Depreciation Report

BCS3550 – Vita at Symphony

Absolute Building Science Strata Engineering Inc.

Cover Letter

Absolute Building Science
Strata Engineering Inc.
#234 - 5589 Byrne Road
Burnaby, BC V3J 3J4

December 28, 2018

Strata Plan BCS3550
565 Smithe Street
Vancouver, BC V6B 0E4

RE: Depreciation Report for Strata Plan BCS3550
File No. B3550DR18

Dear Sirs or Mesdames,

The subject of this depreciation report consists of "Vita at Symphony", a 146-unit high-rise complex constructed in 2009 and located at 565 Smithe Street in Vancouver, BC. We are pleased to present you with the enclosed depreciation report, which we believe will serve as the basis of your reserve planning to help better equip your members for future expenditures.

The depreciation report describes the common property condition and provides immediate and future replacement cost estimates. The replacement cost estimates serve as a basis for financial modeling and contingency reserve fund management. The depreciation report is a document prepared based on on-site inspections and financial analyses. The replacement cost estimates herein apply solely to property defined as common property, unless otherwise noted. This depreciation report is subject to the Assumptions and Limiting Conditions in Section 2.1. and to the Assumptions and Qualifications in Appendix C.

We have inspected the subject property and reviewed all documentations made available by the Strata Corporation. With extensive analyses performed in conjunction with all pertinent data, our cash flow models predict that the optimal reserve fund management includes the following:

1) Contributions of $123,000 to the CRF in the upcoming fiscal year; and
2) An increase of monthly fee allocations to the Contingency Reserve Fund by $35.96 per unit. (Note that this does not necessarily entail an increase in strata fees, but rather an increase in the allocations to the CRF within the annual budget.)

We are hereby delivering to you a report describing our study objectives, methods of research, results, and recommendations.

We appreciate the opportunity of compiling this depreciation report for you and would be honoured to provide you with reviews and updating services as required in future. If you have any questions, please do not hesitate to contact the undersigned.

Respectfully yours,

Absolute Building Science
Strata Engineering Inc.

BCS3550 – Vita at Symphony
565 Smithe Street
Vancouver, BC

Executive Summary

Property Statistics	
Municipal Address	565 Smithe Street, Vancouver, BC
Legal Description	Strata Plan BCS3550
Real Property Type	Concrete-frame high-rise complex
Units	146
Year of Construction	2009
Designated Land Use	Multi-family residential use
Reserve Fund Components	Total of 68 components: 3 Substructure, 18 Shell, 12 Interiors, 27 Services, 3 Equipment and furnishings, 5 Site improvements.

Financial Statistics			
Date of Study	November 28, 2018		
Critical Assumptions	The review is limited to readily accessible and visible building components and documents. Certain inaccessible, hidden problems may not be detected.		
Current Contingency Reserve Fund Balance	$358,380		
Future Replacement Costs	First 10 years: $1,934,285 Final 20 years: $11,015,891		
		Contributions	**Financial Strength**
CRF Contributions and Financial Strength Over 30-year Projection	Current investment schedule:	$1,860,000	15%
	Early investment schedule:	$14,908,560	100%
	Delayed investment schedule:	$14,823,614	100%
	Capped increase schedule:	$8,089,635	55%
	Capped special levies schedule:	$8,476,575	57%

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1. Introduction

1.1 Strata Development

A strata development divides land and buildings into parts for separate ownership with common features. The part of the property that an individual owns is known as the “strata lot”, whereas the remainder of the property is known as "common property”. Strata-titled properties, commonly known as condominiums, provide freehold ownership of a strata lot, together with the use of common property and facilities jointly owned with all strata units.

The strata development is administered by a Strata Corporation comprising of all owners within the strata development. The Strata Corporation is the decision-making body responsible for maintaining, managing, repairing, and insuring the common property and common assets. The Strata Corporation is also tasked with record-keeping responsibilities and must enforce its bylaws or rules.

The Strata Property Act[1] (the "**Act**"), bylaws, and Strata Plan of the corporation are the typical documents governing the operation of the Strata Corporation. They form the legal basis of the Strata Corporation and are generally enforceable in a court of law should the need arise.

As legislated within the Act, an executive body, known as a strata council, is elected annually by the strata owners to oversee the Strata Corporation during intervals between general meetings of all members. The strata council meets at regular intervals and makes decisions on behalf of and binding upon all owners for matters concerning the administration of the strata development that do not require the vote of the strata owners.

The strata council usually hires a strata manager or property manager for the management and maintenance of all common areas and facilities including the exterior of the buildings. The strata manager implements the decisions of the strata council, approves expenses, pays accounts according to the budget, administers the collection of monthly maintenance fees, and performs other like duties. In cases of self-managed stratas, the strata council directly oversees the management and maintenance of all common areas and facilities, assuming the duties of a strata manager.

[1] *Strata Property Act***,** SBC 1998, c 43, as amended

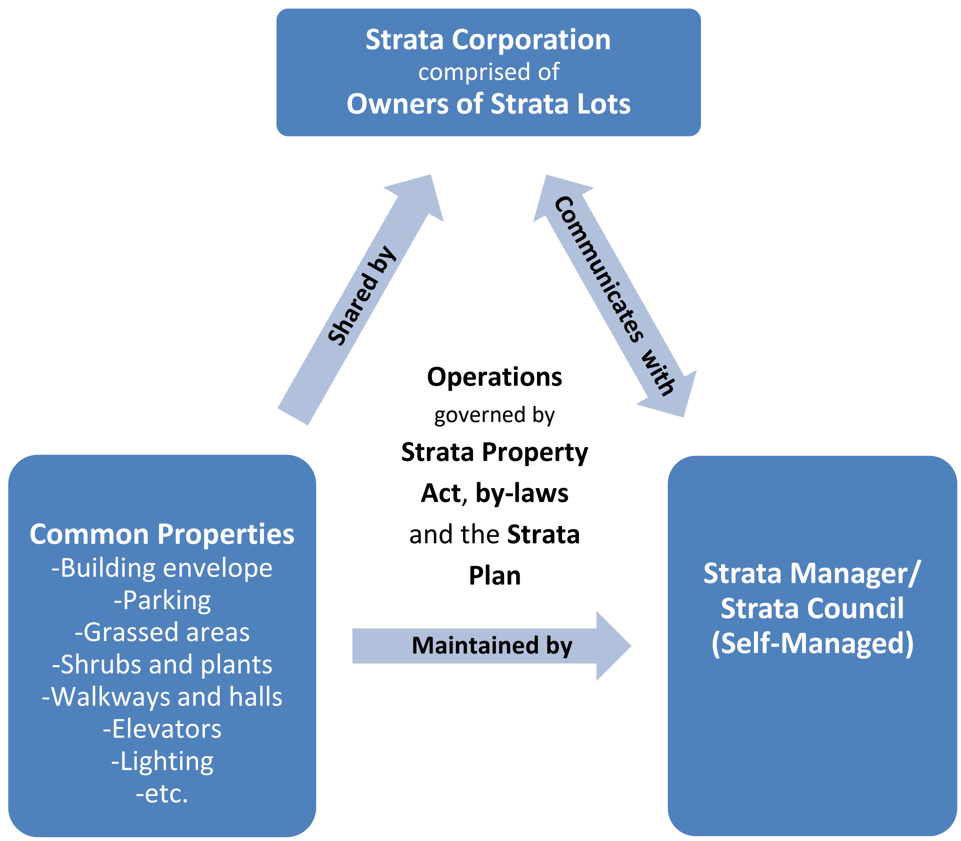

Figure 1: The strata community

1.2 Finances

In order to cover the costs of operating the strata, owners are assessed dues (termed maintenance fees or strata fees) for their proportionate share of the Strata Corporation's expenses based on their unit entitlement (a measure of the owner's allocated interest within the development). The strata fees are used to establish: 1) the operating fund, and 2) the contingency reserve fund.

1.2.1 Operating Fund

The operating fund is set up for expenses that relate to the common properties and common assets of the Strata Corporation that occurs at least once per year[2]. These are normally recurring administrative expenses or costs that relate to the routine maintenance of the common properties. Operating expenses are not taken into consideration for the purposes of this report.

1.2.2 Contingency Reserve Fund

[2] *Ibid*

The contingency reserve fund ("**CRF**") is a separate fund required by the Act to cover expenditures that occur less than once per year or do not usually occur[3] (e.g. major repairs like roof repairs, machinery repairs, etc.). Budgeting for CRF expenditures and planning for adequate funding of the CRF is an important responsibility of the Strata Council. The CRF is required to be maintained in a separate account from the Operating Fund.

1.2.3 Special Levy

The Strata Corporation may raise money from the owners by means of a special levy for various reasons, the primary reason being that the CRF is insufficient to cover the Strata Corporation's existing or anticipated expenditures. A special levy must be approved by a resolution passed by a minimum 3/4 vote at an annual or special general meeting.

1.2.4 Legislation Governing the CRF

1.2.4.1 Contributions

Contributions to the CRF are approved in the annual budget by a majority vote of the owners and collected as a proportion of strata fees. Contributions to the CRF are not refundable to owners. Typically, the CRF may have contributions from current and previous strata lot owners. CRF contributions are based on the unit entitlement of each strata lot in the Strata Corporation.

Section 6.1 of the Strata Property Regulation (the **"Regulation"**) sets out a formula for the purposes of determining the amount of the annual contribution to the CRF, as follows[4]:

> **6.1** … the amount of the annual contribution to the CRF for a fiscal year, other than the fiscal year following the first annual general meeting, must be determined as follows:
>
> (a) if the amount of money in the CRF at the end of any fiscal year after the first annual general meeting is less than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, the annual contribution to the CRF for the current fiscal year must be at least the lesser of
>
> (i) 10% of the total amount budgeted for the contribution to the operating fund for the current fiscal year, and
>
> (ii) the amount required to bring the CRF to at least 25% of the total amount budgeted for the contribution to the operating fund for the current fiscal year;

[3] *Ibid*

[4] *Strata Property Regulation*, BC Reg. 238/2011, s 6.1, as amended

(b) if the amount of money in the CRF at the end of any fiscal year after the first annual general meeting is equal to or greater than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, additional contributions to the CRF may be made as part of the annual budget approval process after consideration of the depreciation report, if any, obtained under section 94 of the Act.

1.2.4.2 Expenditures

Expenditures from the CRF must be consistent with the purpose of the CRF. The expenditure can be approved by a majority vote if it is necessary to obtain a depreciation report or is related to the repair, maintenance or replacement, as recommended by a depreciation report, of common property, common assets or portions of a strata lot for which the Strata Corporation has taken responsibility by bylaw. In almost all other expenditures, a ¾ vote is required for approval.

1.2.4.3 Investing the CRF

The CRF can be invested or held in insured accounts with savings institutions in British Columbia and in those investments permitted by Strata Property Regulation 6.11. The CRF must be accounted for separately from other monies held by the Strata Corporation or separate section and must include any interest or income earned on the CRF.

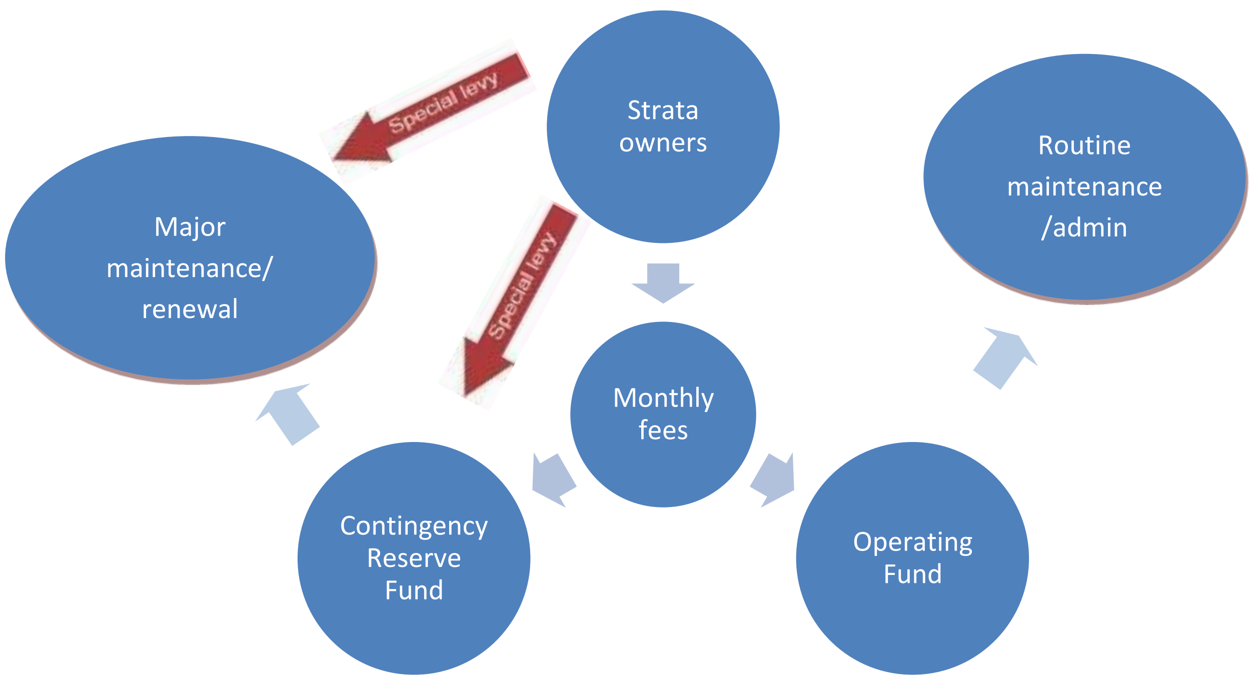

Figure 2: Financial structure of the strata community

1.3 Depreciation Reports

The depreciation report, also known as a reserve fund study, is a legislated planning requirement for Strata Corporations in British Columbia. Depreciation reports serve to guide and assist with long-term planning for CRF management. They are prepared after a thorough assessment of common properties and finances of the Strata Corporation, taking into account projected expenditures, replacement costs, and other factors.

Common properties for the purposes of a depreciation report include those items that comprise the common property, the common assets, the parts of a strata lot and/or limited common property that the Strata Corporation is responsible to maintain or repair under the Act[5], and the Strata Corporation's bylaws or an agreement with an owner, including, but not limited to, the following items:

- the building's structure;
- the building's exterior, including roofs, roof decks, doors, windows and skylights;
- the building's systems, including the electrical, heating, plumbing, fire protection and security systems;
- common amenities and facilities;
- parking facilities and roadways;
- utilities, including water and sewage;
- landscaping, including paths, sidewalks, fencing and irrigation;
- interior finishes, including floor covering and furnishings;
- green building components; and
- balconies and patios.

1.3.1 Benefits of a Depreciation Report

Some important benefits to a well-prepared depreciation report are listed as follows:

A. A depreciation report may assist the Strata Corporation in ensuring that the Strata Corporation complies with the Act. As discussed earlier, the Regulation[6] set out certain thresholds for the management of the CRF. The depreciation report recommends different cash-flow models that will balance expenditures and corresponding special levies to assist the Strata Corporation with maintaining such compliance.

[5] *Strata Property Act*, *supra* note 1
[6] *Strata Property Regulation*, *supra* note 3

B. A depreciation report presents various analysis and models illustrating the concept of reserve fund planning. It aids the strata in prioritizing capital replacement and maintenance expenditures, which may in turn optimize strata investments over time. The models underlying the analyses reflected in the depreciation report incorporate assumptions on return on investments, inflation, the accumulation of strata fee contributions, the timing and amount of special levies relative to the projected timing and future costs of major repairs and replacements.

C. A depreciation report provides a measure of a strata's "financial strength" in the form of a ration of the CRF to projected expenditures. Lending institutions, owners and prospective buyers, may look to the depreciation report to evaluate the likelihood, over time, of strata fee increases and special levies. Therefore, a depreciation report may assist in establishing credit, in personal financial planning, in appraising the value of a Strata Lot and in the negotiation of the purchase price of a Strata Lot.

D. A depreciation report may assist the Strata Corporation with the preservation of the common property value through establishing a timely major maintenance and replacement schedule. It identifies the condition of major items of the common property of a Strata Corporation and their estimated future maintenance/replacement costs. It also provides preventative maintenance recommendations, which can guide the strata council with respect to maintenance and repair which may extend the component's useful life.

E. A depreciation report may also identify risks to Strata Corporations, and potential expenditures not previously recognized, allowing for better planning. Many Strata Councils and Owners assume that their budgeted CRF contributions will adequately cover future expenditures. However, original estimates may be outdated, or may not account for modifications made since the complex was new.

1.3.2 Legislation Regarding the Depreciation Report

The depreciation report must be completed by a "qualified person" as defined in the Act[7]. It must be based upon on-site visual inspection, physical component inventory, summary of repairs and maintenance work on common property (for items that usually occur less than once per year or that do not usually occur), a financial forecasting section, and other information specified in the Regulation[8]. Beginning on December 13, 2012, a depreciation report is required to be obtained every 3 years by Strata Corporations consisting of more than 5 owners unless this requirement is waived by a ¾ vote at an annual or special general meeting. These details outlined within the Act[9] can be found in Appendix A.

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[7] *Strata Property Act*, SBC 1998, c 43, s 94.1
[8] *Strata Property Regulation*, BC Reg. 238/2011, s 6.2
[9] *Strata Property Act***,** SBC 1998, c 43, s 94

1.4 Objectives

This depreciation report can be used as a guide for establishing long term planning for management of common assets or properties listed in detail in Section 1.3. In this report we describe the following:

- Common properties the Strata Corporation owns;
- Condition of common properties in the Strata Corporation;
- Projected timeline for replacement or major maintenance and repairs of components of the common property of the Strata Corporation.
- Opening balance and projected balances of the CRF at year ends on various assumptions as set out in the report.
- Estimated current cost and inflation adjusted future cost of replacement or major maintenance and repairs of common property components.
- Five cash flow models projecting year by year for 30 years the funds available in the CRF relative to the projected future costs on various assumptions with respect to strata fee contributions to the CRF and special levies.

1.5 Intended Use

This depreciation report has been completed for the exclusive use of the council of the Strata Corporation, Strata Plan BCS3550. No other party may rely on the report without explicit written approval of Strata Engineering. This depreciation report is subject to the assumptions and limiting conditions set out in Appendix C attached hereto.

2. Methods

A physical assessment and a financial assessment were first performed, providing information regarding the current status of the building. After determining the common properties, the data were used to generate different strategic plans.

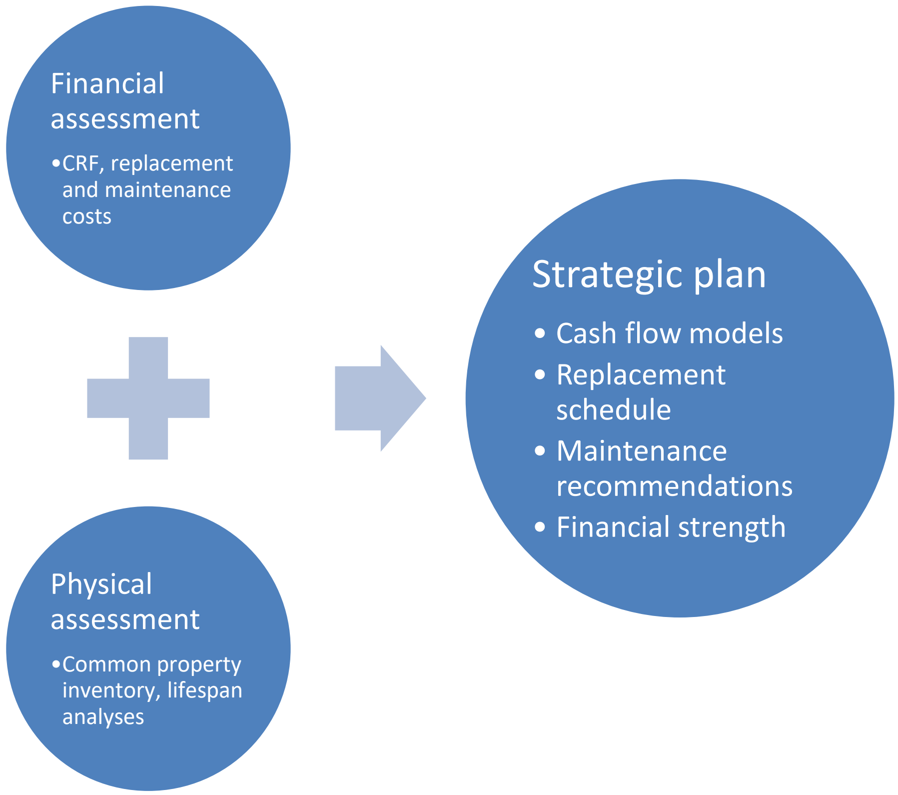

Figure 3: Formulation of the strategic plan

2.1 Assumptions and Limitations

This report contains recommendations based on information available for our review at the time of preparation. This is not a certification of compliance with past or present regulations. This depreciation report is to be read in its entirety and as a whole. No portion of this report can be severed or read independently of the other portions.

