# RESERVE FUND STUDY REPORT

**Prepared for** 

# MACEWAN GARDENS II CONDOMINIUM CORPORATION 263 MACEWAN ROAD, EDMONTON, AB CONDOMINIUM PLAN No. 092 4818



DECEMBER 2019
REPORT AMENDED (AUGUST 2021)





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Financial decisions based on assumptions or findings in this Report must consider the issuance date of this Report, the Scope of Work, Parameters and Variables as defined in this Report.

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#### 1. PROPERTY DESCRIPTION

Project Name: MacEwan Gardens II

Project Address: 263 MacEwan Road, Edmonton, AB

Condominium Plan Number: 092 4818

Style of Buildings: 4-Storey Apartment

Number of Units: 149 Units
Number of Buildings: 1 Building
Age of Buildings: 11 Years

Wade Engineering Ltd. was commissioned to conduct a Reserve Fund Study & Report for <u>MacEwan Gardens II</u> Condominium Corporation (Condominium Plan No. 092 4818). The development is located at 263 MacEwan Road, in the City of Edmonton.

The development consists of 149 residential suites located within a four (4) storey apartment style building.

The building features a common room with kitchen and washrooms located on the main floor and an exercise room located on the second floor. Suites on the main floor feature exclusive use composite wood decks and suites on the second to fourth floors feature exclusive use balconies.

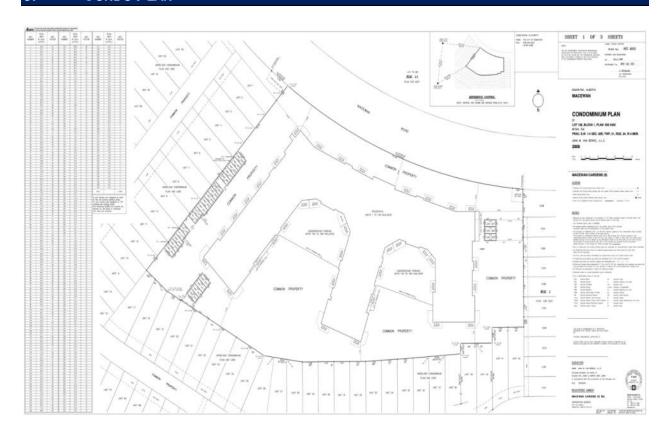
A single level underground parkade is located below the building which can be accessed from the east side of the building. An asphalt surface parking and drive lanes located on both east and west side of the building. The grounds are landscaped with grass, gravel beds, shrubs and trees.

The quantities and conditions of the common components were determined through site investigations conducted in July 2019. The component description, overall condition, conditions noted, pertinent history and specific maintenance or replacement recommendations have been summarized in chart form, beginning with the roof, and working down and out from the building. Areas of Concern are summarized in a similar fashion.

# 2. SITE PLAN



# 3. CONDO PLAN



#### 4. FINANCIAL SUMMARY

#### 4.1 OVERALL RESERVE FUND

Current Replacement Costs:	\$7,686,119
Future Replacement Costs (Next 30 Years):	\$12,243,308
Annual Replacement Costs:	\$205 542
	\$295,543
Recommended Safety Margin:	\$296,000
Opening Fund Balance as at October 31, 2019:	\$842,970
Current Annual Reserve Contribution:	\$157,304
Recommended Annual Contribution (starting 2021):	\$157,304

The expected life and replacement costs of components were estimated using technical resource literature, and information from contractors and industry professionals. Financial spreadsheets were developed, considering interest earned on Reserve Fund investments (2.30% per annum calculated on 70% of the total fund each year less expenses) and inflation (1.75% per annum in 2021, 3,00% in Years 2022, 2023, 2024 & 1.75% thereafter) of replacement cost estimates.

At <u>MacEwan Gardens II</u> Condominium Corporation, the total cost of the common property components to be replaced or restored by the Reserve Fund, in today's dollars is <u>\$7,686,119.00</u>. The Annual Replacement Cost (or the annual rate of deterioration of these components expressed in dollars) is <u>\$295,543.00</u> per year.

A minimum fund balance or "Safety Margin" is recommended to offset unpredictable expenses. The Safety Margin for this development has been set at **\$296,000.00** which is based on the Annual Replacement Cost for this development.

The "Reasonable & Sufficient" spreadsheet recommends the following Annual Contributions:

Year 2021 \$157,304.00 (approx. \$87.98/unit monthly) - same as 2020

Year 2022 \$166,200.00 (approx. \$92.95/unit monthly) – increase of \$4.97/unit monthly

Year 2023 \$178,800.00 (approx. \$100.00/unit monthly) - increase of \$7.05/unit monthly

Year 2024 \$223,500.00 (approx. \$125.00/unit monthly) – increase of \$7.05/unit monthly

Year 2025 \$268,200.00 (approx. \$150.00/unit monthly) – increase of \$7.05/unit monthly and increased annually by **4.50**% thereafter.

The annual increases of <u>4.50%</u> are important to ensure that there are sufficient funds in the Reserve in the critical years (Year 2046) and avoids the need for larger Annual Contribution increases or a Special Levy – see 30 Year Replacement Schedule (Years 1 to 10 (spreadsheet LC5-A), Years 11 to 20 (spreadsheet LC5-B) and Years 21 to 30 (spreadsheet LC5-C) for breakdown of expenses for each year.

Note: The Condominium Corporation has varying Unit Factors. The Reasonable & Sufficient recommendations are based on the average amount per unit (Unit Factors are listed on the Condo Plan(s).

Note: The repair/replacement costs in the 30-year replacement schedule incorporate an inflation rate of 1.75% in 2021, 3.00% in 2022 to 2024 and 1.75% thereafter compounded annually and do not match the current replacement costs noted in the report. The inflated costs are reflected in the expense column on the Present Course and Reasonable & Sufficient Spreadsheets.

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#### 4.2 RESERVE FUND EXPENSES (2021 TO 2025)

The Reserve Fund expenses included in the report & spreadsheets are as follows (see spreadsheet LC5-A for a cost breakdown):

YEAR	EXPENSES		
2020	\$19,561		
2021	\$119,309		
2022	\$94,312		
2023	\$13,805		
2024	\$231,055		
Total Reserve Fund Expenses (5 Years)	\$478,043		

- Note 1: Expenses noted include inflation costs at 1.75% in 2021, 3.00% in years 2022 to 2024 and 1.75% thereafter.
- Note 2: Some component replacement schedules were phased where possible to avoid significant expenses in a single year and the requirement of more significant increases in annual contributions.

#### 4.3 FINAL RESERVE FUND RECOMMENDATIONS

Wade Engineering's recommendations set out and detailed in this report will assist the Corporation to achieve and maintain an adequate Reserve Fund. The current annual contributions are not sufficient to maintain the Reserve Fund and should be increased as soon as possible.

- 1. Corporation should prepare and implement a long-term Reserve Fund strategy.
- 2. Major repairs and replacements should be recorded in and funded from the Reserve Fund account.
- 3. Corporation should schedule repairs as outlined in the report.
- 4. Reserve Fund contributions should be increased as noted above.
- 5. At least half of the Reserve Fund should be invested (ladder investments in line with upcoming work).
- 6. Corporation should make expenditures as necessary to maintain the property in optimum condition.
- 7. Reserve Fund should be reviewed every year to ensure that the assumptions are still valid and that the estimates remain current.
- 8. Corporation is required to update the Reserve Fund Study every 5 years.
- 9. Board is required to prepare a 5-year plan for the owners.
- 10. Board is required to prepare an Annual Report of the Reserve Fund for the owners.

#### 5. SUMMARY OF RECOMMENDATIONS

The most important maintenance consideration for Condominium Boards is ensuring that safety concerns are dealt with in a timely fashion. It is also important to keep water out of the interstitial components of the building and to protect components from the damaging effects of the sun and inclement weather.

Recommendations are summarized below and listed in order of the report. The funds for the suggestions or recommendations that follow may not be accrued in this Study, unless specifically identified on the "Cost/Life Data" spreadsheet.

It is incumbent on the Board to ensure that owner-installed objects have been properly and securely installed, and do not violate any of the current Building, Fire or Safety Codes. As well, it is the Board's responsibility to ensure that unit owners repair or replace these components in a timely fashion.

#### **Specific Recommendations:**

- Balconies (Pg. 22): Due to staining noted on stucco, stone block veneer and locations with negative and lifted cap flashings, a building envelope investigation should be scheduled to determine an appropriate course of action for repair. Replace deteriorated sealant and seal wall penetrations where required. Work to scheduled to be completed 2021/2022.
- Landscaping (Pg. 32): The Corporation is completing some regrading around the building in 2021.

#### 6. INTRODUCTION

This Reserve Fund Study Report is a financial document based on a review of a sample of each of the components to be funded to provide an opinion of the Reserve Fund requirements of the Corporation. In order for a random representative sample of property reviewed to be of benefit, it is prudent to establish realistic parameters for a scope of work that will result in a product that meets the needs of the Corporation, at a reasonable cost. Included in this process is a meeting with the Board to review the draft report such that Board knowledge of the property is included within the report.

The estimate of life expectancies and replacement costs is completed as accurately as can be at the time of the study, however, actual replacement costs and expected life of items can vary depending on market conditions and the rate of deterioration near the end of the life of the component. The Reserve Fund Study Report allows management decisions to be made with the best long - range plan available, which is far better than reacting to immediate needs or being surprised with a substantial unbudgeted expense. Review of the "cash flow" and 30-year replacement schedule will help facilitate decisions regarding the scheduling of component replacement and collection of funds required to meet the financial demands of the Corporation.

#### 7. SCOPE OF WORK

The Study consisted of a review of the condominium plan, bylaws and other pertinent documents and consultation with the Board of Directors and Condominium Manager, to determine the common property components to be replaced or refurbished with monies from the Reserve Fund. These components were measured and counted during visits to the site (quantity and quality survey). This data in combination with current market replacement cost and is used to predict future replacement cost and timelines for each component.

A cursory inspection, noting the general condition of the various components was conducted in conjunction with the quantity survey. The conditions noted and the Inspector's experience, combined with technical resource material referencing life cycles of building components, were used in forecasting the remaining functional lives of the various components.

Anomalies and/or safety concerns, such as Building/Fire Code or Condominium Bylaw violations, are reported if noted during the course of site inspections.

#### 8. PARAMETERS

No money is accrued in this Study for annual inspections and repairs, as they are considered to be part of ongoing operating costs. Specific maintenance recommendations may be included, however, in the interest of achieving the maximum effective life of all components. Furthermore, no monies are included for the catch-up of deferred maintenance. The report reflects the condition by penalizing the life of the item.

Assessment of the mechanical systems in the common building including heating, cooling, ventilation, plumbing, electrical, and fire protection, is based on inspection in conjunction with information provided by the current Board, and/or contractors. Existing drawings, maintenance records and other pertinent documents (if available) were reviewed in conjunction with the site inspection. No testing of the mechanical systems and/or equipment (to determine capacities or peak load capabilities) was undertaken.

Replacement costs of components expected to last the life of the development, such as: structural building components, concrete foundation, etc., are not included, since their expected lives are synonymous with that of the development. Periodic and/or random repairs or upgrades to these types of components may be necessary in the future. If concerns develop regarding the integrity of a life item, it is recommended that the Board be proactive in retaining a Professional to report on specific component conditions.

Components located below grade, such as sewer systems and/or components concealed from view such as electrical, are not reviewed. A contingency amount for underground services has, however, been included to enable the Corporation to service these components, should an issue arise. In addition, a Safety Margin, determined by the Study Provider, is incorporated in all funding scenarios to *help offset* unpredictable expenses that may arise.

Routine flushing of the sewer system is recommended. Consultation with an appropriate professional will help to identify a schedule for flushing the system, identity areas of concern and forecast future costs.

Other components specifically excluded are those considered the responsibility of the unit owner.

The inspections conducted in performance of this Study are cursory and are not to be considered a technical audit. Data generated by this report is not intended for third party use. Wade Engineering Ltd. accepts no responsibility for damages, if any, suffered by a third party, as a result of actions taken, or decisions made, on the basis of this Report.

Should our work in preparing this report uncover conditions that are deemed beyond this Study's scope, recommendations for further investigation will be included. Please note that any additional investigations and the related repair costs are not included in the financial forecasts of this report.

#### 9. VARIABLES

The estimate of life expectancies and replacement costs is not an exact science. However, every attempt is made to anticipate and compensate for the variables encountered in this Study.

Market prices fluctuate because of supply and demand characteristics; lower prices at the beginning of the season when contractors are looking for work, higher at the end of the season when contractors are over booked. Some components will experience accelerated deterioration in the latter part of their functional life. These, and other such phenomena, can cause significant variations between the original life and cost estimates, and those actually realized. Life cycles and replacement costs have been estimated as accurately as possible.

Deterioration of components occurs at different rates; therefore it is prudent to replace or repair portions of some components as they deteriorate, limiting the potential for damage to adjacent components.

#### For example:

- \* Roofs require ongoing maintenance programs to realize their expected life.
- ❖ Balconies may allow water entry into adjacent walls causing collateral damage.
- Windows may leak into the walls and deteriorate the cladding system and underlying components.

If premature failure of a portion of a component or significant hidden damage is suspect, an allowance may be carried in the spreadsheets for additional repair costs or phasing of components to mitigate overall damage and subsequent repair costs. This component replacement method will be more expensive than planned wholesale component replacement.

Where possible, component replacement has been sequenced with other components adjacent to or impacted by other components. Some components that do not require replacement all at the same time have been phased.

Also note that deficiencies may not be identified, or they may be present but not located in areas where random inspections are conducted. These costs may not be carried in the spreadsheets. This can be more accurately accounted for through a technical audit to determine if wall systems have been compromised.

It is assumed that the level of future preventive maintenance will be consistent with the standards currently employed. A more aggressive preventive maintenance program may allow various components to achieve a longer functional life, while deferral of maintenance may shorten their life.

Although inflation and interest rates are difficult to predict, their impact on future pricing and potential earnings cannot be ignored. The spreadsheets for Funding Scenarios, as well as the "30-Year Replacement Plan", incorporate interest and inflation.

#### MAJOR PROJECTS

Often multiple component replacement will have a significant project cost and it is prudent to protect the Ownership by tendering the project with a Professional to multiple General Contractors. This process includes costs such as insurance, bonding, permits, mobilization/demobilization, engineering fees, general contractor overhead and mark-up, etc. The Board of Director's should ensure these items are accounted for when major projects are forecasted in the Study when these projects are scheduled (typically in conjunction with a Building Envelope Review or Technical Audit.

It is the Board of Director's responsibility to seek Professional assistance during major projects to ensure that component replacement is properly designed to address sequencing of component replacement, the appropriate permits are obtained and that the work is completed properly. Major projects should be supervised by appropriate professionals.

While considerable effort has been made to present realistic projections, regular updates of the Study are required to ensure it remains a practical approximation.



#### 10. COMPONENT DESCRIPTION & GENERAL CONDITIONS

To be able to complete a Reserve Fund Study a random sample of each common property component included in the Study was visually inspected for the purpose of estimating the remaining life. In conjunction with a quantity survey and opinion of replacement costs an expense stream for common property component replacement has been developed for the next thirty (30) years.

#### 10.1 BUILDING ENVELOPE COMPONENTS

#### **10.1.1** ROOFING

TYPE OF COMPONENT(S):	<b>OVERALL CONDITION:</b>
2-Ply SBS Membrane (SBS), Standing Seam Metal, Copper Shingles	Good

CURRENT REPLACEMENT C	Cost:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
SBS	\$919,716	25	11	11,10,9	14,15,16
Standing Seam Metal	\$40,509	50	11	11	39
Copper Shingles	\$10,547	50	11	11	39
Roof Repairs	\$3,276	5	Unknown	0	5

#### **COMPONENT DESCRIPTION:**

#### SBS

- The main roof area consists of 2-Ply SBS membrane roof system.
- Internal drains are installed on the roof with debris screens.
- The roofing on the flat roof areas consists of a 2-ply SBS membrane with positive slope to the internal drains. Through-wall overflow scuppers are also installed at parapet wall locations.
- HVAC units, roof hatch, exhaust fans, and a multi-penetration dog-house are all curb mounted on the roof surface. Multiple plumbing vents have been designed with ABS pipes and metal roof jack flashings.
- SBS walkway membrane is installed around some mechanical equipment.
- Prefinished S-lock standing seam metal flashings are installed on the parapet walls and roof area dividers.

#### Metal

- Standing seam metal roof panels with a slope of 4:12 are installed on the roof areas of architectural features and over the front entrance canopy.
- Exfiltration ventilation is managed with a continuous ridge vent.
- All hip locations are detailed with a prefinished metal flashing overlapping the roofing panels.
- Snow guards are installed along the eaves on the building.

## **Copper Shingles**

 Copper shingles are installed on the roof of the architectural dome feature in the middle of the north side roof.

#### **CONDITIONS NOTED:**

#### **SBS**

The SBS membrane appears to be in acceptable condition. Minor concerns were noted which include blistering and buckling on membrane flashings at some locations, minor granule loss on membrane surface, and deteriorated urethane sealant application multipenetration of curbed doghouse.

#### **Metal Roof & Copper Shingles**

No concerns were noted.

Note: Monies have been carried to allow for repair/maintenance of the roof from time to time.

Note: SBS roof replacement has been phased over 3 years.

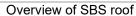
## ROOFING - CONTINUED



Photograph 1



Photograph 2





Photograph 3



Photograph 4
Typical curb mounted equipment with SBS

Pre-finished sheet metal cap flashings secured with concealed fasteners

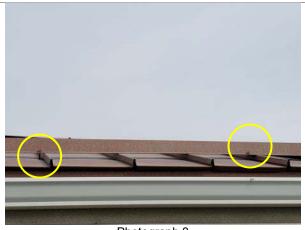




Overview of standing seam metal roof with ridge vent

#### ROOFING - CONTINUED





Photograph 8

Metal hip caps secured with neoprene screws



Photograph 9



Photograph 10

Copper shingled architectural dome feature

- Schedule regular maintenance including blister repairs on SBS membrane flashing surface, application and replacement of sealant where necessary, and removal of loose granules and debris.
- Monitor sealant for deterioration and replace as needed.
- Review roofing system annually by a roofing professional. Regular roof inspections for identification of minor deficiencies will allow for timely repair.

#### 10.1.2 EAVESTROUGHS & DOWNSPOUTS

TYPE OF COMPONENT(S):	OVERALL CONDITION:		
Prefinished metal	Good		

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$5,576	50	11	11	39

#### **COMPONENT DESCRIPTION:**

 Prefinished metal eavestroughs and downspouts are installed on the edges of the standing seam metal roofs to manage drainage.

#### **CONDITIONS NOTED:**

- Where inspected the eavestroughs appear to be clear of debris and appeared to be positively sloped towards downspouts. No concerns were noted with eavestroughs and downspouts.
- Downspouts with extensions from entrance canopy roof drain onto adjacent landscaping surface and upper roofs drain onto SBS membrane.

