BUILDING CONDITION ASSESSMENT

MUNICIPALITY OF STRATHROY-CARADOC

Strathroy and Area Senior Centre

137 Frank St. , Strathroy, Ontario N7G 2R8

WalterFedy Project No.: 2018-0485-10

Municipality of Strathroy-Caradoc Project No.: -

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WalterFedy Project No.: 2018-0485-10
Municipality of Strathroy-Caradoc Project No.: -

February 28, 2019

Robert Lilbourne
Director of Community Services
Municipality of Strathroy-Caradoc
52 Frank Street
Strathroy, ON, N7G 2R4

Dear Mr. Robert Lilbourne,

RE: **Municipality of Strathroy-Caradoc: Building Condition Assessment**
Strathroy and Area Senior Centre, 137 Frank St., Strathroy, Ontario N7G 2R8

WalterFedy is pleased to submit the attached Building Condition Assessment to Municipality of Strathroy-Caradoc. This report encompasses the originally agreed to scope, as outlined in our response to - for the Strathroy and Area Senior Centre located at 137 Frank St. in Strathroy.

Based on the information provided by Municipality of Strathroy-Caradoc, the report was completed with the data supplied and collected, as well as engineering judgement and various analysis tools to arrive at the final recommendations.

All of which is respectfully submitted,

WALTERFEDY

Kevin Nelson, B.Eng., EIT
Project Manager
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WalterFedy

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1 EXECUTIVE SUMMARY

1.1 Facility Description

Table 1 summarizes the background information for the facility at 137 Frank St. :

Table 1: Facility Background Information

Facility Name:	Strathroy and Area Senior Centre
Location:	137 Frank St.
Facility Type:	Senior Centre
Number of Floors:	1
Facility Area (sq.ft.):	10137
Year of Construction:	-
Facility Condition:	Good
Replacement Cost per SF	$300 per SF
Total Replacement Cost	$3,041,100

1.2 General Summary

The report identifies and makes life repair/replacement recommendations for deficiencies visually identified while on site on October 10, 2018. Within the property condition assessment methodology, each major component was assessed for condition, based on visual review, while factoring in component history, current maintenance practices and time since last major replacement/repair. The assessed condition of the component is then compared against industry accepted "expected useful life" values for each component type. An inventory of needs was then developed based on age, condition, and the relative impact that failure of that particular component represents for the building.

The original portion of the building was constructed 1964, with major renovation completed in 2000. Many of the major building mechanical elements were installed in the last major renovation and so are nearing an expected average useful lifecycle. Issues were also identified with some of the building envelope elements (roofs, doors, windows) and these should be repaired in the short to mid-term future.

1.3 Architectural Summary

Design and/or construction items have resulted in early failures and problematic issues with a number of architectural elements. Most notably:

- The building is clad with a mixture of stone masonry in an ashlar pattern implemented during the last major renovation (2000). The original portion of the building is comprised of brick masonry and concrete block. The original portion of the exterior cladding is spalling in localized areas, along with hairline and approx. one (1) cm in width step cracks.

- The low-slope built-up roofing membrane with a gravel ballast was recently replaced (2013), although it is showing signs of pooling around some of the centralized drains. Repairs to mitigate localized pooling are recommended as the proper installation of BUR typically does not have the symptoms observed within five (5) years of being commissioned.

- Staff indicated the gabled roofing system is subject to ice damming during heating months due to an overabundance of insulation overflowing into the soffits not allowing proper air flow to pass through the roof assembly.

- The ice damming was said to have been significant enough to have caused the roof to become undone from the wall assembly, though this could not be confirmed during this assessment

- The ripple effect of the roof has caused cracking and accelerated deterioration of the interior ceiling and wall finishes within the kitchen/dining area.

- The exterior doors are of brushed aluminum framed doors, with viewing panes within the doors, side glazing and transoms. There are double and single hollow metal doors in metal frames.

- The exterior windows within the perimeter of the original portion of the building are comprised of vinyl frames, double glazed, with operability. Since the last major renovation, brushed aluminum framed, double glazed, with operable sections.

1.4 **Mechanical Summary**

The conditioned air throughout the building is supplied from four (4) Rooftop Units that have been replaced since the last major renovation. Staff indicated the RTU – 1 (300,000 BTU/Hr) connected to the multipurpose room and kitchen/dining area is no longer functioning properly. It is recommended that monthly filter changes, semi-annual belt changes, and proper lubrication annually is conducted to all RTUs to extend the useful life of the unit until replacement can be accommodated.

-There is one (1) hot water boiler connected to recessed heating panels concealed by the ceiling finishes. The boiler is past its service life; consideration for a high-efficiency hot water boiler replacement is recommended.

- The hydronic piping network is consistent with the original year of construction. The age and deterioration of the piping has led to leakages in different areas throughout the interior which has caused bubbling and delamination of the paint from the gypsum. It is recommended that replacement of the hydronic piping is completed when the boiler is updated.

- There is one (1) domestic water heater (DHW) connected through copper supply lines to the plumbing fixtures throughout the interior.

1.5 **Electrical Summary**

The building has a primary electrical service of 600 A, 120/208 V, 3phase, 4wire main breaker panel. There are three (3) heavy duty disconnect switches and three (3) intermediate distribution panels throughout the interior.

-The lighting within the site building is a mixture of fluorescent T8 tubes, and CFL pot lighting. It is recommended to re-lamp all existing fixtures with LED lamps. Parking lot lighting and wall packs were upgraded to LED systems.

- Emergency lighting and EXIT lighting is installed and generally in acceptable condition although the individual units are nearing the end of a typical lifecycle.

1.6 **Accessibility Summary**

The building in its current state does not fully comply with the new legislation set to begin in 2025. Remedial work to comply with the current AODA standards is to be considered:

- Accessible Stalls (universal washroom)

- Accessible door widths

- Pushbutton access/automatic door operators on all doors

1.7 **Expenditure Breakdown**

Figure 1 displays recommended expenditures over the next twenty-five (25) years, separated into five-year increments. Details of the expenditure allocation and reserve fund study are provided in the attached reserve fund study spreadsheet.

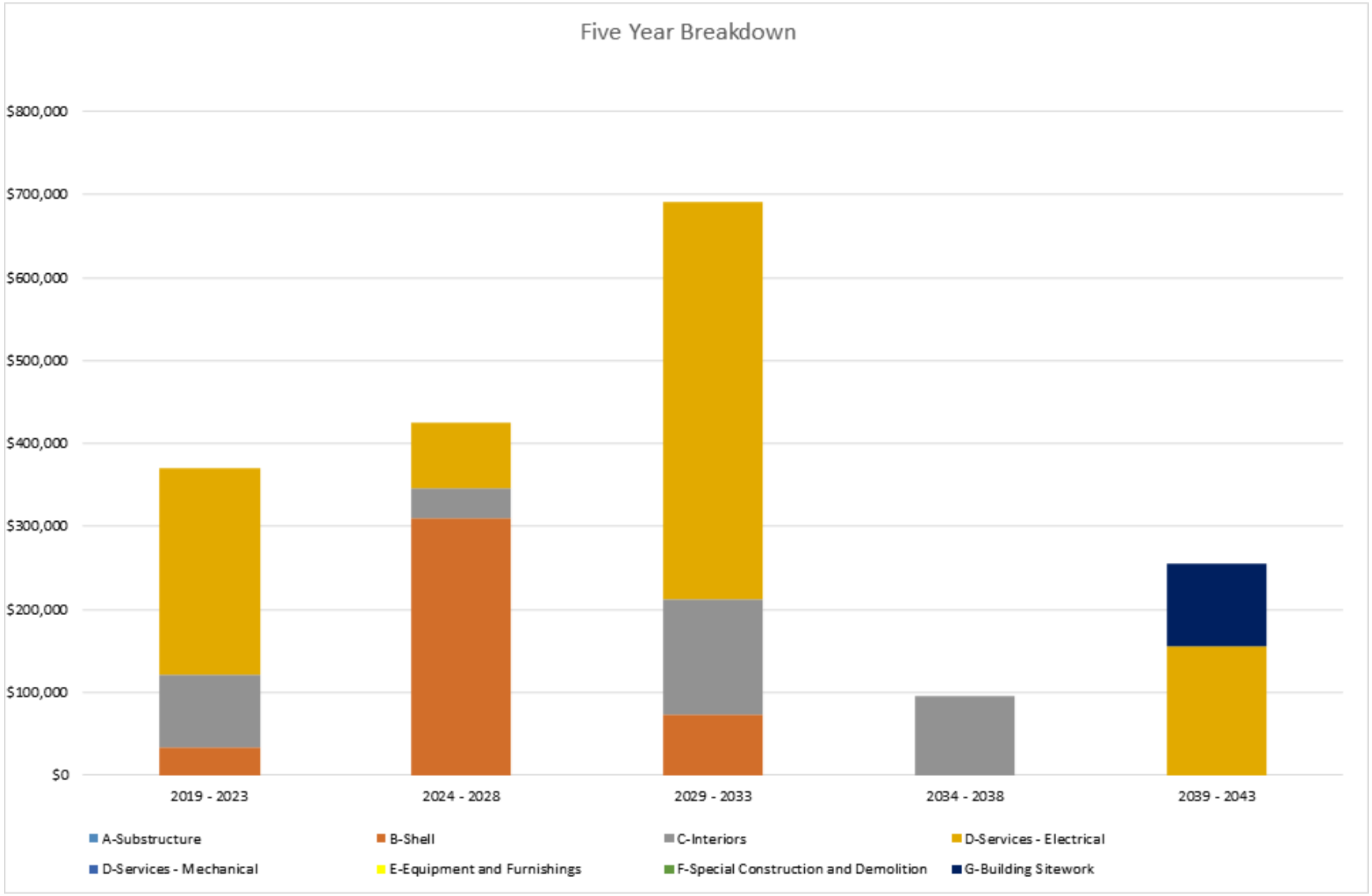

Figure 1: Five-Year Expenditure Breakdown Chart

2 INTRODUCTION

2.1 Objectives

The objectives include the following:

- Identifies all capital items that may/will need repair or replacement over the next 25-years as well as into the future lifetime of the building;
- Provides estimated values for each of the identified repairs and/or replacements based on real-life costs for parts, delivery and service;
- Identifies preventative maintenance tasks to be done to provide for capital items life-span maximization, referencing current supplier maintenance/repair records; and
- Provides recommendations to assist in keeping capital costs minimal over the remaining lifespan of the building and grounds.

2.2 Scope of Work

The Facility Condition Assessments (FCA) included a visual examination of the following:

- Site works (i.e. pavement, soft landscaping, pedestrian walkways, curbs, site lighting, fencing etc.);
- Visible structural elements (i.e. columns, slabs, walls, and beams, etc.);
- Building envelope, comprised of the exterior walls, windows, and exterior doors;
- Roof systems;
- Electrical systems;
- Mechanical systems (i.e. HVAC units, domestic hot water, etc.);
- Equipment/appliances;
- Life safety systems;
- Interior finishes of the common areas; and
- Barrier free elements

2.3 Cost Estimates

Cost estimates provided in this report are preliminary Class "D" estimates and are provided only as an indication of the order of magnitude of the recommended actions identified by WalterFedy assessors. The estimated values have been determined by identifying the requirements for an element or component of the building during the site visit, including the functional capacity sizes (i.e. heating unit output, quantities of windows or floor areas) and then applying market value replacement costs and/or a reasonable lump sum allowance for the recommended work. In the case where a recommended action includes repeating regular work a budgetary allowance is provided.

