DRYDEN

Quartek
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FACILITY EVALUATION REPORT

Museum

15 Van Horne Avenue, Dryden, ON

Facility Details

Gross Area (Sq. m.):	510		
Construction Year:	Renovation and additions (1988) Original house (1897)		
Replacement Cost:	2.2 million		
Previous Evaluation:	2010	By:	Stantec
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	$	91,480.00
6-10 year Recommended Event Action Budget	$	176,020.00
11-20 year Recommended Event Action Budget	$	169,348.00

General Summary:

The facility is a original historic house that was renovated and added in 1988 to accommodate a museum operation on three levels. Consequently the museum was equipped with an elevator to provide barrier-free access on all levels. Certain areas on the upper and lower levels do not meet current accessibility requirements (turning radius, universal washroom, other clearances, etc.) since the updates to the Building Code from 1988. The classification of building would require 3/4 fire resistance of supporting floors and this would require that the supported beams be have a fire rated (gypsum board) enclosure. Other openings in in then basement ceiling need patching.

On the whole the building is sound and most of the noted repair/replacement events are based on age of equipment, fixtures or systems for mechanical and electrical items. The building will likely require re-roofing within the 20 year scope of the study.

Structural Summary (Superstructure)**:**

Aside from some identified leaking in one section of the basement foundation wall (rubble wall) there was no other concern from a structural perspective.

Envelope Summary (Shell):

The brick required some minor restoration work and the roof will require replacement within the study period. A review of glazing performance should be an interim study to monitor the windows and to budget for replacement. An insulation repair event is described to address condensation in the work room.

Interior Summary:

The interior is generally well maintained and all fire doors and other closure hardware appeared to be functional. The finishes that are likely to wear out include carpeting in the public areas. A repainting event may be required in the 15-20 year range of use.

Mechanical Summary:

The museum area is serviced by a force-air furnace with ducted air distribution. The air handling system includes a split system with cooling coils. Due to the overall age of system installation, the theoretical life of various mechanical systems (piping, drains, ducting, etc.) are likely to require partial or whole replacement within the event horizon of the study (20years) that should be budgeted.

Electrical Summary:

Minor repair/replacement events on the whole from an electrical standpoint. Actions are largely 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. The main panel will need replacement due to age during this study period. The emergency lighting batteries will require routine replacement.

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:

> Elevator Study: A passenger elevator, to maintain its license, must be inspected by TSSA and generally requires a maintenance agreement with a local elevator servicing company. An operational review of the features relevant to accessibility and other current standards is further recommended for public buildings.

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

A20 Basement Construction

A2020 **Basement Walls**

A202001 Basement Wall Construction

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM	Repair	1	$ 21,000	Stone foundation walls of original building.	**Repair**

Condition	Overall appeared to be in good condition. A leak was reported at north foundation wall near northwest corner of building. Allowance for localized excavation, repointing and waterproofing.
Scope	This assembly would be based on the type and square footage of excavated wall area and waterproofing used on the foundation wall.

Part B Shell

B10 Superstructure

B20 Exterior Enclosure

B201003 Insulation and Vapour Retarder

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM	Unit Cost Est.	3	$ 14,000	Localized uninsulated section of exterior wall above lean-to roof addition,	**Repair**

Condition	Open up ceiling and spray foam wall section above attic insulation line. Verify the damp-proofing above roof is installed correctly.
Scope	Assemblies would include all types of insulation associated with the exterior wall. Rigid, batt and poured insulation should be separated into different assemblies.

B201099 Other Exterior Walls

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM	Unit Cost Est.	3	$ 6,000	Localized Brick Repair of historic house in several locations	**Repair**

Condition	Repoint with lime mortar (soft) to match existing colour.
Scope	Exterior walls not described by the assembly categories listed above

B2030 **Exterior Doors**

B203001 Solid Doors

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		1	$ 1,000	Main entrance wood door	**Coating**

Condition: weathered exterior: to be cleaned, prime coat and finish painted

Scope: Assemblies include all exterior solid doors, hollow metal or wood with frames. Solid doors may include viewing lites in door.

