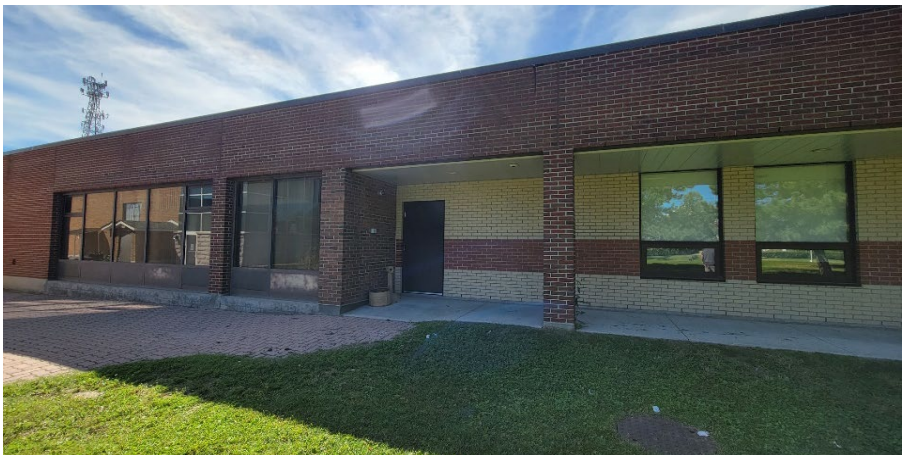
DRYDEN



FACILITY EVALUATION REPORT

Former Police Building

64 King Street, Dryden, ON

Facility Details			
Gross Area (Sq.m.):	1084		
Construction Year:	1978		
Replacement Cost:	3.9 million		
Previous Evaluation:	nil.	By:	nil.
Date of Evaluation:	09-Aug-22	Project #:	22091
Evaluator:	Quartek Group Inc. architects, engineers, planners		

Repair/Maintenance Events **See attached breakdown of action items by period.*

0-5 year Recommended Event Action Budget	$	116,000.00
6-10 year Recommended Event Action Budget	$	286,500.00
11-20 year Recommended Event Action Budget	$	489,520.00

General Summary:

The facility was a purpose-built office and policing station constructed in 1978. Over the course of its functions, it has been well-maintained and the interior finishes are suitable for general office uses with exception of the holding cell area. As a recommendation (no cost carried in the events), it would be make sense to demolish the holding cell area and replace the space with more office area.

The findings indicate very few repair replacement events that are immediate. The long range actions are largely mechanical and electrical replacement events recommended due to theoretic life of these systems/equipment. We have identified studies to be conducted as a standing watch on the roof and exterior glazing.

Structural Summary (Superstructure)**:**

There are a only minor events to report or anticipate. The overall frame structure appears to be solid with no indication of movement, distortion, etc.

Envelope Summary (Shell):

Although not an energy efficient building by today's standards, the envelope is of durable construction and possesses continued function beyond the range of this study. The roofing has had repair events recently and the 2017 to 2019 repair events should be monitored. The spray method of roofing repair is not a conventional method and we have therefore recommended a study be undertaken and to possibly address snow drift build-up affect on the integrity of the water seal between roof heights.

Interior Summary:

The interior surfaces are in excellent condition and the events only list potential repainting and carpet replacement assuming that the building is utilized as an office with associate wear over a 20-year period.

Mechanical Summary:

The facility has several original mechanical equipment components that are recommended for replacement. There are also systematic replacement events listed simply due to age and not necessarily because of the physical condition.

Electrical Summary:

There are a small number of listed replacement events in the interim period of operation. The primary observations are based on the original service from the utility and certain switchgear and lighting replacement events. Due to the overall age of system installation, the theoretical life of various electrical systems are likely to require partial or whole replacement within the event horizon of the study (20 years) that should be budgeted.

Study References and Methodology:

The study provides a snapshot of the physical condition and age of building components or systems of the facility at the time of the site visit conducted for evaluation. The site visit is a brief visual, non-invasion walk-through survey of the readily accessible aspects of the building and its site. The survey should not be considered technically exhaustive. The study team also reviews any technical drawings and or other reports and/or building records that are supplied to the evaluator by the facility owner/operator. A brief interview is conducted with maintenance personnel or building users, when possible, to further ascertain known issues for the facility assessment.