As much as possible the cost estimates in the report are based on costs of similar work that WalterFedy has been involved with, recent costing data from industry standard references such as "RS Means Repair and Remodeling Cost Data - Commercial/Residential" and "Hanscomb's Yardsticks for Costing", or by contacting specialized contractors and suppliers. Unless otherwise stated, the replacement costs identified for an element reflects the cost to remove the existing element and replace it with a new version of the element that would provide equivalent service (i.e. a "like for like" replacement).

Estimated costs are identified in 2018 Canadian Dollars (i.e. the year of assessment), including a 20% contingency fee to cover unforeseen costs and a 10% contingency fee to cover applicable consulting fees, but do not include any applicable taxes.

The estimates assume the work is performed at one time and as such do not include general project management costs, or costs for de-mobilization and re-mobilization if repairs/replacement are spread out over the term of analysis. More precise cost estimates would require more detailed investigation to refine a specific scope of work. WalterFedy

cannot guarantee that or warrant that the final costs will not exceed these estimated amounts or that all ancillary costs related to the recommended actions are covered.

2.4 Condition and Priority Rating System

The condition ratings of the building components are assessed according to the following definitions.

Table 2: Condition Definitions

Condition	Definition
Very Good	Element is performing very well, no noticeable defects
Good	Element is performing adequately; no work is foreseen in the next 10 years
Fair	Element is operational but replacement or major repair action is expected within the next 5-10 years.
Poor	Element requires replacement or major repair action within the next 1-5 years.
Very Poor	Element is beyond its useful life (or not functioning) requiring replacement or major repair action in current year.

Priority of repair/replacement of the building systems and components was assessed according to the age, condition and the following categories:

Table 3: Project Prioritization Questions

Category	Measure
Energy Savings	High; Medium; Low
Accessibility	Yes; No
Grants Available	Yes; No
Legislation	Yes; No
Health & Safety	Yes; No
Part of Strategic Plan	Yes; No
Consequence of Failure	Very High; High; Moderate; Low; Very Low

2.5 Facility Condition Index (FCI)

The FCI is a key performance indicator (KPI) which is used to objectively quantify and evaluate the current condition (i.e. physical health) of a building or a portfolio of buildings as a group. The FCI can help building owners and managers make benchmark comparisons on the relative condition of that one facility with:

- Other facilities within the same portfolio
- Against the same facility at some time in the past

Additionally, by using projected renewal and replacement costs a future FCI can be predicted that will demonstrate the changing condition of the building over time.

FCI is typically expressed using the following equation:

$$FCI = \frac{\text{Total Renewal and Repair Costs}}{\text{Building Replacement Cost}}$$

Where the total renewal and repair costs are identified during the completion of the building condition assessment (i.e. costs for recommended actions as described in section 2.3) and the building replacement cost is typically calculated using the current-day unit cost to construct the same building with the same occupancy and functional spaces built to current standards and code requirements. The building area is determined based on available information (information direct from client sources, drawings, previous reports, Google Map area take-offs, etc.). A construction cost per square foot for a modern version of the similar building/facility constructed according to current Code requirements is assumed based on the current engineering and construction practice. The replacement cost does not consider real estate market factors and is not equal to resale value of the property, simply a cost to build.

It is important to note that FCI is a measure of the condition relative to the reproduction cost of the building, and not an absolute statement of the volume or type of work required. For example, when comparing two buildings of greatly differing sizes but determined to have the same FCI, the larger building would require a larger budget for the identified repair and renewal actions. The FCI for neither building would be able to identify any high priority or life safety actions that may have been identified.

The following benchmarks are typically used in the industry standard to indicate the condition ratings of FCI:

- FCI: 0-5% Good Condition
- FCI: 5-10% Fair Condition
- FCI: 10-30% Poor Condition
- FCI: >30% Critical Condition

To help predict the future performance of the building in the study, repair or replacement action costs for the items noted in this assessment have been estimated using Class “D” estimates (considered to be preliminary or indicative estimates with an accuracy of +/-25%). The cost sheet forecasts include the recommended action costs for each repair or replacement item, distributed according to the appropriate year for when the item is recommended to be completed. Annual cost sub-totals are calculated, in order to determine the FCI per year. Each year’s FCI value is calculated assuming that none of the previous year’s recommended actions are completed; by following this process the FCI trend over the study period can be predicted.

At present the FCI is calculated to be 5.3%, or good. However, by 2020, if none of the recommended actions in this report are completed, the FCI will be 14.3% or in the Poor condition range. Over the next 10 years, the average FCI is calculated to be 22.9% implying that the facility will be in the Poor condition overall. If the FCI is calculated in longer term such as 25 years, some of the lifecycle replacement actions may be repeated. Therefore, the calculation results will not be accurately reflecting the actual condition. Figure 2 displays the FCI graph over twenty-five (25) years.

2.6 List of Reference Documents and Standards

- ASTM E2018 - 15 Standard Guide for Property Condition Assessments: Baseline Property Condition Assessment Process
- ASTM E2166 - 16 Standard Practice for Organizing and Managing Building Data
- ASTM E1557 - 09(2015) Standard Classification for Building Elements and Related Sitework-UNIFORMATII
- Ontario Building Code, 2012
- Ontario Fire Code, 2007
- Building drawings provided by the Owner

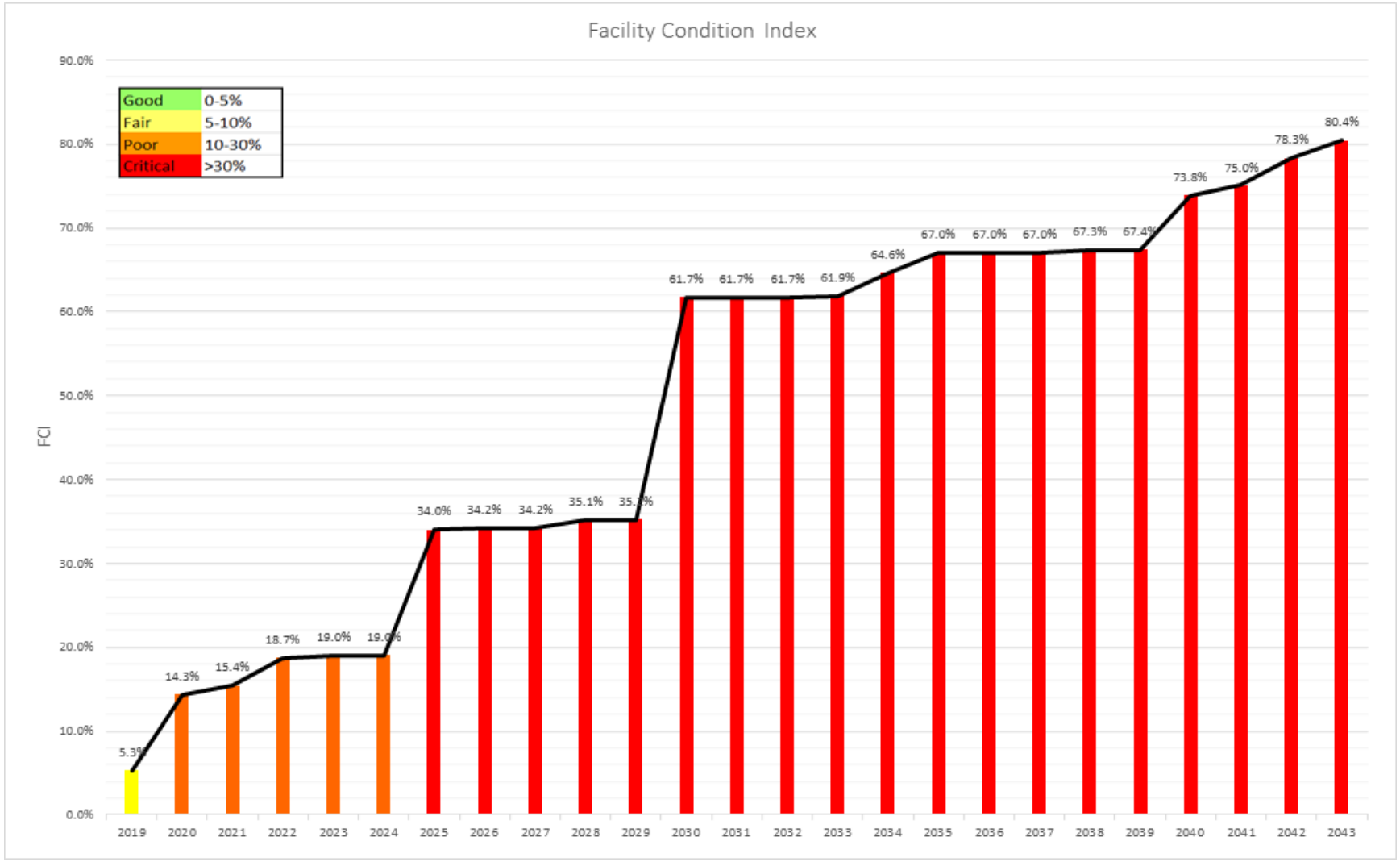

Figure 2: Facility Condition Index (FCI) Chart

3 EXISTING CONDITIONS AND RENEWAL RECOMMENDATIONS

3.1 A - Substructure - A10 - Foundations

3.1.1 A1010 - Standard Foundations:

Condition Assessment: Concrete Foundation Walls and Footings at Foundation

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	99
Commentary	The senior centre is supported by poured concrete foundation walls and footings. Due to the concealed nature of the footings the condition could not be verified. Where visible or exposed, the foundation walls have some areas of spalling and degradation where localized reparging is recommended. Given the expected useful life of approximately 100 years and current observed conditions of the foundations, major repair of the foundation walls is not anticipated within the next 25 years (2019 to 2044).		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	1964-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Reparging of foundation walls		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	10 years

Prioritization Considerations

Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.2 A - Substructure - A10 - Foundations

3.2.1 A1030 - Slab on Grade:

Condition Assessment: Poured Concrete Slab on Grade at Foundation

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	99
Commentary	The concrete slab sitting atop strip footings and backfill consists of 4" poured reinforced concrete. Minimal hairline cracking was observed when the concrete slab is exposed. The slab is exposed in the workshop, mechanical and electrical rooms. In addition, settlement issues was noted/reported in the kitchen area. Given the expected useful life of approximately 100 years and current observed conditions of the foundations, major replacement of the slab on grade foundations is not anticipated within the next 25 years (2019 to 2044). However repair of the cracks as well as investigation and repair to address the settlement issues in the kitchen is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	1964-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to concrete slab on grade		
Intervention Cost	$ 20000		
Intervention Year	2020	**Repeat Interval**	10 years

Prioritization Considerations

Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.3 B - Shell - B20 - Exterior Closure

