RDH BUILDING SCIENCE

Depreciation Report Update | Project R-10807.003

The Coho, 286 & 290 Wilfert Road, Victoria, BC

To The Owners, Strata Plan EPS965
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Site Visit: March 18th 2022
Submitted April 6th, 2023 by
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1 Introduction

RDH Building Science Inc. (RDH) was retained by Strata Plan EPS965 (Owners) to prepare a Depreciation Report Update (the Report) for the residential complex known as The Coho, which is located at 286 & 290 Wilfert Road, Victoria, BC. The Report considers the common property and limited common property components (the Assets) that the Owners are responsible to maintain, repair, and replace.

The Report is intended to help the Owners, the strata council, and the management team make informed decisions about the allocation of resources to the common property Assets (such as roofs, balconies, boilers, and paving).

This Report meets the requirements stipulated in the current Strata Property Act and Regulations. The Report includes a physical inventory of the common property assets; estimated costs for capital expenditures over a 30-year horizon; and four funding models. Refer to the appendices for RDH's qualifications and information on errors and omissions insurance. In accordance with the requirements of the Act, RDH declares that there is no relationship between the employees of RDH and the Owners.

This report is an update to the original Depreciation Report, which was issued on October 2nd, 2017. As part of our work for this Report, a site visit was completed on March 18th 2022. The financial data is based on the 2022/2023 fiscal year. A draft asset inventory and summary of work completed, was distributed to the strata council and strata management on November 23rd, 2022. Based on additional information provided by the strata, an updated asset inventory and funding models were provided for feedback on March 3rd, 2023. The final report was issued on April 6th, 2023.

The Report is a synopsis of a significant volume of data and has two parts: the summary and the appendices. The summary is intended to provide an overview of the Report. The appendices provide detailed information to support the summary report. The appendices include a glossary of terms. Words that are *italicized* are defined in the glossary.

As the physical and financial status of the Assets change over time, the Report will require updating. The Strata Property Act requires updates to the Report every three years; however, the Owners can choose to update portions of the Report more frequently, at their discretion, to reflect changes to their financial status and completed work.

2 The Coho

The Coho is a 9 year old strata complex, with two buildings that are typically of wood-framed construction, over a shared cast-in-place concrete parking structure. The complex was built in two phases.

The principal systems in the residential complex include the building enclosure (the separation of the interior from exterior space), electrical (the electrical distribution, communications, and security equipment), mechanical (heating, ventilation, and plumbing), elevators, fire safety (sprinklers, fire detection, and egress equipment), interior finishes, amenities, and site work. The Assets within each system are described in detail in Appendix B.

Key physical parameters of The Coho are summarized in Table 2.1, Figure 2.1, and Figure 2.2 below.

TABLE 2.1 KEY PHYSICAL PARAMETERS

Date of first occupancy (blended)	2014
→ Phase 1	December 2012
→ Phase 2	October 2015
Approximate gross floor area, including the parkade (ft^2)	139,700
Stories above grade	4
Total number of strata lots	93
→ Phase 1	49
→ Phase 2	44

Figure 2.1 Elevation photograph of The Coho

Figure 2.2 Aerial photograph of The Coho (© CRD Regional Map).

3 Assessments

The Report combines two distinct types of analysis: a *physical assessment,* and a *financial assessment.* The assessments are used to determine what the Owners possess, what condition the Assets are in, what the Owners are responsible for, and the *capital costs* associated with the Assets.

The process of preparing a Report is summarized in Figure 3.1 below:

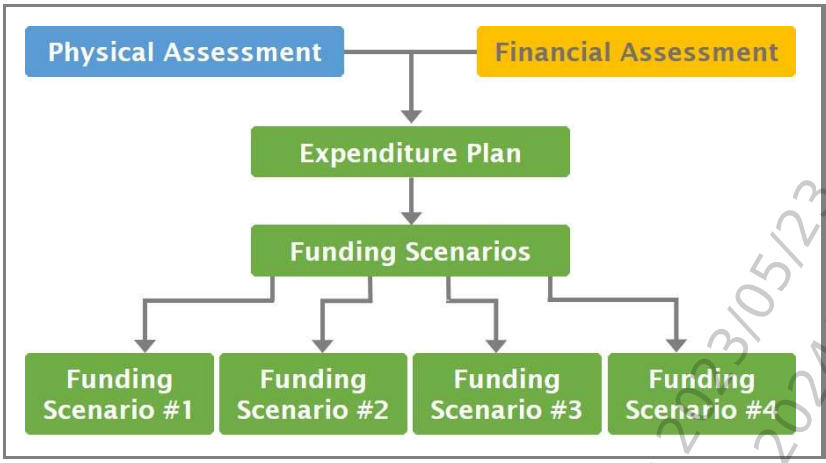

Figure 3.1

Depreciation Report Process

Funding models are built based on the strategic plan (30 years).

The following sections provide a brief overview of the physical assessment and financial assessment.

3.1 Physical Assessment

The physical assessment has two parts: an inventory and an evaluation.

The *Asset Inventory* identifies "the common property, the common assets and those parts of a strata lot or limited common property, or both, that the Owners are responsible to maintain or repair under the Act, the Strata Corporation's bylaws or an agreement with an owner" (*Strata Property Act Regulation,* BC Reg 43/2000, Ch. 6.2). In other words, it identifies what the Owners possess and must repair and maintain. The Asset Inventory is included as an appendix to this report.

Some Assets have been identified as placeholders. Placeholder Assets are included in the Asset Inventory for reference purposes, however they are not included in the financial analysis and do not affect the funding models or other financial calculations. Placeholder Assets are identified based on typical agreements with utilities, the Owner's bylaws, and information provided by the strata manager and council. A summary of placeholder assets is provided in Table 3.1 below.

TABLE 3.1 SUMMARY OF PLACEHOLDER ASSETS

ASSET	PARTY RESPONSIBLE FOR CAPITAL EXPENDITURES
Mech 03 - Meters - Water	→ Utility Provider
Site 10 – Electrical Site Services	→ BC Hydro

The evaluation is used to forecast common repairs, replacements, and maintenance activities that "usually occur less often than once a year or that do not usually occur" (*Strata Property Act Regulation*, BC Reg

43/2000, Ch.6.2). In other words, the evaluation predicts only events that occur at intervals greater than one year.

The evaluation is typically based on:

A review of historical documentation such as inspection reports, minutes, invoices, and the general ledger,

Discussions with Strata Corporation representatives,

A visual review of the residential complex, limited to a sample of readily accessible Assets, and

A review of other technical information such as construction drawings and previous investigations or reports.

Destructive testing, disassembly, and performance testing are not included in the physical evaluation; this report does not replace a Warranty Review or Condition Assessment. Please visit www.rdh.com for additional information on Warranty Reviews and Condition Assessments.

The condition of some Assets may be concealed, for example, buried infrastructure such as sanitary drainage lines or building enclosure assets such as waterproofing membranes. For Assets with the potential for concealed failure, a number of tools are used to assign a reasonable expected service life including the typical performance of the asset in other, similar properties; the performance history reported by the Owners; the original drawings; and any previous investigation reports commissioned by the Owners. It is expected that the Owners will need more detailed reviews as Assets approach the end of their service lives. A summary of the asset service lives is provided in the appendices of this Report. Allowances for additional reviews or investigations are included as appropriate. Recommendations taken from any additional reviews should be incorporated into future Report updates.

As part of the physical assessment, RDH compiled a history of completed projects by reviewing the documents provided by the Owners and interviewing Strata Corporation representatives. The history is summarized in Table 3.2 below. The history of renewals establishes the chronological age of the Assets while the history of major maintenance may affect the effective age of the Assets.

TABLE 3.2 MAINTENANCE AND RENEWALS HISTORY AS OF 2018

Building Enclosure

2021 – Repaired roof leak (Topline)

2021 – Repaired masonry and injected concrete to repair parkade leak (Trailside Masonry)

2021 – Cleaned dryer vents

2022 - Completed roof maintenance and sealant repair Dec. 2022 (Warranty review from Dec 2022 indicates loose soffit panels at building 286)

2022- Completed soffit repair at building 290 at south elevation roof gable.

2022 - Completed roof maintenance incl. application of new sealant in localized areas, gutter cleaning, moss removal and small roof repair.

2022 – Completed powerwash of buildings 286 & 290

2022 – Completed powerwash of garbage enclosures

2022 – Repaired garbage enclosures

2022 - Completed targeted painting of buildings 286 & 290 and garbage enclosure

2022 – Completed 10 year Warranty Review by Method Engineering
Electrical 2021 - Conducted Infrared testing on electrical distribution system 2021 – Replaced failed enterphone with Mircom Entry Panel with scrolling display incl. Mircom Modern Module 2022 - Installed door operator in parkade elevator lobby & re-key of entrance doors
Mechanical → 2021 – Conducted camara inspection in drainage system → 2020 – Replaced appr. 30' of perforated drainpipe at building 290 incl. new drainboard and filter fabric. → 2021 – Replaced 3 gas fired DHW tanks (same models as existing). → 2021 – Replaced components of hot water tank → 2021 – Replaced failed combustion blower on 286 DHW boiler. → 2021 – Replaced blower fan at building 286
Elevator 2021 – Completed elevator maintenance.
Fire Safety 2022 – Repaired fire department connection (FDC) at main entrance of building 286
Interior Finishes 2021 – Painted common area hallways and unit doors (a couple of doors to be finished this year)
Amenities 2022 – Converted storage locker area to bike room including sealing and/or painting of concrete walls and floors, and installation of bike racks.
Sitework 2021 – Maintained irrigation equipment. 2022 – Repainted parking lines and added numbers.

On March 18th 2022, two representatives of RDH Building Science Inc. visited the site to visually review the Assets. While the Report does not constitute a maintenance review or condition assessment, some observations regarding the general condition, design and construction of the Assets were made as part of the visual review. These observations were used to determine a reasonable estimated remaining service life of various assets. Table 3.3 on the next page includes examples of some observations made during the review.

TABLE 3.3 OBSERVATIONS BY SYSTEM	
SYSTEM	OBSERVATION
Structure	→ Many of the bolt connections at wood posts and braces supporting balconies and roof overhangs, are loose.  At Building 286, Unit 412  At Building 290, Entrance Canopy → There is evidence of water entering the parkade in localized areas. This is also noted in the 10 Year Warranty Report issued by Method Engineering& Building Services Ltd. On December 13, 2022  At the parkade wall near the mechanical room → There is a crack in the suspended slab near the electrical room in the parkade.  At underside of suspended slab near the electrical room

TABLE 3.3 OBSERVATIONS BY SYSTEM	
SYSTEM	OBSERVATION
Building Enclosure	→ At time of review there was noticeable moss growth on the lower roof above the building 286 main entrance. A roof maintenance report by Flynn, dated Dec. 1st, 2022 confirms that the moss has since been removed.  → At time of review, wood trim paint was failing in exposed locations, south east facing elevations and at roof level. Targeted painting has since been completed.  Shown at Building 286 roof fascia at mechanical well  Shown at Building 286
Site work	→ Asphalt paving is cracking in some areas, cracks should be repaired and sealed to avoid costly repairs later. 

3.2 Financial Assessment

The financial assessment estimates the future costs associated with the Assets, and examines how future funding requirements will be affected by current financial practises. More specifically, the financial assessment identifies:

The opening balance in the *Contingency Reserve Fund* (CRF).

The estimated value of capital expenditures, expressed in *Current Year Dollars* (CYD).

The estimated future value of capital expenditures, expressed in *Future Year Dollars* (FYD). These costs are calculated by applying an inflation rate (3% per year) to the current costs.

The future value of major maintenance and renewal costs can be compared against the building reproduction cost. The building reproduction cost is the cost to reproduce the buildings in similar materials, in accordance with current market prices, and is obtained from the most recent insurance appraisal.

The financial assessment begins with a review of the current financial situation of the Owners. Table 3.4 below summarizes the key financial parameters reviewed as part of the financial assessment.

TABLE 3.4 KEY FINANCIAL PARAMETERS

PARAMETER	ORIGINAL REPORT (2017/2018)	UPDATE REPORT (2022/2023)
Fiscal year end	February 28th, 2018	February 28th, 2023
Building reproduction cost	$19,125,000	$24,635,000
Operating budget (excluding CRF contribution)	$291,475	$378,605.00
Annual CRF contribution	$46,000	$60,500.00
Opening Balance of the CRF	$128,870	$471,570.62

**The balance in the CRF varies each month as contributions are made and funds are withdrawn for capital renewal projects and major maintenance activities. The accumulated CRF balance is reconciled as of the beginning of the 2022 fiscal year.*

The Report includes capital costs only: the costs for activities that occur at intervals greater than one year. Activities that occur annually or more frequently than once a year are considered operating expenses and are not included in the Report funding models and calculations.

Capital costs can be distributed into three general categories:

Catch-up costs. The cost to complete any deferred maintenance and renewals.

Keep-up costs. The cost to complete planned cyclical maintenance and renewals.

Get-ahead costs. The cost to adapt, upgrade and improve.

The Depreciation Report is based on keep-up costs. Get-ahead costs (improvements) may also be included, but only if they are required to meet changing codes or standards.

Costs are considered *Class D* estimates (±50%), as defined by the Engineers and Geoscientists of British Columbia (EGBC), or unless noted otherwise. Unless otherwise noted, soft costs, such as consulting fees and contingency allowances are not included, because these costs are highly dependent on the scope of work for a particular project. Scopes of work for specific projects should be developed well in advance so that project budgets, including soft costs, can be refined.

The current value of many major maintenance and renewal activities is calculated by multiplying the quantity of an Asset by standard unit rates (for example, the cost per square foot or cost per linear foot). Quantities are measured from original construction documents and visual observations on site. The unit rates are based on historical information, construction trends, information from contractors, and other sources as appropriate. Unit rates will fluctuate over time. Basic unit rates are adjusted for the relative complexity of the property. A detailed list of activities and their associated costs are available through the appendices of this Report.

Costing Caveats

The capital costs given in the Report provide a basic estimate for long term planning. They are intended to help guide priority setting and provide a clearer sense of timing. They are not suitable for planning specific projects as they cannot account for project soft costs such as taxes, grants, engineering or design, municipal permits, etc., or for project specific construction costs such as access to the work (e.g. scaffold), contingencies, hazardous materials, disposal, project management, etc. Such costs cannot be estimated without more information, including a project scope and preliminary design work. Once a project reaches the planning stages, a reasonable assumption of soft costs should be made based on the actual needs of the project. It is recommended that this happens well in advance of predicted work to allow time to plan for the funding of the soft costs.

4 Expenditures

There are three types of activities that relate to expenditures:

- *Renewal* refers to the replacement or refurbishment of an Asset at the end of its useful service life.
- *Maintenance* refers to activities that preserve the Assets, to ensure the Assets will last their predicted service lives and perform as expected.
  - *Major maintenance* refers to maintenance that occurs at intervals greater than one year, for example, every 18 months, two years, five years. Major maintenance typically includes activities such as testing and inspecting, and is considered a capital expense.
  - *Minor maintenance* includes maintenance activities that occur once a year or more frequently such as quarterly or monthly.

The costs associated with major maintenance and renewals are included in the Report funding models as required by the Strata Property Act. Costs associated with minor maintenance are included in the Owners' operating budget.

4.1 Major Maintenance and Renewal Expenditures

Table 4.1 below summarizes all major maintenance and renewal costs by system, including costs forecasted for the next 30 years. The values are rounded.

TABLE 4.1 CAPITAL EXPENDITURES SUMMARY BY SYSTEM

SYSTEM	10 YEAR CAPITAL COSTS (WITHOUT INFLATION)	10 YEAR CAPITAL COSTS (WITH INFLATION)	30 YEAR CAPITAL COSTS (WITHOUT INFLATION)	30 YEAR CAPITAL COSTS (WITH INFLATION)
Structural	$11,000	$13,000	$28,000	$44,000
Building Enclosure	$620,000	$740,000	$6,100,000	$11,000,000
Electrical	$32,000	$37,000	$140,000	$240,000
Mechanical	$180,000	$210,000	$1,600,000	$3,200,000
Elevator	$66,000	$78,000	$880,000	$1,200,000
Fire Safety	$12,000	$14,000	$230,000	$400,000
Interior Finishes	$130,000	$140,000	$460,000	$760,000
Amenities	$15,000	$18,000	$57,000	$93,000
Sitework	$73,000	$79,000	$260,000	$380,000
Building Total	**$1,139,000**	**$1,329,000**	**$9,755,000**	**$17,317,000**

Approximately 10% of the Owners' capital expenditures may occur in the next 10 years. The distribution of estimated capital expenditures over the next 10 years is shown in Figure 4.1 on the next page.

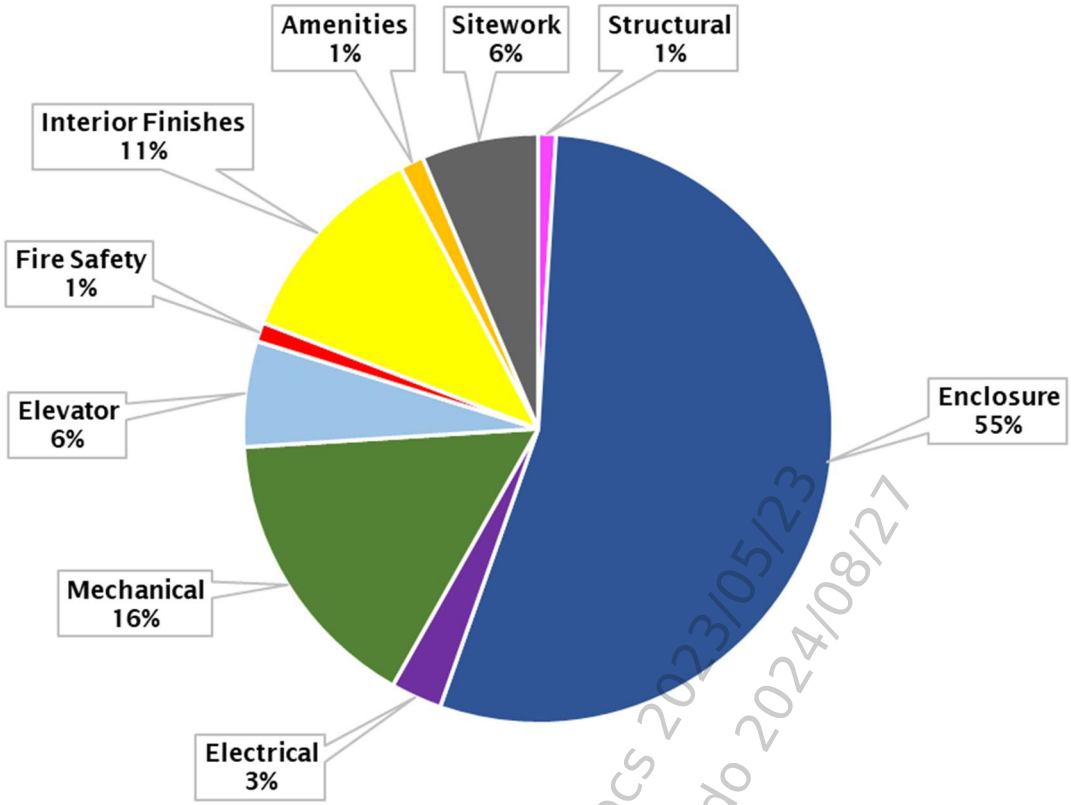

Figure 4.1 Distribution of estimated capital expenditures over 10 years by system.

Section 5 discusses the timing and size of renewal projects forecast for the next 30 years. A detailed list of each major maintenance and renewals activity, including the frequency, costs expressed in current year dollars (CYD), and costs including inflation rates, expressed in future year dollars (FYD) are available to the Owners.

5 Major Maintenance and Renewals Planning Horizons

There are three common planning horizons, used for making different types of capital planning decisions:

Strategic (30 years): The average service life of many Assets is approximately 25 years (such as roofs) so a long-range view captures most renewal projects. In some cases, an asset may be replaced more than once in the 30-year horizon.

Tactical (5-10 years): Many residential Owners will own their strata lot for less than 10 years; the tactical plan captures projects that may occur while current Owners still have an interest in the Strata Corporation.

Operational (1 year): The annual operating period encompasses one fiscal cycle (12 months). Typically, the budget is presented and approved at the annual general meeting (AGM) and will include any capital expenditures paid from the CRF, as well as the CRF contributions for the year. As a minimum, the decision on the CRF contribution should consider projects forecast for the next five to ten years.

5.1 Strategic Planning Horizon

Estimated major maintenance and renewal costs over the next 30 years are shown on the graph below (Figure 5.1). The red bars represent the estimated value of capital costs.

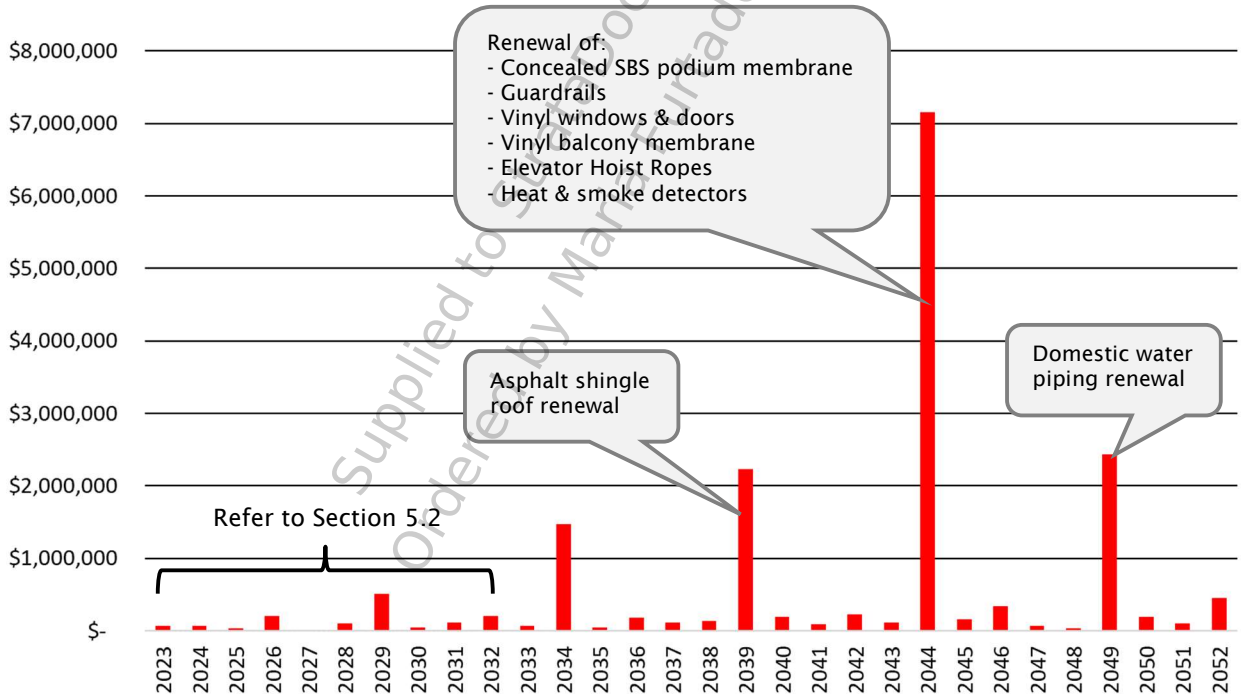

Figure 5.1 Strategic Forecast (30 Years), showing the approximate timing and value of some key capital expenditures.

