Depreciation Report Update (Apartments) | Project 6141.031

Capilano Ridge, 3115 - 3153 Capilano Crescent, North Vancouver, BC



To The Owners, Strata Plan BCS130
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1 Introduction

RDH Building Science Inc. (RDH) was retained by The Owners, Strata Plan BCS130 (the Owners) to prepare a Depreciation Report Update (the Report) for the residential and commercial complex known as Capilano Ridge, which is located at 3115 - 3153 Capilano Crescent, North Vancouver, BC. The complex includes two sections: Apartment Section and Townhouse Section. The Report considers the common property and limited common property components (the Assets) that the Strata Corporation is responsible to maintain, repair and replace.

Please note a separate Depreciation Report Update has also been prepared for the Townhouse Section and ideally both reports should be read in conjunction.

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, fences, 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 at RDH and the Owners.

This Report is an update to the original Depreciation Report, which was issued on July 31st, 2013. The site visit for the Deprecation Report Update was completed on September 20th, 2017, and the financial data is based on the 2017/2018 fiscal year. The final Report was issued on January 30th, 2018. The final Report was revised on July 6th, 2018.

The Depreciation Report Update 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 Depreciation 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 changes, the Report will require updating. The Strata Property Act requires updates to the Report every three years; however, the Strata Corporation can choose to update portions of the Report to reflect changes to their financial status and completed work more frequently at their discretion.

1.1. Governance

Governance refers to how Strata Corporations determine who is responsible for maintaining, repairing and replacing different physical components, referred to as Assets, of the buildings.

In order to prepare the Depreciation Report Update, the following documents were reviewed:

- Strata Plan of Part of Lot 1 (Phase 1), October 29th, 2002
- Strata Plan of Lot 1 (Phase 2), January 30th, 2003
- BCS130 Approved Updated Bylaws, June 24th, 2015

Based on section 3.3 in the bylaws, the Strata Corporation is obliged to repair and maintain all of the following:

- (a) common assets of the strata corporation not designated as the responsibility of a section;
- (b) common property that has not been designated as limited common property or that has not been designated as the responsibility of a section.

Strata Corporation BCS130, Capilano Ridge, is one strata corporation, but is divided into two sections: Apartment Section and Townhouse Section. The responsibility to maintain, repair, and replace various assets for each section is described in Section 3.2 of the 2015 bylaws.

> "The **Apartment Section** must repair and maintain all of the following no matter how often the repair and maintenance ordinarily occurs:
>
> (a) limited common property patios;
>
> (b) limited common property balconies;
>
> (c) fences, railings and similar structures that enclose patios and balconies;
>
> (d) all limited common property designated for the use of strata lots 20-50 collectively;
>
> (e) apartment garbage room;
>
> (f) garage and entry ramp;
>
> (g) the exterior of the building;
>
> (h) the roof of the building; and
>
> (i) common property pipes, wires, cables, chutes, ducts, mechanical, HVAC, boilers and other such equipment used exclusively in respect of the apartment strata lots."

> "The **Townhouse Section** must repair and maintain all of the following no matter how often the repair and maintenance ordinarily occurs:
>
> (a) limited common property patios;
>
> (b) limited common property balconies;
>
> (c) limited common property roof decks;
>
> (d) limited common property driveways;
>
> (e) fences, railings and similar structures that enclose patios, balconies and roof decks;
>
> (f) townhouse garbage enclosure;
>
> (g) townhouse mailbox shelter;

(h) the exterior of all buildings;

(i) the roof of all buildings;

(j) all doors, windows and skylights on the exterior of the building; and

(k) common property pipes, wires, cables, chutes and ducts if the item is used exclusively in respect of a townhouse strata lot."

As a result, RDH has prepared two individual Depreciation Report Updates for the Apartment (AP) and Townhouse (TH) sections with independent life cycle costs and analysis. Both reports should be read in conjunction with each other in order to understand the total estimated life cycle costs and analysis of the Strata Corporation.

The figure below illustrates the location of the Townhouse and Apartment sections.

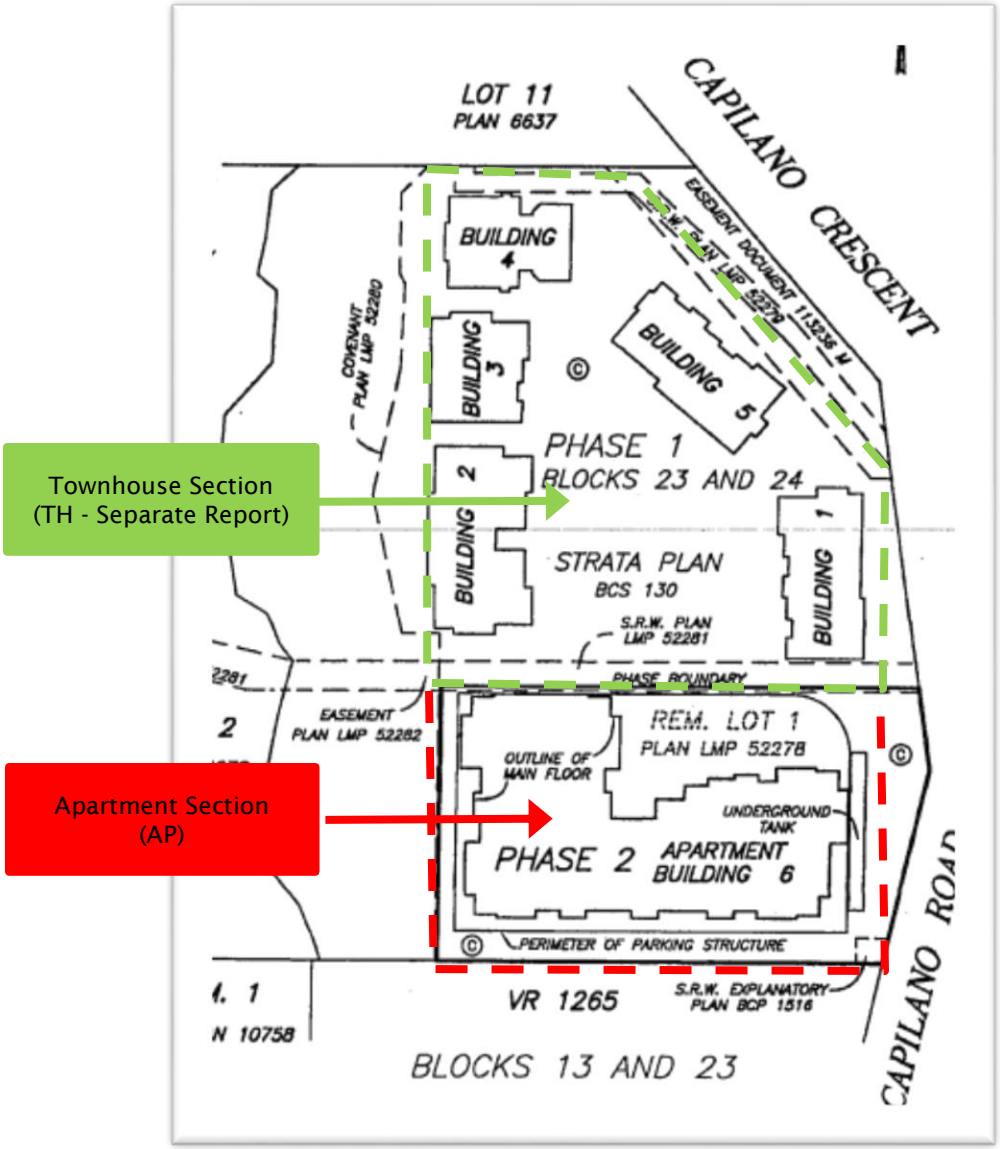


Figure 1.1 Plan view of Capilano Ridge

As a result of the divided sections, some Assets (such as roadways) are shared by both sections and a cost sharing ratio is applied to the renewal, repair, and maintenance of those Assets.

Shared Assets has been identified with an [S] in the Asset Inventory (Appendix B). A summary of the assumed shared assets and cost sharing ratios is described in the table below.

Table 1.1 Division of costs associated with each section

System and Associated Assets		
Sitework	**Apartment Section (AP)**	**Townhome Section (TH)**
Site 01 - Aluminum Site Guardrails	51%	49%
Site 03 - Asphalt Paving	51%	49%
Site 05 - Interlocking Unit Paving	51%	49%
Site 06 - Timber Retaining Walls	51%	49%
Site 07 - Wood Perimeter Fencing	51%	49%
Site 10 - Irrigation System	51%	49%
Site 11 - Soft Landscaping	51%	49%
Site 12 - Electrical Site Services	51%	49%
Site 13 - Underground Drainage Services	51%	49%
Site 14 - Underground Natural Gas Service	51%	49%
Site 15 – Underground Sanitary Sewer Service	51%	49%
Site 16 - Underground Water Services	51%	49%

As the operations and upkeep described in the bylaws include major maintenance and renewal costs (capital costs) which should be included in the Depreciation Report Update, cost estimates for shared assets have been provided and apportioned accordingly. However, the Owners should consider reconciling their Depreciation Report Update against the other section's projected capital costs.

2 Capilano Ridge – Apartment Section

The Apartment building is a three-storey wood-framed building constructed over a single level, below grade concrete parkade.

The principal systems in the apartment section include the building enclosure (the separation of the interior from exterior space), electrical (the electrical, communications and security equipment), mechanical (heating 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 Apartment Section are summarized in Table 2.1, Figure 2.1, and Figure 2.2 below.

TABLE 2.1 KEY PHYSICAL PARAMETERS



Figure 2.1 Typical building elevation photograph of the Apartment at Capilano Ridge.

Date of first occupancy (approximate)	2003
Approximate gross floor area of the Apartments, including the parkade (ft²)	69,700
Total area of Unit Entitlement	
→ Apartment Section	3,601
→ Townhouse Section	3,453
Total	7,054
Stories above grade	3
Number of strata lots	
→ Apartment Section	31
→ Townhouse Section	19
Total	50



Figure 2.2 Aerial photograph of Capilano Ridge (©2017 Google).

3 Assessments

Depreciation Reports and Updates combines two distinct types of analysis: a *physical assessment,* and a *financial assessment.* The assessments are used to determine what the Strata Corporation owns, what condition the Assets are in, what the strata is responsible for, and the *capital costs* associated with the Assets.

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

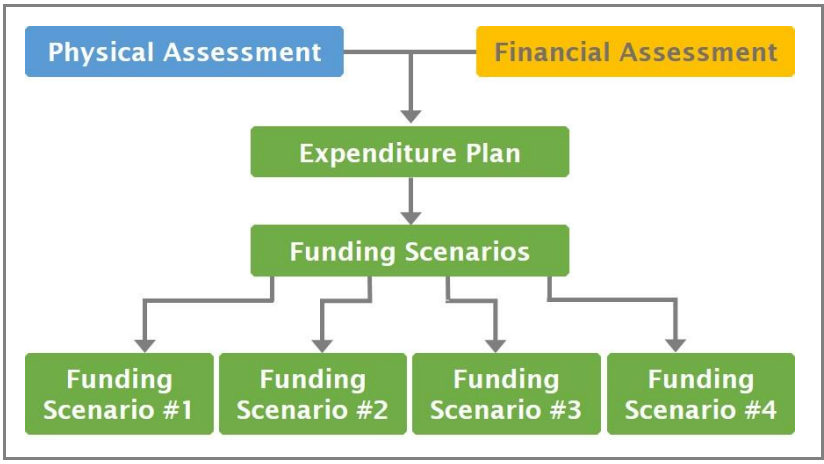


Figure 3.1

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 including a summary of key information.

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 Strata Corporation is 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 Strata Corporation owns and must repair and maintain. The Asset Inventory is included as an appendix to this report.

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 invoices,
- → Discussions with Strata Corporation representatives,
- → A visual review of the complex, limited to a sample of readily accessible Assets, and
- → A review of other technical information such as construction drawings, 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 cladding. 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 Strata Corporation; the original drawings; and any previous investigation reports commissioned by the Strata Corporation. It is expected that the Strata Corporation will need more detailed reviews as Assets approach the end of their service lives. Allowances for additional reviews or investigations are included as appropriate. Recommendations taken from any additional reviews should be incorporated into future Depreciation Report updates.

As part of the physical assessment, RDH compiled a history of completed projects by reviewing the documents provided by the strata and interviewing Strata Corporation representatives. The history of the Apartment Section is summarized in Table 3.1 below. The history establishes the chronological age of the Assets.

TABLE 3.1 MAINTENANCE AND RENEWALS HISTORY
Structural → 2012 – Commissioned a Structural Warranty Review Report by RDH Building Engineering Ltd.
Building Enclosure → 2016 & 2017 – Completed roof maintenance which included gutter cleaning, moss treatment, repaired localized deficiencies, and installed new flashings and sealant on the roof. → 2016 – Inspected the attic of the 3rd floor locker room. → 2015 – Installed manual release on parkade overhead gate. → 2013 – Inspected localized cracks in concrete walls and the ceiling of the parkade. → 2012 – Commissioned an Attic Evaluation by Adair Property Maintenance. → 2008 & 2015 – Replaced sealant around balcony guardrail posts. → 2009 – Repainted the exterior wood walls and trim. → 2009 – Refinished the balcony top coat. → 2007 – Commissioned a Five-Year Building Warranty Review by Spratt Emanuel Engineering Ltd. → 2003 – Commissioned a 12-Month Warranty Review by Spratt Emanuel Engineering Ltd. → Annual cleaning of balconies and patios.
Electrical → 2016 – Replaced the enterphone panel and installed a security bar.
Mechanical → 2016 – Inspected and completed maintenance on rooftop makeup air unit. → 2016 – Replaced belts in various fans. → 2015 – Replaced the expansion tank.

→ 2015 – Replaced the boiler pilot solenoid switch. → 2015 – New bearing assembly and impeller on HAV 8. → 2015 – Replaced the exhaust fan in northwest locker room. → 2014 – Replaced the circulation pump.
Fire Safety → 2016 – Locally replaced smoke detectors, as required. → 2016 – Replaced batteries in fire alarm control panels. → 2015 – Replaced switch for dry sprinkler compressor.
Interior Finishes → 2016 – Replaced the carpet flooring in common hallways. → 2010 & 2016 – Repainted the common hallway walls, doors, and door frames.
Amenities → 2017 – Replaced the computer equipment in the electrical room. → 2016 – Replaced the furniture in the lobby. → 2016 – Replaced various signage in the parkade.
Sitework → 2015 – Repaired localized sections of interlocking pavers. → 2015 – Commissioned a tree review and completed recommendations. → 2015 – Commissioned a review of the asphalt paving around catch basins and man holes.

On September 20th, 2017, two representatives of RDH Building Science Inc. visited the site to visually review the Assets. While the Depreciation Report Update 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 3.2 includes examples of some observations made during the review.

TABLE 3.2 OBSERVATIONS BY SYSTEM

SYSTEM	OBSERVATION
Building Enclosure	→ Although the balcony assemblies are generally protected, the guardrails are fastened through the exterior perimeter horizontal surface of the waterproofing membrane and relies on sealant to resist water from entering the balcony framing. Proactive sealant renewal and regular inspections may help extend the service life of the balcony assemblies. → Efflorescence staining and cracks in the concrete walls and roof slab were observed in the parkade and electrical room. The Strata Council informed RDH that Polycrete has reviewed the staining in 2013 and reported no repairs were required.

TABLE 3.2 OBSERVATIONS BY SYSTEM	
SYSTEM	OBSERVATION
Site work	→ There is some evidence of localized settling of the asphalt paving throughout the site. The Strata Council informed RDH that this issue has been reviewed and no repairs were required. → There are many mature trees in excess of 30 feet in height growing in close proximity to the buildings. The Strata Corporation has commissioned a review of the trees by Burley Brothers and has completed their recommendations.

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 (2% 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 building 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 Strata Corporation. Table 3.3 below summarizes the key financial parameters reviewed as part of the financial assessment.

TABLE 3.3 KEY FINANCIAL PARAMETERS				
PARAMETER	INITIAL STUDY (2012-2013)	UPDATE STUDY (2017-2018)		
Fiscal year end	April 30th	April 30th		
Building reproduction cost	$10,570,000 (Apartments only)	$20,320,000 (Strata Corporation)		
Sections	Apartments	Apartments	Joint (51%)	**Total**
Operating budget (excluding CRF contribution)	$135,100	$105,341	$88,396 AP portion ($46,612)	**$151,953**
Annual CRF contribution	$24,504	$18,243	$3,000 AP portion ($1,530)	**$19,773**
Opening Balance of the CRF*	$115,500	$203,000	$22,275 AP portion ($11,400)	**$214,400**

**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 current fiscal year.*

Depreciation Report Updates include 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 Depreciation 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 Update 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 Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), 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.

The cost estimates in the Depreciation Report Update are a starting point for the capital planning process, and can help Strata Corporations make preliminary decisions about how and when to implement projects. These cost estimates will be refined as the Strata Corporation makes decisions such as what is included or excluded in a project, and if Assets will be improved or changed.

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 in Appendix H.

4 Expenditures

Maintenance refers to activities that preserve the Assets, to ensure the Assets will last their predicted service lives and perform as expected. *Renewal* refers to the replacement or refurbishment of an Asset at the end of its useful service life.

Major maintenance refers to maintenance that occurs at intervals greater than one year, for example, every 18 months, two years, five years, etc. (less frequently than once a year). 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 Depreciation Report funding models. Costs associated with minor maintenance are included in the Strata Corporation's operating budget.