The work underlying this report was, by agreement with your strata council and in compliance with the provisions of the Act and Regulation, of limited scope. Given the constraints of the study, nature of building structures, future economic trends and a multitude of factors, there will always be uncertainty with respect to the assumptions underlying the remaining useful life of common property components, projected future expenditures, inflation and return on investments. This report cannot, and does not eliminate uncertainty regarding existing, or future defects in the common property, cost variations, unpredictable hazards, or losses in connection with the property.

Neither physical testing nor verification of conformance with design parameters or building codes were performed, unless specifically noted. Given the limitations of the physical study undertaken, only conditions visibly apparent during examination of a representative sample of components have been considered in this report.

Only specific information identified below has been reviewed. Absolute Building Science Strata Engineering (Strata Engineering) is not obligated to identify mistakes, or insufficiencies in the information obtained from the various sources or to verify the accuracy of the information.

The depreciation report estimates are subjective and are provided for approximate budgeting purposes only. The report should only be relied upon for general guidance and planning of the Strata Corporation. The figures are calculated based on our educated understanding of life cycle of building components and comparative analyses of similar properties over time. Accurate replacement costs for building components can only be obtained after proper design and tendering processes, with scopes of work established and contractors' obligations identified. The estimated time frame for undertaking replacement or maintenance work represents our opinion at the time of report preparation and may vary based on real-time conditions. Failure of an item, or an optimum repair or replacement process, may vary from our estimates. Additional engineering investigations are required for more certainty in establishing the scope of work and replacement requirements.

In issuing this report, Strata Engineering does not assume any of the duties, or liabilities of the original designers, builders or owners of the subject property. Owners, prospective purchasers, tenants, or others who use, or rely on the contents of this report, do so with the understanding that Strata Engineering cannot be held liable for damages which may be suffered with respect to the purchase, ownership, or use of the subject property.

2.2 Physical Assessment

2.2.1 Physical Inspection

A site visit was performed by Herman Kwok on November 28, 2018 at 565 Smithe Street in Vancouver, BC.

2.2.2 Documentation Review

The following documents were reviewed upon availability from the Strata Corporation:

- Strata plans
- Balance sheet (August 2018)
- AGM & Council Meeting minutes (2017-2018)
- RDH Enclosure Maintenance and Renewals Plan (2010)

2.2.3 *Inspection of Common Properties*

2.2.3.1 Common Property Classification

Within this report, we classified the common properties assets according to the Uniformat II[10] system, specified by the National Institute of Standards and Technology. The Uniformat II system is organized into seven major building component divisions, with a letter assigned to each specific division. The building components inspected are classified into the following divisions[11] (examples of such components are indicated below):

1. ***Substructure:*** Slab on grade, underground garage and basement structures
2. ***Shell:*** Roof construction, exterior walls, exterior windows, balconies etc.
3. ***Interiors:*** Wall finishes, floor finishes, stairs, partitions etc.
4. ***Services:*** Elevators and lifts, HVAC, fire protection etc.
5. ***Equipment and furnishings:*** Commercial, institutional equipment, furniture etc.
6. ***Special construction and demolition:*** Special structures, integrated construction, special facilities etc.
7. ***Site improvements:*** Paving, landscaping, sewers etc.

2.2.3.2 Reserve Component Inventory

The reserve component inventory was compiled following the inspection and included in Section 3.2. It lists all common properties inspected, along with their quantities and life cycle indices.

2.2.4 *Remaining Useful Life Estimation*

The method of estimating the remaining useful life of common properties first necessitates the determination of their physical condition. The chronological age of any asset may not equate to its effective age. Some assets' lifetimes may have been prolonged by continued maintenance whereas others might have undergone rapid deterioration due to unforeseen circumstances or neglect.

In this depreciation report, the effective age of a common property is estimated via documentation review, discussion with facility representatives, and visual inspection. The total useful life is estimated based on industry standards of comparative improvements. The remaining useful life is thus represented by the following equation:

$$Remaining\ useful\ life\ =\ Estimated\ useful\ life\ -\ Effective\ age$$

[10] ASTM Uniformat II for Building Elements (E1557-97)

[11] Components belonging to certain divisions may not be inspected due to accessibility issues.

No destructive testing was carried out on any of the common properties, nor were the common properties disassembled or subjected to confirmation of functionality.

2.3 Financial Assessment

Over the life of every building, owners contribute towards operating, maintenance, and renewal costs of capital assets. Occasionally, more comprehensive rehabilitation costs are also incurred.

The financial assessment identifies the following:

- The current replacement costs of the common properties and their future replacement costs;
- The status of the current CRF balance and how it is impacted by ongoing CRF requirements; and
- The ability of the current budget to meet major maintenance renewal needs.

This depreciation report is primarily concerned with costs of building upkeep. Expenditures such as legal consultation fees and unforeseen emergency expenses are not included.

2.3.1 Future Replacement Cost Estimation

The future replacement cost estimation is performed using the current replacement cost compounded by an average inflation rate across the remaining useful life of the components. Replacement costs were estimated based on the cost data service provided by RSMeans Online[12] and our database collected over time. Inflation measurement in this depreciation report is based on construction indices rather than the widely quoted Consumer Price Index (CPI), which measures consumer goods. An average inflation rate was calculated based on changes in construction price index over a period of 25 years from 1990 to 2015. From the analysis, the inflation rate was found to be 2.6%.

2.3.2 Projected Cash Flow

The projected cash flow predicts how well the CRF would be able to cover necessary replacement costs over the next 30 years. There are five cash flow models presented here for your reference.

> ***Model 1 (Current investment schedule):*** This model maintains the current method of funding the CRF and estimates future special levies based on current CRF contributions. This method has the effect of deferring the funding of replacement costs for your common properties to the date when such replacement is required, resulting in larger special levies and greater future financial burden.

[12] www.rsmeansonline.com

Model 2 (Early investment schedule): This model increases current CRF contributions rapidly over the next three years, such that no special levies will be required over the 30-year projection. Depending on interest rates, this method potentially allows for the greatest investment returns, maximizing financial strength.

Model 3 (Delayed investment schedule): This model increases current CRF contributions over a period of five years, such that no special levies will be required over the 30-year projection. This method still allows for a reasonable return on investment while maintaining financial strength.

Model 4 (Partially funded investment schedule – capped increase): This model increases current CRF contributions by a maximum of 200% in the next year. For the remaining 30-year projection, CRF contributions are increased annually by the current inflation rate.

Model 5 (Partially funded investment schedule – capped special levies): This model increases current CRF contributions over the next three years, such that the sum of all special levies for the 30-year projection is kept at $5,550,000 or less. For the remaining 30-year projection, CRF contributions are increased annually by the current inflation rate.

2.3.2.1 Current CRF Levels

Current CRF level is defined as the opening balance of the reserve account beginning the year in which the study took place. In this case, it is $358,380 beginning in September 2018. In cases where reserve accounts are unavailable, the current CRF level is calculated by summing the total amount of funds set aside for major replacement or repairs beginning the year during which the inspection is performed.

2.3.2.2 Special Levies

The Strata Corporation may raise money from the owners by means of a special levy for various reasons, the primary reason being that the CRF is insufficient to cover the Strata Corporation's existing or anticipated expenditures. A special levy must be approved by a resolution passed by a minimum 3/4 vote at an annual or special general meeting.

Within this report, special levies are calculated as the amount of money required to cover the shortfalls in the CRF after anticipated expenditures.

2.3.2.3 Investment Returns

For this report, the Strata Corporation's funds are placed with a savings account. Hence, investment returns are estimated to be 1.00% based on historical rates and current rates.

2.3.2.4 CRF Contributions

CRF contributions with all our cash flow models except the current model are set based on different calculations tailored to different scenarios.

2.3.2.5 Calculations

The closing balance for a given year was calculated as follows:

$$\begin{aligned}&Closing\ balance\\&\quad = (CRF\ opening\ balance + CRF\ contributions + investment\ returns\\&\quad + Special\ levies) - Replacement\ expenses\end{aligned}$$

2.3.3 Financial Strength

For this depreciation report, the analysis is performed primarily based upon the CRF of the Strata Corporation, and not accounting for operating expenses that are paid through the operating fund. Thus, the financial strength of the Strata Corporation is the proportion of replacement or maintenance expenses that can be covered by the CRF contributions and investment returns. The optimal CRF with maximized financial strength would be able to cover all expenses at any given time, resulting in no special levies over a specified period.

2.3.3.1 Reserve Requirements

Insufficiency in this depreciation report is determined by the percent of replacement expenses covered by special levies, given by the following formula:

$$\%\ Insufficiency = \frac{Special\ levies}{Replacement\ expenses} \times 100\%$$

Financial strength in this depreciation report is expressed in the following formula:

$$\%\ Financial\ strength = 100\% - \frac{Total\ special\ levies}{Total\ replacement\ expenses}$$

Hence, 100% strength means that no special levies are needed (insufficiency is 0%).

3. Results

3.1 Building Information

The building investigated was a 146-unit high-rise complex built in 2009 for residential purposes. The key statistics of the building are presented in Table 1 below.

Table 1: Property statistics

Vita at Symphony	
Municipal Address:	565 Smithe Street, Vancouver, BC
Legal description	Strata Plan BCS3550
Real property type	Concrete-frame high-rise complex
Units	146
Year of Construction	2009
Designated land use	Multi-family residential use
Reserve fund components	Total of 68 components: 3 Substructure, 18 Shell, 12 Interiors, 27 Services, 3 Equipment and furnishings, 5 Site improvements.

3.2 Reserve Components Inventory

The identified components were grouped into major categories according to the Uniformat II system. The schedule of common property components can be found on the next page. Detailed descriptions can be found in Appendix B (reserve component data sheets) and the major replacement schedule regarding the components can be found in Appendix D. The reserve components included within this budget is listed in the following table.

Table 2: Reserve Components

Components	Estimated Useful Life (years)	Effective Age (years)	Remaining Useful Life (years)
Suspended slab	15	9	6
Underground parkade structure	Building life	9	Building life
Parkade Roof Deck	35	9	26
Balcony flooring	15	9	6
Exterior stairs	Building life	9	Building life
Cladding – Metal Panels	Contingency	9	Contingency
Cladding – Brick & Granite Veneer	Building life	9	Building life
Cladding – Exposed Concrete	Building life	9	Building life
Balcony & terrace railings	30	9	21
Exterior painting	15	9	6
Skylights	30	9	21
Exterior windows	Contingency	9	Contingency
Exterior windows	Contingency	7	Contingency
Caulking and weather-stripping	15	9	6
Entrance doors	30	9	21
Egress doors	Contingency	9	Contingency
Garage doors	20	9	11
Patio and balcony doors	Contingency	9	Contingency
Roofing	30	9	21
Roofing	30	9	21
Connected Structures	Building life	9	Building life
Rooms in common areas – Lobby	15	9	6
Rooms in common areas – Lounge	20	9	11
Rooms in common areas – Exercise Room	20	9	11
Rooms in common areas – Sunroom	20	9	11
Rooms in common areas – Children's Playroom	20	9	11
Rooms in common areas – Service & Storage Rooms	Building life	9	Building life
Rooms in common areas - Washrooms	15	9	6
Service doors	30	9	21
Unit entry doors	35	9	26
Interior stairs	Building life	9	Building life
Wall finishes	15	9	6
Floor finishes	15	9	6
Vertical transportation – Traction Machines	30	9	21
Vertical transportation – Cab Finish	30	9	21
Vertical transportation – Interior Finish	30	9	21
Plumbing system – Domestic Piping	35	9	26

Components	Estimated Useful Life (years)	Effective Age (years)	Remaining Useful Life (years)
Plumbing system – Hot Water Boilers	**30**	**9**	**21**
Plumbing system – Domestic Water Heater	**15**	**9**	**6**
Plumbing system – Domestic Hot Water Storage	15	9	6
Plumbing system – Pumps & Circulators	Contingency	9	Contingency
Plumbing system – Sanitary Drainage	Building life	9	Contingency
Plumbing system – Storm Water Drainage	Building life	9	Contingency
Plumbing system – Sum Pumps	Contingency	9	Contingency
Whirlpool equipment	15	9	6
HVAC systems – MUA	20	9	11
HVAC systems – Parkade Exhaust Fans	Contingency	9	Contingency
HVAC systems – Service Fans	Building life	9	Contingency
Heating generating system – Baseboard Heaters	Contingency	9	Contingency
Heating generating system – Heating Pumps	15	9	6
Natural gas distribution system	Building life	9	Building life
Air conditioning	15	9	6
Wet and dry sprinkler systems	Building life	9	Building life
Electrical distribution – High-Voltage Substation	Contingency	9	Contingency
Electrical distribution – Raceways & Cabling	Contingency	9	Contingency
Emergency generator	Contingency	9	Contingency
Site utilities	Contingency	9	Contingency
Fire Protection and Security Systems – Fire Alarm Panel	25	9	16
Fire Protection and Security Systems – Pump Package	20	9	11
Fire Protection and Security Systems – Lighting	Contingency	9	Contingency
Fire Protection and Security Systems – Security Cameras	15	9	6
Lighting fixtures – Corridors	20	9	11
Lighting fixtures – Parkade	20	9	11
Lighting fixtures – Exterior	Contingency	9	Contingency
Outdoor amenities – Playground	Contingency	9	Contingency
Water features – Irrigation	Contingency	9	Contingency
Exterior pedestrian walkway – Concrete Walkways	Building life	9	Building life
Landscaping - Property Signage	Contingency	9	Contingency
Site lighting – External Landscaping Lighting	Contingency	9	Contingency

3.3 Thirty-Year Cash Flow Models

Cash flow models allow you to tailor your budget to suit your own needs or financial abilities. We have provided five distinct cash flow models for the estimation of CRF contributions and special levies not accounting for preventive maintenance. In each of these models, calculations are based on the 2013 CRF opening balance of $358,380. In order to satisfy legal requirements, special levies are assessed to ensure the minimum closing balance of the CRF is 25% of the operating budget, or where there is a shortfall in covering replacement or repair expenses. In this case, the operating budget is $635,682 for 2018-2019 and in each subsequent year, the operating budget is estimated to increase 2.0% to account for inflation.

3.3.1 Model 1: Current Investment Schedule

In the current investment schedule, an annual CRF contribution $60,000 (as noted in the annual budget for 2018) is kept constant over the 30-year projection. Over the 30-year projection, six special levies, ranging from $7,652 to $4,531,904 are expected to be required to cover all replacement expenses. An investment return of $110,230 is obtained.

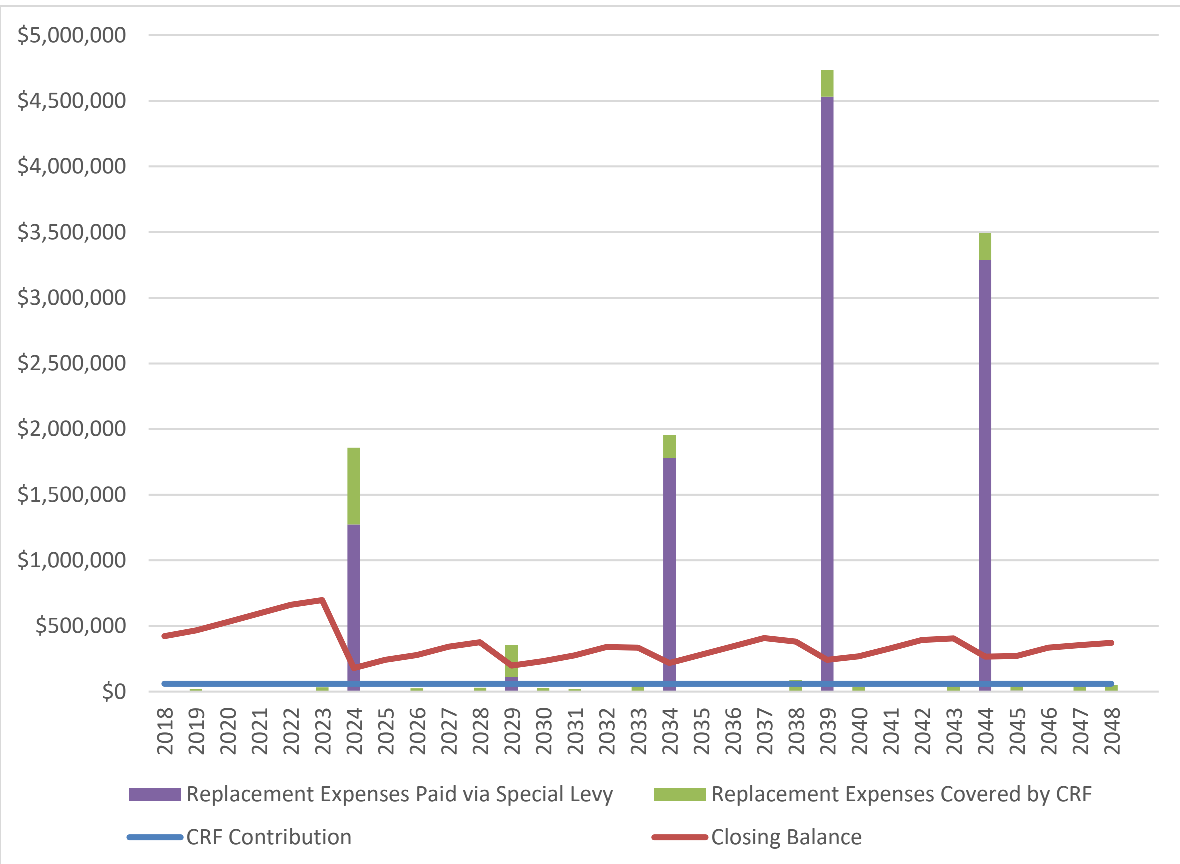

Figure 4: 30-year projection of CRF cash flow using current investment schedule

Table 3: Cash flow table for CRF with current investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2018	$358,380	$60,000		$3,583.80	$0	$0	$421,964
2019	$421,964	$60,000	0%	$4,220	$20,520	$0	$465,663
2020	$465,663	$60,000	0%	$4,657	$0	$0	$530,320
2021	$530,320	$60,000	0%	$5,303	$0	$0	$595,623
2022	$595,623	$60,000	0%	$5,956	$0	$0	$661,580
2023	$661,580	$60,000	0%	$6,616	$31,266	$0	$696,930
2024	$696,930	$60,000	0%	$6,969	$1,857,940	$1,273,012	$178,970
2025	$178,970	$60,000	0%	$1,790	$0	$0	$240,760
2026	$240,760	$60,000	0%	$2,408	$24,559	$0	$278,609
2027	$278,609	$60,000	0%	$2,786	$0	$0	$341,395
2028	$341,395	$60,000	0%	$3,414	$29,084	$0	$375,725
2029	$375,725	$60,000	0%	$3,757	$354,349	$112,465	$197,598
2030	$197,598	$60,000	0%	$1,976	$27,214	$0	$232,359
2031	$232,359	$60,000	0%	$2,324	$17,451	$0	$277,232
2032	$277,232	$60,000	0%	$2,772	$0	$0	$340,004
2033	$340,004	$60,000	0%	$3,400	$69,808	$0	$333,596
2034	$333,596	$60,000	0%	$3,336	$1,956,023	$1,777,254	$218,164
2035	$218,164	$60,000	0%	$2,182	$0	$0	$280,345
2036	$280,345	$60,000	0%	$2,803	$0	$0	$343,149
2037	$343,149	$60,000	0%	$3,431	$0	$0	$406,580
2038	$406,580	$60,000	0%	$4,066	$88,557	$0	$382,089
2039	$382,089	$60,000	0%	$3,821	$4,736,944	$4,531,904	$240,870
2040	$240,870	$60,000	0%	$2,409	$35,178	$0	$268,101
2041	$268,101	$60,000	0%	$2,681	$0	$0	$330,782
2042	$330,782	$60,000	0%	$3,308	$0	$0	$394,090
2043	$394,090	$60,000	0%	$3,941	$52,242	$0	$405,789
2044	$405,789	$60,000	0%	$4,058	$3,493,350	$3,289,443	$265,940
2045	$265,940	$60,000	0%	$2,659	$64,992	$7,652	$271,259
2046	$271,259	$60,000	0%	$2,713	$0	$0	$333,972
2047	$333,972	$60,000	0%	$3,340	$42,102	$0	$355,209
2048	$355,209	$60,000	0%	$3,552	$48,596	$0	$370,165

3.3.2 Model 2: Early Investment Schedule (Recommended)

In the early investment schedule, contributions to the initial opening balance in the CRF increase 105% per year over the next three years. Over the 30-year projection, no special levies are expected to be required. An investment return of $888,852 is obtained.