Each bar on the graph represents a collection of different major maintenance and renewal activities, each with different values. Detailed information about each year, including a description of the maintenance and renewal activities and estimated costs, is available in the appendices.

The strategic plan represents an estimate of future projects. The actual timing of projects will likely vary. Assets may be replaced earlier or later, depending on the quality of maintenance, in-service conditions, and other factors. The Owners can anticipate changes to the strategic plan with each update of the Report.

5.2 Tactical Planning Horizon

The graph below shows the projected major maintenance and renewal costs for the next ten years (Figure 5.2). Commonly, building managers refer to a five-year tactical plan; however, a ten-year plan allows the Owners to see a wider range of projects.

The bars indicate the years in which an event (or bundle of events) is most likely to occur as well as the total magnitude of major maintenance and renewal costs for that year and the costs broken down by system. The costs associated to correct any warranty defects are not included. The soft costs associated with project implementation, such as site access, design, contract administration, are not included.

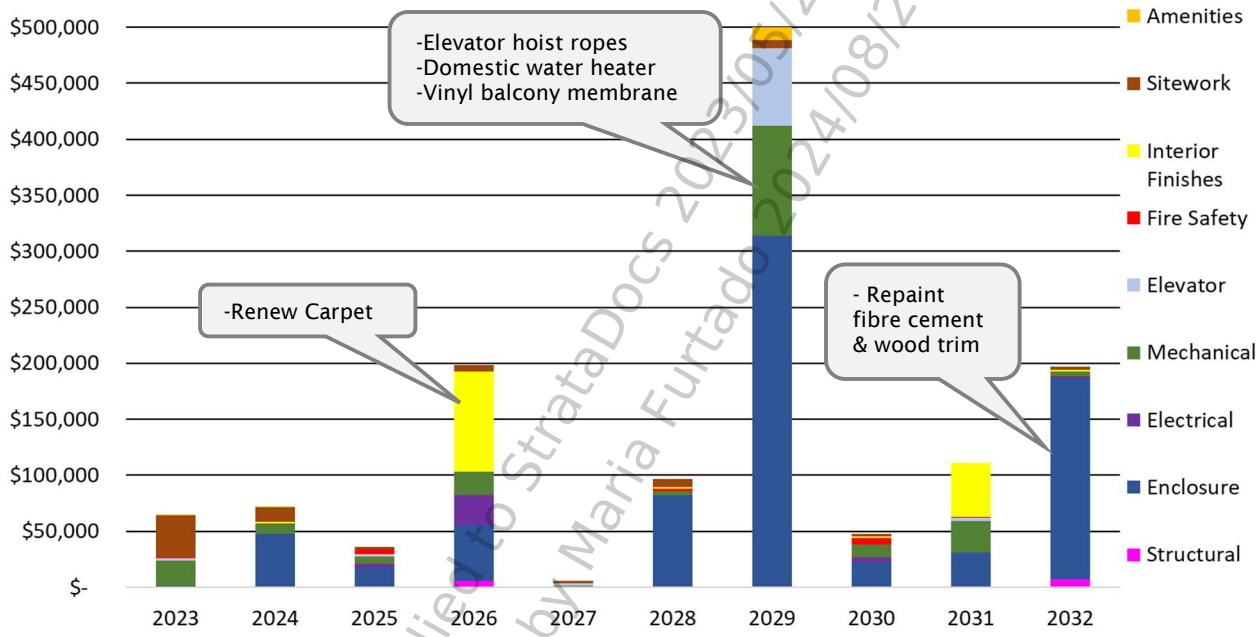

Figure 5.2 Tactical Forecast (10 years), showing the approximate timing and value of some key capital expenditures.

The tactical plan above represents one of many possible approaches to planning major maintenance and renewal activities. The Owners can use this initial plan as a tool, a starting point to identify probable projects, priorities, and strategies. The actual cost, timing, and scope of projects will be determined by the Owners and may be reflected in updates to the Report.

To help the Owners start the project planning process, some of the activities forecast for the next 10 years are listed below. Because the timing is somewhat uncertain, renewals and major maintenance activities are grouped into three and four-year planning periods. The list below is not comprehensive; all renewals and major maintenance activities are included in Appendix B. The list below focuses on renewals likely to cost more than $10,000 in current year dollars, but also includes maintenance events, assessments, and repairs that are needed to ensure the assets achieve their full service life.

2023 to 2025

Building Enclosure

- → Encl 08 Coating on Concrete Wall – Reapplication of the protective coating on concrete wall (10-year cycle).
- → Encl 19 General & Inspections – Perform 10-year extended warranty review for phase 2 construction (1x event).
- → Encl 19 General & Inspections – Conduct leak and crack investigation at parkade walls and suspended slab (1x event).

Electrical

- → Elec 01 Electrical Distribution – Conduct infrared thermography, ultrasonic scanning, and cleaning of the main components of the electrical distribution equipment to detect hidden hazards (5-year cycle).

Mechanical

- → Mech 10 – Tank - DHW - Heating - Gas Fired - Replace original domestic hot water heater (8-year cycle).
- → Auger lateral drain lines
  - → Mech 14 Drainage – Sanitary
- → By means of pipe camera service, visually inspect piping runs (5-year cycle).
  - → Mech 05 Drainage - Perimeter and Foundation
  - → Mech 14 Drainage – Sanitary

Sitework

- → Site 01 Asphalt Paving – Reseal asphalt paving and localized crack repairs to mitigate sub-grade softening (10-year cycle).
- → Site 04 Metal Fencing – Repaint metal fencing as required (10-year cycle).
- → Site 09 Soft Landscaping – Clearance or pruning of trees and large shrubs (1 x event).
- → Powerflush underground drainage piping to clear and remove any buildup of debris (10-year cycle).
  - → Site 11 - Underground Drainage Services – Storm
  - → Site 12 - Underground Sewer Services - Sewer

2026 to 2028

Structural

- → Struct 01 Exposed Structural Wood – Re-coat or re-finish exposed structural wood as required (6-year cycle).

Building Enclosure

- → Encl 01 Laminated Asphalt Shingle Roof – Roof maintenance and repair of damaged roof areas as required (5-year cycle).
- → Encl 11 Wood Trim – Clean and repaint wood trim (6-year cycle).

→ Encl 12 Vinyl Framed Window – Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.] (2-year cycle).

→ Encl 19 General & Inspections – Conduct an update to the depreciation report (3-year cycle).

Electrical

→ Elec 05 - Proximity Access Control - Modernize components of the proximity access control system, excluding field wiring, as required by technological obsolescence (12-year cycle).

Mechanical

→ Mech 24 – Exhaust Fan - Small Service - Cabinet - Cyclical replacement of failed or damaged general purpose exhaust fans, as required (12-year cycle).

Interior Finishes

→ Finish 01 - Sheet Carpet - Glued Down - Renew carpet (10-year cycle).

2029 to 2032

Building Enclosure

→ Encl 07 Guardrail Aluminum – Remove and re-install sections of guardrail in conjunction with balcony waterproofing membrane renewal, including inspect and re-certify guardrail (15-year cycle).

→ Encl 08 Coating on Concrete Wall – Repair delaminated or spalled concrete prior to recoating (10-year cycle).

→ Encl 10 Fiber Cement Wall Cladding and Wood Trim – Clean and repaint fiber cement cladding (10-year cycle).

→ Encl 16 Exposed Vinyl Balcony Membrane – Replace vinyl balcony membrane and associated components (15-year cycle).

Mechanical

→ Mech 02 – Heat Tracing - Freeze Protection - Cyclical replacement of components of electric heat tracing cable, including control module and pipe insulation (15-year cycle).

→ Mech 10 – Tank - DHW - Heating - Gas Fired - Replace domestic hot water heater (8-year cycle).

→ Mech 16 – Pumps - Storm Lift and Control Panel - Cyclic replacement of sump pump storm lift and control panels (15-year cycle).

→ Mech 19 – Outdoor Air Handler - Makeup Air - Gas - Cyclical replacement of pulleys and motors and vibration isolation, as required (8-year cycle).

Elevator

→ Elev 01 - Geared Traction, Overhead - Replace elevator hoist ropes (15-year cycle).

Interior Finishes

→ Finish 05 – Paint - Repaint wall surface including preparation of substrate (10-year cycle).

Sitework

→ Site 08 Irrigation System – Cyclical replacement of components of irrigation sprinkler system, as required (15-year cycle).

5.3 Project Implementation

The projects identified in the previous section represent a preliminary step that is only intended to help the Owners identify, prioritize, and plan projects. Most significant renewal projects identified in the Report will subsequently go through four basic steps before implementing the work: Assessment, Design, Documentation, and Quotation (Figure 5.3).

Assessment – Determines what work must be done, what should be done and what could be done in general terms. The evaluation will help the Owners understand the risks and opportunities associated with deferring or implementing renewals work.

Design – Refines the recommendations from the evaluation, and defines what work will be done in a specific project. The Design may include recommendations for different project strategies such as phasing or bundling projects, or may include recommendations for upgrades.

Documentation – Describes the project in enough technical detail to get competitive pricing.

Quotation – Obtains competitive pricing from different contractors or service providers to perform the work described in the documents, including alternate prices for optional work.

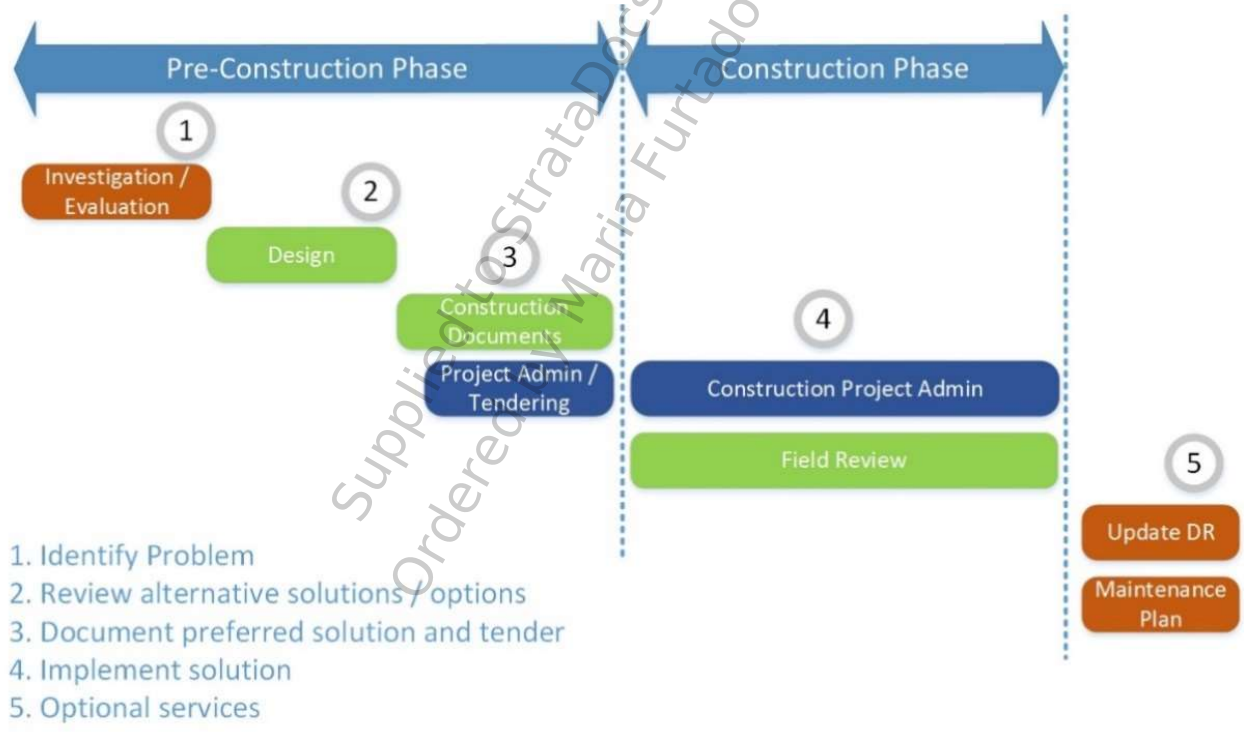

Figure 5.3 Typical phases and sub-phases associated with implementation of a renewal project.

The time period for each step can range from a few days to a few months or more, depending on the scale of the project under consideration. The budget and scope of work will be refined in each step. Most estimates currently included in the Report are considered Class D (±50%) due to the lack of information regarding specific projects and are based on a number of general assumptions regarding scopes of work.

The Owners can implement projects in a variety of ways, including:

Targeted Projects. These projects are localized to particular portions of the building. Different exposure conditions and wear patterns may require that only some sections of the building require renewal at one point in time.

> Example: the carpets in the stairwells would be replaced at a different time to the hallway carpets due to additional wear in high traffic locations.

Phased Projects. These projects are carried out in multiple stages rather than as a single coordinated project. Phased projects can reduce the financial burden by spreading the costs over a longer time period.

> Example: the asphalt shingle roof at 286 Wilfert Road would be replaced at a different time than the asphalt shingle roof at 290 Wilfert Road.

Comprehensive Projects. These projects are implemented as one coordinated undertaking. Comprehensive projects may allow the Owners to leverage the best economies of scale, shorten the overall duration, and lower the overall costs.

> Example: the exterior fiber cement wall cladding and wood trim is repainted at the same time at all locations.

Bundled Projects. These projects bundle or combine various related renewal activities (e.g. renewals that are located in close physical proximity, or that require the same type of trade workers). Bundled projects may allow the Owners to leverage economies of scale and lower the overall costs, improve the quality of the work, and incorporate upgrades.

> Example: the balcony doors would be replaced at the same time as the vinyl membrane at balconies.

The scope of the Report does not compare different implementation methods.

6 Funding Scenarios

The physical assessment and financial assessment were used to create a tentative schedule and budget for forecasted major maintenance and renewal projects. Within this section, hypothetical *funding scenarios*, also known as *funding models*, based on different annual contributions to the contingency reserve fund (CRF) are presented.

The Owners can use the funding scenarios to choose an appropriate funding strategy, based on their tolerance for risk and desired standard of care for the property. RDH provides the tools so the Owners can determine a CRF contribution that suits their needs.

6.1 Minimum Funding Requirements

The Strata Property Act Regulations, BC Reg 43/2000, Ch. 6.1. (Figure 6.1), dictates that if the CRF closing balance at the end of the fiscal year is less than 25% of the operating budget for the fiscal year that just ended, then the Owners must contribute the lesser of:

10% of the total amount budgeted for the contribution to the operating fund for the current fiscal year, or

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.

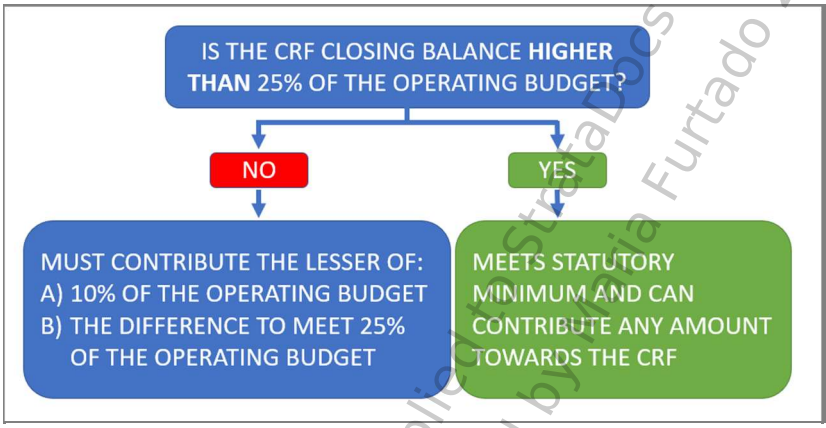

Figure 6.1

Contributions to the CRF per the Strata Property Act Regulations, BC Reg 43/2000, Ch. 6.1.

Table 6.1 on the next page shows the calculation to confirm the Owners meet the minimum requirements set out in the Strata Property Act Regulation.

TABLE 6.1 MINIMUM FUNDING REQUIREMENT CALCULATION	
PARAMETER	VALUE
2022/2023 operating budget (excluding CRF contribution)	$ 378,605
→ 25% of the operating budget	$ 94,651
→ 10% of the operating budget	$ 37,861
2021/2022 CRF closing balance	$ 471,571
2022/2023CRF Contribution	$ 60,500
Does the CRF closing balance exceed 25% of the operating budget?	Yes
Does the CRF contribution exceed 10% of the operating budget?	Yes

6.2 Funding Scenario Comparison

The funding scenarios below compare the financial impact of different funding levels over the next 30 years. The scenarios serve as a sensitivity analysis that allow the Owners to evaluate how changes to the contingency reserve fund impact the number and size of special levies. The actual size and timing of special levies will be affected by how the Owners choose to implement the renewal projects.

While there are many different scenarios that can be generated, Table 6.2 on the next page compares the following alternatives:

Current (2022/2023). The CRF allocation that was approved by the Owners at the 2022 Annual General Meeting.

Alternative #1. This funding scenario is based on an initial annual CRF contribution of $90,000, and continues with a 2% annual increase thereafter.

Alternative #2. This funding scenario is based on a fixed increased contribution and is selected to provide a logical benchmark between the current and progressive CRF allocations.
The alternative funding scenarios are just two of many possible scenarios for the Owners' consideration.

Progressive. This is the annual contribution that would need to be set aside, commencing in the first fiscal year of this Report, to ensure that the reserve balance is sufficient to eliminate or bring special levies over a 30-year period to a minimum. With "progressive" reserve allocation, building complexes with underfunded reserves may still require some special levies at some point in their strategic plan. The "progressive" reserve contribution is an optimum target that the Owners could use as a guide. The progressive reserve allocation is an idealistic target that typically represents an upper bound for the CRF allocation amount.

Progressive Reserve (not summarized). If the Owners wished to offset all forecasted capital expenditures over the next 30 years, an average CRF contribution of approximately $517,500 per year (or an average of approximately $464 per suite, per month) would be required.

TABLE 6.2 COMPARISON OF DIFFERENT FUNDING SCENARIOS				
	CURRENT FUNDING MODEL	ALTERNATIVE #1 FUNDING MODEL	ALTERNATIVE #2 FUNDING MODEL	PROGRESSIVE FUNDING MODEL
Annual CRF allocation	$60,500	Starting at $90,000 +	$180,000	$264,000
Annual CRF increase	0 %	2 %	0 %	0 %
Percent of progressive reserve	23%	34%	68%	100%
CRF contribution per average strata lot		Starting at		
Per month	$54	$81 +	$161	$237
Per year	$651	$968 +	$1,935	$2,839
Approximate number of special levies (over 30 years)	21	10	8	3
Approximate value of special levies (over 30 years)	$14.8M	$12.9M	$11.0M	$8.3M
Minimum Closing Balance	$2,000	$2,000	$2,000	$2,000
Assumed Inflation Rate	3 %	3 %	3 %	3 %
Assumed Interest Rate	2 %	2 %	2 %	2 %

The following sections of the report provide more detailed information about each funding scenario, including a graph showing the closing balance of the CRF, annual CRF contributions, and the approximate value of special levies. Tables with ten years of cash flow data are also provided.

Appendix E includes 30 years of cash flow data for each funding scenario.

6.3 Current (2022/2023) Funding Scenario

The current funding scenario is based on the CRF contribution approved by the Owners at the 2022 annual general meeting. The scenario is based on a fixed annual CRF contribution (no increases).

TABLE 6.3 CURRENT FUNDING SCENARIO: CASH FLOW TABLE

FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2023	$471,571	$60,500	$0	$9,431	$64,530	$476,972
2024	$476,972	$60,500	$0	$9,539	$72,070	$474,941
2025	$474,941	$60,500	$0	$9,499	$36,020	$508,920
2026	$508,920	$60,500	$0	$10,178	$198,540	$381,059
2027	$381,059	$60,500	$0	$7,621	$5,840	$443,340
2028	$443,340	$60,500	$0	$8,867	$96,700	$416,007
2029	$416,007	$60,500	$22,623	$8,320	$505,450	$2,000
2030	$2,000	$60,500	$0	$40	$47,870	$14,670
2031	$14,670	$60,500	$37,937	$293	$111,400	$2,000
2032	$2,000	$60,500	$136,440	$40	$196,980	$2,000

The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

Figure 6.1 CRF balance, contribution, and special levies based on the current funding.

6.4 Alternative Funding Scenario #1

Alternative funding scenario #1 on an initial annual CRF contribution of $90,000, with a 2% annual increase. The initial annual contribution is approximately 150% of the current contribution.

TABLE 6.4 ALTERNATIVE #1 FUNDING SCENARIO: CASH FLOW TABLE

FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2023	$471,571	$90,000	$0	$9,431	$64,530	$506,472
2024	$506,472	$91,800	$0	$10,129	$72,070	$536,331
2025	$536,331	$93,636	$0	$10,727	$36,020	$604,674
2026	$604,674	$95,509	$0	$12,093	$198,540	$513,736
2027	$513,736	$97,419	$0	$10,275	$5,840	$615,590
2028	$615,590	$99,367	$0	$12,312	$96,700	$630,569
2029	$630,569	$101,355	$0	$12,611	$505,450	$239,085
2030	$239,085	$103,382	$0	$4,782	$47,870	$299,378
2031	$299,378	$105,449	$0	$5,988	$111,400	$299,415
2032	$299,415	$107,558	$0	$5,988	$196,980	$215,982

Alternative funding scenario #1 eliminates some of the smaller levies, but it is not adequate to offset all the special levies over the 30-year planning horizon. The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

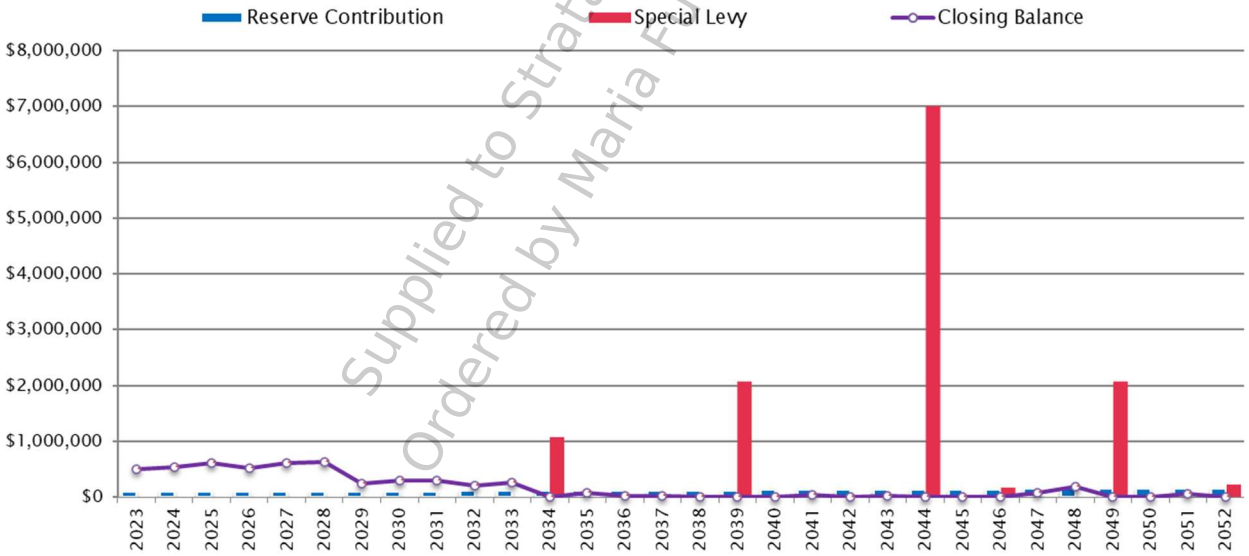

Figure 6.2 CRF balance, contribution, and special levies based on Alternative #1.