4.1 Major Maintenance and Renewal Expenditures

Capilano Ridge is now approximately 15 years old, and it is our understanding that many assets are still original (please see Table 3.1 Maintenance and Renewals History for a detailed list of projects). However, as the apartment section continues to age, various renewal expenditures can be anticipated, some of which are likely to occur in the next 10 years. Table 4.1 below summarizes all major maintenance and renewal costs by system, including costs forecast for the next 30 years.

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)
Enclosure	$420,000	$450,000	$2,300,000	$3,200,000
Electrical	$55,000	$59,000	$180,000	$260,000
Mechanical	$150,000	$170,000	$730,000	$980,000
Elevator	$40,000	$44,000	$150,000	$190,000
Fire Safety	$39,000	$43,000	$110,000	$150,000
Interior Finishes	$44,000	$53,000	$140,000	$210,000
Amenities	$2,600	$2,900	$33,000	$45,000
Sitework	$48,000	$52,000	$240,000	$340,000
Building Total	**$798,600**	**$873,900**	**$3,883,000**	**$5,375,000**

Approximately 20% of the Strata Corporation's 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 below.

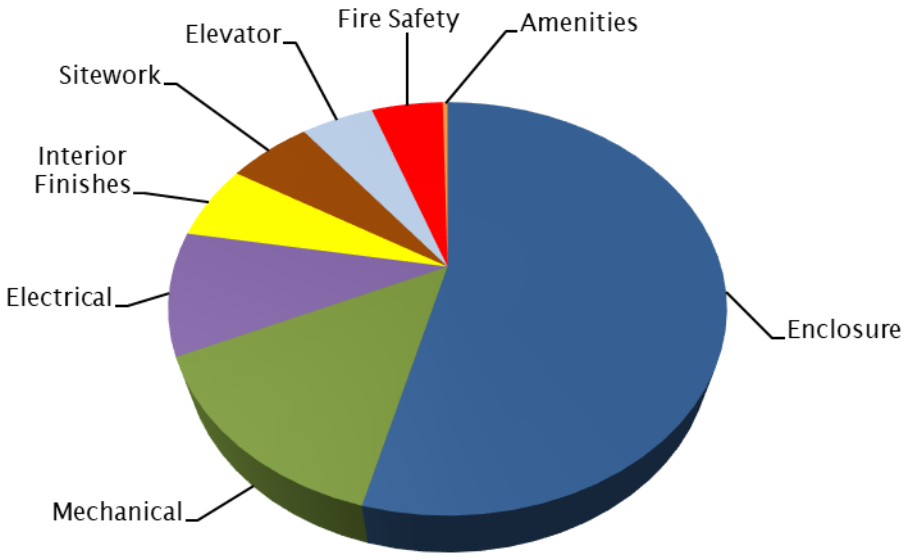


Figure 4.1 Distribution of estimated capital expenditures over 10 years by system.

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 Strata Corporation owners.

5 Major Maintenance and Renewal 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 of 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.

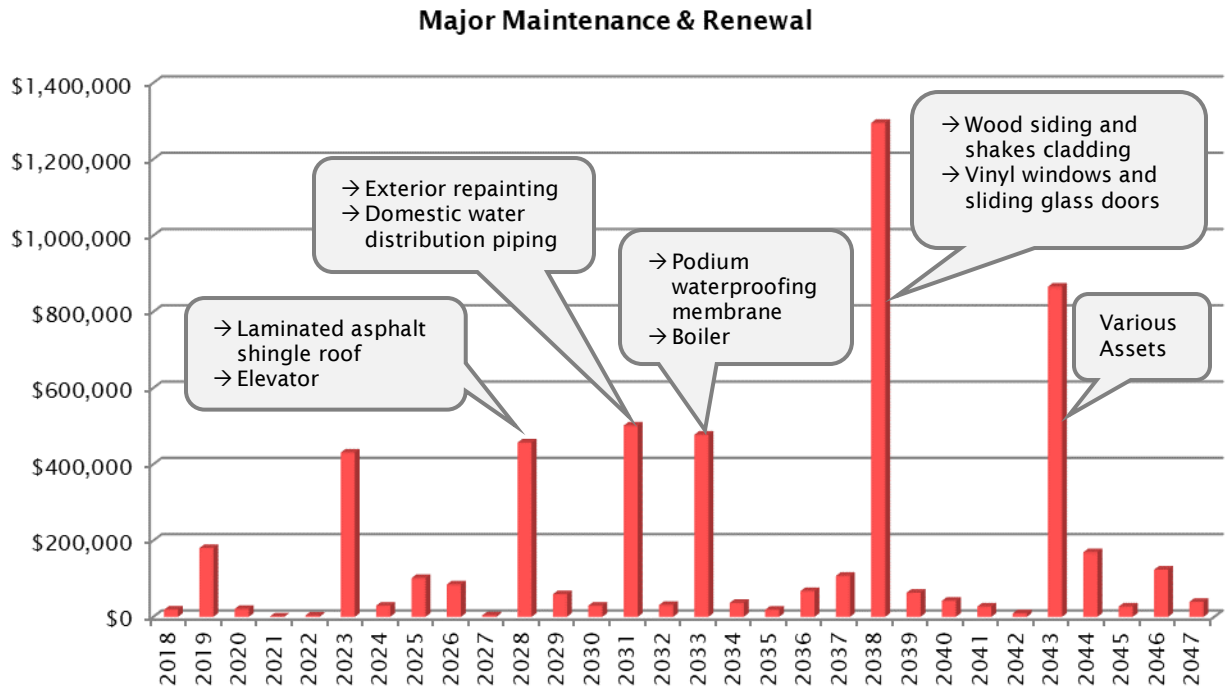


Figure 5.1 Strategic Forecast (30 Years), showing the approximate timing and value of some key capital expenditures.

Each bar on the graph represents a collection of different major maintenance and renewal activities, each with different values. The labels on the graph summarize significant renewal expenditures forecast for that year. Detailed information about each year, including a description of the maintenance and renewal

activities and estimated costs, is also available through the online version of the Depreciation Report, available through BAMS (please contact the strata council for additional information).

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 Strata Corporation can anticipate changes to the strategic plan with each update of the Depreciation 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 Strata Corporation 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. Labels summarize renewals and major maintenance activities forecast for that year. The soft costs associated with project implementation, such as site access, design, contract administration, are not included.

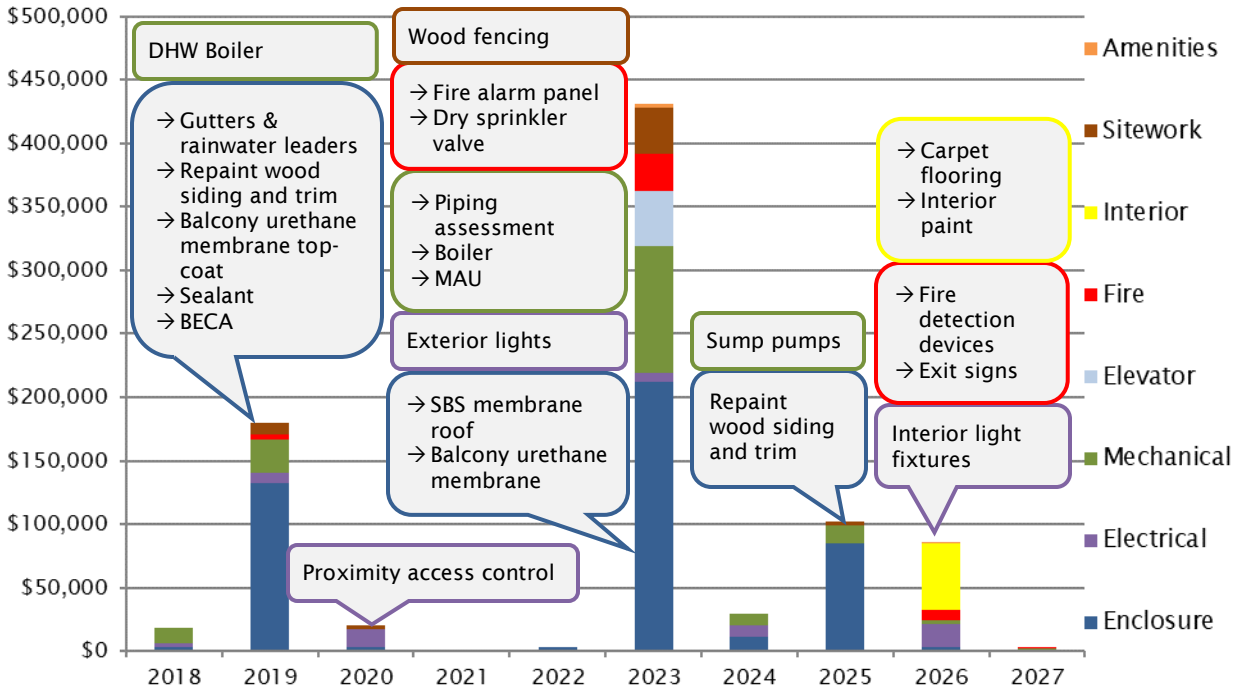


Figure 5.2 Tactical Forecast (10 years), showing the approximate timing and value of some key capital expenditures.

The tactical plan above represents one of many possible approaches to planning major maintenance and renewal activities. The Strata Corporation 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 Strata Corporation and may be reflected in updates to the Depreciation Report.

To help the Strata Corporation 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-year planning periods. The list below is not comprehensive; It is limited to renewal and major maintenance activities likely to cost more than $3,000 in current year

dollars and investigations or assessments recommended as a next step for project planning. A complete list of maintenance and renewals are included in appendix H.

2018 to 2020

Building Enclosure

- → Encl 01 Laminated Asphalt Shingle Roof – Replace any damaged gutter and rainwater leaders, as required.
- → Encl 07 Wood Siding Wall – Repaint wood siding and associated wood trim.
- → Encl 08 Cedar Shake Wall – Repaint cedar shakes.
- → Encl 10 Vinyl Framed Windows – Replace Insulating Glazing Units (IGUs) in window and door frames, as required.
- → Encl 15 Exposed Urethane Balcony Membrane – Locally repair delaminated balcony membrane and reapply top coat, as required.
- → Encl 16 Wood Clad Structural – Repaint wood cladding around balcony columns and beams.
- → Encl 17 Sealant – Replace sealant at interfaces between building enclosure assemblies and at balcony posts.
- → Encl 18 General & Inspections – Commission a BECA report to determine the remaining service life of the building enclosure assemblies.

Electrical

- → Elec 02 Electrical Distribution – Conduct infrared scanning and cleaning of electrical equipment, as required or every five years.
- → Elec 06 Proximity Access Control – Modernize components of the proximity access control system, as required.
- → Elec 07 Security Surveillance – Modernize components of the security surveillance as planned by the Strata Council.

Mechanical

- → Mech 01 Boiler Electronic Controls – Cyclical replacement of controls and sensors for various mechanical equipment
- → Mech 07 Sanitary Drainage – Camera scope and flush drain lines.
- → Mech 10 Storm life Sump Pump – Overhaul storm sump pumps, as required.
- → Mech 04 DHW Boiler – Anticipate replacing the domestic water boiler.

Sitework

- → Site 08 Wood Trellis – Replace components of the wood trellis and repaint, as required.
- → Site 10 Irrigation System [S] – Cyclical replacement of components of the irrigation sprinkler system, as required.

2021 to 2023

Building Enclosure

- → Encl 01 Exposed SBS Membrane Roof – Replace SBS roofs, as required.
- → Encl 06 Glazed aluminum Guardrails – Replace guardrails in conjunction with balcony membrane renewal. Consider side mounting the guardrails.
- → Encl 11 Aluminum Frame Lobby Door – Replace lobby doors, as required.
- → Encl 15 Exposed Urethane Balcony Membrane – Replace urethane balcony membranes, as required. Consider replacing balcony membranes with vinyl sheets.
- → Encl 16 Wood Clad Structural – Remove wood cladding and review the concealed structural components.

Electrical

- → Elec 03 Exterior Light Fixtures – Replace exterior light fixtures, as required.

Mechanical

- → Mech 06 Domestic Water Distribution Piping – Commission a third-party assessment of the copper piping.
- → Mech 07 Sanitary Drainage – Camera scope and jet flush drain lines, to be coordinated with storm drain lines.
- → Mech 13 & 14 Valves – Cyclical replacement of cross connection, backflow prevention, and other plumbing valves, as required.
- → Mech 18 Hydronic Boiler – Replace hydronic boiler, as required.
- → Mech 19 Hydronic Distribution Piping – Cyclical replacement of hydronic valves and piping, as required.
- → Mech 24 Outdoor Makeup Air Unit – Anticipate replacing or rebuilding the outdoor makeup air unit (MAU).

Elevator

- → Elev 02 Elevator Cab & Hoistway – Replace elevator operating and signal fixtures, replace elevator door operator, and install rupture valve, as required.

Fire Safety

- → Fire 01 Fire Alarm Panel – Anticipate replacing the fire alarm control panel, as required.
- → Fire 08 Dry Sprinkler Valve Assembly – Rebuild dry sprinkler valve, as required.

Sitework

- → Site 02 Concrete Block Retaining Wall [S] – Reconstruction sections of the concrete block retaining walls, as required.
- → Site 05 Interlocking Unit Paving [S] – Rebuild sections of interlocking unit paving, as required.
- → Site 07 Wood Perimeter Fencing [S] – Replace or repair wood perimeter fencing, as required.
- → Site 08 Wood Trellis – Rebuild or repair wood trellis, as required.

2024 to 2027

Building Enclosure

- → Encl 18 General & Inspections – Commission a BECA report to determine the remaining service life of the building enclosure assemblies.

Electrical

- → Elec 04 Interior light Fixtures – Replace interior light fixtures, as desired for aesthetics or energy efficiency purposes.

Fire Safety

- → Fire 02 Fire Detection & Alarm – Cyclical replacement of fire detection devices, as required or every 10 years.
- → Fire 09 Emergency Egress Equipment – Replace emergency egress equipment, as required or in conjunction with interior renovations.

Mechanical

- → Mech 10 Storm Lift Sump Pump – Cyclical replacement of storm sump pumps and control panels, as required.

Interior Finishes

- → Finish 02 Carpet – Replace carpet flooring in common corridors, as desired for aesthetics purposes.
- → Finish 03 Paint – Repaint common corridor walls, as required for aesthetic purposes.
- → Finish 04 Spray Texture – Repaint common corridor ceilings, as required for aesthetic purposes.

5.3 Project Implementation

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

- → Assessment – Determines what work must be done, what should be done and what could be done in general terms. The evaluation will help the Strata Corporation 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.

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 Depreciation 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.
- *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.
- *Comprehensive Projects*. These projects are implemented as one coordinated undertaking. Comprehensive projects may allow the Strata Corporation to leverage the best economies of scale, shorten the overall duration, and lower the overall costs.
- *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 Strata Corporation to leverage economies of scale and lower the overall costs, improve the quality of the work, and incorporate upgrades.

The scope of the Depreciation Report Update 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 Strata Corporation 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 dictates that if the CRF closing balance is less than 25% of the operating fund, then the Strata Corporation must contribute either the difference between the balance and 25% of the operating fund, or up to 10% of the operating fund (*Strata Property Act Regulation*, BC Reg 43/2000, Ch. 6.1). Table 6.1 below shows the calculation to confirm the Strata Corporation meets the minimum requirements set out in the Strata Property Act Regulation.

TABLE 6.1 MINIMUM FUNDING REQUIREMENT CALCULATION

PARAMETER	VALUE
2017/2018 operating budget (excluding CRF contribution)	$ 151,953
→ 25% of the operating budget	$ 37,988
→ 10% of the operating budget	$ 15,195
2017 CRF closing balance	$ 214,400
2017/2018 CRF contribution	$ 19,773
Will the CRF closing balance exceed 25% of the operating budget at the end of the fiscal year?	Yes
Does the CRF contribution exceed 10% of the operating budget?	Yes

Although the Strata Corporation meets the statutory minimum contribution to the CRF, it is important to note that the statutory guideline is not a good measure of the financial preparedness of the corporation. If the Owners wish to avoid special levies, or to reduce the number and size of the levies, then increases to the CRF contributions will need to be made over the upcoming years.

6.2 Alternative Funding Scenarios

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 Strata Corporation 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 Strata Corporation chooses to implement the renewal projects.

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

→ ***Previous (2012/2013)***. The CRF allocation that was approved by the Owners at the time of the previous Depreciation Report.

→ ***Current (2017/2018)***. The CRF allocation that was approved by the Owners at the last Annual General Meeting. The current allocation is also known as the status quo.

→ ***Alternative #1***. An increase from the status quo. Alternative #1 is just one of many possible scenarios for a new funding level in the next fiscal year.

→ ***Progressive***. This is the annual allocation that would have been set aside since the first year of operations to ensure that the reserve balance would have been sufficient to avoid any special assessments over a 30-year period. The progressive reserve allocation is an idealistic target which typically represents an upper bound for the amount allocated to the CRF.

TABLE 6.2 COMPARISON OF DIFFERENT FUNDING SCENARIOS

	PREVIOUS (2012/2013)	CURRENT (2017/2018)	ALTERNATIVE #1	PROGRESSIVE RESERVE
Annual CRF allocation	$24,504	$19,773	$25,000	$156,000
Percent of progressive reserve	16%	13%	Starting at 16%	100%
Annual increase	-	-	3%	-
CRF contribution per unit of unit entitlement			Starting at	
Per month	$0.567	$0.458	$0.579	$3.610
Per year	$6.80	$5.49	$6.94	$43.32
CRF contribution per average strata lot			Starting at	
Per month	$66	$53	$67	$419
Per year	$790	$638	$806	$5,032
Approximate number of special levies (over 30 years)	22	22	14	3
Approximate value of special levies (over 30 years)	$4.4M	$4.5M	$4.0M	<0.5M
Assumed Inflation Rate	2 %	2 %	2 %	2 %
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.

