

PREVIOUSLY COMPLETED STUDIES

**Village of Saranac Lake
Saranac Lake, New York**

**Municipal Building Conditions
Assessment**

November 2008

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Engineers • Environmental Scientists • Planners • Landscape Architects

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Appendix D – Drawing A-2, Municipal Building – Conceptual First & Third Floor Plans
(Options A & B)

1.0 Introduction

The Village of Saranac Lake is located in Northern New York within the boundaries of the Adirondack Park. The Village covers parts of three towns (Harrietstown, St. Armand and North Elba) and two counties (Franklin and Essex) and has a population of approximately 5,041 (2000 Census).

The Village offices are located in the former Paul Smith's Electric Light and Power and Railroad Company headquarters at 3 Main Street, Saranac Lake, NY. The building is listed on the National Register of Historic Places and includes a three story Office Wing and a single story Police Station Wing. This report details the findings of the total building and grounds condition assessment performed on this building in September 2008.

2.0 Building Construction and Conditions

2.1 Office Wing

The main office building is a three story stone and concrete structure approximately 64 feet long by 43 feet wide. The Village occupies most of the area on the ground level of the facility along with most of the third floor area and the Franklin County Public Health Services occupy the second floor. The building contains approximately 2,700 square feet per floor. Currently the police station occupies approximately 270 square feet on the first floor of this facility. One steel pan and concrete type stairway and one main elevator currently service the three floors.

The interior of the building typically has large open floor areas with a few permanent walls built within the spaces. At the first two levels, there are exposed painted concrete beams with hard ceilings between. At the third floor, a flat painted hard ceiling exists and the roof structure could not be observed. While the structural components of the facility are mostly hidden behind the interior finishes, what structure that could be observed, appeared to be straight and plumb and showed no significant signs of deterioration. The interior wall finishes throughout the facility consist of painted gypsum wallboard and concrete masonry units. Both seem to be in acceptable condition, although there are some areas throughout the facility that are in need of patching or repair. These areas are a small portion of the overall facility and could be easily repaired. The floors and ceilings of the facility are all in good overall condition, again, with the exception of a few areas in need of patching. Each floor has separate toilet rooms for both men and women. At each floor, these existing restrooms do not meet current requirements for handicap accessibility. Each room would need significant modifications to meet accessibility requirements if any work were to occur on the associated floor. These modifications would greatly depend on the

amount of work being performed, and a thorough investigation of the Existing Building Code would need to be performed to determine the extent of modifications involved. The existing conditions of the toilet rooms are currently adequate but upgrades to these rooms should be considered. New fixtures, new layouts of fixtures and new finishes all could greatly improve these rooms.

The office wing portion of this facility currently has a built up roof system. The existing roof appears in good shape, however there were a couple small isolated areas that appeared a little soft or punky when stepped upon. The roof drains appear to be clear of debris and in working order. Overall, the roof seems to drain well and no ponding of water was observed. All the parapets appear in sound condition. The flashings are generally intact with the exception of a few areas that are in need of repair. These are relatively small areas and could easily be repaired.

2.2 Police Station Wing

The current police facility building is a one story brick veneer building. The building contains approximately 2,700 square feet. Including the square footage the police department is using at the Office Wing, the total square footage of police used space is approximately 2,970 sf.

The interior spaces within this facility all appear to be relatively new construction. The walls are primarily painted gypsum wallboard and appear in good shape. The floors are a combination of vinyl composition tile, carpeting and ceramic tile. The floors are in good condition with the exception of minor areas in need of maintenance repair. Ceilings throughout the police station are acoustic ceiling tile and grid. The ceilings are flat and straight for the most part. There are some small areas of staining of the ceiling tiles which indicates some water infiltration from the roof above. These tiles could very easily and

inexpensively be replaced. Fixing the condition which caused the staining would require additional investigation. While the asphalt roof tiles overall appear to be in good condition, there is some apparent staining and wear on the northern most side of the building. The staining of the ceiling tiles however, appear primarily on the southern most side of the building, seemingly under the dormer roof. This condition should be further investigated to assess the source of the water infiltration and determine the measure of repair.

2.3 Building Exterior

The exterior conditions of both the office facility and the police facility appear to be in sound overall condition. There are a few cracks in the stone of the Office Wing running vertically almost the entire height of the building. There were also a few areas of damaged ornamental stones that are in need of repair. Given the age of the materials in question, however, these can be considered normal aging of the materials due to movements within the facility and can be fixed and patched as necessary. The cracks in the stone, if not taken care of, will become worse and could be a future concern if they are not properly addressed in the near future. The perimeter foundation walls are a combination of masonry materials and poured concrete. Barton and Loguidice was unable to gain access to any basement areas in order to observe conditions on of the interior faces of the office building walls. The interior faces of the foundation wall in the boiler room of the police facility appear dry and in good shape.