3.3.1 B2012-A - Concrete Unit Masonry Wall System:

Condition Assessment: Concrete Block Walls at North / East Elevations

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Concrete block masonry wall (painted) has been implemented as the exterior cladding system and superstructure of the building. The concrete block walls support the loads transferred from the roof assembly. Areas of step cracking and localized spalling was observed. Full replacement is not anticipated. Continuous repairs to problematic areas and monitoring of step cracking is recommended as the block walls will continue to deteriorate with age.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	1964-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to concrete block walls		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	10 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	

Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.4 B - Shell - B20 - Exterior Closure

3.4.1 B2012-B - Clay Brick Masonry Wall System:

Condition Assessment: Brick Masonry at West / South Elevations

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	30
Commentary	There are two (2) different types of brick masonry along the exterior of the building. There is an area of concrete brick (unpainted), along with clay brick masonry around the perimeter of the site building. Overall the brick masonry is considered in Fair condition and full replacement is not anticipated. However there are large, localized sections of the masonry that would be considerd poor and in need of repointing and localized individual brick replacement is recommended. Along the lower courses of the clay brick masonry areas there are several bricks that have spalled and cracked. It appears there may have been prior repairs to this area (different mortars) but further extensive repairs are recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repointing to brick masonry		
Intervention Cost	$ 25000		
Intervention Year	2020	**Repeat Interval**	10 years

Prioritization Considerations

Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.5 B - Shell - B20 - Exterior Closure

3.5.1 B2012-C - Stone Veneer Masonry Wall System:

Condition Assessment: Stone Masonry at West / South Elevations

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Stone masonry, split face ashlar veneer has been installed during the last major renovation (2000). There are minimal signs of cracking and deterioration that was observed during the time of site inspection. The ashlar stone masonry is in good condition. Full replacement is not anticipated within the terms of the study period.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to stone masonry		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	10 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High

Legislation	No

3.6 B - Shell - B20 - Exterior Closure

3.6.1 B2020 - Exterior Windows:

Condition Assessment: Vinyl Framed at Building Perimeter

Element Details			
Condition Rating	Poor	**Remaining Useful Life (Years)**	1
Commentary	The exterior glazing is comprised of vinyl framed, double glazed casements. Typical signs of wear, deterioration and localized areas of condensation accumulation was observed indicating the units are past their estimated service life. Full replacement to high performance/efficiency windows are recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	1978-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	4 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace vinyl framed glazing units		
Intervention Cost	$ 10000		
Intervention Year	2019	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High

Legislation	No

3.7 B - Shell - B20 - Exterior Closure

3.7.1 B2022 - Windows - Aluminum:

Condition Assessment: Brushed Aluminum Framed at Building Perimeter

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	12
Commentary	The exterior glazing is comprised of brushed aluminum framed, double glazed units with operable sections and fixed panes with and without back painting. The large units were installed during the most recent major renovation and are showing minimal signs of wear or accumulation of condensation the glazing is still functioning as intended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 60000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	14 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace brushed aluminum framed glazing units		
Intervention Cost	$ 68000		
Intervention Year	2030	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High

Legislation	No

3.8 B - Shell - B20 - Exterior Closure

3.8.1 B2023 - Windows - Wood:

Condition Assessment: Wood Framed at Building Perimeter

Element Details			
Condition Rating	Poor	**Remaining Useful Life (Years)**	1
Commentary	There are original windows that are comprised of wood framed, single glazed units with an arched architectural feature. There are fixed storm windows on the exterior of the glazing units. Areas of paint chipping and hairline cracks within the frames of the glazing was observed. It is recommended to update the windows with high performance units to see a reduction in overall operation costs.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	1964-jan-01	**Serial Number**	
Replacement Cost	$ 21000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	8 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace wood framed windows		
Intervention Cost	$ 23000		
Intervention Year	2019	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High

Legislation	No

3.9 B - Shell - B20 - Exterior Closure

3.9.1 B2031 - Glazed Entrances:

Condition Assessment: Brushed Aluminum Doors at Building Perimeter

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	10
Commentary	The site building is has a mixture of double and single exterior doors comprised of brushed aluminum doors with glazing inserts within the doors and transoms. Evidence of condensation within the transom at the main entrance was observed indicating that localized repairs are recommended. There are localized areas of damage likely due to impact within the frames where surface corrosion has started to develop. Immediate repairs are recommended. Full replacement will be necessary as the doors and frames will continue to deteriorate with age.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 22000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	5 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to brushed aluminum doors		
Intervention Cost	$ 10000		
Intervention Year	2019	**Repeat Interval**	N/A

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low

Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.10 B - Shell - B20 - Exterior Closure

3.10.1 B2031 - Glazed Entrances:

Condition Assessment: Brushed Aluminum Doors at Building Perimeter

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	10
Commentary	The site building is has a mixture of double and single exterior doors comprised of brushed aluminum doors with glazing inserts within the doors and transoms. Evidence of condensation within the transom at the main entrance was observed indicating that localized repairs are recommended. There are localized areas of damage likely due to impact within the frames where surface corrosion has started to develop. Immediate repairs are recommended. Full replacement will be necessary as the doors and frames will continue to deteriorate with age.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 22000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	5 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace brushed aluminum doors		
Intervention Cost	$ 22000		
Intervention Year	2028	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	High

Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.11 B - Shell - B20 - Exterior Closure

3.11.1 B2032 - Exterior Doors And Frames - Steel:

Condition Assessment: Hollow Metal Doors at Building Perimeter

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	8
Commentary	There are a mixture of double and single hollow metal access doors and frames along the perimeter of the building. They appear to have been updated during the most recent renovation (2000) with minimal signs of surface corrosion was detected.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 8000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	3 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace hollow metal doors		
Intervention Cost	$ 8000		
Intervention Year	2026	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	High
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.12 B - Shell - B20 - Exterior Closure

3.12.1 B2040 - Industrial Doors:

Condition Assessment: Overhead Doors at Building Perimeter

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	15
Commentary	There is one (1) insulated overhead door along the South elevation of the site building. Significant amount of paint chipping and wood rot was apparent on the frame around the overhead door. Repairs/refurbishment is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2008-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to overhead door frame		
Intervention Cost	$ 3000		
Intervention Year	2019	**Repeat Interval**	10 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.13 B - Shell - B20 - Exterior Closure

3.13.1 B2040 - Industrial Doors:

Condition Assessment: Overhead Doors at Building Perimeter

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	15
Commentary	There is one (1) insulated overhead door along the South elevation of the site building. Significant amount of paint chipping and wood rot was apparent on the frame around the overhead door. Repairs/refurbishment is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2008-jan-01	**Serial Number**	
Replacement Cost	$ 4500	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace overhead door		
Intervention Cost	$ 4500		
Intervention Year	2033	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.14 B - Shell - B30 - Roofing

3.14.1 B3010 - Roof Coverings:

Condition Assessment: Shingled Roof at Gabled Roof

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	17
Commentary	The gabled roof above the multipurpose room and kitchen/dining area has been recently re-shingled. Staff indicated that the roof assembly was constructed improperly, along with an overuse of insulation that does not allow for proper air flow through the roof. This leads to ice damming in the winter months and the increased potential of the development of black mould spores within the roof and wall assemblies. Repairs to the roof construction and re-alignment of the insulation to ensure soffit vents are not blocked is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2015-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	4510 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to interior construction of the roof assembly		
Intervention Cost	$ 15000		
Intervention Year	2020	**Repeat Interval**	N/A

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low

Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.15 B - Shell - B30 - Roofing

3.15.1 B3010 - Roof Coverings:

Condition Assessment: Shingled Roof at Gabled Roof

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	17
Commentary	The gabled roof above the multipurpose room and kitchen/dining area has been recently re-shingled. Staff indicated that the roof assembly was constructed improperly, along with an overuse of insulation that does not allow for proper air flow through the roof. This leads to ice damming in the winter months and the increased potential of the development of black mould spores within the roof and wall assemblies. Repairs to the interior of the roof construction is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2015-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	4510 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Make changes to insulation layout to ensure no vents are blocked.		
Intervention Cost	$ 25000		
Intervention Year	2035	**Repeat Interval**	N/A

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	

Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.16 B - Shell - B30 - Roofing

3.16.1 B3011-A - Membrane Roofing:

Condition Assessment: Low-Slope Roof at Low-Slope Roof

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	7
Commentary	The low-slope roof sitting atop the site building is comprised of steel Open Web Steel Joists (OWSJs) supporting corrugated steel decking, 4" rigid insulation, built-up roofing membrane and a gravel ballast. There are areas of pooling/low spots that are in need of immediate repairs and blueberry effect. The roof assembly was replaced in 2013 and has a remaining useful life of approximately 10 years based on age and observed condition..		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2013-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	11100 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to low-slope roof assembly		
Intervention Cost	$ 15000		
Intervention Year	2019	**Repeat Interval**	N/A

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	

Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.17 B - Shell - B30 - Roofing

3.17.1 B3011-A - Membrane Roofing:

Condition Assessment: Low-Slope Roof at Low-Slope Roof

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	7
Commentary	The low-slope roof sitting atop the site building is comprised of steel Open Web Steel Joists (OWSJs) supporting corrugated steel decking, 4" rigid insulation, built-up roofing membrane and a gravel ballast. There are areas of pooling/low spots that are in need of immediate repairs and blueberry effect. The roof assembly was replaced in 2013 and has a remaining useful life of approximately 10 years based on age and observed condition..		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2013-jan-01	**Serial Number**	
Replacement Cost	$ 280000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	11100 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace low-slope roof assembly		
Intervention Cost	$ 280000		
Intervention Year	2025	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	

Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.18 B - Shell - B30 - Roofing

3.18.1 B3018 - Gutters And Downspouts:

Condition Assessment: Rain gutters and downspouts at Gabled Roof

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	22
Commentary	Metal rain gutters and downspouts are installed on the edges of the gabled roof. The downspouts are implemented to funnel rain water away from the foundation. Some areas of damage likely due to impact was observed. Repairs/maintenance is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs and regular cleaning to gutters and downspouts		
Intervention Cost	$ 10000		
Intervention Year	2040	**Repeat Interval**	5 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.19 B - Shell - B30 - Roofing

3.19.1 B3018 - Gutters And Downspouts:

Condition Assessment: Centralized Drainage at Low-Slope Roof

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	22
Commentary	Centralized drainage with PVC piping and metal covers within the roofing membrane is implemented to funnel rain water drainage away from the foundation of the building. Repairs/maintenance is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2010-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs and regular cleaning to centralized drainage		
Intervention Cost	$ 10000		
Intervention Year	2040	**Repeat Interval**	5 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low
Legislation	No		

3.20 C - Interiors - C10 - Interior Construction

3.20.1 C1016 - Toilet Partitions:

Condition Assessment: Wooden Partitions at Washrooms

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	17
Commentary	Wooden toilet partitions with a laminate finish are implemented in both male and female washrooms. The partitions appear to have been recently installed with minimal signs of deterioration and wear observed.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2010-jan-01	**Serial Number**	
Replacement Cost	$ 12000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	5 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace wooden toilet partitions		
Intervention Cost	$ 12000		
Intervention Year	2035	**Repeat Interval**	15 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low
Legislation	No		

