BUILDING CONDITION ASSESSMENT

3/14/2025

91 Sunset Drive, Fredericton NB

[Non-invasive visual inspections and investigations only]

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DAYTON ENGINEERING Ltd.

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24013 – 91 SUNSET DRIVE, FREDERICTON

GENERAL DESCRIPTION

The property is located at 91 Sunset Drive, Fredericton NB. The lands are of fairly level elevation safely above the posted flood elevations for the area. The lands are further improved with a three-story wood framed Residential (Part 9) multi-unit residence of senior citizen occupancy.

The building is comprised of 2 exit stairwells, 24 - 2-bedroom apartment units, laundry facilities on each level, a central electrical entrance room, and an under-stair water entrance. The building is situated on conventional concrete frost-wall foundations with a ½ basement and appropriately sized egress windows elevated on the basement level.

This building is clad with shingle roofing (Mansard roof style) and a combination of Brick & Mortar and vinyl siding.

The building is non-sprinklered, reported as 3283 m^2 (38567 ft^2) in footprint and 8 M (26ft) in height.

The building has basic Mechanical and Electrical systems with in-unit NB Power rental hot water heaters and electric baseboard heating. There is a central corridor Air-Conditioning unit located on the roof which services all level corridors, but no air-conditioning or fresh-air systems are present within rental suites.

The building is situated within the City of Fredericton's zoning By-Laws and is currently classified as MR-2 (multi-residential). The subject property is found to be in conformity with the current zoning with adequate setbacks, green space, and parking present.

CONVENTIONS USED IN THIS REPORT

The following conventions have been used in this report:

Non-Code conforming: denotes current conditions present which are in violation of the presently adopted National Building Code of Canada 2015 Edition and current amendments and applicable local codes & standards.

Minor Concern: denotes a system or component which does not meet present day standards and should be considered for upgrade or replacement. Minor concerns do not lend to degradation of structure or pose a serious risk to the building or its tenants in the immediate future but may eventually be required.

Major Concern: a system or component which is considered significantly deficient, may lead to structural damage over time, or is unsafe. Significant deficiencies need to be corrected and may involve significant expense

Life & Safety: denotes a condition that is unsafe, is non-compliant for Barrier Free standards, or is a fire code violation and in need of prompt attention.

Improve: denotes improvements which are recommended but not required to meet the intended use and occupancy standards.

Monitor: denotes a system or component needing further investigation and/or monitoring in order to determine if at risk or if repairs are necessary.

Recommended Testing: denotes an area of concern which needs verification due to materials discovered or based on age of construction which can only be verified by scientific testing methods.

CONDITION REPORT ITEM SUMMARY

The following is a synopsis of the potentially significant concerns, non-conformances, and improvements that should be budgeted for. Other significant improvement, outside the scope of this inspection, may also be necessary. Please refer to the body of this report for further details on these and other recommendations.

INSPECTION CRITERIA

The goal of this inspection is to provide a complete synopsis of the operations, conditions, and general function of the facility and to identify issues of safety, code related non-compliance, structural concerns, issues with building enclosure, and identify remedies necessary to provide a code compliant facility to a commercial level standard for quality and performance.

Purpose

The purpose of this study was to provide observation and report on the physical condition, areas of concern, code and safety non-conformances, and overall condition and maintenance of the aforementioned property. This report addresses items that are believed to be significant for the continued operation and lifespan of the facilities in its current usage and occupancy classification.

Scope of Investigations

The Scope of investigation was limited to a visual non-invasive inspection of all accessible areas of the facility. The investigation was thorough and encompassed tenancy spaces, common areas, mechanical and electrical systems, and exterior components. The structural bearing systems were identified, structural components were inspected where accessible, and code conformance was investigated. Environment was investigated for areas of moisture, humidity, and temperature concerns as well as any signs of contamination or infestation. Where concerns were identified, potential causes and recommended solutions are provided. RF and IR Equipment was utilized to measure humidity in air and walls as well as dewpoints and temperature variance to help identify areas of risk that may affect air quality and building condition.

Dayton Engineering Ltd. has prepared a single comprehensive Building Condition Report for the identified structure. Along with identifying present building conditions, suggestions for repairs and upgrades of selected items that are not non-compliant, or items that relate to occupancy and use standards, are also included. Suggestions made typically add to the life span of the structure, improve the safety of operations, or improve occupancy standards.

No physical testing has been performed on any materials, and the scope of this investigation was strictly non-invasive unless noted otherwise.

REPORT OVERVIEW

A comprehensive investigation and random sampling of the building located at 91 Sunset Drive, Fredericton, was performed for the purpose of providing insight into quality, condition, and code conformance of the facilities.

The facility was constructed circa 1978 as a multi-residential unit facility. The current occupancy is classified as a senior citizen occupancy and should be given close scrutiny in areas of life-safety due to the nature of the occupancy. The building is not sprinklered and falls under Part 9 of the 2015 NBCC due to its number of floors and building footprint.

A partial code review was performed based on the presently adopted 2015 code for this region. Some minor contraventions were noted that could impact on the use and operation of this facility in its present configuration in the event of any City Permit required major renovations or repairs.

The overall facility is well maintained with regular maintenance. The non-conformances identified are not considered to be detrimental although there are associated costs that could arise should compliance be enforced.

The following is a summary of findings identified during performed inspections. Further explanations and details are provided throughout the report in their respective divisions:

PROJECT SUMMARY

Property Identification	**York Care Center Apartments**
Street Address	**91 Sunset Drive**
City, Province	**Fredericton, New Brunswick**
Primary Use:	**Senior Citizen Apartments**
Year Built & Age	**1978, 47 years old**
Number of Stories	**Three**
Building Footprint	**669 m^2 (7200 ft^2)**
Number of Units	**24 - 2 Bedroom**
Reported Occupancy	**100%**
Reported Site Area	**3283 m^2 (38567 ft^2)**
Flood Zone	**No**
Seismic Zone	**No**
Parking	**Adequate**
Out-buildings	**NA**
Superstructure	**Wood Frame**
Basement	**Conventional Concrete Frost Wall**
Exterior Façade(s)	**Brick, Vinyl Siding**
Roof(s)	**Asphalt Shingle**
Heating	**Electric Baseboard**
Air-Conditioning	**Common area rooftop AHU**
Hot Water	**Electric (NB Power Rentals)**
Electrical Wiring	**Copper**
Fire - Sprinkler	**None**
Fire Alarm System	**Addressable**

INSPECTION OVERVIEW

ITEM	Excellent	Good	Fair	Poor	ACTION	IMMEDIATE NEEDS	8 YR CAPITAL RESERVES
SITE IMPROVEMENTS							
Topography		X			NM		
Storm Drain System		X			NM		
Parking Pavement, Curbs & Gutters			X		RR	$ 2,500.00	$ 28,000.00
Sidewalks & Stairs				X	RR		$ 7,600.00
Utilities		X			NM		
Landscaping			X		NM		
Site Lighting		X			NM		
Site & Building Signage		X			NM		
STRUCTURAL SYSTEMS & BUILDING ENVELOPE							
Foundations		X			FI		
Structural Systems		X			FI		
Exterior Walls / Envelope			X		FI		
Windows & Frames				X	RR		$ 75,000.00
Exterior Doors & Frames		X			NM		
Stairs (Interior & Exterior)		X			NC		
Ancillary Decks / Roof Canopies		X			NM		
Roof Coverings		X			NM		
Roof Drainage		X			NM		
MECH, ELEC, PLUMBING SYSTEMS							
Heating & Ventilation		X			NM		
Air Conditioning				X	RR		$ 23,000.00
Electrical System			X		RR		$ 35,000.00
Potable Water Distribution System		X			NM		
Water Heaters		X			NM		
Faucets & Fixtures			X		RR		$ 40,900.00
Gas Distribution System					NA		
VERTICAL TRANSPORT CONVEYING SYSTEMS							
Elevators / Escalators					NA		
INTERIOR ELEMENTS							
Interior Finishes			X		NM		
Floor Coverings			X		RR		$ 40,100.00

LIFE SAFETY & BARRIER FREE							
Parking, Signage & Ramps		X			NM		
Unit Accessibility				X	NA		
Code Compliance				X	IR		$ 28,750.00
Emergency & Fire Protection		X			NM	$ 2,850.00	
BASE COST ESTIMATES						$ 5,350.00	$ 278,350.00

***Action: NC = Non-Conforming, NM = Normal Maintenance, IR = Immediate Repair, RR = Replacement Reserves, NA = Not-Applicable, FI = Further Investigation, NI = Needs Improvement**

REPORT SUMMARY

NBCC 2015 CODE RELATED ITEMS

Non- Code conforming and Life Safety Concerns:

- Water entrance service room requires 1hr fire rating with a rated access door.
- Common area air conditioning does not conform to minimum standards for fire safety.

