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zHome Neighborhood
Issaquah, WA



Report #: 26469-9
Beginning: July 1, 2023
Expires: June 30, 2024

RESERVE STUDY
Update "With-Site-Visit"

December 7, 2022

Welcome to your Reserve Study!

A Reserve Study is a valuable tool to help you budget responsibly for your property. This report contains all the information you need to avoid surprise expenses, make informed decisions, save money, and protect property values.

Regardless of the property type, it's a fact of life that the very moment construction is completed, every major building component begins a predictable process of physical deterioration. The operative word is "predictable" because planning for the inevitable is what a Reserve Study by **Association Reserves** is all about!

In this Report, you will find three key results:

- **Component List**
Unique to each property, the Component List serves as the foundation of the Reserve Study and details the scope and schedule of all necessary repairs & replacements.
- **Reserve Fund Strength**
A calculation that measures how well the Reserve Fund has kept pace with the property's physical deterioration.
- **Reserve Funding Plan**
A multi-year funding plan based on current Reserve Fund strength that allows for component repairs and replacements to be completed in a timely manner, with an emphasis on fairness and avoiding "catch-up" funding.

Questions?

Please contact your Project Manager directly.



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zHome Neighborhood

Issaquah, WA

Level of Service: **Update "With-Site-Visit"**

Report #: **26469-9**

of Units: 10

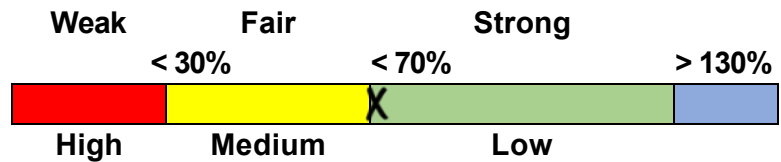
July 1, 2023 through June 30, 2024

Findings & Recommendations

as of July 1, 2023

Starting Reserve Balance	\$184,218
Current Fully Funded Reserve Balance	\$255,417
Percent Funded	72.1 %
Average Reserve (Deficit) or Surplus Per Unit	(\$7,120)
Recommended 2023 100% Monthly "Full Funding" Contributions	\$2,970
Recommended 2023 70% Monthly "Threshold Funding" Contributions	\$2,580
2023 "Baseline Funding" minimum to keep Reserves above \$0	\$1,650
Most Recent Budgeted Contribution Rate	\$2,500

Reserve Fund Strength: 72.1%



Risk of Special Assessment:

Economic Assumptions:

Net Annual "After Tax" Interest Earnings Accruing to Reserves	1.00 %
Annual Inflation Rate	3.00 %

- This is a Update "With-Site-Visit", meeting all requirements of the Revised Code of Washington (RCW). This study was prepared by, or under the supervision of a credentialed Reserve Specialist (RS™).
- Your Reserve Fund is currently 72.1 % Funded. This means the association's special assessment & deferred maintenance risk is currently Low. The objective of your multi-year Funding Plan is to fund your Reserves to a level where you will enjoy a low risk of such Reserve cash flow problems. The current annual deterioration of your reserve components is \$37,924 - see Component Significance table.
- Based on this starting point and your anticipated future expenses, our recommendation is to budget Reserve Contributions to within the 70% to 100% range as noted above. The 100% "Full" and 70% contribution rates are designed to gradually achieve these funding objectives by the end of our 30-year report scope.
- No assets appropriate for Reserve designation known to be excluded. See appendix for component information and the basis of our assumptions. "Baseline Funding" in this report is as defined within the RCW, "to maintain the reserve account balance above zero throughout the thirty-year study period, without special assessments." Funding plan contribution rates, and reserves deficit or (surplus) are presented as an aggregate total, assuming average percentage of ownership. The actual ownership allocation may vary - refer to your governing documents, and assessment computational tools to adjust for any variation.

# Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Site / Grounds			
100 Concrete - Repair/Replace	5	3	\$3,180
103 Concrete Pavers - Repair/Replace	5	3	\$3,180
104 Pervious Concrete - Repair/Replace	50	39	\$19,450
142 Entry Trellis - Repair/Replace	15	3	\$6,505
164 Path Lights - Replace	15	3	\$1,500
182 Drainage/Stormwater Sys - Clean	8	7	\$2,360
200 Signs/Identifiers - Replace	6	4	\$1,910
205 Mailboxes - Replace	25	13	\$1,500
Building Exteriors			
500 Steep Slope Roofing - Repr/Replace	30	18	\$60,100
502 Roofs - Inspect/Clean/Repair	3	1	\$8,240
505 Low Slope Roofing - Repair/Replace	20	8	\$49,150
507 Garden/Trash Roof - Repair/Replace	20	8	\$6,555
510 Gutters/Downspouts - Repair/Replace	30	18	\$10,135
522 Siding:Fiber Cement - Rpr/Replace	50	38	\$273,000
523 Siding:Cedar – Repair/Replace	50	38	\$161,000
524 Siding:Fiber Cement -Full Paint/Clk	10	7	\$49,850
526 Building Exteriors - Repairs	10	2	\$17,450
529 Cedar Siding - Prep/Caulk/Stain	5	3	\$41,950
560 Exterior Lights - Replace	24	13	\$6,555
Systems			
900 Side Sewers - Repair/Replace	5	3	\$3,095
905 Resd. Water Lines - Repair/Replace	5	3	\$3,095
970 Solar Panels Common Areas - Replace	40	29	\$2,295
972 Micro Inverters, Solar CA- Replace	20	9	\$1,420
980 Geothermal Circulating Pump#1 -Repl	15	12	\$6,900
980 Geothermal Circulating Pump#2 -Repl	15	3	\$6,900
981 Environol Fluid(Geotherm) - Replace	15	3	\$12,350

26 Total Funded Components

Note 1: Yellow highlighted line items are expected to require attention in this initial year, light blue highlighted items are expected to occur within the first-five years.

Introduction



A Reserve Study is the art and science of anticipating, and preparing for, an association's major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a combination of research and well-defined computations, following consistent National Reserve Study Standard principles.

The foundation of this and every Reserve Study is your Reserve Component List (what you are reserving for). This is because the Reserve Component List defines the *scope and schedule* of all your anticipated upcoming Reserve projects. Based on that List and your starting balance, we calculate the association's Reserve Fund Strength (reported in terms of "Percent Funded"). Then we compute a Reserve Funding Plan to provide for the Reserve needs of the association. These form the three results of your Reserve Study.



Reserve contributions are not “for the future”. Reserve contributions are designed to offset the ongoing, daily deterioration of your Reserve assets. Done well, a stable, budgeted Reserve Funding Plan will collect sufficient funds from the owners who enjoyed the use of those assets, so the association is financially prepared for the irregular expenditures scattered through future years when those projects eventually require replacement.

Methodology



For this [Update With-Site-Visit Reserve Study](#), we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and researched any well-established association precedents. We performed an on-site inspection to evaluate your common areas, updating and adjusting your Reserve Component List as appropriate.

Which Physical Assets are Funded by Reserves?

There is a national-standard four-part test to determine which expenses should appear in your Reserve Component List. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the remaining life must be predictable (or it by definition is a *surprise* which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost (often between .5% and 1% of an association's total budget). This limits Reserve



RESERVE COMPONENT "FOUR-PART TEST"

Components to major, predictable expenses. Within this framework, it is inappropriate to include *lifetime* components, unpredictable expenses (such as damage due to fire, flood, or earthquake), and expenses more appropriately handled from the Operational Budget or as an insured loss.

How do we establish Useful Life and Remaining Useful Life estimates?

- 1) Visual Inspection (observed wear and age)
- 2) Association Reserves database of experience
- 3) Client History (install dates & previous life cycle information)
- 4) Vendor Evaluation and Recommendation

How do we establish Current Repair/Replacement Cost Estimates?

In this order...

- 1) Actual client cost history, or current proposals
- 2) Comparison to Association Reserves database of work done at similar associations
- 3) Vendor Recommendations
- 4) Reliable National Industry cost estimating guidebooks

How much Reserves are enough?

Reserve adequacy is not measured in cash terms. Reserve adequacy is found when the *amount* of current Reserve cash is compared to Reserve component deterioration (the *needs of the association*). Having *enough* means the association can execute its projects in a timely manner with existing Reserve funds. Not having *enough* typically creates deferred maintenance or special assessments.

Adequacy is measured in a two-step process:

- 1) Calculate the *value of deterioration* at the association (called Fully Funded Balance, or FFB).
- 2) Compare that to the Reserve Fund Balance, and express as a percentage.



Each year, the *value of deterioration* at the association changes. When there is more deterioration (as components approach the time they need to be replaced), there should be more cash to offset that deterioration and prepare for the expenditure. Conversely, the *value of deterioration* shrinks after projects are accomplished. The *value of deterioration* (the FFB) changes each year, and is a moving but predictable target.

There is a high risk of special assessments and deferred maintenance when the Percent Funded is *weak*, below 30%. Approximately 30% of all associations are in this high risk range. While the 100% point is Ideal (indicating Reserve cash is equal to the *value of deterioration*), a Reserve Fund in the 70% - 130% range is considered strong (low risk of special assessment).

Measuring your Reserves by Percent Funded tells how well prepared your association is for upcoming Reserve expenses. New buyers should be very aware of this important disclosure!

How much should we contribute?



RESERVE FUNDING PRINCIPLES

According to National Reserve Study Standards, there are four Funding Principles to balance in developing your Reserve Funding Plan. Our first objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. Second, a stable contribution is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve contributions that are evenly distributed over current and future owners enable each owner to pay their fair share of the association's Reserve expenses over the years. And finally, we develop a plan that is fiscally responsible and safe for Boardmembers to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Boardmembers invite liability exposure when Reserve contributions are inadequate to offset ongoing common area deterioration.

What is our Recommended Funding Goal?

Maintaining the Reserve Fund at a level equal to the *value* of deterioration is called "Full Funding" (100% Funded). As each asset ages and becomes "used up," the Reserve Fund grows proportionally. **This is simple, responsible, and our recommendation.** Evidence shows that associations in the 70 - 130% range *enjoy a low risk of special assessments or deferred maintenance.*



FUNDING OBJECTIVES

Allowing the Reserves to fall close to zero, but not below zero, is called Baseline Funding. Doing so allows the Reserve Fund to drop into the 0 - 30% range, where there is a high risk of special assessments & deferred maintenance. Since Baseline Funding still provides for the timely execution of all Reserve projects, and only the "margin of safety" is different, Baseline Funding contributions average only 10% - 15% less than Full Funding contributions. Threshold Funding is the title of all other Cash or Percent Funded objectives *between* Baseline Funding and Full Funding.

Site Inspection Notes

During our site visit on 12/6/2022, we visually inspected all visible common areas, while compiling a photographic inventory, noting: general exterior observations, make & model information where appropriate, apparent levels of care and maintenance, exposure to weather elements and other factors that may affect the components useful life.

Projected Expenses

While this Reserve Study looks forward 30 years, we have no expectation that all these expenses will all take place as anticipated. This Reserve Study needs to be updated annually because we expect the timing of these expenses to shift and the size of these expenses to change. We do feel more certain of the timing and cost of near-term expenses than expenses many years away.

The figure below summarizes the projected future expenses at your association as defined by your Reserve Component List. A summary of these expenses are shown in the 30-yr Summary Table, while details of the projects that make up these expenses are shown in the Cash Flow Detail Table.

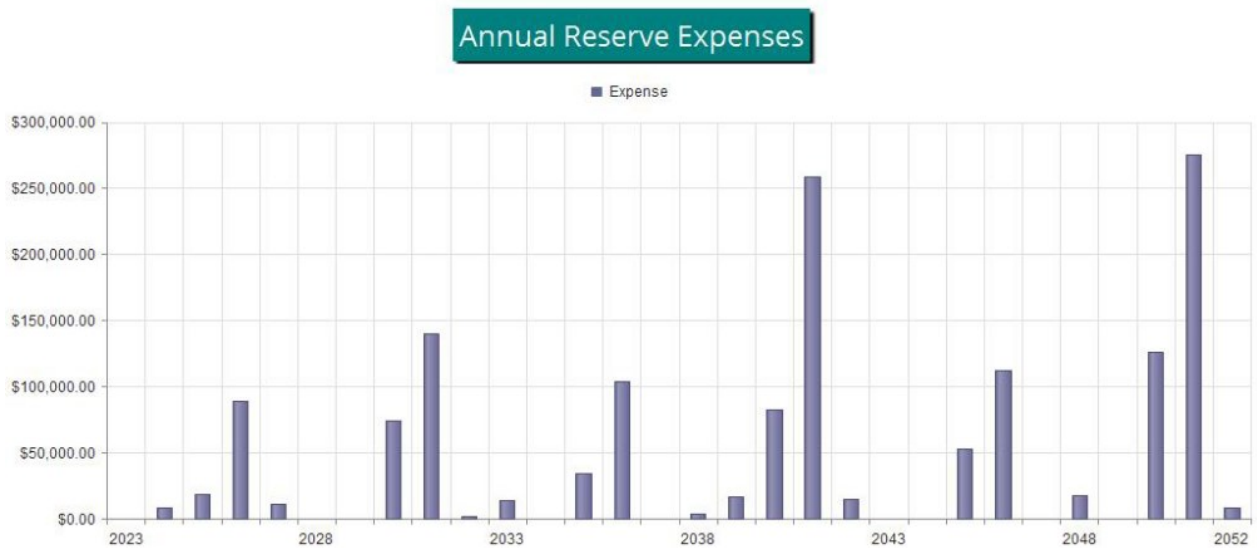


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$184,218 as-of the start of your Fiscal Year on 7/1/2023. As of that date, your Fully Funded Balance is computed to be \$255,417 (see Fully Funded Balance Table). This figure represents the deteriorated value of your common area components.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$2,970 per month this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary Table and the Cash Flow Detail Table.