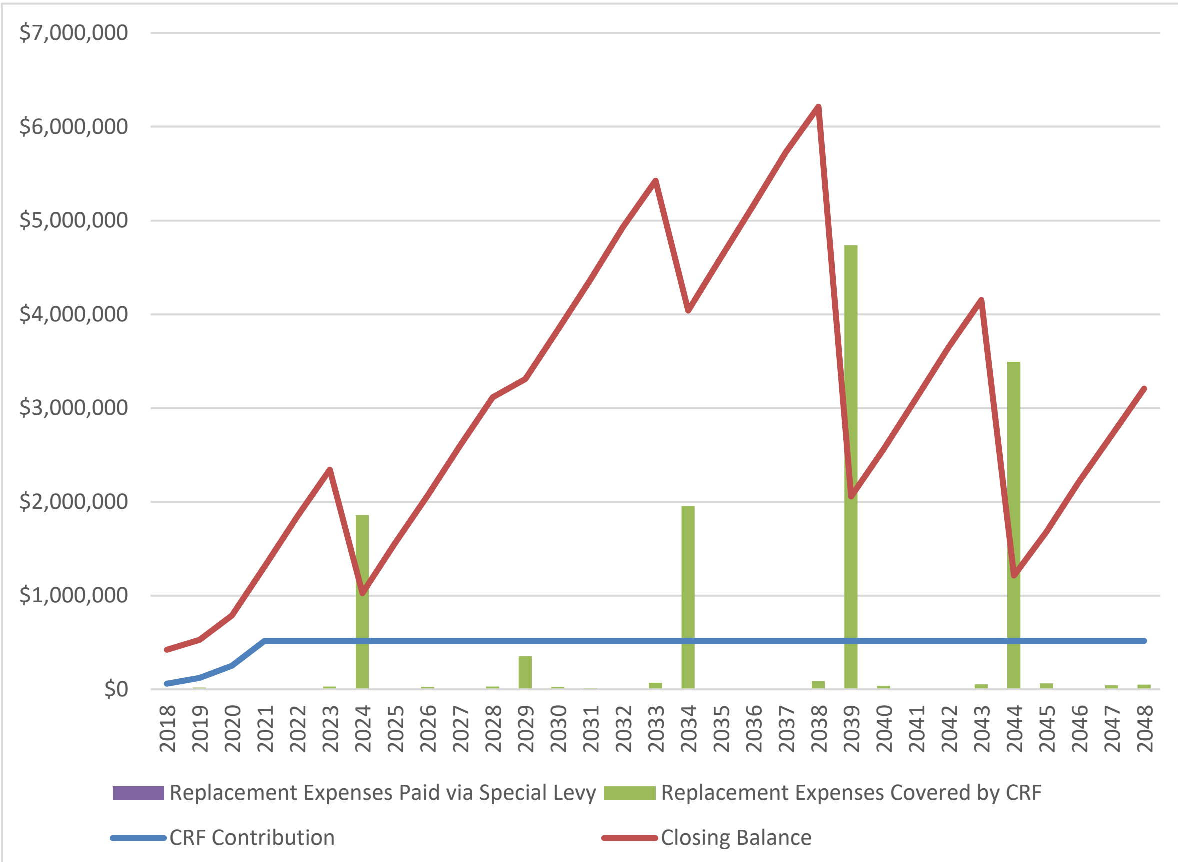

Figure 5: 30-year projection of CRF cash flow using early investment schedule

Table 4: Cash flow table for CRF with early investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2018	$358,380	$60,000		$3,583.80	$0	$0	$421,964
2019	$421,964	$123,000	105%	$4,220	$20,520	$0	$528,663
2020	$528,663	$252,150	105%	$5,287	$0	$0	$786,100
2021	$786,100	$516,908	105%	$7,861	$0	$0	$1,310,869
2022	$1,310,869	$516,908	0%	$13,109	$0	$0	$1,840,885
2023	$1,840,885	$516,908	0%	$18,409	$31,266	$0	$2,344,935
2024	$2,344,935	$516,908	0%	$23,449	$1,857,940	$0	$1,027,352
2025	$1,027,352	$516,908	0%	$10,274	$0	$0	$1,554,533
2026	$1,554,533	$516,908	0%	$15,545	$24,559	$0	$2,062,427
2027	$2,062,427	$516,908	0%	$20,624	$0	$0	$2,599,958
2028	$2,599,958	$516,908	0%	$26,000	$29,084	$0	$3,113,781
2029	$3,113,781	$516,908	0%	$31,138	$354,349	$0	$3,307,478
2030	$3,307,478	$516,908	0%	$33,075	$27,214	$0	$3,830,245
2031	$3,830,245	$516,908	0%	$38,302	$17,451	$0	$4,368,004
2032	$4,368,004	$516,908	0%	$43,680	$0	$0	$4,928,592
2033	$4,928,592	$516,908	0%	$49,286	$69,808	$0	$5,424,977
2034	$5,424,977	$516,908	0%	$54,250	$1,956,023	$0	$4,040,112
2035	$4,040,112	$516,908	0%	$40,401	$0	$0	$4,597,421
2036	$4,597,421	$516,908	0%	$45,974	$0	$0	$5,160,302
2037	$5,160,302	$516,908	0%	$51,603	$0	$0	$5,728,813
2038	$5,728,813	$516,908	0%	$57,288	$88,557	$0	$6,214,452
2039	$6,214,452	$516,908	0%	$62,145	$4,736,944	$0	$2,056,560
2040	$2,056,560	$516,908	0%	$20,566	$35,178	$0	$2,558,855
2041	$2,558,855	$516,908	0%	$25,589	$0	$0	$3,101,351
2042	$3,101,351	$516,908	0%	$31,014	$0	$0	$3,649,272
2043	$3,649,272	$516,908	0%	$36,493	$52,242	$0	$4,150,430
2044	$4,150,430	$516,908	0%	$41,504	$3,493,350	$0	$1,215,492
2045	$1,215,492	$516,908	0%	$12,155	$64,992	$0	$1,679,562
2046	$1,679,562	$516,908	0%	$16,796	$0	$0	$2,213,265
2047	$2,213,265	$516,908	0%	$22,133	$42,102	$0	$2,710,203
2048	$2,710,203	$516,908	0%	$27,102	$48,596	$0	$3,205,617

3.3.3 Model 3: Delayed Investment Schedule

In the delayed investment schedule, the CRF contributions to an initial opening balance of $358,380 are phased in over a period of five years at increases of 55% per year. Over the 30-year projection, no special levies are expected to be required. An investment return of $773,421 is obtained.

Figure 6: 30-year projection of CRF cash flow using delayed investment schedule

Table 5: Cash flow table for CRF with delayed investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2018	$358,380	$60,000		$3,583.80	$0	$0	$421,964
2019	$421,964	$93,000	55%	$4,220	$20,520	$0	$498,663
2020	$498,663	$144,150	55%	$4,987	$0	$0	$647,800
2021	$647,800	$223,433	55%	$6,478	$0	$0	$877,711
2022	$877,711	$346,320	55%	$8,777	$0	$0	$1,232,808
2023	$1,232,808	$536,797	55%	$12,328	$31,266	$0	$1,750,667
2024	$1,750,667	$536,797	0%	$17,507	$1,857,940	$0	$447,030
2025	$447,030	$536,797	0%	$4,470	$0	$0	$988,297
2026	$988,297	$536,797	0%	$9,883	$24,559	$0	$1,510,417
2027	$1,510,417	$536,797	0%	$15,104	$0	$0	$2,062,318
2028	$2,062,318	$536,797	0%	$20,623	$29,084	$0	$2,590,654
2029	$2,590,654	$536,797	0%	$25,907	$354,349	$0	$2,799,008
2030	$2,799,008	$536,797	0%	$27,990	$27,214	$0	$3,336,580
2031	$3,336,580	$536,797	0%	$33,366	$17,451	$0	$3,889,291
2032	$3,889,291	$536,797	0%	$38,893	$0	$0	$4,464,981
2033	$4,464,981	$536,797	0%	$44,650	$69,808	$0	$4,976,619
2034	$4,976,619	$536,797	0%	$49,766	$1,956,023	$0	$3,607,159
2035	$3,607,159	$536,797	0%	$36,072	$0	$0	$4,180,028
2036	$4,180,028	$536,797	0%	$41,800	$0	$0	$4,758,624
2037	$4,758,624	$536,797	0%	$47,586	$0	$0	$5,343,007
2038	$5,343,007	$536,797	0%	$53,430	$88,557	$0	$5,844,677
2039	$5,844,677	$536,797	0%	$58,447	$4,736,944	$0	$1,702,976
2040	$1,702,976	$536,797	0%	$17,030	$35,178	$0	$2,221,624
2041	$2,221,624	$536,797	0%	$22,216	$0	$0	$2,780,637
2042	$2,780,637	$536,797	0%	$27,806	$0	$0	$3,345,240
2043	$3,345,240	$536,797	0%	$33,452	$52,242	$0	$3,863,248
2044	$3,863,248	$536,797	0%	$38,632	$3,493,350	$0	$945,327
2045	$945,327	$536,797	0%	$9,453	$64,992	$0	$1,426,584
2046	$1,426,584	$536,797	0%	$14,266	$0	$0	$1,977,647
2047	$1,977,647	$536,797	0%	$19,776	$42,102	$0	$2,492,118
2048	$2,492,118	$536,797	0%	$24,921	$48,596	$0	$3,005,239

3.3.4 Model 4: Partially Funded Investment Schedule (Capped Increase)

In the capped increase investment schedule, contributions to the initial CRF opening balance are kept at a maximum increase of 200% over the next year, then increased by the current inflation rate for the remaining years. Over the 30-year projection, three special levies, ranging from $55,966 to $3,380,342, are expected to be required. An investment return of $265,693 is obtained.

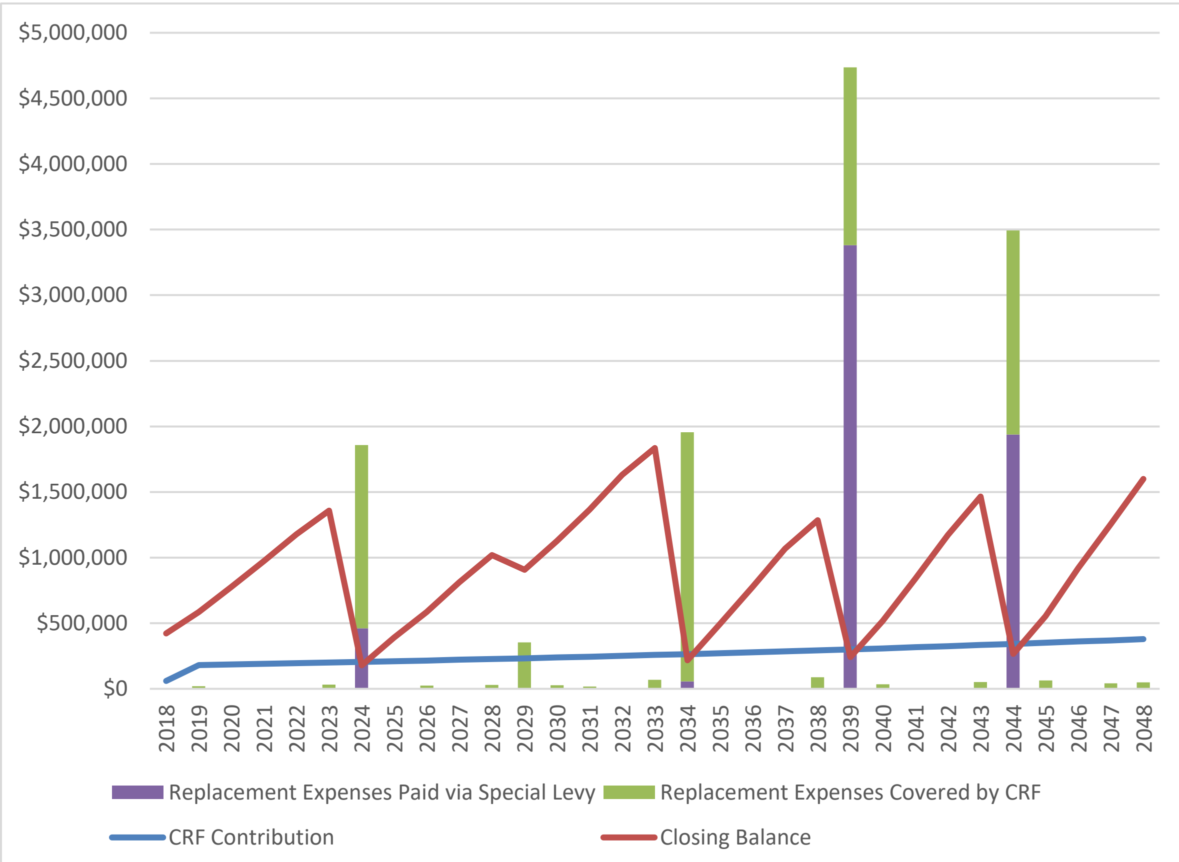

Figure 7: 30-year projection of CRF cash flow using capped increase investment schedule

Table 6: Cash flow table for CRF with capped increase investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2018	$358,380	$60,000		$3,583.80	$0	$0	$421,964
2019	$421,964	$180,000	200%	$4,220	$20,520	$0	$585,663
2020	$585,663	$184,680	2.6%	$5,857	$0	$0	$776,200
2021	$776,200	$189,482	2.6%	$7,762	$0	$0	$973,444
2022	$973,444	$194,408	2.6%	$9,734	$0	$0	$1,177,586
2023	$1,177,586	$199,463	2.6%	$11,776	$31,266	$0	$1,357,559
2024	$1,357,559	$204,649	2.6%	$13,576	$1,857,940	$461,127	$178,970
2025	$178,970	$209,970	2.6%	$1,790	$0	$0	$390,730
2026	$390,730	$215,429	2.6%	$3,907	$24,559	$0	$585,507
2027	$585,507	$221,030	2.6%	$5,855	$0	$0	$812,392
2028	$812,392	$226,777	2.6%	$8,124	$29,084	$0	$1,018,209
2029	$1,018,209	$232,673	2.6%	$10,182	$354,349	$0	$906,715
2030	$906,715	$238,723	2.6%	$9,067	$27,214	$0	$1,127,290
2031	$1,127,290	$244,929	2.6%	$11,273	$17,451	$0	$1,366,041
2032	$1,366,041	$251,298	2.6%	$13,660	$0	$0	$1,630,999
2033	$1,630,999	$257,831	2.6%	$16,310	$69,808	$0	$1,835,333
2034	$1,835,333	$264,535	2.6%	$18,353	$1,956,023	$55,966	$218,164
2035	$218,164	$271,413	2.6%	$2,182	$0	$0	$491,758
2036	$491,758	$278,470	2.6%	$4,918	$0	$0	$775,145
2037	$775,145	$285,710	2.6%	$7,751	$0	$0	$1,068,606
2038	$1,068,606	$293,138	2.6%	$10,686	$88,557	$0	$1,283,874
2039	$1,283,874	$300,760	2.6%	$12,839	$4,736,944	$3,380,342	$240,870
2040	$240,870	$308,580	2.6%	$2,409	$35,178	$0	$516,681
2041	$516,681	$316,603	2.6%	$5,167	$0	$0	$838,450
2042	$838,450	$324,834	2.6%	$8,384	$0	$0	$1,171,669
2043	$1,171,669	$333,280	2.6%	$11,717	$52,242	$0	$1,464,424
2044	$1,464,424	$341,945	2.6%	$14,644	$3,493,350	$1,938,277	$265,940
2045	$265,940	$350,836	2.6%	$2,659	$64,992	$0	$554,443
2046	$554,443	$359,958	2.6%	$5,544	$0	$0	$919,945
2047	$919,945	$369,316	2.6%	$9,199	$42,102	$0	$1,256,359
2048	$1,256,359	$378,919	2.6%	$12,564	$48,596	$0	$1,599,245

3.3.5 Model 5: Partially Funded Investment Schedule (Capped Special Levies)

In the capped special levies investment schedule, contributions to the initial CRF opening balance are increased 50% over the next three years such that the sum of all special levies over the 30-year projection is kept at $5,550,000 or less. For the remaining years, the annual CRF contributions are increased at the current inflation rate. Over the 30-year projection, three special levies, ranging from $552,476 to $3,160,860 are expected to be required. An investment return of $278,436 is obtained.