- Stair headroom clearance non-conforming
- Stair railing clearance non-conforming
- Entrance doors and Frames not ULC rated, recommend changing to "Safe-n-Sound" doors
- R-values are non-conforming to present NBCC 2015 building code. R-Value Improvement is recommended
- Fresh air HRV system is recommended in each unit and common areas (See mechanical commentary)
- Investigate walls beneath window for signs of rot or water infiltration
- Replace Unit Entry doors with ULC Rated Entries (Recommend Safe-n-Sound doors)
- Replace stair-well door with new properly rated doors and frames with self-closing hardware.
- Install appropriate fire barriers to all penetrations of rated rooms service.
- Accessibility and Barrier free requirements are not satisfied

Minor Concern:

- Wood decks are recommended for replacement and should be considered in the 3–5-year capital budget
- Investigation of buried structural support columns to verify structural integrity is recommended.
- Parking surface patching and sealant, recommend budgeting resurfacing within 5 years
- Pipe insulation should be installed over exposed hot and cold-water lines for efficiency and to prevent condensation.
- Common area air-conditioning unit needs replacement with compliant equipment and installation
- Investigate wall to ceiling separations visible in various units primarily along living room to kitchen walls.

Major Concern:

- Further investigation of foundation corner cracking and movement is recommended to ensure that the exterior wall assembly is not further structurally compromised.
- Mansard roof facing shingles due for replacement
- Rear portion of shingle roof needs replacement
- Roof leak in vicinity of AHU curb needs immediate repair
- Exterior windows require immediate maintenance with added sealants
- Upgrade worn receptacles
- Investigate observed wall cracking for possible structural movement
- Investigate for water infiltration in areas of higher moisture content

Improve:

- Cover painted plywood Mansard fasciae with metal to protect and extend life
- Vinyl Siding should be cleaned and treated for UV protection and inspected annually for sealants and degradation.
- Vinyl windows should be budgeted for replacement
- Panel upgrades may be required as breakers become more difficult to obtain for older systems.
- Fixture upgrades should be budgeted for ~ 75% of the facility.
- HRV fresh air systems are recommended for common areas
- Upgrade flooring in non-renovated units

Monitor:

-

1.1 DESCRIPTION OF STRUCTURE

Foundations:	Conventional Concrete Frost Wall
Structural Framing	Wood Frame
Floor Structures:	Wood Frame
Wall Structures:	Wood Frame
Roof Structures:	Engineered Wood Truss

STRUCTURE OBSERVATIONS

General Comments

The Building Structure was constructed circ 1978 and is classified as a Part 9 (residential), 3 Storey, non-sprinklered wood frame structure. The concrete foundations are constructed as conventional concrete frost-wall with insulated interior wood stud knee-walls (See FIG 1.1, 1.2). The foundation walls have very limited visibility with (~6" Exposure) in most areas. Several foundation cracks were noted around the perimeter with visible past repairs made to the foundation with "tar" sealant (See FIG 1.3). Foundation cracking was noted at consistent intervals with no visible differential movement which is common with un-reinforced concrete walls. There is a cracked foundation corner on the rear of the structure which has settled and led to cracking through the masonry veneer (See Fig 1.4). This requires monitoring for continued settlement and shoring if additional settlement occurs.

The roof system was initially a flat-roof wood truss system. This was altered to create a Mansard roof to match the adjacent property some time ago (estimated to be in the early 2000's. The new Mansard style wood truss supports appear to be aligned with corridor bearing walls and therefore should not exceed the original roof design parameters. There were no concerns noted in the revised framing details.

There are wooden decks framed at each of the upper units which are carried on exterior wall framing with anchored ledger boards and on structural steel columns for the outer support line. The wood framing is deteriorating with signs of visible rot and water saturation (See FIG 1.5, 1.6. The structural steel support posts appear to be buried (See FIG 1.7) rather than bearing on piers which greatly reduce their life span. Investigation is recommended to ensure the buried columns remain structurally sound.

The rear sidewalk and entry landing is badly fractured with significant separation (See FIG 1.8). Complete replacement is recommended.

There were no further significant structural concerns noted beyond those mentioned above.

LIMITATIONS OF STRUCTURE INSPECTION

As per the identified scope of this inspection, this is a visual inspection limited in scope by (but not restricted to) the following conditions:

- Structural components concealed behind finished surfaces could not be inspected
- Only a representative sampling of visible structural components was inspected
- Engineering or architectural services such as calculation of structural capacities, adequacy, or integrity are not part of a BCR (Building Condition Report).

Structural Observations & Recommendations

- Further investigation of foundation corner cracking and movement is recommended to ensure that the exterior wall assembly is not further structurally compromised.
- Wood decks are recommended for replacement and should be considered in the 3-5 year capital budget
- Investigation of buried structural support columns to verify structural integrity is recommended.

Fig 1.1

Fig 1.2

Fig 1.3

Fig 1.4

Fig 1.5

Fig 1.6

Fig 1.7

Fig 1.8

1.2 DESCRIPTION OF ROOFING

Roof Covering: Asphalt Shingle

Roof Flashings: Aluminum flashing & Drips

Jacks and Boots: Rubber

Method of Inspection: Visual & Thermal

ROOFING OBSERVATIONS

General Comments

The roof assembly is a shingled 'Mansard' style roof system (See FIG 2.1). Closer investigation revealed the structure was originally a tar & gravel flat roof system (See FIG 1.1) which was modified with an added upper truss assembly to create the "Mansard" style. This was accomplished with engineered wooden trusses bearing on exterior perimeters and corridor support walls (See FIG 2.2). The roof is currently an asphalt shingle membrane. Maintenance advised there were recent upgrades to the roof assembly. Visual investigations revealed the road-side roof surface appears fairly new but the rear side appears to be older with signs of degradation along the roof valley and surrounding area (See FIG 2.3, 2.4). There were leaks identified in the vicinity of the rooftop AHU (See FIG 2.5) which are damaging the roof sheathing. Exposure to moisture appears to have been occurring over a long period and attempts have been made to minimize water damages (See FIG 2.6).

The facing of the Mansard roof is due for replacement with many broken and missing tabs with very visible curling signaling breakdown of the asphalt membrane (See FIG 2.7 – 2.8). The roof membrane has a 25 year manufacturers projected life span when installed and maintained in accordance with the manufacturers recommendations. The recently replaced portion of the roof should be outside the projected capital reserve period. The remaining portions of the roof are in need of replacement and should be scheduled for replacement this season. The leaking portion of the roof should be addressed immediately to prevent further degradation of the roof sheathing and framing.

The roof venting is present (See FIG 2.9), however with the double roof assembly the venting may be somewhat compromised. Due to the enclosed lower roof assembly, proper verification of the venting was not possible.

Soffits have perforated venting (See Fig 2.10) and are in acceptable condition. Mansard fascia's remain as painted plywood which is recommended to be covered with more durable product (ie metal flashing) is recommended before plywood degradation is beyond reasonable repair.

