Town of Middleton

Facility Assessment and Capital Planning- Final submission

6/23/2015

Eagle Project Management Inc.

Peter Smith, RPA/PMP

Town of Middleton

Facilities Assessment and Capital Planning

Final Submission July 6, 2015

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Executive Summary

The Town of Middleton has great opportunities to expand development, to promote small business and generate additional revenue. You are perfectly situated in Annapolis Valley, adjacent to a major highway, great infrastructure and growth potential. You own or could purchase additional lands, you have the personnel structure and the dedication from what this author has experienced during his reviews and research.

Unfortunately like most great towns in Nova Scotia your infrastructure needs extensive repairs and upgrading due to normal aging and decay. This report includes a comprehensive review of each asset, a photographic display of the areas of concern, a Class D estimate of the associated repairs and capital improvements, and a prioritize capital program for the improvements.

The physical review was completed between April 30 and June 16, 2015 for the Town Hall, the Fire Hall, the Visitor Centre, and the Public Works properties, the Sewage Treatment Plant, the Streets and Sidewalks, the Swimming Pool and Regency Park. Each asset was reviewed in cooperation with various Town of Middleton staff. Full access was granted to all areas of each asset. We did not perform any destructive testing while generating this report.

The main objective of this report is to generate a comprehensive observation of the physical characteristics of each asset, the quality and condition of the infrastructure, to establish normal repair/improvement costing of each characteristic and establish a prioritized listing of each characteristic requiring capital improvements. The capital plan has been divided into years and prioritized for each year based on our findings. The capital plan does not represent existing capital funding nor was a relationship developed between existing funding and our findings. During the process of the asset reviews we issued draft copies of our findings. Some of the work identified may have already been started.

As part of the initial review process we requested to review any historical information the Town believes would be beneficial in the generation of our reports. We were issued the following reports for our review.

2. Reports Reviewed

- Town of Middleton capital and expenditure planning program 2014 and 2015
- CBCL reports (found at STP)
    - Water utility assessments March 21/13
    - Water quality monitoring June 2013
    - North Street pumping station upgrade 2009
    - Town facilities Review December 2009
- Friends of Riverside Park
    - 1996 proposal- renovations
    - Paper folders, misc. Works dated the year 2000-2003
    - CBCL outdoor swimming pool upgrades
- Middleton Development Plan- Porter Dillon, dated Nov. 1991
- Middleton Business Development Plan, Porter Dillon dated May 1992
- Sperry Partners Ltd proposal dated March 1996, Recreational Plan at Rotary Park

- Gordon Radcliffe Landscape details Dec. 2000, Conceptual design
- UMA proposal and facility plan, Rotary Park March 1996
- Envronova Landscape Group proposal Rotary park March 1996
- ABL Environmental
    - STP upgrades Nov. 2008
    - STP plant upgrades June 2009
    - STP operational manuals June 2013
- SGE
    - Water System Assessment April 2004
- Town Hall invoice 1658, Enviro-soil, transport contaminated soil, former Underground fuel tank, Sept. 2000
- Waugh Associates Ltd., Municipal Outdoor Swimming Pool drawing 93056, dated Sept. 1993

Comments on the reports issued

- Because of the age of the majority of these reports we found most of them not relevant to current conditions found during our reviews. Reports generally greater than 5 years old require updating to reflect current conditions. However the reports did offer insight into the Town of Middleton planning process over the years, the work that was undertaken and the willingness of the Town to explore possibilities and improvements in a proactive manner.

Major areas of concern

- **Town Hall**
    - fire protection integrity- upper level
    - main entry- code compliance, handrails and accessibility
    - roofing system- leaking
    - upper level means of egress
    - code violations- accessibility, water back flow
- **Fire Hall**
    - state of repairs roofing
    - poor ventilation
    - over crowding
    - code violations
    - structural decay
- **Public Works**
    - maintenance building overcrowding and working conditions
    - former underground fuel storage tanks
    - single wall aboveground fuel storage tank
    - roofing systems in storage Unit 1 and 2
- **Streets and sidewalks**
    - tripping hazards at sidewalks
    - asphalt depressions
    - poorly labelled crosswalks
- **Visitor centre**
    - Foundation not stable
- **Swimming Pool**
    - Roofing system leaks, poor condition
    - Structural decay
- **Trails**

  - Signage
- **Rotary Park**
  - Roofing system- poor
  - Storage of petroleum based products
- **STP**
  - Access ladder- code violation
  - Main building roofing system- failing
- **General**
  - Potential for hazardous materials in aged buildings- no HAZMAT surveys found.
  - Preventative maintenance system, no formal system being used.

General comments
The facility assessment identified key areas of concern due to age and deferred maintenance, assets at various stages of re-built, fairly new, old/original to areas which have undergone renovations and modernization in recent years.

The STP main plant building for example is in good condition except the roof shingles, the PW office is a new construct, the upper floor of the Town Hall was renovated in the year 2000. However we also have great concerns with the Town hall building fire integrity between floors and between the means of egress hallway and adjoining office space areas. The National Building and Fire Codes of Canada would have been in effect during the 2000 renovations but it clear these were not implemented during this renovation. There is no fire seal between the means of egress and the office space areas. The Fire Hall has major overcrowding issues, improper CO exhaust systems, and fire code violations in the boiler room and no extinguishing system for the commercial level kitchen. In depth details are contained within the individual facility assessment reports.

Additional interviews were completed during and after the assessment period with various staff at each location. Each staff member was very cooperative and open to discussions and commentary related to historic usage of the property and systems. The staffs in general do understand the various complexities of budget constraint and the need to be frugal in their activity and expenditures.

One key area we found lacking was that of asset drawings and internal equipment details. Programming long term equipment replacement due to normal age and performance is part of a preventative maintenance program which generally forms part of the capital planning process. Each component of an asset would be recorded with age, size, location and usage. Normal industry life expectancy would then be scheduled for replacement funding. As a section of equipment nears maturity it would be monitored for performance and either replaced as scheduled or revitalized for additional years of usage. Currently it appears when reviewing the budget forecast and programming capital plan, several key sections of priority equipment have not been identified or programmed for replacement. Emergency replacement has been evaluated to cost in the area of 25-30% premium over scheduled replacement.

In closing thank you for the opportunity of working with you and your team. If you have any questions please contact the undersigned at any time.

Peter Smith
Eagle Project Management Inc.
eaglepm@ns.sympatico.ca
902-229-7558

3. Facility Assessments

Town Hall and RCMP

Architectural

1.0 Roofing

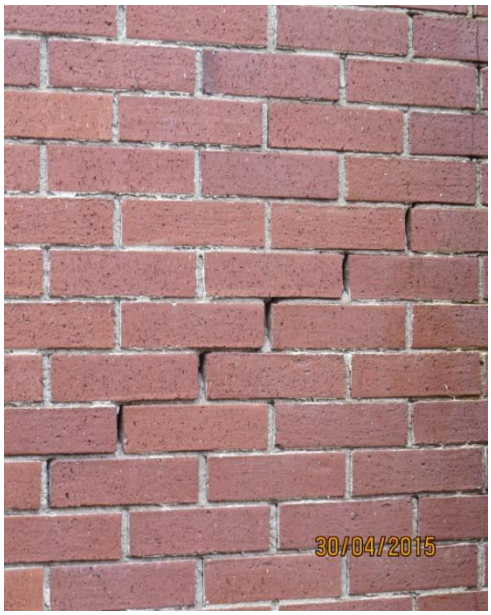
1.1 existing shingles are in poor condition and need replacement

Typical roof condition

Estimated cost: $ 14-16,000

2.0 Exterior walls

2.1 The walls are constructed of a mixture of brick and concrete materials with minor cracks and deflections.

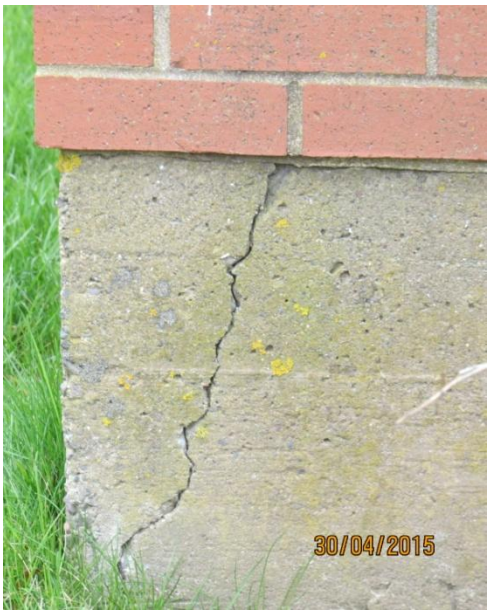


East side

East side

East side near north front corner

Estimated cost to repair: $ 5-6,000



North front corner

3.0 Windows and doors

3.1 Generally in fair to good condition

3.1.1 Replace damaged and worn door seals, threshold sweeps, and casing and door frame sealants.

Main front entry

Typical windows

Estimated cost to repair: $ 2,500

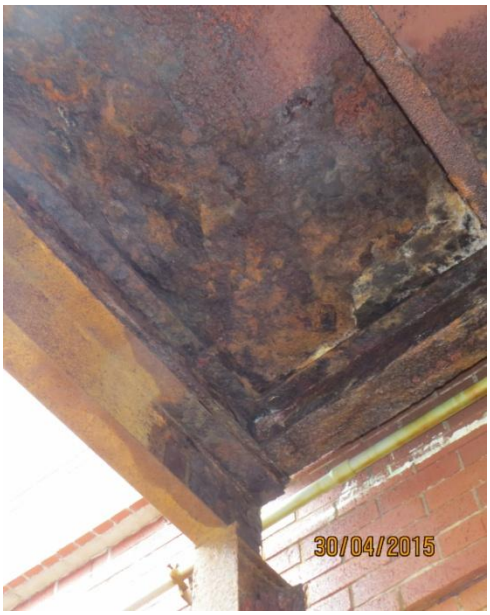
4.0 Accessible entrance- front

Handrails not to NBC code

Estimated cost $ 1,500.00

5.0 Fire route- means of egress- rear elevation

5.1 This structural steel system requires immediate attention. The steel has decayed aggressively in two key areas, the mounting of the top platform and the vertical connections to the support members. This is a mandatory Building Code requirement for a property of this size and usage therefore immediate repair for life safety needs to be considered. Replace the damaged structural steel.



Structural decay extensive- needs repairs/replacement

Top of fire exit stair/platform system

Estimated cost to repair option A: temporary repairs $ 2,500.00

Estimated cost to replace option B: $ 18-20,000 (does not include foundations- presumed reuse)

6.0 Parking areas

6.1 The asphalt parking areas have been patched on several occasions and are showing signs of great decay. Remove asphalt, excavate to minus 18", remove soft- unstable fill, install class D (3"-4") compacted gravels, place, 4" thick class A highway mix gravel compacted, install new highway mix type A asphalt.

