bays.
- If the roof is reconfigured, consider a dormer type addition to provide additional second floor space over the apparatus bays.
- Provide a separate space for the Fire Department's computer center; a space out of the training room (isolated but accessible).

HVAC

- In the Fire Department's "Air Pack Repair/Hazmat Storage/Fire Alarm" room, provide ventilation, cooling for the server racks, and separation of uses.
- Provide workout space, with proper ventilation and other services.

PLUMBING

- Replace fixtures to provide accessibility.
- Improve access to janitor's sink in boiler room.
- Verify distances of vents through roof to HVAC intakes. Survey to determine whether odors or air quality is a problem. Re-pipe as necessary.
- Paint outdoor gas piping serving the cooking range.

FIRE PROTECTION

- No recommendations.



Lobby area at main entrance open to the public.



Police Sargent's Office outside dispatch room.



Apparatus bay for Engine 1. Note the lack of clearance.



Fire Chief's Office.



Fire Training Room.



Fire Department sleeping quarters.



Cramped locker room for the Police Department.



Attic area with ample blown-in insulation.



Valley over main entrance. Ice dams are a constant problem, note heat tape.



South wall of Safety Complex.



West side apparatus bays facing Court Street.



East side apparatus bays facing the rear parking lot.



South edge of roof valley over central portion of building.



Police sally port on east side of building.

SENIOR CITIZEN'S CENTER

1.0 OBSERVATIONS

The Senior Citizen's Center is located at 32 Court Street. The building occupies a footprint of approximately 5,100 square feet. The structure was originally built in 1841 and served as the Town Hall for the Town of Exeter. In 1927, the building was converted to a Fire House which served the Town until 1979. In 1985, the voters approved a warrant article to renovate, furnish and equip a Senior Citizen's Center at the site of the old Fire House. The renovations completed that year to ready the building for the Senior Center included removal of the second floor and lowering of the roof. Large steel trusses were added on top of the first floor walls to support the upper portions of the building. The building also includes the Fire Museum which was formerly one of the apparatus bays in the old fire house.

The building is a wood framed structure with a partial basement under the kitchen area. The remainder of the building is a slab-on-grade with a frost wall. The original slate roof was removed about 10-12 years ago and replaced with three tab asphalt shingles. The roof is in good condition. The building is sided with vinyl which appears to be generally in good condition. The windows in the Senior Center have been upgraded to bow style or regular casement windows with insulated glass, while the windows on the Fire Museum side are original double hung, wood windows covered over with plexi-glass panels on the exterior. The doors are insulated metal doors and they are in good condition with the exception of the weather seal around the front door on the Court Street side. Large air gaps exist at the bottom of the door and the threshold sweep seal should be replaced.

Interior finishes consist of vinyl floor tile, dark paneling on the walls, and a drop ceiling. Most of the finishes seem somewhat outdated but functional. Both the men's and women's restrooms are handicap accessible. The floor finish in the bathrooms is a non-slip sheet vinyl. The kitchen area serves as a packaging center for "Meals on Wheels". Pre-cooked food is brought in and assembled into meals for distribution. Although little cooking is actually done in the center, there is a full cook stove and other kitchen appliances. We did observe that the stove did not have a vent hood over the cooking surface.

Structurally the building has some sags and dips, but is generally sound. We were able to fully access the space above the ceiling, but photos show signs of fire damage on some of the wood members; however it did not affect the structural capacity of the load carrying members. The Fire Museum ceiling has sagged over the years and a glulam beam with additional support posts were added several years ago.



HVAC

The building is very old and not well insulated. Attic is vented with louvers at ends. Siding is vinyl. Windows are small, double-pane casement and fixed type.

Central heating is a fairly new (tagged 2011) HTP gas-fired condensing boiler in the partial basement, with PVC venting, copper piping, and primary-secondary pumps. Boiler is raised off floor on concrete blocks. Air separator is Spirotherm microbubble type. Condensate is piped with neutralizer to a small condensate pump which discharges to the open floor pit around the cast iron sanitary piping and sump pump. There is only the single pump, but if the pump fails, the boiler can continue to drain onto the floor and run into the sump pit. Heating piping is generally bare. Heating units are hot water baseboard along both sides of the dining hall and in toilet rooms.

The dining hall has no ventilation, and windows are too small for natural ventilation. The toilet room exhaust fans duct to separate wall caps, and are switched by the light switches. The fans should run continuously during occupancy. The serving kitchen electric range has no hood or fire protection. Basement bulkhead has a wall exhaust fan on a manual switch.

Cooling is two window-type air conditioners installed through the dining hall outside wall.

Attached Fire Museum has a gas-fired unit heater.

PLUMBING

The Town water supply in the partial basement includes an old 2" copper line through the foundation wall, with an old gate valve. It reduces to 3/4" and the meter. There is no backflow preventer or filter. There is a drain faucet without vacuum breaker. Water heater in partial basement is Bradford White electric type, in good condition, raised off floor with bricks.

Sanitary piping is PVC above slab into the old cast iron drain in the basement floor. Gas piping supplies the boiler. Attached Fire Museum has a separate gas service.

The plumbing fixtures in the multi-user Men's and Women's toilet rooms are in good condition; there have been some efforts to make them accessible, but generally they are not ADA compliant; lacking features include grab bars at water closets, height of urinals, and drain insulation under lavatories. The janitor's closet has a modern plastic mop basin on a raised base, with good faucet.

The serving kitchen three bowl sink has two bowls hard-piped, and one bowl to indirect waste funnel. A sign says "Sanitation sink – No food in this sink." The sink is piped to the basement grease trap. The grease trap in the basement is steel with flow controls.

The basement has a sump basin, which is piped into the foundation wall, presumably to outdoors. An open outdoor PVC pipe is below the kitchen, but was not identified.

Attached Fire Museum has a trench drain, which has a rubber plug in the outlet to prevent draining any leaking oil from the fire trucks.

FIRE PROTECTION

There is no sprinkler system.

2.0 RECOMMENDATIONS

- Improve weather sealing around doors and windows.
- Increase insulation.
- Upgrade finishes in the Senior Center.
- Add a vent hood over the stove.

HVAC

- Provide ventilation for the dining room, such as a heat-recovery ventilator with good air distribution.
- Consider a hood for the dining room range.
- Consider general exhaust for the serving kitchen.
- Insulate heating piping.
- Verify that boiler temperature is reset based on outside temperature, so boiler runs in efficient condensing mode whenever possible.

PLUMBING

- Provide backflow preventer in main entrance.
- Replace the old gate valve with a ball valve.
- Provide an indirect waste funnel in the sanitary system, with trap seal protection, for the boiler condensate.



Back wall of the Senior Center.



South wall of the Senior Center with ADA accessible ramp.



Roof of Senior Center. Shingles in good condition.



North wall of Fire Museum. Note plexi-glass panels over the original windows.



New laminated beam and post added to support ceiling in Fire Museum.



Interior of Senior Center.



Men's Room with ADA accessible sink.



Former second floor ceiling framing members with slight charring.



New framing in attic area above Senior Center. Note steel truss in background that was added when second floor walls and floor were removed, and the roof was lowered.

TOWN OFFICE

1.0 OBSERVATIONS

HVAC

The building is old, with heavy masonry walls, wood framing, and minimal insulation in most assemblies. The attic has loose-fill insulation added at the upper floor ceiling, which varies in depth (some has been disturbed). The single-pane, double-hung, wood windows have original track and weight systems, and have triple-track storm windows on the outside.

The heating system is generally in good condition. Boilers, pumps, and accessories in the boiler room are clean and fairly new. The central heating system consists of three small “residential” Smith GB100 atmospheric, gas-fired, standard-efficiency boilers. These are piped to space heaters, most of which are light-commercial baseboard and convectors. Piping in the boiler room is fairly new copper. There is one main piping loop of the monoflo-tee design, which is simple and reliable, but results in lower water temperatures at the end of the loop. The terminal heaters have low-voltage control valves, thermostats, and balancing valves, which add zone control to the monoflo system.

The boilers share a single low water cut-off on the middle boiler. It appears that valves could isolate the other boilers from this control. The boilers appear to all operate together, and do not appear to have any sequencing control that would allow fewer boilers to operate as needed. The boilers have a fan-forced combustion air make-up system. Boiler breeching and combustion duct are bare.

There is a pair of main circulating pumps, with manual switchover; the lead pump is a new Grundfos Magna pump, with integral variable-speed controls for energy savings and quieter operation; and the standby pump is a single-speed Bell & Gossett. The heating main has a new Spirotherm microbubble air separator.

Air conditioning has recently been provided in most areas, using Mitsubishi and other brands of multi-zone ductless split air conditioners. Piping in the basement lacks hangers to support elbows. Piping is generally well insulated, but insulation is pinched by tie-wraps and compressed at hangers. Piping in occupied spaces is covered with plastic conduit systems. Some outdoor piping is protected with plastic conduits; other outdoor piping is not protected, and its wall penetrations are sealed with spray foam exposed to weather. One of the three outdoor condensing units has a wood shed roof to protect it from falling ice from the main roof

above. The indoor units have hard-wired thermostats separate from the hydronic-heating thermostats. Condensate is piped to indoor sanitary drains, some via condensate pumps or the main sump pump.

Ventilation has recently been provided in most areas by two air-to-air heat-recovery ventilators located in the basement and ducted to the rooms. The ventilators have fairly good pleated filters. First floor rooms generally have floor grilles, with ducts run in the basement. Second floor rooms generally have ceiling grilles, with ducts run in the ceiling and attic. The ductwork is generally bare except in the attic. Heat losses to the basement may be acceptably low if the basement is kept warm in winter. The outside air ducts are insulated. The ducts in the basement appear well sealed. The fresh air intake has been ducted out under the rear stairs and up to well above grade, protected somewhat from falling ice by the fire escape. Hot water coils in the supply ducts temper the air to a neutral room temperature.

Toilet rooms have ceiling fan-lights, switched with the lights. No exhaust was seen at the janitor's storage and sink area at the top of the basement stairs.

Most ducts in the attic for the new ventilation systems are rigid type, supported with clincher cable systems that are spaced far apart. They are insulated with thin fiberglass, foil-faced wrap that is stapled together, but is open in several places. Some ductwork in the attic is uninsulated flexible duct with long runs, multiple bends, and poor support. These may serve the toilet room fan-light(s).

Fire dampers were not observed at floor penetrations. For example, a recent ventilation duct up from the basement to the first floor is sealed with spray foam.

The attic is intended to be isolated from the conditioned rooms below, but the ceiling access hatch has an open grille. Its manual damper and steel cover plate were lying loose during our site visit.

PLUMBING

The building water supply is a 3/4" or 1" underground copper line, with meter, mesh strainer, and backflow preventer. There is a hose faucet after the BFP that lacks a vacuum breaker. Natural gas serves the boilers, and an outdoor electric generator. Water piping is copper, and the newest has pressed connections to avoid soldering. Drain piping is PVC, except for some sections of old cast iron.

Hot water is provided by a Whirlpool electric water heater, which is in good condition and raised off the floor on concrete blocks. The vacuum breaker on the incoming cold water is



poorly placed upstream of the ball valve. The heater does have a simple mixing/tempering valve.

An open sump pit in the boiler room with a single light-duty pump receives condensate from some of the air conditioners. The pump appears older and has simple controls.

There is a dual-height water cooler in the first floor, with a water filter in the basement. The cooler and filter are in good condition. The janitor's sink is a plastic, laundry-type on the top landing of the basement stairs, in good condition, with hose, but no vacuum breaker. The break rooms sink enclosed base cabinet lacks wheelchair access. Toilet room fixtures are in good condition. A water closet in the accessible public toilet lacks a rear grab bar and has the tank flush handle on the narrow side of the stall. A private office toilet on the second floor is non-accessible.

FIRE PROTECTION

There is no sprinkler system.

2.0 RECOMMENDATIONS

HVAC

- Provide low water cut-off on each boiler.
- Provide a staging system for the boilers, which would include controls, as well as automatic control valves to isolate cold boilers from the system. Or stage them manually by shutting-off and valving-off individual boilers based on outdoor temperature.
- Insulate boiler breeching for personnel safety.
- Add supports to ducts in the attics spaced per industry standards. Replace long flexible duct with rigid duct to improve airflow.
- Add supports to basement refrigeration piping, locating the supports outside the insulation to prevent sweating, and providing long metal shields at hangers to prevent compressing the insulation.
- Replace exposed spray foam outdoors at refrigeration piping penetrations, using sealants suitable for sun exposure.
- Add fire dampers at floor penetrations in duct risers.
- Consider insulating ventilation ducts in the basement, and increasing duct insulation thickness in the attic.

- Provide exhaust at the janitor's sink area.

PLUMBING

- Provide back-up or alarm for the sump pump. Plan to replace the pump with a heavier duty type with better controls.

TOWN HALL

1.0 OBSERVATIONS

HVAC

The building is old, with heavy masonry walls, wood framing, and minimal insulation in most assemblies. The attic has only partial areas with loose-fill insulation added at the upper floor ceiling; much area has little or none; much of the second floor has a drop ceiling below the original ceiling which adds a little insulating value. Poly sheeting on the cold side of the attic insulation remains in large areas from past roofing and cupola work. The double-hung, wood windows have had their single panes of glass replaced with double-pane sealed units to avoid using exterior storm windows. The original track and weight systems were replaced with plastic track systems with seals on lower sashes.

The heating system is generally in good condition. Boilers, pumps, and accessories in the boiler room are clean and fairly new and labeled. The central heating system consists of two Buderus standard-efficiency, gas-fired boilers. Pumping is primary/secondary with each boiler having an injection pump to add heat to the main loop. The primary loop pumps appear to be single-speed with motor starters rather than VFDs. These pumps have spring hangers on the motors which might cause shaft misalignment, rather than supporting the pumps by their casing and flanges. The piping mains near the pumps also have spring hangers. The supply header has several branch lines with balance valves; at least one is leaking and corroding. There is a standard air separator and a bladder-type expansion tank. The newer boiler room piping and air separator are well insulated, except at the main pumps where some work has apparently been done on a pump; some older heating piping is bare. The boiler room is kept clean.

The boiler venting is double-wall type which reduces heat to the room and has less-hot surfaces for worker safety. The boilers have a fan-forced combustion air make-up system. The boiler room has a small ceiling exhaust fan ducted out of the room for cooling and an electric unit heater. Boiler room equipment is labeled, and gas and sprinkler piping in the room are painted colors for identification.

Steel piping is mostly bare in the rest of the building. It serves terminal heating units in the rooms, primarily fin-tube wall radiation. In the art gallery, bare piping has a threshold built over it at the door to the fire escape. Bare piping wastes heat, and where it is at occupant level it can be a burn hazard. The piping and fin-tube are generally in good condition, except at least two locations where automatic air vents leaked and damaged the piping or fin-tube enclosure.

The terminal heaters have motorized control valves for zoning, most of which are exposed to view, which may leave them vulnerable in some locations. Zone thermostats are generally programmable type. Some have a switch that could be set to “off” which should be disabled to prevent freeze-ups.

Ventilation to some basement rooms is provided by a Lifebreath heat recovery ventilator mounted in the boiler room with condensate drain pump. Basement public Men’s room seems to be vented by opening the window; other toilet rooms appear to have mechanical ventilation, at least grilles. The former court office spaces in the basement lack ventilation. Ventilation to main auditorium and art gallery was originally a gravity system with large grilles, but this appears to have been blocked closed. The large windows are operable, but have blocks limiting their use to only part-open.

Some of the basement offices have air conditioning, but one area only gets some cooling indirectly through the doorway. The electrical room has a portable dehumidifier with a condensate pump. Another basement room has a portable dehumidifier piped with a garden hose to a sump pit.

PLUMBING

Hot water is provided by a Whirlpool electric water heater, which is in good condition. There is no mixing valve that would allow the water to be stored hotter than the usage temperature. We did not see a timeclock to save energy. We did not see any recirculation pump or piping to reduce wait time and save water at lavatories. The heater lacks an expansion tank.

Natural gas serves the boilers; the meter and regulator are indoors, with the regulator vent piped to outdoors. Water piping is generally older copper with soldered joints. Drain piping is a mix of old cast iron and newer PVC. PVC vent or drain piping is run bare in the attic. Poor attic insulation may help prevent this freezing. Hot and cold water and condensate drain piping is generally bare.

The office break room on the basement level has a closed base and lacks accessibility. A laundry-type plastic sink was seen on the first floor with a hose on the faucet outlet, but lacking a vacuum breaker. In the art/janitor’s room on the second floor, the laundry-type plastic sink has only cold water supply and drain, no hot water, and no vacuum breaker. The floor drain opening lacks a grate or any trap primer to prevent sewer gases.

Public toilet rooms on the basement level (open at night through an outside door to the street) have fixtures that are functional, but lack accessibility. Piping including the Men’s room urinal

drain runs exposed. A basement toilet room for janitors has decent fixtures, but lacks accessibility. There is at least one single-user toilet room on an upper level with newer fixtures and accessibility. There are some old sinks and a water closet in some little-used backstage areas on upper levels that are in poor condition. At one of the sinks, there are openings through the wood floor that may be a fire hazard.

The cupola has drain pans to catch condensation and rain leakage, piped to drain.

FIRE PROTECTION

The building is fully sprinklered. The main entrance valve for the wet-pipe system is on the basement level, and has a small pump from 80 to 125 psi with a relief valve. The dry-pipe system valve with an older belt-drive air compressor is on the second floor and serves the cupola and porches. Both of these entrance valves are in lockable rooms.