Note: Eavestroughs and downspouts have been scheduled for replacement at the same time as standing seam metal roof replacement to allow for proper sequencing of work.







Photograph 12

Overview of eavestroughs and downspouts (upper roof level & canopy entrance)



Photograph 13

Photograph 14

Downspouts draining onto SBS membrane at main roof level

Downspouts with extension draining onto adjacent landscaping at canopy roof

- Eavestroughs should be properly sloped and securely fastened.
- All downspouts should have extensions or splash pads to direct drainage away from the building foundation.
- Eavestroughs should be cleaned of debris regularly to avoid water overflowing the trough and draining onto the building.

#### **10.1.3** FASCIA

TYPE OF COMPONENT(S):	<b>OVERALL CONDITION:</b>
Prefinished metal	Good

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$3,679	40	11	11	29

#### **COMPONENT DESCRIPTION:**

 Prefinished metal fascia is installed on the edges of the standing seam metal and canopy roofs.

#### **CONDITIONS NOTED:**

No concerns were noted with the fascia.

Note: Fascia along the standing seam metal roof have been scheduled for replacement at the same time to allow for proper sequencing of work.



Prefinished metal fascia

#### **GOOD PRACTICE GUIDELINES:**

❖ Inspect annually for loose or damaged sections and repair as necessary.

#### **10.1.4** SOFFIT

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Perforated prefinished metal	Good

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$6,031	40	11	11	29

#### **COMPONENT DESCRIPTION:**

 Perforated prefinished metal soffit is installed on the underside of the roof overhangs and canopies.

#### **CONDITIONS NOTED:**

No concerns were noted with the soffit.

Note: Soffit on the underside of the standing seam metal roof have been scheduled for replacement at the same time to allow for proper sequencing of work.





Perforated prefinished metal soffit

#### **GOOD PRACTICE GUIDELINES:**

❖ Inspect soffits annually for deficiencies and schedule appropriate investigations or repairs.

#### 10.1.5 EXTERIOR WALL CLADDING

Type of Component(s):

Varies Good to Fair					air
CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Stucco	\$1,173,220	35	11	11,10,9	24,25,26
Stone Block Veneer - Repairs	\$91,703	35	11	11,10,9	24,25,26
Cornices	\$90,930	35	11	11,10,9	24,25,26
Accent Trims	\$73,091	35	11	11,10,9	24,25,26
Cap Flashing	\$47,250	35	11	11,10,9	24,25,26
Sealant	\$79,523	15	11	11	4
Stucco Repairs (Estimated)	\$78,750	15	11	11	4

#### **COMPONENT DESCRIPTION:**

- A combination of stucco with an acrylic finish and stone block veneer is installed on the exterior walls and privacy walls of the apartment building.
- The rooftop perimeter cornices and accent trims around windows & doors are clad with Exterior Insulation Finish (EIFS).
- Horizontal prefinished metal cap flashing is installed along the stucco to stone block veneer transition.
- Sealant is applied around the windows, doors, wall penetrations and balcony to wall terminations.

#### **CONDITIONS NOTED:**

- Majority of the cladding components appeared to be in acceptable condition, with exception of few areas where significant failure of acrylic finish coat on stucco was noted along the interior courtyard elevations at balcony to wall junctures.
- No concerns were noted with the stone block veneer and where inspected the weep holes appeared to be clear of debris.
- Sealant is missing at some balcony to wall juncture locations and at random locations it is beginning to deteriorate around windows and doors.
- At cladding transitions, the prefinished metal cap flashing was noted to be creating water entry pathways into the wall assembly and further review/monitoring should be scheduled.

Note: Exterior wall components (wall cladding, windows, patio doors and exterior unit accessories) have been scheduled for replacement at the same time to allow for proper sequencing of work.

Note: It is not thought that the stone block veneer will require wholesale replacement, therefore monies have been carried for repair only.

Note: Exterior wall cladding replacement has been phased over 3 years.





Overview of building elevations

**OVERALL CONDITION:** 

# EXTERIOR WALL CLADDING - CONTINUED





Photograph 20

Overview of courtyard side elevations



Photograph 22



Photograph 23

Rooftop perimeter cornices and accent trims around windows & doors are clad with Exterior Insulation Finish (EIFS)



Photograph 24

Horizontal prefinished metal cap flashing at stucco to stone block veneer transition



Photograph 25

Weep hole in stone block veneer clear of debris

# EXTERIOR WALL CLADDING - CONTINUED



Joint sealers in stone block veneer

Photograph 27

Sealant around wall penetration



Photograph 28



Photograph 29

Sealant application at balcony corners and around windows



Photograph 30



Photograph 31

Negative slope noted on prefinished metal cap flashings

#### EXTERIOR WALL CLADDING - CONTINUED





Lifted prefinished metal cap flashings above stone block veneer wall

- Complete an annual inspection and identify deficiencies in cladding.
- Re-fasten loose metal cap flashing and maintain positive slope away from wall cladding assembly.
- Seal larger cracks in stucco.
- Manage drainage from building such that cladding is not exposed to repeated wetting by drainage from adjacent components.
- Repair parging where delamination of parging is an aesthetic concern. Large areas of wall exposed by settlement are best corrected by re-grading.
- Sealant requires regular inspection and target repair as necessary.

#### 10.1.6 WINDOWS & PATIO DOORS

TYPE OF COMPONENT(S):	OVERALL CONDITION:
PVC, insulated steel	Good

CURRENT REPLACEMENT C	Cost:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Windows	\$538,020	35	11	11,10,9	24,25,26
Patio Doors - Horizontal Sliders	\$325,710	35	11	11,10,9	24,25,26
Patio Doors - Hinged	\$13,440	35	11	11,10,9	24,25,26

#### **COMPONENT DESCRIPTION:**

- The windows consist of a combination of fixed and horizontal slider PVC windows complete with PVC jamb extensions and muntin bar inserts.
- The patio doors consists of PVC horizontal sliders and hinged doors with full glass inserts installed to access the balcony or patio of each unit.

#### **CONDITIONS NOTED:**

- The windows and patio doors appear to be in acceptable condition.
- Windows installed in acrylic stucco cladding have head flashings and EIFS accent trims. Windows installed in stone veneer have sill flashings.

Exterior wall components (Wall cladding, windows, patio doors and exterior unit accessories) Note: have been scheduled for replacement at the same time to allow for proper sequencing of work.

Note: Windows and patio door replacement have been phased over 3 years.





Photograph 34

Photograph 35

#### Exterior view of windows in stucco and brick veneer cladding





Photograph 36

Photograph 37

Interior view of PVC windows, locking mechanism and muntin bars inserts

#### WINDOWS & PATIO DOORS - CONTINUED



Photograph 38



Photograph 39

Window sill and head with PVC Jamb extensions



Photograph 40



Photograph 41 Window sill flashing on brick veneer cladding

Window head flashing



Horizontal slider door



Photograph 43

Hinged patio door

- Regular maintenance of windows and patio doors includes periodic inspection for failed weather stripping, sealant and damaged or inoperable hardware. Service windows and patio doors at least every five (5) years.
- Sealant should be kept in good condition and replaced in a timely manner. Windows/Patio Doors with sealant in the sill to jamb joint should be monitored regularly as this joint is more prone to water
- Head and sill flashings should retain a positive drainage slope.

#### 10.1.7 **Doors**

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Storefront, steel, overhead motor & controls	Good

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Storefront - Entrances	\$4,200	50	11	11	39
Storefront - Exits	\$12,600	50	11	11	39
Parkade Overhead	\$5,250	15	11	11	4
Motor & Controls	\$1,575	15	11	11	4

#### **COMPONENT DESCRIPTION:**

- Storefront style doors are installed at the main entrance and exits of the building.
- Parkade has a double overhead door which is electrically operated.

#### **CONDITIONS NOTED:**

No concerns were noted with the doors.





Photograph 44

Photograph 45

#### Overview of storefront style doors







Photograph 47

Parkade overhead door and motors & controls

- Regular maintenance of doors includes periodic inspection for failed weather stripping, sealant and damaged or inoperable hardware.
- Sealant must be kept in good condition and replaced in a timely fashion.

#### 10.1.8 BALCONIES

TYPE OF COMPONENT(S):	OVERALL CONDITION:
PVC membrane, guardrails, fascia, soffit	Good

CURRENT REPLACEMENT CO	ST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:	
Membrane	\$487,809	15	11	9,8,7	6,7,8	
Guardrails	\$291,648	40	11	11	29	
Guardrails (R&R)	\$72,912	15	11	9,8,7	6,7,8	
Fascia	\$29,165	15	11	9,8,7	6,7,8	
Soffit	\$161,238	15	11	9,8,7	6,7,8	
Column Cladding	\$27,216	15	11	9,8,7	6,7,8	
Balcony Repairs	\$60,263	One-Time Only Costs (2021)				
Engineering Fees	\$23,205	One-Time Only Costs (2021)				
Balcony Repairs	\$60,263	One-Time Only Costs (2022)				
Engineering Fees	\$16,002		One-Time O	nly Costs (2022)		

#### **COMPONENT DESCRIPTION:**

- Balconies have been waterproofed with a PVC membrane adhered to the wood deck.
- Powder coated aluminum railings with glass inserts are fastened to the membrane and metal clad column supports.
- Perforated prefinished metal soffit has been installed on the underside of balcony decks.
- Prefinished metal fascia is installed on the fascia and support columns.

#### **CONDITIONS NOTED:**

- The balconies inspected appeared to be well sloped and membranes appeared to be lapped up the walls and columns and fastened to the bottom of the wall with clamping bars.
- The guardrails appeared to be securely fastened onto the deck/wall assembly with sealed fasteners.
- Sealant application was noted at corners of some balconies.

Note: It is thought that the guardrails can be reused when the balcony membranes are replaced; the guardrails will, however, require approval from a professional engineer to certify their structural integrity prior to reuse. Monies have been carried for guardrail removal and reinstallation (R&R).

Note: Typically the fascia, column cladding and soffit will require replacement to allow for proper sequencing of components.

Note: Installation of correctly sloped balconies with diverters is considered a best practice to protect wall assemblies. Consider contracting the services of a qualified professional to design and oversee installation work when balcony membranes are scheduled for replacement. No monies have been carried for professional design or review services.

Note: Balconies have been phased over 3 years.





Overview of balconies configuration

# BALCONIES - CONTINUED





Photograph 51

PVC membrane with positive deck slope





Photograph 53

Perforated prefinished metal soffit



Balcony guardrails with glass inserts



Guardrail height meets code requirements

#### **BALCONIES – CONTINUED**



Photograph 56



Photograph 57

Membrane lapped up the walls and terminated with clamping bar

Balcony prefinished metal drip edge and fascia



Photograph 58



Photograph 59

Prefinished metal clad balcony support columns

#### **SPECIFIC RECOMMENDATIONS:**

Due to concerns noted with the balconies at some locations, further review was scheduled to evaluate and determine appropriate repairs required. Wade Engineering completed additional reporting in the fall of 2020 and early 2021. Work to scheduled to be completed 2021/2022.

- Balcony membranes should be inspected annually and tears, rips, and holes should be repaired as
- Inspect soffit and fascia annually for displaced or damaged sections and repair as necessary.
- Note that over time buildings settle which can potentially cause the slopes on balconies to change and inhibit adequate water shedding characteristics. It is prudent to monitor balcony slopes periodically in order to schedule appropriate repairs when necessary to prevent potential long term structural damage caused by water entry into the deck system.
- Remove ponding water from balconies to avoid premature deterioration of the membranes.

#### **10.1.9** PATIOS

Type of Component(s):	OVERALL CONDITION:
Composite wood, guardrails	Good

CURRENT REPLACEMENT CO	ST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Composite Wood	\$73,448	40	11	11	29
Guardrails	\$52,920	40	11	11	29

#### **COMPONENT DESCRIPTION:**

Composite wood decking and powder coated aluminum guardrails with glass panels installed on some of the main floor suites.

#### **CONDITIONS NOTED:**

- No concerns were noted with the composite decking and guardrails.
- Some patios are installed on top of the parkade membrane. These patios are covered in the Parkade Membrane and Associated Components section on Pg. 31.





Photograph 60

J 1

#### Overview of composite wood decks with guardrails





Photograph 62

Photograph 63

Guardrails securely fastened onto deck assembly and adjacent wall

#### **GOOD PRACTICE GUIDELINES:**

Schedule regular maintenance as per manufacturer's recommendation for composite decking boards.

#### 10.2 EXTERIOR SITE COMPONENTS

#### 10.2.1 ASPHALT SURFACE

TYPE OF COMPONENT(S):	<b>OVERALL CONDITION:</b>
Asphalt surface	Good

CURRENT REPLACEM	ENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Overlay	\$63,797	25	11	11	14
Repairs	\$10,500	10	Unknown	4	6

#### **COMPONENT DESCRIPTION:**

Asphalt parking and drive surfaces are located on the east and west side of the building.
 CONDITIONS NOTED:

- No major concerns were noted with the asphalt surface.
- Evidence of previously repaired sections were noted around the storm sewer drain areas.
- Minor cracking was evident at some locations.

Note: Monies carried for asphalt is for an overlayment only.

Note: The asphalt, curbs and underground services have been scheduled at the same time to allow for proper sequencing of work. Before resurfacing the asphalt, any sewers which run underneath should be inspected, in order to determine if sewer line repairs are required. In this case, removal and replacement of the asphalt would be necessary.





Asphalt parking and drive surfaces





Previously repaired sections around storm drain and minor cracking on asphalt surface

- Schedule regular maintenance including localized sealing of cracks and patch repairs to realize the expected life of the asphalt.
- Seal cracks as they occur.

#### 10.2.2 CONCRETE (VARIOUS)

Type of Component(s): Poured concrete			Overa Good	ALL CONDITION:
CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	FEECTIVE AGE:	REMAINING LIFE:

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$34,272	35	11	11	24

#### **COMPONENT DESCRIPTION:**

- Poured concrete walkways, steps and islands are located throughout the property.
- Poured concrete wheelchair ramps with metal railings is located at main entrance of the apartment building.

# **CONDITIONS NOTED:**

No concerns were noted with the poured concrete components.



Photograph 68

Photograph 69

#### Poured concrete walkways and steps



Photograph 70



Photograph 71

Poured concrete steps and wheelchair ramp

#### CONCRETE (VARIOUS) - CONTINUED





Photograph 72

Photograph 73

#### Poured concrete islands

#### **GOOD PRACTICE GUIDELINES:**

- Do not use salt for de-icing, as it can cause spalling and premature deterioration of concrete.
- Application of a sealer will help protect the surface from spalling and freeze/ thaw damage.
- Seal cracks wider than 3/16<sup>th</sup> of an inch to minimize progressive damage from freeze/thaw.

#### 10.2.3 CURBS

# TYPE OF COMPONENT(S): Concrete Current Replacement Cost: \$21,962 EXPECTED LIFE: ACTUAL AGE: EFFECTIVE AGE: REMAINING LIFE: \$11 11 14

#### **COMPONENT DESCRIPTION:**

Poured concrete curbs adjoin the asphalt surface and planted islands.

#### **CONDITIONS NOTED:**

No concerns were noted with the poured concrete curbs.

Note: The asphalt, curbs and underground services have been scheduled for replacement at the same time to allow for proper sequencing of work.



Photograph 74



Photograph 75

Overview of poured concrete curbs

#### **GOOD PRACTICE GUIDELINES:**

Repair curbs as required.

#### **10.2.4** FIRE HYDRANT

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Fire hydrant	Good

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$7,350	50	11	11	39

#### **COMPONENT DESCRIPTION:**

Painted fire hydrant is systematically located in the property.

#### **CONDITIONS NOTED:**

No concerns were noted with the fire hydrant.



Painted fire hydrant

Photograph 76

- ❖ Paint fire hydrant approximately every 10 years or as required with a rust inhibitive paint.
- Fire department regulations require annual inspection of fire hydrants to ensure their integrity is maintained for use in the event of an emergency.

#### 10.2.5 GARBAGE AREAS

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Poured concrete, painted wood	Good

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Concrete Pads	\$17,926	35	11	11	24
Fencing	\$3,491	35	11	11	24
Fencing - Paint	\$1,201	10	Unknown	4	6

#### **COMPONENT DESCRIPTION:**

 Garbage areas are located on the east and west end of the property and are enclosed by wood fencing. The garbage bins sit on poured concrete pads.

# **CONDITIONS NOTED:**

No concerns were noted with the garbage areas.





Photograph 77

Photograph 78

Overview of garbage areas - wood fencing and poured concrete pads

- ❖ Do not use salt for de-icing, as it can cause spalling and premature deterioration of concrete.
- Paint fencing approximately every 7 years or as required to protect the wood from the elements.

#### 10.2.6 LANDSCAPING

TYPE OF COMPONENT(S):		OVERALL CONDITION			LL CONDITION:
Varies		Good			
CUBBENT PEDI ACEMENT COST:	EVECTED LIEE:	ACTUAL ACE:	FEEECT	VE ACE:	DEMAINING LIEE

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Contingency (Allowance)	\$8,400	7	Unknown	1	6
Regrading	\$21,000	One-Time Only Cost (2021)			

#### **COMPONENT DESCRIPTION:**

- The landscaping consists of grass, gravel beds, deciduous and coniferous trees and shrubs.
   CONDITIONS NOTED:
- No concerns were noted with trees and grass. Some regrading is scheduled to be completed in 2021.

Note: Monies carried for landscaping is not for wholesale replacement and is a contingency amount for items such as tree and grass replacement, etc. that may be required from time to time.





Overview of landscaping

#### **SPECIFIC RECOMMENDATIONS:**

The Corporation is completing some regrading around the building in 2021.

- Landscaping will settle over time and may allow the ground to slope towards the building foundations. Settling also leaves the potential for uneven walking surfaces and tripping hazards. Re-grading as necessary will help limit the chances of water entry through the foundations.
- A regular tree pruning program would be beneficial.
- Proper aeration, fertilizing, weed control, cutting, and raking will maintain lawns, and they should not require wholesale replacement.

#### 10.2.7 LIGHT STANDARDS

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Site lighting fixtures	Good

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$7,875	50	11	11	39

#### **COMPONENT DESCRIPTION:**

Painted light standards are located throughout the property.

#### **CONDITIONS NOTED:**

No concerns were noted with the light standards.



Photograph 81

Light standard

#### **GOOD PRACTICE GUIDELINES:**

Weekly walk around to ensure lighting is working properly.

#### 10.2.8 MISC. COMPONENTS

#### TYPE OF COMPONENT(S):

Reserve Fund Study

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Reserve Fund Study	\$6,773	5	5	5	0
Site Inspection (camera, flush)	\$10,500	10	Unknown	4	6
Underground Services	\$26,250	25	11	11	14

#### **COMPONENT DESCRIPTION:**

- Engineering fees for project work have been included.
- The Reserve Fund Study requires an update every 5 years.
- Site inspections should be completed to inspect underground services with a camera and to flush the sanitary/storm sewer lines from time to time.
- Storm and sanitary services are typically constructed of concrete and/or cast iron which may deteriorate over time. Repairs to the storm lines and sewer lines may be necessary in the event blockage or breakage occurs. The life of the storm and sanitary sewer systems depends on several factors, primarily the quality of the materials used during initial installation, as well as the soil conditions and the level of use by residents. The pipes are below grade and cannot be visually inspected without the use of a camera system.