6.1.1 Patch and repair only $ 2,500.00

6.1.2 Replace $ 38,600.00 (does not include RCMP side)

6.1.3 RCMP- repairs $ 800.00

6.1.4 RCMP- replace $ 4,500.00

Typical asphalt condition

7.0 General landscaping and finishing

7.1 Damaged fencing

7.1.1 Repair wood fencing- RCMP side and accessible ramp system to bus stop at Northwest corner of parking lot

7.1.2 Repair misc grass areas damaged during winter snow removals and general vehicle traffic

Estimated cost to repair: $ 1,500.00

7.2 Painting and misc. repairs

7.2.1 Wood structures require painting. Front elevation columns and decorative works do not contain moisture relief drainage causing paint to prematurely flake off the wood products. Ensure moisture release holes are installed, scrap, clean and prime all areas with alkaline based paints. Previous paint products may contain lead based products- latex paints will not bond properly to lead based products.

Damaged front entry column

Wood structure requires painting

Misc. Wood decay at roof eve

expansion joint requires repair

Steel lintel requires repair

downspout not connected to drain

Estimated cost to repair, misc exterior works; $ 5,500.00

8.0 Architectural continued

RCMP side- south side of Town Hall building

8.1 South side doors and windows

8.1.1 The RCMP public entrance door requires extensive repairs. The steel door and frame have decayed and the door “jams” when in use.

8.1.2 The RCMP employee entrance is in similar condition as the public entrance. However; the door operation appears to be working normal.

8.1.3 The wood fascia boards need minor repairs and painting

8.1.4 The masonry requires minor repairs

Asphalt leakage behind fascia- roof replacement required- see main building details

RCMP public entrance

Southeast corner- masonry repairs

RCMP employee entrance- door and frame repairs
Estimated cost to repair, replace 2 doors, repair masonry, painting and finishing, $ 10,500.00

9.0 Accessibility

9.1 The exterior main entry contains an accessible ramp system but does require some modifications to meet the current NBC. Handrails shall extend 300 mm beyond the step and be install parallel to the ground surface. Cracks in walking surface pose hazards to mobility impaired.

Extend handrails repair cracks and surfaces
Estimated cost to repair $ 500.00

9.2 Accessible washroom main floor

9.2.1 The washroom meets the NBC intent. Consideration should be given for the installation of an audible alarm system considering Town staffs are not likely to notice a person in distress within the washroom.

Unisex signage

unisex washroom

Estimated cost to repair $ 2,200.00

9.3 Elevator

9.3.1 Signage should be installed directing a person to the operator key and assistance when using the elevator. Annual certification required

9.3.2 Estimated cost to add battery backup system would need design and electrical requirements detailed by manufacture.

10.0 Fire integrity

10.1 The property does contain a fire alarm system which was operational during this review. Annual certification and testing documents also noted.

Located at main entry foyer

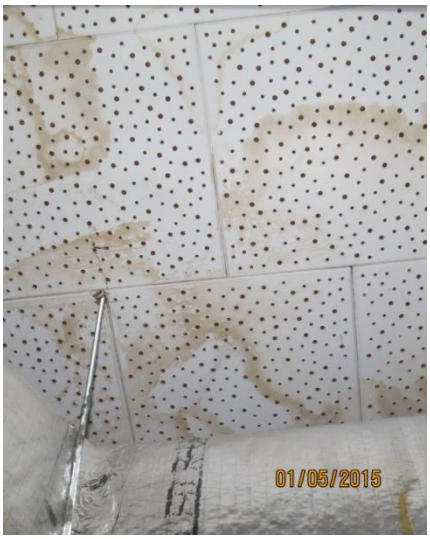
10.2 The building does not contain a generator or emergency power systems. A person could be trapped during a fire egress situation.

Located at main entry foyer

10.3 The building is primarily wood construction with brick exterior. There is no fire separation between the floors, the stair and exit system are not fire rated, between the floor and between adjoining rooms are not fire sealed, between the upper floor main hallway means of egress and the upper floor egress door are not fire rated or sealed. The upper floor means of egress is partly blocked with a moveable office partition which may cause blockage during a fire escape- removal required. The upper floor contains two ceiling elevations, the exposed lower suspended ceiling and the original pressed tile upper ceiling. The upper ceiling contains several areas of historic water leaks. The upper ceiling areas should be checked for mold and asbestos products considering the age and condition.

Remove products from hall

electrical pipes not sealed

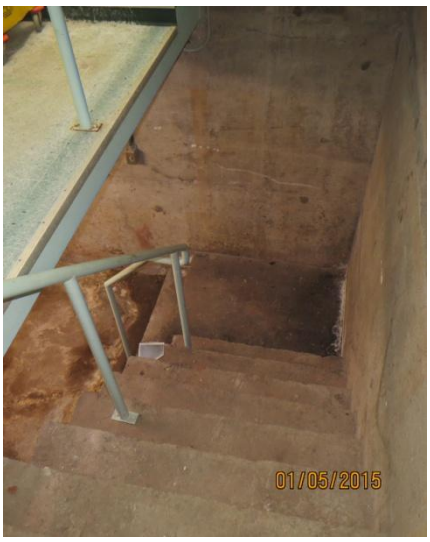


Area above upper floor ceiling, water leaks (roof leaks) on upper ceiling tile, upper ceiling tile may contain asbestos, means of egress halls not fire separated or sealed

At Council Chambers, hall side, storage room- hazard
Not fire sealed
Estimated cost to repair $ 165,000
Note: disruptions to staff during this process, primary work is above ceiling space

11.0 Basement

11.1 This area contains the main heating and water systems and is not occupied. Access is via the main foyer door adjacent to the accessible washroom. The basement is very damp and contains no insulation or ventilation systems.



Handrails not to NBC

wet concrete floors

Decayed cover on sump pit

11.2 The stairs leading down are fair at best, the handrails do not meet NBC; the basement concrete floor surfaces are wet and could cause hazards from electrical shock or general slips and falls.

11.3 The floor tile, vinyl acoustic tile (VAT) of 12`` size with notable black adhesive. The adhesive materials, depending on actual age, have been known to contain asbestos. Estimated cost to repair, add wall insulation, add ventilation, seal and repair floor, repair handrail systems $ 7,500.00

12.0 Upper and lower floor office space areas

12.1 Primarily carpet flooring and vinyl flooring

12.1.1 Room 202 Council Chambers- water stain on suspended ceiling

12.1.2 209B water stain on suspended ceiling

12.1.3 Carpet floor in fair condition

12.1.4 Vinyl flooring in fair to good condition

12.1.5 Baseboards and trims in good condition

12.1.6 Stairs leading up/down in good condition

12.1.7 RCMP space- vinyl floors worn, fair condition. Walls and trim fair. Estimated cost to repair $ 0.00, not recommended until roof replacement is completed. Cost to be determined.

13.0 Electrical systems

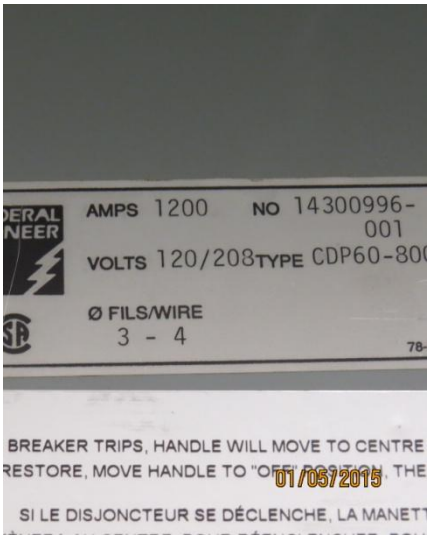
13.1 The property contains 1 primary system and 2 secondary distribution systems. The primary 1200 amp, fused at 400, 3ph, 600 volt is located on the upper floor main electrical room. The basement contains distribution for mechanical system (boiler and hot water) and the upper floor mechanical room contains distribution for the air condition system. All electrical systems appear to be in good condition, the panels are labelled, doors secured.

Secondary system-basement

secondary distribution- upper floor

Main switch breaker

main switch



13.2 The electrical piping system extending from the HVAC room to adjacent space areas is not sealed to the fire separation walls.

13.3 The emergency lights (battery packs) were tested and found in working order.

13.4 The fire alarm system and telecommunication systems all appear to be in working order.

13.5 Materials, plastic bins were found stored in the main telecommunications room. Materials are not permitted to be stored in operational rooms- NSP, NFC codes.

Estimated cost to repair $ 1,000 annual cleaning and inspection of breakers and equipment

14.0 Mechanical systems

14.1 This property contains two heat pump air condenser cooled systems commonly found in properties of the size and context. Internal distribution is via 2- York (model G+FD036S17A) forced air fan systems located on the upper level mechanical room c/w electronic central controls. The condensers are located on the east elevation at ground level between the Town Hall and Fire hall buildings. The physical condition of the systems appears good, the filters were in fair to good condition, the duct work is sealed (areas that are exposed). Verbal interviews with a 4 random staff indicated summer cooling is a concern but air flows appear good.

Condensers/heat pumps, Fuel tanks are for fire hall Estimated cost $ 125,000

typical interior York distribution

14.2 The physical size of the heat pumps appears to be designed properly for a building of the size and content. However; the building is showing signs of aging, the separation walls

are not sealed and therefore a constant cooling loss is prevalent. Based on observations above the suspended ceiling and the open space areas, it is suspected a loss of 35-40 % efficiency with current conditions. A large volume of air is migrating above the lower suspended ceiling system to the upper void cavity space.

14.3 Boiler

14.3.1 A single boiler heating loop system is located in the basement elevation. It is a Slant-Fin oil fired cast iron boiler 248,000 BTU model # Tr-50-XPT, the circulating pumps are Grunfros and the burner is Riello 40-F10. We were unable to locate an age date stamp.

14.3.2 The piping system is a mix of copper and steel commonly found in commercial buildings. The piping system is primarily insulated.

14.3.3 The system appears to be in good working order.

Slant-Fin boiler and Riello burner

Grunfros pump- typical

Estimated cost, boiler, pumps and piping $90,000

14.4 Hot water

14.4.1 A single 175 liter, 240 volt electric Rheemglass model -RR410T systems appears to be in working order. Age link found on web search to be November 2000. Normal life expectancy 10-12 years. This tank has surpassed normal life expectancy.

Estimated cost including piping $ 6,500.00

14.5 Code violation

14.5.1 The building does not contain a domestic water backflow system which is governed by the NSOH&S Act, the Municpal Waters Act and the NS DOE. Recomend installing the water backflow system to meet code and operational safety requirements. System should be installed at the main water entry point, basement elevation. Connect the backflow drains to the sump pit for discharge and annual testing.

Main water entry- no backflow system

Estimated cost $ 8,300

15.0 RCMP space

15.1 Tenants complaining about poor ventilation and air circultion. During this visit air flow levels appeared low along south elevation and very low to non exisitng along east and north elevations. West elevation- public office area appeared to be sufficient.

15.1.1 Estimated repairs: the area appears to have ample duct work and distribution but poor circulation. Suggest air balancing and damper adjustments to obtain optimal flows. $ 4,500

16.0 General

16.1 The property is aging and requires repairs to maintain integrity. Properties of this vintage are generally not energy efficient and after reviewing we believe at least 35-40% energy loss would be expected. The basement is not insulated, the roofing system is leaking, the masony walls require repairs, the space contains no fire integrity/separation between floors or adjacent space areas.