The appendices to the report include 30 years of cash flow data for each funding scenario.

6.3 Current (2017/2018) Funding Scenario

The current funding scenario is based on the CRF contribution approved by the Owners at the last annual general meeting (2017). The scenario is based on a fixed annual CRF contribution (no increases).

TABLE 6.3 CURRENT (2017/2018) FUNDING MODEL: CASH FLOW TABLE

FISCAL YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CONTINGENCY COSTS	CLOSING BALANCE
2018	$214,400	$19,773	$0	$4,288	$18,700	$1,000	$218,761
2019	$218,761	$19,773	$0	$4,375	$180,300	$1,000	$61,609
2020	$61,609	$19,773	$0	$1,232	$20,670	$1,000	$60,944
2021	$60,944	$19,773	$0	$1,219	$1,010	$1,000	$79,926
2022	$79,926	$19,773	$0	$1,599	$3,400	$1,000	$96,898
2023	$96,898	$19,773	$328,116	$1,938	$430,725	$1,000	$15,000
2024	$15,000	$19,773	$10,127	$300	$29,200	$1,000	$15,000
2025	$15,000	$19,773	$82,547	$300	$101,620	$1,000	$15,000
2026	$15,000	$19,773	$65,946	$300	$85,019	$1,000	$15,000
2027	$15,000	$19,773	$0	$300	$3,720	$1,000	$30,353

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.

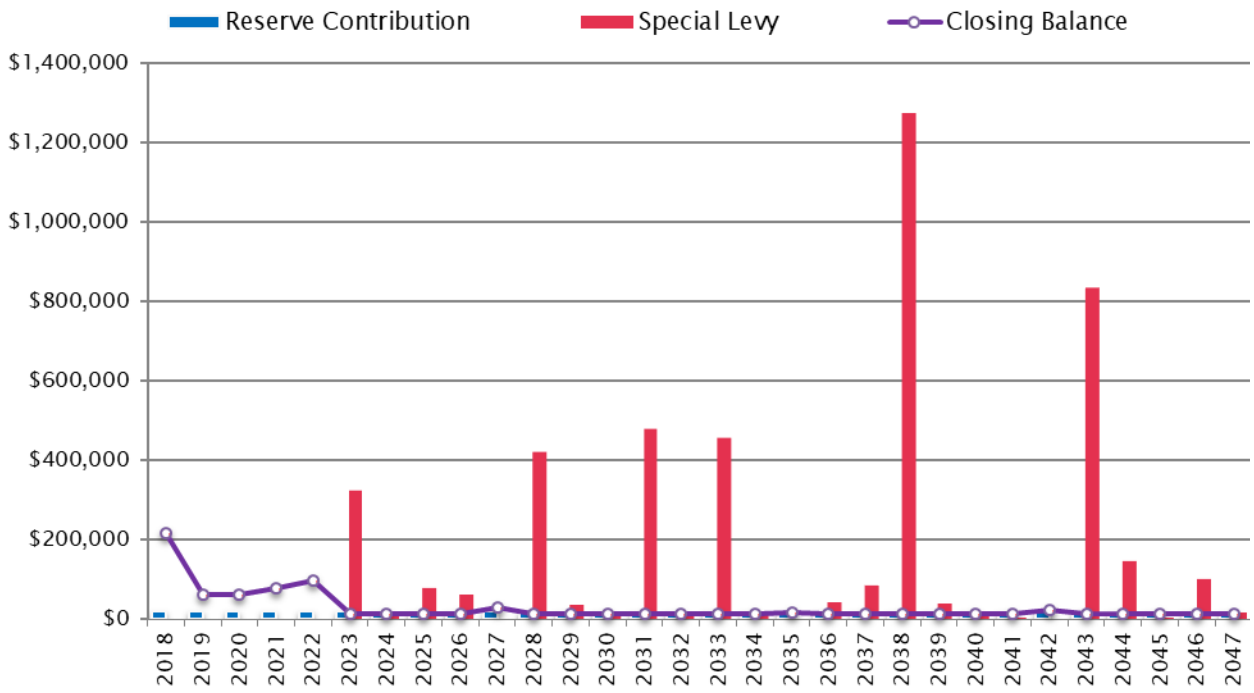


Figure 6.1 CRF balance, contribution and special levies based on the current funding.

If the Strata Corporation wishes to reduce the number and size of special levies, then increases will need to be made over the upcoming years.

6.4 Alternative Funding Scenario #1

Alternative funding scenario #1 is based on an annual CRF contribution of $25,000 and is increased by 3% annually.

TABLE 6.4 ALTERNATIVE FUNDING MODEL #1: CASH FLOW TABLE

FISCAL YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CONTINGENCY COSTS	CLOSING BALANCE
2018	$214,400	$25,000	$0	$4,288	$18,700	$1,000	$223,988
2019	$223,988	$25,750	$0	$4,480	$180,300	$1,000	$72,918
2020	$72,918	$26,522	$0	$1,458	$20,670	$1,000	$79,229
2021	$79,229	$27,318	$0	$1,585	$1,010	$1,000	$106,121
2022	$106,121	$28,138	$0	$2,122	$3,400	$1,000	$131,982
2023	$131,982	$28,982	$283,122	$2,640	$430,725	$1,000	$15,000
2024	$15,000	$29,851	$49	$300	$29,200	$1,000	$15,000
2025	$15,000	$30,747	$71,573	$300	$101,620	$1,000	$15,000
2026	$15,000	$31,669	$54,050	$300	$85,019	$1,000	$15,000
2027	$15,000	$32,619	$0	$300	$3,720	$1,000	$43,199

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.

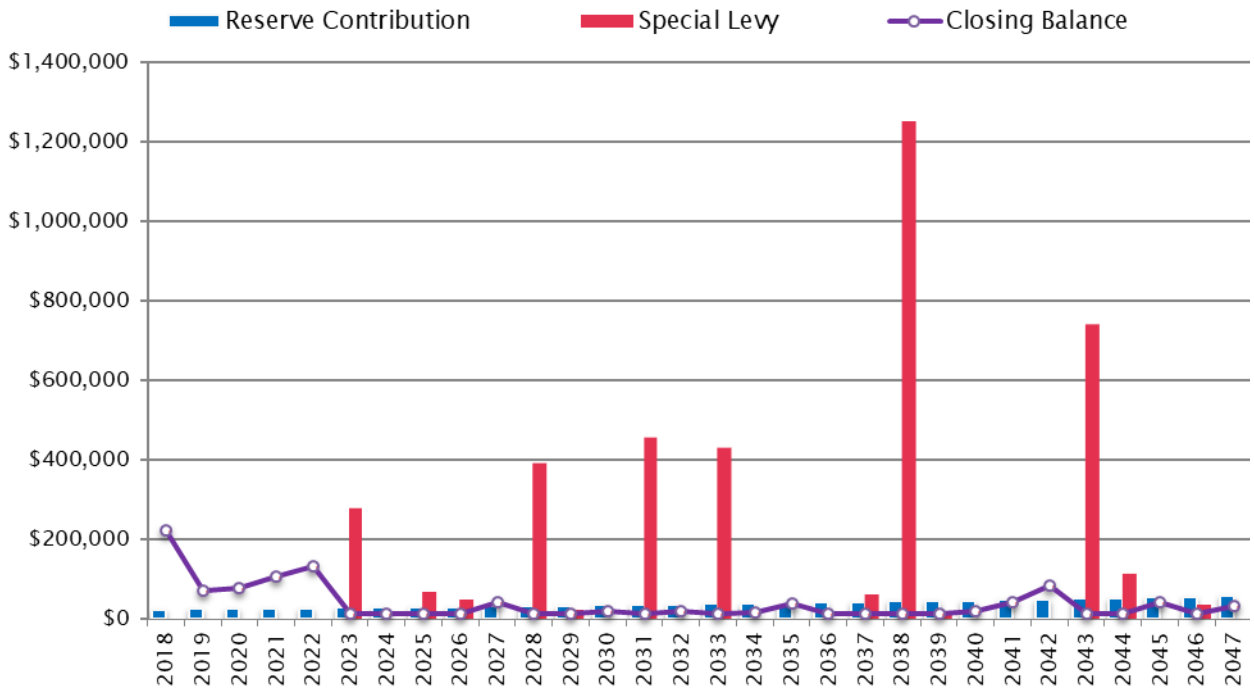


Figure 6.2 CRF balance, contribution and special levies based on Alternative #1.

6.5 Progressive Funding Scenario

The progressive funding scenario is based on a fixed annual CRF contribution.

TABLE 6.5 PROGRESSIVE FUNDING MODEL: CASH FLOW TABLE

FISCAL YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CONTINGENCY COSTS	CLOSING BALANCE
2018	$214,400	$156,000	$0	$4,288	$18,700	$1,000	$354,988
2019	$354,988	$156,000	$0	$7,100	$180,300	$1,000	$336,788
2020	$336,788	$156,000	$0	$6,736	$20,670	$1,000	$477,854
2021	$477,854	$156,000	$0	$9,557	$1,010	$1,000	$641,401
2022	$641,401	$156,000	$0	$12,828	$3,400	$1,000	$805,829
2023	$805,829	$156,000	$0	$16,117	$430,725	$1,000	$546,220
2024	$546,220	$156,000	$0	$10,924	$29,200	$1,000	$682,945
2025	$682,945	$156,000	$0	$13,659	$101,620	$1,000	$749,983
2026	$749,983	$156,000	$0	$15,000	$85,019	$1,000	$834,964
2027	$834,964	$156,000	$0	$16,699	$3,720	$1,000	$1,002,943

The Progressive Reserve would offset smaller special levies. However, because of the timing of anticipated renewal projects, a 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.

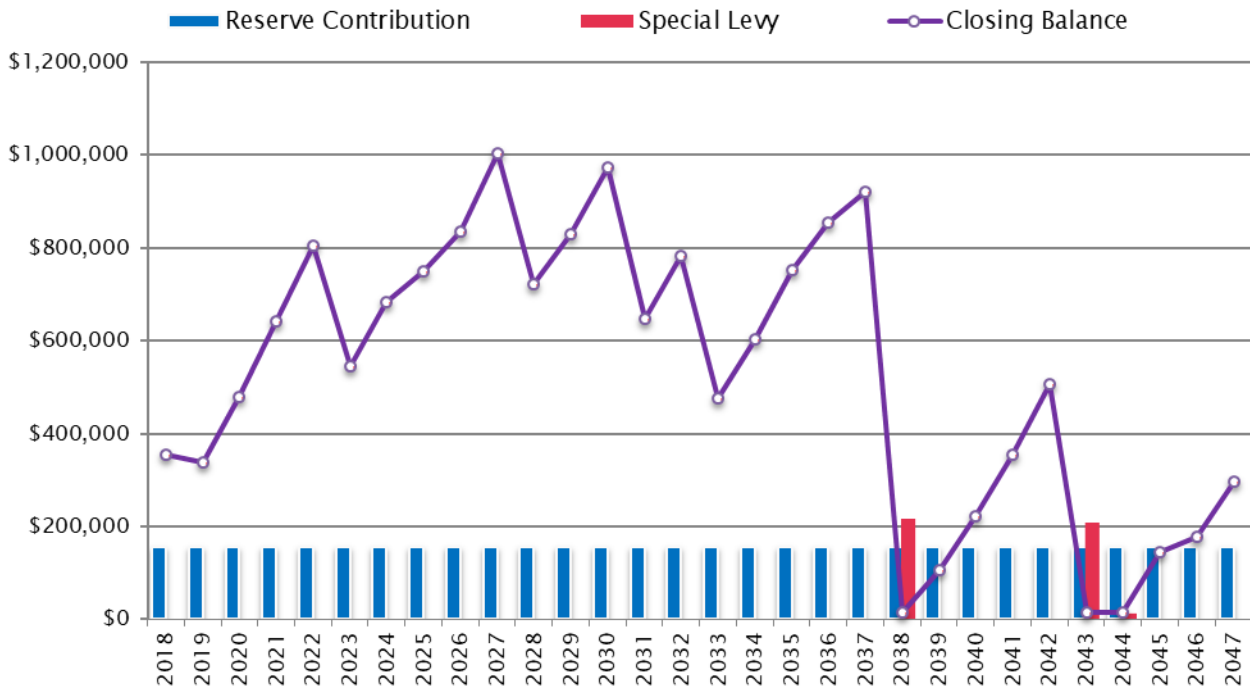


Figure 6.3 CRF balance, contribution and special levies based on a Progressive Reserve calculation.

7 Next Steps

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

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

- **Asset Replacement Policy**. Using the Asset Inventory, develop an asset replacement policy. The policy would assign replacement strategies (run-to-failure, condition based, or time-based) to assets.
- **Maintenance Plan**. Using the Asset Inventory, develop a maintenance plan, or commission a maintenance plan through RDH. The maintenance plan should provide the Strata Corporation with information on how and when to implement different maintenance activities.
- **Building Enclosure Condition Assessment**. Conduct a Condition Assessment of the building enclosure prior to or in conjunction with the update to the Depreciation Report in three years' time. The condition assessment will confirm the estimated remaining service lives of enclosure assets. Update the Report with these findings and recommendations as may be required.
- **Further Investigations.** Conduct additional condition assessments/investigations, as required, to refine the data and confirm assumptions.
- **Updates.** Plan for an update to the Depreciation Report in three years' time. On a yearly basis, the Stata 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

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.

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

Chronological Age – The age of an asset relative to its date of installation (current year minus year of installation).

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.

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 (otherwise known the Contingency Reserve Fund.)

Contribution Threshold - A dollar value which dictates the size of the Contingency Reserve Fund (CRF) contribution based on whether the accumulated CRF balance is greater than or less than the specified dollar value. For example, the Strata Property Act indicates that if the closing balance of the CRF at the end of the fiscal year is less than 25% of the operating budget for the next fiscal year, then the CRF contribution for the next fiscal year should be a minimum of 10% of the operating budget. In this case, the threshold is 25% of the operating budget.

Current Dollars – Dollars in the year they were actually received or paid, unadjusted for price changes.

Effective Age – An assessment of the age of an asset relative to its condition and how that condition may have accelerated or decelerated the chronological age of the asset (service life minus remaining service life).

Funding Model – A mathematical model used to establish an appropriate funding level for sustaining the assets in a building. Running a number of scenarios out of the funding model 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.

Future Dollars – 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
- → Legal obsolescence
- → Style obsolescence

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.

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.

Next Renewal Year - The forecasted date of asset replacement or renewal.

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.

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 years) and ideally should also contemplate elements of the Strategic Plan (30 years).

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

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

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 and rehabilitation of an asset, which occur as result of a shortfall in available funds and requires special decision making and approval procedures. A Reserve Study contains funding scenarios that assist the Owners in long-range financial planning.

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 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.

Style Obsolescence – When an asset is no longer desirable because it has fallen out of popular fashion, its style is obsolete. Some assets, particularly interior furnishings, reflect fashion cycles and can become out-dated.

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

Appendix B

Asset Inventory

Capilano Ridge - Apartment
Asset Inventory

Enclosure

Roofs & Decks

Encl 01 - Laminated Asphalt Shingle Roof



Location

Main roof level.

Description

Laminated asphalt shingles over an underlayment (minimum roofing felt) applied on plywood sheathing at sloped roof. Gutters are provided at roof eaves to manage rainwater.

Information

Service Life:	25
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2028

Encl 02 - Exposed SBS Membrane Roof



Location

Level 2 low sloped roofs along the north elevation and the west section of the main roof level.

Description

Bituminous and modified bituminous SBS (styrene-butadiene-styrene) membrane. Conventional assembly would include insulation and overlay board.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Encl 03 - PVC Panel Soffit



Location

Underside of roof eaves and balconies.

Description

Perforated PVC panels.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Encl 04 - Wood Soffit



Location

Underside of canopy roof at main entrance of the building.

Description

Wood fastened over a wood framing substrate.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Capilano Ridge - Apartment
Asset Inventory

Encl 05 - Protected Podium Membrane with Landscaping



Location

Exterior side of the parkade roof-slab.

Description

Protected membrane overlaid with combination of hard and soft landscaping overburden.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2033

Fall Protection

Encl 06 - Glazed Aluminum Guardrails



Location

At balcony perimeters.

Description

Top-mounted aluminum posts and glass infill panels functioning as a protective barrier at the open sides of balconies, raised walkways, or other locations to prevent accidental falls from one level to another. Guardrail posts were re-caulked in 2015. Currently coordinated to be replaced in conjunction with the balcony membranes.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	25
Next Renewal Year:	2023

Walls

Encl 07 - Wood Siding Wall - Drained



Location

Various exterior wall elevations.

Description

Wood siding installed on furring to create a drained cavity over the exterior sheathing membrane. Last repainted in 2009.

Information

Service Life:	35
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2038

Capilano Ridge - Apartment
Asset Inventory

Encl 08 - Cedar Shake Wall - Drained



Location
Various exterior wall elevations.

Description
Cedar shakes installed on furring and strapping to create a drained cavity over the exterior sheathing membrane.

Information

Service Life:	35
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2038

Encl 09 - Cultured Stone Wall



Location
At base of columns on ground level.

Description
Cultured stone applied with mortar onto a substrate. A localized renewal of this asset has been accounted for.