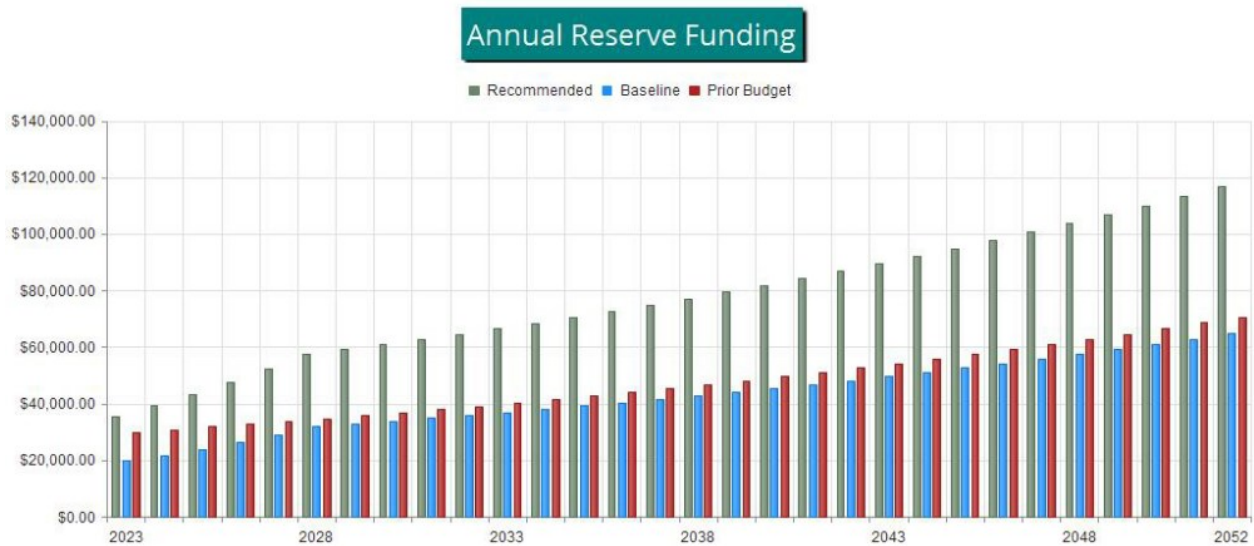


Figure 2

The following chart shows your Reserve balance under our recommended Full Funding Plan, an alternate Baseline Funding Plan, and at your current budgeted contribution rate (assumes future increases), compared to your always-changing Fully Funded Balance target.

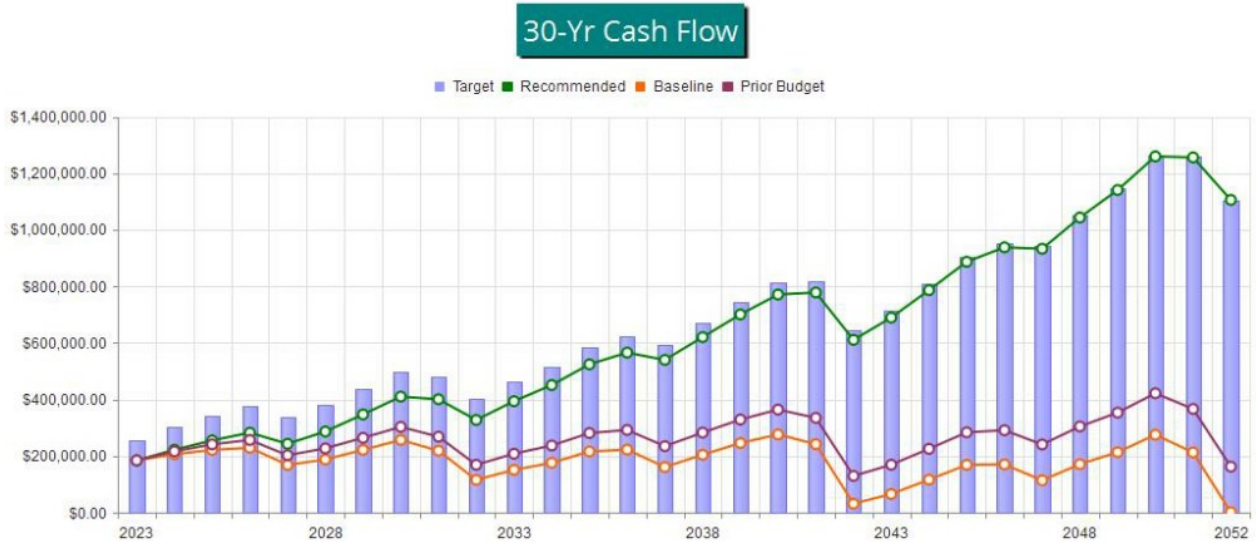


Figure 3

This figure shows the same information plotted on a Percent Funded scale. It is clear here to see how your Reserve Fund strength approaches the 100% Funded level under our recommended multi-yr Funding Plan.

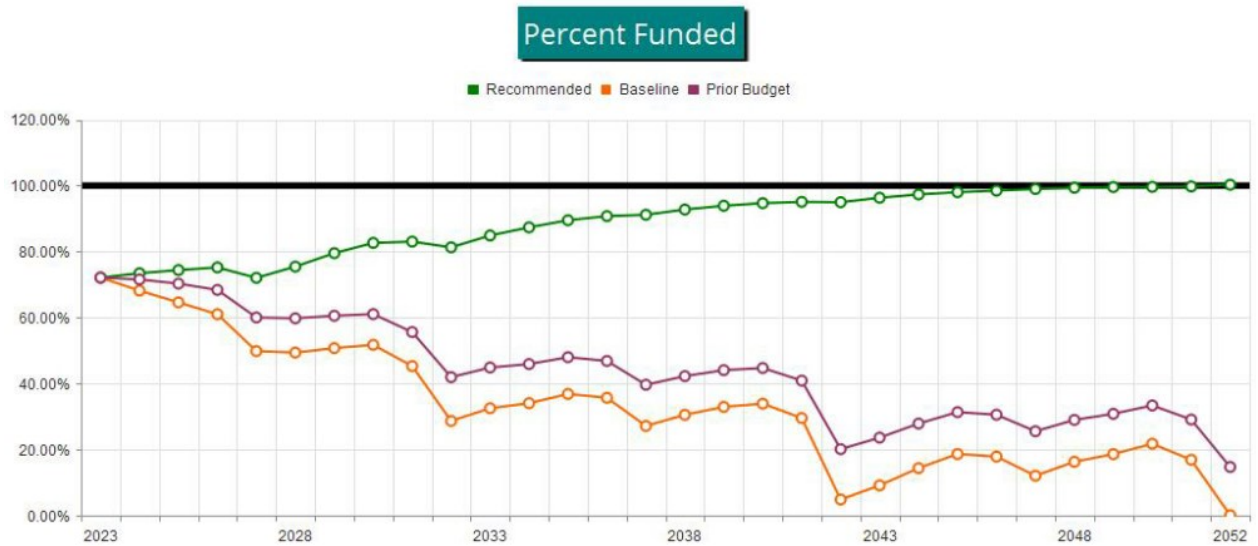


Figure 4



Executive Summary is a summary of your Reserve Components

Reserve Component List Detail discloses key Component information, providing the foundation upon which the financial analysis is performed.

Fully Funded Balance shows the calculation of the Fully Funded Balance for each of your components, and their contributions to the property total. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Component Significance shows the relative significance of each component to Reserve funding needs of the property, helping you see which components have more (or less) influence than others on your total Reserve contribution rate. The deterioration cost/yr of each component is calculated by dividing the estimated Current Replacement Cost by its Useful Life, then that component's percentage of the total is displayed.

30-Yr Reserve Plan Summary provides a one-page 30-year summary of the cash flowing into and out of the Reserve Fund, with a display of the Fully Funded Balance, Percent Funded, and special assessment risk at the beginning of each year.

30-Year Income/Expense Detail shows the detailed income and expenses for each of the next 30 years. This table makes it possible to see which components are projected to require repair or replacement in a particular year, and the size of those individual expenses.

# Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate		
				Best Case	Worst Case	
Site / Grounds						
100	Concrete - Repair/Replace	Moderate, poured in place	5	3	\$2,120	\$4,240
103	Concrete Pavers - Repair/Replace	Moderate, squares	5	3	\$2,120	\$4,240
104	Pervious Concrete - Repair/Replace	~1,300 GSF	50	39	\$13,500	\$25,400
142	Entry Trellis - Repair/Replace	(1) 6' X 12' painted wood	15	3	\$5,140	\$7,870
164	Path Lights - Replace	~(8) metal, low voltage	15	3	\$1,000	\$2,000
182	Drainage/Stormwater Sys - Clean	Pipes, drains, etc.	8	7	\$1,400	\$3,320
200	Signs/Identifiers - Replace	Moderate, assorted	6	4	\$1,850	\$1,970
205	Mailboxes - Replace	(2) six box banks, metal	25	13	\$1,000	\$2,000
Building Exteriors						
500	Steep Slope Roofing - Repr/Replace	~7,500 GSF, shingles	30	18	\$54,600	\$65,600
502	Roofs - Inspect/Clean/Repair	~9,900 GSF	3	1	\$6,180	\$10,300
505	Low Slope Roofing - Repair/Replace	~2,400 GSF, single ply	20	8	\$43,700	\$54,600
507	Garden/Trash Roof - Repair/Replace	~300 GSF, single ply	20	8	\$4,370	\$8,740
510	Gutters/Downspouts - Repair/Replace	~1,000 LF, aluminum	30	18	\$9,070	\$11,200
522	Siding:Fiber Cement - Rpr/Replace	~12,700 GSF lap/panel	50	38	\$218,000	\$328,000
523	Siding:Cedar – Repair/Replace	~5,200 GSF, lap	50	38	\$137,000	\$185,000
524	Siding:Fiber Cement -Full Paint/Clk	~12,700 GSF lap/panel	10	7	\$43,600	\$56,100
526	Building Exteriors - Repairs	Local areas/touch-up	10	2	\$14,000	\$20,900
529	Cedar Siding - Prep/Caulk/Stain	~5,200 GSF	5	3	\$36,300	\$47,600
560	Exterior Lights - Replace	~(40) plastic/metal	24	13	\$5,240	\$7,870
Systems						
900	Side Sewers - Repair/Replace	~270 LF, PVC	5	3	\$2,580	\$3,610
905	Resd. Water Lines - Repair/Replace	~175 LF	5	3	\$2,580	\$3,610
970	Solar Panels Common Areas - Replace	(4) panels	40	29	\$1,970	\$2,620
972	Micro Inverters, Solar CA- Replace	(4) Enphase	20	9	\$1,090	\$1,750
980	Geothermal Circulating Pump#1 -Repl	(1) large pump	15	12	\$6,370	\$7,430
980	Geothermal Circulating Pump#2 -Repl	(1) large pump	15	3	\$6,370	\$7,430
981	Environol Fluid(Geotherm) - Replace	Closed loop fluid	15	3	\$11,700	\$13,000
26 Total Funded Components						

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Site / Grounds								
100	Concrete - Repair/Replace	\$3,180	X	2	/	5	=	\$1,272
103	Concrete Pavers - Repair/Replace	\$3,180	X	2	/	5	=	\$1,272
104	Pervious Concrete - Repair/Replace	\$19,450	X	11	/	50	=	\$4,279
142	Entry Trellis - Repair/Replace	\$6,505	X	12	/	15	=	\$5,204
164	Path Lights - Replace	\$1,500	X	12	/	15	=	\$1,200
182	Drainage/Stormwater Sys - Clean	\$2,360	X	1	/	8	=	\$295
200	Signs/Identifiers - Replace	\$1,910	X	2	/	6	=	\$637
205	Mailboxes - Replace	\$1,500	X	12	/	25	=	\$720
Building Exteriors								
500	Steep Slope Roofing - Repr/Replace	\$60,100	X	12	/	30	=	\$24,040
502	Roofs - Inspect/Clean/Repair	\$8,240	X	2	/	3	=	\$5,493
505	Low Slope Roofing - Repair/Replace	\$49,150	X	12	/	20	=	\$29,490
507	Garden/Trash Roof - Repair/Replace	\$6,555	X	12	/	20	=	\$3,933
510	Gutters/Downspouts - Repair/Replace	\$10,135	X	12	/	30	=	\$4,054
522	Siding:Fiber Cement - Rpr/Replace	\$273,000	X	12	/	50	=	\$65,520
523	Siding:Cedar – Repair/Replace	\$161,000	X	12	/	50	=	\$38,640
524	Siding:Fiber Cement -Full Paint/Clk	\$49,850	X	3	/	10	=	\$14,955
526	Building Exteriors - Repairs	\$17,450	X	8	/	10	=	\$13,960
529	Cedar Siding - Prep/Caulk/Stain	\$41,950	X	2	/	5	=	\$16,780
560	Exterior Lights - Replace	\$6,555	X	11	/	24	=	\$3,004
Systems								
900	Side Sewers - Repair/Replace	\$3,095	X	2	/	5	=	\$1,238
905	Resd. Water Lines - Repair/Replace	\$3,095	X	2	/	5	=	\$1,238
970	Solar Panels Common Areas - Replace	\$2,295	X	11	/	40	=	\$631
972	Micro Inverters, Solar CA- Replace	\$1,420	X	11	/	20	=	\$781
980	Geothermal Circulating Pump#1 -Repl	\$6,900	X	3	/	15	=	\$1,380
980	Geothermal Circulating Pump#2 -Repl	\$6,900	X	12	/	15	=	\$5,520
981	Environol Fluid(Geotherm) - Replace	\$12,350	X	12	/	15	=	\$9,880
								\$255,417

# Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Site / Grounds				
100 Concrete - Repair/Replace	5	\$3,180	\$636	1.68 %
103 Concrete Pavers - Repair/Replace	5	\$3,180	\$636	1.68 %
104 Pervious Concrete - Repair/Replace	50	\$19,450	\$389	1.03 %
142 Entry Trellis - Repair/Replace	15	\$6,505	\$434	1.14 %
164 Path Lights - Replace	15	\$1,500	\$100	0.26 %
182 Drainage/Stormwater Sys - Clean	8	\$2,360	\$295	0.78 %
200 Signs/Identifiers - Replace	6	\$1,910	\$318	0.84 %
205 Mailboxes - Replace	25	\$1,500	\$60	0.16 %
Building Exteriors				
500 Steep Slope Roofing - Repr/Replace	30	\$60,100	\$2,003	5.28 %
502 Roofs - Inspect/Clean/Repair	3	\$8,240	\$2,747	7.24 %
505 Low Slope Roofing - Repair/Replace	20	\$49,150	\$2,458	6.48 %
507 Garden/Trash Roof - Repair/Replace	20	\$6,555	\$328	0.86 %
510 Gutters/Downspouts - Repair/Replace	30	\$10,135	\$338	0.89 %
522 Siding:Fiber Cement - Rpr/Replace	50	\$273,000	\$5,460	14.40 %
523 Siding:Cedar – Repair/Replace	50	\$161,000	\$3,220	8.49 %
524 Siding:Fiber Cement -Full Paint/Clk	10	\$49,850	\$4,985	13.14 %
526 Building Exteriors - Repairs	10	\$17,450	\$1,745	4.60 %
529 Cedar Siding - Prep/Caulk/Stain	5	\$41,950	\$8,390	22.12 %
560 Exterior Lights - Replace	24	\$6,555	\$273	0.72 %
Systems				
900 Side Sewers - Repair/Replace	5	\$3,095	\$619	1.63 %
905 Resd. Water Lines - Repair/Replace	5	\$3,095	\$619	1.63 %
970 Solar Panels Common Areas - Replace	40	\$2,295	\$57	0.15 %
972 Micro Inverters, Solar CA- Replace	20	\$1,420	\$71	0.19 %
980 Geothermal Circulating Pump#1 -Repl	15	\$6,900	\$460	1.21 %
980 Geothermal Circulating Pump#2 -Repl	15	\$6,900	\$460	1.21 %
981 Environol Fluid(Geotherm) - Replace	15	\$12,350	\$823	2.17 %
26 Total Funded Components			\$37,924	100.00 %

30-Year Reserve Plan Summary

Report # 26469-9
With-Site-Visit

Fiscal Year Start: 2023

Interest:

1.00 %

Inflation:

3.00 %

Reserve Fund Strength: as-of Fiscal Year Start Date

Projected Reserve Balance Changes

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	% Increase		Reserve Funding	Reserve Funding	Loan or Special Assmts	Interest Income	Reserve Expenses
					In Annual	Reserve					
2023	\$184,218	\$255,417	72.1 %	Low	18.80 %	\$35,640	\$0	\$2,030	\$0		
2024	\$221,888	\$302,141	73.4 %	Low	10.00 %	\$39,204	\$0	\$2,383	\$8,487		
2025	\$254,988	\$342,697	74.4 %	Low	10.00 %	\$43,124	\$0	\$2,685	\$18,513		
2026	\$282,285	\$375,350	75.2 %	Low	10.00 %	\$47,437	\$0	\$2,625	\$89,336		
2027	\$243,011	\$337,278	72.1 %	Low	10.00 %	\$52,181	\$0	\$2,646	\$11,424		
2028	\$286,414	\$379,594	75.5 %	Low	10.00 %	\$57,399	\$0	\$3,166	\$0		
2029	\$346,978	\$436,265	79.5 %	Low	3.00 %	\$59,121	\$0	\$3,783	\$0		
2030	\$409,881	\$495,995	82.6 %	Low	3.00 %	\$60,894	\$0	\$4,050	\$74,346		
2031	\$400,479	\$482,339	83.0 %	Low	3.00 %	\$62,721	\$0	\$3,637	\$139,604		
2032	\$327,233	\$402,499	81.3 %	Low	3.00 %	\$64,603	\$0	\$3,603	\$1,853		
2033	\$393,585	\$463,632	84.9 %	Low	3.00 %	\$66,541	\$0	\$4,220	\$13,641		
2034	\$450,705	\$515,986	87.3 %	Low	3.00 %	\$68,537	\$0	\$4,872	\$0		
2035	\$524,114	\$585,536	89.5 %	Low	3.00 %	\$70,593	\$0	\$5,445	\$34,717		
2036	\$565,435	\$623,036	90.8 %	Low	3.00 %	\$72,711	\$0	\$5,523	\$103,965		
2037	\$539,704	\$592,007	91.2 %	Low	3.00 %	\$74,892	\$0	\$5,798	\$0		
2038	\$620,395	\$668,851	92.8 %	Low	3.00 %	\$77,139	\$0	\$6,601	\$3,677		
2039	\$700,458	\$745,987	93.9 %	Low	3.00 %	\$79,453	\$0	\$7,354	\$16,288		
2040	\$770,977	\$814,272	94.7 %	Low	3.00 %	\$81,837	\$0	\$7,742	\$82,394		
2041	\$778,162	\$818,397	95.1 %	Low	3.00 %	\$84,292	\$0	\$6,941	\$258,753		
2042	\$610,642	\$642,933	95.0 %	Low	3.00 %	\$86,820	\$0	\$6,498	\$14,449		
2043	\$689,512	\$715,834	96.3 %	Low	3.00 %	\$89,425	\$0	\$7,376	\$0		
2044	\$786,313	\$807,859	97.3 %	Low	3.00 %	\$92,108	\$0	\$8,362	\$0		
2045	\$886,783	\$904,760	98.0 %	Low	3.00 %	\$94,871	\$0	\$9,119	\$52,884		
2046	\$937,889	\$952,278	98.5 %	Low	3.00 %	\$97,717	\$0	\$9,349	\$112,218		
2047	\$932,737	\$942,354	99.0 %	Low	3.00 %	\$100,649	\$0	\$9,876	\$0		
2048	\$1,043,261	\$1,050,028	99.4 %	Low	3.00 %	\$103,668	\$0	\$10,915	\$17,253		
2049	\$1,140,592	\$1,145,545	99.6 %	Low	3.00 %	\$106,778	\$0	\$11,995	\$0		
2050	\$1,259,365	\$1,264,152	99.6 %	Low	3.00 %	\$109,982	\$0	\$12,571	\$126,058		
2051	\$1,255,859	\$1,259,004	99.8 %	Low	3.00 %	\$113,281	\$0	\$11,802	\$275,364		
2052	\$1,105,578	\$1,102,519	100.3 %	Low	3.00 %	\$116,679	\$0	\$11,649	\$8,755		

30-Year Reserve Plan Summary (Alternate Funding Plan)

Report # 26469-9
With-Site-Visit

Fiscal Year Start: 2023

Interest:

1.00 %

Inflation:

3.00 %

Reserve Fund Strength: as-of Fiscal Year Start Date

Projected Reserve Balance Changes

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	% Increase In Annual Reserve Funding	Reserve Funding	Loan or Special Assmts	Interest Income	Reserve Expenses
2023	\$184,218	\$255,417	72.1 %	Low	-34.00 %	\$19,800	\$0	\$1,950	\$0
2024	\$205,968	\$302,141	68.2 %	Medium	10.00 %	\$21,780	\$0	\$2,136	\$8,487
2025	\$221,397	\$342,697	64.6 %	Medium	10.00 %	\$23,958	\$0	\$2,251	\$18,513
2026	\$229,094	\$375,350	61.0 %	Medium	10.00 %	\$26,354	\$0	\$1,985	\$89,336
2027	\$168,097	\$337,278	49.8 %	Medium	10.00 %	\$28,989	\$0	\$1,777	\$11,424
2028	\$187,439	\$379,594	49.4 %	Medium	10.00 %	\$31,888	\$0	\$2,043	\$0
2029	\$221,370	\$436,265	50.7 %	Medium	3.00 %	\$32,845	\$0	\$2,389	\$0
2030	\$256,604	\$495,995	51.7 %	Medium	3.00 %	\$33,830	\$0	\$2,374	\$74,346
2031	\$218,462	\$482,339	45.3 %	Medium	3.00 %	\$34,845	\$0	\$1,668	\$139,604
2032	\$115,371	\$402,499	28.7 %	High	3.00 %	\$35,890	\$0	\$1,330	\$1,853
2033	\$150,739	\$463,632	32.5 %	Medium	3.00 %	\$36,967	\$0	\$1,631	\$13,641
2034	\$175,697	\$515,986	34.1 %	Medium	3.00 %	\$38,076	\$0	\$1,956	\$0
2035	\$215,729	\$585,536	36.8 %	Medium	3.00 %	\$39,218	\$0	\$2,190	\$34,717
2036	\$222,420	\$623,036	35.7 %	Medium	3.00 %	\$40,395	\$0	\$1,915	\$103,965
2037	\$160,765	\$592,007	27.2 %	High	3.00 %	\$41,607	\$0	\$1,824	\$0
2038	\$204,196	\$668,851	30.5 %	Medium	3.00 %	\$42,855	\$0	\$2,248	\$3,677
2039	\$245,622	\$745,987	32.9 %	Medium	3.00 %	\$44,141	\$0	\$2,607	\$16,288
2040	\$276,082	\$814,272	33.9 %	Medium	3.00 %	\$45,465	\$0	\$2,588	\$82,394
2041	\$241,741	\$818,397	29.5 %	High	3.00 %	\$46,829	\$0	\$1,364	\$258,753
2042	\$31,181	\$642,933	4.8 %	High	3.00 %	\$48,234	\$0	\$483	\$14,449
2043	\$65,448	\$715,834	9.1 %	High	3.00 %	\$49,681	\$0	\$907	\$0
2044	\$116,036	\$807,859	14.4 %	High	3.00 %	\$51,171	\$0	\$1,423	\$0
2045	\$168,630	\$904,760	18.6 %	High	3.00 %	\$52,706	\$0	\$1,693	\$52,884
2046	\$170,144	\$952,278	17.9 %	High	3.00 %	\$54,287	\$0	\$1,418	\$112,218
2047	\$113,632	\$942,354	12.1 %	High	3.00 %	\$55,916	\$0	\$1,422	\$0
2048	\$170,970	\$1,050,028	16.3 %	High	3.00 %	\$57,593	\$0	\$1,920	\$17,253
2049	\$213,231	\$1,145,545	18.6 %	High	3.00 %	\$59,321	\$0	\$2,440	\$0
2050	\$274,993	\$1,264,152	21.8 %	High	3.00 %	\$61,101	\$0	\$2,436	\$126,058
2051	\$212,472	\$1,259,004	16.9 %	High	3.00 %	\$62,934	\$0	\$1,067	\$275,364
2052	\$1,109	\$1,102,519	0.1 %	High	3.00 %	\$64,822	\$0	\$293	\$8,755

30-Year Income/Expense Detail

Report # 26469-9
With-Site-Visit

Fiscal Year	2023	2024	2025	2026	2027
Starting Reserve Balance	\$184,218	\$221,888	\$254,988	\$282,285	\$243,011
Annual Reserve Funding	\$35,640	\$39,204	\$43,124	\$47,437	\$52,181
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,030	\$2,383	\$2,685	\$2,625	\$2,646
Total Income	\$221,888	\$263,475	\$300,797	\$332,347	\$297,838
# Component					
Site / Grounds					
100 Concrete - Repair/Replace	\$0	\$0	\$0	\$3,475	\$0
103 Concrete Pavers - Repair/Replace	\$0	\$0	\$0	\$3,475	\$0
104 Pervious Concrete - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Entry Trellis - Repair/Replace	\$0	\$0	\$0	\$7,108	\$0
164 Path Lights - Replace	\$0	\$0	\$0	\$1,639	\$0
182 Drainage/Stormwater Sys - Clean	\$0	\$0	\$0	\$0	\$0
200 Signs/Identifiers - Replace	\$0	\$0	\$0	\$0	\$2,150
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Building Exteriors					
500 Steep Slope Roofing - Repr/Replace	\$0	\$0	\$0	\$0	\$0
502 Roofs - Inspect/Clean/Repair	\$0	\$8,487	\$0	\$0	\$9,274
505 Low Slope Roofing - Repair/Replace	\$0	\$0	\$0	\$0	\$0
507 Garden/Trash Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
522 Siding:Fiber Cement - Rpr/Replace	\$0	\$0	\$0	\$0	\$0
523 Siding:Cedar - Repair/Replace	\$0	\$0	\$0	\$0	\$0
524 Siding:Fiber Cement -Full Paint/Clk	\$0	\$0	\$0	\$0	\$0
526 Building Exteriors - Repairs	\$0	\$0	\$18,513	\$0	\$0
529 Cedar Siding - Prep/Caulk/Stain	\$0	\$0	\$0	\$45,840	\$0
560 Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Systems					
900 Side Sewers - Repair/Replace	\$0	\$0	\$0	\$3,382	\$0
905 Resd. Water Lines - Repair/Replace	\$0	\$0	\$0	\$3,382	\$0
970 Solar Panels Common Areas - Replace	\$0	\$0	\$0	\$0	\$0
972 Micro Inverters, Solar CA- Replace	\$0	\$0	\$0	\$0	\$0
980 Geothermal Circulating Pump#1 -Repl	\$0	\$0	\$0	\$0	\$0
980 Geothermal Circulating Pump#2 -Repl	\$0	\$0	\$0	\$7,540	\$0
981 Environol Fluid(Geotherm) - Replace	\$0	\$0	\$0	\$13,495	\$0
Total Expenses	\$0	\$8,487	\$18,513	\$89,336	\$11,424
Ending Reserve Balance	\$221,888	\$254,988	\$282,285	\$243,011	\$286,414

