

Serving the Pacific Northwest  
601108th Ave. NE, Suite 1900  
Bellevue, WA 98004



Tel : (253) 661-5437  
www.reservestudy.com

Regional Offices  
Arizona  
California  
Colorado  
Florida  
Hawaii  
Nevada  
North Carolina  
Texas  
Washington

## Update "No-Site-Visit" Reserve Study



### Concord Commons Issaquah, WA

**Report #: 21947-9  
For Period Beginning: July 1, 2021  
Expires: June 30, 2022**

**Date Prepared: February 16, 2021**



---

**Hello, and welcome to your Reserve Study!**

**T**his Report is a valuable budget planning tool, for with it you control the future of your association. It contains all the fundamental information needed to understand your current and future Reserve obligations, the most significant expenditures your association will face.

**W**ith respect to Reserves, this Report will tell you "where you are," and "where to go from here."

**In this Report, you will find...**

- 1) A List of What you're Reserving For**
- 2) An Evaluation of your Reserve Fund Size and Strength**
- 3) A Recommended Multi-Year Reserve Funding Plan**

**More Questions?**

Visit our website at [www.ReserveStudy.com](http://www.ReserveStudy.com) or call us at:

253-661-5437



---

## Table of Contents

<b>3-Minute Executive Summary</b>	<b>1</b>
Reserve Study Summary	1
Executive Summary (Component List)	2
<b>Introduction, Objectives, and Methodology</b>	<b>3</b>
Which Physical Assets are Funded by Reserves?	4
How do we establish Useful Life and Remaining Useful Life estimates?	4
How do we establish Current Repair/Replacement Cost Estimates?	4
How much Reserves are enough?	5
How much should we contribute?	6
What is our Recommended Funding Goal?	6
<b>Projected Expenses</b>	<b>7</b>
Annual Reserve Expenses Graph	7
<b>Reserve Fund Status &amp; Recommended Funding Plan</b>	<b>8</b>
Annual Reserve Funding Graph	8
30-Yr Cash Flow Graph	9
Percent Funded Graph	9
<b>Table Descriptions</b>	<b>10</b>
Reserve Component List Detail	11
Fully Funded Balance	12
Component Significance	13
30-Year Reserve Plan Summary	14
30-Year Reserve Plan Summary (Alternate Funding Plan)	15
30-Year Income/Expense Detail	16
<b>Accuracy, Limitations, and Disclosures</b>	<b>22</b>
<b>Terms and Definitions</b>	<b>23</b>
<b>Component Details</b>	<b>24</b>
Site/Grounds	25
Building Exteriors	27

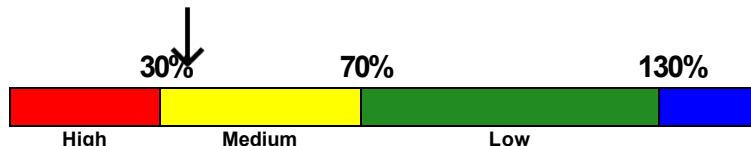
### 3- Minute Executive Summary

**Association:** Concord Commons **Assoc. #:** 21947-9  
**Location:** Issaquah, WA **# of Units:** 48  
**Report Period:** July 1, 2021 through June 30, 2022

***Findings/Recommendations as-of: July 1, 2021***

Starting Reserve Balance .....	\$214,774
Current Fully Funded Reserve Balance .....	\$604,581
Percent Funded .....	35.5 %
Average Reserve (Deficit) or Surplus Per Unit .....	(\$8,121)
Recommended 2021 100% Monthly "Full Funding" Contributions .....	\$6,820
Recommended 2021 70% Monthly "Threshold Funding" Contributions .....	\$6,840
2021 "Alternate / Baseline Funding" minimum to keep Reserves above \$0 .....	\$4,570
Most Recent Budgeted Contribution Rate .....	\$5,970

Reserves % Funded: 35.5%



Special Assessment Risk:

***Economic Assumptions:***

Net Annual "After Tax" Interest Earnings Accruing to Reserves .....	0.40 %
Annual Inflation Rate .....	3.00 %

- This is a Update "No-Site-Visit" Reserve Study, meeting all requirements of the Revised Code of Washington (RCW). This study was prepared by a credentialed Reserve Specialist (RS™).
- Your Reserve Fund is currently 35.5 % Funded. This means the association's special assessment & deferred maintenance risk is currently Medium. 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.
- 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. "Alternate Funding" in this report is synonymous with Baseline Funding, 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 are presented as an aggregate total, assuming average percentage of ownership. The actual ownership allocation may vary - refer to your governing documents.

# Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Site/Grounds			
100 Concrete Dwys/Sdwks- Repr/Replace	5	2	\$5,150
120 Asphalt Alleyways - Resurface/Ovrl	35	16	\$19,900
121 Asphalt - Repair/Sealcoat	5	1	\$4,535
140 Wood Trellis - Repair/Replace	15	2	\$11,725
142 Trellis' - Stain/Paint	5	2	\$9,580
165 Path/Site Lights - Replace	20	10	\$1,750
180 Irrigation System - Maintain/Repair	20	14	\$10,700
335 Site Benches - Replace	20	3	\$3,040
Building Exteriors			
500 Steep Slope Roofs - Repair/Replace	25	8	\$161,000
510 Gutters/Downspouts - Repair/Replace	25	8	\$61,100
518 Ext Surfaces/Siding - Replacement	50	47	\$1,175,000
524 Bldgs. 1, 2 & 8 - Caulk/Paint	10	9	\$125,000
<b>525 Bldgs. 4, 5 &amp; 6 - Caulk/Paint</b>	<b>10</b>	<b>0</b>	<b>\$125,000</b>
526 Bldgs. 3 & 7 - Caulk/Paint	10	1	\$102,500
527 Building Exteriors - Repairs	10	5	\$29,200
540 Elastomeric Deck - Clean/Seal	5	0	\$12,030
545 Wood Decks - Repairs (One Time)	50	0	\$69,000
547 Wood Decks - Repair/Replace	20	21	\$87,000
550 Deck Rail - Repair/Replace	20	21	\$56,800
560 Bldg. Exterior Lights - Replace	24	6	\$14,500
970 Fire Alarm Panels - Repair/Replace	20	3	\$7,880

#### 21 Total Funded Components

Note 1: **Yellow highlighted** line items are expected to require attention in this initial year.

## 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 No-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 updated and adjusted your Reserve Component List on the basis of time elapsed since the last Reserve Study and interviews with association representatives.