Sprinkler piping is mostly exposed, with plain brass sprinklers. Piping is concealed in some areas, with non-recessed chromed sprinklers. Standpipe hose valves are in stairwells at landings. The sprinkler system is zoned by alarm flow switches on branches to floors.

2.0 RECOMMENDATIONS

HVAC

- Insulate remainder of attic, and remove poly sheeting which can trap moisture on the cold side of the insulation.
- Insulate heating piping to save energy. Where exposed within reach of occupants, insulate the piping for safety, and provide protective jacket.
- Provide mechanical ventilation.

PLUMBING

- Replace fixtures to provide accessibility.
- Remove little-used fixtures which are in poor condition.
- Avoid reusing water piping which may have lead-bearing solder.
- Provide hot water to any sink as required by Code.

FIRE PROTECTION

- No recommendations.

LIBRARY

1.0 OBSERVATIONS

HVAC

The building is of 1970s vintage, with moderate insulation, with some brick walls and some EIFS-finished walls. There is quite a bit of glass in aluminum frame systems. The roof eaves are wood construction and have small round vents.

The central heating system consists of a Smith gas-fired, cast iron standard-efficiency boiler. The boiler was running during our visit in spite of the hot weather. The boiler appears fairly old, with some visible rust, but has new-looking stainless steel breeching. This is piped to hot water air coils, fin-tube or baseboard, and other space heaters such as cabinet heaters. Library area has pedestal type fin-tube under the windows. Baseboard in the break room is valved off with a leaky valve. Entry vestibule and main floor toilet room have electric heat.

Upper level HVAC includes a main Carrier air handling unit on the upper level with fixed-speed fan (no VFDs), hot water heating coil with three-way diverting valve in the return piping, two-stage DX cooling coil, Nortec humidifier, and condensate pump. Ventilation intake runs to outdoors. The controls include an abandoned Barber-Colman controller and a newer Honeywell damper motor. Fire dampers in the floor of the upper air handling room are not installed correctly. They are missing retaining angles, leaving large open areas around the floors.

Lower level HVAC includes a smaller carrier ducted air conditioner, with a DX cooling coil, a hot water coil, and a Nortec humidifier. There appeared to be a closed dampered return inlet that could return air from the air handler room into this system. Copper condensate piping is bare. Some corrosion was seen at the humidifier piping. The humidifier was turned off. There was a great deal of water leaking out of what appeared to be the outside air duct to the air handler, and soaking the duct insulation.

Cooling is provided by two small DX condensing units mounted on a balcony near the offices, and a large two-stage, one in the pyramid-topped "well" on the roof. These are near the end of life. The units sit on the roof without external vibration isolators, which may cause noise in the building. Also, the open roof "well" has been a problem for deep snow build-up, and might be enclosed in the future. If the well is enclosed, the large unit could be replaced with a ducted condenser or condensing unit.

Ventilation includes outside air through the AHUs, and exhaust fans at toilet rooms and break room. High Library spaces have ceiling paddle fans to add air movement and de-stratification.

Ceiling diffusers have had a problem with dirt “smudging” on the adjacent ceiling tiles. The Library has been having the air handler air filters changed frequently to minimize the issue, but the smudging continues. Others have suggested that their ducts may need cleaning.

The basement auditorium has a damp basement odor. The room has air conditioning. The return grille is in the wall and fairly small. Controls include a Barber-Colman wall sensor and two other wall devices.

The elevator machine room doesn’t have its own air conditioning. It has a ceiling fan which is controlled by a wall switch with pilot light, and generally runs all the time. We didn’t see a fire damper in the exhaust duct, nor did we see a transfer grille to let cooler room air enter from adjacent spaces.

PLUMBING

Hot water is provided by a Bradford White electric water heater. Natural gas service at the west wall serves the boiler.

Plumbing fixtures are generally in serviceable condition. Water closets are tank type but wall hung for cleaning. Some toilet rooms such as at the employee break room and the children’s area lack ADA accessibility. The employee break room sink lacks accessibility. Urinals are mounted high without accessibility. At the lower level drive-thru, there is a surface mounted wheel type hose bibb which has been vandalized.

Patio areas drain into downspouts in the corner posts, with screened scupper openings. Reportedly this freezes at the outlets, but hasn’t caused problems. Smaller balconies have right-angle scupper drains at edges. Most of the sloped roof drains directly; there is a partial gutter and downspout over the north entry on the main level.

FIRE PROTECTION

The building is fully sprinklered. Sprinklers are surface-type, chrome-plated, and appear older. Sprinklers outdoors under the drive-thru on lower level are corroded green and some escutcheons are missing.

There is a Siamese Fire Department connection on the west wall. There are also two unidentified connections at the lower level drive-thru that may be related to sprinklers.

2.0 RECOMMENDATIONS

HVAC

- Investigate why the boiler was running.
- Investigate and repair the water at the lower level air handling system. Replace any insulation which has been wet or otherwise damaged.
- Plan to replace main air handling units and condensing units.
- Ceiling Diffuser “Smudging”: Considering the age of the ductwork, cleaning may be due. However, any dust and dirt in the duct that needs mechanical cleaning is stuck in place. Experts in the field generally find that ceiling smudging is due to dirt from within the room, not from the duct. What happens is the high-velocity air leaving the diffuser mixes with room air and slams the room dust particles against the ceiling. There may also be dust in the air supply due to dust from outdoors and dust that is in the return air that mixes with the outdoor air. Some improvements could include: replacing the air handling units with equipment that houses more effective filters in tighter racks with less by-pass leakage around the filters; replacing diffusers with ones designed to reduce smudging (often simply extending the outlet surface away from the ceiling surface, or reducing the velocity); and replacing rough-surface ceiling tiles with smoother cleanable surfaces.
- Provide elevator machine room with dedicated air conditioning, or a positive supply of cool air to ensure the equipment stays within the temperature range required by Code and the manufacturer.
- Reinstall fire dampers as directed by their manufacturer, or in accordance with applicable standards.

PLUMBING

- Upgrade fixtures and their installation for ADA accessibility.
- Replace hose bibb at lower level drive-thru, with a recessed type freezeproof wall hydrant with a vandal-resistant lockable brass cover.

FIRE PROTECTION

- Replace sprinklers and escutcheons outdoors under the drive-thru on lower level, with sprinklers with factory corrosion-resistant coating for wet location.
- Upgrade sprinklers in any renovated areas with semi-recessed type (if possible).

- If roof penthouse for condensing unit becomes enclosed, provide sprinklers, with anti-freeze or dry type if space is unheated.
- Label equipment and piping.

MECHANICAL SYSTEMS ASSESSMENT

GENERAL SUMMARY

0.0 NOTE

The general category applies to all the buildings in the report, unless noted otherwise for the specific building.

1.0 OBSERVATIONS

The Town has some full-time technical staff dedicated to maintaining mechanical systems in the Town's buildings.

Equipment and controls for HVAC and plumbing lack identifying labeling. Some of the newest equipment has been labeled using a portable label maker. Some electrical switches at the equipment are labeled to indicate the electrical circuits that serve them.

In at least one location, equipment requiring service such as exhaust fans was seen on sloped roofs or otherwise too close to roof edges.

We observed an orange spray foam being used in several buildings to seal penetrations. One example is the duct and piping leaving the elevator machine room in the Town Office building; elevator machine rooms are typically fire rated. The orange foams are typically "fire block" for use in combustible construction and heat-resistant to 240°F, but will burn and are not fireproof or to be used as a fire stop in fire-rated assemblies. The fire stops are typically red, maroon, or pink for identification. The users may or may not be aware of the differences. In another instance in the Town Office building, yellow spray foam was seen inside an air diffuser; this foam might not meet the combustibility and smoke ratings required for materials in air duct systems.

HVAC AND PLUMBING

Heating water piping systems have small automatic air vents at high points, such as an air handler in the attic of the safety complex, and fin-tube heaters in the Old Town Hall. Some have ball valves at their inlets which are generally open, allowing the air vents to function unattended. Some of these have allowed water to vent along with the air and caused rusting and other problems. Normally, any air bubbles should be purged by the plumber at initial system water fill, after which any remote vents should be valved off, and the air separator in

the boiler room should be the only automatic vent location required. If remote vents need to operate all the time, that indicates water leaks elsewhere in the system are introducing new make-up water with air, or simply the plumber's start-up purging has been inadequate.

Pipe insulation is lacking on many plumbing and heating pipes. Outdoor refrigerant piping insulation lacks protection and deteriorates. Deteriorated insulation results in energy loss, poor control, sweating and rusting.

Water backflow prevention is a concern. Many of the buildings have reduced pressure-zone backflow preventers (RPZ BFP) at the building entrance, which are the safest type for protecting the public water supply from hazards in the building. Some buildings lack backflow preventers at the building entrance. Some fixtures such as janitor's sinks and laundry-style sinks have hose-thread faucet outlets that a hose can attach to, but lack a vacuum breaker. Some drain or hose faucets on water piping have hose outlets but lack a vacuum breaker. When there is a main entrance BFP, the lack of vacuum breakers on outlets is a hazard to building occupants, but not to the Town water supply.

Water heaters generally lack tempering valves. Without a way to control the temperature downstream of the heaters, the heaters' thermostats must be relied on to provide a safe faucet temperature such as 115°F; current Code requires additional control. At that storage temperature, there is increased risk of growth of Legionella.

Water heaters generally lack supply piping temperature maintenance such as recirculation or heat trace. Users may be running the water a long time, waiting for hot water to reach the faucet. This wastes hot water and time. Electric water heaters generally lack timeclocks to save energy at night. Water heaters generally lack expansion tanks to absorb thermal expansion and reduce nuisance relief valve discharge.

2.0 RECOMMENDATIONS

- Label equipment and controls. Establish a uniform system of identification and naming, with documentation for easy reference by accounting and service personnel. We recommend against overly complex systems that can become outdated.
- Label piping and ductwork when performing any renovations or new work. Follow national ANSI standards for color coding and naming of services.
- Keep a copy of Owner's manuals in organized binders at each building.
- Establish standards for mounting and working on serviceable equipment on roofs. The Mechanical Code requires at least 10 feet safe working space from edges of roofs, and working platforms on sloped roofs, with guardrails where space can't be provided.

Serviceable equipment generally can mean items with motors, drive belts, filters, dampers, and the like, and generally would not mean static items such as plumbing vent pipes, or air intake and exhaust hoods.

- Establish standards for sealing and firestopping. Train personnel in appropriate uses of these materials.

HVAC AND PLUMBING

- Use automatic air vents only in boiler rooms and other locations that are frequently checked, and where their outlets can be piped to a floor drain, or where any air and water vented won't do any damage. Pipe each with a ball valve at the inlet to allow repair and replacement. If used at system high points to make refilling and purging the system easier, they must be valved closed when unattended. If there is a continuous need for system venting, eliminate that need by finding and repairing pipe leaks to the extent possible, and providing better air separators in boiler rooms.
- Insulate plumbing and heating piping to save energy, to provide quicker response time such as heating to a room or hot water to a faucet, to protect occupants from hot surfaces, to keep boiler rooms cooler, and to prevent condensation on cold pipes. Boiler breeching (single-wall flue pipes) also benefit from being insulated. Even the newer condensing-boiler systems, though they may run cooler than the older systems much of the time, will be more efficient with insulation. Insulation generally has a good payback.
- Protect outdoor refrigerant piping with protective paint as a minimum, or PVC jacketing or plastic conduit system as a more permanent solution.
- Review backflow prevention in each building, and provide devices at main entrances and at fixtures.
- Provide expansion tanks on water heaters.
- Provide tempering valves on water heaters to allow storing water at a safer, hotter temperature, and to better control supply temperature to fixtures.
- Provide temperature maintenance on domestic hot water piping, such as pumped recirculation or electric heat trace.
- Provide timeclocks on water heaters and any pumps or heat trace, to save energy by shutting the system off on nights and weekends. This would not apply to buildings that are always occupied.

ELECTRICAL ASSESSMENTS

ELECTRICAL SYSTEMS - DPW OFFICE

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 200A, 120/240V, 1-phase, 3W. The service enters the building at exterior into an electrical closet from an overhead utility pole. The electrical switch gear was new service equipment in 2003 and was in excellent condition. The main electrical switch gear consisted of a 200A safety switch and 200A, 42-pole MDP (Siemens). The electrical panel has six spaces and no spares.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Load tests shall be performed to provide actual load to determine future expansion.

Standby Generator

Summary of Existing Conditions and Assessment

The entire building is backed up by an exterior pad mounted 20 kw, 120/240,1P natural gas generator located at the back of the building manufactured by GE. The generator has a weatherproof enclosure and appears to be in good condition. Automatic transfer switch is located within electrical closet adjacent to main panelboard.

Recommendations

It is recommended that the standby generator shall exercise on a set schedule by the manufacturer and serviced as required. A load test should be performed to pull data for the amount of load on the generator to allow for any expansion as required.



Main Electrical Service Panelboard



Standby Generator

Fire Alarm Control Panel

Summary of Existing Conditions and Assessment

The fire alarm system was a NAPCO 4-zoned fire alarm control panel FACP, located on the ground level in the main entrance lobby with an exterior masterbox for connection with the local fire department. The FACP was new and in good condition. The building is not sprinklered. The smoke/heat detector coverage was adequate. The fire alarm initiation and notification devices present were older and the coverage was not sufficient. Additional devices shall be provided in bathrooms, office areas, breakrooms and corridors. The attic contained heat detectors.

Recommendations

It is recommended notification devices are added to the bathrooms, open office areas, meeting rooms and corridors to meet the NFPA requirements.

Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of 2x4 and 2x2 recessed lensed fluorescent fixtures within a ceiling grid. Most of the lighting contained fluorescent T8 and compact fluorescent lamps. The lighting throughout was in good condition and was adequate.

The site lighting consisted of some building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches and ceiling and wall mounted occupancy sensors throughout.



Fire Alarm Control Panel



Recessed Fluorescent Lighting and Occupancy Sensor (ceiling mounted)

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency.

Life Safety/Emergency

Summary of Existing Conditions and Assessment

The building contained wall mounted emergency battery units EBU's with remote heads. The EBU's were newer and in good condition.

There were LED exit signs in good condition and the coverage was adequate throughout.

Recommendations

Clean and re-lamp existing fixtures as required. Emergency lighting shall be checked bi-annually for life safety operation.

Receptacles

Summary of Existing Conditions and Assessment

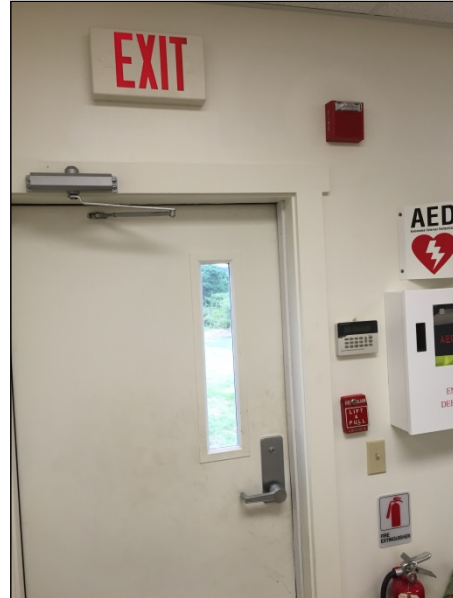
The building's power receptacle devices consisted of mainly recessed devices. The outlet locations appear adequate for the type of facility.

Recommendations

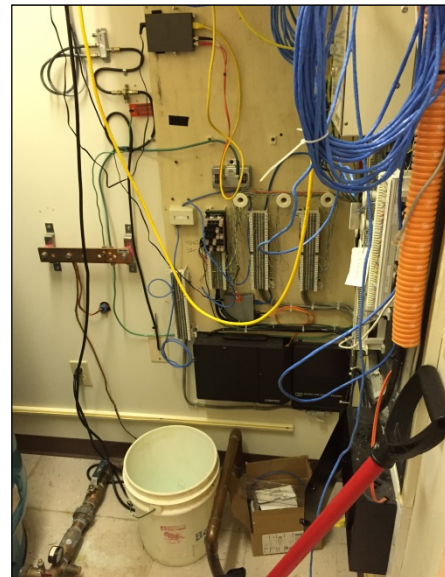
It is recommended that additional devices be installed as required by the office needs.

Items of High Priority

- Provide additional fire alarm notification devices and replace older devices with new devices.



Emergency Exit Sign



General Recessed Outlet

ELECTRICAL SYSTEMS - PUBLIC SAFETY BUILDING

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 600A, 120/208V, 3-phase, 4W. The service enters the building via underground conduits from an overhead utility pole. The electrical switch service equipment manufactured by Westinghouse with older sub-panels located throughout the facility. The sub panels are in fair condition. The main electrical switch gear consisted of a 600A main circuit breaker and various sub circuit breakers. The electrical panel has no space and no spares.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Load tests shall be performed to provide actual load to determine future expansion, compared with PSNH utility bills.

Standby Generator

Summary of Existing Conditions and Assessment

The building is backed up by an exterior pad mounted 150 kw, 120/208, 3P natural gas generator located on the side of the building manufactured by Kohler. The generator has a weatherproof enclosure and appears to be in good condition. Automatic transfer switch is located within the main electric room. The ATS switch is manufactured by Kohler

Recommendations

It is recommended that the standby generator shall exercise on a set schedule by the manufacturer and serviced as required. A load test should be performed to pull data for the amount of load on the generator to allow for any expansion as required.