Roofing Observations & Recommendations

- Mansard roof facing shingles due for replacement
- Rear portion of shingle roof needs replacement
- Roof leak in vicinity of AHU curb needs immediate repair
- Cover painted plywood Mansard fascia's with metal to protect and extend life

Fig2.1

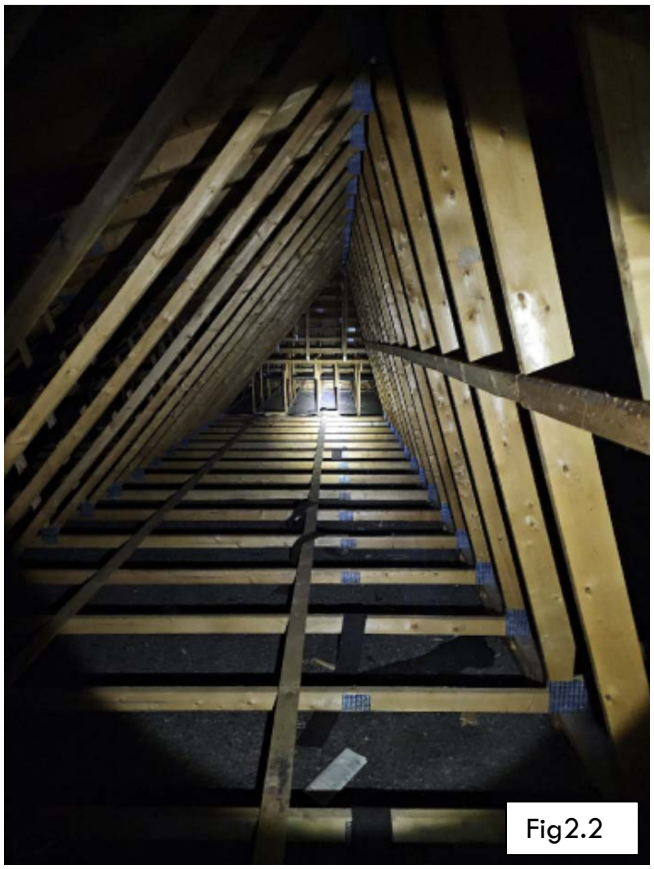

Fig2.2

Fig2.3

Fig2.4

Fig2.5

Fig2.6

Fig 2.7

Fig 2.8

Fig2.9

Fig2.10

1.3 DESCRIPTION OF EXTERIOR

Wall Covering:	Combination of vinyl siding, Brick Masonry, and asphalt shingles
Eaves, Soffits, and Fascia's:	Vented aluminum/vinyl soffits, plywood fascia's and eaves
Window/Door Frames and Trim:	Vinyl windows, aluminum entrances
Parking & Drives surfaces:	Asphalt parking surface
Surface Drainage:	Sloped to Catch-basins

EXTERIOR OBSERVATIONS

General Comments

The exterior façade is comprised of primarily split face concrete brick masonry with panels of vinyl siding accents. The façade's appear to be in generally good condition with the exception of corner cracks noted under the structural commentary. The brick masonry is well pointed with proper rain-screen and weeping vents (See Fig 3.1) but could benefit from a good cleaning and sealing. The vinyl siding also could benefit from a good cleaning and the vinyl to masonry joints appears poorly caulked and require sealant (See Fig 3.2).

Soffits and fascia's are covered under roofing commentary.

Exterior main entrances is a commercial aluminum entrance with side-lites (See FIG 3.3). The rear exit is a single aluminum door and frame. Both entrances were found to be operating as intended..

Windows are residential style Vinyl sliders manufactured circa 1991. Vinyl windows have a recommended 30 year life span and are therefore beyond their projected life span. Although the windows remain in acceptable condition and are not showing any signs of failure, they are not compliant with current codes of practice (NECC and NBCC 2015). Window sealants have also failing and are in need re-sealing with a good quality Poly Urethane sealant (See FIG 3.4).

The frost-wall foundations were found to mostly protrude above grade the required 150 mm. Grading was found to be minimal but appears adequate.

Sidewalks were found to be in weathered but functional condition (See FIG 3.5). Some portions of walkway have been replaced to maintain a level surface (See FIG 3.6). The rear stair and landing was found to be in very poor condition and in need of replacement (See Structural commentary for stair landing).

Parking surfaces are constructed of conventional asphalt pavement. The asphalt is showing signs of degradation with some significant cracking and differential settlement in isolated areas (See FIG 3.7). Surfacing should be repaired with asphalt cut-out and patching of badly broken areas, Remainder of surfaces should be crack-sealed for longevity (See FIG 3.8).

Exterior Recommendations

- Exterior windows require immediate maintenance with added sealants
- Vinyl Siding should be cleaned and treated for UV protection and inspected annually for sealants and degradation.
- Vinyl windows should be budgeted for replacement
- Plywood fascia's are recommended to be covered with metal to prolong life-span
- Parking surface patching and sealant, recommend budgeting resurfacing within 5 years

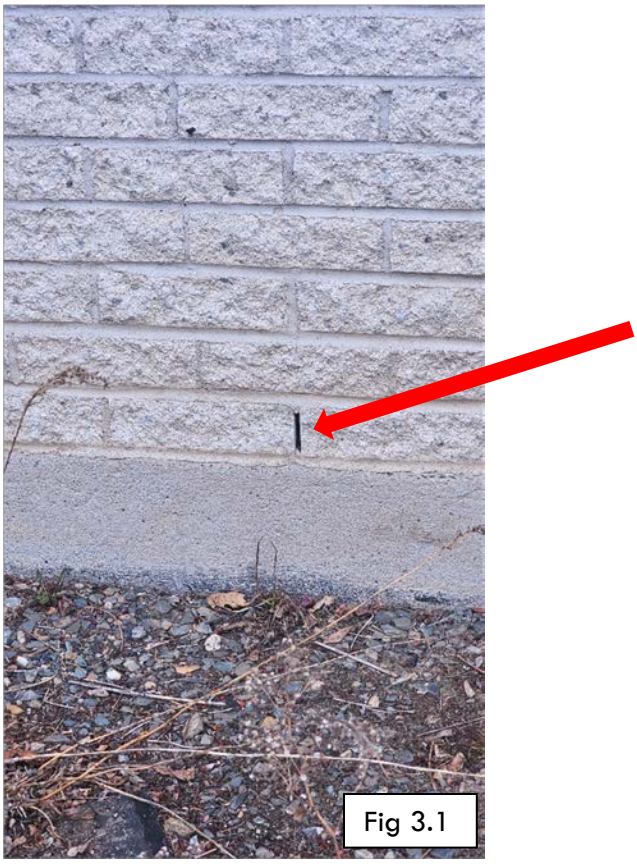

Fig 3.1

Fig 3.2

Fig 3.3

Fig 3.4

Fig 3.5

Fig 3.6

Fig 3.7

Fig 3.8

Fig 3.9

Fig 3.10

1.4 DESCRIPTION OF ELECTRICAL

Size of Electrical Services: **240 V 600A 3PH**

Service Conductors: **Nu-Al**

Service Grounding: **U.G. Plates/Rods**

ELECTRICAL OBSERVATIONS

The building electrical system is supplied from a pole mount transformer to North side of the building. The main service is a 120/240V 600 Amp 3Ø service (See FIG 4.1). The building contains 24 individual meters (See FIG 4.2) and one House meter (See FIG 4.3). The service was installed Circa 1977 (See FIG 4.4). The main entrance is located on the North side of the facility in an electrical room serviceable only from the lower corridor.

Each tenancy is serviced through a sub-panel fed from the electrical room.

The wiring is modern properly rated material (See FIG 4.5) where visible and appears to be well managed throughout with labels, protected and concealed wire, and secured junctions.

The service panels and sub-panels were randomly inspected and verified for proper wiring (See FIG 4.6) and no non-conformances were identified. Unit sub-panels are of type that is no longer readily available and may be necessary to upgrade as parts become unavailable.

Devices were checked at random, GFI's were present in washrooms. Various randomly checked plugs were found to be poorly secured with worn and loose plug inserts.

The electrical room penetrations appeared to be sealed and no major non-conformances were noted.

