

# Wedgewood Park Strata

1437 Foster Street

White Rock BC

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June 7, 2014

Dear Owners;

Please find attached the final version of the Depreciation Report which provides information on the status of our common and limited common property. The report is intended to help the owners and strata council make informed decisions about the allocation of resources to our property assets (such as the roof, windows, boilers, building envelope etc.).

Council considers the report to be a guide only and the dates and timelines in the report are not firm, but they are a guideline as to when we should be preparing to repair or replace a particular asset. The report may be over whelming on first read, but remember the purpose of this document is for financial planning to help us prepare for major upgrades.

We all know that this is an aging building and while we have been doing regular maintenance there are some major projects that will require attention over the next 10 - 20 years. Owners should remember that if they owned a standalone home, these projects would be required at some point if their home was 35+ years old. The key to managing these projects is for Council and owners to be proactive and plan ahead. Council believes that before a project is undertaken we should obtain a detailed assessment of need.

All projects and planned work will be approved either through Special General Meetings or at the AGMs as these items will most likely require special levies. Our contingency fund is very low (\$60,861) in comparison to what is needed to cover the cost of these projects.

Council will begin gathering information and quotes on work required for projects that might be done in 2015 and will bring this information to the AGM in December. The final approval of any project work for 2015 would be done at the AGM in December, once owners are fully informed of the costs.

The one project that is required by law to be done by October 2015 is the upgrade of the elevator. Richmond Elevator Maintenance identified the need and provided a quote in 2011. At that time, Otis elevator was also contacted by Council and they were informed that we did not need the upgrade. Your present Council will be seeking a third independent opinion as to the need for the elevator upgrade and then will put out an RFP for this work if needed. Richmond Elevator Maintenance is willing to honor their quote from 2011, which is \$59,321. Council will obtain at least two additional quotes for this work and will bring the quotes and financing options to the owners at the December AGM.

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In addition to the elevator upgrade, Council will obtain an assessment and quotes if necessary for the fire panel and devices as they relate directly to building safety. The timing of this project will be dependent on the assessment. This information will be brought to the owners at the December AGM.

The findings of these assessments will be discussed and decided upon at the December AGM. The building enclosure condition assessment will be done in 2016 or later, unless we start having failures of the envelope. Again, this will require owner approval to move forward with this project.

In addition to these major projects owners are reminded that we are committed to ongoing maintenance such as our roofing project , which will extend the life of the roof hopefully for another 10 years. Ongoing maintenance is built into our annual budgets, also approved at our AGM.

Today, each owner is being provided one copy of the report and owners are free to make additional copies at their own expense. The report will also be available early next week on the Baywest website to download free of charge.

Council will be holding an 'Information Meeting' to review the depreciation report early Fall to discuss the full report. It is important that Council has the input of all owners as we move ahead.

Please put your questions and concerns in writing and either email them to [Wedgewoodparksc@gmail.com](mailto:Wedgewoodparksc@gmail.com) or place them in the strata mailbox in the lobby.

Looking forward to working together to keep our building up to date and safe.

Sincerely

Strata Council

# 2014 Depreciation Report

Wedgewood Park, 1437 Foster Street, White Rock, BC



SUBMITTED TO The Owners, Strata Plan NW307  
C/O Ms. Joan Cantwell, Property Manager  
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PROJECT # 6424.00

DATE June 5, 2014

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# 1. Introduction

RDH Building Engineering Ltd. (RDH) was retained by The Owners, Strata Plan NW307 (the Owners) to prepare a Depreciation Report (the Report) for the building known as Wedgewood Park, located at 1437 Foster Street, White Rock, BC. The Report considers the common property and limited common property components (the Assets) that the Strata Corporation is responsible to maintain, repair and replace.

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

A site visit was completed on November 5, 2013, and the financial data is based on the 2013/2014 fiscal year. A draft report was distributed to the strata council and strata management on March 7, 2014. The report was later updated to reflect the feedback from the strata council and was issued on June 5, 2014.

The Depreciation Report is a synopsis of many hundreds of pages 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.

In addition to the Report, the supporting data are available to authorized users through RDH's interactive Building Asset Management Services (BAMS) software, posted on a secure website. The data is owned by the Strata Corporation and can be printed and/or exported on request. RDH has developed the interactive software tool to enable Owners to proactively manage their funding requirements and maintenance obligations, and a variety of other services in addition to the Depreciation Report are available.

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.

## 2. Wedgewood Park

Wedgewood Park is a 39 year old, low-rise strata building. The building is typically of wood-framed construction built over a concrete parkade.

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

Key physical parameters of Wedgewood Park are summarized in Table 2.1.1 below.

Table 2.1.1 Key Physical Parameters


Parameters, including age and size		
	Date of first occupancy (approximate)	1975
	Approximate gross floor area (Square Feet)	70,600
	Total Area of Unit Entitlement	100,000
	Stories above grade	3-4
	Total number of strata lots	39

Fig. 2.1.2 Wedgewood Park – North elevation



Fig. 2.1.3 Aerial photo of Wedgewood Park (Imagery ©2014 Bing, Map data © 2014 Bing)



### 3. Assessments

Depreciation Reports combine 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 Fig. 3.1 below:

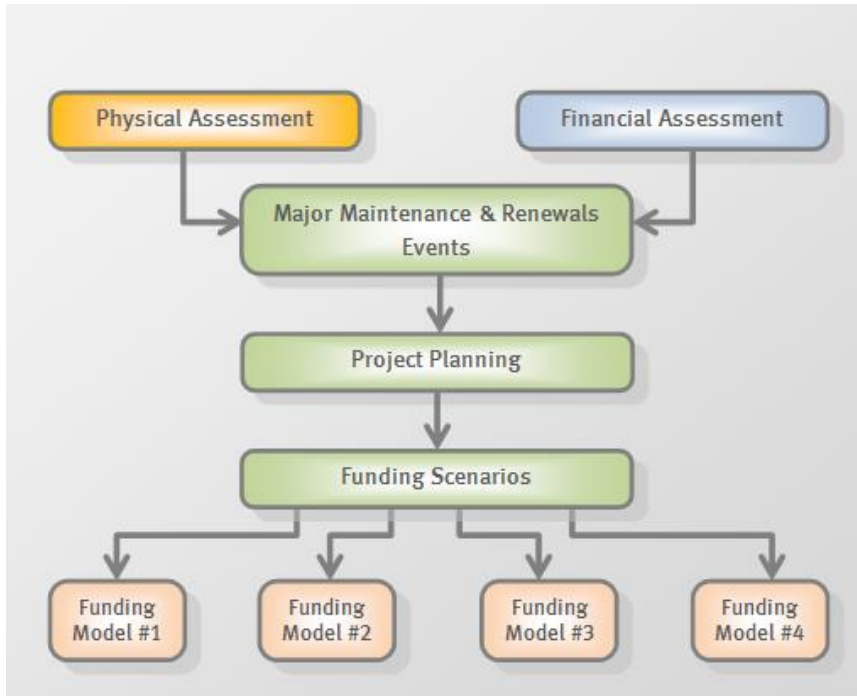


Fig. 3.1 Depreciation Report Process

*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,
- Discussions with Strata Corporation representatives,
- A visual review of the building, limited to a sample of readily accessible Assets, and

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

Destructive testing, disassembly, and performance testing are not included in the physical evaluation; this report does not replace a Warranty Review or Condition Assessment. Please visit [www.rdhbe.com](http://www.rdhbe.com) for additional information on Warranty Reviews and Condition Assessments.

Failure 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.

Wedgewood Park has undertaken several large renewal projects, and key systems such as enclosure and mechanical are comparable to newer buildings.

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 is summarized in Table 3.1.1 below. The history establishes the chronological age of the Assets.

Table 3.1.1 Maintenance and Renewals History

Description	Description
<p><b>Building Enclosure</b></p> <ul style="list-style-type: none"> <li>→ 2003 – Replacement of SBS roof</li> <li>→ 2003 – Replacement of asphalt shingle roof</li> <li>→ 2003 – Replacement of roof deck membranes and wood decking</li> <li>→ 2003 – Repainting of wood trim</li> <li>→ 2005 – Repainting of stucco cladding</li> <li>→ 2011 – Localized replacement of balcony membranes</li> <li>→ 2012 – Replacement of structural wood column</li> <li>→ 2014 – Inspection and localized repairs to SBS roof</li> <li>→ Ongoing – Enclosing of various balconies, pending council’s approval</li> </ul>	<p><b>Mechanical</b></p> <ul style="list-style-type: none"> <li>→ 1986 – Replacement of boiler</li> <li>→ 2007 – Replacement of boiler controller</li> <li>→ 2008 – Replacement of expansion tank</li> <li>→ 2010 – Replacement of rooftop make up air units</li> <li>→ 2011 – Replacement of circulating pumps</li> <li>→ 2011 – Replacement of sump pump</li> <li>→ 2011 – Replacement of parking garage gate</li> <li>→ 2012 – Replacement of hot water storage tank</li> </ul>
<p><b>Amenities</b></p> <ul style="list-style-type: none"> <li>→ 2004 – Replacement of common area furniture</li> <li>→ 2009 – Replacement of mailboxes</li> </ul>	<p><b>Elevator</b></p> <ul style="list-style-type: none"> <li>→ 2010 – Resealing of elevator shaft</li> </ul>
<p><b>Electrical</b></p> <ul style="list-style-type: none"> <li>→ 2013 – Rebuilding of emergency generator</li> <li>→ 2014 – Replacement of enterphone</li> </ul>	<p><b>Sitework</b></p> <ul style="list-style-type: none"> <li>→ 2007 – Replacement of concrete pavement at front entrance</li> <li>→ 2012 – Reapplication of skim coat and resealing of concrete pavement</li> </ul>
<p><b>Interior Finishes</b></p> <ul style="list-style-type: none"> <li>2005 – Replacement of carpet flooring</li> </ul>	



On November 5, 2013 a representative of RDH Building Engineering Ltd. visited the site to visually review the Assets. In addition, a sub-consultant reviewed the elevator. While the Depreciation Report does not constitute a maintenance review or condition assessment, some observations regarding the general condition, design and construction of the Assets were made as part of the visual review. These observations were used to determine a reasonable estimated remaining service life of various assets. Table 3.1.2 includes examples of some observations made during the review.

Table 3.1.2 Observations by System

System	Observation
Building Enclosure	<ul style="list-style-type: none"> <li>••• The stucco-clad walls are constructed as a face-sealed wall assembly.</li> <li>••• The sloped asphalt shingle roofs were replaced in 2003 and appeared to be in good conditions, at the time of our site review.</li> <li>••• Evidence of localized water ingress on the ceiling of the parkade. Crack injection repairs have been completed.</li> </ul>
Elevator	<ul style="list-style-type: none"> <li>••• The existing single bottom hydraulic elevator cylinder is not coated and/or protected from corrosion.</li> </ul>
Fire Safety	<ul style="list-style-type: none"> <li>••• It's our understanding that the fire panel is original to the building and based on its age, it is likely reaching technological obsolescence; therefore making it challenging to locate parts and components.</li> </ul>

The general design of the building results in some wall areas with exposure to wetting. The stucco cladding is constructed as a face-sealed assembly, which generally does not perform well in locations with a high exposure to wetting. The maintenance the Strata Corporation has performed to date, including regular repainting may aid in achieving or even exceeding the anticipated service life; however periodic reviews and condition assessments are recommended to confirm the performance of the cladding and adjacent components.

### 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 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.

The financial assessment begins with a review of the current financial situation of the Strata Corporation. Table 3.2.1 below summarizes the key financial parameters reviewed as part of the financial assessment.

Table 3.2.1 Key Financial Parameters

Parameter	Initial Study (2014)
Fiscal Year End	December 31
Building Reproduction Cost	\$7,160,000
Operating Budget (excluding CRF contribution)	\$150,787
Annual CRF Allocation (2014)	\$7,550
Accumulated CRF Balance	\$65,000

\* *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 current as of the July 31, 2013.*

Depreciation Reports 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 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 ( $\pm 50\%$ ), as defined by the Association of Professional Engineers and Geoscientists of BC (APEG BC). 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 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 through the online BAMS software. Please contact the strata council or strata manager for additional information on how to access and view this information.

## 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 or five years (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

Wedgewood Park is now approximately 39 years old, and has replaced a number of building enclosure and mechanical assets (please see Table 3.1.1 on page 4 for a detailed list of projects). However, additional renewal expenditures can be still anticipated in the next 10 years. Table 4.1.1 below summarizes all major maintenance and renewal costs by system, including costs forecast for the next 30 years.

Table 4.1.1 Capital expenditures summary by system.

System	10 year capital costs (without inflation)	30 year capital costs (without inflation)	30 year capital costs (with inflation)
Building Enclosure	\$1,027,000	\$1,843,000	\$2,304,000
Electrical	\$30,000	\$41,000	\$49,000
Mechanical	\$332,000	\$487,000	\$592,000
Elevator	\$87,000	\$174,000	\$201,000
Fire Safety	\$45,000	\$90,000	\$116,000
Interior Finishes	\$82,000	\$172,000	\$226,000
Amenities	\$5,000	\$12,000	\$15,000
Sitework	\$22,000	\$68,000	\$86,000
<b>Building Total</b>	<b>\$1,630,000</b>	<b>\$2,887,000</b>	<b>\$3,589,000</b>

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.

Approximately 56% of the Strata Corporation’s capital expenditures will occur in the next 10 years. The distribution of capital expenditures over the next 10 years is shown in Fig. 4.1.2 below.