Main Electrical Service Panelboard



Standby Generator

Fire Alarm

Summary of Existing Conditions and Assessment

The fire alarm system was a FCI 12-zoned fire alarm control panel FACP, located on the ground level in the main electric room with an exterior masterbox for connection with the local fire department. The FACP appears to be in good condition. The Police Department is not sprinklered and the Fire Department is sprinklered. The smoke/heat detector coverage appears to be adequate. The fire alarm initiation and notification devices were newer ADA type and the coverage was not sufficient. Additional devices shall be provided in bathrooms, office areas, break rooms and corridors.

Recommendations

It is recommended additional notification devices shall be added to meet NFPA coverage requirements. Additional smoke and heat detectors shall be added where coverage is not present in unsprinklered areas.

Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of 1x4 surface mounted fluorescent fixtures, pendant mounted industrial strip fixtures and recessed downlights at entry lobby. The lighting throughout was in fair condition. Existing fixtures shall be cleaned, re-lamped and ballasted as required for best performance.

The site lighting consisted of Metal Halide building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches and occupancy sensors throughout.



Existing Fire Alarm Control Panel



Surface Mounted Fluorescent Fixture

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency. Existing Metal Halide fixtures may be replaced with high efficient LED style lamping. The Town shall review rebate options with PSNH for replacement.

Life Safety/Emergency

Summary of Existing Conditions and Assessment

The building contained minimal emergency egress lighting or illuminated exit signs. These were located within the corridors and at exit doors to the outside.

There were LED exit signs in fair condition and the coverage was adequate throughout.

Recommendations

All existing life safety lighting shall be checked as part of an annual maintenance schedule and replaced as required. All egress doors shall be provided with illuminated battery backed-up LED type exit signs. Provide additional emergency battery units to provide general egress lighting.

Receptacles

Summary of Existing Conditions and Assessment

The building's power receptacle devices consisted of mainly surface mounted devices. The outlet locations appear adequate for the type of facility.

Recommendations

It is recommended that additional devices be installed where extension cord and power strips are being utilized.



Plastic Incandescent Exit Sign



General Surface Mounted Outlet

Items of High Priority

- Provide additional fire alarm notification devices and replace older devices with new devices.
- Provide 120V battery backed-up emergency exit signs and emergency battery units throughout to meet all life safety requirements.

ELECTRICAL SYSTEMS - HIGHWAY DEPT. GARAGE

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 400A, 120/208V, 3-phase, 4W. The service enters the building at exterior into the back from an overhead utility pole. The electrical switch gear was new service equipment manufactured by Siemens with older sub-panels located throughout garage spaces. The sub-panels are in fair condition. The main electrical switch gear consisted of a 400A main circuit breaker, (1) 150Amp sub-feed, (1) 100Amp sub-feed, (1) 200Amp Sub-feed and (3) 100Amp various circuit breakers. The electrical panel has no space and no spares.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Smaller (12) pole panelboards shall be replaced as required for additional circuits as needed for future equipment in garage bays. Load tests shall be performed to provide actual load to determine future expansion, compared with PSNH utility bills.

Standby Generator

Summary of Existing Conditions and Assessment

The building is backed-up by an exterior pad mounted 45 kw, 120/208, 3P natural gas generator located at the back of the building manufactured by Kohler. The generator has a weatherproof enclosure and appears to be in good condition. Automatic transfer switch is located within the back corridor. The ATS switch is manufactured by Kohler.



Main Electrical Service Lineup



Standby Generator

Recommendations

It is recommended that the standby generator shall exercise on a set schedule by the manufacturer and serviced as required. A load test should be performed to pull data for the amount of load on the generator to allow for any expansion as required.

Fire Alarm

Summary of Existing Conditions and Assessment

The fire alarm system was a Summit SFC-300 Series 12-zoned fire alarm control panel FACP, located on the ground level in the main entrance lobby with an exterior masterbox for connection with the local fire department. The FACP was new and in good condition. The building is not sprinklered. The smoke/heat detector coverage was adequate except for common corridors. The fire alarm initiation and notification devices present were older and the coverage was not sufficient. Additional devices shall be provided in bathrooms, office areas, break rooms and corridors.

Recommendations

It is recommended notification devices shall be replaced with new ADA style devices and additional devices added to meet NFPA coverage requirements. Additional smoke detectors shall be provided on 30'-0" centers in corridors and open office areas.

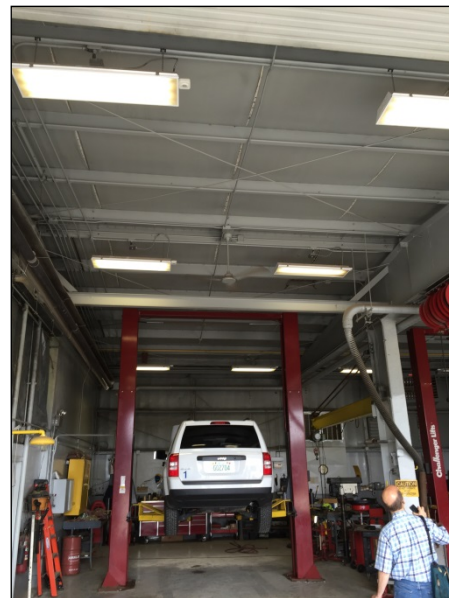
Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of 1x4 pendant mounted and recessed lensed (office/break areas) T8 fluorescent fixtures. The lighting throughout was in fair condition. Existing fixtures shall be cleaned, re-lamped and ballasted as required for best performance. It was noted doors are often open during winter months and cold weather ballast shall be provided.



Existing Fire Alarm Control Panel



Pendant Mounted Fluorescent Fixtures with Integral Occupancy Sensors

The site lighting consisted of Metal Halide building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches and manual timeclocks throughout.

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency. Existing Metal Halide fixtures may be replaced with high efficient LED style lamping. The Town shall review rebate options with PSNH for replacement.

Life Safety/Emergency

Summary of Existing Conditions and Assessment

The building contained minimal emergency egress lighting or illuminated exit signs. These were located within the corridors and at exit doors to the outside.

There were LED exit signs in fair condition and the coverage was adequate throughout.

Recommendations

All existing life safety lighting shall be checked as part of an annual maintenance schedule and replaced as required. All egress doors shall be provided with illuminated battery backed-up LED type exit signs. Provide additional emergency battery units to provide general egress lighting.

Receptacles

Summary of Existing Conditions and Assessment

The building's power receptacle devices consisted of mainly surface mounted devices. The outlet locations appear adequate for the type of facility.



Plastic Non-Illuminated Exit Sign

Recommendations

It is recommended that additional devices be installed where extension cord and power strips are being utilized.

Items of High Priority

- Provide additional fire alarm notification devices and replace older devices with new devices.
- Provide 120V battery backed-up emergency exit signs and emergency battery units throughout to meet all life safety requirements.



General Surface Mounted Outlet

ELECTRICAL SYSTEMS - LIBRARY

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 800A, 120/208V, 3-phase, 4W. The service enters the building via underground conduits from an overhead utility pole. The electrical switch service equipment manufactured by Square D with sub-panels located throughout the facility. The sub-panels are in good condition. The main electrical switch gear consisted of a 800A main circuit breaker and various sub-circuit breakers. The electrical panel has no space and no spares. Water appears to be coming from above the electrical equipment and corroding parts of the electrical system.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Load tests shall be performed to provide actual load to determine future expansion, compared with PSNH utility bills. The electrical equipment that has been compromised by water shall be tested and replaced, as required. This is an immediate hazard.

Fire Alarm

Summary of Existing Conditions and Assessment

The fire alarm system is a Mircom addressable fire alarm control panel located on the ground level in the main electric room with an exterior masterbox for connection with the local Fire Department. The FACP appears to be in good condition. The Library is sprinklered. The smoke/heat detector coverage appears to be adequate.



Main Electrical Service Panelboard



Existing Fire Alarm Control Panel

The fire alarm initiation and notification devices were newer ADA type and the coverage was not sufficient. Additional devices shall be provided in bathrooms, office areas, breakrooms and corridors.

Recommendations

It is recommended additional notification devices shall be added to meet NFPA coverage requirements.

Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of 2x4 recessed mounted fluorescent fixtures, pendant mounted decorative strip fixtures and recessed downlights. The lighting throughout was in fair condition. Existing fixtures shall be cleaned, re-lamped and ballasted as required for best performance.

The site lighting consisted of Metal Halide building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches and occupancy sensors throughout.

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency. Existing Metal Halide fixtures may be replaced with high efficient LED style lamping. The Town shall review rebate options with PSNH for replacement.

Life Safety/Emergency

Summary of Existing Conditions and Assessment

The building contained remote emergency egress lighting or illuminated exit signs. These were located within the corridors and at exit doors to the outside.



Pendant Mounted Fluorescent Fixtures



Exit Sign and Remote Battery Unit Heads

There were LED exit signs in good condition and the coverage was adequate throughout.

Recommendations

All existing life safety lighting shall be checked as part of an annual maintenance schedule and replaced as required. All egress doors shall be provided with illuminated battery backed up LED type exit signs. Provide additional emergency battery units to provide general egress lighting.

Receptacles

Summary of Existing Conditions and Assessment

The building's power receptacle devices consisted of mainly surface mounted devices. The outlet locations appear adequate for the type of facility.

Recommendations

It is recommended that additional devices be installed where extension cord and power strips are being utilized.

Items of High Priority

- Provide additional fire alarm notification devices and replace older devices with new devices.
- Have a licensed electrician conduct a full investigation on the electrical equipment that has been compromised by water damage and replace as required.



General Recessed Mounted Outlets

ELECTRICAL SYSTEMS - RECREATION DEPT.

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 200A, 120/240V, 1-phase, 3W. The service enters the building via overhead utility pole. The electrical switch service equipment manufactured by Cutler Hammer with sub-panels located throughout the facility. The sub-panels are in good condition. The main electrical switch gear consisted of a 200A main circuit breaker and various sub-circuit breakers. The electrical panel has space and spares.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Load tests shall be performed to provide actual load to determine future expansion, compared with PSNH utility bills.

Fire Alarm

Summary of Existing Conditions and Assessment

The fire alarm system is a Mircom zoned fire alarm control panel located on the ground level in the main electric room with a radio masterbox for connection with the local Fire Department. The FACP appears to be in good condition. The center is sprinklered. The smoke/heat detector coverage appears to be adequate. The fire alarm initiation and notification devices were newer ADA type, but the coverage was not sufficient.

Recommendations

No action as this time.



Main Electrical Service Panelboard



Existing Fire Alarm Control Panel

Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of 2x4 recessed mounted fluorescent fixtures. The lighting throughout was in fair condition. Existing fixtures shall be cleaned, re-lamped and ballasted as required for best performance.

The site lighting consisted of Metal Halide building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches.

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency. Existing Metal Halide fixtures may be replaced with high efficient LED style lamping. The Town shall review rebate options with PSNH for replacement.

Life Safety/Emergency

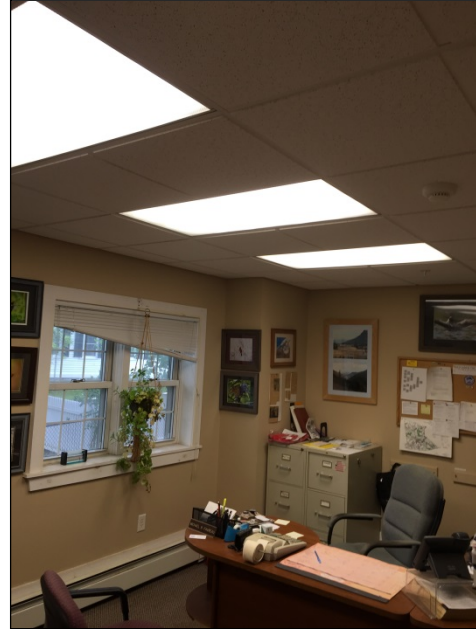
Summary of Existing Conditions and Assessment

The building contained remote emergency egress lighting and illuminated/non-illuminated exit signs. These were located within the corridors and at exit doors to the outside.

There were LED exit signs in good condition and the coverage was adequate throughout.

Recommendations

All existing life safety lighting shall be checked as part of an annual maintenance schedule and replaced as



Recessed Mounted Fluorescent Fixtures



Exit Sign and Remote Battery Unit Heads

required. All egress doors shall be provided with illuminated battery backed up LED type exit signs. Provide additional emergency battery units to provide general egress lighting.

Receptacles

Summary of Existing Conditions and Assessment

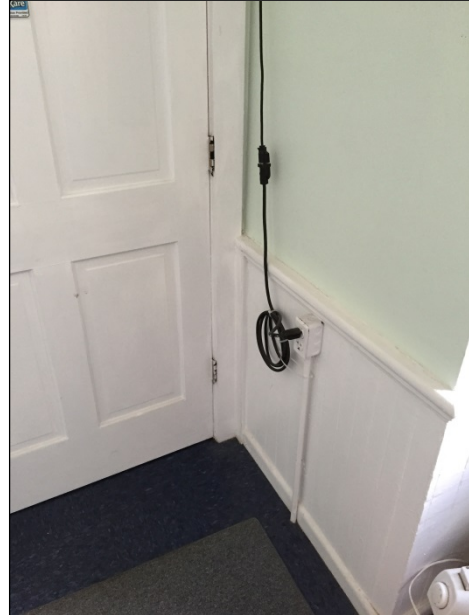
The building's power receptacle devices consisted of mainly surface mounted devices. The outlet locations appear adequate for the type of facility.

Recommendations

It is recommended that additional devices be installed where extension cord and power strips are being utilized.

Items of High Priority

- Plastic exit signs shall be removed and illuminated exits signs installed at interior egress doors as required.



General Surface Mounted Outlets

ELECTRICAL SYSTEMS - SENIOR CENTER

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 200A, 120/208V, 3-phase, 4W. The service enters the building via overhead utility pole. The electrical switch service equipment manufactured by Square D with sub-panels located throughout the facility. The sub-panels are in good condition. The main electrical switch gear consisted of a 200A main circuit breaker and various sub-circuit breakers. The electrical panel has space and spares.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Load tests shall be performed to provide actual load to determine future expansion, compared with PSNH utility bills.

Fire Alarm

Summary of Existing Conditions and Assessment

The fire alarm system is a FCI 4-Zone fire alarm control panel located on the ground level in the main electric room with an exterior masterbox for connection with the local Fire Department. The FACP appears to be in good condition. The center is not sprinklered. The smoke/heat detector coverage appears to be adequate. The fire alarm initiation and notification devices were newer ADA type, but the coverage was not sufficient.

Recommendations

No action as this time.



Main Electrical Service Panelboard



Existing Fire Alarm Control Panel

Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of 2x4 recessed mounted fluorescent fixtures. The lighting throughout was in fair condition. Existing fixtures shall be cleaned, re-lamped and ballasted as required for best performance.

The site lighting consisted of Metal Halide building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches.

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency. Existing Metal Halide fixtures may be replaced with high efficient LED style lamping. The Town shall review rebate options with PSNH for replacement.

Life Safety/Emergency

Summary of Existing Conditions and Assessment

The building contained remote emergency egress lighting or illuminated exit signs. These were located within the corridors and at exit doors to the outside.

There were LED exit signs in good condition and the coverage was adequate throughout.

Recommendations

All existing life safety lighting shall be checked as part of an annual maintenance schedule and replaced as



Recessed Mounted Fluorescent Fixtures



Exit Sign and Remote Battery Unit Heads

required. All egress doors shall be provided with illuminated battery backed-up LED type exit signs. Provide additional emergency battery units to provide general egress lighting.

Receptacles

Summary of Existing Conditions and Assessment

The building's power receptacle devices consisted of mainly surface mounted devices. The outlet locations appear adequate for the type of facility.

Recommendations

It is recommended that additional devices be installed where extension cord and power strips are being utilized.

Items of High Priority

- None at this time.



General Recessed and Surface Mounted Outlets

ELECTRICAL SYSTEMS - TOWN OFFICES

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 400A, 120/208V, 3-phase, 4W. The service enters the building at the basement level via underground duct bank conduit from an overhead utility pole. The electrical switch gear was new service equipment manufactured by Siemens with older sub-panels located throughout the facility. The sub-panels are in good condition. Currently, there is new panelboard upgrades happening on the 2nd floor and the attic space. The main electrical switch gear consisted of a 400A main circuit breaker with various circuit breakers. The electrical panel has no space and no spares.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Load tests shall be performed to provide actual load to determine future expansion, compared with PSNH utility bills.

Standby Generator

Summary of Existing Conditions and Assessment

The building is backed-up by an exterior pad mounted 45 kw, 120/208, 3P natural gas generator located at the back of the building. The generator has a weatherproof enclosure and appears to be in good condition. The automatic transfer switch is located within the back corridor. The ATS switch is manufactured by Kohler.



Main Electrical Service Panelboard



Standby Generator

Recommendations

It is recommended that the standby generator shall exercise on a set schedule by the manufacturer and serviced as required. A load test should be performed to pull data for the amount of load on the generator to allow for any expansion as required. The exhaust for the generator discharges within the enclosure. This unit is adjacent to operable windows and HVAC air intakes. The generator exhaust shall run to above the roofline with a stack. International Building and International Mechanical codes required exhaust to discharge more than 10'-0" from operable windows and/or fresh air intakes.

Fire Alarm

Summary of Existing Conditions and Assessment

The fire alarm system is a FCI 4-zoned fire alarm control panel FACP located in the basement. There is a remote annunciator with indicator lights in the front lobby. A radio masterbox for connection with the local Fire Department is located adjacent to the FACP. The FACP is in fair condition. The building is not sprinklered. The smoke/heat detector coverage was adequate except for common corridors. The fire alarm initiation and notification devices were older and the coverage was not sufficient, nor ADA type devices. The pull stations were noted to be mounted too high to meet ADA requirements. Additional devices shall be provided in bathrooms, office areas, breakrooms and corridors.