Information

Service Life:	35
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2038

Glazing Systems

Encl 10 - Vinyl Framed Window



Location
All levels and elevations.

Description
Vinyl framed windows with double insulating glazing units, and casement, awning, sliding operators. Currently coordinated to be renewed with wood siding.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	10
Next Renewal Year:	2038

Doors

Encl 11 - Aluminum Frame Lobby Door



Location
Main entrance of the building.

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

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Capilano Ridge - Apartment
Asset Inventory

Encl 12 - Steel Swing Door



Location
Emergency exit doors on ground floor and parkade levels.

Description
Hollow steel slab swing door without glazing.

Information

Service Life:	25
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2028

Encl 13 - Vinyl Framed Sliding Glass Door



Location
Access to balconies and patios.

Description
Sliding glass doors, double insulating glazing units, vinyl framing. Currently coordinated to be renewed with wood siding.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	10
Next Renewal Year:	2038

Balconies

Encl 14 - Wood Stairs & Landings



Location
Along north elevation.

Description
Wood plank landings, and pressure treated wood stairs (single landing configuration).

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2033

Encl 15 - Exposed Urethane Balcony Membrane



Location
Horizontal balcony surfaces.

Description
Liquid applied urethane membrane applied over wood balcony sheathing. Top coat re-applied in 2009.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Capilano Ridge - Apartment
Asset Inventory

General & Inspections

Encl 16 - Wood Clad Structural



Location

Supporting balconies throughout the building.

Description

Wood clad columns and beams in both exposed and protected locations.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Encl 17 - Sealant



Location

Service penetrations and interface details.

Description

Sealant of various types located at building enclosure penetrations. Guardrail posts were re-caulked in 2015.

Information

Service Life:	10
Installed Year:	2008
Chronological Age:	10
Effective Age:	9
Next Renewal Year:	2019

Encl 18 - General & Inspections



Location

All levels and elevations throughout the building.

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
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2078

Capilano Ridge - Apartment
Asset Inventory

Electrical

Power Supply

Elec 01 - Distribution Transformer - Exterior



Location

Along Capilano Crescent.

Description

Pad mounted transformers. [Equipment is owned by BC Hydro].

Information

Service Life:	45
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2048

Distribution

Elec 02 - Electrical Distribution



Location

Electrical room in parkade.

Description

Federal Pioneer 1000 A, 208 V main disconnect switch; downstream switchboards, panelboards, breakers, switches, disconnects and wiring to mechanical, lighting and power loads throughout the building and to individual suites through BC Hydro owned metering devices.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Light Fixtures

Elec 03 - Exterior Light Fixtures



Location

Mounted to walls, soffits, and along walkways.

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
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Capilano Ridge - Apartment
Asset Inventory

Elec 04 - Interior Light Fixtures



Location

Throughout interior common areas, including hallways, service rooms, and parkade.

Description

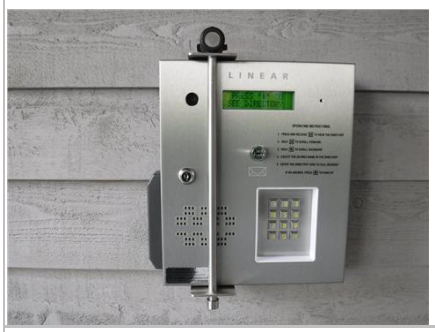
A variety of fixture types, including fixed surface (pendant, track and sconce) and recessed (pot, troffer and cove). A variety of lamp types, including fluorescent, compact fluorescent, halogen, incandescent, LED, etc. for interior direct, indirect and accent lighting applications. A variety of light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

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	12
Next Renewal Year:	2026

Security

Elec 05 - Enterphone System



Location

Main entrance of the apartment.

Description

Surface mounted, enterphone panels with associated key pads and display panels.

Information

Service Life:	25
Installed Year:	2016
Chronological Age:	2
Effective Age:	2
Next Renewal Year:	2041

Elec 06 - Proximity Access Control



Location

Building entry doors.

Description

Local proximity access control system components include fob devices for building occupants, fob readers, RTE sensors/buttons, 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
Installed Year:	2003
Chronological Age:	15
Effective Age:	10
Next Renewal Year:	2020

Capilano Ridge - Apartment
Asset Inventory

Elec 07 - Security Surveillance



Location

Strategic locations throughout the interior common areas.

Description

Cameras, multiplexer, monitors and storage media to deter and track activity on and within building premises.

Information

Service Life:	14
Installed Year:	2003
Chronological Age:	15
Effective Age:	14
Next Renewal Year:	2018

Mechanical

Controls and End Devices

Mech 01 - Controls - Boiler Electronic



Location

Mechanical room in parkade by stall # S.C.35.

Description

Tekmar electronic control panel to optimize boiler operation and efficiency.

Information

Service Life:	15
Installed Year:	2003
Chronological Age:	15
Effective Age:	14
Next Renewal Year:	2019

Mech 02 - Gas Detection - Parking Garage



Location

Parkade level.

Description

QEL, QAS - 200 Series controller electronic sensing devices for detection of dangerous gases, carbon monoxide (CO) produced by vehicles and to activate the exhaust fans accordingly.

Information

Service Life:	10
Installed Year:	2003
Chronological Age:	15
Effective Age:	10
Next Renewal Year:	2018

Mech 03 - Controls - HVAC Instrumentation



Location

Hallways and service rooms.

Description

Stelpro thermostats, programmable thermostats, flow gauges, thermometers, metering equipment, gauges, and other field devices to monitor and regulate pressure and temperature in the HVAC and plumbing distribution systems.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Capilano Ridge - Apartment

Asset Inventory

Plumbing & Drainage

Mech 04 - Boiler - DHW - Heating - Gas Fired



Location

Mechanical room in parkade by stall # S.C.35.

Description

Laars Mighty Therm, coppertube, natural gas fired, hot water heater, 500,000 BTU input, 405,000 BTU output. Atmospheric vent/chimney. Water Heater is connected to two storage tanks.

Information

Service Life:	14
Installed Year:	2003
Chronological Age:	15
Effective Age:	13
Next Renewal Year:	2019

Mech 05 - Pump - DHW - Circulation and Recirculation



Location

Mechanical room in parkade by stall # S.C.35.

Description

Grundfos, fractional HP, pipe-mounted bronze body domestic hot water recirculation pumps.

Information

Service Life:	10
Installed Year:	2014
Chronological Age:	4
Effective Age:	4
Next Renewal Year:	2024

Mech 06 - Piping - Domestic Water Distribution



Location

Connected to supply fixtures throughout.

Description

Mixture of K and L copper for vertical/horizontal mains system and PEX (unconfirmed) piping within the suites. Gasketted clamp and soldered connections.

Information

Service Life:	28
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2031

Mech 07 - Drainage - Sanitary



Location

Connected to waste fixtures throughout.

Description

Piping, with joints, p-traps, and fittings.

Information

Service Life:	50
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2053

Capilano Ridge - Apartment
Asset Inventory

Mech 08 - Drainage - Storm - Internal



Location

Throughout the site.

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
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Mech 09 - Drainage - Perimeter and Foundation



Location

Perimeter of the parkade.

Description

Perforated piping forming part of a sub-surface perimeter drainage system around perimeter of buildings and underground structures.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Mech 10 - Pumps - Storm Lift and Control Panel



Location

Parkade, by stall #3, #39, and garbage room.

Description

Northwest Tech-con, Simplex, 1/2 to 3/4 HP, storm sump pumps and control panels for storm water runoff and sub-surface drainage.

Information

Service Life:	15
Installed Year:	2003
Chronological Age:	15
Effective Age:	8
Next Renewal Year:	2025

Mech 11 - Interceptor - Oil



Location

By stall #2 in the parkade.

Description

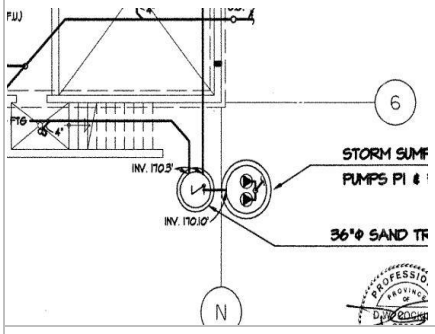
Multi-chamber flow-through interceptor with hatches to grade.

Information

Service Life:	50
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2053

Capilano Ridge - Apartment
Asset Inventory

Mech 12 - Interceptor - Sediment



Location

Southeast corner of the site.

Description

Underslab concrete silt interceptor assembly with backwater valve, cast steel cover and frame.

Information

Service Life:	50
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2053

Mech 13 - Valves - Cross Connection & Backflow Prevention



Location

Mechanical room in parkade by stall # S.C.35

Description

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

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Mech 14 - Valves - Plumbing Flow Control and Directional



Location

Mechanical room in parkade by stall # S.C.35.

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
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Heating & Cooling

Mech 15 - Gas Fireplace



Location

Lounge by lobby entrance.

Description

Natural gas fireplaces with fireplace enclosure, flue, gas piping, gas valve, glass panel and other components.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2033

Capilano Ridge - Apartment
Asset Inventory

Mech 16 - Chemical Treatment Equipment



Location

Mechanical room in parkade by stall # S.C.35.

Description

Pot feeder, chemicals, metering pumps and other associated equipment to provide corrosion protection to boilers, loops and piping.

Information

Service Life:	8
Installed Year:	2003
Chronological Age:	15
Effective Age:	7
Next Renewal Year:	2019

Mech 17 - Electric Baseboard



Location

Hallways and 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
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Mech 18 - Boiler - Hydronic - Fuel Fired



Location

Mechanical room in parkade by stall # S.C.35.

Description

Laars, natural gas fired, hot water boiler, 850,000 BTU input, 688,500 BTU output. Direct vent chimney.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Mech 19 - Piping - Hydronic Distribution



Location

Boiler to strata lots.

Description

Hydronic heating water supply and return system consisting of insulated threaded sch 40 steel victaulic couplings and end-grooved piping.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	25
Next Renewal Year:	2023

Capilano Ridge - Apartment
Asset Inventory

Mech 20 - Pump - Hydronic Loop - Pipemount



Location
Mechanical room in parkade by stall # S.C.35

Description
B&G & Armstrong, pipemount pumps for heating water hydronic loop.

Information

Service Life:	15
Installed Year:	2015
Chronological Age:	3
Effective Age:	3
Next Renewal Year:	2030

Mech 21 - Tank - Expansion - Hydronic - Diaphragm



Location
Mechanical room in parkade by stall # S.C.35

Description
Extrol floor mounted diaphragm expansion tank for hydronic heating system.

Information

Service Life:	20
Installed Year:	2015
Chronological Age:	3
Effective Age:	3
Next Renewal Year:	2035

Ventilation and Air-conditioning

Mech 22 - Exhaust Fan - Parkade - Propellor



Location
Parkade.

Description
Belt driven propeller exhaust fan mounted in exterior wall.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Mech 23 - Exhaust Fan - Small Service - Cabinet



Location
Service and locker rooms.

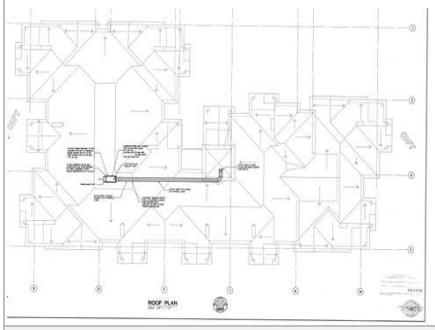
Description
Direct drive fans, ceiling and cabinet fans, and centrifugal inline blower fans.

Information

Service Life:	12
Installed Year:	2003
Chronological Age:	15
Effective Age:	12
Next Renewal Year:	2018

Capilano Ridge - Apartment
Asset Inventory

Mech 24 - Outdoor Air Handler - Makeup Air - Gas



Location
Rooftop.

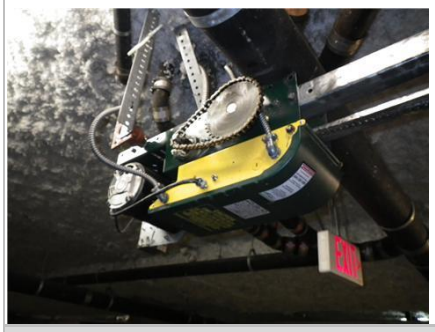
Description
Outdoor rooftop unit, belt-driven, centrifugal fan with natural gas fired heating to supply tempered make-up air to the interior spaces.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Other

Mech 25 - Overhead Gate Motor



Location
Parkade entrance gate.

Description
Manaras, 1/2) HP AC motor and commercial-grade overhead sectional door controlled by an electric operator.

Information

Service Life:	7
Installed Year:	2011
Chronological Age:	7
Effective Age:	6
Next Renewal Year:	2019

Elevator

Hydraulic

Elev 01 - Hydraulic Elevator, Double Bottom



Location
Elevator machine room at bottom (P) level.

Description
Richmond Elevator manufacturer, direct acting hydraulic elevator with a buried cylinder (double bottom, PVC protected), RAM PLC controller, submersed pump unit, EECO UV5-A valve. 2500 lb capacity, 100 fpm estimated.

Information

Service Life:	25
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2028

Capilano Ridge - Apartment
Asset Inventory

Car Interiors

Elev 02 - Elevator Cab & Hoistway



Location

Elevator cab and travelling hoistway.

Description

Single speed side opening doors, plastic car and hall pushbuttons, one (1) car operating panel (plastic pushbuttons), ECI #895 door operator, infrared door protection, plastic laminate cab interior, stainless steel ceiling, stainless steel front return and cab door, tile flooring, hands-free voice communication device, no firefighter's emergency operation, no standby power, no seismic provisions.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Fire Safety

Controls

Fire 01 - Fire Alarm Panel



Location

Lobby.

Description

EST microprocessor and supervised unit with annunciator and display.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Detection

Fire 02 - Fire Detection & Alarm



Location

Throughout the common areas.

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
Installed Year:	2003
Chronological Age:	15
Effective Age:	2
Next Renewal Year:	2026

Capilano Ridge - Apartment
Asset Inventory

Suppression

Fire 03 - Fire Hydrant



Location

Throughout the site.

Description

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

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Fire 04 - Dry Sprinkler Compressor



Location

Mechanical room in parkade by stall # S.C.35.

Description

General Air compressor with 1/2 HP motor to maintain the pressure of air in the dry fire sprinkler lines.

Information

Service Life:	14
Installed Year:	2003
Chronological Age:	15
Effective Age:	13
Next Renewal Year:	2019

Fire 05 - Portable Fire Extinguisher



Location

Throughout the common areas.

Description

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

Information

Service Life:	24
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2027

Fire 06 - Sprinkler & Standpipe - Wet



Location

Throughout the interior common areas.

Description

Standard upright, pendant and sidewall sprinkler heads, flow switches and indicating devices, gauges, steel and PVC distribution lines.

Information

Service Life:	100
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2103

Capilano Ridge - Apartment

Asset Inventory

Fire 07 - Sprinkler System - Dry



Location

Throughout the parkade.

Description

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

Information

Service Life:	100
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2103

Fire 08 - Sprinkler Valve Assembly - Dry



Location

Mechanical room in parkade by stall # S.C.35.

Description

CSC dry sprinkler valve, trim and gauges, steel piping.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Egress

Fire 09 - Emergency Egress Equipment



Location

Throughout the common areas.

Description

Unit battery packs; LED exit signs.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	12
Next Renewal Year:	2026

Capilano Ridge - Apartment
Asset Inventory

Interior Finishes

Floors

Finish 01 - Porcelain Floor Tile



Location

Main entry lobby and parkade elevator vestibule.

Description

Porcelain floor tile on thin set mortar with grout, cove base and interface thresholds with adjoining floor finishes.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Finish 02 - Sheet Carpet



Location

Throughout the hallways and stairwells.

Description

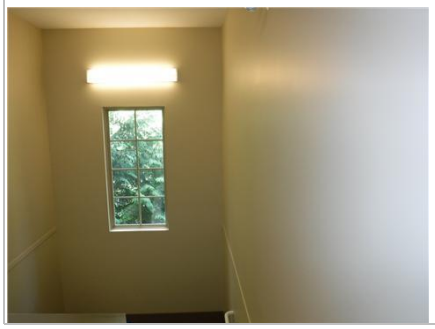
Synthetic, low level loop, textile sheet floor covering glued over floor substrate.

Information

Service Life:	10
Installed Year:	2016
Chronological Age:	2
Effective Age:	2
Next Renewal Year:	2026

Walls

Finish 03 - Paint



Location

Walls and ceiling throughout the hallways and common areas.

Description

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

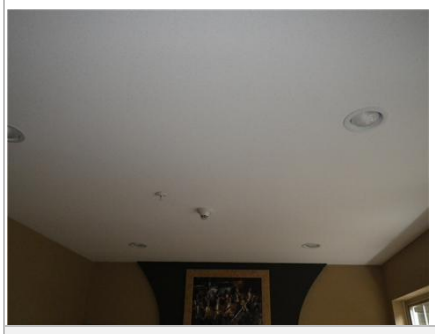
Information

Service Life:	10
Installed Year:	2016
Chronological Age:	2
Effective Age:	2
Next Renewal Year:	2026

Capilano Ridge - Apartment
Asset Inventory

Ceilings

Finish 04 - Spray Texture



Location
Ceilings throughout the hallways.