#### **CONDITIONS NOTED:**

The Reserve Fund Study is being completed in 2019.

- Schedule review/audit of building as necessary.
- Schedule completion of Reserve Fund Study as per legislation requirements.
- Schedule regular maintenance.

#### 10.2.9 PARKADE MEMBRANE & ASSOCIATED COMPONENTS

Type of Component(s):	OVERALL CONDITION:
111 2 01 0 0 mm 0 11 2 mm (0 / 1	<u> </u>
Varies	Good
valies	Oood

CURRENT REPLACEMENT	URRENT REPLACEMENT COST:		ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Membrane	\$141,271	30	11	11,10,9	19,20,21
Composite Wood	\$80,703	30	11	11,10,9	19,20,21
Guardrails	\$34,272	30	11	11,10,9	19,20,21
Concrete Pavers	\$170,402	30	11	11,10,9	19,20,21
Planters	\$15,750	30	11	11,10,9	19,20,21

## **COMPONENT DESCRIPTION:**

- A membrane is installed on the roof of the parkade below the composite wood decking with guardrails, concrete pavers and Allan Block planters (where it extends beyond the footprint of the building). This membrane is not a life item and will require replacement. Although this membrane was not inspected, industry standard and experience suggests that this membrane will have a service life of approximately 25 to 30 years.
- In order to service the membrane the composite wood decking, concrete pavers and planters liners beds above the membrane have to be removed and replaced.

### **CONDITIONS NOTED:**

No concerns were noted with the composite decking, pavers and Allan Block planters above the parkade membrane.

Parkade membrane replacement has been phased over 3 years. Note:







Photograph 83

## Overview of concrete pavers and planters over parkade membrane



Photograph 84



Photograph 85

Overview of composite wood decking, guardrails and planter beds

- Inspect parkade annually to identify localized areas requiring repair.
- Evaluate parkade every 5 years to assess needs for repair/upgrades.

#### **10.2.10** POWER PEDESTALS & OUTLETS

TYPE OF COMPONENT(S):	<b>OVERALL CONDITION:</b>
Power pedestals & outlets	Good

CURRENT REPLACEMENT COST:		INT REPLACEMENT COST: EXPECTED LIFE: ACTUAL AGE:		EFFECTIVE AGE:	REMAINING LIFE:
Pedestals	\$1,050	35	11	11	24
Outlets	\$840	35	11	11	24

## **COMPONENT DESCRIPTION:**

Power pedestals and outlets are located in front of some parking stalls.

## **CONDITIONS NOTED:**

No concerns were noted with the power pedestals and outlets.





Photograph 86

Photograph 87

Power pedestals and outlets

## **GOOD PRACTICE GUIDELINES:**

Repair leaning pedestals to ensure proper operation.

## 10.2.11 PROPERTY SIGNAGE

TYPE OF COMPONENT(S):	OVERA	OVERALL CONDITION:		
Property signage			Good	_
CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$2,100	40	11	11	29

## **COMPONENT DESCRIPTION:**

Property signs are located by the main entrance of the building and along the east and west side entrances to the property.

## **CONDITIONS NOTED:**

No concerns were noted with the property signage.







Photograph 89

Property signage

## **GOOD PRACTICE GUIDELINES:**

Clean and repair signage as required.

#### **10.2.12** RAILINGS

TYPE OF COMPONENT(S):	<b>OVERALL CONDITION:</b>
Painted metal	Good

CURRENT REPLACEME	ENT REPLACEMENT COST:		ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Railings	\$5,670	40	11	11	29
Railings - Paint	\$1,890	20	11	11	9
Bicycle Racks	\$1,260	40	11	11	29

## **COMPONENT DESCRIPTION:**

- Painted metal railings are installed on the parkade ramp retaining walls and alongside barrier free wheel chair ramps.
- Painted metal bicycle racks are located on either sides of the main entrance porch.

## **CONDITIONS NOTED:**

No concerns were noted with miscellaneous metal components.





Photograph 90

Photograph 91

Painted metal railings alongside wheel chair ramp and bicycle racks



Painted metal railings on parkade ramp retaining walls

## **GOOD PRACTICE GUIDELINES:**

Metal railings should be painted approximately every 15 years.

#### 10.2.13 RETAINING WALLS - REPAIRS

TYPE OF COMPONENT(S):			<b>OVERALL CONDITION:</b>
Poured concrete, Allan Block			Good

CURRENT REPLACEMENT	URRENT REPLACEMENT COST:		ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Concrete Repairs & Paint	\$6,300	20	11	11	9
Allan Block	\$8,568	20	11	11	9

## **COMPONENT DESCRIPTION:**

- Poured concrete retaining walls with metal railings are located at the parkade ramp.
- Allan block walls are located throughout the property.

## **CONDITIONS NOTED:**

No concerns were noted with the retaining walls.

Note: It is not thought that the retaining walls will require replacement but repairs may be required from time to time.





Poured concrete retaining wall at parkade ramp

Allan block retaining wall

#### **GOOD PRACTICE GUIDELINES:**

Inspect Allan block/retaining walls for movement. Complete repairs if safety or aesthetics are a concern.

## 10.3 MECHANICAL & ELECTRICAL COMPONENTS

#### 10.3.1 BOILER SYSTEM

TYPE OF COMPONENT(S):	<b>OVERALL CONDITION:</b>
Boiler, flue, controller	Good

CURRENT REPLACEME	ENT REPLACEMENT COST:		ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Boiler	\$52,500	30	11	11	19
Boiler Flue	\$31,500	50	11	11	39
Controller	\$1,890	20	11	11	9

#### **COMPONENT DESCRIPTION:**

- The building utilizes two (2) natural gas-fired hot water boilers that provide heat to the hydronic radiant heat loop system. The boilers are manufactured by Laars Model HH24501N11KCCCTC with 2,450,000 BTU input each.
- A Tekmar Model 264, 4-stage outdoor reset controller regulates the boiler system.
- Two 5-storey flue stacks provide for venting of the boilers and domestic hot water tank combustion gases.
- A Watts 009M3QT backflow protection device has been incorporated into the water system in accordance with the Alberta Building Code. The test tag reads March, 2019. This device prevents chemically treated water from backing up into the domestic water system.

## **CONDITIONS NOTED:**

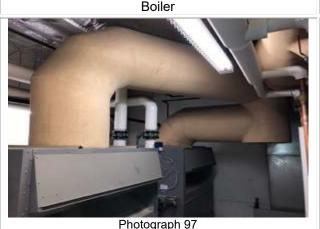
- No concerns were noted with the boiler system.
- A hydronic treatment is in place and is tested annually.







Photograph 96 Controller



1 Hotograph 57



Photograph 98

#### Boiler flues

### Backflow protection

- Inspect the boilers annually and complete seasonal maintenance.
- ❖ Inspect the boiler flue annually in accordance with the Alberta Building Code.

#### 10.3.2 DOMESTIC WATER SYSTEM

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Hot water tanks, boiler, pump	Good

CURRENT REPLACEMENT C	ost:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Hot Water Tanks	\$29,925	15	11	11	4
Piping	\$704,025	50	11	11	39
Recirculating Pump	\$630	20	11	11	9
Repairs	\$21,000	20	11	11	9

#### **COMPONENT DESCRIPTION:**

- The building utilizes three (3) natural gas-fired hot water tanks with 80 gallons and 652,500 BTUH input manufactured by Bradford White; Model D80T7253N, provide heated water to the building.
- The domestic water piping consists of copper and PEX (cross-linked polyethylene) piping.
- A 1/12 HP Grundfos pump is used to recirculate water through the domestic piping.
- A Watts 709 backflow protection device has been incorporated into the water system in accordance with the Alberta Building Code. Test tag reads May, 2019. This device prevents chemically treated water from backing up into the domestic water system.

## **CONDITIONS NOTED:**

- Due to the age of the hot water tanks, replacement should be anticpated in the next few years.
- Insulation has been installed on some sections of piping. As piping ages, replacement of deteriorating sections is anticipated.
- No concerns were noted with the recirculating pump.
- No concerns were noted with this backflow device during the review.

Note: Monies carried for piping replacement can be phased as the building ages as it is not thought that all piping will require replacement at the same time.



Photograph 99

Hot water tanks



Photograph 100

Recirculating pump

## **DOMESTIC WATER SYSTEM - CONTINUED**





Photograph 101

Backflow prevention

Photograph 102

Domestic water piping

## **GOOD PRACTICE GUIDELINES:**

- Flush the hot water tanks annually.
- Record and monitor frequency of leaks to determine repair/replacement requirements.
- Schedule regular maintenance and complete annual inspection of backflow prevention.

#### 10.3.3 **ELECTRICAL SYSTEM - REPAIRS**

Type of Component(s): Varies	OVERA Good	LL CONDITION:		
	REMAINING LIFE:			
\$14,700	25	11	11	14

#### **COMPONENT DESCRIPTION:**

The electrical system is manufactured by Siemens and includes a 1,600 amp main disconnect, sub safety switches, panel boards with breakers, breaker boxes, meter head socket panels, light timers and electrical panels.

## **CONDITIONS NOTED:**

No concerns were noted with the electrical system.

Note: It is not thought that the electrical systems will require wholesale replacement. Monies carried are for repairs only that may be required from time to time.



Photograph 103

Photograph 104

Main switchgear and disconnect

Breaker panel and meter socket

- Schedule regular maintenance.
- Complete thermal scan by a certified electrician if concerns are noted.

#### 10.3.4 ELEVATORS

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Hydraulic	Good

CURRENT REPLACEMENT CO	ST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Elevator	\$262,500	30	11	11,10	19,20
Repairs	\$16,800	15	Unknown	6	9
Cab Modernization	\$31,500	30	11	11,10	19,20
Exhaust Fan	\$630	20	11	11	9

## **COMPONENT DESCRIPTION:**

- The building utilizes two hydraulic-operated elevators, manufactured by Schindler with 1130 kg and 15 person carrying capacity.
- Exhaust fan is mounted near the ceiling of the elevator machine room.
- The elevator cab is finished in a combination of stainless steel and plastic laminate panels.

## **CONDITIONS NOTED:**

No concerns were noted with the elevators.

Note: Some monies have been allocated for elevator repairs, which will be required from time to time to replace components on the elevator; replacement schedule will be determined by the service provider.

Note: Elevator replacement has been phased over 2 years.







Photograph 106

#### Interior of elevator cab



Photograph 107

Photograph 108

Hydraulic operators

Exhaust fan

## **GOOD PRACTICE GUIDELINES:**

Schedule regular maintenance including regular service by qualified technicians.

#### **10.3.5** EXHAUST FANS

# TYPE OF COMPONENT(S): Exhaust fans OVERALL CONDITION: Good

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$3,990	25	11	11	24

## **COMPONENT DESCRIPTION:**

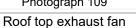
Three (3) exhaust fans are located on the roof. Ceiling exhaust fans serve the electrical room, fitness room and social room.

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## **CONDITIONS NOTED:**

No concerns were noted with the exhaust fans.







Ceiling exhaust fan

## **GOOD PRACTICE GUIDELINES:**

Inspect fan wheel periodically and clean as required.

#### 10.3.6 FIRE ALARM SYSTEM

TYPE OF COMPONENT(S):	OVERALL CONDITION:
<u> </u>	O VIII O CHI O CHI
Panels & devices	Good
1 dileis & devices	Good

CURRENT REPLACEM	ENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Panels	\$8,925	25	11	11	14
Devices	\$26,250	25	11	11	14

## **COMPONENT DESCRIPTION:**

- The fire alarm system consists of one (1) main panel which is located at the electrical room and one (1) remote annunciator panel located at the main entrance, both manufactured by Notifier.
- Pull stations, alarm horns with strobes, booster panels, smoke and heat detectors are located throughout the building and parkade.

## **CONDITIONS NOTED:**

No concerns were noted with the fire alarm system.



Photograph 111



Photograph 112

Main fire alarm panel





Photograph 113

Strobe alarm



Photograph 114

**Pull Station** 

## FIRE ALARM SYSTEM - CONTINUED



Detector

Photograph 115

- Schedule regular maintenance, inspections and tests by qualified technicians and complete upgrades recommended by the Fire Department.
- Replace back-up batteries in alarm panels every two years or as required.

#### 10.3.7 HALLWAY MAKE-UP AIR SYSTEM

TYPE OF COMPONENT(S):	OVERALL CONDITION:
MUA unit and cooling system	Good

CURRENT REPLACEMENT	NT Cost:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Make-Up Air Unit	\$105,000	25	11	11	14
Condenser Unit	\$52,500	25	11	11	14

### **COMPONENT DESCRIPTION:**

- The building utilizes two (2) natural gas-fired roof top hallway MUA units manufactured by Engineered Air; Model DJ100 with 607,000 Btuh of heating capacity and one (1) natural gas-fired roof top hallway MUA unit manufactured by Engineered Air; Model DJ60 with 440,000 Btuh of heating capacity.
- Two (2) condenser packages are Carrier Model 38AKS014 with 12.5 tons of cooling. One
   (1) condenser package is a Carrier Model 38ARS012 with 10 tons of cooling capacity.

## **CONDITIONS NOTED:**

No concerns were noted with the hallway make-up air system.

Note: Replacement of rooftop mechanical unit(s) should be scheduled for replacement at the same time as the SBS roofing.



Photograph 116 Make-Up air unit



Photograph 117
Condensing unit



Hallway grille

- Schedule regular maintenance including replacement of air filters, refrigerant liquid line filter and cleaning of condenser and evaporator fins.
- Replace air filter in make-up air unit (MUA) quarterly or more often if required.

#### 10.3.8 INTERCOM & SECURITY SYSTEM

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Varies	Good

CURRENT REPLACEMENT	NT Cost:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Intercom	\$6,300	25	11	11	14
CCTV System	\$13,650	25	11	11	14

## **COMPONENT DESCRIPTION:**

- Mircom intercom system with phone tie-in is located at the main entrance.
- The security system consists of CCTV cameras with digital recording located throughout the building and parkade.

## **CONDITIONS NOTED:**

No concerns were noted with the intercom or security system.



Photograph 119



Photograph 120

Intercom





CCTV camera

- Visually inspect intercoms regularly and clean as required to ensure proper operation.
- Check cameras and video monitors are operating correctly and images are clear.

#### **10.3.9 LIGHTING**

Interior and exterior lighting  OVERALL CONDITION: Good					
CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Chandelier	\$1,050	25	11	11	14
Wall & Ceiling Mounted	\$47,471	25	11	11	14
Fluorescent – Building	\$3,780	25	11	11	14
Fluorescent – Parkade	\$16,695	25	11	11	14
Emergency	\$17,168	25	11	11	14
Exit	\$6,815	25	11	11	14
Exterior – Units	\$22,061	35	11	11	24
Exterior – Security	\$2,100	35	11	11	24

#### **COMPONENT DESCRIPTION:**

- A chandelier is located in the main floor lobby.
- Wall and ceiling mounted lights are located throughout the main floor lobby, vestibules, mailbox room, common room, stairwells and hallways.
- Fluorescent lights are located in the parkade and storage rooms.
- Emergency and exit lights are installed throughout the parkade and building.
- Exterior wall mounted lights are located on the patios and balconies and beside the entrances to the building.
- Exterior wall mounted security lights are installed by the overhead parkade and exit doors.

## **CONDITIONS NOTED:**

No concerns were noted with the lighting.

Note: Exterior wall components (Wall cladding, windows, patio doors and exterior unit accessories) have been scheduled for replacement at the same time to allow for proper sequencing of work.





Chandelier



Photograph 123

Fluorescent lighting

## LIGHTING - CONTINUED





Photograph 125

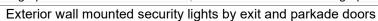
## Wall and ceiling mounted lighting



Exit and emergency lighting









- Weekly walk around to ensure all lighting is working properly.
- Engage a qualified professional to perform annual testing and maintenance of emergency and exit lights, in accordance with Code, to realize the expected life of safety lighting components.

#### 10.3.10 PARKADE EXHAUST SYSTEM

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Gas monitoring and exhaust system	Good

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Exhaust Fan	\$26,460	30	11	11	19
Gas Monitors	\$9,555	25	11	11	14

## **COMPONENT DESCRIPTION:**

- Three exhaust fans in the parkade are inter-locked with the parkade make-up air unit and controlled by the carbon monoxide and nitrogen dioxide gas monitoring system sensors.
- The gas monitoring system was manufactured by Armstrong and is located throughout the parkade.

## **CONDITIONS NOTED:**

No concerns were noted with the parkade exhaust system.



Photograph 130



Photograph 131

Exhaust fan





Photograph 132

Gas sensor

- Gas monitors and exhaust system should be tested by a certified technician twice per year.
- Parkade exhaust system including sensor calibrations and associated MUA system should be tested by a certified technician semi-annually.

#### 10.3.11 PARKADE MAKE-UP AIR SYSTEM

TYPE OF COMPONENT(S): Parkade MUA system				LL CONDITION:
CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$52,500	35	11	11	24

## **COMPONENT DESCRIPTION:**

The building utilizes one (1) natural gas-fired parkade make-up air unit manufactured by Engineered Air; Model HE221 with 2,494,800 Btuh of heating capacity. This unit is interlocked with the parkade exhaust fans to provide fresh air make-up to the underground parkade when the exhaust fans are running.

## **CONDITIONS NOTED:**

No concerns were noted with the parkade make-up air system.



Make-Up air unit

Photograph 133

- Replace filter in make-up air unit (MUA) quarterly or more often if required.
- System should be checked at same time as the parkade exhaust system.

#### 10.3.12 PARKADE RAMP & SNOW MELT SYSTEM

TYPE OF COMPONENT(S): Glycol heat loop, poured concrete			Over/ Good	ALL CONDITION:
CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Piping	\$15,750	30	11	11	19
Controller	\$1,890	20	11	11	9
Pump	\$1,680	20	11	11	9
Heat Exchanger	\$1,260	20	11	11	9
Poured Concrete	\$15,824	30	11	11	19

## **COMPONENT DESCRIPTION:**

The glycol snow melt system consists of a Tekmar 667 temperature controller with inslab sensor, one (1) Grundfos 1/4 HP pump, one (1) 1/8 HP pump, brazed plate heat exchanger, expansion tank, distribution manifold and in-slab <sup>3</sup>/<sub>4</sub>" PEX tubing for heat transfer to concrete slab.

## **CONDITIONS NOTED:**

No concerns were noted with the parkade ramp/snow melt system.

Note: The ramp piping and concrete are scheduled for replacement at the same time to allow for proper sequencing of the work.