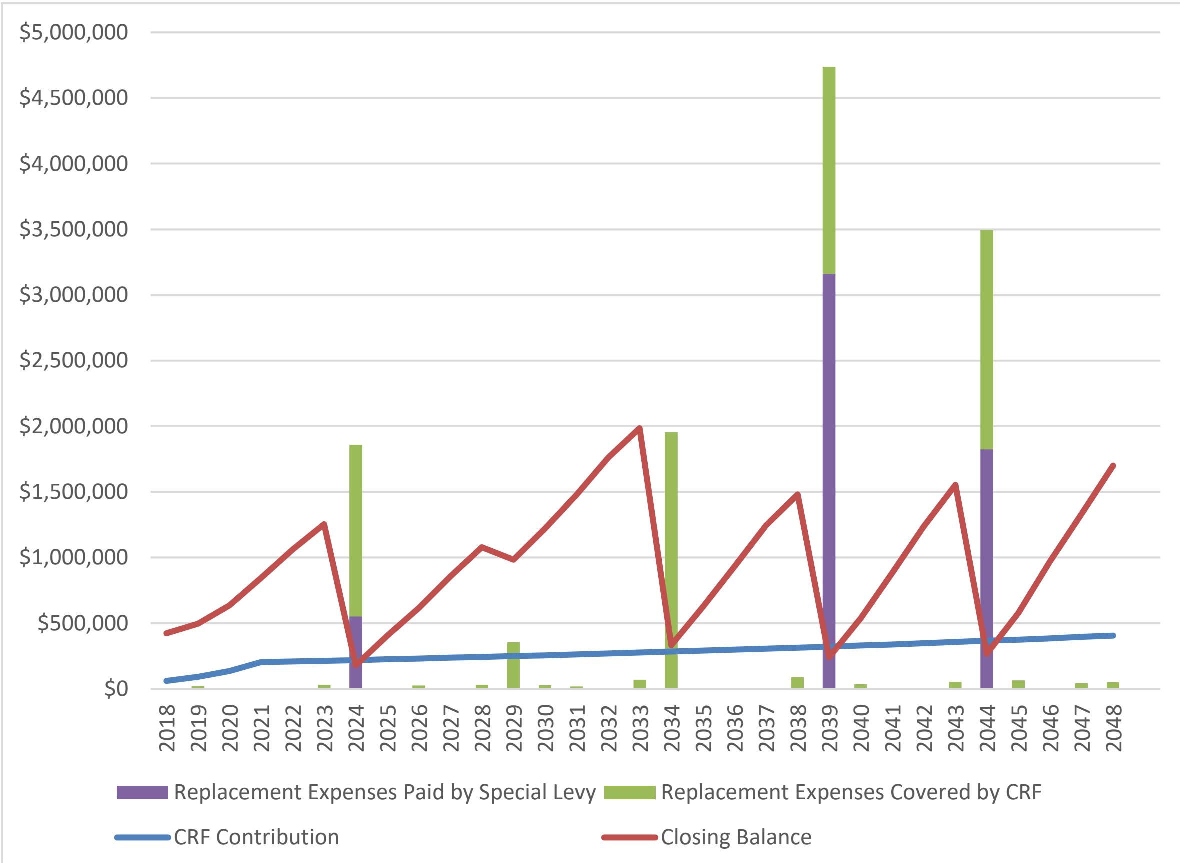

Figure 8: 30-year projection of CRF cash flow using capped special levies investment schedule

Table 7: Cash flow table for CRF with partially funded investment schedule

Year	Opening balance	CRF contributions	Contribution changes	Investment returns	Replacement expenses	Special levies	Closing balance
2018	$358,380	$60,000		$3,583.80	$0	$0	$421,964
2019	$421,964	$90,000	50%	$4,220	$20,520	$0	$495,663
2020	$495,663	$135,000	50%	$4,957	$0	$0	$635,620
2021	$635,620	$202,500	50%	$6,356	$0	$0	$844,476
2022	$844,476	$207,765	2.6%	$8,445	$0	$0	$1,060,686
2023	$1,060,686	$213,167	2.6%	$10,607	$31,266	$0	$1,253,194
2024	$1,253,194	$218,709	2.6%	$12,532	$1,857,940	$552,476	$178,970
2025	$178,970	$224,396	2.6%	$1,790	$0	$0	$405,156
2026	$405,156	$230,230	2.6%	$4,052	$24,559	$0	$614,878
2027	$614,878	$236,216	2.6%	$6,149	$0	$0	$857,243
2028	$857,243	$242,358	2.6%	$8,572	$29,084	$0	$1,079,089
2029	$1,079,089	$248,659	2.6%	$10,791	$354,349	$0	$984,189
2030	$984,189	$255,124	2.6%	$9,842	$27,214	$0	$1,221,941
2031	$1,221,941	$261,757	2.6%	$12,219	$17,451	$0	$1,478,466
2032	$1,478,466	$268,563	2.6%	$14,785	$0	$0	$1,761,814
2033	$1,761,814	$275,546	2.6%	$17,618	$69,808	$0	$1,985,170
2034	$1,985,170	$282,710	2.6%	$19,852	$1,956,023	$0	$331,709
2035	$331,709	$290,060	2.6%	$3,317	$0	$0	$625,086
2036	$625,086	$297,602	2.6%	$6,251	$0	$0	$928,938
2037	$928,938	$305,339	2.6%	$9,289	$0	$0	$1,243,567
2038	$1,243,567	$313,278	2.6%	$12,436	$88,557	$0	$1,480,724
2039	$1,480,724	$321,423	2.6%	$14,807	$4,736,944	$3,160,860	$240,870
2040	$240,870	$329,780	2.6%	$2,409	$35,178	$0	$537,882
2041	$537,882	$338,355	2.6%	$5,379	$0	$0	$881,615
2042	$881,615	$347,152	2.6%	$8,816	$0	$0	$1,237,583
2043	$1,237,583	$356,178	2.6%	$12,376	$52,242	$0	$1,553,895
2044	$1,553,895	$365,439	2.6%	$15,539	$3,493,350	$1,824,418	$265,940
2045	$265,940	$374,940	2.6%	$2,659	$64,992	$0	$578,547
2046	$578,547	$384,688	2.6%	$5,785	$0	$0	$969,021
2047	$969,021	$394,690	2.6%	$9,690	$42,102	$0	$1,331,300
2048	$1,331,300	$404,952	2.6%	$13,313	$48,596	$0	$1,700,969

4. Analysis

4.1 Investment Schedule Comparison

Apart from the current investment schedule, all other cash flow models propose increases to the CRF contributions in the next few years (in addition to matching inflation), eliminating or reducing special levies. Model 2 (the early investment schedule) and Model 3 (the delayed investment schedule) distinguish themselves in that no special levies will be required over the 30-year projection due to larger increases in CRF contributions. The figure below illustrates the outcome of each investment schedule (without preventive maintenance), along with the changes in CRF contributions.

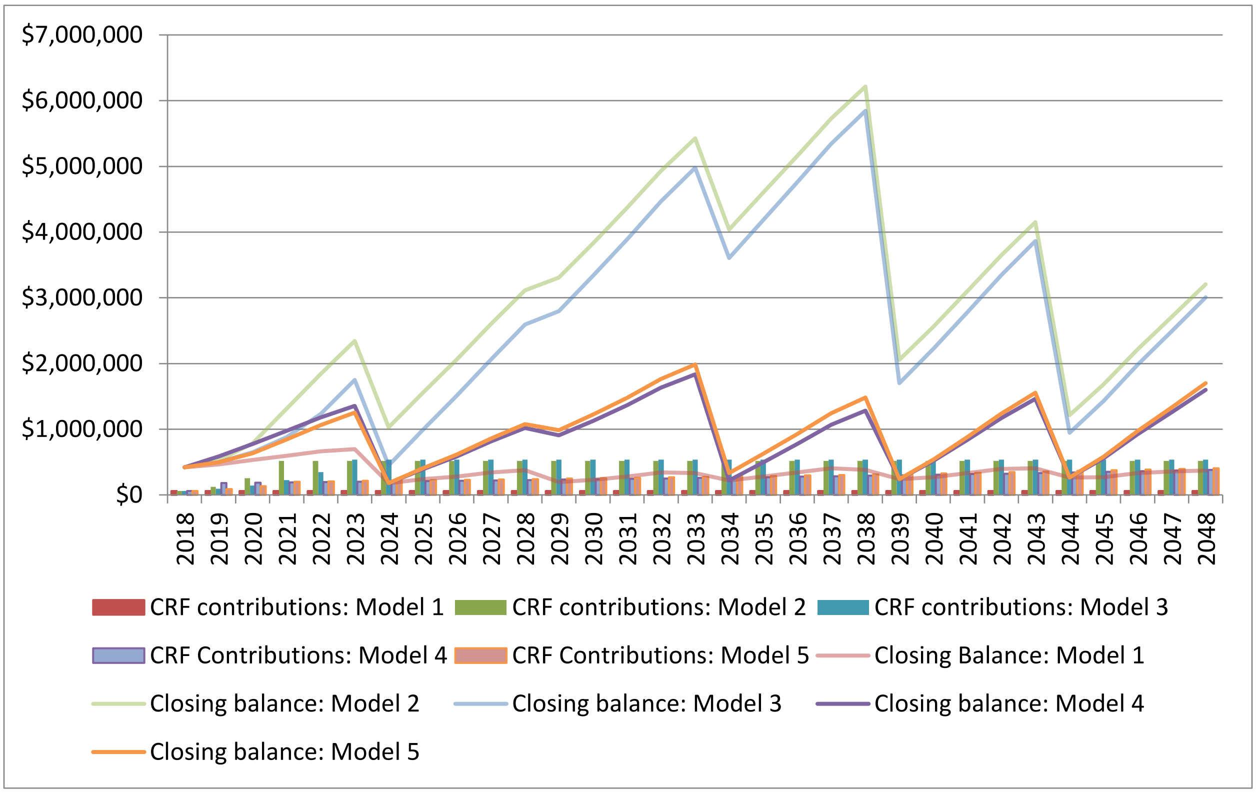

Figure 9: Comparison of CRF contributions and closing balances

Table 8: Summary of investment schedules

	Model 1: Current Model	Model 2: Early investment	Model 3: Delayed investment	Model 4: Capped Increase	Model 5: Capped Special Levies
Analysis for first 10 years					
Current CRF balance	$358,380	$358,380	$358,380	$358,380	$358,380
CRF contributions	$600,000	$4,053,503	$3,550,886	$1,859,110	$1,817,983
Investment returns	$44,288	$122,361	$87,337	$68,060	$62,690
Special levies	$1,273,012	$0	$0	$461,127	$552,476
Replacement expenses	$1,934,285	$1,934,285	$1,934,285	$1,934,285	$1,934,285
Financial strength	34%	100%	100%	76%	71%
Insufficiency	66%	0%	0%	24%	29%
Analysis for final 20 years					
Opening balance in year 11	$341,395	$2,599,958	$2,062,318	$812,392	$857,243
CRF contributions	$1,260,000	$10,855,058	$11,272,728	$6,230,525	$6,658,593
Investment returns	$65,942	$766,491	$686,083	$197,633	$215,746
Special levies	$9,718,719	$0	$0	$5,374,585	$4,985,277
Replacement expenses	$11,015,891	$11,015,891	$11,015,891	$11,015,891	$11,015,891
Financial strength	12%	100%	100%	51%	55%
Insufficiency	88%	0%	0%	49%	45%
Overall analysis (30-yr course)					
Opening balance in year 1	$358,380	$358,380	$358,380	$358,380	$358,380
CRF contributions	$1,860,000	$14,908,560	$14,823,614	$8,089,635	$8,476,575
Investment returns	$110,230	$888,852	$773,421	$265,693	$278,436
Special levies	$10,991,730	$0	$0	$5,835,712	$5,537,753
Replacement expenses	$12,950,176	$12,950,176	$12,950,176	$12,950,176	$12,950,176
Financial strength	15%	100%	100%	55%	57%
Insufficiency	85%	0%	0%	45%	43%
Closing balance in year 30	$370,165	$3,205,617	$3,005,239	$1,599,245	$1,700,969

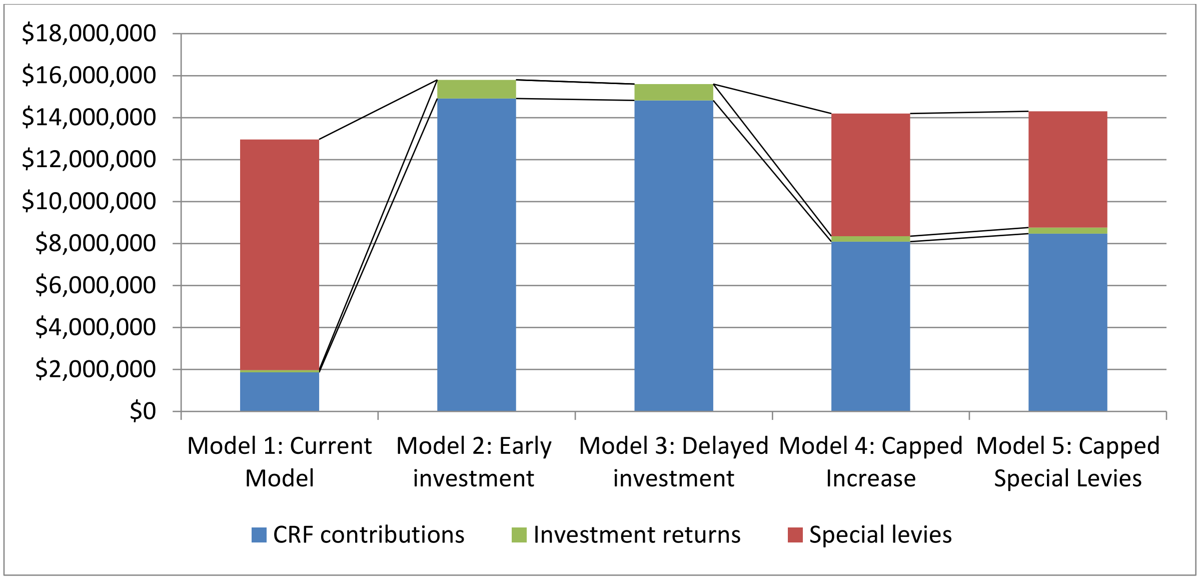

Figure 10: Comparison of financial models over 30-year projection

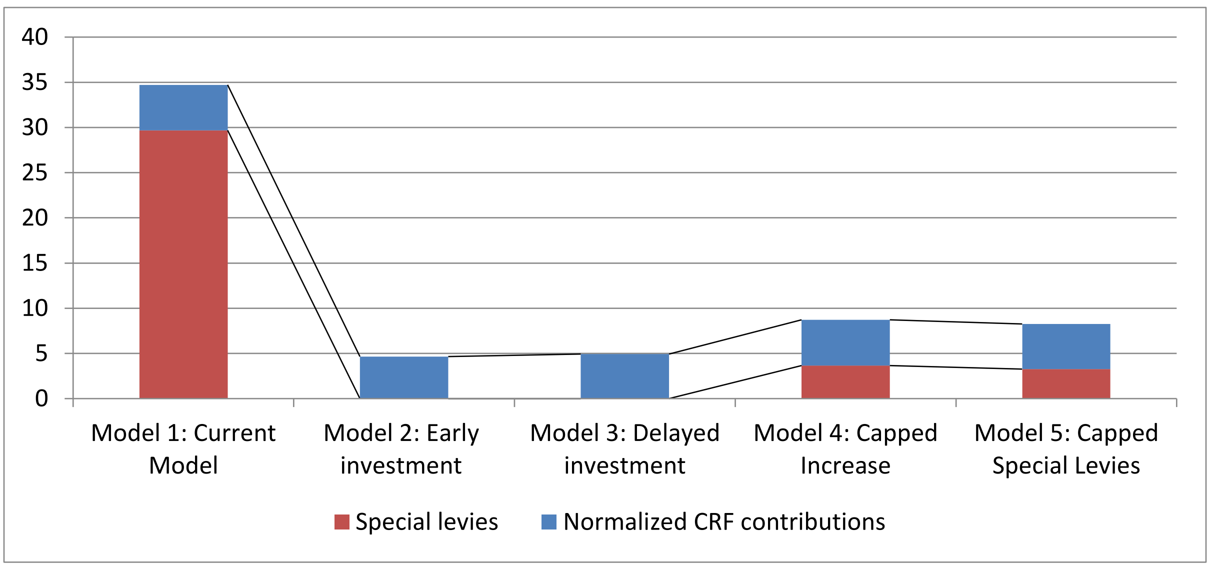

Figure 11: Normalized contributions

From Table 8 and Figures 9, 10, and 11 above, it is apparent that Model 2, the early investment schedule, has the highest rate of investment returns after the 30-year projection, at $888,852. Though Model 2 requires a surge in CRF contributions over the next three years, the normalized contribution amount is still the lowest of all investment schedules (Figure 11). The normalized contribution expresses both CRF contributions and Special levies standardized with respect to their closing balance in 30 years.

5. Recommendations

Given the aforementioned scenarios, the adoption of Cash Flow Model 2, the early investment schedule, is recommended because it has the potential to lead to the greatest amount of investment returns. Investing in the CRF at the earliest possible time is recommended because a greater delay in investment may lead to lower potential income from investment returns.

However, depending on various characteristics of the Strata Corporation, the consideration of Cash Flow Model 2 may not be adequate. The inclusion of additional models allows for flexibility in planning, even as some may appear to forecast larger special levies with less drastic increases to CRF contributions. Although these investment models will potentially lead to lower investment returns compared to Model 2, they may be more viable in the near term.

All of the aforementioned models together illustrate the concept of reserve fund planning. Earlier investments in the CRF leads to greater offsets in replacement expenses due to the return on investment. Ultimately, CRF increases may need to be balanced against prospects of future levies due to practical considerations.

The analysis presented within a depreciation report accounts for the financial position of the Strata Corporation in isolation. The models are not intended to guide personal investment decisions and do not account for the financial circumstances of the owners. The models aim to bring greater predictability to the timing and cost for replacements such that the Strata Corporation may prioritize and prepare for the expenditures at that time.

If your Strata Corporation has any additional concerns about the investment schedule, please do not hesitate to contact Strata Engineering so that a more feasible and reasonable solution may be determined to suit your specific needs.

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Appendix A – Strata Property Act

[SBC 1998] CHAPTER 43

Part 6 — Finances

Division 1 — Operating Fund and Contingency Reserve Fund

Depreciation report

94 (1) In this section, **"qualified person"** has the meaning set out in the regulation.

(2) Subject to subsection (3), a Strata Corporation must obtain from a qualified person, on or before the following dates, a depreciation report estimating the repair and replacement cost for major items in the Strata Corporation and the expected life of those items:

(a) for the first time,

(i) December 14, 2013, in the case of a Strata Corporation that existed on December 14, 2011, or

(ii) the prescribed date, in all other cases;

(b) if the Strata Corporation has, before or after the coming into force of this section, obtained a depreciation report that complies with the requirements of this section, the date that is the prescribed period after the date on which that report was obtained;

(c) if the Strata Corporation has, under subsection (3) (a), waived the requirement under this subsection to obtain a depreciation report, the date that is the prescribed period after the date on which the resolution waiving the requirement was passed.

(3) A Strata Corporation need not comply with the requirement under subsection (2) to obtain a depreciation report on or before a certain date if

(a) the Strata Corporation, by a resolution passed by a 3/4 vote at an annual or special general meeting within the prescribed period, waives that requirement, or

(b) the Strata Corporation is a member of a prescribed class of Strata Corporations.

(4) A depreciation report referred to in subsection (2) must contain the information set out in the regulation.

Strata Property Act

STRATA PROPERTY REGULATION

Part 6 — Finances

Contributions to contingency reserve fund

6.1 For the purposes of section 93 of the **Act**, the amount of the annual contribution to the contingency reserve fund for a fiscal year, other than the fiscal year following the first annual general meeting, must be determined as follows:

(a) if the amount of money in the contingency reserve fund at the end of any fiscal year after the first annual general meeting is less than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, the annual contribution to the contingency reserve fund for the current fiscal year must be at least the lesser of

(i) 10% of the total amount budgeted for the contribution to the operating fund for the current fiscal year, and

(ii) the amount required to bring the contingency reserve fund to at least 25% of the total amount budgeted for the contribution to the operating fund for the current fiscal year;

(b) if the amount of money in the contingency reserve fund at the end of any fiscal year after the first annual general meeting is equal to or greater than 25% of the total amount budgeted for the contribution to the operating fund for the fiscal year that has just ended, additional contributions to the contingency reserve fund may be made as part of the annual budget approval process after consideration of the depreciation report, if any, obtained under section 94 of the **Act**.

[en. B.C. Reg. 238/2011, Sch. 1, s. 2.]

Depreciation report

6.2 (1) For the purposes of section 94 of the **Act**, a depreciation report must include all of the following:

(a) a physical component inventory and evaluation that complies with subsection (2);

(b) a summary of repairs and maintenance work for common expenses respecting the items isted in subsection (2) (b) that usually occur less often than once a year or that do not usually occur;

(c) a financial forecasting section that complies with subsection (3);

(d) the name of the person from whom the depreciation report was obtained and a description of

(i) that person's qualifications,

(ii) the error and omission insurance, if any, carried by that person, and

(iii) the relationship between that person and the Strata Corporation;

(e) the date of the report;

(f) any other information or analysis that the Strata Corporation or the person providing the depreciation report considers appropriate.

(2) For the purposes of subsection (1) (a) and (b) of this section, the physical component inventory and evaluation must

(a) be based on an on-site visual inspection of the site and, where practicable, of the items listed in paragraph (b) conducted by the person preparing the depreciation report,

(b) include a description and estimated service life over 30 years of those items that comprise the common property, the common assets and those parts of a strata lot or limited common property, or both, that the Strata Corporation is responsible to maintain or repair under the **Act**, the Strata Corporation's bylaws or an agreement with an owner, including, but not limited to, the following items:

(i) the building's structure;

(ii) the building's exterior, including roofs, roof decks, doors, windows and skylights;

(iii) the building's systems, including the electrical, heating, plumbing, fire protection and security systems;

(iv) common amenities and facilities;

(v) parking facilities and roadways;

(vi) utilities, including water and sewage;

(vii) landscaping, including paths, sidewalks, fencing and irrigation;

(viii) interior finishes, including floor covering and furnishings;

(ix) green building components;

(x) balconies and patios, and

(c) identify common property and limited common property that the strata lot owner, and not the Strata Corporation, is responsible to maintain and repair.