6.5 Alternative Funding Scenario #2

Alternative funding scenario #2 is based on a fixed annual CRF contribution. The contribution is nearly three times the current funding level.

TABLE 6.5 ALTERNATIVE #2 FUNDING SCENARIO: CASH FLOW TABLE

FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2023	$471,571	$180,000	$0	$9,431	$64,530	$596,472
2024	$596,472	$180,000	$0	$11,929	$72,070	$716,331
2025	$716,331	$180,000	$0	$14,327	$36,020	$874,638
2026	$874,638	$180,000	$0	$17,493	$198,540	$873,591
2027	$873,591	$180,000	$0	$17,472	$5,840	$1,065,223
2028	$1,065,223	$180,000	$0	$21,304	$96,700	$1,169,827
2029	$1,169,827	$180,000	$0	$23,397	$505,450	$867,774
2030	$867,774	$180,000	$0	$17,355	$47,870	$1,017,259
2031	$1,017,259	$180,000	$0	$20,345	$111,400	$1,106,204
2032	$1,106,204	$180,000	$0	$22,124	$196,980	$1,111,348

Alternative funding scenario #2 eliminates all but one special levy within the next 16 years, but it is not adequate to offset all the special levies over the 30-year planning horizon. The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

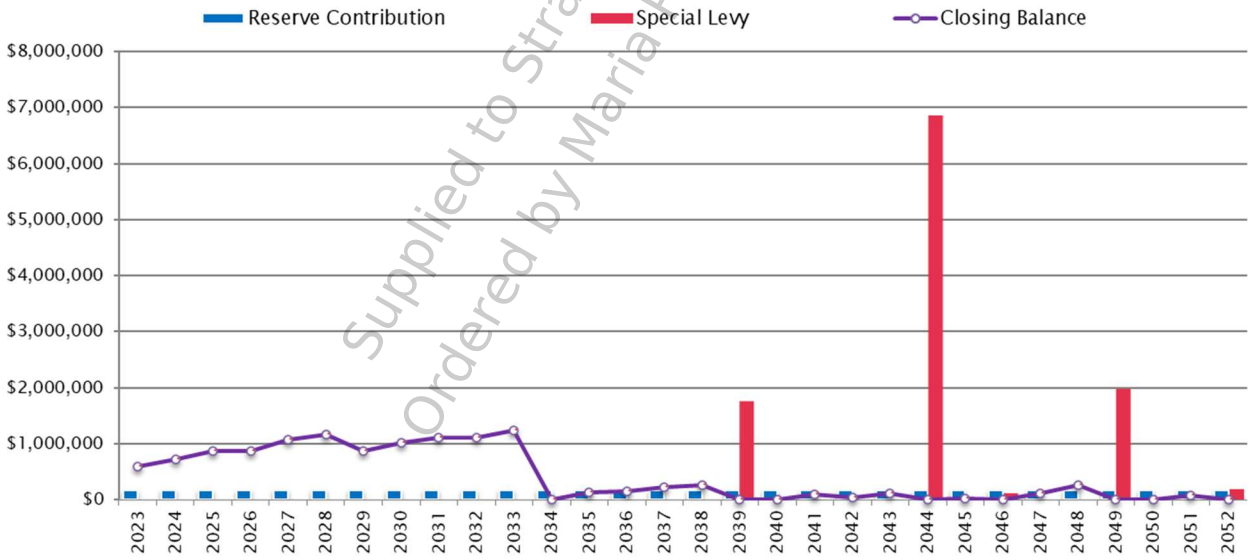

Figure 6.3 CRF balance, contribution, and special levies based on Alternative #2.

6.6 Progressive Funding Scenario

The progressive funding scenario is based on a fixed annual CRF contribution and represents a theoretical upper limit of CRF funding.

TABLE 6.6 PROGRESSIVE FUNDING SCENARIO: CASH FLOW TABLE

FISCAL YEAR	CRF OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CRF CLOSING BALANCE
2023	$471,571	$264,000	$0	$9,431	$64,530	$680,472
2024	$680,472	$264,000	$0	$13,609	$72,070	$886,011
2025	$886,011	$264,000	$0	$17,720	$36,020	$1,131,712
2026	$1,131,712	$264,000	$0	$22,634	$198,540	$1,219,806
2027	$1,219,806	$264,000	$0	$24,396	$5,840	$1,502,362
2028	$1,502,362	$264,000	$0	$30,047	$96,700	$1,699,709
2029	$1,699,709	$264,000	$0	$33,994	$505,450	$1,492,253
2030	$1,492,253	$264,000	$0	$29,845	$47,870	$1,738,229
2031	$1,738,229	$264,000	$0	$34,765	$111,400	$1,925,593
2032	$1,925,593	$264,000	$0	$38,512	$196,980	$2,031,125

The Progressive reserve would offset all special levies within the next 16 years and further reduce the number and sizes of special levies. However, because of the timing of anticipated renewal projects, this fixed annual contribution will not eliminate all special levies over the 30-year planning horizon. The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

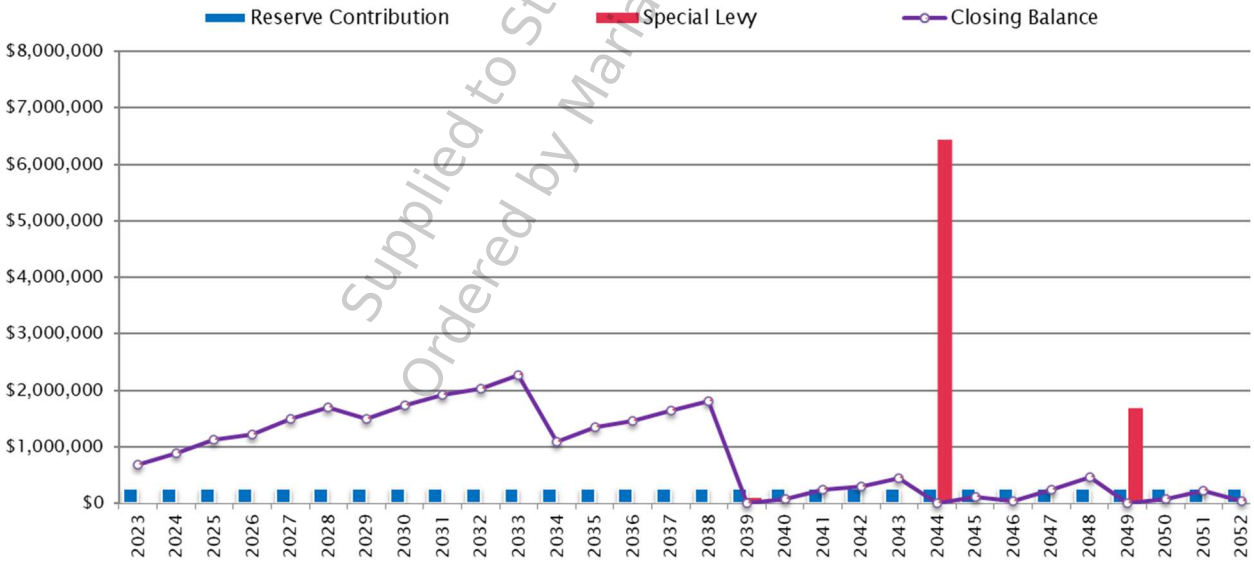

Figure 6.4 CRF balance, contribution and special levies based on a Progressive Reserve calculation.

7 Next Steps

The Report identifies the possible major maintenance and renewal expenditures that The Coho may encounter over the next 30 years. Estimated timelines have been provided to assist the Owners with the planning process; however, the Report should be considered a first step when planning for renewals. Funding scenarios have been developed to provide the Owners with an objective basis for determining appropriate CRF contributions.

The Coho is a 9 year old building complex (as of 2023), and some significant Assets, such as replacing asset #Encl16 - Exposed Vinyl Balcony Membrane, will likely need to be renewed in the next 10 years. Aside from the potential renewal of the balcony membranes, most expenditures that occur over the next ten years relate to the major maintenance of the assets, such as drainage cleaning, repainting and localized repair of various claddings. This is a fairly typical renewal pattern for younger Strata Corporations such as the Coho.

In addition, Assets such as components of the fire safety equipment and elevators may also require renewal within the next 10 years. Similar to the building enclosure system, it is recommended that the Owners consider additional investigations of these systems to confirm renewal requirements, particularly for the life safety Assets, such as the fire safety equipment, and update the renewal forecast accordingly.

Other expenditures that occur over the next 10 years relate to the major maintenance of the Assets, such as cleaning and inspection of drainage and electrical equipment, as well as the cyclical renewal of aging and high-use mechanical equipment. The Owners should continue to be diligent in performing maintenance tasks so assets may achieve their full service life. It is unlikely that the Owners can avoid special levies in the near future; however, there may be opportunities to reduce the scope of work needed or otherwise manage projects to alleviate the financial impact on individual Owners.

Over the past five years since the original Depreciation Report was issued, the Coho Strata has improved their contingency reserve funding. This has allowed the Owners to build up a stronger contingency reserve fund, in comparison to their original report funding, while continuing to perform maintenance of a number of assets. By continuing to save early for anticipated large expenditures, the Owners will benefit from accrued interest and financial preparedness, while minimizing the amount of special levies.

The recommendations below are intended to aid the Owners in the next steps of the renewals planning process.

Recommendations

- → **Project Planning:** Review the information in Section 5.2, and begin planning for significant projects, including commissioning condition assessments, requesting information, and preparing construction budgets, well in advance of the forecasted date of renewal. The planning process will assist the Owners in refining the actual timing, scope of work, and project budget.
- → **Major Maintenance** Planning: Review Appendix B for a detailed checklist of forecasted major maintenance activities and renewals on an annual basis.
- → **Record keeping:** Record significant renewals, repairs, and maintenance activities. These records will be used to improve the forecast at the time of the next Depreciation Report Update.
- → **Contingency Reserve Fund Planning.** On a yearly basis, review and update the Contingency Reserve Fund Planning (CRF) funding strategy based on the estimated forecasts presented in the Report and update information obtained from assessments, investigations, and quotation.

- → **Maintenance Plan**. Using the Asset Inventory, develop a maintenance plan, or commission a maintenance plan through RDH. The maintenance plan should provide the Owners with information on how and when to implement different maintenance activities.
- → **Investigation & Review of the Buried Infrastructure**. Conduct a review of the buried drainage systems on site and throughout the buildings, in particular the foundation, storm, and sanitary drainage systems via pipe camera inspection, prior to the update to the Depreciation Report in three years' time.
- → **Investigation of Concrete Parkade Structure.** Conduct a leak and crack investigation in the parkade to determine the cause of localized leaks and cracks and plan for repairs as required prior to the update of the Depreciation Report in three years' time.
- → **Further Investigations.** Conduct additional condition assessments/investigations, as required, to refine the data and confirm assumptions.
- → **Updates.** Plan for an update to the Report in three years' time. On a yearly basis, the Stata Corporation should review and update their CRF funding strategy based on the estimated forecasts presented in the Report.

Yours truly,

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Appendix A

Glossary of Terms

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Glossary

Annual Contribution – Funds allocated to the Reserve Fund each fiscal year. Sometimes referred to as the Annual Allocation. Determining the appropriate size of the Annual Allocation is aided with a Reserve Study (a Depreciation Report in B.C.).

Asset – An integrated assembly of multiple physical components, which requires periodic maintenance, repair and eventual renewal. Typical examples of assets are: roofs, boilers and hallway carpets.

Asset Inventory – The common assets and those parts of a strata lot or limited common property, or both, that the Strata Corporation is responsible to maintain and repair.

Balcony - A horizontal surface that projects from the building and does not directly protect the interior from water ingress. Compare with Deck.

Bundled Projects – Projects that bundle or combine various related renewal activities into a single project.

Capital Costs – Fixed, one-time expenses after which there will only be recurring operational or running costs. Capital costs can be distributed into three general categories: *Catch-up costs*, *Keep-up costs* and *Get-ahead costs*.

Catch-up Costs – The costs associated with the accumulated backlog of deferred maintenance associated with the assets.

Chronological Age – The calendar age of an Asset. Compare with Effective Age.

Classes of Cost Estimates – Until a project is actually constructed, a cost estimate represents the best judgement of the professional according to their experience and knowledge and the information available at the time. Its completeness and accuracy is influenced by many factors, including the project status and development stage. Estimates have a limited life and are subject to inflation and fluctuating market conditions. The precision of cost estimating is categorized into the following four classes and are as defined in guidelines prepared by the Association of Professional Engineers and Geoscientists of B.C. The percentage figures in parentheses refer to the level of precision or reliability of the cost estimates.

- **Class A Estimate** (±10-15%): A detailed estimate based on quantity take-offs from final drawings and specifications. It is used to evaluate tenders or as a basis of cost control during day-labour construction.
- **Class B Estimate** (±15-25%): An estimate prepared after site investigations and studies have been completed, and the major systems defined. It is based on a project brief and preliminary design. It is used for obtaining effective project approval and for budgetary control.
- **Class C Estimate** (±25-40%): An estimate prepared with limited site information and based on probable conditions affecting the project. It represents the summation of all identifiable project elemental costs and is used for program planning, to establish a more specific definition of client needs and to obtain preliminary project approval.
- **Class D Estimate** (±50%): A preliminary estimate which, due to little or no site information, indicates the approximate magnitude of cost of the proposed project, based on the client's broad requirements. This overall cost estimate may be derived from lump sum or unit costs for a similar project. It may be used in developing long term capital plans and for preliminary discussion of proposed capital projects.

Closing Balance – Alternatively referred to as the Starting Balance. The balance of funds remaining in the reserve account at the end of a fiscal period (Fiscal year end, calendar year or study period). The Closing Balance becomes the Opening Balance for the subsequent fiscal period.

Comprehensive Projects - Projects that are implemented as one coordinated undertaking.

Contingency Costs – An allowance for unexpected or unforeseen costs that may impact monies required for projects to maintain or replace assets. (Not to be confused with costs of Renewal or Major Maintenance projects which are paid for out of the Reserve Fund)

Contingency Reserve Fund (CRF) – Also known as Reserve Fund. The account into which the accumulated Annual Contributions are deposited and from which costs are withdrawn for Renewal projects and Major Maintenance projects.

Current Year Dollars (CYD) – Dollars in the year they were actually received or paid, unadjusted for price changes. Compare with Future Year Dollars.

Deck- A horizontal surface that protects interior space from water ingress. The surface functions as a roof. Compare with Balcony.

Drained Wall Assembly - Also known as rainscreen wall assembly. Refers to a strategy for rain penetration control that relies on deflection of the majority of water at the cladding (stucco, wood, etc.) but also incorporates a cavity that provides a drainage path for water that penetrates past the cladding. In drained/rainscreen wall assembly the cladding is installed on strapping or furring strips so that there is a gap between it and the *sheathing membran*e. Compare with Undrained Wall Assembly.

Effective Age – The Age of an asset relative to its condition. Compare with Chronological Age.

Financial Assessment – Also known as a financial analysis. The cost estimates associated with major maintenance and renewal projects, and identifications of funds in the contingency reserve fund (CRF) that may be available to pay for these costs.

Funding Model – Also known as a Funding Scenario. A mathematical model used to establish an appropriate funding level for sustaining the assets in a building. All major maintenance and renewal costs are projected onto the CRF balance for the 30-year planning period to demonstrate any years where the CRF balance is predicted to be less than the predicted costs for that year. Running a number of scenarios using different parameters (such as inflation rates and interest rates) can serve as a sensitivity analysis to determine the financial impact of different funding levels. The four main types of funding models are listed below and if used are described in Section 6 of the Report.

- → Statutory Funding Model
- → Current Funding Model
- → Alternate Funding Model
- → Progressive Funding Models

Funding Scenarios – See Funding Model

Future Year Dollars (FYD) – The projected cost of future asset renewal projects, which accounts for inflation and escalation factors.

Get Ahead Costs – These are costs associated with adaptation of the building to counter the forces of retirement associated with different forms of obsolescence, such as:

- → **Functional obsolescence** - Reduction of an object's usefulness or desirability because of an outdated design feature
- → **Legal obsolescence** - Force of retirement of assets due to legislation changes, or other directive/order, issued by an authority having jurisdiction.
- → **Style obsolescence** - When an asset is no longer desirable because it has fallen out of popular fashion

Some of the costs in this category are discretionary spending that result in either a change or an improvement to the existing strata building. This category includes projects to alter the physical plant for changes in use, codes and standards. Some typical examples include:

- → Energy retrofits
- → Code retrofits
- → Hazardous material abatement
- → Barrier free access retrofits
- → Seismic Upgrades

Keep-up Costs – The monies required for renewal projects as each asset reaches the end of its useful service life. If an asset is not replaced at the end of its useful service life and is kept in operation, through targeted repairs, then these costs get reclassified into the "catch-up" category.

Maintenance - Activities that preserve the Assets, to ensure the Assets will last their predicted service lives and perform as expected.

Major Maintenance – Any maintenance work for common expenses that usually occurs less often than once a year or that do not usually occur. Major maintenance provides for the preservation of assets to ensure that they achieve their full intended service life. Major maintenance is funded from the CRF.

Opening Balance – Alternatively referred to as the Starting Balance. The amount of money in an account at the beginning of a fiscal period. Opening balances are derived from the balance sheet and are used in cash flow calculations in the Funding Model. Compare with Closing Balance.

Operating Costs – Frequently recurring expenses that arise during the course of a single fiscal year and are paid from the operating budget as opposed to the Reserve Fund.

Operational Plan/Horizon (1 year) – The annual operating period encompasses one fiscal cycle (12 months). The Reserve Contribution in the operating budget should reflect the majority of the projects in the *Tactical Plan* (5 or 10 years) and ideally should also contemplate elements of the *Strategic Plan* (30 years).

Phased Projects - Projects that are carried out in multiple stages rather than as a single coordinated project.

Physical Assessment – Also known as a physical analysis. The identification of all physical assets the Strata Cooperation is responsible for and the prediction of major maintenance and renewal activities regarding these assets.

Placeholder – an item or asset that is not currently part of the strata cost of maintenance or repair and may be owned by another entity such as a utility, tenant, or section.

Progressive Reserve – Also known as Percent Funded. The ratio, at a particular point of time (typically the beginning of the fiscal year), of the actual or projected Reserve Fund balance to the accrued Reserve Fund balance, expressed as a percentage. For example: If the 100% funded balance is $100,000 and there is $76,000 in the Reserve Fund, the Reserve Fund is 76% funded.

Since funds can typically be allocated from one asset to another with ease, this parameter has no real meaning on an individual reserve component basis. The purpose of this parameter is to identify the relative strength or weakness of the entire Reserve Fund at a particular point in time. The value of this parameter is to provide a more stable measure of Reserve Fund strength, since cash in reserve may mean very different things to different governing bodies or Owner groups.

- → **Poor Level** - When the Percent Funded falls to 0% - 30%, the current reserves may be considered to be at a 'poor' level. At this funding level, Special Levies are common. This is also commonly known as the Unfunded or Special Levy Model. The Owner Group does not have a Reserve Fund balance that will cover expected renewal costs and the only recourse is to raise funds by Special Levies to cover those costs when they become due.
- → **Fair Level** - If the Percent Funded level is 31 to 70% then the current reserve may be considered to be in a mid-range level.
- → **Good Level** - If the Percent Funded level is 70% or higher this is likely to be considered 'strong' because cash flow problems are rare.

Renewal – The replacement or refurbishment of an Asset as it reaches the end of its useful service life.

Renewal Cost – The cost required to replace an Asset, which is paid from the Reserve Fund, Special Levy or combination thereof.

Reserve Contribution – See Annual contribution.

Reserve Fund – See Contingency Reserve Fund (CRF)

Reserve Income – The interest earned from investing the money deposited in the Contingency Reserve Fund.

Reserve Study – Also referred to as a Reserve Fund Study or Depreciation Report in BC.

- → A long-range financial planning tool that identifies the current status of the Owners' Reserve Fund and recommends a stable and equitable funding plan to offset the costs of anticipated future major expenditures associated with replacement of the assets and major maintenance.
- → The purpose of the Reserve Study is to provide a plan for appropriate funding for renewal and major maintenance work.
- → While Reserve Studies provide analysis of the timing, costs, and funding for renewal projects, they should ideally be supported by a maintenance plan that assists the Owners to plan for maintenance activities so that assets achieve their predicted service lives.

Service Life - The estimated period of time over which an asset (and its components or assembly) provides adequate performance and function.

Sheathing Membrane - A generic term for a membrane layer that resists the passage of liquid water (and possibly air and vapour) through vertical, drained surfaces.

Special Levy – Also referred to as a "Special Assessment". A financial levy to be paid by the Owner group to finance large-scale projects for major maintenance, repairs, renewal, or rehabilitation of an asset, which occur as result of a shortfall in available funds and requires special decision making and approval procedures.

Statutory Funding Model - A funding model which uses the Strata Property Act and Regulations to determine the minimum amount of money to contribute to the Contingency Reserve Fund on an annual basis.

Strategic Plan/Horizon – The longest of the three planning horizons, which typically covers the full study period of 30 years and identifies the long-term needs of the assets.

Tactical Plan/Horizon – A period of planning for asset Renewal projects and Major Maintenance projects, which typically extends five or ten years from the current year.

Targeted Projects: Projects that are localized to particular portions of the building.

Undrained Wall Assembly - Also known as face seal wall assembly. Refers to a strategy for rain penetration control that relies on the elimination of holes through the cladding. In undrained/face seal wall assemblies, the cladding is installed directly against the *sheathing membrane*. Compare with Drained Wall Assembly.

Appendix B

Asset Inventory

The Coho
Asset Inventory - 2023

Structural

Struct 01 - Exposed Structural Wood

Location

Balcony posts and wood canopy at entrance doors.

Description

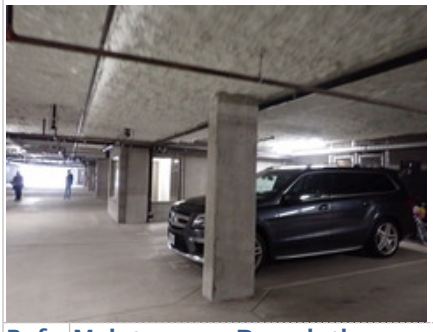
Structural wood components including columns, braces and beams in exposed locations.

Information

Service Life:	50	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2064
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Review all exposed bolt connections for loose washers and nuts in conjunction with review of wood trim asset (Encl 11) Ensure connections are secured and torqued in accordance with structural specifications.	2023	2 Yrs (15)	$0	$0	$0
R01	Re-coat or re-finish exposed structural wood as required.	2026	6 Yrs (5)	$5,500	$27,500	$43,800
R02	Replace components of exposed structural wood beams and columns, as required.	2064	50 Yrs (0)	$0	$0	$0

Struct 02 - Concrete Foundation & Parkade Structure



Location

Foundation and parkade.

Description

Cast-in-place concrete building foundation and underground parking structure.

Information

Service Life:	75	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2089
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	The concrete foundation is not deemed to be a reserve component.	2089	75 Yrs (0)	$0	$0	$0

Struct 03 - Wood Frame Structure

Location

Superstructure.

