



**To The Owners, Strata Plan NW2502
c/o Mr. Robert Gillan, Strata Council
Strata Plan NW2502
12901 - 12981 17th Avenue
Surrey BC V4A 8T3**

**Site Visit: October 13th, 2016
Submitted: December 23rd, 2016 by
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1 Introduction

RDH Building Science Inc. (RDH) was retained by The Owners, Strata Plan NW2502 (the Owners) to prepare a Depreciation Report Update (the Report) for the townhouse complex known as Ocean Park Grove, located at 12901 to 12981 17th Avenue, Surrey, 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 Update Report is intended to help the Owners, the Strata Council, and the management team make informed decisions about the allocation of resources to the common property Assets (such as roofs, fences, and paving).

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

This Report is an update to the Depreciation Report issued on November 12, 2013. A site visit was completed on October 13, 2016, and the financial data is based on the 2016 fiscal year. The final Report was distributed to the Strata Council on December 23, 2016.

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

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

2 Ocean Park Grove

Ocean Park Grove is a 29 year old townhouse complex, with 58 residential strata lots. The buildings are typically of wood-framed construction.

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

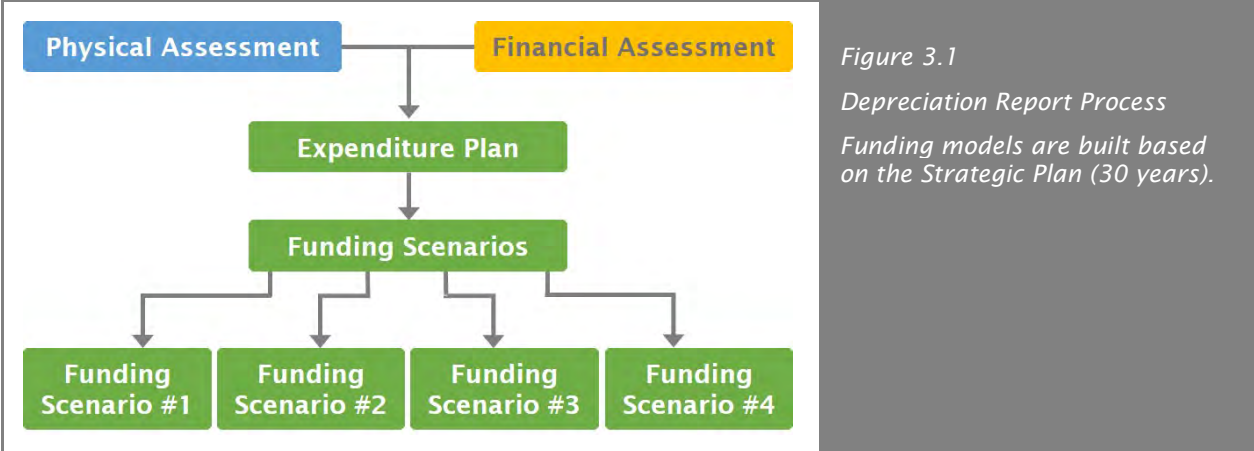
Key physical parameters of Ocean Park Grove are summarized in Table 2.1, Figure 2.1, and Figure 2.2 below.

TABLE 2.1 KEY PHYSICAL PARAMETERS		
	Date of first occupancy (approximate)	1987
	Gross floor area (ft ²)	123,000
	Total area of Unit Entitlement	4,600
	Stories above grade	1 & 2
<p><i>Figure 2.1 Typical Front elevation photograph of Ocean Park Grove</i></p>	Total number of strata lots	58
		
<p><i>Figure 2.2 Aerial photograph of Ocean Park Grove (©2016 Google).</i></p>		

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 Figure 3.1 below:



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 Update Report.

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

TABLE 3.1 SUMMARY OF PLACEHOLDER ASSETS	
ASSET	PARTY RESPONSIBLE FOR CAPITAL EXPENDITURES
ENCL 06 – Vinyl Framed Windows	→ Strata lot Owners
ENCL 07 – Aluminum Framed Windows	→ Strata lot Owners, except for the amenity building.

TABLE 3.1 SUMMARY OF PLACEHOLDER ASSETS	
ASSET	PARTY RESPONSIBLE FOR CAPITAL EXPENDITURES
ENCL 10 – Aluminum Framed Sliding Glass Door	→ Strata lot Owners
ELEC 01 – Distribution Transformer - Exterior	→ BC Hydro
FIRE 02 – Fire Hydrant	→ City of Surrey
AMEN 03 – Central Mailboxes	→ Canada Post

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 complex, limited to a sample of readily accessible Assets, and
- A review of other technical information such as construction drawings, previous investigations, or reports.

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

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

The Strata Corporation has undertaken several major maintenance programs to prolong the life of many Assets, particularly with the enclosure system. The Strata Corporation has also adopted a replaced as required basis for wood components such as wood trim and fencing.

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 3.2 below. The history establishes the chronological age of the Assets.

TABLE 3.2 MAINTENANCE AND RENEWALS HISTORY

<p>Building Enclosure</p> <ul style="list-style-type: none"> → 2015 - Repainting of wood trim every 3-5 years with localized trim replacement → 2015 - Localized replacement of exterior sealant (Ongoing) → 2013 - Inspection of humid crawlspaces by a building enclosure consultant → 2008 - Repainting of stucco cladding → 2006-2008 - Replacement of roofs, gutters, & skylights → 1998 - Replacement of garage doors → Replacement of original aluminum windows by individual Owners (ongoing) → Replacement of insulated glazing units (IGUs) (ongoing) → Localized repairs to doors 	<p>Mechanical</p> <ul style="list-style-type: none"> → 2016 - Replacement of water boiler in amenity building → 2012 - Commissioning of storm and sewer drainage inspection report → 2011 - Replacement of the amenity building hot water tank → 2011 - Replacement of amenity building toilet → 2010 - Replacement of amenity building fireplace → 2006-2013 - Replacement of perimeter drainage in 3 locations → Camera surveys of sanitary drainage every two years.
<p>Electrical</p> <ul style="list-style-type: none"> 2009 - Upgrade of street lights to LED 	<p>Fire Safety System</p> <ul style="list-style-type: none"> → 2013 - Upgrade of fire safety equipment in the amenity building
<p>Sitework System</p> <ul style="list-style-type: none"> → 2016 - Resealing of asphalt paving → 2016 - Localized replacement and repainting of wood fencing (ongoing) → 2016 - Removal, replacement, or pruning of problematic trees (ongoing) → 2016 - Commissioning of an assessment of the west retaining wall → 2012 - Commissioning of arborist and landscaping reports (2012) → 2011 - Installation of irrigation valves → 2010 - Application of sealer and localized repair to masonry fencing → 2002 - Replacement of masonry fencing 	<p>Interior Finishes</p> <ul style="list-style-type: none"> → 2011 - Repainting of the amenity building → 2011 - Replacement of amenity building flooring → 2011 - Replacement of amenity building cabinets

On October 13, 2016, a representative of RDH Building Science Inc. visited the site to visually review the Assets. While the Depreciation Report Update does not constitute a maintenance review or condition assessment, some observations regarding the general condition, design, and construction of the Assets were made as part of the visual review. These observations were used to determine a reasonable



estimated remaining service life of various Assets. Table 3.3 includes examples of some observations made during the review.

TABLE 3.3 OBSERVATIONS BY SYSTEM	
SYSTEM	OBSERVATION
Building Enclosure	<ul style="list-style-type: none"> → There are large and moderate overhangs at most areas that protect the cladding and windows from rain and sun. In general, protected walls and windows will likely have a longer than average service life. → Some areas, particularly at bay windows and entrances, are not protected by overhangs and have a higher exposure to wetting. These areas are likely to have a shorter initial service life. → There is evidence of regular repainting and targeted application of sealant.
Interior Finishes	<ul style="list-style-type: none"> → The amenity building is general low-use, and while interior finishes are dated, there are few deficiencies.
Site work	<ul style="list-style-type: none"> → There are a few mature trees in excess of 30 feet in height throughout the site. The Strata Corporation has a tree management program in place to monitor the growth and condition of trees.

3.2 Financial Assessment

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

- The opening balance in the *Contingency Reserve Fund* (CRF).
- The estimated value of capital expenditures, expressed in *Current Year Dollars* (CYD).
- The estimated future value of capital expenditures, expressed in *Future Year Dollars* (FYD). These costs are calculated by applying an inflation rate (2% per year) to the current costs.

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

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

TABLE 3.4 KEY FINANCIAL PARAMETERS		
PARAMETER		UPDATE STUDY (2016)
Fiscal year end	December 31st	
Building reproduction cost	\$16,261,000	\$17,525,000
Operating budget (excluding CRF contribution)	\$239,000	\$260,730
Annual CRF contribution	\$30,000	\$40,000

TABLE 3.4 KEY FINANCIAL PARAMETERS		
PARAMETER		UPDATE STUDY (2016)
Accumulated CRF Balance	\$137,000	\$248,000

**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 November 2016.*

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

Costs are considered *Class D* estimates ($\pm 50\%$), as defined by the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), or unless noted otherwise. Costs presented include a combination of *Class B*, *Class C*, and *Class D* estimates. Unless otherwise noted, soft costs, such as consulting fees and contingency allowances are not included, because these costs are highly dependent on the scope of work for a particular project.

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

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

4 Expenditures

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

Major maintenance refers to maintenance that occurs at intervals greater than one year, for example, every 18 months, two years, five years, etc. (less frequently than once a year). Major maintenance typically includes activities such as testing and inspecting, and is considered a capital expense. Minor maintenance includes maintenance activities that occur once a year or more frequently such as quarterly or monthly. The costs associated with *major maintenance and renewals* are included in the Depreciation Report Update funding models. Costs associated with minor maintenance are included in the Strata Corporation’s operating budget.

4.1 Major Maintenance and Renewals Expenditures

Ocean Park Grove is now approximately 29 years old. As the townhouse complex ages, some large renewals expenditures can be anticipated in the next 10 years. Table 4.1 below summarizes all major maintenance and renewal costs by system, including costs forecast for the next 30 years.

TABLE 4.1 CAPITAL EXPENDITURES SUMMARY BY SYSTEM				
SYSTEM	10 YEAR CAPITAL COSTS (WITHOUT INFLATION)	10 YEAR CAPITAL COSTS (WITH INFLATION)	30 YEAR CAPITAL COSTS (WITHOUT INFLATION)	30 YEAR CAPITAL COSTS (WITH INFLATION)
Building Enclosure	\$590,000	\$650,000	\$5,600,000	\$7,200,000
Electrical	\$13,000	\$13,000	\$82,000	\$100,000
Mechanical	\$87,000	\$96,000	\$260,000	\$330,000
Fire Safety	\$0	\$0	\$3,000	\$4,000
Interior Finishes	\$4,000	\$4,000	\$27,000	\$38,000
Amenities	\$5,000	\$5,000	\$10,000	\$13,000
Sitework	\$88,000	\$93,000	\$710,000	\$970,000
Building Total	\$787,000	\$861,000	\$6,692,000	\$8,655,000

Approximately 10% to 15% of the Strata Corporation’s capital expenditures will likely occur in the next 10 years. The distribution of estimated capital expenditures over the next 10 years is shown in Figure 4.1 below.

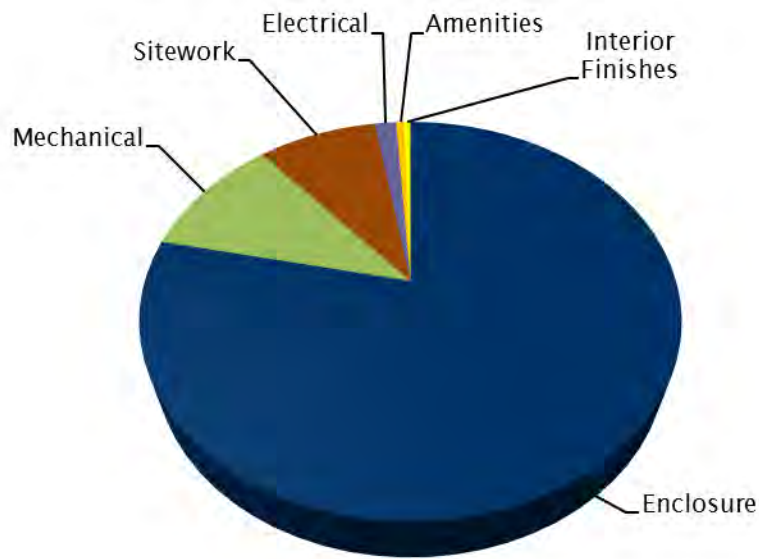


Figure 4.1 Distribution of estimated capital expenditures over 10 years by system.

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

5 Major Maintenance and Renewals Planning Horizons

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

- **Strategic** (30 years): The average service life of many 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 5 to 10 years.

5.1 Strategic Planning Horizon

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

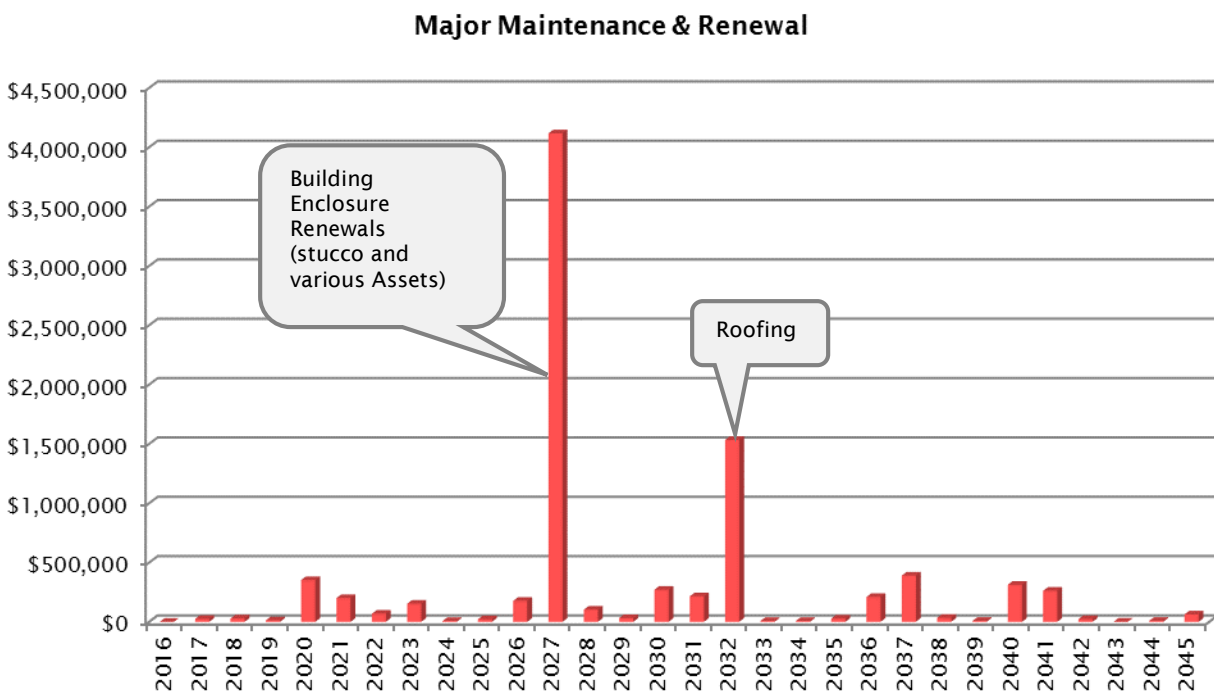


Figure 5.1 Strategic Forecast (30 Years), showing the approximate timing and value of some key capital expenditures.