(3) For the purposes of subsection (1) (c), the financial forecasting section must include

(a) the anticipated maintenance, repair and replacement costs for common expenses that usually occur less often than once a year or that do not usually occur, projected over 30 years, beginning with the current or previous fiscal year of the Strata Corporation, of the items listed in subsection (2) (b),

(b) a description of the factors and assumptions, including interest rates and rates of inflation, used to calculate the costs referred to in paragraph (a),

(c) a description of how the contingency reserve fund is currently being funded,

(d) the current balance of the contingency reserve fund minus any expenditures that have been approved but not yet taken from the fund, and

(e) at least 3 cash-flow funding models for the contingency reserve fund relating to the maintenance, repair and replacement over 30 years, beginning with the current or previous fiscal year of the Strata Corporation, of the items listed in subsection (2) (b).

(4) For the purposes of subsection (3) (e), the cash-flow funding models may include any one or more of the following:

(a) balances of, contributions to and withdrawals from the contingency reserve fund;

(b) special levies;

(c) borrowings.

(5) If a Strata Corporation contributes to the contingency reserve fund based on a depreciation report, the contributions in respect of an item become part of the contingency reserve fund and may be spent for any purpose permitted under section 96 of the **Act**.

(6) For the purposes of section 94 (1) of the **Act**, **"qualified person"** means any person who has the knowledge and expertise to understand the individual components, scope and complexity of the Strata Corporation’s common property, common assets and those parts of a strata lot or limited common property, or both, that the Strata Corporation is responsible to maintain or repair under the **Act**, the Strata Corporation's bylaws or an agreement with an owner and to prepare a depreciation report that complies with subsections (1) to (4).

(7) The following periods are prescribed:

(a) for the purposes of section 94 (2) (b) of the **Act**, 3 years;

(b) for the purposes of section 94 (2) (c) of the **Act**, 18 months;

(c) for the purposes of section 94 (3) (a) of the **Act**, the one year period immediately preceding the date on or before which the depreciation report is required to be obtained.

(8) A Strata Corporation is prescribed for the purposes of section 94 (3) (b) of the **Act** if and for so long as there are fewer than 5 strata lots in the strata plan.

[en. B.C. Reg. 238/2011, Sch. 1, s. 2.]

Appendix B – Component Data Sheets

List of Abbreviations	
DOI	Date of Installation
CA	Chronological Age
EUL	Estimated Useful Life
EA	Effective Age
RUL	Remaining Useful Life
Var	Various

Reserve Component A10100201	Suspended slab				
Properties	Elastomeric traffic coating				
Potential Deterioration	Over time the coating may erode and peel, due to vehicular traffic.				
Condition Analysis	Deterioration	Minor delamination of traffic coating at various locations.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2024	$222,800		$259,896	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Inspect annually and reapply patch as needed.				
Remarks	None.				

Pictures

Traffic coating on suspended slab

Deterioration observed at various stalls

Reserve Component A10100403	Underground parkade structure				
Properties	Walls, suspended slabs, floor slab, columns				
Potential Deterioration	Settlement and seismic movement induce cracks into the concrete foundation. Water may infiltrate and its flow through the concrete leads to the corrosion of the reinforcing steel. The corrosion expands and causes concrete delamination, spalling, and dislodging.				
Condition Analysis	Deterioration	Cracks observed at isolated areas along the walls and floor slab. Staining and damp areas were also apparent at service rooms and various areas within the parkade.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Building life	9 years	Building life
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2019	$20,000		$20,520	
Funding Method	Budget for contingency allowance every 7 years.				
Preventative Maintenance	Annual reviews for water ingress. Water ingress can be managed locally by sealing the leaking cracks. Repair and patch areas of delaminated or spalled concrete on floors and ceilings, sealing joints and cracks in floors, and apply and maintain a protective coating on floors.				
Remarks	None.				

Pictures

Slab-on-grade concrete foundation

Suspended concrete slab ceiling

Reserve Component A10100502	Parkade Roof Deck
Properties	Waterproofing membrane
Potential Deterioration	The reinforced concrete structure of the parkade is susceptible to deterioration that can accelerate due to exposure to moisture and de-icing salts. Moisture and salts may enter through cracks and come in contact with the reinforcing steel within the slabs causing it to oxidize, expand, and detach from the concrete surrounding it. Periodic concrete repairs and replacement of the membrane on the surface of the roof deck are required to keep the structure protected.
Condition Analysis	**Deterioration**: None apparent. **Overall Condition**: Good.
Repair History	Not available.

Life Cycle Analysis

DOI	CA	EUL	EA	RUL
2009	9 years	35 years	9 years	26 years

Cost Estimates

Starting Year	Current Cost	Future Cost
2044	$193,500	$377,148

Funding Method	Budget for full replacement.
Preventative Maintenance	Periodic injection of waterproofing material into cracks at the underside of the exposed parkade roof deck can also be completed to mitigate water infiltration. These injections may assist in deferring replacement of the waterproofing membrane, but are not a permanent solution.
Remarks	None.

Pictures

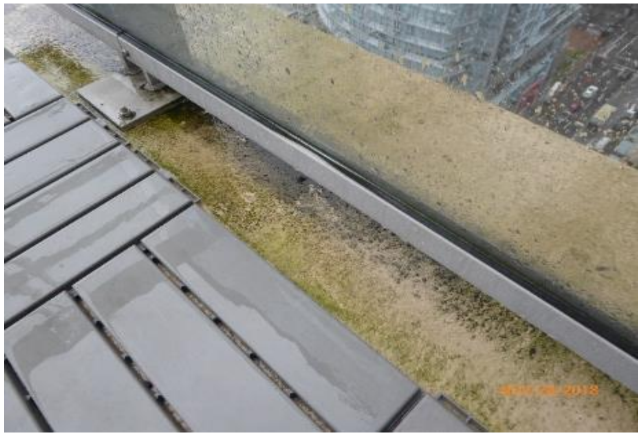
Parkade roof deck

Underside of parkade roof deck

Reserve Component B10100307	Balcony flooring				
Properties	Liquid applied membrane				
Potential Deterioration	The most common deteriorations are mechanical damages that occur over time, resulting in localized erosion and scratching.				
Condition Analysis	Deterioration	Minor delamination of waterproofing membrane at isolated areas at various balconies.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2024	$280,000	$326,620		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Inspect every two years, repair as needed.				
Remarks	None.				

Pictures

Liquid-applied membrane at balcony



Organic growth observed at membrane

Reserve Component B10100501	Exterior stairs				
Properties	Concrete stairs				
Potential Deterioration	Over time movement of the sub-grade, such as settling or heaving, can crack concrete. Exposure to freezing and thawing can cause scaling, which can be made worse by the application of de-icing salts.				
Condition Analysis	Deterioration	Organic growth at concrete surfaces.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Building life	9 years	Building life
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2024	$10,000	$11,665		
Funding Method	Budget for contingency allowance every 10 years.				
Preventative Maintenance	Inspect annually and repair as necessary.				
Remarks	None.				

Pictures

Concrete staircase

Staircase at fifth floor landscaping area

Reserve Component B20100101	Cladding				
Properties	Metal panels				
Potential Deterioration	Staining, discoloration, and corrosion can build up due to oxidizing agents in the rainwater. Buckling and warping may occur due to differential movement. Fasteners and connectors may become loose over time due to temperature movements.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2034	$26,997	$40,708		
Funding Method	Budget for 33% partial replacement.				
Preventative Maintenance	Periodic review (2-3 years) of cladding and flashing for staining, corrosion, loose fasteners or connectors. Touch up sealant and local repairs/replacements.				
Remarks	None.				

Pictures

Metal panel cladding at roof level

Metal panels

Reserve Component B20100103	Cladding				
Properties	Brick & granite veneer				
Potential Deterioration	Moisture absorption may lead to cracking, spalling, and flaking. Bowing, sweeping (horizontally bulging), leaning, may occur from settlement and seismic movement. Joint mortar may fail in areas of excessive moisture, e.g. near leaking downspouts, below windows, etc. Metal component such as reinforcement, ties, or anchors are also susceptible to corrosion.				
Condition Analysis	**Deterioration**	Minor efflorescence observed.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Building life	9 years	Building life
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2024	$25,000	$29,162		
Funding Method	Budget for contingency allowance every 15 years.				
Preventative Maintenance	Clean surfaces with water or cleaning solutions, every 5 years (use non-pressurized water). Review masonry for cracking, spalling, and loose units and repair as needed. Mortar joints may be repaired by re-pointing or "tuck pointing".				
Remarks	None.				

Pictures

Brick cladding at lower levels of the building

Granite veneer cladding at base

Reserve Component B20100114	Cladding
Properties	Exposed concrete elements
Potential Deterioration	The most common issue is weathering from exposure to wind, rain, snow, and salt water or spray. Weathering appears as erosion of the cement paste.
Condition Analysis	**Deterioration**: Minor spalling at various slab edges. **Overall Condition**: Good.
Repair History	Not available.

Life Cycle Analysis

DOI	CA	EUL	EA	RUL
2009	9 years	Building life	9 years	Building life

Cost Estimates

Starting Year	Current Cost	Future Cost
2024	$150,000	$174,975

Funding Method	Budget for contingency allowance every 15 years.
Preventative Maintenance	Power wash every 4-6 years. If a sealer or concrete coating has been used for aesthetics or to minimize moisture penetration, the sealer or coating will require reapplication every 15 years.
Remarks	None.

Pictures

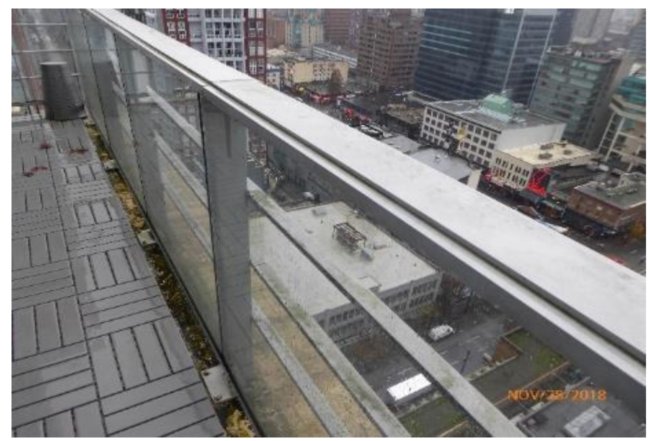
Mass concrete cladding

Exposed concrete elements

Reserve Component B20100501	Balcony & terrace railings				
Properties	Metal railings with glass inserts				
Potential Deterioration	Metal railings are prone to rust. Fasteners on metal railings may become loose over time, leading to detachment.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	30 years	9 years	21 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2039	$403,750	$692,161		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Inspect every two years.				
Remarks	None.				

Pictures

Terrace guards with glass inserts



Balcony guards with glass inserts

Reserve Component B20100801	Exterior painting				
Properties	Elastomeric Paint				
Potential Deterioration	Over prolonged exposure to the elements, fading, yellowing, blistering, or peeling typically occur. Rusting of metal components on surface may lead to stains.				
Condition Analysis	**Deterioration**	Various areas of peeling paint.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	15 years	9 years	6 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2024	$330,000	$384,944		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Clean annually. Remove the deteriorated paint and re-paint locally.				
Remarks	None.				

Pictures

Elastomeric paint coating at concrete walls

Elastomeric paint coating at concrete walls

Reserve Component B20200108	Skylights				
Properties	Flat skylights				
Potential Deterioration	Thermal and structural movement may cause the unit to shift, leading to water ingress, drafts, or foggy panes.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	30 years	9 years	21 years
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2039	$25,000		$42,858	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Annual inspection. Clean windows regularly to prevent corrosive substances from damaging the glass and the frame.				
Remarks	None.				

Pictures

Skylight at common Sunroom

Reserve Component B20200109	Exterior windows
Properties	Aluminum storefront window
Potential Deterioration	Aluminum frames are subject to deterioration of the coating and corrosion of aluminum in severe (industrial, coastal) environments and galvanic corrosion from contact with dissimilar metals. Changes due to fluctuations of temperature and barometric pressure distort the glass and stress the sealant, thereby making the desiccant an instrumental factor in the lifespan of the Insulated Glass Units (IGUs). Inevitably, the desiccant will become saturated and the IGU will fail. The evidence of this stage is the existence of visible moisture accumulating on the glass surfaces inside the IGU.
Condition Analysis	**Deterioration**: None apparent. **Overall Condition**: Good.
Repair History	Not available.

Life Cycle Analysis

DOI	CA	EUL	EA	RUL
2009	9 years	Contingency	9 years	Contingency

Cost Estimates

Starting Year	Current Cost	Future Cost
2034	$15,000	$22,618

Funding Method	Budget for contingency allowance every 25 years.
Preventative Maintenance	Clean windows regularly to prevent corrosive substances from damaging the glass and the frame.
Remarks	None.

Pictures

Aluminum-framed storefront windows

Aluminum-framed storefront window assembly

Reserve Component B20200111	Exterior windows				
Properties	Aluminum-framed windows and sliding doors				
Potential Deterioration	Failure of window hardware, such as hinges or hinge connections to frame may occur over time, leading to difficulty in opening and closing. Condensation may occur on the window frame due to the thermal bridging of the frame (for metal-framed windows) or due to air leakage through the cavity between the rough wall opening and the window frame. Mould and mildew may also grow be present on the frame due to poor air circulation around the window or air leakage through the window.				
Condition Analysis	Deterioration	Broken glazing at one of the windows at penthouse unit.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Contingency	7 years	Contingency
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2034	$1,033,230		$1,557,955	
Funding Method	Budget for contingency allowance every 25 years.				
Preventative Maintenance	Annual washing.				
Remarks	None.				

Pictures

Aluminum-framed window walls

Aluminum-framed window walls

Reserve Component B20200403	Caulking and weather-stripping				
Properties	Exterior sealant & weather-stripping				
Potential Deterioration	Common causes of sealant failures are loss of adhesion and cohesion, mostly due to imperfections of the material and application methods. Sealant subjected to prolonged exposure to ultra violet rays, moisture or cyclic movement will loose its elastic properties, dry out, crack, chalk and fail (reversion, fatigue, UV degradation). Various sealants are more or less resistant to these weathering phenomena. The failure of the sealant contributes to water penetration.				
Condition Analysis	Deterioration	Minor cracks observed at isolated areas along window and door perimeters.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2024	$200,000	$233,300		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Inspect, clean and properly replace deteriorated sealant based on manufacturer's instructions.				
Remarks	None.				

Pictures

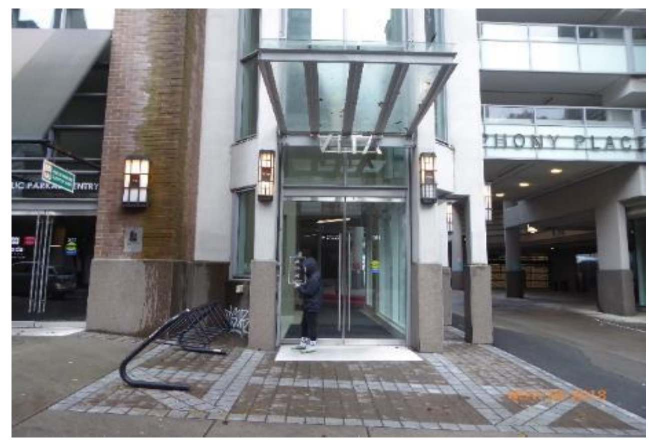
Sealant at window perimeters

Sealant at interfaces

Reserve Component B20300101	Entrance doors				
Properties	Aluminum glass swinging entrance doors				
Potential Deterioration	Drafts may occur due to loose or worn weather-stripping around doors. The operation of the locking system may deteriorate due to the failure of mechanical components. Hardware failure and poor latching may result from distortions in the door frame or loosening of the striker plate.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	30 years	9 years	21 years
Cost Estimates	**Starting Year**	**Current Cost**		**Future Cost**	
	2039	$27,125		$46,501	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Regular cleaning.				
Remarks	None.				

Pictures

Glazed aluminum main entrance door

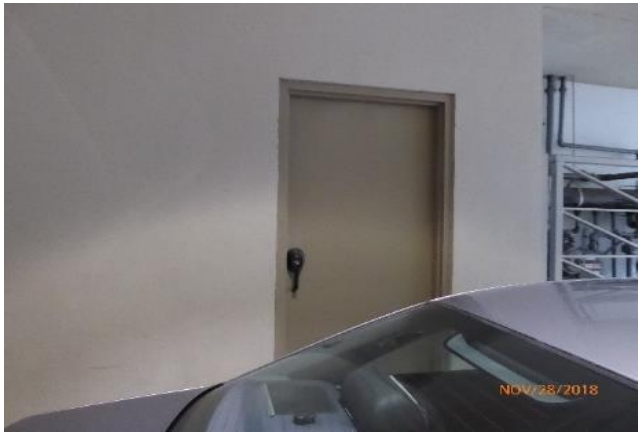


Glazed aluminum secondary entrance door

Reserve Component B20300103	Egress doors				
Properties	Exterior metal fire doors				
Potential Deterioration	Deterioration mostly concerns loss of aesthetic appeal. Striker plate may come loose, affecting the closing of the door. Distortions of the door frame may also lead to difficulties closing.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2038	$4,000	$6,684		
Funding Method	Budget for contingency allowance every 20 years.				
Preventative Maintenance	Regular cleaning.				
Remarks	None.				

Pictures

Fire door at staircase



Fire door at service rooms

Reserve Component B20300402	Garage doors				
Properties	Metal overhead parkade gate				
Potential Deterioration	Mechanical and electrical components of the garage door may fail, leading to difficulty opening. Metallic components of garage door may also be prone to corrosion.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	20 years	9 years	11 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2029	$10,000	$13,262		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Annual inspection and lubrication. Repainting may be required to prevent corrosion and to maintain aesthetic appeal.				
Remarks	None.				

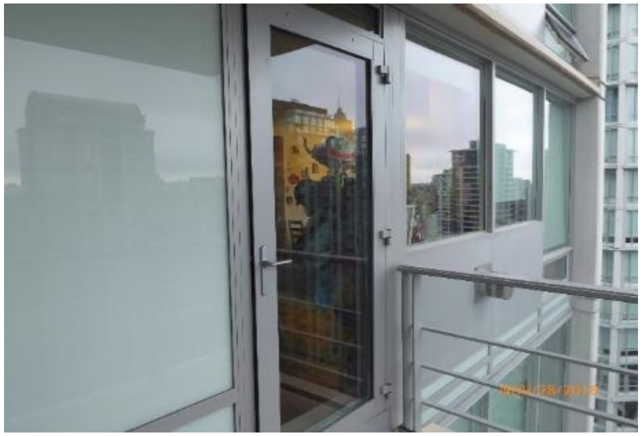
Pictures

Metal overhead gate for the underground parkade

Reserve Component B20300505	Patio and balcony doors				
Properties	French doors				
Potential Deterioration	Dirt and debris may become trapped in sills, leading to difficulties opening. Settling over time can cause distortion of door frame, which also leads to difficulties opening. Seals between the glass may fail, leading to a loss of energy efficiency.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	30 years	9 years	21 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2039	$164,320	$281,699		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Regular cleaning.				
Remarks	None.				

Pictures

French doors at terrace



Single swing French door at balcony

Reserve Component B30100109	Roofing				
Properties	Terrace over occupied spaces - concrete pavers system				
Potential Deterioration	The pavers are susceptible to cracking, spalling, and scaling of paver surface. Displacement of pavers usually indicate a problem with setting bed, mainly due to water stagnant and its freeze/thaw cycles. The waterproofing membrane may experience crack reflection (tearing of the membrane because of movement of cracks in the concrete substrate).				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	30 years	9 years	21 years
Cost Estimates	**Starting Year**	**Current Cost**		**Future Cost**	
	2039	$335,000		$574,301	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Repair/replace the damaged pavers. Check drainage devices regularly for obstructions, remove accumulated debris and reset missing strainers. Review flashings and caulk seals for damage and deterioration, loss of adhesion, and gaps in terminations.				
Remarks	None.				