3.21 C - Interiors - C10 - Interior Construction

3.21.1 C1020 - Interior Doors:

Condition Assessment: Hollow Metal Interior Doors at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	7
Commentary	Hollow metal interior doors within hollow metal frames are used throughout the interior of the building. There are doors with a fire rating at 3/4 hr that complies with applicable OFC standards. Some doors include viewing panes with and without wire meshing within the glazing. Some minor areas of paint chipping and typical wear were observed, no concerning signs of corrosion along the hinges or frames.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 26000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	13 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace hollow metal interior doors		
Intervention Cost	$ 26000		
Intervention Year	2025	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	High
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.22 C - Interiors - C10 - Interior Construction

3.22.1 C1020 - Interior Doors:

Condition Assessment: Wooden Doors at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	7
Commentary	There are solid core, wooden interior doors within hollow metal frames with and without wearshields are used throughout the interior of the building. Paint deterioration along the corners and base of the doors were apparent, there were no concerning signs of corrosion pitting within the hinges or door frames.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 10000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	5 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace solid core wooden doors		
Intervention Cost	$ 10000		
Intervention Year	2025	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	High
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.23 C - Interiors - C10 - Interior Construction

3.23.1 C1030 - Fittings:

Condition Assessment: Cabinetry at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	12
Commentary	Throughout the interior there are areas of fixed casework with wooden cabinetry and laminate/wooden countertops. The fittings appear to have minor signs of wear and paint chipping along the surface individual doors in localized areas.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 140000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	116 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace cabinetry and countertops		
Intervention Cost	$ 140000		
Intervention Year	2030	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low
Legislation	No		

3.24 C - Interiors - C30 - Interior Finishes

3.24.1 C3010 - Wall Finishes:

Condition Assessment: Gypsum Wallboard at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Gypsum wallboard is implemented as the primary wall finish throughout the interior of the building. There are localized areas where damage, scuffs and paint chipping is apparent. Within the kitchen dining area adjacent to the multipurpose room, some cracks were observed along the gypsum wallboard which staff indicated could be from the severe ice damming in the gabled roof. Localized repairs/refurbishment is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	29100 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to gypsum wallboard		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	5 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	

Grants Availability		**Consequence of Failure**	Low
Legislation	No		

3.25 C - Interiors - C30 - Interior Finishes

3.25.1 C3010 - Wall Finishes:

Condition Assessment: Gypsum Wallboard at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Gypsum wallboard is implemented as the primary wall finish throughout the interior of the building. There are localized areas where damage, scuffs and paint chipping is apparent. Within the kitchen dining area adjacent to the multipurpose room, some cracking, paint degradation and areas where the ceiling and wall finish appear to be separating from each other. Staff indicated that this could be a result from the ice damming causing the gabled roof to lift off and separate from the walls of the building. Localized repairs/refurbishment is recommended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 150000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	29100 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Make repairs to gypsum wallboard in localized areas. Removal of some sections may be required to verify existence of moisture / mould or not		
Intervention Cost	$ 15000		
Intervention Year	2020	**Repeat Interval**	5 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low

Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low
Legislation	No		

3.26 C - Interiors - C30 - Interior Finishes

3.26.1 C3010 - Wall Finishes:

Condition Assessment: Brick Masonry at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Clay brick masonry is implemented as the wall finish within the billiards room. There are areas of step cracking and localized spalling and receding mortar between the bricks. Full replacement is not anticipated, although, a repointing allowance will be carried throughout the terms of the study period.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1200 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repointing of brick masonry		
Intervention Cost	$ 10000		
Intervention Year	2023	**Repeat Interval**	15 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.27 C - Interiors - C30 - Interior Finishes

3.27.1 C3010 - Wall Finishes:

Condition Assessment: Concrete Block Walls at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	99
Commentary	Concrete block walls (painted) are used throughout the corridors and private spaces (mechanical/electrical rooms). Areas of step cracking and localized spalling was observed. Full replacement is not anticipated. Continuous repairs to problematic areas and monitoring of step cracking is recommended as the block walls will continue to deteriorate with age.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	2000 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to interior concrete block walls		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	10 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.28 C - Interiors - C30 - Interior Finishes

3.28.1 C3014-A - Ceramic Wall Tile:

Condition Assessment: Ceramic Wall Tile at Washrooms

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Within both male and female washrooms the walls are covered with ceramic tiling atop concrete block walls on approximately 50% of the walls. The ceramic tiling has minimal signs of deterioration and cracking of the tiles along the walls, localized repairs are recommended when necessary. Full replacement is not anticipated within the terms of the study period.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1000 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: SKIPSKIP

Intervention Details			
Intervention Commentary			
Intervention Cost	$		
Intervention Year		**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.29 C - Interiors - C30 - Interior Finishes

3.29.1 C3020 - Floor Finishes:

Condition Assessment: Sheet Carpet at Throughout

Element Details			
Condition Rating	Poor	**Remaining Useful Life (Years)**	1
Commentary	Throughout the private spaces (offices), billiards and knitting lounge, the floor finishes are of sheet carpet. There are areas of fraying around the perimeter of the carpet at the connection of the wall and floor. The sheet carpet has staining, localized areas where the fibres of the carpet begin to become unwound from the carpet base which could develop into potential trip hazards. The sheet carpet is dated and in need of replacement.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 84000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	3350 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace sheet carpet		
Intervention Cost	$ 84000		
Intervention Year	2019	**Repeat Interval**	15 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	

Grants Availability		**Consequence of Failure**	Low
Legislation	No		

3.30 C - Interiors - C30 - Interior Finishes

3.30.1 C3020 - Floor Finishes:

Condition Assessment: Hardwood at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	25
Commentary	Hardwood is used as the floor finish within the multipurpose room. Some areas of localized cracking of the hardwood was observed in the corners and thresholds. Refinishing (sanding, seal joints and cracks, clear-coat) is recommended to ensure long lifecycle of the flooring		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 98000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	3240 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Refinish hardwood flooring		
Intervention Cost	$ 10000		
Intervention Year	2025	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.31 C - Interiors - C30 - Interior Finishes

3.31.1 C3020 - Floor Finishes:

Condition Assessment: Vinyl Composite Tile at Throughout

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	3
Commentary	The arts and crafts room adjacent to the knitting lounge is topped with Vinyl Compostie Tile (VCT). There are other areas throughout the interior where the VCT is used as a secondary finish to sheet carpeting specifically within the kitchen area. The VCT is nearing the end of its useful service life where delamination from the concrete slab has caused the tiling to crack in localized areas.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 5000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	600 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace VCT		
Intervention Cost	$ 5000		
Intervention Year	2021	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.32 C - Interiors - C30 - Interior Finishes

3.32.1 C3020 - Floor Finishes:

Condition Assessment: Ceramic Tile at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Ceramic tiling is implemented throughout the corridors and washrooms. There are some localized areas where individual tiles have hairline cracks, and the grout between the tiles is in need of an update/refurbishment.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1220 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to ceramic tiling		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	N/A

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low
Legislation	No		

3.33 C - Interiors - C30 - Interior Finishes

3.33.1 C3020 - Floor Finishes:

Condition Assessment: Sealed Concrete at Mechanical/Electrical Rooms

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Sealed, treated concrete in the workshop and mechanical/electrical rooms is implemented as the flooring finish. There are hairline cracks that should be monitored and sealed if they continue to expand. Full replacement is not anticipated while repairs are needed.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	2200 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to exposed concrete		
Intervention Cost	$ 10000		
Intervention Year	2021	**Repeat Interval**	N/A

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.34 C - Interiors - C30 - Interior Finishes

3.34.1 C3030 - Ceiling Finishes:

Condition Assessment: Gypsum Ceiling Finish at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Gypsum board is used throughout the interior within the private spaces and as an accent feature along the ceiling in the main lobby. In some areas leakages from the boiler system piping has caused sagging and significant deterioration of the ceiling finish in multiple areas throughout the interior. Repairs/refurbishment is needed in localized areas. A full replacement allowance will be allocated.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	3570 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to gypsum ceiling finish		
Intervention Cost	$ 5000		
Intervention Year	2020	**Repeat Interval**	N/A

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.35 C - Interiors - C30 - Interior Finishes

3.35.1 C3030 - Ceiling Finishes:

Condition Assessment: Acoustic Ceiling Tile at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	30
Commentary	Metal t-bar, suspended lay-in acoustic ceiling tiles are used as the primary ceiling finish throughout the interior. Evidence of staining was observed from leakages through the original roofing system. This has since been mitigated from the recent roofing replacement. Individual tile replacement is needed where necessary.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 51000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	5100 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Localized tile replacement in order to maintain overall integrity of the ceiling		
Intervention Cost	$ 10000		
Intervention Year	2025	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.36 D - Services - D20 - Plumbing

3.36.1 D2010 - Plumbing Fixtures:

Condition Assessment: Washroom Plumbing Fixtures at Washrooms

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	1
Commentary	The washroom plumbing fixtures consist of eight (8) floor mounted and wall mounted waterclosets, five (5) lavatories and one (1) urinal within the public and staff washrooms. Staff indicated that the waterclosets are intended to be replaced before years end (2018). Full replacement is recommended for all washroom plumbing fixtures.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 12000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	16 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace washroom plumbing fixtures		
Intervention Cost	$ 12000		
Intervention Year	2019	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.37 D - Services - D20 - Plumbing

3.37.1 D2010 - Plumbing Fixtures:

Condition Assessment: Stainless Steel Sink at Throughout

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	3
Commentary	There are a mixture of double and triple basin stainless steel sinks, recessed within the countertops in various locations throughout the interior. The steel sinks appear to be dated and in need of an update.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 6800	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	6 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace stainless steel sinks		
Intervention Cost	$ 6800		
Intervention Year	2021	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.38 D - Services - D20 - Plumbing

3.38.1 D2020 - Domestic Water Distribution:

Condition Assessment: Copper Piping at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	40
Commentary	The plumbing piping is copper and dates to the building's last major renovation. Based on age, a provision has been allocated for piping failures, which are known to generally occur, especially at pipe joints, with age.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to copper piping, as needed		
Intervention Cost	$ 10000		
Intervention Year	2025	**Repeat Interval**	40 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.39 D - Services - D20 - Plumbing

3.39.1 D2030 - Sanitary Waste:

Condition Assessment: PVC Piping at Throughout

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	40
Commentary	The sanitary sewage piping is PVC and dates to the building's original construction. Based on age, a provision has been allocated for sanitary piping failures, which are known to generally occur, especially at pipe joints, with age.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	1964-jan-01	**Serial Number**	
Replacement Cost	$ N/A	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Repairs to sanitary piping, as needed		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	40 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High
Legislation	No		

3.40 D - Services - D20 - Plumbing

3.40.1 D2095 - Domestic Water Heaters:

Condition Assessment: Domestic Water Heater at Mechanical Room

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	10
Commentary	Manufactured by A.O. Smith, gas-fired, power vented domestic water heater seventy-one (71) Litre capacity is positioned in the mechanical room. The water heater was recently updated.		
Manufacturer	A.O. Smith	**Model**	BTRC120 118
In Service Date (YYYY-MM-DD)	2013-jan-01	**Serial Number**	1345M000054
Replacement Cost	$ 4500	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace Domestic Water Heater		
Intervention Cost	$ 4500		
Intervention Year	2028	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.41 D - Services - D30 - HVAC