Each bar on the graph represents a collection of different major maintenance and renewals activities, each with different values. The labels on the graph summarize significant renewals expenditures forecast for

that year. Detailed information about each year, including a description of the maintenance and renewal activities and estimated costs, is also available in Appendix H.

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

5.2 Tactical Planning Horizon

The graph below shows the projected major maintenance and renewal costs for the next ten years (Figure 5.2). Commonly, building managers refer to a five-year Tactical Plan; however, a 10-year plan allows the Strata Corporation to see a wider range of projects.

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

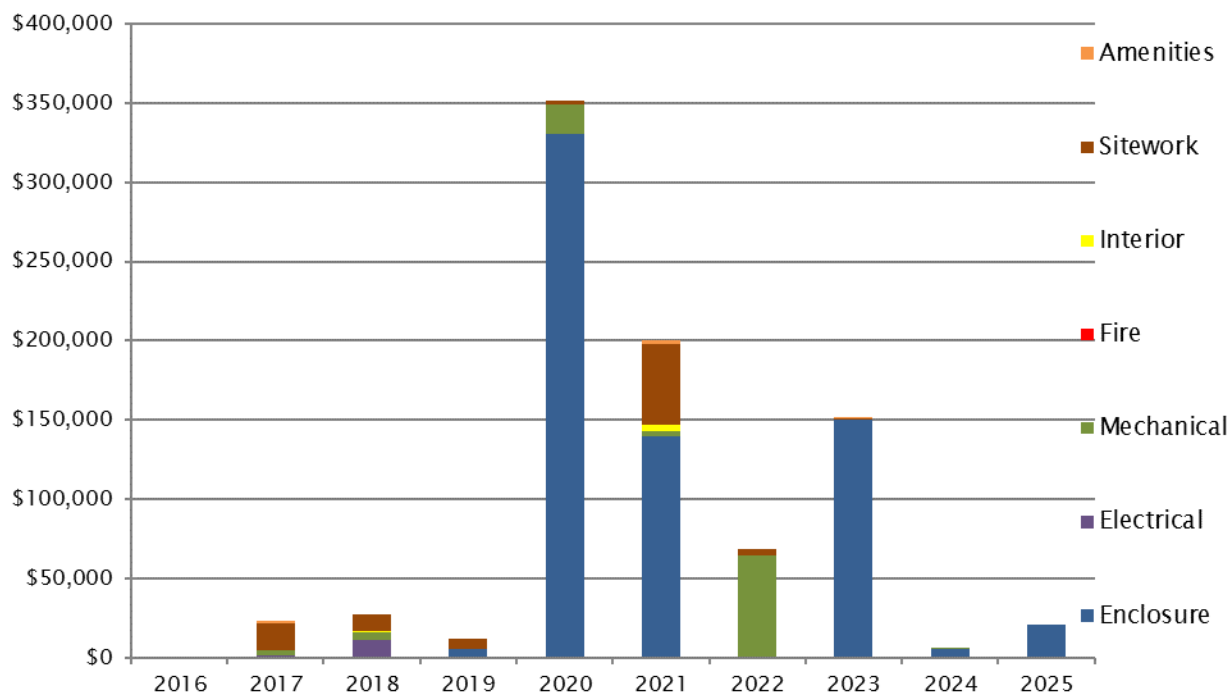


Figure 5.2 Tactical Forecast (10 years), showing the approximate timing and value of some key capital expenditures.

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

To help the Strata Corporation start the project planning process, some of the activities forecast for the next 10 years are listed below. Because the timing is somewhat uncertain, renewals and major maintenance activities are grouped into three-year planning periods. The list below is not comprehensive;

renewals and major maintenance activities likely to cost less than \$5,000 in current year dollars are included in the appendices.

2017 to 2019

Building Enclosure

- Encl 13 General and Inspections - Conduct a building enclosure condition assessment (BECA). In particular, investigate the bay window stacks and front entrance arches.

Electrical

- Elec 02 Electrical Distribution - Conduct infrared thermography scanning on electrical equipment.
- Elec 04 Exterior light fixtures - Replacement of exterior light fixtures, as desired for aesthetics and energy efficiency.
- Elec 05 Interior light fixtures - Replacement of interior light fixtures at the amenity room, as desired for aesthetics.

Mechanical

- Mech 04 Fixtures - Replacement of sinks and faucets in the amenity building, as required.
- Mech 09 Domestic Cold Water Distribution Piping - Consider assessing the domestic cold water distribution piping and connections that are outside of the strata lots.
- Mech 10 Valves - Cross Connection and Backflow Prevention - Anticipate replacing various valves on the plumbing systems.

Amenities

- Amen 01 Computer Equipment - Replace computer and printer if required to address functional issues.

Sitework

- Site 01 Timber Retaining Wall - Continue monitoring west timber retaining wall for overturning, or other types of movement.
- Site 06 Soft Landscaping Large Trees - Continue tree management and restoration program.
- Site 13 Underground Sewer Services - Camera scope and auger drain lines.

2020 to 2022

Building Enclosure

- Encl 01 Laminated asphalt shingle roofs - Clean asphalt shingles and apply moss inhibitor.
- Encl 03 Stucco Clad Walls - If recommended in a BECA, locally repair stucco walls and acrylic finish coat, as required. Repaint the entire complex if desired for aesthetics and to blend any required repair work.
- Encl 04 Wood Trim - Replace deteriorated wood trim and repaint all wood trim as preventative maintenance.

Mechanical

- Mech 02 DHW Circulation Pump - Anticipate replacement of the circulation pump.

- Mech 07 DHW Tank – Anticipate replacement of the electric reheat tank.
- Mech 09 Domestic Cold Water Distribution Piping – Replace domestic cold water distribution piping and connections outside of the strata lots, if recommended in an assessment.
- Mech 10 Valves - Cross Connection and Backflow Prevention – Anticipate replacing various valves on the plumbing systems.

Interior

- Finish 03 Paint – Repaint interior walls in amenity building as desired for aesthetics.

Amenity

- Amen 02 Domestic Appliances – Replace domestic appliances, as required.
- Amen 04 Furniture & Accessories – Replace furniture as desired for aesthetics and comfort.

Sitework

- Site 01 Timber Retaining Wall – Repair west timber retaining wall.
- Site 04 Masonry Fencing & Retaining Walls – Repoint and repair masonry fencing and retaining walls, as required.
- Site 05 Wood Fencing – Replace and repaint wood fencing throughout complex.

2023 to 2025

Building Enclosure

- Encl 08 Glazed Metal Clad Swing Doors – Replaced glazed metal clad doors, as required.
- Encl 09 Metal Clad Swing Doors – Replace metal clad swing doors, as required.
- Encl 14 Sealant – Replace sealant throughout the complex.

5.3 Project Implementation

The projects identified in the previous section represent a preliminary step that is only intended to help the Strata Corporation identify, prioritize, and plan projects. Most significant renewal projects identified in the Depreciation Report Update 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 Update are considered Class D (±50%) due to the

lack of information regarding specific projects and are based on a number of general assumptions regarding scopes of work.

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

- *Targeted Projects*. These projects are localized to particular portions of the building. Different exposure conditions and wear patterns may require that only some sections of the building require renewal at one point in time.
- *Phased Projects*. These projects are carried out in multiple stages rather than as a single coordinated project. Phased projects can reduce the financial burden by spreading the costs over a longer time period.
- *Comprehensive Projects*. These projects are implemented as one coordinated undertaking. Comprehensive projects may allow the Strata Corporation to leverage the best economies of scale, shorten the overall duration, and lower the overall costs.
- *Bundled Projects*. These projects bundle or combine various related renewals activities (e.g. renewals that are located in close physical proximity, or that require the same type of trade workers). Bundled projects may allow the Strata Corporation to leverage economies of scale and lower the overall costs, improve the quality of the work, and incorporate upgrades.

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



6 Funding Scenarios

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

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

6.1 Minimum Funding Requirements

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

TABLE 6.1 MINIMUM FUNDING REQUIREMENT CALCULATION	
PARAMETER	VALUE
2016 operating budget (excluding CRF contribution)	\$ 263,730
→ 25% of the operating budget	\$ 65,933
→ 10% of the operating budget	\$ 26,373
2016 CRF opening balance	\$ 210,000
2016 CRF Contribution	\$ 40,000
Will the CRF closing balance exceed 25% of the operating budget at the end of the fiscal year?	Yes
Does the CRF contribution exceed 10% of the operating budget?	Yes

The Strata Corporation exceeds the statutory minimum contribution to the CRF. However, it is important to note that the statutory guideline is not a good measure of the financial preparedness of the Corporation. Adjustments to the CRF contributions should be based on the forecasted capital expenditures of the Strata Corporation, and not the operating budget.

6.2 Alternative Funding Scenarios

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

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

- **Current (2016).** The CRF allocation that was approved by the Owners at the last Annual General Meeting. The current allocation is also known as the status quo.
- **Alternative #1.** An increase from the status quo. Alternative #1 is just one of many possible scenarios for a new funding level in the next fiscal year.
- **Progressive.** This is the annual allocation that would have been set aside since the first year of operations to ensure that the reserve balance would have been sufficient to avoid any special assessments over a 30-year period. The progressive reserve allocation is an idealistic target which typically represents an upper bound for the amount allocated to the CRF.

TABLE 6.2 COMPARISON OF DIFFERENT FUNDING SCENARIOS			
	CURRENT (2016) CRF	ALTERNATIVE	PROGRESSIVE RESERVE
Annual CRF allocation	\$40,000	\$70,000	\$271,000
Percent of progressive reserve	15 %	26 %	100 %
CRF contribution per unit of unit entitlement (Total UE: 4,600)			
Per month	\$0.72	\$1.27	\$4.91
Per year	\$8.70	\$15.22	\$58.91
CRF contribution per average strata lot			
Per month	\$57	\$100	\$389
Per year	\$690	\$1,207	\$4,672
Approximate number of special levies (over 30 years)	13	8	2
Approximate value of special levies (over 30 years)	\$7.3M	\$6.5M	\$2.1M
Assumed Inflation Rate	2 %	2 %	2 %
Assumed Interest Rate	2 %	2 %	2 %

The following sections of the Update Report provides 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 10 years of cash flow data are also provided.

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



6.3 Current (2016) Funding Scenario

The current funding scenario is based on the CRF contribution approved by the Owners at the last Annual General Meeting (2016). The scenario is based on a fixed annual CRF contribution (no increases).

TABLE 6.3 CURRENT (2016) FUNDING MODEL: CASH FLOW TABLE							
FISCAL YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CONTINGENCY COSTS	CLOSING BALANCE
2016	\$248,000	\$40,000	\$0	\$4,960	\$0	\$1,000	\$291,960
2017	\$291,960	\$40,000	\$0	\$5,839	\$23,810	\$1,000	\$312,989
2018	\$312,989	\$40,000	\$0	\$6,260	\$27,710	\$1,000	\$330,539
2019	\$330,539	\$40,000	\$0	\$6,611	\$12,100	\$1,000	\$364,050
2020	\$364,050	\$40,000	\$0	\$7,281	\$351,700	\$1,000	\$58,631
2021	\$58,631	\$40,000	\$106,417	\$1,173	\$200,220	\$1,000	\$5,000
2022	\$5,000	\$40,000	\$29,300	\$100	\$68,400	\$1,000	\$5,000
2023	\$5,000	\$40,000	\$113,100	\$100	\$152,200	\$1,000	\$5,000
2024	\$5,000	\$40,000	\$0	\$100	\$6,130	\$1,000	\$37,970
2025	\$37,970	\$40,000	\$0	\$759	\$21,000	\$1,000	\$56,729

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

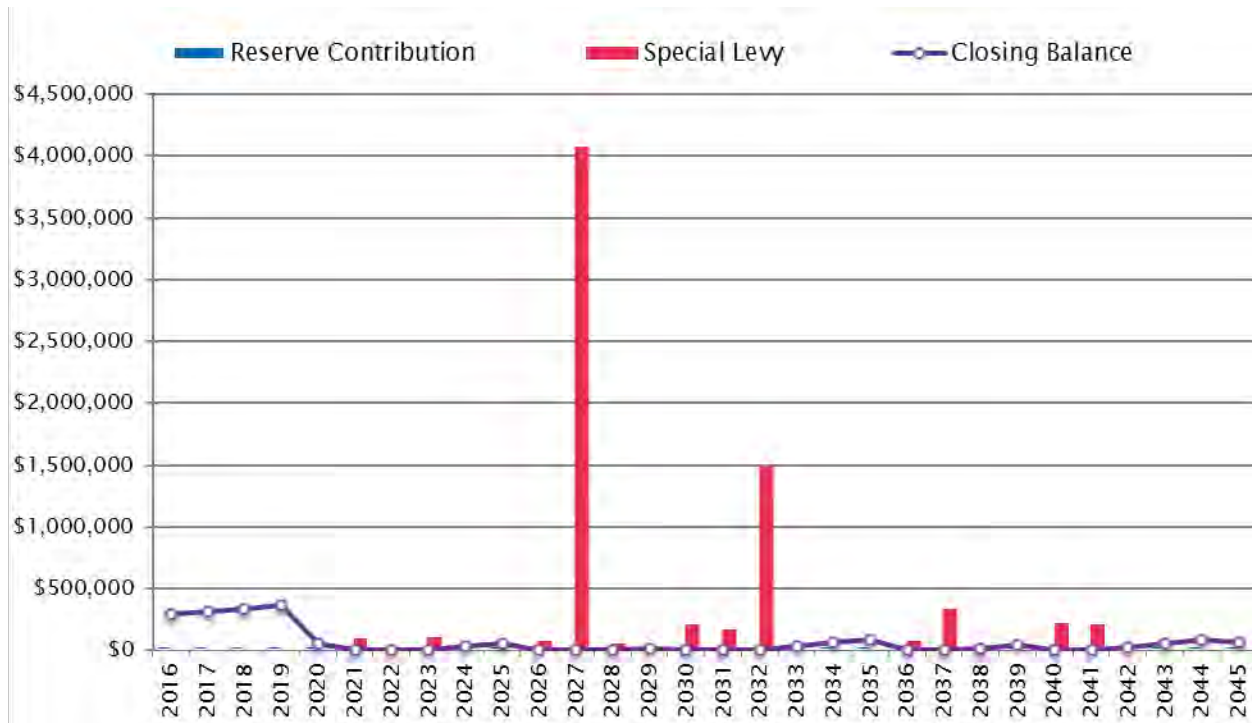


Figure 6.1 CRF balance, contribution and special levies based on the current funding.

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

6.4 Alternative Funding Scenario

Alternative Funding Scenario is based on a fixed annual CRF contribution. The contribution is approximately twice the current funding level.