Pictures

Terrace with concrete paver system

Terrace with concrete paver system at penthouse level

Reserve Component B30100114	Roofing				
Properties	Inverted roofing				
Potential Deterioration	Uneven distribution of gravel will lead to an uneven load distribution on the inverted roof, affecting membrane exposure to the elements. Some quantities of water may be trapped between insulation and waterproofing layer. Slopes should be constructed with utmost care, of at least 2%. Plants can block the flow of water off the roof. Advanced plant growth can also damage the roof membrane, insulation.				
Condition Analysis	**Deterioration**	Insufficient coverage of ballast at isolated areas with rigid insulation and filter fabric exposed.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	30 years	9 years	21 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2039	$55,000	$94,288		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Inspect twice a year (spring and fall) and repair/replace any damage. Remove sprouts before they grow and become a problem. Identify any exposed areas of the roof, any bare spots are unprotected and can lead to rapid deterioration.				
Remarks	None.				

Pictures

Inverted roof with gravel ballast

Inverted roof with gravel ballast

Reserve Component B40100502	Connected Structures				
Properties	Canopies - metal structure and glass				
Potential Deterioration	Over prolonged exposure to the elements, the paint may peel or fade. Rusting of metal structure on surface may lead to stains.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Building life	9 years	Building life
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2029	$5,000	$6,631		
Funding Method	Budget for contingency allowance every 15 years.				
Preventative Maintenance	Inspect every 2 years. Repair as needed. Repaint periodically.				
Remarks	None.				

Pictures

Metal-framed glass canopy at building entrance

Metal-framed glass canopy at balcony

Reserve Component C10100100	Rooms in common areas				
Properties	Lobby				
Potential Deterioration	Partial replacement and renovations in lobby areas, including interior finishes, furnishings, cabinetry, plumbing fixtures, and lighting are generally subject to aesthetic considerations. Wear and tear due to aging are natural, and some components may last up to 30 years before the first signs of deterioration are evident.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2024	$25,000	$29,162		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Periodic inspections local repairs and renovations as needed.				
Remarks	None.				

Pictures

Lobby area with furnishings

Couch and coffee table at lobby

Reserve Component C10100101	Rooms in common areas				
Properties	Lounge				
Potential Deterioration	Partial replacement and renovations in amenity room, including interior finishes, furnishings, cabinetry, plumbing fixtures, and lighting are generally subject to aesthetic considerations. Wear and tear due to aging are natural, and some components may last up to 30 years before the first signs of deterioration are evident.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	20 years	9 years	11 years
Cost Estimates	**Starting Year**	**Current Cost**		**Future Cost**	
	2029	$8,800		$11,671	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Periodic inspections local repairs and renovations as needed.				
Remarks	None.				

Pictures

Lounge area with full kitchen

Lounge area with furnishings

Reserve Component C10100102	Rooms in common areas				
Properties	Exercise room				
Potential Deterioration	Partial replacement and renovations in the exercise/fitness areas, including interior finishes, furnishings, shelving, cabinetry, plumbing fixtures, and lighting are generally subject to aesthetic and/or functionality consideration. Wear and tear due to aging are natural, and some components may last up to 30 years before the first signs of deterioration are evident.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	20 years	9 years	11 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2029	$15,064	$19,978		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Periodic inspections local repairs and renovations as needed.				
Remarks	None.				

Pictures

Exercise room with fitness equipment

Exercise room with fitness equipment

Reserve Component C10100105	Rooms in common areas				
Properties	Sunroom				
Potential Deterioration	Partial replacement and renovations in the guest suite, including interior finishes, furnishings, cabinetry, plumbing fixtures, and lighting are generally subject to aesthetic and functionality considerations. Wear and tear due to aging are natural, and some components may last up to 30 years before the first signs of deterioration are evident.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	20 years	9 years	11 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2029	$1,920	$2,546		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Periodic inspections and repairs/replacements as needed.				
Remarks	None.				

Pictures

Sunroom with couches

Furnishing within Sunroom

Reserve Component C10100107	Rooms in common areas				
Properties	Children's play room				
Potential Deterioration	Partial replacement and renovations in the guest suite, including interior finishes, furnishings, cabinetry, plumbing fixtures, and lighting are generally subject to aesthetic and functionality considerations. Wear and tear due to aging are natural, and some components may last up to 30 years before the first signs of deterioration are evident.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	20 years	9 years	11 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2029	$3,900	$5,172		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Periodic inspections and repairs/replacements as needed.				
Remarks	None.				

Pictures

Children's play area

Children's play area with various toys

Reserve Component C10100108	Rooms in common areas				
Properties	Service and storage rooms				
Potential Deterioration	Typically the interior finishes are limited, with little aesthetic impact. Storage cages, shelves, racks and other components may be damaged mostly due to mechanical impacts.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Building life	9 years	Building life
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2029	$4,500	$5,968		
Funding Method	Budget for contingency allowance every 15 years.				
Preventative Maintenance	Periodic inspections and repairs as needed.				
Remarks	None.				

Pictures

Garbage room

Bike storage room

Reserve Component C10100110	Rooms in common areas				
Properties	Washrooms				
Potential Deterioration	Partial replacement and renovations in the washroom areas, including interior finishes, furnishings, vanities, plumbing fixtures, and lighting are generally subject to aesthetic and/or functionality consideration. Wear and tear due to aging are natural, and some components may last up to 30-35 years before the first signs of deterioration are evident.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2024	$11,700		$13,648	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Periodic inspections local repair and renovations as needed.				
Remarks	None.				

Pictures

Common washroom

Toilet within washroom

Reserve Component C10200101	Service doors				
Properties	Interior fire doors				
Potential Deterioration	Deterioration mostly concerns loss of aesthetic appeal. Striker plate may come loose, affecting the closing of the door. Distortions of the door frame may also lead to difficulties closing.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	30 years	9 years	21 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2038	$14,000	$23,392		
Funding Method	Budget for contingency allowance every 20 years.				
Preventative Maintenance	Regular cleaning.				
Remarks	None.				

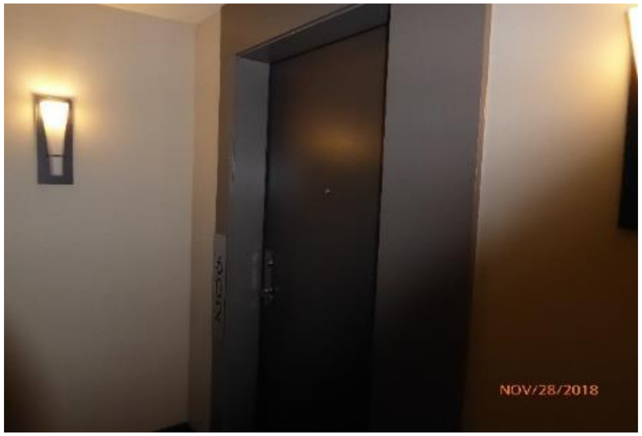
Pictures

Interior fire door within corridors

Interior fire door at parkade level

Reserve Component C10200102	Unit entry doors				
Properties	Wooden doors				
Potential Deterioration	Doors may warp depending on the quality of door and the surrounding moisture. Weather-stripping deterioration around doors may lead to drafts. Other deterioration mostly concerns hardware failure leading to the difficulties in operation.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	35 years	9 years	26 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2044	$120,000	$233,891		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Wipe down once a month; inspect every 6 months.				
Remarks	None.				

Pictures



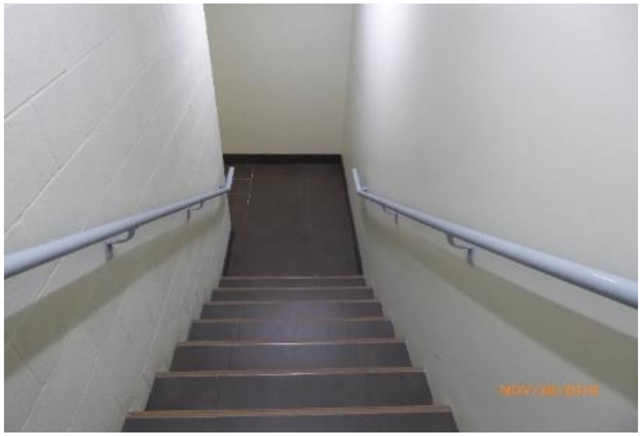
Interior wooden suite doors

Interior wooden suite doors

Reserve Component C20200102	Interior stairs				
Properties	Concrete stairs				
Potential Deterioration	Over time movement of the sub-grade, such as settling or heaving, can crack concrete. Heavy traffic can wear down the surface coating and stair nosing.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Building life	9 years	Building life
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2029	$10,000	$13,262		
Funding Method	Budget for contingency allowance every 15 years.				
Preventative Maintenance	Inspect annually and repair as necessary.				
Remarks	None.				

Pictures

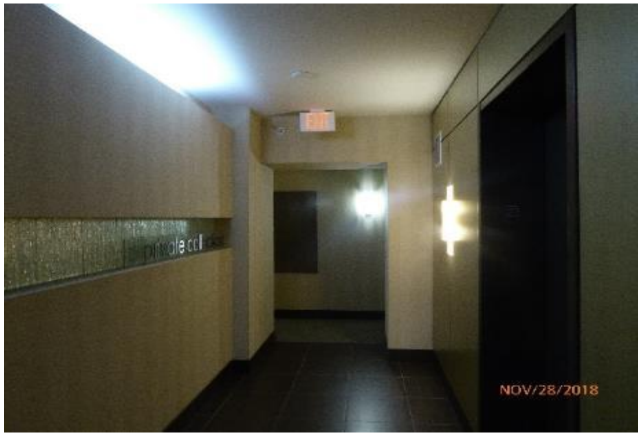
Painted concrete stairways



Concrete stairways with handrails

Reserve Component C30100201	Wall finishes				
Properties	Interior paint, wallpaper, laminate panels				
Potential Deterioration	Paint and/or wallpaper may fade or peel over long periods of time. Cracking in the paint may be due to framing distortion, structural movement, inadequate support, etc. Severe cracks will require further investigation.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2024	$81,250		$94,778	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Clean annually.				
Remarks	None.				

Pictures



Interior finishes with wallpaper

Interior finishes with painted dry walls

Reserve Component C30200406	Floor finishes
Properties	Carpeting & tiling
Potential Deterioration	Ripples and worn areas may appear in carpet due to wear on high traffic areas. Carpet can stretch due to high heat or humidity and may lift along a room perimeter if the tack strip holding the carpet is no longer holding the carpet backing adequately. Filtration soiling may appear as dark or grayish lines on carpet along walls or stairways, around vents, and under doors. Tiles may crack overtime. Poor maintenance will also lead to other deterioration such as staining.
Condition Analysis	**Deterioration**: None apparent. **Overall Condition**: Good.
Repair History	Not available.

Life Cycle Analysis

DOI	CA	EUL	EA	RUL
2009	9 years	15 years	9 years	6 years

Cost Estimates

Starting Year	Current Cost	Future Cost
2024	$90,000	$104,985

Funding Method	Budget for full replacement.
Preventative Maintenance	Always treat the affected area immediately. The longer the spill sits there, the harder it'll be to remove the stain. Vacuum/clean regularly to prevent soil from embedding itself in the pile. Consider professional cleaning every 12 to 18 months. Patch or replace damaged areas.
Remarks	None.

Pictures

Carpeting within corridor

Tiling within corridor

Reserve Component D10100105	Vertical transportation				
Properties	Elevator - traction - refurbish/upgrade				
Potential Deterioration	Typical service life of a traction elevator is approximately 30 years. The most common defects include the following: corrosion of lift platforms, guide tracks, and structural supports, door interlock inoperative, loose electrical connections that can lead pitting of the contacts.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	30 years	9 years	21 years
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2039	$400,000		$685,732	
Funding Method	Budget for full replacement.				
Preventative Maintenance	As elevator ages, it will require more corrective maintenance. A sharp increase in maintenance requirements is an indication that the control system is approaching the end of its service life. Rough operation is an indication of problems within the elevator's cable or guide rails. Decision of system upgrade/refurbishment is generally determined by its impact on safety reliability, performance, and cost savings.				
Remarks	None.				

Pictures

Two traction elevators

Elevator machines

Reserve Component D10100106	Vertical transportation				
Properties	Elevator cab - interior finishes				
Potential Deterioration	Elevator cab may be damaged by moving large objects in and out. Vandalism and wear and tear are the main causes for deterioration for the elevator cab.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	30 years	9 years	21 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2039	$40,000	$68,573		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Regular cleaning.				
Remarks	None.				

Pictures

Elevator cab finishes with glass panels

Elevator cab finishes with LCD screen

Reserve Component D10100107	Vertical transportation
Properties	Disability vertical lift
Potential Deterioration	Typical service life of a vertical lift is approximately 30 years. The most common defects include the following: corrosion of lift platforms, guide tracks, and structural supports, door interlock inoperative, loose electrical connections that can lead pitting of the contacts.

Condition Analysis		
	Deterioration	None apparent.
	Overall Condition	Good.

Repair History	Not available.

Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	30 years	9 years	21 years

Cost Estimates	Starting Year	Current Cost	Future Cost
	2039	$35,000	$60,002

Funding Method	Budget for full replacement.
Preventative Maintenance	Squeaks, vibrations, and rubbing noisy are usually the result of excessive component wear. As the lift ages, it will require more corrective maintenance. A sharp increase in maintenance requirements is an indication that unit is approaching the end of its service life. Decision of system upgrade/refurbishment is generally determined by its impact on safety reliability, performance, and cost savings.
Remarks	None.

Pictures

Disability vertical lift at fifth floor

Controls at vertical lift

Reserve Component D20100101	Plumbing system				
Properties	Domestic cold and hot water distribution - piping, valves, PRV's, backflow				
Potential Deterioration	The piping is exposed to erosion due to water, both entrained in steam flow and also as non-discharged condensate traveling at high speeds in piping				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	35 years	9 years	26 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2044	$1,022,000	$1,991,968		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Periodic inspections and repairs/replacements as needed.				
Remarks	None.				

Pictures

Domestic piping within a service room

Domestic piping within a service room

Reserve Component D20100102	Plumbing system				
Properties	Hot water boilers				
Potential Deterioration	Boiler failure depends on factors such as maintenance, repairs and daily load. Controllers and ignition components may fail causing shutdowns.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	30 years	9 years	21 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2039	$60,000	$102,860		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Annual inspection by a qualified technician.				
Remarks	None.				

Pictures

Hot water gas-fired boiler

Hot water gas-fired boiler

Reserve Component D20100103	Plumbing system				
Properties	Domestic water heater - electrical				
Potential Deterioration	Typically, pitting corrosion occurs on the inner tank wall over time and may lead to water leakage. Failures of different parts (electronic controls, valves, etc.) do not lead to tank replacement and can be addressed separately.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2024	$10,000	$11,665		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Annual inspection by a qualified technician. Replace degraded anode rods if are installed. Drain several gallons from tank to remove sediment. Manually check operation of safety valve. Check operation of aqua stat. Check amperage draw of upper and lower elements. Clean and tighten element connections.				
Remarks	None.				

Pictures

Electric water heaters

Bradford White water heaters

Reserve Component D20100104	**Plumbing system**				
Properties	Domestic hot water storage tank				
Potential Deterioration	Typically, pitting corrosion occurs on the inner tank wall over time and may lead to water leakage. Failures of different parts (electronic controls, valves, etc.) do not lead to tank replacement and can be addressed separately.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	15 years	9 years	6 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2024	$10,000	$11,665		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Annual inspection by a qualified technician.				
Remarks	None.				

Pictures

Water storage tanks

Storage tank with 200 US Gal. capacity

Reserve Component D20100106	Plumbing system				
Properties	Pumps & circulators				
Potential Deterioration	Gradual wear of the booster pumps is natural. The frequency of breakdowns and the cost of maintenance increases over time. Common failures include seal leakage, as well as casting and shaft breakage due to bearing overload caused by vibration or imbalance.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2024	$5,000	$5,832		
Funding Method	Budget for contingency allowance every 15 years.				
Preventative Maintenance	Annual service is typically performed by specialized personnel and may include checking for normal operation observing any vibration or abnormal sounds, lubrication pump bearings, thermal imaging looking for above average heat.				
Remarks	None.				

Pictures

Circulator pump

Circulator pump

Reserve Component D20100201	Plumbing system
Properties	Sanitary drainage system - piping, cleanouts, manholes
Potential Deterioration	Fats, Oil, and Grease (FOGs) from kitchen sinks causes most drain lines to clog. Non-organic material can become imbedded or attached to the FOG build-up inside the pipes, causing further blockage and back-up problems. From 1985, plumbers began to use specially designed plastic PVC pipes.
Condition Analysis	**Deterioration**: None apparent. **Overall Condition**: Good.
Repair History	Not available.

Life Cycle Analysis

DOI	CA	EUL	EA	RUL
2009	9 years	Building life	9 years	Contingency

Cost Estimates

Starting Year	Current Cost	Future Cost
2029	$10,000	$13,262

Funding Method	Budget for contingency allowance every 10 years.
Preventative Maintenance	System should be routinely cleaned and repaired. Proper drainage can be checked by filling sinks and observing the speed at which the water drains. If sinks drain slowly, the trap underneath can usually be opened for cleaning. If toilets drain slowly, a plunger or snake can be used to clear the obstruction.
Remarks	None.

Pictures

Manhole for sanitary system

Reserve Component D20100301	Plumbing system				
Properties	Storm water drainage system - drains, piping, catch basins, manholes				
Potential Deterioration	Catch basins and storm drains that become clogged due to accumulated debris and sediment or due to collapsing because of settlement, can cause flooding and safety issues.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Building life	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**		**Future Cost**	
	2029	$10,000		$13,262	
Funding Method	Budget for contingency allowance every 10 years.				
Preventative Maintenance	Visual inspections at regular intervals. Sump pumps should be annually inspected and may include: flushing and pumping out the pit, inspection and lubrication of motors, inspection of check valves.				
Remarks	None.				

Pictures

Manhole for storm sewer

Reserve Component D20100302	Plumbing system
Properties	Storm water drainage system - sump pumps
Potential Deterioration	Because they work in a damp environment, sump pumps will gradually wear out over time and become less effective and more prone to failure. A common cause of sump pump failure is motor burn out, when the sump pump is being overworked. A failed motor bearing, cracks in the casing, debris in the impeller or a broken impeller can cause the casing to overheat. The float can get stuck due to debris in the sump basin.

Condition Analysis		
	Deterioration	None apparent.
	Overall Condition	Good.

Repair History	Not available.

Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Contingency	9 years	Contingency

Cost Estimates	Starting Year	Current Cost	Future Cost
	2029	$10,000	$13,262

Funding Method	Budget for contingency allowance every 10 years.
Preventative Maintenance	It is recommended for the pump to be run every 2-3 months. Check the operation of the float to make sure it is not restricted. The pump, its check valve, activation switch and basin need to be cleaned as part of a regular maintenance program.
Remarks	None.

Pictures

Sump pump control panels

Reserve Component D30000100	Whirlpool equipment				
Properties	Basin grouting, piping, pumps, heater, filter, chlorination system				
Potential Deterioration	The whirlpool consist of pumps and motors, timers and controls, automatic cleaners, water heaters, and salt and chlorination systems. Components may fail from various causes. Chemical damage and galvanic corrosion are the main causes of premature heater failure. Also pump failure is known to occur after 10-15 years of service. Water leaks may occur over time from broken pipes and valves. Cracks may also form at the whirlpool basin.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2024	$15,000	$17,497		
Funding Method	Budget for full replacement.				
Preventative Maintenance	A professional cleaning should consist of flushing, descaling, and disinfecting the entire circulation system. Some other maintenance operations may include also: filter cleaning and repairs, review and repair chlorine equipment, heater, pumps and piping. Whirlpool basin may require regrouting over time to prevent leakage.				
Remarks	None.				