The study follows the Uniformat II method for categorizing building components and identifies a potential repair or replacement event. Such an event is provided with an approximate estimate of quantities and cost to maintain the building and not necessarily create an improvement of building feature or performance. The events are organized into potential risk of occurrence over three periods starting with the next five years, years 6 to 10 thereafter and for a period not exceeding a horizon of 20 years from the visit date. In each period, the variables affecting repair or replacement events diminish in accuracy of event cost the further this action is undertaken from the date of the report.

The methodology used in this study is based on the contract scope and the terminology/limitations of ASTM E2018-15 Standard Guide for Property Assessments. Event estimates provided herein are represented in 2022 Canadian dollars. Future periods referred to in this report should be indexed based on several factors affecting future costs, of which may include inflation indexing, regional changes in labour or material availability in the construction industry. The reader would apply these accordingly.

Extra Study: In context to a Uniformat II item, our report may on occasion make a recommendation for the City to engage an expert to conduct addition investigation and/or study concerning an existing building component. This is because a determination could not be reasonably ascertained by Quartek within the parameters of our study scope or because the study/investigation will afford the City more latitude as to the best remedial action other than simply a repair/replacement option. The study/investigation recommendation is in itself an event and we identify a potential cost amounts for budgeting this action. The studies we noted:

Window (and door) Condition Study: This is a situation we find commonly with window frames and glazing conditions. Glazing may have been replaced or glazing replacement may be one of the options for the City to consider instead of whole window (frame) replacement often at considerably less cost and with improved performance. Where we have recommended a study, this precedes any budgeting exercise. So in the case where we proposed

Independent Roofing Study: A combined spray-applied roofing insulation/sealant is a system that, in the opinion of our architectural consultant team, is not a proven long-term product that we have a great deal of background knowledge of and lack performance history to support an action or determine a reasonable theoretic life. At the time of this study, we have no reliable data on the durability of the product nor do we have other standards such as “factory mutual” insurance information concerning its use for the application.

CCTV Robot Probe Survey: Perform survey by qualified company to reveal location and nature of sewer damage/blockage.

We may determine that as a follow-up after implementing a recommended study/investigation, the result (findings)are likely to facilitate a cost for replacement, remediation or other action, a budgetary amount in the form of an allowance has been noted. The findings of the recommended study may exceed this allowance depending on the outcome, but some funding will presumably be allocated to cover a portion of the action.

Theoretical Life: (References provided from RECapp and Other M/E reference documents) We have provided selective examples of typical operational/functional life for various building components as a general guide to readers:

Electrical Components	
Electrical Switch gear	40 years
Electrical Light Fixtures	20 - 30 years + *Efficiency Obsolescence
Radiant Electrical Heating	20 years + *Efficiency Obsolescence

Main Conductors	60 – 70 years
Transformers	30 - 40 years + *Efficiency Obsolescence
Mechanical Components	
Plumbing Piping (Copper)	50-60 years
Hydronic Piping (galv.Iron)	70 - 90 years + *Efficiency Obsolescence
Washroom Fixtures	30 years + *Efficiency Obsolescence
San.Waste Piping (Iron)	60 – 70 years
Gas Furnaces(combustion)	20 - 30 years + *Efficiency Obsolescence
Air handling with H/C coils	50 years + *Efficiency Obsolescence
Light Metal Ducting	60 – 70 years
Enclosure Components	
Window Units (Alum.Frame)	40 - 50 years + *Efficiency Obsolescence
Flat Roofing Membranes	30 - 40 years + *Efficiency Obsolescence
Sloped Roofs (Shingles)	20-40 years
San. Waste piping (Iron)	30–70 years
Standard Brick (Veneer)	80 - 100 years
Conventional EIFS wall	40 - 60 years
Exterior Metal Siding	40 - 60 years
Superstructure Components	
Concrete Foundations	40-50 years + *Efficiency Obsolescence
Structural Steel Framing	30 - 40 years + *Efficiency Obsolescence
Masonry Walls	20-40 years
San. Waste piping (Iron)	30–70 years

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General Report Disclaimer:

The report should be reviewed in context to any prior hazardous building materials assessment studies as to further budgeting considerations beyond the limited repair/replacement events described in this report.
The intended use of the report is for assistance with long-range asset management planning for a facility under its current state so ideally adequate budgeting can be provided.