TABLE 6.4 ALTERNATIVE FUNDING MODEL #0: CASH FLOW TABLE							
FISCAL YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CONTINGENCY COSTS	CLOSING BALANCE
2016	\$248,000	\$70,000	\$0	\$4,960	\$0	\$1,000	\$321,960
2017	\$321,960	\$70,000	\$0	\$6,439	\$23,810	\$1,000	\$373,589
2018	\$373,589	\$70,000	\$0	\$7,472	\$27,710	\$1,000	\$422,351
2019	\$422,351	\$70,000	\$0	\$8,447	\$12,100	\$1,000	\$487,698
2020	\$487,698	\$70,000	\$0	\$9,754	\$351,700	\$1,000	\$214,752
2021	\$214,752	\$70,000	\$0	\$4,295	\$200,220	\$1,000	\$87,827
2022	\$87,827	\$70,000	\$0	\$1,757	\$68,400	\$1,000	\$90,184
2023	\$90,184	\$70,000	\$0	\$1,804	\$152,200	\$1,000	\$8,787
2024	\$8,787	\$70,000	\$0	\$176	\$6,130	\$1,000	\$71,833
2025	\$71,833	\$70,000	\$0	\$1,437	\$21,000	\$1,000	\$121,270

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.

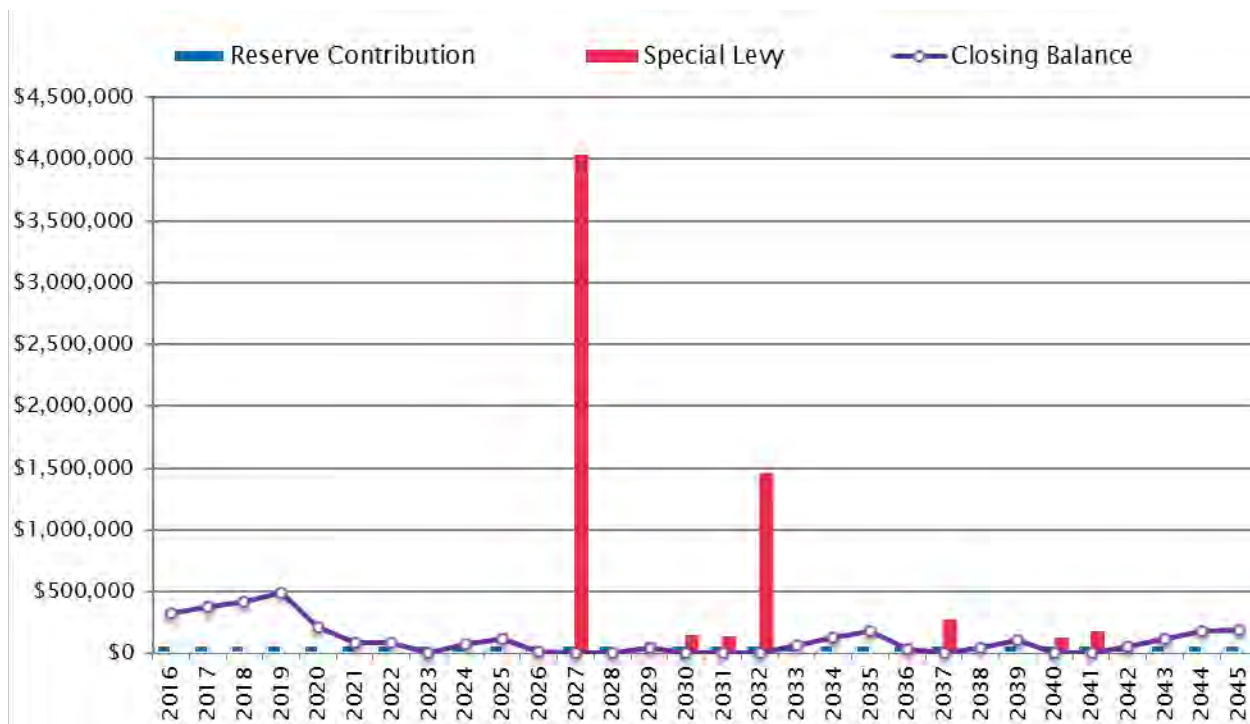


Figure 6.2 CRF balance, contribution and special levies based on Alternative.

Alternative funding scenario would significantly reduce the number of special levies in the next 10 years.

6.5 Progressive Funding Scenario

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

TABLE 6.5 PROGRESSIVE FUNDING MODEL: CASH FLOW TABLE							
FISCAL YEAR	OPENING BALANCE	RESERVE CONTRIBUTION	SPECIAL LEVY	RESERVE INCOME	RENEWAL COSTS	CONTINGENCY COSTS	CLOSING BALANCE
2016	\$248,000	\$271,000	\$0	\$4,960	\$0	\$1,000	\$522,960
2017	\$522,960	\$271,000	\$0	\$10,459	\$23,810	\$1,000	\$779,609
2018	\$779,609	\$271,000	\$0	\$15,592	\$27,710	\$1,000	\$1,037,491
2019	\$1,037,491	\$271,000	\$0	\$20,750	\$12,100	\$1,000	\$1,316,141
2020	\$1,316,141	\$271,000	\$0	\$26,323	\$351,700	\$1,000	\$1,260,764
2021	\$1,260,764	\$271,000	\$0	\$25,215	\$200,220	\$1,000	\$1,355,759
2022	\$1,355,759	\$271,000	\$0	\$27,115	\$68,400	\$1,000	\$1,584,475
2023	\$1,584,475	\$271,000	\$0	\$31,689	\$152,200	\$1,000	\$1,733,964
2024	\$1,733,964	\$271,000	\$0	\$34,679	\$6,130	\$1,000	\$2,032,513
2025	\$2,032,513	\$271,000	\$0	\$40,650	\$21,000	\$1,000	\$2,322,164

The Progressive Reserve would offset smaller special levies. However, because of the timing of anticipated renewals projects, a fixed annual contribution will not eliminate all special levies over the 30-year planning horizon. The graph below shows the annual contribution to the CRF, the closing balance of the CRF, and the size of the special levies forecast for the next 30 years.

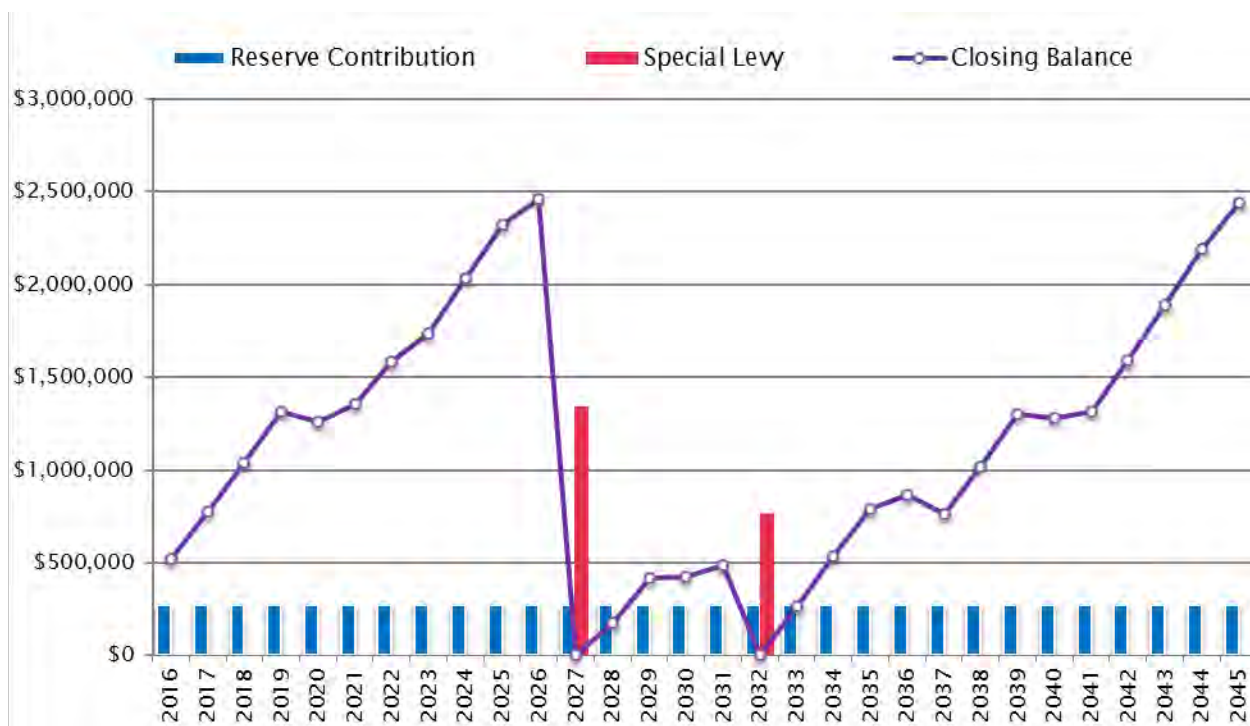


Figure 6.3 CRF balance, contribution, and special levies based on a Progressive Reserve calculation.

7 Next Steps

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

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

Recommendations

- **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 and connections. Update the Report with these findings and recommendations as may be required.

Yours truly,



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Reviewed by:



Laureen Stokes | Dipl.T.
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encl.

Appendix A

Glossary of Terms

Glossary

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

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

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

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

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

- **Class A Estimate** ($\pm 10-15\%$): 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** ($\pm 15-25\%$): 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** ($\pm 25-40\%$): 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** ($\pm 50\%$): A preliminary estimate which, due to little or no site information, indicates the approximate magnitude of cost of the proposed project, based on the client's broad requirements. This overall cost estimate may be derived from lump sum or unit costs for a similar project. It may be used in developing long term capital plans and for preliminary discussion of proposed capital projects.

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

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

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

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

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

Funding Model – A mathematical model used to establish an appropriate funding level for sustaining the assets in a building. Running a number of scenarios out of the funding model using different parameters (such as inflation rates and interest rates) can serve as a sensitivity analysis to determine the financial impact of different funding levels.

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

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

- Functional obsolescence
- Legal obsolescence
- Style obsolescence

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

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

Keep-up Costs – The monies required for renewal projects as each asset reaches the end of its useful service life. If an asset is not replaced at the end of its useful service life

and is kept in operation, through targeted repairs, then these costs get reclassified into the “catch-up” category.

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

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

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

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

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

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

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

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

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

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

Reserve Contribution – See Annual Contribution.

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

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

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

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

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

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

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

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

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

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

Appendix B

Asset Inventory



Enclosure

Roofs & Decks



Encl 01

Laminated Asphalt Shingle Roof & Concealed Gutters

Location:

Sloped roofs of all buildings.

Description:

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

Chronological Age:

9

Service Life:

25

Effective Age:

9

Remaining Service Life:

16

Last Review Rating:

Observation Count:

0



Encl 02

Wood Soffit

Location:

Underside of roof eaves.

Description:

Stained wood soffit over a wood framing substrate.

Chronological Age:

29

Service Life:

40

Effective Age:

29

Remaining Service Life:

11

Last Review Rating:

Observation Count:

0

Walls



Encl 03

Stucco Clad Wall - Undrained

Location:

Walls of all buildings.

Description:

Acrylic coated stucco applied directly over exterior sheathing membrane. There is a mixture of exposure conditions; some areas are protected by overhangs.

Chronological Age:

29

Service Life:

20

Effective Age:

16

Remaining Service Life:

4

Last Review Rating:

Observation Count:

0



Encl 04

Wood Trim

Location:

Perimeters of roofs and windows, and various other locations on exterior walls.

Description:

Vertical and horizontal wood trim boards with coated surface for protection of the substrate and aesthetics. Repainted in 2015 along with localized replacement of wood trim. There is a wide range of wood trim ages as the strata corporation replaces the wood trim on an as needed basis.

Chronological Age:

29

Service Life:

30

Effective Age:

19

Remaining Service Life:

11

Last Review Rating:

Observation Count:

0

Glazing Systems



Encl 05

Unit Skylight

Location:

Roofs of all units.

Description:

Individual unit skylights with double glazed insulating glazing units. Light wells are owner's responsibility. To be replaced during reroofing.

Chronological Age:

9

Service Life:

30

Effective Age:

14

Remaining Service Life:

16

Last Review Rating:

Observation Count:

0



Encl 06	Vinyl Framed Window		
Location:	(Replaced windows). All levels on all elevations of all buildings. Bylaw states that the repair and maintenance of windows and doors are the responsibility of the strata lots.		
Description:	Vinyl framed windows with double insulating glazing units, and casement, awning, or sliding operators. Amenity room windows replaced 2011.		
Chronological Age:	13	Service Life:	30
Effective Age:	13	Remaining Service Life:	17
Last Review Rating:		Observation Count:	0



Encl 07	Aluminum Framed Window		
Location:	(Original windows). All levels on all elevations of all buildings.		
Description:	Aluminum framed, non-thermally broken windows with double insulating glazing units, and casement, awning, or sliding operators. Windows are arranged in punched configuration. Bylaw states that the repair and maintenance of windows and doors are the responsibility of the strata lots.		
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0

Doors



Encl 08	Glazed Metal Clad Swing Door		
Location:	Ground level patio entrances.		
Description:	Metal clad wood swing door with insulating glazing units.		
Chronological Age:	29	Service Life:	25
Effective Age:	18	Remaining Service Life:	7
Last Review Rating:		Observation Count:	0



Encl 09	Metal Clad Swing Door		
Location:	Unit entries.		
Description:	Metal clad wood swing door without insulating glazing units.		
Chronological Age:	29	Service Life:	25
Effective Age:	18	Remaining Service Life:	7
Last Review Rating:		Observation Count:	0



Encl 10	Aluminum Framed Sliding Glass Door		
Location:	Ground level patio entrances.		
Description:	Sliding glass doors, double insulating glazing units, aluminum framing. Bylaw states that the repair and maintenance of windows and doors are the responsibility of the strata lots.		
Chronological Age:	29	Service Life:	30
Effective Age:	19	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0

Parking Garage



Encl 11 **Sectional Overhead Door - Metal**
 Location: Garages entrances.
 Description: Pre-finished metal sectional overhead garage door with motor drive and hardware.
 Chronological Age: 13 Service Life: 25
 Effective Age: 13 Remaining Service Life: 12
 Last Review Rating: Observation Count: 0

☰ **General & Inspections**



Encl 12 **Vinyl Rainwater Leaders**
 Location: Roof perimeter and building exteriors.
 Description: Vinyl rainwater leaders at roof perimeter. Includes concealed roof gutters.
 Chronological Age: 9 Service Life: 20
 Effective Age: 9 Remaining Service Life: 11
 Last Review Rating: Observation Count: 0



Encl 13 **General & Inspections**
 Location: Throughout buildings and site.
 Description: Miscellaneous interior and exterior components, such as service penetrations and interface details, not related to any particular assembly. Warranty, general reviews, and updating of Depreciation Report.
 Chronological Age: 29 Service Life: 75
 Effective Age: 29 Remaining Service Life: 46
 Last Review Rating: Observation Count: 0



Encl 14 **Sealant**
 Location: Various penetrations and interfaces on the building exterior.
 Description: Sealant of various types located at joints between building enclosure assemblies, as well as around components and penetrations within building enclosure assemblies.
 Chronological Age: 1 Service Life: 10
 Effective Age: 1 Remaining Service Life: 9
 Last Review Rating: Observation Count: 0

☰ **Electrical**

☰ **Power Supply**



Elec 01 **Distribution Transformer - Exterior [PLACEHOLDER]**
 Location: Exterior location on site.
 Description: Pad mounted transformer. [Equipment is owned by BC Hydro].
 Chronological Age: 29 Service Life: 45
 Effective Age: 29 Remaining Service Life: 16
 Last Review Rating: Observation Count: 0