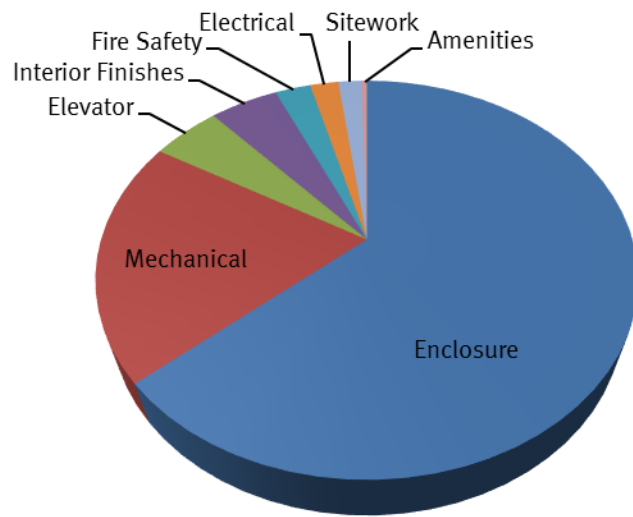


Fig. 4.1.2 Distribution of estimated capital expenditures over 10 years by system.

## 5. Major Maintenance and Renewals Planning

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 (Fig. 5.1.1). The red bars represent the estimated value of capital costs.

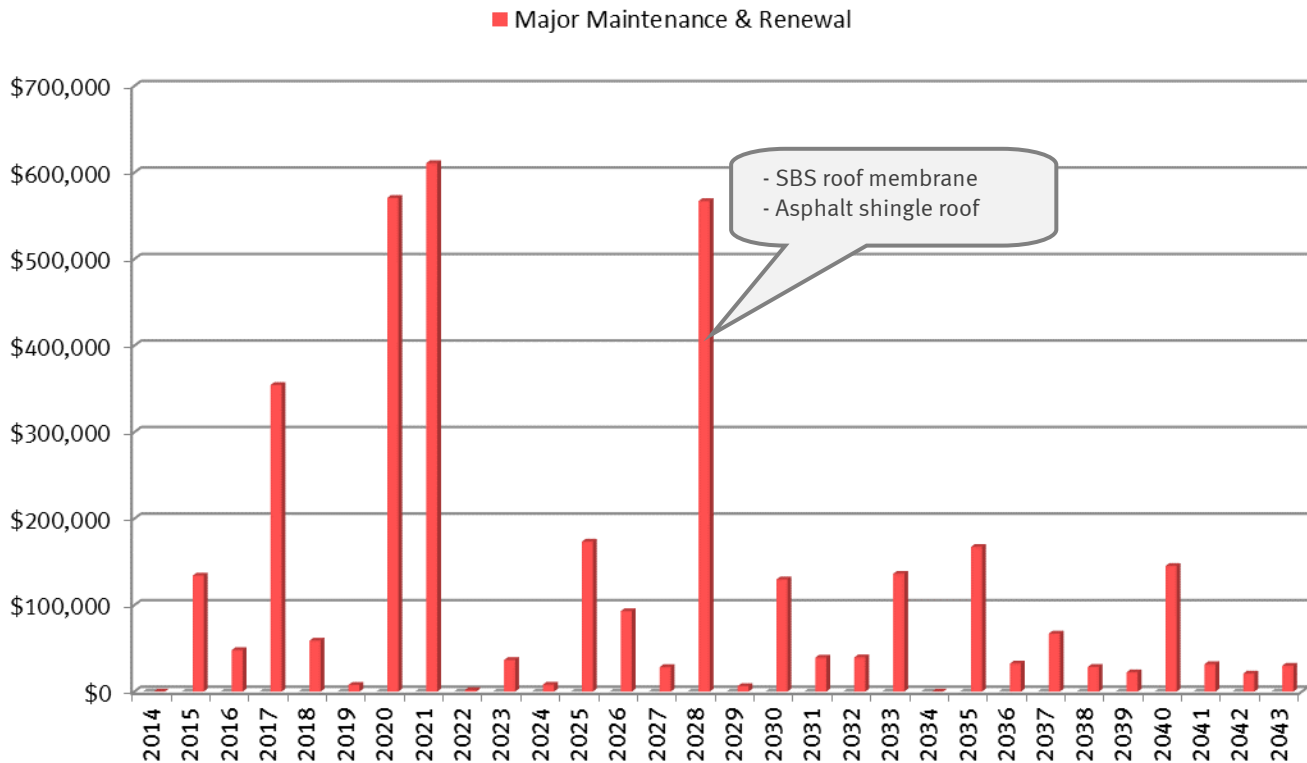


Fig. 5.1.1 Strategic Forecast (30 Years), showing the approximate timing and value of some key capital expenditures.

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 large renewal projects 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 a reasonable estimate of future projects. The actual timing of projects may 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 (Fig. 5.2.1). 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 some renewals and major maintenance activities forecast for that year. Soft costs associated with project implementation, such as site access, design, contract administration etc.

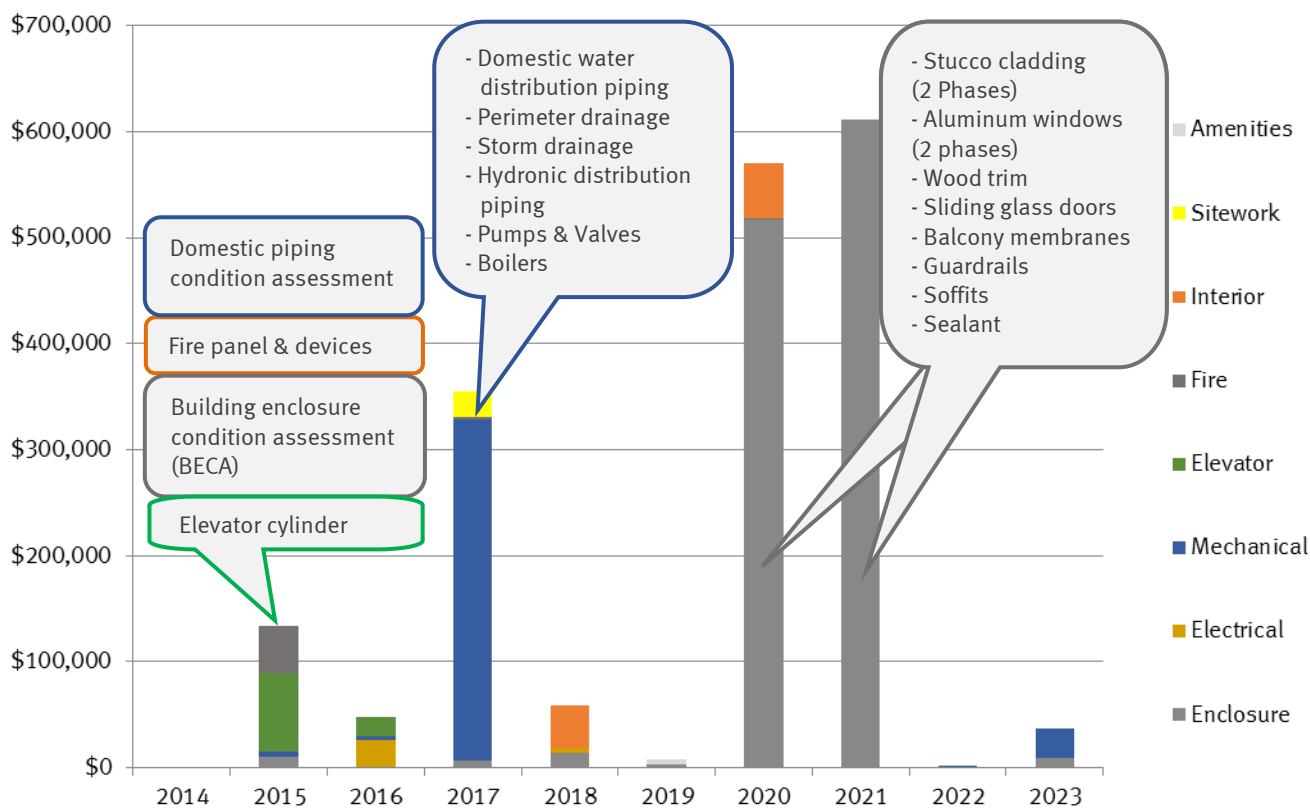


Fig. 5.2.1 Tactical Forecast (10 years), showing the approximate timing and value of some key capital expenditures.

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, Table 5.2.1 below categorizes some of the activities forecast for the next 10 years into different management strategies: Major maintenance, condition based renewals, and time based renewals. The categories are based on the risks associated with failure of an Asset. The list below is not comprehensive; more detailed information is available to the Strata Corporation.



Table 5.2.1 Summary of key projects within the tactical plan.

Category and activities
<p><b>Major Maintenance</b></p> <p>Major maintenance projects are intended to preserve the assets to achieve their full design life, and typically occur on a regular, predictable basis.</p> <ul style="list-style-type: none"> <li>•••• Replacement of exterior sealant</li> <li>•••• Cleaning, repointing and resealing of brick cladding</li> <li>•••• Augering and hydro-flushing of drain lines, including in-camera scoping survey, as required</li> <li>•••• Cyclical replacement of insulated glazing units (IGUs), as required</li> <li>•••• Updating of the Depreciation Report every three years</li> <li>•••• Commissioning of a domestic water distribution piping condition assessment</li> <li>•••• Commissioning of a building enclosure condition assessment (BECA) to confirm the remaining useful service life of the building enclosure assets such as stucco cladding</li> </ul>
<p><b>Condition Based Renewals</b></p> <p>Assets are kept in service as long as possible, but the intent is to replace them before they fail.</p> <p>Condition based strategies require Assets be periodically reviewed in detail, potentially with some destructive testing, in order to predict when failure is likely. The actual timing of renewals in this category may be determined by the results of an assessment, or by other project planning considerations.</p> <ul style="list-style-type: none"> <li>•••• Phased replacement of stucco cladding, based on the results of a building enclosure condition assessment</li> <li>•••• Phased replacement of aluminum framed windows</li> <li>•••• Localized replacement of doors</li> <li>•••• Replacement of balcony membranes</li> <li>•••• Replacement of aluminum guardrails</li> <li>•••• Replacement of domestic water distribution piping</li> <li>•••• Replacement of perimeter drainage, as required</li> <li>•••• Replacement of domestic hot water boilers, as required</li> <li>•••• Replacement of electrical distribution equipment, as required</li> <li>•••• Cyclical replacement of miscellaneous pumps and valves, as required</li> <li>•••• Replacement of interior finishes, as required</li> <li>•••• Replacement of sections of soft landscaping, as required</li> </ul>
<p><b>Time Based Renewals</b></p> <p>Assets are replaced on a regular, time based schedule.</p> <p>This strategy is used when there is low tolerance for failure or out of service conditions. Components, materials or assemblies are typically replaced or refurbished at fixed intervals.</p> <ul style="list-style-type: none"> <li>•••• Replacement of fire panel and associated devices.</li> <li>•••• Replacement of the single bottom elevator cylinder.</li> </ul>

In addition to the three categories mentioned above, the Strata Corporation may also elect to replace some Assets only once they have failed, or upon imminent failure. This strategy is known as *run to failure*. This strategy is only appropriate when failure does not create a safety hazard, will not result in damage to other property, and does not affect the operations of the building. The Strata Corporation should still have funds available to replace assets within this category.

### 5.3. Operational Planning Horizon

Consideration should be given by the Strata Corporation towards reviewing and/or replacing the existing single bottom elevator cylinder and replacing the existing fire alarm panel/associated field devices. In addition, the commissioning of a building enclosure condition assessment (BECA) and a domestic plumbing assessment should be completed in order to evaluate the specific conditions of the enclosure and piping assets.

### 5.4. Project Implementation

The projects identified in the previous section represent a preliminary step, and 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 ( $\pm 50\%$ ) 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 trades 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 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 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 choose the CRF contribution they prefer.

### 6.1. Minimum Funding Requirements

The Strata Property Act Regulations dictates that if the CRF closing balance is less than 25% of the operating budget, then the Strata Corporation must contribute either the difference between the balance and 25% of the operating budget, or up to 10% of the operating budget (*Strata Property Act Regulation*, BC Reg 43/2000, Ch. 6.1). Table 6.1.1 below shows the calculation to confirm the Strata Corporation meets the minimum requirements set out in the Strata Property Act Regulation.

Table 6.1.1 Minimum Funding Requirement Calculation

Parameter	Value
2013 annual operating budget (not including CRF contribution)	\$ 150,787
<ul style="list-style-type: none"> <li>25% of the annual operating budget</li> </ul>	\$ 37,697
<ul style="list-style-type: none"> <li>10% of the annual operating budget</li> </ul>	\$ 15,079
2013 CRF closing balance (as of July 2013)	\$ 65,000
2013 CRF Contribution	\$ 7,550
Will the CRF closing balance exceed 25% of the annual operating budget at the end of the fiscal year?	Yes
Does the CRF contribution exceed 10% of the annual operating budget?	No

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 mitigate the financial hardship by reducing 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. The scenarios allow the Strata Corporation to evaluate how changes to the contingency reserve fund impact the number and size of special levies; however the actual size and timing of special levies will be affected by how the Strata Corporation chooses to implement the renewal projects.

- **Statutory Reserve Allocation.** The CRF allocation required to meet the statutory requirements in BC, as described in section 6.1 above. For comparison purposes, the table below shows the amount equal to 10% of the operating budget, this is the maximum that would be allocated to the reserve fund annually under this scenario.
- **Current (2014) Reserve Allocation.** 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 Reserve Allocation.** An incremental increase from the current funding level. This alternative is just one of many possible scenarios for a new funding level in the next fiscal year.
- **Progressive Reserve Allocation.** 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 that most Strata Corporations will not meet and is provided for reference purposes.

Table 6.2.1 Comparison of Different Funding Scenarios

	Statutory	Current (2014)	Alternative	Progressive Reserve
Annual CRF allocation	\$0 to \$15,079	\$7,550	\$30,000	\$140,000
Percent of progressive reserve	11 %	5 %	21 %	100 %
CRF contribution per unit of unit entitlement				
Per month	\$0 to \$0.01	\$0.01	\$0.03	\$0.1
Per year	\$0 to \$0.15	\$0.08	\$0.30	\$1.4
CRF contribution per average strata lot				
Per month	\$0 to \$32	\$16	\$64	\$299
Per year	\$0 to \$384	\$192	\$768	\$3,588
Approximate number of special levies (over next 30 years)	24	27	20	1
Approximate value of special levies (over next 30 years)	\$3.2M	\$3.4M	\$2.7M	\$0.6M
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 model.