## 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 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.

## 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.

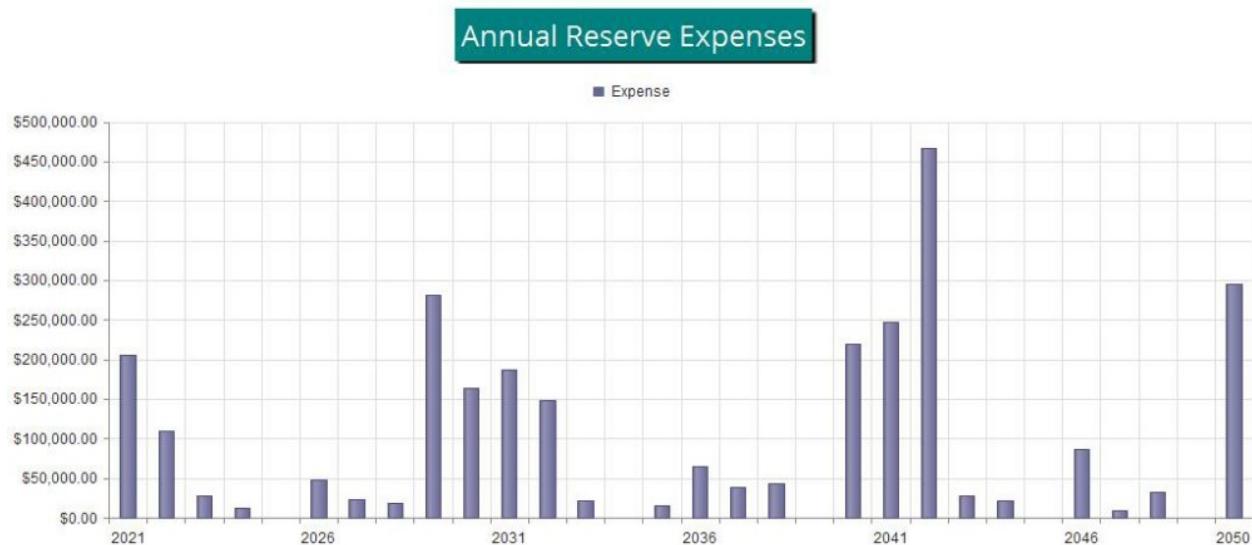


Figure 1

## Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$214,774 as-of the start of your Fiscal Year on 7/1/2021. As of that date, your Fully Funded Balance is computed to be \$604,581 (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 \$6,820 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.

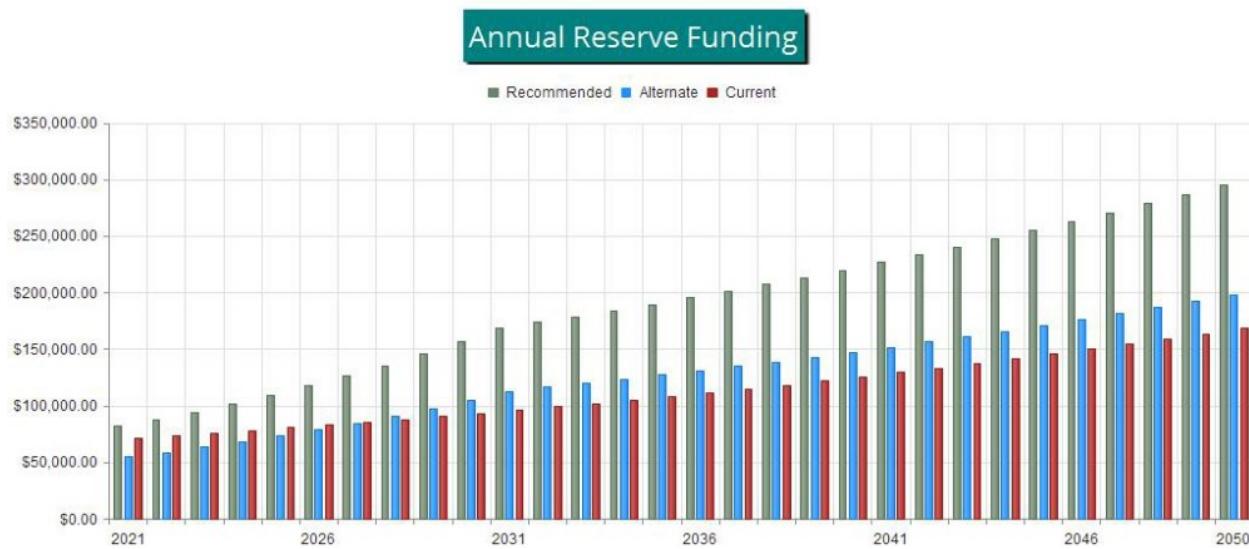


Figure 2

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.

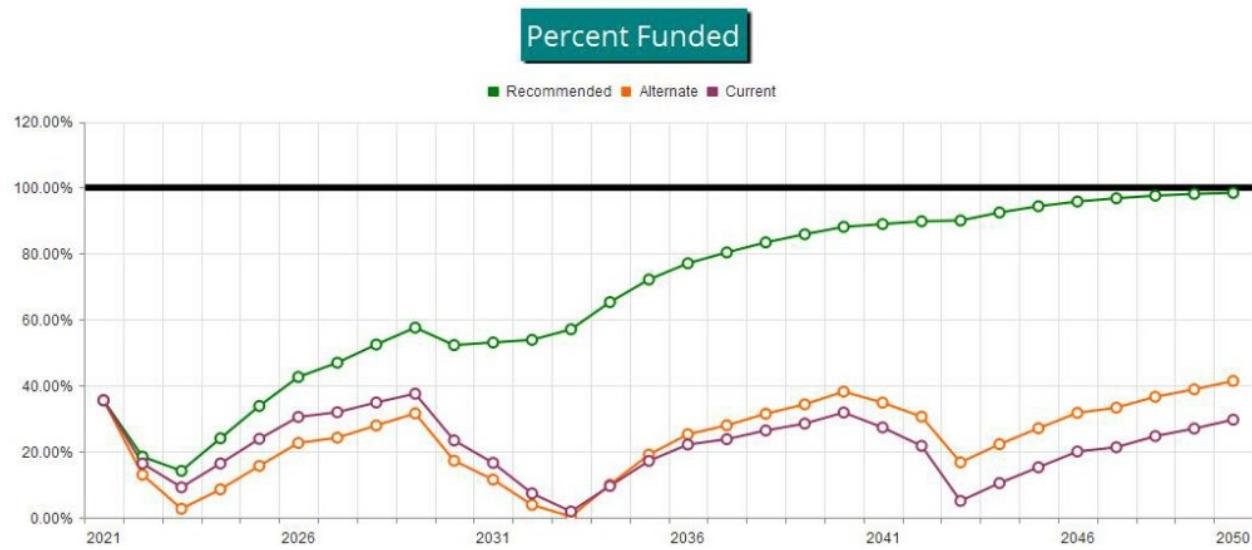


Figure 4

## Table Descriptions

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.