Part C Interiors

C30 Interior Finishes

C3010 **Wall Finishes**

C103003 Gypsum Wallboard Finishes

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
LM		10	$ 23,000	Exposed supporting steel beams and posts in basement	**Repair**

Condition: Provide Type X gyp. Bd. enclosure in compliance with approved 3/4 hour FRR.

Scope: This assembly includes painting, spackling and sealant applied directly to an interior wall surface.

C3030 **Ceiling Finishes**

C303003 Gypsum Wallboard Ceiling Finishes

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		46	$ 10,800	Original Basement ceiling in storage rooms and mechanical rooms	**Repair Code Req'mt.**

Condition: Significant number of openings in fire protection , exposing existing wood joists and some locations around duct chases.

Scope: Assemblies include gypsum wallboard applied to interior ceilings. Furring strips or channels are included in this assembly if they are applied directly to the ceiling surface. This assembly does not include items that directly apply to ceiling finishes covered elsewhere in this subsystem.

Part D Services

D20 Plumbing

C2020 **Domestic Water Distribution**

D202004 Insulation and Identification

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA	Assembly	1	$ 1,680	Condensate lines and other exposed cold-water lines	**Replace**

Condition	Wrap exposed lines to prevent condensate water damage.
Scope	Assemblies include insulation used in association with domestic water supply. The unit of measure at the assembly level is number of fixtures.

D30 HVAC

D3030 **Cooling Generating Systems**

D303003 Direct Expansion Systems

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
KW	EA	1	$ 7,000		**Replace**

Condition	Exceeds theoretic life of Equipment Operation. Not efficient
Scope	Assemblies include condensers, compressors, heat pumps, and refrigerant piping. The unit of measure at the assembly level is each.

D3040 **Distribution Systems**

D304007 Exhaust Systems

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
L/S	Assembly	1	$ 1,400		**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.

D3050 **Terminal and Package Units**

D305099 Other Terminal and Package Units

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
KW	EA	1	$ 5,600		**Replace**

Condition	Exceeds theoretical life of equipment operation. Not efficient
Scope	Terminal and package units not described by the assembly categories listed above.

Part E Equipmt. & Furnishings

No Events

Part F Special Construction

No Events

Part G Bldg. Siteworks

No Events

Part A Substructure

No Events

Part B Shell

B10 Superstructure

B20 Exterior Enclosure

B2010 **Exterior Walls**

B201010 Exterior Coatings

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		18	$ 800	Existing Exposed Painted Masonry Block	**Coating**

Condition	Fair Condition: Paint has degraded and cracks are noted: to be re-pointed prior to paint
Scope	Assemblies include paint, stucco, etc. The unit of measure at the assembly level is area of exterior coatings.

B201011 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
LM		80	$ 1,300	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

Part C Interiors

C10 Interior Construction

C1010 **Partitions**

C101008 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
LM			$ 1,200	General Locations Throughout.	**Maint'nc.**

Condition	Repair - Original Basement thru-floor penetrations. Many open gaps in drywall and exposed flooring structure
Scope	Assembly includes caulking, gasketing between dissimilar materials and at joints.

C30 Interior Finishes

C3010 **Wall Finishes**

C103005 Painting to Walls

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		230	$ 26,500	all drywall surfaces on main floor plus select basement walls	**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		112	$ 30,000	Main Floor public areas and second floor public areas	**Replace**

Condition	Carpet in fair condition: Replacement due to projected wear in 6 - 10 years
Scope	Sheet or tile carpet with appropriate underlay

Part D Services

D10 Conveying

D1010 **Elevators and Lifts**

D101002 Passenger Elevators

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
				Existing elevator	
EA	Study	1	$ 2,000		**Study**

Condition: Obtain a review of elevator features, TSSA requirements and advancements for future upgrades.

Scope: The unit measure at the assembly level is each stop.