3.41.1 D3022 - Hot Water Boilers:

Condition Assessment: Boiler B-1 at Mechanical room 111

Element Details			
Condition Rating	Poor	**Remaining Useful Life (Years)**	2
Commentary	Hot water boiler manufactured by Weil-McLain (153,000 BTU/Hr) is connected to radiant heat panels within the ceiling, concealed by the finishes and the different Unit Heaters throughout the interior. It is recommended to upgrade to a high efficiency hot water boiler as the current unit is dated and nearing end of useful service life. See also notes regarding issues with the hydronic system piping.		
Manufacturer	Weil-McLain	**Model**	GV-6
In Service Date (YYYY-MM-DD)	1990-jan-01	**Serial Number**	
Replacement Cost	$ 10000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace hot water boiler		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.42 D - Services - D30 - HVAC

3.42.1 D3034 - Packaged Air Conditioning Units:

Condition Assessment: RTU-1 at Low-Slope Roof

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	12
Commentary	Manufactured by York packaged, rooftop unit (300,000 BTU/HR) supplying conditioned air to the multipurpose room and kitchen/dining area has been updated since the last major renovation. Preventative maintenance practices (monthly filter changes, semi-annual belt changes, proper lubrication etc.) will extend the service life of the RTU.		
Manufacturer	York	**Model**	ZJ180N24S2TAA2A
In Service Date (YYYY-MM-DD)	2010-oct-01	**Serial Number**	N1L3138265
Replacement Cost	$ 175000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace RTU - 1		
Intervention Cost	$ 175000		
Intervention Year	2030	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.43 D - Services - D30 - HVAC

3.43.1 D3034 - Packaged Air Conditioning Units:

Condition Assessment: RTU-2 at Low-Slope Roof

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	12
Commentary	Manufactured by York packaged, rooftop unit (180,000 BTU/HR) servicing the conference room, knitting lounge and billiards room has been updated since the last major renovation. Staff indicated that the unit has been a problematic unit since it was installed requiring above average maintenance.		
Manufacturer	York	**Model**	ZF090N15P2TAA5A
In Service Date (YYYY-MM-DD)	2010-oct-01	**Serial Number**	N1L3142945
Replacement Cost	$ 100000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace RTU - 2		
Intervention Cost	$ 100000		
Intervention Year	2022	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.44 D - Services - D30 - HVAC

3.44.1 D3034 - Packaged Air Conditioning Units:

Condition Assessment: RTU-3 at Low-Slope Roof

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	12
Commentary	Manufactured by York packaged, rooftop unit (115,000 BTU/HR) supplies conditioned air to the main lobby, staff washrooms and office spaces has been updated since the last major renovation. Staff indicated that the unit is functioning as intended, preventative maintenance practices should be considered to extend the service life of the RTU. Staff did not mention any notable HVAC dead zones meaning the capacities meet the needs of the spaces covered.		
Manufacturer	York	**Model**	ZF036D10P2TAA2A
In Service Date (YYYY-MM-DD)	2010-oct-01	**Serial Number**	N1L3125161
Replacement Cost	$ 85000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace RTU - 3		
Intervention Cost	$ 85000		
Intervention Year	2030	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	

Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.45 D - Services - D30 - HVAC

3.45.1 D3034 - Packaged Air Conditioning Units:

Condition Assessment: RTU-4 at Low-Slope Roof

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	12
Commentary	Manufactured by York packaged, rooftop unit (115,000 BTU/HR) that services the workshop has been updated since the last major renovation. Staff indicated that the unit is functioning as intended, preventative maintenance practices should be considered to extend the service life of the RTU. Staff did not mention any notable HVAC dead zones meaning the capacities meet the needs of the spaces covered.		
Manufacturer	York	**Model**	ZF036D10P2TAA2A
In Service Date (YYYY-MM-DD)	2010-oct-01	**Serial Number**	N1L3125162
Replacement Cost	$ 85000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace RTU - 4		
Intervention Cost	$ 85000		
Intervention Year	2030	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.46 D - Services - D30 - HVAC

3.46.1 D3040 - Distribution Systems:

Condition Assessment: Ductwork at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	40
Commentary	Metal ductwork transfers conditioned air from the air handling units to various rooms in the building.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	1964-jan-01	**Serial Number**	
Replacement Cost	$ 80000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace existing metal ductwork		
Intervention Cost	$ 80000		
Intervention Year	2030	**Repeat Interval**	40 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.47 D - Services - D30 - HVAC

3.47.1 D3040 - Distribution Systems:

Condition Assessment: Hydronic Distribution Piping at Throughout

Element Details			
Condition Rating	Poor	**Remaining Useful Life (Years)**	2
Commentary	Hot water is distributed to terminal units by a network of hot water pipes. The network is partially concealed by interior finishes, although leakages within the piping system has caused significant deterioration and sagging of the interior finishes. According to staff the piping was installed during the 199-2000 renovation when the current HVAC units were installed. Given the noted problems with leaks in the system replacement is recommended over the term of the study.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	1999-jan-01	**Serial Number**	
Replacement Cost	$ 60000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace hydronic distribution piping		
Intervention Cost	$ 60000		
Intervention Year	2020	**Repeat Interval**	40 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	

Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.48 D - Services - D30 - HVAC

3.48.1 D3040 - Distribution Systems:

Condition Assessment: Hot water Circulation Pump CP-BI at Mechanical room 111

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	7
Commentary	Manufactured by Armstrong, circulation pump (3/4HP) connected to the boiler piping within the mechanical room. The pump appears to have been replaced/updated, although the pipe flanges connected to the pump are showing signs of corrosion pitting and significant deterioration. Pump connections should be replaced during hydronic piping system replacement.		
Manufacturer	Armstrong	**Model**	H64
In Service Date (YYYY-MM-DD)	2010-jan-01	**Serial Number**	
Replacement Cost	$ 6000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace circulation pump		
Intervention Cost	$ 6000		
Intervention Year	2025	**Repeat Interval**	25 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.49 D - Services - D30 - HVAC

3.49.1 D3045 - Exhaust Ventilation Systems:

Condition Assessment: Exhaust Fans at Kitchen Area

Element Details			
Condition Rating	Poor	**Remaining Useful Life (Years)**	1
Commentary	30" range hood, 180cfm with grease filter and lamps; ducted through wall and servicing the stove top in the kitchen area. The range hood dates to the last major renovation and nearing the end of its service life.		
Manufacturer	Broan	**Model**	58300x
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 3500	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace range hood		
Intervention Cost	$ 3500		
Intervention Year	2019	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.50 D - Services - D30 - HVAC

3.50.1 D3045 - Exhaust Ventilation Systems:

Condition Assessment: Exhaust Fans at Throughout

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	12
Commentary	There are twelve (12) exhaust fans manufactured by Cook, ranging between 108cfm and 680cfm dome, in-line, downblasts and ceiling mounted exhausts. The exhaust fans were replaced during the last major renovation, indicating that they are about 2/3 through an expected service life.		
Manufacturer	Cook	**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 50000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	12 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace exhaust fans		
Intervention Cost	$ 50000		
Intervention Year	2030	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.51 D - Services - D30 - HVAC

3.51.1 D3057 - Radiant Heater Units:

Condition Assessment: Ceiling Mounted Radiant Heating Panel at Throughout

Element Details			
Condition Rating	Poor	**Remaining Useful Life (Years)**	2
Commentary	Radiant heater panels connected to the hydronic piping and hot water boiler are concealed by the ceiling finishes. Due to the concealed nature of the heating panels the condition could not be verified. Staff indicated that the heater panels also have leakages similar to the piping network. Full replacement to all heater panels is recommended as they are presumed to be past its useful service life.		
Manufacturer	Eng-A	**Model**	Airtex radiant heating system
In Service Date (YYYY-MM-DD)	1990-jan-01	**Serial Number**	
Replacement Cost	$ 35000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	14 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace radiant heater panels		
Intervention Cost	$ 35000		
Intervention Year	2020	**Repeat Interval**	25 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.52 D - Services - D30 - HVAC

3.52.1 D3057 - Radiant Heater Units:

Condition Assessment: Unit Heaters at Throughout

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	3
Commentary	There are two (2) recessed unit heaters located in the vestibules and one (1) ceiling hung unit heater within the workshop. All unit heaters are connected to the hydronic heating system, and functioning as intended. Full replacement should be considered as a preventative measure as the units are nearing the end of its useful service life.		
Manufacturer	Trane	**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 11000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	3 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace unit heaters		
Intervention Cost	$ 11000		
Intervention Year	2021	**Repeat Interval**	25 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.53 D - Services - D30 - HVAC

3.53.1 D3060 - Controls & Instrumentation:

Condition Assessment: VAV Boxes at

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	12
Commentary	There are three (3) VAV boxes in various locations within the metal ductwork. Staff indicated that the VAV boxes do not function properly and are constantly breaking down.		
Manufacturer	EH Price	**Model**	LGB-6
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 3000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	3 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace VAV boxes. Verify control system is properly programmed		
Intervention Cost	$ 3000		
Intervention Year	2030	**Repeat Interval**	30 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.54 D - Services - D50 - Electrical

3.54.1 D5010 - Electrical service & Distribution:

Condition Assessment: Primary Breaker Panel at Electrical Room

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	22
Commentary	There is one (1) primary breaker panel (600 A, 120/208 V, 3phase, 4wire) manufactured by Siemens servicing the different HVAC units and intermediate distribution panels throughout the interior. The panel has minimal signs of corrosion along the metal casing staff did not mention any notable deficiencies in regards to the electrical components within the building.		
Manufacturer	Siemens	**Model**	AECAFRP 001
In Service Date (YYYY-MM-DD)	2000-jan-19	**Serial Number**	
Replacement Cost	$ 12500	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	1 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace primary breaker panel		
Intervention Cost	$ 12500		
Intervention Year	2040	**Repeat Interval**	40 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.55 D - Services - D50 - Electrical

3.55.1 D5010 - Electrical service & Distribution:

Condition Assessment: Main Disconnect Switches at Electrical Room

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	22
Commentary	There are three (3) heavy duty disconnect switches manufactured by Square D servicing the primary breaker panel and intermediate distribution panels throughout the interior. Minimal signs of wear and deterioration were apparent.		
Manufacturer	Square D	**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-19	**Serial Number**	
Replacement Cost	$ 24000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	3 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace heavy duty disconnect switches		
Intervention Cost	$ 24000		
Intervention Year	2040	**Repeat Interval**	40 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.56 D - Services - D50 - Electrical

3.56.1 D5010 - Electrical service & Distribution:

Condition Assessment: Intermediate Distribution Panel at Throughout

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	22
Commentary	There is three (3) intermediate distribution panels (100 A - 225 A) manufactured by Siemens or Eaton servicing the different electrical components throughout the interior. The intermediate panel has minimal signs of corrosion along the metal casing staff did not mention any notable deficiencies in regards to the electrical components within the building.		
Manufacturer	Siemens/Eaton	**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-19	**Serial Number**	
Replacement Cost	$ 9000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	3 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace intermediate distribution panels		
Intervention Cost	$ 9000		
Intervention Year	2040	**Repeat Interval**	40 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.57 D - Services - D50 - Electrical