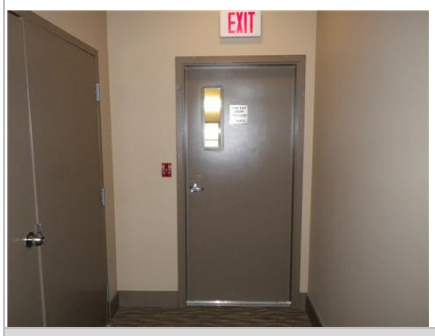
Description
Textured finish coat applied to concrete or gypsum wallboard.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	12
Next Renewal Year:	2026

Doors

Finish 05 - Interior Swing Door - General



Location
Throughout the common areas.

Description
Hollow metal swing door hung in framed opening including hardware. Exterior door is considered separately as part of the building enclosure system. Localized replacement has been accounted for.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Amenities

Equipment

Amen 01 - Computer Equipment



Location
Electrical room within the parkade.

Description
Computer, monitor, and associated electronic devices required for general operations and management of the facility.

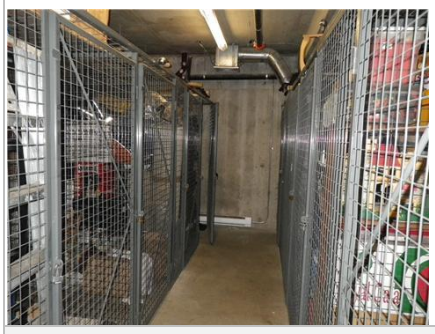
Information

Service Life:	6
Installed Year:	2017
Chronological Age:	1
Effective Age:	1
Next Renewal Year:	2023

Capilano Ridge - Apartment
Asset Inventory

Specialties

Amen 02 - Metal Screen Storage Locker



Location

Locker storage rooms at each floor of the building.

Description

Painted metal screen storage lockers with steel framing and hardware. Localized replacement has been accounted for.

Information

Service Life:	25
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2028

Furnishings

Amen 03 - Bicycle Rack



Location

Bike storage within the parkade.

Description

Floor mounted, steel frame bicycle rack.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2033

Amen 04 - Central Mailbox



Location

Main lobby of the building.

Description

Flush mounted, front loading, brushed aluminum finish, extruded aluminum trim.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2033

Amen 05 - Public Signage



Location

Throughout the building and site.

Description

Variety of permanently displayed information placards.

Information

Service Life:	25
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2028

Capilano Ridge - Apartment
Asset Inventory

Suite

Amen 06 - Furniture & Accessories



Location
Lounge adjacent to the main lobby.

Description
Coffee table, sofas, and artwork.

Information

Service Life:	15
Installed Year:	2016
Chronological Age:	2
Effective Age:	2
Next Renewal Year:	2031

Sitework

Sitework

Site 01 - Aluminum Site Guardrail [S]



Location
Throughout the site and adjacent to the parkade ramp.

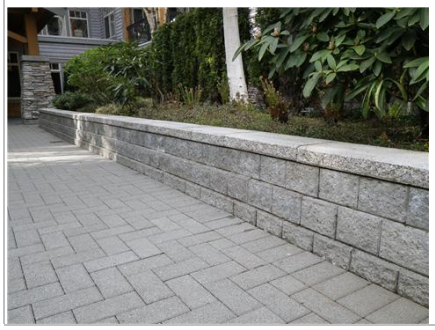
Description
Aluminum posts and pickets functioning as a protective barrier at the open sides of stairs, landings, raised walkways or other locations to prevent accidental falls from one level to another.

Information

Service Life:	30
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2033

Hard Landscaping

Site 02 - Concrete Block Retaining Wall



Location
Planters by main building entrance.

Description
Concrete blocks complete with a pre-cast concrete cap. Localized replacement has been accounted for.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Capilano Ridge - Apartment

Asset Inventory

Site 03 - Asphalt Paving [S]



Location

Throughout the site.

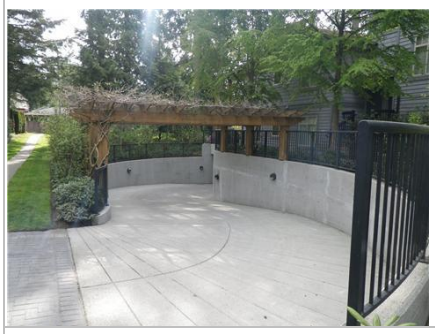
Description

Asphalt paving without curbs, onto compacted gravel base. Localized replacement has been accounted for.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Site 04 - Concrete Paving



Location

Parkade ramp.

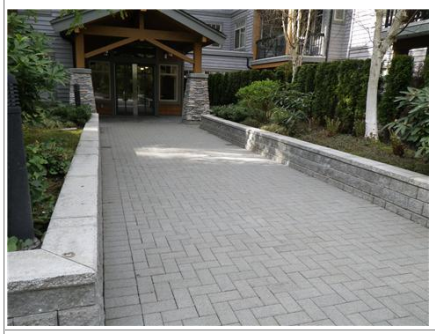
Description

Concrete pavement, cast with control and construction joints, onto compacted gravel base.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Site 05 - Interlocking Unit Paving [S]



Location

Walkways and patios throughout the site.

Description

Precast concrete unit pavers without curbs, combination of chip seal joint filler and jointing sand, bedding sand, and onto compacted gravel base. Localized replacement has been accounted for. Minor repairs were completed in 2015.

Information

Service Life:	40
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2043

Site 06 - Timber Retaining Wall [S]



Location

Ground floor level, adjacent to various windows and localized areas throughout the site.

Description

Approximately two feet high heavy timber with tie-backs.

Information

Service Life:	25
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2028

Capilano Ridge - Apartment
Asset Inventory

Site 07 - Wood Perimeter Fencing [S]



Location

West perimeter of site.

Description

Approximately four feet high wood fence with posts and rail, wire; gates with hardware.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Site 08 - Wood Trellis



Location

Above the parkade entry ramp.

Description

Timber framed with wood cross pieces.

Information

Service Life:	20
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2023

Soft Landscaping

Site 09 - Irrigation System [S]



Location

Throughout the site. Controller in mechanical room in parkade by stall # S.C.35.

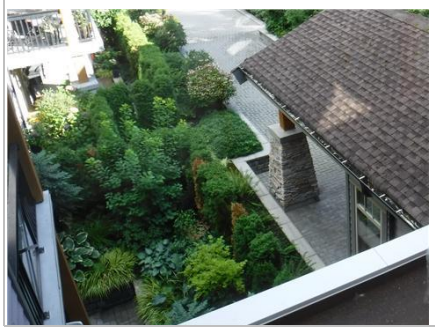
Description

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

Information

Service Life:	15
Installed Year:	2003
Chronological Age:	15
Effective Age:	14
Next Renewal Year:	2019

Site 10 - Soft Landscaping [S]



Location

Throughout the site.

Description

Lawn, ground cover, shrubs, perennials and small trees (up to 30'). Inspection and recommendations completed in 2015

Information

Service Life:	15
Installed Year:	2015
Chronological Age:	3
Effective Age:	3
Next Renewal Year:	2030

Capilano Ridge - Apartment
Asset Inventory

Site Services

Site 11 - Electrical Site Services [S]



Location
Throughout the site.

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

Information

Service Life:	50
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2053

Site 12 - Underground Drainage Services [S]



Location
Throughout the site.

Description
Storm sewer from buildings and catch basins to property line, including underground tank buried at west elevation of the apartment building.

Information

Service Life:	50
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2053

Site 13 - Underground Natural Gas Service [S]



Location
Throughout the site.

Description
Natural gas pipe installed underground from the property line to the building.

Information

Service Life:	50
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2053

Site 14 - Underground Sanitary Sewer Services [S]



Location
Throughout the site.

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

Information

Service Life:	50
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2053

Capilano Ridge - Apartment

Asset Inventory

Site 15 - Underground Water Services with Copper Piping [S]



Location

Throughout the site.

Description

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

Information

Service Life:	50
Installed Year:	2003
Chronological Age:	15
Effective Age:	15
Next Renewal Year:	2053

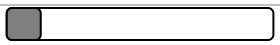
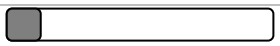
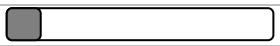
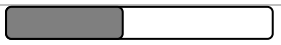
Appendix C

Asset Service Life Summary

Capilano Ridge - Apartment

Asset Ref	Asset Name	Chronological Age	Estimated Remaining SL
Encl 01	Laminated Asphalt Shingle Roof	15	10
Encl 02	Exposed SBS Membrane Roof	15	5
Encl 03	PVC Panel Soffit	15	25
Encl 04	Wood Soffit	15	25
Encl 05	Protected Podium Membrane with Landscaping	15	15
Encl 06	Glazed Aluminum Guardrails	15	5
Encl 07	Wood Siding Wall - Drained	15	20
Encl 08	Cedar Shake Wall - Drained	15	20
Encl 09	Cultured Stone Wall	15	20
Encl 10	Vinyl Framed Window	15	20
Encl 11	Aluminum Frame Lobby Door	15	5
Encl 12	Steel Swing Door	15	10
Encl 13	Vinyl Framed Sliding Glass Door	15	20
Encl 14	Wood Stairs & Landings	15	15
Encl 15	Exposed Urethane Balcony Membrane	15	5
Encl 16	Wood Clad Structural	15	25
Encl 17	Sealant	10	1
Encl 18	General & Inspections	15	60
Elec 01	Distribution Transformer - Exterior	15	30
Elec 02	Electrical Distribution	15	25
Elec 03	Exterior Light Fixtures	15	5
Elec 04	Interior Light Fixtures	15	8
Elec 05	Enterphone System	2	23
Elec 06	Proximity Access Control	15	2
Elec 07	Security Surveillance	15	0
Mech 01	Controls - Boiler Electronic	15	1
Mech 02	Gas Detection - Parking Garage	15	0
Mech 03	Controls - HVAC Instrumentation	15	5
Mech 04	Boiler - DHW - Heating - Gas Fired	15	1
Mech 05	Pump - DHW - Circulation and Recirculation	4	6
Mech 06	Piping - Domestic Water Distribution	15	13
Mech 07	Drainage - Sanitary	15	35
Mech 08	Drainage - Storm - Internal	15	25
Mech 09	Drainage - Perimeter and Foundation	15	25
Mech 10	Pumps - Storm Lift and Control Panel	15	7
Mech 11	Interceptor - Oil	15	35
Mech 12	Interceptor - Sediment	15	35
Mech 13	Valves - Cross Connection & Backflow Prevention	15	5

Mech 14	Valves - Plumbing Flow Control and Directional	15	5
Mech 15	Gas Fireplace	15	15
Mech 16	Chemical Treatment Equipment	15	1
Mech 17	Electric Baseboard	15	25
Mech 18	Boiler - Hydronic - Fuel Fired	15	5
Mech 19	Piping - Hydronic Distribution	15	5
Mech 20	Pump - Hydronic Loop - Pipemount	3	12
Mech 21	Tank - Expansion - Hydronic - Diaphragm	3	17
Mech 22	Exhaust Fan - Parkade - Propellor	15	5
Mech 23	Exhaust Fan - Small Service - Cabinet	15	0
Mech 24	Outdoor Air Handler - Makeup Air - Gas	15	5
Mech 25	Overhead Gate Motor	7	1
Elev 01	Hydraulic Elevator, Double Bottom	15	10
Elev 02	Elevator Cab & Hoistway	15	5
Fire 01	Fire Alarm Panel	15	5
Fire 02	Fire Detection & Alarm	15	8
Fire 03	Fire Hydrant	15	25
Fire 04	Dry Sprinkler Compressor	15	1
Fire 05	Portable Fire Extinguisher	15	9
Fire 06	Sprinkler & Standpipe - Wet	15	85
Fire 07	Sprinkler System - Dry	15	85
Fire 08	Sprinkler Valve Assembly - Dry	15	25
Fire 09	Emergency Egress Equipment	15	8
Finish 01	Porcelain Floor Tile	15	25
Finish 02	Sheet Carpet	2	8
Finish 03	Paint	2	8
Finish 04	Spray Texture	15	8
Finish 05	Interior Swing Door - General	15	25
Amen 01	Computer Equipment	1	5
Amen 02	Metal Screen Storage Locker	15	10
Amen 03	Bicycle Rack	15	15
Amen 04	Central Mailbox	15	15
Amen 05	Public Signage	15	10
Amen 06	Furniture & Accessories	2	13
Site 01	Aluminum Site Guardrail [S]	15	15
Site 02	Concrete Block Retaining Wall	15	25
Site 03	Asphalt Paving [S]	15	25
Site 04	Concrete Paving	15	25
Site 05	Interlocking Unit Paving [S]	15	25
Site 06	Timber Retaining Wall [S]	15	10
Site 07	Wood Perimeter Fencing [S]	15	5
Site 08	Wood Trellis	15	5
Site 09	Irrigation System [S]	15	1
Site 10	Soft Landscaping [S]	3	12
Site 11	Electrical Site Services [S]	15	35

Site 12	Underground Drainage Services [S]	15 	35 
Site 13	Underground Natural Gas Service [S]	15 	35 
Site 14	Underground Sanitary Sewer Services [S]	15 	35 
Site 15	Underground Water Services with Copper Piping [S]	15 	35 

Appendix D

Disclosures and Disclaimers

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 regarding 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 2012 the model looks forward to 2042. In year two, it will be accurate for 29 years, as it is only looking forward to year 2042. When an update study is performed in three years, the revised funding scenarios will look forward 30 years from 2015 to 2045. 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

Building - Funding Model
Capilano Ridge - Apartment

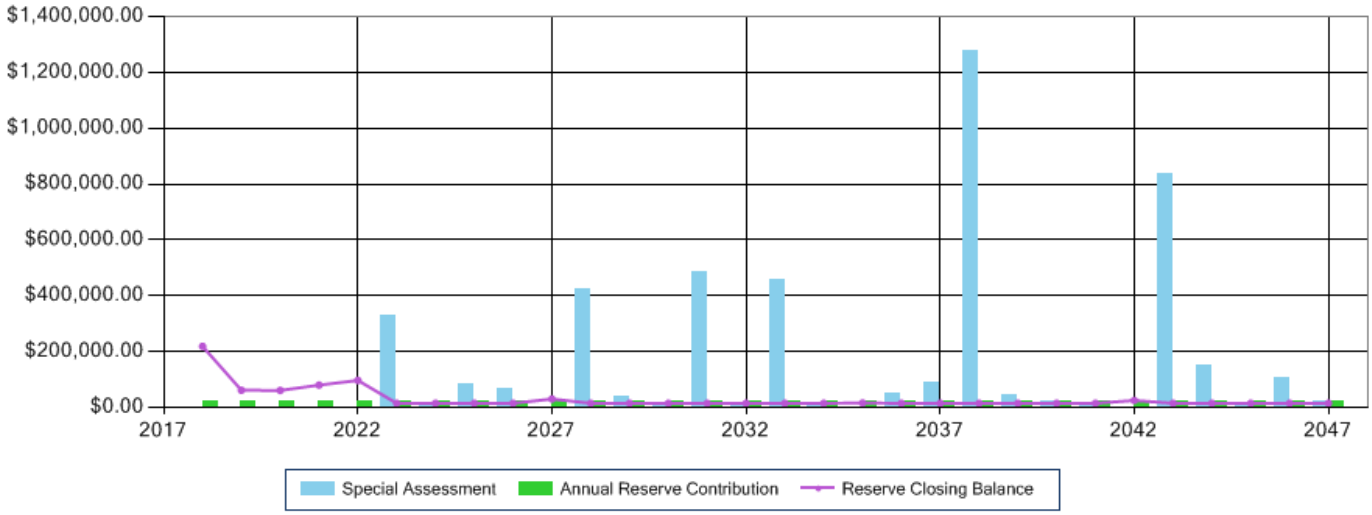


Name	2018 Fixed Annual Funding: $19,773 (Status Quo)
Type	Basic
Regarding	Capilano Ridge - Apartment
Start Year	2018
Interest/Investment Rate	2.0%
Estimated Contingency Allowance	$1,000
Tax Rate	0.0%
Planning Horizon	30
Number Of Units	31

Init Catchup Cost	$0
Operating Budget	$151,953
Starting Reserve Balance	$214,400
Reserve Contribution Threshold	$500,000
Contribution Below Threshold	$19,773
Contribution Above Threshold	$19,773
Reserve Contribution Increase	0.00 %
Monthly Avg. Unit Contribution	$53