Electrical Observations &Recommendations

- Panel upgrades may be required as breakers become more difficult to obtain for older systems.
- Upgrade worn receptacles

Fig 4.1


Fig 4.2


Fig 4.3

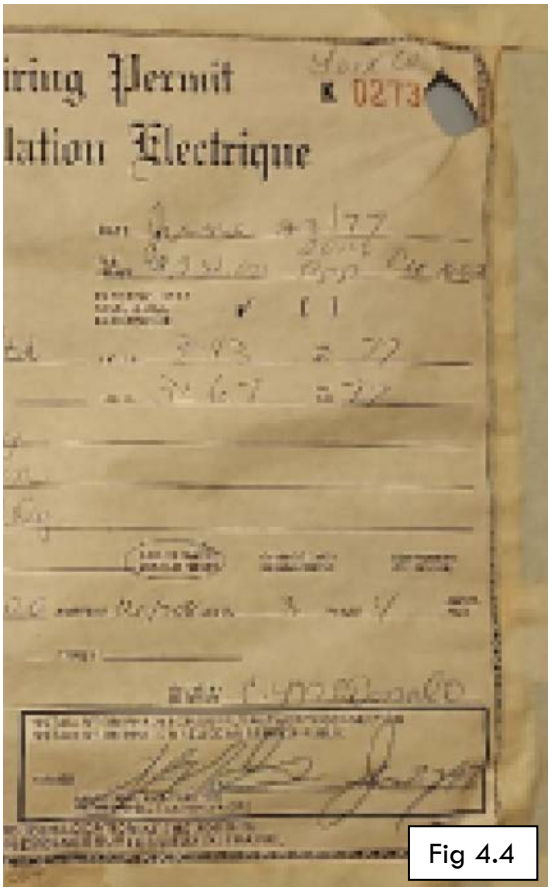

Fig 4.4

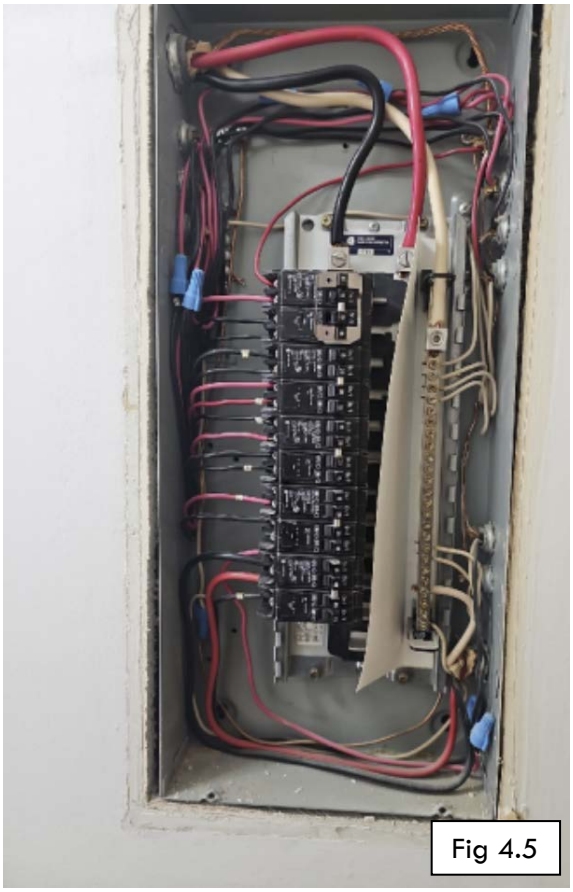

Fig 4.5

Fig 4.6

Fig 4.7

1.5 DESCRIPTION OF PLUMBING

Water supply source:	**City of Fredericton Serviced**
Service Pipe:	**Copper**
Service Entrance size:	**1" to 3/4" main supply**
Waste system:	**City of Fredericton Serviced**
Hot Water:	**Electric (NB Power Rentals)**
Water entrance location:	**Service Room beneath stairs**

PLUMBING OBSERVATIONS

General Comments

The domestic water supply and waste service for the overall complex is provided via City of Fredericton Servicing (See Fig 5.1). The scope of this investigation was limited to visual observation only. Water service is supplied through domestic copper piping where visible and shut-off valves were identified but were not tested (See Fig 5.2-5.3). The water meter testing was current and the certificate was present (See Fig 5.4).

Waste piping is believed to be Cast Iron below grade and converts to primarily copper above grade (See Fig 5.5). Vent piping is also Copper (See Fig 5.6). Venting was extended through the new Mansard roof with ABS piping (See Fig 5.7) and some units have had plumbing converted to ABS Piping (See Fig 5.8).

Plumbing fixtures were identified as a mixture of original (See Fig 5.9, 5.11) and replacement fixtures (See Fig 5.10). The original equipment is of poor aesthetic condition but remains functional.

The rental units domestic hot water is fed from individual 220V 40 Gal NB Power rental hot water heaters (See FIG 5.13) located in hallway closets in each unit. Shared laundry facilities contain individual NB Power HW heaters also (See FIG 5.14).

There was no insulation present on hot or cold-water lines which can result in condensation damages and poor efficiency with heat loss. Pipe insulation is always recommended.

The water entrance is located beneath the exit stairs. This area is not properly rated for fire protection, it does contain the proper rated access door, and penetrations are no protected.

Plumbing System Recommendations

- Fixture upgrades should be budgeted for ~ 75% of the facility.
- Pipe insulation should be installed over exposed hot and cold-water lines for efficiency and to prevent condensation.
- Water entrance service room requires 1 hr fire rating with rated access door.