The repair replacement events identified in the report are not intended to capture routine maintenance of various components of the facility that would be generally anticipated as part of the day-to-day operations. Deferred maintenance can lead to earlier than predicted failure of equipment, systems, materials, etc.
Not withstanding the described methodology, the study findings are only as accurate as the available information provided, the allowable time to conduct a site visit to properly document findings and the level of access afforded the surveyors by the owner's representative. Costing accuracy may vary due to our ability to fully assess that collateral affects of a repair/replacement event on other elements of the building or surrounding site.

Part A Substructure

No Event

Part B Shell

No Event

Part C Interiors

No Event

Part D Services

D30 HVAC

D3020 **Heat Generating Systems**

D302004 Fuel-Fired Unit Heaters

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
KW	EA	3	$ 21,000	3 Areas in garages	**Replace**

Condition	Exceeds theoretical life of equipment operation. Not efficient
Scope	Assemblies would include unit heaters and the energy supply system hookup (other than electrical), including all necessary pipe, fittings, and specialties required for hook-up. Flue and stack, if required, are included in this assembly. The unit of measure at the assembly level is each.

D3050 **Terminal and Package Units**

D305006 Package Units

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
KW	EA	1	$ 64,000	3 zones	**Replace**

Condition	Exceeds theoretical life of equipment operation. Not efficient
Scope	Assemblies include complete package units, with integral roof top curbs and all associated devices. A heating system can be selected from hot water, steam coil, or gas furnace and can be a single or multi-zone system. The unit of measure at the assembly level is each.

D50 Electrical

D5090 **Other Electrical Services**

D509006 Energy Management Control System

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM			$ 28,000	Demand control system in main electrical room	**Replace**

Condition	Exceeded reliable Operation Life: Replace batteries at end of life.
Scope	Assemblies include wire, conduit, conduit support or fastening systems, sensor devices, and all electrical connections.

Part E Equipmt. & Furnishings

No Events

Part F Special Construction

No Events

Part G Bldg. Siteworks

G30 Site Civil/Mechanical Utilities

G3020 **Sanitary Sewer**

D306001 Sanitary Sewer Piping

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
LM	Study		$ 3,000	Municipal sanitary service.	**Study**

Condition	Reported that sewer backups are an issue when holding cells are occupied.
Scope	A sewer pipie CCTV investigation recommended to determine scope of work for repair. See future repair allowance with range of repair/replacemnt cost based on location of blockage or other damage.

Part A Substructure

No Events

Part B Shell

B20 Exterior Enclosure

B2020 **Exterior Windows**

B202004 Exterior Glazing

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM	Study		$ 3,000	All exterior Glass to be reviewed for gasketing, glazing and performance.	**Study Req'd**

Condition	Periodic scheduled review of glazing performance, sealed unit performance, etc.
Scope	In addition to glass, this includes acrylic, polycarbonate, and plastic glazing.

B30 Roofing

B3010 **Roof Coverings**

B301002 Low Slope Membrane Systems

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM	Study	approx. **1117.5**	$ 5,000	Lower Roof replacement in 2016 or 2017 with spray applied sealant/insulation. Upper roof possibly older or original	**Study Req'd**

Condition	Both Roof appear to be in good condition: Conduct a study into the composition and integrity of the roofing systems and recommend any potential repair replacement events for either or both roof surfaces.
Scope	Assemblies include roof coverings, such as built-up, elastomeric, modified bitumen, etc. Also, walkways or work areas (used to gain access to rooftop equipment) will be included here.

Part C Interiors

No Events

Part D Services

D20 Plumbing

D2020 **Domestic Water Distribution**

D202003 Domestic Water Equipment

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		2	$ 35,000		**Replace**

Condition

Scope This assembly includes equipment associated with the domestic water supply, including fittings, and specialties required for hookup. Assemblies include hot water heaters, water treatment plant, i.e., water softeners, filters, distillers, etc.; pumps directly associated with domestic water supply; and tanks for the potable hot or cold water system. The unit of measure at the assembly level is pieces of equipment.

D30 HVAC

D3040 **Distribution Systems**

D304008 Exhaust Systems

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
L/S	Assembly	1	$ 21,000		**Replace**

Condition Exceeds theoretic life of Equipment Operation. Not efficient

Scope Assemblies include ductwork grilles, registers, diffusers, fans, and all associated work. The unit of measure at the assembly level is each system.

D50 Electrical

D5010 **Electrical Service and Distribution**

D501002 Secondary

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
KVA		1	$ 28,000	Wiring runs underground from pad mount transformer to main switchboard.	**Replace**

Condition Condition of wiring unknown. Age estimated to be original to building. Suggest replacement at same time as main switchboard.