## Reserve Component List Detail

21947-9  
NSV

# Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate	
				Best Case	Worst Case
<b>Site/Grounds</b>					
100 Concrete Dwys/Sdwks- Repr/Replace	Poured in place	5	2	\$3,810	\$6,490
120 Asphalt Alleyways - Resurface/Ovrl	~7,800 GSF	35	16	\$18,100	\$21,700
121 Asphalt - Repair/Sealcoat	~7,800 GSF	5	1	\$4,020	\$5,050
140 Wood Trellis - Repair/Replace	(8), ~270 linear feet	15	2	\$8,550	\$14,900
142 Trellis' - Stain/Paint	(8), ~270 linear feet	5	2	\$9,060	\$10,100
165 Path/Site Lights - Replace	(8) metal fixtures	20	10	\$1,440	\$2,060
180 Irrigation System - Maintain/Repair	Controls, valves, etc.	20	14	\$10,200	\$11,200
335 Site Benches - Replace	(4) metal	20	3	\$2,580	\$3,500
<b>Building Exteriors</b>					
500 Steep Slope Roofs - Repair/Replace	~29,000 SF, arch shingles	25	8	\$143,000	\$179,000
510 Gutters/Downspouts - Repair/Replace	~8,100 LF metal	25	8	\$51,700	\$70,500
518 Ext Surfaces/Siding - Replacement	~76,000 GSF	50	47	\$1,060,000	\$1,290,000
524 Bldgs. 1, 2 & 8 - Caulk/Paint	Portion of ~76,000 GSF	10	9	\$100,000	\$150,000
525 Bldgs. 4, 5 & 6 - Caulk/Paint	Portion of ~76,000 GSF	10	0	\$100,000	\$150,000
526 Bldgs. 3 & 7 - Caulk/Paint	Portion of ~76,000 GSF	10	1	\$77,500	\$127,500
527 Building Exteriors - Repairs	Extensive GSF	10	5	\$23,600	\$34,800
540 Elastomeric Deck - Clean/Seal	(9) decks, ~1,300 SF	5	0	\$9,060	\$15,000
545 Wood Decks - Repairs (One Time)	Some beams, rails, fascia	50	0	\$63,700	\$74,300
547 Wood Decks - Repair/Replace	(38) deck, ~2,010 SF	20	21	\$75,400	\$98,600
550 Deck Rail - Repair/Replace	~890 LF, wood picket	20	21	\$51,600	\$62,000
560 Bldg. Exterior Lights - Replace	~(100) metal/glass	24	6	\$11,500	\$17,500
970 Fire Alarm Panels - Repair/Replace	(3) panels	20	3	\$7,000	\$8,760

21 Total Funded Components

# Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
<b>Site/Grounds</b>							
100 Concrete Dwys/Sdwks- Repr/Replace	\$5,150	X	3	/	5	=	\$3,090
120 Asphalt Alleyways - Resurface/Ovrl	\$19,900	X	19	/	35	=	\$10,803
121 Asphalt - Repair/Sealcoat	\$4,535	X	4	/	5	=	\$3,628
140 Wood Trellis - Repair/Replace	\$11,725	X	13	/	15	=	\$10,162
142 Trellis' - Stain/Paint	\$9,580	X	3	/	5	=	\$5,748
165 Path/Site Lights - Replace	\$1,750	X	10	/	20	=	\$875
180 Irrigation System - Maintain/Repair	\$10,700	X	6	/	20	=	\$3,210
335 Site Benches - Replace	\$3,040	X	17	/	20	=	\$2,584
<b>Building Exteriors</b>							
500 Steep Slope Roofs - Repair/Replace	\$161,000	X	17	/	25	=	\$109,480
510 Gutters/Downspouts - Repair/Replace	\$61,100	X	17	/	25	=	\$41,548
518 Ext Surfaces/Siding - Replacement	\$1,175,000	X	3	/	50	=	\$70,500
524 Bldgs. 1, 2 & 8 - Caulk/Paint	\$125,000	X	1	/	10	=	\$12,500
525 Bldgs. 4, 5 & 6 - Caulk/Paint	\$125,000	X	10	/	10	=	\$125,000
526 Bldgs. 3 & 7 - Caulk/Paint	\$102,500	X	9	/	10	=	\$92,250
527 Building Exteriors - Repairs	\$29,200	X	5	/	10	=	\$14,600
540 Elastomeric Deck - Clean/Seal	\$12,030	X	5	/	5	=	\$12,030
545 Wood Decks - Repairs (One Time)	\$69,000	X	50	/	50	=	\$69,000
547 Wood Decks - Repair/Replace	\$87,000	X	0	/	20	=	\$0
550 Deck Rail - Repair/Replace	\$56,800	X	0	/	20	=	\$0
560 Bldg. Exterior Lights - Replace	\$14,500	X	18	/	24	=	\$10,875
970 Fire Alarm Panels - Repair/Replace	\$7,880	X	17	/	20	=	\$6,698
							\$604,581

## Component Significance

21947-9  
NSV

# Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
<b>Site/Grounds</b>				
100 Concrete Dwys/Sdwks- Repr/Replace	5	\$5,150	\$1,030	1.16 %
120 Asphalt Alleyways - Resurface/Ovrl	35	\$19,900	\$569	0.64 %
121 Asphalt - Repair/Sealcoat	5	\$4,535	\$907	1.02 %
140 Wood Trellis - Repair/Replace	15	\$11,725	\$782	0.88 %
142 Trellis' - Stain/Paint	5	\$9,580	\$1,916	2.16 %
165 Path/Site Lights - Replace	20	\$1,750	\$88	0.10 %
180 Irrigation System - Maintain/Repair	20	\$10,700	\$535	0.60 %
335 Site Benches - Replace	20	\$3,040	\$152	0.17 %
<b>Building Exteriors</b>				
500 Steep Slope Roofs - Repair/Replace	25	\$161,000	\$6,440	7.28 %
510 Gutters/Downspouts - Repair/Replace	25	\$61,100	\$2,444	2.76 %
518 Ext Surfaces/Siding - Replacement	50	\$1,175,000	\$23,500	26.55 %
524 Bldgs. 1, 2 & 8 - Caulk/Paint	10	\$125,000	\$12,500	14.12 %
525 Bldgs. 4, 5 & 6 - Caulk/Paint	10	\$125,000	\$12,500	14.12 %
526 Bldgs. 3 & 7 - Caulk/Paint	10	\$102,500	\$10,250	11.58 %
527 Building Exteriors - Repairs	10	\$29,200	\$2,920	3.30 %
540 Elastomeric Deck - Clean/Seal	5	\$12,030	\$2,406	2.72 %
545 Wood Decks - Repairs (One Time)	50	\$69,000	\$1,380	1.56 %
547 Wood Decks - Repair/Replace	20	\$87,000	\$4,350	4.91 %
550 Deck Rail - Repair/Replace	20	\$56,800	\$2,840	3.21 %
560 Bldg. Exterior Lights - Replace	24	\$14,500	\$604	0.68 %
970 Fire Alarm Panels - Repair/Replace	20	\$7,880	\$394	0.45 %
21 Total Funded Components		\$88,506		100.00 %