Fig 5.1

Fig 5.2

Fig 5.3

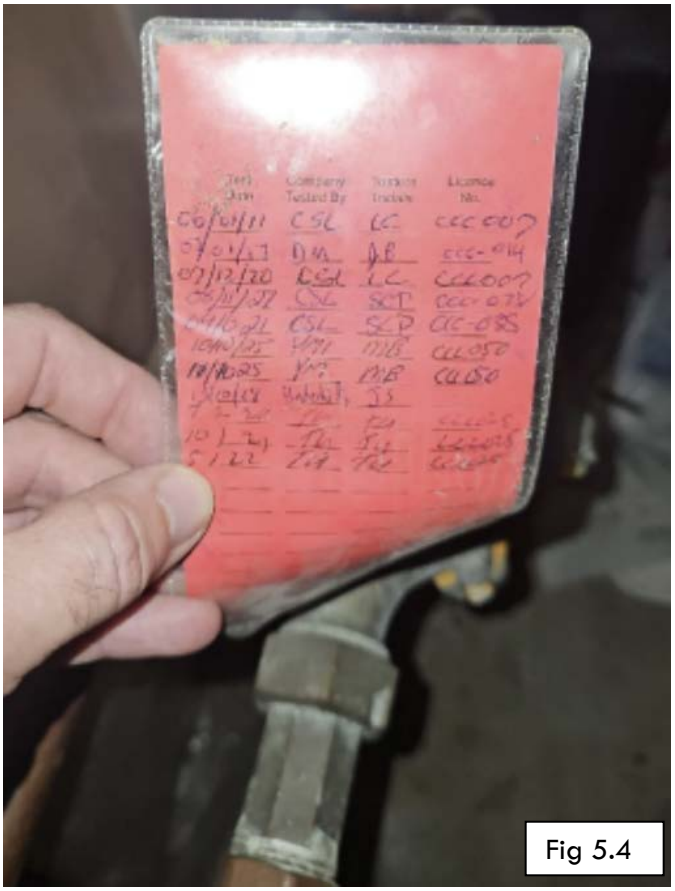

Fig 5.4

Fig 5.5

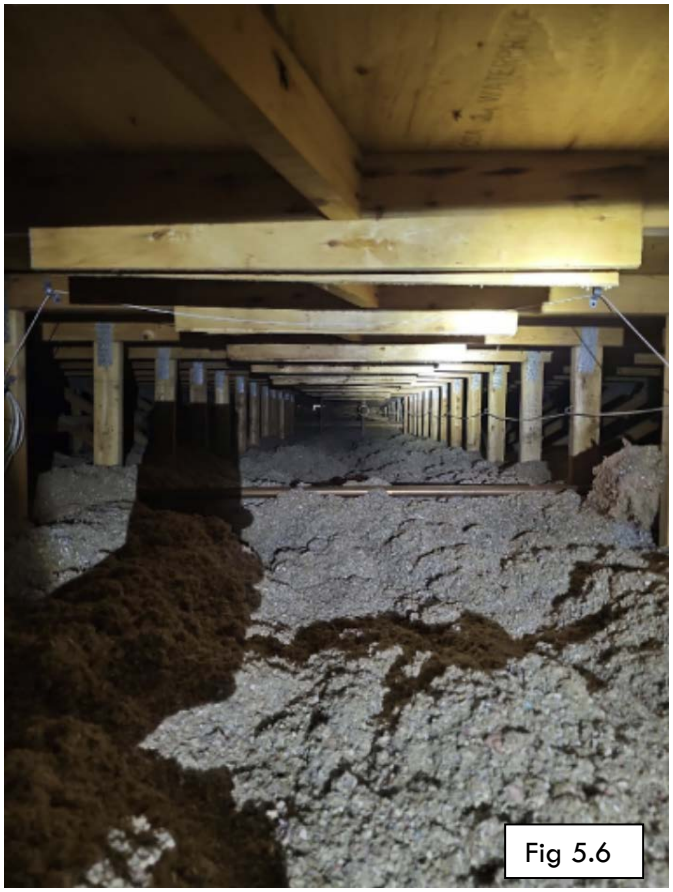

Fig 5.6

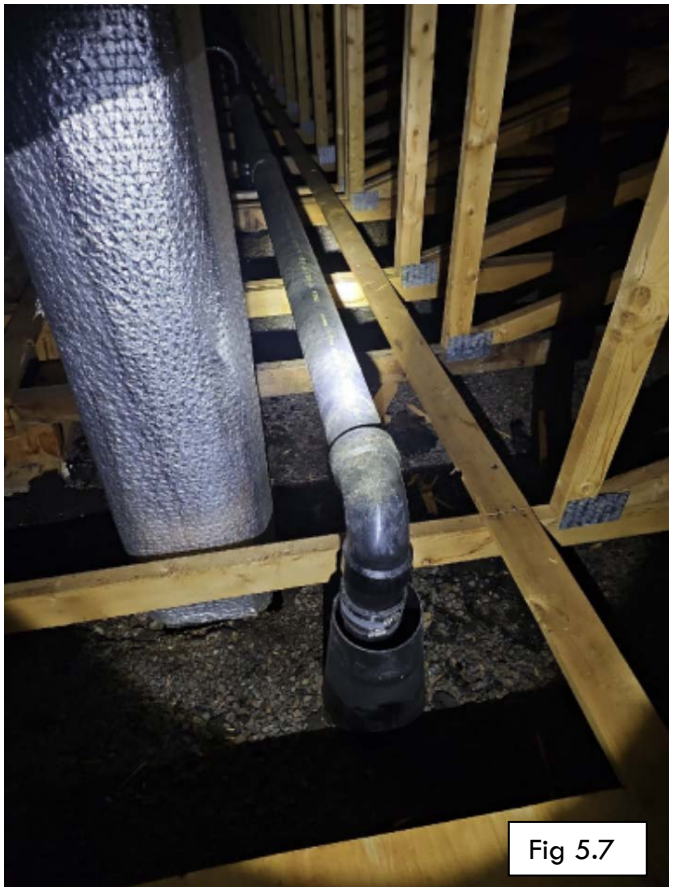

Fig 5.7

Fig 5.8

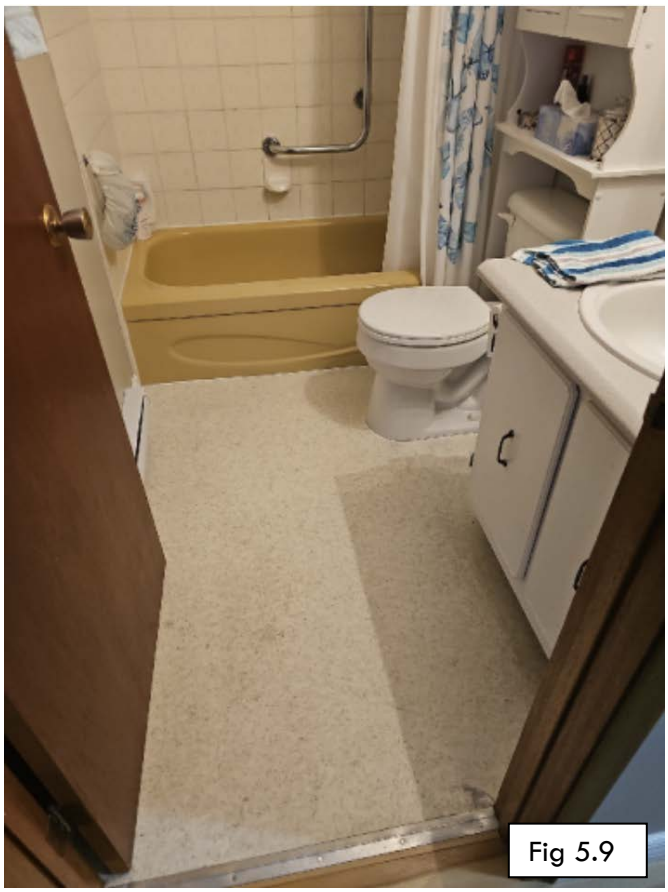

Fig 5.9

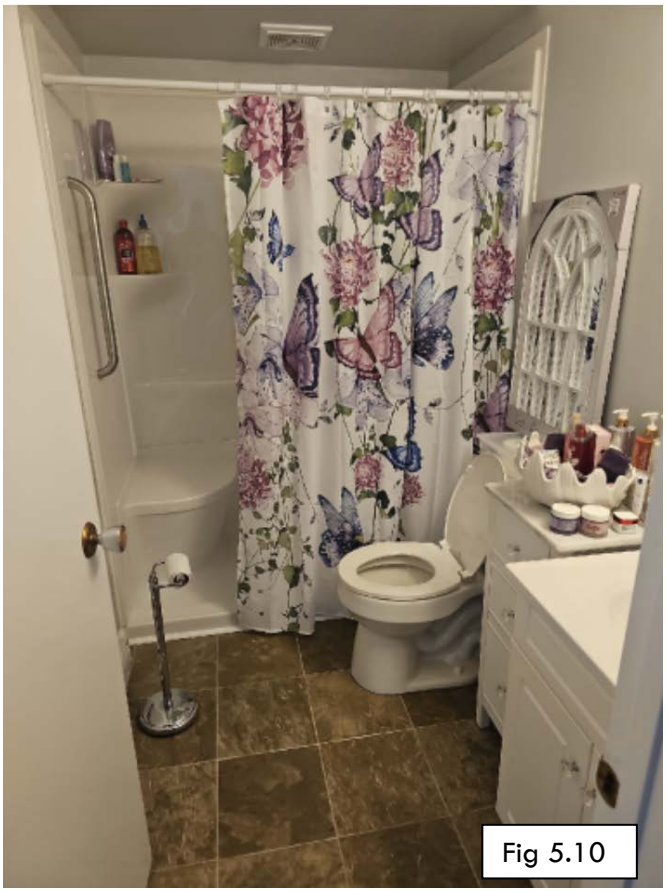

Fig 5.10

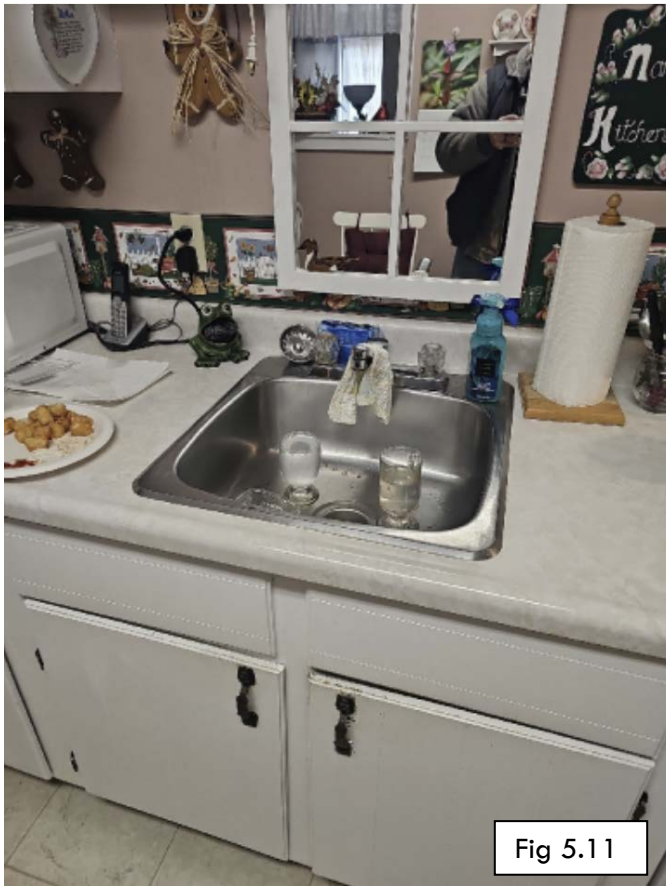

Fig 5.11

Fig 5.12

Fig 5.13

Fig 5.14

1.6 DESCRIPTION OF HEATING & VENTILATION

Heating:	**Electric Baseboard Heaters**
Cooling:	**Single roof-top AHU for common corridors, None in residential suites**
Fresh Air/Exhaust:	**There are no (HRV) fresh air supplies present, Bath-fans are present**

HEATING AND VENTILATION SYSTEMS OBSERVATIONS

General Comments

The heating source for this facility is provided by Electric Radiant Baseboard & Electric forced air heaters (See Fig 6.1, 6.2).

The common corridors are provided with mechanical cooling from a 5 ton rooftop AHU (Air Handling Unit) located on the roof over the rear building entry/stair (See FIG 6.2). This unit was manufactured in 1989 and has surpassed the recommended life expectancy. As the installation does no conform to present code requirements, an alternate solution may be required.

The facility does not have proper fresh-air intake with the use of a compliant mechanical system such as an HRV (Heat Recovery Ventilator) system. HRV's provide fresh air, exhaust, and heat recovery by using exhaust air to heat incoming cold air. HRV's are industry standard in current building codes.

Units are required to contain exhaust to washrooms and kitchens and fresh supply to living rooms and bedrooms. This is typically provided by individual unit HRV's in modern construction. Minimum code allows for the use of exhaust fans and operable windows to provide fresh air and exhaust, each unit is equipped with a washroom exhaust (See Fig 6.6) and kitchen exhaust (See Fig 6.7) paired with operable windows. There is a central exhaust unit that connects to several exhaust lines with its own high-speed fan unit. This appears to be exhausting several connections (See Fig 6.4, 6.5).

Overall this facility has minimal mechanical systems with very little AC, poor circulation, and no conforming mechanical fresh-air supply systems.

Heating & Ventilation Observations &Recommendations

- Common area air conditioning does not conform to minimum standards for fire safety.
- HRV fresh-air systems are recommended for common areas