Overview of poured concrete ramp with inslab heating and trench drain channel



Photograph 136

Controller



Photograph 137

Glycol loop piping

## PARKADE RAMP & SNOW MELT SYSTEM - CONTINUED

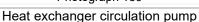


Photograph 138



Photograph 139

Loop circulation pump





Thotograph 140



Photograph 141

Heat exchanger

Expansion tank

- Do not use salt for de-icing, as it can cause spalling and premature deterioration of concrete components.
- Glycol concentration, pH, dissolved solids and inhibitor strength mix should be tested prior to the beginning of winter.
- Seal cracks in the concrete parkade ramp.

#### 10.3.13 Perimeter Heating

Type of Component(s): Hydronic heating				OVERALL CONDITION: Good	
CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:	

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Cabinet Heaters	\$15,750	40	11	11	29
Baseboard Heaters	\$8,925	40	11	11	29
Unit Heaters	\$8,400	40	11	11	29

#### **COMPONENT DESCRIPTION:**

- Cabinet heaters are located in the main entrance vestibule and stairwell exits.
- Radiant copper tube baseboard heaters with aluminum fins are located at the main and rear entrances and in the hallways.
- Unit heaters are located in the parkade and mechanical rooms. Unit heaters are mounted near the ceiling.

## **CONDITIONS NOTED:**

No concerns were noted with the cabinet/baseboard/unit heaters.



Entrance cabinet heater



Stairwell cabinet heater



Parkade unit heater



Photograph 145

Mechanical room unit heater

## GOOD PRACTICE GUIDELINES:

Repair damaged fins.

#### 10.3.14 RADIANT HEAT LOOP SYSTEM

Type of Component(c):

Radiant heat loop system Good					
CURRENT REPLACEMENT CO	OST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Heat Supply Pumps	\$8,610	20	11	11	9
Heat Loop Piping	\$220,395	50	11	11	39
Expansion Tanks	\$4,725	20	11	11	9
Zone Valves & Thermostats	\$21,525	15	Unknown	6	9

## **COMPONENT DESCRIPTION:**

- Water is being circulated through the boilers by two (2) Grundfos 3 HP heating pumps.
- Three (3) Amtrol Extrol SX-160V expansion tanks allow for expansion and contraction of hot and cold water at temperature differentials for service required.
- Zone valves and thermostats are used to regulate heating in the building and residential suites.

#### **CONDITIONS NOTED:**

- No concerns were noted with the radiant heat loop system.
- Perimeter heating loops consist of copper and steel piping, side stream filters.
- Insulation is installed on some sections of piping.
- As piping ages, replacement of deteriorating sections is anticipated.

Note: Zone valves and thermostats should be replaced on an as needed basis.



Photograph 146



Photograph 147

Circulation pumps





Photograph 148

Heating pumps

- Schedule regular maintenance and complete annual inspection of backflow prevention.
- Record and monitor frequency of leaks to determine repair/replacement requirements.

#### 10.3.15 Sprinkler System - Repairs

\$26,250

				OVERA	ALL CONDITION:
Sprinkler heads and distribution piping				Good	
CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECT	VE AGE:	REMAINING LIFE:

20

## **COMPONENT DESCRIPTION:**

 Fire suppression sprinkler systems are located in the building and parkade to protect the residents and property.

11

- DCVA is manufactured by Watts, Model 757DC. Inspection tag in place reads March, 2019
- The sprinkler costing is for common areas only.

## **CONDITIONS NOTED:**

No concerns were noted with sprinkler system.

Note: It is not thought that the sprinkler systems will require wholesale replacement. Monies carried are for repairs only that may be required from time to time.



Photograph 149



11

Photograph 150
Building sprinkler head

Main building sprinkler service



1 Hotograph 101



Photograph 152

**Building DCVA** 

Parkade sprinkler head

- Inspect and test once a year by a certified technician.
- Conduct annual sprinkler testing as per local building code requirements.

## **10.3.16** SUMP PUMPS

TYPE OF COMPONENT(S): Sump pumps				LL CONDITION:
CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$3,150	15	Unknown	6	9

## **COMPONENT DESCRIPTION:**

Sump pumps are installed in the mechanical room and parkade.

## **CONDITIONS NOTED:**

- Fail alarms have been installed and appear to be operating adequately.



Sump pump with fail alarm

Photograph 153

## **GOOD PRACTICE GUIDELINES:**

Monitor and test operation of pumps every three to four months.

## 10.4 INTERIOR COMPONENTS

## **10.4.1** COMMUNITY MAILBOXES

# TYPE OF COMPONENT(S): Recessed metal OVERALL CONDITION: Good

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$13,655	40	11	11	29

# **COMPONENT DESCRIPTION:**

Community mailboxes are located in the mail box room on the main floor.

## **CONDITIONS NOTED:**

No concerns were noted with the community mailboxes.



Community mailboxes

## **GOOD PRACTICE GUIDELINES:**

❖ Inspect regularly for damaged locks and hinges and repair when required.

## 10.4.2 EXERCISE EQUIPMENT

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Exercise equipment	Good

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
\$6,300	15	Unknown	9	6

## **COMPONENT DESCRIPTION:**

Exercise equipment is located in the common fitness room.

## **CONDITIONS NOTED:**

No concerns were noted with the exercise equipment.

Note: It is not thought that the exercise equipment will require wholesale replacement. Costs carried are a contingency amount for component replacement that may be required from time to time.





Photograph 155

Photograph 156

Exercise equipment

#### **GOOD PRACTICE GUIDELINES:**

❖ Exercise equipment should be cleaned and maintained as per manufacturer's suggestion.

#### 10.4.3 FLOORING

TYPE OF COMPONENT(S):	<b>OVERALL CONDITION:</b>
Carpet, ceramic & vinyl tile, linoleum	Good

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Carpet	\$118,832	15	11	9,8,7	6,7,8
Ceramic Tile	\$27,799	30	11	11	19
Vinyl Tile	\$24,889	30	11	11	19
Linoleum	\$2,194	30	11	11	19

## **COMPONENT DESCRIPTION:**

- Carpet is installed in the common room hallways and stairwells.
- Ceramic tile is installed in the main floor vestibules, lobby, mailbox room, common washrooms and kitchen area.
- Vinyl tiles are installed in storage rooms and elevator lobby on the parkade level.
- Linoleum is installed in the fitness room.

## **CONDITIONS NOTED:**

No concerns were noted with the flooring.

Note: It would be prudent to schedule flooring replacement in conjunction with interior painting to allow for proper sequencing of work.

Note: Carpet replacement has been phased over 3 years.





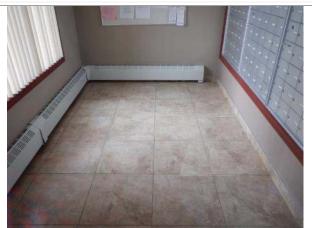


Photograph 158

#### Carpet in hallways and stairwells



Photograph 159



Photograph 160

Ceramic tile in main floor lobby and mailbox room

## FLOORING - CONTINUED





Vinyl tile

Photograph 162

Linoleum flooring

# GOOD PRACTICE GUIDELINES:

Maintain flooring by following manufacturer's recommendations for cleaning and care.

#### 10.4.4 **FURNITURE & FIXTURES**

TYPE OF COMPONENT(S):			OVERA	LL CONDITION:
Furniture and fixtures			Good	_
CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:

CURRENT REPLACEMENT COST:	EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:	ľ
\$10,500	15	Unknown	9	6	

#### **COMPONENT DESCRIPTION:**

- Furniture is located in the main floor lobby, common rooms and elevator lobbies of upper floors.
- Plumbing fixtures are located in the washroom and kitchen in the common room.

## **CONDITIONS NOTED:**

No concerns were noted with the furniture and fixtures.

Note: It is not thought that the furniture & fixtures will require wholesale replacement. Costs carried are a contingency amount for component replacement that may be required from time to time.







Photograph 164

#### Furniture in upper floor lobbies and social room



Photograph 165

Photograph 166

Kitchen cabinetry and appliances in common room

Plumbing fixtures in common room washroom

#### **GOOD PRACTICE GUIDELINES:**

Furniture should be cleaned and maintained as per manufacturer's suggestion.

#### 10.4.5 INTERIOR PAINT

TYPE OF COMPONENT(S):	OVERALL CONDITION:
Latex paint	Good

CURRENT REPLACEMENT COST:		EXPECTED LIFE:	ACTUAL AGE:	EFFECTIVE AGE:	REMAINING LIFE:
Ceilings	\$41,098	15	11	9,8,7	6,7,8
Walls	\$57,078	15	11	9,8,7	6,7,8
Wallpaper	\$7,837	15	11	9,8,7	6,7,8
Unit Doors	\$7,823	15	11	9,8,7	6,7,8

## **COMPONENT DESCRIPTION:**

- Ceilings are painted and have a stipple finish; walls and unit doors are painted with a smooth finish.
- Wallpaper is installed around unit doors, in the main floor lobby and mailbox room.

## **CONDITIONS NOTED:**

No concerns were noted with interior paint.

Note: It would be prudent to schedule flooring replacement in conjunction with interior painting to allow for proper sequencing of work.

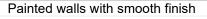
Note: Interior painting has been phased over 3 years.





Photograph 168

Ceilings with stipple paint finish







Painted unit door

Wallpaper finishes

#### **GOOD PRACTICE GUIDELINES:**

Repair and repaint scratches and dents in the walls as necessary.

## 11. LIFE ITEMS

If deficiencies in a life item are detected they will be included in the Cost/Life Data sheet as a non-reoccurring expense (i.e. structural or other components not typically planned for replacement). It should be noted that some deficiencies may not become apparent during the Reserve Fund Study site inspections since only a sample of components are reviewed. Although a report on the cursory inspection of life items and areas of concern follows, this should not be considered a technical audit. General comments relating to the condition of the components are included to give a better overall understanding of conditions of the property. Often these conditions may require further investigation for an accurate estimation of repair scope and funds required. No cost centres have been included in this report for these items.

#### 11.1.1 PARKADE

## **COMPONENT DESCRIPTION:**

- There is an underground slab-on-grade parkade below the building and extends beyond the footprint of the building on south side.
- Entrance to the parkade is located on the east side of the building.

## **CONDITIONS NOTED:**

- Diamond cut control joints around columns and saw cuts on slab on grade have been implemented to control cracking on the concrete slabs.
- Fire stops are installed in soffit penetrations.
- The slab-on-grade is positively sloped to drains throughout the parkade.
- Minor cracking and surface spalling was noted along heavy traffic areas on slab on grade.
- Minor cracking (dry) was noted at few locations on parkade walls and soffit.

Note: No monies have been carried for the parkade as this is a life item; repairs will, however, be required from time to time and should be budgeted as necessary.





Overview of underground parkade

## PARKADE - CONTINUED





Photograph 174

Diamond cut control joint around column and saw cuts on slab on grade concrete





Photograph 175

Photograph 176

Fire stops at soffit and wall penetrations



Photograph 177



Photograph 178

Slab on grade exhibiting positive slope towards parkade drain

## PARKADE - CONTINUED





Photograph 180

Cracking on parkade walls and soffit





Minor cracking and spalling of slab on grade concrete

## **GOOD PRACTICE GUIDELINES:**

❖ Inspect parkade regularly for water entry and schedule repairs or reviews as necessary.

## 12. FINANCIAL ANALYSIS

The financial spreadsheets that follow summarize and link the quantity survey, conditions noted, estimated life cycles, replacement costs and future expenditures.

#### 12.1 "Cost/Life Data" Spreadsheet

Summarizes the following key information:

- Common Property Component Outlines components to be repaired/replaced by the Reserve Fund.
- Current Replacement Cost Estimates current replacement cost of each component.
- **Expected Life -** Expresses the expected life of each component.
- **Actual Age -** Expresses the actual age of each component.
- **Effective Age -** Expected life of each component, adjusted to reflect conditions noted.
- **Remaining Life -** Expected life of each component less effective age of that component.
- Annual Replacement Cost Current Replacement Cost of each component, divided by its Expected Life (indicator of annual reserve fund contribution requirements).

## 12.2 "Cost/Life Analysis" Spreadsheet

Analyzes the information from the "Cost/Life" Data spreadsheet and determines the following:

- ❖ Percent of Total Contribution Percentage each component's Current Replacement Cost in relation to the Total Replacement Cost of all components.
- Actual Present Fund Percentage (as calculated above) of the Actual Present Fund, allocated proportionately for each component.
- Expired Equity Represents the value of each component, that has been "used up", calculated by multiplying the Effective Age by the Annual Replacement Cost.
- Shortfall Difference between the Expired Equity and the Actual Present Fund.
- Contingency In order to compensate for the variables discussed previously, a contingency amount is included in the totals. Based on 5% of the total replacement cost spread over a 30-year period, and injected annually.
- ❖ Life Items & Areas of Concern Outlines areas of concern, however monies typically are not carried for the items noted as they typically relate to operating maintenance issues that affect the Reserve Fund components.

#### 12.3 Funding Plan Scenarios

The ideal Reserve Fund scenario would see adequate contributions being made from the start of the project's life. Unfortunately, this is a rare occurrence. As the age of a project advances, the "catchup" of under-funding becomes increasingly difficult.

The first step in establishing appropriate contribution figures is consideration of the expenses for which the fund is responsible. It is not practical or reasonable to suggest condominiums maintain a level of funding sufficient to accommodate a major catastrophe. In those situations, it is anticipated the Condominium Board will levy a Special Assessment. However, it is prudent to maintain a reasonable minimum level of funding (Safety Margin), to help offset unpredictable expenses. The Study Provider determines a Safety Margin taking into account various factors including the age, size, and location of the project.

The purpose of this Study is to determine a "Reasonable" Annual contribution figure that will generate a cash stream "Sufficient" to cover predictable expenses (Annual Replacement Costs), and to help offset unpredictable expenses (random sewer collapse). Various contribution figures are tested, to find the funding scenario that maintains a cash stream that flows as closely to the Safety Margin as possible (Reasonable), without dipping below it (Sufficient).

Each funding scenario follows the projected flow of cash over a 30-year period, starting with the base year (now), and incorporates the effects of interest and inflation.

The cash flow is tracked through:

- Opening Balance begins with current fund balance
- Expenses cost of components to be repaired/replaced for each year, with inflation compounded annually
- ❖ Interest calculated on 70% of the opening fund balance less expenses for each year
- Annual Contributions contributions each year, and do not factor in interest accrued for that year (inflation is compounded annually)
- Additional Assessments may be included in some funding plan scenarios, usually when major repair /replacement of common property is required within the first few years.
- Closing Balance each year's closing balance

The effects of each funding scenario are illustrated in graph form, by plotting the Closing Balance for each year, along with the Safety Margin.

Two funding scenarios are presented:

- Present Course
- Reasonable and Sufficient

#### 12.3.1 Present Course

This spreadsheet predicts the flow of funds, based on the current fund balance, current contributions (inflated over time), and predicted expenses. This enables the Board to preview the long-term effects of current funding levels. Review of this funding Scenario can confirm the adequacy of fund balances and contribution levels, or reveal the need for change.

## 12.3.2 Reasonable & Sufficient

This funding plan suggests the collection of an Annual Contribution approximately equal to the Annual Replacement Cost, in conjunction with the portion of Shortfall required to generate and maintain a cash flow that is:

- Reasonable covers predictable expenses, yet maintains a cash stream that flows as closely to the Safety Margin as possible
- Sufficient does not fall below Safety Margin, required to help offset unpredictable expenses

### 12.4 Thirty Year Replacement Schedule

To assist the Board, replacement scheduling of common property components is summarized in chart form. It starts with the Base Year (now), and schedules the predicted replacement of components for a 30-year period. The 30-Year Replacement Schedule is included with all scheduling scenarios.

#### 13. QUALIFICATIONS

Wade Engineering Ltd. has been preparing Reserve Fund Studies in Alberta since 1994, prior the legislation requiring completion. The principal of Wade Engineering was involved in the initial stakeholder discussions for Reserve Fund requirements with the government in the late 1990's as well as in 2018/2019.

Wade Engineering Ltd. was established in 1986, as an independent consulting firm, specializing in preparation of specifications for and/or review of work in progress for the repair/restoration of building envelopes, roofing and parkades.

A combination of technical expertise and "hands on" experience has resulted in an extensive understanding of the repair and replacement procedures for common property components. Years of involvement in the condominium industry, including involvement with some education based organizations, has resulted in a sound understanding of the Reserve Fund requirements for condominiums, as well as the challenges facing Managers, Board Members and owners.

Wade Engineering Ltd. carries WCB, Commercial General Liability Insurance and Professional Liability Insurance.

## 14. STUDY PERSONNEL

#### **OVERSIGHT RESOURCES:**

## A. C. (AI) King, P.Eng., A.C.C.I., F.C.C.I.

- ⇒ Principal of Wade Engineering for 30+ years.
- ⇒ University of Waterloo, Bachelor of Applied Science degree.
- ⇒ Association of Professional Engineers and Geoscientists of Alberta, Member (APEGA).
- ⇒ International Institute of Building Enclosure Consultants, Member
- ⇒ Southern Alberta Institute of Technology (SAIT), Certified Moisture Control Technician.
- ⇒ Canadian Condominium Institute, Member (Associate & Fellow).

## Ron Shannon, Director, Building Envelope Services

- ⇒ Building Envelope Consultant with Wade Engineering for 19 years.
- University of Manitoba, Faculty of Business Administration.
- ⇒ Southern Alberta Institute of Technology (SAIT), Certified Moisture Control Technician.

## Shantel Kalakalo, Director, Reserve Fund Studies

- ⇒ Various roles within Wade Engineering over the past 15 years.
- ⇒ Real Estate Institute of Canada, Member (completed CRP designation, pending approval)
- ⇒ Reserve Fund Analyst (reviewed more than 700 reports).
- ⇒ Condominium Management experience.
- ⇒ Client liaison presenting Reserve Fund Study Reports to Condominium Corporation.
- ⇒ Canadian Condominium Institute (past Board Member 1st Vice President) for 10 years.
- ⇒ Condominium Owner (Board Member Treasurer).

Other individuals employed by Wade Engineering Ltd. may be called upon for technical and/or clerical assistance. Outside professionals may also be consulted.

### 15. REFERENCE SOURCES

Information used in completing this Study was collected from the following sources:

- ⇒ Condominium Plan (downloaded from Land Titles)
- ⇒ By-Laws (provided by Condominium Corporation)
- ⇒ Financial Statements (opening fund balance & reserve fund contributions only as at October 31, 2019)
- ⇒ Technical Reports on Common Property Components (Balcony Technical Audit October 2020 and Exterior Wall Cladding Probing January 2021)
- ⇒ Site Investigations (July 2019)
- ⇒ Condominium Manager and/or Board Members
- ⇒ Technical Resource Material

Life cycles of common property components were determined using a combination of the following:

⇒ Recognizable conditions, experience factors, discussion with manufacturers, suppliers and service contractors

Replacement costs of common property components were determined using a combination of the following:

- RSMeans (Commercial Renovation Cost Data, Square Foot Costs, Interior Cost Data)
- ⇒ Experience with similar developments, discussion with manufacturers, suppliers and service contractors, review of financial documentation

#### 16. Conclusion

The Reserve Fund Study Report and Spreadsheets were prepared by Wade Engineering Ltd. The authors of the report are employees of Wade Engineering and are not employees or agents of, or otherwise associated with the Condominium Corporation or any person who performs management or maintenance services for the Condominium Corporation.