Fiscal Year Start: 2021				Interest: 0.40 %		Inflation: 3.00 %			
Reserve Fund Strength Calculations: (All values 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 Contribs.	Reserve Contribs.	Loan or Special Assmts	Interest Income	Reserve Expenses
2021	\$214,774	\$604,581	35.5 %	Medium	14.24 %	\$81,840	\$0	\$612	\$206,030
2022	\$91,196	\$494,262	18.5 %	High	7.50 %	\$87,978	\$0	\$321	\$110,246
2023	\$69,249	\$489,433	14.1 %	High	7.50 %	\$94,576	\$0	\$411	\$28,066
2024	\$136,170	\$567,397	24.0 %	High	7.50 %	\$101,670	\$0	\$725	\$11,933
2025	\$226,632	\$670,189	33.8 %	Medium	7.50 %	\$109,295	\$0	\$1,127	\$0
2026	\$337,054	\$791,297	42.6 %	Medium	7.50 %	\$117,492	\$0	\$1,490	\$47,797
2027	\$408,239	\$869,838	46.9 %	Medium	7.50 %	\$126,304	\$0	\$1,843	\$22,729
2028	\$513,658	\$979,677	52.4 %	Medium	7.50 %	\$135,777	\$0	\$2,294	\$18,116
2029	\$633,613	\$1,100,776	57.6 %	Medium	7.50 %	\$145,960	\$0	\$2,268	\$281,350
2030	\$500,491	\$957,689	52.3 %	Medium	7.50 %	\$156,907	\$0	\$1,993	\$163,097
2031	\$496,294	\$935,520	53.1 %	Medium	7.50 %	\$168,675	\$0	\$1,953	\$186,509
2032	\$480,413	\$892,084	53.9 %	Medium	3.00 %	\$173,735	\$0	\$1,976	\$148,161
2033	\$507,963	\$890,461	57.0 %	Medium	3.00 %	\$178,947	\$0	\$2,352	\$21,001
2034	\$668,261	\$1,023,491	65.3 %	Medium	3.00 %	\$184,316	\$0	\$3,047	\$0
2035	\$855,624	\$1,185,981	72.1 %	Low	3.00 %	\$189,845	\$0	\$3,777	\$16,185
2036	\$1,033,061	\$1,340,630	77.1 %	Low	3.00 %	\$195,540	\$0	\$4,403	\$64,235
2037	\$1,168,769	\$1,454,498	80.4 %	Low	3.00 %	\$201,407	\$0	\$5,009	\$39,211
2038	\$1,335,973	\$1,601,751	83.4 %	Low	3.00 %	\$207,449	\$0	\$5,682	\$43,726
2039	\$1,505,378	\$1,753,092	85.9 %	Low	3.00 %	\$213,672	\$0	\$6,461	\$0
2040	\$1,725,511	\$1,958,461	88.1 %	Low	3.00 %	\$220,082	\$0	\$6,917	\$219,188
2041	\$1,733,321	\$1,948,810	88.9 %	Low	3.00 %	\$226,685	\$0	\$6,904	\$247,491
2042	\$1,719,419	\$1,914,438	89.8 %	Low	3.00 %	\$233,485	\$0	\$6,423	\$466,627
2043	\$1,492,701	\$1,658,187	90.0 %	Low	3.00 %	\$240,490	\$0	\$6,407	\$28,224
2044	\$1,711,373	\$1,850,812	92.5 %	Low	3.00 %	\$247,705	\$0	\$7,311	\$21,552
2045	\$1,944,838	\$2,061,248	94.4 %	Low	3.00 %	\$255,136	\$0	\$8,305	\$0
2046	\$2,208,278	\$2,305,507	95.8 %	Low	3.00 %	\$262,790	\$0	\$9,203	\$86,326
2047	\$2,393,945	\$2,473,651	96.8 %	Low	3.00 %	\$270,674	\$0	\$10,116	\$9,780
2048	\$2,664,954	\$2,731,319	97.6 %	Low	3.00 %	\$278,794	\$0	\$11,172	\$32,720
2049	\$2,922,201	\$2,978,895	98.1 %	Low	3.00 %	\$287,158	\$0	\$12,286	\$0
2050	\$3,221,644	\$3,273,580	98.4 %	Low	3.00 %	\$295,772	\$0	\$12,913	\$294,571

# 30-Year Reserve Plan Summary (Alternate Funding Plan)

21947-9  
NSV

Fiscal Year Start: 2021			Interest: 0.40 %		Inflation: 3.00 %				
Reserve Fund Strength Calculations: (All values 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 Contribs.	Loan or Special Assmts	Interest Income	Reserve Expenses	
2021	\$214,774	\$604,581	35.5 %	Medium	-23.45 %	\$54,840	\$0	\$558	\$206,030
2022	\$64,142	\$494,262	13.0 %	High	7.50 %	\$58,953	\$0	\$154	\$110,246
2023	\$13,003	\$489,433	2.7 %	High	7.50 %	\$63,374	\$0	\$123	\$28,066
2024	\$48,434	\$567,397	8.5 %	High	7.50 %	\$68,128	\$0	\$307	\$11,933
2025	\$104,936	\$670,189	15.7 %	High	7.50 %	\$73,237	\$0	\$567	\$0
2026	\$178,740	\$791,297	22.6 %	High	7.50 %	\$78,730	\$0	\$778	\$47,797
2027	\$210,452	\$869,838	24.2 %	High	7.50 %	\$84,635	\$0	\$967	\$22,729
2028	\$273,325	\$979,677	27.9 %	High	7.50 %	\$90,982	\$0	\$1,241	\$18,116
2029	\$347,432	\$1,100,776	31.6 %	Medium	7.50 %	\$97,806	\$0	\$1,025	\$281,350
2030	\$164,913	\$957,689	17.2 %	High	7.50 %	\$105,141	\$0	\$545	\$163,097
2031	\$107,503	\$935,520	11.5 %	High	7.50 %	\$113,027	\$0	\$284	\$186,509
2032	\$34,304	\$892,084	3.8 %	High	3.00 %	\$116,418	\$0	\$74	\$148,161
2033	\$2,635	\$890,461	0.3 %	High	3.00 %	\$119,910	\$0	\$209	\$21,001
2034	\$101,752	\$1,023,491	9.9 %	High	3.00 %	\$123,508	\$0	\$655	\$0
2035	\$225,915	\$1,185,981	19.0 %	High	3.00 %	\$127,213	\$0	\$1,128	\$16,185
2036	\$338,071	\$1,340,630	25.2 %	High	3.00 %	\$131,029	\$0	\$1,489	\$64,235
2037	\$406,354	\$1,454,498	27.9 %	High	3.00 %	\$134,960	\$0	\$1,820	\$39,211
2038	\$503,923	\$1,601,751	31.5 %	Medium	3.00 %	\$139,009	\$0	\$2,210	\$43,726
2039	\$601,416	\$1,753,092	34.3 %	Medium	3.00 %	\$143,179	\$0	\$2,697	\$0
2040	\$747,292	\$1,958,461	38.2 %	Medium	3.00 %	\$147,475	\$0	\$2,851	\$219,188
2041	\$678,430	\$1,948,810	34.8 %	Medium	3.00 %	\$151,899	\$0	\$2,527	\$247,491
2042	\$585,364	\$1,914,438	30.6 %	Medium	3.00 %	\$156,456	\$0	\$1,724	\$466,627
2043	\$276,917	\$1,658,187	16.7 %	High	3.00 %	\$161,149	\$0	\$1,376	\$28,224
2044	\$411,219	\$1,850,812	22.2 %	High	3.00 %	\$165,984	\$0	\$1,937	\$21,552
2045	\$557,588	\$2,061,248	27.1 %	High	3.00 %	\$170,963	\$0	\$2,577	\$0
2046	\$731,129	\$2,305,507	31.7 %	Medium	3.00 %	\$176,092	\$0	\$3,110	\$86,326
2047	\$824,004	\$2,473,651	33.3 %	Medium	3.00 %	\$181,375	\$0	\$3,646	\$9,780
2048	\$999,245	\$2,731,319	36.6 %	Medium	3.00 %	\$186,816	\$0	\$4,313	\$32,720
2049	\$1,157,655	\$2,978,895	38.9 %	Medium	3.00 %	\$192,421	\$0	\$5,025	\$0
2050	\$1,355,100	\$3,273,580	41.4 %	Medium	3.00 %	\$198,193	\$0	\$5,237	\$294,571