### 6.3. Statutory Funding Scenario

The first scenario is based on the minimum funding level required by the Strata Property Act Regulation, as described in section 6.1 above. The scenario is based a variable annual CRF contribution over the 30-year planning horizon; when the CRF closing balance is greater than 25% of the estimated operating budget, no funds are deposited into the CRF.

Table 6.3.1 Statutory Funding Model: Cash Flow Table

Fiscal Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Closing Balance
2014	\$64,000	\$0	\$0	\$1,280	\$0	\$2,000	\$63,280
2015	\$63,280	\$0	\$71,604	\$1,266	\$134,150	\$2,000	\$0
2016	\$0	\$15,079	\$34,921	\$0	\$48,000	\$2,000	\$0
2017	\$0	\$15,079	\$341,421	\$0	\$354,500	\$2,000	\$0
2018	\$0	\$15,079	\$45,821	\$0	\$58,900	\$2,000	\$0
2019	\$0	\$15,079	\$0	\$0	\$7,800	\$2,000	\$5,279
2020	\$5,279	\$15,079	\$552,127	\$106	\$570,590	\$2,000	\$0
2021	\$0	\$15,079	\$597,721	\$0	\$610,800	\$2,000	\$0
2022	\$0	\$15,079	\$0	\$0	\$1,800	\$2,000	\$11,279
2023	\$11,279	\$15,079	\$12,017	\$226	\$36,600	\$2,000	\$0

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.

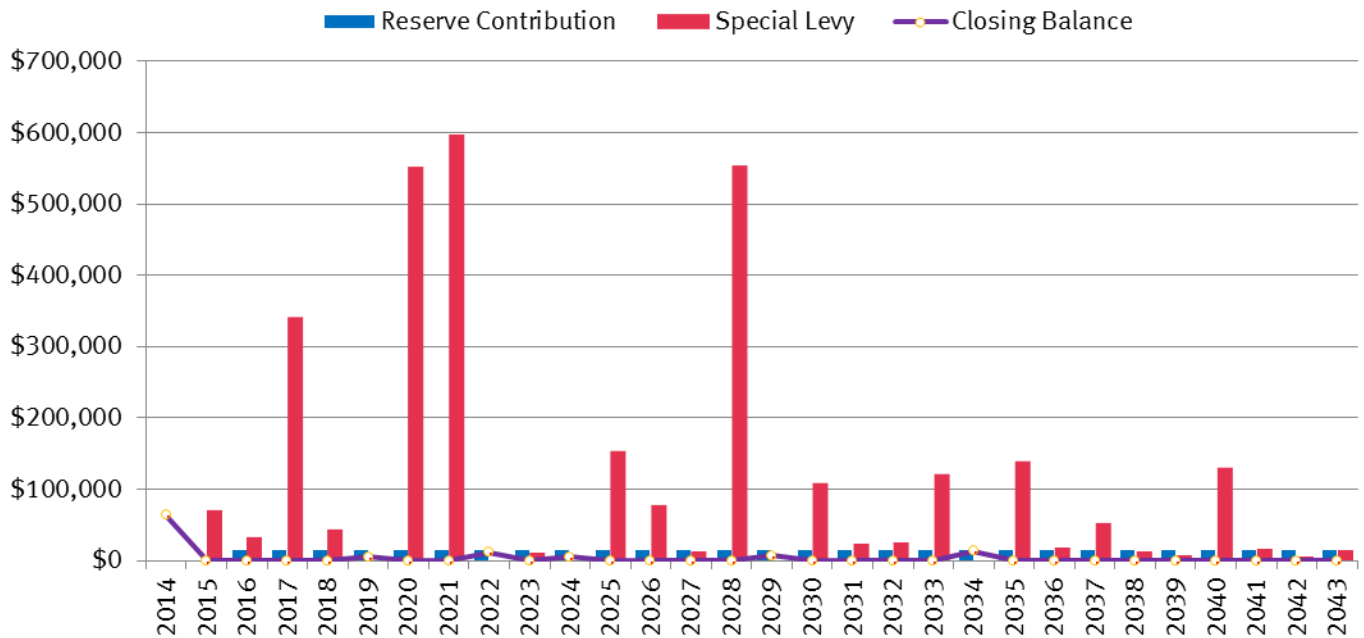


Fig. 6.3.1 CRF balance, contribution and special levies based on the statutory minimum funding.

The minimum CRF contributions required by the Strata Property Act Regulation will result in numerous special levies, and is generally not considered adequate as a long-term funding strategy.

## 6.4. Current (2014) Funding Scenario

The current funding scenario is based on the CRF contribution approved by the Owners at the last annual general meeting for the 2014 fiscal year. The scenario is based on a fixed annual CRF contribution (no increases).

Table 6.4.1 Current (2014) Funding Model: Cash Flow Table

Fiscal Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Closing Balance
2014	\$64,000	\$7,550	\$0	\$1,280	\$0	\$2,000	\$70,830
2015	\$70,830	\$7,550	\$61,353	\$1,417	\$134,150	\$2,000	\$5,000
2016	\$5,000	\$7,550	\$42,350	\$100	\$48,000	\$2,000	\$5,000
2017	\$5,000	\$7,550	\$348,850	\$100	\$354,500	\$2,000	\$5,000
2018	\$5,000	\$7,550	\$53,250	\$100	\$58,900	\$2,000	\$5,000
2019	\$5,000	\$7,550	\$2,150	\$100	\$7,800	\$2,000	\$5,000
2020	\$5,000	\$7,550	\$564,940	\$100	\$570,590	\$2,000	\$5,000
2021	\$5,000	\$7,550	\$605,150	\$100	\$610,800	\$2,000	\$5,000
2022	\$5,000	\$7,550	\$0	\$100	\$1,800	\$2,000	\$8,850
2023	\$8,850	\$7,550	\$27,023	\$177	\$36,600	\$2,000	\$5,000

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

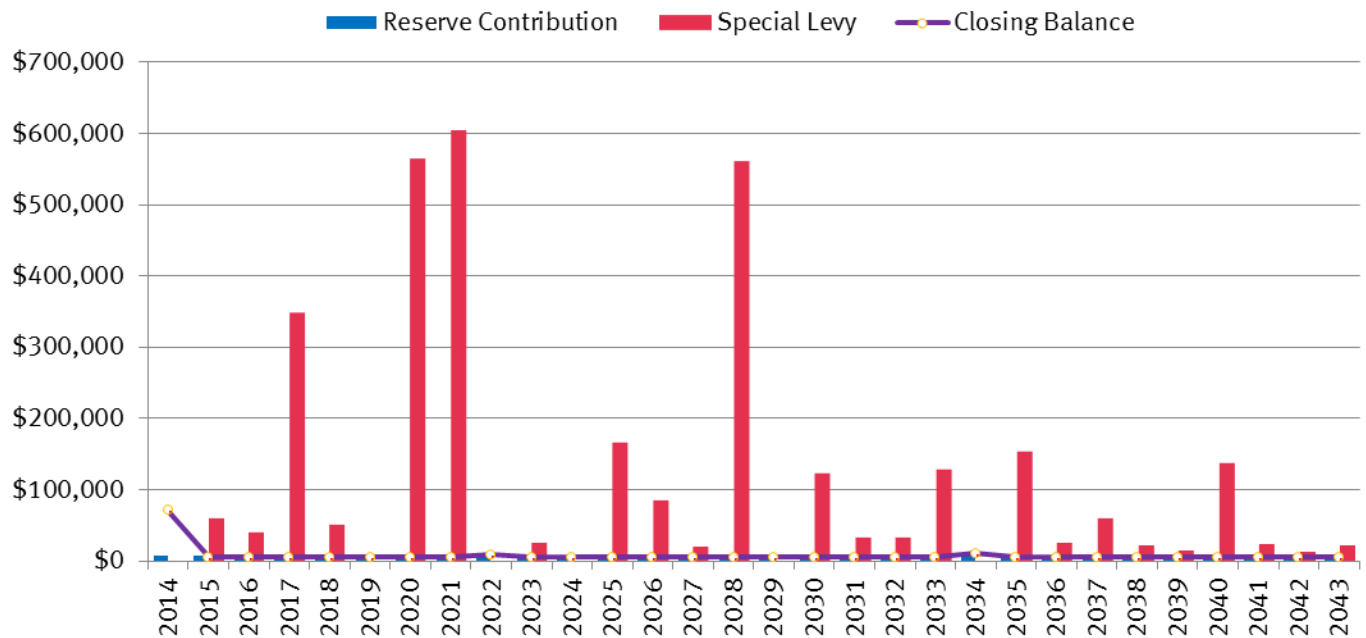


Fig. 6.4.1 CRF balance, contribution and special levies based on the current budget

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.

## 6.5. Alternative Funding Scenario

The alternative funding scenario is based on a fixed annual CRF contribution. The contribution is approximately four times the current funding level.

Table 6.5.1 Alternative Funding Model: Cash Flow Table

Fiscal Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Closing Balance
2014	\$64,000	\$30,000	\$0	\$1,280	\$0	\$2,000	\$93,280
2015	\$93,280	\$30,000	\$16,004	\$1,866	\$134,150	\$2,000	\$5,000
2016	\$5,000	\$30,000	\$19,900	\$100	\$48,000	\$2,000	\$5,000
2017	\$5,000	\$30,000	\$326,400	\$100	\$354,500	\$2,000	\$5,000
2018	\$5,000	\$30,000	\$30,800	\$100	\$58,900	\$2,000	\$5,000
2019	\$5,000	\$30,000	\$0	\$100	\$7,800	\$2,000	\$25,300
2020	\$25,300	\$30,000	\$521,784	\$506	\$570,590	\$2,000	\$5,000
2021	\$5,000	\$30,000	\$582,700	\$100	\$610,800	\$2,000	\$5,000
2022	\$5,000	\$30,000	\$0	\$100	\$1,800	\$2,000	\$31,300
2023	\$31,300	\$30,000	\$0	\$626	\$36,600	\$2,000	\$23,326

The alternative funding scenario 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.

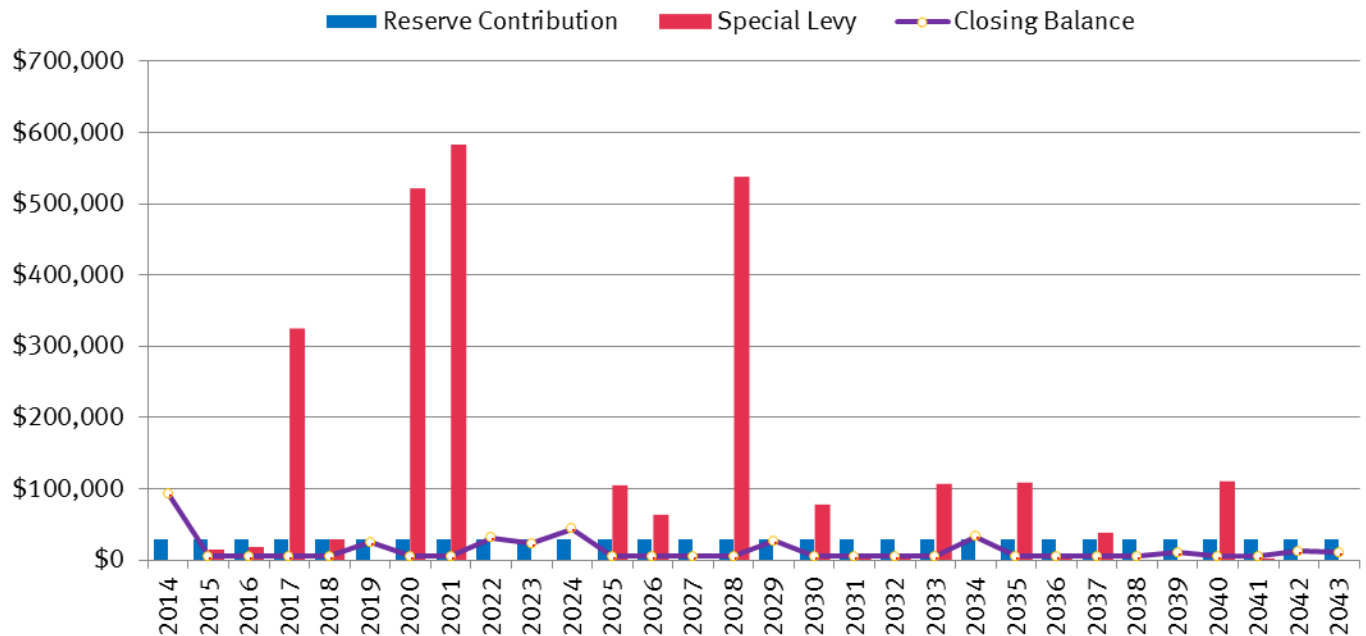


Fig. 6.5.1 CRF balance, contribution and special levies based on Alternative #0



## 6.6. Progressive Funding Scenario

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

Table 6.6.1 Progressive Funding Model: Cash Flow Table

Fiscal Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Closing Balance
2014	\$64,000	\$140,000	\$0	\$1,280	\$0	\$2,000	\$203,280
2015	\$203,280	\$140,000	\$0	\$4,066	\$134,150	\$2,000	\$211,196
2016	\$211,196	\$140,000	\$0	\$4,224	\$48,000	\$2,000	\$305,420
2017	\$305,420	\$140,000	\$0	\$6,108	\$354,500	\$2,000	\$95,028
2018	\$95,028	\$140,000	\$0	\$1,901	\$58,900	\$2,000	\$176,028
2019	\$176,028	\$140,000	\$0	\$3,521	\$7,800	\$2,000	\$309,749
2020	\$309,749	\$140,000	\$121,646	\$6,195	\$570,590	\$2,000	\$5,000
2021	\$5,000	\$140,000	\$472,700	\$100	\$610,800	\$2,000	\$5,000
2022	\$5,000	\$140,000	\$0	\$100	\$1,800	\$2,000	\$141,300
2023	\$141,300	\$140,000	\$0	\$2,826	\$36,600	\$2,000	\$245,526

The Progressive Reserve would eliminate all but two 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.