Fiscal Year	2028	2029	2030	2031	2032
Starting Reserve Balance	\$286,414	\$346,978	\$409,881	\$400,479	\$327,233
Annual Reserve Funding	\$57,399	\$59,121	\$60,894	\$62,721	\$64,603
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$3,166	\$3,783	\$4,050	\$3,637	\$3,603
Total Income	\$346,978	\$409,881	\$474,825	\$466,837	\$395,438
# Component					
Site / Grounds					
100 Concrete - Repair/Replace	\$0	\$0	\$0	\$4,028	\$0
103 Concrete Pavers - Repair/Replace	\$0	\$0	\$0	\$4,028	\$0
104 Pervious Concrete - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Entry Trellis - Repair/Replace	\$0	\$0	\$0	\$0	\$0
164 Path Lights - Replace	\$0	\$0	\$0	\$0	\$0
182 Drainage/Stormwater Sys - Clean	\$0	\$0	\$2,903	\$0	\$0
200 Signs/Identifiers - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Building Exteriors					
500 Steep Slope Roofing - Repr/Replace	\$0	\$0	\$0	\$0	\$0
502 Roofs - Inspect/Clean/Repair	\$0	\$0	\$10,134	\$0	\$0
505 Low Slope Roofing - Repair/Replace	\$0	\$0	\$0	\$62,262	\$0
507 Garden/Trash Roof - Repair/Replace	\$0	\$0	\$0	\$8,304	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
522 Siding:Fiber Cement - Rpr/Replace	\$0	\$0	\$0	\$0	\$0
523 Siding:Cedar - Repair/Replace	\$0	\$0	\$0	\$0	\$0
524 Siding:Fiber Cement -Full Paint/Clk	\$0	\$0	\$61,309	\$0	\$0
526 Building Exteriors - Repairs	\$0	\$0	\$0	\$0	\$0
529 Cedar Siding - Prep/Caulk/Stain	\$0	\$0	\$0	\$53,141	\$0
560 Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Systems					
900 Side Sewers - Repair/Replace	\$0	\$0	\$0	\$3,921	\$0
905 Resd. Water Lines - Repair/Replace	\$0	\$0	\$0	\$3,921	\$0
970 Solar Panels Common Areas - Replace	\$0	\$0	\$0	\$0	\$0
972 Micro Inverters, Solar CA- Replace	\$0	\$0	\$0	\$0	\$1,853
980 Geothermal Circulating Pump#1 -Repl	\$0	\$0	\$0	\$0	\$0
980 Geothermal Circulating Pump#2 -Repl	\$0	\$0	\$0	\$0	\$0
981 Environol Fluid(Geotherm) - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$0	\$0	\$74,346	\$139,604	\$1,853
Ending Reserve Balance	\$346,978	\$409,881	\$400,479	\$327,233	\$393,585

Fiscal Year	2033	2034	2035	2036	2037
Starting Reserve Balance	\$393,585	\$450,705	\$524,114	\$565,435	\$539,704
Annual Reserve Funding	\$66,541	\$68,537	\$70,593	\$72,711	\$74,892
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,220	\$4,872	\$5,445	\$5,523	\$5,798
Total Income	\$464,346	\$524,114	\$600,152	\$643,669	\$620,395
# Component					
Site / Grounds					
100 Concrete - Repair/Replace	\$0	\$0	\$0	\$4,670	\$0
103 Concrete Pavers - Repair/Replace	\$0	\$0	\$0	\$4,670	\$0
104 Pervious Concrete - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Entry Trellis - Repair/Replace	\$0	\$0	\$0	\$0	\$0
164 Path Lights - Replace	\$0	\$0	\$0	\$0	\$0
182 Drainage/Stormwater Sys - Clean	\$0	\$0	\$0	\$0	\$0
200 Signs/Identifiers - Replace	\$2,567	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$2,203	\$0
Building Exteriors					
500 Steep Slope Roofing - Repr/Replace	\$0	\$0	\$0	\$0	\$0
502 Roofs - Inspect/Clean/Repair	\$11,074	\$0	\$0	\$12,101	\$0
505 Low Slope Roofing - Repair/Replace	\$0	\$0	\$0	\$0	\$0
507 Garden/Trash Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
522 Siding:Fiber Cement - Rpr/Replace	\$0	\$0	\$0	\$0	\$0
523 Siding:Cedar - Repair/Replace	\$0	\$0	\$0	\$0	\$0
524 Siding:Fiber Cement -Full Paint/Clk	\$0	\$0	\$0	\$0	\$0
526 Building Exteriors - Repairs	\$0	\$0	\$24,880	\$0	\$0
529 Cedar Siding - Prep/Caulk/Stain	\$0	\$0	\$0	\$61,605	\$0
560 Exterior Lights - Replace	\$0	\$0	\$0	\$9,626	\$0
Systems					
900 Side Sewers - Repair/Replace	\$0	\$0	\$0	\$4,545	\$0
905 Resd. Water Lines - Repair/Replace	\$0	\$0	\$0	\$4,545	\$0
970 Solar Panels Common Areas - Replace	\$0	\$0	\$0	\$0	\$0
972 Micro Inverters, Solar CA- Replace	\$0	\$0	\$0	\$0	\$0
980 Geothermal Circulating Pump#1 -Repl	\$0	\$0	\$9,838	\$0	\$0
980 Geothermal Circulating Pump#2 -Repl	\$0	\$0	\$0	\$0	\$0
981 Environol Fluid(Geotherm) - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$13,641	\$0	\$34,717	\$103,965	\$0
Ending Reserve Balance	\$450,705	\$524,114	\$565,435	\$539,704	\$620,395

Fiscal Year	2038	2039	2040	2041	2042
Starting Reserve Balance	\$620,395	\$700,458	\$770,977	\$778,162	\$610,642
Annual Reserve Funding	\$77,139	\$79,453	\$81,837	\$84,292	\$86,820
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$6,601	\$7,354	\$7,742	\$6,941	\$6,498
Total Income	\$704,135	\$787,265	\$860,556	\$869,395	\$703,961
# Component					
Site / Grounds					
100 Concrete - Repair/Replace	\$0	\$0	\$0	\$5,414	\$0
103 Concrete Pavers - Repair/Replace	\$0	\$0	\$0	\$5,414	\$0
104 Pervious Concrete - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Entry Trellis - Repair/Replace	\$0	\$0	\$0	\$11,074	\$0
164 Path Lights - Replace	\$0	\$0	\$0	\$2,554	\$0
182 Drainage/Stormwater Sys - Clean	\$3,677	\$0	\$0	\$0	\$0
200 Signs/Identifiers - Replace	\$0	\$3,065	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Building Exteriors					
500 Steep Slope Roofing - Repr/Replace	\$0	\$0	\$0	\$102,316	\$0
502 Roofs - Inspect/Clean/Repair	\$0	\$13,223	\$0	\$0	\$14,449
505 Low Slope Roofing - Repair/Replace	\$0	\$0	\$0	\$0	\$0
507 Garden/Trash Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$17,254	\$0
522 Siding:Fiber Cement - Rpr/Replace	\$0	\$0	\$0	\$0	\$0
523 Siding:Cedar - Repair/Replace	\$0	\$0	\$0	\$0	\$0
524 Siding:Fiber Cement -Full Paint/Clk	\$0	\$0	\$82,394	\$0	\$0
526 Building Exteriors - Repairs	\$0	\$0	\$0	\$0	\$0
529 Cedar Siding - Prep/Caulk/Stain	\$0	\$0	\$0	\$71,417	\$0
560 Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Systems					
900 Side Sewers - Repair/Replace	\$0	\$0	\$0	\$5,269	\$0
905 Resd. Water Lines - Repair/Replace	\$0	\$0	\$0	\$5,269	\$0
970 Solar Panels Common Areas - Replace	\$0	\$0	\$0	\$0	\$0
972 Micro Inverters, Solar CA- Replace	\$0	\$0	\$0	\$0	\$0
980 Geothermal Circulating Pump#1 -Repl	\$0	\$0	\$0	\$0	\$0
980 Geothermal Circulating Pump#2 -Repl	\$0	\$0	\$0	\$11,747	\$0
981 Environol Fluid(Geotherm) - Replace	\$0	\$0	\$0	\$21,025	\$0
Total Expenses	\$3,677	\$16,288	\$82,394	\$258,753	\$14,449
Ending Reserve Balance	\$700,458	\$770,977	\$778,162	\$610,642	\$689,512

Fiscal Year	2043	2044	2045	2046	2047
Starting Reserve Balance	\$689,512	\$786,313	\$886,783	\$937,889	\$932,737
Annual Reserve Funding	\$89,425	\$92,108	\$94,871	\$97,717	\$100,649
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$7,376	\$8,362	\$9,119	\$9,349	\$9,876
Total Income	\$786,313	\$886,783	\$990,773	\$1,044,955	\$1,043,261
# Component					
Site / Grounds					
100 Concrete - Repair/Replace	\$0	\$0	\$0	\$6,276	\$0
103 Concrete Pavers - Repair/Replace	\$0	\$0	\$0	\$6,276	\$0
104 Pervious Concrete - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Entry Trellis - Repair/Replace	\$0	\$0	\$0	\$0	\$0
164 Path Lights - Replace	\$0	\$0	\$0	\$0	\$0
182 Drainage/Stormwater Sys - Clean	\$0	\$0	\$0	\$4,658	\$0
200 Signs/Identifiers - Replace	\$0	\$0	\$3,660	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Building Exteriors					
500 Steep Slope Roofing - Repr/Replace	\$0	\$0	\$0	\$0	\$0
502 Roofs - Inspect/Clean/Repair	\$0	\$0	\$15,789	\$0	\$0
505 Low Slope Roofing - Repair/Replace	\$0	\$0	\$0	\$0	\$0
507 Garden/Trash Roof - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
522 Siding:Fiber Cement - Rpr/Replace	\$0	\$0	\$0	\$0	\$0
523 Siding:Cedar - Repair/Replace	\$0	\$0	\$0	\$0	\$0
524 Siding:Fiber Cement -Full Paint/Clk	\$0	\$0	\$0	\$0	\$0
526 Building Exteriors - Repairs	\$0	\$0	\$33,436	\$0	\$0
529 Cedar Siding - Prep/Caulk/Stain	\$0	\$0	\$0	\$82,792	\$0
560 Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Systems					
900 Side Sewers - Repair/Replace	\$0	\$0	\$0	\$6,108	\$0
905 Resd. Water Lines - Repair/Replace	\$0	\$0	\$0	\$6,108	\$0
970 Solar Panels Common Areas - Replace	\$0	\$0	\$0	\$0	\$0
972 Micro Inverters, Solar CA- Replace	\$0	\$0	\$0	\$0	\$0
980 Geothermal Circulating Pump#1 -Repl	\$0	\$0	\$0	\$0	\$0
980 Geothermal Circulating Pump#2 -Repl	\$0	\$0	\$0	\$0	\$0
981 Environol Fluid(Geotherm) - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$0	\$0	\$52,884	\$112,218	\$0
Ending Reserve Balance	\$786,313	\$886,783	\$937,889	\$932,737	\$1,043,261

Fiscal Year	2048	2049	2050	2051	2052
Starting Reserve Balance	\$1,043,261	\$1,140,592	\$1,259,365	\$1,255,859	\$1,105,578
Annual Reserve Funding	\$103,668	\$106,778	\$109,982	\$113,281	\$116,679
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$10,915	\$11,995	\$12,571	\$11,802	\$11,649
Total Income	\$1,157,844	\$1,259,365	\$1,381,917	\$1,380,942	\$1,233,907
# Component					
Site / Grounds					
100 Concrete - Repair/Replace	\$0	\$0	\$0	\$7,276	\$0
103 Concrete Pavers - Repair/Replace	\$0	\$0	\$0	\$7,276	\$0
104 Pervious Concrete - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Entry Trellis - Repair/Replace	\$0	\$0	\$0	\$0	\$0
164 Path Lights - Replace	\$0	\$0	\$0	\$0	\$0
182 Drainage/Stormwater Sys - Clean	\$0	\$0	\$0	\$0	\$0
200 Signs/Identifiers - Replace	\$0	\$0	\$0	\$4,370	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Building Exteriors					
500 Steep Slope Roofing - Repr/Replace	\$0	\$0	\$0	\$0	\$0
502 Roofs - Inspect/Clean/Repair	\$17,253	\$0	\$0	\$18,853	\$0
505 Low Slope Roofing - Repair/Replace	\$0	\$0	\$0	\$112,452	\$0
507 Garden/Trash Roof - Repair/Replace	\$0	\$0	\$0	\$14,997	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
522 Siding:Fiber Cement - Rpr/Replace	\$0	\$0	\$0	\$0	\$0
523 Siding:Cedar - Repair/Replace	\$0	\$0	\$0	\$0	\$0
524 Siding:Fiber Cement -Full Paint/Clk	\$0	\$0	\$110,731	\$0	\$0
526 Building Exteriors - Repairs	\$0	\$0	\$0	\$0	\$0
529 Cedar Siding - Prep/Caulk/Stain	\$0	\$0	\$0	\$95,979	\$0
560 Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
Systems					
900 Side Sewers - Repair/Replace	\$0	\$0	\$0	\$7,081	\$0
905 Resd. Water Lines - Repair/Replace	\$0	\$0	\$0	\$7,081	\$0
970 Solar Panels Common Areas - Replace	\$0	\$0	\$0	\$0	\$5,408
972 Micro Inverters, Solar CA- Replace	\$0	\$0	\$0	\$0	\$3,346
980 Geothermal Circulating Pump#1 -Repl	\$0	\$0	\$15,327	\$0	\$0
980 Geothermal Circulating Pump#2 -Repl	\$0	\$0	\$0	\$0	\$0
981 Environol Fluid(Geotherm) - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$17,253	\$0	\$126,058	\$275,364	\$8,755
Ending Reserve Balance	\$1,140,592	\$1,259,365	\$1,255,859	\$1,105,578	\$1,225,152



Accuracy, Limitations, and Disclosures

"The reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair or replacement of a reserve component."

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James Talaga, company President, is a credentialed Reserve Specialist (#066). All work done by Association Reserves WA, LLC is performed under his responsible charge and is performed in accordance with National Reserve Study Standards (NRSS). There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the client's situation.

Per NRSS, information provided by official representative(s) of the client, vendors, and suppliers regarding financial details, component physical details and/or quantities, or historical issues/conditions will be deemed reliable, and is not intended to be used for the purpose of any type of audit, quality/forensic analysis, or background checks of historical records. As such, information provided to us has not been audited or independently verified.