- Common area air-conditioning unit is in need of replacement with compliant equipment and installation

Fig 6.1

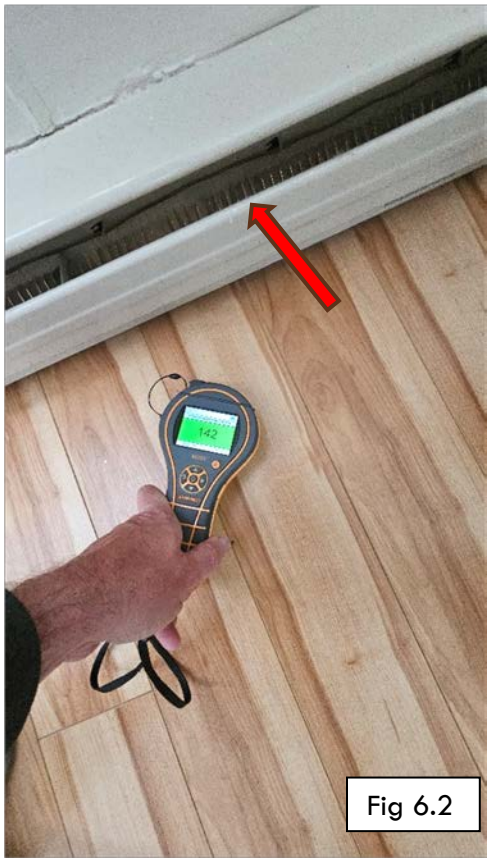

Fig 6.2

Fig 6.3

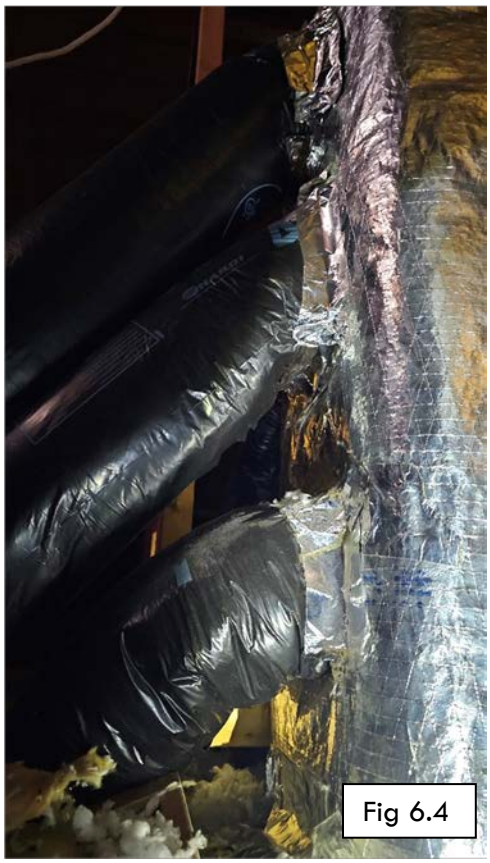

Fig 6.4

Fig 6.5

Fig 6.6

Fig 6.7

1.7 DESCRIPTION OF INTERIOR

Walls and Ceilings:	**Painted Gyprock**
Floor Surfaces:	**Common Area Carpeting**
	Carpet Stair Treads
	Laminate and vinyl to unit floors
Doors:	**Aluminum Entrances to lobby's**
	Wood interior doors & Frames

INTERIOR OBSERVATIONS

Finishes:

Flooring – Several units have upgrades which include newer laminate flooring installations (See FIG 7.1). Based on interviews with maintenance personnel, approximately 35% of the units are estimated to require upgrades which includes new flooring installation (See FIG 7.2). These non-renovated units contain older product which has a very dated appearance and is showing signs of wear. Unit 10 flooring had separating joints. Investigation showed higher than normal moisture readings (See FIG 7.3). It is suspected that the tenant is using excessive water to mop the floors causing swelling of the floor planks which led to its damages.

Walls - The walls throughout are painted gyprock and are generally kept in reasonably good repair. A few units were under renovation at the time of inspection. Of primary concern are areas of wall cracking (See Unit 23 FIG 7.4) and wall to ceiling connections where cracking and separation was identified (See Unit FIG 7.5 & Structural commentary). Moisture reading along visible cracks did not read "Wet" but were of significantly higher moisture content than surrounding wall surfaces (See FIG 7.6). The tape is also delaminating around the wall cracking (See FIG 7.7) which is often a result of moisture.

Ceilings - Ceilings are painted gyprock with textured spray finish (See FIG 7.5). The applied finish is difficult to match and therefore any areas of required repair tend to remain very noticeable.

Stairs – Stairs are wood frame and are located on each end of the facility for exiting. The stairs do not conform to present day code requirements with excessive rise >7" and insufficient run (<11") (See FIG 7.8, 7.9). Stairways are required to maintain a minimum headroom clearance of 2.08 m. Landing bulkheads restrict headroom to a non-conforming 1.93 m (See FIG 7.10). Stair railings are required to maintain continuous holding with wall clearances of 30 mm but railings are restricted to 12.7 mm at landing crossings (See FIG 7.11).