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Tax Liability	Closing Balance	Percent Funded
2018	$214,400	$19,773	$0	$4,288	$18,700	$1,000	$0	$218,761	16.41 %
2019	$218,761	$19,773	$0	$4,375	$180,300	$1,000	$0	$61,609	4.70 %
2020	$61,609	$19,773	$0	$1,232	$20,670	$1,000	$0	$60,944	4.21 %
2021	$60,944	$19,773	$0	$1,219	$1,010	$1,000	$0	$79,926	4.97 %
2022	$79,926	$19,773	$0	$1,599	$3,400	$1,000	$0	$96,898	5.46 %
2023	$96,898	$19,773	$328,116	$1,938	$430,725	$1,000	$0	$15,000	0.99 %
2024	$15,000	$19,773	$10,127	$300	$29,200	$1,000	$0	$15,000	0.90 %
2025	$15,000	$19,773	$82,547	$300	$101,620	$1,000	$0	$15,000	0.86 %
2026	$15,000	$19,773	$65,946	$300	$85,019	$1,000	$0	$15,000	0.81 %
2027	$15,000	$19,773	$0	$300	$3,720	$1,000	$0	$30,353	1.49 %
2028	$30,353	$19,773	$422,367	$607	$457,100	$1,000	$0	$15,000	0.85 %
2029	$15,000	$19,773	$40,319	$300	$59,392	$1,000	$0	$15,000	0.79 %
2030	$15,000	$19,773	$10,012	$300	$29,085	$1,000	$0	$15,000	0.73 %
2031	$15,000	$19,773	$482,357	$300	$501,430	$1,000	$0	$15,000	0.87 %
2032	$15,000	$19,773	$11,903	$300	$30,976	$1,000	$0	$15,000	0.80 %
2033	$15,000	$19,773	$458,477	$300	$477,550	$1,000	$0	$15,000	0.97 %
2034	$15,000	$19,773	$17,527	$300	$36,600	$1,000	$0	$15,000	0.90 %
2035	$15,000	$19,773	$0	$300	$18,300	$1,000	$0	$15,773	0.87 %
2036	$15,773	$19,773	$47,569	$315	$67,430	$1,000	$0	$15,000	0.78 %
2037	$15,000	$19,773	$88,427	$300	$107,500	$1,000	$0	$15,000	0.76 %
2038	$15,000	$19,773	$1,276,051	$300	$1,295,124	$1,000	$0	$15,000	1.90 %
2039	$15,000	$19,773	$44,127	$300	$63,200	$1,000	$0	$15,000	1.81 %
2040	$15,000	$19,773	$22,807	$300	$41,880	$1,000	$0	$15,000	1.69 %
2041	$15,000	$19,773	$7,746	$300	$26,819	$1,000	$0	$15,000	1.56 %
2042	$15,000	$19,773	$0	$300	$9,100	$1,000	$0	$24,973	2.37 %
2043	$24,973	$19,773	$836,515	$499	$865,760	$1,000	$0	$15,000	5.53 %
2044	$15,000	$19,773	$150,401	$300	$169,474	$1,000	$0	$15,000	10.06 %
2045	$15,000	$19,773	$7,877	$300	$26,950	$1,000	$0	$15,000	10.48 %
2046	$15,000	$19,773	$104,367	$300	$123,440	$1,000	$0	$15,000	42.85 %
2047	$15,000	$19,773	$20,096	$300	$39,169	$1,000	$0	$15,000	100.00 %
		$593,190	$4,535,680		$5,320,643				




$1,400,000.00
$1,200,000.00
$1,000,000.00
$800,000.00
$600,000.00
$400,000.00
$200,000.00
$0.00
2017
2022
2027
2032
2037
2042
2047
Special Assessment
Annual Reserve Contribution
Reserve Closing Balance

Building - Funding Model
Capilano Ridge - Apartment

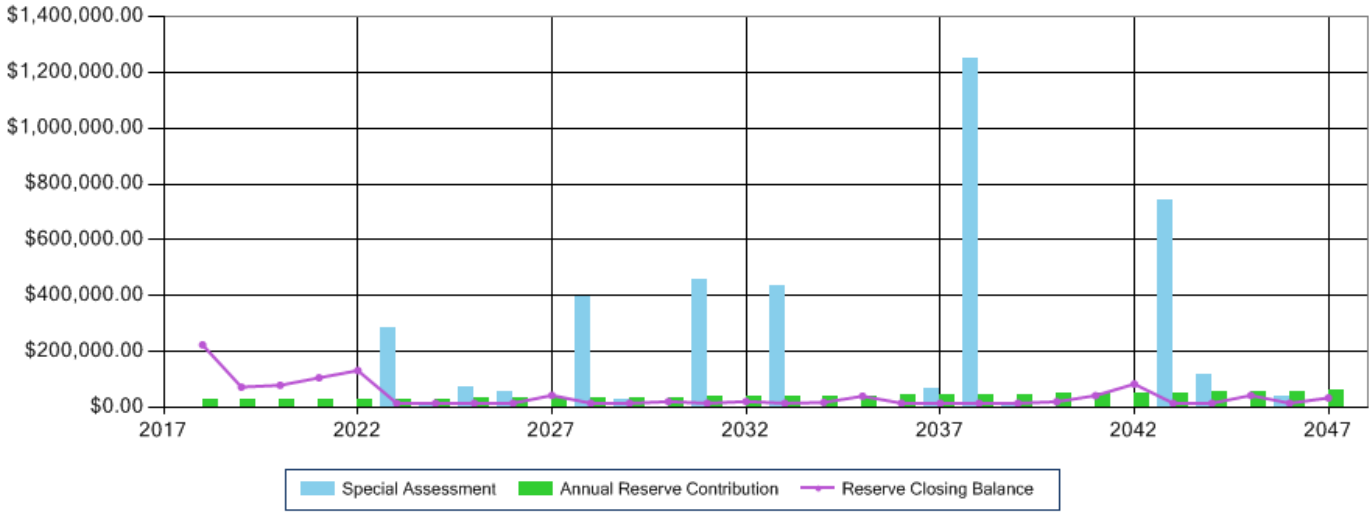


Name	2018 Inc. Annual Funding: $25,000 +3% (Alternative)
Type	Basic
Regarding	Capilano Ridge - Apartment
Start Year	2018
Interest/Investment Rate	2.0%
Estimated Contingency Allowance	$1,000
Tax Rate	0.0%
Planning Horizon	30
Number Of Units	31

Init Catchup Cost	
Operating Budget	$151,953
Starting Reserve Balance	$214,400
Reserve Contribution Threshold	$500,000
Contribution Below Threshold	$25,000
Contribution Above Threshold	$25,000
Reserve Contribution Increase	3.00 %
Monthly Avg. Unit Contribution	$67

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Tax Liability	Closing Balance	Percent Funded
2018	$214,400	$25,000	$0	$4,288	$18,700	$1,000	$0	$223,988	16.80 %
2019	$223,988	$25,750	$0	$4,480	$180,300	$1,000	$0	$72,918	5.57 %
2020	$72,918	$26,522	$0	$1,458	$20,670	$1,000	$0	$79,229	5.47 %
2021	$79,229	$27,318	$0	$1,585	$1,010	$1,000	$0	$106,121	6.59 %
2022	$106,121	$28,138	$0	$2,122	$3,400	$1,000	$0	$131,982	7.43 %
2023	$131,982	$28,982	$283,122	$2,640	$430,725	$1,000	$0	$15,000	0.99 %
2024	$15,000	$29,851	$49	$300	$29,200	$1,000	$0	$15,000	0.90 %
2025	$15,000	$30,747	$71,573	$300	$101,620	$1,000	$0	$15,000	0.86 %
2026	$15,000	$31,669	$54,050	$300	$85,019	$1,000	$0	$15,000	0.81 %
2027	$15,000	$32,619	$0	$300	$3,720	$1,000	$0	$43,199	2.13 %
2028	$43,199	$33,598	$395,439	$864	$457,100	$1,000	$0	$15,000	0.85 %
2029	$15,000	$34,606	$25,486	$300	$59,392	$1,000	$0	$15,000	0.79 %
2030	$15,000	$35,644	$0	$300	$29,085	$1,000	$0	$20,859	1.02 %
2031	$20,859	$36,713	$459,440	$417	$501,430	$1,000	$0	$15,000	0.87 %
2032	$15,000	$37,815	$0	$300	$30,976	$1,000	$0	$21,139	1.14 %
2033	$21,139	$38,949	$433,039	$423	$477,550	$1,000	$0	$15,000	0.97 %
2034	$15,000	$40,118	$0	$300	$36,600	$1,000	$0	$17,818	1.07 %
2035	$17,818	$41,321	$0	$356	$18,300	$1,000	$0	$40,195	2.22 %
2036	$40,195	$42,561	$0	$804	$67,430	$1,000	$0	$15,130	0.79 %
2037	$15,130	$43,838	$64,230	$303	$107,500	$1,000	$0	$15,000	0.76 %
2038	$15,000	$45,153	$1,250,671	$300	$1,295,124	$1,000	$0	$15,000	1.90 %
2039	$15,000	$46,507	$17,393	$300	$63,200	$1,000	$0	$15,000	1.81 %
2040	$15,000	$47,903	$0	$300	$41,880	$1,000	$0	$20,323	2.29 %
2041	$20,323	$49,340	$0	$406	$26,819	$1,000	$0	$42,250	4.41 %
2042	$42,250	$50,820	$0	$845	$9,100	$1,000	$0	$83,814	7.96 %
2043	$83,814	$52,344	$743,925	$1,676	$865,760	$1,000	$0	$15,000	5.53 %
2044	$15,000	$53,915	$116,259	$300	$169,474	$1,000	$0	$15,000	10.06 %
2045	$15,000	$55,532	$0	$300	$26,950	$1,000	$0	$42,882	29.98 %
2046	$42,882	$57,198	$38,502	$858	$123,440	$1,000	$0	$15,000	42.85 %
2047	$15,000	$58,914	$0	$300	$39,169	$1,000	$0	$34,045	100.00 %
		$1,189,385	$3,953,178		$5,320,643				




$1,400,000.00
$1,200,000.00
$1,000,000.00
$800,000.00
$600,000.00
$400,000.00
$200,000.00
$0.00
2017
2022
2027
2032
2037
2042
2047
Special Assessment
Annual Reserve Contribution
Reserve Closing Balance



Name	2018 Fixed Annual Funding: $156,000 (Progressive)
Type	Basic
Regarding	Capilano Ridge - Apartment
Start Year	2018
Interest/Investment Rate	2.0%
Estimated Contingency Allowance	$1,000
Tax Rate	0.0%
Planning Horizon	30
Number Of Units	31

Init Catchup Cost	
Operating Budget	$151,953
Starting Reserve Balance	$214,400
Reserve Contribution Threshold	$500,000
Contribution Below Threshold	$156,000
Contribution Above Threshold	$156,000
Reserve Contribution Increase	0.00 %
Monthly Avg. Unit Contribution	$419

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Tax Liability	Closing Balance	Percent Funded
2018	$214,400	$156,000	$0	$4,288	$18,700	$1,000	$0	$354,988	26.63 %
2019	$354,988	$156,000	$0	$7,100	$180,300	$1,000	$0	$336,788	25.72 %
2020	$336,788	$156,000	$0	$6,736	$20,670	$1,000	$0	$477,854	33.04 %
2021	$477,854	$156,000	$0	$9,557	$1,010	$1,000	$0	$641,401	39.88 %
2022	$641,401	$156,000	$0	$12,828	$3,400	$1,000	$0	$805,829	45.42 %
2023	$805,829	$156,000	$0	$16,117	$430,725	$1,000	$0	$546,220	36.12 %
2024	$546,220	$156,000	$0	$10,924	$29,200	$1,000	$0	$682,945	41.16 %
2025	$682,945	$156,000	$0	$13,659	$101,620	$1,000	$0	$749,983	43.15 %
2026	$749,983	$156,000	$0	$15,000	$85,019	$1,000	$0	$834,964	45.42 %
2027	$834,964	$156,000	$0	$16,699	$3,720	$1,000	$0	$1,002,943	49.50 %
2028	$1,002,943	$156,000	$0	$20,059	$457,100	$1,000	$0	$720,902	40.98 %
2029	$720,902	$156,000	$0	$14,418	$59,392	$1,000	$0	$830,928	44.24 %
2030	$830,928	$156,000	$0	$16,619	$29,085	$1,000	$0	$973,462	47.88 %
2031	$973,462	$156,000	$0	$19,469	$501,430	$1,000	$0	$646,501	37.78 %
2032	$646,501	$156,000	$0	$12,930	$30,976	$1,000	$0	$783,455	42.30 %
2033	$783,455	$156,000	$0	$15,669	$477,550	$1,000	$0	$476,574	30.84 %
2034	$476,574	$156,000	$0	$9,531	$36,600	$1,000	$0	$604,506	36.35 %
2035	$604,506	$156,000	$0	$12,090	$18,300	$1,000	$0	$753,296	41.75 %
2036	$753,296	$156,000	$0	$15,066	$67,430	$1,000	$0	$855,932	45.02 %
2037	$855,932	$156,000	$0	$17,119	$107,500	$1,000	$0	$920,550	46.99 %
2038	$920,550	$156,000	$216,163	$18,411	$1,295,124	$1,000	$0	$15,000	1.90 %
2039	$15,000	$156,000	$0	$300	$63,200	$1,000	$0	$107,100	12.98 %
2040	$107,100	$156,000	$0	$2,142	$41,880	$1,000	$0	$222,362	25.15 %
2041	$222,362	$156,000	$0	$4,447	$26,819	$1,000	$0	$354,990	37.05 %
2042	$354,990	$156,000	$0	$7,100	$9,100	$1,000	$0	$507,990	48.28 %
2043	$507,990	$156,000	$207,610	$10,160	$865,760	$1,000	$0	$15,000	5.53 %
2044	$15,000	$156,000	$14,174	$300	$169,474	$1,000	$0	$15,000	10.06 %
2045	$15,000	$156,000	$0	$300	$26,950	$1,000	$0	$143,350	100.24 %
2046	$143,350	$156,000	$0	$2,867	$123,440	$1,000	$0	$177,777	507.93 %
2047	$177,777	$156,000	$0	$3,556	$39,169	$1,000	$0	$297,164	100.00 %
		$4,680,000	$437,947		$5,320,643				




$1,200,000.00
$1,000,000.00
$800,000.00
$600,000.00
$400,000.00
$200,000.00
$0.00
2017
2022
2027
2032
2037
2042
2047
Special Assessment
Annual Reserve Contribution
Reserve Closing Balance

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.

Building Asset Management Software (BAMS)

All of this information is accessible through our propriety online BAM Software—we do the groundwork and provide the critical information so that you can leverage the Software to track and report on maintenance, repair, and renewal activities. Alternatively, we can follow up and manage the activities on your behalf.

The Software tool also empowers you to create your own funding scenarios so you can evaluate different funding levels and find a solution that works specifically for your building. Where a Depreciation Report identifies what items you need to spend money on and when you need to spend it, this tool helps you optimize the way you spend your money. Ultimately, we can help you track what work is completed versus what is outstanding so that you are better able to produce reports and make informed decisions.





About Us



Mark Will | B.A. Econ.

Managing Principal, Vancouver Regional Manager

Mark is the Regional Manager of the Vancouver office and has worked at RDH since 1998. He has a wealth of project management experience and holds a Bachelor's Degree in Economics. Mark is currently a member on the Board of Directors at the Condominium Home Owner's Association (CHOA) and a member of the Professional Association of Managing Agents (PAMA).



Laureen Stokes | Dipl.T.

Associate, Senior Project Manager

As the Maintenance + Planning Service Area Leader in Vancouver as well as a Senior Project Manager, Laureen provides technical review and support particularly for building enclosure projects in both Vancouver and Victoria on wood-framed buildings. She also leads internal training and mentorship on how to apply bylaws and cost sharing agreements to Depreciation Report forecasts and funding models in the Vancouver Office.

After completing the Architectural and Building Engineering Technology Diploma program in 2008 at BCIT, Laureen joined RDH as a Building Science Technologist, providing field review services on rehabilitation projects as well as building enclosure condition asessments. In 2012, she joined the Maintenance and Planning team and has been involved on over 200 Depreciation Reports.



Jason Dunn | B.Arch.Sc., CCCA

Associate, Senior Project Manager

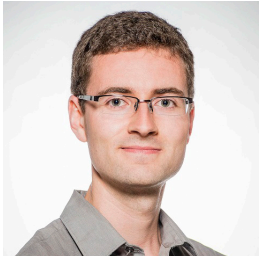
Jason is a Senior Project Manager on the MaP team primarily responsible for leading technical review, client liaison, and budget tracking. He first joined RDH in 2006, bringing 4 years of experience with him and a Bachelor's Degree in Architecture, then joined the MaP team in 2011. As an expert in the area of project management, Jason is closely involved with project and contract administration.



David Taguchi | AScT, P.Tech.(Eng.), RRO

Building Science Specialist

David has over 15 years of experience working on MaP projects in British Columbia, Alberta, Sakatchewan, Manitoba, and Colorado in the US. As a Building Science Specialist on the MaP team, David's expertise lies in roofing, below-grade waterproofing, and above-grade enclosure assemblies. His primary responsibilities include conducting assessments and investigations of all building enclosure aspects as well as ensuring project deliverable commitments are met. He also mentors junior staff members and manages their field review schedules to ensure efficiency. David joined RDH in 2016 and the MaP team in 2017.



Jesse Listoen | Dipl.T.

Project Manager

As a Project Manager on the MaP team, Jesse's primary responsibilities include managing and overseeing the preparation fo Depreciation Reports, Reserve Fund Studies, and 2-5-10 Warranty Reviews. Since joining RDH and the MaP team in 2013, he has also been involved on building enclosure condition assessments and localized investigations, field review, and the development of construction documents and specifications.



Brandon Carreira | Dipl.T.

Maintenance and Planning Technologist

Brandon is a Maintenance and Planning Technologist primarily responsible for preparing depreciation reports, capital needs asessments, and facility condition assessments. He also assists with leak investigations, water testing and warranty claims. Since joining the MaP team in 2011, Brandon has completed nearly 200 projects and gained expertise in asset management, maintenance management, reserve analysis as well as tactical and strategic planning.



Alex Seto | Dipl.T.

Building Science Technologist

As a technologist on RDH's Maintenance and Planning (MaP) Team, Alex's role is focused on long term financial forecasting based on the expected life cycle of building components as well as the preparation of Depreciation Reports and maintenance plans. Alex joined RDH in 2012 after completing his Architectural and Building Engineering Technology Diploma from BCIT.



Roya Kiani Amin | B.Sc., AScT

Maintenance and Planning Technologist

With over 10 years of experience in the industry, Roya holds a Bachelor's Degree in Civil Engineering and is a Certified Applied Science Technologist. She joined the RDH MaP team in 2012 as a quantity estimator providing quantity estimating for Depreciation Reports + QTO quality assurance and quality control. In 2015, Roya transitioned into her present role as a MaP Technologist. Her primary responsibilities include developing Depreciation Reports, maintenance and renewal plans, as well as conducting visual assessments in the field.



Talen Springer | EIT

Building Science Engineer (EIT)

Talen is a Building Science Engineer (EIT) with a multi-faceted role at RDH working on warranty reviews, warranty claims, and rehabilitation projects. He joined the MaP team in 2017 and particularly experienced with working on building enclosures of all types. Talen's primary responsibilities include field review and the preparation of Depreciation Reports, facility condition assessments, and capital needs assessments. He first joined RDH as a co-op student in 2015 and joined full time after completing his Bachelor's Degree in Applied Science in Civil Engineering in 2016.



Padraig Sweeney | B.Sc. Arch. Tech.

Maintenance and Planning Technologist

With expertise in design, drafting, and the building enclosure, Padraig's responsibilities as a technologist includes the preparation of Depreciation Reports, field review, leak investigations, and SketchUp drawings. Prior to joining RDH in March 2017, Padraig worked as a Façade Designer, Project Designer/Co-ordinator and Architectural Technologist in Ireland and the UK for 4 years.

Administrators and Client Support



Vanessa Jumawan

Maintenance and Planning Coordinator

As the MaP Coordinator, Vanessa manages documents, responds to clients' Requests for Proposals related to Depreciation Reports, issues proposals, and coordinates meetings with clients and within the MaP team. Vanessa joined RDH in 2008 and has been a part of the MaP team since 2011. She is also the Coordinator on Warranty Claims projects.



Anna Qiu

Maintenance and Planning Project Assistant

Certificate, Business Administration

Anna has over 10 years' experience in administration within engineering/architecture firms and has been a part of RDH's MaP team since 2010. Her responsibilities include setting up user accounts and buildings on BAMs, as well as compiling documents including drawings and strata plans.

Software Support and Programmer



Matthew Branch | P.Eng.

Software Developer

Matthew Branch is a BAMS Software Developer on the MaP team, with expertise in software development and implementation. His primary responsibilities also include services life analysis and statistical modeling and data evaluation. Matthew has a Bachelor's Degree in Applied Science in Civil Engineering, joining RDH in 2000 and the MaP team in 2005. He is also the co-author on several asset management papers.

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.

RDH 2004 - 2017

Appendix G

Insurance Certificate

Ref. No. 320007864285

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 #	8611292		
Effective	02-May-2018	**Expiry**	02-May-2019
Limits of Liability	Bodily Injury & Property Damage, Each Occurrence $1,000,000 Products and Completed Operations, Aggregate $1,000,000 Non-Owned Automobile Liability $1,000,000 Policy may be subject to a general aggregate and other aggregates where applicable		

Architects & Engineers Professional Liability

Insurer	Lloyd's Underwriters		
Policy #	PSDEF1800249		
Effective	02-May-2018	**Expiry**	02-May-2019
Limits of Liability	Subject to aggregate where applicable		

Terms and / or Additional Coverage

Professional Liability
Limit: $1,000,000 Per Claim Limit / $2,000,000 Aggregate Limit

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

Commercial General Liability

Products and Completed Operations
Broad Form Property Damage
Cross Liability
Contractual Liability
Owners and Contractors Protective
Contractual Liability included

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.

Aon Reed Stenhouse Inc.

Dated : 07-May-2018
Issued By : McLean,Chris J.
Tel : 1-604-688-4442

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

Appendix H

Strategic Plan

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Enclosure																																			
Roofs & Decks																																			
Encl 01 - Laminated Asphalt Shingle Roof																																			
J01	Clean all exterior surfaces of asphalt shingles.	5 Yrs	$0	2033	$0																	•					•					•				
J02	Replace damaged gutters and rainwater leaders as required.	12 Yrs	$2,200	2019	$2,200			•																					•						
R01	Replace asphalt shingles and associated components such as gutters and flashing.	25 Yrs	$261,600	2028	$320,000												•																		
Encl 02 - Exposed SBS Membrane Roof																																			
R01	Replace SBS membrane roof assembly and associated component such as drains and flashing.	20 Yrs	$57,600	2023	$64,000							•																				•			
Encl 03 - PVC Panel Soffit																																			
J04	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth and other stains.	3 Yrs	$0	2018	$0		•			•			•			•			•			•			•			•			•				•
R01	Replace soffit panels and associated components, such as venting strips.	40 Yrs	$49,000	2043	$80,000																											•			
Encl 04 - Wood Soffit																																			
J01	Clean exterior soffit surfaces to remove atmospheric dirt, vegetative growth and other stains.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•						•
R01	Repaint/restain wood soffit as required.	6 Yrs	$0	2019	$0			•						•						•			•			•									
R02	Replace wood soffit and associated components.	40 Yrs	$4,400	2043	$7,200																											•			
Encl 05 - Protected Podium Membrane with Landscaping																																			
J01	Review traffic surface for signs of distress. Replace damaged pavers as required.	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•						•		•		•		•		•
J02	Locally remove pavers, landscaping and soil overburden to visually review the surface of the underlying membrane, paying close attention to all penetration locations for signs of distress, such as ridges, cracks, and delamination. Review to include sealants and flashings.	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•						•		•		•		•		•
R01	Replace roof membrane assembly and associated components. Some of the pavers and overburden may be salvageable.	30 Yrs	$243,750	2033	$330,000																	•													
Fall Protection																																			
Encl 06 - Glazed Aluminum Guardrails																																			
J01	Review all metal finishes. Touch up paint as required. [Refer to guardrail paint finish warranty if applicable.]	2 Yrs	$0	2019	$0			•		•				•		•		•		•		•		•		•		•		•		•		•	
J02	Review guardrails for structural adequacy including attachments.	10 Yrs	$0	2019	$0			•														•										•			
R01	Remove and re-install sections of guardrail in conjunction with balcony waterproofing membrane renewal, including inspect and re-certify guardrail.	15 Yrs	$3,072	2038	$4,600																						•								
R03	Replace exterior guardrails.	30 Yrs	$52,000	2023	$57,000							•																							
Walls																																			
Encl 07 - Wood Siding Wall - Drained																																			
J01	Clean wood siding surfaces to remove atmospheric dirt, vegetative growth and other stains.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•				•		

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Enclosure																																			
J04	Review wood siding for signs of distress, such as delamination and discolouration.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•					•		•		•
R01	Repaint wood siding and associated wood trim.	6 Yrs	$42,350	2019	$43,000			•						•						•						•							•		
R02	Replace wood siding along with associated 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.	35 Yrs	$314,600	2038	$470,000																						•								
Encl 08 - Cedar Shake Wall - Drained																																			
J03	Clean wood shingles to remove atmospheric dirt, vegetative growth and other stains.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•				•			•		
J04	Review wood shingles for signs of distress, such as delamination and discolouration.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•					•		•		•
R01	Repaint wood shingle and associated wood trim.	6 Yrs	$22,750	2019	$23,000			•						•						•						•							•		
R02	Replace wood shakes along with associated 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.	35 Yrs	$169,000	2038	$250,000																						•								
Encl 09 - Cultured Stone Wall																																			
J01	Clean exterior surfaces of cultured stone cladding to remove vegetation growth and other atmospheric staining.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•			•		•		•		•
J02	Review cultured stone for signs of distress, such as cracking, spalling, and loose sections of cultured stones	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•						•			
R01	Replace sections of cultured stone veneer as required, along with associated components. [Extent of renewal may vary based on site condition.]	35 Yrs	$20,250	2038	$30,000																						•								
Glazing Systems																																			
Encl 10 - Vinyl Framed Window																																			
J01	Replace or repair gasket and weatherstripping, as required.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•									
J02	Install cap bead over glazing tape on exterior of windows.	15 Yrs	$0	2019	$0			•															•												
J03	Replace insulating glazing units (IGUs) with condensation or misting between panes of glass. [Refer to manufacturer's warranty if applicable.]	2 Yrs	$3,150	2018	$3,200		•		•		•		•		•		•		•		•		•		•				•		•		•		•
R01	Replace vinyl windows and associated components.	30 Yrs	$210,000	2038	$310,000																						•								
Doors																																			
Encl 11 - Aluminum Frame Lobby Door																																			
R01	Replace/upgrade door hardware along with inter phone	10 Yrs	$1,100	2033	$1,500																	•													
R02	Replace aluminum frame lobby doors.	20 Yrs	$4,000	2023	$4,400							•																				•			
Encl 12 - Steel Swing Door																																			
J01	Replace or repair gasket and weatherstripping, as required.	2 Yrs	$0	2019	$0			•		•		•		•		•										•		•		•		•		•	
R01	Repaint steel door finish.	8 Yrs	$1,250	2025	$1,500									•										•								•			
R02	Replace steel swing doors.	25 Yrs	$8,000	2028	$9,800												•																		

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Enclosure																																			
Encl 13 - Vinyl Framed Sliding Glass Door																																			
J01	Check weather-stripping and gasket seals prior to the onset of the winter season. Repair as required.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•									
J03	Replace insulating glazing units (IGUs) with condensation or misting between panes of glass. [Refer to manufacturer's warranty if applicable.]	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•		•		•				•		•		•		•
R01	Replace sliding glass doors and associated components.	30 Yrs	$96,800	2038	$140,000																						•								
Balconies																																			
Encl 14 - Wood Stairs & Landings																																			
J01	Review all railing finishes. Provide touch up paint as required.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•				•		•		•		•		•		•	
J02	Repaint deck surfaces, as required.	8 Yrs	$0	2019	$0			•								•														•					
R01	Replace components of single and double configuration wood stair and landings, as required.	30 Yrs	$3,500	2033	$4,700																	•													
Encl 15 - Exposed Urethane Balcony Membrane																																			
J01	Repair locally damaged and delaminated balcony membrane prior to re-application of top coat. [Refer to membrane warranty if applicable}	5 Yrs	$3,420	2019	$3,500			•									•					•					•								
R01	Prepare and re-apply membrane top coat	10 Yrs	$22,800	2019	$23,000			•														•													
R02	Replace exposed urethane balcony membrane and associated component.	20 Yrs	$72,960	2023	$81,000							•																			•				
General & Inspections																																			
Encl 16 - Wood Clad Structural																																			
J01	Remove wood cladding and inspect structural columns and beams, as required.	20 Yrs	$5,000	2023	$5,500							•																							
R01	Repaint/recoat exposed structural timber as required.	6 Yrs	$7,500	2019	$7,700			•						•						•						•									
R02	Replace components of exposed structural timber beams and columns, as required.	40 Yrs	$10,000	2043	$16,000																											•			
Encl 17 - Sealant																																			
J01	Review condition of sealant at all locations and undertake localized repairs or replacement as required.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•		•		•		•		•	
R01	Replace sealants at interfaces between building enclosure assemblies, and at penetrations through assemblies in accordance with sealant renewals plan.	10 Yrs	$22,200	2019	$23,000			•										•										•							
Encl 18 - General & Inspections																																			
J01	Review metal flashing at all location and touch-up paint as required.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•			•
J02	Repaint dryer, kitchen and bathroom exhaust vents as required.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•			•
J03	Update depreciation report	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•			•
J05	Perform full condition assessment of all enclosure systems.	5 Yrs	$7,000	2019	$7,100			•					•					•					•					•					•		
R01	This is not a renewable asset.	75 Yrs	$0	2078	$0																														

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046

Capilano Ridge - Apartment

Electrical

Power Supply

Elec 01 - Distribution Transformer - Exterior

R01	Replace distribution transformers. [Work to be coordinated, completed and paid for by BC Hydro, at their discretion.]	45 Yrs	$0	2048	$0																													

Distribution

Elec 02 - Electrical Distribution

J01	Check for any exposed wiring and visually inspect wiring, where accessible, for signs of distress. Repair as required.	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•		•		•		•		•		•		•	
J02	Check raceways and cables for proper mechanical support, check insulation for abrasion or cracks at support points, examine raceway joints for clean and tight connections. Check busducts connections for proper tightness and evidence of overheating, corrosion, arcing or other deterioration. Clean and torque dirty and loose connections.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•		•		•		•		
R01	Clean and maintain all electrical distribution equipment (reference subsequent maintenance tasks). Vacuum to remove accumulated dust. Check oil levels of oil filled equipment.	5 Yrs	$5,000	2019	$5,100			•					•				•				•				•				•						
R02	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.	5 Yrs	$3,000	2019	$3,100			•					•				•				•				•				•						
R03	Cyclical replacement of components of the electrical distribution equipment, as required.	40 Yrs	$30,000	2043	$49,000																									•				

Light Fixtures

Elec 03 - Exterior Light Fixtures

J01	Perform survey of actual lighting use and lighting levels to determine lighting needs. Consider updating fixtures or lighting controls to optimize light levels and energy costs.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•		
R01	Cyclical replacement of lighting controls (timers, motion sensors, etc.) as required.	6 Yrs	$800	2020	$830				•						•						•						•						•		
R02	Cyclical group replacement of lamps in exterior lighting fixtures. A set of lamps is replaced at a scheduled time.	3 Yrs	$50	2020	$52				•			•			•			•			•			•			•				•			
R03	Cyclical cleaning of exterior light fixtures. Use cleaning agents suited to fixture type.	10 Yrs	$75	2020	$78				•									•									•							
R04	Cyclical replacement of electronic ballasts.	10 Yrs	$0	2027	$0											•									•									
R05	Replace exterior light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	20 Yrs	$5,000	2023	$5,500							•																			•			

Elec 04 - Interior Light Fixtures

J01	Perform survey of actual lighting use and lighting levels to determine lighting needs. Consider updating fixtures, lighting controls or interior finishes (e.g. painting) to optimize light levels and energy costs.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•		
R01	Cyclical group replacement of lamps in interior lighting fixtures. A set of lamps are replaced at a scheduled time.	3 Yrs	$168	2020	$170				•			•			•			•			•			•			•				•			
R02	Cyclical replacement of lighting controls (timers, motion sensors, etc.) as required.	6 Yrs	$0	2020	$0				•						•						•						•						•		

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	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Electrical																																			
R03	Cyclical cleaning of interior light fixtures. Use cleaning agents suited to fixture type.	10 Yrs	$210	2020	$220				•										•									•						
R04	Cyclical replacement of electronic ballasts.	10 Yrs	$0	2020	$0				•										•									•						
R05	Replace interior light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	20 Yrs	$14,000	2026	$16,000										•																		•
Security																																			
Elec 05 - Enterphone System																																			
R01	Replace enterphone panels, excluding field wiring.	25 Yrs	$6,000	2041	$9,500																								•						
Elec 06 - 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.	6 Yrs	$500	2020	$520				•						•						•						•						•		
R02	Modernize components of the proximity access control system, excluding field wiring, as required by technological obsolescence.	12 Yrs	$12,000	2020	$12,000				•												•												•		
Elec 07 - Security Surveillance																																			
R01	Service the multiplex unit, update software as required.	5 Yrs	$1,000	2023	$1,100							•					•									•				•					
R02	Modernize components of the security surveillance system, excluding field wiring, as required by technological obsolescence.	14 Yrs	$3,200	2018	$3,200		•														•														•

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Mechanical																																			
Controls and End Devices																																			
Mech 01 - Controls - Boiler Electronic																																			
R01	Cyclical replacement of sensors and other field devices, as required.	3 Yrs	$0	2022	$0			•			•			•			•			•						•			•			•			•
R02	Replace boiler control, as required.	15 Yrs	$3,000	2019	$3,100			•															•												
Mech 02 - Gas Detection - Parking Garage																																			
R01	Cyclical replacement of gas detection sensors.	5 Yrs	$1,800	2018	$1,800		•					•					•					•					•					•			
Mech 03 - Controls - HVAC Instrumentation																																			
R01	Cyclical replacement of miscellaneous HVAC instrumentation, as required.	3 Yrs	$100	2023	$110							•			•			•			•			•			•			•			•		
Plumbing & Drainage																																			
Mech 04 - Boiler - DHW - Heating - Gas Fired																																			
J01	Tighten electrode mounting clamp.	2 Yrs	$0	2021	$0				•	•		•		•		•		•		•				•		•		•		•		•		•	
J03	Replace nozzle assembly.	5 Yrs	$0	2024	$0				•				•					•									•					•			
R01	Cyclical replacement of gas fired domestic hot water heaters.	14 Yrs	$15,000	2019	$15,000			•														•													
Mech 05 - Pump - DHW - Circulation and Recirculation																																			
J01	Inspect brushes and remove brush dust from motor.	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•		•		•		•		•		•		•		•
R01	Cyclical replacement of recirculating pumps, as required.	8 Yrs	$3,000	2024	$3,700								•								•								•						