☰ **Distribution**



Elec 02	Electrical Distribution		
Location:	Throughout the site.		
Description:	Main disconnect switch; downstream switchboards, panelboards, breakers, switches, disconnects and wiring to mechanical, lighting and power loads throughout the buildings and to individual suites through BC Hydro owned metering devices.		
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0

Light Fixtures



Elec 03	Street Lights		
Location:	Alongside roads throughout the side.		
Description:	Lumec Roadstar LED Pole lights along the road way.		
Chronological Age:	6	Service Life:	20
Effective Age:	6	Remaining Service Life:	14
Last Review Rating:		Observation Count:	0



Elec 04	Exterior Light Fixtures		
Location:	Various locations on building exteriors.		
Description:	A variety of fixture types, including wall mounted and recessed soffit pot lighting. A variety of lamp types, including fluorescent, compact fluorescent, incandescent, LED, etc. for exterior direct, indirect and accent lighting applications. A variety of light fixture controls, including switches, motion sensors, timers and photocells.		
Chronological Age:	29	Service Life:	20
Effective Age:	18	Remaining Service Life:	2
Last Review Rating:		Observation Count:	0



Elec 05	Interior Light Fixtures		
Location:	Amenity building.		
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, 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.		
Chronological Age:	29	Service Life:	20
Effective Age:	18	Remaining Service Life:	2
Last Review Rating:		Observation Count:	0

Mechanical

Controls and End Devices

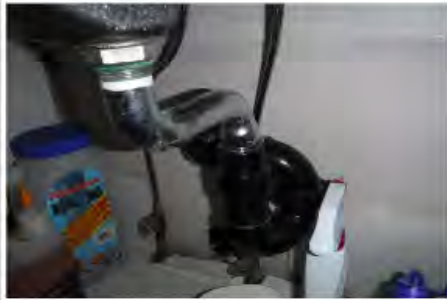


Mech 01	Controls - HVAC Instrumentation		
Location:	Amenity building.		
Description:	Programmable thermostats, flow gauges, thermometers, metering equipment, gauges, and other field devices to monitor and regulate pressure and temperature in the HVAC and plumbing distribution systems.		
Chronological Age:	29	Service Life:	20
Effective Age:	18	Remaining Service Life:	2
Last Review Rating:		Observation Count:	0

Plumbing & Drainage



Mech 02	Pump - DHW - Circulation and Recirculation		
Location:	Amenity building.		
Description:	Pipe-mounted bronze body domestic hot water circulation pumps. Circulating hot water from boilers to tanks and recirculating hot water from system.		
Chronological Age:	5	Service Life:	10
Effective Age:	5	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0



Mech 03	Drainage - Sanitary		
Location:	Throughout buildings and site.		
Description:	Buried and concealed piping, with mechanical or glued joints, ABS p-traps, and fittings		
Chronological Age:	29	Service Life:	50
Effective Age:	29	Remaining Service Life:	21
Last Review Rating:		Observation Count:	0



Mech 04	Fixtures - Taps & Sinks		
Location:	Amenity building washrooms and kitchen.		
Description:	Sinks, janitors mop sinks, and other plumbing supply fixtures.		
Chronological Age:	29	Service Life:	25
Effective Age:	24	Remaining Service Life:	1
Last Review Rating:		Observation Count:	0



Mech 05	Fixtures - Toilets		
Location:	Amenity building washrooms.		
Description:	Floor mounted toilets.		
Chronological Age:	5	Service Life:	20
Effective Age:	5	Remaining Service Life:	15
Last Review Rating:		Observation Count:	0



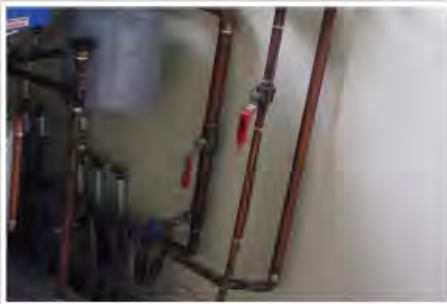
Mech 06	Interceptor - Sediment		
Location:	Throughout the site.		
Description:	Underslab concrete silt interceptor assembly with backwater valve, cast steel cover and frame		
Chronological Age:	29	Service Life:	50
Effective Age:	29	Remaining Service Life:	21
Last Review Rating:		Observation Count:	0



Mech 07	Tank - DHW - Small Domestic Electric		
Location:	Amenity room.		
Description:	GSW SS12SEB 1.5 KW, electric domestic hot water tank for small domestic service.		
Chronological Age:	5	Service Life:	10
Effective Age:	5	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0



Mech 08	Drainage - Perimeter and Foundation		
Location:	(Concealed Asset). Perimeters of buildings.		
Description:	Perforated piping forming part of a sub-surface foundation/footing drainage system around perimeters of buildings and underground structures. New perimeter drains at 3 locations over last 7 years.		
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0



Mech 09	Piping - Domestic Cold Water Distribution		
Location:	In crawlspaces of each building.		
Description:	Mixture of K and L copper connecting the below grade water distribution piping into the suites to the shut-off valves.		
Chronological Age:	29	Service Life:	35
Effective Age:	29	Remaining Service Life:	6
Last Review Rating:		Observation Count:	0



Mech 10	Valves - Cross Connection & Backflow Prevention		
Location:	Various locations at individual units and amenity room.		
Description:	Various types and sizes of backflow prevention valves, including vacuum breakers, double check, reduced pressure valves on systems.		
Chronological Age:	29	Service Life:	20
Effective Age:	16	Remaining Service Life:	4
Last Review Rating:		Observation Count:	0

☐ Heating & Cooling



Mech 11	Fireplace - Gas		
Location:	Amenity building.		
Description:	Natural gas fireplaces with fireplace enclosure, flue, gas piping, gas valve, glass panel and other components.		
Chronological Age:	5	Service Life:	30
Effective Age:	5	Remaining Service Life:	25
Last Review Rating:		Observation Count:	0



Mech 12 **Boiler - Hydronic - Electric**
 Location: Amenity building.
 Description: Allied Engineering 15MSE 62.5A single phase 15KW mounted electric hydronic heating boiler, which provide hydronic space heating water.

Chronological Age:	0	Service Life:	15
Effective Age:	0	Remaining Service Life:	15
Last Review Rating:		Observation Count:	0



Mech 13 **Tank - Expansion - Hydronic - Diaphragm**
 Location: Amenity building.
 Description: Diaphragm expansion tank for hydronic heating system.

Chronological Age:	5	Service Life:	20
Effective Age:	5	Remaining Service Life:	15
Last Review Rating:		Observation Count:	0

☰ **Fire Safety**

☰ **Detection**



Fire 01 **Fire Detection & Alarm**
 Location: Amenity building.
 Description: Smoke detectors, heat detectors, and other fixed apparatus field devices to detect fire and smoke conditions and initiate timely response. Strata responsible only for amenity building fire alarm system.

Chronological Age:	3	Service Life:	20
Effective Age:	3	Remaining Service Life:	17
Last Review Rating:		Observation Count:	0

☰ **Suppression**



Fire 02 **Fire Hydrant [PLACEHOLDER]**
 Location: Exterior site location.
 Description: Devices used to access water directly from the municipal water supply by fire department, to assist in extinguishing fires. This may be municipally owned if on property perimeter. Inspected and repainted in 2016.

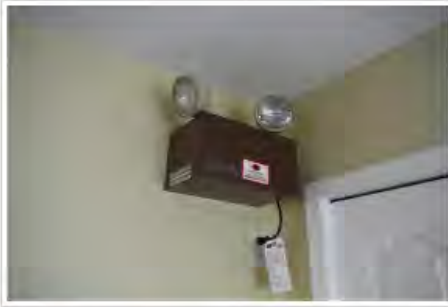
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0



Fire 03 **Portable Fire Extinguisher**
 Location: Amenity building.
 Description: Wall mounted, manually operated, 5lbs ABC type, pressurized vessel for controlled discharge of chemicals to extinguish small fires.

Chronological Age:	3	Service Life:	24
Effective Age:	3	Remaining Service Life:	21
Last Review Rating:		Observation Count:	0

☰ **Egress**



Fire 04

Location:

Description:

Chronological Age:

Emergency Egress Equipment

Location:

Description:

Service Life:

Effective Age:

Remaining Service Life:

Last Review Rating:

Observation Count:

3

3

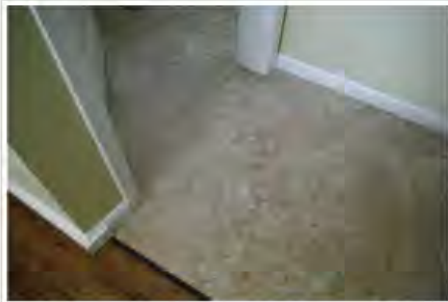
20

17

0

Interior Finishes

Floors



Finish 01

Location:

Description:

Chronological Age:

Resilient Sheet Flooring

Location:

Description:

Service Life:

Effective Age:

Remaining Service Life:

Last Review Rating:

Observation Count:

5

5

20

15

0



Finish 02

Location:

Description:

Chronological Age:

Wood Flooring

Location:

Description:

Service Life:

Effective Age:

Remaining Service Life:

Last Review Rating:

Observation Count:

5

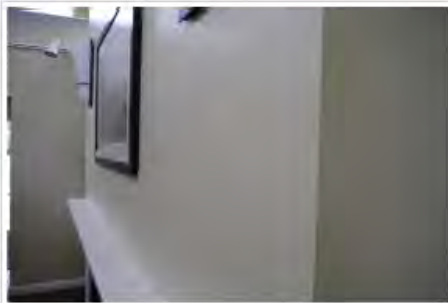
5

20

15

0

Walls



Finish 03

Location:

Description:

Chronological Age:

Paint

Location:

Description:

Service Life:

Effective Age:

Remaining Service Life:

Last Review Rating:

Observation Count:

5

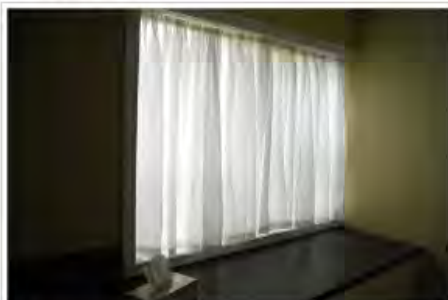
5

10

5

0

Window Coverings



Finish 04

Location:

Description:

Chronological Age:

Window Covering

Location:

Description:

Service Life:

Effective Age:

Remaining Service Life:

Last Review Rating:

Observation Count:

29

9

20

11

0



Architectural Woodwork



Finish 05

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Carpentry and Millwork

Location: Amenity building kitchen and washroom.

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

Service Life:

Remaining Service Life:

Observation Count:

30

25

0

Housekeeping



Finish 06

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

General Housekeeping

Location: Throughout amenity building.

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

Service Life:

Remaining Service Life:

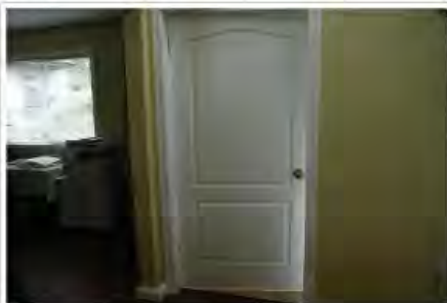
Observation Count:

3

2

0

Doors



Finish 07

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Interior Swing Door - General

Location: Amenity building.

Description: Solid wood core or hollow metal swing door hung in framed opening including hardware. Exterior door is considered separately as part of the building enclosure system.

Service Life:

Remaining Service Life:

Observation Count:

40

17

0

Amenities

Equipment



Amen 01

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Computer Equipments

Location: Amenity building.

Description: Electronic devices required for general operations and management of the facility.

Service Life:

Remaining Service Life:

Observation Count:

6

1

0



Amen 02 Domestic Appliances
Location: Amenity building.
Description: Refrigerator, range, and microwave oven of miscellaneous brands.

Chronological Age:	29	Service Life:	15
Effective Age:	10	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0

Furnishings



Amen 03 Central Mailboxes [PLACEHOLDER]
Location: Entrance and opposite end of the complex.
Description: Free-standing, front loading, brushed aluminum finish, painted steel structure. [Asset owned by Canada Post.]

Chronological Age:	29	Service Life:	30
Effective Age:	29	Remaining Service Life:	1
Last Review Rating:		Observation Count:	0



Amen 04 Furniture & Accessories
Location: Amenity room.
Description: Desk, chairs, filing cabinet, etc.

Chronological Age:	17	Service Life:	15
Effective Age:	10	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0

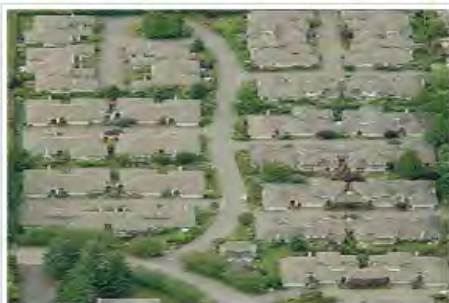


Amen 05 Public Signage
Location: Throughout site exterior and Amenity building interior.
Description: Variety of permanently displayed information placards in the common areas of the building.

Chronological Age:	29	Service Life:	25
Effective Age:	24	Remaining Service Life:	1
Last Review Rating:		Observation Count:	0

Sitework

Hard Landscaping



Site 01 Timber Retaining Wall
Location: Along west property line.
Description: High heavy timbers with braces (installed 2003).

Chronological Age:	20	Service Life:	25
Effective Age:	20	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0



Site 02	Asphalt Paving		
Location:	Roadways.		
Description:	Flexible asphalt paving with curbs, onto compacted gravel base. Asphalt paving resealed in 2016.		
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0



Site 03	Concrete Paving		
Location:	Patios and walkways.		
Description:	Concrete pavement, cast with control and construction joints, onto compacted gravel base.		
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0



Site 04	Masonry Fencing & Retaining Wall		
Location:	Along 17th Ave. and throughout the site.		
Description:	Masonry/stone fencing and retaining walls with and without mortared joints.		
Chronological Age:	14	Service Life:	45
Effective Age:	14	Remaining Service Life:	31
Last Review Rating:		Observation Count:	0



Site 05	Wood Fencing		
Location:	Along property lines.		
Description:	Wood fence with posts and panels. Ongoing fence replacement and repainting 2013 -2016. There is a wide range of wood fencing ages as the strata corporation replaces the wood fencing on an as needed basis.		
Chronological Age:	29	Service Life:	20
Effective Age:	15	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0

☐ **Soft Landscaping**



Site 06	Soft Landscaping - Large Trees		
Location:	Throughout the site.		
Description:	Large trees, typically greater than 30' in height, such as Pin Oaks, Norway Spruce, and Western Red Cedar.		
Chronological Age:	29	Service Life:	25
Effective Age:	24	Remaining Service Life:	1
Last Review Rating:		Observation Count:	0



Site 07

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Groundskeeping & Pest Control

Throughout site and soft landscaping.

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

Service Life: 3

Remaining Service Life: 2

Observation Count: 0



Site 08

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Irrigation System

Throughout soft landscaping.

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

Service Life: 15

Remaining Service Life: 10

Observation Count: 0



Site 09

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Soft Landscaping

Throughout the site.

Lawn, ground cover, shrubs, perennials and small trees (up to 30'). Typically paid from the operating budget.

Service Life: 15

Remaining Service Life: 1

Observation Count: 0

Site Services



Site 10

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Underground Natural Gas Service

(Concealed Asset). From the property line to the buildings.