Estimates for interest and inflation have been included, because including such estimates are more accurate than ignoring them completely. When we are hired to prepare Update reports, the client is considered to have deemed those previously developed component quantities as accurate and reliable, whether established by our firm or other individuals/firms (unless specifically mentioned in our Site Inspection Notes). During inspections our company standard is to establish measurements within 5% accuracy, and our scope includes visual inspection of accessible areas and components and does not include any destructive or other testing. Our work is done only for budget purposes. Uses or expectations outside our expertise and scope of work include, but are not limited to: project audit, quality inspection, and the identification of construction defects, hazardous materials, or dangerous conditions. Identifying hidden issues such as but not limited to, plumbing or electrical problems are also outside our scope of work. Our estimates assume proper original installation & construction, adherence to recommended preventive maintenance, a stable economic environment, and do not consider frequency or severity of natural disasters. Our opinions of component Useful Life, Remaining Useful Life, and current or future cost estimates are not a warranty or guarantee of actual costs or timing.

Because the physical and financial status of the property, legislation, the economy, weather, owner expectations, and usage are all in a continual state of change over which we have no control, we do not expect that the events projected in this document will all occur exactly as planned. This Reserve Study is by nature a "one-year" document in need of being updated annually so that more accurate estimates can be incorporated. It is only because a long-term perspective improves the accuracy of near-term planning that this Report projects expenses into the future. We fully expect a number of adjustments will be necessary through the interim years to the cost and timing of expense projections and the funding necessary to prepare for those estimated expenses.

In this engagement our compensation is not contingent upon our conclusions, and our liability in any matter involving this Reserve Study is limited to our fee for services rendered.



Terms and Definitions

BTU	British Thermal Unit (a standard unit of energy)
DIA	Diameter
GSF	Gross Square Feet (area). Equivalent to Square Feet
GSY	Gross Square Yards (area). Equivalent to Square Yards
HP	Horsepower
LF	Linear Feet (length)
Effective Age	The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.
Fully Funded Balance (FFB)	The value of the deterioration of the Reserve Components. This is the fraction of life "used up" of each component multiplied by its estimated Current Replacement. While calculated for each component, it is summed together for an association total.
Inflation	Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on the "30-yr Income/Expense Detail" table.
Interest	Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.
Percent Funded	The ratio, at a particular point in time (the first day of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.
Remaining Useful Life (RUL)	The estimated time, in years, that a common area component can be expected to continue to serve its intended function.
Useful Life (UL)	The estimated time, in years, that a common area component can be expected to serve its intended function.



Component Details

The primary purpose of the Component Details appendix is to provide the reader with the basis of our funding assumptions resulting from our research and analysis. The information presented here represents a wide range of components that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding.

- 1) Common area repair & replacement responsibility
- 2) Component must have a limited useful life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of Annual operating expenses).

Not all your components may have been found appropriate for reserve funding. In our judgment, the components meeting the above four criteria are shown with the Useful Life (how often the project is expected to occur), Remaining Useful Life (when the next instance of the expense will be) and representative market cost range termed “Best Cost” and “Worst Cost”. There are many factors that can result in a wide variety of potential costs, and we have attempted to present the cost range in which your actual expense will occur.

Where no Useful Life, Remaining Useful Life, or pricing exists, the component was deemed inappropriate for Reserve Funding.

Site / Grounds

Comp #: 100 Concrete - Repair/Replace

Quantity: Moderate, poured in place

Location: Exteriors walkways, stairs, retaining walls, pads, etc. throughout community

Funded?: Yes.

History: None known

Comments: Like our previous site visit, we observed some localized cracking, but not widespread or significant. We assume cleaned as part of annual maintenance.

Due to the general age and eventual wear, we suggest a periodic funding allowance to supplement the operating budget for non-annual large-scale repair/replacements as reflected below.

As routine maintenance utilizing operating funds, inspect regularly, and pressure wash for appearance. Repair promptly as needed to prevent water penetrating into the base, which can cause further damage. Factors affecting the quality of the concrete include the preparation of the underlying soil and drainage, thickness and strength of the concrete used, steel reinforcement (none likely), and the amount and weight of vehicle traffic.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$ 2,120

Worst Case: \$ 4,240

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 103 Concrete Pavers - Repair/Replace

Quantity: Moderate, squares

Location: Common area

Funded?: Yes. Useful life not predictable

History: None known

Comments: No significant problems observed of concrete pavers at grade level. No major cracking, shifting or other problems observed of these areas.

Since these pavers do not have any living area/garage areas below them, just earth, no predictable expectation for large scale repair/replacement project. As routine maintenance, inspect regularly, pressure wash for appearance and repair/replace pavers promptly as needed if damaged. We noted some extra pavers stored at the mail/trash enclosure building.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$ 2,120

Worst Case: \$ 4,240

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 104 Pervious Concrete - Repair/Replace

Quantity: ~1,300 GSF

Location: Driveways

Funded?: Yes.

History: None known

Comments: No obvious widespread or major damage noted.

In previous research with Washington Aggregates & Concrete Association, this is a fairly new product in the Washington area starting in about 2000 with the oldest application believed to be around 30 years in Florida. Pervious concrete is a two part on-site filter for storm water in a dry detention system consisting of the pervious concrete pavement and a coarse gravel retention layer for storm water storage. Pervious concrete is a specialty concrete consisting of cement, recycled fly ash or slag, coarse aggregates, water, and other necessary components to produce sufficient paste and bonding ability to glue coarse aggregates together. This creates a highly permeable yet, structural system of interconnected voids that are designed to allow rainfall and storm water to directly infiltrate through to the native soils. Aggregate characteristics, paste content and proper placement methods are extremely important in the initial design/install stage. Additionally, design of the retention layer is a site specific task and should take into account percability and characteristics of native soils, volume of storm water anticipated, rate of flow, and duration. An initial soils survey and site specific storm water calculations should be performed by a storm water management engineer.

Assuming proper design/install, etc. although this type of concrete should have long life, there are some factors which can affect it's functionality and life span. The infiltration characteristics can be impeded by such things as run-on of landscaping, storage of materials and construction activity on these surfaces. A regular routine cleaning schedule should be implemented (vacator/street cleaning trucks, pressure washing, etc); see component #106 for periodic cleaning. The other item which can be a concern is raveling of the surfaces which leads to loose rocks on the surface. This is typically a result of type/frequency of traffic on the surface (construction traffic, garbage trucks, moving trucks, etc) and the turns in the road. Over time structural failure can result. To remedy cracks/raveling failures, entire panels have to be completely removed and the surface replaced as patching is not an option.

Although difficult to determine if large scale replacements will be needed, for financial planning purposes, we are including a long term replacement allowance to build funds for this component to be used as needed.

We highly recommend the Association have these areas professionally inspected and monitored and therefore early signs of deterioration can be recognized and possibly further damage/problems can be eliminated. A proactive cleaning schedule should be implemented.

Useful Life:
50 years

Remaining Life:
39 years



Best Case: \$ 13,500

Worst Case: \$ 25,400

Lower allowance

Higher allowance

Cost Source: Inflated Est:Wash. Aggregates & Conc. Assoc, 206-878-1622

Comp #: 106 Pervious Concrete - Cleaning

Quantity: ~1,300 GSF

Location: Common area

Funded?: No. Management reports will be operational expense, not Reserves

History: Management reports will be completed in 2020-2021 as operating expense, previous to this in 2017-18 fiscal year

Comments: We observed some slight moss and other debris/dirt on the surfaces during our December 2022 site visit. These surfaces should be professionally cleaned as blockage can impede drainage. Association Management reports this is funded within the annual operating budget, not reserves.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 114 Steel Rail - Repair/Replace

Quantity: ~40 LF, assorted

Location: ~20 LF painted pipe rail at stairs and ~20LF ~3' high grid rail adjacent to trellis at entry

Funded?: No. Useful life not predictable

History: None known

Comments: No obvious instability observed of sturdy, painted metal site rail.

Sturdy item that can typically last for an extended period with ordinary care and maintenance. With small total quantity and sturdy component, no reserve funding recommended at this time. Inspect regularly, clean for appearance and repair promptly as needed to ensure safety and maintain waterproofing; clean, touch-up and paint (if needed) as part of routine maintenance or as part of larger building projects, not separate reserve project.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 140 Privacy Screen/Fence - Repr/Replace

Quantity: ~100 LF, ~4' high wood

Location: West property perimeter adjacent to Units 1-3 & 10

Funded?: No. Unit owner responsibility per resolution

History: None known

Comments: In a previous reserve study, it was reported to us this fencing is considered to be unit owner responsibility based on resolution approved June 24, 2015 and enacted November 2015 and thus no reserve funding included here. For reference, fencing is grayed/weathered appearance at this time, however no obvious instability observed.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 142 Entry Trellis - Repair/Replace

Quantity: (1) 6' X 12' painted wood

Location: Entry to community courtyard off of High Street

Funded?: Yes.

History: None known

Comments: Some weathering of wood trellis structure, however no obvious instability or major damage noted. In order to lengthen the life of these components, metal cap flashing can be installed in these highly exposed locations. Solar panels are mounted on the top (see separate component).

Even with ordinary care and maintenance, funding shown for typical deterioration that will result from constant exposure. Local repairs between large scale replacements can be funded as general maintenance item. Clean and paint along with larger building paint project or as general maintenance (not separate reserve item) to preserve the wood and extend the useful life.

Useful Life:
15 years

Remaining Life:
3 years



Best Case: \$ 5,140

Worst Case: \$ 7,870

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 164 Path Lights - Replace

Quantity: ~ (8) metal, low voltage

Location: Adjacent to walkway areas within community

Funded?: Yes.

History: None known

Comments: No widespread or major damage/deterioration noted of small metal stake lights. Observed during daylight hours; assumed to be in functional operating condition.

Funding included for replacement as shown here due to damage/deterioration that will result from constant exposure. As routine maintenance, inspect regularly, clean for appearance and repair/change bulbs as needed.

Useful Life:
15 years

Remaining Life:
3 years



Best Case: \$ 1,000

Worst Case: \$ 2,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 170 Landscape - Refurbish

Quantity: Shrubs, plants, etc.

Location: Common area open space tracts throughout community

Funded?: No. Useful life not predictable

History: None known

Comments: No obvious issues noted of drought-tolerant and native landscaping planted with amended soil.

Although typically funded as ongoing maintenance item, this component may be utilized for setting aside funds for larger expenses that do not occur on an annual basis, such as large scale plantings, resodding lawn areas, bark/mulch replenishment, etc. Often times these type of projects can be handled within the annual operating budget as a separate line item from the landscape maintenance contract. With low maintenance landscaping at this site, no reserve funding recommended at this time for landscaping. Note: no irrigation system at this site.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 182 Drainage/Stormwater Sys - Clean

Quantity: Pipes, drains, etc.

Location: Throughout community

Funded?: Yes.

History: Association budgeting in 2022/23 for this work

Comments: No obvious problems drainage/stormwater systems reported to us. Rainwater from roofs is directed by downspouts to cisterns where it is collected and stored (see #950). An overflow directs the water to the community rain gardens and storm rill which empties into the water feature at the southwest portion of the site where it is then absorbed back into the ground.

As discussed with Association Management, we are including funding for periodic larger cleaning of drain lines as shown here to keep systems clean and functioning properly. As for infrastructure of concrete storm rill, tiled water feature, etc., no large scale repair/replacement anticipated for these items. See component #950 for cistern/tanks. Routine inspections and cleaning of storm system should be performed as needed as part of routine maintenance.

Useful Life:
8 years

Remaining Life:
7 years



Best Case: \$ 1,400

Worst Case: \$ 3,320

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 200 Signs/Identifiers - Replace

Quantity: Moderate, assorted

Location: Informational signs posted at site, addresses, unit numbers, etc. attached to bldgs.

Funded?: Yes.

History: One rainwater reuse sign replaced in 21/22 FY. Replacement in 2017-2018 FY.

Comments: No obvious widespread or major damage noted of various signs. Some work in recent years.

Factored here is funding for replacement of the informational signs as shown here. Other various signs can be repaired/replaced locally as needed out of the operating budget. As routine maintenance, inspect regularly, clean/touch up for appearance and repair/replace as needed from operating budget.

Useful Life:
6 years

Remaining Life:
4 years



Best Case: \$ 1,850

Worst Case: \$ 1,970

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 205 Mailboxes - Replace

Quantity: (2) six box banks, metal

Location: Mounted within exterior wall of trash enclosure building

Funded?: Yes.

History: None known

Comments: No major damage/deterioration noted of metal units installed within wall of structure; this location affords some protection from direct exposure.

Factored here is funding for replacement due to typical deterioration that will occur over time. Note: USPS has a limited budget for replacement and should not be relied upon for purposes of long term planning. Inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget.

Useful Life:
25 years

Remaining Life:
13 years



Best Case: \$ 1,000

Worst Case: \$ 2,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Building Exteriors

Comp #: 500 Steep Slope Roofing - Repr/Replace

Quantity: ~7,500 GSF, shingles

Location: Partial rooftops of residential buildings

Funded?: Yes.

History: None known

Comments: We had limited visibility of these roofs from ground level only of these two and three story roofs. The majority of areas are covered by solar panels which further blocks visibility. As researched previously, roofing materials are Certainteed Landmark Plus 40 year shingles. We observed metal flashing at barge boards/roof edges. Ventilation was blocked from view. No problems reported to us at this time. Management reports periodic repairs are factored in reserves (see #502).

Funding included here for replacement at roughly the 30 year mark of life as shown. Although the shingle is a considered a 40 year shingle, this typically refers to manufacture warranty time periods and does not cover typical wear and tear. Although the surfaces are mostly covered from direct exposure by solar panels (#970), shade created by the panels may not allow the roof to dry out which may lead to more moisture/organic growth at surfaces. Ensure surfaces are being inspected routinely. As routine maintenance, many manufacturers recommend inspections at least twice annually (once in the fall, before the rainy season, and again in the spring) and after large storm events. Promptly replace any damaged/missing sections or any other repair needed to ensure waterproof integrity of roof. Keep roof surface, gutters and downspouts clear and free of moss or debris.

At time of re-roof we recommend that you hire a professional roof consultant such as Architect, Engineer, or building envelope consultant; to evaluate, design, specify, help bid the project, select best bidder, and observe construction to ensure proper installation. We recommend all Associations seek advice from a qualified consultant whenever they are considering having work performed on any building envelope components (roof, walls, windows, decks, exterior painting and caulking/sealant).