Recommendations

It is recommended notification devices shall be replaced with new ADA style devices and additional devices added to meet NFPA coverage requirements. Additional smoke detectors shall be provided on 30'-0" centers in corridors and open office areas. Existing pull stations shall be relocated to 48" to meet ADA requirements.



Existing Fire Alarm Audio Visual Device

Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of 1x4 surface mounted strip fixtures in the basement, and recessed mounted lensed fluorescent fixtures in the office areas. Lighting fixtures contained T8 fluorescent lamps. The lighting throughout was in fair condition. Existing fixtures shall be cleaned, re-lamped and ballasted as required for best performance. It was noted doors are often open during winter months and cold weather ballast shall be provided.

The site lighting consisted of Metal Halide building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches and manual timeclocks throughout.

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency. Existing Metal Halide fixtures may be replaced with high efficient LED style lamping. The Town shall review rebate options with PSNH for replacement.

Life Safety/Emergency

Summary of Existing Conditions and Assessment

The building contained minimal emergency egress lighting (wall mounted battery units) or illuminated exit signs. These were located within the corridors and at exit doors to the outside.



Recessed Mounted Fluorescent Fixtures



Plastic Iridescent Non-Illuminated Exit Sign

Recommendations

All existing life safety lighting shall be checked as part of an annual maintenance schedule and replaced as required. All egress doors shall be provided with illuminated battery backed-up LED type exit signs. Provide additional emergency battery units to provide general egress lighting.

Receptacles

Summary of Existing Conditions and Assessment

The building's power receptacle devices consisted of mainly surface mounted devices. The outlet locations appear adequate for the type of facility.

Recommendations

It is recommended that additional devices be installed where extension cord and power strips are being utilized.

Items of High Priority

- Provide additional fire alarm notification devices and replace older devices with new devices.
- Provide 120V battery backed-up emergency exit signs and emergency battery units throughout to meet all life safety requirements.
- Exhaust stack for the generator exhaust shall be reviewed and run to the top of the roof line as required.



General Surface Mounted Outlet

ELECTRICAL SYSTEMS - TOWN HALL

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 400A, 120/208V, 3-phase, 4W. The service enters the building at the basement level via underground duct bank conduit from an overhead utility pole. The electrical switch gear was new service equipment manufactured by Siemens with older sub-panels located throughout the facility. The sub-panels are in good condition. The main electrical switch gear consisted of a 400A main circuit breaker with various circuit breakers. The electrical panel has few spaces for future breakers.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Load tests shall be performed to provide actual load to determine future expansion, compared with PSNH utility bills.

Fire Alarm

Summary of Existing Conditions and Assessment

The fire alarm system is a Gamewell FCI zoned fire alarm control panel FACP located in the basement. There is a remote annunciator with indicator lights in the front lobby. A radio masterbox for connection with the local Fire Department is located adjacent to the FACP. The FACP is in fair condition. The building is sprinklered. The smoke/heat detector coverage was adequate except for common corridors. The fire alarm initiation and notification devices appear to be in good condition, but the coverage was not sufficient. The pull stations were noted to be mounted too high to meet ADA requirements. Additional devices shall be provided in bathrooms, office areas, breakrooms and corridors.



Main Electrical Service Panelboard



Existing Fire Alarm Pull Station

Recommendations

It is recommended additional notification devices be added to meet NFPA coverage requirements. Existing pull stations shall be relocated to 48" to meet ADA requirements.

Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of surface mounted pendant fixtures, track lighting, surface mounted strip fixtures. Lighting fixtures contained T8 fluorescent lamps and incandescent lamping. The lighting throughout was in fair condition. Existing fixtures shall be cleaned, re-lamped and ballasted as required for best performance.

The site lighting consisted of Metal Halide building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches and manual timeclocks throughout.

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency. Existing Metal Halide fixtures may be replaced with high efficient LED style lamping. The Town shall review rebate options with PSNH for replacement.

Life Safety/Emergency

Summary of Existing Conditions and Assessment

The building contained minimal emergency egress lighting (wall mounted battery units) and few illuminated exit signs. These were located within the corridors and at exit doors to the outside.



Surface Mounted Track and Pendant Mounted Fixtures



Plastic Non-illuminated Exit Sign

There were iridescent style non-powered exit signs. These signs appear to be new and in good condition. Although these are new and may meet code, 120v wired exit signs with battery back-up shall be installed at all egress doors, corridors and meeting rooms.

Recommendations

All existing life safety lighting shall be checked as part of an annual maintenance schedule and replaced as required. All egress doors shall be provided with illuminated battery backed-up LED type exit signs. Provide additional emergency battery units and 120V exit signs with battery back-up to provide general egress lighting.

Receptacles

Summary of Existing Conditions and Assessment

The building's power receptacle devices consisted of mainly surface mounted devices. The outlet locations appear adequate for the type of facility.

Recommendations

It is recommended that additional devices be installed where extension cord and power strips are being utilized.

Items of High Priority

- Provide additional fire alarm notification devices and replace older devices with new devices.
- Provide 120V battery backed-up emergency exit signs and emergency battery units throughout to meet all life safety requirements.



General Surface and Recessed Mounted Outlets

ELECTRICAL SYSTEMS - WATER/SEWER DEPT. GARAGE

Electrical Service and Distribution

Summary of Existing Conditions and Assessment

The main electrical service is a 200A, 120/240V, 1-phase, 3W. The service enters the building at exterior into the garage from an overhead utility pole. The electrical switch gear was new service equipment in 2003 and was in excellent condition. The main electrical switch gear consisted of a 200A safety switch and 200A, 42-pole MDP (Siemens). The electrical panel has (11) spaces and no spares.

Recommendations

It is recommended that the main electrical switch gear remain as installed and updated directory cards be updated for circuit breakers. Load tests shall be performed to provide actual load to determine future expansion.

Fire Alarm

Summary of Existing Conditions and Assessment

The fire alarm system installed appears to be fed from an adjacent small concrete building. This building didn't have a fire alarm control panel, but devices were present. The building is not sprinklered. The smoke/heat detector coverage was adequate. The fire alarm initiation and notification devices were not ADA style strobes, nor was the coverage sufficient. Additional devices shall be provided in the garage area and truck washing (weatherproof) as required for NFPA and local Fire Department.



Main Electrical Service Panelboard



Pull Station with NON-ADA Type

Recommendations

It is recommended notification devices shall be replaced with new ADA style devices and additional devices added to meet NFPA coverage requirements. Weatherproof devices shall be provided within the truck wash-bay.

Lighting

Summary of Existing Conditions and Assessment

The lighting fixture types consisted of 1x8 pendant mounted T8 fluorescent fixtures. The lighting throughout was in fair condition. Existing fixtures shall be cleaned, re-lamped and ballasted as required for best performance. It was noted doors are often open during winter months and cold weather ballast shall be provided.

The site lighting consisted of Metal Halide building mounted flood lights and sconces. All fixtures were in good condition.

Lighting Controls

The building interior lighting was controlled by manual toggle switches and manual timeclocks throughout.

Recommendations

It is recommended that lights are checked for lamping outage and exterior fixtures cleaned for optimal efficiency. Existing Metal Halide fixtures may be replaced with high efficient LED style lamping. The Town shall review rebate options with PSNH for replacement.

Life Safety/Emergency

Summary of Existing Conditions and Assessment

The building did not contain emergency egress lighting or illuminated exit signs. There were various plastic exit signs located over doors leaving the garage.



Pendant Mounted Fluorescent Fixtures

There were LED exit signs in good condition and the coverage was adequate throughout.

Recommendations

All egress doors shall be provided with illuminated battery backed-up exit signs. Provide additional weatherproof emergency battery units to provide general egress lighting.

Receptacles

Summary of Existing Conditions and Assessment

The building's power receptacle devices consisted of mainly surface mounted devices. The outlet locations appear adequate for the type of facility.

Recommendations

It is recommended that additional devices be installed where extension cord and power strips are being utilized.

Items of High Priority

- Provide additional fire alarm notification devices and replace older devices with new devices.
- Provide 120V battery backed-up emergency exit signs and emergency battery units throughout to meet all life safety requirements.



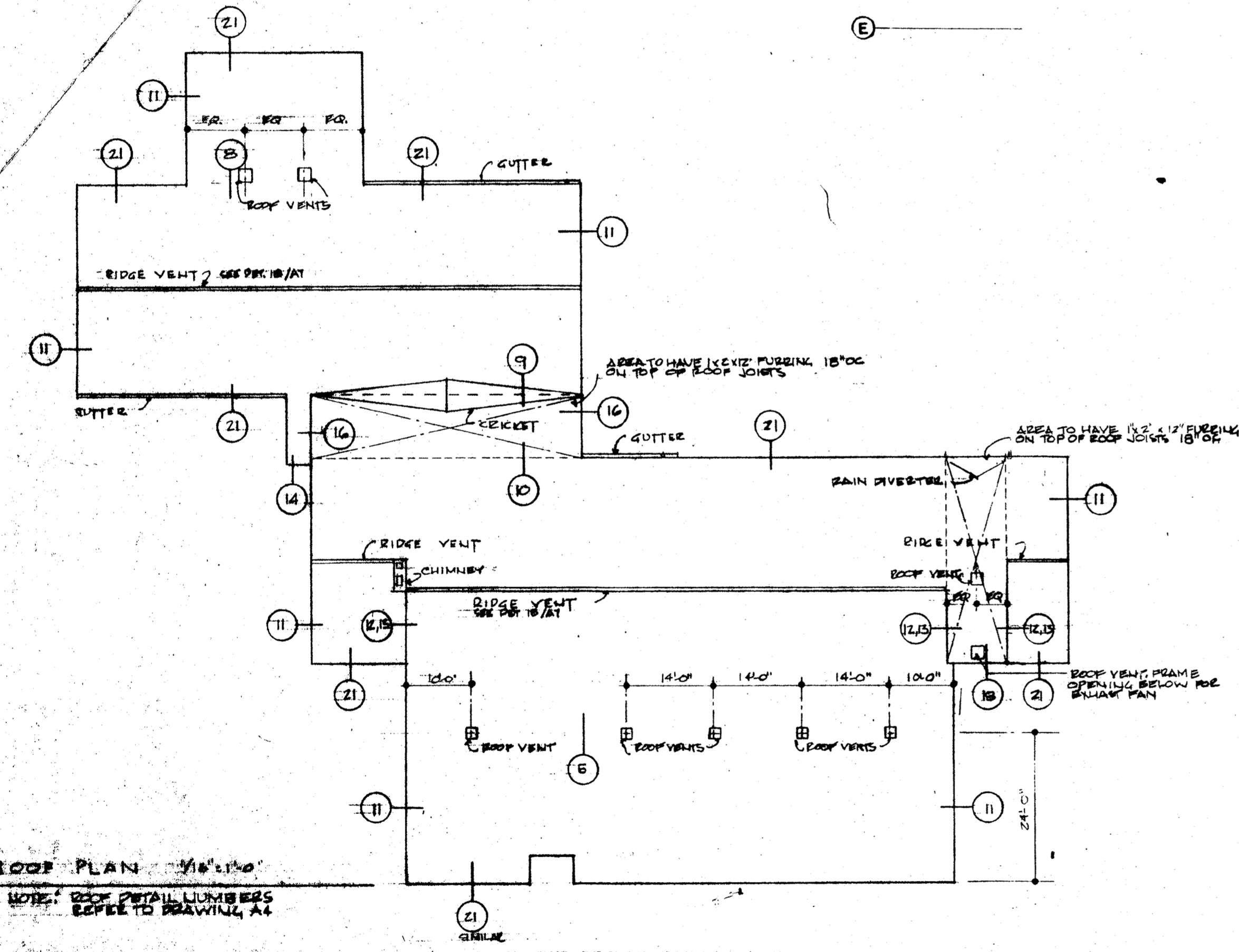
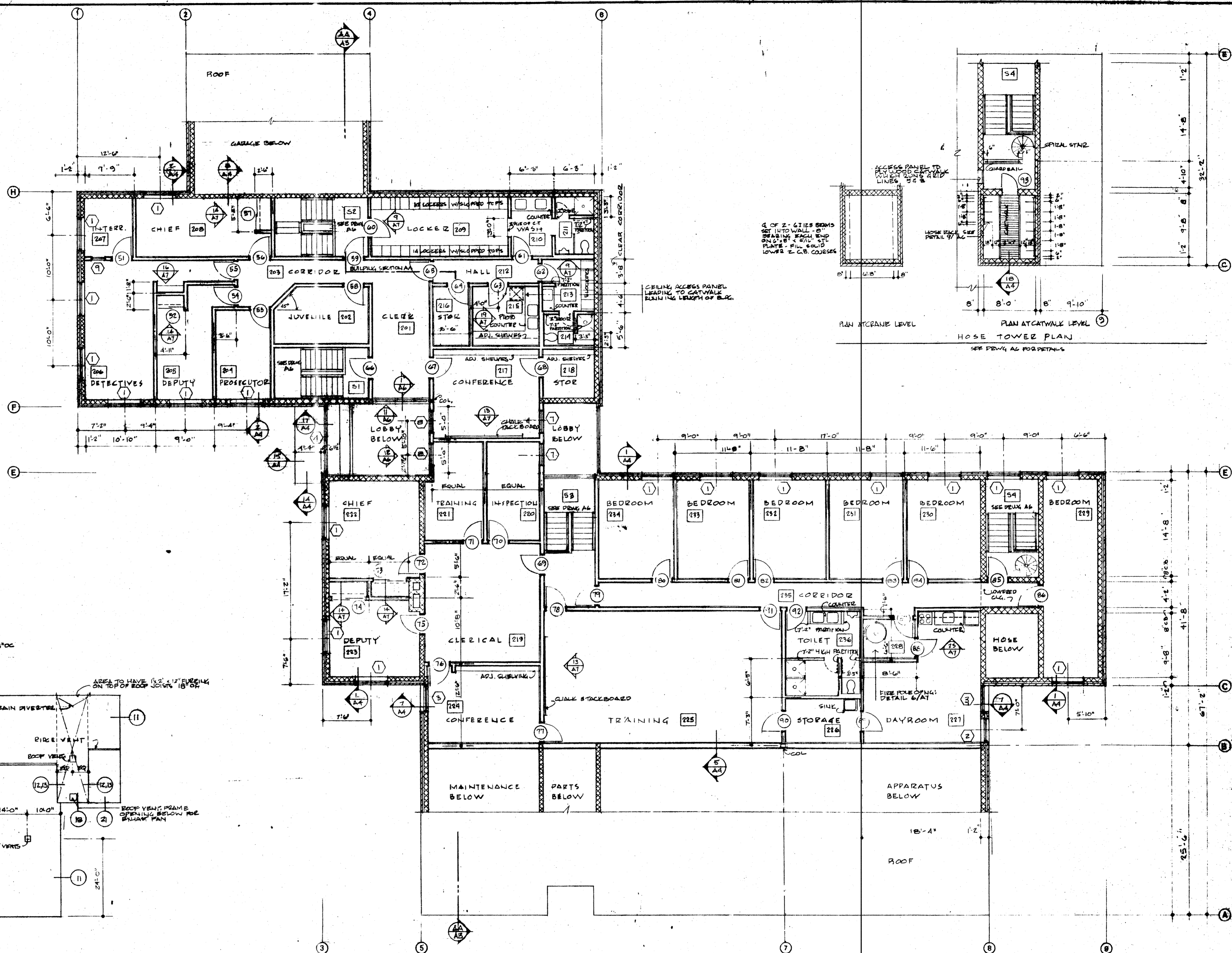
Plastic Non-Illuminated Exit Sign



General Surface Mounted Outlet

APPENDIX A

DRAWINGS



ROOM FINISH SCHEDULE

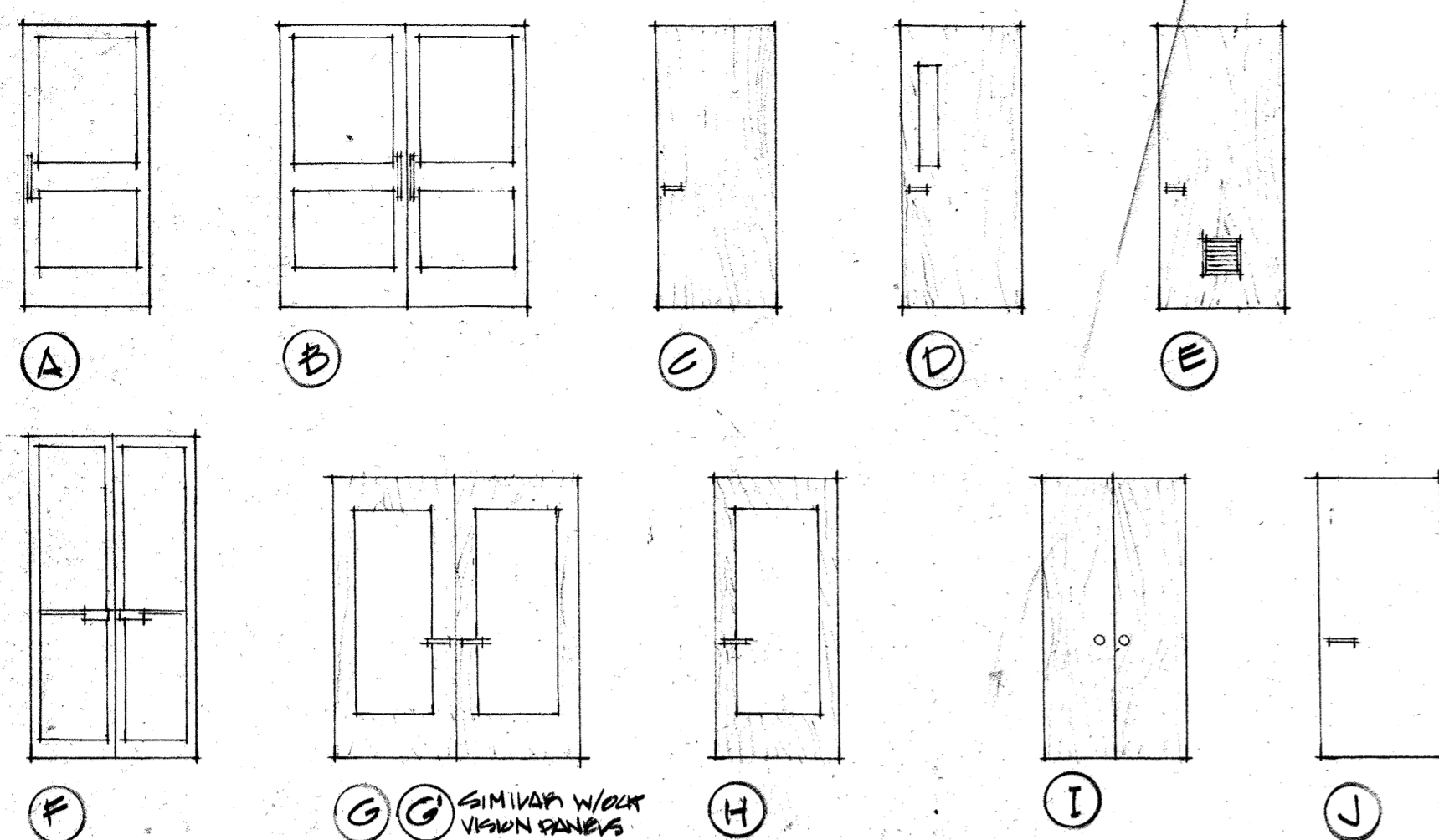
NO.	FLOOR	BASE	WALLS	CEILING	REMARKS	NO.	NAME	FLOOR	BASE	WALLS	CEILING	REMARKS	NO.	NAME	FLOOR	BASE	WALLS	CEILING	REMARKS	
201	205	VINYL	DRYWALL	DRYWALL	8'-0"	212	HALL	V.A.T.	VINYL	DRYWALL	DRYWALL	8'-0"	223	DEPUTY CHIEF	V.A.T.	VINYL	DRYWALL	DRYWALL	9'-0"	
202	JUVENILE	"	"	"	"	213	WOMEN	CER. TILE	CER. TILE	DRYWALL	DRYWALL	"	224	CONFERENCE	"	"	DRYWALL	DRYWALL	"	"
203	CORRIDOR	"	"	"	"	214	TOILET	"	"	DRYWALL	DRYWALL	"	225	TRAINING	"	"	DRYWALL	DRYWALL	"	"
204	PROSECUTOR	"	"	"	"	215	PHOTO	V.A.T.	VINYL	DRYWALL	DRYWALL	"	226	STORAGE	"	"	DRYWALL	DRYWALL	"	"
205	DEPUTY CHIEF	"	"	"	"	216	STORAGE	"	"	DRYWALL	DRYWALL	"	227	DAYROOM	"	"	DRYWALL	DRYWALL	"	"
206	DETECTIVES	"	"	"	"	217	CONFERENCE	"	"	DRYWALL	DRYWALL	"	228	FIRE POLE	"	"	DRYWALL	DRYWALL	"	"
207	INTERVIEW	"	"	"	"	218	STORAGE	"	"	DRYWALL	DRYWALL	"	229	BEDROOM	"	"	DRYWALL	DRYWALL	"	"
208	CHIEF	"	"	"	"	219	CLERICAL	"	"	DRYWALL	DRYWALL	"	230	BEDROOM	"	"	DRYWALL	DRYWALL	"	"
209	LOCKER	"	"	"	"	220	INSPECTION	"	"	DRYWALL	DRYWALL	"	231	BEDROOM	"	"	DRYWALL	DRYWALL	"	"
210	WASH AREA	CERAMIC TILE	CERAMIC TILE	"	"	221	TRAINING	"	"	DRYWALL	DRYWALL	"	232	BEDROOM	"	"	DRYWALL	DRYWALL	"	"
211	TOILET	"	"	"	"	222	CHIEF	"	"	DRYWALL	DRYWALL	"	233	BEDROOM	"	"	DRYWALL	DRYWALL	"	"

GENERAL NOTES

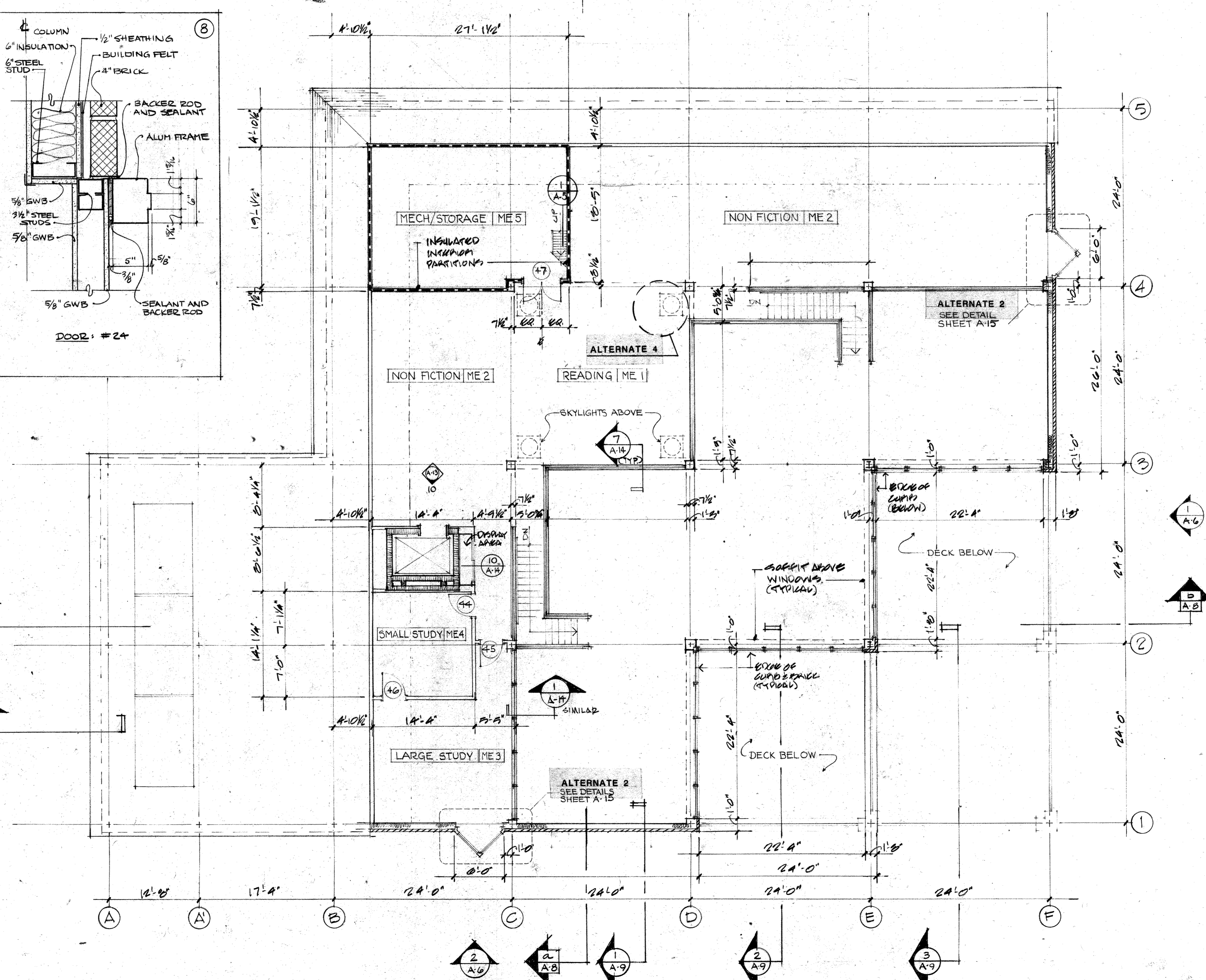
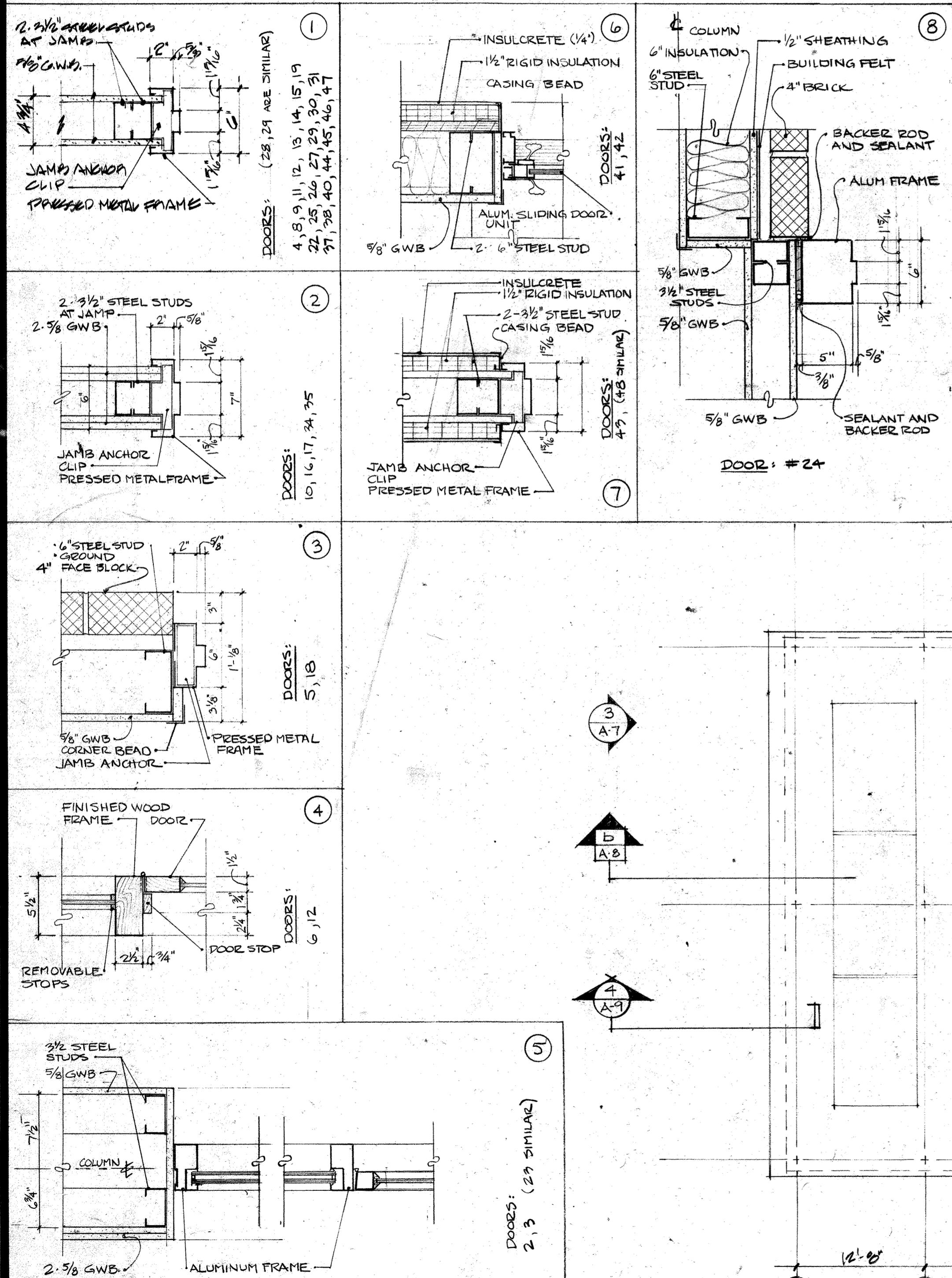
ALL DOORS TO HAVE FIXED TEMPERED GLASS WHEN NOTED IN ELEVATION ADJACENT WINDOWS SHALL BE SET WITH TEMPERED FIXED GLASS. T.F.G. TO INDICATE TEMPERED FIXED GLASS UNLESS OTHERWISE NOTED, ALL OTHER GLASS TO BE FLOAT GLASS AS SPEC.

INT. ROOM FINISHES - MEZZANINE LEVEL										
#	FLOOR	BASE	WALLS	C/LING	REMARKS					
ME-1	Reading	Carpet	V.C.T.	Ceramic Tile						
ME-2	Non-Fiction		Granite Tile	Rubber Mat						
ME-3	Large Study		Sealed Conc	Straight Vinyl						
ME-4	Small Study		Vinyl Cove	Ceramic Tile						
ME-5	Mech. Stor.		Ptd. G.W.B Wood Trim	Glazed Wall Finish						
			Ptd. Gypsum	Act. 2x2						
			Act. 2x4							

DOOR SCHEDULE - MEZZANINE LEVEL										
#	SIZE	GEN	MAT'L	FIN.	MAT'L	FIN.	HARDWARE	REMARKS		
44	3'7" X 11'	H	Aluminum	Painted	Aluminum	Painted	Close	VISION PANEL		
45	3'7" X 11'	H	Aluminum	Painted	Aluminum	Painted	Close			
46	3'7" X 11'	H	Aluminum	Painted	Aluminum	Painted	Close			
47	2'4" X 7'11"	H	Aluminum	Painted	Aluminum	Painted	Close	INSULATED		
48	3' X 11'	H	Aluminum	Painted	Aluminum	Painted	Close	INSULATED		



DOOR ELEVATIONS



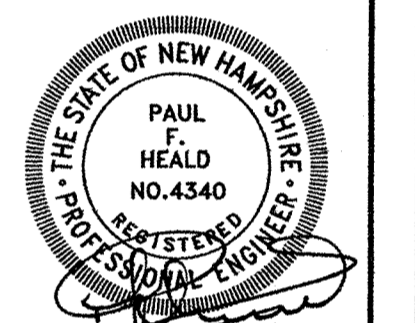
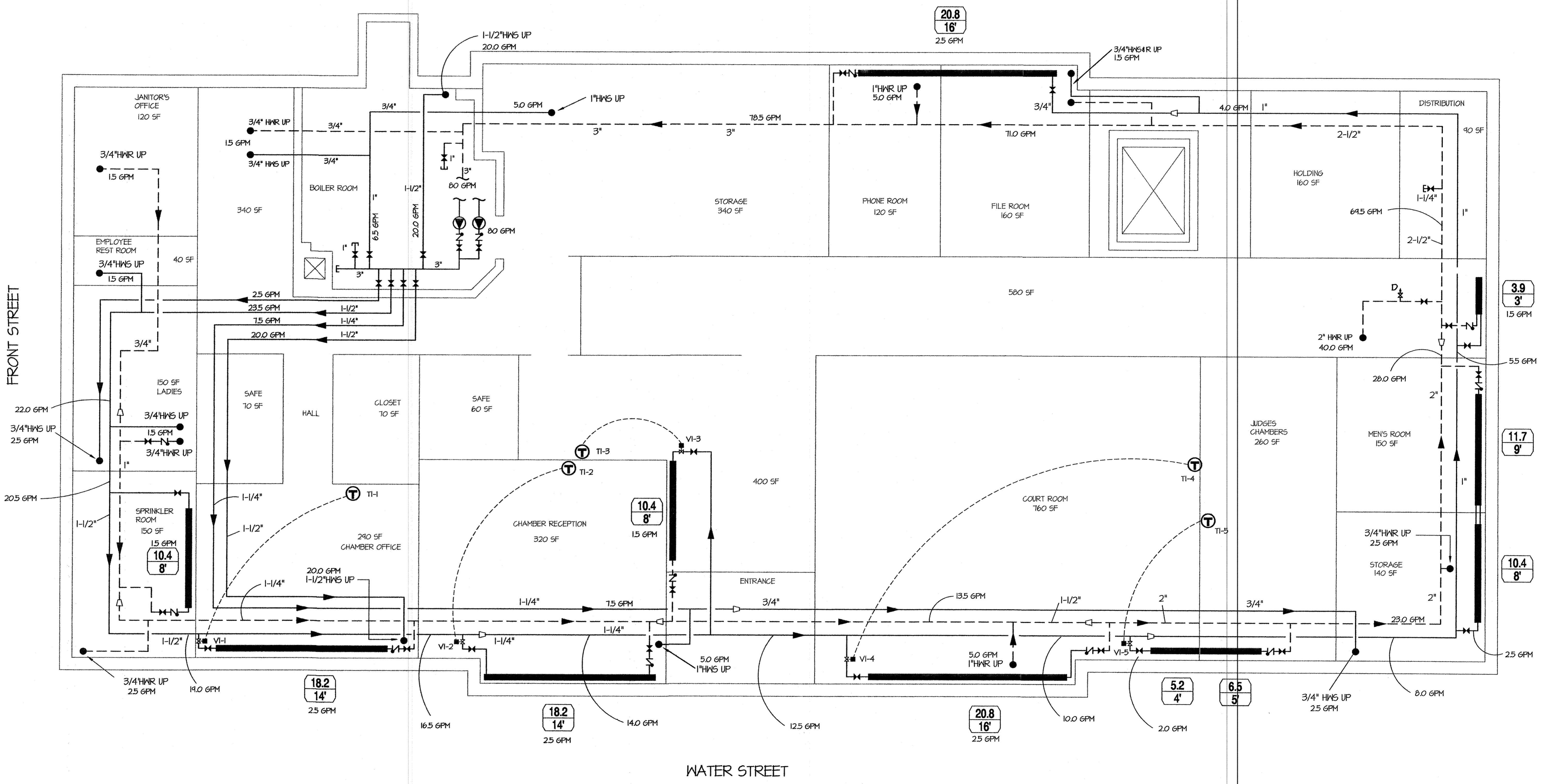
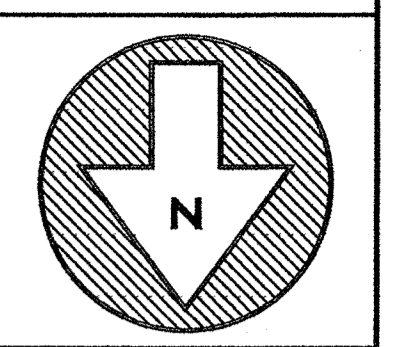
NO. DATE REVISION
STAHL ASSOCIATES
 ARCHITECTS/CONSULTANTS
 73 TREMONT STREET
 BOSTON MASSACHUSETTS 02108 (617) 523-2225