In issuing this report, Wade Engineering does not assume any of the duties or liabilities of the designers, builders, or owners of the subject property. Owner, prospective purchasers, tenants or others who rely on the contents of this report do so with the understanding as to the limitations of the general visual inspection undertaken and understand that Wade Engineering cannot be held liable for damages they may suffer in respect to the purchase, ownership, use or other interests they may have in the subject property.

Peer Review by:

WADE ENGINEERING LTD.

Shantel Kalakalo

Director, Reserve Fund Studies

Tel: (587) 743-0555

Email: <u>skalakalo@wadeengineering.com</u>

Reviewed by:

WADE ENGINEERING

Allan C. King. P.Eng.

President

Tel: (587) 416-0555

Email: aking@wadeengin

2022-10-14

## **COST/LIFE DATA**

			COSTILIF	LDAIA						
			CURRENT					ANNUAL		
		RE	PLACEMENT	EXPECTED	ACTUAL	EFFECTIVE	REMAINING	RE	PLACEMENT	
	COMPONENT	1.	COST	LIFE	AGE	AGE	LIFE		COST	
	Roofing - SBS	\$	919,716	25	11	11	14	\$	36,789	
	Roofing - Standing Seam Metal	\$	40,509	50	11	11	39	\$	811	
3	Roofing - Copper Shingles	\$	10,547	50	11	11	39	\$	211	
4	Roofing - Repairs	\$	3,276	5	Unknown	0	5	\$	656	
5	Eavestroughs & Downspouts	\$	5,576	50	11	11	39	\$	112	
6	Fascia	\$	3,679	40	11	11	29	\$	92	
7	Soffit	\$	6,031	40	11	11	29	\$	151	
8	Exterior Wall Cladding - Stucco	\$	1,173,220	35	11	11	24	\$	33,521	
9	Exterior Wall Cladding - Stone Block Veneer - Repairs	\$	91,703	35	11	11	24	\$	2,621	
10	Exterior Wall Cladding - Cornices	\$	90,930	35	11	11	24	\$	2,598	
11	Exterior Wall Cladding - Accent Trims	\$	73,091	35	11	11	24	\$	2,089	
12	Exterior Wall Cladding - Cap Flashing	\$	47,250	35	11	11	24	\$	1,350	
13	Exterior Wall Cladding - Sealant	\$	79,523	15	11	11	4	\$	5,302	
14	Exterior Wall Cladding - Cladding Repairs (Estimated)	\$	78,750	15	11	11	4	\$	5,250	
	Windows & Patio Doors - Windows	\$	538,020	35	11	11	24	\$	15,372	
	Windows & Patio Doors - Patio Doors - Sliders	\$	325,710	35	11	11	24	\$	9,306	
	Windows & Patio Doors - Patio Doors - Hinged	\$	13,440	35	11	11	24	\$	384	
	Doors - Storefront - Entrances	\$	4,200	50	11	11	39	\$	84	
	Doors - Storefront - Exits	\$	12,600	50 50	11	11	39	\$	252	
			-					1		
	Doors - Parkade Overhead	\$	5,250	15	11	11	4	\$	350	
	Doors - Parkade Overhead - Motors & Controls	\$	1,575	15	11	11	4	\$	105	
	Balconies - PVC Membrane	\$	487,809	15	11	9	6	\$	32,521	
	Balconies - Guardrails	\$	291,648	40	11	11	29	\$	7,292	
	Balconies - Guardrails (R&R)	\$	72,912	15	11	9	6	\$	4,861	
25	Balconies - Fascia	\$	29,165	15	11	9	6	\$	1,945	
26	Balconies - Soffit	\$	161,238	15	11	9	6	\$	10,750	
27	Balconies - Column Cladding	\$	27,216	15	11	9	6	\$	1,815	
28	Patios - Composite Wood	\$	73,448	40	11	11	29	\$	1,837	
29	Patios - Guardrails	\$	52,920	40	11	11	29	\$	1,323	
30	Asphalt Surface - Overlay	\$	63,797	25	11	11	14	\$	2,552	
31	Asphalt Surface - Repairs	\$	10,500	10	Unknown	4	6	\$	1,050	
32	Concrete (Various)	\$	34,272	35	11	11	24	\$	980	
33	Curbs - Poured	\$	21,962	25	11	11	14	\$	879	
34	Fire Hydrant	\$	7,350	50	11	11	39	\$	147	
	Garbage Area - Concrete Pads	\$	17,926	35	11	11	24	\$	513	
	Garbage Area - Fencing	\$	3,491	35	11	11	24	\$	100	
	Garbage Area - Fencing - Paint	\$	1,201	10	Unknown	4	6	\$	121	
	Landscaping	\$	8,400	7	Unknown	1	6	\$	1,200	
	Light Standards	\$	7,875	, 50	11	11	39	\$	158	
	Misc. Components - Reserve Fund Study	\$	6,773	5	5	5	0	\$	1,355	
	Misc. Components - Reserve Fund Study  Misc. Components - Site Inspection	\$		10	Unknown	4	6	\$	1,050	
	· ·		10,500						•	
	Misc. Components - Underground Services	\$	26,250	25	11	11	14	\$	1,050	
	Parkade Membrane & Assoc. Comps Membrane	\$	141,271	30	11	11	19	\$	4,710	
	Parkade Membrane & Assoc. Comps Composite Wood Decks	\$	80,703	30	11	11	19	\$	2,691	
	Parkade Membrane & Assoc. Comps Guardrails	\$	34,272	30	11	11	19	\$	1,143	
	Parkade Membrane & Assoc. Comps Concrete Pavers	\$	170,402	30	11	11	19	\$	5,681	
47	Parkade Membrane & Assoc. Comps Planters	\$	15,750	30	11	11	19	\$	525	
48	Power Pedestals & Outlets - Pedestals	\$	1,050	35	11	11	24	\$	30	
49	Power Pedestals & Outlets - Outlets	\$	840	35	11	11	24	\$	24	
50	Property Signage	\$	2,100	40	11	11	29	\$	53	

### **COST/LIFE DATA**

		С	2022-10-14						
		CL	JRRENT						ANNUAL
		REPL	ACEMENT	EXPECTED	ACTUAL	EFFECTIVE	REMAINING	RE	EPLACEMENT
NO.	COMPONENT		COST	LIFE	AGE	AGE	LIFE		COST
51	Railings - Metal	\$	5,670	40	11	11	29	\$	142
52	Railings - Metal - Paint	\$	1,890	20	11	11	9	\$	95
53	Railings - Metal - Bicycle Racks	\$	1,260	40	11	11	29	\$	32
54	Retaining Walls - Concrete Repairs & Paint	\$	6,300	20	11	11	9	\$	315
55	Retaining Walls (Repairs) - Allan Blocks	\$	8,568	20	11	11	9	\$	429
56	Boiler System - Boilers	\$	52,500	30	11	11	19	\$	1,750
57	Boiler System - Boiler Flue	\$	31,500	50	11	11	39	\$	630
	Boiler System - Controller	\$	1,890	20	11	11	9	\$	95
	Domestic Hot Water System - Hot Water Tanks	\$	29,925	15	11	11	4	\$	1,995
	Domestic Hot Water System - Piping	\$	704,025	50	11	11	39	\$	14,081
	Domestic Hot Water System - Recirculating Pump	\$	630	20	11	11	9	\$	32
	Domestic Hot Water System - Repairs	\$	21,000	20	11	11	9	\$	1,050
	Electrical System - Repairs	\$	14,700	25	11	11	14	\$	588
	Elevators	\$	262,500	30	11	11	19	\$	8,750
	Elevators - Repairs	\$	16,800	15	Unknown	6	9	\$	1,120
	Elevators - Cab Modernization	\$	31,500	30	11	11	19	\$	1,050
		l '	-		11	11	9	\$	-
	Elevators - Exhaust Fan	\$	630	20				1	32
	Exhaust Fans	\$	3,990	25	11	11	14	\$	160
	Fire Alarm System - Panels	\$	8,925	25	11	11	14	\$	357
	Fire Alarm System - Devices	\$	26,250	25	11	11	14	\$	1,050
	Hallway Make-Up Air System - Air Units	\$	105,000	25	11	11	14	\$	4,200
	Hallway Make-Up Air System - Condenser Units	\$	52,500	25	11	11	14	\$	2,100
	Intercom & Security System - Intercom	\$	6,300	25	11	11	14	\$	252
	Intercom & Security System - CCTV System	\$	13,650	25	11	11	14	\$	546
75	Lighting - Chandelier	\$	1,050	25	11	11	14	\$	42
76	Lighting - Wall & Ceiling Mounted	\$	47,471	25	11	11	14	\$	1,899
77	Lighting - Fluorescent - Building	\$	3,780	25	11	11	14	\$	152
78	Lighting - Fluorescent - Parkade	\$	16,695	25	11	11	14	\$	668
79	Lighting - Emergency	\$	17,168	25	11	11	14	\$	687
80	Lighting - Exit	\$	6,815	25	11	11	14	\$	273
81	Lighting - Exterior - Units	\$	22,061	35	11	11	24	\$	631
82	Lighting - Exterior - Security	\$	2,100	35	11	11	24	\$	60
83	Parkade Exhaust System - Exhaust Fans	\$	26,460	30	11	11	19	\$	882
84	Parkade Exhaust System - Gas Monitors	\$	9,555	25	11	11	14	\$	383
85	Parkade Make-Up Air System	\$	52,500	35	11	11	24	\$	1,500
86	Parkade Ramp & Snow Melt System - Piping	\$	15,750	30	11	11	19	\$	525
87	Parkade Ramp & Snow Melt System - Controller	\$	1,890	20	11	11	9	\$	95
88	Parkade Ramp & Snow Melt System - Pumps	\$	1,680	20	11	11	9	\$	84
89	Parkade Ramp & Snow Melt System - Heat Exchanger	\$	1,260	20	11	11	9	\$	63
90	Parkade Ramp & Snow Melt System - Poured Concrete	\$	15,824	30	11	11	19	\$	528
91	Perimeter Heating - Cabinet Heaters	\$	15,750	40	11	11	29	\$	394
92	Perimeter Heating - Baseboard Heaters	\$	8,925	40	11	11	29	\$	224
93	Perimeter Heating - Unit Heaters	\$	8,400	40	11	11	29	\$	210
94	Radiant Heat Loop System - Heat Supply Pumps	\$	8,610	20	11	11	9	\$	431
95	Radiant Heat Loop System - Heat Loop Piping	\$	220,395	50	11	11	39	\$	4,408
	Radiant Heat Loop System - Expansion Tanks	\$	4,725	20	11	11	9	\$	237
	Radiant Heat Loop System - Zone Valves & Thermostats - Repairs	\$	21,525	15	Unknown	6	9	\$	1,435
	Sprinkler System - Repairs	\$	26,250	20	11	11	9	\$	1,313
	Sump Pumps	\$	3,150	15	Unknown	6	9	\$	210
	Community Mailboxes	\$	13,655	40	11	11	29	\$	342

### **COST/LIFE DATA**

	CURRENT													
		RE	PLACEMENT	EXPECTED	ACTUAL	EFFECTIVE	REMAINING	REF	PLACEMENT					
NO.	COMPONENT		COST	LIFE	AGE	AGE	LIFE		COST					
101	Exercise Equipment	\$	6,300	15	Unknown	9	6	\$	420					
102	Flooring - Carpet	\$	118,832	15	11	9	6	\$	7,923					
103	Flooring - Ceramic Tile	\$	27,799	30	11	11	19	\$	927					
104	Flooring - Vinyl Tile	\$	24,889	30	11	11	19	\$	830					
105	Flooring - Linoleum	\$	2,194	30	11	11	19	\$	74					
106	Furniture & Fixtures	\$	10,500	15	Unknown	9	6	\$	700					
107	Interior Finishes - Ceilings - Paint	\$	41,098	15	11	9	6	\$	2,740					
108	Interior Finishes - Walls - Paint	\$	57,078	15	11	9	6	\$	3,806					
109	Interior Finishes - Walls - Wallpaper	\$	7,837	15	11	9	6	\$	523					
110	Interior Finishes - Unit Doors	\$	7,823	15	11	9	6	\$	522					
140	Contingency	\$	12,789	1	0	1	0	\$	12,789					
	TOTAL	\$	7,686,119		•	•		\$	295,543					

	NON - RECURRING EXPENSES	
200	Balcony Repairs - Phase 1 (2021)	60,263
201	Engineering Fees - Balcony Repairs (2021)	23,205
202	Balcony Repairs - Phase 1 (2022)	60,263
203	Engineering Fees - Balcony Repairs (2022)	16,002
204	Landscaping - Regrading (2021)	21,000
	TOTAL	\$ 180,732

### **COST/LIFE ANALYSIS**

NO.	COMPONENT	% OF ANNUAL REPLACEMENT COSTS	ACTUAL PRESENT FUND	EXPIRED EQUITY	SHORT FALL
	Roofing - SBS	12.45%	104,932	404,679	299,747
	Roofing - Standing Seam Metal	0.27%	2,313	8,921	6,608
	Roofing - Copper Shingles	0.07%	602	2,321	1,719
	Roofing - Repairs	0.22%	1,871	_,=_:	(1,871)
	Eavestroughs & Downspouts	0.04%	319	1,232	913
	Fascia	0.03%	262	1,012	750
	Soffit	0.05%	431	1,661	1,230
	Exterior Wall Cladding - Stucco	11.34%	95,611	368,731	273,120
	Exterior Wall Cladding - Stone Block Veneer - Repairs	0.89%	7,476	28,831	21,355
	Exterior Wall Cladding - Cornices	0.88%	7,410	28,578	21,168
	Exterior Wall Cladding - Accent Trims	0.71%	5,958	22,979	17,021
	Exterior Wall Cladding - Cap Flashing	0.46%	3,851	14,850	10,999
	Exterior Wall Cladding - Sealant	1.79%	15,123	58,322	43,199
	Exterior Wall Cladding - Cladding Repairs (Estimated)	1.78%	14,974	57,750	42,776
	Windows & Patio Doors - Windows	5.20%	43,845	169,092	125,247
	Windows & Patio Doors - Patio Doors - Sliders	3.15%	26,543	102,366	75,823
	Windows & Patio Doors - Patio Doors - Hinged	0.13%	1,095	4,224	3,129
	Doors - Storefront - Entrances	0.13%	240	924	684
	Doors - Storefront - Entrances  Doors - Storefront - Exits	0.03%	719	2,772	2,053
				*	•
	Doors - Parkade Overhead	0.12%	998	3,850	2,852
	Doors - Parkade Overhead - Motors & Controls	0.04%	299	1,155	856
	Balconies - PVC Membrane	11.00%	92,759	292,689	199,930
	Balconies - Guardrails	2.47%	20,799	80,212	59,413
	Balconies - Guardrails (R&R)	1.64%	13,865	43,749	29,884
	Balconies - Fascia	0.66%	5,548	17,505	11,957
	Balconies - Soffit	3.64%	30,662	96,750	66,088
	Balconies - Column Cladding	0.61%	5,177	16,335	11,158
	Patios - Composite Wood	0.62%	5,240	20,207	14,967
	Patios - Guardrails	0.45%	3,774	14,553	10,779
	Asphalt Surface - Overlay	0.86%	7,279	28,072	20,793
	Asphalt Surface - Repairs	0.36%	2,995	4,200	1,205
	Concrete (Various)	0.33%	2,795	10,780	7,985
	Curbs - Poured	0.30%	2,507	9,669	7,162
	Fire Hydrant	0.05%	419	1,617	1,198
	Garbage Area - Concrete Pads	0.17%	1,463	5,643	4,180
	Garbage Area - Fencing	0.03%	285	1,100	815
37	Garbage Area - Fencing - Paint	0.04%	345	484	139
	Landscaping	0.41%	3,423	1,200	(2,223)
	Light Standards	0.05%	451	1,738	1,287
40	Misc. Components - Reserve Fund Study	0.46%	3,865	6,775	2,910
	Misc. Components - Site Inspection	0.36%	2,995	4,200	1,205
42	Misc. Components - Underground Services	0.36%	2,995	11,550	8,555
	Parkade Membrane & Assoc. Comps Membrane	1.59%	13,434	51,810	38,376
44	Parkade Membrane & Assoc. Comps Composite Wood Decks	0.91%	7,675	29,601	21,926
	Parkade Membrane & Assoc. Comps Guardrails	0.39%	3,260	12,573	9,313
46	Parkade Membrane & Assoc. Comps Concrete Pavers	1.92%	16,204	62,491	46,287
47	Parkade Membrane & Assoc. Comps Planters	0.18%	1,497	5,775	4,278
	Power Pedestals & Outlets - Pedestals	0.01%	86	330	244
49	Power Pedestals & Outlets - Outlets	0.01%	68	264	196
50	Property Signage	0.02%	151	583	432
51	Railings - Metal	0.05%	405	1,562	1,157
52	Railings - Metal - Paint	0.03%	271	1,045	774
53	Railings - Metal - Bicycle Racks	0.01%	91	352	261
54	Retaining Walls - Concrete Repairs & Paint	0.11%	898	3,465	2,567
55	Retaining Walls (Repairs) - Allan Blocks	0.15%	1,224	4,719	3,495
56	Boiler System - Boilers	0.59%	4,991	19,250	14,259
57	Boiler System - Boiler Flue	0.21%	1,797	6,930	5,133
	Boiler System - Controller	0.03%	271	1,045	774
	Domestic Hot Water System - Hot Water Tanks	0.68%	5,690	21,945	16,255
	Domestic Hot Water System - Piping	4.76%	40,163	154,891	114,728