Pictures

Hot tub equipment

Hot tub at fifth floor

Reserve Component D30100102	HVAC systems				
Properties	Make-up Air Unit - Industrial indirect fired heaters				
Potential Deterioration	Common issues with the make-up air unit may include: malfunctioning of the blower motor, failing ignition, tripped pressure switches, broken belt, control malfunctioning.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	20 years	9 years	11 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2029	$20,000	$26,525		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Annual maintenance is provided by specialized personnel and should include: checking fan blades and dumpers for dirt accumulation and cleaning if necessary, checking fan bearing collar set screws for tightness, checking damper actuators for proper operation, checking belts for wear and adjusting tension or alignment, lubrication of bearings, checking and adjusting controls.				
Remarks	None.				

Pictures

Roof top MUA unit

Roof top MUA unit

Reserve Component D30100201	HVAC systems				
Properties	Exhaust fans, including related casing/ductwork, in underground parkade				
Potential Deterioration	Typically, the malfunctioning and failures are caused by dirt accumulation. Over time, the exhaust fan may experience electrical motor breakdowns, or loose or defective components.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	25 years	9 years	16 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2034	$47,500	$71,623		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Annual maintenance may include: checking blades for dust buildup and clean if necessary, checking fan RPM to design specifications, checking belt tension, wear and alignment, bearing collar set screws to make sure that they are tight, lubricate fan bearings and motor. Measure motor amperage using a C clamp amprobe. Increased current flow may indicate that bearings are seizing.				
Remarks	None.				

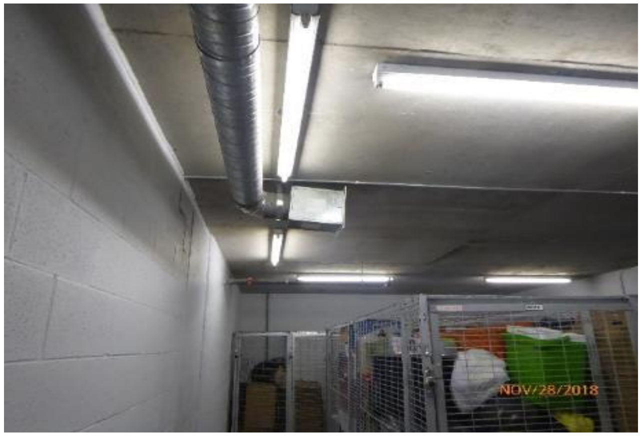
Pictures

Exhaust fan within underground parkade

Exhaust fan within underground parkade

Reserve Component D30100202	HVAC systems				
Properties	Exhaust fans with related ductwork in service/storage rooms				
Potential Deterioration	Typically, the malfunctioning and failures are caused by dirt accumulation. Over time, the exhaust fan may experience electrical motor breakdowns, or loose or defective components.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Building life	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2029	$10,000	$13,262		
Funding Method	Budget for contingency allowance every 15 years.				
Preventative Maintenance	Check cleanliness of the fan, switch operation. Repair as required. Check fan belt tension, wear and alignment. Replace if necessary to ensure proper operation. Check and adjust the controls.				
Remarks	None.				

Pictures



Smaller exhaust fan within storage room

Reserve Component D30200108	Heating generating system				
Properties	Electrical heating - electrical baseboard heaters				
Potential Deterioration	Dust and debris can prevent electric baseboard heaters from working optimally, and in some cases will cause soot, smoke and the smell of burning. Loose wire connections, faulty thermostats, or other electrical faults in the systems may impair their functionality.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2024	$4,500	$5,249		
Funding Method	Budget for contingency allowance every 10 years.				
Preventative Maintenance	Vacuum the fins or vents once a year prior to the heating season. Electric baseboards with corroded, overheated connections or burnt-out elements should be replaced. Repair/replace faulty thermostats as needed.				
Remarks	None.				

Pictures

Electric baseboard heaters

Electric baseboard heaters

Reserve Component D30200303	Heating generating system				
Properties	Heating pumps				
Potential Deterioration	A heat pump is an air conditioner which can work in reverse to help heat the interior when cooling is not needed. As the heat pump ages, the frequency of breakdowns and the cost of maintenance increases. Typical issues may include: failures of electrical motors, failures of compressor, leaking refrigerant.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2024	$30,000		$34,995	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Maintenance tasks may include: adjusting refrigerant charge, checking fan motor and compressor operation, checking controls, checking for excessive noise and vibration, inspection/replacement of air filters.				
Remarks	None.				

Pictures

Carrier heat pumps

Carrier heat pumps

Reserve Component D30400301	Natural gas distribution system				
Properties	Natural gas piping, valves				
Potential Deterioration	Natural gas pipes that are buried in the ground can leak and metal pipes deteriorate with age, causing a potentially dangerous situation. Spotting an unseasonably dead area of grass on the lawn is one of many signs indicating a potential gas leak. Dirt, leaf, grass debris, or water blowing into the air also indicates a gas leak. Brass fittings can develop cracks due to aging and deterioration, and can result in gas line leaks.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Building life	9 years	Building life
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2029	$5,000	$6,631		
Funding Method	Budget for contingency allowance every 20 years.				
Preventative Maintenance	Inspect annually as follows: using a combustible gas detector check every joint and connection in the exposed piping. Inspect for cracks, corrosion, damage and the smell of gas. Gas professionals often recommend replacing gas lines and fittings every ten years to ensure proper safety.				
Remarks	None.				

Pictures

Natural gas piping and fittings

Gas meters

Reserve Component D40100102	Air conditioning				
Properties	Central Air Conditioner Air Handling units				
Potential Deterioration	Most common deficiencies include refrigerant leaks, electric control and sensor failures, drainage problems.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	15 years	9 years	6 years
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2024	$30,000		$34,995	
Funding Method	Budget for full replacement.				
Preventative Maintenance	Maintenance is typically performed by qualified personnel.				
Remarks	None.				

Pictures

Central air conditioner air handling units

Central air conditioner air handling units

Reserve Component D40100201	Wet and dry sprinkler systems				
Properties	Typical sprinkler system				
Potential Deterioration	Corrosion or rust can weaken pipes and sprinkler heads and ultimately cause water release. Wet system pipes that are inadequately insulated can freeze and rupture during the winter months, rendering a sprinkler system inoperable and potentially causing severe damage once temperatures rises and pipes begin to thaw. There may be leaks and occasional fluctuations in pressures that may need to be monitored.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Building life	9 years	Building life
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2034	$25,000	$37,696		
Funding Method	Budget for contingency allowance every 25 years.				
Preventative Maintenance	Fire sprinkler systems are subject to very specific inspections, testing and maintenance requirements to help ensure that they will function properly when needed, and should be performed annually by licensed contractors. Conducting a thorough winterization inspection of a facility can help protect a Wet Pipe system from freezing.				
Remarks	None.				

Pictures

Sprinkler piping system

Sprinkler head

Reserve Component D50100102	Electrical distribution				
Properties	High voltage -modulated substation (switch gears, transformer,				
Potential Deterioration	Dust and other contaminants may built up within the enclosures, on the energized equipment, on vents and fan grills. Seals and gaskets may deteriorate over time.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2034	$80,000	$120,628		
Funding Method	Budget for contingency allowance every 25 years.				
Preventative Maintenance	Preventive maintained and testing are recommended every 3 years, performed by specialized personnel. Electrical rooms or vaults should be kept cleaned of dirt, and should be examined for water seepage, especially at the top of electrical equipment enclosures, since this is a common entry way.				
Remarks	None.				

Pictures

Switchgear unit

Subpanels and meters within electrical room

Reserve Component D50100104	Electrical distribution				
Properties	Raceways, bus duct, cabling, wiring				
Potential Deterioration	Cable and wire insulation may exhibit signs of deterioration, cracking, flaking, or overheating. Water or foreign matter may contaminate the bus duct. Raceway connection may become loose over time.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2034	$10,000	$15,078		
Funding Method	Budget for contingency allowance every 25 years.				
Preventative Maintenance	Electrical cable and wiring examination and testing is recommended to be performed every 3 years by certified personnel. Testing may include insulation resistance and polarization index. Prior to the planned maintenance, an infrared survey should be conducted to help identify areas that need specific and immediate attention. Each breaker in the distribution panels should be turned on and off at least once a year to prevent them from stiffening up.				
Remarks	None.				

Pictures

Typical cabling

Cabling within electrical closet

Reserve Component D50900201	Emergency generator				
Properties	Fuel generator				
Potential Deterioration	The electric generator may fail to start due to inaccurate settings or neglected maintenance. The most common reasons may involve battery failure, low coolant levels, low coolant temperature alarms, oil, fuel, or coolant leaks, air in the fuel system, breaker trip.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2029	$35,000	$46,418		
Funding Method	Budget for contingency allowance every 15 years.				
Preventative Maintenance	Maintenance is performed by a licensed contractor and may include: exercising the generator on a monthly basis, reviews of cooling and fuel systems, of battery and charging system, the engine's belts, oil levels, air filters.				
Remarks	None.				

Pictures

Emergency generator

Fuel tanks for generator

Reserve Component D60100101	Site utilities
Properties	Garbage compactor
Potential Deterioration	Deterioration of sewers is manifested as: structural defects (e.g., cracks/broken pipe, pipe sags, deformation, open joints, displaced joints), service defects (e.g., protruding laterals, tree root intrusions, silt, grease build-up, encrustation, obstructions), system surcharges and sewer backups, and a high groundwater infiltration rate in sanitary sewer systems
Condition Analysis	**Deterioration**: None apparent.
	Overall Condition: Good.
Repair History	Not available.

Life Cycle Analysis

DOI	CA	EUL	EA	RUL
2009	9 years	Contingency	9 years	Contingency

Cost Estimates

Starting Year	Current Cost	Future Cost
2030	$20,000	$27,214

Funding Method	Budget for contingency allowance every 15 years.
Preventative Maintenance	System should be routinely cleaned and repaired.
Remarks	None.

Pictures

Garbage compactor

Reserve Component D90100101	Fire Protection and Security Systems
Properties	Fire alarm system - fire alarm panel, annunciator, monitoring devices, pull
Potential Deterioration	Increased frequency of failures while performing the tests may signal the necessity of replacement or upgrading.
Condition Analysis	**Deterioration**: None apparent. **Overall Condition**: Good.
Repair History	Not available.

Life Cycle Analysis

DOI	CA	EUL	EA	RUL
2009	9 years	25 years	9 years	16 years

Cost Estimates

Starting Year	Current Cost	Future Cost
2034	$40,000	$60,314

Funding Method	Budget for full replacement.
Preventative Maintenance	Annual inspections and testing as required, performed by a certified contractor.
Remarks	None.

Pictures

Annunciator panel at lobby

Inspection tag for annunciator panel

Reserve Component D90100102	Fire Protection and Security Systems				
Properties	Fire pump package system				
Potential Deterioration	Fire pumps are manufactured to have long life cycles if the proper maintenance measures are taken. Most common issues uncovered during the tests include: suction piping or impeller obstructions, drawing of air into the suction connection through leaks in the piping, and power failures.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	20 years	9 years	11 years
Cost Estimates	Starting Year	Current Cost	Future Cost		
	2029	$8,000	$10,610		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Fire pumps are subject to very specific inspection, testing and maintenance requirements to help ensure that they will function properly when needed, and should be performed by licensed contractors. The maintenance tests refer to alteration of environmental condition programmed to start pump and observation of operation for normal conditions.				
Remarks	None.				

Pictures

Fire pump

Fire pump controller

Reserve Component D90100201	Fire Protection and Security Systems				
Properties	Emergency lighting and exit signage				
Potential Deterioration	The emergency lighting and exit signs may become obsolete and no longer meet the code requirements. Emergency lighting needs to be tested annually and batteries should be replaced as needed.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2024	$5,000	$5,832		
Funding Method	Budget for contingency allowance every 10 years.				
Preventative Maintenance	Annual inspections and testing as required, performed by a licensed contractor, including but not limited to inspect for structural defects and deposits, pushing test button and observing light operation.				
Remarks	None.				

Pictures

Exit signage

Exit signage

Reserve Component D90100601	Fire Protection and Security Systems				
Properties	Security surveillance system - video cameras, recording system, wiring				
Potential Deterioration	The frequency of breakdowns may increase toward the end of its expected useful life, increasing the maintenance costs. The system may also become obsolete over time.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	15 years	9 years	6 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2024	$25,000	$29,162		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Annual inspections and testing as required, performed by a certified contractor.				
Remarks	None.				

Pictures

Security camera

Surveillance system equipment

Reserve Component E10100101	Lighting fixtures				
Properties	Light fixtures on corridors and stairwells				
Potential Deterioration	Interior lighting is generally replaced based on aesthetic and energy saving considerations or for better illumination of the areas served. Over time the corrosion may occur on the casing or discoloring and yellowing may occur on the lens.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	20 years	9 years	11 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2029	$75,000	$99,468		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Maintenance service should be performed annually and typically include: removing of old lamps and cleaning the fixtures, inspecting wiring, contacts, terminals and sockets, installation of new lamps, putting back into service and testing the operation.				
Remarks	None.				

Pictures

Interior wall-mounted light fixtures

Interior wall-mounted light fixtures

Reserve Component E10100102	Lighting fixtures				
Properties	Light fixtures in parkade area and service/storage rooms				
Potential Deterioration	Lighting in parkade areas and service/storage rooms is generally replaced based on energy saving considerations or for better illumination. Over time the corrosion may occur on the casing.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	20 years	9 years	11 years
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2029	$25,000	$33,156		
Funding Method	Budget for full replacement.				
Preventative Maintenance	Maintenance service should be performed annually and typically include: removing of old lamps and cleaning the fixtures, inspecting wiring, contacts, terminals and sockets, installation of new lamps, putting back into service and testing the operation.				
Remarks	None.				

Pictures

Fluorescent light fixtures within parkade

Fluorescent light fixtures within parkade

Reserve Component E10100201	Lighting fixtures				
Properties	Light fixtures on building facades				
Potential Deterioration	Wall and soffit lighting is generally replaced based on aesthetic and energy saving considerations and/or for better illumination of the areas served. Over time the corrosion may occur on the casing or discoloring and yellowing may occur on the lens.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2024	$12,500		$14,581	
Funding Method	Budget for contingency allowance every 7 years.				
Preventative Maintenance	Maintenance service should be performed annually and typically include: removing of old lamps and cleaning the fixtures, inspecting wiring, contacts, terminals and sockets, installation of new lamps, putting back into service and testing the operation.				
Remarks	None.				

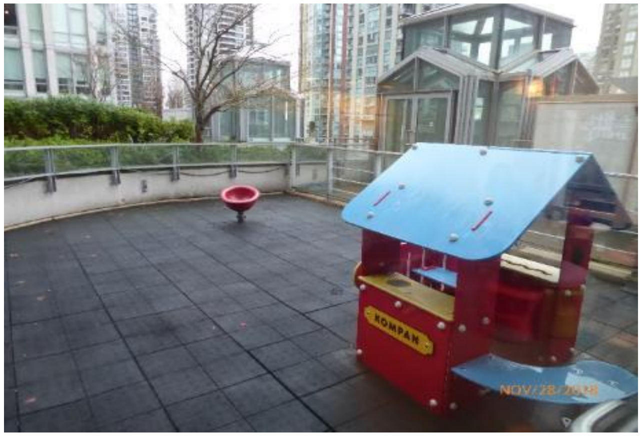
Pictures

Outdoor Sconces

Main entrance chandeliers

Reserve Component G10000101	Outdoor amenities				
Properties	Playground - surface, play structures				
Potential Deterioration	Equipment may be damaged due to weathering and mechanical impacts. Play surface changes may occur after prolonged use. The deterioration of the play equipment may pose hazardous situations to the children, while a compacted play surface may not provide adequate protection in case of falling.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**		**Future Cost**	
	2024	$20,000		$23,330	
Funding Method	Budget for contingency allowance every 15 years.				
Preventative Maintenance	Periodic revisions and repairs as well as upgrades in order to meet the requirements of the current standards should be performed. Also, loose-fill surfacing materials used to provide impact absorption beneath play equipment should be checked frequently to ensure surfacing is of sufficient depth and has not been displaced.				
Remarks	None.				

Pictures



Playground structure at children's play area

Playground structure at children's play area

Reserve Component G10200100	Water features				
Properties	Irrigation system				
Potential Deterioration	Lack of maintenance not only leads to unsightly aesthetics in the form of biological growth or deterioration of the façade (efflorescence, spalling, or bubbling of coatings), but also it can lead to structural deterioration of the water feature itself or adjacent areas of the property or structure.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**		**Future Cost**	
	2023	$10,000		$11,369	
Funding Method	Budget for contingency allowance every 5 years.				
Preventative Maintenance	Maintenance service should be performed semi annually, and typically includes: draining of the fountain, cleaning scale from heads, cleaning of overflows and strainers. Repair any damaged water feature architectural components.				
Remarks	None.				

Pictures

Rainbird irrigation system

Irrigation system for planters

Reserve Component G20300104	Exterior pedestrian walkway				
Properties	Concrete walkways				
Potential Deterioration	Over time, settlement, and freeze-thaw cycles may lead to cracks and spalling.				
Condition Analysis	Deterioration	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	DOI	CA	EUL	EA	RUL
	2009	9 years	Building life	9 years	Building life
Cost Estimates	Starting Year	Current Cost		Future Cost	
	2028	$5,000		$6,463	
Funding Method	Budget for contingency allowance every 10 years.				
Preventative Maintenance	Stresses producing minor defects are constantly at work. Early detection and repair (patching, crack sealing, etc.) of minor defects is essential before they deteriorate into pavement failures requiring major repair expenditures.				
Remarks	None.				

Pictures

Walkway with concrete pavers

Concrete paving

Reserve Component G20500501	Landscaping				
Properties	Property signage & architectural features				
Potential Deterioration	Architectural installations may be prone to deterioration and distortion due to weathering. Irrigation systems and pumps for the pool may fail due to wear.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2023	$7,500	$8,527		
Funding Method	Budget for contingency allowance every 5 years.				
Preventative Maintenance	Plants will need regular pruning and maintenance. Mechanical equipment such as pumps and irrigation systems will need regular servicing.				
Remarks	None.				

Pictures

Property signage

Landscape bollards

Reserve Component G40200101	Site lighting				
Properties	External lighting				
Potential Deterioration	Socket deterioration and filament corrosion may compromise light output and shorten lamp life.				
Condition Analysis	**Deterioration**	None apparent.			
	Overall Condition	Good.			
Repair History	Not available.				
Life Cycle Analysis	**DOI**	**CA**	**EUL**	**EA**	**RUL**
	2009	9 years	Contingency	9 years	Contingency
Cost Estimates	**Starting Year**	**Current Cost**	**Future Cost**		
	2023	$10,000	$11,369		
Funding Method	Budget for contingency allowance every 10 years.				
Preventative Maintenance	Annual inspection. Touch up paint to protect lamp post from deterioration.				
Remarks	None.				

Pictures

Recessed garden wall light

Lamp post at fifth floor terrace

Appendix C – Assumptions and Qualifications

Preamble

This report is subject to the assumptions and qualifications outlined below and otherwise set out elsewhere in this report. Use of this report by any reader constitutes acceptance of these assumptions, qualification and the conditions outlined below and elsewhere in this report. The acceptance of this report also constitutes acceptance of responsibility for payment of the fee balance and any due costs to Strata Engineering.

Common Property Conditions

The determination of the physical condition of the common properties is solely based on a visual review of a representative sampling of all common properties in readily accessible locations after discussion with Strata Corporation representatives and a review of documentation provided by the Strata Corporation. No invasive testing or excavations were carried out on the site for the purposes of this report. Similarly, none of the equipment is disassembled, operated or subjected to any sort of functional testing. The physical inspection does not constitute a "technical audit" since extensive, comprehensive testing was not included in the scope of work.

Building Codes

The visual reviews were not conducted to determine whether common property construction meets or exceeds building code requirements and thus this depreciation report is exempt from all recommendations regarding build code requirements.