Scope Transformers fed from protection equipment on the building side of primary transformer. Assemblies include transformers, conduit, conduit support, and wire.

D501003 Main Switchboards

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
KVA		1	$ 98,000	Main Electrical Room	**Replace**

Condition Main switchboard appears to be original to the building. Equipment near end of theoretical life.

Scope This includes the protection equipment and metering devices for main distribution. Assemblies include main distribution panel, breaker, fuses, and meters.

D501005 Panels

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
AMP		1	$ 28,000	Panels A, B, C, D & F in main electrical room. Panel "P" in garage	**Replace**

Condition	Panel boards appears to be original to the building. Panels at or near end of theoretical life.
Scope	Branch circuit panel boards. Assemblies include panel boards, breakers, conduit, and wire.

D5020 **Lighting and Branch Wiring**

D502002 Lighting Equipment

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM			$ 28,000	Mostly fluorescent T8 light fixtures throughout building. Some incandescent pot lights.	**Replace**

Condition	Energy Reduction Payback: Replace ballasts and lamps in fluorescent light fixtures. Replace bulbs in incandescent pot lights
Scope	This assembly includes fixtures, conduit, wire, and switching devices.

D5090 **Other Electrical Services**

D509005 Electric Heating

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM			$ 10,500	Baseboard heaters below windows. Fan forced heater in vestibule	**Replace**

Condition	Replace batteries and replace lamps at end of service life.
Scope	Items could include baseboard heaters and wall and ceiling heaters. Assemblies include safety switches, control devices, heaters, conduit, and wire.

Part E Equipmt. & Furnishings

No Events

Part F Special Construction

No Events

Part G Bldg. Siteworks

D306001 Sanitary Sewer Piping

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
LM	Allowance		$ 30,000	Municipal sanitary service.	**Repair**

Condition	Reported that sewer backups are an issue when holding cells are occupied. Further investigation required to determine scope of work for repair. Allowance provided; to be confirmed pending investigation.
Scope	This includes installation of piping for collection of sewage.

Part A Substructure

A1030 **Slab On Grade**

A103001 Standard Slab on Grade

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		1	$ 39,200	Resurfacing of slab in west garage bays.	**Repair**

Condition	Limited visibility due to furnishings and floor finishes. Where visible, appeared to be in good condition except at door slab projection. No issues reported or observed.
Scope	Standard slab-on-grade is supported by compacted earth or gravel fill. The soil bearing capacity is sufficient to support the slab. Assemblies include fine grade, gravel fill, underslab insulation, edge forms, termite treatment (interior slabs only), vapor retarder, reinforcing, expansion joints, control joints, and finish and curing. Assemblies are based on thickness of slab.

Part B Shell

B20 Exterior Enclosure

B2010 **Exterior Walls**

B201011 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
LM		300	$ 3,000	General maintenance labour and sealant supply to various joint locations throughout.	**Repair**

Condition	Some caulking has dried and is cracked; other evidence of gaps and lack of elasticity. Theoretical life of exterior sealant is 10 to 15 years.

B2020 **Exterior Windows**

B202004 Exterior Glazing

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA	allowance	10	$ 35,000	All exterior Glass to be reviewed for gasketing, glazing and performance. Based on prior study.	**Repair or Replace**

Condition	General: window frames are in fair condition but reglazing due to age of sealed units.
Scope	Exterior application of joint sealants

B30 Roofing

B3010 **Roof Coverings**

B301002 Low Slope Membrane Systems

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM	Allowance Est.	approx. 1117.5	$ 85,000	Entire upper and lower roof area.	**Replace**

Condition	Roof Allowance for potential reroofing event based on study conducted in the 6-10 year period. Also based on theoretic life of membrane system.
Scope	Assemblies include roof coverings, such as built-up, elastomeric, modified bitumen, etc. Also, walkways or work areas (used to gain access to rooftop equipment) will be included here.

B301003 Roof Insulation and Fill

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		1117.5	$ 73,000	See B301002 for description of location	**Replace**

Condition	Remove insulated liner and install new liner (top down)
Scope	Assemblies include all types of insulation associated with the roof area.

B301004 Flashing and Trim

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		1117.5	$ 32,000	See B301002for description of location	**Replace**

Condition	Provide flashing around edges and at valleys, etc. plus interface between 1987 addition.
Scope	Assemblies include all flashings associated with the roof, i.e., eave flashing, gable flashing, etc.