## 30-Year Income/Expense Detail

21947-9  
NSV

Fiscal Year	2021	2022	2023	2024	2025
Starting Reserve Balance	\$214,774	\$91,196	\$69,249	\$136,170	\$226,632
Annual Reserve Contribution	\$81,840	\$87,978	\$94,576	\$101,670	\$109,295
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$612	\$321	\$411	\$725	\$1,127
Total Income	\$297,226	\$179,495	\$164,236	\$238,565	\$337,054
# Component					
<b>Site/Grounds</b>					
100 Concrete Dwys/Sdwks- Repr/Replace	\$0	\$0	\$5,464	\$0	\$0
120 Asphalt Alleyways - Resurface/Ovrl	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Repair/Sealcoat	\$0	\$4,671	\$0	\$0	\$0
140 Wood Trellis - Repair/Replace	\$0	\$0	\$12,439	\$0	\$0
142 Trellis' - Stain/Paint	\$0	\$0	\$10,163	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$0
335 Site Benches - Replace	\$0	\$0	\$0	\$3,322	\$0
<b>Building Exteriors</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
518 Ext Surfaces/Siding - Replacement	\$0	\$0	\$0	\$0	\$0
524 Bldgs. 1, 2 & 8 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
525 Bldgs. 4, 5 & 6 - Caulk/Paint	\$125,000	\$0	\$0	\$0	\$0
526 Bldgs. 3 & 7 - Caulk/Paint	\$0	\$105,575	\$0	\$0	\$0
527 Building Exteriors - Repairs	\$0	\$0	\$0	\$0	\$0
540 Elastomeric Deck - Clean/Seal	\$12,030	\$0	\$0	\$0	\$0
545 Wood Decks - Repairs (One Time)	\$69,000	\$0	\$0	\$0	\$0
547 Wood Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
970 Fire Alarm Panels - Repair/Replace	\$0	\$0	\$0	\$8,611	\$0
Total Expenses	\$206,030	\$110,246	\$28,066	\$11,933	\$0
Ending Reserve Balance	\$91,196	\$69,249	\$136,170	\$226,632	\$337,054

Fiscal Year	2026	2027	2028	2029	2030
Starting Reserve Balance	\$337,054	\$408,239	\$513,658	\$633,613	\$500,491
Annual Reserve Contribution	\$117,492	\$126,304	\$135,777	\$145,960	\$156,907
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,490	\$1,843	\$2,294	\$2,268	\$1,993
Total Income	\$456,036	\$536,387	\$651,729	\$781,840	\$659,391
# Component					
<b>Site/Grounds</b>					
100 Concrete Dwys/Sdwks- Repr/Replace	\$0	\$0	\$6,334	\$0	\$0
120 Asphalt Alleyways - Resurface/Ovrl	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Repair/Sealcoat	\$0	\$5,415	\$0	\$0	\$0
140 Wood Trellis - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Trellis' - Stain/Paint	\$0	\$0	\$11,782	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$0
335 Site Benches - Replace	\$0	\$0	\$0	\$0	\$0
<b>Building Exteriors</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$203,950	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$77,400	\$0
518 Ext Surfaces/Siding - Replacement	\$0	\$0	\$0	\$0	\$0
524 Bldgs. 1, 2 & 8 - Caulk/Paint	\$0	\$0	\$0	\$0	\$163,097
525 Bldgs. 4, 5 & 6 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
526 Bldgs. 3 & 7 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
527 Building Exteriors - Repairs	\$33,851	\$0	\$0	\$0	\$0
540 Elastomeric Deck - Clean/Seal	\$13,946	\$0	\$0	\$0	\$0
545 Wood Decks - Repairs (One Time)	\$0	\$0	\$0	\$0	\$0
547 Wood Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$17,314	\$0	\$0	\$0
970 Fire Alarm Panels - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$47,797	\$22,729	\$18,116	\$281,350	\$163,097
Ending Reserve Balance	\$408,239	\$513,658	\$633,613	\$500,491	\$496,294

<b>Fiscal Year</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>	<b>2035</b>
Starting Reserve Balance	\$496,294	\$480,413	\$507,963	\$668,261	\$855,624
Annual Reserve Contribution	\$168,675	\$173,735	\$178,947	\$184,316	\$189,845
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,953	\$1,976	\$2,352	\$3,047	\$3,777
<b>Total Income</b>	<b>\$666,922</b>	<b>\$656,125</b>	<b>\$689,262</b>	<b>\$855,624</b>	<b>\$1,049,246</b>
# Component					
<b>Site/Grounds</b>					
100 Concrete Dwys/Sdwks- Repr/Replace	\$0	\$0	\$7,343	\$0	\$0
120 Asphalt Alleyways - Resurface/Ovrl	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Repair/Sealcoat	\$0	\$6,278	\$0	\$0	\$0
140 Wood Trellis - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Trellis' - Stain/Paint	\$0	\$0	\$13,659	\$0	\$0
165 Path/Site Lights - Replace	\$2,352	\$0	\$0	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$16,185
335 Site Benches - Replace	\$0	\$0	\$0	\$0	\$0
<b>Building Exteriors</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
518 Ext Surfaces/Siding - Replacement	\$0	\$0	\$0	\$0	\$0
524 Bldgs. 1, 2 & 8 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
525 Bldgs. 4, 5 & 6 - Caulk/Paint	\$167,990	\$0	\$0	\$0	\$0
526 Bldgs. 3 & 7 - Caulk/Paint	\$0	\$141,884	\$0	\$0	\$0
527 Building Exteriors - Repairs	\$0	\$0	\$0	\$0	\$0
540 Elastomeric Deck - Clean/Seal	\$16,167	\$0	\$0	\$0	\$0
545 Wood Decks - Repairs (One Time)	\$0	\$0	\$0	\$0	\$0
547 Wood Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
970 Fire Alarm Panels - Repair/Replace	\$0	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$186,509</b>	<b>\$148,161</b>	<b>\$21,001</b>	<b>\$0</b>	<b>\$16,185</b>
<b>Ending Reserve Balance</b>	<b>\$480,413</b>	<b>\$507,963</b>	<b>\$668,261</b>	<b>\$855,624</b>	<b>\$1,033,061</b>

<b>Fiscal Year</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>	<b>2040</b>
Starting Reserve Balance	\$1,033,061	\$1,168,769	\$1,335,973	\$1,505,378	\$1,725,511
Annual Reserve Contribution	\$195,540	\$201,407	\$207,449	\$213,672	\$220,082
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,403	\$5,009	\$5,682	\$6,461	\$6,917
Total Income	\$1,233,004	\$1,375,184	\$1,549,104	\$1,725,511	\$1,952,509
# Component					
<b>Site/Grounds</b>					
100 Concrete Dwys/Sdwks- Repr/Replace	\$0	\$0	\$8,512	\$0	\$0
120 Asphalt Alleyways - Resurface/Ovrl	\$0	\$31,934	\$0	\$0	\$0
121 Asphalt - Repair/Sealcoat	\$0	\$7,277	\$0	\$0	\$0
140 Wood Trellis - Repair/Replace	\$0	\$0	\$19,380	\$0	\$0
142 Trellis' - Stain/Paint	\$0	\$0	\$15,834	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$0
335 Site Benches - Replace	\$0	\$0	\$0	\$0	\$0
<b>Building Exteriors</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
518 Ext Surfaces/Siding - Replacement	\$0	\$0	\$0	\$0	\$0
524 Bldgs. 1, 2 & 8 - Caulk/Paint	\$0	\$0	\$0	\$0	\$219,188
525 Bldgs. 4, 5 & 6 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
526 Bldgs. 3 & 7 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
527 Building Exteriors - Repairs	\$45,493	\$0	\$0	\$0	\$0
540 Elastomeric Deck - Clean/Seal	\$18,742	\$0	\$0	\$0	\$0
545 Wood Decks - Repairs (One Time)	\$0	\$0	\$0	\$0	\$0
547 Wood Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
970 Fire Alarm Panels - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$64,235	\$39,211	\$43,726	\$0	\$219,188
Ending Reserve Balance	\$1,168,769	\$1,335,973	\$1,505,378	\$1,725,511	\$1,733,321