(Insert Town Hall Capital Plan- Excel sheet)

Town of Middleton

Fire Hall

Overview

This structure has undergone several refurbishments and changes over the years whereas the main fire truck storage garage and reception area are original and in need of major repairs. The newer section, common ballroom/meeting area roof is leaking in 2 main areas, exterior brick walls are cracked in several locations, the washrooms are not adequate nor do they meet codes and standards of today. The galley style commercial kitchen appears reasonable in size and appliances.

There was a proposal to construct a much larger new facility on Brooklyn Street (development sign is posted) however the cost of approximately $ 6 million is not feasible for the Town of Middleton. The current location is very congested and does not permit expansion or alteration without sacrificing operational use. The asphalt parking areas are very crowded during community events and during emergency service as the fire attendants are volunteers and require parking for their personal vehicles when attending a fire event.

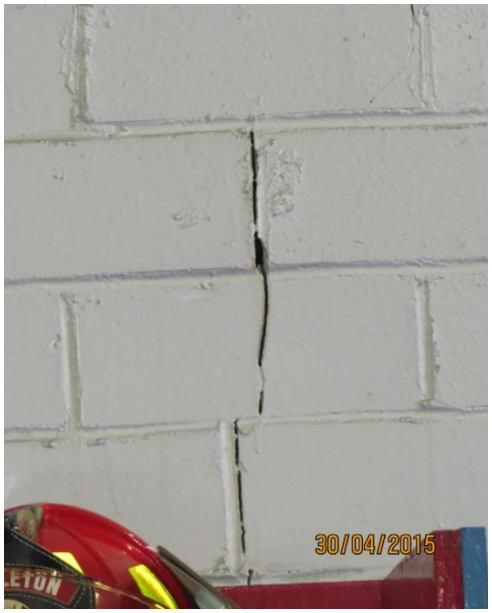
There are several areas not meeting fire code and building code standards of today. They include, but are not limited to the upper radio room in the fire bay, non code compliance means of egress, not fire or fume (off-gas- CO/CO3) rated; the breathing air refill station is not fire rated, the clear space around vehicles does not meet means of egress, the entrance door is not fire rated between the office space and fire vehicle storage; the boiler room door does not contain a fire rated seal, the attic space is used

for storage and is not fire rated, the chimney from the boiler roof passes through the attic with no fire seal and numerous others. In all we noted over 70 fire and building code violations during our review period.

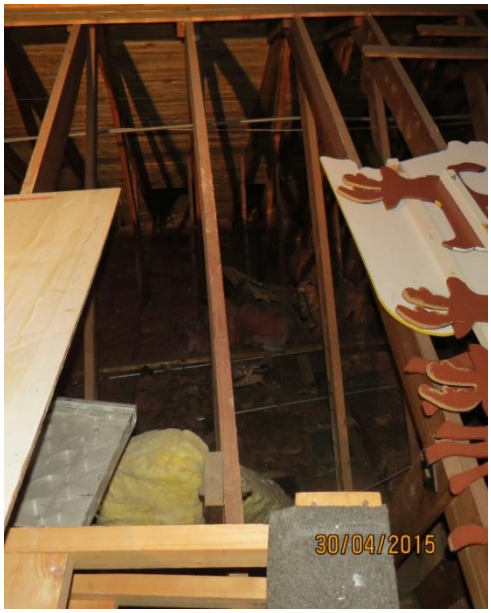
In general this property is long overdue for a major renovation and or relocation to meet current needs of the fire department and the community.

1.0 Fire vehicle bay

This area contains no exhaust fume ventilation, minimal air circulation. There are low levels of lighting, no interconnected CO exhaust system, is over crowded with emergency vehicles and equipment and is undersized for the Town operations. There are several cracks in the masonry walls, the attic storage access ladder is broken and unusable, equipment storage is very crowded and the small employee exercise room is combined with the tools and maintenance area. The upper radio room head room clearance is poor, the hand railing does not meet code, the physical ceiling height is not to code and the room itself is not fire rated. The breathing air room contains a very low ceiling and it is not fire rated.



Typical structural crack



typical attic storage

Typical attic storage

typical structural crack

Vehicle bay

crowded exercise and work shop area

Broken attic access ladder- duct tape on vertical

Typical ceiling fan

breathing air room

2.0 Hazardous materials- Asbestos

The radio room materials may contain asbestos which is commonly found in materials of this style and size of ceiling and floor tiles. A proper survey (Phase 1 ESA) should be completed to verify these products. Corrective actions, encapsulation or removal may be required once products are identified.

3.0 Washrooms

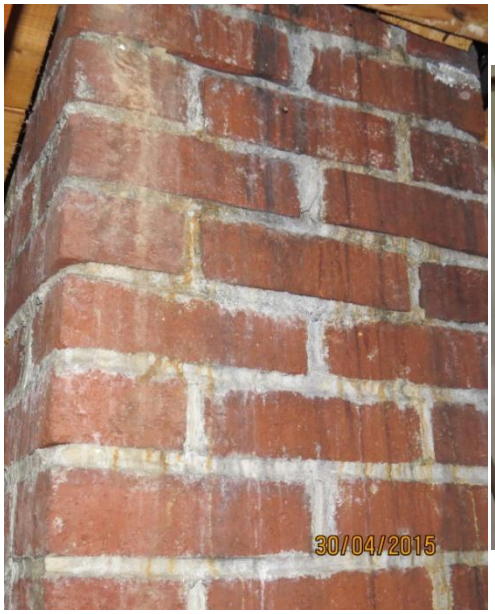
The men's is 2 urinals and 1 toilet, the ladies contains one toilet. The washrooms do not contain any shower facilities. The National Building and Fire codes require a minimum of 1 toilet and 1 urinal for every 10 men and 1 toilet for every 6 women. During regular daily activity, fire attendees being volunteers, the washroom facilities would meet common office operations. However; during usage of the common training hall the washroom facilities are not adequate to meet codes and standards. A common standard for fire emergency service properties is the ability for showers for the employees after a fire event. This property does not meet the standards.

Female washroom undersized for occupancy load

4.0 Boiler room

The access entry door is a fire rated steel door and steel frame. However; under the codes governing this door entry system requires a door closure and latching device. This room also requires a CO and smoke detection service which does not exist.

The heating system is hot water baseboard oil fired, a single heating boiler and a single 60 gallon how water tank are located within the boiler room. The majority of the piping system is not insulated generating great heat loss during operations. The chimney is leaking creosote from the boiler operations; the 2x 909 litre fuel storage tanks are located on the west side of the property between this property and the Town hall property near the main entry to the fire hall.



Chimney through attic leaking

John Wood 60 gallon hot water tank

Non-insulated piping

boiler exhaust leaking

Boiler room door

5.0 Fuel storage tanks

There are 2- 909 ZCL fibreglass double wall fuel storage tanks (manufactured in 2009) located on the west side of the property. The fuel supply line is not secondary contained and there is no overfill/spillage containment on the tanks. The tanks themselves meet code but the connecting apparatus (supply piping, filler pipe, etc.) does not.

Heating fuel storage tanks

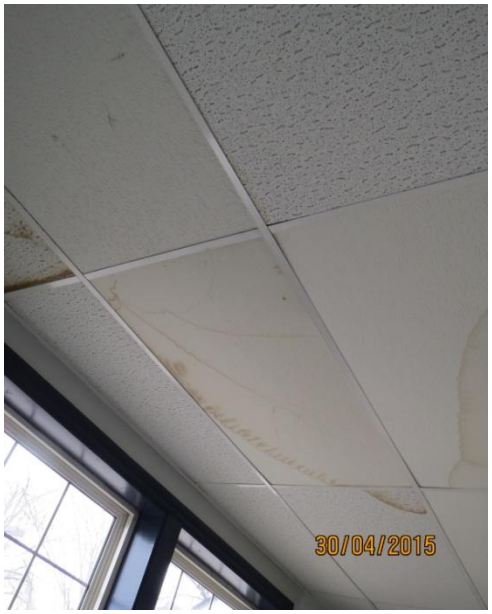
6.0 Heating

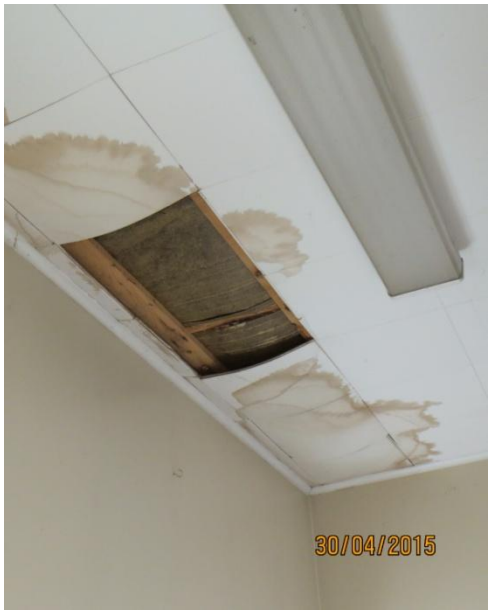
There are three sources of heating. The original hot water baseboard being provided by the single boiler, the 2 heat pumps providing heating and cooling for the common area and kitchen and the 2 Kerr suspended unit heaters located in the fire service bays.

Typical hot water baseboard heater

7.0 Common hall

The suspended ceiling, near the north corner contains a substantial roof leak area very visible. The south end storage room ceilings contain several stains from past roof leaks.





Ceiling tile damage- leak above storage room roof leak

8.0 Kitchen

The kitchen is in reasonable condition but is missing key equipment to meet current codes and standards. An exhaust system is required for the commercial ovens, a CO and smoke detection system is required, wood and flammable products cannot be placed or stored in close proximity to ovens or other cooking appliances. The large commercial ovens should be certified to ensure there is no leakage or areas of concern considering the age of the equipment.

Wood and flammable products need to be relocated

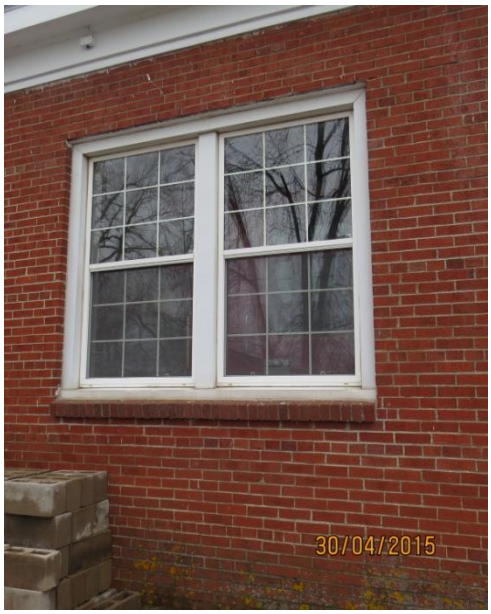
9.0 Roofing system

The shingled roof system is in poor condition with several areas of damaged and missing roof shingles, poor soffit and ridge ventilation and has generally reached the age of replacement.

Typical roof condition- shingles failing

10.0 Doors and windows

The doors and windows and in good condition and appear to have been replaced in recent years. The majority of main building contains vinyl window products, the fire hall entry door system is commercial grade aluminum and the other exit door systems were replaced within the past 10 years.