Useful Life:
30 years

Remaining Life:
18 years



Best Case: \$ 54,600

Worst Case: \$ 65,600

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 502 Roofs - Inspect/Clean/Repair

Quantity: ~9,900 GSF

Location: All type of roofing

Funded?: Yes.

History: Roofing cleaning and caulking seams in 2020/21 FY

Comments: Management reports comprehensive cleaning and seam caulking project in 2020/21. No problems currently reported to us. We had limited visibility from ground level. As reported by Management, desire to have every few year funding factored as shown here.

Useful Life:
3 years

Remaining Life:
1 years



Best Case: \$ 6,180

Worst Case: \$ 10,300

Lower allowance

Higher allowance

Cost Source: Client Cost History

Comp #: 505 Low Slope Roofing - Repair/Replace

Quantity: ~2,400 GSF, single ply

Location: Partial rooftops of residential buildings (trash building included separately - #507)

Funded?: Yes.

History: None known

Comments: Due to the surrounding flat topography and two and three story height of these low slope roofs, we were not able to view these areas. No problems reported to us. Information provided to us previously indicates this is a single ply 60-mil, thermoplastic roofing system; install vendor reported Carlisle product. In the past reported to us some indents in surface a result of foot traffic as structural supporting beams are 24" apart, however no water intrusion reported previously or currently.

Factored here is replacement; typical useful life of low slope roof is 15-25 years depending on the quality of the roof system installed and the maintenance receives throughout its life. As previously discussed with the install vendor, factored here is replacement at about 20 years. Inspect often and adjust this component if needed in reserve study updates. We recommend all Associations hire qualified consultants whenever they are considering having work performed on any building envelope components (roof, walls, windows, decks, exterior painting and caulking/sealant). As routine maintenance, many manufacturers recommend professional inspections at least twice annually and after storms. Promptly repair any damaged sections or any other repairs needed to ensure waterproof integrity of roof. Keep scuppers, drains, gutters, and downspouts clear and free of debris to allow proper drainage and prevent the ponding of water on the roof surface.

Useful Life:
20 years

Remaining Life:
8 years



Best Case: \$ 43,700

Worst Case: \$ 54,600

Lower allowance

Higher allowance

Cost Source: Inflated Research with Star Roofing & Gutters,425-290-7827

Comp #: 507 Garden/Trash Roof - Repair/Replace

Quantity: ~300 GSF, single ply

Location: Rooftop of trash enclosure building

Funded?: Yes.

History: None known

Comments: As with other roofs, we viewed from ground level only so we could not see surface of this single story "green" garden roof. Previous information provided to us indicates plantings are atop a single ply 60 mil. thermoplastic roofing system; install vendor reported Carlisle product. Vendor indicated, warranties for planted roofs are only given for minimum 80 mil. product.

Factored here is replacement at typical useful life; typical useful life of low slope roof is 15-25 years depending on the quality of the roof system installed and the maintenance receives throughout its life. Plantings atop provide benefit of roof membrane not open to direct exposure, however plantings can cause issues to roof. We are aligning replacement of this roof at the same time as the low slope residential building roofs (#505) for cost efficiency/consistency. Inspect often and adjust this component if needed in reserve study updates. We recommend all Associations hire qualified consultants whenever they are considering having work performed on any building envelope components (roof, walls, windows, decks, exterior painting and caulking/sealant).

As routine maintenance, many manufacturers recommend professional inspections at least twice annually and after storms. Promptly repair any damaged sections or any other repairs needed to ensure waterproof integrity of roof. Keep scuppers, drains, gutters, and downspouts clear and free of debris to allow proper drainage and prevent the ponding of water on the roof surface.

Useful Life:
20 years

Remaining Life:
8 years



Best Case: \$ 4,370

Worst Case: \$ 8,740

Lower allowance

Higher allowance

Cost Source: Inflated Research with Star Roofing & Gutters,425-290-7827

Comp #: 510 Gutters/Downspouts - Repair/Replace

Quantity: ~1,000 LF, aluminum

Location: Sides of buildings

Funded?: Yes.

History: None known

Comments: We had limited visibility from ground level only. No obvious damage/deterioration such as improper slope, poor attachment, etc. observed and no problems reported to us.

Factored here is total replacement of gutter and downspouts to maintain proper functionality and for cost efficiency/consistency. As routine maintenance, inspect regularly, keep gutters and downspouts free of debris.

Useful Life:
30 years

Remaining Life:
18 years



Best Case: \$ 9,070

Worst Case: \$ 11,200

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 522 Siding:Fiber Cement - Rpr/Replace

Quantity: ~12,700 GSF lap/panel

Location: Portions of exteriors of building

Funded?: Yes.

History: None known

Comments: No obvious issues noted of fiber-cement siding (see next component for cedar/wood siding #523)). This is James Hardie fiber-cement lap and smooth panel siding. Some wood areas at fascia, trim and prepainted metal flashing. No obvious signs of damage/deterioration (warping, cracking, etc) of fiber-cement siding noted. Windows appear to have proper head flashing.

Warranty periods for fiber-cement products have generally lessened in recent years. James Hardie siding, offers either a 30-year non-prorated warranty in the Washington area or the Association can choose a 50-year prorated warranty. These warranties generally cover (a) remain non-combustible, (b) resist damage caused by hail or termites, (c) will not crack, rot or delaminate; warranty does not cover ordinary wear and tear. At the suggestion of Hardie siding rep and based on our research, we recommend planning for about 50 year life for this product as shown here due to normal wear and tear, degradation of underlying waterproofing, etc. This assumes routine maintenance and following recommended paint/caulk cycles (see #524). As timing draws nearer, inspect closely and adjust this component in reserve study updates. As routine maintenance, inspect regularly and touch-up/repair locally as needed as part of operating budget.

Useful Life:
50 years

Remaining Life:
38 years



Best Case: \$ 218,000

Worst Case: \$ 328,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 523 Siding:Cedar – Repair/Replace

Quantity: ~5,200 GSF, lap

Location: Portions of exteriors

Funded?: Yes.

History: None known

Comments: No obvious major damage/deterioration noted of cedar, wood siding observed from our limited ground level inspection. During 2021 (21/22 fiscal year) cedar siding was washed, sanded as needed and stained with alkyd semi-transparent stain. Declaration documents indicate siding installed over all horizontal rainscreen areas. No problems reported to us.

Although wood siding can last for extended period of time with proactive maintenance, factored best to plan to replace as shown here due to typical damage/deterioration that will result from exposure and to underlying waterproofing. Siding should be inspected regularly and this component can be adjusted if needed. As routine maintenance, inspect regularly and repair/replace locally as needed. Follow recommended stain/coating cycles (#529).

Useful Life:
50 years

Remaining Life:
38 years



Best Case: \$ 137,000

Worst Case: \$ 185,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 524 Siding:Fiber Cement -Full Paint/Clk

Quantity: ~12,700 GSF lap/panel

Location: Exterior of buildings including swing doors

Funded?: Yes.

History: Siding painted in August 2020 (during 20/21 FY), swing doors painted during 2021/22 FY

Comments: According to the Association declaration Section 3.1 (c) (ii), "painting (including staining) of all exterior painted portions of the improvements", including any garage door, exterior doors, shutters, fascia on the improvements, etc. is the responsibility of the Neighborhood Association. For discussion of exterior repairs/replacement, see component #522. Additionally, per Association declaration, caulking of the exteriors portion of the windows and doors is also responsibility of the Neighborhood Association.

No major fading/wear noted of painted fiber cement materials; stained cedar siding included separately (see #529). Typical Northwest paint cycles vary greatly depending upon many factors including; type of material painted, surface preparations, quality of primer/paint/stain, application methods, weather conditions during application, moisture beneath paint, and exposure to weather conditions. We recommend planning to paint entire building exterior surfaces (body/field area of siding) and caulk as shown here. Component #526 factors a mid-cycle project for those areas that wear quicker (wood materials, South and West exposures, etc.). As routine maintenance, inspect regularly (including sealants) repair locally and touch-up paint as needed.

Useful Life:
10 years

Remaining Life:
7 years



Best Case: \$ 43,600

Worst Case: \$ 56,100

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 526 Building Exteriors - Repairs

Quantity: Local areas/touch-up

Location: Exterior of buildings

Funded?: Yes.

History: Varies

Comments: This component reflects partial paint projects (trim, touch-up, more exposed areas) and caulking at the mid-way point between exhaustive paint projects (#524) hence this reflects 10 year cycles which fund 5 years following the full paint project (#524). This typically would include more exposed sides of buildings, wood areas, darker colors that fade quickly, etc. As routine maintenance, inspect regularly (including sealants) repair locally and touch-up paint as needed.

Useful Life:
10 years

Remaining Life:
2 years



Best Case: \$ 14,000

Worst Case: \$ 20,900

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 529 Cedar Siding - Prep/Caulk/Stain

Quantity: ~5,200 GSF

Location: Cedar sided areas of building

Funded?: Yes.

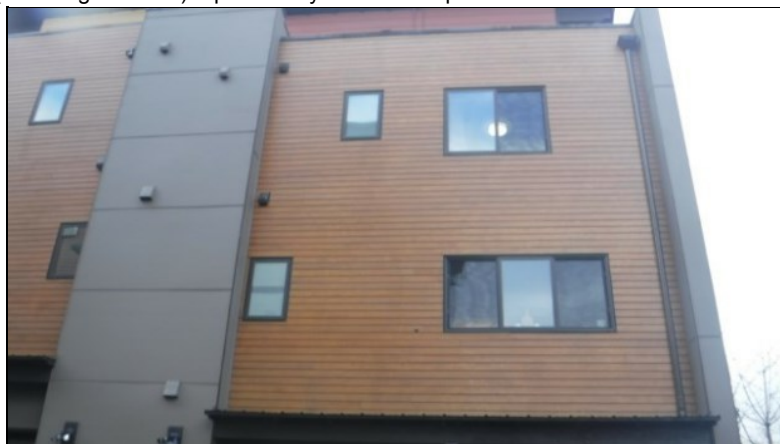
History: Last completed in 2021 during 21/22 fiscal year, previous to this 2016-2017 fiscal year

Comments: No obvious major fading/wear of stained cedar siding; tight knot 1"X4" boards.

Factored here is cyclical staining to maintain appearance and provide protection. Typical Northwest stain/paint cycles vary greatly depending upon many factors including; type of material used, surface preparations, quality of underlying coating, application methods, weather conditions during application, moisture beneath stain, and exposure to weather conditions. As routine maintenance, inspect regularly (including sealants) repair locally and touch-up as needed.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$ 36,300

Worst Case: \$ 47,600

Lower allowance

Higher allowance

Cost Source: Inflated Actual with Paintworx (\$35,636.06 in 22/22 FY)

Comp #: 535 Windows/Sliders - Repair/Replace

Quantity: Extensive, assorted

Location: Exterior walls

Funded?: No. Unit owner responsibility

History: None known

Comments: According to Governing Documents for zHome Neighborhood (Article 3.1 (c) (iii), although the residential association is responsible for caulking of the exterior portions of all windows, "The Residential Association shall not be responsible for any maintenance or repairs to any ... windows" (Article 3.1 (k)). With this understanding, no funding for association repair/replacement herein. However, the association should establish specific guidelines and architectural control policies for repairs/replacements to ensure that underlying structure is protected when any work is done in these areas. Note: funding for caulking included within components #524, 526 & 529.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 537 Pedestrian/Garage Doors - Replace

Quantity: Extensive, assorted

Location: Entries to units, mechanical doors, trash structure doors and garages

Funded?: No. Unit owner responsibility

History: None known

Comments: According to Governing Documents for zHome Neighborhood (Article 3.1 (c) (iii), although the residential association is responsible for caulking of the exterior portions of all doors, "The Residential Association shall not be responsible for any maintenance or repairs to any ... doors" (Article 3.1 (k)). With this understanding, no funding for association repair/replacement herein. However, the association should establish specific guidelines and architectural control policies for repairs/replacements to ensure that underlying structure is protected when any work is done in these areas. Note: funding for caulking included within components #524, 526 & 528.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 539 Trash Building - Repair/Replace

Quantity: 12' X 20' wood frame

Location: At NE corner of site

Funded?: No. Maintain along with other building components or as part of operating budget

History: None known

Comments: No obvious problems observed of free standing trash building.

Clean, stain/paint and inspect as general maintenance item or along with larger building projects, not as separate reserve project. Other than roofing (funded within component #507), no separate reserve funding for this structure anticipated.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 540 Decks - Repair/Replace

Quantity: Various

Location: Elevated areas adjacent to individual units

Funded?: No. Unit owner responsibility

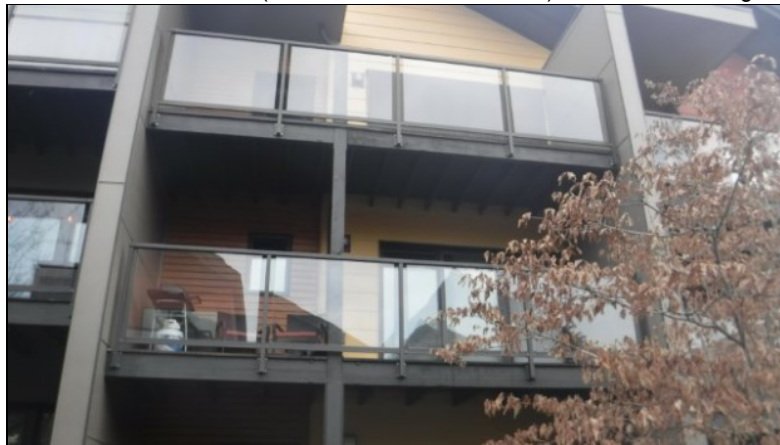
History: None known

Comments: After review of the Associations governing documents and as discussed with Association Management, decks are not specifically listed in the items to be maintained, repaired and replaced by the Association - hence no funding is being included for decks.