Cost Estimation for Common Properties

All cost estimates are performed in future year dollars. The estimates presented are solely intended for budgetary or planning purposes and not accounting for tender use. Actual costs will vary depending on a variety of factors. Most importantly, the estimates assume economies of scale and small operations will incur higher costs when performed individually. Miscellaneous costs such as consulting services and certain contingency allowances unrelated to building components are not included in the budget estimates. Cost estimates for actual projects should be developed in greater detail, accounting for owner contingency, permit fees, engineering fees etc. Construction costs may fluctuate, varying based on the time of year, contractor availability and other factors. These cost estimates must be updated over time and confirmed by competitive tender before any contracts are awarded. The cost estimates do not include allowances for site-specific access requirements or environmental concerns. Generally, replacement costs are based on like-for-like with a similar component except in face of building code modifications or external obsolescence.

Remaining Useful Life of Common Properties

Determination of the remaining useful life is based on the condition of the common properties assessed through a visual review and on the average lifespan of the same component by industry standards, Poor maintenance, insurable losses such as earthquakes, fires and floods can shorten the life of an asset. These unforeseen events are not accounted for in our calculation

Funding Models

The funding models for this depreciation report are calculated based on a 30-year horizon, beginning within the current year. A report performed in 2013 projects funding until 2043. The projected period is stationary and does not shift. Hence, in year 1, 2014, the projections will be valid for 29 years. The funding projections does not extend past 30 years and accuracy is only estimated by a +/- 30% error within the prescribed period of 30 years. Renewals and major maintenance projects occurring beyond the 30-year projection time frame are not considered in the given funding models.

Services Not Included

The agreed compensation for services rendered in preparing this report does not include fees for follow-up consultations and/or attendances to arbitrations or mediations, other than those outlined at the time of the acceptance of the given quote. Additional fees will have to be negotiated if personal appearances are required in connection with this report after its acceptance.

Services Included

Limited consulting or clarification regarding the content of this report or requested modifications shall be provided at no additional charge within one year of the completion of the draft report. Attendance of a final meeting with the strata council to clarify ramifications and concerns regarding the report will also be provided at no extra charge.

Currency

Unless otherwise noted, all estimates are expressed in Canadian currency.

Report Distribution, Third Party Liability

This report is intended sole and exclusive use of the Strata Corporation. Possession of a copy of the report shall not authorize use of the report for any purpose other than that noted in the agreement and/or report. This report shall not be distributed or communicated to unauthorized third parties in whole or in part without prior written consent of representative of the client as noted herein. Any liability, if any, of Strata Engineering is limited to the Strata Corporation only. Notwithstanding anything herein to the contrary, the Strata Corporation will forever indemnify and hold Strata Engineering along with its employees harmless from any claims by third parties related in any way to this report.

Information Provided by Third Parties

This report, its analysis and conclusions required information from various sources. Such information was believed to be reasonably reliable, accurate, and true. Strata Engineering shall not be responsible for the accuracy of any information used in this report that has been obtained from any source. No independent verification of factual data presented to Strata Engineering has been undertaken by Strata Engineering.

Modifications

Strata Engineering reserves the right at any time to alter statements, analyses, conclusions or value estimates, if additional facts pertinent to this report are discovered at any time. Strata Engineering is not responsible for any unauthorized alterations or distributions to the report. The report must not be abstracted and must be used in its entirety.

Measurements and Exhibits

The sketches, maps and photographs in the report are included solely for the purpose of assisting the reader in visualizing the assets and may not be to scale. All components assessed herein are assumed to be completed according to the architectural, structural, mechanical, electrical plans provided, unless otherwise noted. Any variation in land or building areas from those considered in the depreciation report may alter the estimates and in turn, the required funding. No legal survey, soil tests, engineering investigations, detailed quantity survey compilations, nor exhaustive physical examinations have been made. Accordingly, no responsibility is assumed concerning these matters or other technical and engineering techniques, which would be required to discover any inherent or hidden condition of the property.

Legal Concerns

The author is highly qualified in matters concerning the depreciation report itself but otherwise not qualified in legal affairs and does not purport to give legal advice. It is assumed that:

1) The legal description as well as the registered survey as stated herein is that which is recorded by the Registrar of the requisite Land Titles Office and are assumed correct;
2) Title to the property is good and marketable; and
3) Rights-of-way, easements or encroachments over other real property, are legally enforceable.

The distribution of cost and other estimates in this report apply only under the programme of utilization as identified in this report. The estimates herein must not be used in conjunction with any other forms of valuation or depreciation reports and may be invalid if so used.

The report is based, unless otherwise stated, on there being full compliance with all applicable federal, provincial and local environmental regulations, laws and restrictions.

Moreover, it is assumed that all required permits have been or can be obtained or renewed for any use considered herein. It is also assumed that the subject property is maintained and managed pursuant to prudent and competent ownership and management.

Environmental Concerns

Strata Engineering personnel are not qualified in aspects of surveying and environmental assessment. Unless otherwise stated in the report, it is assumed that the subject assets are not affected in any way by any adverse environmental conditions. Strata Engineering personnel are not qualified to detect potentially hazardous materials and/or substances which may adversely affect the value of the property. Hence, Strata Engineering shall not be held responsible for past or present, legal or physical deficiencies that may be found.

Furthermore, Strata Engineering personnel are not qualified to comment on environmental issues that may affect the market value of the property. These environmental issues include but are not limited to, the pollution or contamination of land, buildings, water, groundwater or air. Unless expressly stated, the property is assumed to be free and clear of pollutants and contaminants including, but not limited to, moulds or mildews or the conditions that might give rise to either. Strata Engineering and its assignees expressly deny any legal liability relating to the effect of environmental issues on the market value of the property assessed.

Physical Concerns

Strata Engineering shall not be held responsible for any costs incurred to investigate or correct any deficiencies of any type, which may be present in the real estate and/or real property described herein. It is assumed that there are no patent or latent defects in the subject improvements, that no objectionable materials are present and that the improvements are structurally, mechanically and electrically adequate and in need of no immediate repairs unless expressly noted within this report.

Appendix D – Replacement Schedule

The following table notes the recommended years of replacement for each component over the 30-year period. Please note that the years listed below may differ from the replacement years in Appendix B in order to optimize the financial models. The costs listed are the future replacement costs as determined by the inflation rates noted in Section 2.3.1.

Component	Current Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Suspended slab	$ 222,800	-	-	-	-	-	-	$ 259,896	-	-	-	-	-	-	-	-	-	-	-
Underground parkade structure	$ 20,000	-	$ 20,520	-	-	-	-	-	-	$ 24,559	-	-	-	-	-	-	$ 29,393	-	-
Parkade Roof Deck	$ 193,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Balcony flooring	$ 280,000	-	-	-	-	-	-	$ 326,620	-	-	-	-	-	-	-	-	-	-	-
Exterior stairs	$ 10,000	-	-	-	-	-	-	$ 11,665	-	-	-	-	-	-	-	-	-	$ 15,078	-
Cladding	$ 26,997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 40,708	-
Cladding	$ 25,000	-	-	-	-	-	-	$ 29,162	-	-	-	-	-	-	-	-	-	-	-
Cladding	$ 150,000	-	-	-	-	-	-	$ 174,975	-	-	-	-	-	-	-	-	-	-	-
Balcony & terrace railings	$ 403,750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exterior painting	$ 330,000	-	-	-	-	-	-	$ 384,944	-	-	-	-	-	-	-	-	-	-	-
Skylights	$ 25,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Exterior windows	$ 15,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 22,618	-
Exterior windows	$ 1,033,230	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 1,557,955	-
Caulking and weatherstripping	$ 200,000	-	-	-	-	-	-	$ 233,300	-	-	-	-	-	-	-	-	-	-	-
Entrance doors	$ 27,125	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Egress doors	$ 4,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Garage doors	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	$ 13,262	-	-	-	-	-	-
Patio and balcony doors	$ 164,320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roofing	$ 335,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roofing	$ 55,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Connected Structures	$ 5,000	-	-	-	-	-	-	-	-	-	-	-	$ 6,631	-	-	-	-	-	-
Rooms in common areas	$ 25,000	-	-	-	-	-	-	$ 29,162	-	-	-	-	-	-	-	-	-	-	-
Rooms in common areas	$ 8,800	-	-	-	-	-	-	-	-	-	-	-	$ 11,671	-	-	-	-	-	-
Rooms in common areas	$ 15,064	-	-	-	-	-	-	-	-	-	-	-	$ 19,978	-	-	-	-	-	-
Rooms in common areas	$ 1,920	-	-	-	-	-	-	-	-	-	-	-	$ 2,546	-	-	-	-	-	-
Rooms in common areas	$ 3,900	-	-	-	-	-	-	-	-	-	-	-	$ 5,172	-	-	-	-	-	-
Rooms in common areas	$ 4,500	-	-	-	-	-	-	-	-	-	-	-	$ 5,968	-	-	-	-	-	-
Rooms in common areas	$ 11,700	-	-	-	-	-	-	$ 13,648	-	-	-	-	-	-	-	-	-	-	-
Service doors	$ 14,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unit entry doors	$ 120,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Interior stairs	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	$ 13,262	-	-	-	-	-	-
Wall finishes	$ 81,250	-	-	-	-	-	-	$ 94,778	-	-	-	-	-	-	-	-	-	-	-
Floor finishes	$ 90,000	-	-	-	-	-	-	$ 104,985	-	-	-	-	-	-	-	-	-	-	-
Vertical transportation	$ 400,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vertical transportation	$ 40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vertical transportation	$ 35,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plumbing system	$ 1,022,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plumbing system	$ 60,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	-	-	-	$ 11,665	-	-	-	-	-	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	-	-	-	$ 11,665	-	-	-	-	-	-	-	-	-	-	-
Plumbing system	$ 5,000	-	-	-	-	-	-	$ 5,832	-	-	-	-	-	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	$ 13,262	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	$ 13,262	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	$ 13,262	-	-	-	-	-	-
Whirlpool equipment	$ 15,000	-	-	-	-	-	-	$ 17,497	-	-	-	-	-	-	-	-	-	-	-
HVAC systems	$ 20,000	-	-	-	-	-	-	-	-	-	-	-	$ 26,525	-	-	-	-	-	-
HVAC systems	$ 47,500	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 71,623	-
HVAC systems	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	$ 13,262	-	-	-	-	-	-
Heating generating system	$ 4,500	-	-	-	-	-	-	$ 5,249	-	-	-	-	-	-	-	-	-	$ 6,785	-
Heating generating system	$ 30,000	-	-	-	-	-	-	$ 34,995	-	-	-	-	-	-	-	-	-	-	-
Natural gas distribution system	$ 5,000	-	-	-	-	-	-	-	-	-	-	-	$ 6,631	-	-	-	-	-	-
Air conditioning	$ 30,000	-	-	-	-	-	-	$ 34,995	-	-	-	-	-	-	-	-	-	-	-
Wet and dry sprinkler systems	$ 25,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 37,696	-
Electrical distribution	$ 80,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 120,628	-
Electrical distribution	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 15,078	-
Emergency generator	$ 35,000	-	-	-	-	-	-	-	-	-	-	-	$ 46,418	-	-	-	-	-	-
Site utilities	$ 20,000	-	-	-	-	-	-	-	-	-	-	-	-	$ 27,214	-	-	-	-	-
Fire Protection and Security Systems	$ 40,000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ 60,314	-
Fire Protection and Security Systems	$ 8,000	-	-	-	-	-	-	-	-	-	-	-	$ 10,610	-	-	-	-	-	-
Fire Protection and Security Systems	$ 5,000	-	-	-	-	-	-	$ 5,832	-	-	-	-	-	-	-	-	-	$ 7,539	-
Fire Protection and Security Systems	$ 25,000	-	-	-	-	-	-	$ 29,162	-	-	-	-	-	-	-	-	-	-	-
Lighting fixtures	$ 75,000	-	-	-	-	-	-	-	-	-	-	-	$ 99,468	-	-	-	-	-	-
Lighting fixtures	$ 25,000	-	-	-	-	-	-	-	-	-	-	-	$ 33,156	-	-	-	-	-	-
Lighting fixtures	$ 12,500	-	-	-	-	-	-	$ 14,581	-	-	-	-	-	-	$ 17,451	-	-	-	-
Outdoor amenities	$ 20,000	-	-	-	-	-	-	$ 23,330	-	-	-	-	-	-	-	-	-	-	-
Water features	$ 10,000	-	-	-	-	-	$ 11,369	-	-	-	-	$ 12,926	-	-	-	-	$ 14,696	-	-
Exterior pedestrian walkway	$ 5,000	-	-	-	-	-	-	-	-	-	-	$ 6,463	-	-	-	-	-	-	-
Landscaping	$ 7,500	-	-	-	-	-	$ 8,527	-	-	-	-	$ 9,695	-	-	-	-	$ 11,022	-	-
Site lighting	$ 10,000	-	-	-	-	-	$ 11,369	-	-	-	-	-	-	-	-	-	$ 14,696	-	-
Total	-	-	$ 20,520	-	-	-	$ 31,266	$ 1,857,940	-	$ 24,559	-	$ 29,084	$ 354,349	$ 27,214	$ 17,451	-	$ 69,808	$ 1,956,023	-

Component	Current Cost	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Suspended slab	$ 222,800	-	-	-	-	-	-	-	-	$ 434,257	-	-	-	-
Underground parkade structure	$ 20,000	-	-	-	-	$ 35,178	-	-	-	-	-	-	$ 42,102	-
Parkade Roof Deck	$ 193,500	-	-	-	-	-	-	-	-	$ 377,148	-	-	-	-
Balcony flooring	$ 280,000	-	-	-	$ 480,013	-	-	-	-	-	-	-	-	-
Exterior stairs	$ 10,000	-	-	-	-	-	-	-	-	$ 19,491	-	-	-	-
Cladding	$ 26,997	-	-	-	-	-	-	-	-	-	-	-	-	-
Cladding	$ 25,000	-	-	-	$ 42,858	-	-	-	-	-	-	-	-	-
Cladding	$ 150,000	-	-	-	-	-	-	-	-	$ 292,363	-	-	-	-
Balcony & terrace railings	$ 403,750	-	-	-	$ 692,161	-	-	-	-	-	-	-	-	-
Exterior painting	$ 330,000	-	-	-	$ 565,729	-	-	-	-	-	-	-	-	-
Skylights	$ 25,000	-	-	-	$ 42,858	-	-	-	-	-	-	-	-	-
Exterior windows	$ 15,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Exterior windows	$ 1,033,230	-	-	-	-	-	-	-	-	-	-	-	-	-
Caulking and weatherstripping	$ 200,000	-	-	-	$ 342,866	-	-	-	-	-	-	-	-	-
Entrance doors	$ 27,125	-	-	-	$ 46,501	-	-	-	-	-	-	-	-	-
Egress doors	$ 4,000	-	-	$ 6,684	-	-	-	-	-	-	-	-	-	-
Garage doors	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Patio and balcony doors	$ 164,320	-	-	-	$ 281,699	-	-	-	-	-	-	-	-	-
Roofing	$ 335,000	-	-	-	$ 574,301	-	-	-	-	-	-	-	-	-
Roofing	$ 55,000	-	-	-	$ 94,288	-	-	-	-	-	-	-	-	-
Connected Structures	$ 5,000	-	-	-	-	-	-	-	-	$ 9,745	-	-	-	-
Rooms in common areas	$ 25,000	-	-	-	$ 42,858	-	-	-	-	-	-	-	-	-
Rooms in common areas	$ 8,800	-	-	-	-	-	-	-	-	-	-	-	-	-
Rooms in common areas	$ 15,064	-	-	-	-	-	-	-	-	-	-	-	-	-
Rooms in common areas	$ 1,920	-	-	-	-	-	-	-	-	-	-	-	-	-
Rooms in common areas	$ 3,900	-	-	-	-	-	-	-	-	-	-	-	-	-
Rooms in common areas	$ 4,500	-	-	-	-	-	-	-	-	$ 8,771	-	-	-	-
Rooms in common areas	$ 11,700	-	-	-	$ 20,058	-	-	-	-	-	-	-	-	-
Service doors	$ 14,000	-	-	$ 23,392	-	-	-	-	-	-	-	-	-	-
Unit entry doors	$ 120,000	-	-	-	-	-	-	-	-	$ 233,891	-	-	-	-
Interior stairs	$ 10,000	-	-	-	-	-	-	-	-	$ 19,491	-	-	-	-
Wall finishes	$ 81,250	-	-	-	$ 139,289	-	-	-	-	-	-	-	-	-
Floor finishes	$ 90,000	-	-	-	$ 154,290	-	-	-	-	-	-	-	-	-
Vertical transportation	$ 400,000	-	-	-	$ 685,732	-	-	-	-	-	-	-	-	-
Vertical transportation	$ 40,000	-	-	-	$ 68,573	-	-	-	-	-	-	-	-	-
Vertical transportation	$ 35,000	-	-	-	$ 60,002	-	-	-	-	-	-	-	-	-
Plumbing system	$ 1,022,000	-	-	-	-	-	-	-	-	$ 1,991,968	-	-	-	-
Plumbing system	$ 60,000	-	-	-	$ 102,860	-	-	-	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	$ 17,143	-	-	-	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	$ 17,143	-	-	-	-	-	-	-	-	-
Plumbing system	$ 5,000	-	-	-	$ 8,572	-	-	-	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	$ 17,143	-	-	-	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	$ 17,143	-	-	-	-	-	-	-	-	-
Plumbing system	$ 10,000	-	-	-	$ 17,143	-	-	-	-	-	-	-	-	-
Whirlpool equipment	$ 15,000	-	-	-	$ 25,715	-	-	-	-	-	-	-	-	-
HVAC systems	$ 20,000	-	-	-	-	-	-	-	-	-	-	-	-	-
HVAC systems	$ 47,500	-	-	-	-	-	-	-	-	-	-	-	-	-
HVAC systems	$ 10,000	-	-	-	-	-	-	-	-	$ 19,491	-	-	-	-
Heating generating system	$ 4,500	-	-	-	-	-	-	-	-	$ 8,771	-	-	-	-
Heating generating system	$ 30,000	-	-	-	$ 51,430	-	-	-	-	-	-	-	-	-
Natural gas distribution system	$ 5,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Air conditioning	$ 30,000	-	-	-	$ 51,430	-	-	-	-	-	-	-	-	-
Wet and dry sprinkler systems	$ 25,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical distribution	$ 80,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Electrical distribution	$ 10,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Emergency generator	$ 35,000	-	-	-	-	-	-	-	-	$ 68,218	-	-	-	-
Site utilities	$ 20,000	-	-	-	-	-	-	-	-	-	$ 39,995	-	-	-
Fire Protection and Security Systems	$ 40,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire Protection and Security Systems	$ 8,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Fire Protection and Security Systems	$ 5,000	-	-	-	-	-	-	-	-	$ 9,745	-	-	-	-
Fire Protection and Security Systems	$ 25,000	-	-	-	$ 42,858	-	-	-	-	-	-	-	-	-
Lighting fixtures	$ 75,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Lighting fixtures	$ 25,000	-	-	-	-	-	-	-	-	-	-	-	-	-
Lighting fixtures	$ 12,500	-	-	$ 20,886	-	-	-	-	-	-	$ 24,997	-	-	-
Outdoor amenities	$ 20,000	-	-	-	$ 34,287	-	-	-	-	-	-	-	-	-
Water features	$ 10,000	-	-	$ 16,709	-	-	-	-	$ 18,997	-	-	-	-	$ 21,598
Exterior pedestrian walkway	$ 5,000	-	-	$ 8,354	-	-	-	-	-	-	-	-	-	$ 10,799
Landscaping	$ 7,500	-	-	$ 12,532	-	-	-	-	$ 14,248	-	-	-	-	$ 16,199
Site lighting	$ 10,000	-	-	-	-	-	-	-	$ 18,997	-	-	-	-	-
Total	-	-	-	$ 88,557	$ 4,736,944	$ 35,178	-	-	$ 52,242	$ 3,493,350	$ 64,992	-	$ 42,102	$ 48,596