Main entry aluminum door typical window

11.0 Ventilation

This property does not contain proper ventilation and exhaust systems. The kitchen contains a main exhaust with no grease collection, the fire vehicle storage does not contain an exhaust system, the common space (largest space) area is supplied by 2 ceiling mounted unit placed in the fire vehicle storage areas with 2 heat pumps located on the exterior east wall (Samsung model AQV36JAX). These units are of applicable size but being placed within the fire vehicle garage is a very poor location. These units require fresh air intake to function properly and they are circulating vehicle exhaust into common space.

There is no central air exchange system for the office areas, the washrooms, the member's room or the central common area. The heat pumps are circulation fans appear to be in good working order.

Located in vehicle garage

Samsung heat pump- east side

12.0 Electrical System

The service is a 400 amp/600v/3ph primary commonly found in properties of this size and operation. The electrical system appears to be labelled properly and functioning according to design.

Located in boiler room- secondary service for mechanical equipment

13.0 Exterior

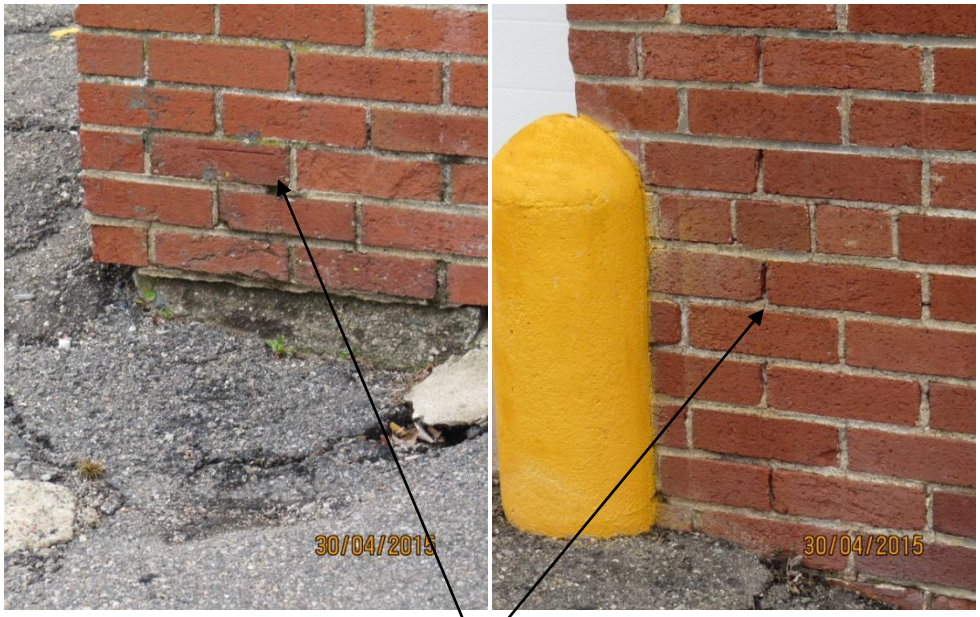
The asphalt surface along the east side parking requires repairs and the catch basin needs to be raised and repaired. The grass areas have been damaged during snow clearing efforts, the wood fence requires minor repairs along the east and south elevations.

Catch basin requires repair

damaged landscaping- note shingles on ground

14.0 Masonry and mortar exterior

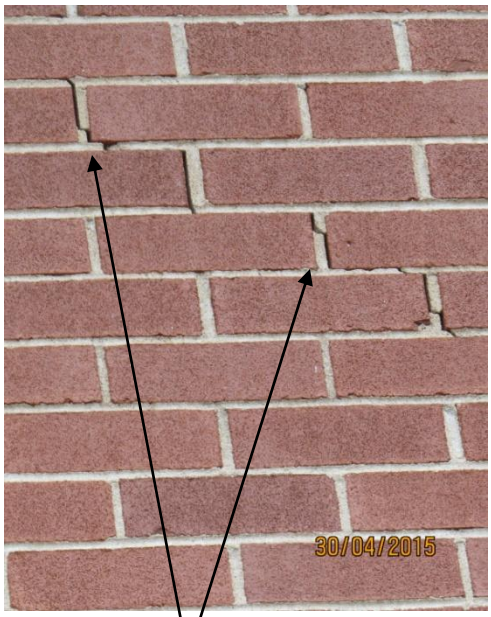
The property contains numerous cracks and deflections which need repairs to sustain this property. Constant cracks will permit water entry, ice to form and expand, creating additional damages and concerns. Most of the exterior cracks follow the brick/masonry mortar lines and are considered deflections non structural, those cracks which split bricks/masonry are structural deflection/settling and more concerning. The photos attached are examples of brick and mortar decay and structural deflection, 37 locations noted during our review.

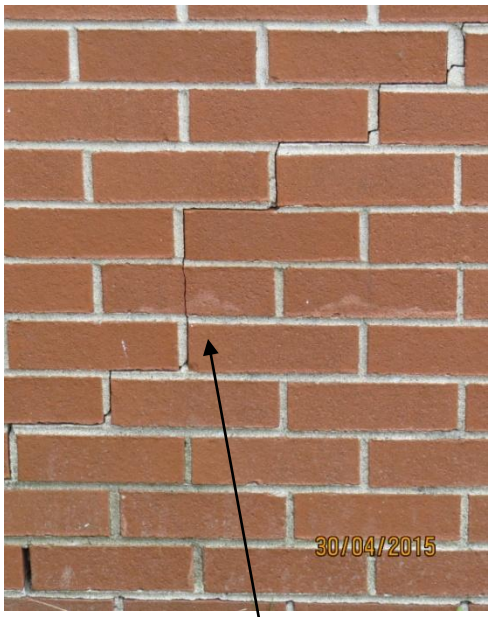


Mortar and brick decay- non structural

Mortar and brick decay- non structural

Mortar and brick decay- structural deflection





Mortar decay

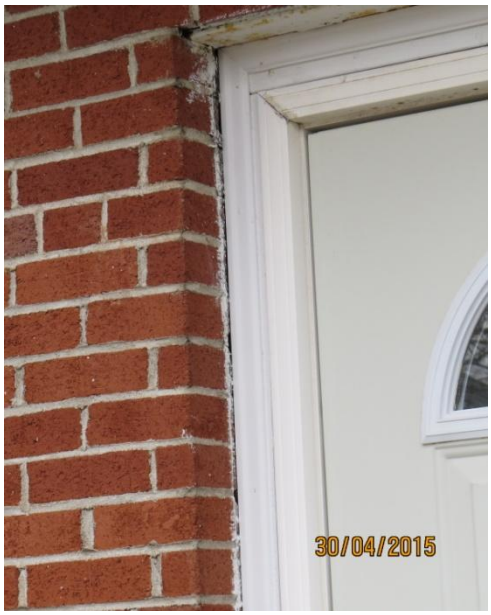
structural deflection

Structural deflection and mortar decay

15.0 Exterior windows, doors and flashings

The majority of windows and doors are at various stages of decay requiring repairs. There are several areas of exposed flashing, missing sealant, mortar decay and general repair work required.

Left front corner



south entry door frame

Water running behind fascia

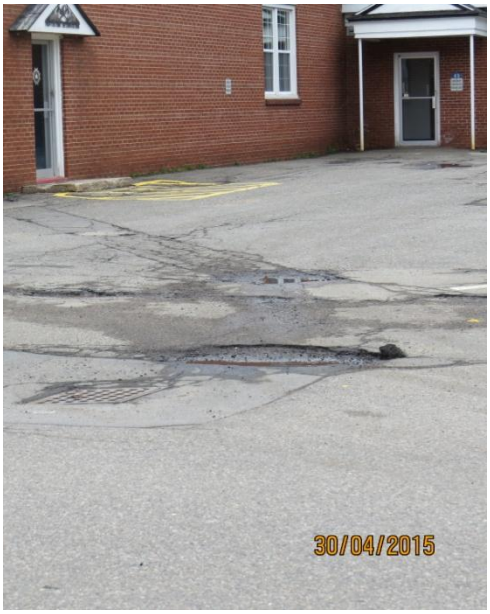
extensive decay to fascia and flashing

Flashing and shingle failure above vehicle door

16.0 Asphalt areas

The west asphalt area is shared with the Town Hall and is in poor condition (noted in Town Hall assessment). The north vehicle entry asphalt is fair to poor, the east side driveway is in good condition with minor repairs and the south end driveway is in good repair. The catch basin on the east driveway near the parking lot requires repairs.

East side parking lot



west side parking lot

East side catch basin needs repairs

typical west side asphalt

East side driveway- repair edging

Conclusions

The entire property requires extensive repairs and capital improvements which when considering the age of the property, the congested operations of the property, the physical location not being a prime area for fire emergency services and the overall cost to reconstruction this property, a greater consideration for relocation is being reviewed.

The primary areas of capital improvement, to maintain the structure, are the roofing replacement, the structural deflections in the brick and mortar, fire protection of the occupants (visitors and staff), adequate washroom facilities and proper ventilation. We are estimating these basic requirements will cost $ 327,500 which includes design fees, add 15% project management and contingency, budget $ 376,000.00. **This value only includes basic Building and Fire Code upgrades to enhance the current accommodations. The overcrowding of fire service vehicles and equipment will be addressed under separate cover.**

Table 1

Ref #	Area	Issue	Priority	Cost	Notes
1.0	CO system	Install new	1	65000	Code requirement, includes 2 exhaust fans
3.0	Washrooms	Full renovation	1	145000	Extensive reno, remove walls, underground plumbing, accessible stalls and more locations, both men's and women's, existing does not meet code
4.0	Boiler room	Door closure and heat/smoke detector	1	5500	Code requirement
5.0	Fuel tank and piping	piping	1	2500	Code requirement
7.0	Interior	Ceiling tiles etc	2	3500	After roof replacement
9.0	Roof	Leaking-replace	1	35000	Unknown structural plywood replacement-added 10%
11.0	Ventilation	Install new	1	175000	Mandatory code for 300 person load
13.0	Catch basin	Reset elevations and asphalt	1	2500	Safety hazard, concrete collar under steel rim has failed.
14.0	Masonry	Non structural	2	6500	
		Structural	1	7500	
		Chimney	1	1500	Full replacement
				$ 449,500	

Note: there is an extensive amount of small items to be considered at this property including the attic storage, breathing air room, radio room and others. However; the current space is very limited and does not permit extensive renovations.

The estimate to complete capital repairs and modifications to meet current codes and standards is $ 1.7 to 2.2 million (with variables pending final Town Council decisions, designs and implementation). **The work noted in Table 1 is the primary work to be completed to maintain the structure and meet basic Codes and Standards governing. Table 1 does not address the total space requirements and community need, this is under separate cover.**

Options:

1. Reduce the large common space room in size to 150 occupant load, extend fire services into the reclaimed space, relocate sections of the fire operations (breathing air, gym, washrooms, storage, etc.) into the reclaimed space.
2. Relocate fire services to a new location- to be determined

3. Relocate common space areas and services to a new location- to be determined
4. Obtain adjacent property and expand fire services property, services and common areas into adjacent property
5. Demolish the property and relocate all existing services and occupant services to a new location. Construct a new location.
6. Additional options are being explored and will be identified under separate cover.

Town of Middleton

Public Works Property

Overview

This property is located at 295 and 297 Marshall Street, contains 4 buildings and a large generally flat property area used for machinery and materials storage.