There are two existing ramps serving the side entrances of both buildings that are in good condition and provide both with handicap accessibility. All the entrances to the buildings are newer aluminum framed entrances and appear in good working order.

The windows of both facilities are in good condition and are not in need of replacement. However, the windows in the Office Wing are not energy efficient and may not meet the requirements of the Existing Building Code. Replacing these windows would be expensive due to the historical character.

3.0 HVAC Systems and Conditions

3.1 Central Equipment

The central equipment room is located below the West end of the Police Station Wing, with access only through a sloped exterior access door. The space houses the steam boiler system, the domestic water heater and the emergency generator.

The steam boiler is a Weil-McLain Model 88 Series 1 with a CF1400-W burner. The boiler burns no. 2 fuel oil which is stored in a 2,000 gallon underground storage tank located to the West of the building. The boiler is controlled to maintain a 2 PSIG steam pressure and is rated to consume 18.8 gallons of fuel oil per hour at full fire. The rated gross output capacity of the boiler is 2,176 MBH. The boiler appears to be oversized for the building which may result in short cycling. A nameplate was not visible on the boiler, so the serial number and date of manufacture are unknown. The boiler appeared to be in serviceable condition and staff reports indicated that there are no significant issues with the unit. The boiler exhausts through a 15" diameter stack on the South side of the Police Station Wing. Boiler water treatment is being performed by M.I.S. of America, Inc.

Combustion air entry to the room is through a 20"x36" opening in the door to the entry way. The entry way has two 16"x16" louvers to communicate with the outdoors, which are estimated to be 50% free area resulting in approximately 256 square inches of free area. The openings to the outdoors are not large enough to provide the proper quantity of combustion air to the space in accordance with the Mechanical Code of NYS.

The boiler feed system is a Hoffman Series VBF with a 100 gallon

condensate receiver tank and a duplex pump arrangement. The manufacture date of the feed system was also not indicated, but the unit appeared to be in serviceable condition.

Piping insulation in the boiler room was noted to be in poor condition and replacement is recommended.

3.2 Office Wing

The three story office building utilizes steam radiators for heat, served by the central steam boiler. Space temperature control is via radiator thermostats, including both integral sensor models and remote sensor models. The radiators appeared to be in serviceable condition. Several thermostats were broken and in need of replacement (e.g. 1st floor stairwell, 3rd floor stairwell, etc.), but the majority appeared to be in serviceable condition.

Window air conditioning units have been installed throughout the building (approximately 13 in total) to provide individual space cooling and dehumidification. In general, the installation of the window units was of temporary quality, with marginal supports and unsealed penetrations.

The first floor kitchen area and both toilet rooms included exhaust grilles but it was not clear where the exhaust fan(s) or exhaust outlet(s) were located. The toilet rooms on the 2nd floor had no provisions for exhaust but did have operable windows. The toilet rooms on the 3rd floor had no provisions for exhaust and had no operable windows.

The 2nd floor included a second toilet room that was in use as a storage room. This space had no provisions for exhaust but did have operable windows.

3.3 Police Station Wing

The Police Station Wing is served by an air handling unit installed in the ceiling of a storage room with limited accessibility. The air handling unit is a Trane Model TWE060, manufactured in 1996, with 2,000 CFM of nominal airflow, a DX coil with 5-tons of nominal capacity and a steam heating coil. A remote condensing unit, Armstrong Air Conditioning Model SCU13, serves the air handling unit and is installed on the South side of the building at grade. The air system includes a ducted supply and ducted return for distribution to all spaces in the Wing. All HVAC equipment in the Wing appeared to be in good and serviceable condition.

The Chief's office is integral to the Police Station space, but located on the 1st floor of the Office Wing. Therefore, heating in this space is accomplished by a steam radiator, served by the central boiler.

4.0 Plumbing Systems and Conditions

4.1 Central Equipment

A one inch water service provides domestic water to the complex, entering the facility through the South side of the Police Station Wing. Visible portions of the domestic water distribution system were plumbed with copper tubing. It is reported that the complex is connected to the sanitary sewer system with a single four-inch cast iron pipe.

The water heater for the domestic water system is located in the central equipment room and serves both the Office Building and the Police Station. The water heater is a John Wood Model JWF-507, with a 50 gallon storage tank. At full fire, this heater is rated to consume 0.75 gallons of fuel oil per hour and to provide a recovery rate of 100 gallons per hour at a 100°F temperature rise. The unit appeared to be in serviceable condition.