Underground natural gas pipe.

Service Life: 50

Remaining Service Life: 21

Observation Count: 0



Site 11

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Underground Water Services with PVC/Copper and Ductile Piping

(Concealed Asset). From the property line to each buildings.

Fire/domestic water supply system, including valves.

Service Life: 50

Remaining Service Life: 21

Observation Count: 0



Site 12

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Underground Drainage Services - Storm

(Concealed Asset). From buildings and catch basins to property line.

Storm sewer system and piping.

29

29

Service Life:

Remaining Service Life:

Observation Count:

80

51

0



Site 13

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Underground Sewer Services - Sewer

(Concealed Asset). From the buildings to the property line.

Sanitary sewer system, including all appurtenances.

29

29

Service Life:

Remaining Service Life:

Observation Count:

80

51

0



Site 14

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Electrical Site Services

(Concealed Asset). From electrical rooms to suites.

Underground secondary distribution conduits and services.

29

29

Service Life:

Remaining Service Life:

Observation Count:

50

21

0

Appendix C

Asset Service Life Summary



☰ Enclosure

☰ Roofs & Decks



Encl 01

Laminated Asphalt Shingle Roof & Concealed Gutters

Location:

Sloped roofs of all buildings.

Description:

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

Chronological Age:

9

Service Life:

25

Effective Age:

9

Remaining Service Life:

16

Last Review Rating:

Observation Count:

0



Encl 02

Wood Soffit

Location:

Underside of roof eaves.

Description:

Stained wood soffit over a wood framing substrate.

Chronological Age:

29

Service Life:

40

Effective Age:

29

Remaining Service Life:

11

Last Review Rating:

Observation Count:

0

☰ Walls



Encl 03

Stucco Clad Wall - Undrained

Location:

Walls of all buildings.

Description:

Acrylic coated stucco applied directly over exterior sheathing membrane. There is a mixture of exposure conditions; some areas are protected by overhangs.

Chronological Age:

29

Service Life:

20

Effective Age:

16

Remaining Service Life:

4

Last Review Rating:

Observation Count:

0



Encl 04

Wood Trim

Location:

Perimeters of roofs and windows, and various other locations on exterior walls.

Description:

Vertical and horizontal wood trim boards with coated surface for protection of the substrate and aesthetics. Repainted in 2015 along with localized replacement of wood trim. There is a wide range of wood trim ages as the strata corporation replaces the wood trim on an as needed basis.

Chronological Age:

29

Service Life:

30

Effective Age:

19

Remaining Service Life:

11

Last Review Rating:

Observation Count:

0

☰ Glazing Systems



Encl 05

Unit Skylight

Location:

Roofs of all units.

Description:

Individual unit skylights with double glazed insulating glazing units. Light wells are owner's responsibility. To be replaced during reroofing.

Chronological Age:

9

Service Life:

30

Effective Age:

14

Remaining Service Life:

16

Last Review Rating:

Observation Count:

0



Encl 06

Vinyl Framed Window

Location: (Replaced windows). All levels on all elevations of all buildings. Bylaw states that the repair and maintenance of windows and doors are the responsibility of the strata lots.

Description: Vinyl framed windows with double insulating glazing units, and casement, awning, or sliding operators. Amenity room windows replaced 2011.

Chronological Age:	13	Service Life:	30
Effective Age:	13	Remaining Service Life:	17
Last Review Rating:		Observation Count:	0



Encl 07

Aluminum Framed Window

Location: (Original windows). All levels on all elevations of all buildings.

Description: Aluminum framed, non-thermally broken windows with double insulating glazing units, and casement, awning, or sliding operators. Windows are arranged in punched configuration. Bylaw states that the repair and maintenance of windows and doors are the responsibility of the strata lots.

Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0

Doors



Encl 08

Glazed Metal Clad Swing Door

Location: Ground level patio entrances.

Description: Metal clad wood swing door with insulating glazing units.

Chronological Age:	29	Service Life:	25
Effective Age:	18	Remaining Service Life:	7
Last Review Rating:		Observation Count:	0



Encl 09

Metal Clad Swing Door

Location: Unit entries.

Description: Metal clad wood swing door without insulating glazing units.

Chronological Age:	29	Service Life:	25
Effective Age:	18	Remaining Service Life:	7
Last Review Rating:		Observation Count:	0



Encl 10

Aluminum Framed Sliding Glass Door

Location: Ground level patio entrances.

Description: Sliding glass doors, double insulating glazing units, aluminum framing. Bylaw states that the repair and maintenance of windows and doors are the responsibility of the strata lots.

Chronological Age:	29	Service Life:	30
Effective Age:	19	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0

Parking Garage



Encl 11 **Sectional Overhead Door - Metal**
 Location: Garages entrances.
 Description: Pre-finished metal sectional overhead garage door with motor drive and hardware.
 Chronological Age: 13 Service Life: 25
 Effective Age: 13 Remaining Service Life: 12
 Last Review Rating: Observation Count: 0

☰ **General & Inspections**



Encl 12 **Vinyl Rainwater Leaders**
 Location: Roof perimeter and building exteriors.
 Description: Vinyl rainwater leaders at roof perimeter. Includes concealed roof gutters.
 Chronological Age: 9 Service Life: 20
 Effective Age: 9 Remaining Service Life: 11
 Last Review Rating: Observation Count: 0



Encl 13 **General & Inspections**
 Location: Throughout buildings and site.
 Description: Miscellaneous interior and exterior components, such as service penetrations and interface details, not related to any particular assembly. Warranty, general reviews, and updating of Depreciation Report.
 Chronological Age: 29 Service Life: 75
 Effective Age: 29 Remaining Service Life: 46
 Last Review Rating: Observation Count: 0



Encl 14 **Sealant**
 Location: Various penetrations and interfaces on the building exterior.
 Description: Sealant of various types located at joints between building enclosure assemblies, as well as around components and penetrations within building enclosure assemblies.
 Chronological Age: 1 Service Life: 10
 Effective Age: 1 Remaining Service Life: 9
 Last Review Rating: Observation Count: 0

☰ **Electrical**

☰ **Power Supply**



Elec 01 **Distribution Transformer - Exterior [PLACEHOLDER]**
 Location: Exterior location on site.
 Description: Pad mounted transformer. [Equipment is owned by BC Hydro].
 Chronological Age: 29 Service Life: 45
 Effective Age: 29 Remaining Service Life: 16
 Last Review Rating: Observation Count: 0

☰ **Distribution**



Elec 02	Electrical Distribution		
Location:	Throughout the site.		
Description:	Main disconnect switch; downstream switchboards, panelboards, breakers, switches, disconnects and wiring to mechanical, lighting and power loads throughout the buildings and to individual suites through BC Hydro owned metering devices.		
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0

☰ Light Fixtures



Elec 03	Street Lights		
Location:	Alongside roads throughout the side.		
Description:	Lumec Roadstar LED Pole lights along the road way.		
Chronological Age:	6	Service Life:	20
Effective Age:	6	Remaining Service Life:	14
Last Review Rating:		Observation Count:	0



Elec 04	Exterior Light Fixtures		
Location:	Various locations on building exteriors.		
Description:	A variety of fixture types, including wall mounted and recessed soffit pot lighting. A variety of lamp types, including fluorescent, compact fluorescent, incandescent, LED, etc. for exterior direct, indirect and accent lighting applications. A variety of light fixture controls, including switches, motion sensors, timers and photocells.		
Chronological Age:	29	Service Life:	20
Effective Age:	18	Remaining Service Life:	2
Last Review Rating:		Observation Count:	0



Elec 05	Interior Light Fixtures		
Location:	Amenity building.		
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, 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.		
Chronological Age:	29	Service Life:	20
Effective Age:	18	Remaining Service Life:	2
Last Review Rating:		Observation Count:	0

☰ Mechanical

☰ Controls and End Devices

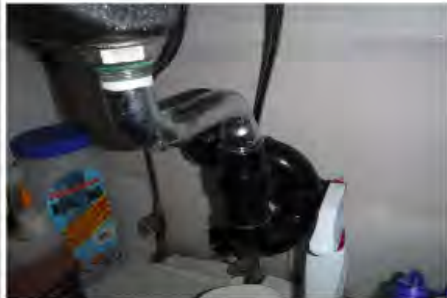


Mech 01	Controls - HVAC Instrumentation		
Location:	Amenity building.		
Description:	Programmable thermostats, flow gauges, thermometers, metering equipment, gauges, and other field devices to monitor and regulate pressure and temperature in the HVAC and plumbing distribution systems.		
Chronological Age:	29	Service Life:	20
Effective Age:	18	Remaining Service Life:	2
Last Review Rating:		Observation Count:	0

☰ Plumbing & Drainage



Mech 02	Pump - DHW - Circulation and Recirculation		
Location:	Amenity building.		
Description:	Pipe-mounted bronze body domestic hot water circulation pumps. Circulating hot water from boilers to tanks and recirculating hot water from system.		
Chronological Age:	5	Service Life:	10
Effective Age:	5	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0



Mech 03	Drainage - Sanitary		
Location:	Throughout buildings and site.		
Description:	Buried and concealed piping, with mechanical or glued joints, ABS p-traps, and fittings		
Chronological Age:	29	Service Life:	50
Effective Age:	29	Remaining Service Life:	21
Last Review Rating:		Observation Count:	0



Mech 04	Fixtures - Taps & Sinks		
Location:	Amenity building washrooms and kitchen.		
Description:	Sinks, janitors mop sinks, and other plumbing supply fixtures.		
Chronological Age:	29	Service Life:	25
Effective Age:	24	Remaining Service Life:	1
Last Review Rating:		Observation Count:	0



Mech 05	Fixtures - Toilets		
Location:	Amenity building washrooms.		
Description:	Floor mounted toilets.		
Chronological Age:	5	Service Life:	20
Effective Age:	5	Remaining Service Life:	15
Last Review Rating:		Observation Count:	0



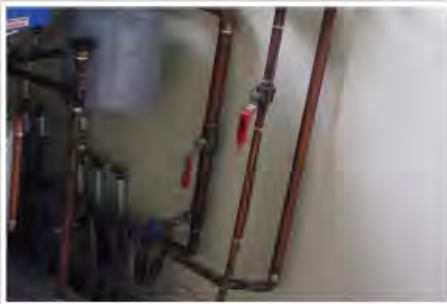
Mech 06	Interceptor - Sediment		
Location:	Throughout the site.		
Description:	Underslab concrete silt interceptor assembly with backwater valve, cast steel cover and frame		
Chronological Age:	29	Service Life:	50
Effective Age:	29	Remaining Service Life:	21
Last Review Rating:		Observation Count:	0



Mech 07	Tank - DHW - Small Domestic Electric		
Location:	Amenity room.		
Description:	GSW SS12SEB 1.5 KW, electric domestic hot water tank for small domestic service.		
Chronological Age:	5	Service Life:	10
Effective Age:	5	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0



Mech 08	Drainage - Perimeter and Foundation		
Location:	(Concealed Asset). Perimeters of buildings.		
Description:	Perforated piping forming part of a sub-surface foundation/footing drainage system around perimeters of buildings and underground structures. New perimeter drains at 3 locations over last 7 years.		
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0



Mech 09	Piping - Domestic Cold Water Distribution		
Location:	In crawlspaces of each building.		
Description:	Mixture of K and L copper connecting the below grade water distribution piping into the suites to the shut-off valves.		
Chronological Age:	29	Service Life:	35
Effective Age:	29	Remaining Service Life:	6
Last Review Rating:		Observation Count:	0



Mech 10	Valves - Cross Connection & Backflow Prevention		
Location:	Various locations at individual units and amenity room.		
Description:	Various types and sizes of backflow prevention valves, including vacuum breakers, double check, reduced pressure valves on systems.		
Chronological Age:	29	Service Life:	20
Effective Age:	16	Remaining Service Life:	4
Last Review Rating:		Observation Count:	0

☐ Heating & Cooling



Mech 11	Fireplace - Gas		
Location:	Amenity building.		
Description:	Natural gas fireplaces with fireplace enclosure, flue, gas piping, gas valve, glass panel and other components.		
Chronological Age:	5	Service Life:	30
Effective Age:	5	Remaining Service Life:	25
Last Review Rating:		Observation Count:	0



Mech 12 **Boiler - Hydronic - Electric**
 Location: Amenity building.
 Description: Allied Engineering 15MSE 62.5A single phase 15KW mounted electric hydronic heating boiler, which provide hydronic space heating water.

Chronological Age:	0	Service Life:	15
Effective Age:	0	Remaining Service Life:	15
Last Review Rating:		Observation Count:	0



Mech 13 **Tank - Expansion - Hydronic - Diaphragm**
 Location: Amenity building.
 Description: Diaphragm expansion tank for hydronic heating system.

Chronological Age:	5	Service Life:	20
Effective Age:	5	Remaining Service Life:	15
Last Review Rating:		Observation Count:	0

☰ **Fire Safety**

☰ **Detection**



Fire 01 **Fire Detection & Alarm**
 Location: Amenity building.
 Description: Smoke detectors, heat detectors, and other fixed apparatus field devices to detect fire and smoke conditions and initiate timely response. Strata responsible only for amenity building fire alarm system.

Chronological Age:	3	Service Life:	20
Effective Age:	3	Remaining Service Life:	17
Last Review Rating:		Observation Count:	0

☰ **Suppression**



Fire 02 **Fire Hydrant [PLACEHOLDER]**
 Location: Exterior site location.
 Description: Devices used to access water directly from the municipal water supply by fire department, to assist in extinguishing fires. This may be municipally owned if on property perimeter. Inspected and repainted in 2016.

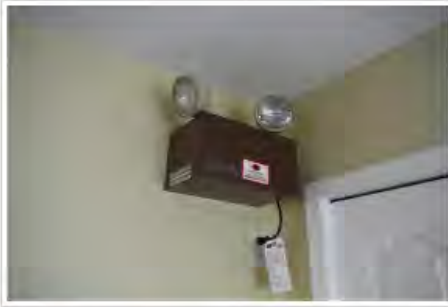
Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0



Fire 03 **Portable Fire Extinguisher**
 Location: Amenity building.
 Description: Wall mounted, manually operated, 5lbs ABC type, pressurized vessel for controlled discharge of chemicals to extinguish small fires.