1.0 **Office Building- Civic 297 Marshall Street**

2.0 This building was purchased in 2013 and is used by the town PW employees and manager. It is a sloped wood framed roof with asphalt shingles, vinyl siding and 2 heat pump air conditioners. The building is in very good condition.

3.0 Unit 1 Salt Storage Building

3.1 The building is in fair condition and is used primarily for salt storage. The wood constructed building is secured to a poured in place concrete foundation. The exterior of the structure is wood and the roofing system is asphalt shingles.

3.2 The building contains an electrical panel power source however during our review this system was turned off. The PW Manager indicated the power is not required and not used at this location. The current electrical panel is not mounted in accordance with the National Electrical Code which requires a fire rated backing and all wiring to be secured within 12” of the panel.

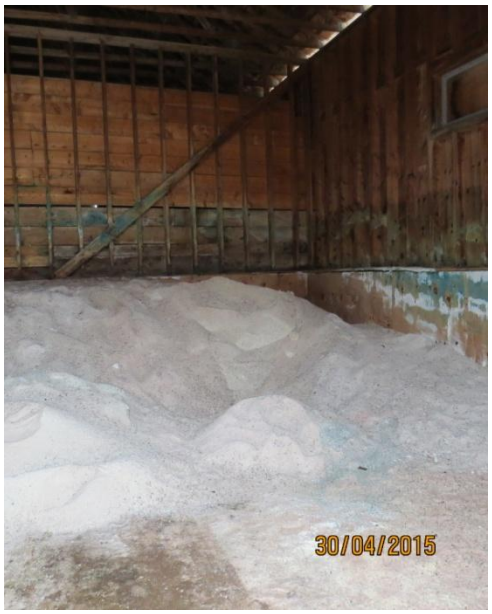
3.3 The concrete floor of the structure contains several cracks but these are normal considering the use of the structure, heavy equipment entering the structure to load salt and the general age of the structure.

Open soffit ventilation

Interior-salt storage

Panel not mounted to Code

Structural crack in foundation



Salt storage

repairs required at doors

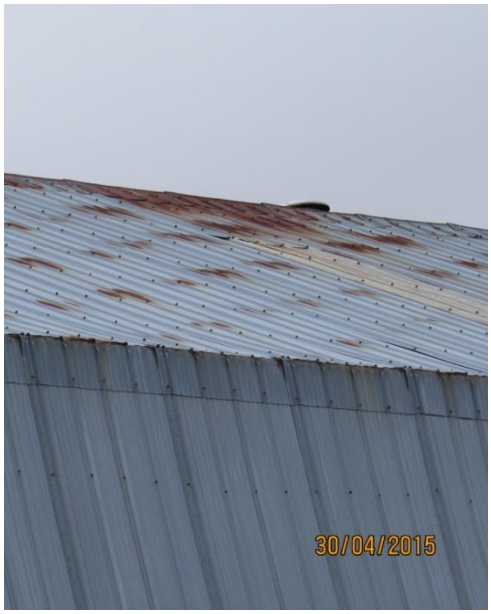
4.0 **Storage building Unit 2**

4.1 This building is primarily used for small equipment and materials storage, seasonal products, repair products, hand held tools and equipment, portable equipment and machinery.

4.2 The metal siding is in fair condition, the metal roof is in poor condition and there are several large cracks in the poured in place concrete foundation. The large entry doors serve the purpose but do need constant repair due to age and usage.

4.3 The building is heated with an oil fired boiler located on the upper floor and the 909 litre steel fuel storage tank is located inside the building on the lower floor. The fuel storage tank does not meet NSDOE secondary containment regulations. The fuel supply lines are exposed running several feet inside the building on the lower floor and extending up to the upper floor boiler. The fuel supply lines do not meet NSDOE secondary containment regulations.

4.4 The building appears to be over crowded for the extent of materials, tools and equipment stored on site. We also noted several sections of products and equipment within the building which do not appear to have been used in an extended period of time. The products require additional shelving and organization to reduce hazards of falling products.



Rusted roofing system

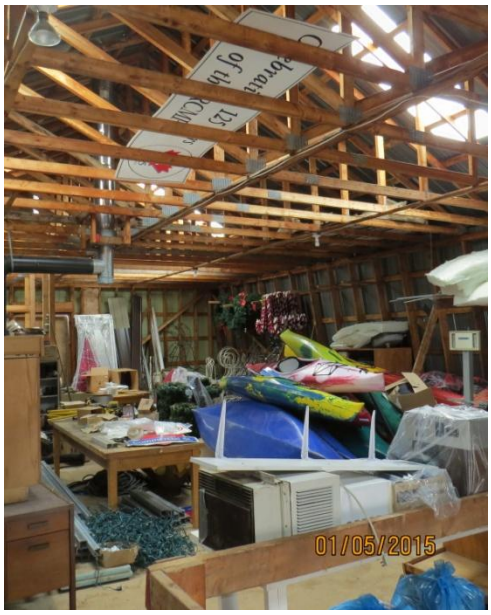
Foundation crack- 4 found

heating system fuel tank fills and vent pipe

Foundation crack

rusting metal roof

Stairs not to code



over crowded storage

Gemini boiler and ventilation

Mectron burner

Improperly stored gas and oil cans

Unit 2 lower level

Unit 2 heating fuel- not to Code

5.0 **295 Marshall Street Maintenance Building**

5.1 The building is a metal prefabricated structure, metal siding and metal roof with structural steel framing. The siding contains a few small holes and damages. The roof is extensively rusted and has had some past minor repairs completed. The overall structure is in fair condition considering the age is estimated at 30 years old.

5.2 The structure is undersized for the amount of equipment and materials being stored within and the activities performed in the building. The structure contains tools and

small equipment and operational materials and others to perform maintenance activities. A section of the concrete floor was recently replaced as a result of some minor demolition work to obtain additional working space.

5.3 The overall structure is useable but very crowded and dated and is showing signs of extensive aging. The heating system is an oil fired ceiling suspended forced air system with very little controls and very inefficient. The standard galvanized duct work is not balance or distributed evening to provide adequate heating. There is a single 40 gallon hot water tank located in the upper storage above the former office space. The property contains a single washroom with a shower which is very aged.

Typical exterior wall condition

Former refueling area (east side)

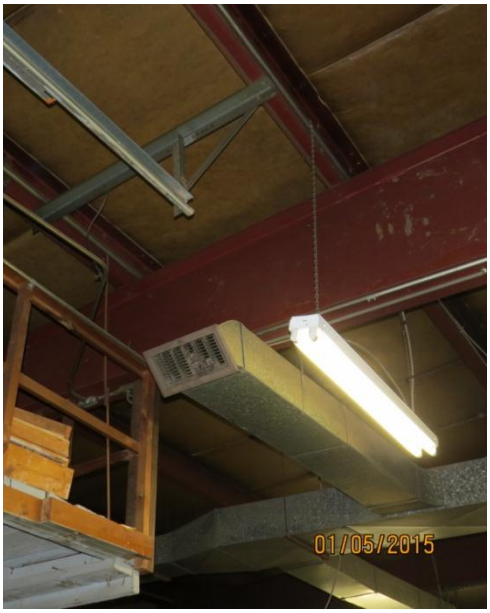
Former refueling center monitoring wells

typical exterior metal

Typical exterior metal siding

Double wall furnace fuel tank-heating

Heating system exhaust



typical forced air heating duct work

40 gallon hot water tank

over crowded work space

Washroom

Damage to exterior wall

6.0 **Conclusions**

6.1 The building is extensively aged and over crowded (not large enmough) for the type of operations being performed within the building. There is a concern of employee safety when performing thier activities because of the restricted work area.

6.2 There is a concern of the former gasoline refueling system and visible monitoring wells (2). There is a concern with the longevity of the structure itself. We do not believe the physical steel structure to be of great concern however the exterior walls and roofing system are extensively rusted and are highly susceptible to wind and snow loads which may not be supported by the aged materials.

6.3 We are concerned with the restrictive working conditions for employees when considering the large quantity of equipment, materials and tools stored at this location.

Area	Issue	Priority	Cost	Notes
Structure	Walls and roof	2	75,000	Extensively aged, replace
Gasoline refueling	Decommission	1	TBD	Verify monitoring wells levels of contamination, if any.
Second floor	Access stairs	1	2500	Not to code, old and weak
Relocation of products	Over crowded	1	In house	safety

Note: building replacement, same size, average cost including foundation/footing and services (power and water) is $ 325,000

Town of Middleton

Sewage Treatment Plant

Overview

The original facility was constructed in 1980 according to previous assessments found during our reviews. Several upgrades and extensions have been completed over the years including new buildings to house major systems, additional piping and filtration systems and enlarge capacity to manage the services. This review is concentrated on the physical properties and not the services or equipment servicing the sewage treatment or fresh water supply.

The property is located at 204 Main Street. The treatment plant property is enclosed with chain link fence and secured gates to restrict public access.

The property contains 4 buildings of various sizes and construction. The main building is a mixture of masonry and metal siding material with a sloped wood roof frame and asphalt shingles. The primary pump auger building is a wood constructed building with a sloped roof and asphalt shingles, the equipment storage building is of concrete block construction and a flat tar and gravel roof and the small pump building is a grey vinyl siding, sloped wood roof with asphalt shingles. Each building requires various levels of repairs as follows.

Main Building

This overall building appears to be in good condition with some areas of capital improvement/repairs required. The shingle rood system is failing, two cracks were found in the masonry and the larger equipment door requires general repairs.

The building is the primary site office and control center for the Town of Middleton sewage treatment system. The main pump controllers, augers and mixing systems are managed from this location.

Rear elevation

Front elevation- lose shingles

Shingles on ground

rear elevation

Right side elevation

Electrical room

The main electrical room is 347/600v/3ph/400 amp Square D c/w a PJ400 Power-pact switch interconnected with a Kohler generator (model SD2S-610 fuel fired/operated). Transformers for the electrical service were placed in an adjacent room which is now being used for storage of miscellaneous products. The National Building, Fire and Electrical codes do not permit non electrical products to be stored in electrical rooms.

In transformer room- Code violation

In transformer room

Main electrical switch

Kohler generator and transfer switch

Transfer switch- systems normal and ready

Mechanical room

The property contains an air to air ventilator (Vanee HRV units) c/w humidifiers connected to primary office ventilation and air conditioning systems. This also serves the washroom, general office areas, storage, the electrical rooms and the lab. Two Frederic heat pumps operate the air conditioning component for the office space. The mechanical forced air distribution system also contains Thermolec duct heaters to maintain comforts levels within the office and primary areas.

The backflow prevention device was last tested on March 27, 2012 and is a 1-1/4" Watts system. NSDOE Regulations require backflow preventers to be certified annually.

Backflow preventer not certified

Vanee air to air exchanger

Frederic heat pump exterior and interior sections

Out Building # 1

Small grey coloured vinyl sided building located near the main sewage collection chamber measuring approximately 12’ x 12’ in size. The roofing system is in poor condition and needs replacement. The electrical system originally attached to the structure needs to be secured.

Asphalt shingle system failure attach/secure electrical system to structure

Out building # 2 main Auger

This build is in fair condition and according to on site Town staff, recently was over hauled and reconditioned with the new auger pump system. Approximately 70 percent of the structure rest on a poured in place concrete foundation whereas the new addition structure rest on a wood frame support foundation.