Doors – The main entrances are double aluminum commercial doors (See FIG 7.12). The entry doors are in good condition and operating as intended. Entrances are in conformance with the present use exiting requirements.

The interior doors are primarily wood veneer hollow core residential doors (See FIG 7.13) and remain functional but very dated in appearance. Door hardware appears to be original hardware of brass 1970's styling. Unit entry doors are of poor sound quality and do not meet current fire rating requirements (See FIG 7.14). There were no UL ratings identified during inspections.

Recommendations/Observations

- Investigate observed wall cracking for possible structural movement
- Investigate for water infiltration at areas of higher moisture content
- Investigate wall to ceiling separations visible in various units primarily along living room to kitchen walls.

Non-conformances

- Stair headroom clearance non-conforming
- Stair railing clearance non-conforming
- Entrance doors and Frames not ULC rated, recommend changing to “Safe-n-Sound” doors

Recommended Improvements

- Upgrade flooring in non-renovated units

Fig 7.1

Fig 7.2

Fig 7.3

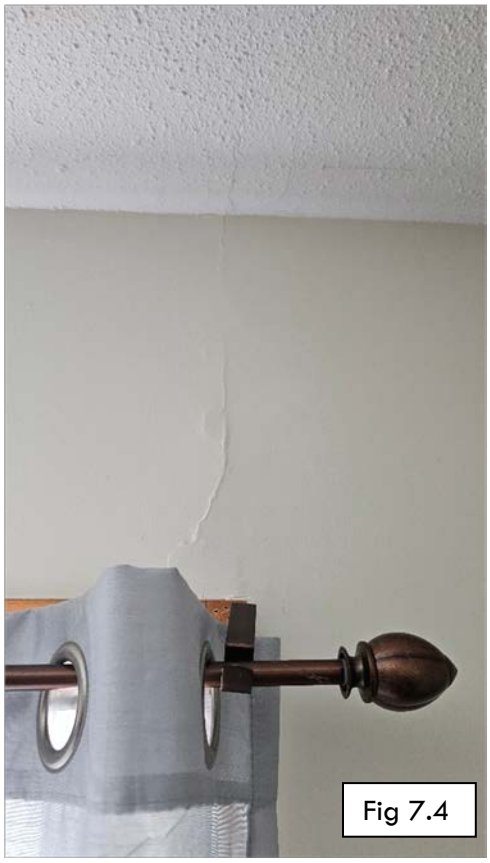

Fig 7.4

Fig 7.5

Fig 7.6

Fig 7.7

Fig 7.8

Fig 7.9

Fig 7.10

Fig 7.11

Fig 7.12

Fig 7.13

Fig 7.14

1.8 DESCRIPTION OF ENVIRONMENT

General Comments

A buildings environment is perhaps the most important component of a buildings overall health and is also one of the most difficult to evaluate. To identify concerns, consideration of personal senses is the most effective way to investigate. As such, careful attention is paid to odors, humidity, freshness of air, comfort of breathing, as well as quantitative measurable aspects utilizing IR cameras, Protometers to determine relative humidity, dew point, condensation issues, etc. During inspection spaces are checked for odor, humidity, signs of mold, temperature variations, and any evidence of infestations.

A critical component for a healthy environment is insulation and vapor barrier components. The wall assembly is inspected using moisture sensors and an IR Camera. The walls revealed several small cold zones at structural components and connections (See Example FIG 8.1). The wall system is non-compliant in its thermal transmissivity which is very noticeable with the IR Camera (See FIG 8.2). Attic insulation R-values are also non-conforming with <R20 values and areas of wet/missing insulation were noted (insulation which was or is wet will also lose R-value and show as cold zone) (See FIG 8.3).

Windows show signs of cold infiltration around perimeters and trims. Air movement could also be felt in these zones (See FIG 8.4). Windows are expected to be "chinked" (stuffed with FG Batt insulation) based on age of construction which allows infiltration and air movement. An attempt has been made to seal the windows from the exterior with caulking which helps but this does not stop wind pressure from causing infiltration. Low expansion PU foam insulation is recommended around windows. Given the age of windows and building construction, a closer invasive investigation of a random selection of wall assemblies around and beneath windows is recommended to ensure no structural rot is present. The unit identified with cracked drywall would be one that is recommended for closer investigation.

Fresh air is also a critical component to maintaining a healthy building. For the present use, minimum code considers operable windows and mechanical exhaust fans as an acceptable alternative to mechanical ventilation. This does not hold true unless the openings allow fresh air to enter. Although it is possible to open the windows to allow fresh air in, this does not provide equivalent air changes to mechanical systems. A mechanical HRV system is recommended in each unit for overall building health and present code compliance.

Environmental Recommendations/Observations

- R-values are non-conforming to present NBCC 2015 building code. R-Value Improvement is recommended
- Fresh air HRV system is recommended in each unit and common areas (See mechanical commentary)
- Investigate walls beneath window for signs of rot or water infiltration