Part D Services

D20 Plumbing

D2010 **Plumbing Fixtures**

D201001 Water Closets

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		2	$ 4,760 L		**Replace**

Condition: Older High-volume fixtures. At theoretic life.

Scope: Self explained

D201003 Lavatories

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		2	$ 3,640		**Replace**

Condition: Older fixtures and faucets. At theoretic life.

Scope: Self explained

D201004 Sinks

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		1	$ 1,820		**Replace**

Condition: Older fixtures and faucets. At theoretic life.

Scope: Self explained

D2020 **Domestic Water Distribution**

D202001 Pipes and Fittings

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA	Assembly	1	$ 4,200		**Replace**

Condition: Exceeds theoretic life of Equipment Operation. Not efficient

Scope: Assemblies include all pipe, fittings, and associated work with regard to domestic water supply. The unit of measure at the assembly level is number of fixtures.

D202003 Domestic Water Equipment

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		1	$ 5,600		**Replace**

Condition	
Scope	his 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.

D50 Electrical

D502002 Lighting Equipment

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM			$ 4,200	Mostly incandescent track light fixtures throughout building. Some fluorescent light fixtures throughout building.	**Replace**

Condition	Replace ballasts and lamps in fluorescent light fixtures. Replace drivers in LED light fixtures.
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			$ 2,800	Emergency battery units and remote heads located throughout building	**Replace**

Condition	Replace batteries at end of life. Replace lamps in remote heads.
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

G2020 **Parking Lots**

G202005 Guardrails and Barriers

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		2500	$ 66,700	Pre-cast concrete curbs at edge of parking at lawn.	**Replace**

Condition	Appeared to be in fair condition. Anticipate to be replaced at time of resurfacing.
Scope	Guardrails, barriers, parking stops and other similar devices.

G202006 Resurfacing

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		425	$ 11,400	Asphalt parking lot resurfacing.	**Replace**

Condition	Parking surface appeared to be in good condition with minimal cracking.
Scope	This is the placement of an asphalt wearing course over the existing parking surface.

G2040 **Site Development**

G204005 Signage

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		1	$ 7,000	Masonry pier with wooden sign at street corner.	**Replace**

Condition	Sign appeared to be in fair condition with minor deterioration of the wood frame at the posts.
Scope	Signs displayed to convey direction or information such as building function or tenant except for signs included in G201004 and G202004

G40 Site Electrical Utilities Preparations

G4020 **Site Lighting**

G402006 Exterior Lighting Fixtures and Controls

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		150	$ 2,100	Incandescent lights mounted to wall of building near entrance / exits. Ground mounted flood light in yard. Post top light at corner of walkway.	**Replace**

Condition	Replace lamps and ballasts in exterior light fixtures
Scope	Includes fixtures, controls, and all components used in conjunction with

Part A Substructure

No Events

Part B Shell

B20 Exterior Enclosure

B2010 **Exterior Walls**

B201004 Joint Sealant

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
LM		150	$ 1,000	General maintenance labour and sealant supply to various joint locations throughout.	**Repair**

Condition	Routine periodic maintenance or future event. Theoretical life of exterior sealant is 10 to 15 years.
Scope	Exterior application of joint sealants

B2020 **Exterior Windows**

B202004 Exterior Glazing

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM	Allowance		$ 66,000	Exterior glass Sealed unit replacement	**Allowance**

Condition	Based on prior study to be conducted. Remove original sealed units and replace or replace window entirely
Scope	In addition to glass, this includes acrylic, polycarbonate, and plastic glazing.

B30 Roofing

B3010 **Roof Coverings**

B301001 High Slope Roof Coverings

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		approx. 220m2	$ 16,600	Asphalt Shingles	**Replace**

Condition	Shingle Roofing exceeded useful life based on 2016-2017 date of last installation.
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.