### **COST/LIFE ANALYSIS**

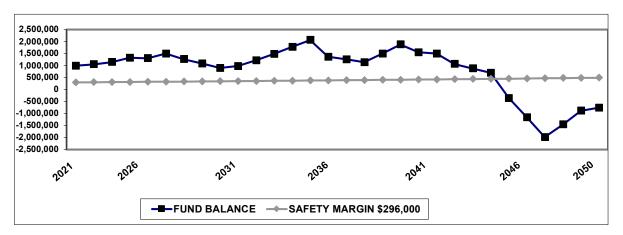
		% OF ANNUAL	ACTUAL		
		REPLACEMENT	PRESENT	EXPIRED	SHORT
NO.	COMPONENT	COSTS	FUND	EQUITY	FALL
61	Domestic Hot Water System - Recirculating Pump	0.01%	91	352	261
62	Domestic Hot Water System - Repairs	0.36%	2,995	11,550	8,555
63	Electrical System - Repairs	0.20%	1,677	6,468	4,791
64	Elevators	2.96%	24,957	96,250	71,293
65	Elevators - Repairs	0.38%	3,195	6,720	3,525
66	Elevators - Cab Modernization	0.36%	2,995	11,550	8,555
67	Elevators - Exhaust Fan	0.01%	91	352	261
68	Exhaust Fans	0.05%	456	1,760	1,304
69	Fire Alarm System - Panels	0.12%	1,018	3,927	2,909
70	Fire Alarm System - Devices	0.36%	2,995	11,550	8,555
71	Hallway Make-Up Air System - Air Units	1.42%	11,980	46,200	34,220
72	Hallway Make-Up Air System - Condenser Units	0.71%	5,990	23,100	17,110
73	Intercom & Security System - Intercom	0.09%	719	2,772	2,053
74	Intercom & Security System - CCTV System	0.18%	1,557	6,006	4,449
75	Lighting - Chandelier	0.01%	120	462	342
76	Lighting - Wall & Ceiling Mounted	0.64%	5,416	20,889	15,473
77	Lighting - Fluorescent - Building	0.05%	434	1,672	1,238
78	Lighting - Fluorescent - Parkade	0.23%	1,905	7,348	5,443
79	Lighting - Emergency	0.23%	1,960	7,557	5,597
80	Lighting - Exit	0.09%	779	3,003	2,224
81	Lighting - Exterior - Units	0.21%	1,800	6,941	5,141
82	Lighting - Exterior - Security	0.02%	171	660	489
83	Parkade Exhaust System - Exhaust Fans	0.30%	2,516	9,702	7,186
	Parkade Exhaust System - Gas Monitors	0.13%	1,092	4,213	3,121
	Parkade Make-Up Air System	0.51%	4,278	16,500	12,222
	Parkade Ramp & Snow Melt System - Piping	0.18%	1,497	5,775	4,278
	Parkade Ramp & Snow Melt System - Controller	0.03%	271	1,045	774
	Parkade Ramp & Snow Melt System - Pumps	0.03%	240	924	684
	Parkade Ramp & Snow Melt System - Heat Exchanger	0.02%	180	693	513
	Parkade Ramp & Snow Melt System - Poured Concrete	0.18%	1,506	5,808	4,302
	Perimeter Heating - Cabinet Heaters	0.13%	1,124	4,334	3,210
	Perimeter Heating - Baseboard Heaters	0.08%	639	2,464	1,825
	Perimeter Heating - Unit Heaters	0.07%	599	2,310	1,711
	Radiant Heat Loop System - Heat Supply Pumps	0.15%	1,229	4,741	3,512
	Radiant Heat Loop System - Heat Loop Piping	1.49%	12,573	48,488	35,915
	Radiant Heat Loop System - Expansion Tanks	0.08%	676	2,607	1,931
	Radiant Heat Loop System - Zone Valves & Thermostats - Repairs	0.49%	4,093	8,610	4,517
	Sprinkler System - Repairs	0.44%	3,745	14,443	10,698
	Sump Pumps	0.07%	599	1,260	661
	Community Mailboxes	0.12%	975	3,762	2,787
	Exercise Equipment	0.14%	1,198	3,780	2,582
	Flooring - Carpet	2.68%	22,599	71,307	48,708
	Flooring - Ceramic Tile	0.31%	2,644	10,197	7,553
	Flooring - Vinyl Tile	0.28%	2,367	9,130	6,763
	Flooring - Linoleum	0.03%	2,367	814	603
	Furniture & Fixtures	0.03%	1,997	6,300	4,303
	Interior Finishes - Ceilings - Paint	0.24%	7,815	24,660	4,303 16,845
	Interior Finishes - Ceilings - Paint Interior Finishes - Walls - Paint	1.29%	10,856		23,398
				34,254	
	Interior Finishes - Walls - Wallpaper	0.18%	1,492	4,707	3,215
	Interior Finishes - Unit Doors	0.18%	1,489	4,698	3,209
140	Contingency	4.33%	36,478	12,789	(23,689)
	TOTAL	400 000/	£ 040.0=0	¢ 0000010	£ 0.000.010
L	TOTAL	100.00%	\$ 842,970	\$ 2,929,313	\$ 2,086,343

### PRESENT COURSE

Inflation Varies - 1.75% in 2021, 3.00% 2022 to 2024 and 1.75% thereafter

Interest 2.75%

Annual Contribu	ıtion Increase	5.00%				
	Opening			Annual	Additional	Closing
Year	Balance	Expenses	Interest	Contribution	Contributions	Balance
2020	\$ 842,970	\$ 19,561	\$ 11,322	\$ 157,304		\$ 992,034
2021	\$ 992,034	\$ 119,309	\$ 12,000	\$ 165,169		\$ 1,049,895
2022	\$ 1,049,895	\$ 94,312	\$ 13,139	\$ 173,428		\$ 1,142,150
2023	\$ 1,142,150	\$ 13,805	\$ 15,515	\$ 182,099		\$ 1,325,958
2024	\$ 1,325,958	\$ 231,055	\$ 15,055	\$ 191,204		\$ 1,301,162
2025	\$ 1,301,162	\$ 26,153	\$ 17,531	\$ 200,764		\$ 1,493,304
2026	\$ 1,493,304	\$ 454,671	\$ 14,281	\$ 210,802		\$ 1,263,717
2027	\$ 1,263,717	\$ 418,876	\$ 11,617	\$ 221,343		\$ 1,077,800
2028	\$ 1,077,800	\$ 426,206	\$ 8,959	\$ 232,410		\$ 892,963
2029	\$ 892,963	\$ 171,343	\$ 9,922	\$ 244,030		\$ 975,573
2030	\$ 975,573	\$ 28,523	\$ 13,022	\$ 256,232		\$ 1,216,303
2031	\$ 1,216,303	\$ 16,253	\$ 16,501	\$ 269,043		\$ 1,485,595
2032	\$ 1,485,595	\$ 16,537	\$ 20,200	\$ 282,495		\$ 1,771,752
2033	\$ 1,771,752	\$ 27,878	\$ 23,978	\$ 296,620		\$ 2,064,473
2034	\$ 2,064,473	\$ 1,024,419	\$ 14,301	\$ 311,451		\$ 1,365,805
2035	\$ 1,365,805	\$ 448,708	\$ 12,610	\$ 327,024		\$ 1,256,731
2036	\$ 1,256,731	\$ 473,404	\$ 10,771	\$ 343,375		\$ 1,137,473
2037	\$ 1,137,473	\$ 18,036	\$ 15,392	\$ 360,544		\$ 1,495,374
2038	\$ 1,495,374	\$ 18,351	\$ 20,309	\$ 378,571		\$ 1,875,902
2039	\$ 1,875,902	\$ 743,776	\$ 15,567	\$ 397,499		\$ 1,545,193
2040	\$ 1,545,193	\$ 483,863	\$ 14,593	\$ 417,374		\$ 1,493,298
2041	\$ 1,493,298	\$ 876,676	\$ 8,479	\$ 438,243		\$ 1,063,343
2042	\$ 1,063,343	\$ 655,519	\$ 5,608	\$ 460,155		\$ 873,586
2043	\$ 873,586	\$ 666,991	\$ 2,841	\$ 483,163		\$ 692,599
2044	\$ 692,599	\$ 1,549,284	\$ (11,779)	\$ 507,321		\$ (361,143)
2045	\$ (361,143)	\$ 1,307,983	\$ (22,950)	\$ 532,687		\$ (1,159,390)
2046	\$ (1,159,390)	\$ 1,350,907	\$ (34,517)	\$ 559,322		\$ (1,985,492)
2047	\$ (1,985,492)	\$ 35,543	\$ (27,789)	\$ 587,288		\$ (1,461,536)
2048	\$ (1,461,536)	\$ 21,828	\$ (20,396)	\$ 616,652		\$ (887,108)
2049	\$ (887,108)	\$ 503,538	\$ (19,121)	\$ 647,485		\$ (762,283)
		\$12,243,308	\$ 186,958	\$ 10,451,096	\$ -	



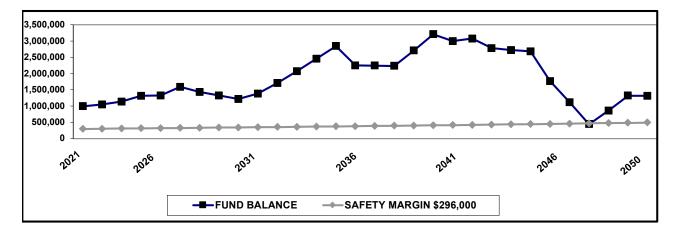
# **REASONABLE AND SUFFICIENT**

Inflation Varies - 1.75% in 2021, 3.00% 2022 to 2024 and 1.75% thereafter

Interest 2.30%

Annual Contribution Increase 4.50%

Opening			4.30	7,0				Annual	Additional	Closing
Year		Balance		Expenses	I	nterest	С	ontribution	Contributions	Balance
2020	\$	842,970	\$	19,561	\$	13,257	\$	157,304		\$ 993,969
2021	\$	993,969	\$	119,309	\$	14,082	\$	157,304		\$ 1,046,047
2022	\$	1,046,047	\$	94,312	\$	15,323	\$	166,200		\$ 1,133,258
2023	\$	1,133,258	\$	13,805	\$	18,023	\$	178,800		\$ 1,316,276
2024	\$	1,316,276	\$	231,055	\$	17,472	\$	223,500		\$ 1,326,192
2025	\$	1,326,192	\$	26,153	\$	20,931	\$	268,200		\$ 1,589,170
2026	\$	1,589,170	\$	454,671	\$	18,265	\$	280,269		\$ 1,433,033
2027	\$	1,433,033	\$	418,876	\$	16,328	\$	292,881		\$ 1,323,367
2028	\$	1,323,367	\$	426,206	\$	14,444	\$	306,061		\$ 1,217,666
2029	\$	1,217,666	\$	171,343	\$	16,846	\$	319,833		\$ 1,383,002
2030	\$	1,383,002	\$	28,523	\$	21,807	\$	334,226		\$ 1,710,512
2031	\$	1,710,512	\$	16,253	\$	27,278	\$	349,266		\$ 2,070,803
2032	\$	2,070,803	\$	16,537	\$	33,074	\$	364,983		\$ 2,452,323
2033	\$	2,452,323	\$	27,878	\$	39,034	\$	381,407		\$ 2,844,885
2034	\$	2,844,885	\$	1,024,419	\$	29,310	\$	398,571		\$ 2,248,346
2035	\$	2,248,346	\$	448,708	\$	28,974	\$	416,506		\$ 2,245,119
2036	\$	2,245,119	\$	473,404	\$	28,525	\$	435,249		\$ 2,235,489
2037	\$	2,235,489	\$	18,036	\$	35,701	\$	454,835		\$ 2,707,990
2038	\$	2,707,990	\$	18,351	\$	43,303	\$	475,303		\$ 3,208,245
2039	\$	3,208,245	\$	743,776	\$	39,678	\$	496,692		\$ 3,000,839
2040	\$	3,000,839	\$	483,863	\$	40,523	\$	519,043		\$ 3,076,542
2041	\$	3,076,542	\$	876,676	\$	35,418	\$	542,400		\$ 2,777,684
2042	\$	2,777,684	\$	655,519	\$	34,167	\$	566,808		\$ 2,723,139
2043	\$	2,723,139	\$	666,991	\$	33,104	\$	592,314		\$ 2,681,566
2044	\$	2,681,566	\$	1,549,284	\$	18,230	\$	618,968		\$ 1,769,480
2045	\$	1,769,480	\$	1,307,983	\$	7,430	\$	646,822		\$ 1,115,748
2046	\$	1,115,748	\$	1,350,907	\$	-	\$	675,929		\$ 440,770
2047	\$	440,770	\$	35,543	\$	6,524	\$	447,000		\$ 858,751
2048	\$	858,751	\$	21,828	\$	13,474	\$	467,115		\$ 1,317,513
2049	\$	1,317,513	\$	503,538	\$	13,105	\$	488,135		\$ 1,315,215
			\$	12,243,308	\$	693,629	\$	12,021,924	\$ -	



			1	2	3	4	5	6	7	8	9	10
NO.	COMPONENT		2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Inflation Rate		0.00%	1.75%	3.00%	3.00%	3.00%	3.00%	1.75%	<mark>6 1.75</mark>	% 1.75%	<b>6</b> 1.75%
1	Roofing - SBS	\$	- \$	- \$	- :			\$ -	\$	- \$	- \$	- \$ -
2	Roofing - Standing Seam Metal	\$	- \$	- \$	- :	\$ - !	-	\$ -	\$	- \$	- \$	- \$ -
3	Roofing - Copper Shingles	\$	- \$	- \$	- :	\$ - !	-	\$ -	\$	- \$	- \$	- \$ -
4	Roofing - Repairs	\$	- \$	- \$	- :	- :	-	\$ 3,752	\$	- \$	- \$	- \$ -
5	Eavestroughs & Downspouts	\$	- \$	- \$	- :	- 9	-	\$ -	\$	- \$	- \$	- \$ -
6	Fascia	\$	- \$	- \$	- :	\$ - :	-	\$ -	\$	- \$	- \$	- \$ -
7	Soffit	\$	- \$	- \$	- 3	\$ - :	-	\$ -	\$	- \$	- \$	- \$ -
8	Exterior Wall Cladding - Stucco	\$	- \$	- \$	- :	5 - !	-	\$ -	\$	- \$	- \$	- \$ -
9	Exterior Wall Cladding - Stone Block Veneer - Repairs	\$	- \$	- \$	- :	\$ - :	-	\$ -	\$	- \$	- \$	- \$ -
10	Exterior Wall Cladding - Cornices	\$	- \$	- \$	- :			\$ -	\$	- \$	- \$	- \$ -
11	Exterior Wall Cladding - Accent Trims	\$	- \$	- \$	- :	5 - 5		\$ -	\$	- \$	- \$	- \$ -
12	Exterior Wall Cladding - Cap Flashing	\$	- \$	- \$	- :	5 - 5	-	\$ -	\$	- \$	- <b>\$</b>	- \$ -
13	Exterior Wall Cladding - Sealant	\$	- \$	- \$		-		\$ -	\$		- <b>\$</b>	- \$ -
14	Exterior Wall Cladding - Cladding Repairs (Estimated)	\$	- <b>\$</b>	- \$	- :		,	\$ -	\$	- \$	- <b>\$</b>	- \$ -
15	Windows & Patio Doors - Windows	\$	- \$	- \$			,	\$ -	\$	- \$	- <b>\$</b>	- \$ -
16	Windows & Patio Doors - Patio Doors - Sliders	\$	- \$	- \$		-		\$ -	\$		- <b>\$</b>	- \$ -
17	Windows & Patio Doors - Patio Doors - Hinged	\$	- \$	- \$				\$ -	\$	- \$	- \$	- \$ -
18	Doors - Storefront - Entrances	\$	- \$	- \$				\$ -	\$	- \$	- \$ ·	- \$ -
19	Doors - Storefront - Exits	\$	- \$	- \$	- :			\$ -			- \$	1
20	Doors - Parkade Overhead	\$	- \$	- \$				\$ -	\$		- \$	- \$ -
21	Doors - Parkade Overhead - Motors & Controls	\$	- \$	- \$			,	\$ -	\$	- \$	- \$ - \$	- \$ -
22		\$	- \$	- \$			,	\$ -	\$ 189,473		· ·	
	Balconies - PVC Membrane	\$	- \$	- \$ - \$	- :					- \$	- \$	- \$ -
23	Balconies - Guardrails	\$			- :			\$ -				
24	Balconies - Guardrails (R&R)	\$	- \$ - \$					•	\$ 28,320			
25	Balconies - Fascia	\$		- \$	- ;	-		\$ -	\$ 11,328	· ·		
26	Balconies - Soffit	\$	- \$	- \$ - \$				\$ -	\$ 62,627 \$ 10,571		·	
27	Balconies - Column Cladding	\$	- \$	- \$ - \$				-				
28	Patios - Composite Wood	\$	- \$	-	- ;			\$ -	\$	- \$	- \$ ·	- \$ -
29	Patios - Guardrails	-	- \$	- \$		-		\$ -	*	- \$	-	- \$ -
30	Asphalt Surface - Overlay	\$	- \$	- \$	- ;			\$ -	\$	- \$	- \$	- \$ -
31	Asphalt Surface - Repairs	\$	- \$	- \$	- :			\$ -	\$ 12,235		- \$	- \$ -
32	Concrete (Various)	\$	- \$	- \$				\$ -	*	*	- \$	- \$ -
33	Curbs - Poured	\$	- \$	- \$				\$ -	\$	- \$	- \$	- \$ -
34	Fire Hydrant	\$	- \$	- \$	- :	-		\$ -	\$	- \$	- \$	- \$ -
35	Garbage Area - Concrete Pads	\$	- \$	- \$			-	\$ -	\$	*	- \$	- \$ -
36	Garbage Area - Fencing	\$	- \$	- \$				\$ -	\$	- \$	- \$	- \$ -
37	Garbage Area - Fencing - Paint	\$	- \$	- \$	- :			\$ -	\$ 1,400		- \$	- \$ -
38	Landscaping	\$	- \$	- \$				\$ -	\$ 9,788		- \$	- \$ -
39	Light Standards	\$	- \$	- \$	- :			\$ -	\$	- \$	- \$	- \$ -
40	Misc. Components - Reserve Fund Study	\$	6,773 \$	- \$				\$ 7,756	\$	- \$	- \$	- \$ -
41	Misc. Components - Site Inspection	\$	- \$	- \$	- :	5 - 5	-	\$ -	\$ 12,235	5 \$	- \$	- \$ -
42	Misc. Components - Underground Services	\$	- \$	- \$		\$ - :	-	\$ -	\$	- \$	- \$	- \$ -
43	Parkade Membrane & Assoc. Comps Membrane	\$	- \$	- \$	- :			\$ -	\$	- \$	- \$	- \$ -
44	Parkade Membrane & Assoc. Comps Composite Wood Decks	\$	- \$	- \$	- :	\$ - :		\$ -	\$	- \$	- \$	- \$ -
45	Parkade Membrane & Assoc. Comps Guardrails	\$	- \$	- \$	- :	\$ - !		\$ -	\$	- \$	- \$	- \$ -
46	Parkade Membrane & Assoc. Comps Concrete Pavers	\$	- \$	- \$	- :		-	\$ -	\$	- \$	- \$	- \$ -
47	Parkade Membrane & Assoc. Comps Planters	\$	- \$	- \$	- :	- 9	-	\$ -	\$	- \$	- \$	- \$ -
48	Power Pedestals & Outlets - Pedestals	\$	- \$	- \$	- :	\$ - :	-	\$ -	\$	- \$	- \$	- \$ -
49	Power Pedestals & Outlets - Outlets	\$	- \$	- \$	- :	\$ - :	-	\$ -	\$	- \$	- \$	- \$ -
50	Property Signage	\$	- \$	- \$	- :	\$ - !		\$ -	\$	- \$	- \$	- \$ -
			1 7		1 "			*	4 - 1			-1