The main entry door requires minor maintenance, the roofing system appears good (metal an no signs of leaks), the exterior of the structure appears to be in good condition.

Minor maintenance at front doors

wood and concrete foundation

Monster Auger building (out building # 2)

Monster auger

basic washroom

Main electrical for auger (remove oil can)

Out Building # 3 (former pump building- now storage)

The masonry is in poor condition and requires re-pointing of the block work. The roofing system is failing and contains two small leaks today. There is strong evidence of major roof failure in the near future due to tar based products being released from the roof and running down the side of the masonry block in 3 locations. These heavy black tar filled drainage marks (evident in the photo above) are very good indicators of roof system, delaminating being washed away by natural rain fall events.

The electrical system appears to be in good working order, the electric unit heater (Trane) was not operating at the time of our review. The unit heater appears to be aged and the model and year tags were not visible.

The main entry door is functioning well but does require minor maintenance.

Masonry joint failures- several locations

Masonry joint failure

Front door

Trane unit heater 400 amp/347/600v/3ph electrical

General

During our review we noted an observation which should be addressed on the main sewage collection chamber. The access ladder system, in accordance with NS OH&S Act shall extend a minimum 3 feet above a flat surface, shall be fully enclosed for any elevation over 8 feet and shall contain a flat platform at both the top and bottom for safe entry and exit. This ladder system does not comply with Provincial Act.

Ladder system to be modified to meet NS OH&S

Conclusion

The main building roofing system requires repairs and the electrical transformer room requires housekeeping. Out building # 1 requires a new shingled roof, outbuilding # 2 is in good repair, out building # 3 requires a new roof and masonry repairs. The main collection and pumping chamber requires modifications to the access ladder.

Area	Issue	Priority	Cost	Notes
Chamber ladder	NSOH&S Act	1	2500.00	Code compliance/safety, modify ladder and construct safe landing
Main building	Roof repairs	1	1500.00	If not repaired, water infiltration may cause additional damages and cost
	Housekeeping	1	0.00	Code violation- in house work
Out building # 1	Roofing	2	1500.00	Replace
Out building # 3	Roofing	2	5500.00	Replace
	Masonry repairs	2	1500.00	Repair mortar joints
	Front door	2	100.00	Painting and general repair

Town of Middleton

Roads and Sidewalks

Overview:

The general condition of the roads and sidewalks are in fair to good condition with some exceptions detailed in this document. The key areas of concern were more related to pedestrian and vehicle traffic flows and awareness issues primarily crosswalk and lane turning identifications.

A systematic approach with short and long term capital replacements combined with smaller repair projects will extend the life expectancy of the products. The roads are asphalt however the sidewalks are a mixture of asphalt and concrete products. The asphalt sidewalks, in some areas, were deliberately placed over the original concrete sidewalks. This is a common practice as asphalt products are generally less expensive to install and meet the immediate needs of pedestrian safety.

For the intent of this report we are reporting on replacing concrete sidewalks with concrete products and asphalt sidewalks and asphalt roads with asphalt products. This report includes all areas within the identified Town of Middleton boundaries. Areas not clearly identified on this report are areas with no immediate actions required.

Table 1

The attached spreadsheet identifies the areas of concern, the current conditions and the years forward when the work should be scheduled. Each issue has been listed in order of priority for each capital program segment. Priority 1 are those areas of immediate concern which should be addressed within 1-3 years, Priority 2 areas of concern which should be addressed between years 4-6 and Priority 3 are those areas of concern which should be addressed between the years 7-10.

Priority 1	$ 837,800.00
Priority 2	$ 2,145,600.00
Priority 3	$ 164,600.00
	$ 3,148,000.00

General comments

The attached spreadsheet costing is based on the following

1. Patching- preventative maintenance measures to prolong total road system. Most areas top layer of asphalt has delaminated from lower structural asphalt. Patching will reduce additional delaminating and extend life expectancy.
2. Road asphalt replace cost include excavation of existing and disposal, excavation of sub-base to minus 18”, install and compaction of structural rock fill, install and compaction structural gravel

and install of 2 layers highway mix asphalt, install gravel shoulder and line painting/crosswalks as required.

3. Concrete sidewalk replacement includes removal of existing, excavation to minus 18", placement and compaction of structural gravel, form, place and finish concrete, backfilling and grading areas adjacent to new sidewalk.
4. Estimates included for all repairs assume external resources for asphalt and concrete sidewalk replacements, internal resources for patching and sidewalk crack repairs.
5. Information gathered on May 15 and 16 in the year 2015.
6. Clarification note: Commercial Street from Highway 101 near NSCC is in very poor condition and extends approximately 1200 lineal feet. This area has not been included within the report as it is outside the Town boundary. Additional clarification required for this area as it does impact vehicular traffic on Commercial Street.
7. The area of review includes the Town of Middleton boundaries as identified on/in the Lanmark Geographic Solutions Municipal view provided during our initial project meeting.

Conclusions

It is suggested, because of the normal climatic changes which occur in the spring of year, that all roads and sidewalks to be reviewed for immediate concerns which may impact public safety. It is common for snow and ice melting to cause uplift of products, create voids and depressions, to create uneven surfaces and hazards due to constantly changing climatic conditions.

Patching and "top coating" of asphalt areas where the top layer has delaminated, will reduce the possibility of the lower structural asphalt decay and subsequently prolong life expectancy. The majority of asphalt roads are/were in fair to good condition during our review.

Cost savings could be enhanced with asphalt placement over damaged concrete sidewalks as completed in other areas. New asphalt products however will be placed over non structural components (broken concrete) which will cost more in the future to remove and dispose of 2 subsequent layers of sidewalk materials. The broken concrete products will have a tendency to move and shift more frequently during the changing climatic seasons.

Cost savings can also be noted when similar projects are combined. For an example combining both sections of Victoria Street as one project or combining Meadow and Sunset as one project generally creates savings at 10-15%. Savings are recognized by external contractors when they reduce equipment moving, close proximity of each work activity, same crews doing both projects.

(Insert spreadsheet details)

Town of Middleton

Trails

Overview

The majority of the trails are in good condition with minor winter/spring maintenance required. The majority of maintenance areas are near vehicle transit crossing areas where constant vehicle traffic has created hazards in and near the crossing areas. The former rail bridge crossing the Annapolis River is not included in this review as it is not maintained by the Town of Middleton.

The Town has also noted pedestrian shall use this property at their own risk and no motor vehicles permitted. Signage does not reflect these comments and is noted below.

Increase signage

We noticed during our review signage was not consistent, in some areas not existing and in other areas the signage is blocked or partially blocked by foliage. These visually blocked areas should be cleared to ensure visual awareness.

Stop signs

They are not consistent in size or quantity.

- Two signs at the Brooklyn Street crossing are very small and non visible
- Install a new sign at TRA parking lot, Town boundary
- Install a new sign on Public Works property between old rail line building and Foodland.
- Install new sign at bridge before crossing Annapolis River
- Install new sign, Town boundary, end of Senator Road

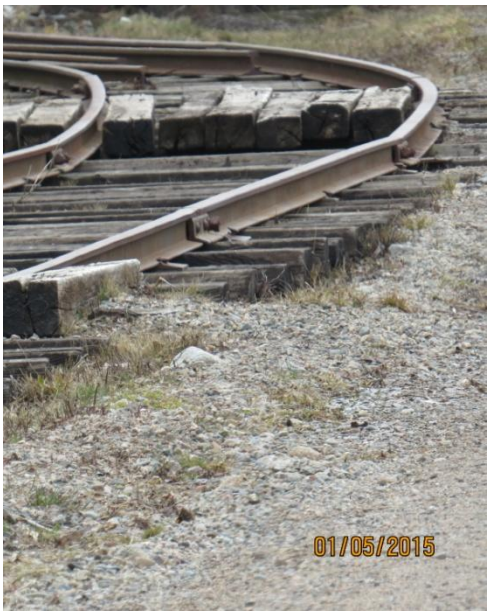
Other signs

- Install “use at your own risk” at all entry points from Town boundary lines and where public streets intersect trails. 17 required
- Install “no motorized vehicle” signs at all public road crossings and at Town boundaries, 17 required in total, 2 found posted, total new 15. **Contradiction:** During initial Town meetings it was clearly noted motorized vehicles are not permitted on the trails. However; signs are posted permitting motorized vehicles- ATV, snowmobile, etc. Town policy and liability should be reviewed and signs posted reflecting liability/non liability. I.e. potentially reducing town liability by posting signs with same message located at all entry points.
- Install “end of Town limits” at trail/Town boundary points (TRA Transport, Annapolis River bridge, end of Senator Street), 3 required.
-

Additional works

- Install vehicle barricade between PW property and Foodland at old rail building behind PW property buildings Unit 1 and Unit 2. Suggest 2 x 8" wood post and single galvanized guardrail x 12 feet long.
- Install vehicle barricade at end of Senator Street, suggest 2 x 8" wood post and galvanized guardrail x 8 feet long.

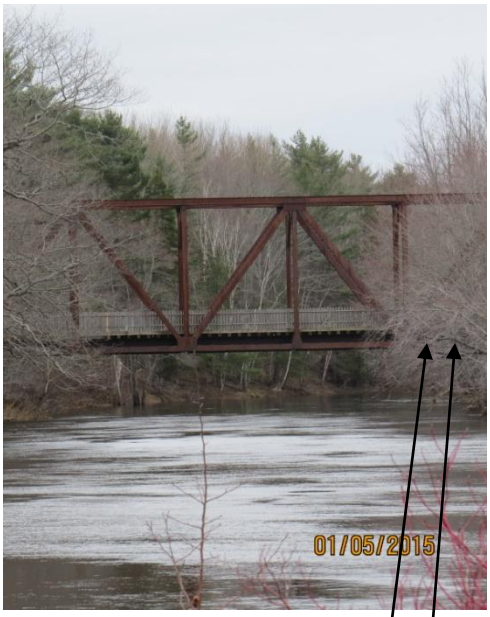
Common pot holes near roadways



Pedestrian hazard near rail museum

Typical signs found- additional signs required

Only 2 of these signs found



Town boundary limit

Former Rail Bridge, not part of Town maintenance program, posting of signs required.

Trails

Table 1

Location	Issue	Cost	Priority	Notes
Vehicle crossing	Poor signage	$ 1700.00	1	Pedestrian and vehicle safety
Town limits signs	Town liability	$ 300.00	1	Distinguishes Town liability points
PW property Unit1	Install vehicle barricade	$ 2,500	2	Non public property
Senator Street	Install vehicle barricade	$ 2,000	2	Public road and clear access to trail
Gates Ave	Southwest end clear vehicle access to trail	$ 2,500	2	Public road and clear access to trail

Conclusions and Notes:

1. These two roads contain no signage at present and pose a greater risk of vehicles (cars, ATV etc.) entering the trail and potentially causing pedestrian safety concerns.
2. There are several entry points to the trail systems within the town boundaries. Not all areas are practical for the installation of barricades or other devices. The areas noted are those of greater concern. Ultimately the Town of Middleton should review internal liabilities (obtain legal advice) before making additional decisions on this infrastructure. Additional signage, barricades or other devices and procedures may also be required.