B301006 Roof Openings and Supports

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		approx. 625	$ 12,500	See B301002for description of location	**Replace**

Condition	Various existing HVAC openings and venting/exhaust openings. Verify framing between purlins of pre-eng frame. Review and if required brace dormer to meet original pre-eng. Specs.
Scope	All roof penetrations including roof hatches, sky lights, area glazing, roof hatches, gravity roof ventilators, smoke vents, etc.

Part C Interiors

C10 Interior Construction

C1010 **Partitions**

C101008 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
LM			$ 2,500	General maintenance labour and sealant supply to various joint locations throughout.	**Repair**

Condition	Some caulking has dried and is cracked; other evidence of gaps and lack of elasticity. Theoretical life of exterior sealant is 10 to 15 years.
Scope	Exterior application of joint sealants

C30 Interior Finishes

C3010 **Wall Finishes**

C103005 Painting to Walls

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		1000.0	$ 36,600	all drywall wall surfaces and concrete block wall surfaces within the office/staff zone and the stores zone of the building	**Coating**

Condition	General paint wear and damage over period of use.
Scope	This assembly includes painting, spackling and sealant applied directly to an interior wall surface.

C3020 **Floor Finishes**

C302005 Carpeting

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		830	$ 62,000	All carpet and carpet tile replaces	**Replace**

Condition	Theoretical life of carpet exceeded and due for replacement.
Scope	Sheet or tile carpet with appropriate underlay

C302007 Painting and Staining Floors

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		150	$ 4,000	Garage areas with exposed painted floors	**Coating**

Condition	Theoretical life of paint of concrete exceeded

Part D Services

D20 Plumbing

D2040 **Rain Water Drainage**

D204002 Roof Drains

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		4	$ 6,720		**Replace**

Condition

Scope Rain water drainage system not described by the assembly categories

D50 Electrical

D5020 **Lighting and Branch Wiring**

D502002 Lighting Equipment

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM			$ 28,000	Mostly fluorescent T8 light fixtures throughout building. Some incandescent pot lights.	**Replace**

Condition Energy Reduction Payback: Replace ballasts and lamps in fluorescent light fixtures. Replace bulbs in incandescent pot lights

Scope This assembly includes fixtures, conduit, wire, and switching devices.

D5090 **Other Electrical Services**

D509002 Emergency Lighting and Power

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM			$ 70,000	UPS in main electrical room	**Replace**

Condition UPS at or near end of service life.

Scope Assemblies include fixtures, motors used for power generation, connection and testing, transfer switches, conduit, wire, battery chargers, batteries, and solar panels.