B301004 Flashing and Trim

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
SM		approx. 220m2	$ 3,200	Associated eaves and other trim around roof including soffit where disturbed.	**Replace**

Condition	Required replacement as part of roof replacement.
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
Unit Cost Est.		1	$ 1,200	Only 3 noted roof penetrations. Flashing and sealant as required.	**Replace**

Condition	Required replacement with reroofing
Scope	All roof penetrations including roof hatches, sky lights, area glazing, roof hatches, gravity roof ventilators, smoke vents, etc.

Part C Interiors

No Events

Part D Services

D20 Plumbing

C2020 **Domestic Water Distribution**

D202002 Valves and Hydrants

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA	Assembly	1	$ 868		**Replace**

Condition	Theoretic Life
Scope	Assemblies include all valves and hydrants. Hose bibbs are included in this assembly. The unit of measure at the assembly level is number of valves and hydrants.

D202005 Specialties

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

Condition	
Scope	Any other special items associated with domestic water supply. All associated work items, including pipes, fittings, valves, insulation, and hookup should be included in this assembly. The unit of measure at the assembly level is pieces of special equipment.

C2030 **Sanitary Waste**

D203001 Waste Pipe and Fittings

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA	Assembly	1	$ 5,250		**Replace**

Condition	Exceeds theoretic life of System Operation.
Scope	Assemblies include all pipe, fittings, and associated work with regard to sanitary waste pipe and fittings. The unit of measure at the assembly level is number of fixtures.

D203002 Vent Pipe and Fittings

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA	Assembly	1	$ 2,800		**Replace**

Condition	Exceeds theoretic life of System Operation.
Scope	Assemblies include all pipe, fittings, and associated work with regard to sanitary vent pipe and fittings. The unit of measure at the assembly level is number of fixtures.

D203003 Floor Drains

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		2	$ 1,960		**Replace**

Condition	Exceeds theoretic life of System Operation.
Scope	Assemblies include all floor drains. Hub drains are considered to be pipe and are not included in this category. The unit of measure at the assembly level is number of drains.

D203004 Sanitary and Vent Equipment

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		2	$ 1,960		**Replace**

Condition	Exceeds theoretic life of System Operation.
Scope	This is equipment associated with the sanitary waste system, including fittings and specialties required for hook-up. Assemblies include waste treatment equipment, i.e., sluice gates, incinerators, etc.; pumps for sewage injection; and holding tanks for the domestic water system. The unit of measure at the assembly level is pieces of equipment.

HVAC

D3010 **Energy Supply**

D301002 Gas Supply System

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
KW	Assembly	1	$ 1,260		**Replace**

Condition	Exceeds theoretic life of Equipment Operation. Not efficient
Scope	This category includes both natural gas and LPG. Assemblies include metering and regulation equipment, storage equipment, transfer equipment, and distribution piping. The unit of measure at the assembly level is each system.

D3020 **Heat Generating Systems**

D302003 Furnaces

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
KW	EA	1	$ 18,200		**Replace**

Condition	Exceeds theoretic life of Equipment Operation. Not efficient
Scope	This is a system that heats air. Assemblies would include furnace and necessary fittings and specialties required for hookup, including flue and stack. The unit of measure at the assembly level is each.

D3040 **Distribution Systems**

D304001 Air Distribution, Heating and Cooling

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
L/S	Assembly	1	$ 22,800		**Replace**

Condition	Exceeds theoretical life of Equipment Operation. Not efficient
Scope	Assemblies include heating coils, cooling coils, and fittings and specialties required for water hook-up. This assembly also includes duct heaters, filters, humidifiers, supply and return ductwork, dampers, fire dampers, supply and return grilles, registers and diffusers, turning vanes, sound traps, and all associated insulation. The unit of measure at the assembly level is CF/M.