<b>Fiscal Year</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>	<b>2045</b>
Starting Reserve Balance	\$1,733,321	\$1,719,419	\$1,492,701	\$1,711,373	\$1,944,838
Annual Reserve Contribution	\$226,685	\$233,485	\$240,490	\$247,705	\$255,136
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$6,904	\$6,423	\$6,407	\$7,311	\$8,305
Total Income	\$1,966,910	\$1,959,328	\$1,739,598	\$1,966,389	\$2,208,278
# Component					
<b>Site/Grounds</b>					
100 Concrete Dwys/Sdwks- Repr/Replace	\$0	\$0	\$9,868	\$0	\$0
120 Asphalt Alleyways - Resurface/Ovrl	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Repair/Sealcoat	\$0	\$8,436	\$0	\$0	\$0
140 Wood Trellis - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Trellis' - Stain/Paint	\$0	\$0	\$18,356	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$0
335 Site Benches - Replace	\$0	\$0	\$0	\$6,000	\$0
<b>Building Exteriors</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
518 Ext Surfaces/Siding - Replacement	\$0	\$0	\$0	\$0	\$0
524 Bldgs. 1, 2 & 8 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
525 Bldgs. 4, 5 & 6 - Caulk/Paint	\$225,764	\$0	\$0	\$0	\$0
526 Bldgs. 3 & 7 - Caulk/Paint	\$0	\$190,680	\$0	\$0	\$0
527 Building Exteriors - Repairs	\$0	\$0	\$0	\$0	\$0
540 Elastomeric Deck - Clean/Seal	\$21,728	\$0	\$0	\$0	\$0
545 Wood Decks - Repairs (One Time)	\$0	\$0	\$0	\$0	\$0
547 Wood Decks - Repair/Replace	\$0	\$161,846	\$0	\$0	\$0
550 Deck Rail - Repair/Replace	\$0	\$105,665	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
970 Fire Alarm Panels - Repair/Replace	\$0	\$0	\$0	\$15,552	\$0
Total Expenses	\$247,491	\$466,627	\$28,224	\$21,552	\$0
Ending Reserve Balance	\$1,719,419	\$1,492,701	\$1,711,373	\$1,944,838	\$2,208,278

<b>Fiscal Year</b>	<b>2046</b>	<b>2047</b>	<b>2048</b>	<b>2049</b>	<b>2050</b>
Starting Reserve Balance	\$2,208,278	\$2,393,945	\$2,664,954	\$2,922,201	\$3,221,644
Annual Reserve Contribution	\$262,790	\$270,674	\$278,794	\$287,158	\$295,772
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$9,203	\$10,116	\$11,172	\$12,286	\$12,913
<b>Total Income</b>	<b>\$2,480,271</b>	<b>\$2,674,734</b>	<b>\$2,954,920</b>	<b>\$3,221,644</b>	<b>\$3,530,329</b>
# Component					
<b>Site/Grounds</b>					
100 Concrete Dwys/Sdwks- Repr/Replace	\$0	\$0	\$11,440	\$0	\$0
120 Asphalt Alleyways - Resurface/Ovrl	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Repair/Sealcoat	\$0	\$9,780	\$0	\$0	\$0
140 Wood Trellis - Repair/Replace	\$0	\$0	\$0	\$0	\$0
142 Trellis' - Stain/Paint	\$0	\$0	\$21,280	\$0	\$0
165 Path/Site Lights - Replace	\$0	\$0	\$0	\$0	\$0
180 Irrigation System - Maintain/Repair	\$0	\$0	\$0	\$0	\$0
335 Site Benches - Replace	\$0	\$0	\$0	\$0	\$0
<b>Building Exteriors</b>					
500 Steep Slope Roofs - Repair/Replace	\$0	\$0	\$0	\$0	\$0
510 Gutters/Downspouts - Repair/Replace	\$0	\$0	\$0	\$0	\$0
518 Ext Surfaces/Siding - Replacement	\$0	\$0	\$0	\$0	\$0
524 Bldgs. 1, 2 & 8 - Caulk/Paint	\$0	\$0	\$0	\$0	\$294,571
525 Bldgs. 4, 5 & 6 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
526 Bldgs. 3 & 7 - Caulk/Paint	\$0	\$0	\$0	\$0	\$0
527 Building Exteriors - Repairs	\$61,138	\$0	\$0	\$0	\$0
540 Elastomeric Deck - Clean/Seal	\$25,188	\$0	\$0	\$0	\$0
545 Wood Decks - Repairs (One Time)	\$0	\$0	\$0	\$0	\$0
547 Wood Decks - Repair/Replace	\$0	\$0	\$0	\$0	\$0
550 Deck Rail - Repair/Replace	\$0	\$0	\$0	\$0	\$0
560 Bldg. Exterior Lights - Replace	\$0	\$0	\$0	\$0	\$0
970 Fire Alarm Panels - Repair/Replace	\$0	\$0	\$0	\$0	\$0
<b>Total Expenses</b>	<b>\$86,326</b>	<b>\$9,780</b>	<b>\$32,720</b>	<b>\$0</b>	<b>\$294,571</b>
<b>Ending Reserve Balance</b>	<b>\$2,393,945</b>	<b>\$2,664,954</b>	<b>\$2,922,201</b>	<b>\$3,221,644</b>	<b>\$3,235,758</b>

## 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

<b>BTU</b>	British Thermal Unit (a standard unit of energy)
<b>DIA</b>	Diameter
<b>GSF</b>	Gross Square Feet (area). Equivalent to Square Feet
<b>GSY</b>	Gross Square Yards (area). Equivalent to Square Yards
<b>HP</b>	Horsepower
<b>LF</b>	Linear Feet (length)
<b>Effective Age</b>	The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.
<b>Fully Funded Balance (FFB)</b>	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.
<b>Inflation</b>	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.
<b>Interest</b>	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.
<b>Percent Funded</b>	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.
<b>Remaining Useful Life (RUL)</b>	The estimated time, in years, that a common area component can be expected to continue to serve its intended function.
<b>Useful Life (UL)</b>	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  $\frac{1}{2}$  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 Dwys/Sdwks- Repr/Replace

Location: Sidewalks, walkways, stairs, driveways, etc.  
Funded?: Yes.