Part E Equipmt. & Furnishings

No Events

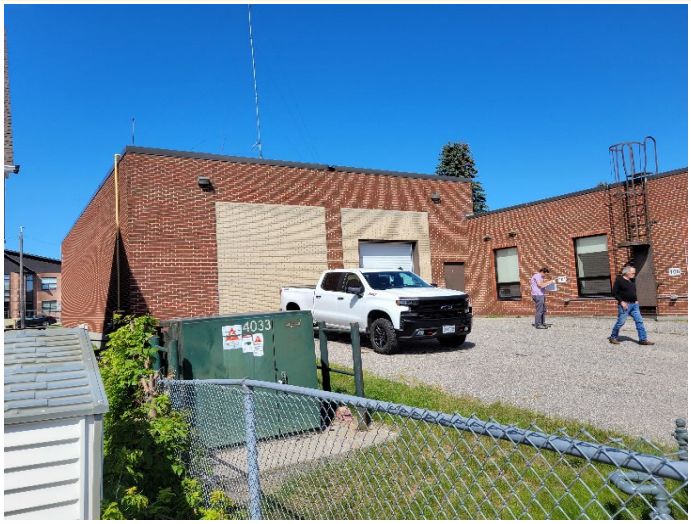
Part F Special Construction

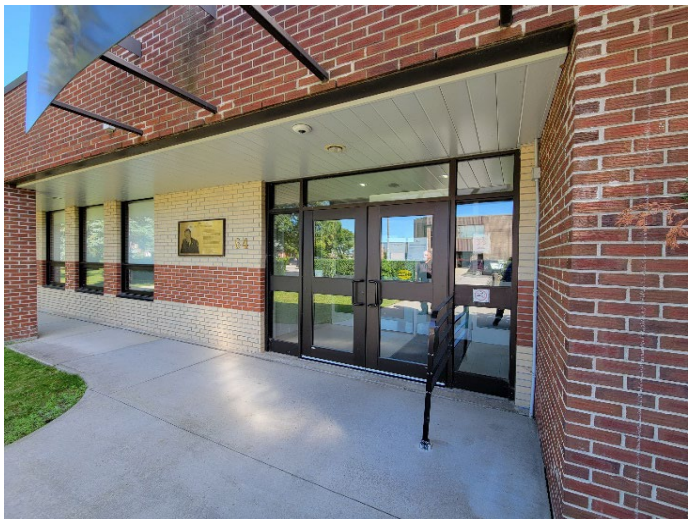
No Events

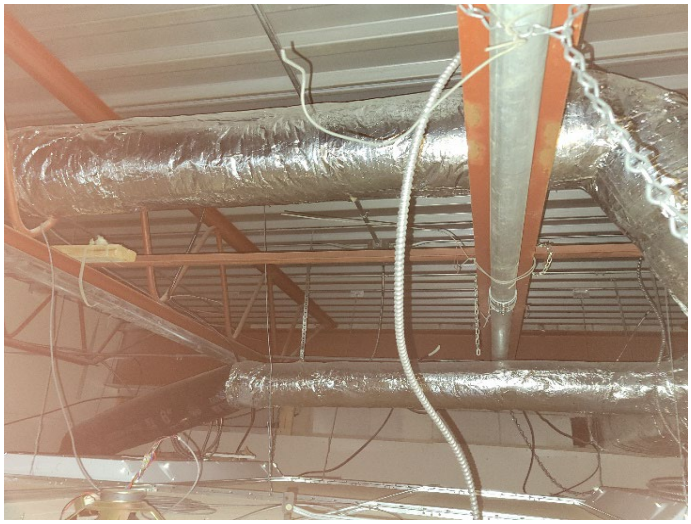
Part G Bldg. Siteworks

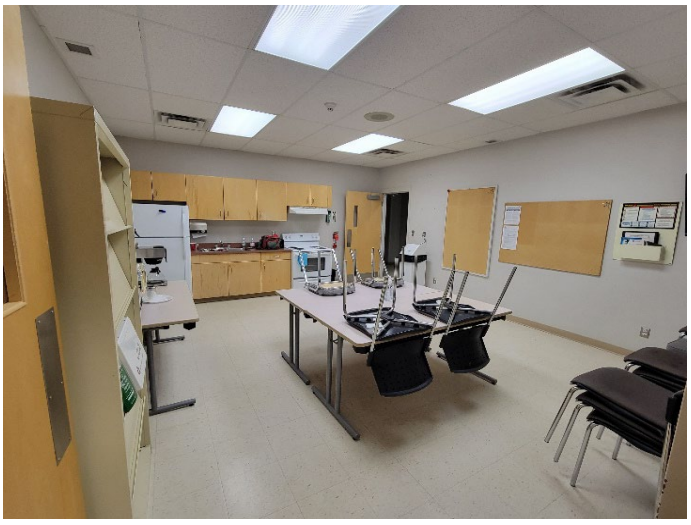
No Events

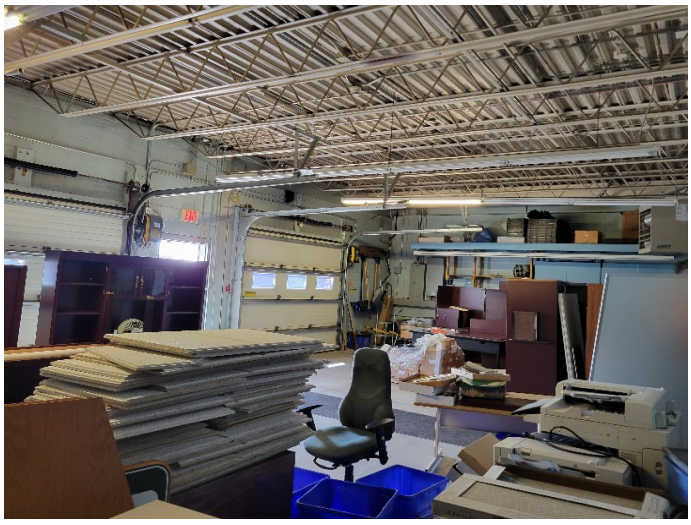
Interior and Exterior Views, Structural Views











Interior Views, M/E Views