D50 Electrical

D5010 **Electrical Service and Distribution**

D501005 Panels

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
AMP		1	$ 4,200	Panel A in multipurpose room. Panel B in basement utility room.	**Replace**

Condition	Exceeds theoretic life of Panel.
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			$ 4,200	Mostly incandescent track light fixtures throughout building. Some fluorescent light fixtures throughout building.	**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			$ 2,800	Emergency battery units and remote heads located throughout building	**Replace**

Condition	Exceeded reliable Operation Life: Replace batteries at end of life. Replace lamps in remote heads.
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

F10 Special Construction

F1010 **Special Structures**

F101099 Other Special Construction

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		5	$ 4,200	Wood gazebo at south building face.	**Replace**

Condition	Overall in good condition. Deterioration noted at post bases at grade. Further investigation would be needed to determine extent of rot. When replaced, recommend to install posts on foundation raised min. 6" above grade to prevent this condition from recurring.
Scope	Special structures includes air-supported structures, and pre-engineered structures.

Part G Bldg. Siteworks

G20 Site Improvements

G2040 **Site Development**

G204009 Flagpoles

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		1	$ 6,800	Aluminum flagpole, approx. 20ft high, internal halyard, on front lawn.	**Replace**

Condition	Appeared to be in good to fair condition. Some wear noted at the top of the pole near the bottom of the flag.
Scope	Included are assemblies for on-site construction of fences, retaining walls, playing fields, fountains, and other site improvements.

G40 Site Electrical Utilities Preparations

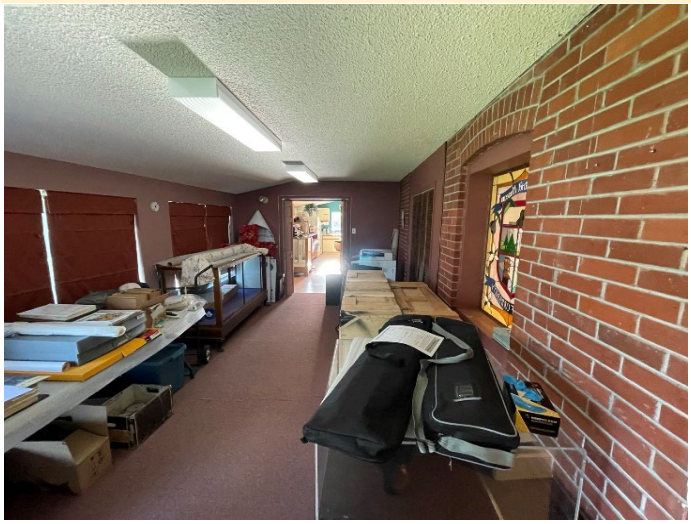
G4020 **Site Lighting**

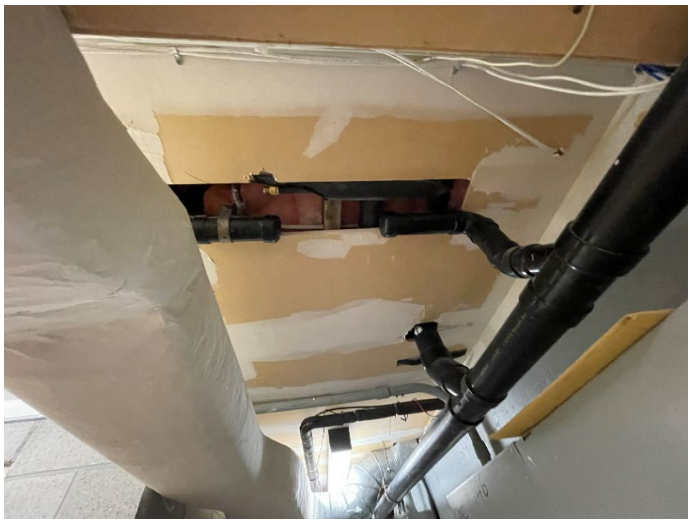
G402006 Exterior Lighting Fixtures and Controls

Unit/Meas.	O/Factor	Quantity	Event $ Est.	Location	Flag
EA		150	$ 1,050	Incandescent lights mounted to wall of building near entrance / exits. Ground mounted flood light in yard. Post top light at corner of walkway.	**Replace**

Condition	Replace ballasts and lamps in light fixture.
Scope	Includes fixtures, controls, and all components used in conjunction with

Interior Views





Elevator View, Exterior Views , M/E Views & Foundation Damage