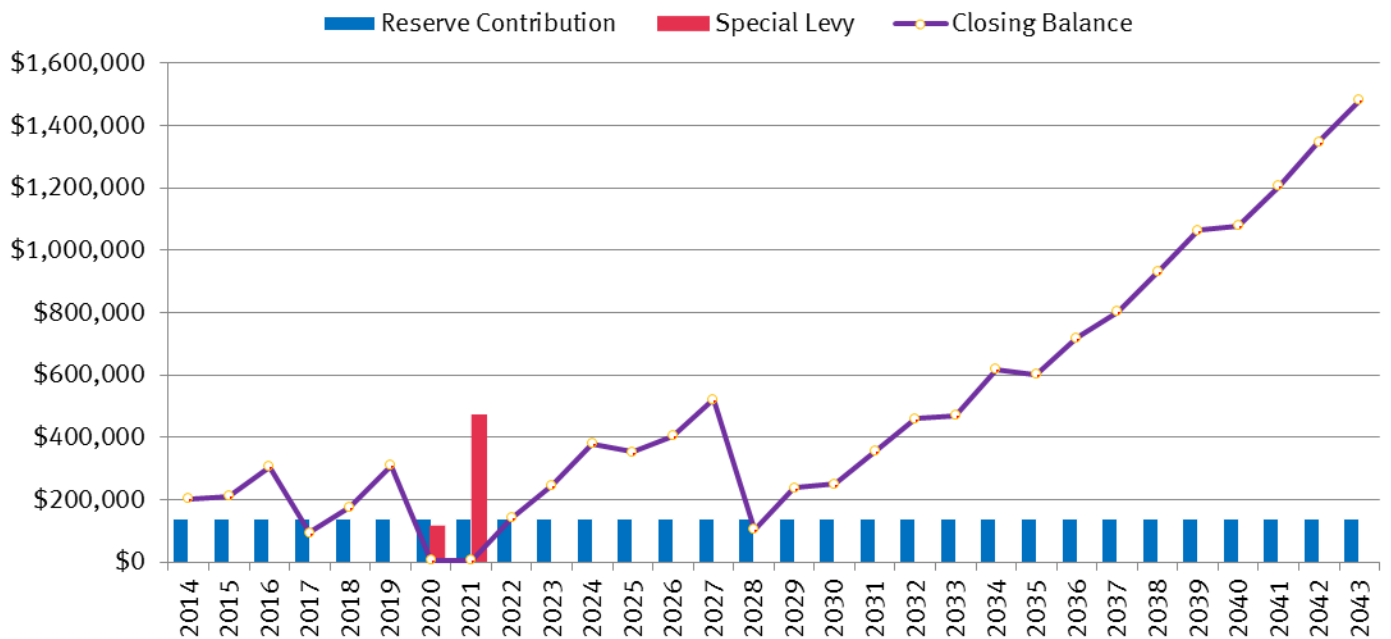


Fig. 6.6.1 CRF balance, contribution and special levies based on a Progressive Reserve calculation.

## 7. Next Steps

The Depreciation Report identifies the predictable major maintenance and renewal expenditures Wedgewood Park could potentially encounter over the next 30 years. Estimated timelines have been provided to assist the Strata Corporation with the planning process; however the Depreciation Report 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.

### Recommendations

- **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.
- **Piping Condition Assessment or Evaluation.** Conduct a Condition Assessment of the piping 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 piping. 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.
- **Project Planning.** The following projects have been identified as possible asset renewals that the Strata Corporation should consider reviewing and/or completing prior to the update of the Depreciation Report in three years' time.
  - Replacement of the existing single bottom elevator cylinder.
  - Replacement of fire panel and associated devices.

Sincerely,

RDH Building Engineering Ltd.



Brandon Carreira, Dipl.T.

Maintenance & Planning Technologist



Jason Dunn, B.Arch.Sc.

Project Manager

# 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 calendar age of an Asset. Compare with Effective Age.

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

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

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

**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.)

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

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

**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.

**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** – The amount of money that is allocated to the Reserve Fund each fiscal year. Determining the appropriate size of the Reserve Contribution is aided with a Reserve Fund Study (Depreciation Report in B.C.).

**Reserve Fund** – Also known as the Contingency Reserve Fund. 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.

**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.

**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

# Wedgewood Park

## Asset Inventory

### Enclosure

#### Roofs & Decks

##### Encl 01 - Exposed SBS Membrane Roof

**Location**

Main roof.

**Description**

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

**Information**

Service Life: 25  
Installed Year: 2003  
Chronological Age: 11  
Effective Age: 11  
Next Renewal Year: 2028

##### Encl 02 - Protected SBS Membrane Deck (Conventional Assembly) with Traffic-Bearing Surface

**Location**

Rooftop units.

**Description**

SBS membrane overlaid with deck boards as traffic-bearing surface.

**Information**

Service Life: 30  
Installed Year: 2003  
Chronological Age: 11  
Effective Age: 11  
Next Renewal Year: 2033

##### Encl 03 - Stucco Clad Soffit

**Location**

Underside of roof eaves and balconies.

**Description**

Stucco cladding over supporting structure.

**Information**

Service Life: 40  
Installed Year: 1975  
Chronological Age: 39  
Effective Age: 33  
Next Renewal Year: 2021

##### Encl 04 - Laminated Asphalt Shingle Roof

**Location**

All sloped roofing.

**Description**

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

**Information**

Service Life: 25  
Installed Year: 2003  
Chronological Age: 11  
Effective Age: 11  
Next Renewal Year: 2028

# Wedgewood Park Asset Inventory

## Fall Protection

### Encl 05 - Guardrail Aluminum



**Location**

Roof, balcony and deck perimeters.

**Description**

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

**Information**

Service Life: 30  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 23  
 Next Renewal Year: 2021

## Walls

### Encl 06 - Masonry Veneer Wall



**Location**

Along the ground floor.

**Description**

Masonry units applied as a veneer with a drained and vented cavity over exterior sheathing membrane.

**Information**

Service Life: 50  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2025

### Encl 07 - Stucco Clad Wall - Undrained



**Location**

Primary wall cladding on levels 2-3.

**Description**

Acrylic coated stucco applied directly over exterior sheathing membrane.

**Information**

Service Life: 20  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 14  
 Next Renewal Year: 2020

### Encl 08 - Wood Trim



**Location**

Accent pieces throughout the stucco cladding, and fascia boards.

**Description**

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

**Information**

Service Life: 30  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 24  
 Next Renewal Year: 2020

# Wedgewood Park Asset Inventory

## Glazing Systems

### Encl 09 - Aluminum Framed Window



**Location**

All building elevations and levels.

**Description**

Aluminum framed, thermally broken windows with double insulating glazing units, and casement, awning, sliding operators.

**Information**

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 34  
 Next Renewal Year: 2020

## Doors

### Encl 10 - Aluminum Frame Lobby Door



**Location**

Building entrance.

**Description**

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

**Information**

Service Life: 20  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 16  
 Next Renewal Year: 2018

### Encl 11 - Aluminum Framed Sliding Glass Door



**Location**

Balconies, patios and roof decks.

**Description**

Sliding glass doors, double insulating glazing units, aluminum framing.

**Information**

Service Life: 30  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 23  
 Next Renewal Year: 2021

### Encl 12 - Wood Swing Door



**Location**

Emergency egress/ stairwell access doors.

**Description**

Solid wood swing door; various units equipped with glazing units.

**Information**

Service Life: 25  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 19  
 Next Renewal Year: 2020

# Wedgewood Park Asset Inventory

## Balconies

### Encl 13 - Balcony Enclosures [PLACEHOLDER]



**Location**

Various balconies.

**Description**

Balconies enclosed by individual unit owner.

**Information**

Service Life: 25  
Installed Year: 1975  
Chronological Age: 39  
Effective Age: 14  
Next Renewal Year: 2025

### Encl 14 - Exposed Balcony Membrane - Wood Substrate



**Location**

Balcony surfaces.

**Description**

Balcony membrane applied over wood balcony sheathing.

**Information**

Service Life: 25  
Installed Year: 1975  
Chronological Age: 39  
Effective Age: 18  
Next Renewal Year: 2021

## Parking Garage

### Encl 15 - Slab-on-Grade



**Location**

Parking garage.

**Description**

Concrete slab on grade.

**Information**

Service Life: 75  
Installed Year: 1975  
Chronological Age: 39  
Effective Age: 39  
Next Renewal Year: 2050

## General & Inspections

### Encl 16 - General & Inspections



**Location**

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: 1975  
Chronological Age: 39  
Effective Age: 39  
Next Renewal Year: 2050



# Wedgewood Park Asset Inventory

## Encl 17 - Sealant



### Location

Interfaces and service penetrations at the exterior walls, roofs, and other locations.

### Description

Sealant of various types located at joints between building enclosure assemblies, as well as around components and penetrations within building enclosure assemblies.

### Information

Service Life: 10  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 4  
 Next Renewal Year: 2020

## Electrical

### Power Supply

#### Elec 01 - Emergency Generator



### Location

Electrical room, west elevation.

### Description

Onan 5.0KW generator to provide standby/emergency power. Rebuilt 2013.

### Information

Service Life: 35  
 Installed Year: 2013  
 Chronological Age: 1  
 Effective Age: 1  
 Next Renewal Year: 2048

#### Elec 02 - Distribution Transformer



### Location

Parking garage level electrical room.

### Description

Marcus, 150 KVA, 120/208V, 3 phase, dry-type, coil and core unit with vibration dampers and NEMA enclosure.

### Information

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 38  
 Next Renewal Year: 2016

### Distribution

#### Elec 03 - Electrical Distribution



### Location

Throughout the building.

### Description

Distribution switchgear, panelboards, breakers and wiring to several local sub-panels and mechanical loads. May include Tech cable or conduit systems.

### Information

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 38  
 Next Renewal Year: 2016

# Wedgewood Park Asset Inventory

## Light Fixtures

### Elec 04 - Exterior Light Fixtures



**Location**

Throughout the building.

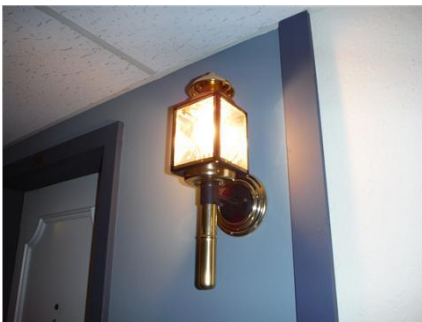
**Description**

A mixture of wall-mounted, soffit recessed and metal bollard fixtures with compact fluorescent lights, metal halide, PAR halogen fixtures and fluorescent accent lights.

**Information**

Service Life: 15  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 11  
 Next Renewal Year: 2018

### Elec 05 - Interior Light Fixtures



**Location**

Lobby, hallways, service rooms, parking garage, and all other common areas.

**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. Some parking garage lighting has been replaced.

**Information**

Service Life: 20  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 16  
 Next Renewal Year: 2018

## Security

### Elec 06 - Enterphone System



**Location**

Building entrance.

**Description**

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

**Information**

Service Life: 25  
 Installed Year: 2014  
 Chronological Age: 0  
 Effective Age: 0  
 Next Renewal Year: 2039



# Wedgewood Park

## Asset Inventory

### Mechanical

#### Controls and End Devices

##### Mech 01 - Controls - Boiler Electronic

**Location**

Parkade level, main mechanical room.

**Description**

Tekmar electronic control panel to optimize boiler operation and efficiency.

**Information**

Service Life:	15
Installed Year:	2011
Chronological Age:	3
Effective Age:	3
Next Renewal Year:	2026

##### Mech 02 - Controls - HVAC Instrumentation

**Location**

Common areas throughout.

**Description**

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:	1975
Chronological Age:	39
Effective Age:	19
Next Renewal Year:	2015

#### Plumbing & Drainage

##### Mech 03 - Valves - Plumbing Flow Control and Directional

**Location**

Mechanical rooms.

**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:	2000
Chronological Age:	14
Effective Age:	11
Next Renewal Year:	2023

##### Mech 04 - Boiler - DHW - Heating - Gas Fired

**Location**

Main mechanical room, parking garage level.

**Description**

Superhot coppertube natural gas fired, domestic service hot water heater, 480,000 BTU input. Atmospheric vent/chimney. Water Heaters are connected to a storage tank.

**Information**

Service Life:	14
Installed Year:	1996
Chronological Age:	18
Effective Age:	11
Next Renewal Year:	2017

# Wedgewood Park Asset Inventory

## Mech 05 - Drainage - Sanitary



### Location

Throughout the building.

### Description

Copper and cast iron DWV piping, with mechanical joints, p-traps, and fittings.

### Information

Service Life: 50  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2025

## Mech 06 - Fixtures - Taps & Sinks



### Location

Amenity room.

### Description

Sinks, janitors mop sinks, and other plumbing supply fixtures.

### Information

Service Life: 25  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 16  
 Next Renewal Year: 2023

## Mech 07 - Fixtures - Toilets



### Location

Amenity room washrooms.

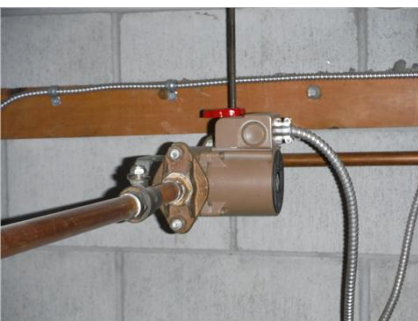
### Description

6 LPF, floor or wall mounted toilets.

### Information

Service Life: 20  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 11  
 Next Renewal Year: 2023

## Mech 08 - Pump - DHW - Circulation and Recirculation



### Location

Main mechanical room, parking garage level.

### Description

Fractional HP pumps. Circulating hot water from system.