Town of Middleton

Rotary Park

Overview

Rotary Park is the main community outdoor sports and recreational area consisting of tennis courts, basketball, and baseball and a walking and running track as the main activities. There are common use amenities like washrooms, horseshoe pits and enclosed lounging area, seating and a small playground. The majority of areas reviewed are in good condition with specific areas of repair required.

1.0 Washrooms

1.1 The roofing system is a prefinished metal installed approximately 5 years ago and in good condition. The masonry block walls contain cracks associated with movement, ice and general climatic conditions. The floors are concrete and in good condition.

Washroom structure

East wall

East wall

Cracks in east wall

2.0 Multi Use Structure

Drawings obtained dated November 2000 from Gordon Radcliffe Landscape Architects originally named this structure as the gift shop and Tourist Bureau measuring 30 feet x 40 feet and designed as an open market venue. The structure today is as it was designed with heavy wood beams, concrete floor and a shingled roof. The roof shingles have surpassed their life expectancy and should be replaced, there are several missing today. The concrete floors contain several cracks- non structural related. Continual monitoring to ensure they do not become a hazard to pedestrians.

West wall and corner

east roof- several shingle missing

Tower on roof- shingles missing

concrete floor cracks and water pond

West side roof several shingles missing

3.0 Multi Use oval track

The gravel track is in good condition and requires minor winter /spring maintenance to make ready for full summer use.

View of general road and track- maintenance required

4.0 Ball Fields

During our review annual spring maintenance was ongoing for irrigation and rolling after the winter snow melt. The fields appear to be in good condition.

5.0 Maintenance Building

The Sports and Recreation department operates the Rotary Park system with lawn mowers, rollers and other pieces of equipment. The operation tools and equipment are

stored on site in a building located at the southwest end of the property. The building is in good condition and requires minor repairs at the door and loading door areas.

5.11 Inside the building proper storage of petroleum products is not in compliance with the NS Motive Fuels Act. There are several open fuel storage cans, the lawn tractor was having maintenance performed on it with an open gas tank and the odours of petroleum products were very strong in general. Motive products are required to be stored in air tight sealed containers specifically designed for motive fuel storage. These products must be stored in a fire rated cabinet which contains self ventilation to remove excess fumes to the exterior.

5.12 Portable propane tanks are not permitted to be stored inside a building (NFC). They must be placed outside and secured.

Maintenance building

loading door needs minor repairs

Pedestrian door needs minor repairs

improper storage of propane tanks

6.0 Horseshoe Pits

Appear to be in good condition only requiring minor spring maintenance.

7.0 Basketball Court

The basketball court is in good condition requiring minor maintenance such as painting of the steel support structures.

Painting required

8.0 Tennis Courts

Minor maintenance required to the surface areas. Minor paint delaminating is a few areas.

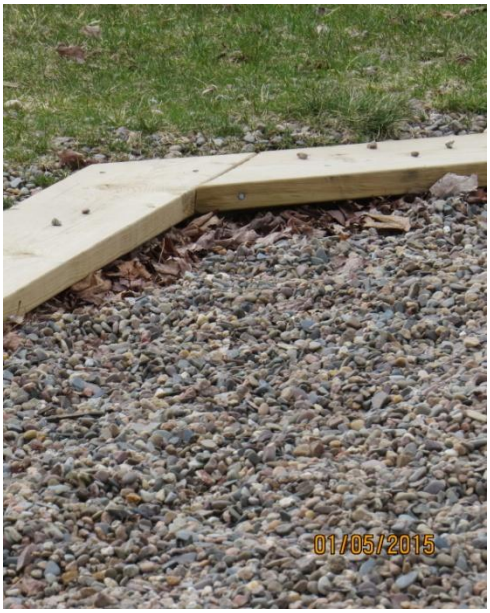
Paint flaking

Paint flaking

9.0 Small Playground structure

This structure appears to be in fair to good condition but is showing signs of aging. Several sections of the equipment require refinishing and refurbishing to ensure longevity. The structures themselves appear to be in good working order. The gravel enclosure requires minor maintenance to reset the gravel and remove the tripping hazards.

Main structure- Little- Tykes



re-grade gravel- remove tripping hazard

Typical pedestrian bench

Rust on structure

10.0 Parking areas

The parking areas are in good condition but do require maintenance after the winter snow melt. Several pot holes and lose garbage.

Fill gravel holes- general maintenance

11.0 Table 1

Area	Issue	Priority	Cost	Notes
Maintenance Building	Propane tanks	1	$ 500	Proper storage
	Motive fuels	1	$500	Proper storage
	Doors	2	$ 500	Bi-annual maintenance
Basketball court	paint	2	100	repair
Common open building	Roof	1	$ 7500	30’ x40’ + tower, damage to structure may occur if not repaired
Washrooms	Block wall repairs	1	$ 1,500	Repair cracks in concrete block
Playground	Exterior painting	2	$300	Bi-annual
	Replace structures	3	$ 5,000	Program- longer term replacement
Parking and roads	Repair gravels	2	$ 200	Re-grading, in house work, annual spring

Town of Middleton

Visitor Information Centre

Overview

This centre is located near the corner of Main Street with a civic address of 8 Bridge Street. The building is a free standing single storey structure measuring 23'-4" x23'-4". The structure rest on wood post and concrete blocks and is not used during the winter months.

The structure is a wood framed, painted cedar siding exterior with a sloped asphalt shingle roof. The main entry door is wood c/w an aluminum exterior screen storm door. The windows are wood construction and contain security grills to reduce vandalism.

There are small areas of concern which should be address which include the main entry wood door and wood frame has decayed, the wood soffit requires minor repairs, the concrete blocks supporting the structure have shifted. The flag pole system requires repairs and painting, the pole is slightly tilted.

Minor repairs to wood soffit required

replace wood door and wood frame

Concrete block footings have shifted

flag pole- adjust and paint

Costing and priorities

Table 1

Location	Issue	Cost	Priority	Notes
Front door	Replace decayed frame and door	$ 800	1	Safety and security issue
Wood soffit	Repair	$ 200	3	Non structural
Flag pole	Straighten and paint	$ 800	2	Visual, non structural
Foundation	Adjust supports	$ 1,000	1	Building has shifted, could become unstable

Town of Middleton

Swimming Pool

Overview

The outdoor swimming pool is located at 29 Gates Ave adjacent to the arena. The pool property contains a small concrete block building with tar and gravel roofing, poured concrete floor and wood interior framing and contains an oil fired heating system for hot water showers and pool water circulation.

The physical pool measures approximately 30 feet x 75 feet, the structure measures approximately 30 feet x 72 feet. The pool area contains additional space for pedestrians and visitors around the pool surface.

The commemorative plaque posted near the front entrance states constructed in 1967 as the year of construction. The building and pool areas are in poor condition and require extensive repairs. There are immediate safety hazards which need to be addressed, there are areas of structural concern which need to be assessed and repaired. A more detail report follows.

Building

- The concrete block constructed building is in poor condition with extensive amounts of block joint failure, stress delaminating, and stress crack flaws very visible.
- The tar and gravel roof system is leaking in 3 known areas, primarily the northeast end of the building (mechanical room areas)
- The fuel storage tank is a single layer steel tank not protected from leaks, no secondary containment

- The wood windows in the structure are poor at best- several were replaced this year.
- The wood roof structural component is weak, noted visibly in the mechanical room, noted verbally by Parks maintenance during this review and their own work forces replacing decayed window frames.
- Interior is well maintained for the age of the structure itself.

Pool area

- Various cracks and sections missing in and around the perimeter of the pool structure.
- Lifeguard safety stations in fair condition
- Visitor bleachers/stands fair at best, loose boards
- The chain link fencing appears in good condition

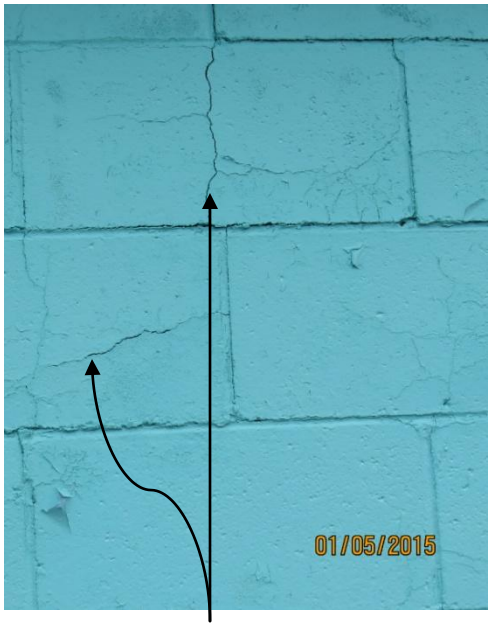
Pool

Table 1

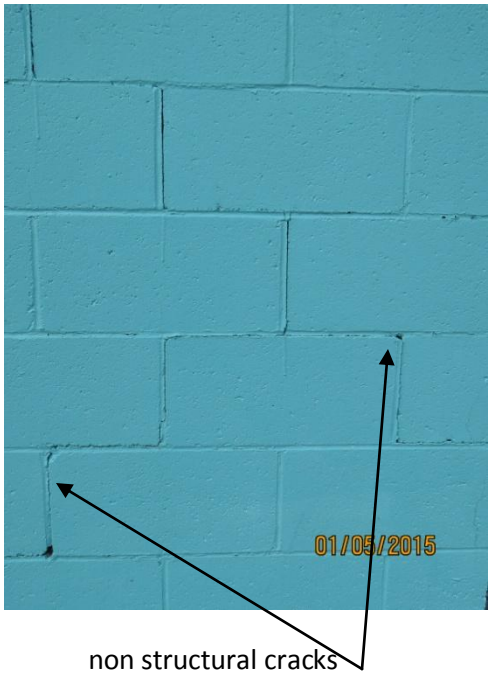
Area	Issue	Priority	Cost	Notes
Building	Structure	1	$ 8-10,000	Structural assessment (note # 3)
Fuel tank	Containment	1	5,000	Replace with double wall system, Code req. NSDOE
Roof	Condition	1	5,000	Leaking, repair, use hot rubber
			28,000	Replace roof tar and gravel
Pool perimeter	Concrete	1	2,500	Repair concrete, hazard
Mechanical room	Equipment	2	10,000	Equipment, old and poor condition
bleachers	structure	1	2,000	2 sets, repair, safety hazards

Notes:

1. The **building structural assessment is a priority 1** because of the extensive amount of structural cracks. Seam cracks, between concrete blocks are fairly common, structural cracks are those which extend across and through the physical blocks. 30+ structural cracks were noted.
2. The leaking roof is causing extensive decay to the wood framing supporting the roofing structure above. Constant leaks will decay the wood support structure and potentially cause total roof failure.
3. Costing noted does not include repairs to the concrete block building structure. The structural assessment is required before investing in repairs. The structural assessment may require additional works to be completed prior to physical block repairs.