Description

Wood framed walls, floors, and roof structure.

Information

Service Life:	75	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2089
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost

R01	The wood frame structure is not deemed to be a reserve component.	2089	75 Yrs (0)	$0	$0	$0

Enclosure

Encl 01 - Laminated Asphalt Shingle Roof

Location

All sloped roofs.

Description

Laminated asphalt shingle over roofing felt applied on solid wood sheathing at sloped roof. Typically, gutters are provided at roof eaves to manage rainwater.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2039
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Roof maintenance and repair of damaged roof areas as required.	2026	5 Yrs (5)	$16,000	$80,000	$125,000
R01	Replace asphalt shingles and associated components such as gutters and flashing.	2039	25 Yrs (1)	$1,224,000	$1,224,000	$2,000,000

Encl 02 - Concealed SBS Roof Membrane with Traffic-Bearing Surface

Location

Roof Access and above elevator shafts

Description

SBS membrane overlaid with 2'x2' precast pavers as traffic-bearing surface.

Information

Service Life:	30	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace roof hatch in conjunction with roof membrane replacement.	2044	30 Yrs (1)	$3,000	$3,000	$5,600
R02	Replace roof membrane assembly and associated components. Some of the pavers may be salvageable.	2044	30 Yrs (1)	$30,000	$30,000	$56,000

Encl 03 - Aluminum Panel Soffit

Location

Underside of roof eaves and balconies.

Description

Perforated aluminum panel soffit.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost

J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	2025	3 Yrs (10)	$1,848	$18,480	$30,200
R01	Replace soffit panels and associated components.	2054	40 Yrs (0)	$0	$0	$0

Encl 04 - Concealed SBS Podium Membrane with Hard and Soft Landscaping

Location

Surrounding the buildings on top of the parkade structure.

Description

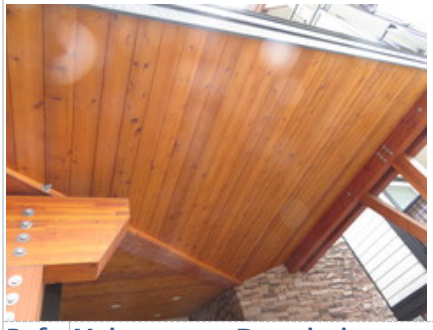
Concealed asset. SBS membrane on parkade roof slab overburdened with landscaping and paved walkways.

Information

Service Life: 30
Chronological Age: 9
Effective Age: 9
Install Year: 2014
Next Renewal Year: 2044

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace membrane assembly and associated components. Some of the overburden may be salvageable.	2044	30 Yrs (1)	$2,062,500	$2,062,500	$3,800,000

Encl 05 - Wood Soffit



Location

Underside of entrance canopies.

Description

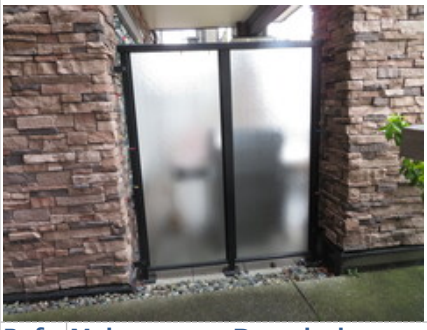
Painted wood soffit over a wood framing substrate.

Information

Service Life: 40
Chronological Age: 9
Effective Age: 9
Install Year: 2014
Next Renewal Year: 2054

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	2023	3 Yrs (10)	$126	$1,260	$1,940
R01	Recoat wood soffit as required.	2026	6 Yrs (5)	$1,260	$6,300	$10,100
R02	Replace wood soffit and associated components.	2054	40 Yrs (0)	$0	$0	$0

Encl 06 - Glazed Aluminum Frame Divider



Location

Between ground level patios.

Description

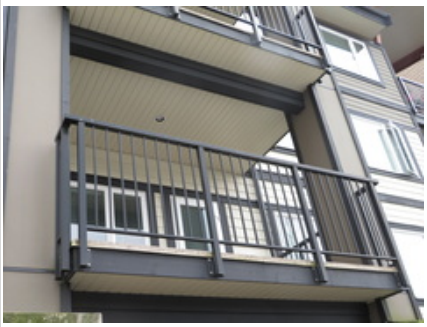
Aluminum frame and glass infill panels functioning as a privacy barrier between first floor patio and building entrances.

Information

Service Life: 30
Chronological Age: 9
Effective Age: 9
Install Year: 2014
Next Renewal Year: 2044

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace glazed aluminum frame dividers.	2044	30 Yrs (1)	$21,850	$21,850	$41,000

Encl 07 - Guardrail Aluminum



Location

Balcony and patio perimeters.

Description

Aluminum posts and pickets functioning as a protective barrier at the open sides of stairs, landings, balconies, or other locations to prevent accidental falls from one level to another.

Information

Service Life:	30	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Remove and re-install sections of guardrail in conjunction with balcony waterproofing membrane renewal, including inspect and re-certify guardrail.	2029	15 Yrs (1)	$22,200	$22,200	$27,000
R02	Replace exterior guardrails.	2044	30 Yrs (1)	$111,000	$111,000	$210,000

Encl 08 - Coating on Concrete Wall

Location

Exposed parkade walls.

Description

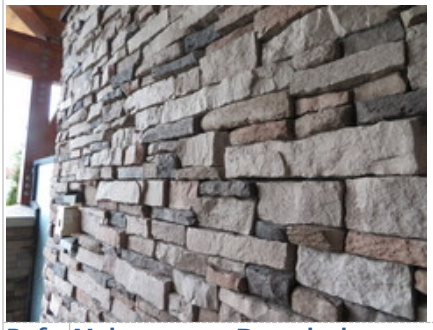
Protective coating on poured-in-place architectural concrete wall. Phase 2 portion of the parkade does not have the coating applied.

Information

Service Life:	10	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2024
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Repair of delaminated or spalled concrete should be carried out prior to recoating.	2029	10 Yrs (3)	$13,500	$40,500	$67,000
R01	Reapplication of the protective coating on concrete wall.	2024	10 Yrs (3)	$22,500	$67,500	$99,000

Encl 09 - Cultured Stone Wall - Drained



Location

First floor exterior of buildings.

Description

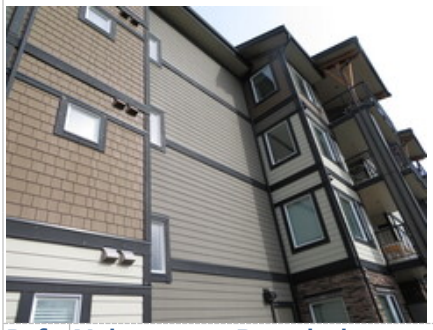
Cultured stone applied with mortar onto stucco base coat.

Information

Service Life:	30	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Clean exterior surfaces of cultured stone cladding to remove vegetation growth and other atmospheric staining.	2025	3 Yrs (9)	$1,638	$14,742	$23,100
R01	Replace sections of cultured stone veneer as required, along with associated components.	2044	30 Yrs (1)	$45,500	$45,500	$85,000

Encl 10 - Fiber Cement Wall Cladding and Wood Trim



Location
Exterior cladding

Description
Fiber cement cladding installed on wood strapping to create a drained cavity over the exterior sheathing membrane.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Clean exterior fiber cement board surfaces to remove atmospheric dirt, vegetative growth and other stains.	2025	3 Yrs (10)	$4,200	$42,000	$68,500
R01	Clean and repaint fiber cement cladding.	2032	10 Yrs (3)	$105,000	$315,000	$570,000
R02	Replace fiber cement cladding along with associated trim, flashing and sealants. Consideration should be given to replacement of vent hoods and other accessories that penetrated the cladding at the time of cladding replacement.	2054	40 Yrs (0)	$0	$0	$0

Encl 11 - Wood Trim

Location
At belly bands, fascias, cladding transitions, windows and doors.

Description
Vertical and horizontal wood trim boards with coated surface for protection of the substrate and aesthetics.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	-11		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Clean surface of wood trim, as required, to remove vegetation growth and other staining. [Cost to be included with cleaning of fiber cement wall cladding asset.]	2025	3 Yrs (10)	$0	$0	$0
J02	Touch up painting of wood trim as required.	2024	2 Yrs (15)	$1,800	$27,000	$43,500
J03	Review exterior surfaces of wood trim for signs of distress, such as warping, water damage, loose trim board and discolouration, condition of coating and sealant. Review includes exposed bolt connections at exposed structural wood asset (Struct 01).	2024	2 Yrs (15)	$1,500	$22,500	$36,000
J04	Locally repair wood trim, as required.	2024	2 Yrs (15)	$2,160	$32,400	$52,300
R01	Clean and repaint wood trim.	2028	6 Yrs (5)	$45,000	$225,000	$387,000
R02	Replace wood trim in conjunction with fiber cement wall cladding replacement.	2054	20 Yrs (0)	$0	$0	$0

Encl 12 - Vinyl Framed Window

Location

All elevations and all levels of the building.

Description

Vinyl framed windows with double insulating glazing units, and casement operators.

Information

Service Life:	30	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	2026	2 Yrs (9)	$11,400	$102,600	$144,000
R01	Replace vinyl windows and associated components.	2044	30 Yrs (1)	$617,500	$617,500	$1,200,000

Encl 13 - Steel Swing Door

Location

Emergency egress doors.

Description

Hollow steel slab swing door without glazing.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2039
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Repaint steel door finish.	2023	8 Yrs (3)	$1,200	$3,600	$5,100
R02	Replace steel swing doors and frames.	2039	25 Yrs (1)	$48,000	$48,000	$77,000

Encl 14 - Vinyl Frame Glazed Swing Door

Location

Balcony entrances

Description

Vinyl frame swing door with insulating glazing units.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	4		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	2026	2 Yrs (13)	$1,560	$20,280	$33,200
R01	Replace vinyl frame swing doors.	2044	30 Yrs (1)	$288,000	$288,000	$540,000

Encl 15 - Aluminum Frame Lobby and Amenity Room Door.

Location

Lobby entrance doors and amenity room patio door.

Description

Outswing aluminum-framed doors with fixed IGU's and low-profile thresholds with electric strike and hardware.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace/upgrade door hardware.	2024	10 Yrs (2)	$2,600	$5,200	$7,500
R02	Replace aluminum frame lobby and amenity room doors.	2034	20 Yrs (1)	$15,000	$15,000	$21,000

Encl 16 - Exposed Vinyl Balcony Membrane

Location

Balconies.

Description

Sheet vinyl membrane applied over wood balcony sheathing. The term 'balcony' refers to an exterior horizontal surface that is intended for pedestrian use, but which projects from the building such that it is not located over occupied space.

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace vinyl balcony membrane and associated components.	2029	15 Yrs (2)	$212,500	$425,000	$650,000

Encl 17 - Sectional Overhead Door - Metal

Location

Parking garage entrance.

Description

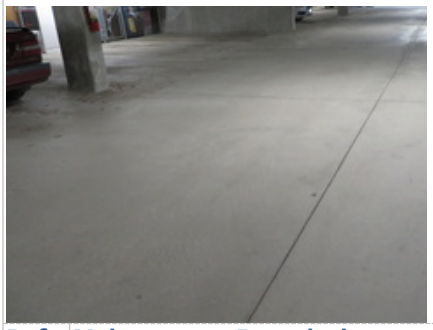
Pre-manufactured open grid metal, sectional overhead gate and hardware. Overhead gate motor is included in Mechanical Assets.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2039
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replacement of sectional overhead door and associated hardware.	2039	25 Yrs (1)	$6,000	$6,000	$9,900

Encl 18 - Slab-on-Grade



Location
Parking garage.

Description
Concrete slab on grade.

Information

Service Life:	75	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2089
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Re-apply traffic demarcation striping and directional signage. Frequency will depend on traffic volume and other factors.	2024	5 Yrs (6)	$1,000	$6,000	$9,500
J02	Heavy duty cleaning on slab surface to remove oil stains, etc.	2024	5 Yrs (6)	$437.50	$2,625	$4,150
R01	Prepare surface and re-apply concrete sealer as required.	2024	5 Yrs (6)	$5,700	$34,200	$54,500
R02	Concrete slab is durable and not deemed a renewable asset. Maintenance of the concrete substrate is required for the asset to achieve longevity.	2089	75 Yrs (0)	$0	$0	$0

Encl 19 - General & Inspections

Location
Throughout the site.

Description
Miscellaneous interior and exterior components, such as service penetrations and interface details, not related to any particular assembly. Warranty and general reviews.

Information

Service Life:	75	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2089
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Conduct an update to the depreciation report.	2026	3 Yrs (9)	$10,000	$90,000	$144,000
J02	Perform 10-year extended warranty review for phase 2 construction in sufficient time prior to expiration of warranty period for certain portions of the work. Prepare list of any deficiencies for correction.	2025	10 Yrs (1)	$8,500	$8,500	$9,000
J03	Perform condition assessment of enclosure systems, as required.	2040	6 Yrs (3)	$18,000	$54,000	$108,000
J04	Conduct leak investigation at parkade walls and suspended slab.	2024	1 x (1)	$7,500	$7,500	$7,700
R01	This is not a renewable asset.	2089	75 Yrs (0)	$0	$0	$0

Electrical

Elec 01 - Electrical Distribution

Location

Parkade Electrical Room

Description

1600A, 208V main disconnect switch; downstream switchboards, panelboards, breakers, switches, disconnects and wiring to mechanical, lighting and power loads throughout the building.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Conduct infrared thermography and ultrasonic scanning tests on all switchgear, distribution panels, cable and bus connections, and other critical equipment. Results may diagnose hidden hazards; contractor should provide certificate for insurance purposes. To be coordinated prior to planned maintenance to identify areas that require immediate attention. Tests should be conducted on energized equipment during peak demand periods if possible.	2025	5 Yrs (6)	$3,500	$21,000	$33,300
R02	Cyclical replacement of components of the electrical distribution equipment, as required.	2054	40 Yrs (0)	$0	$0	$0

Elec 02 - Exterior Light Fixtures

Location

Various locations attached to the exterior of the buildings and throughout site.

Description

A variety of fixture types, including wall, pole and post mounted, street, pathway and recessed soffit pot lighting. A variety of lamp types, including fluorescent, compact fluorescent, halogen, incandescent, LED, etc. for exterior direct, indirect and accent lighting applications. A variety of light fixture controls, including switches, motion sensors, timers and photocells.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace exterior pole mounted site light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	2054	40 Yrs (0)	$0	$0	$0
R02	Cyclical replacement of lighting controls (timers, motion sensors, etc.) as required.	2026	6 Yrs (5)	$1,000	$5,000	$8,100
R03	Replace exterior bollard site light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	2044	30 Yrs (1)	$20,000	$20,000	$37,000
R04	Replace exterior light fixtures at buildings, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	2034	20 Yrs (1)	$9,000	$9,000	$13,000

Elec 03 - Interior Light Fixtures

Location

All common areas throughout the building and the parkade.

Description

A variety of fixture types, including fixed surface (pendant, track and sconce) and recessed (pot, troffer and cove). A variety of lamp types, including fluorescent, compact fluorescent, halogen, incandescent, LED, etc. for interior direct, indirect and accent lighting applications. A variety of light fixture controls, including switches, motion sensors, timers, dimmers and photocells.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace interior light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	2034	20 Yrs (1)	$3,850	$3,850	$5,500

Elec 04 - Enterphone System

Location

Lobby entrances.

Description

Mircom, surface mounted enterphone panels with associated key pads and display panels.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2039
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace enterphone panels, excluding field wiring at 286 Wilfert.	2046	25 Yrs (1)	$6,700	$6,700	$14,000
R02	Replace enterphone panels, excluding field wiring at 290 Wilfert.	2039	25 Yrs (1)	$6,700	$6,700	$11,000

Elec 05 - Proximity Access Control

Location

Lobbies, parking garage, elevators, and common area entrances.

Description

Local proximity access control system components include fob devices for building occupants, fob readers, RTE sensors, electric strikes and door controllers. Network level components include door control panel, communication boards, backup batteries, RTE board, conduit, cable and connectors.

Information

Service Life:	12	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2026
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace media in recording device to maintain continuous records from proximity access control devices. Retain records in secure archive for period determined by policy.	2026	6 Yrs (5)	$550	$2,750	$4,380
R02	Modernize components of the proximity access control system, excluding field wiring, as required by technological obsolescence.	2026	12 Yrs (3)	$22,000	$66,000	$110,000

Mechanical

Mech 01 - Gas Detection - Parking Garage

Location

Mounted to columns throughout the parkade.

Description

Honeywell Analytics, E3SAH electronic sensing devices for detection of dangerous gases (carbon monoxide produced by vehicles and to activate the exhaust fans accordingly.

Information

Service Life:	10	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2023
Effective Age:	10		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of gas detection sensors.	2023	5 Yrs (6)	$3,000	$18,000	$26,900

Mech 02 - Heat Tracing - Freeze Protection

Location

Throughout the parking garage.

Description

Heat trace for piping systems exposed to freezing (self regulating heater cable with parallel circuit heater strip and outer thermoplastic elastomer jacket).

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of components of electric heat tracing cable, including control module and pipe insulation.	2029	15 Yrs (2)	$5,500	$11,000	$17,800

Mech 03 - Meters - Water [PLACEHOLDER]

Location
Mechanical room.

Description
Digital domestic water meters for measuring water consumption.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2039
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of meters, as required.	2039	5 Yrs (0)	$0	$0	$0

Mech 04 - Controls - Door Actuators

Location
Door Actuator at lobby doors

Description
Electronic motor-driven control devices on valves, dampers, etc. to control heating, air-conditioning, domestic hot water system and boilers etc.

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of electronic actuator controls, as required.	2029	15 Yrs (2)	$6,000	$12,000	$18,200

Mech 05 - Drainage - Perimeter and Foundation

Location
Perimeter of building.

Description
Perforated piping forming part of a sub-surface foundation/footing drainage system around the perimeter of the parkade and underground structures.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	By means of pipe camera service, visually inspect underground piping runs. Look for build up of silts and dirt fines, tree roots, and other obstructions. Look for standing water indicating saturated soil conditions or impermeable conditions.	2025	5 Yrs (6)	$2,500	$15,000	$23,900

R01	Repair and/replace components of perimeter drainage system, as required.	2054	40 Yrs (0)	$0	$0	$0

Mech 06 - Drainage - Storm - Exterior System

Location

Perimeter of building.

Description

DWV-PVC underground tight piping forming part of a drainage system around perimeter of buildings, podiums and structures, intended for collection of downspout drains and hard surface area drainage. Not including aluminum downspouts and gutters.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	By means of pipe camera service, visually inspect underground piping runs. Look for build up of silts and dirt fines, tree roots, and other obstructions. Cost carried in perimeter and foundation drainage asset.	2025	5 Yrs (6)	$0	$0	$0
R01	Repair and replace components of exterior drainage system, as required. It is assumed this would happen in conjunction with the perimeter drainage.	2054	40 Yrs (0)	$0	$0	$0

Mech 07 - Drainage - Storm - Internal

Location

Parkade.

Description

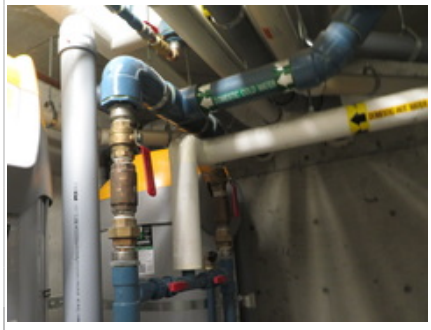
Trench drains, catch basins and associated piping systems for rainwater runoff. Roof drains may be included with the roof assets.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Repair and/replace components of storm water drainage distribution system, as required.	2054	40 Yrs (0)	$0	$0	$0

Mech 08 - Piping - Domestic Water Distribution



Location

Connected to fixtures throughout the building.

Description

Mixture of K and L copper for vertical/horizontal mains and PEX distribution piping runouts within the suites. Soldered and propress connections.

Information

Service Life:	35	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2049
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Comprehensive third party testing and inspection of the copper domestic water distribution system.	2044	30 Yrs (1)	$10,000	$10,000	$19,000
R01	Replace components of domestic plumbing distribution system, including domestic valves.[Extent and timing of renewal will be dependent on the third-party testing of the domestic water distribution piping recommended in tactical plan.	2049	35 Yrs (1)	$1,023,000	$1,023,000	$2,300,000

Mech 09 - Piping - Gas Distribution

Location

In the parkade and up to the rooftop.

Description

Gas distribution system consisting of steel piping from meter to appliance.

Information

Service Life:	50	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	29		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of fittings and valves, as required.	2044	20 Yrs (1)	$20,400	$20,400	$38,000

Mech 10 - Tank - DHW - Heating - Gas Fired

Location

Mechanical room in parkade.

Description

A.O. Smith 199900 BTU natural gas fired domestic water heaters, model BTH 199 100, for domestic hot water for plumbing fixtures in the suites.

Information

Service Life:	8	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2023
Effective Age:	8		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of various components of domestic hot water storage tanks, such as burners, controls, etc.	2026	5 Yrs (6)	$2,200	$13,200	$21,400
R02	Replace domestic hot water heater.	2029	8 Yrs (3)	$51,000	$153,000	$236,000
R03	Replace domestic hot water heater.	2023	8 Yrs (4)	$17,000	$68,000	$101,000

Mech 11 - Tank - Expansion -DHW - Diaphragm

Location

Mechanical room in parkade.

Description

Amtrol Therm-X-Trol ST-80V floor mounted diaphragm expansion tank for domestic water system.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of buffer tanks, as required.	2034	20 Yrs (1)	$2,200	$2,200	$3,100

Mech 12 - Valves - Cross Connection & Backflow Prevention

Location

Mechanical room.

Description

Various types and sizes of backflow prevention valves, including vacuum breakers, double check, reduced pressure valves on systems.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of cross connection & back flow prevention valves, as required.	2034	20 Yrs (1)	$6,700	$6,700	$9,600

Mech 13 - Valves - Plumbing Flow Control and Directional

Location

Mechanical room.

Description

Various types and sizes of valves, including pressure reducing valves, isolation valves, two-way and three way valves, circuit flow control valves and check valves to regulate the flow of water through domestic plumbing systems.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of valves, as required.	2034	20 Yrs (1)	$6,700	$6,700	$9,300

Mech 14 - Drainage - Sanitary

Location

Connected to waste fixtures throughout the building.

Description

PVC DWV piping, p-traps, and fittings, with glued joints.

Information

Service Life:	50	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2064
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Insert video cameras into main lines to conduct pipe inspection.	2025	5 Yrs (6)	$3,300	$19,800	$31,400
J02	Auger lateral drain lines.	2024	10 Yrs (3)	$4,400	$13,200	$19,400
R01	Repair components of sanitary drainage distribution system, as required.	2064	50 Yrs (0)	$0	$0	$0

Mech 15 - Pump - DHW - Circulation and Recirculation

Location

Mechanical Room

Description

B&G PL30, 1/12 HP, pipe-mounted domestic hot water circulation pumps. Circulating hot water from boilers to tanks and recirculating hot water from system.