### Information

Service Life: 10  
 Installed Year: 2012  
 Chronological Age: 2  
 Effective Age: 2  
 Next Renewal Year: 2022

# Wedgewood Park

## Asset Inventory

### Mech 09 - Pumps - Storm Lift and Control Panel



**Location**

Parking garage, south end.

**Description**

Duplex 1/2 HP, storm sump pumps and control panels for storm water runoff and sub-surface drainage.

**Information**

Service Life: 15  
 Installed Year: 2012  
 Chronological Age: 2  
 Effective Age: 2  
 Next Renewal Year: 2027

### Mech 10 - Tank - DHW - Heating - Gas Fired



**Location**

Main mechanical room, parking garage level.

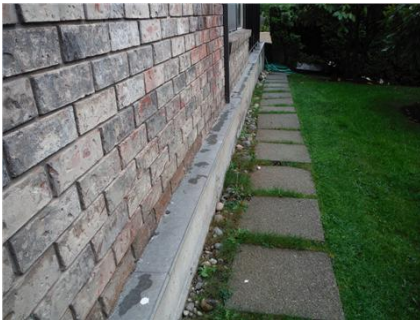
**Description**

Bradford White natural gas fired domestic water heaters, for domestic hot water for plumbing fixtures in the suites.

**Information**

Service Life: 12  
 Installed Year: 2011  
 Chronological Age: 3  
 Effective Age: 3  
 Next Renewal Year: 2023

### Mech 11 - Drainage - Perimeter and Foundation



**Location**

Perimeter of the building.

**Description**

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

**Information**

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 37  
 Next Renewal Year: 2017

### Mech 12 - Drainage - Storm - Internal



**Location**

Throughout the building.

**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: 1975  
 Chronological Age: 39  
 Effective Age: 37  
 Next Renewal Year: 2017

# Wedgewood Park

## Asset Inventory

### Mech 13 - Piping - Domestic Water Distribution



**Location**

Throughout the building.

**Description**

Mixture of K and L copper for vertical/horizontal mains system.

**Information**

Service Life: 28  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 25  
 Next Renewal Year: 2017

### Mech 14 - Valves - Cross Connection & Backflow Prevention



**Location**

Throughout the building.

**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: 2000  
 Chronological Age: 14  
 Effective Age: 11  
 Next Renewal Year: 2023

## Heating & Cooling

### Mech 15 - Baseboard - Hydronic Heater



**Location**

Common areas throughout the building.

**Description**

Horizontal baseboard hot water (hydronic) convectors along perimeter and interior wall faces.

**Information**

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 37  
 Next Renewal Year: 2017

### Mech 16 - Piping - Hydronic Distribution



**Location**

Throughout the building.

**Description**

Hydronic heating water supply and return system consisting of insulated piping.

**Information**

Service Life: 30  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 27  
 Next Renewal Year: 2017



# Wedgewood Park

## Asset Inventory

### Mech 17 - Pump - Hydronic Loop - Pipemount



**Location**

Main mechanical room, parking garage level.

**Description**

Armstrong pipemounted pumps for heating water hydronic loop.

**Information**

Service Life: 15  
 Installed Year: 2012  
 Chronological Age: 2  
 Effective Age: 2  
 Next Renewal Year: 2027

### Mech 18 - Tank - Expansion - Hydronic - Diaphragm



**Location**

Main mechanical room, parking garage level.

**Description**

Amtrol/ State floor mounted diaphragm expansion tanks for hydronic heating system.

**Information**

Service Life: 20  
 Installed Year: 2008  
 Chronological Age: 6  
 Effective Age: 6  
 Next Renewal Year: 2028

## Ventilation and Air-conditioning

### Mech 19 - Air Handler - Make Up Air Unit - Small Unheated



**Location**

Throughout the rooftop.

**Description**

Roof mounted, to supply make-up air to the interior of the building.

**Information**

Service Life: 20  
 Installed Year: 2010  
 Chronological Age: 4  
 Effective Age: 4  
 Next Renewal Year: 2030

### Mech 20 - Exhaust Fan - Parkade - Propellor



**Location**

Parking garage.

**Description**

Belt-driven propellor exhaust fan mounted in exterior wall.

**Information**

Service Life: 20  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 18  
 Next Renewal Year: 2016

# Wedgewood Park

## Asset Inventory

### Mech 21 - Exhaust Fan - Small Service - Cabinet



**Location**

Various service and amenity rooms.

**Description**

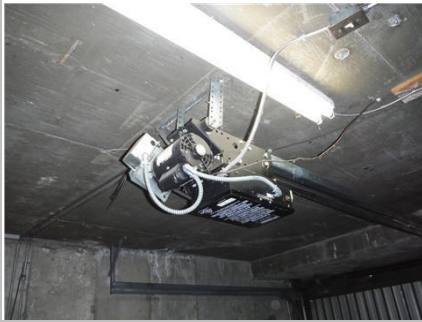
Direct drive fans, ceiling and cabinet fans, and centrifugal inline blower fans.

**Information**

Service Life: 12  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 10  
 Next Renewal Year: 2016

### Other

### Mech 22 - Overhead Gate Motor



**Location**

Parkade entrances.

**Description**

1/2 HP AC motors and commercial-grade overhead sectional door controlled by an electric operator.

**Information**

Service Life: 20  
 Installed Year: 2011  
 Chronological Age: 3  
 Effective Age: 3  
 Next Renewal Year: 2031

### Elevator

#### Hydraulic

### Elev 01 - Hydraulic Elevator, Single Bottom



**Location**

Elevator machine room at basement.

**Description**

Richmond Elevator direct acting hydraulic elevator with a buried single bottom cylinder (NOT protected from corrosion), RAM PLC/Relay control system, submersed pump unit, Maxton UC4M valve, 2500 lbs capacity, ~100 fpm rated speed (estimate).

**Information**

Service Life: 30  
 Installed Year: 1996  
 Chronological Age: 18  
 Effective Age: 18  
 Next Renewal Year: 2026

#### Car Interiors

### Elev 02 - Elevator Cabs & Hoistway



**Location**

Elevator cab and travelling hoistway.

**Description**

Single speed side opening door, plastic car and hall pushbuttons, one (1) car operating panel (stainless steel), infrared door protection, ECI-1000 door operator, stainless steel door, door header, front return, plastic laminate walls, and ceiling, tile flooring, flat bar wood handrails on rear

**Information**

Service Life: 25  
 Installed Year: 1996  
 Chronological Age: 18  
 Effective Age: 13  
 Next Renewal Year: 2026

# Wedgewood Park Asset Inventory

wall, no firefighter's emergency operation, no standby power, hands-free voice communication device, no seismic provision.

## Fire Safety

### Controls

#### Fire 01 - Fire Alarm Panel



#### Location

Main electrical room.

#### Description

Edwards microprocessor and supervised unit with annunciator.

#### Information

Service Life:	20
Installed Year:	1975
Chronological Age:	39
Effective Age:	19
Next Renewal Year:	2015

### Detection

#### Fire 02 - Fire Detection & Alarm



#### Location

Throughout the building.

#### 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:	20
Installed Year:	1975
Chronological Age:	39
Effective Age:	19
Next Renewal Year:	2015

### Suppression

#### Fire 03 - Dry Sprinkler Compressor



#### Location

Water entry/ locker storage room.

#### Description

Compressor with fractional HP motor to maintain the pressure of air in the dry fire sprinkler lines.

#### Information

Service Life:	14
Installed Year:	1975
Chronological Age:	39
Effective Age:	11
Next Renewal Year:	2017

# Wedgewood Park Asset Inventory

## Fire 04 - Portable Fire Extinguisher



### Location

Various strategic locations throughout the building.

### Description

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

### Information

Service Life: 24  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 23  
 Next Renewal Year: 2015

## Fire 05 - Sprinkler & Standpipe - Wet



### Location

Throughout all common, heated interior spaces at each building.

### Description

Upright, pendant and sidewall sprinkler heads, flow switches and indicating devices, gauges, steel distribution lines.

### Information

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2015

## Fire 06 - Sprinkler System - Dry



### Location

Throughout the parking garage.

### Description

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

### Information

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2015

## Fire 07 - Sprinkler Valve Assembly - Dry



### Location

Water entry/ locker storage room.

### Description

Dry sprinkler valve, trim and gauges, steel piping.

### Information

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2015



# Wedgewood Park Asset Inventory

## Egress

### Fire 08 - Emergency Egress Equipment



**Location**

Various strategic locations throughout the building.

**Description**

Exit lights and emergency lighting equipment to facilitate evacuation from the interior of the building in the event of an emergency.

**Information**

Service Life: 20  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 19  
 Next Renewal Year: 2015

## Interior Finishes

### Floors

#### Finish 01 - Porcelain Floor Tile



**Location**

Lobby.

**Description**

Porcelain floor tile on thin set mortar with grout.

**Information**

Service Life: 40  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 36  
 Next Renewal Year: 2018

#### Finish 02 - Resilient Sheet Flooring



**Location**

Various locations throughout the ground floor, including the amenity room.

**Description**

Vinyl tile or vinyl sheet adhered to the substrate.

**Information**

Service Life: 20  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 16  
 Next Renewal Year: 2018

#### Finish 03 - Sheet Carpet - Glued Down



**Location**

Hallways, stairwells and common areas.

**Description**

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

**Information**

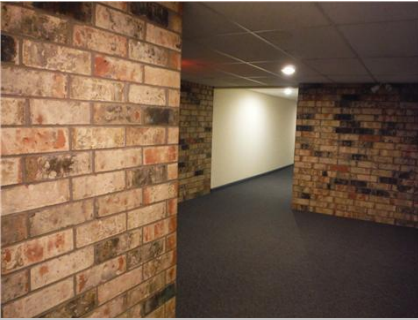
Service Life: 15  
 Installed Year: 2005  
 Chronological Age: 9  
 Effective Age: 9  
 Next Renewal Year: 2020

# Wedgewood Park

## Asset Inventory

### Walls

#### Finish 04 - Masonry Wall



**Location**

Lobby and adjacent to the amenity room.

**Description**

Masonry wall assembly. Asset not deemed a reserve component.

**Information**

Service Life: 75  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2050

#### Finish 05 - Paint



**Location**

Hallways, stairwells and amenity spaces throughout the building.

**Description**

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

**Information**

Service Life: 15  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 11  
 Next Renewal Year: 2018

### Ceilings

#### Finish 06 - Acoustic Ceiling Tile



**Location**

Ground floor and first floor ceilings.

**Description**

Suspended grid of metal T channels with infill acoustic tiles that form a drop ceiling.

**Information**

Service Life: 50  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2025

### Architectural Woodwork

#### Finish 07 - Carpentry and Millwork



**Location**

Amenity room.

**Description**

Shop fabricated custom casework, built-in counter-tops with laminate, composite or stone surface, wood veneer or composite cabinets.

**Information**

Service Life: 30  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 20  
 Next Renewal Year: 2024

# Wedgewood Park

## Asset Inventory

### Housekeeping

#### Finish 08 - General Housekeeping

**Location**

Throughout the building.

**Description**

Cleaning and care of miscellaneous brightwork, millwork, flooring glass and other interior finishes. Includes housekeeping equipment.

**Information**

Service Life:	20
Installed Year:	1975
Chronological Age:	39
Effective Age:	16
Next Renewal Year:	2018

### Amenities

#### Equipment

#### Amen 01 - Domestic Appliances

**Location**

Amenity room.

**Description**

Refrigerator and microwave oven of miscellaneous brands.

**Information**

Service Life:	15
Installed Year:	1975
Chronological Age:	39
Effective Age:	5
Next Renewal Year:	2024

### Specialties

#### Amen 02 - Wood Storage Locker

**Location**

Ground/ parking garage level storage rooms.

**Description**

Wood framed general purpose storage locker with swing door and hardware.

**Information**

Service Life:	30
Installed Year:	1975
Chronological Age:	39
Effective Age:	25
Next Renewal Year:	2019

# Wedgewood Park Asset Inventory

## Furnishings

### Amen 03 - Central Mailboxes



**Location**

Lobby.

**Description**

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

**Information**

Service Life: 30  
 Installed Year: 2009  
 Chronological Age: 5  
 Effective Age: 5  
 Next Renewal Year: 2039

### Amen 04 - Furniture



**Location**

Lobby and amenity room.

**Description**

Couches, chairs, tables, etc.

**Information**

Service Life: 15  
 Installed Year: 2003  
 Chronological Age: 11  
 Effective Age: 10  
 Next Renewal Year: 2019

### Amen 05 - Pool Table



**Location**

Amenity room.

**Description**

Pool table with felt on high density substrate, bumpers, pockets and frame. Protective cover, pool cues and other miscellaneous accessories.

**Information**

Service Life: 20  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 10  
 Next Renewal Year: 2024

### Amen 06 - Public Signage



**Location**

Throughout the building.

**Description**

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

**Information**

Service Life: 25  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 20  
 Next Renewal Year: 2019



# Wedgewood Park

## Asset Inventory

### Sitework

#### Hard Landscaping

##### Site 01 - Concrete Paving

**Location**

Site entrance and unit patios.

**Description**

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

**Information**

Service Life: 40  
Installed Year: 2007  
Chronological Age: 7  
Effective Age: 7  
Next Renewal Year: 2047

#### Soft Landscaping

##### Site 02 - Groundskeeping & Pest Control

**Location**

Throughout the site.

**Description**

Care of miscellaneous site furnishing, hard paved surfaces and landscaped areas.

**Information**

Service Life: 5  
Installed Year: 1975  
Chronological Age: 39  
Effective Age: 4  
Next Renewal Year: 2015

##### Site 03 - Soft Landscaping

**Location**

Throughout the site.

**Description**

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

**Information**

Service Life: 15  
Installed Year: 1975  
Chronological Age: 39  
Effective Age: 12  
Next Renewal Year: 2017

#### Site Services

##### Site 04 - Underground Natural Gas Service

**Location**

Throughout the site.

**Description**

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

**Information**

Service Life: 50  
Installed Year: 1975  
Chronological Age: 39  
Effective Age: 39  
Next Renewal Year: 2025

# Wedgewood Park Asset Inventory

## Site 05 - Underground Water Services with PVC/Copper and Ductile Piping



### Location

Throughout the site.

