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# "Full" Reserve Study



# Meadows East HOA San Tan Valley, AZ

Report #: 37418-0

For Period Beginning: January 1, 2020

Expires: December 31, 2020

Date Prepared: September 18, 2019

## Hello, and welcome to your Reserve Study!

This 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 <a href="https://www.ReserveStudy.com">www.ReserveStudy.com</a> or call us at:

480-361-5340



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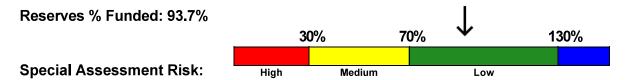
## **3- Minute Executive Summary**

Association: Meadows East HOA Assoc. #: 37418-0 Location: San Tan Valley, AZ # of Units: 406

Report Period: January 1, 2020 through December 31, 2020

Findings/Recommendations as-of: January 1, 2020

	4
Projected Starting Reserve Balance\$102,292	2
Current Fully Funded Reserve Balance\$109,158	3
Average Reserve Deficit (Surplus) Per Unit	•
Percent Funded93.7 %	,
Recommended 2020 Monthly Reserve Contribution\$4,500	)
Recommended 2020 Special Assessments for Reserves\$0	)
Most Recent Reserve Contribution Rate\$1,624	ŀ



**Economic Assumptions:** 

This is a "Full" Reserve Study (original, created "from scratch") based on our site inspection on 8/2/2019.

The Reserve expense threshold for this analysis is \$1,000, which means no expenses under that amount are funded in the Reserve Study.

Your Reserve Fund is 93.7 % Funded. This means the Reserve Fund status is Strong, and special assessment risk is currently Low.

The objective of your multi-year Funding Plan is to Fully Fund Reserves, where associations enjoy a low risk of Reserve cash flow problems.

Based on this starting point and anticipated future expenses, we recommend budgeting Monthly Reserve contributions of \$4,500. Nominal annual increases are scheduled to help offset inflation (see tables herein for details).

Although your current position is Strong, our recommended increase will be necessary to provide Reserves with sufficient funding for future projects.

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
	COMMON AREAS			
220	Concrete - Repair	5	3	\$2,500
380	Mailboxes - Replace	20	18	\$50,000
405	Park Furniture - Replace	15	13	\$20,000
410	Playground Equipment - Replace	20	18	\$180,000
414	Playground Sand - Replenish	8	6	\$5,700
420	Ramada Roof - Replace	30	28	\$8,000
501	Block Walls - Repair	25	23	\$30,000
502	Block Walls - Repaint	6	4	\$40,000
505	Metal Fence - Replace	30	28	\$20,000
510	Metal Surfaces - Repaint	6	4	\$4,000
610	Irrigation Controllers - Replace	12	10	\$6,000
640	Landscape Granite - Replenish	10	8	\$290,000
660	Drywells - Inspect/Clean	5	3	\$4,500
662	Drywells - Partial Replace	30	28	\$20,000

<sup>14</sup> 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 STUDY RESULTS

Reserve contributions are not "for the future". Reserve contributions are designed to offset the ongoing, daily deterioration of your Reserve assets. Done well, a <u>stable</u>, <u>budgeted</u> 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 <u>Full Reserve Study</u>, 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



RESERVE COMPONENT "FOUR-PART TEST

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

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

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

How do we establish Current Repair/Replacement Cost Estimates?

## In this order...

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

## How much Reserves are enough?

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

Adequacy is measured in a two-step process:

- 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 <u>sufficient cash</u> to perform your Reserve projects on time. Second, a <u>stable contribution</u> is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve contributions that are <u>evenly distributed</u> 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 <u>fiscally responsible</u> and safe for Boardmembers to recommend to their association. Remember, it is the Board's <u>job</u> 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 <u>Baseline Funding</u>. 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. <u>Threshold Funding</u> is the title of all other Cash or Percent Funded objectives *between* Baseline Funding and Full Funding.

## **Site Inspection Notes**

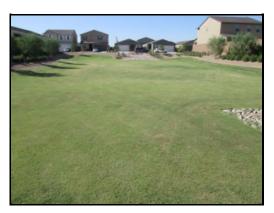
During the site visit on 8/2/2019, we started by visually inspecting the community playgrounds followed by common area assets.

Please see the Component Details Appendix at the end of this report for a detailed look at each component.