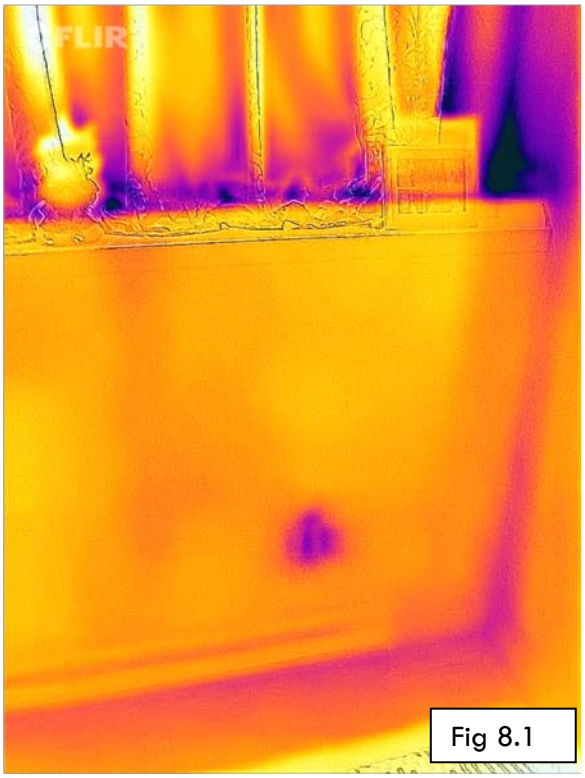

Fig 8.1

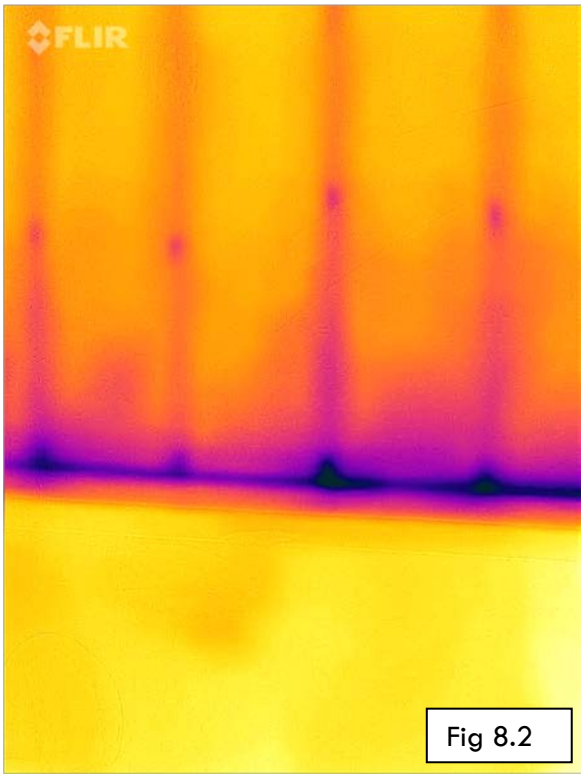

Fig 8.2

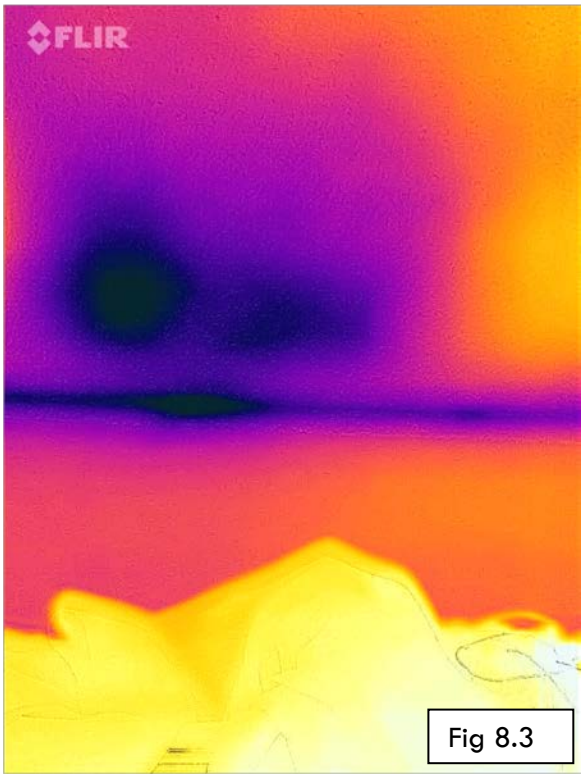

Fig 8.3

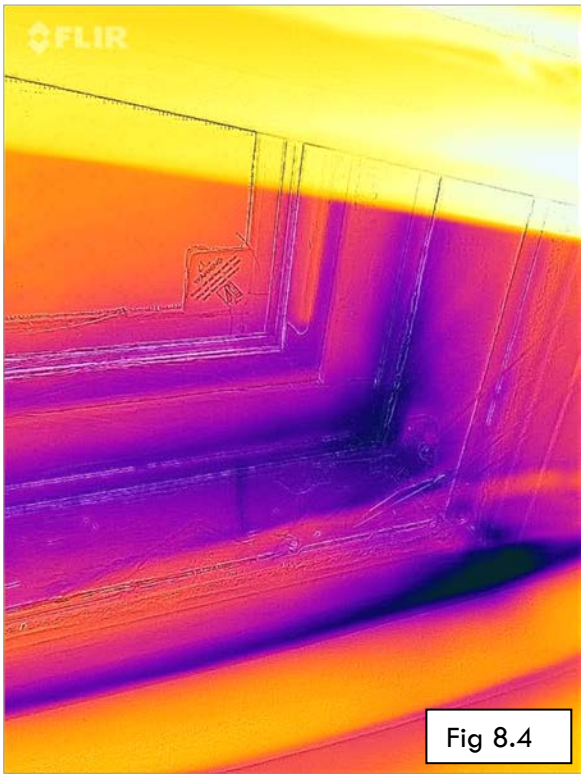

Fig 8.4

1.9 DESCRIPTION OF LIFE SAFETY AND ACCESSIBILITY

Installed Components: **Addressable F.A. System**

Code compliant detectors

Emergency Exit lighting

LIFE SAFETY & ACCESSIBILITY OBSERVATIONS

General Comments

This structure contains NBCC Part 9 use and classifications for Multi-residential occupancy. The facility is required to be constructed to a NBCC 2015 Part 9 residential standards to be conforming based on code criteria.

NBCC 2015 does not require a sprinkler system, however an addressable FA system is required. There is a certified and operational FA System in place (See FIG 9.1).

ULC Labelling was not present on entry doors or on stairwell doors or frames and are therefore non-conforming (See FIG 9.2).

Exit Doors into stair-wells are required to self-close and provide fire rated separation and smoke seal. Doors were found to not latch properly or completely seal off openings (See FIG 9.3).

Emergency exits were clearly labelled (See FIG 9.4). Emergency lighting was tested and passed test circuit testing (See FIG 9.5).

City Fire Hydrants are in close proximity to the facilities.

Fire extinguishers are present on each level and inspections are current (See FIG 9.6)

Service areas require fire separations of 1 hour rating. Several penetrations were identified which require patch and repair and application of approved fire sealants or collars (See FIG 9.7-9.8).

The facilities are non-compliant for accessibility with all floor access via stairs. There are no compliant barrier free units present.

Fire & Safety Recommendations/Observations

- Replace Unit Entry doors with ULC Rated Entries (Recommend Safe-n-Sound doors)
- Replace stair-well door with new properly rated doors and frames with self-closing hardware.
- Install appropriate fire barriers to all penetrations of rated rooms service.
- Accessibility and Barrier free requirements are not satisfied

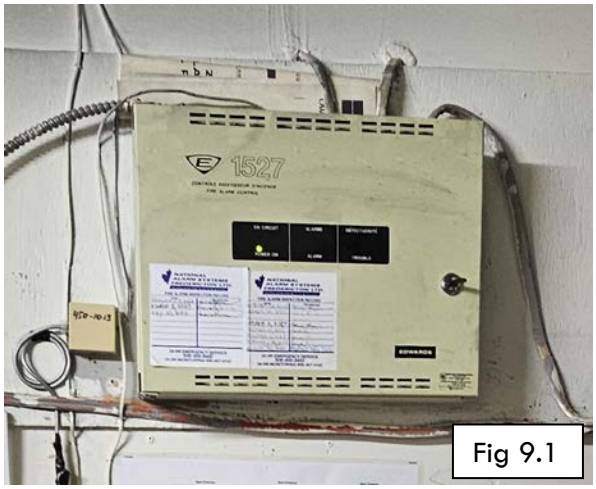

Fig 9.1

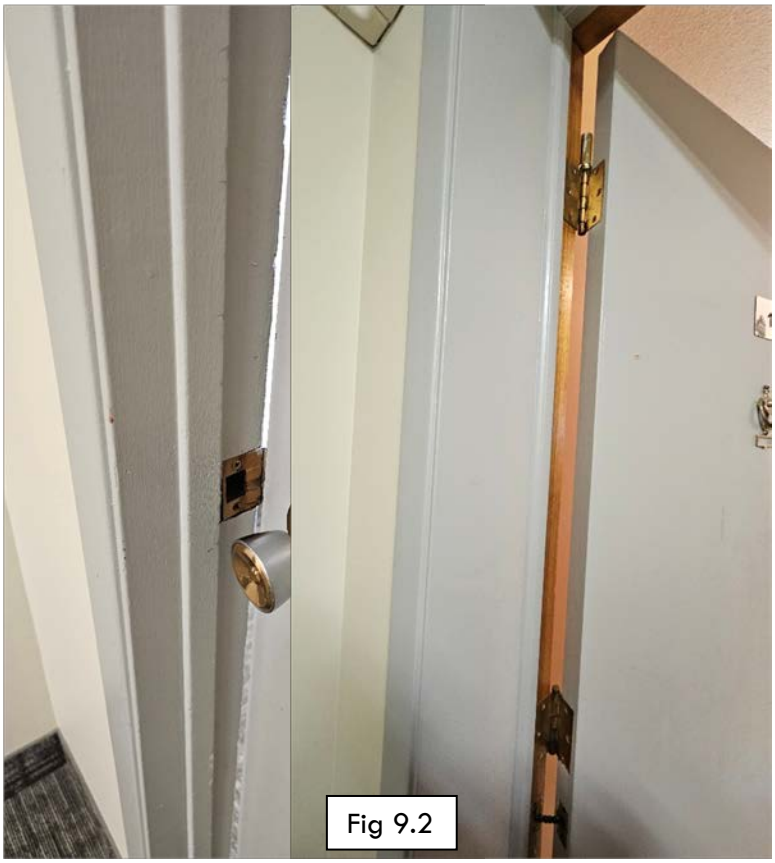
Fig 9.2


Fig 9.3

Fig 9.4


Fig 9.5

Fig 9.6


Fig 9.7


Fig 9.8