		1	2	3	4	5	6	7	8	9	10
NO.	COMPONENT	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	Inflation Rate	0.00%	1.75%	3.00%	3.00%	3.00%	3.00%	1.75%	1.75%	1.75%	1.75%
51	Railings - Metal \$			- \$	- \$	- \$	- \$	- \$	- \$	- \$	
52	Railings - Metal - Paint \$	-	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	2,320
53	Railings - Metal - Bicycle Racks \$			- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
54	Retaining Walls - Concrete Repairs & Paint \$	-	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	7,733
55	Retaining Walls (Repairs) - Allan Blocks			- \$	- \$	- \$	- \$	- \$	- \$	- \$	10,517
56	Boiler System - Boilers \$	-	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
57	Boiler System - Boiler Flue \$	<u> </u>	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
58	Boiler System - Controller \$			- \$	- \$	- \$	- \$	- \$	- \$	- \$	2,320
59	Domestic Hot Water System - Hot Water Tanks \$	-		- \$	- \$	33,272 \$	- \$	- \$	- \$	- \$	-
60	Domestic Hot Water System - Piping \$		- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
61	Domestic Hot Water System - Recirculating Pump \$	-		- \$	- \$	- \$	- \$	- \$	- \$	- \$	773
62	Domestic Hot Water System - Repairs \$	-		- \$	- \$	- \$	- \$	- \$	- \$	- \$	25,777
63	Electrical System - Repairs \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
64	Elevators \$	<u> </u>	· ·	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
65	Elevators - Repairs \$		- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	20,622
66	Elevators - Cab Modernization \$	<u> </u>	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
67	Elevators - Exhaust Fan \$	-	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	773
68	Exhaust Fans \$		- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
69	Fire Alarm System - Panels \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
70	Fire Alarm System - Devices \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
71	Hallway Make-Up Air System - Air Units \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
72	Hallway Make-Up Air System - Condenser Units \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
73	Intercom & Security System - Intercom \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
74	Intercom & Security System - CCTV System \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
75	Lighting - Chandelier \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
76	Lighting - Wall & Ceiling Mounted \$		- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
77	Lighting - Fluorescent - Building \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	
78	Lighting - Fluorescent - Parkade \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
79	Lighting - Emergency \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
80	Lighting - Exit \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
81	Lighting - Exterior - Units \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
82	Lighting - Exterior - Security \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
83	Parkade Exhaust System - Exhaust Fans \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
84	Parkade Exhaust System - Gas Monitors \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
85	Parkade Make-Up Air System \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
86	Parkade Ramp & Snow Melt System - Piping \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
87	Parkade Ramp & Snow Melt System - Controller \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	2,320
88	Parkade Ramp & Snow Melt System - Pumps \$		- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	2,062
89	Parkade Ramp & Snow Melt System - Heat Exchanger \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	1,547
90	Parkade Ramp & Snow Melt System - Poured Concrete \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
91	Perimeter Heating - Cabinet Heaters \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
92	Perimeter Heating - Baseboard Heaters \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
93	Perimeter Heating - Unit Heaters \$	- \$		- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
94	Radiant Heat Loop System - Heat Supply Pumps \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	10,569
95	Radiant Heat Loop System - Heat Loop Piping \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-
96	Radiant Heat Loop System - Expansion Tanks \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	5,800
97	Radiant Heat Loop System - Zone Valves & Thermostats - Repairs \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	26,422
98	Sprinkler System - Repairs \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	32,222
99	Sump Pumps \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	3,867
100	Community Mailboxes \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	- \$	-

#### THIRTY YEAR REPLACEMENT SCHEDULE (Years 1 to 10)

						CLI LAGEINIEI	•••	OHEDOLE (I	cars i to io,					
			1	2		3		4	5	6	7	8	9	10
NO.	COMPONENT		2020	2021		2022		2023	2024	2025	2026	2027	2028	2029
	Inflation Rat	e	0.00%	1.75	%	3.00%		3.00%	3.00%	3.00%	1.75%	1.75%	1.75%	1.75%
101	Exercise Equipment	\$	-	\$	- \$	i -	\$	- \$	-	\$ -	\$ 7,341	\$ -	\$ -	\$ -
102	Flooring - Carpet	\$	-	\$	- \$	; <u>-</u>	\$	- \$	-	\$ -	\$ 46,156	\$ 46,964	\$ 47,786	\$ -
103	Flooring - Ceramic Tile	\$	-	\$	- \$	-	\$	- \$	-	\$ -	\$ -	\$ -	\$ -	\$ -
104	Flooring - Vinyl Tile	\$		\$	- \$		\$	- \$	-	\$ -	\$	\$ -	\$ -	\$ -
105	Flooring - Linoleum	\$	-	\$	- \$		\$	- \$	-	\$ -	\$	\$ -	\$ -	\$ -
106	Furniture & Fixtures	\$	-	\$	- \$		\$	- \$	-	\$ -	\$ 4,078	\$ 4,150	\$ 4,222	\$ -
107	Interior Finishes - Ceilings - Paint	\$	-	\$	- \$		\$	- \$	-	\$ -	\$ 15,963	\$ 16,242	\$ 16,527	\$ -
108	Interior Finishes - Walls - Paint	\$	-	\$	- \$		\$	- \$	-	\$ -	\$ 22,170	\$ 22,558	\$ 22,953	\$ -
109	Interior Finishes - Walls - Wallpaper	\$	-	\$	- \$		\$	- \$	-	\$ -	\$ 3,044	\$ 3,097	\$ 3,152	\$ -
110	Interior Finishes - Unit Doors	\$	-	\$	- \$		\$	- \$	-	\$ -	\$ 3,038	\$ 3,092	\$ 3,146	\$
140	Contingency	\$	12,789	\$ 13,01	3 \$	13,403	\$	13,805 \$	14,219	\$ 14,646	\$ 14,902	\$ 15,163	\$ 15,428	\$ 15,698
200	Balcony Repairs - Phase 1 (2021)	\$	-	\$ 61,31	7 \$		\$	- \$	-	\$ -	\$ -	\$	\$ -	\$ -
201	Engineering Fees - Balcony Repairs (2021)	\$	-	\$ 23,61	1 \$		\$	- \$	-	\$ -	\$ -	\$	\$ -	\$ -
202	Balcony Repairs - Phase 1 (2022)	\$	-	\$	- \$	63,933	\$	- \$	-	\$ -	\$ -	\$	\$ -	\$ -
203	Engineering Fees - Balcony Repairs (2022)	\$	-	\$	- \$	16,977	\$	- \$	-	\$ -	\$ -	\$	\$ -	\$ -
204	Landscaping - Regrading (2021)	\$	-	\$ 21,36	3 \$		\$	- \$	-	\$ -	\$ -	\$	\$ -	\$ -
	Future Dollars	\$	19,561	\$ 119,30	9 \$	94,312	\$	13,805 \$	231,055	\$ 26,153	\$ 454,671	\$ 418,876	\$ 426,206	\$ 171,343

		11	12	13	14	15	16	17	18	19	20
NO.	COMPONENT	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
NO.	Inflation Rate			1.75%	1.75%	1.75%		1.75%	1.75%		1.75%
1	Roofing - SBS	\$ -	\$ -	\$ - 5		\$ 410,417				\$ - \$	-
2	Roofing - Standing Seam Metal	\$ -	\$ -	\$ - 5			\$ -		\$ -	s - s	-
3	Roofing - Copper Shingles	\$ -	\$ -	\$ - 5		•	\$ -		\$ -	s - s	-
4	Roofing - Repairs	\$ 4,092		\$ - 5		•	-		\$ -	s - s	
5	Eavestroughs & Downspouts	\$ -	\$ -	\$ - 5					\$ -	s - s	
6	Fascia	\$ -	\$ -	\$ - 5			\$ -		\$ -	s - s	-
7	Soffit	\$ -	\$ -	\$ - 5		\$ -	\$ -	-	\$ -	s - s	
8	Exterior Wall Cladding - Stucco	\$ -	\$ -	\$ - 5	-	\$ -	\$ -	\$ -	\$ -	s - s	
9	Exterior Wall Cladding - Stone Block Veneer - Repairs	\$ -	\$ -	\$ - 5	-	\$ -	\$ -	\$ -	\$ -	s - s	
10	Exterior Wall Cladding - Cornices	\$ -	\$ -	\$ - 5		\$ -	\$ -		\$ -	s - s	-
11	Exterior Wall Cladding - Accent Trims	\$ -	\$ -	\$ - 5	-	\$ -	\$ -	\$ -	\$ -	\$ - \$	-
12	Exterior Wall Cladding - Cap Flashing	\$ -	\$ -	\$ - 5		\$ -	\$ -		\$ -	\$ - \$	
13	Exterior Wall Cladding - Sealant	\$ -	\$ -	\$ - 5		•	\$ -	•	\$ -	\$ -	
14	Exterior Wall Cladding - Cladding Repairs (Estimated)	\$ -	\$ -	\$ - 5		-			\$ -	\$ -	
15	Windows & Patio Doors - Windows	\$ -	\$ -	\$ - 5		\$ -	\$ -	-	\$ -	s - s	
16	Windows & Patio Doors - Patio Doors - Sliders	\$ -	s -	\$ - 5		•		•	\$ -	\$ - \$	
17	Windows & Patio Doors - Patio Doors - Hinged	\$ -	\$ -	\$ - 5		•	\$ -		\$ -	\$ - \$	
18	Doors - Storefront - Entrances	\$ -	\$ -	\$ - 5		\$ -	\$ -		\$ -	s - s	
19	Doors - Storefront - Exits	s -	s -	\$ - 5		•	\$ -		\$ -	s - s	
20	Doors - Parkade Overhead	\$ -	s -	\$ - 5		\$ -	\$ -	•	\$ -	s - s	
21	Doors - Parkade Overhead - Motors & Controls	\$ -	\$ -	\$ - 5		•	\$ -	•	\$ -	\$ - \$	1,000
22	Balconies - PVC Membrane	\$ -	\$ -	\$ - 5		•	\$ -		\$ -	s - s	-
23	Balconies - Guardrails	\$ -	\$ -	\$ - 5		\$ -	\$ -		\$ -	s - s	
24		\$ -	\$ -	\$ - 5		•	\$ -		\$ -	\$ - \$	
25	Balconies - Guardrails (R&R)	\$ -	\$ -	\$ - 5		•	\$ -		\$ -	s - s	
26	Balconies - Fascia	\$ -	\$ -	\$ - 5		\$ -	\$ -		\$ -	\$ - \$	
	Balconies - Soffit	\$ -	\$ -	\$ - 5		•			\$ -	\$ - \$	
27	Balconies - Column Cladding	\$ -	\$ -	\$ - 5		\$ -	\$ -		\$ -	\$ - \$	
28 29	Patios - Composite Wood	\$ -	\$ -	\$ - 5		\$ -	\$ -	•	\$ -	\$ - \$	
30	Patios - Guardrails	\$ -	\$ -	\$ - :		\$ 85,407	-		\$ -	\$ - \$	
	Asphalt Surface - Overlay	\$ -	\$ -	\$ - :			\$ -		•	\$ - \$	
31	Asphalt Surface - Repairs					•	-	, , , , , , ,		\$ - \$	
32	Concrete (Various)	\$ -	\$ -	•		\$ -	\$ -	·	\$ -		
33	Curbs - Poured	\$ -	\$ -	\$ - 5		\$ 29,401			\$ -	\$ - \$	
34	Fire Hydrant	\$ -	\$ -	\$ - 5		\$ -	\$ -		\$ -	\$ - \$	
35	Garbage Area - Concrete Pads	\$ -	\$ -	\$ - 5		•	\$ -		\$ -	\$ - \$	
36	Garbage Area - Fencing	\$ -	\$ -	\$ - 5			\$ -		\$ -	\$ - \$	
37	Garbage Area - Fencing - Paint	\$ -	\$ -	\$ - 5		\$ -	\$ -	\$ 1,665		\$ - \$	
38	Landscaping	\$ -	\$ -	\$ - 5		-	\$ -	-	\$ -	\$ - \$	
39	Light Standards	\$ -	\$ -	\$ - 5			-		\$ -	\$ - \$	
40	Misc. Components - Reserve Fund Study	\$ 8,459		\$ - \$		\$ -	\$ 9,225		\$ -	\$ - \$	
41	Misc. Components - Site Inspection	\$ -	\$ -	\$ - \$		\$ -	-	\$ 14,553		\$ - \$	
42	Misc. Components - Underground Services			\$ - !				\$ -			
43	Parkade Membrane & Assoc. Comps Membrane	\$ -	\$ -	\$ - \$					\$ -	\$ - \$	,
44	Parkade Membrane & Assoc. Comps Composite Wood Decks			\$ - 5			-		•	\$ - \$	,
45	Parkade Membrane & Assoc. Comps Guardrails	\$ -	\$ -	\$ - 5			\$ -		\$ -	\$ - \$	
46	Parkade Membrane & Assoc. Comps Concrete Pavers	\$ -		\$ - !					•	\$ - \$	
47	Parkade Membrane & Assoc. Comps Planters		\$ -	\$ - !					•	\$ - \$	•
48	Power Pedestals & Outlets - Pedestals	\$ -	\$ -	\$ - !			\$ -		\$ -	\$ - \$	
49	Power Pedestals & Outlets - Outlets			\$ - !				\$ -	•	\$ - \$	
50	Property Signage	\$ -	\$ -	\$ - !	-	\$ -	\$ -	\$ -	\$ -	\$ - \$	

		44	12	12			16	17	10	19	20
NO.	COMPONENT	11 2030	2031	13 2032	14 2033	15 2034	16 2035	2036	18 2037	2038	2039
NO.	Inflation Rate			1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
51	Railings - Metal	\$ -	\$ -	\$ - \$	- \$			5 - \$	- 8		-
52	Railings - Metal - Paint	\$ -	\$ -	\$ - \$	- S		\$ -		- 9		_
53	Railings - Metal - Bicycle Racks	\$ -	\$ -	\$ - \$	- S		-	5 - \$	- 9	S	_
54	Retaining Walls - Concrete Repairs & Paint	\$ -	\$ -	\$ - \$	- \$			· - \$	- 8	- \$	_
55	Retaining Walls (Repairs) - Allan Blocks	\$ -	\$ -	s - s	- \$		\$ - :		- 8	- \$	_
56	Boiler System - Boilers	\$ -	\$ -	s - s	- \$			5 - \$	- 8	- \$	76,652
57	Boiler System - Boiler Flue	\$ -	\$ -	s - s	- \$	-	\$ -	5 - \$	- 8	- \$	-
58	Boiler System - Controller	\$ -	\$ -	s - s	- \$	_	\$ - :	- \$	- 9	- \$	_
59	Domestic Hot Water System - Hot Water Tanks	\$ -	\$ -	s - s	- \$			5 - \$	- 9	- \$	43,692
60	Domestic Hot Water System - Piping	\$ -	\$ -	s - s	- \$	_	\$ - :	5 - \$	- 9	- \$	_
61	Domestic Hot Water System - Recirculating Pump	\$ -	\$ -	\$ - \$	- S		-	5 - \$	- 9		_
62	Domestic Hot Water System - Repairs	\$ -	\$ -	\$ - \$	- S		-	5 - \$	- 9	S	-
63	Electrical System - Repairs	\$ -	\$ -	s - s	- \$			5 - \$	- \$	- \$	-
64	Elevators	\$ -	\$ -	\$ - \$	- \$		\$ -		- 9		191,630
65	Elevators - Repairs	\$ -	\$ -	\$ - \$	- \$			5 - \$	- 3		
66	Elevators - Cab Modernization	\$ -	\$ -	\$ - \$	- \$		\$ -		- 3	· · · · · · · · · · · · · · · · · · ·	45,991
67	Elevators - Exhaust Fan	\$ -	\$ -	\$ - \$	- \$			5 - \$	- 9		-
68	Exhaust Fans	\$ -	\$ -	\$ - \$	- \$		-	5 - \$	- 9		-
69	Fire Alarm System - Panels	\$ -	\$ -	\$ - \$	- \$				- 9	- s	-
70	Fire Alarm System - Devices	\$ -	\$ -	\$ - \$	- S		,	5 - \$	- 9	- s	-
71	Hallway Make-Up Air System - Air Units	\$ -	\$ -	\$ - \$	- \$				- 3		_
72	Hallway Make-Up Air System - Condenser Units	\$ -	\$ -	\$ - \$	- \$	· · ·	\$ -		- 9		_
73	Intercom & Security System - Intercom	\$ -	\$ -	s - s	- \$			5 - \$	- 9		_
74	Intercom & Security System - CCTV System	\$ -	\$ -	s - s	- \$				- 3		_
75	Lighting - Chandelier	\$ -	\$ -	\$ - \$	- \$		\$ -		- 9		_
76	Lighting - Wall & Ceiling Mounted	\$ -	\$ -	\$ - \$	- \$		,	5 - \$	- 3		_
77	Lighting - Fluorescent - Building	\$ -	\$ -	s - s	- \$		,		- 3	· · · · · · · · · · · · · · · · · · ·	_
78	Lighting - Fluorescent - Parkade	\$ -	\$ -	\$ - \$	- S			5 - \$	- 3	· · · · · · · · · · · · · · · · · · ·	_
79	Lighting - Emergency	\$ -	\$ -	\$ - \$	- \$	,		5 - \$	- 3		_
80	Lighting - Exit	\$ -	\$ -	\$ - \$	- S				- 3		_
81	Lighting - Exterior - Units	\$ -	\$ -	\$ - \$	- S	-, -		5 - \$	- 3		_
82	Lighting - Exterior - Security	\$ -	\$ -	s - s	- S		\$ -		- 3		_
83	Parkade Exhaust System - Exhaust Fans	\$ -	\$ -	\$ - \$	- \$		\$ -		- 3		38,633
84	Parkade Exhaust System - Gas Monitors	\$ -	\$ -	\$ - \$	- S			5 - \$	- 9	· · · · · · · · · · · · · · · · · · ·	-
85	Parkade Make-Up Air System	\$ -	\$ -	\$ - \$	- \$	, -		5 - \$	- 3		
86	Parkade Ramp & Snow Melt System - Piping	\$ -	\$ -	\$ - \$	- S		\$ -		- 3		22,996
87	Parkade Ramp & Snow Melt System - Controller	\$ -	\$ -	s - s	- s			s - s	- 3		
88	Parkade Ramp & Snow Melt System - Pumps	\$ -	\$ -	s - s	- S			s - s	- 3		_
89	Parkade Ramp & Snow Melt System - Heat Exchanger	\$ -	\$ -	\$ - \$	- \$		\$ -		- 3		_
90	Parkade Ramp & Snow Melt System - Poured Concrete	\$ -	\$ -	s - s	- s			s - s	- 3		23,103
91	Perimeter Heating - Cabinet Heaters	\$ -	\$ -	s - s	- s			s - s	- 9	· · · · · · · · · · · · · · · · · · ·	
92	Perimeter Heating - Baseboard Heaters			\$ - \$	- \$						_
93	Perimeter Heating - Unit Heaters	\$ -	\$ -	s - s	- \$			s - s			_
94	Radiant Heat Loop System - Heat Supply Pumps			\$ - \$	- s		-	s - s	_		
95	Radiant Heat Loop System - Heat Loop Piping	\$ -	\$ -	\$ - \$	- \$			s - s			
96	Radiant Heat Loop System - Expansion Tanks	\$ -		\$ - \$	- S			5 - \$	_		_
97	Radiant Heat Loop System - Zone Valves & Thermostats - Repairs	-	\$ -	\$ - \$	- \$			s - s			_
98	Sprinkler System - Repairs	\$ -	\$ -	s - s	- \$			s - s			_
99	Sump Pumps	-		s - s	- s				_		
100	Community Mailboxes	•	•	\$ - \$	- \$				- 9		-
100	Community Wallboxes	-	Ψ -	· - 3	-   3	-	Ψ - ·	, - 3	-   3	, - <sub> </sub> 3	-