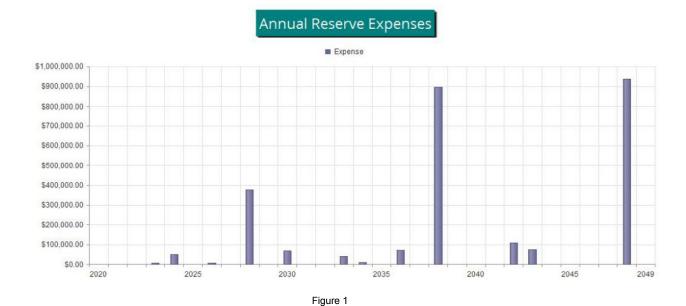




## **Projected Expenses**

While this Reserve Study looks forward 30 years, we have no expectation that all of these expenses will take place as anticipated. This Reserve Study needs to be updated annually, because we expect the timing of expenses to shift and the size of the 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 chart below summarizes the projected future expenses at your association as defined by the Reserve Component List. A summary of these components is shown in the Component Details Table, while a summary of the expenses themselves is shown in the 30-yr Expense Summary Table.



## **Reserve Fund Status**

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$102,292 as-of the start of your fiscal year on 1/1/2020. This figure was provided by the client. As of 1/1/2020, your Fully Funded Balance is computed to be \$109,158. This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to the Fully Funded Balance indicates Reserves are 93.7 % Funded.

## Recommended Funding Plan

Based on your current Percent Funded and cash flow requirements, we recommend budgeting Monthly Reserve contributions of \$4,500 this Fiscal Year. The overall 30-year plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary and the Cash Flow Detail tables.

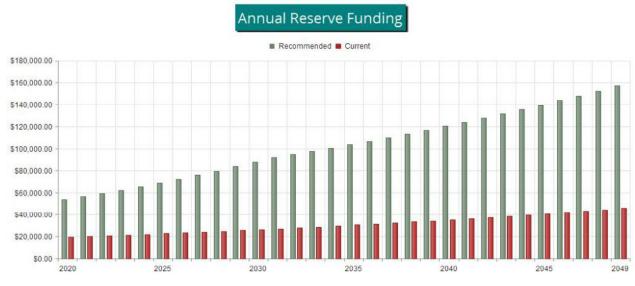
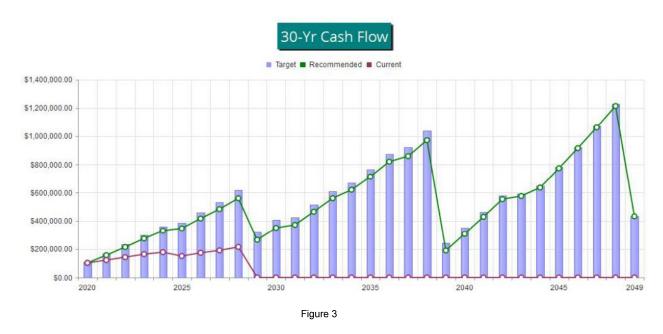
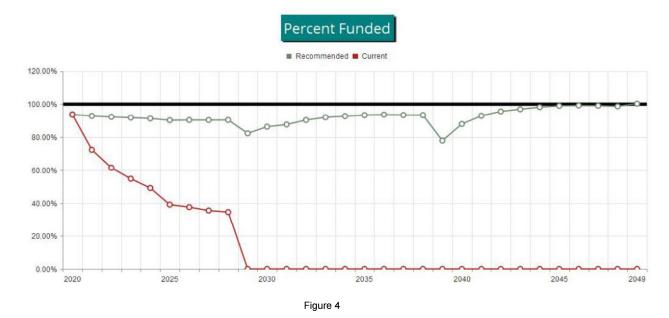


Figure 2

The following chart shows your Reserve balance under our recommended Funding Plan and your currently budgeted contribution rate, compared to the always-changing Fully Funded Balance target.



This chart 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-year Funding Plan.



## **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.

<u>Fully Funded Balance</u> 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.

<u>30-Yr Reserve Plan Summary</u> 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.

<u>30-Year Income/Expense Detail</u> 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.

					Current Co	ost Estimate
#	Component	Quantity	Useful Life	Rem. Useful Life	Best Case	Worst Case
	COMMON AREAS					
220	Concrete - Repair	Numerous Sq Ft	5	3	\$2,000	\$3,000
380	Mailboxes - Replace	(28) Clusters	20	18	\$45,000	\$55,000
405	Park Furniture - Replace	(15) Pieces	15	13	\$18,000	\$22,000
410	Playground Equipment - Replace	(9) Pieces	20	18	\$160,000	\$200,000
414	Playground Sand - Replenish	Approx 9,500 Sq Ft	8	6	\$5,100	\$6,300
420	Ramada Roof - Replace	(1) Roof, ~440 Sq Ft	30	28	\$7,000	\$9,000
501	Block Walls - Repair	Approx 96,500 Sq Ft	25	23	\$25,000	\$35,000
502	Block Walls - Repaint	Approx 96,500 Sq Ft	6	4	\$35,000	\$45,000
505	Metal Fence - Replace	Approx 500 LF	30	28	\$18,000	\$22,000
510	Metal Surfaces - Repaint	Fence, Rails, Ramada	6	4	\$3,500	\$4,500
610	Irrigation Controllers - Replace	(7) Controllers	12	10	\$5,000	\$7,000
640	Landscape Granite - Replenish	Approx 901,800 Sq Ft	10	8	\$260,000	\$320,000
660	Drywells - Inspect/Clean	(8) Drywells	5	3	\$4,000	\$5,000
662	Drywells - Partial Replace	(8) Drywells	30	28	\$17,000	\$23,000

<sup>14</sup> Total Funded Components

#	Component	Current Cost Estimate	X	Effective Age	1	Useful Life	=	Fully Funded Balance
	COMMON AREAS							
220	Concrete - Repair	\$2,500	Х	2	1	5	=	\$1,000
380	Mailboxes - Replace	\$50,000	Χ	2	1	20	=	\$5,000
405	Park Furniture - Replace	\$20,000	Χ	2	/	15	=	\$2,667
410	Playground Equipment - Replace	\$180,000	Х	2	/	20	=	\$18,000
414	Playground Sand - Replenish	\$5,700	Χ	2	/	8	=	\$1,425
420	Ramada Roof - Replace	\$8,000	Χ	2	/	30	=	\$533
501	Block Walls - Repair	\$30,000	Х	2	1	25	=	\$2,400
502	Block Walls - Repaint	\$40,000	Х	2	1	6	=	\$13,333
505	Metal Fence - Replace	\$20,000	Χ	2	/	30	=	\$1,333
510	Metal Surfaces - Repaint	\$4,000	Χ	2	/	6	=	\$1,333
610	Irrigation Controllers - Replace	\$6,000	Х	2	1	12	=	\$1,000
640	Landscape Granite - Replenish	\$290,000	Х	2	1	10	=	\$58,000
660	Drywells - Inspect/Clean	\$4,500	Χ	2	/	5	=	\$1,800
662	Drywells - Partial Replace	\$20,000	Χ	2	1	30	=	\$1,333

\$109,158

# **Component Significance**

# Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
COMMON AREAS				
220 Concrete - Repair	5	\$2,500	\$500	0.92 %
380 Mailboxes - Replace	20	\$50,000	\$2,500	4.58 %
405 Park Furniture - Replace	15	\$20,000	\$1,333	2.44 %
410 Playground Equipment - Replace	20	\$180,000	\$9,000	16.49 %
414 Playground Sand - Replenish	8	\$5,700	\$713	1.31 %
420 Ramada Roof - Replace	30	\$8,000	\$267	0.49 %
501 Block Walls - Repair	25	\$30,000	\$1,200	2.20 %
502 Block Walls - Repaint	6	\$40,000	\$6,667	12.21 %
505 Metal Fence - Replace	30	\$20,000	\$667	1.22 %
510 Metal Surfaces - Repaint	6	\$4,000	\$667	1.22 %
610 Irrigation Controllers - Replace	12	\$6,000	\$500	0.92 %
640 Landscape Granite - Replenish	10	\$290,000	\$29,000	53.13 %
660 Drywells - Inspect/Clean	5	\$4,500	\$900	1.65 %
662 Drywells - Partial Replace	30	\$20,000	\$667	1.22 %
14 Total Funded Components			\$54,579	100.00 %

Fiscal Year Start: 2020	Interest:	0.25 %	Inflation:	3.00 %
Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)		Projected Reserve Balar	nce Changes	

					% Increase				
	Starting	Fully		Special	In Annual		Loan or		
	Reserve	Funded	Percent	Assmt	Reserve	Reserve	Special	Interest	Reserve
Year	Balance	Balance	Funded	Risk	Contribs.	Contribs.	Assmts	Income	Expenses
2020	\$102,292	\$109,158	93.7 %	Low	177.18 %	\$54,000	\$0	\$324	\$0
2021	\$156,616	\$168,650	92.9 %	Low	5.00 %	\$56,700	\$0	\$463	\$0
2022	\$213,779	\$231,612	92.3 %	Low	5.00 %	\$59,535	\$0	\$610	\$0
2023	\$273,923	\$298,201	91.9 %	Low	5.00 %	\$62,512	\$0	\$754	\$7,649
2024	\$329,540	\$360,697	91.4 %	Low	5.00 %	\$65,637	\$0	\$845	\$49,522
2025	\$346,500	\$383,783	90.3 %	Low	5.00 %	\$68,919	\$0	\$953	\$0
2026	\$416,373	\$460,466	90.4 %	Low	5.00 %	\$72,365	\$0	\$1,124	\$6,806
2027	\$483,056	\$534,396	90.4 %	Low	5.00 %	\$75,983	\$0	\$1,304	\$0
2028	\$560,343	\$619,567	90.4 %	Low	5.00 %	\$79,783	\$0	\$1,031	\$376,231
2029	\$264,927	\$321,849	82.3 %	Low	5.00 %	\$83,772	\$0	\$768	\$0
2030	\$349,466	\$404,855	86.3 %	Low	5.00 %	\$87,960	\$0	\$901	\$67,196
2031	\$371,132	\$423,339	87.7 %	Low	5.00 %	\$92,358	\$0	\$1,044	\$0
2032	\$464,534	\$513,856	90.4 %	Low	3.00 %	\$95,129	\$0	\$1,282	\$0
2033	\$560,945	\$609,423	92.0 %	Low	3.00 %	\$97,983	\$0	\$1,477	\$39,650
2034	\$620,755	\$669,422	92.7 %	Low	3.00 %	\$100,922	\$0	\$1,669	\$8,622
2035	\$714,724	\$765,657	93.3 %	Low	3.00 %	\$103,950	\$0	\$1,919	\$0
2036	\$820,594	\$876,210	93.7 %	Low	3.00 %	\$107,069	\$0	\$2,099	\$70,607
2037	\$859,155	\$919,982	93.4 %	Low	3.00 %	\$110,281	\$0	\$2,288	\$0
2038	\$971,724	\$1,040,499	93.4 %	Low	3.00 %	\$113,589	\$0	\$1,451	\$897,182
2039	\$189,582	\$243,321	77.9 %	Low	3.00 %	\$116,997	\$0	\$621	\$0
2040	\$307,200	\$349,197	88.0 %	Low	3.00 %	\$120,507	\$0	\$920	\$0
2041	\$428,626	\$461,206	92.9 %	Low	3.00 %	\$124,122	\$0	\$1,228	\$0
2042	\$553,976	\$579,621	95.6 %	Low	3.00 %	\$127,846	\$0	\$1,413	\$106,727
2043	\$576,507	\$594,798	96.9 %	Low	3.00 %	\$131,681	\$0	\$1,516	\$73,023
2044	\$636,682	\$648,377	98.2 %	Low	3.00 %	\$135,631	\$0	\$1,763	\$0
2045	\$774,077	\$782,105	99.0 %	Low	3.00 %	\$139,700	\$0	\$2,112	\$0
2046	\$915,889	\$923,273	99.2 %	Low	3.00 %	\$143,891	\$0	\$2,472	\$0
2047	\$1,062,253	\$1,072,207	99.1 %	Low	3.00 %	\$148,208	\$0	\$2,844	\$0
2048	\$1,213,305	\$1,229,246	98.7 %	Low	3.00 %	\$152,654	\$0	\$2,057	\$935,762
2049	\$432,253	\$430,908	100.3 %	Low	3.00 %	\$157,234	\$0	\$1,279	\$0

# 30-Year Income/Expense Detail

	Fiscal Year	2020	2021	2022	2023	2024
	Starting Reserve Balance	\$102,292	\$156,616	\$213,779	\$273,923	\$329,540
	Annual Reserve Contribution	\$54,000	\$56,700	\$59,535	\$62,512	\$65,637
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$324	\$463	\$610	\$754	\$845
	Total Income	\$156,616	\$213,779	\$273,923	\$337,189	\$396,022
#	Component					
	COMMON AREAS					
220	Concrete - Repair	\$0	\$0	\$0	\$2,732	\$0
380	Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
405	Park Furniture - Replace	\$0	\$0	\$0	\$0	\$0
410	Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
414	Playground Sand - Replenish	\$0	\$0	\$0	\$0	\$0
420	Ramada Roof - Replace	\$0	\$0	\$0	\$0	\$0
501	Block Walls - Repair	\$0	\$0	\$0	\$0	\$0
502	Block Walls - Repaint	\$0	\$0	\$0	\$0	\$45,020
505	Metal Fence - Replace	\$0	\$0	\$0	\$0	\$0
510	Metal Surfaces - Repaint	\$0	\$0	\$0	\$0	\$4,502
610	Irrigation Controllers - Replace	\$0	\$0	\$0	\$0	\$0
640	Landscape Granite - Replenish	\$0	\$0	\$0	\$0	\$0
660	Drywells - Inspect/Clean	\$0	\$0	\$0	\$4,917	\$0
662	Drywells - Partial Replace	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$0	\$0	\$0	\$7,649	\$49,522
	Ending Reserve Balance	\$156,616	\$213,779	\$273,923	\$329,540	\$346,500

	Fiscal Year	2025	2026	2027	2028	2029
	Starting Reserve Balance	\$346,500	\$416,373	\$483,056	\$560,343	\$264,927
	Annual Reserve Contribution	\$68,919	\$72,365	\$75,983	\$79,783	\$83,772
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$953	\$1,124	\$1,304	\$1,031	\$768
	Total Income	\$416,373	\$489,862	\$560,343	\$641,157	\$349,466
#	Component					
	COMMON AREAS					
220	Concrete - Repair	\$0	\$0	\$0	\$3,167	\$0
380	Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
405	Park Furniture - Replace	\$0	\$0	\$0	\$0	\$0
410	Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
414	Playground Sand - Replenish	\$0	\$6,806	\$0	\$0	\$0
420	Ramada Roof - Replace	\$0	\$0	\$0	\$0	\$0
501	Block Walls - Repair	\$0	\$0	\$0	\$0	\$0
502	Block Walls - Repaint	\$0	\$0	\$0	\$0	\$0
505	Metal Fence - Replace	\$0	\$0	\$0	\$0	\$0
510	Metal Surfaces - Repaint	\$0	\$0	\$0	\$0	\$0
610	Irrigation Controllers - Replace	\$0	\$0	\$0	\$0	\$0
640	Landscape Granite - Replenish	\$0	\$0	\$0	\$367,363	\$0
660	Drywells - Inspect/Clean	\$0	\$0	\$0	\$5,700	\$0
662	Drywells - Partial Replace	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$0	\$6,806	\$0	\$376,231	\$0
	Ending Reserve Balance	\$416,373	\$483,056	\$560,343	\$264,927	\$349,466

	Fiscal Year	2030	2031	2032	2033	2034
	Starting Reserve Balance	\$349,466	\$371,132	\$464,534	\$560,945	\$620,755
	Annual Reserve Contribution	\$87,960	\$92,358	\$95,129	\$97,983	\$100,922
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$901	\$1,044	\$1,282	\$1,477	\$1,669
	Total Income	\$438,327	\$464,534	\$560,945	\$660,405	\$723,346
#	Component					
	COMMON AREAS					
220	Concrete - Repair	\$0	\$0	\$0	\$3,671	\$0
380	Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
405	Park Furniture - Replace	\$0	\$0	\$0	\$29,371	\$0
410	Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
414	Playground Sand - Replenish	\$0	\$0	\$0	\$0	\$8,622
420	Ramada Roof - Replace	\$0	\$0	\$0	\$0	\$0
501	Block Walls - Repair	\$0	\$0	\$0	\$0	\$0
502	Block Walls - Repaint	\$53,757	\$0	\$0	\$0	\$0
505	Metal Fence - Replace	\$0	\$0	\$0	\$0	\$0
510	Metal Surfaces - Repaint	\$5,376	\$0	\$0	\$0	\$0
610	Irrigation Controllers - Replace	\$8,063	\$0	\$0	\$0	\$0
640	Landscape Granite - Replenish	\$0	\$0	\$0	\$0	\$0
660	Drywells - Inspect/Clean	\$0	\$0	\$0	\$6,608	\$0
662	Drywells - Partial Replace	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$67,196	\$0	\$0	\$39,650	\$8,622
	Ending Reserve Balance	\$371,132	\$464,534	\$560,945	\$620,755	\$714,724

	Fiscal Year	2035	2036	2037	2038	2039
	Starting Reserve Balance	\$714,724	\$820,594	\$859,155	\$971,724	\$189,582
	Annual Reserve Contribution	\$103,950	\$107,069	\$110,281	\$113,589	\$116,997
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$1,919	\$2,099	\$2,288	\$1,451	\$621
	Total Income	\$820,594	\$929,762	\$971,724	\$1,086,764	\$307,200
#	Component					
	COMMON AREAS					
220	Concrete - Repair	\$0	\$0	\$0	\$4,256	\$0
380	Mailboxes - Replace	\$0	\$0	\$0	\$85,122	\$0
405	Park Furniture - Replace	\$0	\$0	\$0	\$0	\$0
410	Playground Equipment - Replace	\$0	\$0	\$0	\$306,438	\$0
414	Playground Sand - Replenish	\$0	\$0	\$0	\$0	\$0
420	Ramada Roof - Replace	\$0	\$0	\$0	\$0	\$0
501	Block Walls - Repair	\$0	\$0	\$0	\$0	\$0
502	Block Walls - Repaint	\$0	\$64,188	\$0	\$0	\$0
505	Metal Fence - Replace	\$0	\$0	\$0	\$0	\$0
510	Metal Surfaces - Repaint	\$0	\$6,419	\$0	\$0	\$0
610	Irrigation Controllers - Replace	\$0	\$0	\$0	\$0	\$0
640	Landscape Granite - Replenish	\$0	\$0	\$0	\$493,706	\$0
660	Drywells - Inspect/Clean	\$0	\$0	\$0	\$7,661	\$0
662	Drywells - Partial Replace	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$0	\$70,607	\$0	\$897,182	\$0
	Ending Reserve Balance	\$820,594	\$859,155	\$971,724	\$189,582	\$307,200

	Fiscal Year	2040	2041	2042	2043	2044
	Starting Reserve Balance	\$307,200	\$428,626	\$553,976	\$576,507	\$636,682
	Annual Reserve Contribution	\$120,507	\$124,122	\$127,846	\$131,681	\$135,631
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$920	\$1,228	\$1,413	\$1,516	\$1,763
	Total Income	\$428,626	\$553,976	\$683,234	\$709,705	\$774,077
#	Component					
	COMMON AREAS					
220	Concrete - Repair	\$0	\$0	\$0	\$4,934	\$0
380	Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
405	Park Furniture - Replace	\$0	\$0	\$0	\$0	\$0
410	Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
414	Playground Sand - Replenish	\$0	\$0	\$10,922	\$0	\$0
420	Ramada Roof - Replace	\$0	\$0	\$0	\$0	\$0
501	Block Walls - Repair	\$0	\$0	\$0	\$59,208	\$0
502	Block Walls - Repaint	\$0	\$0	\$76,644	\$0	\$0
505	Metal Fence - Replace	\$0	\$0	\$0	\$0	\$0
510	Metal Surfaces - Repaint	\$0	\$0	\$7,664	\$0	\$0
610	Irrigation Controllers - Replace	\$0	\$0	\$11,497	\$0	\$0
640	Landscape Granite - Replenish	\$0	\$0	\$0	\$0	\$0
660	Drywells - Inspect/Clean	\$0	\$0	\$0	\$8,881	\$0
662	Drywells - Partial Replace	\$0	\$0	\$0	\$0	\$0
	Total Expenses	\$0	\$0	\$106,727	\$73,023	\$0
	Ending Reserve Balance	\$428,626	\$553,976	\$576,507	\$636,682	\$774,077

	Fiscal Year	2045	2046	2047	2048	2049
	Starting Reserve Balance	\$774,077	\$915,889	\$1,062,253	\$1,213,305	\$432,253
	Annual Reserve Contribution	\$139,700	\$143,891	\$148,208	\$152,654	\$157,234
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$2,112	\$2,472	\$2,844	\$2,057	\$1,279
	Total Income	\$915,889	\$1,062,253	\$1,213,305	\$1,368,016	\$590,766
#	Component					
	COMMON AREAS					
220	Concrete - Repair	\$0	\$0	\$0	\$5,720	\$0
380	Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
405	Park Furniture - Replace	\$0	\$0	\$0	\$45,759	\$0
410	Playground Equipment - Replace	\$0	\$0	\$0	\$0	\$0
414	Playground Sand - Replenish	\$0	\$0	\$0	\$0	\$0
420	Ramada Roof - Replace	\$0	\$0	\$0	\$18,303	\$0
501	Block Walls - Repair	\$0	\$0	\$0	\$0	\$0
502	Block Walls - Repaint	\$0	\$0	\$0	\$91,517	\$0
505	Metal Fence - Replace	\$0	\$0	\$0	\$45,759	\$0
510	Metal Surfaces - Repaint	\$0	\$0	\$0	\$9,152	\$0
610	Irrigation Controllers - Replace	\$0	\$0	\$0	\$0	\$0
640	Landscape Granite - Replenish	\$0	\$0	\$0	\$663,499	\$0
660	Drywells - Inspect/Clean	\$0	\$0	\$0	\$10,296	\$0
662	Drywells - Partial Replace	\$0	\$0	\$0	\$45,759	\$0
	Total Expenses	\$0	\$0	\$0	\$935,762	\$0
	Ending Reserve Balance	\$915,889	\$1,062,253	\$1,213,305	\$432,253	\$590,766

## **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. DJ Vlaming, R.S., company president, is a credentialed Reserve Specialist (#61). 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.

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

## **Terms and Definitions**

BTU British Thermal Unit (a standard unit of energy)

**DIA** Diameter

GSF Gross Square Feet (area). Equivalent to Square Feet

**GSY** Gross Square Yards (area). Equivalent to Square Yards

**HP** Horsepower

**LF** Linear Feet (length)

Effective Age The difference between Useful Life and Remaining Useful Life.

Note that this is not necessarily equivalent to the chronological

age of the component.

**Fully Funded Balance (FFB)** The value of the deterioration of the Reserve Components.

This is the fraction of life "used up" of each component multiplied by its estimated Current Replacement. While calculated for each component, it is summed together for an

association total.

**Inflation** Cost factors are adjusted for inflation at the rate defined in the

Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on the "30-yr Income/Expense Detail" table.

Interest earnings on Reserve Funds are calculated using the

average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.

Percent Funded The ratio, at a particular point in time (the first day of the Fiscal

Year), of the actual (or projected) Reserve Balance to the Fully

Funded Balance, expressed as a percentage.

Remaining Useful Life (RUL) The estimated time, in years, that a common area component

can be expected to continue to serve its intended function.

**Useful Life (UL)** The estimated time, in years, that a common area component

can be expected to serve its intended function.

## **Component Details**

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

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

Not all of 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.

## **COMMON AREAS**

Quantity: Numerous Sq Ft

Quantity: (28) Clusters

#### Comp #: 220 Concrete - Repair

Location: Walkways, curbs & gutters throughout community

Funded?: Yes.

History: Installed during 2018.

Comments: There is no expectancy to completely replace the concrete. This component funds an allowance for periodic repairs and/or partial replacements as needed.

Useful Life: 5 years

Remaining Life: 3 years



Best Case: \$ 2,000 Worst Case: \$ 3,000

Cost Source: ARI Cost Allowance

### Comp #: 380 Mailboxes - Replace

Location: Common areas throughout community

Funded?: Yes.

History: Installed during 2018-19.

Comments: There are 16-box clusters. Observed to be newer and in good condition. Future replacement should be anticipated.

\*Mfg, Dates: 3/2018, 9/2018, 10/2018 & 3/2019

Useful Life: 20 years

Remaining Life: 18 years



Best Case: \$45,000 Worst Case: \$55,000

### Comp #: 405 Park Furniture - Replace

Location: Parks adjacent to Painted Desert Dr, Lesharo Trail & Salali Trail/Nikita Dr

Funded?: Yes.

History: Installed during 2018.

Comments: Pieces include (13) 6' benches, (1) 6' picnic table and (1) trash can. Furniture is constructed of recycled plastic

Quantity: (15) Pieces

Quantity: (9) Pieces

manufactured by PW Athletics. Observed to be newer and in good shape.

Useful Life: 15 years

Remaining Life: 13 years



Best Case: \$ 18,000 Worst Case: \$ 22,000

Cost Source: ARI Cost Database

### Comp #: 410 Playground Equipment - Replace

Location: Parks adjacent to Painted Desert Dr, Lesharo Trail & Salali Trail/Nikita Dr

Funded?: Yes.

History: Installed during 2018.

Comments: Pieces include (1) Little Tikes large play structure with multiple attachments, (2) Playworld large play structures, (1)

Useful Life: 20 years

Remaining Life: 18 years



Best Case: \$ 160,000 Worst Case: \$ 200,000

### Comp #: 414 Playground Sand - Replenish

Location: Parks adjacent to Painted Desert Dr, Lesharo Trail & Salali Trail/Nikita Dr

Funded?: Yes.

History: Installed during 2018.

Comments: There is no expectancy to completely replace the sand. This component provides funding to replenish the sand with a 2" layer, which is approximately 95 tons. Observed to be soft and full.

Quantity: Approx 9,500 Sq Ft

Quantity: (1) Roof, ~440 Sq Ft

Useful Life: 8 years

Remaining Life: 6 years



Best Case: \$5,100 Worst Case: \$6,300

Cost Source: ARI Cost Database

### Comp #: 420 Ramada Roof - Replace

Location: Park adjacent to Painted Desert Dr

Funded?: Yes.

History: Installed during 2018.

Comments: Long life expectancy under normal circumstances. It would still be prudent to plan for replacement eventually, even if just for aesthetic purposes. Observed to be intact and in good condition.

Useful Life: 30 years

Remaining Life: 28 years



Best Case: \$7,000 Worst Case: \$9,000

### Comp #: 501 Block Walls - Repair

Location: Common areas throughout community

Funded?: Yes.

History: Installed during 2018.

Comments: Walls are expected to last the life of the community under normal circumstances. This component funds an allowance for repairs and/or partial replacement due to excessive settling or other sources of damage.