For informational purposes, it appears the second floor decks are constructed of a drip-thru, planked Ironwood (IPE) surface and the top floor, solid surface decks are coated with a Tufflex (membrane with trowel finish). Rails are a metal/glass rail structure.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 560 Exterior Lights - Replace

Quantity: ~(40) plastic/metal

Location: Attached to building exteriors at pedestrian and near garage doors throughout community

Funded?: Yes.

History: None known

Comments: No major damage or widespread deterioration noted of light fixtures and no problems reported to us. Observed during daylight hours so we did not view functioning.

Best to plan for large scale replacement, timed to coincide with exterior paint cycles when possible for cost efficiency and consistent quality/appearance throughout association. A mid-range replacement allowance is factored below for planning purposes. As routine maintenance, inspect, repair/change bulbs as needed.

Useful Life:
24 years

Remaining Life:
13 years



Best Case: \$ 5,240

Worst Case: \$ 7,870

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Systems

Comp #: 600 Vehicle Charging Station - Replace

Quantity: Electric station

Location: Alongside NE High St. at South side of site

Funded?: No. Association not responsible to maintain, repair or replace

History: Unknown

Comments: Electric vehicle charging station is responsibility of city of Issaquah to maintain, repair and replace therefore no funding for this neighborhood association. Reported to us, there is some infrastructure at the trash/mail building for a charging station, however a complete, working system is not presently installed.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 900 Side Sewers - Repair/Replace

Quantity: ~270 LF, PVC

Location: Throughout community

Funded?: Yes.

History: None known

Comments: According to the Association declaration Section 3.1.(v), maintenance, repair and replacement as necessary of all side sewers connecting zHome Neighborhood Units with public sewer lines are the responsibility of the Neighborhood Association.

Information provided by city Sewer department, states that sewer lines from each lot are 6" SDR (PVC) 35 gasketed pipe (~132 LF) and the main line that these connect to and connects to the City Manhole is 8" SDR (PVC) 35 gasketed pipe (~138 LF). City Sewer department goes on to state this PVC side sewer pipe should typically last around 75 to 100 years depending on location and assumes pipe was laid professionally and on even ground. This is the best and only an estimate for PVC. With this information, the estimated total cost to replace these side sewers is \$40,000 to \$55,000 and with estimated life about 75 years, this calculates to about \$500-700 per year for reserve contribution. As discussed with Association Management, a 5 year allowance is factored based on these costs. This component is primarily to accumulate funds for this project and the actual scope and timing could vary significantly.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$ 2,580

Worst Case: \$ 3,610

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 905 Resd. Water Lines - Repair/Replace

Quantity: ~175 LF

Location: Throughout community

Funded?: Yes.

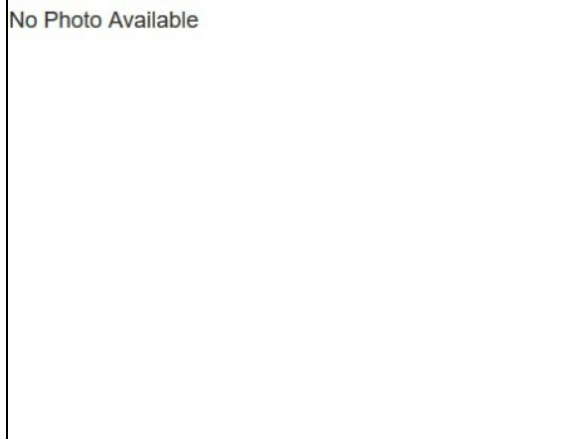
History: None known

Comments: According to the Association declaration Section 3.1.(vi), maintenance, repair and replacement as necessary of all residential water lines connecting zHome Neighborhood Units with residential water lines are the responsibility of the Neighborhood Association.

This component is for residential water lines from meter boxes to each unit. Funding is being included as discussed with Client Management. In our inquiry with information provided by city Water department, they could not identify what type and size of lines are used. The size shown here is a rough estimate based on map provided to us. The Water department estimates useful life as 50 years. The estimated total cost to replace these water service lines is about \$25,000 to \$35,000 with a 50 year life, this calculates to about \$500 to \$700 per year for reserve contribution. As discussed with Association Management, a 5 year allowance is factored based on these costs. This component is primarily to accumulate funds for this project and the actual scope and timing could vary significantly.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$ 2,580

Worst Case: \$ 3,610

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 950 Cistern Tanks Above Grd - Replace

Quantity: (2) 1000 gallon poly

Location: Adjacent to Units 1 and 2

Funded?: No. Individual owner responsibility, not Association per Resolution

History: None known

Comments: Funding for this component was removed as part of the 2016-17 reserve study update as a resolution approved on June 24, 2015 and enacted November 2015 cites the rainwater harvesting cisterns and associated gutters and downspouts to be owner individual responsibility.

The following is for informational purpose based on our previous research. The community is serviced by traditional direct connection to water, however there is also a supplemental rainwater harvesting system for each of the 10 units for toilet water, outside spigots and clothes washing (optional). Rainwater is directed from the roofs via downspouts to individual storage tanks which are outfitted with submersible pumps that pump water to a pressure/expansion tank within the individual owner unit to be used for the intended purposes. The outdoor storage tanks include (2) above and (8) buried poly/plastic tanks. Overflow from these tanks is directed to the storm rill system of the community (#182). As discussed with installation contractor and manufacturer of these plastic/polyethylene tanks, although life of the tanks can vary depending on conditions, maintenance, etc. best to plan for replacement of the above ground storage tanks about every 20 years. Buried tanks should last for extended period of time as they are not exposed with no predictable basis for replacement (#952).

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 952 Cistern Tanks Underground - Replace

Quantity: (8) 1700 gallon poly

Location: Adjacent to Unit 3-10

Funded?: No. Individual owner responsibility, not Association per Resolution

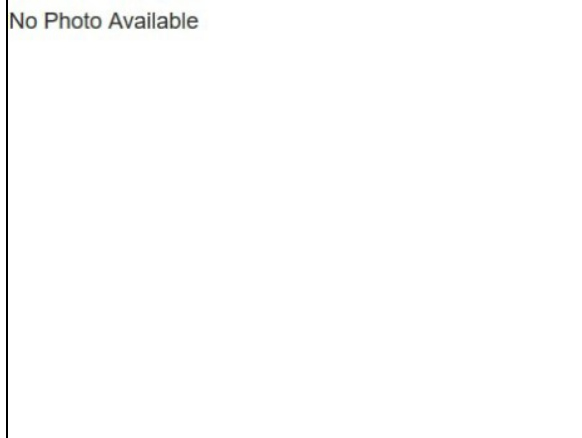
History: None known

Comments: A resolution approved on June 24, 2015 and enacted November 2015 cites the rainwater harvesting cisterns and associated gutters and downspouts to be owner individual responsibility not the Association.

The following is provided for informational purposes based on research we conducted on this system in the past. As detailed within component #950, no predictable basis for replacement of the buried, below ground rainwater storage tanks. See component #950 for complete details. As routine maintenance, inspect regularly and clean as needed; see component #953.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 953 Cistern Tanks/Pumps - Cln/Backflush

Quantity: (10) tanks, (10) pumps

Location: (2) above ground and (8) below ground tanks and (10) pumps within tanks

Funded?: No. Individual owner responsibility, not Association per Resolution

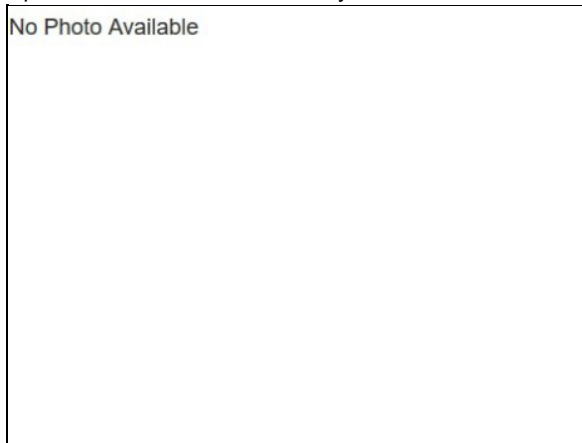
History: None known

Comments: Funding for this component was removed as part of the 2016-17 reserve study update as a resolution approved on June 24, 2015 and enacted November 2015 cites the rainwater harvesting cisterns and associated gutters and downspouts to be owner individual responsibility.

The following is for informational purpose based on our previous research. As discussed with engineer for the system and installation contractor, tanks should be cleaned every couple years and the pumps should be pulled and backflushed to remove any sediment/dirt. This reportedly occurred immediately following installation so, at this point needs to be performed. If problems develop between these cycles, inspect and clean as needed locally.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 954 Cistern Pumps - Replace

Quantity: (10) Braewater submersible

Location: Installed within each of the (10) rainwater holding tanks
Funded?: No. Individual owner responsibility, not Association per Resolution
History: None known

Comments: Funding for this component was removed as part of the 2016-17 reserve study update as a resolution approved on June 24, 2015 and enacted November 2015 cites the rainwater harvesting cisterns and associated gutters and downspouts to be owner individual responsibility.

The following is for informational purpose based on our previous research. There are submersible pumps located within the holding tanks of the cistern system. According to information provided to us, these pumps are a 1/2 HP submersible pump with floating intake. Although life can vary depending on usage and maintenance, best to plan to replace about every 10 years. As routine maintenance, inspect regularly and follow recommended backflushing as detailed within #953.

Useful Life:	No Photo Available
Remaining Life:	

Best Case:

Worst Case:

Cost Source:

Comp #: 956 Cistern Controls - Replace

Quantity: (10) water level controls

Location: At tanks and controls within each individual living unit
Funded?: No. Individual owner responsibility, not Association per Resolution
History: None known

Comments: Funding for this component was removed as part of the 2016-17 reserve study update as a resolution approved on June 24, 2015 and enacted November 2015 cites the rainwater harvesting cisterns and associated gutters and downspouts to be owner individual responsibility.

The following is for informational purpose based on our previous research. These systems are used to monitor water levels in the tank and control the pumps to ensure proper water levels. As discussed with installation contractor, due to parts obsolescence, electronic equipment, etc. best to plan for replacement. As routine maintenance, inspect and ensure working properly.

Useful Life:	No Photo Available
Remaining Life:	

Best Case:

Worst Case:

Cost Source:

Comp #: 957 Cistern Pressure Tanks - Replace

Quantity: (10) 62 gallon steel

Location: Installed inside each of the individual living units

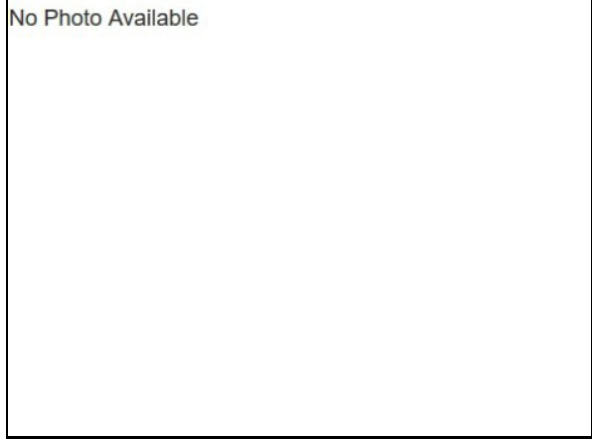
Funded?: No. Individual owner responsibility, not Association per Resolution

History: None known

Comments: Not funded as individual unit owner responsibility. The following is for informational purpose based on our previous research. This component is for the expansion/pressure tanks located within each individual unit. These steel tanks have an inner rubber bladder/membrane and functions as a holding tank with very little moving parts. As discussed with engineer and installation contractor, eventual replacement will be needed. As routine maintenance, inspect regularly and repair/replace locally if needed.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 968 Solar/Photovoltaic System - Repr/Rp

Quantity: (11) Systems

Location: Mounted on rooftops of buildings and at entry trellis

Funded?: No. Unit owners responsible for individual system; common system included separately

History: None known

Comments: Units are serviced by traditional direct connections to electricity, however there is also a supplemental photovoltaic solar electric system. There are (11) systems with each of the 10 units having a system and 1 additional for common area. Based on a resolution approved on June 24, 2015 and enacted November 2015, the photostatic solar electric facilities at each of the the (10) owner units is to be individual owner responsibility not the Association. Funding for the (10) unit systems was removed during the 2016-17 reserve study update. However, we are including funding for the common area system within separate components.

This component is primarily for informational purposes based on our initial research. The overall system has a five year installation warranty. The systems utilize monocrystalline panels (generally a passive component) with micro inverters attached below each of the panels. A monitoring system is attached to each of these systems. Based on the solar panel model number provided to us, the manufacturer indicates a 25 year warranty for the panel. The micro inverters are much more complicated than the panels themselves and have a 15 year warranty (again, based on the model number provided to us).

We conferred with both the manufacturer of the panels and the installation contractor to discuss typical useful life, costs for repairs/replacement, etc. While timing can vary depending on exposure, maintenance, etc., we recommend replacing the micro inverters around the 20 year mark of life and the panels at the 40 year mark of life. The controls are being recommended at about 10 year intervals (controls for each individual unit).

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 970 Solar Panels Common Areas - Replace

Quantity: (4) panels

Location: Mounted on entry trellis

Funded?: Yes.

History: None known

Comments: No problems reported of system for common area usage. More detailed information for the solar/photovoltaic system can be found in the previous component (#968).

We conferred with both the manufacturer of the panels and the installation contractor to discuss typical useful life, costs for repairs/replacement, etc. While timing can vary depending on exposure, maintenance, etc., we recommend replacing the micro inverters around the 20 year mark of life and the panels at the 40 year mark of life. The controls are being recommended at about 10 year intervals. This component includes funding for the panels; see subsequent components in this reserve study for the other parts.

Useful Life:
40 years

Remaining Life:
29 years



Best Case: \$ 1,970

Worst Case: \$ 2,620

Lower allowance

Higher allowance

Cost Source: Inflated Previous Research

Comp #: 972 Micro Inverters, Solar CA- Replace

Quantity: (4) Enphase

Location: Mounted on entry trellis

Funded?: Yes.

History: None known

Comments: This component for the common system (see component #970 for details). Factored here is replacement of micro inverters about every 20 years as shown here. For complete details, see previous component.