Information

Service Life:	10	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2024
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Inspect brushes and remove brush dust from motor.	2023	2 Yrs (15)	$100	$1,500	$2,340
R01	Cyclical replacement of recirculating pumps, as required.	2024	8 Yrs (4)	$3,400	$13,600	$21,300

Mech 16 - Pumps - Storm Lift and Control Panel

Location

Parkade

Description

A Liberty Pumps storm and a SJE Rhombus perimeter drain sump pump and control panel for storm water runoff and sub-surface drainage.

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Coat exposed shaft of impeller with anti-seize compound.	2023	2 Yrs (15)	$100	$1,500	$2,340
R01	Cyclic replacement of sump pump storm lift and control panels.	2029	15 Yrs (2)	$9,000	$18,000	$28,000

Mech 17 - Interceptor - Oil

Location
Parkade.

Description
A.E. concrete 24x54 API 150 GPM Oil Interceptor.

Information

Service Life:	50	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2064
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclic replacement of oil interceptor, as required.	2064	50 Yrs (0)	$0	$0	$0

Mech 18 - Baseboard - Electric

Location
Elevator landings, stairwells landings, parkade service rooms.

Description
Standard grade, wall mounted, electric convector baseboard heaters with electrical fins for localized space heating and integral thermostat control.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of electric baseboard heaters, as required.	2054	40 Yrs (0)	$0	$0	$0

Mech 19 - Outdoor Air Handler - Makeup Air - Gas

Location
Rooftop on both buildings.

Description
Greenheck 3000 CFM outdoor, rooftop unit. Belt-driven, fan with indirect natural gas fired heating to supply tempered make-up air to the interior spaces. Capacity 250 MBH input, 200 MBH output.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of pulleys and motors and vibration isolation, as required.	2029	8 Yrs (3)	$10,000	$30,000	$48,000
R02	Cyclical rebuild or replacement of make-up air units.	2034	20 Yrs (1)	$66,000	$66,000	$94,000

Mech 20 - Exhaust Fan - Parkade - Propellor

Location
Parkade exhaust shafts.

Description
Cook 3 HP 15,000 cfm belt driven propellor exhaust fans mounted in exterior wall with backdraft damper.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	2024	3 Yrs (10)	$500	$5,000	$7,830
R02	Rebuild of fan, as required.	2034	20 Yrs (1)	$2,200	$2,200	$3,100

Mech 21 - Fire Damper

Location
Parkade

Description
Parkade fire damper in ventilation transfer opening.

Information

Service Life:	12	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2026
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of failed or damaged fire damper, as required.	2026	12 Yrs (3)	$1,700	$5,100	$8,500

Mech 22 - Coil - Electric - Duct Heater

Location
Amenity rooms, in bulkheads.

Description
Electric duct heaters, 5KW duct-mounted with stainless steel elements.

Information

Service Life:	17	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2031
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of electric duct heaters.	2031	17 Yrs (2)	$2,200	$4,400	$7,600

Mech 23 - Parkade Transfer Fan - Inline

Location
Parkade.

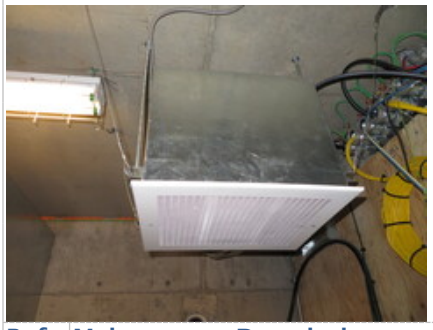
Description
Greenheck 0.5 HP belt driven centrifugal fans suspended from structure.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	2024	3 Yrs (10)	$500	$5,000	$7,830
R02	Rebuild of supply and exhaust fans, as required.	2034	20 Yrs (1)	$11,000	$11,000	$16,000

Mech 24 - Exhaust Fan - Small Service - Cabinet



Location
Parkade service and storage rooms, common washrooms.

Description
Cabinet fans of varying speed and airflow suspended from structure.

Information

Service Life:	12	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2026
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of failed or damaged general purpose exhaust fans, as required.	2026	12 Yrs (3)	$14,850	$44,550	$75,000

Mech 25 - Overhead Gate Motor

Location
Parking garage.

Description
Liftmaster, 1/2 HP AC motor and door operator mechanism. Gate included in Enclosure Assets.

Information

Service Life:	7	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2023
Effective Age:	7		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace motor and drive unit.	2023	7 Yrs (5)	$2,500	$12,500	$20,300

Elevator

Elev 01 - Geared Traction, Overhead

Location

One in each building.

Description

One TyssenKrupp Elevator (TKE Synergy 85S) with TAC-50/04 controls, 2500 lbs capacity, 150 fpm rated speed. One KONE EcoSpace with KCM831 LCE controls, KDL16L drives, 2000-4000 lb capacity, 150 fpm rated speed.

Information

Service Life:	50	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2064
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Check and test the overload devices.	2023	2 Yrs (15)	$1,000	$15,000	$23,400
J02	Conduct full load performance test.	2023	2 Yrs (15)	$1,000	$15,000	$23,400
J03	Obtain a comprehensive elevator review by an elevating device engineer to confirm the remaining service life of controllers and safety devices.	2039	25 Yrs (1)	$7,000	$7,000	$11,000
R01	Replace elevator hoist ropes.	2029	15 Yrs (2)	$56,000	$112,000	$167,000
R02	Replace elevator controls and drive.	2034	20 Yrs (1)	$670,000	$670,000	$930,000
R03	Replace elevator geared machines and roller guides.	2064	50 Yrs (0)	$0	$0	$0

Elev 02 - Elevator Cabs & Hoistway

Location

Phase I and II Buildings

Description

Single opening doors, resilient/tile flooring, wood paneling with stainless steel handrails, diffused lighting.

Information

Service Life:	50	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2064
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace elevator cylinder.	2064	50 Yrs (0)	$0	$0	$0
R02	Replace door operators and door detectors.	2034	20 Yrs (1)	$56,000	$56,000	$78,000
R03	Replace elevator operating and signal fixtures, including cab phones.	2064	50 Yrs (0)	$0	$0	$0

Fire Safety

Fire 01 - Fire Alarm Panel - Addressable

Location
Electrical room.

Description
General Electric EST QuickStart control panel and annunciator panel with display.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Replace battery packs for fire alarm control panels.	2025	5 Yrs (6)	$800	$4,800	$7,530
R01	Replace battery packs.	2025	5 Yrs (6)	$560	$3,360	$5,310
R02	Replace fire alarm annunciator panels and control panel, excluding field wiring and field devices.	2034	20 Yrs (1)	$44,000	$44,000	$63,000

Fire 02 - Fire Detection & Alarm

Location
Throughout the buildings.

Description
Smoke detectors, heat detectors, flow switches, tamper switches, horns, pull stations and other fixed apparatus field devices to detect fire and smoke conditions and initiate timely response.

Information

Service Life:	10	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2024
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of speakers, heat detectors, smoke detectors and related modules, excluding field wiring. Ongoing replacements, as required, are assumed to be covered by annual maintenance budget.	2024	10 Yrs (3)	$0	$0	$0
R02	Replacement of heat and smoke detectors, wiring, and other field devices.	2044	30 Yrs (1)	$96,000	$96,000	$180,000

Fire 03 - Dry Sprinkler Compressor

Location
Mechanical room.

Description
Swan FP1011ASB-0 dry pipe sprinkler compressor with 1 HP motor to maintain the pressure of air in the dry fire sprinkler lines.

Information

Service Life:	14	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2028
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost

R01	Replace fire sprinkler compressor.	2028	14 Yrs (2)	$2,300	$4,600	$6,900

Fire 04 - Fire Hydrant

Location

At top of the driveway near building 290 and parking stall 29 and at garbage enclosure near building 286 adjacent to stall 12.

Description

Devices used to access water directly from the municipal water supply by fire department, to assist in extinguishing fires.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Repaint exterior hydrant cap, bonnet and body for sufficient identification.	2023	8 Yrs (4)	$400	$1,600	$2,360
J02	Lubricate cap threads with light white grease.	2023	8 Yrs (4)	$100	$400	$590
R01	Replace fire hydrants.	2054	40 Yrs (0)	$0	$0	$0

Fire 05 - Portable Fire Extinguisher

Location

Throughout the building.

Description

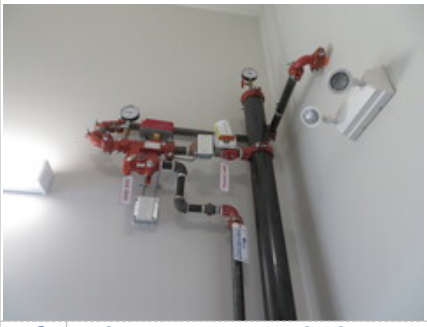
Wall mounted, manually operated, 5lbs and 10lbs ABC type, pressurized vessels for controlled discharge of chemicals to extinguish small fires.

Information

Service Life:	12	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2026
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of fire extinguishers. Ongoing replacements assumed to be covered by annual maintenance budget.	2026	12 Yrs (3)	$0	$0	$0

Fire 06 - Sprinkler & Standpipe - Wet



Location

Throughout the heated spaces of the buildings.

Description

Pendant sprinkler heads, flow switches and indicating devices, gauges, steel distribution lines.

Information

Service Life:	100	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2114
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground.	2025	5 Yrs (6)	$500	$3,000	$4,740
J02	Sprinkler Heads - Test extra high temperature on sprinkler heads.	2025	5 Yrs (6)	$500	$3,000	$4,740

R01	Phased replacement of sprinkler zone control valves, as required.	2034	20 Yrs (1)	$2,500	$2,500	$3,600
R02	Renew compromised portions of piping, gaskets, connections, valves, devices and trim to maintain required function.	2039	5 Yrs (3)	$16,065.50	$48,196.50	$94,000
R03	Replace all heads, or submit representative sample of heads for testing by recognised testing agency at the 50th anniversary, to the satisfaction of the authority having jurisdiction at the 50th anniversary, in accordance with NFPA 25.	2064	10 Yrs (0)	$0	$0	$0
R04	Replace entire system including risers, branch piping, valves, heads, swaybracing, and all related trim, back to Sprinkler Room.	2114	100 Yrs (0)	$0	$0	$0

Fire 07 - Sprinkler System - Dry

Location

Throughout the parkade.

Description

Exposed dry sprinklers, upright and sidewall sprinkler heads, steel piping.

Information

Service Life:	60	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2074
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground.	2025	5 Yrs (6)	$500	$3,000	$4,740
J02	Sprinkler Heads - Test extra high temperature on sprinkler heads.	2025	5 Yrs (6)	$500	$3,000	$4,740
R01	Replace all heads, or submit representative sample of heads for testing by recognized testing agency at the 50th anniversary, to the satisfaction of the authority having jurisdiction, in accordance with NFPA 25.	2064	10 Yrs (0)	$0	$0	$0
R02	Replace damaged sprinkler heads, hangers and leaking gaskets, cages, sway-braces, drains etc as required.	2025	5 Yrs (6)	$1,231.50	$7,389	$11,700
R03	Replace entire system including risers, branch piping, valves, heads, swaybracing, and all related trim, back to Sprinkler Room.	2074	60 Yrs (0)	$0	$0	$0

Fire 08 - Sprinkler Valve Assembly - Dry

Location

Mechanical Room

Description

Firelock NXT S/768 dry sprinkler valves, trim and gauges, steel piping.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Phased replacement of sprinkler zone control valves, as required.	2034	20 Yrs (1)	$2,800	$2,800	$4,000

R02	Replace gaskets in dry sprinkler valves.	2034	20 Yrs (1)	$650	$650	$930
R03	Rebuild dry sprinkler valves.	2034	20 Yrs (1)	$4,000	$4,000	$5,700
R04	Replace sprinkler valves, as required.	2054	40 Yrs (0)	$0	$0	$0

Fire 09 - Emergency Egress Equipment

Location

Throughout buildings.

Description

Emergency lighting; Unit battery packs; LED exit signs.

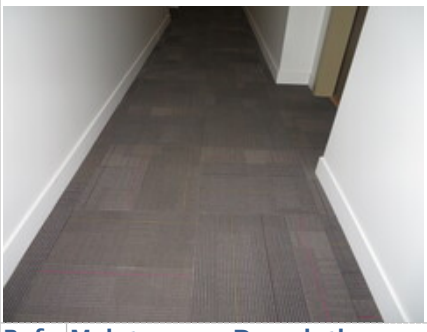
Information

Service Life: 20
Chronological Age: 9
Effective Age: 9
Install Year: 2014
Next Renewal Year: 2034

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of batteries and lamps in DC battery packs. Cost typically included in operating budget.	2025	5 Yrs (6)	$0	$0	$0
R02	Cyclical replacement of LED exit signs. Cost typically included in operating budget.	2034	15 Yrs (2)	$0	$0	$0

Interior Finishes

Finish 01 - Sheet Carpet - Glued Down



Location

Common corridors in Phase I and II buildings.

Description

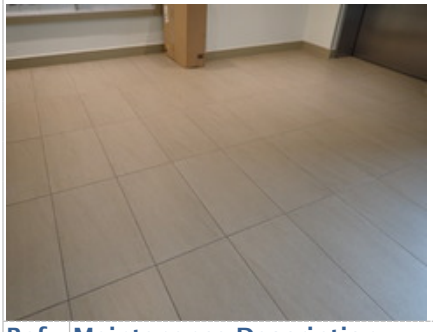
Synthetic, low level loop, textile sheet floor covering glued over floor substrate.

Information

Service Life: 10
Chronological Age: 9
Effective Age: 7
Install Year: 2014
Next Renewal Year: 2026

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Renew carpet.	2026	10 Yrs (3)	$72,000	$216,000	$329,000

Finish 02 - Tile Floor



Location

Lobby entrances and guest suite washroom.

Description

Cut floor tile on thin set mortar with grout.

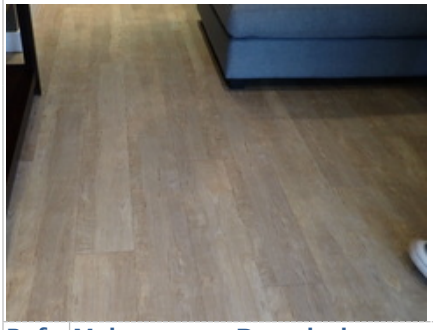
Information

Service Life: 40
Chronological Age: 9
Effective Age: 9
Install Year: 2014
Next Renewal Year: 2054

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Re-polish the floor with polishing compounds using floor buffing equipment.	2024	2 Yrs (15)	$1,327.50	$19,912.50	$31,900

J02	Recolour or replace tile grout as required.	2026	12 Yrs (3)	$2,655	$7,965	$13,400
R01	Renew tile floor.	2054	40 Yrs (0)	$0	$0	$0

Finish 03 - Wood Flooring



Location
Amenity and guest rooms.

Description
Wood laminate flooring.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace wood flooring, as required.	2034	20 Yrs (1)	$5,625	$5,625	$8,000

Finish 04 - Mirror

Location
Phase I building amenity room

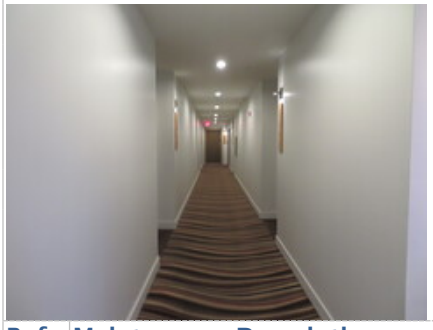
Description
Mirrored glass with structural fasteners to the substrate.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2039
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace mirrored wall, as required.	2039	25 Yrs (1)	$3,600	$3,600	$6,000

Finish 05 - Paint



Location
Hallways throughout the buildings.

Description
Primers and multiple pigmented coating finishes applied to interior gypsum wallboard, mill work trim details.

Information

Service Life:	10	Install Year:	2021
Chronological Age:	2	Next Renewal Year:	2031
Effective Age:	2		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Repaint interior wall in high traffic area, as required.	2026	5 Yrs (3)	$5,637.50	$16,912.50	$25,500
R02	Repaint wall surface including preparation of substrate.	2031	10 Yrs (3)	$38,335	$115,005	$202,000

Finish 06 - Baseboard, Molding and Casing

Location
Hallways throughout the buildings.

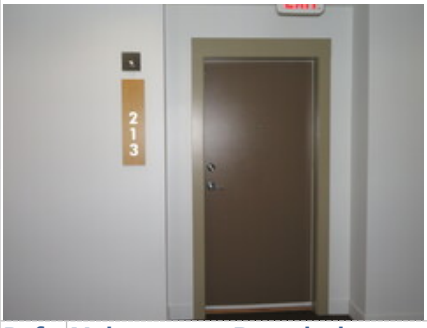
Description
Linear components constructed out of painted or finished wood.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace sections of damaged baseboard, molding, and casing.	2054	40 Yrs (0)	$0	$0	$0

Finish 07 - Interior Swing Door - General



Location
Common areas of both buildings.

Description
Solid core wood and hollow metal swing door hung in framed opening including hardware.

Information

Service Life:	30	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace interior swing door as required.	2044	30 Yrs (1)	$74,800	$74,800	$140,000

Amenities

Amen 01 - Domestic Appliances

Location
Phase I Amenity room.

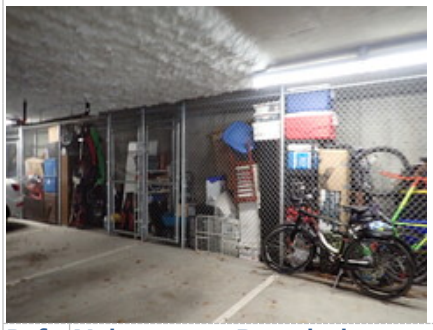
Description
Refrigerator, microwave oven, dishwasher of miscellaneous brands.

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace domestic appliances.	2029	15 Yrs (2)	$3,400	$6,800	$10,700

Amen 02 - Metal Screen Storage Locker



Location
All throughout parkade

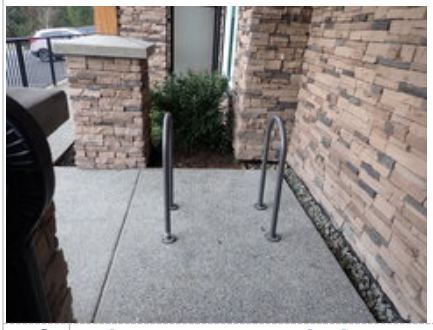
Description
Painted metal screen storage lockers with steel framing and hardware.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2039
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace metal storage lockers, as required.	2039	25 Yrs (1)	$5,580	$5,580	$9,200

Amen 03 - Bicycle Rack



Location
Outside of main entrances and in a converted storage room in the parkade.

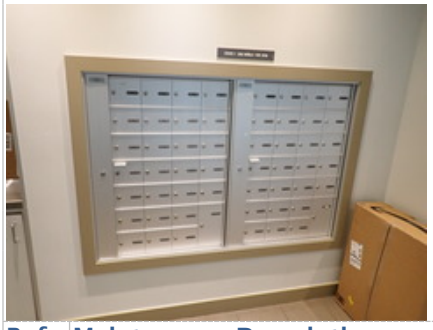
Description
Steel frame bicycle rack.

Information

Service Life:	30	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Remove rust and touch up painting of bike racks, as required.	2023	5 Yrs (1)	$300	$300	$300
R01	Replace bicycle racks in parkade bike storage room, as required.	2079	35 Yrs (0)	$0	$0	$0
R02	Replace bicycle racks at main entrances, as required.	2044	30 Yrs (1)	$5,200	$5,200	$9,700

Amen 04 - Central Mailboxes



Location
Main lobby of both buildings.

Description
Flush or surface mounted, front or rear loading, brushed aluminum finish, extruded aluminum trim.

Information

Service Life:	30	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2044
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Rekey cylinder on master lock.	2024	5 Yrs (5)	$600	$3,000	$4,430
R01	Replace central mail boxes as required.	2044	30 Yrs (1)	$6,600	$6,600	$13,000

Amen 05 - Exterior Furniture & Accessories

Location
Various site locations

Description
Metal benches and miscellaneous accessories.

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace furnishings in common areas, as required.	2029	15 Yrs (2)	$2,125	$4,250	$6,700

Amen 06 - Public Signage

Location
Front entrances and various site locations.

Description
Variety of permanently displayed information placards in the common areas of the building.

Information

Service Life:	25	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2039
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace damaged and outdated signage, as required.	2039	25 Yrs (1)	$2,000	$2,000	$3,300

Amen 07 - Furniture & Accessories

Location
Building lobbies.

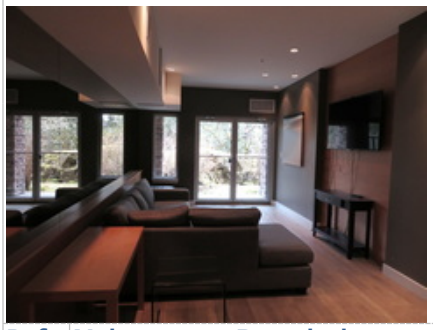
Description
Lobby chairs and tables. Furniture and accessories associated with amenity room and guest suite are accounted for in the individual respective assets.

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement/updating of accessories, as required.	2029	15 Yrs (2)	$4,000	$8,000	$12,200

Amen 08 - Amenity Room Furniture & Accessories



Location
Phase I amenity room.

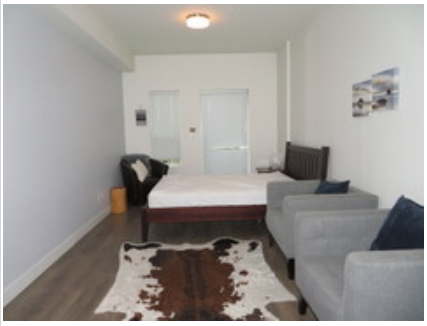
Description
Couch, chairs, tables and other miscellaneous accessories.

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement/updating of accessories, as required.	2029	15 Yrs (2)	$4,000	$8,000	$12,200

Amen 09 - Guest Suite



Location
First level of Phase II building.

Description
Guest suite including washroom with plumbing fixtures, furnishings, light fixtures, and other accessories. Renewal for flooring and wall covering are included in the interior finishes assets.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of toilet, sink, shower and associated components such as faucets etc. in guest suite washroom.	2039	25 Yrs (1)	$3,500	$3,500	$5,800
R02	Cyclical replacement/updating of furnishings, millwork, cabinetry, appliances, lighting fixtures, and accessories.	2034	20 Yrs (1)	$4,000	$4,000	$5,700

Sitework

Site 01 - Asphalt Paving

Location
Access road and parking lot.

Description
Flexible asphalt paving with curbs, onto compacted gravel base.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Reapply traffic markings in parking area (the main roadway and upper driveway are bare and not included here).	2027	5 Yrs (6)	$1,207.50	$7,245	$12,200

R01	Reseal asphalt paving and localized crack repairs to mitigate sub-grade softening.	2023	10 Yrs (3)	$8,680	$26,040	$36,700
R02	Repave sections of asphalt paving, including sub-grade as required.	2033	10 Yrs (2)	$39,060	$78,120	$123,000
R03	Asphalt paving is not deemed to be a renewable asset.	2054	40 Yrs (0)	$0	$0	$0

Site 02 - Concrete Walkways

Location

Access road and walkways.

Description

Architectural concrete walkways, cast with control and construction joints, onto compacted gravel base. Concrete finish consists of combination of exposed aggregate, stamped, and broom finish.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace sections of concrete walkway, as required. (2/4)	2064	40 Yrs (0)	$0	$0	$0
R02	Replace sections of concrete walkway, as required. (3/4)	2074	40 Yrs (0)	$0	$0	$0
R03	Replace sections of concrete walkway, as required. (4/4)	2084	40 Yrs (0)	$0	$0	$0
R04	Replace sections of concrete walkway, as required. (1/4)	2054	40 Yrs (0)	$0	$0	$0

Site 03 - Interlocking Unit Paving Driveway/Walkway

Location

Landscaping feature between the two buildings.

Description

Precast concrete unit pavers, combination of chip seal joint filler and jointing sand, bedding sand, and onto compacted gravel base.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Rebuild sections of interlocking paving, including sub-grade, as required.	2054	10 Yrs (0)	$0	$0	$0
R02	Interlocking paving is not deemed to be a renewable asset.	2054	40 Yrs (0)	$0	$0	$0

Site 04 - Metal Fencing

Location

Perimeter of site walkways, stairs, on top of parkade and carious retaining walls.

Description

Aluminum post and pickets functioning as a protective barrier to prevent accidental falls from one level to another.

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Repaint metal fencing as required.	2024	10 Yrs (3)	$9,800	$29,400	$43,000
R01	Replace metal fencing.	2054	40 Yrs (0)	$0	$0	$0

Site 05 - Playground Equipment

Location

Between building phase I and II.

Description

Modular wood, plastic and metal playground apparatus. Reconstituted rubber safety flooring in playground area.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace outdoor playground equipment.	2034	20 Yrs (1)	$12,000	$12,000	$17,000

Site 06 - Wood Fence

Location

Pathway along rear of phase 1 building

Description

Stacked wood fence on concrete footings.

Information

Service Life:	20	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2034
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Rebuild sections of wood fencing as required.	2034	20 Yrs (1)	$5,000	$5,000	$7,100

Site 07 - Garbage Enclosure

Location

Within parking area near the centre of the site, opposite buildings 286 and 290 respectively.

Description

Timber framed with decorative wood roof, painted wood trim, gates & concrete board lap siding

Information

Service Life:	40	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2054
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Repaint/recoat wood trellis/garbage enclosure as required.	2028	6 Yrs (5)	$6,000	$30,000	$51,200
R02	Replace gate hardware.	2024	10 Yrs (3)	$200	$600	$860
R03	Replace components of trellis/gazebo structures.	2027	5 Yrs (6)	$800	$4,800	$8,000
R04	Replace Garbage Enclosure	2054	40 Yrs (0)	$0	$0	$0

Site 08 - Irrigation System

Location

Parkade and around buildings.

Description

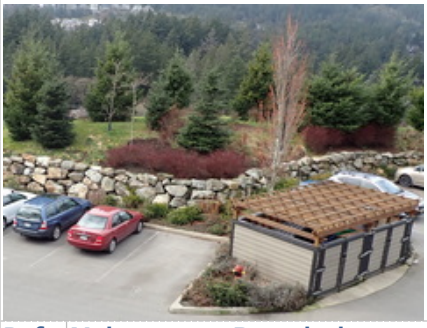
Controller with time clock, network of pipes, valves, and irrigation heads distributed around the soft landscaping.

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Cyclical replacement of components of irrigation sprinkler system, as required.	2029	15 Yrs (2)	$5,500	$11,000	$17,800

Site 09 - Soft Landscaping



Location

Perimeter of buildings and various site locations.

Description

Lawn, ground cover, shrubs, perennials and small trees (up to 30').

Information

Service Life:	15	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2029
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Clearance and pruning of trees and large shrubs as required.	2026	3 Yrs (1)	$5,000	$5,000	$5,600
J02	Clearance or pruning of trees and large shrubs. [Cost is included in the Owner's Contingency Reserve Fund Budget for 2023]	2023	1 x (1)	$28,000	$28,000	$29,000

R01	Renovate sections of the soft landscaping, as required. It is assumed that regular replacements are completed as part of the annual landscaping contract and funded from the operating budget. Significant landscape replacements/redesign would likely involve a design development process therefore renewal costs are not included at this stage.	2029	15 Yrs (2)	$0	$0	$0

Site 10 - Electrical Site Services [PLACEHOLDER]

Location

Below grade with transformer on edge of parking lot.

Description

Underground secondary distribution conduits and services from individual pad mounted transformers to building electrical rooms.

Information

Service Life:	50	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2064
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace components of underground electrical site services from transformer to electrical rooms. Work to be coordinated, completed and paid for by BC Hydro, at their discretion.	2064	50 Yrs (0)	$0	$0	$0

Site 11 - Underground Drainage Services - Storm

Location

Below grade between buildings and city connection at base of service road.

Description

Concealed asset. Storm sewer from buildings and catch basins to property line.

Information

Service Life:	80	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2094
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	Review underground drainage piping by video camera for condition and performance.	2025	5 Yrs (6)	$1,100	$6,600	$10,500
J02	Powerflush underground drainage piping to clear and remove any buildup of debris.	2024	10 Yrs (3)	$2,200	$6,600	$9,600
R01	Replace components of underground drainage services.	2094	80 Yrs (0)	$0	$0	$0

Site 12 - Underground Sewer Services - Sewer

Location

Below grade between buildings and city connection at base of service road.

Description

Concealed asset. Sanitary sewer system from the buildings to the property line, including all appurtenances.

Information

Service Life:	80	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2094
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
J01	CCTV length of services for inspection of condition and function.	2025	5 Yrs (6)	$600	$3,600	$5,630
J02	Powerflush underground sanitary drains to remove buildup and debris.	2024	10 Yrs (3)	$600	$1,800	$2,600
R01	Replace portions of underground sewer services, including all appurtenances. Includes temporary services during construction (assumes no room to abandon old services in place), trench backfill and asphalt patching. (1/5)	2074	10 Yrs (0)	$0	$0	$0
R02	Replace portions of underground sewer services, including all appurtenances. Includes temporary services during construction (assumes no room to abandon old services in place), trench backfill and asphalt patching. (3/5)	2094	80 Yrs (0)	$0	$0	$0

Site 13 - Underground Water Services with PVC/Copper and Ductile Piping

Location

Below grade between buildings and city connection at base of service road.

Description

Fire and domestic water supplies, from the property line to the buildings and hydrant.

Information

Service Life:	50	Install Year:	2014
Chronological Age:	9	Next Renewal Year:	2064
Effective Age:	9		

Ref	Maintenance Description	Next Event	Frequency (30 Yr Count)	Current Cost	30 Year Current Cost	30 Year Future Cost
R01	Replace portions of underground water services with PVC/copper and ductile piping, hydrants, valves and connections. (2/5)	2064	10 Yrs (0)	$0	$0	$0
R02	Replace underground water services with PVC/copper piping, hydrants, valves and connections. (1/5)	2064	50 Yrs (0)	$0	$0	$0

Appendix C

Tactical Plan

The Coho

Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2023						
Enclosure						
Encl 05 - Wood Soffit						
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	Maintenance Level 1	3 Yrs	2023	$126	$130
Encl 13 - Steel Swing Door						
R01	Repaint steel door finish.	Renew Component	8 Yrs	2023	$1,200	$1,200
Mechanical						
Mech 01 - Gas Detection - Parking Garage						
R01	Cyclical replacement of gas detection sensors.	Renew Assembly	5 Yrs	2023	$3,000	$3,000
Mech 10 - Tank - DHW - Heating - Gas Fired						
R03	Replace domestic hot water heater.	Renew Assembly	8 Yrs	2023	$17,000	$17,000
Mech 15 - Pump - DHW - Circulation and Recirculation						
J01	Inspect brushes and remove brush dust from motor.	Maintenance Level 3	2 Yrs	2023	$100	$100
Mech 16 - Pumps - Storm Lift and Control Panel						
J01	Coat exposed shaft of impeller with anti-seize compound.	Maintenance Level 3	2 Yrs	2023	$100	$100
Mech 25 - Overhead Gate Motor						
R01	Replace motor and drive unit.	Renew Assembly	7 Yrs	2023	$2,500	$2,500
Elevator						
Elev 01 - Geared Traction, Overhead						
J01	Check and test the overload devices.	Maintenance Level 3	2 Yrs	2023	$1,000	$1,000
J02	Conduct full load performance test.	Maintenance Level 3	2 Yrs	2023	$1,000	$1,000
Fire Safety						
Fire 04 - Fire Hydrant						
J01	Repaint exterior hydrant cap, bonnet and body for sufficient identification.	Maintenance Level 2	8 Yrs	2023	$400	$400
J02	Lubricate cap threads with light white grease.	Maintenance Level 3	8 Yrs	2023	$100	$100
Amenities						
Amen 03 - Bicycle Rack						
J01	Remove rust and touch up painting of bike racks, as required.	Maintenance Level 3	5 Yrs	2023	$300	$300
Sitework						
Site 01 - Asphalt Paving						
R01	Reseal asphalt paving and localized crack repairs to mitigate sub-grade softening.	Renew Component	10 Yrs	2023	$8,680	$8,700
Site 09 - Soft Landscaping						
J02	Clearance or pruning of trees and large shrubs. [Cost is included in the Owner's Contingency Reserve Fund Budget for 2023]	Maintenance Level 3	1 x	2023	$28,000	$29,000

The Coho

Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2024						
Enclosure						
Encl 08 - Coating on Concrete Wall						
R01	Reapplication of the protective coating on concrete wall.	Renew Assembly	10 Yrs	2024	$22,500	$24,000
Encl 11 - Wood Trim						
J02	Touch up painting of wood trim as required.	Maintenance Level 1	2 Yrs	2024	$1,800	$1,900
J03	Review exterior surfaces of wood trim for signs of distress, such as warping, water damage, loose trim board and discolouration, condition of coating and sealant. Review includes exposed bolt connections at exposed structural wood asset (Struct 01).	Maintenance Level 2	2 Yrs	2024	$1,500	$1,500
J04	Locally repair wood trim, as required.	Maintenance Level 2	2 Yrs	2024	$2,160	$2,200
Encl 15 - Aluminum Frame Lobby and Amenity Room Door.						
R01	Replace/upgrade door hardware.	Renew Component	10 Yrs	2024	$2,600	$2,700
Encl 18 - Slab-on-Grade						
J01	Re-apply traffic demarcation striping and directional signage. Frequency will depend on traffic volume and other factors.	Maintenance Level 1	5 Yrs	2024	$1,000	$1,100
J02	Heavy duty cleaning on slab surface to remove oil stains, etc.	Maintenance Level 2	5 Yrs	2024	$437.50	$460
R01	Prepare surface and re-apply concrete sealer as required.	Renew Component	5 Yrs	2024	$5,700	$6,000
Encl 19 - General & Inspections						
J04	Conduct leak and crack investigation at parkade walls and suspended slab.	Assessment	1 x	2024	$7,500	$7,700
Mechanical						
Mech 14 - Drainage - Sanitary						
J02	Auger lateral drain lines.	Maintenance Level 3	10 Yrs	2024	$4,400	$4,700
Mech 15 - Pump - DHW - Circulation and Recirculation						
R01	Cyclical replacement of recirculating pumps, as required.	Renew Assembly	8 Yrs	2024	$3,400	$3,600
Mech 20 - Exhaust Fan - Parkade - Propellor						
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	Renew Component	3 Yrs	2024	$500	$520
Mech 23 - Parkade Transfer Fan - Inline						
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	Renew Component	3 Yrs	2024	$500	$520
Interior Finishes						
Finish 02 - Tile Floor						
J01	Re-polish the floor with polishing compounds using floor buffing equipment.	Maintenance Level 2	2 Yrs	2024	$1,327.50	$1,400
Amenities						
Amen 04 - Central Mailboxes						
J01	Rekey cylinder on master lock.	Maintenance Level 2	5 Yrs	2024	$600	$620

The Coho

Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Sitework						
Site 04 - Metal Fencing						
J01	Repaint metal fencing as required.	Maintenance Level 2	10 Yrs	2024	$9,800	$10,000
Site 07 - Garbage Enclosure						
R02	Replace gate hardware.	Renew Component	10 Yrs	2024	$200	$210
Site 11 - Underground Drainage Services - Storm						
J02	Powerflush underground drainage piping to clear and remove any buildup of debris.	Maintenance Level 3	10 Yrs	2024	$2,200	$2,300
Site 12 - Underground Sewer Services - Sewer						
J02	Powerflush underground sanitary drains to remove buildup and debris.	Maintenance Level 3	10 Yrs	2024	$600	$640

The Coho

Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2025						
Enclosure						
Encl 03 - Aluminum Panel Soffit						
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	Maintenance Level 1	3 Yrs	2025	$1,848	$2,000
Encl 09 - Cultured Stone Wall - Drained						
J01	Clean exterior surfaces of cultured stone cladding to remove vegetation growth and other atmospheric staining.	Maintenance Level 1	3 Yrs	2025	$1,638	$1,700
Encl 10 - Fiber Cement Wall Cladding and Wood Trim						
J01	Clean exterior fiber cement board surfaces to remove atmospheric dirt, vegetative growth and other stains.	Maintenance Level 1	3 Yrs	2025	$4,200	$4,300
Encl 19 - General & Inspections						
J02	Perform 10-year extended warranty review for phase 2 construction in sufficient time prior to expiration of warranty period for certain portions of the work. Prepare list of any deficiencies for correction.	Warranty Review	10 Yrs	2025	$8,500	$9,000
Electrical						
Elec 01 - Electrical Distribution						
R01	Conduct infrared thermography and ultrasonic scanning tests on all switchgear, distribution panels, cable and bus connections, and other critical equipment. Results may diagnose hidden hazards; contractor should provide certificate for insurance purposes. To be coordinated prior to planned maintenance to identify areas that require immediate attention. Tests should be conducted on energized equipment during peak demand periods if possible.	Renew Component	5 Yrs	2025	$3,500	$3,700
Mechanical						
Mech 05 - Drainage - Perimeter and Foundation						
J01	By means of pipe camera service, visually inspect underground piping runs. Look for build up of silts and dirt fines, tree roots, and other obstructions. Look for standing water indicating saturated soil conditions or impermeable conditions.	Maintenance Level 3	5 Yrs	2025	$2,500	$2,700
Mech 14 - Drainage - Sanitary						
J01	Insert video cameras into main lines to conduct pipe inspection.	Maintenance Level 3	5 Yrs	2025	$3,300	$3,500
Mech 15 - Pump - DHW - Circulation and Recirculation						
J01	Inspect brushes and remove brush dust from motor.	Maintenance Level 3	2 Yrs	2025	$100	$110
Mech 16 - Pumps - Storm Lift and Control Panel						
J01	Coat exposed shaft of impeller with anti-seize compound.	Maintenance Level 3	2 Yrs	2025	$100	$110
Elevator						
Elev 01 - Geared Traction, Overhead						
J01	Check and test the overload devices.	Maintenance Level 3	2 Yrs	2025	$1,000	$1,100
J02	Conduct full load performance test.	Maintenance Level 3	2 Yrs	2025	$1,000	$1,100

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Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Fire Safety						
Fire 01 - Fire Alarm Panel - Addressable						
J01	Replace battery packs for fire alarm control panels.	Maintenance Level 3	5 Yrs	2025	$800	$850
R01	Replace battery packs.	Renew Component	5 Yrs	2025	$560	$590
Fire 06 - Sprinkler & Standpipe - Wet						
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground.	Maintenance Level 3	5 Yrs	2025	$500	$530
J02	Sprinkler Heads - Test extra high temperature on sprinkler heads.	Maintenance Level 3	5 Yrs	2025	$500	$530
Fire 07 - Sprinkler System - Dry						
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground.	Maintenance Level 3	5 Yrs	2025	$500	$530
J02	Sprinkler Heads - Test extra high temperature on sprinkler heads.	Maintenance Level 3	5 Yrs	2025	$500	$530
R02	Replace damaged sprinkler heads, hangers and leaking gaskets, cages, sway-braces, drains etc as required.	Renew Component	5 Yrs	2025	$1,231.50	$1,300
Sitework						
Site 11 - Underground Drainage Services - Storm						
J01	Review underground drainage piping by video camera for condition and performance.	Maintenance Level 3	5 Yrs	2025	$1,100	$1,200
Site 12 - Underground Sewer Services - Sewer						
J01	CCTV length of services for inspection of condition and function.	Maintenance Level 3	5 Yrs	2025	$600	$640

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Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2026						
Structural						
Struct 01 - Exposed Structural Wood						
R01	Re-coat or re-finish exposed structural wood as required.	Renew Component	6 Yrs	2026	$5,500	$6,000
Enclosure						
Encl 01 - Laminated Asphalt Shingle Roof						
J01	Roof maintenance and repair of damaged roof areas as required.	Maintenance Level 3	5 Yrs	2026	$16,000	$17,000
Encl 05 - Wood Soffit						
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	Maintenance Level 1	3 Yrs	2026	$126	$140
R01	Recoat wood soffit as required.	Renew Component	6 Yrs	2026	$1,260	$1,400
Encl 11 - Wood Trim						
J02	Touch up painting of wood trim as required.	Maintenance Level 1	2 Yrs	2026	$1,800	$2,000
J03	Review exterior surfaces of wood trim for signs of distress, such as warping, water damage, loose trim board and discolouration, condition of coating and sealant. Review includes exposed bolt connections at exposed structural wood asset (Struct 01).	Maintenance Level 2	2 Yrs	2026	$1,500	$1,600
J04	Locally repair wood trim, as required.	Maintenance Level 2	2 Yrs	2026	$2,160	$2,400
Encl 12 - Vinyl Framed Window						
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	Maintenance Level 3	2 Yrs	2026	$11,400	$12,000
Encl 14 - Vinyl Frame Glazed Swing Door						
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	Maintenance Level 3	2 Yrs	2026	$1,560	$1,700
Encl 19 - General & Inspections						
J01	Conduct an update to the depreciation report.	Maintenance Level 3	3 Yrs	2026	$10,000	$11,000
Electrical						
Elec 02 - Exterior Light Fixtures						
R02	Cyclical replacement of lighting controls (timers, motion sensors, etc.) as required.	Renew Component	6 Yrs	2026	$1,000	$1,100
Elec 05 - Proximity Access Control						
R01	Replace media in recording device to maintain continuous records from proximity access control devices. Retain records in secure archive for period determined by policy.	Renew Component	6 Yrs	2026	$550	$600
R02	Modernize components of the proximity access control system, excluding field wiring, as required by technological obsolescence.	Renew Assembly	12 Yrs	2026	$22,000	$25,000
Mechanical						
Mech 10 - Tank - DHW - Heating - Gas Fired						
R01	Cyclical replacement of various components of domestic hot water storage tanks, such as burners, controls, etc.	Renew Component	5 Yrs	2026	$2,200	$2,400

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Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Mech 21 - Fire Damper						
R01	Cyclical replacement of failed or damaged fire damper, as required.	Renew Assembly	12 Yrs	2026	$1,700	$1,900
Mech 24 - Exhaust Fan - Small Service - Cabinet						
R01	Cyclical replacement of failed or damaged general purpose exhaust fans, as required.	Renew Assembly	12 Yrs	2026	$14,850	$17,000
Interior Finishes						
Finish 01 - Sheet Carpet - Glued Down						
R01	Renew carpet.	Renew Assembly	10 Yrs	2026	$72,000	$79,000
Finish 02 - Tile Floor						
J01	Re-polish the floor with polishing compounds using floor buffing equipment.	Maintenance Level 2	2 Yrs	2026	$1,327.50	$1,500
J02	Recolour or replace tile grout as required.	Maintenance Level 3	12 Yrs	2026	$2,655	$3,000
Finish 05 - Paint						
R01	Repaint interior wall in high traffic area, as required.	Renew Component	5 Yrs	2026	$5,637.50	$6,200
Sitework						
Site 09 - Soft Landscaping						
J01	Clearance and pruning of trees and large shrubs as required.	Maintenance Level 2	3 Yrs	2026	$5,000	$5,600

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Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2027						
Mechanical						
Mech 15 - Pump - DHW - Circulation and Recirculation						
J01	Inspect brushes and remove brush dust from motor.	Maintenance Level 3	2 Yrs	2027	$100	$110
Mech 16 - Pumps - Storm Lift and Control Panel						
J01	Coat exposed shaft of impeller with anti-seize compound.	Maintenance Level 3	2 Yrs	2027	$100	$110
Mech 20 - Exhaust Fan - Parkade - Propellor						
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	Renew Component	3 Yrs	2027	$500	$560
Mech 23 - Parkade Transfer Fan - Inline						
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	Renew Component	3 Yrs	2027	$500	$560
Elevator						
Elev 01 - Geared Traction, Overhead						
J01	Check and test the overload devices.	Maintenance Level 3	2 Yrs	2027	$1,000	$1,100
J02	Conduct full load performance test.	Maintenance Level 3	2 Yrs	2027	$1,000	$1,100
Sitework						
Site 01 - Asphalt Paving						
J01	Reapply traffic markings in parking area (the main roadway and upper driveway are bare and not included here).	Maintenance Level 2	5 Yrs	2027	$1,207.50	$1,400
Site 07 - Garbage Enclosure						
R03	Replace components of trellis/gazebo structures.	Renew Component	5 Yrs	2027	$800	$900

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Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2028						
Enclosure						
Encl 03 - Aluminum Panel Soffit						
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	Maintenance Level 1	3 Yrs	2028	$1,848	$2,100
Encl 09 - Cultured Stone Wall - Drained						
J01	Clean exterior surfaces of cultured stone cladding to remove vegetation growth and other atmospheric staining.	Maintenance Level 1	3 Yrs	2028	$1,638	$1,900
Encl 10 - Fiber Cement Wall Cladding and Wood Trim						
J01	Clean exterior fiber cement board surfaces to remove atmospheric dirt, vegetative growth and other stains.	Maintenance Level 1	3 Yrs	2028	$4,200	$4,900
Encl 11 - Wood Trim						
J02	Touch up painting of wood trim as required.	Maintenance Level 1	2 Yrs	2028	$1,800	$2,100
J03	Review exterior surfaces of wood trim for signs of distress, such as warping, water damage, loose trim board and discolouration, condition of coating and sealant. Review includes exposed bolt connections at exposed structural wood asset (Struct 01).	Maintenance Level 2	2 Yrs	2028	$1,500	$1,700
J04	Locally repair wood trim, as required.	Maintenance Level 2	2 Yrs	2028	$2,160	$2,500
R01	Clean and repaint wood trim.	Renew Component	6 Yrs	2028	$45,000	$52,000
Encl 12 - Vinyl Framed Window						
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	Maintenance Level 3	2 Yrs	2028	$11,400	$13,000
Encl 14 - Vinyl Frame Glazed Swing Door						
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	Maintenance Level 3	2 Yrs	2028	$1,560	$1,800
Mechanical						
Mech 01 - Gas Detection - Parking Garage						
R01	Cyclical replacement of gas detection sensors.	Renew Assembly	5 Yrs	2028	$3,000	$3,500
Fire Safety						
Fire 03 - Dry Sprinkler Compressor						
R01	Replace fire sprinkler compressor.	Renew Assembly	14 Yrs	2028	$2,300	$2,700
Interior Finishes						
Finish 02 - Tile Floor						
J01	Re-polish the floor with polishing compounds using floor buffing equipment.	Maintenance Level 2	2 Yrs	2028	$1,327.50	$1,500
Sitework						
Site 07 - Garbage Enclosure						
R01	Repaint/recoat wood trellis/garbage enclosure as required.	Renew Component	6 Yrs	2028	$6,000	$7,000