### Description

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

### Information

Service Life: 50  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2025

## Site 06 - Electrical Site Services



### 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: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2025

## Site 07 - Underground Drainage Services - Storm



### Location

Throughout the site.

### Description

Storm sewer from buildings and catch basins to property line.

### Information

Service Life: 80  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2055

## Site 08 - Underground Sewer Services - Sewer



### Location

Throughout the site.

### Description

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

### Information

Service Life: 80  
 Installed Year: 1975  
 Chronological Age: 39  
 Effective Age: 39  
 Next Renewal Year: 2055

# Appendix C

## Asset Service Life Summary

## Wedgewood Park Asset Service Life Summary

Asset Ref	Asset Name	Chronological Age	Estimated Remaining SL
<b>Enclosure</b>			
Encl 01	Exposed SBS Membrane Roof	11	14
Encl 02	Protected SBS Membrane Deck (Conventional Assembly) with Traffic-Bearing Surface	11	19
Encl 03	Stucco Clad Soffit	39	7
Encl 04	Laminated Asphalt Shingle Roof	11	14
Encl 05	Guardrail Aluminum	39	7
Encl 06	Masonry Veneer Wall	39	11
Encl 07	Stucco Clad Wall - Undrained	39	6
Encl 08	Wood Trim	39	6
Encl 09	Aluminum Framed Window	39	6
Encl 10	Aluminum Frame Lobby Door	39	4
Encl 11	Aluminum Framed Sliding Glass Door	39	7
Encl 12	Wood Swing Door	39	6
Encl 13	Balcony Enclosures [PLACEHOLDER]	39	11
Encl 14	Exposed Balcony Membrane - Wood Substrate	39	7
Encl 15	Slab-on-Grade	39	36
Encl 16	General & Inspections	39	36
Encl 17	Sealant	39	6
<b>Electrical</b>			
Elec 01	Emergency Generator	1	34
Elec 02	Distribution Transformer	39	2
Elec 03	Electrical Distribution	39	2
Elec 04	Exterior Light Fixtures	39	4
Elec 05	Interior Light Fixtures	39	4
Elec 06	Enterphone System	0	25
<b>Mechanical</b>			
Mech 01	Controls - Boiler Electronic	3	12
Mech 02	Controls - HVAC Instrumentation	39	1
Mech 03	Valves - Plumbing Flow Control and Directional	14	9
Mech 04	Boiler - DHW - Heating - Gas Fired	18	3
Mech 05	Drainage - Sanitary	39	11
Mech 06	Fixtures - Taps & Sinks	39	9
Mech 07	Fixtures - Toilets	39	9
Mech 08	Pump - DHW - Circulation and Recirculation	2	8



## Wedgewood Park Asset Service Life Summary

Asset Ref	Asset Name	Chronological Age	Estimated Remaining SL
Mech 09	Pumps - Storm Lift and Control Panel	2	13
Mech 10	Tank - DHW - Heating - Gas Fired	3	9
Mech 11	Drainage - Perimeter and Foundation	39	3
Mech 12	Drainage - Storm - Internal	39	3
Mech 13	Piping - Domestic Water Distribution	39	3
Mech 14	Valves - Cross Connection & Backflow Prevention	14	9
Mech 15	Baseboard - Hydronic Heater	39	3
Mech 16	Piping - Hydronic Distribution	39	3
Mech 17	Pump - Hydronic Loop - Pipemount	2	13
Mech 18	Tank - Expansion - Hydronic - Diaphragm	6	14
Mech 19	Air Handler - Make Up Air Unit - Small Unheated	4	16
Mech 20	Exhaust Fan - Parkade - Propellor	39	2
Mech 21	Exhaust Fan - Small Service - Cabinet	39	2
Mech 22	Overhead Gate Motor	3	17
<b>Elevator</b>			
Elev 01	Hydraulic Elevator, Single Bottom	18	12
Elev 02	Elevator Cabs & Hoistway	18	12
<b>Fire Safety</b>			
Fire 01	Fire Alarm Panel	39	1
Fire 02	Fire Detection & Alarm	39	1
Fire 03	Dry Sprinkler Compressor	39	3
Fire 04	Portable Fire Extinguisher	39	1
Fire 05	Sprinkler & Standpipe - Wet	39	1
Fire 06	Sprinkler System - Dry	39	1
Fire 07	Sprinkler Valve Assembly - Dry	39	1
Fire 08	Emergency Egress Equipment	39	1
<b>Interior Finishes</b>			
Finish 01	Porcelain Floor Tile	39	4
Finish 02	Resilient Sheet Flooring	39	4
Finish 03	Sheet Carpet - Glued Down	9	6
Finish 04	Masonry Wall	39	36
Finish 05	Paint	39	4
Finish 06	Acoustic Ceiling Tile	39	11
Finish 07	Carpentry and Millwork	39	10
Finish 08	General Housekeeping	39	4

## Wedgewood Park Asset Service Life Summary

Asset Ref	Asset Name	Chronological Age	Estimated Remaining SL
<b>Amenities</b>			
Amen 01	Domestic Appliances	39	10
Amen 02	Wood Storage Locker	39	5
Amen 03	Central Mailboxes	5	25
Amen 04	Furniture	11	5
Amen 05	Pool Table	39	10
Amen 06	Public Signage	39	5
<b>Sitework</b>			
Site 01	Concrete Paving	7	33
Site 02	Groundskeeping & Pest Control	39	1
Site 03	Soft Landscaping	39	3
Site 04	Underground Natural Gas Service	39	11
Site 05	Underground Water Services with PVC/Copper and Ductile Piping	39	11
Site 06	Electrical Site Services	39	11
Site 07	Underground Drainage Services - Storm	39	41
Site 08	Underground Sewer Services - Sewer	39	41

# Appendix D

## Funding Scenario Cash Flow Tables

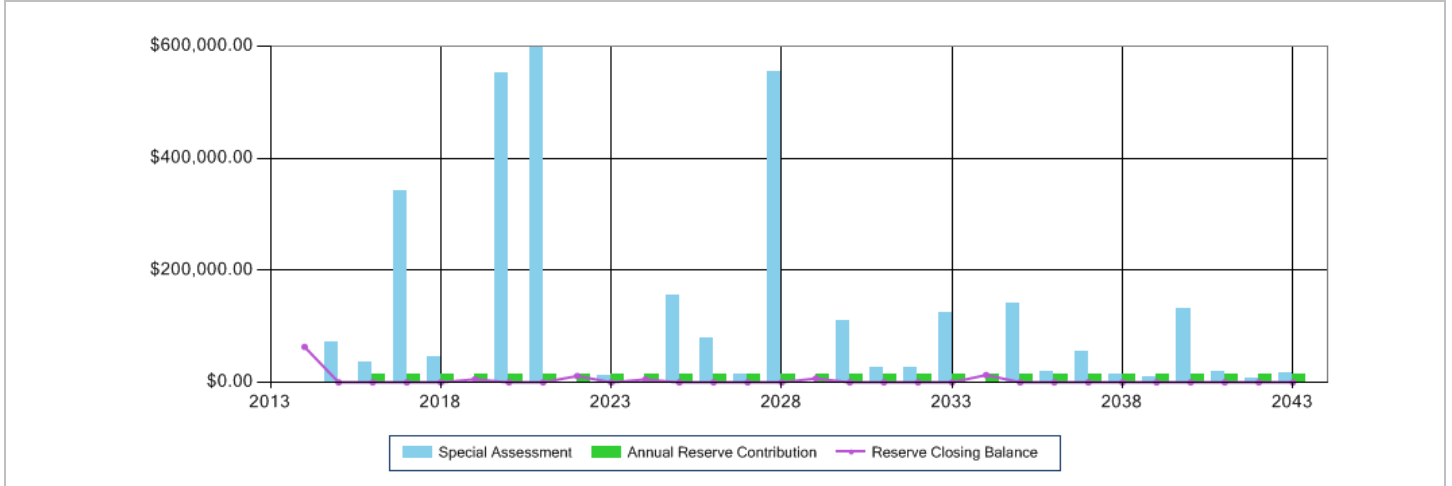
## Funding Model - Statutory Funding Model

Funding Model Name	Statutory Funding Model	Initial Catch-Up Cost	
Building	Wedgewood Park	Operating Budget	\$150,787
Start Year	2014	Starting Reserve Balance	\$64,000
Interest/Investment Rate	2.0 %	Contribution Threshold	\$37,697
Estimated Contingency Allowance	\$2,000	Contribution Below Threshold	\$15,079
Tax Rate	0.0 %	Contribution Above Threshold	\$0
Planning Horizon	30	Reserve Contribution Increase	0.0
Number of Units	39	Monthly Avg. Unit Contribution	\$0

YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	ADDITIONAL FUNDING	RESERVE INCOME	KEEP-UP	CONTINGENCY COSTS	TAX LIABILITY	CLOSING BALANCE	PERCENT FUNDED
2014	\$64,000	\$0	\$0	\$1,280	\$0	\$2,000	\$0	\$63,280	3.85 %
2015	\$63,280	\$0	\$71,604	\$1,266	\$134,150	\$2,000	\$0	\$0	0.00 %
2016	\$0	\$15,079	\$34,921	\$0	\$48,000	\$2,000	\$0	\$0	0.00 %
2017	\$0	\$15,079	\$341,421	\$0	\$354,500	\$2,000	\$0	\$0	0.00 %
2018	\$0	\$15,079	\$45,821	\$0	\$58,900	\$2,000	\$0	\$0	0.00 %
2019	\$0	\$15,079	\$0	\$0	\$7,800	\$2,000	\$0	\$5,279	0.31 %
2020	\$5,279	\$15,079	\$552,127	\$106	\$570,590	\$2,000	\$0	\$0	0.00 %
2021	\$0	\$15,079	\$597,721	\$0	\$610,800	\$2,000	\$0	\$0	0.00 %
2022	\$0	\$15,079	\$0	\$0	\$1,800	\$2,000	\$0	\$11,279	1.41 %
2023	\$11,279	\$15,079	\$12,017	\$226	\$36,600	\$2,000	\$0	\$0	0.00 %
2024	\$0	\$15,079	\$0	\$0	\$8,100	\$2,000	\$0	\$4,979	0.54 %
2025	\$4,979	\$15,079	\$155,273	\$100	\$173,430	\$2,000	\$0	\$0	0.00 %
2026	\$0	\$15,079	\$79,921	\$0	\$93,000	\$2,000	\$0	\$0	0.00 %
2027	\$0	\$15,079	\$15,221	\$0	\$28,300	\$2,000	\$0	\$0	0.00 %
2028	\$0	\$15,079	\$553,921	\$0	\$567,000	\$2,000	\$0	\$0	0.00 %
2029	\$0	\$15,079	\$0	\$0	\$6,300	\$2,000	\$0	\$6,779	1.57 %
2030	\$6,779	\$15,079	\$109,687	\$136	\$129,680	\$2,000	\$0	\$0	0.00 %
2031	\$0	\$15,079	\$26,221	\$0	\$39,300	\$2,000	\$0	\$0	0.00 %
2032	\$0	\$15,079	\$26,521	\$0	\$39,600	\$2,000	\$0	\$0	0.00 %
2033	\$0	\$15,079	\$123,121	\$0	\$136,200	\$2,000	\$0	\$0	0.00 %
2034	\$0	\$15,079	\$0	\$0	\$0	\$2,000	\$0	\$13,079	3.92 %
2035	\$13,079	\$15,079	\$140,811	\$262	\$167,230	\$2,000	\$0	\$0	0.00 %
2036	\$0	\$15,079	\$19,321	\$0	\$32,400	\$2,000	\$0	\$0	0.00 %
2037	\$0	\$15,079	\$54,021	\$0	\$67,100	\$2,000	\$0	\$0	0.00 %
2038	\$0	\$15,079	\$15,421	\$0	\$28,500	\$2,000	\$0	\$0	0.00 %
2039	\$0	\$15,079	\$9,221	\$0	\$22,300	\$2,000	\$0	\$0	0.00 %
2040	\$0	\$15,079	\$132,201	\$0	\$145,280	\$2,000	\$0	\$0	0.00 %
2041	\$0	\$15,079	\$18,621	\$0	\$31,700	\$2,000	\$0	\$0	0.00 %
2042	\$0	\$15,079	\$7,721	\$0	\$20,800	\$2,000	\$0	\$0	0.00 %
2043	\$0	\$15,079	\$16,721	\$0	\$29,800	\$2,000	\$0	\$0	100.00 %

# Funding Model - Statutory Funding Model

## GRAPHIC REPRESENTATION



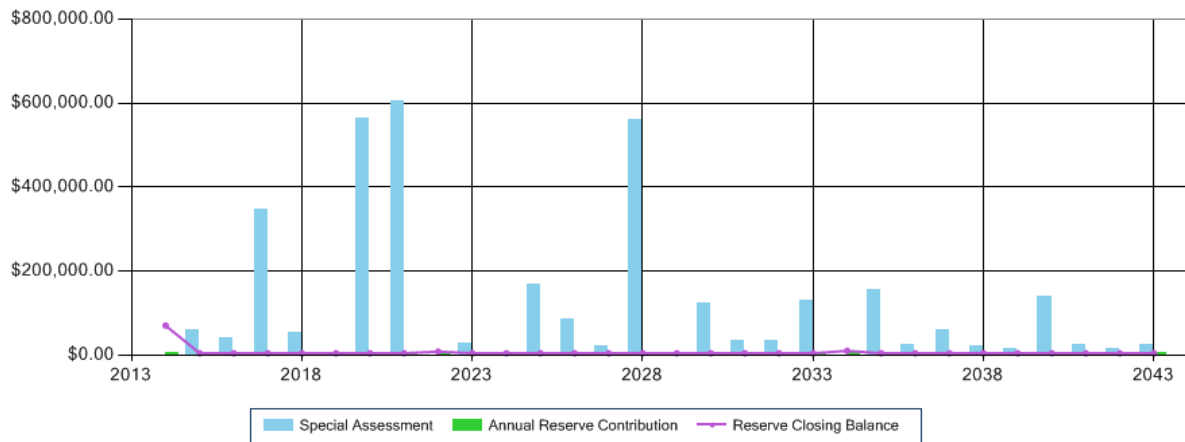
## Funding Model - Fixed Annual Funding of \$ 7,550 (Status Quo)