Chronological Age:	3	Service Life:	24
Effective Age:	3	Remaining Service Life:	21
Last Review Rating:		Observation Count:	0

☰ **Egress**



Fire 04

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Emergency Egress Equipment

Location:

Description:

Service Life:

Remaining Service Life:

Observation Count:

Amenity building.
Dualite unit battery packs; illuminated incandescent exit signs.
20
17
0

Interior Finishes

Floors



Finish 01

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Resilient Sheet Flooring

Location:

Description:

Service Life:

Remaining Service Life:

Observation Count:

Amenity building kitchen and washroom.
Vinyl tile or vinyl sheet adhered to the substrate.
20
15
0



Finish 02

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Wood Flooring

Location:

Description:

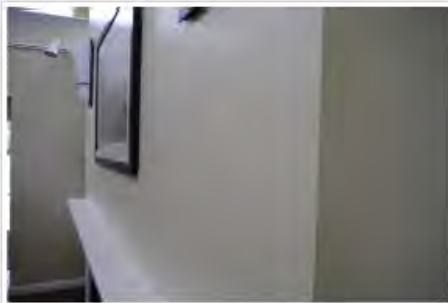
Service Life:

Remaining Service Life:

Observation Count:

Amenity building.
Wood laminate flooring.
20
15
0

Walls



Finish 03

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Paint

Location:

Description:

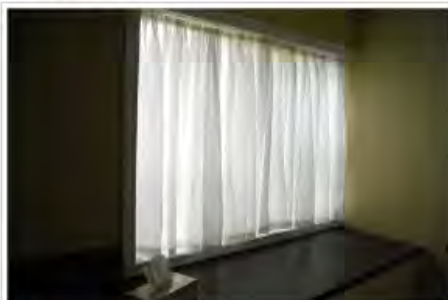
Service Life:

Remaining Service Life:

Observation Count:

Amenity building.
Primers and multiple pigmented coating finishes applied to interior gypsum wallboard, mill work trim details, and metal trim.
10
5
0

Window Coverings



Finish 04

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Window Covering

Location:

Description:

Service Life:

Remaining Service Life:

Observation Count:

Amenity building.
Fabric drapes with head rails, lift cords, control cords; mounted to walls.
20
11
0



Architectural Woodwork



Finish 05

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Carpentry and Millwork

Location: Amenity building kitchen and washroom.

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

Service Life:

Remaining Service Life:

Observation Count:

30

25

0

Housekeeping



Finish 06

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

General Housekeeping

Location: Throughout amenity building.

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

Service Life:

Remaining Service Life:

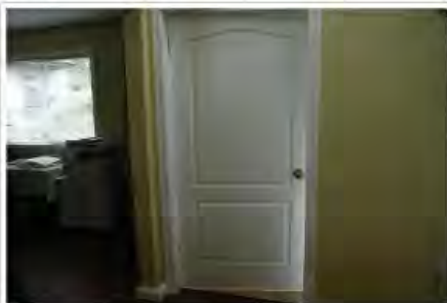
Observation Count:

3

2

0

Doors



Finish 07

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Interior Swing Door - General

Location: Amenity building.

Description: Solid wood core or hollow metal swing door hung in framed opening including hardware. Exterior door is considered separately as part of the building enclosure system.

Service Life:

Remaining Service Life:

Observation Count:

40

17

0

Amenities

Equipment



Amen 01

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Computer Equipments

Location: Amenity building.

Description: Electronic devices required for general operations and management of the facility.

Service Life:

Remaining Service Life:

Observation Count:

6

1

0



Amen 02 Domestic Appliances
 Location: Amenity building.
 Description: Refrigerator, range, and microwave oven of miscellaneous brands.

Chronological Age:	29	Service Life:	15
Effective Age:	10	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0

Furnishings



Amen 03 Central Mailboxes [PLACEHOLDER]
 Location: Entrance and opposite end of the complex.
 Description: Free-standing, front loading, brushed aluminum finish, painted steel structure. [Asset owned by Canada Post.]

Chronological Age:	29	Service Life:	30
Effective Age:	29	Remaining Service Life:	1
Last Review Rating:		Observation Count:	0



Amen 04 Furniture & Accessories
 Location: Amenity room.
 Description: Desk, chairs, filing cabinet, etc.

Chronological Age:	17	Service Life:	15
Effective Age:	10	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0



Amen 05 Public Signage
 Location: Throughout site exterior and Amenity building interior.
 Description: Variety of permanently displayed information placards in the common areas of the building.

Chronological Age:	29	Service Life:	25
Effective Age:	24	Remaining Service Life:	1
Last Review Rating:		Observation Count:	0

Sitework

Hard Landscaping



Site 01 Timber Retaining Wall
 Location: Along west property line.
 Description: High heavy timbers with braces (installed 2003).

Chronological Age:	20	Service Life:	25
Effective Age:	20	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0



Site 02 Asphalt Paving
Location: Roadways.
Description: Flexible asphalt paving with curbs, onto compacted gravel base. Asphalt paving resealed in 2016.

Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0



Site 03 Concrete Paving
Location: Patios and walkways.
Description: Concrete pavement, cast with control and construction joints, onto compacted gravel base.

Chronological Age:	29	Service Life:	40
Effective Age:	29	Remaining Service Life:	11
Last Review Rating:		Observation Count:	0



Site 04 Masonry Fencing & Retaining Wall
Location: Along 17th Ave. and throughout the site.
Description: Masonry/stone fencing and retaining walls with and without mortared joints.

Chronological Age:	14	Service Life:	45
Effective Age:	14	Remaining Service Life:	31
Last Review Rating:		Observation Count:	0



Site 05 Wood Fencing
Location: Along property lines.
Description: Wood fence with posts and panels. Ongoing fence replacement and repainting 2013 -2016. There is a wide range of wood fencing ages as the strata corporation replaces the wood fencing on an as needed basis.

Chronological Age:	29	Service Life:	20
Effective Age:	15	Remaining Service Life:	5
Last Review Rating:		Observation Count:	0

☐ **Soft Landscaping**



Site 06 Soft Landscaping - Large Trees
Location: Throughout the site.
Description: Large trees, typically greater than 30' in height, such as Pin Oaks, Norway Spruce, and Western Red Cedar.

Chronological Age:	29	Service Life:	25
Effective Age:	24	Remaining Service Life:	1
Last Review Rating:		Observation Count:	0



Site 07

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Groundskeeping & Pest Control

Throughout site and soft landscaping.

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

Service Life: 3

Remaining Service Life: 2

Observation Count: 0



Site 08

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Irrigation System

Throughout soft landscaping.

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

Service Life: 15

Remaining Service Life: 10

Observation Count: 0



Site 09

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Soft Landscaping

Throughout the site.

Lawn, ground cover, shrubs, perennials and small trees (up to 30'). Typically paid from the operating budget.

Service Life: 15

Remaining Service Life: 1

Observation Count: 0

Site Services



Site 10

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Underground Natural Gas Service

(Concealed Asset). From the property line to the buildings.

Underground natural gas pipe.

Service Life: 50

Remaining Service Life: 21

Observation Count: 0



Site 11

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Underground Water Services with PVC/Copper and Ductile Piping

(Concealed Asset). From the property line to each buildings.

Fire/domestic water supply system, including valves.

Service Life: 50

Remaining Service Life: 21

Observation Count: 0



Site 12

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Underground Drainage Services - Storm

(Concealed Asset). From buildings and catch basins to property line.

Storm sewer system and piping.

29

29

Service Life:

Remaining Service Life:

Observation Count:

80

51

0



Site 13

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Underground Sewer Services - Sewer

(Concealed Asset). From the buildings to the property line.

Sanitary sewer system, including all appurtenances.

29

29

Service Life:

Remaining Service Life:

Observation Count:

80

51

0



Site 14

Location:

Description:

Chronological Age:

Effective Age:

Last Review Rating:

Electrical Site Services

(Concealed Asset). From electrical rooms to suites.

Underground secondary distribution conduits and services.

29

29

Service Life:

Remaining Service Life:

Observation Count:

50

21

0

Appendix D

Disclosures and Disclaimers

Disclosures and Disclaimers

Condition of the Assets

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

Cost Estimating for Assets

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

Maintenance of the Assets:

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

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

Specialist and Non-Specialist Reviews

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

Forecasting the Useful Service Life of Assets

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

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

Funding Models

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

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

For example, in 2012 the model looks forward to 2042. In year two, it will be accurate for 29 years, as it is only looking forward to year 2042. When an update study is performed in three years, the revised funding scenarios will look forward 30 years from 2015 to 2045. Renewal and major maintenance projects that occur beyond the 30-year planning horizon are not considered in the scenarios; that is, those projects that occur beyond 30 years are unfunded in the funding scenarios.

Appendix E

Funding Scenario Cash Flow Tables



Name	2016 Fixed Annual Funding of \$40,000 (Status Quo)
Type	Basic
Regarding	Ocean Park Grove
Start Year	2016
Interest/Investment Rate	2.0%
Estimated Contingency Allowance	\$1,000
Tax Rate	0.0%
Planning Horizon	30
Number Of Units	58

Init Catchup Cost	\$0
Operating Budget	\$263,730
Starting Reserve Balance	\$248,000
Reserve Contribution Threshold	\$500,000
Contribution Below Threshold	\$40,000
Contribution Above Threshold	\$40,000
Reserve Contribution Increase	0.00 %
Monthly Avg. Unit Contribution	\$57

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Tax Liability	Closing Balance	Percent Funded
2016	\$248,000	\$40,000	\$0	\$4,960	\$0	\$1,000	\$0	\$291,960	9.44 %
2017	\$291,960	\$40,000	\$0	\$5,839	\$23,810	\$1,000	\$0	\$312,989	9.26 %
2018	\$312,989	\$40,000	\$0	\$6,260	\$27,710	\$1,000	\$0	\$330,539	9.01 %
2019	\$330,539	\$40,000	\$0	\$6,611	\$12,100	\$1,000	\$0	\$364,050	9.13 %
2020	\$364,050	\$40,000	\$0	\$7,281	\$351,700	\$1,000	\$0	\$58,631	1.47 %
2021	\$58,631	\$40,000	\$106,417	\$1,173	\$200,220	\$1,000	\$0	\$5,000	0.12 %
2022	\$5,000	\$40,000	\$29,300	\$100	\$68,400	\$1,000	\$0	\$5,000	0.11 %
2023	\$5,000	\$40,000	\$113,100	\$100	\$152,200	\$1,000	\$0	\$5,000	0.10 %
2024	\$5,000	\$40,000	\$0	\$100	\$6,130	\$1,000	\$0	\$37,970	0.76 %
2025	\$37,970	\$40,000	\$0	\$759	\$21,000	\$1,000	\$0	\$56,729	1.07 %
2026	\$56,729	\$40,000	\$84,946	\$1,135	\$176,810	\$1,000	\$0	\$5,000	0.09 %
2027	\$5,000	\$40,000	\$4,077,720	\$100	\$4,116,820	\$1,000	\$0	\$5,000	0.28 %
2028	\$5,000	\$40,000	\$63,330	\$100	\$102,430	\$1,000	\$0	\$5,000	0.27 %
2029	\$5,000	\$40,000	\$0	\$100	\$30,800	\$1,000	\$0	\$13,300	0.67 %
2030	\$13,300	\$40,000	\$222,994	\$266	\$270,560	\$1,000	\$0	\$5,000	0.26 %
2031	\$5,000	\$40,000	\$176,370	\$100	\$215,470	\$1,000	\$0	\$5,000	0.26 %
2032	\$5,000	\$40,000	\$1,494,000	\$100	\$1,533,100	\$1,000	\$0	\$5,000	1.10 %
2033	\$5,000	\$40,000	\$0	\$100	\$7,000	\$1,000	\$0	\$37,100	6.78 %
2034	\$37,100	\$40,000	\$0	\$742	\$7,100	\$1,000	\$0	\$69,742	10.82 %
2035	\$69,742	\$40,000	\$0	\$1,395	\$26,500	\$1,000	\$0	\$83,637	11.53 %
2036	\$83,637	\$40,000	\$90,570	\$1,673	\$209,880	\$1,000	\$0	\$5,000	0.80 %
2037	\$5,000	\$40,000	\$350,100	\$100	\$389,200	\$1,000	\$0	\$5,000	1.50 %
2038	\$5,000	\$40,000	\$0	\$100	\$33,350	\$1,000	\$0	\$10,750	2.73 %
2039	\$10,750	\$40,000	\$0	\$215	\$8,220	\$1,000	\$0	\$41,745	8.71 %
2040	\$41,745	\$40,000	\$235,420	\$835	\$312,000	\$1,000	\$0	\$5,000	1.94 %
2041	\$5,000	\$40,000	\$222,620	\$100	\$261,720	\$1,000	\$0	\$5,000	8.62 %
2042	\$5,000	\$40,000	\$0	\$100	\$23,170	\$1,000	\$0	\$20,930	45.50 %
2043	\$20,930	\$40,000	\$0	\$419	\$1,700	\$1,000	\$0	\$58,649	108.60 %
2044	\$58,649	\$40,000	\$0	\$1,173	\$8,700	\$1,000	\$0	\$90,122	163.85 %
2045	\$90,122	\$40,000	\$0	\$1,802	\$62,360	\$1,000	\$0	\$68,564	100.00 %
		\$1,200,000	\$7,266,887		\$8,660,160				



Name	2016 Fixed Annual Funding of \$70,000 (Alternative)
Type	Basic
Regarding	Ocean Park Grove
Start Year	2016
Interest/Investment Rate	2.0%
Estimated Contingency Allowance	\$1,000
Tax Rate	0.0%
Planning Horizon	30
Number Of Units	58

Init Catchup Cost	\$0
Operating Budget	\$263,730
Starting Reserve Balance	\$248,000
Reserve Contribution Threshold	\$500,000
Contribution Below Threshold	\$70,000
Contribution Above Threshold	\$70,000
Reserve Contribution Increase	0.00 %
Monthly Avg. Unit Contribution	\$101

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Tax Liability	Closing Balance	Percent Funded
2016	\$248,000	\$70,000	\$0	\$4,960	\$0	\$1,000	\$0	\$321,960	10.41 %
2017	\$321,960	\$70,000	\$0	\$6,439	\$23,810	\$1,000	\$0	\$373,589	11.06 %
2018	\$373,589	\$70,000	\$0	\$7,472	\$27,710	\$1,000	\$0	\$422,351	11.51 %
2019	\$422,351	\$70,000	\$0	\$8,447	\$12,100	\$1,000	\$0	\$487,698	12.23 %
2020	\$487,698	\$70,000	\$0	\$9,754	\$351,700	\$1,000	\$0	\$214,752	5.41 %
2021	\$214,752	\$70,000	\$0	\$4,295	\$200,220	\$1,000	\$0	\$87,827	2.13 %
2022	\$87,827	\$70,000	\$0	\$1,757	\$68,400	\$1,000	\$0	\$90,184	2.05 %
2023	\$90,184	\$70,000	\$0	\$1,804	\$152,200	\$1,000	\$0	\$8,787	0.19 %
2024	\$8,787	\$70,000	\$0	\$176	\$6,130	\$1,000	\$0	\$71,833	1.45 %
2025	\$71,833	\$70,000	\$0	\$1,437	\$21,000	\$1,000	\$0	\$121,270	2.28 %
2026	\$121,270	\$70,000	\$0	\$2,425	\$176,810	\$1,000	\$0	\$15,885	0.28 %
2027	\$15,885	\$70,000	\$4,036,617	\$318	\$4,116,820	\$1,000	\$0	\$5,000	0.28 %
2028	\$5,000	\$70,000	\$33,330	\$100	\$102,430	\$1,000	\$0	\$5,000	0.27 %
2029	\$5,000	\$70,000	\$0	\$100	\$30,800	\$1,000	\$0	\$43,300	2.18 %
2030	\$43,300	\$70,000	\$162,394	\$866	\$270,560	\$1,000	\$0	\$5,000	0.26 %
2031	\$5,000	\$70,000	\$146,370	\$100	\$215,470	\$1,000	\$0	\$5,000	0.26 %
2032	\$5,000	\$70,000	\$1,464,000	\$100	\$1,533,100	\$1,000	\$0	\$5,000	1.10 %
2033	\$5,000	\$70,000	\$0	\$100	\$7,000	\$1,000	\$0	\$67,100	12.26 %
2034	\$67,100	\$70,000	\$0	\$1,342	\$7,100	\$1,000	\$0	\$130,342	20.23 %
2035	\$130,342	\$70,000	\$0	\$2,607	\$26,500	\$1,000	\$0	\$175,449	24.19 %
2036	\$175,449	\$70,000	\$0	\$3,509	\$209,880	\$1,000	\$0	\$38,078	6.14 %
2037	\$38,078	\$70,000	\$286,361	\$762	\$389,200	\$1,000	\$0	\$5,000	1.50 %
2038	\$5,000	\$70,000	\$0	\$100	\$33,350	\$1,000	\$0	\$40,750	10.36 %
2039	\$40,750	\$70,000	\$0	\$815	\$8,220	\$1,000	\$0	\$102,345	21.36 %
2040	\$102,345	\$70,000	\$143,608	\$2,047	\$312,000	\$1,000	\$0	\$5,000	1.94 %
2041	\$5,000	\$70,000	\$192,620	\$100	\$261,720	\$1,000	\$0	\$5,000	8.62 %
2042	\$5,000	\$70,000	\$0	\$100	\$23,170	\$1,000	\$0	\$50,930	110.71 %
2043	\$50,930	\$70,000	\$0	\$1,019	\$1,700	\$1,000	\$0	\$119,249	220.83 %
2044	\$119,249	\$70,000	\$0	\$2,385	\$8,700	\$1,000	\$0	\$181,934	330.78 %
2045	\$181,934	\$70,000	\$0	\$3,639	\$62,360	\$1,000	\$0	\$192,212	100.00 %
		\$2,100,000	\$6,465,300		\$8,660,160				