3.57.1 D5022 - Lighting Equipment:

Condition Assessment: Fluorescent Fixtures at Throughout

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	7
Commentary	Fluorescent fixtures are recessed and suspended with acrylic coverings and T8 tubes. The fixtures are functioning as intended and staff indicated that the light levels are adequate within the rooms. It is recommended to update to LED lighting fixtures to see a reduction in operating costs and overall energy consumption.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-19	**Serial Number**	
Replacement Cost	$ 50000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	120 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Upgrade to LED light fixtures		
Intervention Cost	$ 50000		
Intervention Year	2025	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium

Legislation	No

3.58 D - Services - D50 - Electrical

3.58.1 D5022 - Lighting Equipment:

Condition Assessment: Compact Fluorescent Fixtures at Throughout

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	7
Commentary	Compact Fluorescent Lamps (CFL) are used throughout the interior, they are recessed within the gypsum ceiling finish. It is recommended to update to LED lighting fixtures to see a reduction in operating costs and overall energy consumption.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-19	**Serial Number**	
Replacement Cost	$ 18000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	72 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Upgrade to LED light fixtures		
Intervention Cost	$ 18000		
Intervention Year	2025	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

3.59 D - Services - D50 - Electrical

3.59.1 D5091 - Exit & Emergency Light Systems:

Condition Assessment: Exit Signs and Egress Lighting at Throughout

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	2
Commentary	The existing exit signage and emergency egress lighting appears to be in good working condition and the number is sufficient for the building. Lifecycle replacement is recommended every 25 years. It is recommended that the exit signs eventually be replaced with LED lamp fixtures with the Green Runner		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 10000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	16 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Upgrade to LED exit signage		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	25 years

Prioritization Considerations			
Energy Savings	Yes	**Health & Safety**	High
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	High

Legislation	Yes

3.60 G - Building Sitework - G20 - Site Improvements

3.60.1 G2020 - Parking Lots:

Condition Assessment: Asphalt Parking Lot at Site

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	25
Commentary	Asphalt paving is used throughout the parking lot. Some areas of pot holes, alligator cracks, and heaving was observed. There was evidence of recent replacement/repairs in localized areas. Full replacement is recommended within the terms of the study period.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 280000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	9250 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Repair

Intervention Details			
Intervention Commentary	Seal cracks, repair potholes and other asphalt damage.		
Intervention Cost	$ 10000		
Intervention Year	2020	**Repeat Interval**	5 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.61 G - Building Sitework - G20 - Site Improvements

3.61.1 G2020 - Parking Lots:

Condition Assessment: Asphalt Parking Lot at Site

Element Details			
Condition Rating	Fair	**Remaining Useful Life (Years)**	25
Commentary	Asphalt paving is used throughout the parking lot. Some areas of pot holes, alligator cracks, and heaving was observed. There was evidence of recent replacement/repairs in localized areas. Full replacement is recommended within the terms of the study period.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 280000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	9250 Area (sq ft)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace asphalt parking lot		
Intervention Cost	$ 55000		
Intervention Year	2043	**Repeat Interval**	50 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Low
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low

Legislation	No

3.62 G - Building Sitework - G20 - Site Improvements

3.62.1 G2030 - Pedestrian Paving:

Condition Assessment: Concrete Pedestrian Paving at Site

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	25
Commentary	Concrete pedestrian paving provides access to the main entrance and rear entrances (North and East elevations), implementing an accessible ramp. The pedestrian paving is in good condition, with regular maintenance needed.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2000-jan-01	**Serial Number**	
Replacement Cost	$ 8500	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	115 Length (feet)		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace concrete pedestrian paving		
Intervention Cost	$ 8500		
Intervention Year	2043	**Repeat Interval**	50 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Medium
Accessibility	Yes	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Low
Legislation	No		

3.63 G - Building Sitework - G40 - Site Electrical Utilities

3.63.1 G4020 - Site Lighting:

Condition Assessment: Site Lighting at Site

Element Details			
Condition Rating	Good	**Remaining Useful Life (Years)**	23
Commentary	LED wall packs along the exterior cladding are implemented to illuminate the parking lot, pedestrian paving and patio area. Staff indicated that the exterior site lighting has been recently updated and are functioning as intended.		
Manufacturer		**Model**	
In Service Date (YYYY-MM-DD)	2016-jan-01	**Serial Number**	
Replacement Cost	$ 36000	**Replacement Cost Date (YYYY-MM-DD)**	2018-Dec.-01
Quantity	24 Quantity		
Warranty Effective Date		**Warranty Term**	years
Assessed By	AL		

Recommendation: Replace

Intervention Details			
Intervention Commentary	Replace exterior site lighting		
Intervention Cost	$ 36000		
Intervention Year	2041	**Repeat Interval**	20 years

Prioritization Considerations			
Energy Savings	No	**Health & Safety**	Medium
Accessibility	No	**Part of Strategic Plan**	
Grants Availability		**Consequence of Failure**	Medium
Legislation	No		

4 ANNUAL REINVESTMENT PROJECTIONS

As with all buildings, annual investment on maintenance, repair and replacement of some of the building components will be required within the next twenty-five (25) years in order to ensure the building lifecycle is maximized and it remains in safe condition for the users of the building.

The study timeline for this report spans from 2019 to 2043. The annual expenditure in each year is not constant; changing as different actions are recommended in different years - therefore, WalterFedy provides an average and maximum annual investment value over the study period twenty-five (25) years listed in the table below. The total recommended investment expenditure amount is also listed.

Table 5: Summary of Annual Expenditure for Lifecycle Replacement

Average Annual Expenditure [$]	73452
Maximum Annual Expenditure [$]	686000
Total 25-Year Expenditure [$]	1836300

Table 6: Summary of Annual Expenditure for Operation and Maintenance

Average Annual Expenditure [$]	24360
Maximum Annual Expenditure [$]	160000
Total 25-Year Expenditure [$]	609000