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Mechanical																																			
Mech 06 - Piping - Domestic Water Distribution																																			
J03	Check that pipe hangars are properly fastened and dissimilar metals are isolated from one another.	5 Yrs	$0	2018	$0		•					•					•					•					•					•			
J04	Check piping and supports for mechanical damage, proper clearance, adequate insulation, and labeling.	5 Yrs	$0	2021	$0					•					•					•					•					•				•
J05	Check integrity of all soldered pipe connections and couplings.	5 Yrs	$0	2021	$0					•					•					•					•					•				•
J06	Comprehensive third party testing and inspection of the copper domestic water distribution system.	20 Yrs	$10,000	2023	$11,000							•																						
R01	Replace components of domestic plumbing distribution system, including domestic valves.	28 Yrs	$310,000	2031	$400,000															•														
Mech 07 - Drainage - Sanitary																																			
J01	Insert video cameras into main lines to conduct pipe inspection.	5 Yrs	$3,000	2018	$3,000		•					•					•					•					•					•			
J02	Jet-flush lateral drain lines.	10 Yrs	$4,000	2018	$4,000		•										•										•								
R01	Repair components of sanitary drainage collection system, as required.	50 Yrs	$30,000	2053	$60,000																														
Mech 08 - Drainage - Storm - Internal																																			
R01	Repair and/replace components of storm water drainage collection system, as required.	40 Yrs	$40,000	2043	$66,000																											•			
Mech 09 - 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.	5 Yrs	$2,000	2018	$2,000		•					•					•					•					•					•			
R01	Repair and/replace components of perimeter drainage system, as required.	40 Yrs	$20,000	2043	$33,000																											•			
Mech 10 - Pumps - Storm Lift and Control Panel																																			
J01	Coat exposed shaft of impeller with anti-seize compound.	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•		•		•		•		•		•		•		•
R01	Overhaul storm sump pumps.	5 Yrs	$3,000	2019	$3,100			•					•					•					•						•				•		
R02	Cyclic replacement of sump pump storm lift and control panels.	15 Yrs	$12,000	2025	$14,000									•																•					
Mech 11 - Interceptor - Oil																																			
R01	Cyclic replacement of oil interceptor, as required.	50 Yrs	$8,000	2053	$16,000																														
Mech 12 - Interceptor - Sediment																																			
R01	Replace backwater valve and trim	50 Yrs	$500	2053	$1,000																														
Mech 13 - Valves - Cross Connection & Backflow Prevention																																			
R01	Installation and cyclical replacement of cross connection & back flow prevention valves, as required.	20 Yrs	$6,000	2023	$6,600							•																				•			
Mech 14 - Valves - Plumbing Flow Control and Directional																																			
R01	Cyclical replacement of valves, as required.	20 Yrs	$6,000	2023	$6,600							•																				•			
Heating & Cooling																																			
Mech 15 - Gas Fireplace																																			
R01	Check integrity of exterior vent cap or coax discharge assembly, and replace if corroded or damaged.	5 Yrs	$200	2033	$270																	•					•					•			

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Mechanical																																			
R02	Replace components of fireplace, such as gas valve and switch.	30 Yrs	$1,500	2033	$2,000																	•													
Mech 16 - Chemical Treatment Equipment																																			
R01	Cyclical replacement of components of water treatment equipment.	8 Yrs	$2,000	2019	$2,000			•								•								•								•			
Mech 17 - Electric Baseboard																																			
J01	Check that circuit breakers for electric baseboard heaters are properly labeled for maintenance and servicing.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•			•
J02	Inspect baseboard heaters for signs of distress, such as detachment from the wall substrate, impact damage, loose connections and potential hazards.	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•		•		•		•		•		•		•		•
R01	Cyclical replacement of electric baseboard heaters, as required.	40 Yrs	$2,250	2043	$3,700																											•			
Mech 18 - Boiler - Hydronic - Fuel Fired																																			
R01	Cyclical replacement of heating boiler, as required.	20 Yrs	$20,000	2023	$22,000							•																				•			
Mech 19 - Piping - Hydronic Distribution																																			
J01	Check fitting for leakage and condensation. Tighten fittings.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•		•		•		•		•	
R01	Cyclical replacement of hydronic piping and valves, as required.	20 Yrs	$14,400	2023	$16,000							•																				•			
Mech 20 - Pump - Hydronic Loop - Pipemount																																			
R01	Replace circulating pumps for hydronic loop - heating, chilled and condenser water.	15 Yrs	$6,000	2030	$7,600														•															•	
Mech 21 - Tank - Expansion - Hydronic - Diaphragm																																			
R01	Cyclic replacement of diaphragm heating expansion tanks, as required.	20 Yrs	$1,500	2035	$2,100																			•											
Ventilation and Air-conditioning																																			
Mech 22 - Exhaust Fan - Parkade - Propellor																																			
R01	Cyclical replacement of motors, fan blades and bearings on supply and exhaust fans, as required.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•			•
R02	Rebuild of supply and exhaust fans, as required.	20 Yrs	$2,000	2023	$2,200							•																				•			
Mech 23 - Exhaust Fan - Small Service - Cabinet																																			
R01	Cyclical replacement of failed or damaged general purpose exhaust fans, as required.	6 Yrs	$1,500	2018	$1,500		•						•						•						•						•				
Mech 24 - Outdoor Air Handler - Makeup Air - Gas																																			
J01	Motor mount - Inspect for damage, cracks or corrosion.	2 Yrs	$0	2019	$0			•		•		•		•		•		•		•		•		•		•		•		•		•		•	
J02	Conduct measurements and assessment of indoor air quality (IAQ) to ensure that desirable levels are being attained.	5 Yrs	$0	2018	$0		•					•					•					•					•					•			
R01	Cyclical replacement of pulleys and motors and vibration isolation, as required.	8 Yrs	$0	2019	$0			•								•								•								•			
R02	Cyclical rebuild or replacement of make-up air units.	20 Yrs	$25,000	2023	$28,000							•																				•			
Other																																			
Mech 25 - Overhead Gate Motor																																			
R01	Replace overhead door motors and operators, as required.	7 Yrs	$2,500	2019	$2,600			•							•							•							•						

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Elevator																																			
Hydraulic																																			
Elev 01 - Hydraulic Elevator, Double Bottom																																			
J01	Check and test overload device.	2 Yrs	$0	2013																															
J02	Conduct full load performance test.	2 Yrs	$0	2013																															
R01	Replace elevator cylinder.	50 Yrs	$0	2053	$0																														
R02	Replace elevator controls, tank unit, and valve. Upgrade elevator cab interior.	25 Yrs	$70,000	2028	$85,000												•																		
Car Interiors																																			
Elev 02 - Elevator Cab & Hoistway																																			
R01	Replace elevator operating and signal fixtures, replace door operator, install rupture valve.	15 Yrs	$40,000	2023	$44,000							•															•								

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Fire Safety																																			
Controls																																			
Fire 01 - Fire Alarm Panel																																			
J01	Replace battery packs for fire alarm control panels.	5 Yrs	$400	2021	$420					•					•					•					•					•					•
R01	Replace battery packs.	5 Yrs	$250	2021	$270					•					•					•					•					•					•
R02	Replace fire alarm annunciator panels and control panel, excluding field wiring and field devices.	20 Yrs	$20,000	2023	$22,000							•																			•				
Detection																																			
Fire 02 - Fire Detection & Alarm																																			
R01	Cyclical replacement of speakers, heat detectors, smoke detectors and related modules, excluding field wiring.	10 Yrs	$2,880	2026	$3,400										•										•										•
Suppression																																			
Fire 03 - Fire Hydrant																																			
J01	Repaint exterior hydrant cap, bonnet and body for sufficient identification.	8 Yrs	$100	2019	$100			•								•								•											
J02	Lubricate cap threads with light white grease.	8 Yrs	$0	2019	$0			•								•								•											
R01	Replace fire hydrants. Not normally part of Common property asset. Municipally owned and maintained.	40 Yrs	$10,000	2043	$16,000																											•			
Fire 04 - Dry Sprinkler Compressor																																			
R01	Replace fire sprinkler compressor.	14 Yrs	$2,000	2019	$2,000			•													•														
Fire 05 - Portable Fire Extinguisher																																			
J01	Conduct hydrotest on fire extinguishers.	12 Yrs	$2,000	2019	$2,000			•												•												•			
R01	Cyclical replacement of fire extinguishers.	12 Yrs	$1,040	2027	$1,200											•											•								
Fire 06 - Sprinkler & Standpipe - Wet																																			
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground.	5 Yrs	$0	2021	$0					•					•					•					•					•					•

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Fire Safety																																			
J02	Sprinkler Heads - Test extra high temperature on sprinkler heads.	5 Yrs	$0	2021	$0					•					•					•					•					•					•
R01	Phased replacement of sprinkler zone control valves, as required.	20 Yrs	$0	2023	$0							•																				•			
R02	Renew compromised portions of piping, gaskets, connections, valves, devices and trim to maintain required function.	5 Yrs	$2,260	2023	$2,500							•					•					•					•					•			
R03	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 at the 50th anniversary, in accordance with NFPA 25.	10 Yrs	$1,356	2053	$2,700																														
R04	Replace entire system including risers, branch piping, valves, heads, swaybracing, and all related trim, back to Sprinkler Room.	100 Yrs	$45,202	2103																															
Fire 07 - Sprinkler System - Dry																																			
J01	Sprinkler Piping - Conduct flow test on piping, both exposed and underground.	5 Yrs	$0	2021	$0					•					•					•					•					•					•
J02	Sprinkler Heads - Test extra high temperature on sprinkler heads.	5 Yrs	$0	2021	$0					•					•					•					•					•					•
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.	10 Yrs	$367	2023	$410							•										•										•			
R02	Replace damaged sprinkler heads, hangers and leaking gaskets, cages, sway-braces, drains etc as required.	5 Yrs	$612	2053	$1,200																														
R03	Replace entire system including risers, branch piping, valves, heads, swaybracing, and all related trim, back to Sprinkler Room.	100 Yrs	$24,486	2103																															
Fire 08 - Sprinkler Valve Assembly - Dry																																			
R01	Phased replacement of sprinkler zone control valves, as required.	20 Yrs	$0	2023	$0							•																				•			
R02	Replace gaskets in dry sprinkler valves.	20 Yrs	$0	2023	$0							•																				•			
R03	Rebuild dry sprinkler valves.	20 Yrs	$4,000	2023	$4,400							•																				•			
R04	Replace sprinkler valves, as required.	40 Yrs	$3,000	2043	$4,900																											•			
Egress																																			
Fire 09 - Emergency Egress Equipment																																			
R01	Cyclical replacement of batteries and lamps in DC battery packs.	5 Yrs	$0	2021	$0					•					•					•					•					•					•
R02	Cyclical replacement of LED exit signs.	15 Yrs	$3,000	2026	$3,500										•															•					

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Interior Finishes																																			
Floors																																			
Finish 01 - Porcelain Floor Tile																																			
J01	Recolour or replace tile grout as required.	12 Yrs	$0	2020	$0				•												•														
R01	Renew porcelain tile floor.	40 Yrs	$7,480	2043	$12,000																											•			

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Interior Finishes																																			
Finish 02 - Sheet Carpet																																			
R01	Renew carpet.	10 Yrs	$22,000	2026	$26,000										•										•										•
Walls																																			
Finish 03 - Paint																																			
R01	Repaint interior wall in high traffic area, as required.	5 Yrs	$0	2021	$0					•										•										•					
R02	Re-coat painted wall surface including preparation of substrate.	10 Yrs	$16,050	2026	$19,000										•										•										•
Ceilings																																			
Finish 04 - Spray Texture																																			
R01	Re-coat spray textured ceiling.	20 Yrs	$6,400	2026	$7,500										•																					•
Doors																																			
Finish 05 - Interior Swing Door - General																																			
J01	Lubricate door hinges. [Frequency to be determined by traffic wear and environmental exposure conditions.]	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•			•
J03	Repaint door and frame in high-traffic locations as required.	8 Yrs	$0	2019	$0			•								•								•								•			
J04	Rekey master door cylinders and issue new master keys to facility staff.	5 Yrs	$0	2021	$0					•					•					•					•					•					•
R01	Locally replace interior swing door as required.	40 Yrs	$8,000	2043	$13,000																											•			

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Amenities																																			
Equipment																																			
Amen 01 - Computer Equipment																																			
R01	Replace components of electronic equipment.	6 Yrs	$2,000	2023	$2,200							•						•						•						•					
Specialties																																			
Amen 02 - Metal Screen Storage Locker																																			
R01	Repair or replace metal storage lockers, as required.	25 Yrs	$5,000	2028	$6,100												•																		
Furnishings																																			
Amen 03 - Bicycle Rack																																			
J01	Touch up painting of bike racks, as required.	5 Yrs	$0	2021	$0					•					•					•							•					•			
R01	Replace bicycle racks, as required.	30 Yrs	$2,400	2033	$3,200																	•													
Amen 04 - Central Mailbox																																			
J01	Lubricate locks and hinges.	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•			•		•		•		•		•		•	
J02	Rekey cylinder on master lock.	5 Yrs	$300	2021	$320					•					•					•							•					•			
R01	Replace central mail boxes as required.	30 Yrs	$6,000	2033	$8,100																	•													
Amen 05 - Public Signage																																			
R01	Replace damaged and outdated signage, as required.	25 Yrs	$2,000	2028	$2,400												•																		

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Amenities																																			
Suite																																			
Amen 06 - Furniture & Accessories																																			
R01	Cyclical replacement of furnishings within the suites, as required.	15 Yrs	$3,000	2031	$3,900															•															•

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Sitework																																			
Sitework																																			
Site 01 - Aluminum Site Guardrail [S]																																			
J01	Review all metal finishes. Touch up paint as required. [Refer to guardrail paint finish warranty if applicable.]	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•			•		•		•		•		•		•	
J02	Review guardrails for structural adequacy including attachments.	10 Yrs	$0	2018	$0		•										•															•			
R01	Replace exterior guardrails.	30 Yrs	$15,300	2033	$21,000																	•													
Hard Landscaping																																			
Site 02 - Concrete Block Retaining Wall																																			
R01	Reconstruct sections of concrete block retaining walls.	10 Yrs	$5,000	2023	$5,500							•										•													
R03	Concrete block retaining walls are not deemed as a renewable asset. Localized replacement is included as a component of this Asset.	40 Yrs	$0	2043	$0																													•	
Site 03 - Asphalt Paving [S]																																			
R01	Reapply traffic markings on roadways.	5 Yrs	$1,020	2020	$1,100				•					•					•					•					•						
R02	Repave sections of asphalt paving, including sub-grade as required.	10 Yrs	$6,242	2033	$8,400																	•													
R04	Repave sections of asphalt paving, including sub-grade as required.	40 Yrs	$62,424	2043	$100,000																													•	
Site 04 - Concrete Paving																																			
R01	Replace sections of concrete paving, as required.	10 Yrs	$3,000	2033	$4,000																	•													
R03	Replace concrete paving, as required.	40 Yrs	$9,000	2043	$15,000																													•	
Site 05 - Interlocking Unit Paving [S]																																			
R02	Rebuild sections of interlocking paving, including sub-grade, as required.	10 Yrs	$7,589	2023	$8,400							•										•													
R03	Interlocking paving is not deemed as a renewable Asset. Localized replacement is included as a component of this Asset.	40 Yrs	$0	2043	$0																													•	
Site 06 - Timber Retaining Wall [S]																																			
R01	Replace sections of timber retaining wall, as required.	5 Yrs	$510	2023	$560							•										•					•								
R02	Replace sections of timber retaining wall, as required.	25 Yrs	$5,100	2028	$6,200												•																		
Site 07 - Wood Perimeter Fencing [S]																																			
R03	Replace wood perimeter fencing.	20 Yrs	$9,563	2023	$11,000							•																							
Site 08 - Wood Trellis																																			
R01	Repaint/recoat wood trellises.	6 Yrs	$5,000	2019	$5,100			•										•						•						•					
R03	Replace components of trellis/gazebo structures.	5 Yrs	$2,000	2019	$2,000			•									•					•					•								

Capilano Ridge - Apartment

	Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046
Sitework																																			
R04	Rebuild trellis structures.	20 Yrs	$10,000	2023	$11,000							•																			•				
Soft Landscaping																																			
Site 09 - Irrigation System [S]																																			
J01	Replace the back-up battery in the timer/controller.	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•		•		•		•		•		•		•		•
R01	Cyclical replacement of components of irrigation sprinkler system, as required.	15 Yrs	$2,550	2019	$2,600			•															•												
Site 10 - Soft Landscaping [S]																																			
J01	Apply pre-emergent herbicides in accordance with municipal regulation (Feb & Sep).	2 Yrs	$0	2018	$0		•		•		•		•		•		•		•		•		•		•		•		•		•		•		•
J02	Clearance pruning of trees of large shrubs.	3 Yrs	$0	2019	$0			•			•			•			•			•			•			•			•			•			•
R01	Renovate sections of the soft landscaping, as required.	15 Yrs	$8,548	2030	$11,000														•															•	
Site Services																																			
Site 11 - Electrical Site Services [S]																																			
R01	Replace underground electrical services.	50 Yrs	$15,912	2053	$32,000																														
Site 12 - Underground Drainage Services [S]																																			
J01	Powerflush underground drainage piping to clear and remove any buildup of debris.	10 Yrs	$653	2020	$680				•										•										•						
J03	Inspect underground drainage piping by video camera for condition and performance.	5 Yrs	$653	2020	$680				•					•					•				•						•					•	
R01	Replace underground drainage services.	50 Yrs	$42,432	2053	$85,000																														
Site 13 - Underground Natural Gas Service [S]																																			
R01	Replace underground drainage services.	50 Yrs	$42,432	2053	$85,000																														
Site 14 - Underground Sanitary Sewer Services [S]																																			
J01	CCTV length of services for inspection of condition and function.	5 Yrs	$497	2020	$520				•					•					•				•						•					•	
J02	Powerflush underground sanitary drains to remove buildup and debris.	10 Yrs	$497	2020	$520				•										•										•						
R01	Replace 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.	50 Yrs	$25,857	2053	$52,000																														
Site 15 - Underground Water Services with Copper Piping [S]																																			
R01	Replace underground water services, hydrants, valves and connections.	40 Yrs	$42,432	2053	$85,000																														