Useful Life:
20 years

Remaining Life:
9 years



Best Case: \$ 1,090

Worst Case: \$ 1,750

Lower allowance

Higher allowance

Cost Source: Previous Research

Comp #: 974 Solar Panels CA - Inspect/Clean

Quantity: (4) panels

Location: Mounted on entry trellis

Funded?: No. Too small for reserve funding

History: Unknown

Comments: This component for the common system (see component #970 for details). As discussed with installation contractor and per manufacturer recommendations, best to plan to clean panels routinely for optimal performance. As routine maintenance, monitor performance, clean locally as part of annual operating budget if certain areas seem to be more susceptible to dirt/grime. Lower costs that can be funded out of the operating budget.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 980 Geothermal Circulating Pump#1 -Repl

Quantity: (1) large pump

Location: Mechanical closet at end of Units 4-6 building

Funded?: Yes.

History: Replaced August 2020 due to pump failure

Comments: No problems reported to us of this system. The community is serviced by a supplemental geothermal heating and cooling system. This system has (10) geothermal wells that are about 250-350 feet down, about 6,000 lineal feet of HDPE tubing in the ground (closed loop system with Environol "anti-freeze" type solution), pumps/systems at buildings that provide the in-floor radiant heating/cooling system for each unit. This system includes many different components with some having a predictable useful life and included within this reserve study for funding and other parts of the system (like tubing, wells, etc.) that do not have a predictable useful life. We previously spoke with the Buzz Burgett with NW Mechanical who was the component supplier and installer of the system regarding long term planning for this system.

As discussed with NW Mechanical, factored here is replacement of the two large circulating pumps. As part of routine maintenance, inspect regularly and repair/rebuilding as needed as part of general maintenance.

Useful Life:
15 years

Remaining Life:
12 years



Best Case: \$ 6,370

Worst Case: \$ 7,430

Lower allowance

Higher allowance

Cost Source: Client Cost History in 2020 (\$6,419)

Comp #: 980 Geothermal Circulating Pump#2 -Repl

Quantity: (1) large pump

Location: Mechanical closet at end of Units 4-6 building

Funded?: Yes.

History: None known

Comments: No problems reported to us of this system. The community is serviced by a supplemental geothermal heating and cooling system. This system has (10) geothermal wells that are about 250-350 feet down, about 6,000 lineal feet of HDPE tubing in the ground (closed loop system with Environol "anti-freeze" type solution), pumps/systems at buildings that provide the in-floor radiant heating/cooling system for each unit. This system includes many different components with some having a predictable useful life and included within this reserve study for funding and other parts of the system (like tubing, wells, etc.) that do not have a predictable useful life. We previously spoke with the Buzz Burgett with NW Mechanical who was the component supplier and installer of the system regarding long term planning for this system.

As discussed with NW Mechanical, factored here is replacement of the two large circulating pumps. As part of routine maintenance, inspect regularly and repair/rebuilding as needed as part of general maintenance.

Useful Life:
15 years

Remaining Life:
3 years



Best Case: \$ 6,370

Worst Case: \$ 7,430

Lower allowance

Higher allowance

Cost Source: Client Cost History in 2020 for Pump #1 (\$6,419)

Comp #: 981 Environol Fluid(Geotherm) - Replace

Quantity: Closed loop fluid

Location: Within the closed loop system tubing installed within ground

Funded?: Yes.

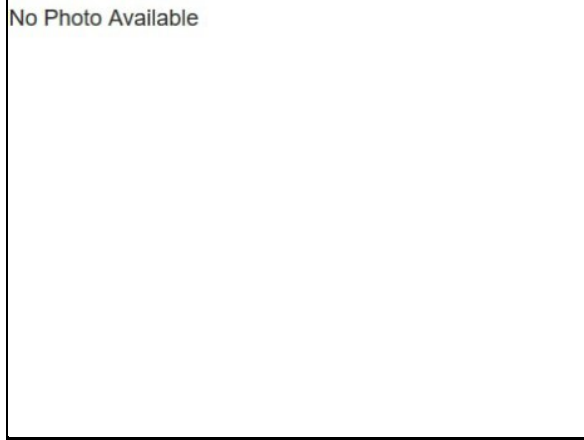
History: None known

Comments: For complete details on the geothermal heating/cooling system, see component #980.

As previously discussed with component supplier and installer of the system, difficult to predict if the environol fluid for the system will need to be replaced. Factored here is removal of fluid, recycle and refill and purge air as shown here. The cost shown here based on estimate from the vendor. As part of routine maintenance, inspect regularly and add/modify this solution as needed.

Useful Life:
15 years

Remaining Life:
3 years



Best Case: \$ 11,700

Worst Case: \$ 13,000

Lower allowance

Higher allowance

Cost Source: Inflated Estimate by NW Mechanical, 206-267-4328

Comp #: 982 Geothermal Pumps - Replace

Quantity: (20) pumps

Location: Within each unit

Funded?: No. Individual owner responsibility, not Association per Resolution

History: None known

Comments: Funding for this component removed in the 2015-16 reserve study based on a resolution approved on June 24, 2015 and enacted November 2015. Per Association Management, this portion of the geothermal heating/cooling plant is considered individual owner responsibility, not Association. For complete details on the geothermal heating/cooling system, see component #980.

The following is for informational purposes. As discussed with component supplier and installer of the system, best to plan for replacement of the two pumps about every 15 years (within each unit in connection with this system). Life can vary depending on usage. As part of routine maintenance, inspect regularly and repair/rebuild as needed as part of general maintenance.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 984 Heat Pumps (Geothermal) - Replace

Quantity: (10) Envision Series NSW

Location: Within each unit

Funded?: No. Individual owner responsibility, not Association per Resolution

History: Unknown

Comments: Funding for this component removed in the 2015-16 reserve study based on a resolution approved on June 24, 2015 and enacted November 2015. Per Association Management, this portion of the geothermal heating/cooling plant is considered individual owner responsibility, not Association. For complete details on the geothermal heating/cooling system, see component #980.

The following is for informational purposes. As discussed with component supplier and installer of the system, best to plan for replacement of the heat pumps for each unit in connection with this system every 15 years. Life can vary depending on usage. As part of routine maintenance, inspect regularly and repair locally as needed as part of general maintenance.

Useful Life:	No Photo Available
Remaining Life:	

Best Case:

Worst Case:

Cost Source:

Comp #: 986 Hot Water Tanks (GeoThrm) - Replace

Quantity: (10) 120 gallon stainless

Location: Within each unit

Funded?: No. Individual owner responsibility, not Association per Resolution

History: None known

Comments: Funding for this component removed in the 2015-16 reserve study based on a resolution approved on June 24, 2015 and enacted November 2015. Per Association Management, this portion of the geothermal heating/cooling plant is considered individual owner responsibility, not Association. For complete details on the geothermal heating/cooling system, see component #980.

The following is for informational purposes. As discussed with component supplier and installer of the system, best to plan for replacement of the hot water storage tanks for each unit in connection with this system every 30 years. As part of routine maintenance, inspect regularly and repair locally as needed as part of general maintenance.

Useful Life:	No Photo Available
Remaining Life:	

Best Case:

Worst Case:

Cost Source:

Comp #: 988 Ventilators (Geothermal) - Replace

Quantity: (10) heat recovery

Location: Within each unit

Funded?: No. Individual owner responsibility, not Association per Resolution

History: None known

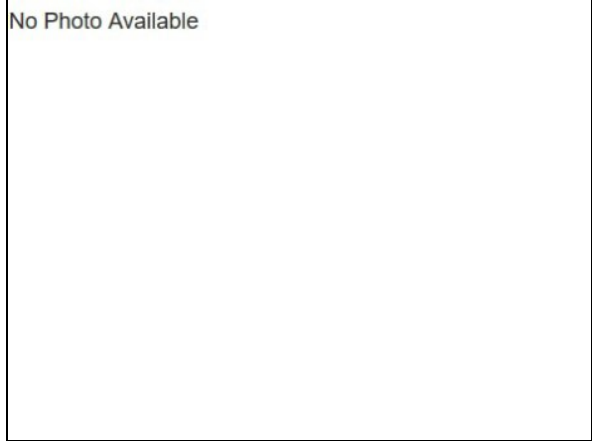
Comments: Funding for this component removed in the 2015-16 reserve study based on a resolution approved on June 24, 2015 and enacted November 2015. Per Association Management, this portion of the geothermal heating/cooling plant is considered individual owner responsibility, not Association. For complete details on the geothermal heating/cooling system, see component #980.

The following is for informational purposes. As discussed with component supplier and installer of the system, best to plan for replacement of the fans in conjunction with the heat recovery ventilators every 15 years.

As part of routine maintenance, inspect regularly and repair locally as needed as part of general maintenance.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:



Comp #: 990 Ancillary Evaluations

Quantity: Specialty evaluations

Location: To augment reserve planning.

Funded?: No. Operating expense in year of occurrence

History:

Comments: A reserve study is a budget model, limited to visual exterior observations and research. As there are some key details and factors of buildings and grounds hidden from view, it is prudent to conduct additional ancillary evaluations from time to time. The purpose of these evaluations is to aid planning and assess for any basis of predictable funding that may be incorporated into the reserve study. We recommend that you periodically engage specialty evaluations in the following areas/fields as applicable to your property:

- Civil Engineering review: Soils & drainage, pavement specifications, below grade waterproofing
- Arborist: Trees & landscape - plan of care and life cycle forecast
- Legal Responsibility Matrix: Governing document review for clear expense delineation between the association and unit owners
- Legal Governing Document review periodically to incorporate changes in law over time and best practices
- Investment consultant: Maximize return and cash flow management while protecting principal
- Insurance policy & coverage review: Understand what is and is not covered and by whom (association vs. owner policies)
- Masonry consultant: Assess mortar condition and waterproofing, and provide forecast and recommendations
- Energy Audit: Typically conducted by a utility company, HVAC vendor or consulting engineer to assess efficiency, and cost benefit to retrofit existing equipment. WA Clean Building Performance Standard is a new law in Washington for residential buildings 20,000 GSF and larger - see Dept. of Commerce for more information. Rules and compliance are not yet fully formed.

Note: There are several other important professional evaluations to augment reserve planning that are of heightened importance such as Life-Safety and/or Building Envelope & Structural issues, and Plumbing. Those components are addressed separately within this report.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 995 Building Envelope & Structure

Quantity: Siding, windows, etc.

Location: The exterior walls, underlying waterproofing components, and structural components.

Funded?: No. Operating expense: cyclical timing and cost may vary after initial baseline study

History:

Comments: A reserve study is a budget model, limited to visual exterior observations and research. It is outside the scope of our services, and the purpose of a reserve study, to assess the adequacy of the building envelope and structural performance, as many of the key details are hidden from view. Many associations are required to have annual inspections by a qualified engineer or architect to assess the physical condition of the improvements - check your governing documents for any such requirements. Any areas of concern observable from our limited exterior observations, and cycles for repair and replacement, have been stated in the various component field notes throughout this report. We highly recommend regular professional specialty inspections by a qualified engineering, architectural, or building envelope consulting firm to evaluate the performance of the building envelope and structural components.

Many associations are required by their Declaration to have annual inspections by a qualified architect or engineer to assess the physical condition of the building envelope enclosure. The building envelope inspection typically covers at minimum the roofs, decks, siding, windows, doors, sealants/caulking, and flashings. As the building ages, and the waterproofing typically deteriorates, provide more frequent inspections.

Building envelope inspections can be either visual or intrusive. An intrusive investigation (where finished materials are removed to view and better understand the underlying systems, conditions and performance) should be of greater benefit, since a visual review provides only a limited amount of information derived from surface observations.

In addition, we recommend the association annually survey residents to inquire about conditions only visible from the unit interiors that the association may not be aware of. Survey questions may include, but are not limited to, water intrusion/organic growth (particularly at windows and doors, skylights, water heaters, plumbing fixtures, etc), cracking or any other movement of drywall or structural members, and any other general building concerns. Such surveys can be key in identifying potential concerns early, thus increasing the opportunity to conduct repairs before advanced deterioration/damage and, therefore, larger expenses occur.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 998 Association Annual Inspection

Quantity: Annual inspection

Location: Common elements of association

Funded?: No. Annual expense, not reserves

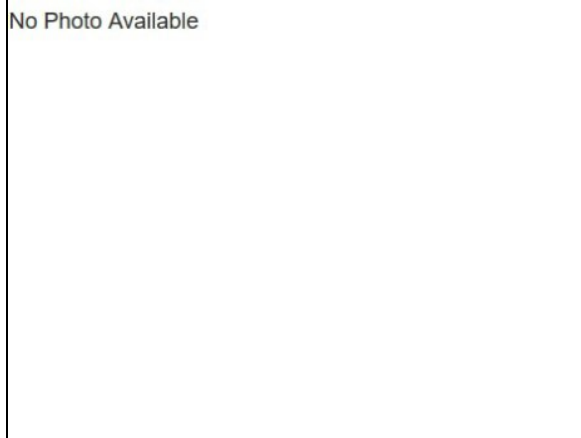
History: Unknown

Comments: Many Associations are required to have annual inspections by a qualified engineer or architect to assess the physical condition of the improvements. The inspection typically covers, at a minimum, the building envelope, including: roofs, exterior, decks, waterproofing / sealants, flashings, glazing systems and doors. Forensic evaluation, building drops, etc...are beyond the scope of a typical reserve study.

Although your Associations governing documents do not appear to have such a requirement, we recommend the Board provide for periodic building envelope inspections, funded from the operating budget, to help ensure critical areas are functioning properly.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 999 Reserve Study - Update

Quantity: Annual update

Location: Common areas of association

Funded?: No. Annual expense, not reserves

History: Current study for the 2023/24 fiscal year; previous study for 2022/23

Comments: Per Washington law (RCW), reserve studies are to be updated annually, with site inspections by an independent reserve study professional to occur no less than every three years to assess changes in condition (i.e., physical, economic, governmental, etc...) and the resulting effect on the community's long-term reserve plan. Most appropriately factored within operating budget, not as reserve component.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source: