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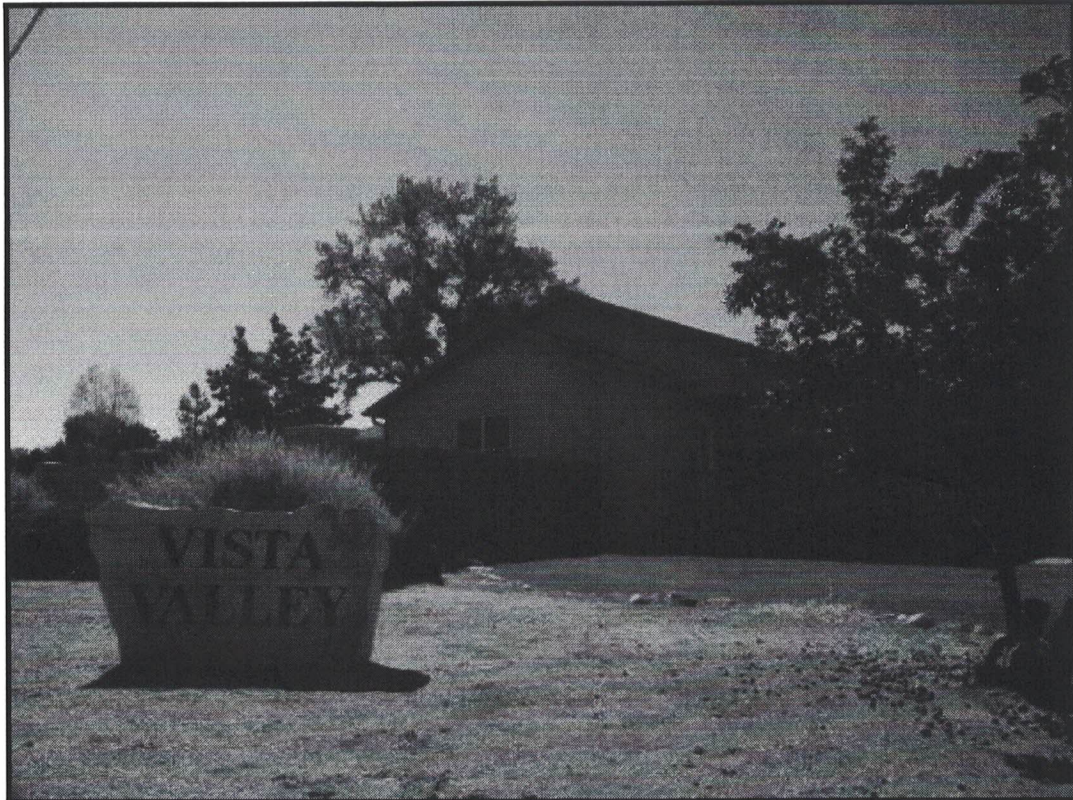


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## "Full" Reserve Study



### Vista Valley Subdivision HOA Fruita, CO

**Report #: 37401-0**

**For Period Beginning: January 1, 2020**

**Expires: December 31, 2020**

**Date Prepared: August 14, 2019**



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**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:

303-394-9181



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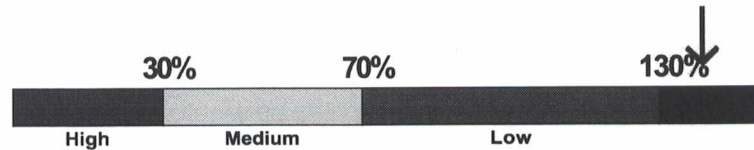
### 3- Minute Executive Summary

**Association:** Vista Valley Subdivision HOA **Assoc. #: 37401-0**  
**Location:** Fruita, CO **# of Units: 195**  
**Report Period:** January 1, 2020 through December 31, 2020

**Findings/Recommendations as-of: January 1, 2020**

Projected Starting Reserve Balance .....	\$144,600
Current Fully Funded Reserve Balance .....	\$66,609
Percent Funded .....	217.1 %
Recommended 2020 Annual "Fully Funding" Contributions .....	\$15,500
Alternate/Baseline Annual Minimum Contributions to Keep Reserves Above \$0 ..	\$12,700
Recommended 2020 Special Assessments for Reserves .....	\$0
Most Recent Annual Reserve Contribution Rate .....	\$4,665

Reserves % Funded: 217.1%



Special Assessment Risk:

**Economic Assumptions:**

**Net Annual "After Tax" Interest Earnings Accruing to Reserves .....** 1.25 %  
**Annual Inflation Rate .....** 3.00 %

- This is a "Full" Reserve Study, (original, created "from scratch"), based on our site inspection on 7/22/2019.
- The Reserve Study was prepared by a credentialed Reserve Specialist (RS #260).
- Your Reserve Fund is currently 217.1 % Funded. This means the client'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.
- Based on this starting point and your anticipated future expenses, our recommendation is to budget the Annual Reserve contributions at \$15,500 with 3% annual increases in order to be within the 70% to 130% level as noted above. 100% "Full" contribution rates are designed to achieve these funding objectives by the end of our 30-year report scope.
- No assets appropriate for Reserve designation were excluded. See photo appendix for component details; the basis of our assumptions.
- We recommend that this Reserve Study be updated annually, with a With-Site-Visit Reserve Study every three years. Research has found that clients who update their Reserve Study annually with a No-Site-Visit Reserve Study reduce their risk of special assessment by ~ 35%.
- A sample 'How to Read a Reserve Study' video tutorial can be found by following this link - [tiny.cc/reservestudy](http://tiny.cc/reservestudy)

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
<b>Sites &amp; Grounds</b>				
21320	Site Fencing: Wood - Repair/Paint	5	0	\$10,450
21330	Site Fencing: Wood - Replace	25	8	\$43,200
21610	Sign/Monument - Refurbish/Replace	30	13	\$18,000
<b>Mechanical</b>				
25270	Badger Flow Meter – Replace	15	13	\$2,000
25280	Baldor Motor - Repair/Replace	15	13	\$20,000
25290	Fan Unit – Replace	20	3	\$3,000
25300	Variable Frequency Drive - Replace	15	13	\$8,250
25580	Irrigation System - Repair	1	0	\$10,000

**8 Total Funded Components**

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

## Introduction



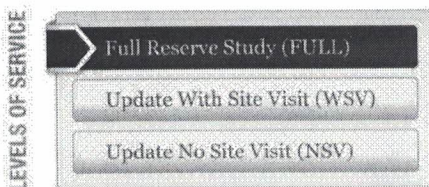
A Reserve Study is the art and science of anticipating, and preparing for, an association's major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a combination of research and well-defined 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 Full Reserve Study, we started with a review of your Governing Documents, recent Reserve expenditures, an evaluation of how expenditures are handled (ongoing maintenance vs Reserves), and research into any well-established association precedents. We

performed an on-site inspection to quantify and evaluate your common areas, creating your Reserve Component List *from scratch*.

## *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...

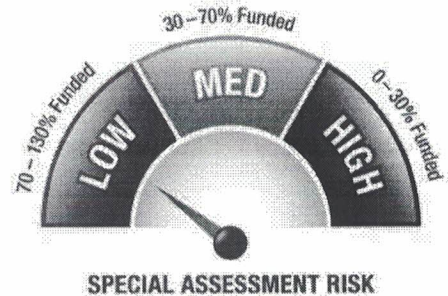
- 1) Actual client cost history, or current proposals
- 2) Comparison to Association Reserves database of work done at similar associations
- 3) Vendor Recommendations
- 4) Reliable National Industry cost estimating guidebooks

## 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.



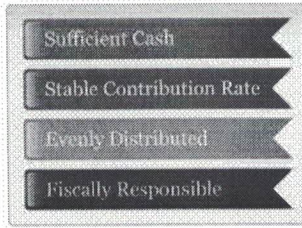
Each year, the *value of deterioration* at the association changes. When there is more deterioration (as components approach the time they need to be replaced), there should be more cash to offset that deterioration and prepare for the expenditure. Conversely, the *value of deterioration* shrinks after 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?



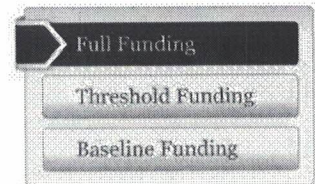
RESERVE FUNDING PRINCIPLES

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.*



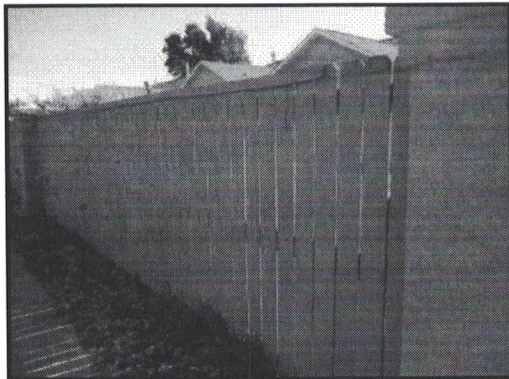
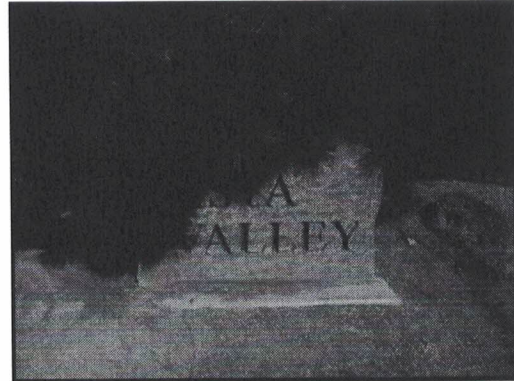
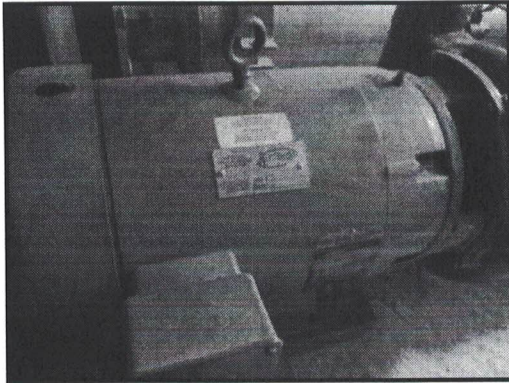
FUNDING OBJECTIVES

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.

## Site Inspection Notes

During our site visit on 7/22/2019 we visually inspected the common area assets and were able to see a majority of the common areas.

Please see photo appendix for component details; the basis of our assumptions.



## 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. Please be aware of your near-term expenses, which we are able to project more accurately than the more distant projections.

The figure below summarizes the projected future expenses 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.

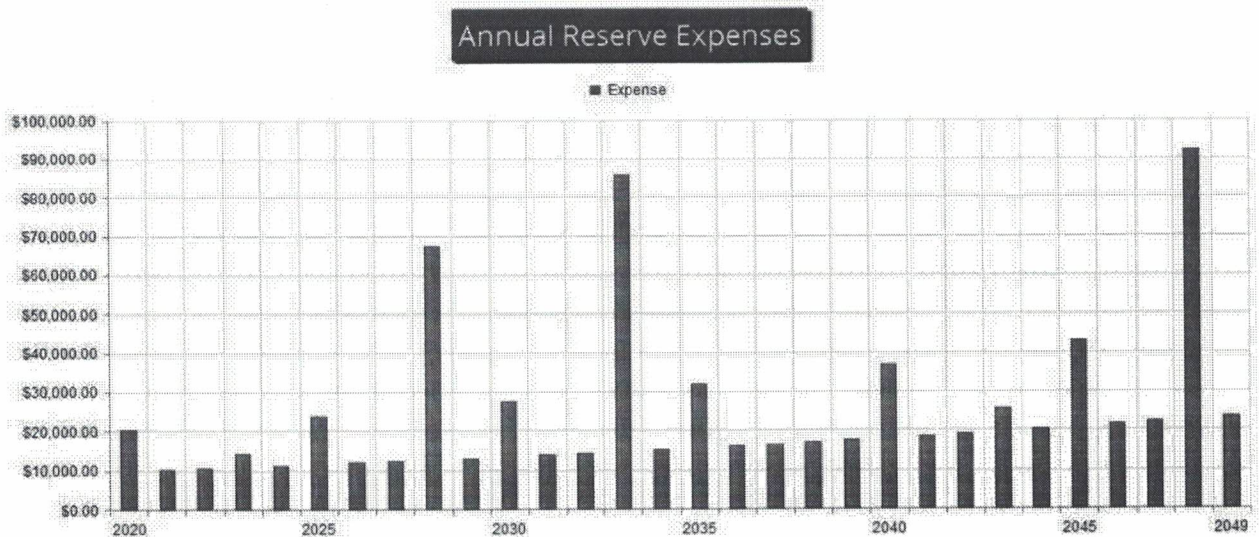


Figure 1

## Reserve Fund Status

As of 1/1/2020 your Reserve Fund balance is projected to be \$144,600 and your Fully Funded Balance is computed to be \$66,609 (see the Fully Funded Balance Table). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 217.1 % Funded.

## Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending Annual budgeted contributions of \$15,500. 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.

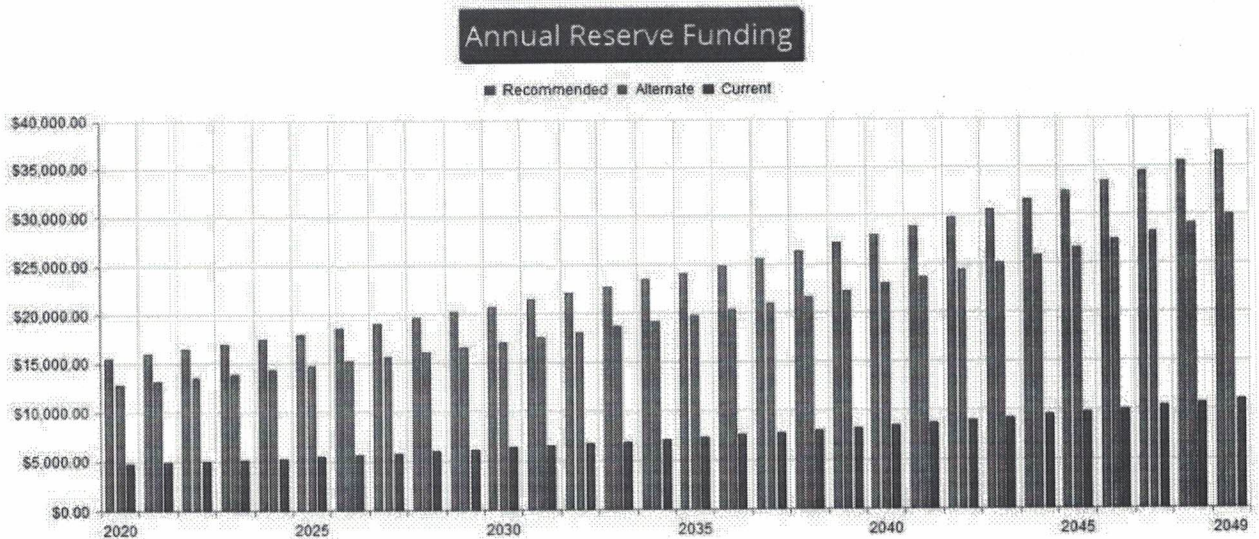


Figure 2

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, compared to your always-changing Fully Funded Balance target.

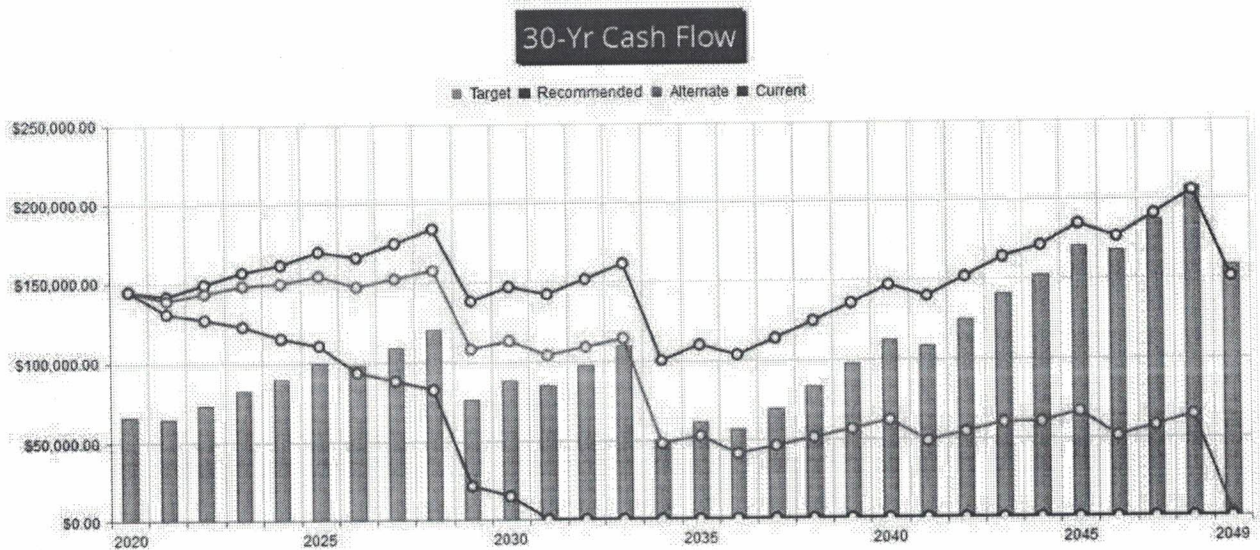


Figure 3

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.

A client that has a percent funded level of <30% may experience an ~ 20%-60% chance risk of special assessment. A client that is between 30% and 70% may experience an ~ 20%-5% chance risk of special assessment. A client that has a percent funded of >70% may experience an ~ <1% chance risk of special assessment.

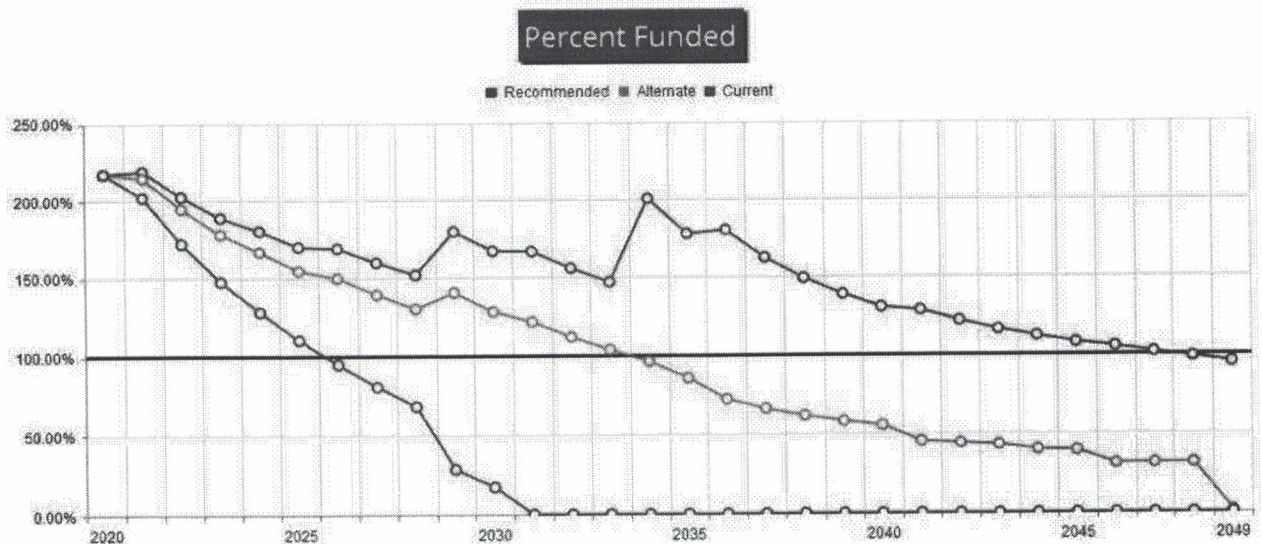


Figure 4

## **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.

#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate	
					Best Case	Worst Case
<b>Sites &amp; Grounds</b>						
21320	Site Fencing: Wood - Repair/Paint	~ 1100 LF	5	0	\$9,000	\$11,900
21330	Site Fencing: Wood - Replace	~ 1100 LF	25	8	\$37,800	\$48,600
21610	Sign/Monument - Refurbish/Replace	~ (4) Monuments	30	13	\$16,000	\$20,000
<b>Mechanical</b>						
25270	Badger Flow Meter – Replace	~ (1) Flow Meter	15	13	\$1,600	\$2,400
25280	Baldor Motor - Repair/Replace	~ (1) Pump	15	13	\$18,000	\$22,000
25290	Fan Unit – Replace	(1) Unit	20	3	\$2,500	\$3,500
25300	Variable Frequency Drive - Replace	~ (1) VFD	15	13	\$8,000	\$8,500
25580	Irrigation System - Repair	System	1	0	\$8,000	\$12,000

8 Total Funded Components

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
<b>Sites &amp; Grounds</b>								
21320	Site Fencing: Wood - Repair/Paint	\$10,450	X	5	/	5	=	\$10,450
21330	Site Fencing: Wood - Replace	\$43,200	X	17	/	25	=	\$29,376
21610	Sign/Monument - Refurbish/Replace	\$18,000	X	17	/	30	=	\$10,200
<b>Mechanical</b>								
25270	Badger Flow Meter – Replace	\$2,000	X	2	/	15	=	\$267
25280	Baldor Motor - Repair/Replace	\$20,000	X	2	/	15	=	\$2,667
25290	Fan Unit – Replace	\$3,000	X	17	/	20	=	\$2,550
25300	Variable Frequency Drive - Replace	\$8,250	X	2	/	15	=	\$1,100
25580	Irrigation System - Repair	\$10,000	X	1	/	1	=	\$10,000
								\$66,609



# Component		Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
<b>Sites &amp; Grounds</b>					
21320	Site Fencing: Wood - Repair/Paint	5	\$10,450	\$2,090	12.60 %
21330	Site Fencing: Wood - Replace	25	\$43,200	\$1,728	10.42 %
21610	Sign/Monument - Refurbish/Replace	30	\$18,000	\$600	3.62 %
<b>Mechanical</b>					
25270	Badger Flow Meter – Replace	15	\$2,000	\$133	0.80 %
25280	Baldor Motor - Repair/Replace	15	\$20,000	\$1,333	8.04 %
25290	Fan Unit – Replace	20	\$3,000	\$150	0.90 %
25300	Variable Frequency Drive - Replace	15	\$8,250	\$550	3.32 %
25580	Irrigation System - Repair	1	\$10,000	\$10,000	60.30 %
<b>8 Total Funded Components</b>				<b>\$16,585</b>	<b>100.00 %</b>

# 30-Year Reserve Plan Summary

37401-0  
Full

Fiscal Year Start: 2020

Interest:

1.25 %

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		Loan or Special Assmts	Interest Income	Reserve Expenses
					In Annual Reserve Contribs.	Reserve Contribs.			
2020	\$144,600	\$66,609	217.1 %	Low	232.26 %	\$15,500	\$0	\$1,787	\$20,450
2021	\$141,437	\$64,626	218.9 %	Low	3.00 %	\$15,965	\$0	\$1,814	\$10,300
2022	\$148,915	\$73,551	202.5 %	Low	3.00 %	\$16,444	\$0	\$1,909	\$10,609
2023	\$156,659	\$82,953	188.9 %	Low	3.00 %	\$16,937	\$0	\$1,987	\$14,205
2024	\$161,378	\$89,476	180.4 %	Low	3.00 %	\$17,445	\$0	\$2,068	\$11,255
2025	\$169,636	\$99,793	170.0 %	Low	3.00 %	\$17,969	\$0	\$2,097	\$23,707
2026	\$165,994	\$98,172	169.1 %	Low	3.00 %	\$18,508	\$0	\$2,128	\$11,941
2027	\$174,689	\$109,215	159.9 %	Low	3.00 %	\$19,063	\$0	\$2,239	\$12,299
2028	\$183,692	\$120,833	152.0 %	Low	3.00 %	\$19,635	\$0	\$2,009	\$67,392
2029	\$137,944	\$76,683	179.9 %	Low	3.00 %	\$20,224	\$0	\$1,779	\$13,048
2030	\$146,900	\$87,833	167.2 %	Low	3.00 %	\$20,831	\$0	\$1,805	\$27,483
2031	\$142,052	\$85,117	166.9 %	Low	3.00 %	\$21,456	\$0	\$1,834	\$13,842
2032	\$151,499	\$97,059	156.1 %	Low	3.00 %	\$22,099	\$0	\$1,954	\$14,258
2033	\$161,295	\$109,641	147.1 %	Low	3.00 %	\$22,762	\$0	\$1,633	\$85,542
2034	\$100,148	\$49,907	200.7 %	Low	3.00 %	\$23,445	\$0	\$1,311	\$15,126
2035	\$109,779	\$61,663	178.0 %	Low	3.00 %	\$24,148	\$0	\$1,332	\$31,860
2036	\$103,398	\$57,310	180.4 %	Low	3.00 %	\$24,873	\$0	\$1,355	\$16,047
2037	\$113,580	\$69,913	162.5 %	Low	3.00 %	\$25,619	\$0	\$1,485	\$16,528
2038	\$124,155	\$83,221	149.2 %	Low	3.00 %	\$26,388	\$0	\$1,620	\$17,024
2039	\$135,139	\$97,263	138.9 %	Low	3.00 %	\$27,179	\$0	\$1,760	\$17,535
2040	\$146,542	\$112,074	130.8 %	Low	3.00 %	\$27,995	\$0	\$1,786	\$36,935
2041	\$139,388	\$108,246	128.8 %	Low	3.00 %	\$28,835	\$0	\$1,817	\$18,603
2042	\$151,437	\$124,110	122.0 %	Low	3.00 %	\$29,700	\$0	\$1,970	\$19,161
2043	\$163,945	\$140,829	116.4 %	Low	3.00 %	\$30,591	\$0	\$2,092	\$25,657
2044	\$170,971	\$152,340	112.2 %	Low	3.00 %	\$31,508	\$0	\$2,220	\$20,328
2045	\$184,371	\$170,697	108.0 %	Low	3.00 %	\$32,454	\$0	\$2,253	\$42,818
2046	\$176,260	\$167,482	105.2 %	Low	3.00 %	\$33,427	\$0	\$2,290	\$21,566
2047	\$190,412	\$187,133	101.8 %	Low	3.00 %	\$34,430	\$0	\$2,471	\$22,213
2048	\$205,099	\$207,812	98.7 %	Low	3.00 %	\$35,463	\$0	\$2,223	\$92,089
2049	\$150,696	\$158,278	95.2 %	Low	3.00 %	\$36,527	\$0	\$1,976	\$23,566

**30-Year Income/Expense Detail**

**37401-0  
Full**

<b>Fiscal Year</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>
Starting Reserve Balance	\$144,600	\$141,437	\$148,915	\$156,659	\$161,378
Annual Reserve Contribution	\$15,500	\$15,965	\$16,444	\$16,937	\$17,445
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,787	\$1,814	\$1,909	\$1,987	\$2,068
<b>Total Income</b>	<b>\$161,887</b>	<b>\$159,215</b>	<b>\$167,268</b>	<b>\$175,583</b>	<b>\$180,891</b>
<b># Component</b>					
<b>Sites &amp; Grounds</b>					
21320 Site Fencing: Wood - Repair/Paint	\$10,450	\$0	\$0	\$0	\$0
21330 Site Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
21610 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
<b>Mechanical</b>					
25270 Badger Flow Meter – Replace	\$0	\$0	\$0	\$0	\$0
25280 Baldor Motor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
25290 Fan Unit – Replace	\$0	\$0	\$0	\$3,278	\$0
25300 Variable Frequency Drive - Replace	\$0	\$0	\$0	\$0	\$0
25580 Irrigation System - Repair	\$10,000	\$10,300	\$10,609	\$10,927	\$11,255
<b>Total Expenses</b>	<b>\$20,450</b>	<b>\$10,300</b>	<b>\$10,609</b>	<b>\$14,205</b>	<b>\$11,255</b>
Ending Reserve Balance	\$141,437	\$148,915	\$156,659	\$161,378	\$169,636

<b>Fiscal Year</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
Starting Reserve Balance	\$169,636	\$165,994	\$174,689	\$183,692	\$137,944
Annual Reserve Contribution	\$17,969	\$18,508	\$19,063	\$19,635	\$20,224
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,097	\$2,128	\$2,239	\$2,009	\$1,779
<b>Total Income</b>	<b>\$189,701</b>	<b>\$186,630</b>	<b>\$195,991</b>	<b>\$205,336</b>	<b>\$159,947</b>
# Component					
<b>Sites &amp; Grounds</b>					
21320 Site Fencing: Wood - Repair/Paint	\$12,114	\$0	\$0	\$0	\$0
21330 Site Fencing: Wood - Replace	\$0	\$0	\$0	\$54,724	\$0
21610 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
<b>Mechanical</b>					
25270 Badger Flow Meter – Replace	\$0	\$0	\$0	\$0	\$0
25280 Baldor Motor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
25290 Fan Unit – Replace	\$0	\$0	\$0	\$0	\$0
25300 Variable Frequency Drive - Replace	\$0	\$0	\$0	\$0	\$0
25580 Irrigation System - Repair	\$11,593	\$11,941	\$12,299	\$12,668	\$13,048
<b>Total Expenses</b>	<b>\$23,707</b>	<b>\$11,941</b>	<b>\$12,299</b>	<b>\$67,392</b>	<b>\$13,048</b>
Ending Reserve Balance	\$165,994	\$174,689	\$183,692	\$137,944	\$146,900

<b>Fiscal Year</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>
Starting Reserve Balance	\$146,900	\$142,052	\$151,499	\$161,295	\$100,148
Annual Reserve Contribution	\$20,831	\$21,456	\$22,099	\$22,762	\$23,445
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,805	\$1,834	\$1,954	\$1,633	\$1,311
<b>Total Income</b>	<b>\$169,535</b>	<b>\$165,342</b>	<b>\$175,552</b>	<b>\$185,690</b>	<b>\$124,905</b>
<b># Component</b>					
<b>Sites &amp; Grounds</b>					
21320 Site Fencing: Wood - Repair/Paint	\$14,044	\$0	\$0	\$0	\$0
21330 Site Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
21610 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$26,434	\$0
<b>Mechanical</b>					
25270 Badger Flow Meter – Replace	\$0	\$0	\$0	\$2,937	\$0
25280 Baldor Motor - Repair/Replace	\$0	\$0	\$0	\$29,371	\$0
25290 Fan Unit – Replace	\$0	\$0	\$0	\$0	\$0
25300 Variable Frequency Drive - Replace	\$0	\$0	\$0	\$12,115	\$0
25580 Irrigation System - Repair	\$13,439	\$13,842	\$14,258	\$14,685	\$15,126
<b>Total Expenses</b>	<b>\$27,483</b>	<b>\$13,842</b>	<b>\$14,258</b>	<b>\$85,542</b>	<b>\$15,126</b>
Ending Reserve Balance	\$142,052	\$151,499	\$161,295	\$100,148	\$109,779

<b>Fiscal Year</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>
Starting Reserve Balance	\$109,779	\$103,398	\$113,580	\$124,155	\$135,139
Annual Reserve Contribution	\$24,148	\$24,873	\$25,619	\$26,388	\$27,179
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,332	\$1,355	\$1,485	\$1,620	\$1,760
<b>Total Income</b>	<b>\$135,259</b>	<b>\$129,627</b>	<b>\$140,684</b>	<b>\$152,163</b>	<b>\$164,077</b>
<b># Component</b>					
<b>Sites &amp; Grounds</b>					
21320 Site Fencing: Wood - Repair/Paint	\$16,281	\$0	\$0	\$0	\$0
21330 Site Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
21610 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
<b>Mechanical</b>					
25270 Badger Flow Meter – Replace	\$0	\$0	\$0	\$0	\$0
25280 Baldor Motor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
25290 Fan Unit – Replace	\$0	\$0	\$0	\$0	\$0
25300 Variable Frequency Drive - Replace	\$0	\$0	\$0	\$0	\$0
25580 Irrigation System - Repair	\$15,580	\$16,047	\$16,528	\$17,024	\$17,535
<b>Total Expenses</b>	<b>\$31,860</b>	<b>\$16,047</b>	<b>\$16,528</b>	<b>\$17,024</b>	<b>\$17,535</b>
Ending Reserve Balance	\$103,398	\$113,580	\$124,155	\$135,139	\$146,542

<b>Fiscal Year</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>
Starting Reserve Balance	\$146,542	\$139,388	\$151,437	\$163,945	\$170,971
Annual Reserve Contribution	\$27,995	\$28,835	\$29,700	\$30,591	\$31,508
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,786	\$1,817	\$1,970	\$2,092	\$2,220
<b>Total Income</b>	<b>\$176,323</b>	<b>\$170,040</b>	<b>\$183,106</b>	<b>\$196,628</b>	<b>\$204,699</b>
<b># Component</b>					
<b>Sites &amp; Grounds</b>					
21320 Site Fencing: Wood - Repair/Paint	\$18,874	\$0	\$0	\$0	\$0
21330 Site Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
21610 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
<b>Mechanical</b>					
25270 Badger Flow Meter – Replace	\$0	\$0	\$0	\$0	\$0
25280 Baldor Motor - Repair/Replace	\$0	\$0	\$0	\$0	\$0
25290 Fan Unit – Replace	\$0	\$0	\$0	\$5,921	\$0
25300 Variable Frequency Drive - Replace	\$0	\$0	\$0	\$0	\$0
25580 Irrigation System - Repair	\$18,061	\$18,603	\$19,161	\$19,736	\$20,328
<b>Total Expenses</b>	<b>\$36,935</b>	<b>\$18,603</b>	<b>\$19,161</b>	<b>\$25,657</b>	<b>\$20,328</b>
Ending Reserve Balance	\$139,388	\$151,437	\$163,945	\$170,971	\$184,371