A sump is located in the central equipment room to handle ground water that infiltrates the room and any drainage from equipment in the room. Two sump pumps are located in the sump in a duplex arrangement. The pumps were reported to be functional but they were dated, corroded and did not appear to be in good serviceable condition.

4.2 Office Wing

Plumbing throughout the facility appeared to be composed of cast iron sanitary lines and copper domestic water lines. Insulation was not noted on domestic cold water piping where visible in chases. Three cast iron sanitary vents penetrations were noted on the roof.

The primary roof drainage system consists of four 4" plumbed main area roof drains with dome strainers. The secondary roof drainage system consists of two 11"x3" scuppers discharging down the building face.

All plumbing fixtures throughout the building are dated but appeared to be in serviceable condition. However, numerous fixtures were inadequately anchored to the wall/floor structure or were in need of repair, including the following:

- 1st floor men's pedestal sink (inadequately anchored)
- 1st floor men's tank-type toilet (inadequately anchored)
- 1st floor men's urinal (sealant around unit was deteriorated)
- 2nd floor unisex pedestal sink (inadequately anchored)
- 2nd floor unisex tank-type toilet, quantity 2 (both inadequately anchored)
- 2nd floor unisex tank-type toilet, quantity 2 (both had malfunctioning fill mechanisms)

The 2nd floor included a second toilet room that was in use as a storage room. The sink had been removed but rough-in plumbing remained. The tank-type toilet was abandoned in place.

4.3 Police Station Wing

The Police Station Wing includes two toilet / shower rooms. Each room includes a tank-type floor mounted toilet, lavatory and stall shower. All fixtures and plumbing in the rooms appeared to be in good and serviceable condition.

5.0 Electrical Systems and Conditions

5.1 Emergency Generator

An emergency generator is located in the space directly off the central equipment room. The generator is a Kohler Power System, Model 60RZ202, with rated nominal power of 60 kW. The generator is controlled by an automatic transfer switch and is configured to serve the equipment in the central equipment room and the entire Police Station Wing. Cooling for the generator is a once-through pass of domestic water, discharging to the room sump. The generator exhaust exits the building on the South side of the Police Station Wing and discharges through a 4" stack adjacent to the boiler stack.

5.2 Office Wing

Lighting throughout the facility generally consists of hanging luminaires and lay-in troffers, with a combination of 48" T8 and 48" T12 fluorescent lamps. Incandescent and compact fluorescent lighting are installed in some locations. Lighting control is manual, with either remote or luminaire mounted switches.

Circuit wiring is typically installed in surface mount wiremold, except for in drop ceiling spaces. The following circuit anomalies were noted:

- NEMA 1-15R outlets (2-wire, no ground) were noted in some locations.
- GFI protected outlets were not present in all kitchen/bath spaces.
- Convenience outlets were not present in some spaces.
- Exposed power wiring was noted in the 4th floor stairwell.
- A wall-mounted incandescent fixture was located outside the 3rd floor men's toilet room, with no globe and no lamp in place.
- A disconnect for the "Pen Stock Gate Heater", located in the 1st floor lobby, was not locked.

- A disconnect located in the 2nd floor probation office was not locked.

In general, the adequacy of the electrical system is questionable. The Northwest office on the 2nd floor lacks air conditioning and the space occupant reported that the reason is inadequate circuit capacity.

5.3 Police Station Wing

The Police Station Wing lighting consists of 2 and 4 lamp troffer luminaires installed in the suspended tile ceiling, each with 2 or 4 T8 lamps.

An electrical room is located on the South side of the Police Station Wing, housing the panels for the building and the automatic transfer switch for the emergency generator system. Additionally, the room contains communication equipment and panels. The equipment in the room appeared to be in good and serviceable condition. The adequacy of the electrical service was not assessed. The room is being utilized as a storage room, with numerous cardboard boxes stacked on the floor. These boxes should be removed.

6.0 Exterior Features and Parking Area Conditions

The building is located on the Easternmost edge of the site, with paved parking area extending from the building to the South and West. Beyond the parking area, further to the South and West, the property slopes up to the Petrova Avenue and Lake Street. The property includes approximately 200 feet of frontage on the Saranac River, beginning at the Northwest corner of the building and continuing to the Northwest.

The asphalt on the site is in fair to good condition. There are surface cracks throughout, but little to no heaving was observed. The lot should be maintained with crack and asphalt sealer. There were locations at the pavement / building interface along the South side of the building that are in need of repair, including several areas with plants growing through the interface. There is a lack of curbing at asphalt boundaries across the site, resulting in an unfinished appearance due to worn dirt patches and/or vegetation overgrowth.

The concrete sidewalk along the entrance to the parking lot from Main Street has some locations of significant cracking, but was generally complete with no large missing sections or heaving. The edge of sidewalk adjacent to the road is showing significant degradation. The concrete sidewalk along Lake Street shows significant degradation at the interface with the road, primarily due to the lack of curbing. All sidewalks are due for repair or replacement in the short to mid-term.

The fence along the Lake Street and Petrova Avenue side of the property is constructed of square pressure treated lumber posts and dimensional pressure treated lumber rails. The posts are generally in good condition and some of the rails are bowing. The fence has a weathered appearance and there is no evidence of recent application of wood preservative.

The wood-framed storage shed to the West of the Police Station wing is constructed on a concrete slab and finished with T1-11 plywood siding and a sloped metal roof. The building appeared to be in good condition.

New construction was underway to the West of the Police Station wing, including construction of a precast concrete paver patio and kiosk. The existing concrete stairs and ramp to the pedestrian bridge (to the North of the new construction) was inaccessible but appeared to be in excellent condition.

7.0 Space Needs Analysis

Saranac Lake - Municipal Building Space Needs Analysis

Departments/Personnel

Village Manager: Recommended Standards S.F.
200 sf Office

Relation to other spaces:

- near Admin. Assistant
- near Village Clerk

Fixed/Movable Equipment Required:

- 6 chairs
- Credenza
- Desk
- Small file
- Counter space

Village Clerk: Recommended Standards S.F.
140 sf Office

Relation to other spaces:

- near Admin. Assistant
- near Account Clerk

Fixed/Movable Equipment Required:

- 3 chairs
- Printer
- 4 file cabinets
- Desk

Accounts Clerk: Recommended Standards S.F.
110 sf Open Office

Relation to other spaces:

- near Village Clerk
- near Village Manager

Fixed/Movable Equipment Required:

- 1 chair
- Desk
- 1 - 5 drawer file cabinet

Admin. Assistant:

Recommended Standards S.F.
110 sf Open Office

Relation to other spaces:

- near Village Clerk
- near Village Manager

Fixed/Movable Equipment Required:

- 1 chair
- Desk
- Storage shelf/counter

Codes Enforcement:

Recommended Standards S.F.
150 sf Office

Relation to other spaces:

- near Secretary/Assistant
- near Storage
- near Community Development

Fixed/Movable Equipment Required:

- 3 chairs
- Desk
- Map table
- Bookcase (1/2 ht)

Community Development:

Recommended Standards S.F.
150 sf Office

Relation to other spaces:

- near All Personnel

Fixed/Movable Equipment Required:

- 3 chairs
- Desk
- Map cabinets
- 4 file cabinets

Treasurer: Recommended Standards S.F.
200 sf Office

Relation to other spaces:

- near Accounts Payable
- near Conference/Meeting Area

Fixed/Movable Equipment Required:

- 3 chairs
- Desk
- Meeting table
- 5 file cabinets

Accounts Payable: Recommended Standards S.F.
120 sf Open Office

Relation to other spaces:

- near Treasurer
- Fixed/Movable Equipment Required:
- 2 chairs
- Desk
- 5 file cabinets

Deputy Village Treasurer: Recommended Standards S.F.
Part Time
Share w/Accounts
Payable

Assistant/Secretary: Recommended Standards S.F.
Part Time
Share w/Accounts
Clerk

Requested New Spaces:

Conference Room Recommended Standards S.F.
250 sf

File storage/storage area(s) Recommended Standards S.F.
100 sf

8.0 Square Footage Assessment

1) <u>New First Floor Spaces</u>	<u>Recm'd</u>	<u>Actual</u>
Village Manager	200	191
Village Clerk	140	127
Accounts Clerk	110	104
Waiting/Admin. Assistant	110	97
Codes Enforcement	150	153
Community Development	150	148
File Storage	50	45
Supplies	35	37
<u>Existing First Floor Spaces</u>		<u>Actual</u>
Unisex Toilet		49
Toilet		62
Kitchenette		27
Existing Secure Storage		44
Closet		10
Total		1,094 sf
Corridors/Common Space		747 sf
Total First Floor Square Footage -		1,841 sf
(not including stair/elevator and police dept.)		

2) <u>New Third Floor Spaces</u>	<u>Recm'd</u>	<u>Actual</u>
Treasurer	200	189
Accounts Payable	120	118
Conference Room	250	253
File Storage	100	57
Corridors/Wall Areas		192
Total Used Space @ 3rd Floor		809 sf
<u>Existing First Floor Spaces</u>		<u>Actual</u>
Mens Toilet		62
Womens Toilet		65
Total		127 sf
Corridors/Common Space		371 sf
Leasable Space		662 sf
Total Third Floor Square Footage -		1,969 sf
(not including stair/elevator and probation office)		