#### THIRTY YEAR REPLACEMENT SCHEDULE (Years 11 to 20)

								,					
			11	12	13	14		15	16	17	18	19	20
NO.	COMPONENT		2030	2031	2032	2033		2034	2035	2036	2037	2038	2039
	Inflation	Rate	1.75%	1.75%	1.75%	1.7	5%	1.75%	1.75%	1.75	<b>%</b> 1.75	% 1.75°	<b>6</b> 1.75%
101	Exercise Equipment	\$	-	\$ -	\$ -	\$	- \$	-	\$ -	\$	- \$	- \$	\$ -
102	Flooring - Carpet	\$	-	\$ -	\$ -	\$	- \$	-	\$ -	\$	- \$	- \$	\$ -
103	Flooring - Ceramic Tile	\$	-	\$ -	\$ -	\$	- \$	-	\$ -	\$	- \$	- \$	\$ 40,588
104	Flooring - Vinyl Tile	\$	-	\$ -	\$ -	\$	- \$	-	\$ -	\$	\$	- \$	\$ 36,339
105	Flooring - Linoleum	\$	-	\$ -	\$ -	\$	- \$	-	\$ -	\$	\$	- \$	\$ 3,203
106	Furniture & Fixtures	\$	-	\$ -	\$ -	\$	- \$	-	\$ -	\$	\$	- \$	\$ -
107	Interior Finishes - Ceilings - Paint	\$	-	\$ -	\$ -	\$	- \$	-	\$ -	\$	- \$	- \$	\$ -
108	Interior Finishes - Walls - Paint	\$	-	\$ -	\$ -	\$	- \$	=	\$ -	\$	- \$	- \$	\$ -
109	Interior Finishes - Walls - Wallpaper	\$	-	\$ -	\$ -	\$	- \$	=	\$ -	\$	- \$	- \$	\$ -
110	Interior Finishes - Unit Doors	\$	-	\$ -	\$ -	\$	- \$	-	\$ -	\$	\$	\$	\$ -
140	Contingency	\$	15,973	\$ 16,253	\$ 16,537	\$ 16,82	26 \$	17,121	\$ 17,420	\$ 17,725	\$ 18,036	\$ 18,351	\$ 18,672
	Future Dollars	\$	28.523	\$ 16.253	\$ 16.537	\$ 27.87	78 \$	1.024.419	\$ 448,708	\$ 473,404	\$ 18.036	\$ 18.351	\$ 766,772

		_			I EAGEME		CHEDULE (Yea	10 21 10 00)						2022-10-14		
		21		22	23		24	25	26	27	28		29		30	
NO.	COMPONENT	2040		2041	2042		2043	2044	2045	2046	2047		2048		2049	
	Inflation Rate		.75%	1.75%	1.75%		1.75%	1.75%	1.75%	1.75%		1.75%	1.75%	T	1.75%	
1	Roofing - SBS	\$		\$ - \$	-	\$	- \$		\$ - !		\$	- \$		\$	-	
2	Roofing - Standing Seam Metal	\$		\$ - \$	-	\$	- \$		\$ - :		\$	- \$	•	\$	-	
3	Roofing - Copper Shingles	\$		\$ - \$	-	\$	- \$		\$ - !		\$	- \$		\$	-	
4	Roofing - Repairs		867		-	\$	- \$		\$ 5,308		\$	- \$		\$	-	
5	Eavestroughs & Downspouts	\$		\$ - \$	-	\$	- \$		\$ - !		\$	- \$		\$	-	
6	Fascia	\$		\$ - \$	-	\$	- \$		\$ - !		\$	- \$		\$	6,389	
7	Soffit	\$	- \$	\$ - \$	-	\$	- \$	-	\$ - !	-	\$	- \$		\$	10,474	
8	Exterior Wall Cladding - Stucco	\$	- \$	\$ - \$	-	\$	- \$	622,724	\$ 633,621	644,710	\$	- \$	-	\$	-	
9	Exterior Wall Cladding - Stone Block Veneer - Repairs	\$	- \$	\$ - \$	-	\$	- \$	48,674	\$ 49,526	50,393	\$	- \$	-	\$	-	
10	Exterior Wall Cladding - Cornices	\$	- \$	\$ - \$	=	\$	- \$	48,264	\$ 49,109	49,968	\$	- \$	-	\$	-	
11	Exterior Wall Cladding - Accent Trims	\$	- \$	\$ - \$	-	\$	- \$	38,795	\$ 39,474	40,165	\$	- \$	-	\$	-	
12	Exterior Wall Cladding - Cap Flashing	\$	- \$	\$ - \$	-	\$	- \$	25,079	\$ 25,518	25,965	\$	- \$	-	\$	-	
13	Exterior Wall Cladding - Sealant	\$	- \$	\$ - \$	-	\$	- \$	=	\$ - !	-	\$	- \$	-	\$	-	
14	Exterior Wall Cladding - Cladding Repairs (Estimated)	\$	- \$	\$ - \$	-	\$	- \$	-	\$ - !	-	\$	- \$	-	\$	-	
15	Windows & Patio Doors - Windows	\$	- \$	\$ - \$	=	\$	- \$	285,571	\$ 290,569	295,654	\$	- \$	-	\$	-	
16	Windows & Patio Doors - Patio Doors - Sliders	\$	- \$	\$ - \$	-	\$	- \$	172,881	\$ 175,906	178,985	\$	- \$	-	\$	-	
17	Windows & Patio Doors - Patio Doors - Hinged	\$	- \$	\$ - \$	-	\$	- \$	7,134	\$ 7,259	7,386	\$	- \$	-	\$	-	
18	Doors - Storefront - Entrances	\$	- \$	\$ - \$	-	\$	- \$	-	\$ - !	-	\$	- \$	-	\$	-	
19	Doors - Storefront - Exits	\$	- \$	s - s	-	\$	- \$	-	\$ - !	-	\$	- \$	-	\$	-	
20	Doors - Parkade Overhead	\$	- 5	s - s	-	\$	- \$	-	\$ - !	-	\$	- 5	-	\$	-	
21	Doors - Parkade Overhead - Motors & Controls	\$	- 5	s - s	-	\$	- \$	-	\$ - !		\$	- 5	-	\$	-	
22	Balconies - PVC Membrane	\$	- 5	\$ 245,789 \$	250,090	\$	254,467 \$	_	\$ - 5		\$	- 5		\$	-	
23	Balconies - Guardrails	\$		\$ 146,951 \$	149,522		152,139 \$		\$ - !		\$	- \$	<u> </u>			
24	Balconies - Guardrails (R&R)	\$			,	7	\$		\$ - !		\$	- 5		\$	_	
25	Balconies - Fascia	\$	- 5	\$ 14,695 \$	14,952	\$	15,214 \$		\$ - !		\$	- 5		\$	_	
26	Balconies - Soffit	\$	- 9		82,664		84,110 \$		\$ - !		\$	- \$		\$	_	
27	Balconies - Column Cladding	\$		\$ 13,713 \$	13,953		14,197 \$		\$ - S		\$	- 9		\$	_	
28	Patios - Composite Wood	\$		s - s	10,000	\$	- \$		\$ - !		\$	- 5	•	\$	127,552	
29	Patios - Guardrails	\$		s - s		\$	- \$		\$ - !		\$	- 5		\$	91,903	
30	Asphalt Surface - Overlay	s		s - s		\$	- \$		\$ - !		\$	- 5		\$	31,303	
31		\$		s - s		\$	- \$		\$ - !			- 5		\$	-	
32	Asphalt Surface - Repairs  Concrete (Various)	\$		\$ - \$	-	\$	- \$		\$ - !		\$ \$	- \$		\$	-	
33	Curbs - Poured	s		\$ - \$	-	\$	- \$	34,373	\$ - :		\$ \$	- 5		\$	-	
		\$		\$ - \$	-	\$	- \$	-	\$ - :		\$ \$	- 4		\$	-	
34	Fire Hydrant	\$		\$ - \$	-	\$	- \$		*		\$ \$	- 3		\$	-	
35	Garbage Area - Concrete Pads				-	\$			•			- 3		1	-	
36	Garbage Area - Fencing	\$		\$ - \$	-	-	- \$		\$ - 9		\$ •			\$	-	
37	Garbage Area - Fencing - Paint	\$		\$ - \$	-	\$	- \$		\$ - 5		\$ • 1	- \$		\$	-	
38	Landscaping			\$ - \$	-	-	- \$		\$ - !			4,090 \$		\$	-	
39	Light Standards	\$		\$ - \$	-	\$	- \$		\$ - 5		\$	- \$		\$	-	
40	Misc. Components - Reserve Fund Study			\$ - \$	-	\$	- \$		\$ 10,973		\$	- \$		\$	-	
41	Misc. Components - Site Inspection	\$		\$ - \$	-	\$	- \$		\$ - !			- \$	•	\$	-	
42	Misc. Components - Underground Services	\$	- \$		-	\$	- \$		\$ - !			- \$		\$	-	
43	Parkade Membrane & Assoc. Comps Membrane		957		-	\$	- \$		\$ - !		\$	- \$		\$	-	
44	Parkade Membrane & Assoc. Comps Composite Wood Decks		964		-	\$	- \$		\$ - :		\$	- \$		\$	-	
45	Parkade Membrane & Assoc. Comps Guardrails		971 \$		-	\$	- \$		\$ - :			- \$		\$	-	
46	Parkade Membrane & Assoc. Comps Concrete Pavers		383	·	=	+ ·	- \$		\$ - !			- \$		\$	-	
47	Parkade Membrane & Assoc. Comps Planters		799	·	=	\$	- \$		\$ - !		\$	- \$		\$	-	
48	Power Pedestals & Outlets - Pedestals	\$	- \$	\$ - \$	-	\$	- \$	1,672	\$ - !	-	\$	- \$	-	\$	-	
49	Power Pedestals & Outlets - Outlets	\$	- \$	\$ - \$	-	\$	- \$	1,338	\$ - !	-	\$	- \$	-	\$	-	
50	Property Signage	\$	- \$	\$ - \$	-	\$	- \$	-	\$ - !	-	\$	- \$	-	\$	3,647	

				THIRTY YEAR RE	PLACEMILINI	SOTIL DOLL (100	113 21 10 00)					
			21	22	23	24	25	26	27	28	29	30
NO.	COMPONENT		2040	2041	2042	2043	2044	2045	2046	2047	2048	2049
		tion Rate	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
51	Railings - Metal	\$	- \$		- \$	- \$	- 5		- \$	- \$		
52	Railings - Metal - Paint	\$	- \$		- \$	- \$	- 8		- \$	- \$		
53	Railings - Metal - Bicycle Racks	\$	- \$		- \$	- \$	- 8		- \$	- \$		
54	Retaining Walls - Concrete Repairs & Paint	\$	- \$		- \$	- \$	- 8		- \$	- \$		
55	Retaining Walls (Repairs) - Allan Blocks	\$	- \$		- \$	- \$	- :		- \$	- \$		
56	Boiler System - Boilers	\$	- \$		- \$	- \$	- :		- \$	- \$		-
57	Boiler System - Boiler Flue	\$	- \$	-	- \$	- \$	-		- \$	- \$		
58	Boiler System - Controller	\$	- \$		- \$	- \$	- (		- \$	- \$		\$ 3,282
59	Domestic Hot Water System - Hot Water Tanks	\$	- \$		- \$	- \$	- 8	\$ - \$	- \$	- \$		<u> </u>
60	Domestic Hot Water System - Piping	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	- :	<u>\$</u> -
61	Domestic Hot Water System - Recirculating Pump	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	i - :	\$ 1,094
62	Domestic Hot Water System - Repairs	\$	- \$	- \$	- \$	- \$	- (	\$ - \$	- \$	- \$	i - :	\$ 36,469
63	Electrical System - Repairs	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	i - !	\$ -
64	Elevators	\$	194,984 \$	- \$	- \$	- \$	- 8	\$ - \$	- \$	- \$	i - :	\$ -
65	Elevators - Repairs	\$	- \$	- \$	- \$	- \$	26,751	\$ - \$	- \$	- \$	:	\$ -
66	Elevators - Cab Modernization	\$	- \$	- \$	- \$	- \$	- (	\$ - \$	- \$	- \$	:	\$ -
67	Elevators - Exhaust Fan	\$	- \$	- \$	- \$	- \$	- 9	\$ - \$	- \$	- \$	· - :	\$ 1,094
68	Exhaust Fans	\$	- \$	- \$	- \$	- \$	- 5	s - s	- \$	- \$		\$ -
69	Fire Alarm System - Panels	\$	- \$	- \$	- S	- \$	- 5	\$ - \$	- \$	- S	- :	\$ -
70	Fire Alarm System - Devices	\$	- \$	-	- \$	- \$	- 9		- \$	- S	- :	\$ -
71	Hallway Make-Up Air System - Air Units	\$	- \$		- \$	- \$	- 5		- \$	- S		
72	Hallway Make-Up Air System - Condenser Units	\$	- S		- <b>\$</b>	- \$	- 8		- \$	- S		-
73	Intercom & Security System - Intercom	\$	- S		- \$	- \$	- 9		- \$	- \$		-
74	Intercom & Security System - CCTV System	\$	- \$		- \$	- \$	- 9		- s	- s		
75		\$	- \$	-	- \$	- \$	- 9		- \$	- s		•
76	Lighting - Chandelier	\$	- \$		- \$	- \$	- 9		- \$	- \$		•
	Lighting - Wall & Ceiling Mounted	\$	- ş		- \$ - \$	- ş	- 5		- \$	- ş		•
77	Lighting - Fluorescent - Building		- s - s	•	- \$	- \$	- 3		- \$	- s		•
78	Lighting - Fluorescent - Parkade	\$	- s		- \$	- \$	- 3		- \$	- \$		
79	Lighting - Emergency	\$	- s - s		- \$ - \$	- \$	- 3			- s - s		•
80	Lighting - Exit								- \$			•
81	Lighting - Exterior - Units	\$	- \$		- \$	- \$	35,128		- \$	- \$		-
82	Lighting - Exterior - Security	\$	- \$	-	- \$	- \$	3,344		- \$	- \$		
83	Parkade Exhaust System - Exhaust Fans	\$	- \$		- \$	- \$	- 5	*	- \$	- \$		•
84	Parkade Exhaust System - Gas Monitors	\$	- \$	· ·	- \$	- \$	- 5		- \$	- \$		
85	Parkade Make-Up Air System	\$	- \$	-	- \$	- \$	83,598		- \$	- \$		
86	Parkade Ramp & Snow Melt System - Piping	\$	- \$	-	- \$	- \$	- (		- \$	- \$		•
87	Parkade Ramp & Snow Melt System - Controller	\$	- \$		- \$	- \$	- (		- \$	- \$		
88	Parkade Ramp & Snow Melt System - Pumps	\$	- \$		- \$	- \$	- (		- \$	- \$		, , , , , , , , , , , , , , , , , , , ,
89	Parkade Ramp & Snow Melt System - Heat Exchanger	\$	- \$	- \$	- \$	- \$	- (	\$ - \$	- \$	- \$		\$ 2,188
90	Parkade Ramp & Snow Melt System - Poured Concrete	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	- :	<u> </u>
91	Perimeter Heating - Cabinet Heaters	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	i - :	\$ 27,352
92	Perimeter Heating - Baseboard Heaters	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	i - :	\$ 15,499
93	Perimeter Heating - Unit Heaters	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	i - !	\$ 14,588
94	Radiant Heat Loop System - Heat Supply Pumps	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	i - !	\$ 14,952
95	Radiant Heat Loop System - Heat Loop Piping	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	:	\$ -
96	Radiant Heat Loop System - Expansion Tanks	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	- ;	\$ 8,206
97	Radiant Heat Loop System - Zone Valves & Thermostats - R	tepairs \$	- \$	- \$	- \$	- \$	34,275	\$ - \$	- \$	- \$	- :	\$ -
98	Sprinkler System - Repairs	\$	- \$	- \$	- \$	- \$	- 5	\$ - \$	- \$	- \$	· - !	\$ 45,587
99	Sump Pumps	\$	- \$	- \$	- \$	- \$	5,016	\$ - \$	- \$	- \$	· - !	
100	Community Mailboxes	\$	- \$		- \$	- \$	- 8		- \$	- \$		\$ 23,714
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#### THIRTY YEAR REPLACEMENT SCHEDULE (Years 21 to 30)

			21		22	23		24	25	26	27	28	29	30
NO.	COMPONENT		2040	2	2041	2042		2043	2044	2045	2046	2047	2048	2049
	Inflation Rate	1	1.75%		1.75%	1.75%	6	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%
101	Exercise Equipment	\$	-	\$	9,523	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
102	Flooring - Carpet	\$	-	\$	59,875	\$ 60,923	\$	61,989	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
103	Flooring - Ceramic Tile	\$	-	\$	-	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
104	Flooring - Vinyl Tile	\$	-	\$	-	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
105	Flooring - Linoleum	\$	-	\$	-	\$ -	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
106	Furniture & Fixtures	\$	-	\$	5,291	\$ 5,383	\$	5,477	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
107	Interior Finishes - Ceilings - Paint	\$	-	\$	20,708	\$ 21,070	\$	21,439	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
108	Interior Finishes - Walls - Paint	\$	-	\$	28,760	\$ 29,263	\$	29,775	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
109	Interior Finishes - Walls - Wallpaper	\$	-	\$	3,949	\$ 4,018	\$	4,088	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
110	Interior Finishes - Unit Doors	\$	-	\$	3,941	\$ 4,010	\$	4,081	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
140	Contingency	\$	18,999	\$	19,332	\$ 19,670	\$	20,014	\$ 20,364	\$ 20,721	\$ 21,083	\$ 21,452	\$ 21,828	\$ 22,210
	Future Dollars	\$	460,465	\$	876,676	\$ 655,519	\$	666,991	\$ 1,549,284	\$ 1,307,983	\$ 1,350,907	\$ 35,543	\$ 21,828	\$ 503,538