Name	2016 Fixed Annual Funding of \$271,000 (Progressive)
Type	Basic
Regarding	Ocean Park Grove
Start Year	2016
Interest/Investment Rate	2.0%
Estimated Contingency Allowance	\$1,000
Tax Rate	0.0%
Planning Horizon	30
Number Of Units	58

Init Catchup Cost	\$0
Operating Budget	\$263,730
Starting Reserve Balance	\$248,000
Reserve Contribution Threshold	\$500,000
Contribution Below Threshold	\$271,000
Contribution Above Threshold	\$271,000
Reserve Contribution Increase	0.00 %
Monthly Avg. Unit Contribution	\$389

Year	Opening Balance	Reserve Contribution	Special Levy	Reserve Income	Renewal Costs	Contingency Costs	Tax Liability	Closing Balance	Percent Funded
2016	\$248,000	\$271,000	\$0	\$4,960	\$0	\$1,000	\$0	\$522,960	16.91 %
2017	\$522,960	\$271,000	\$0	\$10,459	\$23,810	\$1,000	\$0	\$779,609	23.08 %
2018	\$779,609	\$271,000	\$0	\$15,592	\$27,710	\$1,000	\$0	\$1,037,491	28.28 %
2019	\$1,037,491	\$271,000	\$0	\$20,750	\$12,100	\$1,000	\$0	\$1,316,141	33.01 %
2020	\$1,316,141	\$271,000	\$0	\$26,323	\$351,700	\$1,000	\$0	\$1,260,764	31.76 %
2021	\$1,260,764	\$271,000	\$0	\$25,215	\$200,220	\$1,000	\$0	\$1,355,759	33.01 %
2022	\$1,355,759	\$271,000	\$0	\$27,115	\$68,400	\$1,000	\$0	\$1,584,475	36.13 %
2023	\$1,584,475	\$271,000	\$0	\$31,689	\$152,200	\$1,000	\$0	\$1,733,964	37.78 %
2024	\$1,733,964	\$271,000	\$0	\$34,679	\$6,130	\$1,000	\$0	\$2,032,513	41.11 %
2025	\$2,032,513	\$271,000	\$0	\$40,650	\$21,000	\$1,000	\$0	\$2,322,164	43.84 %
2026	\$2,322,164	\$271,000	\$0	\$46,443	\$176,810	\$1,000	\$0	\$2,461,797	44.75 %
2027	\$2,461,797	\$271,000	\$1,340,787	\$49,236	\$4,116,820	\$1,000	\$0	\$5,000	0.28 %
2028	\$5,000	\$271,000	\$0	\$100	\$102,430	\$1,000	\$0	\$172,670	9.43 %
2029	\$172,670	\$271,000	\$0	\$3,453	\$30,800	\$1,000	\$0	\$415,323	20.92 %
2030	\$415,323	\$271,000	\$0	\$8,306	\$270,560	\$1,000	\$0	\$423,070	22.23 %
2031	\$423,070	\$271,000	\$0	\$8,461	\$215,470	\$1,000	\$0	\$486,061	25.95 %
2032	\$486,061	\$271,000	\$772,318	\$9,721	\$1,533,100	\$1,000	\$0	\$5,000	1.10 %
2033	\$5,000	\$271,000	\$0	\$100	\$7,000	\$1,000	\$0	\$268,100	49.01 %
2034	\$268,100	\$271,000	\$0	\$5,362	\$7,100	\$1,000	\$0	\$536,362	83.28 %
2035	\$536,362	\$271,000	\$0	\$10,727	\$26,500	\$1,000	\$0	\$790,589	109.04 %
2036	\$790,589	\$271,000	\$0	\$15,812	\$209,880	\$1,000	\$0	\$866,521	139.76 %
2037	\$866,521	\$271,000	\$0	\$17,330	\$389,200	\$1,000	\$0	\$764,651	229.62 %
2038	\$764,651	\$271,000	\$0	\$15,293	\$33,350	\$1,000	\$0	\$1,016,594	258.67 %
2039	\$1,016,594	\$271,000	\$0	\$20,332	\$8,220	\$1,000	\$0	\$1,298,706	271.12 %
2040	\$1,298,706	\$271,000	\$0	\$25,974	\$312,000	\$1,000	\$0	\$1,282,680	499.09 %
2041	\$1,282,680	\$271,000	\$0	\$25,654	\$261,720	\$1,000	\$0	\$1,316,614	2,270.02 %
2042	\$1,316,614	\$271,000	\$0	\$26,332	\$23,170	\$1,000	\$0	\$1,589,776	3,456.03 %
2043	\$1,589,776	\$271,000	\$0	\$31,796	\$1,700	\$1,000	\$0	\$1,889,872	3,499.76 %
2044	\$1,889,872	\$271,000	\$0	\$37,797	\$8,700	\$1,000	\$0	\$2,188,969	3,979.94 %
2045	\$2,188,969	\$271,000	\$0	\$43,779	\$62,360	\$1,000	\$0	\$2,440,389	100.00 %
		\$8,130,000	\$2,113,105		\$8,660,160				

Appendix F

RDH Qualifications

Maintenance and Planning (MaP)

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

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

Depreciation Reports

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

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

Building Asset Management Software

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

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





Serge Desmarais, B.Arch. Architect AIBC, CP
Managing Principal, Senior Building Science Specialist

- Registered architect, AIBC, Certified Professional, UBC
- 30 years' experience in building design and construction capital renewal projects
- Technical lead for MaPs



Peter Fitch, C.Tech.
Senior Project Manager, Mechanical Specialist

- UBC/UBCM Certified Professional program (audit only)
- Member of Applied Science Technologists & Technicians of British Columbia
- 40 years' experience in the mechanical design field
- Technical review of asset inventories for MEFS and site assets



Lauren Stokes, Dipl.T.
Associate, Project Manager

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)
- Regional group leader for MaP Vancouver
- 4 years' experience in building science consulting
- 4 years' experience in MaP consulting



Jason Dunn, B.Arch.Sc., CCCA
Associate, Project Manager

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



Brandon Carreira, Dipl.T.
Maintenance and Planning Technologist

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)
- 4 years' experience in maintenance and planning consulting
- Prepared over 50+ depreciation reports and has been involved with 75+ MaP projects



Alex Seto, Dipl.T.
Maintenance and Planning Technologist

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)
- 2+ years' experience in maintenance and planning consulting and has prepared 50+ depreciation reports





Jesse Listoen, Dipl.T.
Maintenance and Planning Technologist

- Dipl.T., Architectural & Building Engineering Technology (Building Science Option)
- 2+ years' experience in maintenance and planning consulting and has prepared 50+ depreciation reports



Roya Kiani Amin, B.Sc., ASCT
Maintenance and Planning Technologist

- B.Sc., Civil Engineering
- ASCT, Certified Applied Science Technologist
- 5+ years' experience in architectural drafting
- 4+ years' experience as senior quantity estimator providing quantity estimating for depreciation reports + QTO quality assurance and quality control
- 1+ years' experience in MaP consulting and preparation of depreciation reports

Administrators and Client Support



Vanessa Jumawan
Maintenance and Planning Coordinator

- 5+ years' experience in administration within engineering/architecture
- Preparation of depreciation report estimates and proposals



Anna Qiu
Maintenance and Planning Project Assistant

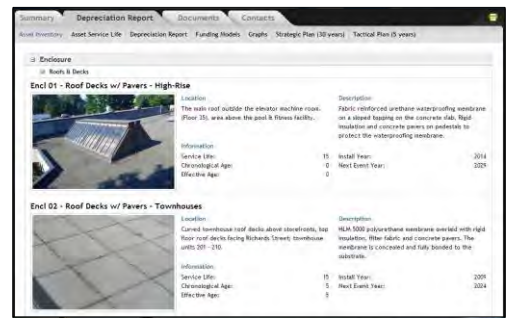
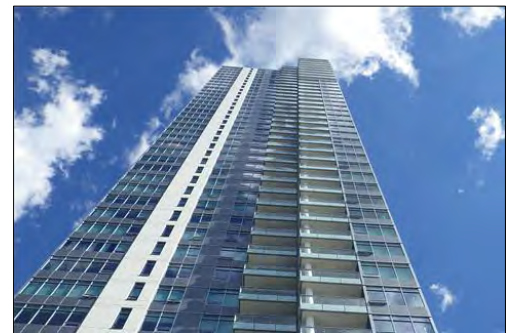
- Certificate, Business Administration
- 10+ years' experience in administration within engineering/architecture firms
- BAMS user account setup and maintenance

Software Support and Programmers



Matthew Branch, P.Eng.
Software Engineer

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



Appendix G

Insurance Certificate

Ref. No. 320007422038

CERTIFICATE OF INSURANCE

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

Re: Evidence of Insurance:

To Whom It May Concern

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

Insured

RDH Building Science Inc.
224 West 8th Avenue
Vancouver, BC V5Y 1N5

Coverage

Commercial General Liability	Insurer	Zurich Insurance Company Ltd	
Policy #	8611292		
Effective	02-May-2016	Expiry	02-May-2017
Limits of Liability	Bodily Injury & Property Damage, Each Occurrence \$1,000,000 Products and Completed Operations, Aggregate \$1,000,000 Non-Owned Automobile Liability \$1,000,000 Policy may be subject to a general aggregate and other aggregates where applicable		
Professional Liability	Insurer	Lloyd's Underwriters	
Policy #	QC1602155		
Effective	02-May-2016	Expiry	02-May-2017
Limits of Liability	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**



Ref. No. 320007422038

CERTIFICATE OF INSURANCE

Commercial General Liability

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

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

Aon Reed Stenhouse Inc.



Dated : 03-May-2016
Issued By : McLean, Chris J.
Tel : 1-604-688-4442

THE POLICY CONTAINS A CLAUSE THAT MAY LIMIT THE AMOUNT PAYABLE
OR, IN THE CASE OF AUTOMOBILE INSURANCE,
THE POLICY CONTAINS A PARTIAL PAYMENT OF LOSS CLAUSE

Appendix H

Strategic Plan

Ocean Park Grove

Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
Enclosure																																			
Roofs & Decks																																			
Encl 01 - Laminated Asphalt Shingle Roof & Concealed Gutters																																			
J01	Clean all exterior surfaces of asphalt shingles and apply moss inhibitor.	5 yrs	\$5,000	2021	\$5,500					•					•					•					•										
J02	Inspect concealed gutters, including seams, folds and drains.	5 yrs	\$500	2021	\$550					•					•					•					•										
J03	Replace damaged gutters and rainwater leaders as required.	12 Yrs	\$0	2023	\$0							•												•											
J04	Perform condition assessment of roof, associated components, service penetrations and interfaces.	3 Yrs	\$0	2019	\$0			•			•			•			•			•			•			•					•				
R01	Replace asphalt shingles and associated components such as gutters and flashing.	25 Yrs	\$1,127,000	2032	\$1,500,000																•														
Encl 02 - Wood Soffit																																			
R01	Replace wood soffit and associated components.	40 Yrs	\$304,000	2027	\$380,000											•																			
Walls																																			
Encl 03 - Stucco Clad Wall - Undrained																																			
J02	Re-paint stucco surface as required.	10 Yrs	\$156,800	2020	\$170,000					•										•															
J03	Perform condition assessment of wall, associated components, service penetrations and interfaces.	3 Yrs	\$0	2017	\$0	•				•				•				•			•				•					•					
R01	Clean and renew acrylic stucco finish coat, as required.	10 Yrs	\$18,816	2020	\$20,000					•											•														
R02	Phased replacement of stucco cladding along with associated flashing and sealants. Consideration should be given to replacement of vent hoods and other accessories that penetrated the cladding at the time of cladding replacement.	40 Yrs	\$2,457,840	2027	\$3,100,000											•																			
R03	Phased replacement of stucco cladding at exposed areas, along with associated flashing and sealants. Consideration should be given to replacement of vent hoods and other accessories that penetrated the cladding at the time of cladding replacement.	40 Yrs	\$129,360	2020	\$140,000					•																									
Encl 04 - Wood Trim																																			
J02	Touch up painting of wood trim as required.	2 Yrs	\$0	2017	\$0	•		•		•		•		•		•		•		•		•		•		•		•		•		•		•	
J04	Locally repair wood trim, as required.	5 yrs	\$32,025	2021	\$35,000					•					•					•					•					•					
R01	Repaint wood trim, as required.	5 yrs	\$90,000	2021	\$99,000					•					•					•					•					•					
R03	Phased replacement of wood trim, as required. Cost included in renew component.	30 Yrs	\$0	2027	\$0											•																			
Glazing Systems																																			
Encl 05 - Unit Skylight																																			
R01	Replace unit skylights and associated components, as required.	30 Yrs	\$21,000	2032	\$29,000																•														
Encl 06 - Vinyl Framed Window																																			
R01	Replace vinyl windows and associated components.	30 Yrs	\$0	2033	\$0																	•													
Encl 07 - Aluminum Framed Window																																			
R01	Replace aluminum framed windows and associated components.	40 Yrs	\$8,160	2027	\$10,000											•																			
Doors																																			
Encl 08 - Glazed Metal Clad Swing Door																																			
R01	Replace metal clad swing doors, as required.	25 Yrs	\$35,000	2023	\$40,000							•																							