DATE: 21 JULY, 1986 DRAWN BY: JD JOB NO: 618.1
 SCALE: 1/8" = 1'-0" CHECKED BY: EJP

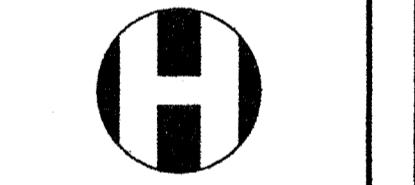
PROJECT:
EXETER PUBLIC LIBRARY
 EXETER, NEW HAMPSHIRE

TITLE:
MEZZANINE PLAN

STAMP: REGISTERED ARCHITECT
 FREDERICK A. STAHL
 No. 557
 STATE OF NEW HAMPSHIRE
 A 4



**HEALD
ENGINEERING
ASSOCIATES**



CONSULTING ENGINEERS
40 TIMBER SWAMP RD
HAMPTON, NH 03842
TEL: 603-426-8860
FAX: 603-426-8863
EMAIL: HEALD123@AOL.COM

**EXETER
TOWN HALL
HEATING
SYSTEM
RENOVATION**

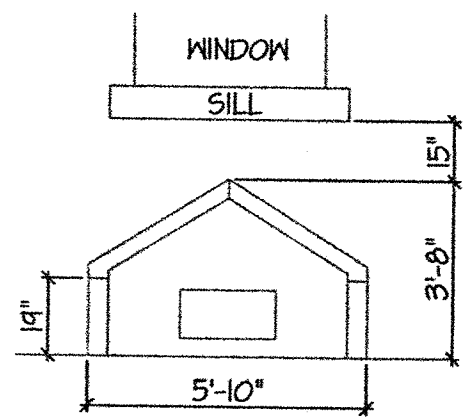
**BASEMENT
HEATING**

JOB NO: 1450
FILE: ETH
DATE: MAY 2003
ENGINEER: PFH

SCALE
1/4" = 1'-0"

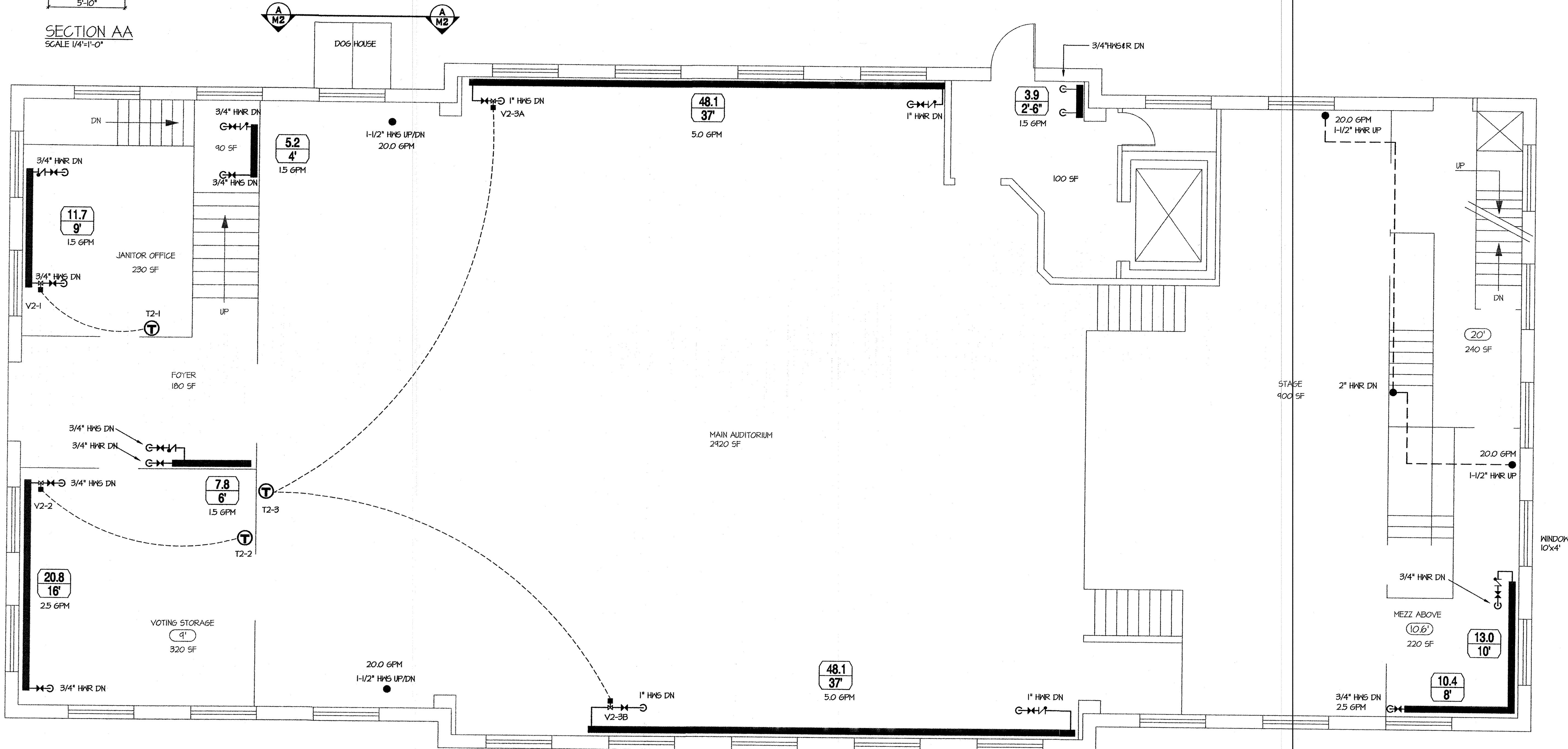
M1
DATE OF ISSUE
6/18/03

BASEMENT HEATING PLAN
SCALE 1/4"=1'-0" 5200 SQ.FT.



SECTION AA
SCALE 1/4"=1'-0"

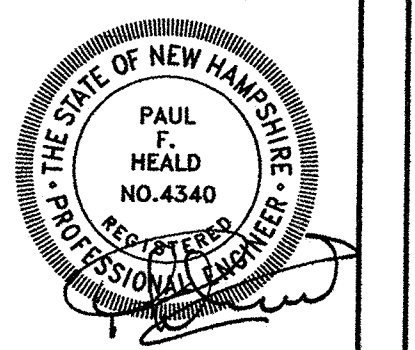
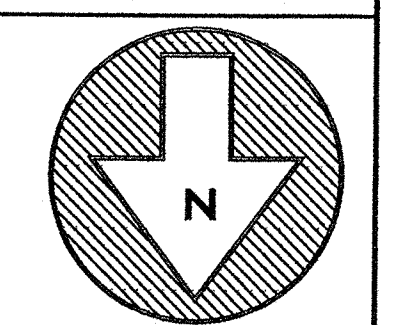
FRONT STREET



WATER STREET

FIRST FLOOR HEATING PLAN
SCALE 1/4"=1'-0" 5,200 SQ.FT.

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CONSULTING ENGINEERS
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FAX: 603-426-8863
EMAIL: HEALD123@AOL.COM

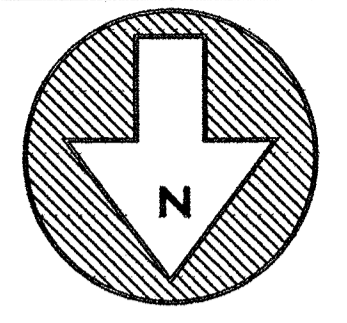
EXETER
TOWN HALL
HEATING
SYSTEM
RENOVATION

1ST FLOOR
HEATING

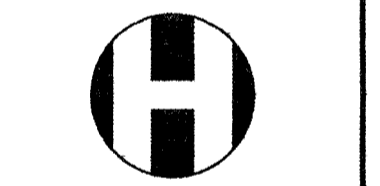
JOB NO: 1450
FILE: ETH
DATE: MAY 2003
ENGINEER: PFH
SCALE
1/4"=1'-0"

M2
DATE OF ISSUE
6/18/03

C:\ACDRI\3\NEW\01450\ETH\1450R2



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ASSOCIATES**



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HAMPTON, NH 03842
TEL: 603-426-8860
FAX: 603-426-8863
EMAIL: HEALD123@AOL.COM

**EXETER
TOWN HALL
HEATING
SYSTEM
RENOVATION**

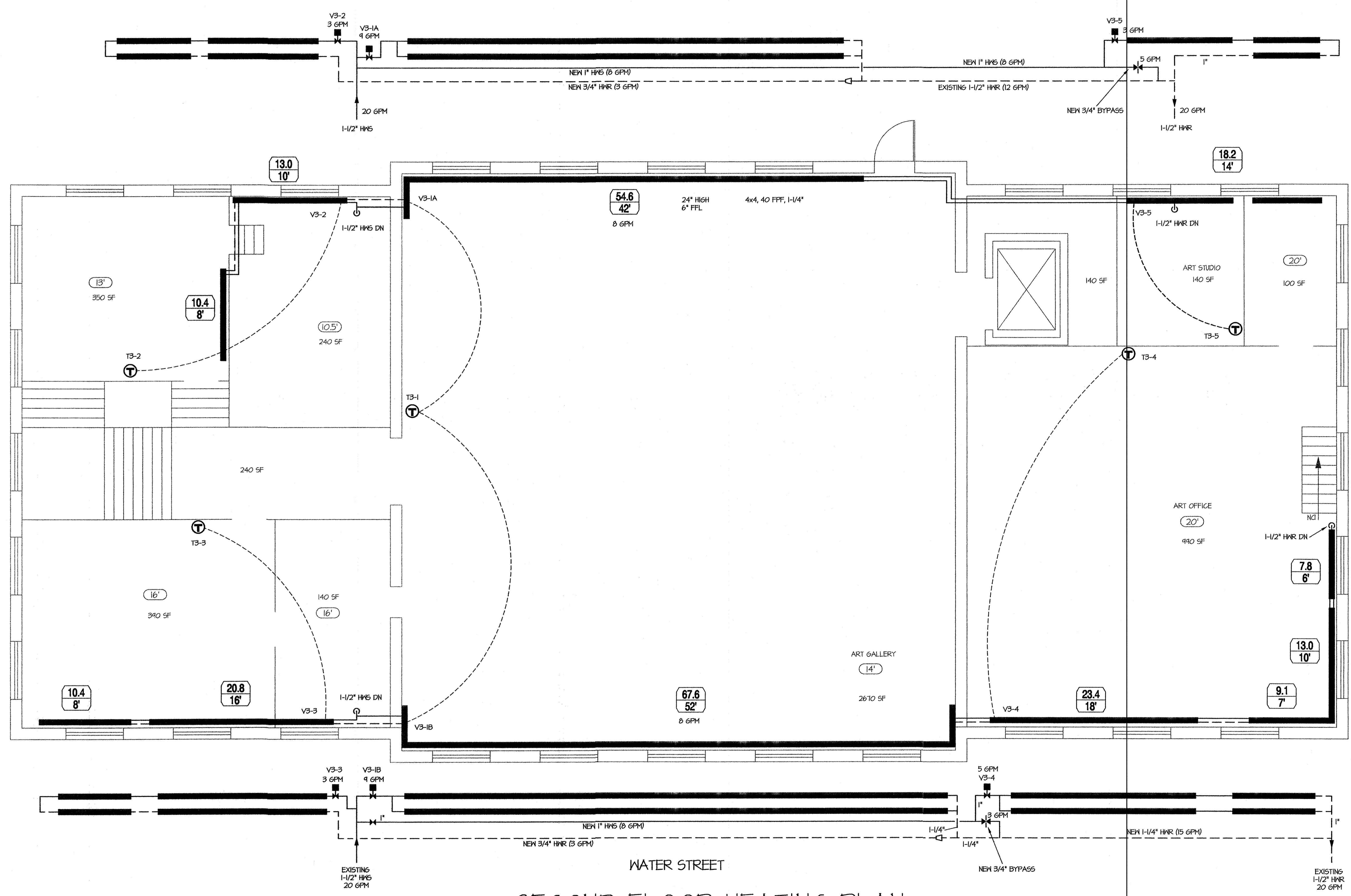
**2ND FLOOR
HEATING**

JOB NO: 1450
FILE: ETH
DATE: MAY 2003
ENGINEER: PFFH

SCALE
1/4" = 1'-0"

M3
DATE OF ISSUE
6/18/03

FRONT STREET



SECOND FLOOR HEATING PLAN
SCALE 1/4" = 1'-0"
5,400 SQ.FT.

- Demolition Notes:**
 Existing generator and associated gas lines to be moved
 (2) existing AC condensers to be moved
 Existing utility pole to be moved
 Existing electrical service to be moved
 Existing drainage structure to be moved



- Notes:** New windows to match existing
 New exterior door to match existing
 New interior doors to match existing
 New siding and siding details to match existing.
 New interior finishes to match existing

Exeter Department of Public Works Office Building

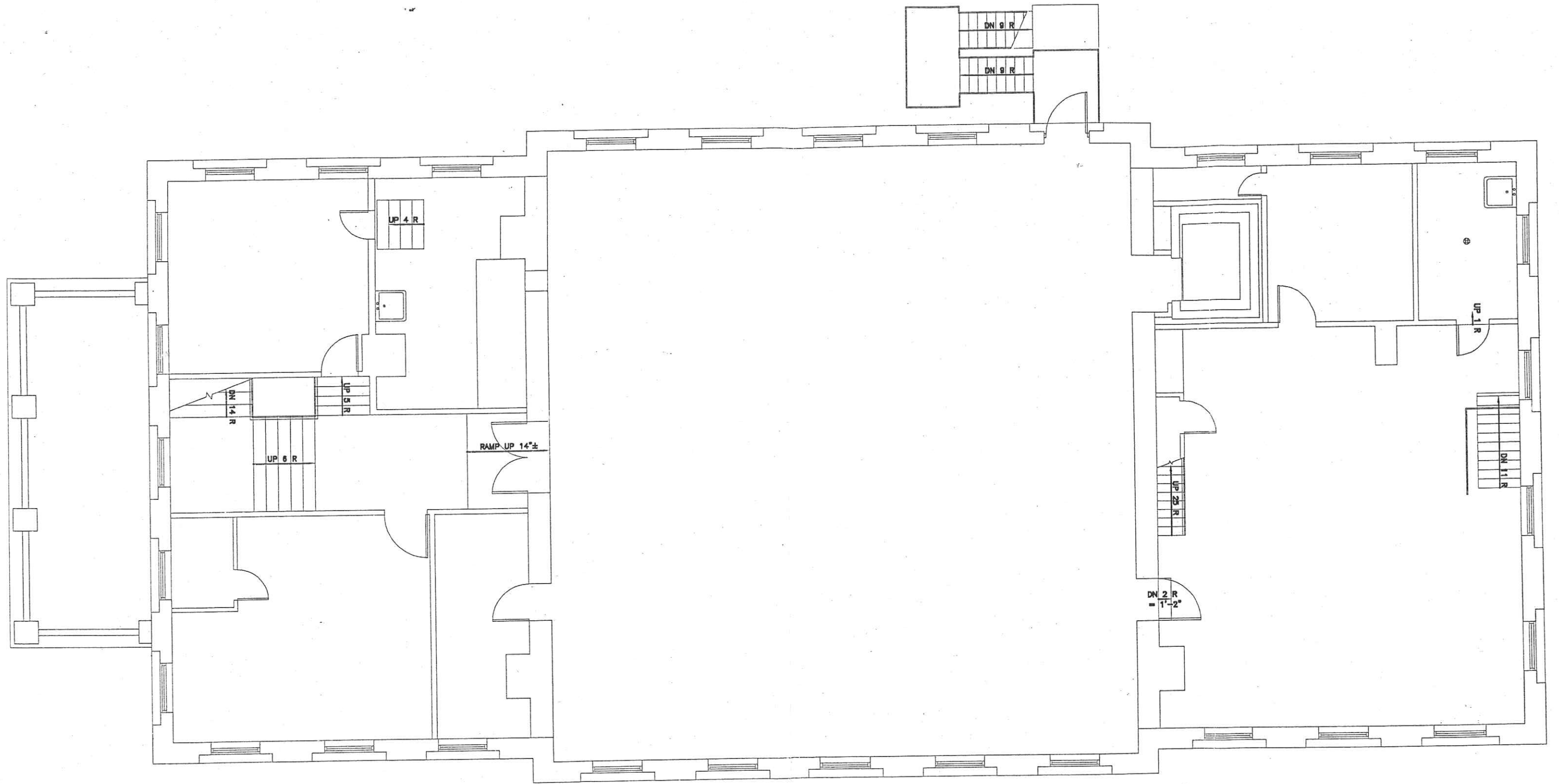
Plan For:
 Exeter Department of Public Works
 Newfields Road
 Exeter, New Hampshire

D. F. Lambert, Contractor, LLC
 David F. Lambert
 19 Moulton Ridge Road
 Kensington, New Hampshire 03833

Tel. 603-T2-6108
 Cell 603-234-0214
 DflnceComcat.net
 Since 1967

SCALE 1/4" = 1'
 DRAWN BY
 APPROVED

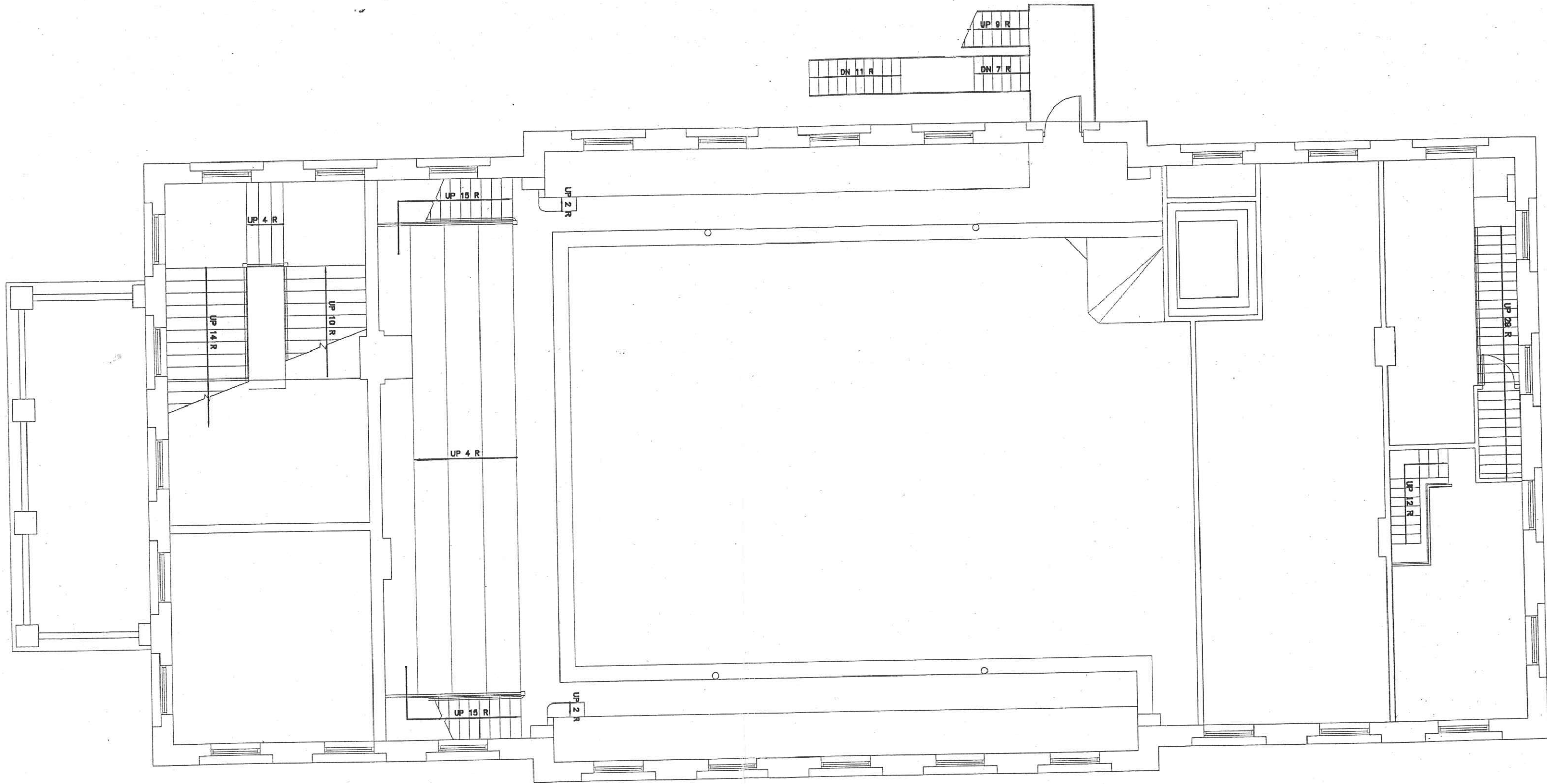
DATE July 18, 2012
 REVISED
 DRAWING#



EXETER, N.H. TOWN HALL SECOND FLOOR PLAN

(MAIN STREET)

16'
3" = 1'-0"



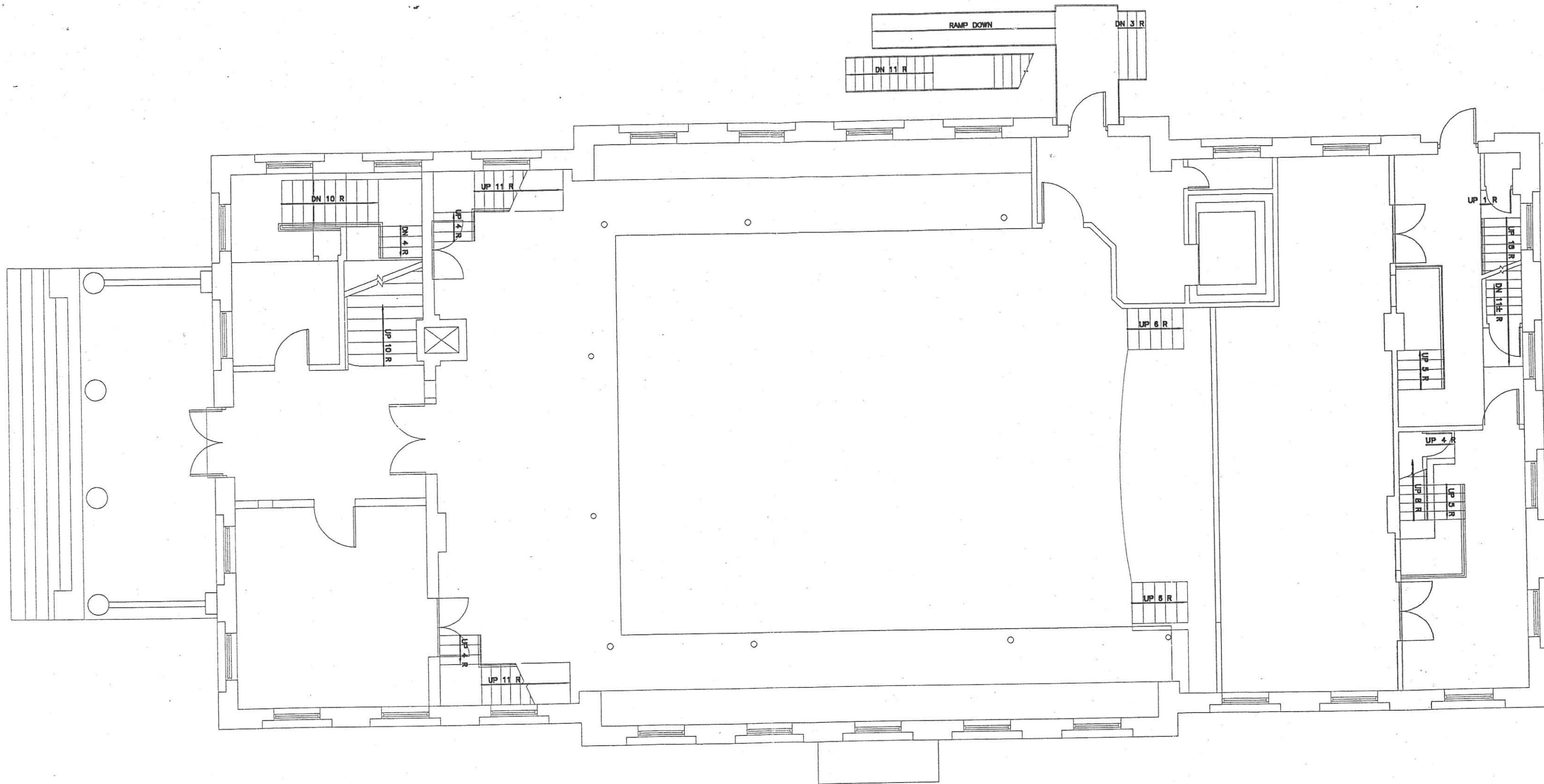
EXETER, N.H. TOWN HALL MEZZANINE PLAN

(MAIN STREET)

8' 16'

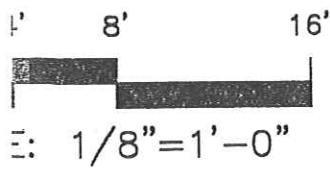


1/8" = 1'-0"

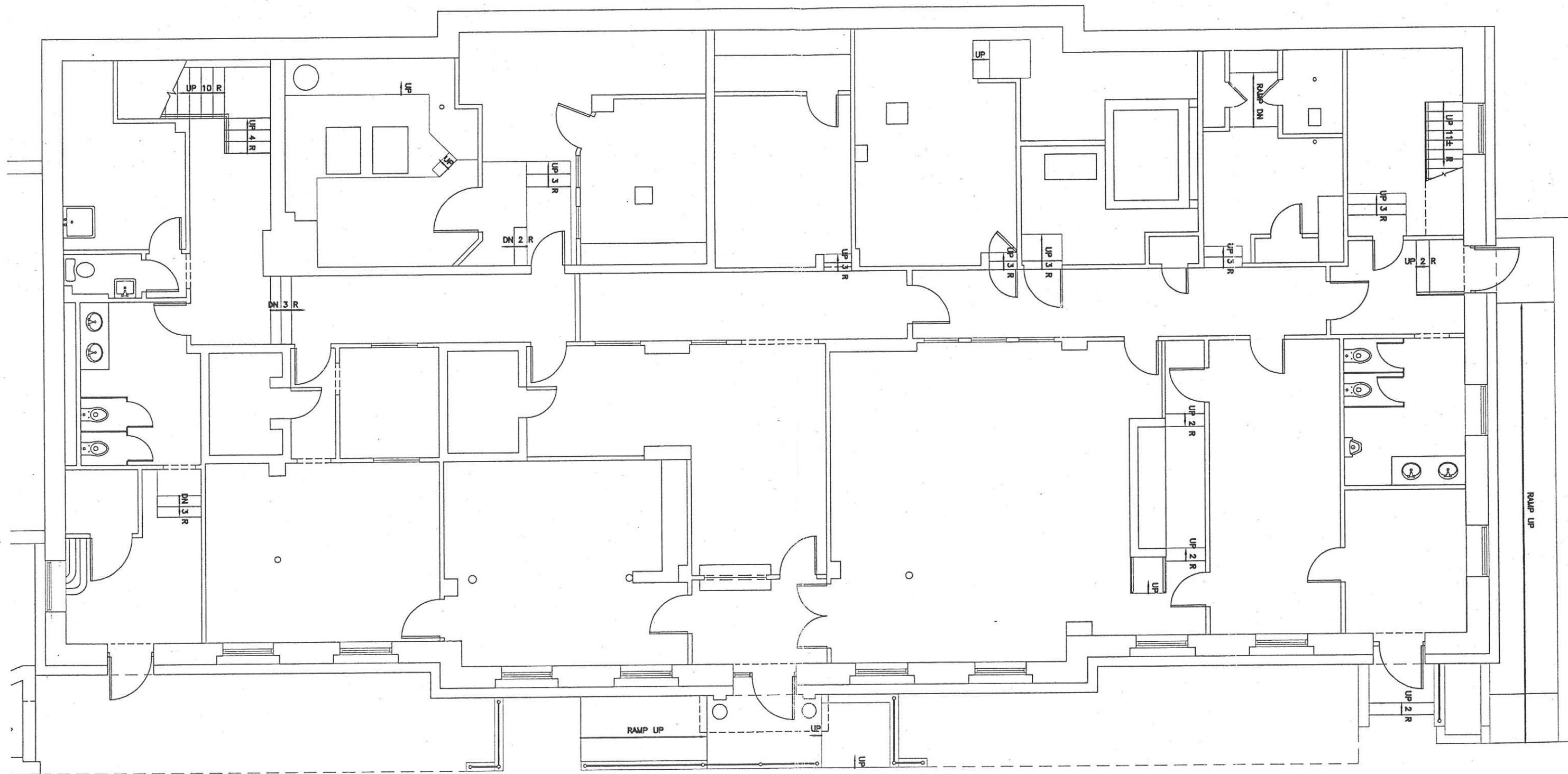


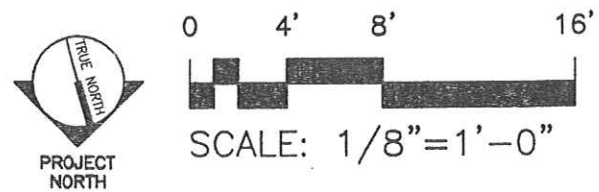
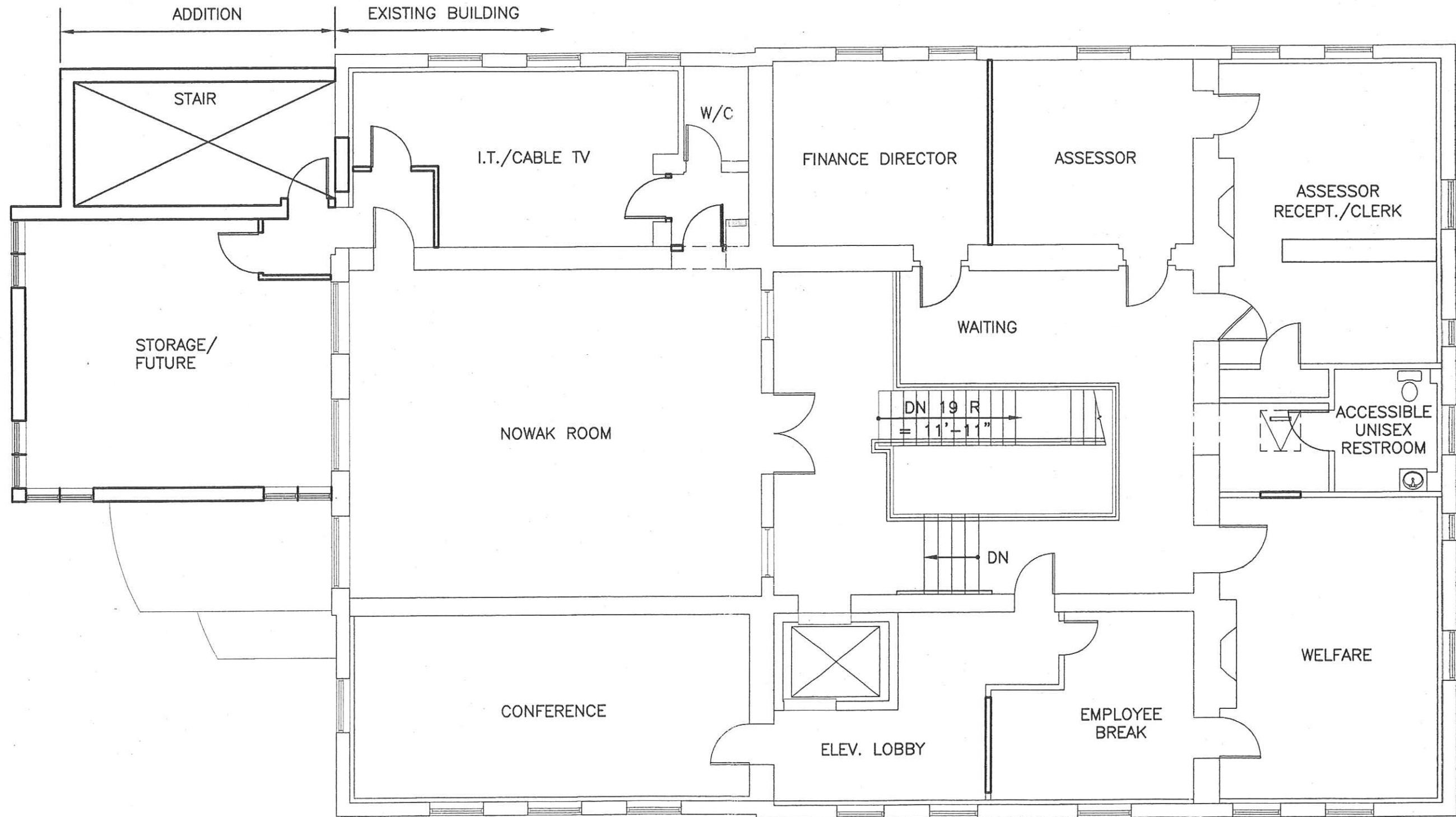
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(MAIN STREET)