<b>Fiscal Year</b>	<b>2045</b>	<b>2046</b>	<b>2047</b>	<b>2048</b>	<b>2049</b>
Starting Reserve Balance	\$184,371	\$176,260	\$190,412	\$205,099	\$150,696
Annual Reserve Contribution	\$32,454	\$33,427	\$34,430	\$35,463	\$36,527
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,253	\$2,290	\$2,471	\$2,223	\$1,976
Total Income	\$219,078	\$211,978	\$227,312	\$242,785	\$189,198
<b># Component</b>					
<b>Sites &amp; Grounds</b>					
21320 Site Fencing: Wood - Repair/Paint	\$21,880	\$0	\$0	\$0	\$0
21330 Site Fencing: Wood - Replace	\$0	\$0	\$0	\$0	\$0
21610 Sign/Monument - Refurbish/Replace	\$0	\$0	\$0	\$0	\$0
<b>Mechanical</b>					
25270 Badger Flow Meter – Replace	\$0	\$0	\$0	\$4,576	\$0
25280 Baldor Motor - Repair/Replace	\$0	\$0	\$0	\$45,759	\$0
25290 Fan Unit – Replace	\$0	\$0	\$0	\$0	\$0
25300 Variable Frequency Drive - Replace	\$0	\$0	\$0	\$18,875	\$0
25580 Irrigation System - Repair	\$20,938	\$21,566	\$22,213	\$22,879	\$23,566
Total Expenses	\$42,818	\$21,566	\$22,213	\$92,089	\$23,566
Ending Reserve Balance	\$176,260	\$190,412	\$205,099	\$150,696	\$165,633



## Accuracy, Limitations, and Disclosures

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. Bryan Farley, R.S., president of the Colorado LLC, is a credentialed Reserve Specialist (#260). All work done by Association Reserves 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.

## 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 photographic appendix is to provide the reader with the basis of our funding assumptions resulting from our physical analysis and subsequent research. The photographs herein represent a wide range of elements that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding:

- 1) Common are maintenance, repair & replacement reasonability
- 2) Components must have a limited life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of annual operating expenses).

Some components are recommended for reserve funding, while others are not. The components that meet these criteria in our judgment are shown with corresponding maintenance, repair or replacement cycles to the left of the photo (UL = Useful Life or how often the project is expected to occur, RUL = Remaining Useful Life or how many years from our reporting period) and a representative market cost range termed “Best Cost” and “Worst Cost” below the photo. There are many factors that can result in a wide variety of potential cost; we are attempting to represent a market average for budget purposes. Where there is no UL, the component is expected to be a one-time expense. Where no pricing, the component deemed inappropriate for Reserve Funding.

## Sites & Grounds

**Comp #: 21320 Site Fencing: Wood - Repair/Paint**

**Quantity: ~ 1100 LF**

Location: Common Areas

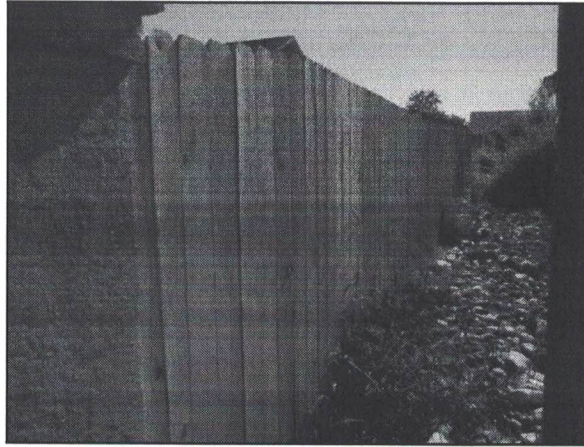
Funded?: Yes.

History:

Comments: Wood fencing determined to be in fair to poor condition typically exhibits a finish coat which is mostly uniform but exhibits moderate surface wear or fading possibly exposing wood substrate in some areas. Regular uniform professional paint or sealer applications are recommended for appearance protection of wood and maximum design life. Repair as needed and clean prior to application. Plan for regular applications as shown below. Timing of repair/paint cycles may need to be coordinated with eventual fence replacement.

Useful Life:  
5 years

Remaining Life:  
0 years



Best Case: \$ 9,000

Worst Case: \$ 11,900

Cost Source: ARI Cost Database: Similar Project Cost History

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**Comp #: 21330 Site Fencing: Wood - Replace**

**Quantity: ~ 1100 LF**

Location: Common Areas

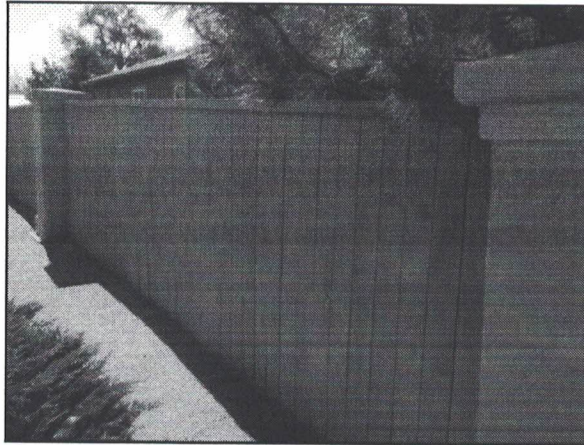
Funded?: Yes.

History:

Comments: Wood fencing determined to be in fair condition typically exhibits some minor to moderate amounts of surface wear and other signs of age which may include a small percentage of warped split and/or rotted sections. In general appearance is consistent but declining. As routine maintenance inspect regularly for any damage repair as needed and avoid contact with ground and surrounding vegetation wherever possible. Regular cycles of uniform professional sealing/painting will help to maintain appearance and maximize life. In our experience wood fencing will typically eventually break down due to a combination of sun and weather exposure which is sometimes exacerbated by other factors such as irrigation overspray abuse and lack of preventive maintenance. Recommendation and costs shown here are based on replacement with similar style and material. However the client might want to consider replacing with more sturdy lower-maintenance products like composite vinyl etc. Although installation costs are higher total life cycle cost is lower due to less maintenance and longer design life expectancy.