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2029						
Enclosure						
Encl 05 - Wood Soffit						
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	Maintenance Level 1	3 Yrs	2029	$126	$150
Encl 07 - Guardrail Aluminum						
R01	Remove and re-install sections of guardrail in conjunction with balcony waterproofing membrane renewal, including inspect and re-certify guardrail.	Renew Component	15 Yrs	2029	$22,200	$27,000
Encl 08 - Coating on Concrete Wall						
J01	Repair of delaminated or spalled concrete should be carried out prior to recoating.	Maintenance Level 3	10 Yrs	2029	$13,500	$16,000
Encl 16 - Exposed Vinyl Balcony Membrane						
R01	Replace vinyl balcony membrane and associated components.	Renew Assembly	15 Yrs	2029	$212,500	$250,000
Encl 18 - Slab-on-Grade						
J01	Re-apply traffic demarcation striping and directional signage. Frequency will depend on traffic volume and other factors.	Maintenance Level 1	5 Yrs	2029	$1,000	$1,200
J02	Heavy duty cleaning on slab surface to remove oil stains, etc.	Maintenance Level 2	5 Yrs	2029	$437.50	$540
R01	Prepare surface and re-apply concrete sealer as required.	Renew Component	5 Yrs	2029	$5,700	$7,000
Encl 19 - General & Inspections						
J01	Conduct an update to the depreciation report.	Maintenance Level 3	3 Yrs	2029	$10,000	$12,000
Mechanical						
Mech 02 - Heat Tracing - Freeze Protection						
R01	Cyclical replacement of components of electric heat tracing cable, including control module and pipe insulation.	Renew Assembly	15 Yrs	2029	$5,500	$6,800
Mech 04 - Controls - Door Actuators						
R01	Cyclical replacement of electronic actuator controls, as required.	Renew Assembly	15 Yrs	2029	$6,000	$7,200
Mech 10 - Tank - DHW - Heating - Gas Fired						
R02	Replace domestic hot water heater.	Renew Component	8 Yrs	2029	$51,000	$61,000
Mech 15 - Pump - DHW - Circulation and Recirculation						
J01	Inspect brushes and remove brush dust from motor.	Maintenance Level 3	2 Yrs	2029	$100	$120
Mech 16 - Pumps - Storm Lift and Control Panel						
J01	Coat exposed shaft of impeller with anti-seize compound.	Maintenance Level 3	2 Yrs	2029	$100	$120
R01	Cyclic replacement of sump pump storm lift and control panels.	Renew Assembly	15 Yrs	2029	$9,000	$11,000
Mech 19 - Outdoor Air Handler - Makeup Air - Gas						
R01	Cyclical replacement of pulleys and motors and vibration isolation, as required.	Renew Component	8 Yrs	2029	$10,000	$12,000
Elevator						
Elev 01 - Geared Traction, Overhead						
J01	Check and test the overload devices.	Maintenance Level 3	2 Yrs	2029	$1,000	$1,200
J02	Conduct full load performance test.	Maintenance Level 3	2 Yrs	2029	$1,000	$1,200

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	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
R01	Replace elevator hoist ropes.	Renew Component	15 Yrs	2029	$56,000	$67,000
Amenities						
Amen 01 - Domestic Appliances						
R01	Replace domestic appliances.	Renew Assembly	15 Yrs	2029	$3,400	$4,200
Amen 04 - Central Mailboxes						
J01	Rekey cylinder on master lock.	Maintenance Level 2	5 Yrs	2029	$600	$720
Amen 05 - Exterior Furniture & Accessories						
R01	Replace furnishings in common areas, as required.	Renew Assembly	15 Yrs	2029	$2,125	$2,600
Amen 07 - Furniture & Accessories						
R01	Cyclical replacement/updating of accessories, as required.	Renew Assembly	15 Yrs	2029	$4,000	$4,800
Amen 08 - Amenity Room Furniture & Accessories						
R01	Cyclical replacement/updating of accessories, as required.	Renew Assembly	15 Yrs	2029	$4,000	$4,800
Sitework						
Site 08 - Irrigation System						
R01	Cyclical replacement of components of irrigation sprinkler system, as required.	Renew Assembly	15 Yrs	2029	$5,500	$6,800

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	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2030						
Enclosure						
Encl 11 - Wood Trim						
J02	Touch up painting of wood trim as required.	Maintenance Level 1	2 Yrs	2030	$1,800	$2,200
J03	Review exterior surfaces of wood trim for signs of distress, such as warping, water damage, loose trim board and discolouration, condition of coating and sealant. Review includes exposed bolt connections at exposed structural wood asset (Struct 01).	Maintenance Level 2	2 Yrs	2030	$1,500	$1,800
J04	Locally repair wood trim, as required.	Maintenance Level 2	2 Yrs	2030	$2,160	$2,700
Encl 12 - Vinyl Framed Window						
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	Maintenance Level 3	2 Yrs	2030	$11,400	$14,000
Encl 14 - Vinyl Frame Glazed Swing Door						
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	Maintenance Level 3	2 Yrs	2030	$1,560	$1,900
Electrical						
Elec 01 - Electrical Distribution						
R01	Conduct infrared thermography and ultrasonic scanning tests on all switchgear, distribution panels, cable and bus connections, and other critical equipment. Results may diagnose hidden hazards; contractor should provide certificate for insurance purposes. To be coordinated prior to planned maintenance to identify areas that require immediate attention. Tests should be conducted on energized equipment during peak demand periods if possible.	Renew Component	5 Yrs	2030	$3,500	$4,300
Mechanical						
Mech 05 - Drainage - Perimeter and Foundation						
J01	By means of pipe camera service, visually inspect underground piping runs. Look for build up of silts and dirt fines, tree roots, and other obstructions. Look for standing water indicating saturated soil conditions or impermeable conditions.	Maintenance Level 3	5 Yrs	2030	$2,500	$3,100
Mech 14 - Drainage - Sanitary						
J01	Insert video cameras into main lines to conduct pipe inspection.	Maintenance Level 3	5 Yrs	2030	$3,300	$4,100
Mech 20 - Exhaust Fan - Parkade - Propellor						
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	Renew Component	3 Yrs	2030	$500	$610
Mech 23 - Parkade Transfer Fan - Inline						
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	Renew Component	3 Yrs	2030	$500	$610
Mech 25 - Overhead Gate Motor						
R01	Replace motor and drive unit.	Renew Assembly	7 Yrs	2030	$2,500	$3,200

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Tactical Plan 10 Year Costing - 2023 through 2032

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Fire Safety						
Fire 01 - Fire Alarm Panel - Addressable						
J01	Replace battery packs for fire alarm control panels.	Maintenance Level 3	5 Yrs	2030	$800	$980
R01	Replace battery packs.	Renew Component	5 Yrs	2030	$560	$690
Fire 06 - Sprinkler & Standpipe - Wet						
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground.	Maintenance Level 3	5 Yrs	2030	$500	$610
J02	Sprinkler Heads - Test extra high temperature on sprinkler heads.	Maintenance Level 3	5 Yrs	2030	$500	$610
Fire 07 - Sprinkler System - Dry						
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground.	Maintenance Level 3	5 Yrs	2030	$500	$610
J02	Sprinkler Heads - Test extra high temperature on sprinkler heads.	Maintenance Level 3	5 Yrs	2030	$500	$610
R02	Replace damaged sprinkler heads, hangers and leaking gaskets, cages, sway-braces, drains etc as required.	Renew Component	5 Yrs	2030	$1,231.50	$1,500
Interior Finishes						
Finish 02 - Tile Floor						
J01	Re-polish the floor with polishing compounds using floor buffing equipment.	Maintenance Level 2	2 Yrs	2030	$1,327.50	$1,600
Sitework						
Site 11 - Underground Drainage Services - Storm						
J01	Review underground drainage piping by video camera for condition and performance.	Maintenance Level 3	5 Yrs	2030	$1,100	$1,400
Site 12 - Underground Sewer Services - Sewer						
J01	CCTV length of services for inspection of condition and function.	Maintenance Level 3	5 Yrs	2030	$600	$740

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2031						
Enclosure						
Encl 01 - Laminated Asphalt Shingle Roof						
J01	Roof maintenance and repair of damaged roof areas as required.	Maintenance Level 3	5 Yrs	2031	$16,000	$20,000
Encl 03 - Aluminum Panel Soffit						
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	Maintenance Level 1	3 Yrs	2031	$1,848	$2,300
Encl 09 - Cultured Stone Wall - Drained						
J01	Clean exterior surfaces of cultured stone cladding to remove vegetation growth and other atmospheric staining.	Maintenance Level 1	3 Yrs	2031	$1,638	$2,100
Encl 10 - Fiber Cement Wall Cladding and Wood Trim						
J01	Clean exterior fiber cement board surfaces to remove atmospheric dirt, vegetative growth and other stains.	Maintenance Level 1	3 Yrs	2031	$4,200	$5,300
Encl 13 - Steel Swing Door						
R01	Repaint steel door finish.	Renew Component	8 Yrs	2031	$1,200	$1,500
Mechanical						
Mech 10 - Tank - DHW - Heating - Gas Fired						
R01	Cyclical replacement of various components of domestic hot water storage tanks, such as burners, controls, etc.	Renew Component	5 Yrs	2031	$2,200	$2,800
R03	Replace domestic hot water heater.	Renew Assembly	8 Yrs	2031	$17,000	$22,000
Mech 15 - Pump - DHW - Circulation and Recirculation						
J01	Inspect brushes and remove brush dust from motor.	Maintenance Level 3	2 Yrs	2031	$100	$130
Mech 16 - Pumps - Storm Lift and Control Panel						
J01	Coat exposed shaft of impeller with anti-seize compound.	Maintenance Level 3	2 Yrs	2031	$100	$130
Mech 22 - Coil - Electric - Duct Heater						
R01	Cyclical replacement of electric duct heaters.	Renew Assembly	17 Yrs	2031	$2,200	$2,900
Elevator						
Elev 01 - Geared Traction, Overhead						
J01	Check and test the overload devices.	Maintenance Level 3	2 Yrs	2031	$1,000	$1,300
J02	Conduct full load performance test.	Maintenance Level 3	2 Yrs	2031	$1,000	$1,300
Fire Safety						
Fire 04 - Fire Hydrant						
J01	Repaint exterior hydrant cap, bonnet and body for sufficient identification.	Maintenance Level 2	8 Yrs	2031	$400	$510
J02	Lubricate cap threads with light white grease.	Maintenance Level 3	8 Yrs	2031	$100	$130
Interior Finishes						
Finish 05 - Paint						
R02	Repaint wall surface including preparation of substrate.	Renew Assembly	10 Yrs	2031	$38,335	$49,000

	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Year 2032						
Structural						
Struct 01 - Exposed Structural Wood						
R01	Re-coat or re-finish exposed structural wood as required.	Renew Component	6 Yrs	2032	$5,500	$7,200
Enclosure						
Encl 05 - Wood Soffit						
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth, and other stains.	Maintenance Level 1	3 Yrs	2032	$126	$160
R01	Recoat wood soffit as required.	Renew Component	6 Yrs	2032	$1,260	$1,600
Encl 10 - Fiber Cement Wall Cladding and Wood Trim						
R01	Clean and repaint fiber cement cladding.	Renew Component	10 Yrs	2032	$105,000	$140,000
Encl 11 - Wood Trim						
J02	Touch up painting of wood trim as required.	Maintenance Level 1	2 Yrs	2032	$1,800	$2,300
J03	Review exterior surfaces of wood trim for signs of distress, such as warping, water damage, loose trim board and discolouration, condition of coating and sealant. Review includes exposed bolt connections at exposed structural wood asset (Struct 01).	Maintenance Level 2	2 Yrs	2032	$1,500	$2,000
J04	Locally repair wood trim, as required.	Maintenance Level 2	2 Yrs	2032	$2,160	$2,800
Encl 12 - Vinyl Framed Window						
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	Maintenance Level 3	2 Yrs	2032	$11,400	$15,000
Encl 14 - Vinyl Frame Glazed Swing Door						
J01	Allowance to replace insulating glazing units (IGUs) with condensation or misting between panes of glass as required. [Refer to manufacturer's warranty if applicable.]	Maintenance Level 3	2 Yrs	2032	$1,560	$2,000
Encl 19 - General & Inspections						
J01	Conduct an update to the depreciation report.	Maintenance Level 3	3 Yrs	2032	$10,000	$13,000
Electrical						
Elec 02 - Exterior Light Fixtures						
R02	Cyclical replacement of lighting controls (timers, motion sensors, etc.) as required.	Renew Component	6 Yrs	2032	$1,000	$1,300
Elec 05 - Proximity Access Control						
R01	Replace media in recording device to maintain continuous records from proximity access control devices. Retain records in secure archive for period determined by policy.	Renew Component	6 Yrs	2032	$550	$720
Mechanical						
Mech 15 - Pump - DHW - Circulation and Recirculation						
R01	Cyclical replacement of recirculating pumps, as required.	Renew Assembly	8 Yrs	2032	$3,400	$4,600

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	Description	Task	Frequency	Next Event	Cost (CYD)	Cost (FYD)
Interior Finishes						
Finish 02 - Tile Floor						
J01	Re-polish the floor with polishing compounds using floor buffing equipment.	Maintenance Level 2	2 Yrs	2032	$1,327.50	$1,700
Sitework						
Site 01 - Asphalt Paving						
J01	Reapply traffic markings in parking area (the main roadway and upper driveway are bare and not included here).	Maintenance Level 2	5 Yrs	2032	$1,207.50	$1,600
Site 07 - Garbage Enclosure						
R03	Replace components of trellis/gazebo structures.	Renew Component	5 Yrs	2032	$800	$1,000

Appendix D

Disclosures and Disclaimers

RDH Building Science Inc.
740 Hillside Avenue #602
Victoria, BC V8T 1Z4

Disclosures and Disclaimers

Condition of the Assets

The method of determining the physical condition of the assets is based on a visual review of a representative sampling of the assets in readily accessible locations, discussions with facility representatives, and review of readily available reference documents. No destructive testing or exploratory openings are carried out on any of the assets and the equipment is not disassembled, operated, or subject to re-commissioning tests. The physical review is not a full "condition assessment" since operating, testing, or exploratory openings are excluded from the scope of services.

Cost Estimating for Assets

- All estimates of costs are provided in future year dollars.
- All estimates of costs are Class D estimates intended for planning purposes and not for accounting or tender use. See Glossary of Terms for definition of Class D estimates.
- Actual costs will vary depending on several factors. The estimates assume economies of scale will be achieved by bundling work tasks together into larger renewal, repair, or rehabilitation projects. Small tasks performed individually may exceed the estimates presented.
- Soft costs, such as consulting services and contingency allowances are not included in the budget estimates. When developing cost estimates for projects in greater detail for budgeting, each project should include appropriate soft costs - such as Owner contingency, permit fees, engineering fees, etc. Depending on the sizes, scope and timing of individual projects, the magnitude of the soft costs will vary.
- Construction costs are subject to the vagaries of the marketplace. At the time of tender, costs may vary depending on the time of the year, contractor availability, and other factors.
- The estimates must be updated over time, further developed for scope of work and confirmed by competitive tender before any contracts are awarded.
- Detailed repair specifications are required to be prepared in order to confirm scopes of work and costs.
- The estimates do not include allowances for site specific access requirements or environmental concerns, which should be addressed on a project-by-project basis.
- Consideration may sometimes need to be given to costs arising from the impact of projects on occupancy use and facility operations.
- Replacement costs are typically based on like-for-like with a similar asset unless code or other circumstances require the replacement cost to include an upgrade.

Maintenance of the Assets:

The maintenance checklists are not exhaustive and are intended as a framework for the ongoing refinement of the maintenance program.

- Work must only be carried out by appropriately qualified personnel who have the necessary and sufficient knowledge about the maintenance tasks and maintenance intervals.
- The manufacturers' latest printed instructions should take precedence in the event of any conflict with the maintenance checklists.
- The Owners' maintenance staff and/or service contractors are responsible to verify what is contained in the manufacturers' documentation regarded recommended maintenance procedures and intervals.
- The maintenance checklists and maintenance intervals should be reviewed annually and adjusted, as required, to reflect the service environment, feedback from contractors, etc.

Specialist and Non-Specialist Reviews

Our personnel collect the asset inventory data for all the different systems, including mechanical, plumbing, fire safety, elevator, electrical, interior finishes, and sitework. Our scope of services is to identify the assets within each system, determine their age and report on their reasonable service life-cycles according to accepted industry standards. RDH personnel do not make observations with regard to specialty building system conditions unless specifically addressed in our proposal.

Forecasting the Useful Service Life of Assets

The service life of assets can be affected by a variety of circumstances, including the following:

- The quality of the maintenance conducted on an asset will affect the service life of the asset. Poor maintenance can lead to a reduced service life and may result in the premature failure of an asset.
- Insurable losses (force majeure), such as earthquakes, fires, and floods can shorten the life of an asset. These events are not considered in a Depreciation Report.
- Asset service life in a Depreciation Report is determined according to accepted industry standards.

Funding Models

The funding models for Depreciation Reports are based on a 30-year horizon and use "future year dollars termed" methodology. This methodology projects the costs (in future year dollars) over the planning horizon and not beyond the terminus year of the planning horizon. The current year is the starting year of the planning horizon. The term,

therefore, matches the initial horizon and does not respect a shifting horizon. This means that in year 1 the funding scenarios will look forward for 30 years.

For example, in 2019 the model looks forward to 2048. In year two, it will be accurate for 29 years, as it is only looking forward to year 2048. When an update study is performed in three years, the revised funding scenarios will look forward 30 years from 2022 to 2051. Renewal and major maintenance projects that occur beyond the 30-year planning horizon are not considered in the scenarios; that is, those projects that occur beyond 30 years are unfunded in the funding scenarios.

Appendix E

Funding Scenario Cash Flow Tables

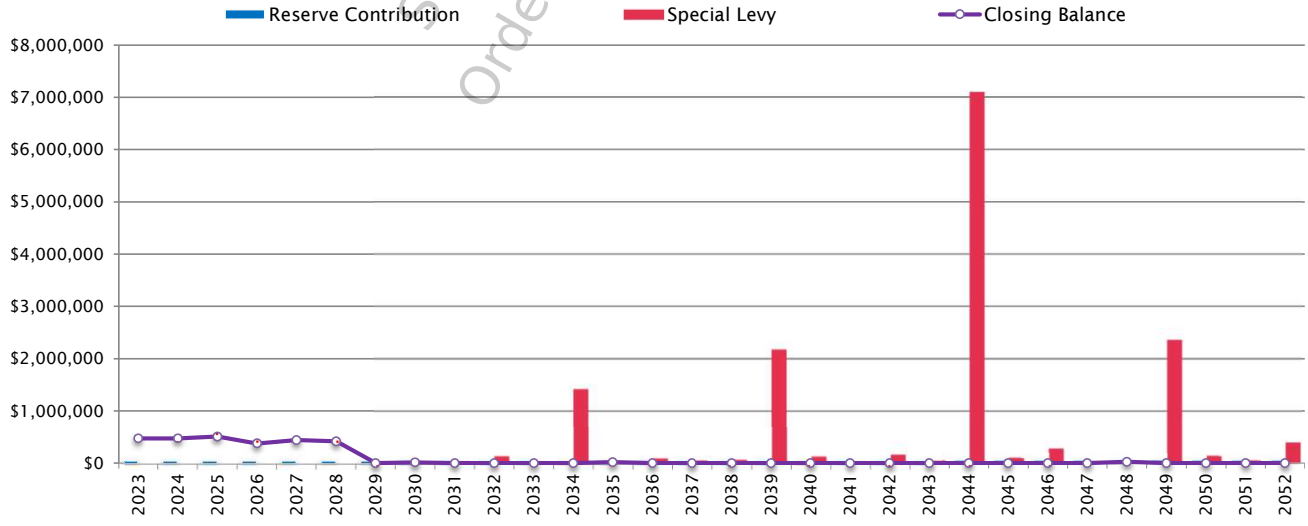
RDH Making Buildings Better

Current Funding Model

The Coho

Fixed Annual Contribution of $65,000		Starting Reserve Balance	$471,571
Building	The Coho	Minimum Closing Balance	$2,000
Interest/Investment Rate	2.0%	Annual Reserve Contribution	$60,500
Planning Horizon	30	Reserve Contribution Increase	0.0%
Number of Units	93	Monthly Avg. Unit Contribution	$54

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Closing Balance
2023	$471,571	$60,500	$0	$9,431	$64,530	$476,972
2024	$476,972	$60,500	$0	$9,539	$72,070	$474,941
2025	$474,941	$60,500	$0	$9,499	$36,020	$508,920
2026	$508,920	$60,500	$0	$10,178	$198,540	$381,059
2027	$381,059	$60,500	$0	$7,621	$5,840	$443,340
2028	$443,340	$60,500	$0	$8,867	$96,700	$416,007
2029	$416,007	$60,500	$22,623	$8,320	$505,450	$2,000
2030	$2,000	$60,500	$0	$40	$47,870	$14,670
2031	$14,670	$60,500	$37,937	$293	$111,400	$2,000
2032	$2,000	$60,500	$136,440	$40	$196,980	$2,000
2033	$2,000	$60,500	$11,660	$40	$72,200	$2,000
2034	$2,000	$60,500	$1,413,180	$40	$1,473,720	$2,000
2035	$2,000	$60,500	$0	$40	$39,560	$22,980
2036	$22,980	$60,500	$93,220	$460	$175,160	$2,000
2037	$2,000	$60,500	$54,360	$40	$114,900	$2,000
2038	$2,000	$60,500	$70,420	$40	$130,960	$2,000
2039	$2,000	$60,500	$2,167,360	$40	$2,227,900	$2,000
2040	$2,000	$60,500	$130,500	$40	$191,040	$2,000
2041	$2,000	$60,500	$29,110	$40	$89,650	$2,000
2042	$2,000	$60,500	$163,520	$40	$224,060	$2,000
2043	$2,000	$60,500	$49,720	$40	$110,260	$2,000
2044	$2,000	$60,500	$7,096,600	$40	$7,157,140	$2,000
2045	$2,000	$60,500	$93,400	$40	$153,940	$2,000
2046	$2,000	$60,500	$274,260	$40	$334,800	$2,000
2047	$2,000	$60,500	$9,930	$40	$70,470	$2,000
2048	$2,000	$60,500	$0	$40	$37,800	$24,740
2049	$24,740	$60,500	$2,351,675	$495	$2,435,410	$2,000
2050	$2,000	$60,500	$130,540	$40	$191,080	$2,000
2051	$2,000	$60,500	$45,620	$40	$106,160	$2,000
2052	$2,000	$60,500	$394,060	$40	$454,600	$2,000
		$1,815,000	$14,776,135	$65,504	$17,126,210	