History: Project completed in 2016-17 fiscal year

Comments: Remaining useful life increased as Management reports no major issues based on their inspection; cost inflated 3% from previous reserve study

Useful Life: 5 years

Best Case: \$ 3,810

Lower allowance

Remaining Life: 2 years

Worst Case: \$6,490

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

**Quantity: Poured in place**

### Comp #: 120 Asphalt Alleyways - Resurface/Ovrl

Location: Private alleys throughout association (Tract RC)  
Funded?: Yes.

History: Sealcoat/repairs last in 2017-2018; no history of large scale resurface/repave

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study

Useful Life: 35 years

Best Case: \$ 18,100

Lower allowance

Remaining Life: 16 years

Worst Case: \$21,700

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

**Quantity: ~7,800 GSF**

### Comp #: 121 Asphalt - Repair/Sealcoat

Location: Private alleys throughout association

Funded?: Yes.

History: Last sealcoat during 2017-18 fiscal year; previous to this work in 2011

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study

Useful Life: 5 years

Best Case: \$ 4,020

Lower allowance

Remaining Life: 1 years

Worst Case: \$5,050

Higher allowance

Cost Source: Inflated Client Cost History

**Quantity: ~7,800 GSF**

### Comp #: 140 Wood Trellis - Repair/Replace

Location: Scattered locations adjacent to building ends

Funded?: Yes.

History: Repairs in 2018-2019 fiscal year

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve stud. Some local work/cleaning in 2018-2019 fiscal year.

Useful Life: 15 years

Best Case: \$ 8,550

Lower allowance

Remaining Life: 2 years

Worst Case: \$14,900

Higher allowance

Cost Source: Client Cost History/Estimate

**Quantity: (8), ~270 linear feet**

### Comp #: 142 Trellis' - Stain/Paint

Location: Scattered locations adjacent to building ends

Funded?: Yes.

History: Stain/Paint anticipated by management in 2019-2020 fiscal year

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve stud. Some local work/cleaning in 2018-2019 fiscal year.

Useful Life: 5 years

Best Case: \$ 9,060

Lower allowance

Remaining Life: 2 years

Worst Case: \$10,100

Higher allowance

Cost Source: Inflated Client Cost Estimate

**Quantity: (8), ~270 linear feet**

**Comp #: 165 Path/Site Lights - Replace** **Quantity: (8) metal fixtures**  
Location: Adjacent to paths near buildings  
Funded?: Yes.  
History: Installed in 2011  
Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study  
Useful Life: 20 years Remaining Life: 10 years  
Best Case: \$ 1,440 Worst Case: \$ 2,060  
Lower allowance Higher allowance  
Cost Source: ARI Cost Database: Similar Project  
Cost History

---

**Comp #: 170 Landscape - Maintain/Refurbish** **Quantity: Shrubs, trees, grass**  
Location: Scattered areas throughout site  
Funded?: No. Useful life not predictable, repair/replace as needed out of operating budget  
History: None known  
Comments: Not funded - no changes from previous reserve study  
Useful Life: Remaining Life:  
Best Case: Worst Case:  
Cost Source:

---

**Comp #: 175 Drain Lines - Clean/Inspect** **Quantity: Storm drains**  
Location: Scattered throughout community  
Funded?: No. Management reports an operating expense not Reserves.  
History: Cleaning completed 2015-16 fiscal year; prior to this in 2011  
Comments: Not funded - no changes from previous reserve study  
Useful Life: Remaining Life:  
Best Case: Worst Case:  
Cost Source:

---

**Comp #: 180 Irrigation System - Maintain/Repair** **Quantity: Controls, valves, etc.**  
Location: Scattered throughout community  
Funded?: Yes.  
History: Some work in the 2015-16 fiscal year  
Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study  
Useful Life: 20 years Remaining Life: 14 years  
Best Case: \$ 10,200 Worst Case: \$ 11,200  
Lower allowance Higher allowance  
Cost Source: Inflated Estimate Provided by Client

---

**Comp #: 335 Site Benches - Replace** **Quantity: (4) metal**  
Location: Open space areas of site  
Funded?: Yes.  
History: Unknown  
Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study  
Useful Life: 20 years Remaining Life: 3 years  
Best Case: \$ 2,580 Worst Case: \$ 3,500  
Lower allowance Higher allowance  
Cost Source: ARI Cost Database: Similar Project  
Cost History

---

## Building Exteriors

---

**Comp #: 500 Steep Slope Roofs - Repair/Replace** Quantity: ~29,000 SF, arch shingles

Location: Rooftops of buildings

Funded?: Yes.

History: Original to installation

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study.

Useful Life: 25 years

Remaining Life: 8 years

Best Case: \$ 143,000

Worst Case: \$179,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

---

**Comp #: 505 Roofs - Inspect/Clean/Repair**Quantity: ~29,000 SF, comp shingles

Location: Rooftops of buildings

Funded?: No. Management reports an operating expense not Reserves.

History: Last completed in the 2017-2018 fiscal year, inspection/cleaning during 2014-15 fiscal year; previous to this in August 2011

Comments: Not funded - no changes from previous reserve study

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

---

**Comp #: 510 Gutters/Downspouts - Repair/Replace**Quantity: ~8,100 LF metal

Location: Perimeter of buildings

Funded?: Yes.

History: Original to installation

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study

Useful Life: 25 years

Remaining Life: 8 years

Best Case: \$ 51,700

Worst Case: \$70,500

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

---

**Comp #: 518 Ext Surfaces/Siding - Replacement**Quantity: ~76,000 GSF

Location: Exterior of buildings

Funded?: Yes.

History: Repairs anticipated in 2019-2020

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study. A building evaluation was completed in 2019 with several items of concerns/deficiencies found. High priority items are anticipated to be completed in the 2019-2020 fiscal year with medium and low priority items following this. The cost for the high priority items (~\$37,092) is reflected the starting balance for this 2020-2021 reserve study, however costs for the medium and low priority items are not yet known and not factored in this reserve study.

Useful Life: 50 years

Remaining Life: 47 years

Best Case: \$ 1,060,000

Worst Case: \$1,290,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

---

**Comp #: 524 Bldgs. 1, 2 & 8 - Caulk/Paint**Quantity: Portion of ~76,000 GSF

Location: Exterior of buildings

Funded?: Yes.

History: These buildings were painted in Summer 2020 during 2020/2021 fiscal year.

Comments: Life reset and cost adjusted based on Summer 2020 actual project.

Useful Life: 10 years

Remaining Life: 9 years

Best Case: \$ 100,000

Worst Case: \$150,000

Lower allowance

Higher allowance

Cost Source: Client Cost History

---

**Comp #: 525 Bldgs. 4, 5 & 6 - Caulk/Paint****Quantity: Portion of ~76,000 GSF**

Location: Exterior of buildings

Funded?: Yes.

History:

Comments: Adjusted to reflect cost estimate provided by Client based on Bldgs 1, 2 &amp; 8 completed in Summer 2020 (#524).

Useful Life: 10 years

Remaining Life: 0 years

Best Case: \$ 100,000

Worst Case: \$150,000

Lower allowance

Higher allowance

Cost Source: Client Cost History at Bldgs. 1, 2 &amp; 8

**Comp #: 526 Bldgs. 3 & 7 - Caulk/Paint****Quantity: Portion of ~76,000 GSF**

Location: Exterior of buildings

Funded?: Yes.