Structural crack

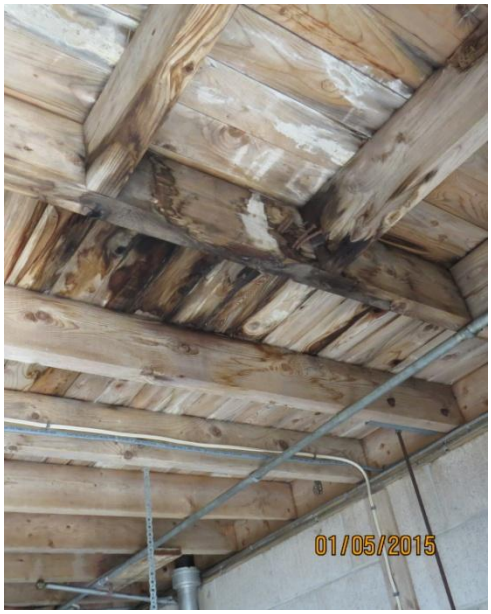


non structural cracks

Replace 909 litre single wall tank

typical pool perimeters

Pool parameter



Leaking roof

Leaking roof

Business Opportunities

Capital funding in Middleton is limited, unfortunately normal for most Towns within Nova Scotia but there are those towns that have shown economic prosper through business initiatives and marketing opportunities. Towns like Kingston/Greenwood, Lunenburg, Kentville/New Minas, Truro and Antigonish for example have been fortunate, to a greater extent, than other towns through marketing and planning.

Our research reveals a great amount of effort is placed in web marketing, web page advertizing and promotional benefits for small business opportunities. The Town of Middleton owns a great deal of undeveloped property waiting for the right business development and intern additional tax revenue. You are situated very close to major highways, the town itself offers opportunity, the adjacent communities require services and the Province needs development and growth.

As the Town develops and obtains growth the aging current infrastructure needs replacement or major upgrading to meet the current and future demands. The Town hall and Fire hall buildings for example are very aged and overcrowded and have reached their life cycle maturity. These two properties/buildings are the majority of town holdings (square footage area), the most visible and in the greatest need of replacement.

The Town generated a proposal to replace the fire hall with an elaborate non affordable design at a cost over $ 6 million on Brooklyn Street (development sign is posted today). The current capital budget just cannot afford such a development yet the need and demand is clear. To mitigate this demand the town needs to generate internal and external revenue opportunities to move forward with any new construction or major renovations to existing properties.

To obtain revenue key operational efficiencies are a must and with the amalgamation of “like” services under “one stop consumer shopping”. The majority of successful towns and business construct a central facility housing all public services, Town, Provincial and Federal. The public in general does not distinguish between the various agencies, and for that matter generally do not care who provides the service, just they need the service.

A development needs a key stakeholder (foundation client) to attract others. The Town Hall is generally the key stakeholder. We believe for example, amalgamating Town services/administration with Access Nova Scotia, RCMP, the Visitor centre, Canada Post, Veteran Affairs, Social Services and other alike, the public will generate a great amount of the revenue through partnerships and acceptance. Again for example, the Town purchases and constructs the facility, leases the various internal space areas for a fixed fee for a fixed period with renewal opportunities. This fixed fee generates the revenue for mortgaging the property, generates additional revenue for the Town through property tax and the town can escalate the lease each year with CPI to ensure continual cost escalations are recaptured and passed onto the various tenants.

Where do we go from here?

The theory of amalgamation has been proven, through various Federal and Provincial changes over the past several years, as a great cost savings measure and a “one stop centre” for the public. Eagle Project Management has been, and are involved in several renovation projects and new construction projects over the years specifically addressing amalgamation of like services to enhance delivery and reduce operating cost.

On a much larger scale than Middleton but still relevant is Halifax Regional Municipality. Over the past 3 years Halifax, in particular Dartmouth Alderney Landing, has been undergoing significant changes to amalgamate services. Today into year 3 of the 5 year plan, all HRM common services will be located under one roof, internal services share resources and equipment, Provincial and Federal departments have joined in the space sharing (Veteran Affairs, ACOA, Service NS, NS Library, HRM development for example).

The Town of Middleton needs to look at the long term big picture, market it and build it. The old saying, “if you build it they will come” is very true if consideration and upfront planning are involved. Do not construct a two storey facility if you are trying to secure a coffee shop or Access Nova Scotia or Service Nova Scotia or Veterans affairs, their standards are clear, ground floor entry. A dentistry, legal firm, family doctor, merchandise company or technical (IT) companies prefer upper floors and not ground floor.

OK so who moves where, who can be beside each other and what benefits can be foreseen by taking certain measures. The greatest demands today is the fire department and in particular the lack of space for the department. Our suggestions are as follows and with all change may not be totally accepted. We present these as ideas for discussion; obviously the Town Council of Middleton will need to make the difficult decisions. We will support you in any direction you want to proceed.

1. The pool is in very poor condition and will require substantial capital funding to replace a service which only operates 3-4 months of the year. Close and decommission the pool.
2. The fire hall is very undersized and need of extensive repairs- re-utilize, move fire department.
3. Develop a marketing plan for the vacant property, upgrade the town web site, seek and obtain potential business owners to the area. Seek the businesses that support NSCC, Tim Horton’s, NSLC, the automobile dealerships, Sobeys’/TRA and the other National chains or large market companies’ already in town or adjacent to town.
4. Seek and obtain development funding from/within Federal and Provincial and to another extend Municipal development funding. Create a professional business plan for future expansion with economic growth which identifies and attracts local business with very attractive benefits.
5. Create a goal and a vision for the project- what benefits, what Town cost savings can be achieved, what projected revenue, what public and operational conveniences will be recognized, what benefits the actual town patrons will physically see and obtain.

The author of this report has not reviewed the original fire hall proposal to comment on design and operational efficiencies. A review of the current over priced design should be completed before any physical development or marketing plan is put into action. The majority of tenants will be looking for

modern yet efficient space to ensure their own investment is protected, their employees are comfortable, the property has exposure and their own cost can be projected and forecasted properly. To base rate the rent per month after year one with relevant CPI is a common Federal and Provincial tactic well recognized and accepted within the industry- also predictable to a great extent (historic information).

To house common services you must also consider specifics for each service, for example the fire department. As an essential service they also have very specific requirements and standards let alone they are physically loud. However; they are not generally visited by the public, and in the case of the Town being a fully volunteer department, they would experience less public visitors. EMS services again non public and loud due to the nature of their business.

Community services, Veterans, social services and certain Town administrative services require ground floor public access and visibility. Town accounting, Council, recreational service, Public Works and other administrative functions supporting each department could be located on an upper level or other non public area.

The cost of a new construction should be limited to 3.0-4.0 million- why, comparisons to the Town of Berwick, Kingston, Digby and Windsor community centres which house the fire departments. Public records, old tenders and building permits, indicate these properties were constructed within these range values with Berwick being the most expensive at 3.3 million. However; I/we believe that other Towns missed opportunities to combine like services (EMS/RCMP/EMO for example). These towns are still operating other properties at additional cost.

Current properties for sale or lease in Middleton- web and real-estate search

1. 25-33 Commercial Street @ $ 549,000 for 10,604 sq. Ft which include a 25 vehicle parking area maintained by the town.

2. 68 Victoria Street, $ 110,000 for 6.68 acres. Contains several buildings in various stages of decline. Currently used as storage.

3. Several small properties and mixed use properties not included as they are considered not meeting current needs let alone future need.

4. Several acres of vacant virgin land owned by the Town of Middleton.

5. Several smaller sections of land generally not viable for commercial usage.

Unfortunately with very little commercial space for sale or lease currently on the market, the Town of Middleton has few choices. This is both a negative for relocations but a positive market.

The Town Hall (including RCMP) measures approximately 6270 square feet on 2 floors total and the Fire hall (including community centre) measures approximately 6436 square feet on a single floor.

Scenario discussion

1. Relocate town hall to 25-33 Commercial Street
    a. Space is adequate
    b. Parking good
    c. Public visibility good
        i. Existing town hall- what do we do with it?
        ii. Cannot expand fire hall into town hall, wrong configuration, structurally not suitable for fire station activity
        iii. Option: sell the property
        iv. Cost for fit up of new space meeting current codes, very rough estimate, have not seen mechanical systems or physically reviewed the structure, potentially $ 150-200/sq. ft. x10,604 = 1.6 to 2.1 million
        v. Purchase cost $ 549,000 + fit up cost
2. Move fire station, leave Town Hall
    a. Move where?
    b. Cost of new construction 3 million + land
    c. Benefits to town patrons and the fire station operations in general
    d. Funding- likely partial through provincial and municipal channels
        i. Negative- what to do with existing fire hall and community centre?
        ii. Can it be divided from Town Hall and sold
        iii. Any potential departments/agencies who could be interested in renting existing fire hall?
3. Design/build/lease
    a. Generally a preferred method by both developers and leases
    b. Lessor cost recovered over term of lease-generally 15-20 years
    c. Lessee cost for fit up only, average 20-30 % of total construction cost. i.e.: construct a building for 4 million, Town of Middleton investment, 1 million
    d. Pro-generally the lessee can dictate design criteria and layouts

e. Negative- Town does not own the asset, rents with fixed monthly and CPI escalations
f. Pro- the Town already owns the land
g. Negative- dispose of Town hall and fire station with potential positives= revenue which can offset fit up cost in new location.

4. Demo Town Hall, expand fire hall/reconfigure common space
    a. Demo cost- $ 55,000
    b. Add washrooms- $ 125,000
    c. Add extension to fire hall for trucks and storage $ 2 million
    d. Reconfigure existing space
    e. Upgrade for code compliance $ 400,000
    f. Estimated total cost 2.7 million

The noted scenarios are based on the author's review of current assets listed within the Town of Middleton boundary lines posted and or found through interviews and web searches. This may not be a total listing and may change over time. These comments are based on our findings between June 1 and June 10, 2015.

Recommendation based on findings and associated cost

Option 3 Design/Build

Design /build cost estimate $ 3.5-3.9 million

Fire Hall, Town Hall, RCMP and other common services, Veterans, Service Canada, Social Services, Visitor Centre, etc.

Town of Middleton investment $ 900,000 to 1.3 million- fit up cost

Lease term fixed 15 years with 5 year renewable option.

Negotiate lease to purchase option at end of lease term at a fixed value

Suggestive design:

20 to 24,000 sq. Ft. Office space over 2 floors (12,000 for Town Hall)

Fire station bays- 4 (divided space from office portion, separate driveway.

RCMP operations, obtain fixed term signed lease

Additional Provincial and/or Federal tenants

Additional private/public tenants

Closing

This document was generated for the sole purpose of the Town of Middleton and shall not be distributed or copied without written consent of the Town of Middleton and the author Eagle Project Management Inc.

Contents of this report will be held in strict confidence by Eagle Project Management Inc. (EPM). This report is limited to the time and duration of the events and collection of the information and does not reflect any actions taken before or after the dates specified within this report. The photographs contained within this report are dated and reflect the noted concerns identified and received on the dates noted.

Formal distribution and presentation of the report is one hard copy and one electronic copy issued on July 6, 2015 to Town Council.

For any clarifications, comments or concerns please address all inquiries to:

Eagle Project Management Inc.

Peter Smith, President

201 Freshwater Trail

Dartmouth, NS

B2W 0G5

Email: eaglepm@ns.sympatico.ca

Eagle Project Management Inc. offers full design services, property and development reviews, estimating, construction and project management services as our key functions. Please do not hesitate to contact us for any renovation works, demolition works, scope developments, new construction or design criteria.

It has been a pleasure working with the Town of Middleton.

Thank you and we look forward to working with you on other projects and services.