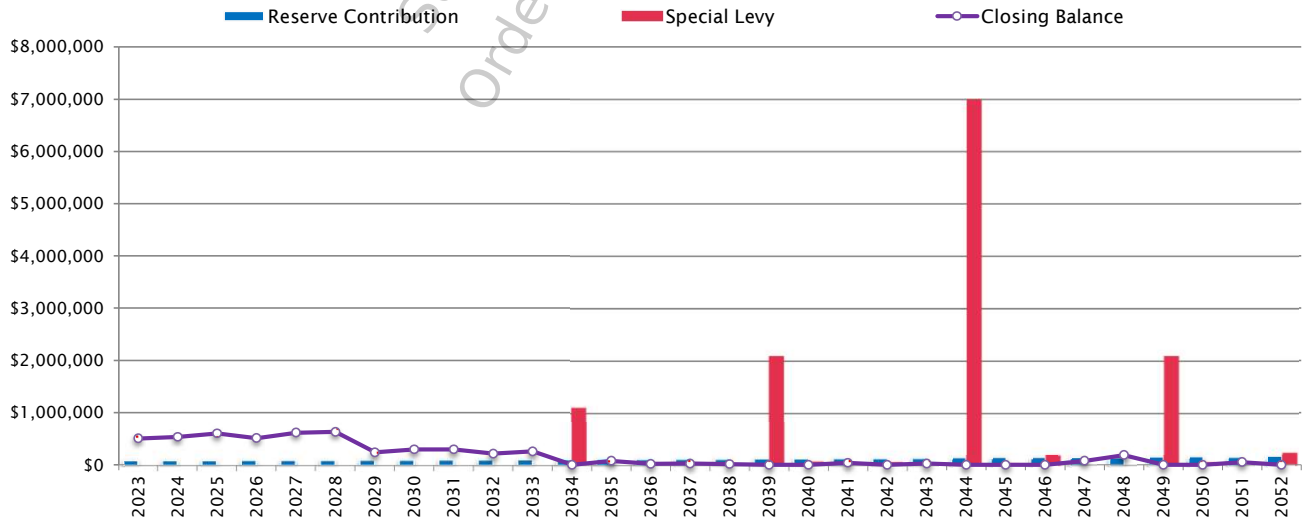
RDH Making Buildings Better

Alternative #1 Funding Model

The Coho

Increasing Annual Contribution, Starting at $90,000 + 2%		Starting Reserve Balance	$471,571
Building	The Coho	Minimum Closing Balance	$2,000
Interest/Investment Rate	2.0%	Annual Reserve Contribution	$90,000
Planning Horizon	30	Reserve Contribution Increase	2.0%
Number of Units	93	Monthly Avg. Unit Contribution	$81

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Closing Balance
2023	$471,571	$90,000	$0	$9,431	$64,530	$506,472
2024	$506,472	$91,800	$0	$10,129	$72,070	$536,331
2025	$536,331	$93,636	$0	$10,727	$36,020	$604,674
2026	$604,674	$95,509	$0	$12,093	$198,540	$513,736
2027	$513,736	$97,419	$0	$10,275	$5,840	$615,590
2028	$615,590	$99,367	$0	$12,312	$96,700	$630,569
2029	$630,569	$101,355	$0	$12,611	$505,450	$239,085
2030	$239,085	$103,382	$0	$4,782	$47,870	$299,378
2031	$299,378	$105,449	$0	$5,988	$111,400	$299,415
2032	$299,415	$107,558	$0	$5,988	$196,980	$215,982
2033	$215,982	$109,709	$0	$4,320	$72,200	$257,811
2034	$257,811	$111,904	$1,100,849	$5,156	$1,473,720	$2,000
2035	$2,000	$114,142	$0	$40	$39,560	$76,622
2036	$76,622	$116,425	$0	$1,532	$175,160	$19,419
2037	$19,419	$118,753	$0	$388	$114,900	$23,660
2038	$23,660	$121,128	$0	$473	$130,960	$14,302
2039	$14,302	$123,551	$2,091,762	$286	$2,227,900	$2,000
2040	$2,000	$126,022	$64,978	$40	$191,040	$2,000
2041	$2,000	$128,542	$0	$40	$89,650	$40,932
2042	$40,932	$131,113	$53,196	$819	$224,060	$2,000
2043	$2,000	$133,735	$0	$40	$110,260	$25,515
2044	$25,515	$136,410	$6,996,704	$510	$7,157,140	$2,000
2045	$2,000	$139,138	$14,762	$40	$153,940	$2,000
2046	$2,000	$141,921	$192,839	$40	$334,800	$2,000
2047	$2,000	$144,759	$0	$40	$70,470	$76,329
2048	$76,329	$147,655	$0	$1,527	$37,800	$187,710
2049	$187,710	$150,608	$2,095,338	$3,754	$2,435,410	$2,000
2050	$2,000	$153,620	$37,420	$40	$191,080	$2,000
2051	$2,000	$156,692	$0	$40	$106,160	$52,572
2052	$52,572	$159,826	$243,150	$1,051	$454,600	$2,000
		$3,651,127	$12,890,999	$114,514	$17,126,210	



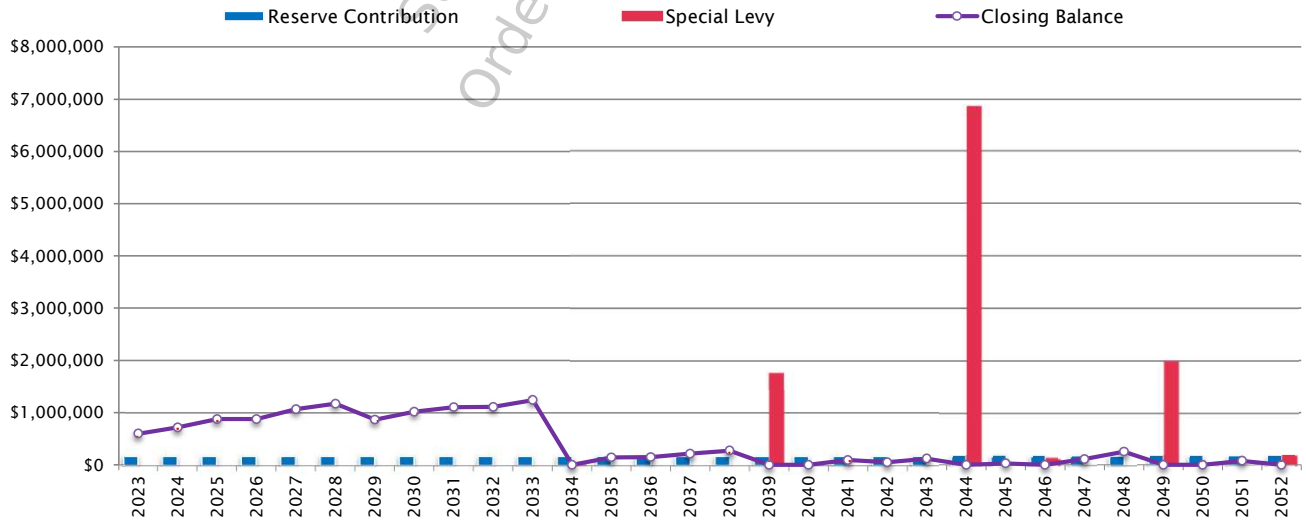
RDH Making Buildings Better

Alternative #2 Funding Model

The Coho

Fixed Annual Contribution of $180,000		Starting Reserve Balance	$471,571
Building	The Coho	Minimum Closing Balance	$2,000
Interest/Investment Rate	2.0%	Annual Reserve Contribution	$180,000
Planning Horizon	30	Reserve Contribution Increase	0.0%
Number of Units	93	Monthly Avg. Unit Contribution	$161

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Closing Balance
2023	$471,571	$180,000	$0	$9,431	$64,530	$596,472
2024	$596,472	$180,000	$0	$11,929	$72,070	$716,331
2025	$716,331	$180,000	$0	$14,327	$36,020	$874,638
2026	$874,638	$180,000	$0	$17,493	$198,540	$873,591
2027	$873,591	$180,000	$0	$17,472	$5,840	$1,065,223
2028	$1,065,223	$180,000	$0	$21,304	$96,700	$1,169,827
2029	$1,169,827	$180,000	$0	$23,397	$505,450	$867,774
2030	$867,774	$180,000	$0	$17,355	$47,870	$1,017,259
2031	$1,017,259	$180,000	$0	$20,345	$111,400	$1,106,204
2032	$1,106,204	$180,000	$0	$22,124	$196,980	$1,111,348
2033	$1,111,348	$180,000	$0	$22,227	$72,200	$1,241,375
2034	$1,241,375	$180,000	$29,517	$24,828	$1,473,720	$2,000
2035	$2,000	$180,000	$0	$40	$39,560	$142,480
2036	$142,480	$180,000	$0	$2,850	$175,160	$150,170
2037	$150,170	$180,000	$0	$3,003	$114,900	$218,273
2038	$218,273	$180,000	$0	$4,365	$130,960	$271,678
2039	$271,678	$180,000	$1,772,788	$5,434	$2,227,900	$2,000
2040	$2,000	$180,000	$11,000	$40	$191,040	$2,000
2041	$2,000	$180,000	$0	$40	$89,650	$92,390
2042	$92,390	$180,000	$0	$1,848	$224,060	$50,178
2043	$50,178	$180,000	$0	$1,004	$110,260	$120,921
2044	$120,921	$180,000	$6,855,800	$2,418	$7,157,140	$2,000
2045	$2,000	$180,000	$0	$40	$153,940	$28,100
2046	$28,100	$180,000	$128,138	$562	$334,800	$2,000
2047	$2,000	$180,000	$0	$40	$70,470	$111,570
2048	$111,570	$180,000	$0	$2,231	$37,800	$256,001
2049	$256,001	$180,000	$1,996,289	$5,120	$2,435,410	$2,000
2050	$2,000	$180,000	$11,040	$40	$191,080	$2,000
2051	$2,000	$180,000	$0	$40	$106,160	$75,880
2052	$75,880	$180,000	$199,202	$1,518	$454,600	$2,000
		$5,400,000	$11,003,774	$252,865	$17,126,210	



RDH Making Buildings Better

Progressive Funding Model

The Coho

Fixed Annual Contribution of $264,000		Starting Reserve Balance	$471,571
Building	The Coho	Minimum Closing Balance	$2,000
Interest/Investment Rate	2.0%	Annual Reserve Contribution	$264,000
Planning Horizon	30	Reserve Contribution Increase	0.0%
Number of Units	93	Monthly Avg. Unit Contribution	$237

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Closing Balance
2023	$471,571	$264,000	$0	$9,431	$64,530	$680,472
2024	$680,472	$264,000	$0	$13,609	$72,070	$886,011
2025	$886,011	$264,000	$0	$17,720	$36,020	$1,131,712
2026	$1,131,712	$264,000	$0	$22,634	$198,540	$1,219,806
2027	$1,219,806	$264,000	$0	$24,396	$5,840	$1,502,362
2028	$1,502,362	$264,000	$0	$30,047	$96,700	$1,699,709
2029	$1,699,709	$264,000	$0	$33,994	$505,450	$1,492,253
2030	$1,492,253	$264,000	$0	$29,845	$47,870	$1,738,229
2031	$1,738,229	$264,000	$0	$34,765	$111,400	$1,925,593
2032	$1,925,593	$264,000	$0	$38,512	$196,980	$2,031,125
2033	$2,031,125	$264,000	$0	$40,622	$72,200	$2,263,547
2034	$2,263,547	$264,000	$0	$45,271	$1,473,720	$1,099,098
2035	$1,099,098	$264,000	$0	$21,982	$39,560	$1,345,520
2036	$1,345,520	$264,000	$0	$26,910	$175,160	$1,461,271
2037	$1,461,271	$264,000	$0	$29,225	$114,900	$1,639,596
2038	$1,639,596	$264,000	$0	$32,792	$130,960	$1,805,428
2039	$1,805,428	$264,000	$124,363	$36,109	$2,227,900	$2,000
2040	$2,000	$264,000	$0	$40	$191,040	$75,000
2041	$75,000	$264,000	$0	$1,500	$89,650	$250,850
2042	$250,850	$264,000	$0	$5,017	$224,060	$295,807
2043	$295,807	$264,000	$0	$5,916	$110,260	$455,463
2044	$455,463	$264,000	$6,430,568	$9,109	$7,157,140	$2,000
2045	$2,000	$264,000	$0	$40	$153,940	$112,100
2046	$112,100	$264,000	$0	$2,242	$334,800	$43,542
2047	$43,542	$264,000	$0	$871	$70,470	$237,943
2048	$237,943	$264,000	$0	$4,759	$37,800	$468,902
2049	$468,902	$264,000	$1,695,130	$9,378	$2,435,410	$2,000
2050	$2,000	$264,000	$0	$40	$191,080	$74,960
2051	$74,960	$264,000	$0	$1,499	$106,160	$234,299
2052	$234,299	$264,000	$0	$4,686	$454,600	$48,385
		$7,920,000	$8,250,061	$532,963	$17,126,210	

Appendix F

RDH Qualifications

Maintenance and Planning (MaP)

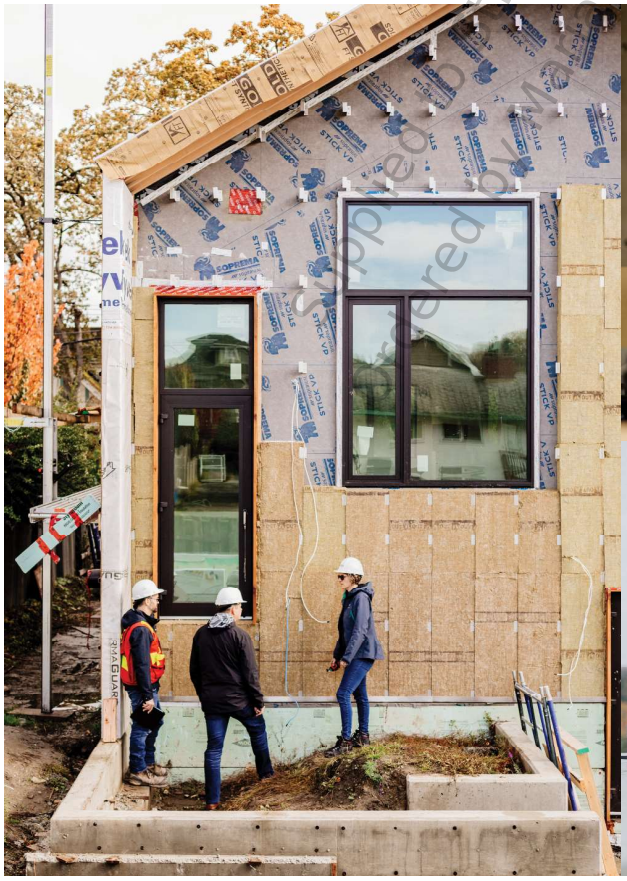
Our Maintenance and Planning (MaP) group works with your owner group to plan and develop strategies for the long- and short-term needs of your building—everything from roof maintenance to boiler replacement. As the acronym suggests, our services are designed so that we can provide you with a comprehensive roadMaP for the management of your assets.

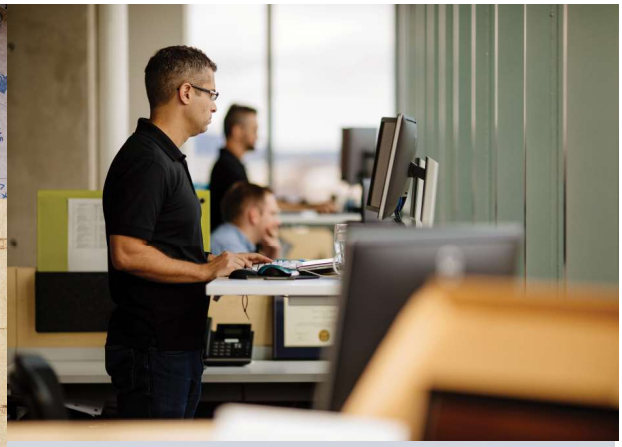
RDH staff have broad practical experience assisting building owners with all aspects of planning for the long term stewardship of their building(s). Our reserve fund analysts, engineers, architects, and technologists have a wide variety of formal training—including building science, structural engineering, and mechanical engineering. We believe that by using a team approach, we can ensure an appropriate level of thoroughness and quality. We have prepared hundreds of Depreciation Reports and are recognized as industry leaders.

Depreciation Reports

A Depreciation Report is a long-range financial planning tool. It's used to identify funding requirements for costs associated with future repair, renewal, and replacement projects. The report establishes where you need to focus resources and is a good place to start developing your roadMaP.

The first step in preparing the report is to compile an inventory of all of your building's assets (roofs, boilers, carpets, etc.). Using the inventory as a foundation, we estimate the remaining life of each asset, forecast the replacement costs in future-year dollars, and display the financial analysis with graphs and cash flow tables.





About Us

Mark Will | B.A. Econ.

Principal, Director of Corporate Operations

- B.A., Economics
- Has worked in project management since 1997
- Member of the Board of Directors, Condominium Home Owner's Association (CHOA)
- Member of Professional Association of Managing Agents (PAMA)

Jason Dunn | B.Arch.Sc., CCCA

Principal, Senior Project Manager

- B.Arch.Sc., Building Science Option
- Certified Construction Contract Administrator, CSC
- Has worked in building science consulting since 2004

Harvey Goodman | P.Eng.

Building Science Specialist

- B.A.Sc., Civil Engineering
- P.Eng, Engineers and Geoscientists of BC
- Has worked in building science consulting since 1993

Robin Breuer | A.Sc.T., RRO

Principal, Senior Project Manager

- Dipl.T., Building Engineering Technology (Building Science Option)
- Registered Roof Observer, RCI, Inc.
- Has worked in building science consulting since 1998

Christy Love | P.Eng., Certified Passive House Consultant

Principal, Vancouver Island Regional Manager

- B.A.Sc., Civil Engineering (Environmental Option)
- P.Eng, Engineers and Geoscientists of BC
- Certified Passive House Consultant, International Passive House Association
- Has worked in Building Science Consulting since 2003

Stephen Lowther | A.Sc.T.

Associate, Project Manager

- MaP Service Area Leader
- Dipl.T., Architectural & Building Engineering Technology
- Member of Applied Science Technologists and Technicians of British Columbia
- Member of Roof Consultants Institute, Western Canada Chapter
- Has worked in building science consulting since 2006

RDH Qualifications

Peter Fitch | C.Tech.

Mechanical Specialist

- → UBC/UBCM Certified Professional program (audit only)
- → Member of Applied Science Technologists & Technicians of British Columbia
- → Has worked in the mechanical design field since 1978
- → Technical review of asset inventories for MEFS and site assets

Grant Laing | Architect AIBC

Senior Project Architect

- → MEDes, Architecture, University of Calgary, AB
- → Member, Architectural Institute of British Columbia (AIBC)
- → Has worked in architecture since 1994

Brandon Carreira | Dipl.T.

Project Manager

- → MaP Service Area Leader
- → Dipl.T., Architectural & Building Engineering Technology (Building Science Option)
- → Has worked in maintenance and planning consulting since 2011
- → Prepared 200+ Depreciation Reports and has been involved with 250+ MaP projects

Nicola Alexander | B.Arch.Sc.

Architectural Technologist

- → B.Tech., Architectural Science
- → Has worked in maintenance and planning consulting since 2013 and has prepared 200+ Depreciation Reports in the Victoria office

Kyle Tulloch | Dipl.T., B.A.Sc.

Building Science Engineer (EIT)

- → Dipl.T., Civil Engineering
- → B.A.Sc., Civil Engineering
- → Has worked in maintenance and planning consulting since 2016 and has prepared 100+ Depreciation Reports in the Victoria office

Brigitte MacKenzie | Architectural Technologist AIBC

Senior Architectural Technologist

- → Member, Architectural Institute of British Columbia (AIBC)
- → 30 years experience in architectural drafting
- → Has worked in building science consulting since 2009
- → Has worked in maintenance and planning consulting for quantity take-offs since 2013 and with Depreication Reports since 2020

RDH Qualifications

Allan Daoust | Dipl.T., B.Eng

Building Science Engineer (EIT)

- → Dipl.T., Civil Engineering
- → B.Eng., Civil Engineering
- → Has worked in building science consulting since 2021

Danielle Toth | B. Eng

Building Science Engineer (EIT)

- → B.Eng., Civil Engineering
- → Has worked in maintenance and planning consulting since 2021 and has prepared 20+ Depreciation Reports in the Victoria office

Kevin Garrahan | B. Sc

Building Science Technologist

- → B.Sc., Building Science
- → Has worked in the construction industry since 2019

Software Support and Programmer

Matthew Branch | P.Eng.

Software Developer

- → B.Sc., Civil Engineering
- → Registered professional engineer, APEGBC
- → Has worked in engineering data analysis since 2000

Acknowledgements

Serge Desmarais | B.Arch. Architect AIBC, CP

Principal (In Memoriam), Senior Building Science Specialist

RDH gratefully acknowledges the contributions of Serge Desmarais as the building science technical lead for the MaP group.

- → Registered Architect AIBC, Certified Professional
- → 30+ years' experience in building design and construction capital renewal projects
- → RDH 2004 - 2017

Appendix G

Insurance Certificate

Ref. No. 320009316542

CERTIFICATE OF INSURANCE

Aon Reed Stenhouse Inc.
401 West Georgia Street, Suite 1200
PO Box 3228 STN. TERMINAL
Vancouver BC V6B 3X8
tel 604-688-4442 *fax* 604-682-4026

Re: Evidence of Insurance

To Whom It May Concern
Suite 400, 4333 Still Creek Drive
Burnaby, BC V5C 6S6

Insurance as described herein has been arranged on behalf of the Insured named herein under the following policy(ies) and as more fully described by the terms, conditions, exclusions and provisions contained in the said policy(ies) and any endorsements attached thereto.

Insured

RDH Building Science Inc.
Suite 400, 4333 Still Creek Drive
Burnaby, BC V5C 6S6

Coverage

Commercial General Liability	**Insurer**	Zurich Insurance Company Ltd		
	Policy #	8850746		
	Effective	01-Jul-2022	**Expiry**	01-Jul-2023
	Limits of Liability	Bodily Injury & Property Damage, Each Occurrence $2,000,000 Products and Completed Operations, Aggregate $2,000,000 Non-Owned Automobile Liability $2,000,000 Legal Liability for Damage to Hired Automobiles $100,000 Policy may be subject to a general aggregate and other aggregates where applicable		
Architects & Engineers Professional Liability	**Insurer**	Lloyd's Underwriters		
	Policy #	PSDEF2100249		
	Effective	01-Jul-2022	**Expiry**	01-Jul-2023
		Per Claim $2,000,000 Policy Term Aggregate $4,000,000		

THE POLICY CONTAINS A CLAUSE THAT MAY LIMIT THE AMOUNT PAYABLE
OR, IN THE CASE OF AUTOMOBILE INSURANCE,
THE POLICY CONTAINS A PARTIAL PAYMENT OF LOSS CLAUSE
THIS CERTIFICATE DOES NOT AMEND, EXTEND, OR ALTER THE COVERAGE AFFORDED BY THE POLICY

AON

Ref. No. 320009316542

CERTIFICATE OF INSURANCE

THIS CERTIFICATE CONSTITUTES A STATEMENT OF THE FACTS AS OF THE DATE OF ISSUANCE AND ARE SO REPRESENTED AND WARRANTED ONLY TO THE INSURED. OTHER PERSONS RELYING ON THIS CERTIFICATE DO SO AT THEIR OWN RISK.

Dated : 04-July-2022

Aon Reed Stenhouse Inc

THE POLICY CONTAINS A CLAUSE THAT MAY LIMIT THE AMOUNT PAYABLE
OR, IN THE CASE OF AUTOMOBILE INSURANCE,
THE POLICY CONTAINS A PARTIAL PAYMENT OF LOSS CLAUSE
THIS CERTIFICATE DOES NOT AMEND, EXTEND, OR ALTER THE COVERAGE AFFORDED BY THE POLICY

AON