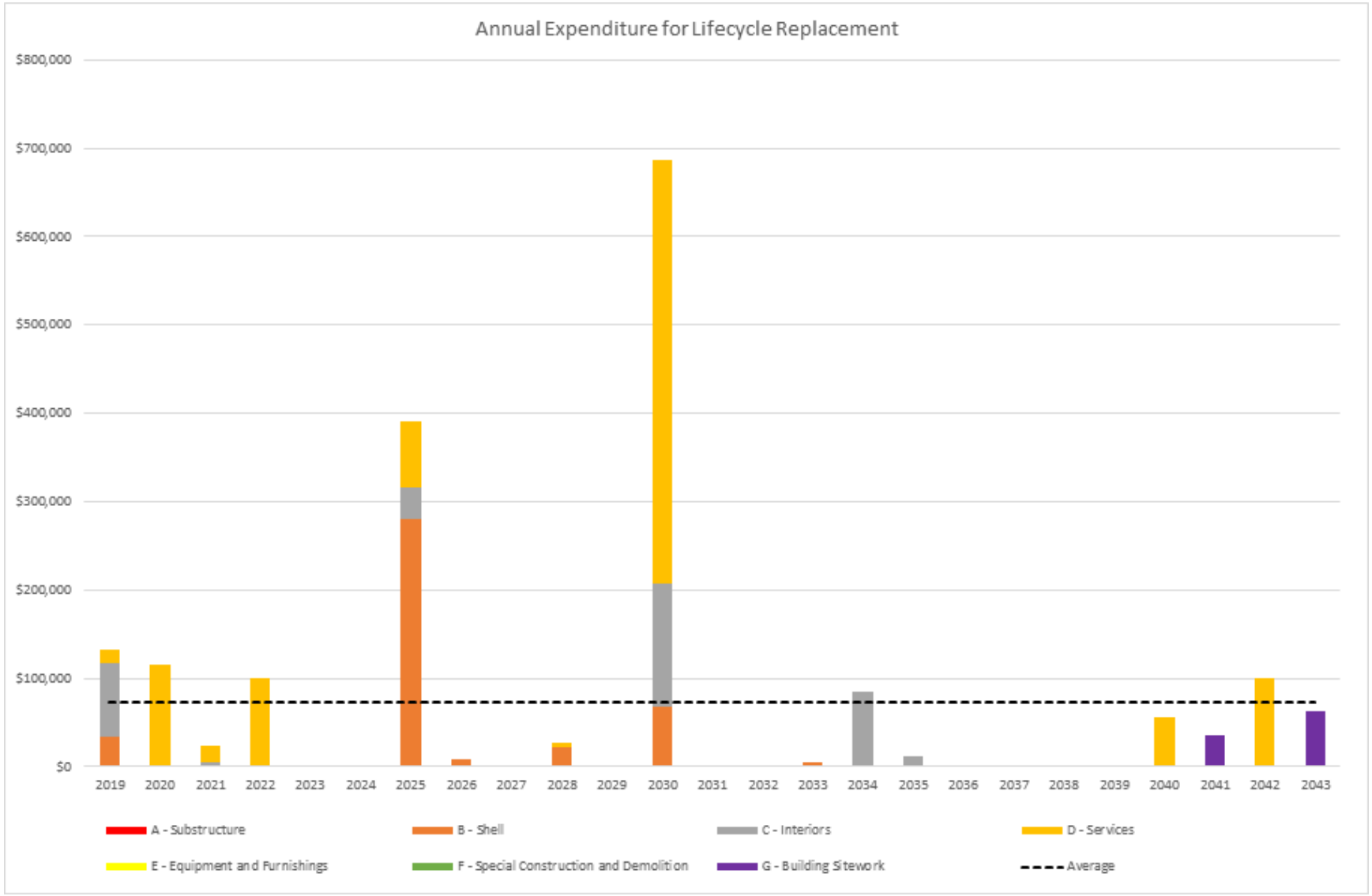

Figure 3: Annual Expenditures Chart for Lifecycle Replacement

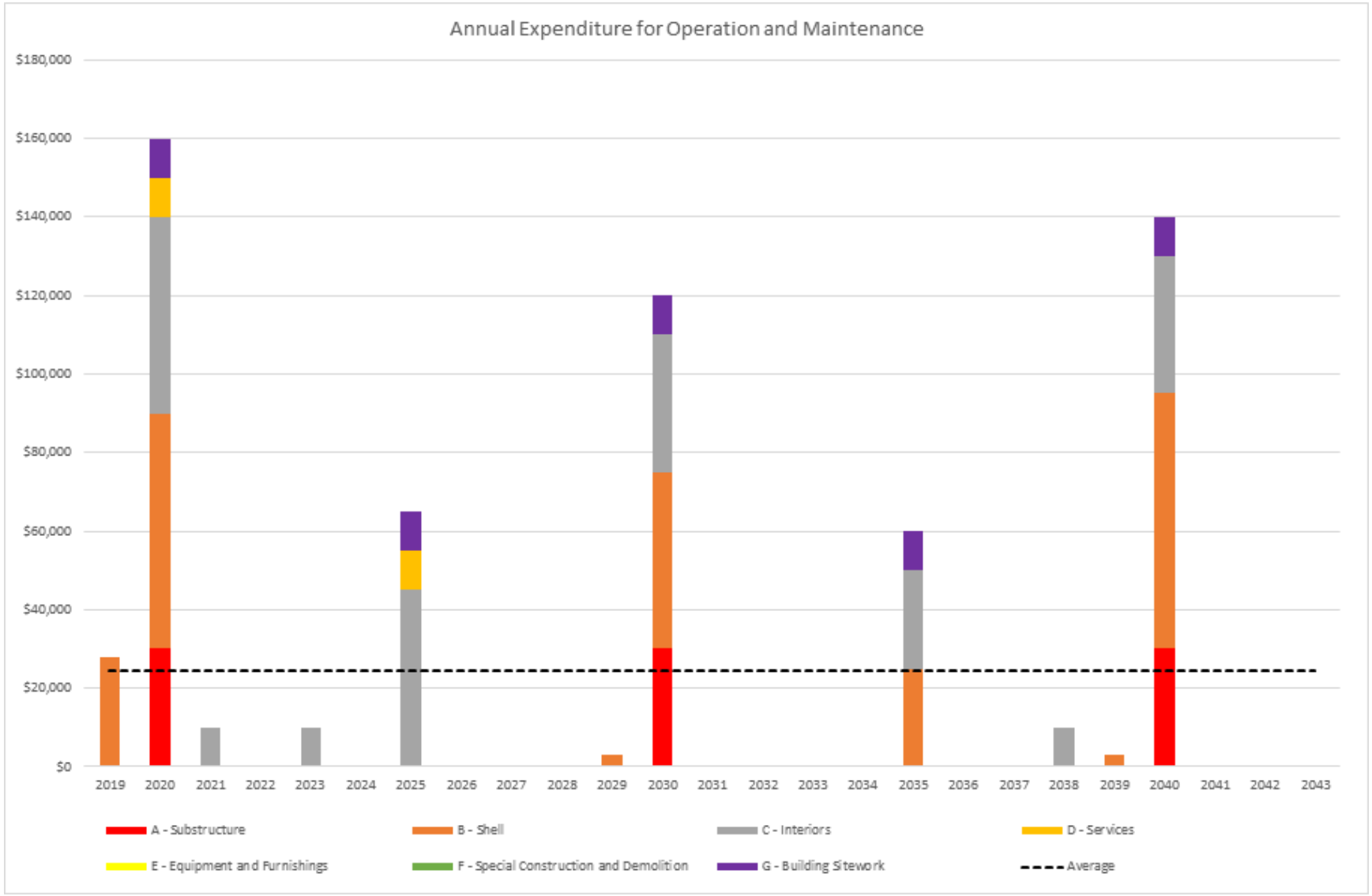

Figure 4: Annual Expenditures Chart for Operation and Maintenance

5 GLOSSARY OF TERMS AND DEFINITIONS

Condition Rating This identifies the overall condition of the entire element/system. For example, a new flat roof is in good overall condition. But there may be localized minor damage to the roof membrane, drainage, or flashing, etc. The observed minor defect will not affect the good overall condition.

In Service Date This date indicates that timing of the installation of the element. It is noted that this date will vary for elements throughout the facility.

Intervention Repeat Interval This means the time interval in which the recommended intervention needs to be repeated. For lifecycle replacement, the repeat interval is usually equal to the normal life expectancy of the component. For regular maintenance recommendations, the repeat interval is determined based on the existing condition, consultant's professional opinion, and staff/tenant's reports.

Intervention Cost This is the estimated cost of the intervention recommended, repairs and/replacement, derived from the market or building cost services, which publish construction and remodeling costs on an annual basis. Replacement cost estimates are generally based on local material costs, union labor costs and normal construction conditions.

Intervention Commentary This provides the details of the work recommended to be undertaken.

Intervention Year This indicates the year in which the action recommended should be undertaken.

Replacement Cost –These are unit cost estimates of various building components, derived from the market or building cost services, which publish construction and remodeling costs on an annual basis. Replacement cost estimates are generally based on local material costs, union labour costs and normal construction conditions. The represent the costs of major repairs or replacements at the current prices and under current conditions

Reserve Fund Study (RFS) This is a study for future funding of the reserve fund that the board determines will ensure that, within a prescribed period of time and in accordance with the prescribed requirements, the fund will be adequate for the purpose for which it was established.

APPENDIX A

PHOTOGRAPHS



































EXIT












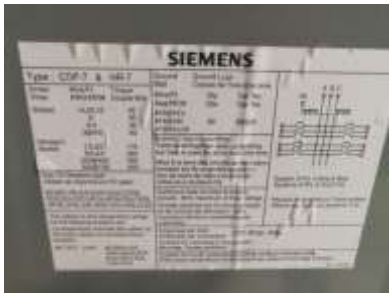
SIEMENS


































APPENDIX B

ELEMENTAL COST FORECAST

Element #	Level 3 - Component	Component Description	Component Location	Condition Rating	Intervention Details Narrative	Intervention Type	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
1	A1010 - Standard Foundations	Concrete Foundation Walls and Footings	Foundation	Good	Reparging of foundation walls	Repair	$ -	$ 10,000	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$0.00	$ -	$ 10,000	$ -	$ -	0
2	A1030 - Slab on Grade	Poured Concrete Slab on Grade	Foundation	Good	Repairs to concrete slab on grade	Repair	$ -	$ 20,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 20,000	$ -	$ -	0
3	B2012-A - Concrete Unit Masonry Wall System	Concrete Block Walls	North / East Elevations	Good	Repairs to concrete block walls	Repair	0	10000	0	0	0	0	0	0	0	0	0	10000	0	0	0
4	B2012-B - Clay Brick Masonry Wall System	Brick Masonry	West / South Elevations	Fair	Repointing to brick masonry	Repair	$ -	$ 25,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 25,000	$0.00	$ -	0
5	B2012-C - Stone Veneer Masonry Wall System	Stone Masonry	West / South Elevations	Good	Repairs to stone masonry	Repair	$ -	$ 10,000	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ 10,000	$ -	$ -	0
6	B2020 - Exterior Windows	Vinyl Framed	Building Perimeter	Poor	Replace vinyl framed glazing units	Replace	$ 10,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
7	B2022 - Windows - Aluminum	Brushed Aluminum Framed	Building Perimeter	Good	Replace brushed aluminum framed glazing units	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ 68,000	$ -	$ -	0
8	B2023 - Windows - Wood	Wood Framed	Building Perimeter	Poor	Replace wood framed windows	Replace	$ 23,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	0
9	B2031 - Glazed Entrances	Brushed Aluminum Doors	Building Perimeter	Good	Repairs to brushed aluminum doors	Repair	$ 10,000	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
10	B2031 - Glazed Entrances	Brushed Aluminum Doors	Building Perimeter	Good	Replace brushed aluminum doors	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ 22,000	$ -	$ -	$ -	$ -	0
11	B2032 - Exterior Doors And Frames - Steel	Hollow Metal Doors	Building Perimeter	Good	Replace hollow metal doors	Replace	$ -	$ -	$0.00	$ -	$ -	$ -	$0.00	$ 8,000	$ -	$ -	$ -	$ -	$ -	$ -	0
12	B2040 - Industrial Doors	Overhead Doors	Building Perimeter	Good	Repairs to overhead door frame	Repair	$ 3,000	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,000	$ -	$ -	$ -	0
13	B2040 - Industrial Doors	Overhead Doors	Building Perimeter	Good	Replace overhead door	Replace	$ -	$ -	$0.00	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	4500
14	B3010 - Roof Coverings	Shingled Roof	Gabled Roof	Good	Repairs to interior construction of the roof assembly	Repair	$ -	$ 15,000	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
15	B3010 - Roof Coverings	Shingled Roof	Gabled Roof	Good	Make changes to insulation layout to ensure no	Repair	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0

Element #	Level 3 - Component	Component Description	Component Location	Condition Rating	Intervention Details Narrative	Intervention Type	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
					vents are blocked.																
16	B3011-A - Membrane Roofing	Low-Slope Roof	Low-Slope Roof	Fair	Repairs to low-slope roof assembly	Repair	$ 15,000	$ -	$ -	$ -	$ -	$0.00	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
17	B3011-A - Membrane Roofing	Low-Slope Roof	Low-Slope Roof	Fair	Replace low-slope roof assembly	Replace	$ -	$ -	$ -	$ -	$ -	$0.00	$ 280,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
18	B3018 - Gutters And Downspouts	Rain gutters and downspouts	Gabled Roof	Good	Repairs and regular cleaning to gutters and downspouts	Repair	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	0
19	B3018 - Gutters And Downspouts	Centralized Drainage	Low-Slope Roof	Good	Repairs and regular cleaning to centralized drainage	Repair	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	0
20	C1016 - Toilet Partitions	Wooden Partitions	Washrooms	Good	Replace wooden toilet partitions	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	0
21	C1020 - Interior Doors	Hollow Metal Interior Doors	Throughout	Good	Replace hollow metal interior doors	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$26,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
22	C1020 - Interior Doors	Wooden Doors	Throughout	Good	Replace solid core wooden doors	Replace	$ -	$ -	$ -	$ -	$0.00	$ -	$ 10,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
23	C1030 - Fittings	Cabinetry	Throughout	Good	Replace cabinetry and countertops	Replace	$ -	$ -	$ -	$ -	$0.00	$0.00	$ -	$ -	$ -	$ -	$ -	$ 140,000	$ -	$ -	0
24	C3010 - Wall Finishes	Gypsum Wallboard	Throughout	Good	Repairs to gypsum wallboard	Repair	$ -	$ 10,000	$ -	$ -	$ -	$0.00	$ 10,000	$ -	$ -	$ -	$ -	$ 10,000	$ -	$ -	0
25	C3010 - Wall Finishes	Gypsum Wallboard	Throughout	Good	Make repairs to gypsum wallboard in localized areas. Removal of some sections may be required to verify existence of moisture / mould or not	Repair	$ -	$ 15,000	$ -	$ -	$ -	$ -	$15,000.00	$ -	$ -	$ -	$ -	$ 15,000	$ -	$ -	0
26	C3010 - Wall Finishes	Brick Masonry	Throughout	Good	Repointing of brick masonry	Repair	$ -	$ -	$ -	$ -	$ 10,000	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	0
27	C3010 - Wall Finishes	Concrete Block Walls	Throughout	Good	Repairs to interior	Repair	$ -	$ 10,000	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ 10,000	$0.00	$ -	0

Element #	Level 3 - Component	Component Description	Component Location	Condition Rating	Intervention Details Narrative	Intervention Type	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
					concrete block walls																
28	C3014-A - Ceramic Wall Tile	Ceramic Wall Tile	Washrooms	Good			$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	0
29	C3020 - Floor Finishes	Sheet Carpet	Throughout	Poor	Replace sheet carpet	Replace	$ 84,000	$ -	$ -	$ -	$0.00	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
30	C3020 - Floor Finishes	Hardwood	Throughout	Good	Refinish hardwood flooring	Repair	$ -	$ -	$ -	$ -	$ -	$0.00	$10,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
31	C3020 - Floor Finishes	Vinyl Composite Tile	Throughout	Fair	Replace VCT	Replace	$ -	$ -	$ 5,000	$0.00	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
32	C3020 - Floor Finishes	Ceramic Tile	Throughout	Good	Repairs to ceramic tiling	Repair	$ -	$ 10,000	$ -	$0.00	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
33	C3020 - Floor Finishes	Sealed Concrete	Mechanical/Electrical Rooms	Good	Repairs to exposed concrete	Repair	$ -	$ -	$ 10,000	$ -	$0.00	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
34	C3030 - Ceiling Finishes	Gypsum Ceiling Finish	Throughout	Good	Repairs to gypsum ceiling finish	Repair	$ -	$ 5,000	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	0
35	C3030 - Ceiling Finishes	Acoustic Ceiling Tile	Throughout	Good	Localized tile replacement in order to maintain overall integrity of the ceiling	Repair	$ -	$ -	$ -	$ -	$ -	$ -	$ 10,000	$0.00	$ -	$ -	$ -	$ -	$0.00	$ -	0
36	D2010 - Plumbing Fixtures	Washroom Plumbing Fixtures	Washrooms	Fair	Replace washroom plumbing fixtures	Replace	$ 12,000	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$0.00	0
37	D2010 - Plumbing Fixtures	Stainless Steel Sink	Throughout	Fair	Replace stainless steel sinks	Replace	$ -	$ -	$ 6,800	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	0
38	D2020 - Domestic Water Distribution	Copper Piping	Throughout	Good	Repairs to copper piping, as needed	Repair	$ -	$ -	$ -	$ -	$0.00	$ -	$10,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
39	D2030 - Sanitary Waste	PVC Piping	Throughout	Fair	Repairs to sanitary piping, as needed	Repair	$ -	$ 10,000	$ -	$ -	$0.00	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	0
40	D2095 - Domestic Water Heaters	Domestic Water Heater	Mechanical Room	Good	Replace Domestic Water Heater	Replace	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$0.00	$ 4,500	$ -	$ -	$ -	$ -	0
41	D3022 - Hot Water Boilers	Boiler B-1	Mechanical room 111	Poor	Replace hot water boiler	Replace	$ -	$ 10,000	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
42	D3034 - Packaged Air Conditioning Units	RTU-1	Low-Slope Roof	Good	Replace RTU - 1	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ 175,000	$ -	$ -	0
43	D3034 - Packaged Air Conditioning Units	RTU-2	Low-Slope Roof	Fair	Replace RTU - 2	Replace	$ -	$ -	$ -	$ 100,000	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	0
44	D3034 - Packaged Air	RTU-3	Low-Slope Roof	Good	Replace RTU - 3	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$85,000.00	$ -	$ -	0

Element #	Level 3 - Component	Component Description	Component Location	Condition Rating	Intervention Details Narrative	Intervention Type	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
	Conditioning Units																				
45	D3034 - Packaged Air Conditioning Units	RTU-4	Low-Slope Roof	Good	Replace RTU - 4	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ 85,000	$ -	$ -	0
46	D3040 - Distribution Systems	Ductwork	Throughout	Good	Replace existing metal ductwork	Replace	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ 80,000	$ -	$ -	0
47	D3040 - Distribution Systems	Hydronic Distribution Piping	Throughout	Poor	Replace hydronic distribution piping	Replace	$ -	$ 60,000	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	0
48	D3040 - Distribution Systems	Hot water Circulation Pump CP-BI	Mechanical room 111	Good	Replace circulation pump	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$6,000.00	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	0
49	D3045 - Exhaust Ventilation Systems	Exhaust Fans	Kitchen Area	Poor	Replace range hood	Replace	$ 3,500	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
50	D3045 - Exhaust Ventilation Systems	Exhaust Fans	Throughout	Fair	Replace exhaust fans	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ 50,000	$0.00	$ -	0
51	D3057 - Radiant Heater Units	Ceiling Mounted Radiant Heating Panel	Throughout	Poor	Replace radiant heater panels	Replace	$ -	$ 35,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	0
52	D3057 - Radiant Heater Units	Unit Heaters	Throughout	Fair	Replace unit heaters	Replace	$ -	$ -	$ 11,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	0
53	D3060 - Controls & Instrumentation	VAV Boxes		Good	Replace VAV boxes. Verify control system is properly programmed	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,000	$0.00	$ -	0
54	D5010 - Electrical service & Distribution	Primary Breaker Panel	Electrical Room	Good	Replace primary breaker panel	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	0
55	D5010 - Electrical service & Distribution	Main Disconnect Switches	Electrical Room	Good	Replace heavy duty disconnect switches	Replace	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	0
56	D5010 - Electrical service & Distribution	Intermediate Distribution Panel	Throughout	Good	Replace intermediate distribution panels	Replace	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
57	D5022 - Lighting Equipment	Fluorescent Fixtures	Throughout	Fair	Upgrade to LED light fixtures	Replace	$ -	$ -	$ -	$ -	$ -	$0.00	$ 50,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
58	D5022 - Lighting Equipment	Compact Fluorescent Fixtures	Throughout	Fair	Upgrade to LED light fixtures	Replace	$ -	$ -	$ -	$ -	$ -	$0.00	$ 18,000	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
59	D5091 - Exit & Emergency Light Systems	Exit Signs and Egress Lighting	Throughout	Fair	Upgrade to LED exit signage	Replace	$ -	$ 10,000	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	0

Element #	Level 3 - Component	Component Description	Component Location	Condition Rating	Intervention Details Narrative	Intervention Type	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
60	G2020 - Parking Lots	Asphalt Parking Lot	Site	Fair	Seal cracks, repair potholes and other asphalt damage.	Repair	$ -	$ 10,000	$ -	$ -	$ -	$ -	$ 10,000	$0.00	$ -	$ -	$ -	$ 10,000	$ -	$ -	0
61	G2020 - Parking Lots	Asphalt Parking Lot	Site	Fair	Replace asphalt parking lot	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	0
62	G2030 - Pedestrian Paving	Concrete Pedestrian Paving	Site	Good	Replace concrete pedestrian paving	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$0.00	$ -	$ -	$ -	$ -	$ -	$ -	0
63	G4020 - Site Lighting	Site Lighting	Site	Good	Replace exterior site lighting	Replace	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0

Element #	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Level 1 - Major Group	Intervention Year
1	0	0	0	0	0	0	10000	0	0	0	A - Substructure	2020
2	0	0	0	0	0	0	20000	0	0	0	A - Substructure	2020
3	0	0	0	0	0	0	10000	0	0	0	B - Shell	2020
4	0	0	0	0	0	0	25000	0	0	0	B - Shell	2020
5	0	0	0	0	0	0	10000	0	0	0	B - Shell	2020
6	0	0	0	0	0	0	0	0	0	0	B - Shell	2019
7	0	0	0	0	0	0	0	0	0	0	B - Shell	2030
8	0	0	0	0	0	0	0	0	0	0	B - Shell	2019
9	0	0	0	0	0	0	0	0	0	0	B - Shell	2019
10	0	0	0	0	0	0	0	0	0	0	B - Shell	2028
11	0	0	0	0	0	0	0	0	0	0	B - Shell	2026
12	0	0	0	0	0	3000	0	0	0	0	B - Shell	2019
13	0	0	0	0	0	0	0	0	0	0	B - Shell	2033
14	0	0	0	0	0	0	0	0	0	0	B - Shell	2020
15	0	25000	0	0	0	0	0	0	0	0	B - Shell	2035
16	0	0	0	0	0	0	0	0	0	0	B - Shell	2019
17	0	0	0	0	0	0	0	0	0	0	B - Shell	2025
18	0	0	0	0	0	0	10000	0	0	0	B - Shell	2040
19	0	0	0	0	0	0	10000	0	0	0	B - Shell	2040
20	0	12000	0	0	0	0	0	0	0	0	C - Interiors	2035

Element #	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Level 1 - Major Group	Intervention Year
21	0	0	0	0	0	0	0	0	0	0	C - Interiors	2025
22	0	0	0	0	0	0	0	0	0	0	C - Interiors	2025
23	0	0	0	0	0	0	0	0	0	0	C - Interiors	2030
24	0	10000	0	0	0	0	10000	0	0	0	C - Interiors	2020
25	0	15000	0	0	0	0	15000	0	0	0	C - Interiors	2020
26	0	0	0	0	10000	0	0	0	0	0	C - Interiors	2023
27	0	0	0	0	0	0	10000	0	0	0	C - Interiors	2020
28	0	0	0	0	0	0	0	0	0	0	C - Interiors	
29	84000	0	0	0	0	0	0	0	0	0	C - Interiors	2019
30	0	0	0	0	0	0	0	0	0	0	C - Interiors	2025
31	0	0	0	0	0	0	0	0	0	0	C - Interiors	2021
32	0	0	0	0	0	0	0	0	0	0	C - Interiors	2020
33	0	0	0	0	0	0	0	0	0	0	C - Interiors	2021
34	0	0	0	0	0	0	0	0	0	0	C - Interiors	2020
35	0	0	0	0	0	0	0	0	0	0	C - Interiors	2025
36	0	0	0	0	0	0	0	0	0	0	D - Services	2019
37	0	0	0	0	0	0	0	0	0	0	D - Services	2021
38	0	0	0	0	0	0	0	0	0	0	D - Services	2025
39	0	0	0	0	0	0	0	0	0	0	D - Services	2020
40	0	0	0	0	0	0	0	0	0	0	D - Services	2028
41	0	0	0	0	0	0	10000	0	0	0	D - Services	2020
42	0	0	0	0	0	0	0	0	0	0	D - Services	2030
43	0	0	0	0	0	0	0	0	100000	0	D - Services	2022
44	0	0	0	0	0	0	0	0	0	0	D - Services	2030
45	0	0	0	0	0	0	0	0	0	0	D - Services	2030
46	0	0	0	0	0	0	0	0	0	0	D - Services	2030
47	0	0	0	0	0	0	0	0	0	0	D - Services	2020
48	0	0	0	0	0	0	0	0	0	0	D - Services	2025
49	0	0	0	0	0	0	0	0	0	0	D - Services	2019
50	0	0	0	0	0	0	0	0	0	0	D - Services	2030
51	0	0	0	0	0	0	0	0	0	0	D - Services	2020
52	0	0	0	0	0	0	0	0	0	0	D - Services	2021
53	0	0	0	0	0	0	0	0	0	0	D - Services	2030

Element #	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	Level 1 - Major Group	Intervention Year
54	0	0	0	0	0	0	12500	0	0	0	D - Services	2040
55	0	0	0	0	0	0	24000	0	0	0	D - Services	2040
56	0	0	0	0	0	0	9000	0	0	0	D - Services	2040
57	0	0	0	0	0	0	0	0	0	0	D - Services	2025
58	0	0	0	0	0	0	0	0	0	0	D - Services	2025
59	0	0	0	0	0	0	0	0	0	0	D - Services	2020
60	0	10000	0	0	0	0	10000	0	0	0	G - Building Sitework	2020
61	0	0	0	0	0	0	0	0	0	55000	G - Building Sitework	2043
62	0	0	0	0	0	0	0	0	0	8500	G - Building Sitework	2043
63	0	0	0	0	0	0	0	36000	0	0	G - Building Sitework	2041