Useful Life:  
25 years

Remaining Life:  
8 years



Best Case: \$ 37,800

Worst Case: \$ 48,600

Cost Source: ARI Cost Database: Similar Project Cost History

**Comp #: 21390 Stucco Columns – Repair/Paint**

**Quantity: ~ (45) Columns**

Location: Common Areas

Funded?: No.

History:

Comments: At this time costs related to this component are expected to be included in the client's Operating budget. No recommendation for Reserve funding at this time. However any repair and maintenance or other related expenditures should be tracked and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding component can be included in the funding plan at that time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

**Comp #: 21610 Sign/Monument - Refurbish/Replace**

**Quantity: ~ (4) Monuments**

Location: Common Areas

Funded?: Yes.

History:

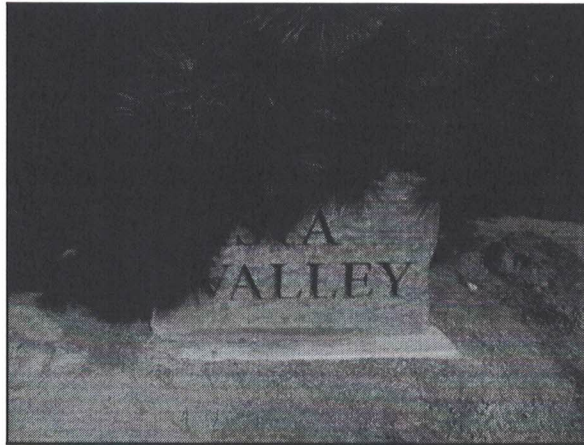
Comments: Monument signage determined to be in good condition typically exhibits good appearance and aesthetics in keeping with local area. Generally uniform and attractive finishes. If present lettering is clean complete and legible and any surrounding landscaping lighting etc. is attractive and functioning. As routine maintenance inspect regularly clean/touch-up and repair as an Operating expense. Plan to refurbish or replace at the interval below. Timing and scope of refurbishing or replacement projects is subjective but should always be scheduled in order to maintain good curb appeal. In our experience most clients choose to refurbish or replace signage periodically in order to maintain good appearance and aesthetics in keeping with local area often before signage is in poor physical condition. If present concrete walls are expected to be painted and repaired as part of refurbishing but not fully replaced unless otherwise noted. Costs can vary significantly depending on style/type desired and may include additional costs for design work landscaping lighting water features etc. Reserve Study updates should incorporate any estimates or information collected regarding potential projects.

Useful Life:

30 years

Remaining Life:

13 years



Best Case: \$ 16,000

Worst Case: \$ 20,000

Cost Source: ARI Cost Database: Similar Project Cost History

**Comp #: 21720 Landscaping - Refurbish**

**Quantity: Common Areas**

Location: Common Areas

Funded?: No.

History:

Comments: In general costs related to this component are reported to be included in the client's Operating budget. No recommendation for Reserve funding at this time. However any repair and maintenance or other related expenditures should be tracked and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding component can be included in the funding plan at that time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:



## Mechanical

**Comp #: 25270 Badger Flow Meter – Replace**

**Quantity: ~ (1) Flow Meter**

Location: Mechanical Room

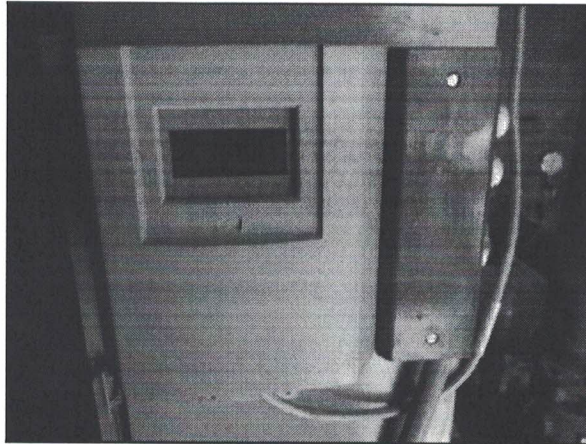
Funded?: Yes.

History:

Comments: Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted remaining useful life expectancy is based primarily on original installation or last replacement/purchase date our experience with similar systems/components and assuming normal amount of usage and good preventive maintenance. Pump(s) can often be repaired or rebuilt rather than completely replaced. Motor rebuilds and other repairs are often considered an Operating expense. Pumps and motors need to be checked and serviced regularly by vendor or other maintenance personnel to ensure proper function. If possible equipment should be protected from sunlight and weather to minimize exposure and prolong life. Costs to replace are based on similar size and horsepower. If there is more than one pump in place cost ranges shown below are based on complete replacement of all pumps at one time usually based on similar/same age and expectation of comparable life expectancy.

Useful Life:  
15 years

Remaining Life:  
13 years



Best Case: \$ 1,600

Worst Case: \$ 2,400

Cost Source: ARI Cost Database: Similar Project Cost History



**Comp #: 25280 Baldor Motor - Repair/Replace**

**Quantity: ~ (1) Pump**

Location: Mechanical Room

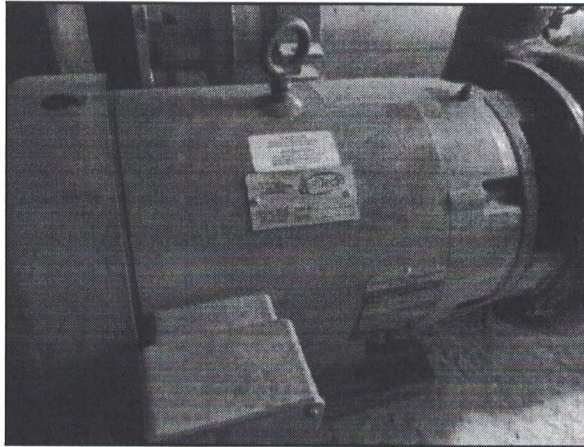
Funded?: Yes.

History: Reportedly replaced in 2017

Comments: Baldor pump with a Berkely pump. Unit is a 3 phase 15 HP. Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted remaining useful life expectancy is based primarily on original installation or last replacement/purchase date our experience with similar systems/components and assuming normal amount of usage and good preventive maintenance.

Useful Life:  
15 years

Remaining Life:  
13 years



Best Case: \$ 18,000

Worst Case: \$ 22,000

Cost Source: ARI Cost Database: Similar Project Cost History

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**Comp #: 25290 Fan Unit – Replace**

**Quantity: (1) Unit**

Location: Common areas

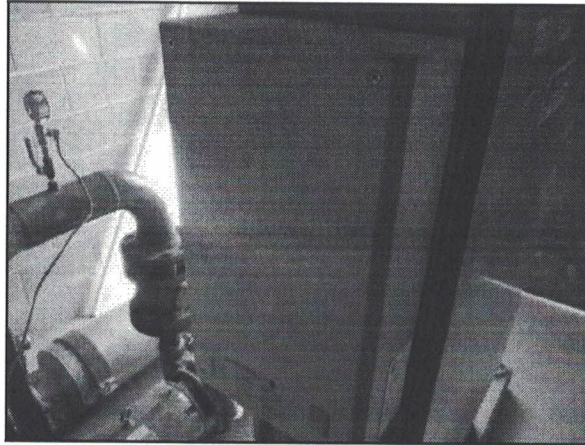
Funded?: Yes.

History: MFG in 2003

Comments: Rittal unit. SK 3217115. Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted, remaining useful life expectancy is based primarily on original installation or last replacement/purchase date, our experience with similar systems/components, and assuming normal amount of usage and good preventive maintenance. We recommend that routine repairs and maintenance such as filter replacements, system flushing, etc. be budgeted as an Operating expense. Useful life can often be extended with proactive service and maintenance. Unless otherwise noted, funding for system with same size/capacity as the current system. For split systems, we recommend budgeting to replace the entire system (condensing unit and air handler) together in order to obtain better unit pricing and ensure maximum efficiency, refrigerant compatibility, etc. If additional costs are expected during replacement, such as for system reconfiguration or expansion, ductwork repairs, electrical work, etc. costs should be re-evaluated and adjusted as needed during future Reserve Study updates.

Useful Life:  
20 years

Remaining Life:  
3 years



Best Case: \$ 2,500

Worst Case: \$ 3,500

Cost Source: ARI Cost Database: Similar Project Cost History

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**Comp #: 25300 Variable Frequency Drive - Replace**

**Quantity: ~ (1) VFD**

Location: Mechanical Room

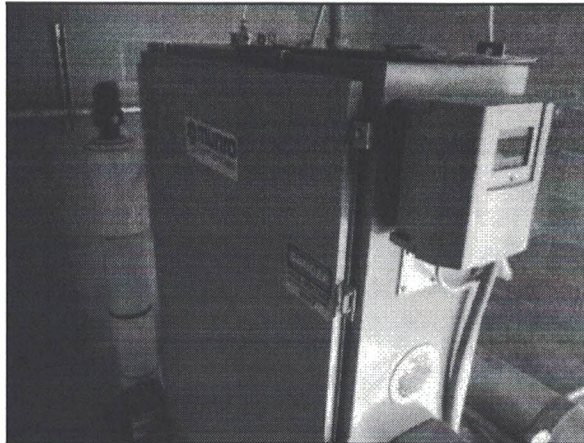
Funded?: Yes.

History:

Comments: Yaskawa F7 drive. Minimal or no subjective/aesthetic value for this component. Useful life is based primarily on normal expectations for service/performance life in this location. Unless otherwise noted remaining useful life expectancy is based primarily on original installation or last replacement/purchase date our experience with similar systems/components and assuming normal amount of usage and good preventive maintenance. Variable frequency drives (AKA variable speed drives) are used to control output of mechanical equipment when full power is not required at all times. Should be inspected and repaired as needed by servicing vendor to ensure proper function and optimal performance. Unless otherwise noted assumed to be functional and in good condition. Plan to replace at the approximate interval shown below. The payback period for these systems measured in energy savings is often a fraction of the design life of the unit itself.

Useful Life:  
15 years

Remaining Life:  
13 years



Best Case: \$ 8,000

Worst Case: \$ 8,500

Cost Source: ARI Cost Database: Similar Project Cost History

**Comp #: 25340 Munro Equipment – Update/Replace**

**Quantity: ~ (1) Equipment**

Location: Mechanical Room

Funded?: No.

History:

Comments: Vendor reported that the unit is operational with no reported issues at this time. No recommendation for Reserve funding at this time. However any repair and maintenance or other related expenditures should be tracked and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding component can be included in the funding plan at that time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

**Comp #: 25570 Irrigation Clock - Replace**

**Quantity: ~ (1) Controller**

Location: Mechanical Room

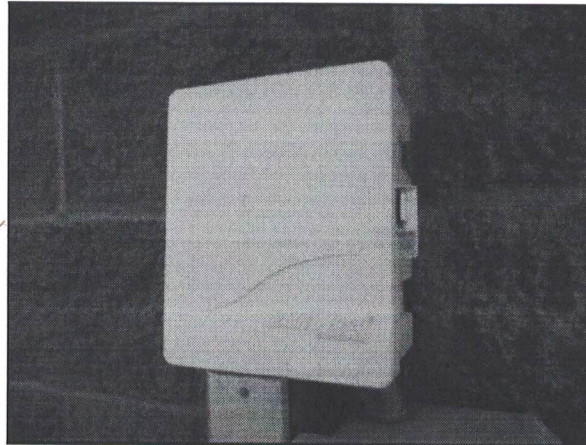
Funded?: No.

History:

Comments: Includes (1) Rain Bird unit. Replaced in 2004. Serial - 0413453. Appears to be a (2) station clock. In general costs related to this component are expected to be included in the client's Operating budget. No recommendation for Reserve funding at this time. However any repair and maintenance or other related expenditures should be tracked and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding component can be included in the funding plan at that time.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

**Comp #: 25580 Irrigation System - Repair**

**Quantity: System**

Location: Mechanical Room

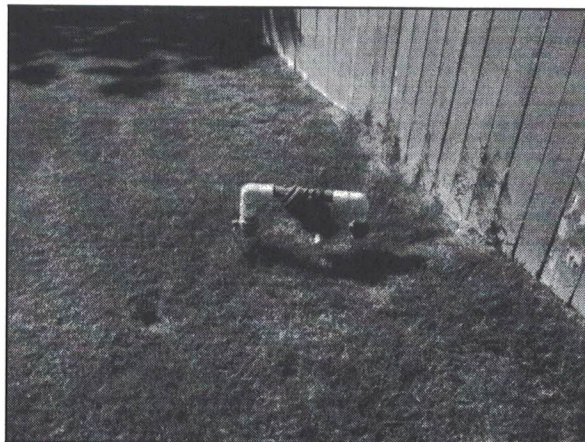
Funded?: Yes.

History:

Comments: At the request of the client we have included an allowance for ongoing annual line breaks based upon the historical averages of the association. As routine maintenance inspect regularly test system and repair as needed from Operating budget. We recommend consulting with irrigation vendor to determine what types of repairs and replacements are included in the landscaping contract. If properly installed without defect most of the elements within this system (distribution piping valves sprinkler heads etc) are generally low-cost and have a failure rate that is difficult to predict making routine repairs best-suited to be handled through the Operating budget. However in some instances Reserve funding can be warranted based on actual project history or expectations for major repairs/replacements. The life expectancies and cost estimates shown here should be re-evaluated during future Reserve Study updates.

Useful Life:  
1 years

Remaining Life:  
0 years



Best Case: \$ 8,000

Worst Case: \$ 12,000

Cost Source: Client Cost History