Funding Model Name	Fixed Annual Funding of \$ 7,550 (Status Quo)	Initial Catch-Up Cost	\$0
Building	Wedgewood Park	Operating Budget	\$150,787
Start Year	2014	Starting Reserve Balance	\$64,000
Interest/Investment Rate	2.0 %	Contribution Threshold	\$500,000
Estimated Contingency Allowance	\$2,000	Contribution Below Threshold	\$7,550
Tax Rate	0.0 %	Contribution Above Threshold	\$7,550
Planning Horizon	30	Reserve Contribution Increase	0.0
Number of Units	39	Monthly Avg. Unit Contribution	\$16

YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	ADDITIONAL FUNDING	RESERVE INCOME	KEEP-UP	CONTINGENCY COSTS	TAX LIABILITY	CLOSING BALANCE	PERCENT FUNDED
2014	\$64,000	\$7,550	\$0	\$1,280	\$0	\$2,000	\$0	\$70,830	4.31 %
2015	\$70,830	\$7,550	\$61,353	\$1,417	\$134,150	\$2,000	\$0	\$5,000	0.30 %
2016	\$5,000	\$7,550	\$42,350	\$100	\$48,000	\$2,000	\$0	\$5,000	0.29 %
2017	\$5,000	\$7,550	\$348,850	\$100	\$354,500	\$2,000	\$0	\$5,000	0.33 %
2018	\$5,000	\$7,550	\$53,250	\$100	\$58,900	\$2,000	\$0	\$5,000	0.32 %
2019	\$5,000	\$7,550	\$2,150	\$100	\$7,800	\$2,000	\$0	\$5,000	0.29 %
2020	\$5,000	\$7,550	\$564,940	\$100	\$570,590	\$2,000	\$0	\$5,000	0.40 %
2021	\$5,000	\$7,550	\$605,150	\$100	\$610,800	\$2,000	\$0	\$5,000	0.69 %
2022	\$5,000	\$7,550	\$0	\$100	\$1,800	\$2,000	\$0	\$8,850	1.11 %
2023	\$8,850	\$7,550	\$27,023	\$177	\$36,600	\$2,000	\$0	\$5,000	0.59 %
2024	\$5,000	\$7,550	\$2,450	\$100	\$8,100	\$2,000	\$0	\$5,000	0.54 %
2025	\$5,000	\$7,550	\$167,780	\$100	\$173,430	\$2,000	\$0	\$5,000	0.60 %
2026	\$5,000	\$7,550	\$87,350	\$100	\$93,000	\$2,000	\$0	\$5,000	0.61 %
2027	\$5,000	\$7,550	\$22,650	\$100	\$28,300	\$2,000	\$0	\$5,000	0.57 %
2028	\$5,000	\$7,550	\$561,350	\$100	\$567,000	\$2,000	\$0	\$5,000	1.29 %
2029	\$5,000	\$7,550	\$650	\$100	\$6,300	\$2,000	\$0	\$5,000	1.16 %
2030	\$5,000	\$7,550	\$124,030	\$100	\$129,680	\$2,000	\$0	\$5,000	1.42 %
2031	\$5,000	\$7,550	\$33,650	\$100	\$39,300	\$2,000	\$0	\$5,000	1.36 %
2032	\$5,000	\$7,550	\$33,950	\$100	\$39,600	\$2,000	\$0	\$5,000	1.32 %
2033	\$5,000	\$7,550	\$130,550	\$100	\$136,200	\$2,000	\$0	\$5,000	1.73 %
2034	\$5,000	\$7,550	\$0	\$100	\$0	\$2,000	\$0	\$10,650	3.19 %
2035	\$10,650	\$7,550	\$155,817	\$213	\$167,230	\$2,000	\$0	\$5,000	2.42 %
2036	\$5,000	\$7,550	\$26,750	\$100	\$32,400	\$2,000	\$0	\$5,000	2.39 %
2037	\$5,000	\$7,550	\$61,450	\$100	\$67,100	\$2,000	\$0	\$5,000	2.84 %
2038	\$5,000	\$7,550	\$22,850	\$100	\$28,500	\$2,000	\$0	\$5,000	2.84 %
2039	\$5,000	\$7,550	\$16,650	\$100	\$22,300	\$2,000	\$0	\$5,000	2.74 %
2040	\$5,000	\$7,550	\$139,630	\$100	\$145,280	\$2,000	\$0	\$5,000	7.93 %
2041	\$5,000	\$7,550	\$26,050	\$100	\$31,700	\$2,000	\$0	\$5,000	12.19 %
2042	\$5,000	\$7,550	\$15,150	\$100	\$20,800	\$2,000	\$0	\$5,000	19.23 %
2043	\$5,000	\$7,550	\$24,150	\$100	\$29,800	\$2,000	\$0	\$5,000	100.00 %

# Funding Model - Fixed Annual Funding of \$ 7,550 (Status Quo)

## GRAPHIC REPRESENTATION



## Funding Model - Fixed Annual Funding of \$30,000 (Alternative)

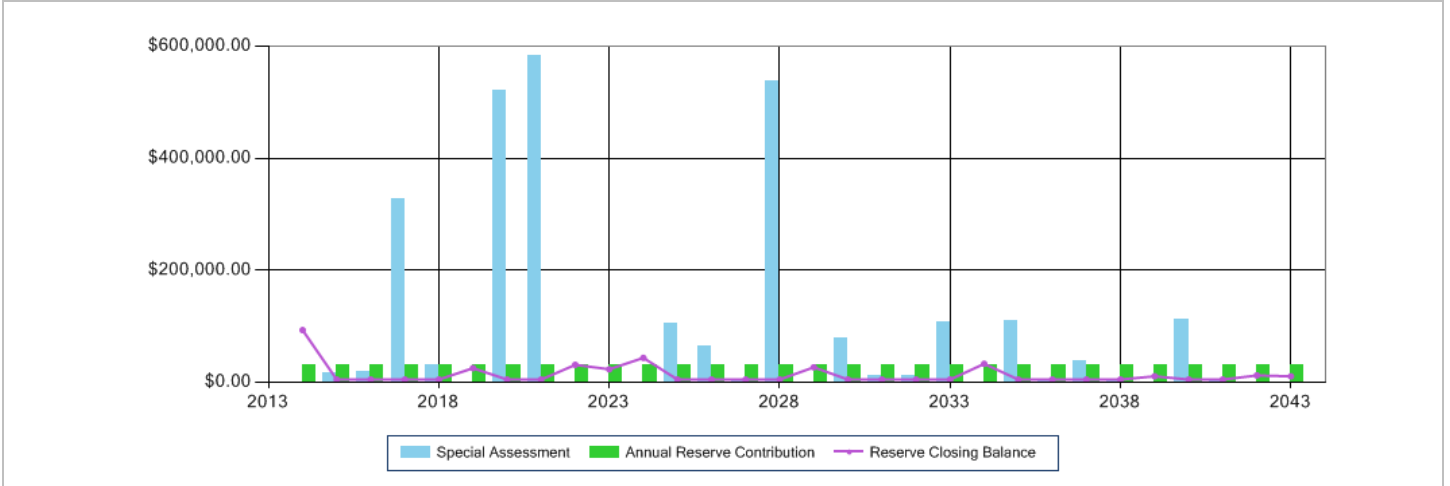
Funding Model Name	Fixed Annual Funding of \$30,000 (Alternative)	Initial Catch-Up Cost	\$0
Building	Wedgewood Park	Operating Budget	\$150,787
Start Year	2014	Starting Reserve Balance	\$64,000
Interest/Investment Rate	2.0 %	Contribution Threshold	\$500,000
Estimated Contingency Allowance	\$2,000	Contribution Below Threshold	\$30,000
Tax Rate	0.0 %	Contribution Above Threshold	\$30,000
Planning Horizon	30	Reserve Contribution Increase	0.0
Number of Units	39	Monthly Avg. Unit Contribution	\$64

YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	ADDITIONAL FUNDING	RESERVE INCOME	KEEP-UP	CONTINGENCY COSTS	TAX LIABILITY	CLOSING BALANCE	PERCENT FUNDED
2014	\$64,000	\$30,000	\$0	\$1,280	\$0	\$2,000	\$0	\$93,280	5.68 %
2015	\$93,280	\$30,000	\$16,004	\$1,866	\$134,150	\$2,000	\$0	\$5,000	0.30 %
2016	\$5,000	\$30,000	\$19,900	\$100	\$48,000	\$2,000	\$0	\$5,000	0.29 %
2017	\$5,000	\$30,000	\$326,400	\$100	\$354,500	\$2,000	\$0	\$5,000	0.33 %
2018	\$5,000	\$30,000	\$30,800	\$100	\$58,900	\$2,000	\$0	\$5,000	0.32 %
2019	\$5,000	\$30,000	\$0	\$100	\$7,800	\$2,000	\$0	\$25,300	1.50 %
2020	\$25,300	\$30,000	\$521,784	\$506	\$570,590	\$2,000	\$0	\$5,000	0.40 %
2021	\$5,000	\$30,000	\$582,700	\$100	\$610,800	\$2,000	\$0	\$5,000	0.69 %
2022	\$5,000	\$30,000	\$0	\$100	\$1,800	\$2,000	\$0	\$31,300	3.93 %
2023	\$31,300	\$30,000	\$0	\$626	\$36,600	\$2,000	\$0	\$23,326	2.77 %
2024	\$23,326	\$30,000	\$0	\$467	\$8,100	\$2,000	\$0	\$43,693	4.76 %
2025	\$43,693	\$30,000	\$105,864	\$874	\$173,430	\$2,000	\$0	\$5,000	0.60 %
2026	\$5,000	\$30,000	\$64,900	\$100	\$93,000	\$2,000	\$0	\$5,000	0.61 %
2027	\$5,000	\$30,000	\$200	\$100	\$28,300	\$2,000	\$0	\$5,000	0.57 %
2028	\$5,000	\$30,000	\$538,900	\$100	\$567,000	\$2,000	\$0	\$5,000	1.29 %
2029	\$5,000	\$30,000	\$0	\$100	\$6,300	\$2,000	\$0	\$26,800	6.23 %
2030	\$26,800	\$30,000	\$79,344	\$536	\$129,680	\$2,000	\$0	\$5,000	1.42 %
2031	\$5,000	\$30,000	\$11,200	\$100	\$39,300	\$2,000	\$0	\$5,000	1.36 %
2032	\$5,000	\$30,000	\$11,500	\$100	\$39,600	\$2,000	\$0	\$5,000	1.32 %
2033	\$5,000	\$30,000	\$108,100	\$100	\$136,200	\$2,000	\$0	\$5,000	1.73 %
2034	\$5,000	\$30,000	\$0	\$100	\$0	\$2,000	\$0	\$33,100	9.93 %
2035	\$33,100	\$30,000	\$110,468	\$662	\$167,230	\$2,000	\$0	\$5,000	2.42 %
2036	\$5,000	\$30,000	\$4,300	\$100	\$32,400	\$2,000	\$0	\$5,000	2.39 %
2037	\$5,000	\$30,000	\$39,000	\$100	\$67,100	\$2,000	\$0	\$5,000	2.84 %
2038	\$5,000	\$30,000	\$400	\$100	\$28,500	\$2,000	\$0	\$5,000	2.84 %
2039	\$5,000	\$30,000	\$0	\$100	\$22,300	\$2,000	\$0	\$10,800	5.93 %
2040	\$10,800	\$30,000	\$111,264	\$216	\$145,280	\$2,000	\$0	\$5,000	7.93 %
2041	\$5,000	\$30,000	\$3,600	\$100	\$31,700	\$2,000	\$0	\$5,000	12.19 %
2042	\$5,000	\$30,000	\$0	\$100	\$20,800	\$2,000	\$0	\$12,300	47.30 %
2043	\$12,300	\$30,000	\$0	\$246	\$29,800	\$2,000	\$0	\$10,746	100.00 %



# Funding Model - Fixed Annual Funding of \$30,000 (Alternative)

## GRAPHIC REPRESENTATION



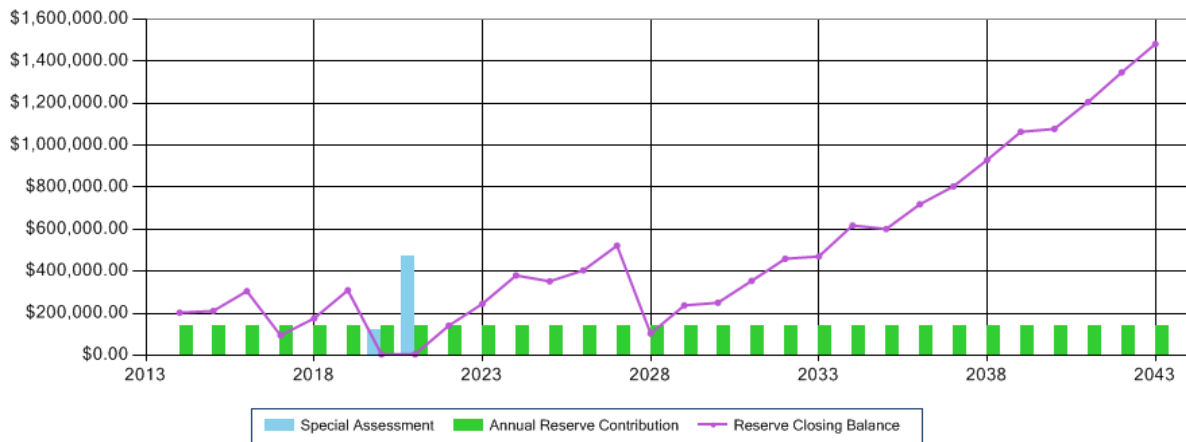
## Funding Model - Fixed Annual Funding of \$140,000 (Progressive)

Funding Model Name	Fixed Annual Funding of \$140,000 (Progressive)	Initial Catch-Up Cost	\$0
Building	Wedgewood Park	Operating Budget	\$150,787
Start Year	2014	Starting Reserve Balance	\$64,000
Interest/Investment Rate	2.0 %	Contribution Threshold	\$500,000
Estimated Contingency Allowance	\$2,000	Contribution Below Threshold	\$140,000
Tax Rate	0.0 %	Contribution Above Threshold	\$140,000
Planning Horizon	30	Reserve Contribution Increase	0.0
Number of Units	39	Monthly Avg. Unit Contribution	\$299

YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	ADDITIONAL FUNDING	RESERVE INCOME	KEEP-UP	CONTINGENCY COSTS	TAX LIABILITY	CLOSING BALANCE	PERCENT FUNDED
2014	\$64,000	\$140,000	\$0	\$1,280	\$0	\$2,000	\$0	\$203,280	12.38 %
2015	\$203,280	\$140,000	\$0	\$4,066	\$134,150	\$2,000	\$0	\$211,196	12.87 %
2016	\$211,196	\$140,000	\$0	\$4,224	\$48,000	\$2,000	\$0	\$305,420	17.72 %
2017	\$305,420	\$140,000	\$0	\$6,108	\$354,500	\$2,000	\$0	\$95,028	6.33 %
2018	\$95,028	\$140,000	\$0	\$1,901	\$58,900	\$2,000	\$0	\$176,028	11.26 %
2019	\$176,028	\$140,000	\$0	\$3,521	\$7,800	\$2,000	\$0	\$309,749	18.45 %
2020	\$309,749	\$140,000	\$121,646	\$6,195	\$570,590	\$2,000	\$0	\$5,000	0.40 %
2021	\$5,000	\$140,000	\$472,700	\$100	\$610,800	\$2,000	\$0	\$5,000	0.69 %
2022	\$5,000	\$140,000	\$0	\$100	\$1,800	\$2,000	\$0	\$141,300	17.77 %
2023	\$141,300	\$140,000	\$0	\$2,826	\$36,600	\$2,000	\$0	\$245,526	29.22 %
2024	\$245,526	\$140,000	\$0	\$4,911	\$8,100	\$2,000	\$0	\$380,337	41.52 %
2025	\$380,337	\$140,000	\$0	\$7,607	\$173,430	\$2,000	\$0	\$352,513	42.47 %
2026	\$352,513	\$140,000	\$0	\$7,050	\$93,000	\$2,000	\$0	\$404,564	49.39 %
2027	\$404,564	\$140,000	\$0	\$8,091	\$28,300	\$2,000	\$0	\$522,355	59.90 %
2028	\$522,355	\$140,000	\$0	\$10,447	\$567,000	\$2,000	\$0	\$103,802	26.96 %
2029	\$103,802	\$140,000	\$0	\$2,076	\$6,300	\$2,000	\$0	\$237,578	55.25 %
2030	\$237,578	\$140,000	\$0	\$4,752	\$129,680	\$2,000	\$0	\$250,649	71.41 %
2031	\$250,649	\$140,000	\$0	\$5,013	\$39,300	\$2,000	\$0	\$354,362	96.82 %
2032	\$354,362	\$140,000	\$0	\$7,087	\$39,600	\$2,000	\$0	\$459,850	121.65 %
2033	\$459,850	\$140,000	\$0	\$9,197	\$136,200	\$2,000	\$0	\$470,847	163.48 %
2034	\$470,847	\$140,000	\$0	\$9,417	\$0	\$2,000	\$0	\$618,264	185.66 %
2035	\$618,264	\$140,000	\$0	\$12,365	\$167,230	\$2,000	\$0	\$601,399	291.94 %
2036	\$601,399	\$140,000	\$0	\$12,028	\$32,400	\$2,000	\$0	\$719,027	344.03 %
2037	\$719,027	\$140,000	\$0	\$14,381	\$67,100	\$2,000	\$0	\$804,308	456.99 %
2038	\$804,308	\$140,000	\$0	\$16,086	\$28,500	\$2,000	\$0	\$929,894	528.34 %
2039	\$929,894	\$140,000	\$0	\$18,598	\$22,300	\$2,000	\$0	\$1,064,192	584.72 %
2040	\$1,064,192	\$140,000	\$0	\$21,284	\$145,280	\$2,000	\$0	\$1,078,195	1,711.42 %
2041	\$1,078,195	\$140,000	\$0	\$21,564	\$31,700	\$2,000	\$0	\$1,206,059	2,941.60 %
2042	\$1,206,059	\$140,000	\$0	\$24,121	\$20,800	\$2,000	\$0	\$1,347,380	5,182.23 %
2043	\$1,347,380	\$140,000	\$0	\$26,948	\$29,800	\$2,000	\$0	\$1,482,528	100.00 %

# Funding Model - Fixed Annual Funding of \$140,000 (Progressive)

## GRAPHIC REPRESENTATION



# Appendix E

## 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 F

## RDH Qualifications



## Depreciation Report

New regulations in British Columbia make Depreciation Reports mandatory for most strata corporations. RDH Building Engineering Ltd. offers building science and building asset management services from three offices in BC; Vancouver, Victoria, and Courtenay. 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. To supplement our in-house expertise, we consult subconsultants for items such as elevator and swimming pool reviews. 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. David Albrice is a certified Professional Reserve Analyst and was one of the key people consulted when the legislation was drafted. He has an unrivaled depth of understanding of the physical, financial planning, and strata governance issues that need to be considered in the development of an effective Depreciation Report.

## About Us



### David Albrice, B.Sc. URP, ARP, PRA

- Professional Reserve Analyst, APRA
- B.Sc. Urban and Regional Planning
- Associate Reserve Planner, REIC
- Project Manager on 100s of Facility Condition Assessments and Reserve Studies (Depreciation Reports)



### Mike Wilson, P.Eng.

- B.Eng. & M.Eng., Structural Engineering
- Registered professional engineer, APEGBC
- 20 years experience as a consultant focused in the field of building science



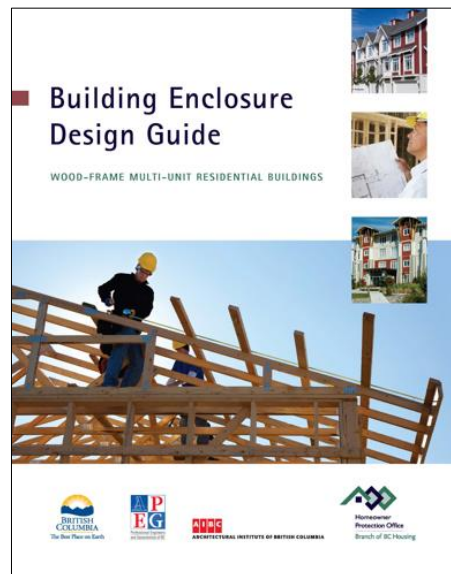
### Mark Will, Dipl.T., BA

- Dipl.T., Building Science Technology
- B.A., Economics
- 15 years experience in project management
- CHOA Board Member



### Peter Fitch, C.Tech.

- UBC/UBCM Certified Professional program (audit only)
- Member of Applied Science Technologists & Technicians of British Columbia
- 30 years of experience in the mechanical design field





**Matt Mulleray, P.Eng.**

- B.A.Sc., Civil Engineering
- Dipl.T., Civil and Structural Engineering
- Registered professional engineer, APEGBC
- 10 years experience in bldg. science & engineering consulting



**Harvey Goodman, P.Eng.**

- B.A.Sc., Civil Engineering
- Registered professional engineer, APEGBC
- 20 years experience in building science consulting



**Serge Desmarais, Architect AIBC, CP**

- B.Arch.
- Registered architect, AIBC
- Certified Professional, UBC
- 30 years experience in building design and construction capital renewal projects



**Jason Dunn, B.Arch.Sc., CCCA**

- B.Arch.Sc, Building Science Option
- Certified Construction Contract Administrator, CSC
- 10 years experience in building science consulting



**Robin Breuer, A.Sc.T., RRO**

- Dipl.T., Building Engineering Technology (Building Science Option)
- Registered Roof Observer, RCI Inc.
- 15 years experience in building science consulting



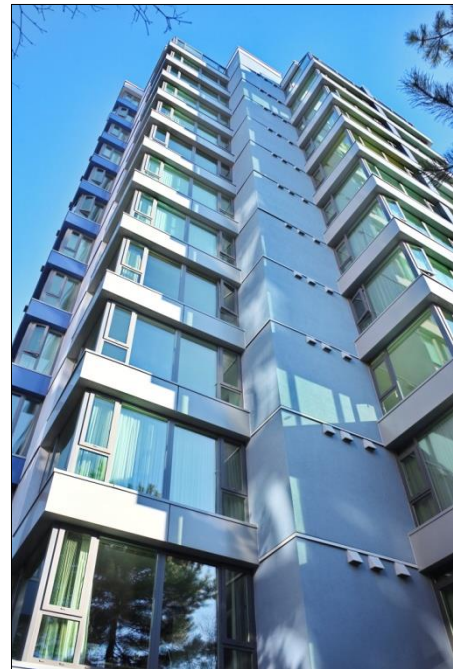
**Lauren Stokes, Dipl.T.**

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)
- 5 years experience in building science consulting



**Rob Mathena, Dipl.T.**

- Dipl.T., Technology in Building Engineering (Building Science Option)
- 15 years experience in building science consulting and construction





**Tim Smith, A.Sc.T.**

- Dipl.T., Civil Engineering Technologist
- Member of Applied Science Technologists & Technicians of British Columbia
- 5 years experience in building science consulting



**Amy Montgomery, EIT**

- B.Sc., Mechanical Engineering
- M.A.Sc., Mechanical Engineering, in progress



**Byron Searle, B.B.Sc.**

- B.B.Sc., Building Science



**Jesus De Mesa, Dipl.T.**

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



**Alex Seto, Dipl.T.**

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



**Roma Santos, Dipl.T.**

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



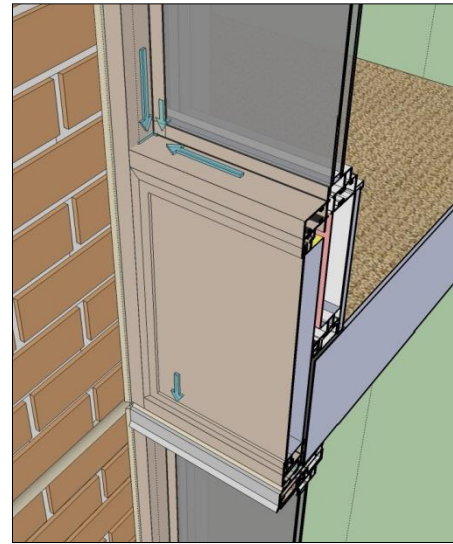
**Nick Smit, Dipl.T.**

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



**Brandon Carreira, Dipl.T.**

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)







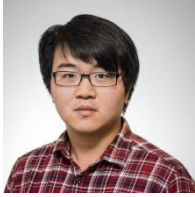
**Jesse Listoen, Dipl.T.**

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



**James Hornett, Dipl.T.**

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)



**Kingston Chow, EIT, Dipl.T.**

- B.Eng., Civil Engineering
- Dipl.T., Civil Engineering



**Nicola Alexander, B.Tech.**

- B.Tech., Architectural Science

### Administrators and Client Support



**Vanessa Jumawan**

- 5 years experience in administration with engineering/architecture firm



**Anna Qiu**

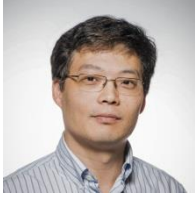
- Cert., Business Administration
- 10 years experience in administration with engineering/architecture firm

### Software Support and Programmers



**Matthew Branch, P.Eng.**

- B.Sc., Civil Engineering
- Registered professional engineer, APEGBC
- 13 years experience in engineering data analysis



**Gary Zhang, B.Sc.**

- B.Sc., Computer Science and Engineering
- 15 years experience in software development



**Kan Ma, B.Sc.**

- B.Sc., Computing Science
- 7 years experience in software development

**Quantity Take-Offs**



**Andrea Corona, Dipl.**

- Dipl., Small Craft Naval Architecture
- 25 years experience in architectural drafting



**Roya Kiani Amin, B.Sc.**

- B.Sc., Civil Engineering
- 5 years experience in architectural drafting
- 2 years experience in construction



**Brigitte MacKenzie**

- 3-year Apprenticeship Program, Germany
- 25 years experience in architectural drafting

# Appendix G

Insurance Certificate

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

Amending Certificate No. : 320006980411

Re: Evidence of Insurance:

**To Whom It May Concern**

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 Engineering Ltd.  
 224 West 8th Avenue  
 Vancouver, BC V5Y 1N5

**Coverage**

<b>Commercial General Liability</b>	<b>Insurer</b>	Royal & Sun Alliance Ins Co of Canada	
<b>Policy #</b>	8141333		
<b>Effective</b>	02-May-2014	<b>Expiry</b>	02-May-2015
<b>Limits of Liability</b>	Bodily Injury & Property Damage, Each Occurrence \$5,000,000 Products and Completed Operations, Aggregate \$5,000,000 Personal Injury \$5,000,000 Non-Owned Automobile Liability \$5,000,000 Policy may be subject to a general aggregate and other aggregates where applicable		

<b>Professional Liability</b>	<b>Insurer</b>	Lloyd's Underwriters	
<b>Policy #</b>	QC1402155		
<b>Effective</b>	02-May-2014	<b>Expiry</b>	02-May-2015
<b>Limits of Liability</b>	Subject to aggregate where applicable		

**Terms and / or Additional Coverage**

Professional Liability  
 Limit: \$2,000,000 Per Claim Limit / \$4,000,000 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.**

*L. Hadden*

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Dated : 06-May-2014  
Issued By : Hadden, Lindsay D.  
Tel : 604-443-2524

**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**