Quantity: Approx 96,500 Sq Ft

Quantity: Approx 96,500 Sq Ft

Useful Life: 25 years

Remaining Life: 23 years



Best Case: \$ 25,000 Worst Case: \$ 35,000

Cost Source: ARI Cost Allowance

### Comp #: 502 Block Walls - Repaint

Location: Common areas throughout community

Funded?: Yes.

History: Painted during 2018.

Comments: Surfaces were observed to be uniform and in good shape.

Useful Life: 6 years

Remaining Life: 4 years



Best Case: \$35,000 Worst Case: \$45,000

### Comp #: 505 Metal Fence - Replace

Location: North perimeter of community (excludes fencing past perimeter walls on Panola Dr & Talula Trail)

Funded?: Yes.

History: Installed during 2018.

Comments: Observed to be intact and secure. Future replacement should be anticipated.

Useful Life: 30 years

Remaining Life: 28 years



Quantity: Approx 500 LF

Quantity: Approx 210 LF

Best Case: \$18,000 Worst Case: \$22,000

Cost Source: ARI Cost Database

### Comp #: 507 Culvert Rails - Replace

Location: Common areas throughout community

Funded?: No. These are iron pipe rails mounted on top of concrete culverts. They have an extended life span with no expectancy to replace in the foreseeable future. Inspections and repairs should be addressed as a maintenance expense when needed. History: Installed during 2018.

Comments:

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

### Comp #: 510 Metal Surfaces - Repaint

Location: Common areas throughout community

Funded?: Yes.

History: Painted during 2018.

Comments: Surfaces were observed to be uniform and in good shape. This component funds to periodically repaint approximately 500 LF of metal fencing, 210 LF of culvert rails and the ramada roof. Repainting of metal surfaces has been scheduled to coincide with the block walls repainting projects.

Quantity: Fence, Rails, Ramada

Quantity: Lines, Valves, Heads

Useful Life: 6 years

Remaining Life: 4 years



Best Case: \$ 3,500 Worst Case: \$ 4,500

Cost Source: ARI Cost Database

## Comp #: 600 Irrigation System - Replace

Location: Common areas throughout community

Funded?: No. It is beyond the scope of this Reserve Study to quantify and assess conditions of the irrigation system. Funding can be provided for future replacement at the client's request, but we would need to be provided with cost and life expectancy estimates. Repairs and partial replacements should be included in the annual landscape maintenance budget. History: Installed during 2018.

Comments:

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

### Comp #: 610 Irrigation Controllers - Replace

Location: Common areas throughout community

Funded?: Yes.

History: Installed during 2018.

Comments: There are (6) Rain Dial and (1) Leit controllers. Appear to be functional and in good shape.

Useful Life: 12 years

Remaining Life: 10 years



Quantity: (7) Controllers

**Quantity: Numerous Valves** 

Best Case: \$5,000 Worst Case: \$7,000

Cost Source: ARI Cost Database

### Comp #: 630 Backflow Valves - Replace

Location: Common areas throughout community

Funded?: No. Backflow valves typically last a long time. They can often be repaired and rebuilt rather than replaced. Recommend repairing or replacing as needed with Operating funds.

History: Installed during 2018.

Comments:

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

### Comp #: 640 Landscape Granite - Replenish

Location: Common areas throughout the community

Funded?: Yes.

History: Installed during 2018.

Comments: Complete replacement of the landscape granite is not anticipated. Coverage will deplete over time, so this component funds an allowance to top dress the existing granite with a new 1" layer, which is approximately 4,510 tons.

Quantity: Approx 901,800 Sq Ft

Quantity: (8) Drywells

Useful Life: 10 years

Remaining Life: 8 years



Best Case: \$ 260,000 Worst Case: \$ 320,000

Cost Source: ARI Cost Database

### Comp #: 660 Drywells - Inspect/Clean

Location: Common areas throughout community

Funded?: Yes.

History:

Comments: Drywells need to be inspected and cleaned out periodically to ensure proper operation and to prevent failure.

Useful Life: 5 years

Remaining Life: 3 years



Best Case: \$4,000 Worst Case: \$5,000

Cost Source: ARI Cost Allowance

## Comp #: 662 Drywells - Partial Replace

Location: Common areas throughout community

Funded?: Yes.

History: Installed during 2018.

Comments: There is no expectancy to replace all drywells under normal circumstances. This component funds a long-term allowance for partial replacement in the event some do fail.

Quantity: (8) Drywells

Useful Life: 30 years

Remaining Life: 28 years



Best Case: \$ 17,000 Worst Case: \$ 23,000

Allowance to replace (1) drywell

Cost Source: ARI Cost Allowance