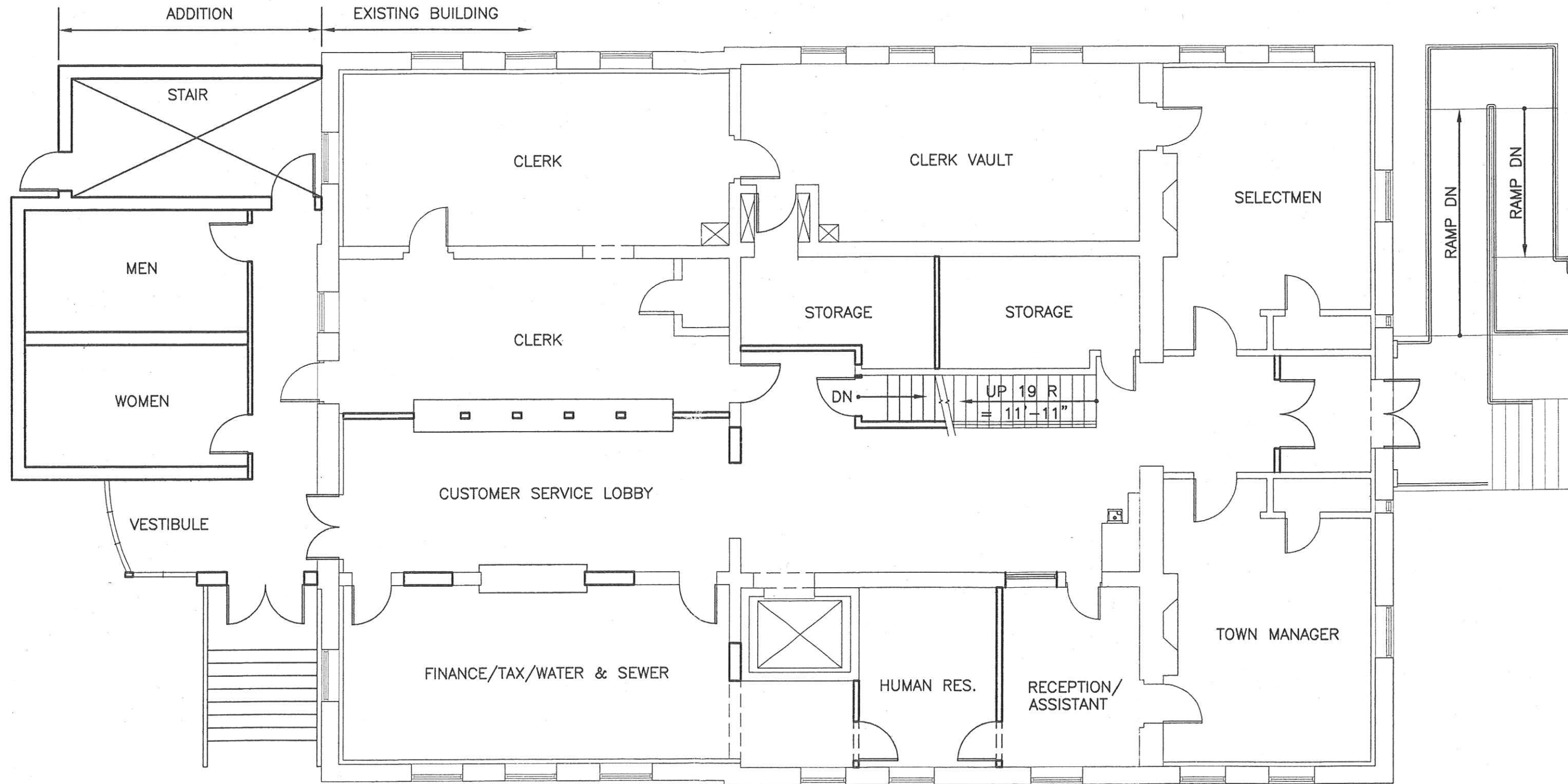
Town Hall





EXETER, N.H. TOWN OFFICES SECOND FLOOR PLAN

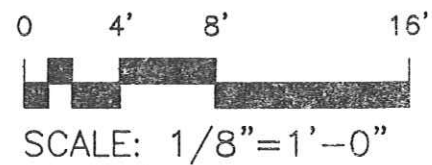
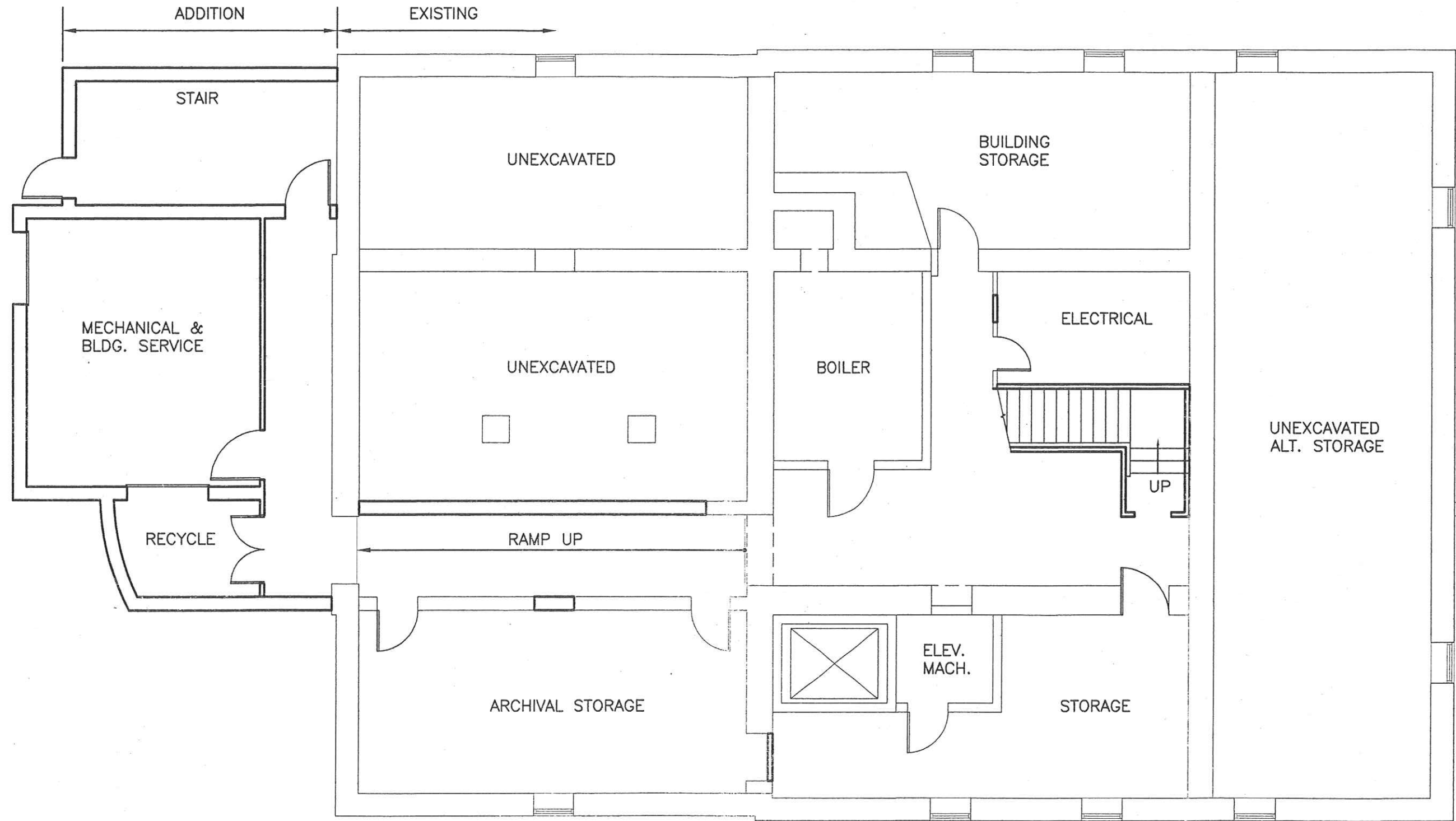
(MAIN STREET)



0 4' 8' 16'
 SCALE: 1/8"=1'-0"

EXETER, N.H. TOWN OFFICES FIRST FLOOR PLAN

(MAIN STREET)



EXETER, N.H. TOWN OFFICES GROUND FLOOR PLAN

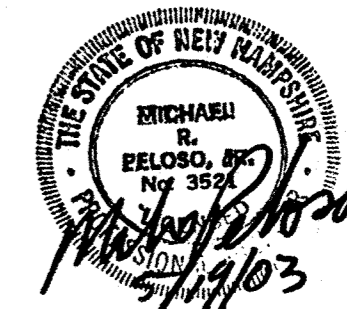
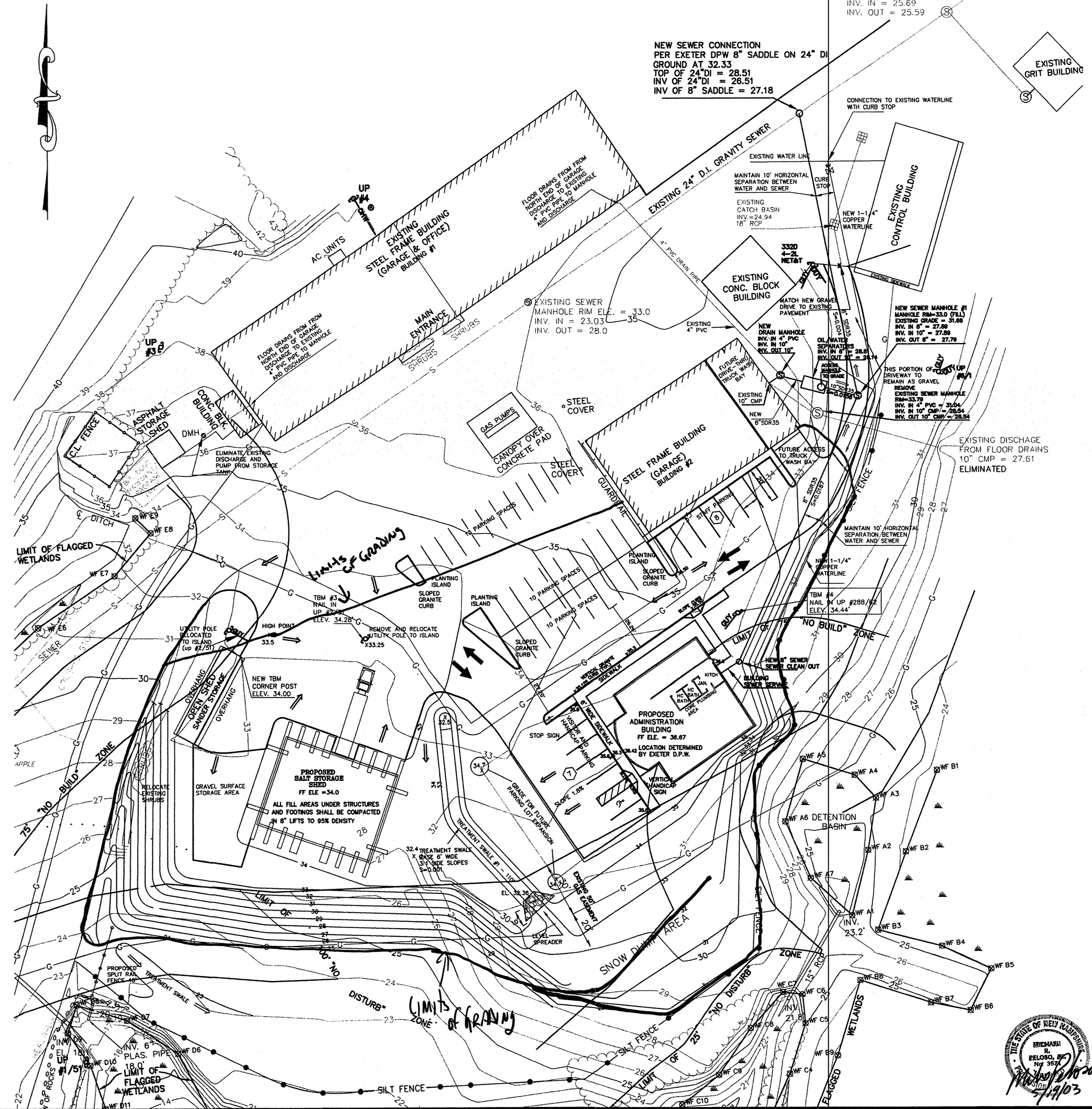
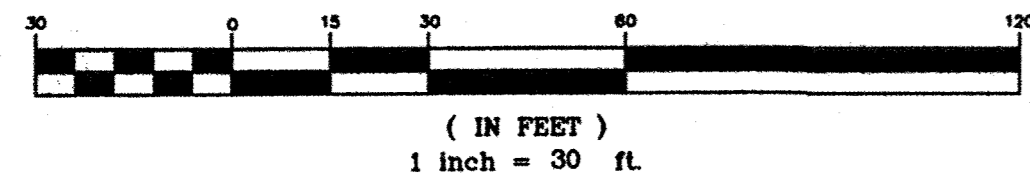
(MAIN STREET)

LEGEND OF SYMBOLS

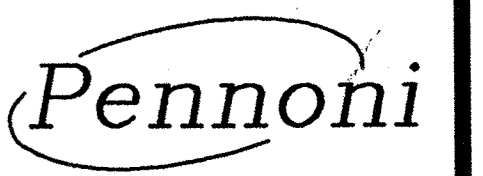
EXISTING CONTOUR	
FLAGGED WETLAND LINE	
25' "NO DISTURBANCE" LINE	
75' "NO BUILD" LINE	
100' "NO DISTURBANCE" LINE	
EXISTING SEWER MAIN	
EXISTING GAS MAIN	
EXISTING DRAIN MANHOLE	
EXISTING CATCH BASIN	
EXISTING SEWER MANHOLE	
EXISTING UTILITY POLE	
EXISTING BIT. CONC. PAVEMENT	
EXISTING BUILDING	
EXISTING TREE LINE	
EXISTING CHAIN LINK FENCE	
TEMPORARY BENCHMARK (T.B.M.)	
PROPOSED PAVEMENT	
PROPOSED PARKING SPACES	
PROPOSED SILT FENCE	
DRAINAGE PATH	
TRAFFIC FLOW	

- NOTES:**
- BOUNDARY AND SITE TOPOGRAPHY WAS PERFORMED BY WALTER J. ZWARGAN, L.L.S., 171 EMERSON AVENUE, HAMPSSTEAD, NEW HAMPSHIRE 603-329-6937.
 - BOUNDARY INFORMATION SHOWN HEREON IS APPROXIMATE. FIELD SURVEY WAS PERFORMED IN AUGUST, 2002 TO LOCATE WETLAND FLAGGING AND NATURAL AND MANMADE FEATURES.
 - THE PARCEL IS ZONED R-1, SINGLE FAMILY.
 - VERTICAL DATUM IS NAVD OF 1929.
 - THE PARCEL IS NOT WITHIN A FLOOD HAZARD ZONE AS DETERMINED BY FEMA FROM FIRM, TOWN OF EXETER PANEL # OF 7, COMMUNITY PANEL #4 OF 7, DATED MAY 17, 1982.
 - LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND BASED ON WABLE ABOVE GROUND STRUCTURES AND INFORMATION RECEIVED FROM THE TOWN OF EXETER.
 - THE LANDOWNER IS RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ALL UTILITIES AND IS LIABLE FOR ALL DAMAGE BY CONSTRUCTION ACTIVITIES. UTILITIES IF SHOWN ARE APPROXIMATE. ADDITIONAL UTILITIES MAY EXIST. PRIOR TO THE START OF CONSTRUCTION CALL NH DIG SAFE 1-888-344-7233.
 - THE LANDOWNER IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL WETLANDS REGULATIONS, INCLUDING ANY PERMITTING AND SETBACK REQUIREMENTS REQUIRED UNDER THESE REGULATIONS.
- OWNER OF RECORD**
TOWN OF EXETER
10 FRONT STREET
EXETER, NH 03833
TEL 603-778-0591
R.C.R.D. BOOK 1767, PAGE 479
- PARKING ANALYSIS**
15 NEW PARKING SPACES HAVE BEEN PROVIDED IN CONJUNCTION WITH THE DEVELOPMENT OF THE NEW ADMINISTRATION BUILDING AND SITE IMPROVEMENTS.
4 EXISTING PARKING SPACES WERE ELIMINATED TO ALLOW FOR THE CONSTRUCTION OF TWO GRANITE CURBED PLANTING ISLANDS IN THE PARKING AREA ADJACENT TO THE NEW ADMINISTRATION BUILDING. THERE IS A NET GAIN OF 11 PARKING SPACES WITH NO SIGNIFICANT INCREASE IN THE NUMBER OF EMPLOYEES.

GRAPHIC SCALE



Pennoni Associates Inc.
 The Concord Center, Suite 434, 10 Ferry Street, Concord, NH 03301-2319
Pennoni Consulting Engineers



DATE	NO.	NO.	DATE	BY	BY

ALL DIMENSIONS AND LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE. THE USER SHALL VERIFY ALL DIMENSIONS AND LOCATIONS IN THE FIELD PRIOR TO ANY CONSTRUCTION. PENNONI ASSOCIATES, INC. SHALL NOT BE RESPONSIBLE FOR ANY DISCREPANCIES NOTICED OR NOTICED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

TOWN OF EXETER
DEPARTMENT OF PUBLIC WORKS
PROPOSED SITE PLAN
EXETER, NEW HAMPSHIRE

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JOB NO.	TEXE-0202
BLOCK MAP NO.	SHEET 2 of 4
SCALE	1" = 30'
DRAWN BY	MJC/MRP
DATE	12/11/02
APPROVED	MRP

CORPORATE OFFICE:

27 Locke Road
Concord, NH 03301
Telephone: (603) 228-1122
Fax: (603) 228-1126
E-mail: info@hlturner.com
Web Page: www.hlturner.com

BRANCH OFFICES:

26 Pinewood Lane
Harrison, ME 04040-4334
Telephone: (207) 583-4571
Fax: (207) 583-4572

P.O. Box 1365
75 South Street
Lyndonville, VT 05851-1365
Telephone: (802) 626-8233

100 Pearl Street, 14th Floor
Hartford, CT 06103
Telephone: (860) 249-7105
Fax: (860) 249-7001