Ocean Park Grove																																				
Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045		
Enclosure																																				
Encl 09 - Metal Clad Swing Door																																				
R01	Replace metal clad swing doors, as required.	25 Yrs	\$94,000	2023	\$110,000							•																								
Encl 10 - Aluminum Framed Sliding Glass Door																																				
R01	Replace sliding glass doors and associated components.	30 Yrs	\$0	2027	\$0											•																				
Parking Garage																																				
Encl 11 - Sectional Overhead Door - Metal																																				
R02	Replacement of sectional overhead door and associated hardware, as required.	25 Yrs	\$69,600	2028	\$88,000												•																			
General & Inspections																																				
Encl 12 - Vinyl Rainwater Leaders																																				
J01	Replace damaged gutters and rainwater leader as required.	10 Yrs	\$0	2017	\$0	•																														
R01	Replace gutter, rainwater leaders and associated components such as flashing.	20 Yrs	\$93,000	2027	\$120,000											•																				
Encl 13 - General & Inspections																																				
J01	Review metal flashing at all location and touch-up paint as required.	3 Yrs	\$0	2019	\$0			•		•				•			•			•			•			•										
J02	Repaint dryer, kitchen and bathroom exhaust vents as required.	3 Yrs	\$0	2019	\$0			•		•				•			•			•			•			•										
J03	Perform full condition assessment of all enclosure systems.	5 yrs	\$5,000	2019	\$5,500			•					•				•					•					•									
R01	Update depreciation report.	75 Yrs	\$0	2062	\$0																															
Encl 14 - Sealant																																				
R01	Replace sealants at interfaces between building enclosure assemblies, and at penetrations through assemblies in accordance with sealant renewals plan.	10 Yrs	\$17,400	2025	\$21,000										•										•											
Electrical																																				
Power Supply																																				
Elec 01 - Distribution Transformer - Exterior																																				
R01	Replace distribution transformers. [Work to be coordinated, completed and paid for by BC Hydro, at their discretion.] [PLACEHOLDER]	45 Yrs	\$0	2032																																
Distribution																																				
Elec 02 - Electrical Distribution																																				
J01	Check for any exposed wiring and visually inspect wiring, where accessible, for signs of distress. Repair as required.	2 Yrs	\$0	2013																																
J02	Check raceways and cables for proper mechanical support, check insulation for abrasion or cracks at support points, examine raceway joints for clean and tight connections. Check busducts connections for proper tightness and evidence of overheating, corrosion, arcing or other deterioration. Clean and torque dirty and loose connections.	2 Yrs	\$0	2013																																
R01	Clean and maintain all electrical distribution equipment (reference subsequent maintenance tasks). Vacuum to remove accumulated dust. Check oil levels of oil filled equipment.	10 Yrs	\$0	2017	\$0	•										•										•										

Ocean Park Grove																																			
Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
Electrical																																			
R02	Conduct infrared thermography and ultrasonic scanning tests on all switchgear, distribution panels, cable and bus connections, and other critical equipment. Results may diagnose hidden hazards; contractor should provide certificate for insurance purposes. To be coordinated prior to planned maintenance to identify areas that require immediate attention. Tests should be conducted on energized equipment during peak demand periods if possible.	10 Yrs	\$2,000	2017	\$2,000		•									•										•									
R03	Cyclical replacement of components of the electrical distribution equipment, as required.	40 Yrs	\$30,000	2027	\$37,000											•																			
Light Fixtures																																			
Elec 03 - Street Lights																																			
R01	Replace pole lamps, excluding field wiring.	20 Yrs	\$24,000	2030	\$32,000															•															
Elec 04 - Exterior Light Fixtures																																			
J01	Perform survey of actual lighting use and lighting levels to determine lighting needs. Consider updating fixtures or lighting controls to optimize light levels and energy costs.	3 Yrs	\$0	2019	\$0			•			•			•			•			•			•			•			•						
R01	Cyclical replacement of lighting controls (timers, motion sensors, etc.) as required.	6 Yrs	\$0	2017	\$0	•						•						•					•						•						
R02	Cyclical group replacement of lamps in exterior lighting fixtures. A set of lamps is replaced at a scheduled time.	3 Yrs	\$0	2019	\$0			•			•			•			•			•			•			•			•						
R03	Cyclical cleaning of exterior light fixtures. Use cleaning agents suited to fixture type.	10 Yrs	\$0	2017	\$0	•										•										•									
R04	Cyclical replacement of electronic ballasts.	10 Yrs	\$0	2017	\$0	•										•										•									
R05	Replace exterior light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	20 Yrs	\$5,800	2018	\$6,000			•																			•								
Elec 05 - Interior Light Fixtures																																			
J01	Perform survey of actual lighting use and lighting levels to determine lighting needs. Consider updating fixtures, lighting controls or interior finishes (e.g. painting) to optimize light levels and energy costs.	3 Yrs	\$0	2019	\$0			•			•			•			•			•			•			•			•						
R01	Cyclical group replacement of lamps in interior lighting fixtures. A set of lamps are replaced at a scheduled time.	3 Yrs	\$0	2019	\$0			•			•			•			•			•			•			•			•						
R02	Cyclical replacement of lighting controls (timers, motion sensors, etc.) as required.	6 Yrs	\$0	2017	\$0	•						•						•					•						•						
R03	Cyclical cleaning of interior light fixtures. Use cleaning agents suited to fixture type.	10 Yrs	\$0	2017	\$0	•										•										•									
R04	Cyclical replacement of electronic ballasts.	10 Yrs	\$0	2017	\$0	•										•										•									
R05	Replace interior light fixtures, as required, for aesthetic purposes, to match ballast replacement cycles, or technological obsolescence.	20 Yrs	\$5,000	2018	\$5,200			•																			•								
Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	

Ocean Park Grove																																			
Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
Fire Safety																																			
Detection																																			
Fire 01 - Fire Detection & Alarm																																			
R01	Cyclical replacement of speakers, heat detectors, smoke detectors and related modules, excluding field wiring.	20 Yrs	\$2,000	2033	\$2,800																	•													
Suppression																																			
Fire 02 - Fire Hydrant																																			
J01	Repaint exterior hydrant cap, bonnet and body for sufficient identification. [PLACEHOLDER]	8 Yrs	\$0	2019																															
J02	Lubricate cap threads with light white grease. [PLACEHOLDER]	8 Yrs	\$0	2019																															
R01	Replace fire hydrants. Not normally part of Common property asset. Municipally owned and maintained. [PLACEHOLDER]	40 Yrs	\$0	2027																															
Fire 03 - Portable Fire Extinguisher																																			
J01	Conduct hydrotest on fire extinguishers.	12 Yrs	\$0	2023	\$0							•												•											
R01	Replace fire extinguisher.	12 Yrs	\$200	2037	\$300																					•									
Egress																																			
Fire 04 - Emergency Egress Equipment																																			
R01	Cyclical replacement of batteries and lamps in DC battery packs.	5 yrs	\$0	2017	\$0	•					•					•					•													•	
R02	Cyclical replacement of LED exit signs.	15 Yrs	\$300	2033	\$420																	•													

Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
Interior Finishes																																			
Floors																																			
Finish 01 - Resilient Sheet Flooring																																			
R01	Replace resilient flooring.	20 Yrs	\$2,500	2031	\$3,400																		•												
Finish 02 - Wood Flooring																																			
R01	Replace wood flooring, as required.	20 Yrs	\$6,630	2031	\$8,900																		•												
Walls																																			
Finish 03 - Paint																																			
R02	Re-coat painted wall surface including preparation of substrate.	10 Yrs	\$3,500	2021	\$3,900					•												•													•
Window Coverings																																			
Finish 04 - Window Covering																																			
R01	Replace window covering, as required.	20 Yrs	\$300	2027	\$370											•																			
Architectural Woodwork																																			
Finish 05 - Carpentry and Millwork																																			
R01	Replace damaged components of carpentry and millwork, as required.	30 Yrs	\$5,000	2041	\$8,200																														•
Housekeeping																																			
Finish 06 - General Housekeeping																																			
R01	Update and replace cleaning equipment, as required.	10 Yrs	\$100	2018	\$100		•										•										•								

Ocean Park Grove																																					
Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045			
Interior Finishes																																					
Doors																																					
Finish 07 - Interior Swing Door - General																																					
R01	Cyclical replacement of interior swing door in low traffic/exposure locations, as required.	40 Yrs	\$1,500	2033	\$2,100																																
Amenities																																					
Equipment																																					
Amen 01 - Computer Equipments																																					
R01	Replace components of electronic equipment.	6 Yrs	\$1,000	2017	\$1,000		•					•																									
Amen 02 - Domestic Appliances																																					
R01	Replace domestic appliances.	15 Yrs	\$1,500	2021	\$1,700						•																										
Furnishings																																					
Amen 03 - Central Mailboxes																																					
J01	Lubricate locks and hinges. [PLACEHOLDER]	2 Yrs	\$0	2013																																	
J02	Rekey cylinder on master lock. [PLACEHOLDER]	5 yrs	\$0	2017																																	
R01	Replace central mail boxes as required. [PLACEHOLDER]	30 Yrs	\$0	2017																																	
Amen 04 - Furniture & Accessories																																					
R01	Replace furniture and associated components.	15 Yrs	\$500	2021	\$550						•																										
Amen 05 - Public Signage																																					
R01	Replace damaged and outdated signage, as required.	25 Yrs	\$500	2017	\$510		•																														
Sitework																																					
Hard Landscaping																																					
Site 01 - Timber Retaining Wall																																					
J01	Perform condition assessment of retaining wall.	3 Yrs	\$0	2019	\$0					•																											
R01	Replace timber retaining wall, as required.	25 Yrs	\$16,500	2021	\$18,000						•																										
Site 02 - Asphalt Paving																																					
R01	Reapply traffic markings on roadways.	5 yrs	\$0	2021	\$0						•																										
R02	Repave sections of asphalt paving, including sub-grade as required.	40 Yrs	\$141,975	2027	\$180,000																																
Site 03 - Concrete Paving																																					
R01	Reapply traffic markings on roadways.	5 yrs	\$0	2017	\$0		•				•																										
R02	Replace sections of concrete paving, as required.	40 Yrs	\$43,200	2027	\$54,000																																
Site 04 - Masonry Fencing & Retaining Wall																																					
J01	Perform condition assessment of fence wall.	3 Yrs	\$0	2019	\$0					•																											
R01	Reseal, repair and repoint masonry fencing, as required.	10 Yrs	\$2,500	2020	\$2,700																																

Ocean Park Grove

Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
Sitework																																			
R02 Reconstruct sections of masonry fencing, as required.	45 Yrs	\$10,200	2047	\$19,000																															
Site 05 - Wood Fencing																																			
R01 Recoat/repaint wood fencing, as required.	8 Yrs	\$17,500	2021	\$19,000						•								•								•								•	
R02 Replace sections of wood perimeter fencing, as required.	5 yrs	\$12,500	2021	\$14,000						•				•						•					•										
R03 Replace sections of wood perimeter fencing, as required. Cost is included in renew component.	20 Yrs	\$0	2021	\$0						•																									
Soft Landscaping																																			
Site 06 - Soft Landscaping - Large Trees																																			
J01 Clearance pruning of trees of large shrubs.	3 Yrs	\$0	2019	\$0				•		•			•			•			•			•			•			•			•				
R01 Tree management and restoration program.	25 Yrs	\$6,500	2019	\$6,600				•																											
R02 Tree management and restoration program.	10 Yrs	\$10,000	2018	\$10,000			•										•										•								
R03 Tree management and restoration including removal of large problem trees.	25 Yrs	\$10,000	2017	\$10,000	•																													•	
Site 07 - Groundskeeping & Pest Control																																			
J01 Stripe and reapply thermoplastic traffic and safety demarcation markings.	5 yrs	\$0	2017	\$0	•					•						•					•					•							•		
R01 Replace groundskeeping equipment, as required.	5 yrs	\$1,000	2018	\$1,000			•				•					•					•					•								•	
Site 08 - Irrigation System																																			
J01 Replace the back-up battery in the timer/controller.	2 Yrs	\$0	2013																																
R01 Cyclical replacement of components of irrigation sprinkler system, as required.	15 Yrs	\$5,000	2026	\$6,100											•																			•	
Site 09 - Soft Landscaping																																			
J01 Apply pre-emergent herbicides in accordance with municipal regulation (Feb & Sep).	2 Yrs	\$0	2013																																
J02 Clearance pruning of trees of large shrubs.	3 Yrs	\$0	2019	\$0				•		•			•			•			•			•			•			•			•				
R01 Renovate sections of the soft landscaping, as required.	15 Yrs	\$0	2017	\$0	•																	•													
Site Services																																			
Site 10 - Underground Natural Gas Service																																			
R01 Replace gas services where not owned by Utility, as required.	50 Yrs	\$65,000	2037	\$99,000																															•
Site 11 - Underground Water Services with PVC/Copper and Ductile Piping																																			
R02 Replace portions of underground water services with PVC/copper and ductile piping, hydrants, valves and connections. 5/5	50 Yrs	\$38,000	2057	\$86,000																															
R03 Replace portions of underground water services with PVC/copper and ductile piping, hydrants, valves and connections. 4/5	50 Yrs	\$38,000	2047	\$70,000																															
R04 Replace portions of underground water services with PVC/copper and ductile piping, hydrants, valves and connections. 1&2/5	50 Yrs	\$76,000	2027	\$94,000												•																			
R05 Replace underground water services with PVC/copper piping, hydrants, valves and connections. 3/5	50 Yrs	\$28,500	2037	\$43,000																							•								
Site 12 - Underground Drainage Services - Storm																																			
J01 Review underground drainage piping by video camera for condition and performance.	5 yrs	\$0	2017	\$0	•					•						•					•					•							•		
J02 Powerflush underground drainage piping to clear and remove any buildup of debris.	10 Yrs	\$0	2017	\$0	•											•										•									

Ocean Park Grove

Maintenance Description	Frequency	Current Cost	Next Event	Future Cost	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	
Sitework																																			
R01	Replace components of underground drainage services. 2/5	80 Yrs	\$52,000	2057	\$120,000																														
R01	Replace components of underground drainage services. 5/5	80 Yrs	\$52,000	2087																															
R01	Replace components of underground drainage services. 4/5	80 Yrs	\$52,000	2077																															
R01	Replace components of underground drainage services. 1/5	80 Yrs	\$52,000	2047	\$96,000																														
R02	Replace components of underground drainage services. 3/5	80 Yrs	\$52,000	2067	\$140,000																														
Site 13 - Underground Sewer Services - Sewer																																			
J01	CCTV length of services for inspection of condition and function.	5 yrs	\$3,000	2017	\$3,100	•				•						•					•														
J02	Powerflush underground sanitary drains to remove buildup and debris.	10 Yrs	\$4,000	2017	\$4,100	•										•																			
R02	Replace portions of underground sewer services, including all appurtenances. Includes temporary services during construction (assumes no room to abandon old services in place), trench backfill and asphalt patching. 5/5	80 Yrs	\$54,000	2087																															
R03	Replace portions of underground sewer services, including all appurtenances. Includes temporary services during construction (assumes no room to abandon old services in place), trench backfill and asphalt patching. 4/5	80 Yrs	\$54,000	2077																															
R04	Replace portions of underground sewer services, including all appurtenances. Includes temporary services during construction (assumes no room to abandon old services in place), trench backfill and asphalt patching. 1/5	80 Yrs	\$54,000	2047	\$100,000																														
R05	Replace portions of underground sewer services, including all appurtenances. Includes temporary services during construction (assumes no room to abandon old services in place), trench backfill and asphalt patching. 2/5	80 Yrs	\$54,000	2057	\$120,000																														
R06	Replace underground sewer services, including all appurtenances. Includes temporary services during construction (assumes no room to abandon old services in place), trench backfill and asphalt patching. 3/5	80 Yrs	\$54,000	2067	\$150,000																														
Site 14 - Electrical Site Services																																			
R01	Replace underground electrical services, as required.	50 Yrs	\$100,000	2037	\$150,000																														