History:

Comments: Adjusted to reflect cost estimate provided by Client based on Bldgs 1, 2 &amp; 8 completed in Summer 2020 (#524).

Useful Life: 10 years

Remaining Life: 1 years

Best Case: \$ 77,500

Worst Case: \$127,500

Lower allowance

Higher allowance

Cost Source: Client Estimate based on Cost History at Bldgs. 1, 2 &amp; 8

**Comp #: 527 Building Exteriors - Repairs****Quantity: Extensive GSF**

Location: Exterior of buildings ; trim, fascia, door moldings, etc. are painted wood

Funded?: Yes.

History: Completed during the 2015-16 fiscal year

Comments: Cost allowance for repairs/touch-up between comprehensive paint cycles.

Useful Life: 10 years

Remaining Life: 5 years

Best Case: \$ 23,600

Worst Case: \$34,800

Lower allowance

Higher allowance

Cost Source: Client Cost History Inflated

**Comp #: 535 Windows, Sliders - Repair/Replace****Quantity: Extensive, assorted**

Location: Exterior walls

Funded?: No. Unit owner responsibility, not Association

History: None known

Comments: Not funded - no changes from previous reserve study

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

**Comp #: 540 Elastomeric Deck - Clean/Seal****Quantity: (9) decks, ~1,300 SF**

Location: Decks built over garages at rear of structures of Lots 25-33 (these front to Park Dr)

Funded?: Yes.

History: Recoated and repaired during 2015-16 fiscal year; previous to this, coated in October 2011

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study

Useful Life: 5 years

Remaining Life: 0 years

Best Case: \$ 9,060

Worst Case: \$15,000

Lower allowance

Higher allowance

Cost Source: Inflated Client Cost History

**Comp #: 541 Patios/Porches - Repair/Replace****Quantity: Moderate, Concrete**

Location: Adjacent to units throughout the community

Funded?: No. Useful life not predictable, repair/replace as needed out of operating budget

History: Unknown

Comments: Not funded - no changes from previous reserve study

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

**Comp #: 545 Wood Decks - Repairs (One Time)****Quantity: Some beams, rails, fascia**

Location: Scattered decks

Funded?: Yes.

History: Special project as shown here

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study. Repairs completed in 2018-2019 however more anticipated as one time project as shown.

Useful Life: 50 years

Remaining Life: 0 years

Best Case: \$ 63,700

Worst Case: \$74,300

Lower allowance

Higher allowance

Cost Source: Estimate per RW Anderson, Dick

Crowe, 206-778-4100

**Comp #: 547 Wood Decks - Repair/Replace****Quantity: (38) deck, ~2,010 SF**

Location: Decks throughout association

Funded?: Yes.

History: Unknown

Comments: Remaining useful life assumes work in 2021-2022 (#545) will include these areas; cost inflated 3% from previous reserve study.

Useful Life: 20 years

Remaining Life: 21 years

Best Case: \$ 75,400

Worst Case: \$98,600

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

**Comp #: 550 Deck Rail - Repair/Replace****Quantity: ~890 LF, wood picket**

Location: Adjacent to elastomeric and wood decks

Funded?: Yes.

History: Some repairs but assumed original

Comments: Remaining useful life assumes work in 2021-2022 (#545) will include these areas; cost inflated 3% from previous reserve study.

Useful Life: 20 years

Remaining Life: 21 years

Best Case: \$ 51,600

Worst Case: \$62,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

**Comp #: 552 Metal Railings - Repair/Replace****Quantity: Moderate Linear Feet**

Location: Adjacent to entry stair areas of units

Funded?: No. Useful life not predictable, repair/replace as needed out of operating budget

History: None known

Comments: Not funded - no changes from previous reserve study

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

**Comp #: 560 Bldg. Exterior Lights - Replace****Quantity: ~(100) metal/glass**

Location: Near doors throughout exteriors; entry, decks, etc. plus at covered passageways

Funded?: Yes.

History: None known

Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study

Useful Life: 24 years

Remaining Life: 6 years

Best Case: \$ 11,500

Worst Case: \$17,500

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project

Cost History

**Comp #: 570 Entry Awnings - Replace****Quantity: (52) steel/metal**

Location: Above doors

Funded?: No. Useful life not predictable, repair/replace as needed out of operating budget

History: None known

Comments: Not funded - no changes from previous reserve study

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source:

**Comp #: 580 Unit/Garage Doors - Replace** **Quantity:** Extensive, assorted  
Location: Entries to units and garages  
Funded?: No. Unit owner responsibility  
History: None known  
Comments: Not funded - no changes from previous reserve study  
Useful Life: Remaining Life:  
Best Case: Worst Case:  
Cost Source:

---

**Comp #: 582 Utility Doors - Replace** **Quantity:** (3) steel  
Location: Ends of select buildings  
Funded?: No. Useful life not predictable, repair/replace as needed out of operating budget  
History: None known  
Comments: Not funded - no changes from previous reserve study  
Useful Life: Remaining Life:  
Best Case: Worst Case:  
Cost Source:

---

**Comp #: 900 Side Sewers - Repair/Replace** **Quantity:** Moderate areas  
Location: Throughout community  
Funded?: No. Useful life not predictable, repair/replace as needed out of operating budget  
History: None known  
Comments: Not funded - no changes from previous reserve study  
Useful Life: Remaining Life:  
Best Case: Worst Case:  
Cost Source:

---

**Comp #: 905 Resd. Water Lines - Repair/Replace** **Quantity:** Moderate areas  
Location: Throughout community  
Funded?: No. Useful life not predictable, repair/replace as needed out of operating budget  
History: None known  
Comments: Not funded - no changes from previous reserve study  
Useful Life: Remaining Life:  
Best Case: Worst Case:  
Cost Source:

---

**Comp #: 910 Electrical - Maintain/Repair** **Quantity:** Moderate  
Location: Common areas/association responsibility  
Funded?: No. Useful life not predictable, repair/replace as needed out of operating budget  
History: None known  
Comments: Not funded - no changes from previous reserve study  
Useful Life: Remaining Life:  
Best Case: Worst Case:  
Cost Source:

---

**Comp #: 970 Fire Alarm Panels - Repair/Replace** **Quantity:** (3) panels  
Location: At select building locations  
Funded?: Yes.  
History: None known  
Comments: Remaining useful life reduced 1 year and cost inflated 3% from previous reserve study  
Useful Life: 20 years Remaining Life: 3 years  
Best Case: \$ 7,000 Worst Case: \$8,760  
Lower allowance Higher allowance  
Cost Source: ARI Cost Database: Similar Project  
Cost History

---

**Comp #: 997 Association Annual Inspection** **Quantity:** Every year  
Location: Common elements of association  
Funded?: No. Annual costs, best handled in operational budget  
History: Last inspection by Integrity Group during the 2018-2019 fiscal year  
Comments: Not funded - no changes from previous reserve study  
Useful Life: Remaining Life:  
Best Case: Worst Case:  
Cost Source:

---

**Comp #: 999 Reserve Study Update****Quantity: Annual**

Location: Common elements of association

Funded?: No. Annual costs, best handled in operational budget

History: Association Reserves completed 2015-16 fiscal year study

Comments: Not funded - no changes from previous reserve study

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source: