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FORENSIC & SPECIALTY ENGINEERING

February 29, 2024 R1

Mesquite Groves Estates Board of Directors  
c/o Taylor Sullivan, Community Manager  
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**PROPERTY:** MESQUITE GROVES ESTATES  
CHANDLER, ARIZONA

**SERVICE:** FULL RESERVE FUND ANALYSIS

**ATTACHMENT:** 23-0446 – FINAL REPORT

Dear Ms. Sullivan and members of the Board of Directors:

As requested by Ms. Taylor Sullivan and Vision Community Management on your behalf, Criterium-Kessler Engineers has completed a Full Reserve Study for Mesquite Grove Estates. We submit the attached report for the Board's consideration and use.

This Reserve Study has been performed in general accordance with Community Association Institute (CAI) National Reserve Study Standards.

We observed the property Thursday, January 16, 2024. Our findings and recommendations are principally based on observations made during our on-site visual observation performed by Dan Kessler.

We have reviewed the Association's Declarations, provided financial and repair /maintenance records, real estate information, and other public mapping resources.

The report should be reviewed in its entirety, including its Appendices, which contain the financial analysis, captioned photographs, and reference documents.

As a result of our on-site inspections and other investigations, we find the common components of your community to be in generally good to fair condition. We did observe several deficiencies and deferred repairs, which are noted in the report.

Independently Owned and Operated

In summary, given the \$445,754 starting balance of the Reserve Fund on January 1, 2024 and assuming the following data:

- ✓ Ongoing monthly rate of contribution to the reserves at \$2,914 carried forward unchanged throughout the 30-year planning period,
- ✓ Using an anticipated average investment rate of return of 1.3% per year (provided by the Association),
- ✓ Using an anticipated rate of inflation of 4.0% per year (provided by the Association),
- ✓ A reserve threshold of \$230,000,

Our financial analysis indicates that the Association's current level of funding will prove **inadequate** to cover anticipated reserve expenditures throughout the 30-year reserve period.

Further, the 30-year total of projected reserve expenditures include the current cost estimates inflated at the percentage noted previously are \$8,948,200, inflated, and \$6,907,372 non-inflated. This is an annual average of \$298,273 inflated, and \$230,246 non-inflated.

Due to drawdowns to pay for these reserve expenses, projected year-end balances would drop below the threshold in Year 3 (2026), become negative in Year 6 (2029), and reach a theoretical accumulated negative value of approximately (\$7,435,168) at the end of the planning period in Year 30 (2053).

To enable the Association to meet future reserve repair and replacement expenses, this report utilizes minimum reserve threshold fund balances be maintained starting at \$230,000 (inflated annually at the selected inflation rate). The threshold was selected by the provider and is equal to the average annual non-inflated reserve expenditures over 30-years. A reserve fund that remains above this threshold is considered to be fully funded.

Since the reserve funding is inadequate, we have provided three alternate funding plans for the Board's consideration that will result in fully-funded Association reserves (i.e. above the threshold level). The plans represent different levels of risk depending upon how the Association manages the fund and/or seeks to become fully funded.

In reviewing the engineering assumptions, cost estimates and projected fund values herein, please understand that their accuracy diminishes as time passes—particularly in volatile economic environment. Long range facility maintenance projections are intended only to indicate the likely pattern of reserve expenditures and to guide financial planning. Criterium-Kessler Engineers agrees with CAI's recommendation that reserve studies should be updated regularly to allow periodic adjustment of facility plans and funding strategies.

Further, some Boards of Directors perform annual reviews and adjustments as part of their budgeting process. Our format allows for this type of increased planning should the Board of Directors choose to engage in an annual iterative process.

If you have any questions or would like to discuss further services, please contact Dan Kessler at 480.218.1969.

Criterion-Kessler Engineers appreciates this opportunity to assist Board in support of the Association's facility and financial planning.

Thank you for your confidence in Criterion-Kessler Engineers.

**CRITERIUM-KESSLER ENGINEERS**



Dan Kessler, R.S.  
President  
Criterion-Kessler Engineers

**STANDARD RESERVE STUDY**  
**The Mesquite Grove Estates Community**  
**YEARS 2024 - 2053**



*Prepared for:*  
Mesquite Grove Estates  
Board of Directors  
c/o Vision Management Company  
Attention: Taylor Sullivan, Community Manager  
16625 S. Desert Foothills Pkwy  
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*Prepared by:*



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Project Number: 23-0446

Final Submittal: February 29, 2024



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## 1.0 INTRODUCTION

Following authorization by the Mesquite Grove Estates Homeowners Association Board of Directors, Criterion-Kessler Engineers has conducted a Standard full Reserve Study of your 205-unit residential community located in Chandler, Arizona. The results of this study are consistent with the scope in our proposal dated October 19, 2023.

This report must be reviewed in its entirety to understand our findings and their limitations. The Appendices are an integral part of this report and must be included in any review. Please refer to Appendix D for definitions of common terms of reference used herein and Appendix E for an overview of different reserve study funding methodologies.

We have conducted the study in general accordance with the National Reserve Study Standards published by the Community Association Institute (CAI). Please refer to Appendix D which contains a copy of the CAI standards.

This study was conducted by licensed Professional Engineers and other qualified staff working under the responsible charge of a CAI-certified Reserve Specialist. Please refer to Appendix F for the qualifications of the project team.

On-site data collection occurred on the following date(s):

- ✓ January 16, 2024

Dan Kessler, President of Criterion-Kessler Engineers performed this study. This report is principally based on our on-site visual inspection(s) conducted on January 16, 2024. Mr. Kessler prepared this report and the attached financial analysis. Mr. Chuck Jones, PE reviewed his findings, and presents this confidential report for the Board's review and use.

In reviewing the engineering assumptions, cost estimates and projected fund values located in this report, please understand that their accuracy diminishes greatly beyond Year 5. Long-range facility maintenance projections are intended only to indicate the likely pattern of reserve fund expenditures and to guide financial planning. Criterion-Kessler Engineers agrees with CAI's recommendation that reserve studies should be updated regularly to allow periodic adjustment of facility plans and funding strategies.

For example, given typical service lives, our 30-year cash flow analysis has not anticipated contributions to reserves to offset savings for these longer-term expenses:

- ✓ Brick and concrete masonry re-pointing and renewal of joint sealants
- ✓ Sanitary sewer line replacement or significant repairs
- ✓ Bridges / buildings / etc.

However, if the Association updates their reserve study periodically, and continue to use a 30-year planning horizon, then all these eventual reserve expenditures will be anticipated well before they become pressing needs.

## 2.0 EXECUTIVE SUMMARY

In summary, our on-site assessment revealed the common components of the property to be in good to fair general condition and generally well-maintained. We observed several deficiencies and deferred repairs that may affect the remaining useful life of some of the common components. These are noted within the report where appropriate.

We have identified an inventory of Association-responsible common components that are likely to require periodic repair or replacement, or other recurrent reserve investment.

Our on-site observations were performed to form an opinion of the remaining useful life (RUL) of the common components based upon condition and use. We have estimated the current cost of required reserve fund expenditures for their repair or replacement, and have projected annual reserve fund expenditure budgets over a 30-year planning period.

The Community Manager, Ms. Taylor Sullivan, has provided us with information on the Association's Reserve Fund and the current funding plan. Our initial financial analysis of the current reserve funding is based on the data supplied.

In summary, given the \$445,754 starting balance of the Reserve Fund on January 1, 2024 and assuming the following data:

- ✓ Ongoing monthly rate of contribution to the reserves at \$2,914 carried forward unchanged throughout the 30-year planning period,
- ✓ Using an anticipated average investment rate of return of 1.3% per year (provided by the Association),
- ✓ Using an anticipated rate of inflation of 4.0% per year (provided by the Association),
- ✓ A reserve threshold of \$230,000,

Our financial analysis indicates that the Association's current level of funding will prove **inadequate** to cover anticipated reserve expenditures throughout the 30-year reserve period.

Further, the 30-year total of projected reserve expenditures include the current cost estimates inflated at the percentage noted previously are \$8,948,200, inflated, and \$6,907,372 non-inflated. This is an annual average of \$298,273 inflated, and \$230,246 non-inflated.



Due to drawdowns to pay for these reserve expenses, projected year-end balances would drop below the threshold in Year 3 (2026), become negative in Year 6 (2029), and reach a theoretical accumulated negative value of approximately (\$7,435,168) at the end of the planning period in Year 30 (2053).

To enable the Association to meet future reserve repair and replacement expenses, this report utilizes minimum reserve threshold fund balances be maintained starting at \$230,000 (inflated annually at the selected inflation rate). The threshold was selected by the provider and is equal to the average annual non-inflated reserve expenditures over 30-years. A reserve fund that remains above this threshold is considered to be fully funded.

Since the reserve funding is inadequate, we have provided three alternate funding plans for the Board’s consideration that will result in fully-funded Association reserves (i.e. above the threshold level). The plans represent different levels of risk depending upon how the Association manages the fund and/or seeks to become fully funded.

The following chart provides an overview of the current funding plan and suggested alternate funding plans that the Board may choose to implement to meet future reserve funding requirements.

PLANS >>	CURRENT	ALTERNATE 1	ALTERNATE 2	ALTERNATE 3
Starting Reserve Balance (2024)	\$445,754	\$445,754	\$445,754	\$445,754
Annual Increase (Year 1)	None	35%	40%	40%
Annual Increase (Year 2)	None	95%	55%	75%
Annual Increase (Year 3)	None	50%	50%	75%
Annual Increase (Year 4)	None	50%	50%	40%
Annual Increase (Year 5)	None	50%	46%	40%
Special Assessments	None	None	None	\$250,000 x 2
2024 Monthly Reserve Deposit	\$2,914	\$3,935	\$4,081	\$4,081
2053 Monthly Reserve Deposit	\$2,914	\$56,784	\$60,840	\$43,596
Ending Reserve Balance (2053)	(\$7,435,168)	\$9,724,484	\$10,771,391	\$6,378,133
Years Below Threshold	28	1	1	1

**TABLE 2.0-1: CURRENT AND ALTERNATE RESERVE FUNDING PLAN OVERVIEW**

## 3.0 PURPOSE & SCOPE

### 3.1 OBJECTIVES

The purpose of this reserve study is to determine a reserve expenditure plan for the Association, to evaluate the current rate of contribution to the reserve fund, and, if required, to suggest alternate funding strategies.

This report is intended for use as a tool by the Association's Board of Director's for considering and managing future financial obligations, for determining appropriate reserve fund allocations, and for informing the individual Homeowners of the Association's required reserve expenditures and the resulting financial plan.

For purposes of financial planning, Association-responsibility expenses are typically divided into two categories.

- ✓ Operation and maintenance (O&M) of commonly-held elements of real property and other assets. These O&M expenses usually include taxes, insurance, property management costs, utilities, and other service fees.
- ✓ Reserve expenditures for major periodic repairs and replacement of commonly-held elements.

Normal, recurring O&M costs are typically paid by the individual owners through periodic assessments or service fees equal to their share of the annual budget, which is estimated based on cost projections of either actual or average levels of expense.

Some additional contingency amount may be included in annual O&M budgets to result in a year-end surplus which is carried forward year-to-year to cover variations in annual costs or any uninsured losses. This carry-over is often referred to as an operating reserve and is not to be confused with the reserve budget associated with this study.

These O&M costs, their funding and operating reserves are not typically considered by a reserve study.

Long-term reserve expenditures, the funding plan, and ensuring adequate reserve fund balances are the focus of this Reserve Study.

Reserve Studies are a budgeting tool, and are important to provide a roadmap for a community to set aside sufficient funds for the long-term, periodic reserve expenditure requirements. This helps preserve the value of the community and the units within it.

Our reserve expenditure forecast is more reliable over its first few years than in later years. History demonstrates that, as time progresses, property conditions and management strategies will change. As a result, planned scopes of work may be altered or deferred. Actual cost in the marketplace will vary from estimates. Actual rates of inflation and returns on investment *will vary from projections*.

For these reasons, we concur with Community Association Institute guidelines and recommend that this reserve study be updated every three to five years. Significant changes in a community and/or the economy may dictate more frequent updates. Recently, many associations choose to perform a yearly update; this allows them to remain current and focused despite frequent Management or Board turnovers, and significantly aids in the annual budgeting process, particularly with an inflation rate running above historic averages for the last few years.

### 3.2 LEVEL OF SERVICE

The Community Association Institute (CAI) identifies four levels of service for Reserve Studies:

- I. Full Reserve Study, with site visit/on-site review
- II. Reserve Study Update, with site visit/on-site review
- III. Reserve Study Update, without site visit/off-site review
- IV. Preliminary Reserve Study, Community not yet constructed

All may be appropriate for a community, depending on the condition of the facility and the phase of their planning cycle. The CAI National Reserve Study Standard in Appendix D contains more detail on these levels of service and the scope of study of each of them.

Our current study is Level I Full Reserve Study.

Our actual scope of service is enhanced and exceeds the CAI standard in several principal ways:

- ✓ Our investigation and evaluation of the property is performed by, or overseen by experienced professional engineers and engineering technicians
- ✓ Our plan includes maintenance requirements that meet the definition of a reserve asset, where appropriate
- ✓ Our knowledge and expertise related to buildings and infrastructure elements may provide significant insight to our clients either through the report, or in follow-on discussions or projects
- ✓ Depending upon our client's requirements, and the type of study selected, we also provide an overview of the reserve process and a presentation of the results to the Board of Directors and/or the community at large.
- ✓ Reserve studies frequently reveal the need for follow-on specialized engineering consulting; as a licensed structural and civil engineering firm, the knowledge we gather during the reserve process may benefit the community in the future on special requirements. Where appropriate, we have included those studies – although some associations prefer to leave those studies in their operating budgets.

### 3.3 SUPPLEMENTAL STUDIES

Although not within the scope of a reserve study, CAI recommends two supplemental reports in recognition that the life cycle costs of a community may be comprised of more than replacement or repair of common components. This recommendation includes developing and maintaining a preventative maintenance manual and performing periodic structural inspections (where appropriate). The need for these recommended supplemental reports has become more apparent over the last few years due to the number of communities nationwide with significant deferred maintenance, particularly those with potentially serious structural concerns that are not being addressed.

Criterion-Kessler Engineers is in full concurrence of the need for these two supplemental reports and as a licensed consulting engineering firm, can provide these services to community associations. Additionally, in our opinion, there are other studies that should be performed. Therefore, additional recommended studies can be found in Section 4.3 (Condition Assessment), under the subsection titled "Professional Studies," and the reserve study component list (Appendix A), which also provides estimated fees and periodicity.

The following is the community's status on the two recommended CAI supplemental reports:

- ✓ Preventative Maintenance Manual: The community does not have a written preventative maintenance manual/checklist; we recommend that the community develop one that covers the major components and assets.
- ✓ Periodic Structural Inspections: The community has no buildings for which a structural inspection is required. However, we recommend a structural inspection of the block walls by a licensed engineering firm (such as Criterion-Kessler Engineers).

Structural inspections may include components other than buildings such as block walls, staircases, and balconies/decks—these would be included in the Professional Studies section.

If structural issues are discovered, repair designs should be developed by a licensed engineering firm, and quality assurance repairs should be inspected by that firm to ensure compliance to the design documents and that repairs are performed correctly. All of these costs should be considered a reserve expenditure.

### 3.4 SOURCES OF INFORMATION

We obtained information from a variety of sources including the following:

#### Board and Committee Members

- ✓ Susan Carroll, Board President
- ✓ Rick Faw, Board Treasurer
- ✓ Roger Rouse, Finance Committee

#### Other

- ✓ Taylor Sullivan, Community Manager

The following documents were provided to us and reviewed:

- ✓ CC&Rs
- ✓ Original Plat Maps
- ✓ Repair estimates from DR Paint and Rose Paving

## **4.0 PHYSICAL ANALYSIS**

### 4.1 PROPERTY DESCRIPTION

Please refer to Appendix C for captioned photographs for selected assets throughout the community.

Mesquite Grove Estates is located in Chandler, Arizona is located northeast of S Gilbert Road and East Riggs Road. It was developed by William Lyons Homes. Construction of the HOA started in about 2001 and was completed in approximately 2004. Mesquite Grove Estates consists of 205 single family homes.

Common community components for which the association is responsible include but are not limited to the following: Three entrance gates, perimeter block walls, landscape, irrigation, concrete sidewalks and gutters, monument signs, lighting, playground, greenbelt areas, and asphalt roads in the gated community.

## 4.2 COMMON COMPONENTS

Please refer to Appendix A for the Common Component Inventory.

Association-responsible common components include

- ✓ Entrance Gates
- ✓ Perimeter block wall and wrought iron view fences
- ✓ Landscaping
- ✓ Irrigation
- ✓ Concrete sidewalks
- ✓ Monument signs
- ✓ Lighting
- ✓ Playground
- ✓ Greenbelt areas
- ✓ Asphalt roads

## 4.3 CONDITION ASSESSMENT

### 4.3.1 Site Improvements

#### Descriptions & Observations

The site is generally flat with some slope from west to east. The topography is suitable.

Roof and surface storm water runoff drain to on-site retention basins located throughout the community to include two along the west side of the community, one in the center of the community (the largest park), one near the south of the property, and at the far south end of the community exterior to the perimeter walls and adjacent to East Riggs Road. Overall, the storm drainage system appears to function as designed, although some repair is required in several locations.

Several of the drainage culverts are not draining completely and/or require refreshing of the river rock. Additionally, the drainage in the main park has been modified in what appears to be an effort to address water management issues. This appears to have created new issues and should be inspected by a licensed civil engineer with an appropriate mitigation plan developed.

The network of interior roads providing access to the units are in good general condition. The community should continue a consistent application of seal coating, crack-sealing, and repairs to optimize the remaining useful life of the asphalt.

The stamped asphalt at the entrance off of South Gilbert Road is in good to fair condition with some significant cracks in the asphalt. This should be repaired and maintained in the same fashion as the other asphalt roads in the community.

The network of sidewalks and other walkways providing pedestrian routes across the property is in good general condition, although there are several areas that should be repaired and one located adjacent to a drainage culvert was identified to the community manager through an e-mail on January 16, 2024 as being a potential safety hazard and requires repair.

The network of perimeter block walls and view fences throughout the property is in good to fair general condition. We noted a number of locates where significant erosion has exposed the wall footing/foundation – this should be inspected by a licensed engineering firm and then repaired by a qualified contractor using repair designs prepared and stamped by a licensed engineering firm.

The wrought iron fencing is in good general condition, although corrosion was observed in multiple locations. During the next paint cycle corrosion should be removed completely and the treated with corrosion inhibiting paint before the final coat is applied. In our experience, most paint vendors do not prepare the wrought iron properly. The Association should take steps to ensure the work is performed properly, even if this means hiring an independent third-party to oversee the work. The wrought iron fencing is listed for replacement in phases.

The access control systems at the three entrances appear to be original equipment and have exceeded the expected useful life. They appear to be in good condition. The swing arm controllers at the three entrances also appear to be original equipment and are in good to fair condition. The Association should expect to replace these in the next few years.

According to the community manager, the backflow preventer is currently being repaired.

The interior street lights and those located in the greenbelts and retention basins around the community appear to be the responsibility of SRP (Salt River Project). We did not observe the lights at night. Several of the lights are leaning and SRP should be contacted to make repairs.

Granite replenishment has been entered into the reserve study to be performed in three phases. There are several areas that could use replenishment now and the erosion adjacent to walls is washing away granite in multiple locations.

Funds to perform annual drywell maintenance are provided from the Operations budget.

We understand that the irrigation controllers were replaced with Weathermatic systems by the landscaper and are part of the contract. These have been removed from the reserve study, but if this contract ends, these may need to be placed back into the study in the future.

Except as noted in Section 4.5 Current Deficiencies, the site improvements are in good general condition.

#### Selected Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all site improvements which are common components, and a detailed schedule of projected reserve expenditure budgets for these items. The following is a sample.

- ✓ Asphalt Seal Coat and Stripe in Years 2, 6, 11, 15, 19, 23, 27
- ✓ Asphalt Repairs, and Crack Seal in Years 2, 6, 23, 27
- ✓ Asphalt remove and replace is planned for Years 10 and 11
- ✓ Block Wall Repairs and Painting in Years 2, 10, 18, 26
- ✓ Concrete, Curbing, and Hardscape Repairs in Years 1, 5, 10, 15, 20, 25, 30
- ✓ Granite Refresh with 1-inch of new granite in Years 5, 6, 7, 13, 14, 15, 23, 24, 25s
- ✓ Freestanding Mailbox Kiosk Replacement in Year 16, 17, 18, 19 (performed in phases)
- ✓ Wrought Iron Fence Replacement in Years 12, 16, 20, 24, 28 (performed in phases)
- ✓ Entrance Gate Swing Arm Operators and Access Control Systems Replaced in Years 2, 3, 4

#### 4.3.2 Amenities

##### Descriptions & Observations

Park furniture is located in two parks and includes benches, picnic tables, pedestal BBQs, and picnic tables. These are in generally good condition with several replaced within the last few years and several with visible corrosion.

The pet stations are in fair to poor condition and are located throughout the community.

According to the community manager, the ramada in the main community park had the columns replaced in the last year due to corrosion. The association should work with the landscaper to ensure that the irrigation water does not come into contact with the metal, which would result in the new columns becoming corroded.



The playground equipment is in good to fair condition. The large play structure is nearing the end of its useful life and it is apparent several components have been replaced. There are other components that are deteriorating and require repairs / replacement. Parts obsolescence will also likely become an issue. The smaller pieces of playground equipment are in good general condition.

#### Selected Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all site improvements which are common components, and a detailed schedule of projected reserve expenditure budgets for these items. The following is a sample.

- ✓ Large play structure replacement in Year 3 and 28
- ✓ Smaller playground equipment replacement in Year 10
- ✓ Picnic tables and other park equipment are slated for replacement in phases

#### 4.3.3 Professional Reports

##### Descriptions & Observations

Professional studies and reports are an important aspect of successfully managing a community association since there are components and infrastructure elements that require more detailed assessments to determine estimated useful life, remaining useful life, steps that should be taken to optimize the lifecycle and the associated costs. These studies should be provided by licensed engineering firms or other third-party neutral consultants who would not perform the required work.

Additionally, the results of these studies can be utilized for future reserve studies for determining when the relevant components should receive maintenance and/or replacement.

These studies are better budgeted for through the reserve study rather than the Operations and Maintenance (O&M) budget since they are performed infrequently, the costs are usually such that saving toward them is of value, and maybe most importantly, when the changing board members and management companies, if left in the O&M budget, they are frequently forgotten or pushed out. This delay can result in more expensive repairs and/or earlier replacement if timely repairs are not made.

We suggest the following studies for your community:

- ✓ Structural Block Wall Evaluation – The Mesquite Grove Estates walls have serious issues that should be inspected in 2024. The block walls in a community are expensive to maintain and replace and should be inspected by a licensed structural engineering firm to evaluate the condition of all block walls, retaining walls, and wrought iron fences. After the initial inspection we recommend inspections about every 8 years thereafter unless the walls have significant issues, in which case they may need to be re-inspected more frequently. Performing this inspection the year before the walls are painted allows time for repairs before painting.

If there are significant issues that require repairs and/or replacements, repair designs should be prepared and stamped by a licensed engineer, with quality assurance inspections to ensure compliance to the plans during repair/reconstruction.

- ✓ Reserve Study – A reserve study is very important to all communities and should be performed every three to five years. Some communities will have the studies done more frequently, while others will have the performing reserve company provide annual financial updates during the budgeting process.

Studies should be performed by a qualified reserve study company and result in a FULLY FUNDED plan. Reserve studies that are missing components, or have “unfunded” components cannot be considered a fully funded plan, regardless of the final results – and this may create a high-risk financial situation for the community in the future.

- ✓ Asphalt Evaluation – Asphalt roads are a valuable and high maintenance asset that require ongoing and consistent maintenance. Asphalt typically lasts between 25 – 35 years assuming proper maintenance, however, asphalt roads and parking areas in a community can be very expensive and to ensure the community is planning for this expense, the asphalt should be regularly evaluated by a licensed civil engineering or asphalt consulting firm. To ensure unbiased results, the selected firm should not be affiliated with an asphalt company. This company should identify concerns and issues and provide a report with repair suggestions.
- ✓ Water Management / Drainage Study – Drainage and water management is a key element of the infrastructure and issues can create significant and expensive issues. Mesquite Grove Estates has water management issues that are affecting the block walls and other elements within the community and it appears that the landscaper has been tasked to make repairs – and in some cases the issues are becoming worse. A licensed and qualified civil engineer with water management expertise should be brought in to perform an inspection in 2024 with repairs made in accordance with the report.

### Common Components & Required Reserve Expenditures

Appendix A contains an inventory of all site improvements which are common components, and a detailed schedule of projected reserve expenditure budgets for these items.

#### 4.5 CURRENT DEFICIENCIES

Our site assessment and data collection should not be considered an inspection of the assets since that is not within the scope of a reserve study. The assessments we perform are used to determine the appropriate remaining useful asset life for the common elements. However, based on the Board of Director's list of concerns, individual owner's reports and our own observations, we note the following for your consideration. Some of these may require additional inspections.

- ✓ Sidewalk in the Tract 1 park is broken and should be replaced.
- ✓ A sidewalk in Tract E is a trip hazard and should be replaced.
- ✓ There are numerous block wall issues throughout the community that include leaning walls, seriously erosion around foundations (footings), and deterioration from water infiltration in numerous locations. As noted previously, the walls should be inspected by a licensed structural engineering firm.
- ✓ The sidewalk over the drainage culvert off of Capricorn Way (south side of the street) is damaged and has exposed rebar. This is a safety issues and should be blocked off and then repaired. The community manager was notified immediately via e-mail and we were informed the process of repair is already underway.
- ✓ Several of the pedestal BBQs and picnic tables have corrosion and are nearing the end of their useful life.
- ✓ Concrete landscape curbing is damaged in multiple locations, primarily around the two largest parks and associated with tree roots and erosion issues.
- ✓ The stamped asphalt at the entrance off of South Gilbert Road has significant cracks – these should be filled and the asphalt should be sealed the next time that the roads are seal coated.
- ✓ Many of the landscape lights at the entrance off of South Gilbert Road are corroded and damaged.
- ✓ Corrosion was observed on the main playground structure.
- ✓ Several of the drainage culverts and retention basins appear to not be draining in accordance with county requirements.
- ✓ Several of the drainage culverts and spillways require refurbishment.
- ✓ Several locations on the asphalt streets appeared to be low spots that were holding water on the surface; this will deteriorate the asphalt more quickly.

## 4.6 LIFE AND VALUATION

### 4.6.1 Opinions of Useful Life

Simply stated, for components that require periodic repairs or replacement, the frequency of work equals the typical; industry accepted expected useful life (EUL) for the type of feature:

$$\text{Component's Frequency of repair/replacement} = \text{Component's EUL}$$

And, the remaining useful life (RUL) of a component before the next repair or replacement is equal to the difference between its EUL and its age:

$$\text{RUL} = \text{EUL} - \text{Age}$$

Of course, the condition and rate of deterioration of actual site improvements and building elements rarely conform to such simple analysis. Often, a property's history and available documentation does not provide any record of a particular component's actual age.

In our experience, the effective age and actual RUL of an installed item may vary greatly from its actual age and calculated RUL. These variances depend on the quality of its original materials and workmanship, level of service, climatic exposure, and ongoing maintenance. As part of Criterion-Kessler Engineer's work on this reserve study, we have determined our opinion of the effective age, EUL and RUL of each common component based on our evaluation of its existing condition and considering those factors.

As a result, in preparing the expense schedule for reserve studies, we often:

- ✓ Accelerate the schedule of work for components found to be in poorer condition than expected for their age.
- ✓ Defer work for components observed to be in unusually good condition.
- ✓ Spread the replacement or maintenance over a series of years when that is a more realistic plan than full replacement.

Repair and replacement work for some components is often spread over many years. This may be done because not all on-site installations of a particular type of component age or deteriorate at the same rate. Or, work may be scheduled in phases to limit disruption or ease cash flow.

In summary, we have based our opinion of the remaining service life and expected frequency and schedule of repair for each common component on some or all of the following:

- ✓ Actual or assumed age
- ✓ Observed existing condition
- ✓ Association's or Community Manager's maintenance history and plan
- ✓ Our experience with actual performance of such components under similar service and exposure
- ✓ Our experience managing the repairs and replacements of such components

We use the following documentation to guide our considerations:

- ✓ Fannie Mae - Expected Useful Life Tables
- ✓ National Association of Home Builders - Life Expectancy of Components
- ✓ Marshall & Swift Valuation Service –Expected Life Expectancies

#### 4.6.2 Cost Estimating

History demonstrates that, as time progresses, property conditions and management strategies will change. As a result, planned scopes of work may be altered or deferred. Actual cost in the marketplace will vary from estimates. Of course, it is impossible to accurately predict inflation rate fluctuations. Actual rates of inflation and returns on investment will vary from projections.

Annual expenses have been projected for the study period using an annual inflation rate of 4.0%, which was provided by the Community Manager.

In developing our estimate of expenses for most common components, we have estimated a quantity of each item and a unit cost for its repair or replacement. In some cases, it is more appropriate to estimate a lump sum cost for a required work package.

Unless directed to take a different approach, we assume that contract labor will perform the work and apply appropriate installer's mark-ups on supplied material and equipment. When required or requested, our estimated costs include demolition and disposal of existing materials, and protection of other portions of the property.

When appropriate for large capital projects, we will also include soft costs for design and project management, and typical general contractor's cost for general conditions, supervision, overhead and profit.

We have based our opinion of unit and lump sum costs on some or all of the following:

- ✓ Records of previous maintenance expenses
- ✓ Previously solicited Vendor quotations or Contractor proposals
- ✓ Budgets provided and developed by others
- ✓ Our project files on repairs and replacements at other properties

We use the following publications to guide our considerations:

- ✓ Local knowledge and experience
- ✓ On-Line RS Means - Construction Cost Data
- ✓ Marshall & Swift Valuation Service – Facility Cost Index

Obtaining replacement and repair costs from vendors is beyond the scope of a reserve study.

## 5.0 FINANCIAL ANALYSIS

We have projected reserve expenditures over the next 30-years and analyzed funding options to satisfy those expenditures. The projections are based on anticipated repair or replacement schedules and estimated costs as discussed in the report. The projections also take into consideration 1.3% return on invested moneys and the inflation percentage noted above. These values and return on invested moneys are based on information provided to us by the Association. Please note that actual values and rates may vary significantly based upon economic changes and the current economic climate.

Please refer to Appendix A, which contains tables and graphs illustrating the findings discussed below and includes the following:

- ✓ **Reserve Study Summary:** Defines the criteria used for financial calculations, including the assumed inflation rate and rate of return on deposited reserve funds. Also includes is a summary of the three alternate funding plans.
- ✓ **Component Inventory:** Replacement and/or repair components broken down by categories that match the report. The table lists estimated costs as well as estimated useful lives and remaining useful lies for each component.
- ✓ **Table of Annual Reserve Expenditures:** Costs for component replacement and/or repair items broken down by year based on projections of estimated and remaining lives.

- ✓ **Summary of Funding Plan Balances for Each Alternative:** A table of yearly balances for each funding plan (if more than one) and annual reserve expenditures. Also included is a combined graph illustrating end of year balances for all funding plans over the 30-year study period.

## 5.1 RESERVE EXPENDITURE PROJECTION

Based on our field investigations and research described in Section 4.0 of this report, we have identified likely reserve expenditures throughout the study period. The components identified are those understood to be the responsibility of the Association.

A graphical summary of the current reserve plan (and alternate plans, if any) are found in Appendix A, tables titled Executive Summary, "Funding Plan Comparison Summary – 7-Year," and "Funding Plan Comparison Summary – 30-Year."

For detailed information on projected reserve expenditures, please refer to the Appendix A tables titled "Common Component Inventory and Reserve Fund Planning" and "Annual Reserve Expenditures – 30-Year Budget Projection."

Appendix A also contains tables for the current funding plan and any alternate plans that may be provided.

Please note that we have assumed that the cost of routine, annually occurring minor repair and replacement work (typically valued at less than \$3,000) will be covered by the normal Operations & Maintenance (O&M) budget. Such minimal costs may be for one-time work on a single item, or aggregated repairs of a type of component over a year.

Community associations also typically maintain common infrastructure elements that should have periodic inspections by a qualified engineering company or other vendor, such as block walls, drainage and erosion, asphalt, roofs, etc. Where appropriate, we have included budgets to ensure these inspections are performed since this may enable the association to identify and address potential issues before they become a financial burden.

We have not included any reserve expenditures for repair of casualty damage by vehicle impact, severe storm action, etc. It is assumed that such expenses would be defrayed by proceeds of insurance claims.

Projections are based on a fiscal year running from January 1 to December 31. In summary, we calculate reserve expenditures over the next thirty years of approximately \$6,804,332 annually (in current dollars) and \$8,751,019 total (in inflated dollars).

## 5.2 CURRENT FUNDING

### 5.2.1 Board-Provided Information

Our analysis and calculations are based upon the following starting data provided by the Community Manager:

<b>FISCAL YEAR STARTING DATE:</b>	January 1, 2024
<b>FOR FISCAL YEAR:</b>	2024
<b>STARTING RESERVE FUND BALANCE:</b>	\$445,754.00
<b>ON DATE:</b>	January 1, 2024
<b>CURRENT ANNUAL CONTRIBUTIONS:</b>	\$2,914 Overall per month \$34,970 Overall per year
<b>PLANNED RESERVE INCREASES:</b>	None formally adopted
<b>PLANNED SPECIAL ASSESSMENTS OR IMPACT FEES:</b>	None
<b>PROJECTED RETURN ON INVESTMENT:</b>	1.3% per year
<b>PROJECTED RATE OF INFLATION:</b>	4.0% per year

TABLE 5.2-1: PROVIDED STARTING DATA

Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed.

### 5.2.2 Current Funding Plan Projection

The Reserve Fund beginning balance for January 1, 2024 was determined from the actual budget balance on the start of the reserve period. Our initial analysis was a projection of the Association's *current* annual fund contribution rate carried forward over 30 years, with no increases.

In summary, given the \$445,754 starting balance of the Reserve Fund on January 1, 2024 and assuming the following data:

- ✓ Ongoing monthly rate of contribution to the reserves at \$2,914 carried forward unchanged throughout the 30-year planning period,
- ✓ Using an anticipated average investment rate of return of 1.3% per year (provided by the Association),



- ✓ Using an anticipated rate of inflation of 4.0% per year (provided by the Association),
- ✓ A reserve threshold of \$230,000,

Our financial analysis indicates that the Association's current level of funding will prove **inadequate** to cover anticipated reserve expenditures throughout the 30-year reserve period.

Further, the 30-year total of projected reserve expenditures include the current cost estimates inflated at the percentage noted previously are \$8,948,200, inflated, and \$6,907,372 non-inflated. This is an annual average of \$298,273 inflated, and \$230,246 non-inflated.

Due to drawdowns to pay for these reserve expenses, projected year-end balances would drop below the threshold in Year 3 (2026), become negative in Year 6 (2029), and reach a theoretical accumulated negative value of approximately (\$7,435,168) at the end of the planning period in Year 30 (2053).

To enable the Association to meet future reserve repair and replacement expenses, this report utilizes minimum reserve threshold fund balances be maintained starting at \$230,000 (inflated annually at the selected inflation rate). The threshold was selected by the provider and is equal to the average annual non-inflated reserve expenditures over 30-years. A reserve fund that remains above this threshold is considered to be fully funded.

To correct the inadequate funding for projected reserve expenditures, we have developed and provided three alternate funding approaches below (Section 5.3: Alternate Funding Plans) for the Board's consideration that will result in fully-funded Association reserves (i.e. above the threshold level). The plans represent different levels of risk depending upon how the Association manages the fund and/or seeks to become fully funded.

For detailed data, please refer to Appendix A tables and graphs titled "Alternate Plan #1, #2, or #3," and "Current Funding Plan."

### 5.3 ALTERNATE FUNDING PLANS

In this report, we suggested that the Board consider working toward and maintaining a minimum threshold fund balance of \$230,000, which is equal to the average annual reserve expenditure budget, adjusted ahead for inflation.

Since the current funding profile is in inadequate, Criterion-Kessler Engineers has prepared three alternate funding plans for the Board's consideration that would result in positive year-end balances above the threshold throughout most of the planning period. These plans take different approaches to increasing the level of funding.

### Alternate Plan 1 –

Of the three alternate plans, this is the second most expensive plan over the 30-year term of the reserve study and utilizes significant increases at the beginning of the study to achieve a fully funded balance.

- ✓ Details throughout the 30-year plan to include:
  - Year 1 (2024) – 35% increase
  - Year 2 (2025) – 95% increase
  - Years 3 – 5 (2026 – 2028) – 50% annual increases
  - Years 6 – 10 (2029 – 2033) – 17% annual increases
  - Years 11 – 30 (2034 – 2053) – No planned increases
  - No planned special assessments
- ✓ This results in a plan that dips below the \$230,000 threshold in Year 11, and then rises above the threshold and remains above the threshold for the duration of the plan.
- ✓ The monthly contribution to the reserve fund by the association rises from the current \$2,914 per month to \$56,784 per month in Year 30 (2053)
  - This breaks down to an individual monthly current fee of \$19.20 per unit per month in Year 1 (2024) and growing to \$276.99 per unit per month in Year 30 (2053)

### Alternate Plan 2 –

Of the three alternate plans, this is the most expensive plan over the 30-year term of the reserve study and utilizes more gradual (although still significant) increases at the beginning of the study to achieve a fully funded balance.

- ✓ Details throughout the 30-year plan to include:
  - Year 1 (2024) – 40% increase
  - Year 2 (2025) – 55% increase
  - Years 3 – 4 (2026 – 2027) – 50% annual increases
  - Years 5 – 6 (2028 – 2029) – 46% annual increases
  - Years 7 – 10 (2030 – 2043) – 19% annual increases
  - Years 11 - 30 (2034 – 2053) – No planned increases

- No planned special assessments
- ✓ This results in a plan that dips below the \$230,000 threshold in Year 11, and then rises above the threshold and remains above the threshold for the duration of the plan.
- ✓ The monthly contribution to the reserve fund by the association rises from the current \$2,914 per month to \$60,840 per month in Year 30 (2053)
  - This breaks down to an individual monthly current fee of \$19.91 per unit per month in Year 1 (2024) and growing to \$296.78 per unit per month in Year 30 (2053)

### Alternate Plan 3 –

Of the three alternate plans, this is the least expensive plan over the 30-year term of the reserve study and utilizes a combination of more gradual (although still significant) increases at the beginning of the study and two special assessments to achieve a fully funded balance.

- ✓ Details throughout the 30-year plan to include:
  - Year 1 (2024) – 40% increase
  - Years 2 - 3 (2025 - 26) – 75% increase
  - Years 4 – 5 (2027 – 2028) – 40% annual increases
  - Years 6 – 9 (2029 – 2032) – 15.5% annual increases
  - Years 10 - 30 (2033 – 2053) – No planned increases
  - Special Assessments in Years 8 (2032) and 10 (2034) at \$250,000 each
- ✓ This results in a plan that dips below the \$230,000 threshold in Year 11, and then rises above the threshold and remains above the threshold for the duration of the plan.
- ✓ The monthly contribution to the reserve fund by the association rises from the current \$2,914 per month to \$43,596 per month in Year 30 (2053)
  - This breaks down to an individual monthly current fee of \$19.91 per unit per month in Year 1 (2024) and growing to \$212.66 per unit per month in Year 30 (2053)

### 5.4 FUNDING METHODOLOGIES

The approach to funding methodologies continues to be a subject of much discussion and can create confusion for those responsible for long-term strategic planning for a community.

Appendix E provides general information related to Funding Methodologies and is not specific to your Association or Community. These are included to provide as a educational information and a framework for consideration of the attached study, and to explain our funding analysis approach.

We also recommend that the Board review the Community Association Institute (CAI) National Reserve Study Standards attached in Appendix D.

The Community Association Institute (CAI) recognizes several funding methodologies, all of which may be used to satisfy these principles:

- ✓ Sufficient Funds When Required
- ✓ Maintains Property Values
- ✓ Stable Contribution Rate over the Years
- ✓ Evenly Distributed Contributions over the Years
- ✓ Fiscally Responsible

For this reserve study, Criterion-Kessler Engineers has utilized a cash flow based funding approach as described below:

#### 5.4.1 Cash Flow Based Funding

***Criterion-Kessler Engineer's suggested approach to reserve planning utilizes a cash flow model, which is compatible with how homeowners associations actually manage and utilize the money in a reserve fund.***

A cash flow based funding plan is prepared so that contributions to reserves are selected to be sufficient to offset future variable annual reserve expenditures.

Our engineering evaluation and planning yields a projected annual reserve expenditure budget schedule over the planning period. This reserve expenditure plan and the Association's current rate of contribution to reserves is entered into our computer model.

The model allows us to determine whether the Association's current rate of contribution will prove sufficient to meet reserve obligations over the planning period.

If the Association's current rate of contribution is not sufficient, our model allows us to develop alternate contribution strategies for the Association's consideration.

#### Baseline Funding

The goal of baseline funding is to maintain positive year-end balances throughout the planning period.

## Threshold Funding

One strategy to ensure there will be sufficient funds available to cover unplanned emergencies is to maintain prudent minimum threshold reserve balances. In the face of unusual and uninsured expenses, this may eliminate the need for either making a special assessment or borrowing money.

Often, the initial threshold is established as some multiple of the average annual reserve expense budget, and then inflated forward at the selected rate of inflation.

Maintaining significant threshold balances has the additional benefit of allowing the Association to generate greater returns on investments and thereby reduce the rate of Owners' contribution to reserves.

Of course, the benefits of establishing larger threshold balance values must be weighed against Unit Owners' preference to control their own funds.

In any event, the goal of threshold funding is to ensure that year-end reserve fund balances will not fall below some minimum value. The threshold has been developed with the Association and will increase at the selected annual rate of inflation.

### 5.4.2 Special Assessments

The goal of nearly all reserve studies is to establish a regular, periodic rate of contribution to reserves which ensures there will be sufficient funds when required.

However, sometimes it is necessary to boost the reserve balance quickly, before there is adequate time to accumulate funds through regular savings. In those cases, assuming the Unit Owners' personal finances can support it, assessing a lump sum special payment may be more expeditious.

Special assessments are often tied to, or ear-marked for, some particular reserve expenditure. This may be a periodic but unusually high expense such as re-paving or re-roofing. Or, it may be to collect funds to pay for some desired new amenity, such as a new tennis court or an elevator.

## 6.0 STANDARDS AND LIMITATIONS

Criterion-Kessler Engineers shall perform duties to at least the professional standards consistent with a licensed Professional Engineer, but does not guarantee or warrant that all adverse conditions concerning the property can be or will be discovered and included in the report. The photographs are an integral part of this report and must be included in any review.

The information in this study is not to be considered a warranty of condition, quality, compliance, or cost. No warranty is implied, offered, or provided.

This study is limited to the visual observations made during our inspection. We did not undertake any excavation, conduct any destructive or invasive testing, remove surface materials or finishes, or displace furnishings or equipment. The observations described in this study are valid on the dates of the investigation.

Accordingly, we cannot comment on the condition of systems that we could not see, such as buried structures and utilities, nor are we responsible for conditions that could not be seen or were not within the scope of our services at the time of the site assessment. This is a reserve study and not a building or structural inspection. Comments and discussion on conditions are primarily to support remaining useful life for a component and not to be considered an evaluation or inspection.

We did not perform any computations or other engineering analysis as part of this study, nor did we conduct a comprehensive code compliance investigation.

Financial data, records of past expenses, and cost estimates provided by others have been taken in good faith and at face value. No audit or other verification has been performed.

Reserve budgets are opinions of likely expense based on reasonable cost estimates. We have not obtained competitive quotations or estimates from contractors. Actual costs can vary significantly, based on the specific scope of work developed, availability of materials and qualified contractors, and many other variables. We cannot be responsible for variances. We also are not responsible for assets that fail early or are not adequately maintained, which may result in higher costs over time.

The observations described in this study are valid on the dates of the investigation and have been made under the conditions noted in the report.

Criterion-Kessler Engineers does not offer financial counseling services. Although reasonable rates of inflation and return on investment must be assumed to calculate projected balances, no one can accurately predict actual economic performance. Although reserve fund management and investment may be discussed during the course of the study, we do not purport to hold any special qualifications in this area.

We recommend that the Board also seek other professional guidance before finalizing their current reserve fund planning. Depending on issues, which may arise, an appropriate team of consultants to aid decision-making might include the property manager, accountant, financial counselor, insurance agent and attorney.

Criterion-Kessler Engineers prepared this confidential report for the review and use of the Board of the Association. We do not intend any other individual or party to rely upon this study without our express written consent. If another individual or party relies on this study, they shall indemnify, defend, and hold Criterion-Kessler Engineers, Criterion Engineers, its subsidiaries, affiliates, officers, directors, members, shareholders, partners, agents, employees and such other parties in interest specified by

Criterion-Kessler Engineers harmless for any damages, losses, or expenses they may incur as a result of its use. Any use or reliance of the report by an individual or party other than shall constituted acceptance of these terms and conditions.

## 7.0 CONCLUSION

Criterion-Kessler Engineers appreciates this opportunity to assist Community and the Board in support of the Association's facility and financial planning. We are pleased to present this report for the Board's consideration and use.

To the best of our ability, we have attempted to work in the best interest of the Association and to aid the Board toward fulfillment of their fiduciary responsibilities and obligations to the individual homeowners who comprise the association's membership.

In our professional opinion, and within the limitations disclosed elsewhere herein, all information contained herein is reliable and appropriate to guide the Board's deliberations and decision-making.

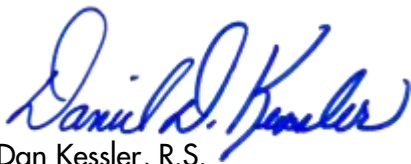
We recommend that the Board seek other appropriate professional guidance before finalizing their current reserve planning. Depending on issues which may arise, consultants who could aid the Association's decision-making might include their community manager, certified public accountant, financial counselor, and/or attorney.

Criterion-Kessler Engineers' work for this study has been carried out in strict accordance with the Code of Ethics of the National Society of Professional Engineers (NSPE), and the Community Association Institute (CAI). We consider our report confidential to the Association, and will not share its content with anyone but the Client without their knowledge and release.

We are unaware of any other involvement or business relationship between Criterion-Kessler Engineers and the Developer, or individual Unit Owners, or members of the Board, or your Property Manager or any other Vendors or Contractors that constitutes any conflict of interest.

Please contact us at 480.218.1969 or 702.294.3160 to discuss any immediate questions or comments.

### **CRITERIUM-KESSLER ENGINEERS**



Dan Kessler, R.S.

President

Criterion-Kessler Engineers

## APPENDICES

### **A – Financial Exhibits**

- Funding information from the Association
- Common Component Inventory Reserve Expense Planning
- 30-Year Projection of the Current Funding Plan
- 30-Year Projection of the 3 Alternate Funding Plans

### **B – Graphic Exhibits**

- Aerial Photographs / Images

### **C – Photographs**

### **D – Reference Documents**

- Initial Information from Association
- CAI National Reserve Study Standards
- Definitions of Other Terms & References used in the report
- Definitions of Building Systems – Common Abbreviations and Acronyms

### **E – Funding Methodologies**

### **F – Project Team Qualifications**



# APPENDIX A

## FINANCIAL EXHIBITS

Data Provided	
Number of Units	205
Age of Community (in years)	23
Fiscal Year Begins	1/1/2024
Reserve Funds at Beginning of Fiscal Year	\$445,754.00
Rate of Investment Return on Reserve Funds (%)	1.25%
Inflation Rate (%)	4.00%
Initial Minimum Threshold	\$230,000.00
Current Plan - Reserve Funding Plan Contribution Details	
Per Unit/Month	\$14.22
Per Unit/Year	\$170.64
Total/Month	\$2,915.10
Total Annual	\$34,981.20
Expenditures / Resulting Balance*	
Total Reserve Expenditures Over 30 Years (Inflated)	\$8,948,199.69
Average Annual Reserve Expenditures (Inflated)	\$298,273.32
Total Reserve Expenditures Over 30 Years (Non-Inflated)	\$6,907,372.00
Average Annual Reserve Expenditures (Non-Inflated)	\$230,245.73
<b>Deficit/ Surplus - End of Planning Period Year 30</b>	<b>-\$7,435,168.42</b>

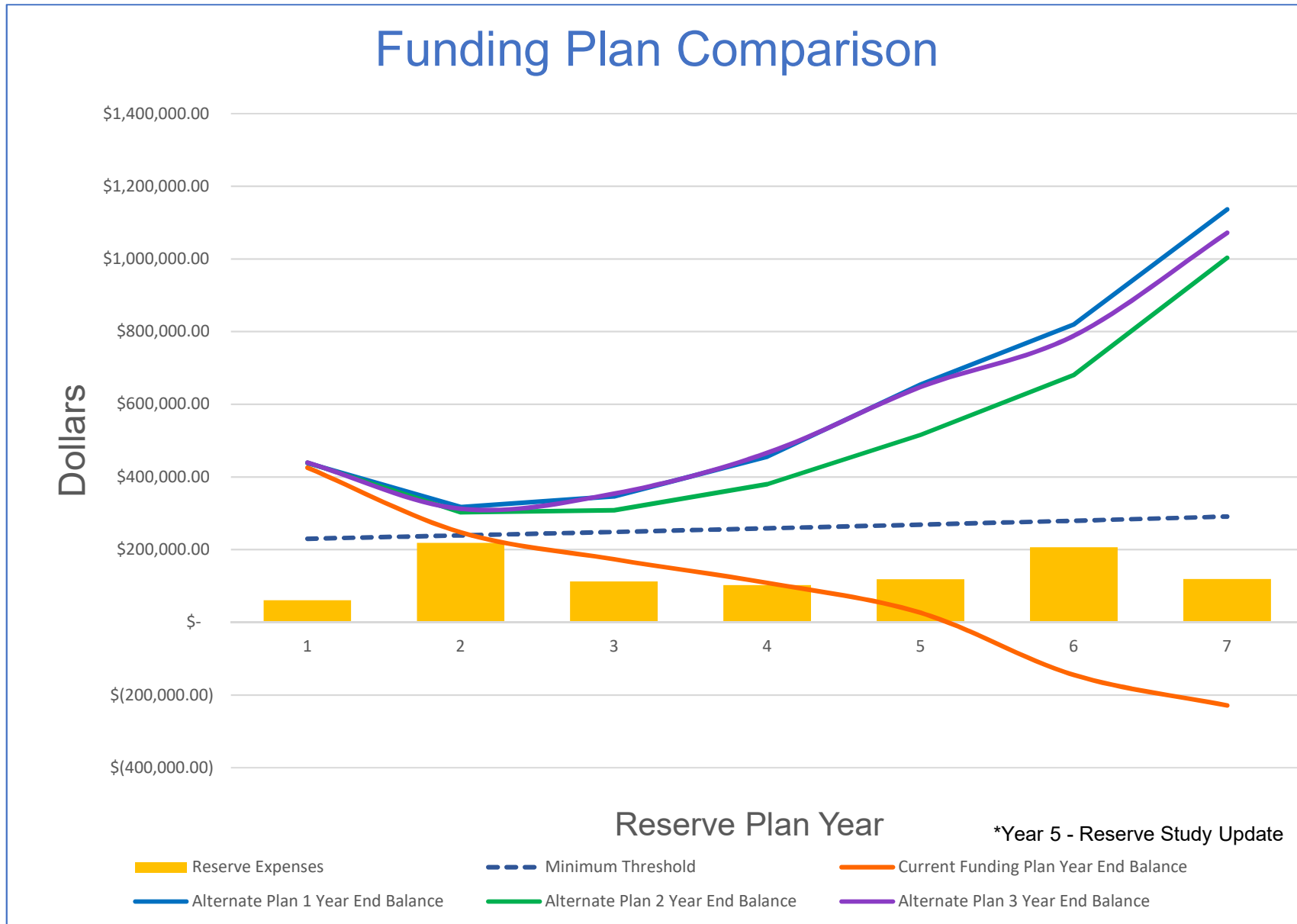
Alternate Plan 1 - Reserve Funding Plan Contribution Details	
Per Unit/Month - Year 1	\$19.20
Per Unit/Year - Year 1	\$230.36
Total/Month - Year 1	\$3,935.39
Total Annual - Year 1	\$47,224.62
Special Assessment / Impact Fees - Annually	\$0.00
Per Unit/Month - Year 30	\$276.99
Per Unit/Year - Year 30	\$3,323.93
Total/Month - Year 30	\$56,783.86
Total Annual - Year 30	\$681,406.34
Expenditures / Resulting Balance*	
Total Reserve Expenditures Over 30 Years (Inflated)	\$8,948,199.69
Average Annual Reserve Expenditures (Inflated)	\$298,273.32
Total Reserve Expenditures Over 30 Years (Non-Inflated)	\$6,907,372.00
Average Annual Reserve Expenditures (Non-Inflated)	\$230,245.73
<b>Deficit/ Surplus - End of Planning Period Year 30</b>	<b>\$9,724,483.68</b>

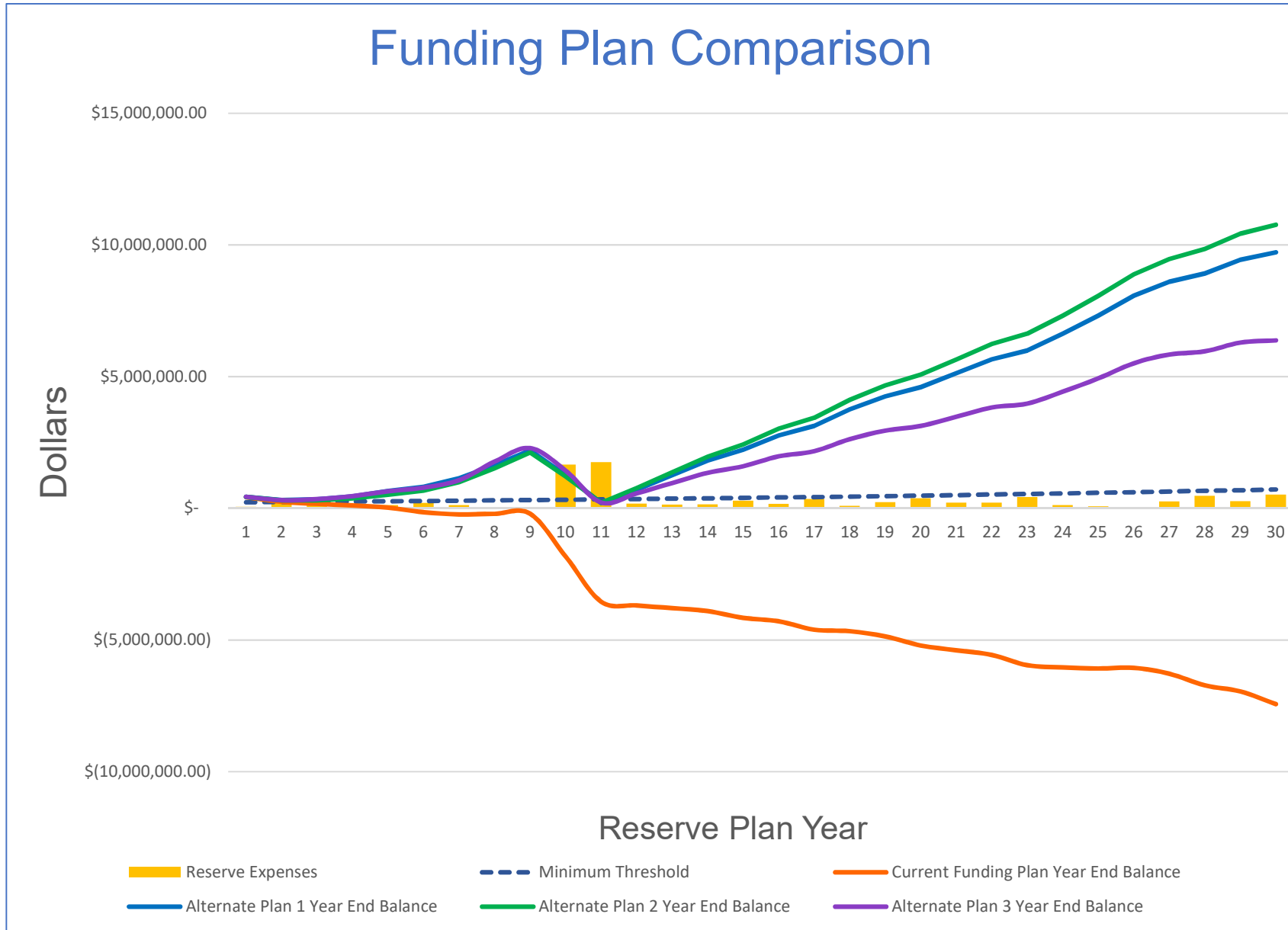
\*Values Rounded to Nearest \$00.00

<b>Alternate Plan 2 - Reserve Funding Plan Contribution Details</b>	
Per Unit/Month - Year 1	\$19.91
Per Unit/Year - Year 1	\$238.90
Total/Month - Year 1	\$4,081.14
Total Annual - Year 1	\$48,973.68
Special Assessment / Impact Fees - Annually	\$0.00
Per Unit/Month - Year 30	\$296.78
Per Unit/Year - Year 30	\$3,561.37
Total/Month - Year 30	\$60,840.01
Total Annual - Year 30	\$730,080.10
<b>Expenditures / Resulting Balance*</b>	
Total Reserve Expenditures Over 30 Years (Inflated)	\$8,948,199.69
Average Annual Reserve Expenditures (Inflated)	\$298,273.32
Total Reserve Expenditures Over 30 Years (Non-Inflated)	\$6,907,372.00
Average Annual Reserve Expenditures (Non-Inflated)	\$230,245.73
<b>Deficit/ Surplus - End of Planning Period Year 30</b>	<b>\$10,771,390.53</b>

<b>Alternate Plan 3 - Reserve Funding Plan Contribution Details</b>	
Per Unit/Month - Year 1	\$19.91
Per Unit/Year - Year 1	\$238.90
Total/Month - Year 1	\$4,081.14
Total Annual - Year 1	\$48,973.68
Special Assessments - 2 Years at \$250,000 Each	\$500,000.00
Per Unit/Month - Year 30	\$212.66
Per Unit/Year - Year 30	\$2,551.93
Total/Month - Year 30	\$43,595.49
Total Annual - Year 30	\$523,145.92
<b>Expenditures / Resulting Balance*</b>	
Total Reserve Expenditures Over 30 Years (Inflated)	\$8,948,199.69
Average Annual Reserve Expenditures (Inflated)	\$298,273.32
Total Reserve Expenditures Over 30 Years (Non-Inflated)	\$6,907,372.00
Average Annual Reserve Expenditures (Non-Inflated)	\$230,245.73
<b>Deficit/ Surplus - End of Planning Period Year 30</b>	<b>\$6,378,132.97</b>

\*Values Rounded to Nearest \$00.00





Common Component Inventory  
Reserve Asset Inventory



Line Number	Cost Center	Reserve Asset	Actual Quantity	Units	Unit Cost	Actual EUL	Actual RUL
1	1- Site Improvements						
2	1 - Site Improvements	Access Control System - Gilbert Road	1	Each	6,000.00	15	2
3	1 - Site Improvements	Access Control System - Riggs Road	1	Each	6,000.00	15	3
4	1 - Site Improvements	Access Control System - Wood Drive	1	Each	6,000.00	15	4
5	1 - Site Improvements	Asphalt (Stamped), Seal Coat	1,150	SF	0.26	4	2
6	1 - Site Improvements	Asphalt (Stamped), Crack Seal	1,150	SF	0.40	4	2
7	1 - Site Improvements	Asphalt (Stamped), Remove and Replace	1,150	SF	12.00	30	10
8	1 - Site Improvements	Asphalt, Seal Coat	46,700	SY	1.30	4	2
9	1 - Site Improvements	Asphalt, Crack Seal	46,700	SY	0.40	4	2
10	1 - Site Improvements	Asphalt, Repairs	46,700	SY	75.00	4	2
11	1 - Site Improvements	Asphalt, Remove and Replace	46,700	SY	46.75	30	10
12	1 - Site Improvements	Backflow Preventer, Replace	1	Each	3,500.00	15	7
13	1 - Site Improvements	Block Walls, Paint	68,000	SF	0.46	8	4
14	1 - Site Improvements	Block Walls, Repairs	12,000	LF	300.00	10	10
15	1 - Site Improvements	Concrete Components, Repairs	1	Allow	5,000.00	5	5
16	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 1	1	Allow	15,000.00	15	1
17	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 2	1	Allow	15,000.00	15	2
18	1 - Site Improvements	Electrical control meter, replace	3	Each	5,500.00	35	11
19	1 - Site Improvements	Entrance Gates, Gilbert Road Entrance, Replace	4	Each	3,200.00	40	17
20	1 - Site Improvements	Entrance Gates, Riggs Road Entrance, Replace	4	Each	3,200.00	40	17
21	1 - Site Improvements	Entrance Gates, Wood Drive Entrance, Replace	4	Each	3,200.00	40	17
22	1 - Site Improvements	Granite Replenishment, Phase 1	130,680	SF	0.65	8	5
23	1 - Site Improvements	Granite Replenishment, Phase 2	130,680	SF	0.65	8	6
24	1 - Site Improvements	Granite Replenishment, Pase 3	130,680	SF	0.65	8	7

Common Component Inventory  
Reserve Asset Inventory



Line Number	Cost Center	Reserve Asset	Actual Quantity	Units	Unit Cost	Actual EUL	Actual RUL
25	1 - Site Improvements	Irrigation Controller and Smart Link, Replace	3	Each	2,500.00	-	-
26	1 - Site Improvements	Irrigation System, Repairs	1	Allow	4,000.00	3	2
27	1 - Site Improvements	Landscape Lighting, Replace	1	Allow	12,000.00	15	1
28	1 - Site Improvements	Mailbox Kiosks (13 + 1 parcel), replace	15	Each	3,520.00	35	16
29	1 - Site Improvements	Mailbox Kiosks (16 + 2 parcel), replace	3	Each	3,660.00	35	16
30	1 - Site Improvements	Mailbox Kiosks, Repairs	18	Each	425.00	8	1
31	1 - Site Improvements	Monument Entry Signs, Replacement	3	Each	25,000.00	40	17
32	1 - Site Improvements	Swing Gate Operators, Gilbert Road Entrance, Replace	4	Each	5,738.00	15	2
33	1 - Site Improvements	Swing Gate Operators, Riggs Road Entrance, Replace	4	Each	5,738.00	15	2
34	1 - Site Improvements	Swing Gate Operators, Wood Drive Entrance, Replace	4	Each	5,738.00	15	2
35	1 - Site Improvements	Wrought Iron Fences, Painting	14,000	SF	1.83	8	4
36	1 - Site Improvements	Wrought Iron Fences, Replace	2,800	LF	65.00	35	12
37	1 - Site Improvements	Wrought Iron Pedestrian Gate, Gilbert Road Entrance, Replace	2	Each	1,200.00	35	12
38	1 - Site Improvements	Wrought Iron Pedestrian Gate, Replace	1	Each	800.00	25	24
39	1 - Site Improvements	Wrought Iron Pedestrian Gate, Riggs Road Entrance, Replace	2	Each	1,200.00	35	12
40	1 - Site Improvements	Wrought Iron Pedestrian Gate, Wood Drive Entrance, Replace	2	Each	1,200.00	35	12
<b>41</b>	<b>2 - Amenities</b>						
42	2 - Amenities	Bench, Replace	2	Each	1,200.00	16	5
43	2 - Amenities	Pedestal BBQ Grills, Replace	6	Each	700.00	3	3
44	2 - Amenities	Pet Station, Replace	7	Each	650.00	10	2
45	2 - Amenities	Picnic Tables, Replace	2	Each	1,600.00	4	3
46	2 - Amenities	Play Structure, Large, Replace	1	Each	65,000.00	25	3
47	2 - Amenities	Play Structure, Small, Replace	2	Each	8,000.00	25	10

Common Component Inventory  
Reserve Asset Inventory



Line Number	Cost Center	Reserve Asset	Actual Quantity	Units	Unit Cost	Actual EUL	Actual RUL
48	2 - Amenities	Play Swings, Replace	1	Each	4,500.00	25	10
49	2 - Amenities	Ramada Metal Roof, Replace	1	Allow	2,500.00	60	36
50	2 - Amenities	Ramada Structure, Paint	1	Allow	800.00	8	8
51	2 - Amenities	Trash Recepticals, Replace	2	Each	1,200.00	4	3
52	<b>3 - Professional Reports</b>						
53	3 - Professional Reports	Asphalt Study	1	Allow	5,000.00	10	5
54	3 - Professional Reports	Block Wall Structural Inspection	1	Allow	12,000.00	8	1
55	3 - Professional Reports	Reserve Study, Full	1	Each	5,000.00	4	4
56	3 - Professional Reports	Water Management / Drainage Study	1	Allow	7,500.00	10	1



Reserve Fund Planning  
Budgeted Spending Plan by Reserve Asset



Line Number	Cost Center	Reserve Asset	Calc Quantity	Units	Unit Cost	Calc EUL	Calc RUL	Planning Notes	Total Cost for Replace
1	1- Site Improvements								
2	1 - Site Improvements	Access Control System - Gilbert Road	1	Each	6,000.00	15	2	Includes removal and installation of new system and components Brand: DKS Original equipment past EUL; spaced out for replacement	\$ 6,000
3	1 - Site Improvements	Access Control System - Riggs Road	1	Each	6,000.00	15	3	Includes removal and installation of new system and components Brand: DKS Original equipment past EUL; spaced out for replacement	\$ 6,000
4	1 - Site Improvements	Access Control System - Wood Drive	1	Each	6,000.00	15	4	Includes removal and installation of new system and components Brand: DKS Original equipment past EUL; spaced out for replacement	\$ 6,000
5	1 - Site Improvements	Asphalt (Stamped), Seal Coat	1,150	SF	0.26	4	2	There are four stamped asphalt pads at the Gilbert Road Entrance; work should be performed at the same time the asphalt roads are maintained	\$ 299
6	1 - Site Improvements	Asphalt (Stamped), Crack Seal	230	SF	0.40	4	2	There are four stamped asphalt pads at the Gilbert Road Entrance; work should be performed at the same time the asphalt roads are maintained	\$ 92
7	1 - Site Improvements	Asphalt (Stamped), Remove and Replace	1,150	SF	12.00	30	10	There are four stamped asphalt pads at the Gilbert Road Entrance; work should be performed at the same time the asphalt roads are maintained	\$ 13,800
8	1 - Site Improvements	Asphalt, Seal Coat	46,700	SY	1.30	4	2		\$ 60,710
9	1 - Site Improvements	Asphalt, Crack Seal	4,670	SY	0.40	4	2	Estimated amount of crack sealant	\$ 1,868
10	1 - Site Improvements	Asphalt, Repairs	234	SY	75.00	4	2	Several repairs are needed to the asphalt (small areas); 0.5% of the asphalt listed for repairs	\$ 17,513
11	1 - Site Improvements	Asphalt, Remove and Replace	46,700	SY	46.75	30	10	There are some issues with the roads, but overall they appear to be in good general condition; remove and replace spread over Year 10 and Year 11	\$ 2,183,225
12	1 - Site Improvements	Backflow Preventer, Replace	1	Each	3,500.00	15	7	Estimated remaining useful life	\$ 3,500
13	1 - Site Improvements	Block Walls, Paint	68,000	SF	0.46	8	4	This includes painting the entrance monument signs. To be performed the same time the wrought iron fencing is painted.	\$ 31,280
14	1 - Site Improvements	Block Walls, Repairs	240	LF	300.00	10	10	There are significant repairs needed now; repair costs have been added to Year 2 (after an inspection) and then every 10 years. Allows for approximately 2% of the walls to be removed and replaced every 10 years. The small decorative walls are included in this line item.	\$ 72,000
15	1 - Site Improvements	Concrete Components, Repairs	1	Allow	5,000.00	5	5	Includes curbing, concrete sidewalks, concrete pads, and other concrete components. First-year expense to repair landscape curbing, damaged sidewalks and the drainage culvert off Capricorn Way	\$ 5,000
16	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 1	1	Allow	15,000.00	15	1	There are currently repairs that are required to the culverts - provides for two-year staggered replacement every 15 years.	\$ 15,000
17	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 2	1	Allow	15,000.00	15	2	There are currently repairs that are required to the culverts - provides for two-year staggered replacement every 15 years.	\$ 15,000
18	1 - Site Improvements	Electrical control meter, replace	3	Each	5,500.00	35	11	The typical EUL is 35 years; replace as required, which may be a longer EUL	\$ 16,500
19	1 - Site Improvements	Entrance Gates, Gilbert Road Entrance, Replace	4	Each	3,200.00	40	17	Continued maintenance may extend the life of the gates	\$ 12,800
20	1 - Site Improvements	Entrance Gates, Riggs Road Entrance, Replace	4	Each	3,200.00	40	17	Continued maintenance may extend the life of the gates	\$ 12,800
21	1 - Site Improvements	Entrance Gates, Wood Drive Entrance, Replace	4	Each	3,200.00	40	17	Continued maintenance may extend the life of the gates	\$ 12,800
22	1 - Site Improvements	Granite Replenishment, Phase 1	130,680	SF	0.65	8	5	Approximately 9-acres of granite across community (392,000 SF). Replenishment of 1-inch performed in phases every 8 years with 1/3 of total replaced over three years.	\$ 84,942
23	1 - Site Improvements	Granite Replenishment, Phase 2	130,680	SF	0.65	8	6	Approximately 9-acres of granite across community (392,000 SF). Replenishment of 1-inch performed in phases every 8 years with 1/3 of total replaced over three years.	\$ 84,942

Reserve Fund Planning  
Budgeted Spending Plan by Reserve Asset



Line Number	Cost Center	Reserve Asset	Calc Quantity	Units	Unit Cost	Calc EUL	Calc RUL	Planning Notes	Total Cost for Replace
24	1 - Site Improvements	Granite Replenishment, Pase 3	130,680	SF	0.65	8	7	Approximately 9-acres of granite across community (392,000 SF). Replenishment of 1-inch performed in phases every 8 years with 1/3 of total replaced over three years.	\$ 84,942
25	1 - Site Improvements	Irrigation Controller and Smart Link, Replace	3	Each	2,500.00	-	-	These are Weathermatic systems and were new in December 2023. Costs are through the landscape contract. Line item remains for potential future use (not cost added to the reserve study).	\$ 7,500
26	1 - Site Improvements	Irrigation System, Repairs	1	Allow	4,000.00	3	2	Provides for ongoing maintenance of irrigation components in the community as required (does not include full system replacement at one time)	\$ 4,000
27	1 - Site Improvements	Landscape Lighting, Replace	1	Allow	12,000.00	15	1	The landscape lights should be replaced together - includes all necessary components	\$ 12,000
28	1 - Site Improvements	Mailbox Kiosks (13 + 1 parcel), replace	15	Each	3,520.00	35	16	EUL extended based upon performing maintenance and painting. Replace over four years to spread costs.	\$ 52,800
29	1 - Site Improvements	Mailbox Kiosks (16 + 2 parcel), replace	3	Each	3,660.00	35	16	EUL extended based upon performing maintenance and painting	\$ 10,980
30	1 - Site Improvements	Mailbox Kiosks, Repairs	18	Each	425.00	8	1	Clean, fix hardware, paint	\$ 7,650
31	1 - Site Improvements	Monument Entry Signs, Replacement	3	Each	25,000.00	40	17	This is the full replacement of the signs performed around 40 years since HOAs eventually want to update signage	\$ 75,000
32	1 - Site Improvements	Swing Gate Operators, Gilbert Road Entrance, Replace	4	Each	5,738.00	15	2	The swing gate operators appear to be original and are due for replacement. Includes removal /disposal of old operators. Replacement is staggered	\$ 22,952
33	1 - Site Improvements	Swing Gate Operators, Riggs Road Entrance, Replace	4	Each	5,738.00	15	3	The swing gate operators appear to be original and are due for replacement. Includes removal /disposal of old operators. Replacement is staggered	\$ 22,952
34	1 - Site Improvements	Swing Gate Operators, Wood Drive Entrance, Replace	4	Each	5,738.00	15	4	The swing gate operators appear to be original and are due for replacement. Includes removal /disposal of old operators. Replacement is staggered	\$ 22,952
35	1 - Site Improvements	Wrought Iron Fences, Painting	14,000	SF	1.83	8	4	Includes the painting of the 12 entrance gates and 6 entrance pedestrian gates.	\$ 25,620
36	1 - Site Improvements	Wrought Iron Fences, Replace	2,800	LF	65.00	35	12	The wrought iron is in generally good condition and replacement is staggered. Replace as needed.	\$ 182,000
37	1 - Site Improvements	Wrought Iron Pedestrian Gate, Gilbert Road Entrance, Replace	2	Each	1,200.00	35	12	Includes replacement of locking mechanisms; continued maintenance and mpainting will optimize the life of the gate	\$ 2,400
38	1 - Site Improvements	Wrought Iron Pedestrian Gate, Replace	1	Each	800.00	25	24	Located in the southwest portion of the property leading to commercial property	\$ 800
39	1 - Site Improvements	Wrought Iron Pedestrian Gate, Riggs Road Entrance, Replace	2	Each	1,200.00	35	12	Includes replacement of locking mechanisms; continued maintenance and mpainting will optimize the life of the gate	\$ 2,400
40	1 - Site Improvements	Wrought Iron Pedestrian Gate, Wood Drive Entrance, Replace	2	Each	1,200.00	35	12	Includes replacement of locking mechanisms; continued maintenance and mpainting will optimize the life of the gate	\$ 2,400
41	<b>2 - Amenities</b>								
42	2 - Amenities	Bench, Replace	2	Each	1,200.00	16	5	Both are located in Track 1 Park near the play structures	\$ 2,400
43	2 - Amenities	Pedistal BBQ Grills, Replace	6	Each	700.00	3	3	There are a total of 6 BBQs, 2 are newer, replace 2 every 3 years at \$700. EUL for each is 12 years.	\$ 4,200
44	2 - Amenities	Pet Station, Replace	7	Each	650.00	10	2	These are in fair condition and primarily located in the parks.	\$ 4,550
45	2 - Amenities	Picnic Tables, Replace	2	Each	1,600.00	4	3	There are a total of 7 picnic tables, 2 are newer, replace 2 every 4 years at \$1,600. EUL for each is 16 years.	\$ 3,200
46	2 - Amenities	Play Structure, Large, Replace	1	Each	65,000.00	25	3	The RUL can be extended through continued maintenance, but obsolescence will start to become an issue.	\$ 65,000
47	2 - Amenities	Play Structure, Small, Replace	2	Each	8,000.00	25	10	Includes quattro seesaw and climbing structure	\$ 16,000
48	2 - Amenities	Play Swings, Replace	1	Each	4,500.00	25	10		\$ 4,500
49	2 - Amenities	Ramada Metal Roof, Replace	1	Allow	2,500.00	60	36	Metal roofs have a long life; replacement of this roof is not expected to occur during the timeframe of this study	\$ 2,500

Reserve Fund Planning  
Budgeted Spending Plan by Reserve Asset



Line Number	Cost Center	Reserve Asset	Calc Quantity	Units	Unit Cost	Calc EUL	Calc RUL	Planning Notes	Total Cost for Replace
50	2 - Amenities	Ramada Structure, Paint	1	Allow	800.00	8	8	There is one ramada in the community - located in Tract E park The four columns were replaced in 2023 rather than painted (keep water off to ensure longer-life.	\$ 800
51	2 - Amenities	Trash Recepticals, Replace	2	Each	1,200.00	4	3	There are a total of 7 trash cans, 2 are newer, replace 2 every 4 years at \$1,200. EUL for each is 16 years.	\$ 2,400
52	<b>3 - Professional Reports</b>								
53	3 - Professional Reports	Asphalt Study	1	Allow	5,000.00	10	5	A full study by a qualified 3rd party should be performed to to optimize the asphalt and plan for appropriate repairs and long-term replacement.	\$ 5,000
54	3 - Professional Reports	Block Wall Structural Inspection	1	Allow	12,000.00	8	1	There are numerous wall deficiencies thoroughout the community. An inspection by a qualified licensed structural engineering firm should be performed before failures occur.	\$ 12,000
55	3 - Professional Reports	Reserve Study, Full	1	Each	5,000.00	4	4	A full study should be performed approximately every 4 years or when major capital projects are planned	\$ 5,000
56	3 - Professional Reports	Water Management / Drainage Study	1	Allow	7,500.00	10	1	There are a numberr of drainage issues throughout the community, particularly impacting block walls. An inspection by a qualified civil engineering firm should be performed within the next 12 months.	\$ 7,500

Annual Reserve Fund Expenditures - 30-Year Budget Projections



Line Number	Cost Center	TOTAL ANNUAL RESERVE EXPENSE >>	\$60,650	\$218,303	\$112,218	\$102,196	\$118,556	\$206,373	\$118,993	\$12,896	\$32,640	\$1,658,415
	Asset		Year 1 2024	Year 2 2025	Year 3 2026	Year 4 2027	Year 5 2028	Year 6 2029	Year 7 2030	Year 8 2031	Year 9 2032	Year 10 2033
1	1- Site Improvements											
2	1 - Site Improvements	Access Control System - Gilbert Road	-	6,240	-	-	-	-	-	-	-	-
3	1 - Site Improvements	Access Control System - Riggs Road	-	-	6,490	-	-	-	-	-	-	-
4	1 - Site Improvements	Access Control System - Wood Drive	-	-	-	6,749	-	-	-	-	-	-
5	1 - Site Improvements	Asphalt (Stamped), Seal Coat	-	311	-	-	-	364	-	-	-	-
6	1 - Site Improvements	Asphalt (Stamped), Crack Seal	-	96	-	-	-	112	-	-	-	-
7	1 - Site Improvements	Asphalt (Stamped), Remove and Replace	-	-	-	-	-	-	-	-	-	19,642
8	1 - Site Improvements	Asphalt, Seal Coat	-	63,138	-	-	-	73,863	-	-	-	-
9	1 - Site Improvements	Asphalt, Crack Seal	-	1,943	-	-	-	2,273	-	-	-	-
10	1 - Site Improvements	Asphalt, Repairs	-	18,213	-	-	-	21,307	-	-	-	-
11	1 - Site Improvements	Asphalt, Remove and Replace	-	-	-	-	-	-	-	-	-	1,500,000
12	1 - Site Improvements	Backflow Preventer, Replace	-	-	-	-	-	-	4,429	-	-	-
13	1 - Site Improvements	Block Walls, Paint	-	-	-	35,186	-	-	-	-	-	-
14	1 - Site Improvements	Block Walls, Repairs	-	80,000	-	-	-	-	-	-	-	102,478
15	1 - Site Improvements	Concrete Components, Repairs	6,500	-	-	-	5,849	-	-	-	-	7,117
16	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 1	15,000	-	-	-	-	-	-	-	-	-
17	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 2	-	15,600	-	-	-	-	-	-	-	-
18	1 - Site Improvements	Electrical control meter, replace	-	-	-	-	-	-	-	-	-	-
19	1 - Site Improvements	Entrance Gates, Gilbert Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
20	1 - Site Improvements	Entrance Gates, Riggs Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
21	1 - Site Improvements	Entrance Gates, Wood Drive Entrance, Replace	-	-	-	-	-	-	-	-	-	-
22	1 - Site Improvements	Granite Replenishment, Phase 1	-	-	-	-	99,370	-	-	-	-	-
23	1 - Site Improvements	Granite Replenishment, Phase 2	-	-	-	-	-	103,345	-	-	-	-
24	1 - Site Improvements	Granite Replenishment, Phase 3	-	-	-	-	-	-	107,479	-	-	-
25	1 - Site Improvements	Irrigation Controller and Smart Link, Replace	-	-	-	-	-	-	-	-	-	-
26	1 - Site Improvements	Irrigation System, Repairs	-	4,160	-	-	4,679	-	-	5,264	-	-
27	1 - Site Improvements	Landscape Lighting, Replace	12,000	-	-	-	-	-	-	-	-	-
28	1 - Site Improvements	Mailbox Kiosks (13 + 1 parcel), replace	-	-	-	-	-	-	-	-	-	-
29	1 - Site Improvements	Mailbox Kiosks (16 + 2 parcel), replace	-	-	-	-	-	-	-	-	-	-
30	1 - Site Improvements	Mailbox Kiosks, Repairs	7,650	-	-	-	-	-	-	-	10,470	-
31	1 - Site Improvements	Monument Entry Signs, Replacement	-	-	-	-	-	-	-	-	-	-
32	1 - Site Improvements	Swing Gate Operators, Gilbert Road Entrance, Replace	-	23,870	-	-	-	-	-	-	-	-
33	1 - Site Improvements	Swing Gate Operators, Riggs Road Entrance, Replace	-	-	24,825	-	-	-	-	-	-	-
34	1 - Site Improvements	Swing Gate Operators, Wood Drive Entrance, Replace	-	-	-	25,818	-	-	-	-	-	-
35	1 - Site Improvements	Wrought Iron Fences, Painting	-	-	-	28,819	-	-	-	-	-	-
36	1 - Site Improvements	Wrought Iron Fences, Replace	-	-	-	-	-	-	-	-	-	-

Annual Reserve Fund Expenditures - 30-Year Budget Projections



Asset			Year 1 2024	Year 2 2025	Year 3 2026	Year 4 2027	Year 5 2028	Year 6 2029	Year 7 2030	Year 8 2031	Year 9 2032	Year 10 2033
37	1 - Site Improvements	Wrought Iron Pedestrian Gate, Gilbert Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
38	1 - Site Improvements	Wrought Iron Pedestrian Gate, Replace	-	-	-	-	-	-	-	-	-	-
39	1 - Site Improvements	Wrought Iron Pedestrian Gate, Riggs Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
40	1 - Site Improvements	Wrought Iron Pedestrian Gate, Wood Drive Entrance, Replace	-	-	-	-	-	-	-	-	-	-
41	<b>2 - Amenities</b>											
42	2 - Amenities	Bench, Replace	-	-	-	-	2,808	-	-	-	-	-
43	2 - Amenities	Pedestal BBQ Grills, Replace	-	-	4,543	-	-	5,110	-	-	5,748	-
44	2 - Amenities	Pet Station, Replace	-	4,732	-	-	-	-	-	-	-	-
45	2 - Amenities	Picnic Tables, Replace	-	-	3,461	-	-	-	4,049	-	-	-
46	2 - Amenities	Play Structure, Large, Replace	-	-	70,304	-	-	-	-	-	-	-
47	2 - Amenities	Play Structure, Small, Replace	-	-	-	-	-	-	-	-	-	22,773
48	2 - Amenities	Play Swings, Replace	-	-	-	-	-	-	-	-	-	6,405
49	2 - Amenities	Ramada Metal Roof, Replace	-	-	-	-	-	-	-	-	-	-
50	2 - Amenities	Ramada Structure, Paint	-	-	-	-	-	-	-	1,053	-	-
51	2 - Amenities	Trash Recepticals, Replace	-	-	2,596	-	-	-	3,037	-	-	-
52	<b>3 - Professional Reports</b>											
53	3 - Professional Reports	Asphalt Study	-	-	-	-	5,849	-	-	-	-	-
54	3 - Professional Reports	Block Wall Structural Inspection	12,000	-	-	-	-	-	-	-	16,423	-
55	3 - Professional Reports	Reserve Study, Full	-	-	-	5,624	-	-	-	6,580	-	-
56	3 - Professional Reports	Water Management / Drainage Study	7,500	-	-	-	-	-	-	-	-	-

Annual Reserve Fund Expenditures - 30-Year Budget Projections



Line Number	Cost Center	TOTAL ANNUAL RESERVE EXPENSE >>	\$1,751,066	\$178,123	\$135,995	\$148,095	\$291,252	\$166,799	\$352,111	\$93,100	\$232,333	\$380,826
	Asset	Year 11 2034	Year 12 2035	Year 13 2036	Year 14 2037	Year 15 2038	Year 16 2039	Year 17 2040	Year 18 2041	Year 19 2042	Year 20 2043	
1	1- Site Improvements											
2	1 - Site Improvements	Access Control System - Gilbert Road	-	-	-	-	-	11,238	-	-	-	-
3	1 - Site Improvements	Access Control System - Riggs Road	-	-	-	-	-	-	11,687	-	-	-
4	1 - Site Improvements	Access Control System - Wood Drive	-	-	-	-	-	-	-	12,155	-	-
5	1 - Site Improvements	Asphalt (Stamped), Seal Coat	460	-	-	-	538	-	-	630	-	-
6	1 - Site Improvements	Asphalt (Stamped), Crack Seal	-	-	-	-	-	-	-	200	-	-
7	1 - Site Improvements	Asphalt (Stamped), Remove and Replace	-	-	-	-	-	-	-	-	-	-
8	1 - Site Improvements	Asphalt, Seal Coat	93,460	-	-	-	109,335	-	-	-	127,907	-
9	1 - Site Improvements	Asphalt, Crack Seal	-	-	-	-	-	-	-	3,936	-	-
10	1 - Site Improvements	Asphalt, Repairs	-	-	-	-	-	-	-	-	-	-
11	1 - Site Improvements	Asphalt, Remove and Replace	1,607,410	-	-	-	-	-	-	-	-	-
12	1 - Site Improvements	Backflow Preventer, Replace	-	-	-	-	-	-	-	-	-	-
13	1 - Site Improvements	Block Walls, Paint	-	48,154	-	-	-	-	-	-	-	65,902
14	1 - Site Improvements	Block Walls, Repairs	-	-	-	-	-	-	-	-	-	151,693
15	1 - Site Improvements	Concrete Components, Repairs	-	-	-	-	8,658	-	-	-	-	10,534
16	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 1	-	-	-	-	-	27,014	-	-	-	-
17	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 2	-	-	-	-	-	-	28,095	-	-	-
18	1 - Site Improvements	Electrical control meter, replace	24,424	-	-	-	-	-	-	-	-	-
19	1 - Site Improvements	Entrance Gates, Gilbert Road Entrance, Replace	-	-	-	-	-	-	23,974	-	-	-
20	1 - Site Improvements	Entrance Gates, Riggs Road Entrance, Replace	-	-	-	-	-	-	23,974	-	-	-
21	1 - Site Improvements	Entrance Gates, Wood Drive Entrance, Replace	-	-	-	-	-	-	23,974	-	-	-
22	1 - Site Improvements	Granite Replenishment, Phase 1	-	-	135,995	-	-	-	-	-	-	-
23	1 - Site Improvements	Granite Replenishment, Phase 2	-	-	-	141,435	-	-	-	-	-	-
24	1 - Site Improvements	Granite Replenishment, Phase 3	-	-	-	-	147,092	-	-	-	-	-
25	1 - Site Improvements	Irrigation Controller and Smart Link, Replace	-	-	-	-	-	-	-	-	-	-
26	1 - Site Improvements	Irrigation System, Repairs	5,921	-	-	6,660	-	-	7,492	-	-	8,427
27	1 - Site Improvements	Landscape Lighting, Replace	-	-	-	-	-	21,611	-	-	-	-
28	1 - Site Improvements	Mailbox Kiosks (13 + 1 parcel), replace	-	-	-	-	-	19,778	27,426	28,523	29,664	-
29	1 - Site Improvements	Mailbox Kiosks (16 + 2 parcel), replace	-	-	-	-	-	19,774	-	-	-	-
30	1 - Site Improvements	Mailbox Kiosks, Repairs	-	-	-	-	-	-	-	-	-	-
31	1 - Site Improvements	Monument Entry Signs, Replacement	-	-	-	-	-	-	140,474	-	-	-
32	1 - Site Improvements	Swing Gate Operators, Gilbert Road Entrance, Replace	-	-	-	-	-	-	42,989	-	-	-
33	1 - Site Improvements	Swing Gate Operators, Riggs Road Entrance, Replace	-	-	-	-	-	-	-	44,708	-	-
34	1 - Site Improvements	Swing Gate Operators, Wood Drive Entrance, Replace	-	-	-	-	-	-	-	-	46,497	-
35	1 - Site Improvements	Wrought Iron Fences, Painting	-	39,441	-	-	-	-	-	-	-	53,977
36	1 - Site Improvements	Wrought Iron Fences, Replace	-	58,277	-	-	-	68,176	-	-	-	79,757

Annual Reserve Fund Expenditures - 30-Year Budget Projections



Asset			Year 11 2034	Year 12 2035	Year 13 2036	Year 14 2037	Year 15 2038	Year 16 2039	Year 17 2040	Year 18 2041	Year 19 2042	Year 20 2043
37	1 - Site Improvements	Wrought Iron Pedestrian Gate, Gilbert Road Entrance, Replace	-	3,695	-	-	-	-	-	-	-	-
38	1 - Site Improvements	Wrought Iron Pedestrian Gate, Replace	-	-	-	-	-	-	-	-	-	-
39	1 - Site Improvements	Wrought Iron Pedestrian Gate, Riggs Road Entrance, Replace	-	3,695	-	-	-	-	-	-	-	-
40	1 - Site Improvements	Wrought Iron Pedestrian Gate, Wood Drive Entrance, Replace	-	3,695	-	-	-	-	-	-	-	-
41	<b>2 - Amenities</b>											
42	2 - Amenities	Bench, Replace	-	-	-	-	-	-	-	-	-	-
43	2 - Amenities	Pedestal BBQ Grills, Replace	-	6,466	-	-	7,273	-	-	8,181	-	-
44	2 - Amenities	Pet Station, Replace	-	7,005	-	-	-	-	-	-	-	-
45	2 - Amenities	Picnic Tables, Replace	4,737	-	-	-	5,541	-	-	-	6,483	-
46	2 - Amenities	Play Structure, Large, Replace	-	-	-	-	-	-	-	-	-	-
47	2 - Amenities	Play Structure, Small, Replace	-	-	-	-	-	-	-	-	-	-
48	2 - Amenities	Play Swings, Replace	-	-	-	-	-	-	-	-	-	-
49	2 - Amenities	Ramada Metal Roof, Replace	-	-	-	-	-	-	-	-	-	-
50	2 - Amenities	Ramada Structure, Paint	-	-	-	-	-	1,441	-	-	-	-
51	2 - Amenities	Trash Recepticals, Replace	3,553	-	-	-	4,156	-	-	-	4,862	-
52	<b>3 - Professional Reports</b>											
53	3 - Professional Reports	Asphalt Study	-	-	-	-	8,658	-	-	-	-	-
54	3 - Professional Reports	Block Wall Structural Inspection	-	-	-	-	-	-	22,476	-	-	-
55	3 - Professional Reports	Reserve Study, Full	-	7,697	-	-	-	9,005	-	-	-	10,534
56	3 - Professional Reports	Water Management / Drainage Study	11,102	-	-	-	-	-	-	-	-	-

Annual Reserve Fund Expenditures - 30-Year Budget Projections



Line Number	Cost Center	TOTAL ANNUAL RESERVE EXPENSE >>	\$217,013	\$211,907	\$422,514	\$119,923	\$76,002	\$10,663	\$259,335	\$475,051	\$266,711	\$518,139
	Asset		Year 21 2044	Year 22 2045	Year 23 2046	Year 24 2047	Year 25 2048	Year 26 2049	Year 27 2050	Year 28 2051	Year 29 2052	Year 30 2053
1	1- Site Improvements											
2	1 - Site Improvements	Access Control System - Gilbert Road	-	-	-	-	-	-	-	-	-	-
3	1 - Site Improvements	Access Control System - Riggs Road	-	-	-	-	-	-	-	-	-	-
4	1 - Site Improvements	Access Control System - Wood Drive	-	-	-	-	-	-	-	-	-	-
5	1 - Site Improvements	Asphalt (Stamped), Seal Coat	-	-	737	-	-	-	862	-	-	-
6	1 - Site Improvements	Asphalt (Stamped), Crack Seal	-	-	227	-	-	-	265	-	-	-
7	1 - Site Improvements	Asphalt (Stamped), Remove and Replace	-	-	-	-	-	-	-	-	-	-
8	1 - Site Improvements	Asphalt, Seal Coat	-	-	149,633	-	-	-	175,049	-	-	-
9	1 - Site Improvements	Asphalt, Crack Seal	-	-	4,604	-	-	-	5,386	-	-	-
10	1 - Site Improvements	Asphalt, Repairs	-	-	43,256	-	-	-	50,603	-	-	-
11	1 - Site Improvements	Asphalt, Remove and Replace	-	-	-	-	-	-	-	-	-	-
12	1 - Site Improvements	Backflow Preventer, Replace	-	7,976	-	-	-	-	-	-	-	-
13	1 - Site Improvements	Block Walls, Paint	-	-	-	-	-	-	-	90,192	-	-
14	1 - Site Improvements	Block Walls, Repairs	-	-	-	-	-	-	-	-	-	224,543
15	1 - Site Improvements	Concrete Components, Repairs	-	-	-	-	12,817	-	-	-	-	15,593
16	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 1	-	-	-	-	-	-	-	-	-	-
17	1 - Site Improvements	Drainage Culvert Repairs and Maintenance - Phase 2	-	-	-	-	-	-	-	-	-	-
18	1 - Site Improvements	Electrical control meter, replace	-	-	-	-	-	-	-	-	-	-
19	1 - Site Improvements	Entrance Gates, Gilbert Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
20	1 - Site Improvements	Entrance Gates, Riggs Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
21	1 - Site Improvements	Entrance Gates, Wood Drive Entrance, Replace	-	-	-	-	-	-	-	-	-	-
22	1 - Site Improvements	Granite Replenishment, Phase 1	186,118	-	-	-	-	-	-	-	254,716	-
23	1 - Site Improvements	Granite Replenishment, Phase 2	-	193,563	-	-	-	-	-	-	-	264,904
24	1 - Site Improvements	Granite Replenishment, Phase 3	-	-	201,306	-	-	-	-	-	-	-
25	1 - Site Improvements	Irrigation Controller and Smart Link, Replace	-	-	-	-	-	-	-	-	-	-
26	1 - Site Improvements	Irrigation System, Repairs	-	-	9,480	-	-	10,663	-	-	11,995	-
27	1 - Site Improvements	Landscape Lighting, Replace	-	-	-	-	-	-	-	-	-	-
28	1 - Site Improvements	Mailbox Kiosks (13 + 1 parcel), replace	-	-	-	-	-	-	-	-	-	-
29	1 - Site Improvements	Mailbox Kiosks (16 + 2 parcel), replace	-	-	-	-	-	-	-	-	-	-
30	1 - Site Improvements	Mailbox Kiosks, Repairs	-	-	-	-	19,609	-	-	-	-	-
31	1 - Site Improvements	Monument Entry Signs, Replacement	-	-	-	-	-	-	-	-	-	-
32	1 - Site Improvements	Swing Gate Operators, Gilbert Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
33	1 - Site Improvements	Swing Gate Operators, Riggs Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
34	1 - Site Improvements	Swing Gate Operators, Wood Drive Entrance, Replace	-	-	-	-	-	-	-	-	-	-
35	1 - Site Improvements	Wrought Iron Fences, Painting	-	-	-	-	-	-	-	73,872	-	-
36	1 - Site Improvements	Wrought Iron Fences, Replace	-	-	-	93,304	-	-	-	109,152	-	-



Annual Reserve Fund Expenditures - 30-Year Budget Projections



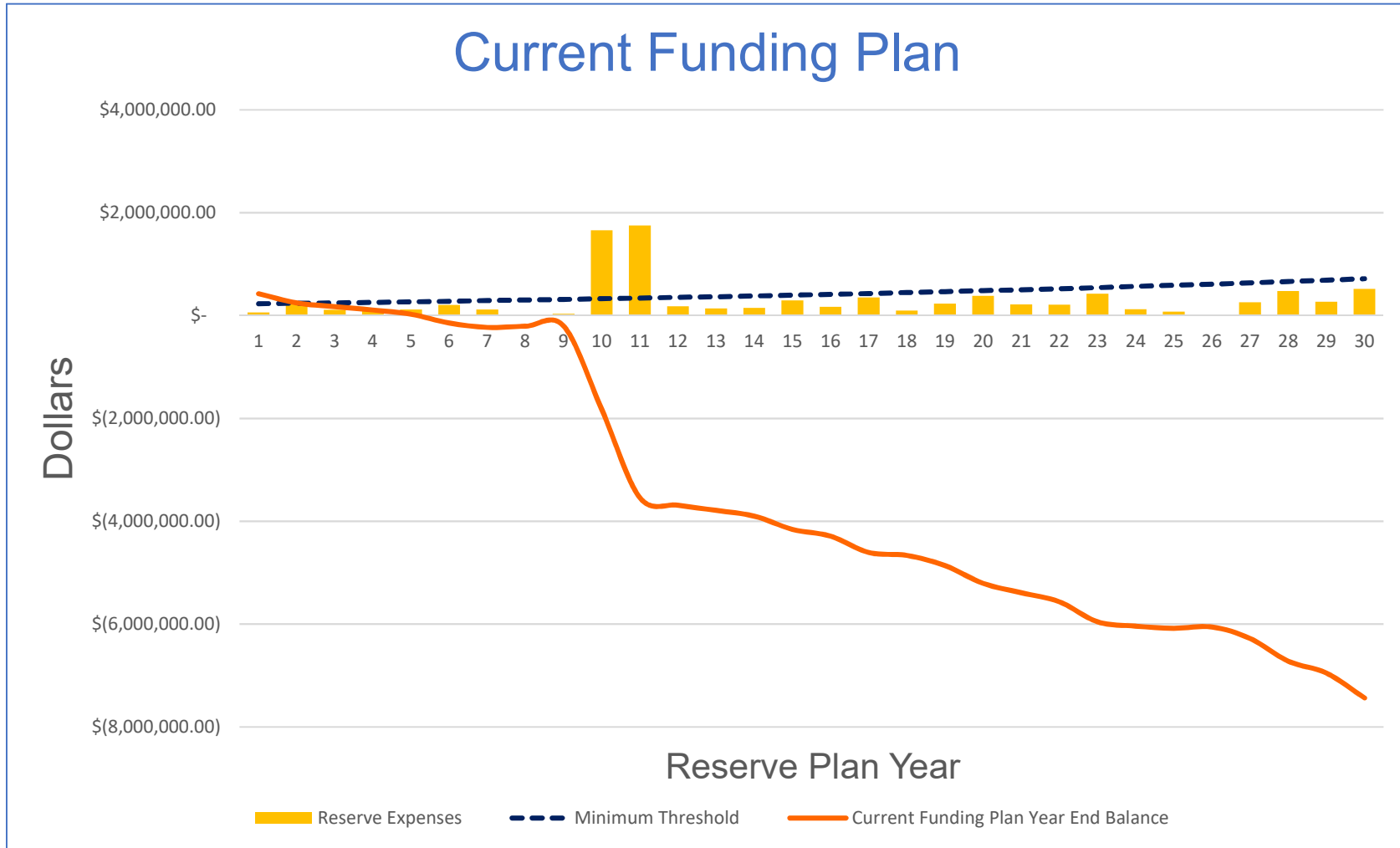
Asset			Year 21 2044	Year 22 2045	Year 23 2046	Year 24 2047	Year 25 2048	Year 26 2049	Year 27 2050	Year 28 2051	Year 29 2052	Year 30 2053
37	1 - Site Improvements	Wrought Iron Pedestrian Gate, Gilbert Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
38	1 - Site Improvements	Wrought Iron Pedestrian Gate, Replace	-	-	-	1,972	-	-	-	-	-	-
39	1 - Site Improvements	Wrought Iron Pedestrian Gate, Riggs Road Entrance, Replace	-	-	-	-	-	-	-	-	-	-
40	1 - Site Improvements	Wrought Iron Pedestrian Gate, Wood Drive Entrance, Replace	-	-	-	-	-	-	-	-	-	-
41	<b>2 - Amenities</b>											
42	2 - Amenities	Bench, Replace	5,259	-	-	-	-	-	-	-	-	-
43	2 - Amenities	Pedistal BBQ Grills, Replace	9,203	-	-	10,352	-	-	11,644	-	-	13,098
44	2 - Amenities	Pet Station, Replace	-	10,368	-	-	-	-	-	-	-	-
45	2 - Amenities	Picnic Tables, Replace	-	-	7,584	-	-	-	8,872	-	-	-
46	2 - Amenities	Play Structure, Large, Replace	-	-	-	-	-	-	-	187,419	-	-
47	2 - Amenities	Play Structure, Small, Replace	-	-	-	-	-	-	-	-	-	-
48	2 - Amenities	Play Swings, Replace	-	-	-	-	-	-	-	-	-	-
49	2 - Amenities	Ramada Metal Roof, Replace	-	-	-	-	-	-	-	-	-	-
50	2 - Amenities	Ramada Structure, Paint	-	-	-	1,972	-	-	-	-	-	-
51	2 - Amenities	Trash Recepticals, Replace	-	-	5,688	-	-	-	6,654	-	-	-
52	<b>3 - Professional Reports</b>											
53	3 - Professional Reports	Asphalt Study	-	-	-	-	12,817	-	-	-	-	-
54	3 - Professional Reports	Block Wall Structural Inspection	-	-	-	-	30,760	-	-	-	-	-
55	3 - Professional Reports	Reserve Study, Full	-	-	-	12,324	-	-	-	14,417	-	-
56	3 - Professional Reports	Water Management / Drainage Study	16,433	-	-	-	-	-	-	-	-	-

**CONTRIBUTION DETAILS**

	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
<b>First Year</b>	\$2,915.10	\$34,981.20	\$14.22	\$170.64
<b>Last Year</b>	\$2,915.10	\$34,981.20	\$14.22	\$170.64

<b>Number of Units</b>	205	<p><b>SUMMARY</b></p> <p>No Change in Contribution No Special Assessments</p>
<b>Fiscal Year starts:</b>	01/01/24	
<b>Reserve Funds at start</b>	\$445,754.00	
<b>Rate of Return (%)</b>	1.25%	
<b>Inflation Rate (%)</b>	4.00%	
<b>Initial Minimum Threshold</b>	\$230,000.00	
<b>Impact Fees / Special Assessments</b>		
Year	Total/Year	Per Unit
		\$0.00
		\$0.00
		\$0.00

CURRENT FUNDING PLAN  
Cash Flow Reserve Funding



CURRENT FUNDING PLAN  
Cash Flow Reserve Funding



Year	Plan Year	Scheduled Increase	Beginning Reserve Balance	Annual Contribution	Current Per Month Per Unit	Special Assessment	Investment Earnings	Reserve Expenditure	Ending Reserve Balance	Minimum Threshold
2024	1	0.00%	445,754	34,981	14.22	-	5,572	60,650	425,657	230,000
2025	2	0.00%	425,657	34,981	14.22	-	5,321	218,303	247,656	239,200
2026	3	0.00%	247,656	34,981	14.22	-	3,096	112,218	173,515	248,768
2027	4	0.00%	173,515	34,981	14.22	-	2,169	102,196	108,469	258,719
2028	5	0.00%	108,469	34,981	14.22	-	1,356	118,556	26,250	269,067
2029	6	0.00%	26,250	34,981	14.22	-	328	206,373	(144,813)	279,830
2030	7	0.00%	(144,813)	34,981	14.22	-	-	118,993	(228,825)	291,023
2031	8	0.00%	(228,825)	34,981	14.22	-	-	12,896	(206,740)	302,664
2032	9	0.00%	(206,740)	34,981	14.22	-	-	32,640	(204,399)	314,771
2033	10	0.00%	(204,399)	34,981	14.22	-	-	1,658,415	(1,827,833)	327,362
2034	11	0.00%	(1,827,833)	34,981	14.22	-	-	1,751,066	(3,543,918)	340,456
2035	12	0.00%	(3,543,918)	34,981	14.22	-	-	178,123	(3,687,060)	354,074
2036	13	0.00%	(3,687,060)	34,981	14.22	-	-	135,995	(3,788,074)	368,237
2037	14	0.00%	(3,788,074)	34,981	14.22	-	-	148,095	(3,901,188)	382,967
2038	15	0.00%	(3,901,188)	34,981	14.22	-	-	291,252	(4,157,459)	398,286
2039	16	0.00%	(4,157,459)	34,981	14.22	-	-	166,799	(4,289,277)	414,217
2040	17	0.00%	(4,289,277)	34,981	14.22	-	-	352,111	(4,606,407)	430,786
2041	18	0.00%	(4,606,407)	34,981	14.22	-	-	93,100	(4,664,525)	448,017
2042	19	0.00%	(4,664,525)	34,981	14.22	-	-	232,333	(4,861,877)	465,938
2043	20	0.00%	(4,861,877)	34,981	14.22	-	-	380,826	(5,207,722)	484,575
2044	21	0.00%	(5,207,722)	34,981	14.22	-	-	217,013	(5,389,754)	503,958
2045	22	0.00%	(5,389,754)	34,981	14.22	-	-	211,907	(5,566,680)	524,117
2046	23	0.00%	(5,566,680)	34,981	14.22	-	-	422,514	(5,954,212)	545,081
2047	24	0.00%	(5,954,212)	34,981	14.22	-	-	119,923	(6,039,154)	566,885
2048	25	0.00%	(6,039,154)	34,981	14.22	-	-	76,002	(6,080,175)	589,560
2049	26	0.00%	(6,080,175)	34,981	14.22	-	-	10,663	(6,055,857)	613,142
2050	27	0.00%	(6,055,857)	34,981	14.22	-	-	259,335	(6,280,211)	637,668
2051	28	0.00%	(6,280,211)	34,981	14.22	-	-	475,051	(6,720,281)	663,175
2052	29	0.00%	(6,720,281)	34,981	14.22	-	-	266,711	(6,952,011)	689,702
2053	30	0.00%	(6,952,011)	34,981	14.22	-	-	518,139	(7,435,168)	717,290

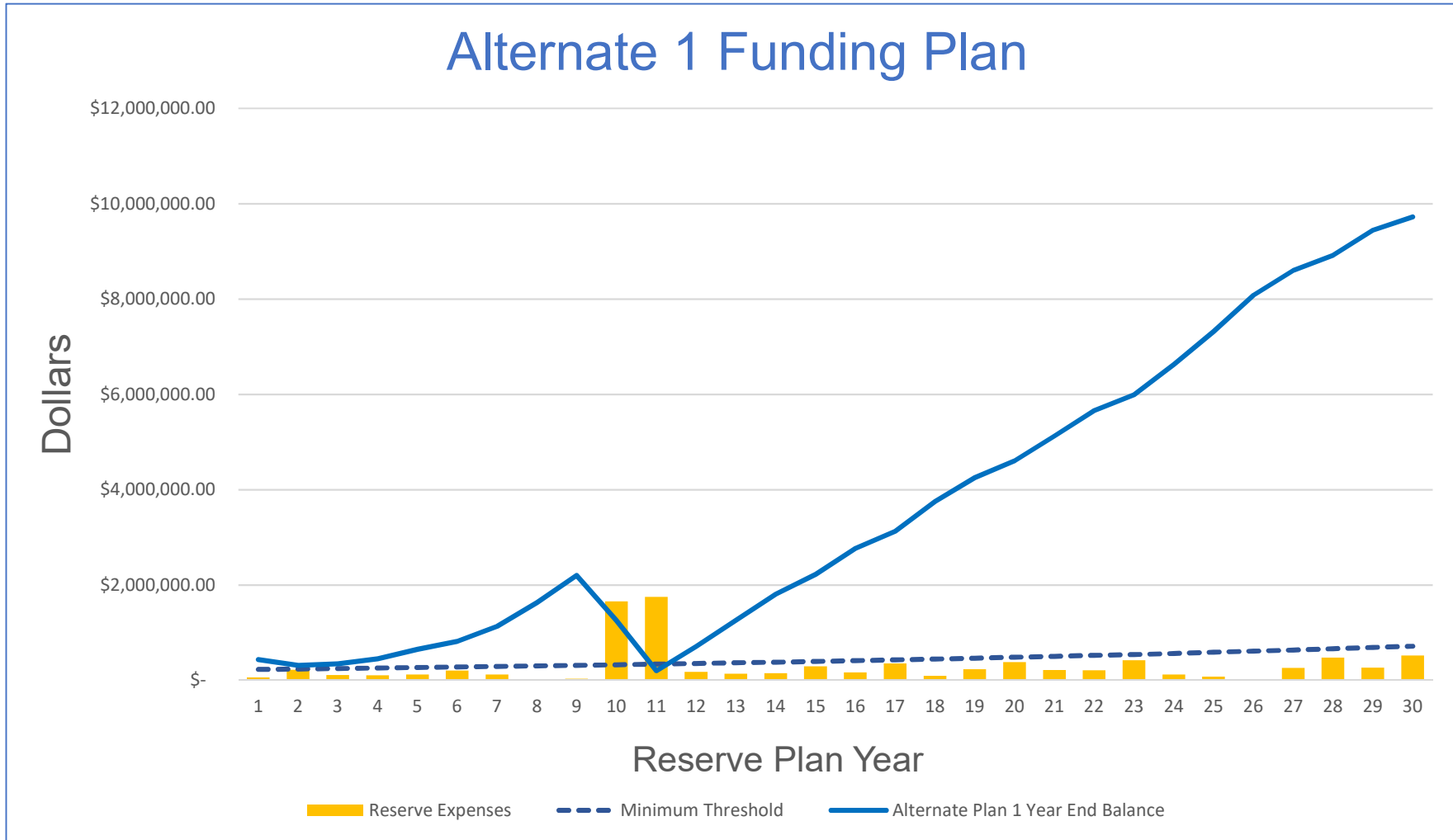
### CONTRIBUTION DETAILS

	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
<b>First Year</b>	\$3,935.39	\$47,224.62	\$19.20	\$230.36
<b>Last Year</b>	\$56,783.86	\$681,406.34	\$276.99	\$3,323.93

<b>Number of Units:</b>	205
<b>Fiscal Year starts:</b>	01/01/24
<b>Reserve Funds at start:</b>	\$445,754.00
<b>Rate of Return (%):</b>	1.25%
<b>Inflation Rate (%):</b>	4.00%
<b>Initial Minimum Threshold:</b>	\$230,000.00

Impact Fees / Special Assessments		
Year	Total/Year	Per Unit
		\$0.00
		\$0.00
		\$0.00

SUMMARY
35% Increase - Year 1
95% Increase - Year 2
50% Increase - Years 3 - 5
17% Increase - Years 6 - 10
No Increases - Years 11 - 30
No Special Assessments



# ALTERNATE FUNDING PLAN #1

## Cash Flow Reserve Funding



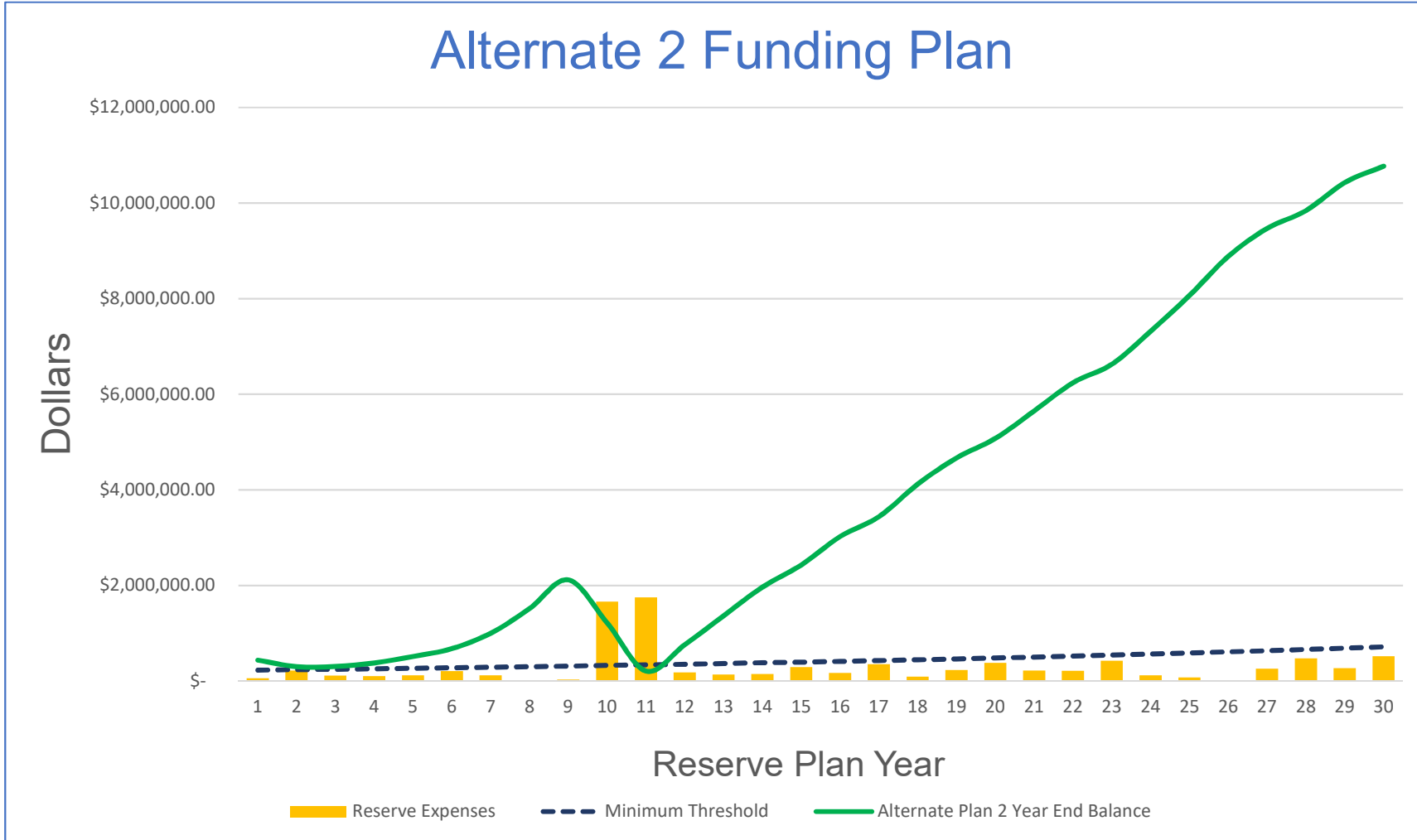
Year	Plan Year	Beginning Reserve Balance	Scheduled Increase	Annual Contribution	Plan Per Month Per Unit	Special Assessment	Investment Earnings	Reserve Expenditure	Ending Reserve Balance	Minimum Threshold
2024	1	445,754	35.00%	47,225	19.20	-	5,572	60,650	437,901	230,000
2025	2	437,901	95.00%	92,088	37.43	-	5,474	218,303	317,159	239,200
2026	3	317,159	50.00%	138,132	56.15	-	3,964	112,218	347,038	248,768
2027	4	347,038	50.00%	207,198	84.23	-	4,338	102,196	456,378	258,719
2028	5	456,378	50.00%	310,797	126.34	-	5,705	118,556	654,324	269,067
2029	6	654,324	17.00%	363,633	147.82	-	8,179	206,373	819,762	279,830
2030	7	819,762	17.00%	425,450	172.95	-	10,247	118,993	1,136,466	291,023
2031	8	1,136,466	17.00%	497,777	202.35	-	14,206	12,896	1,635,552	302,664
2032	9	1,635,552	17.00%	582,399	236.75	-	20,444	32,640	2,205,755	314,771
2033	10	2,205,755	17.00%	681,406	276.99	-	27,572	1,658,415	1,256,319	327,362
2034	11	1,256,319	0.00%	681,406	276.99	-	15,704	1,751,066	202,363	340,456
2035	12	202,363	0.00%	681,406	276.99	-	2,530	178,123	708,175	354,074
2036	13	708,175	0.00%	681,406	276.99	-	8,852	135,995	1,262,439	368,237
2037	14	1,262,439	0.00%	681,406	276.99	-	15,780	148,095	1,811,531	382,967
2038	15	1,811,531	0.00%	681,406	276.99	-	22,644	291,252	2,224,329	398,286
2039	16	2,224,329	0.00%	681,406	276.99	-	27,804	166,799	2,766,740	414,217
2040	17	2,766,740	0.00%	681,406	276.99	-	34,584	352,111	3,130,620	430,786
2041	18	3,130,620	0.00%	681,406	276.99	-	39,133	93,100	3,758,059	448,017
2042	19	3,758,059	0.00%	681,406	276.99	-	46,976	232,333	4,254,108	465,938
2043	20	4,254,108	0.00%	681,406	276.99	-	53,176	380,826	4,607,865	484,575
2044	21	4,607,865	0.00%	681,406	276.99	-	57,598	217,013	5,129,856	503,958
2045	22	5,129,856	0.00%	681,406	276.99	-	64,123	211,907	5,663,479	524,117
2046	23	5,663,479	0.00%	681,406	276.99	-	70,793	422,514	5,993,165	545,081
2047	24	5,993,165	0.00%	681,406	276.99	-	74,915	119,923	6,629,563	566,885
2048	25	6,629,563	0.00%	681,406	276.99	-	82,870	76,002	7,317,837	589,560
2049	26	7,317,837	0.00%	681,406	276.99	-	91,473	10,663	8,080,053	613,142
2050	27	8,080,053	0.00%	681,406	276.99	-	101,001	259,335	8,603,124	637,668
2051	28	8,603,124	0.00%	681,406	276.99	-	107,539	475,051	8,917,018	663,175
2052	29	8,917,018	0.00%	681,406	276.99	-	111,463	266,711	9,443,177	689,702
2053	30	9,443,177	0.00%	681,406	276.99	-	118,040	518,139	9,724,484	717,290

**CONTRIBUTION DETAILS**

	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
<b>First Year</b>	\$4,081.14	\$48,973.68	\$19.91	\$238.90
<b>Last Year</b>	\$60,840.01	\$730,080.10	\$296.78	\$3,561.37

<b>Number of Units:</b>	205	<p><b>SUMMARY</b></p> <p>40% Increase - Year 1 55% Increase - Year 2 50% Increase - Years 3 - 4 46% Increase - Years 5 - 6 19% Increase - Years 7 - 10 No Increases - Years 11 - 30 No Special Assessments</p>
<b>Fiscal Year starts:</b>	01/01/24	
<b>Reserve Funds at start:</b>	\$445,754.00	
<b>Rate of Return (%):</b>	1.25%	
<b>Inflation Rate (%):</b>	4.00%	
<b>Initial Minimum Threshold:</b>	\$230,000.00	
<b>Impact Fees / Special Assessments</b>		
Year	Total/Year	Per Unit
		\$0.00
		\$0.00
		\$0.00





# ALTERNATE FUNDING PLAN #2

## Cash Flow Reserve Funding

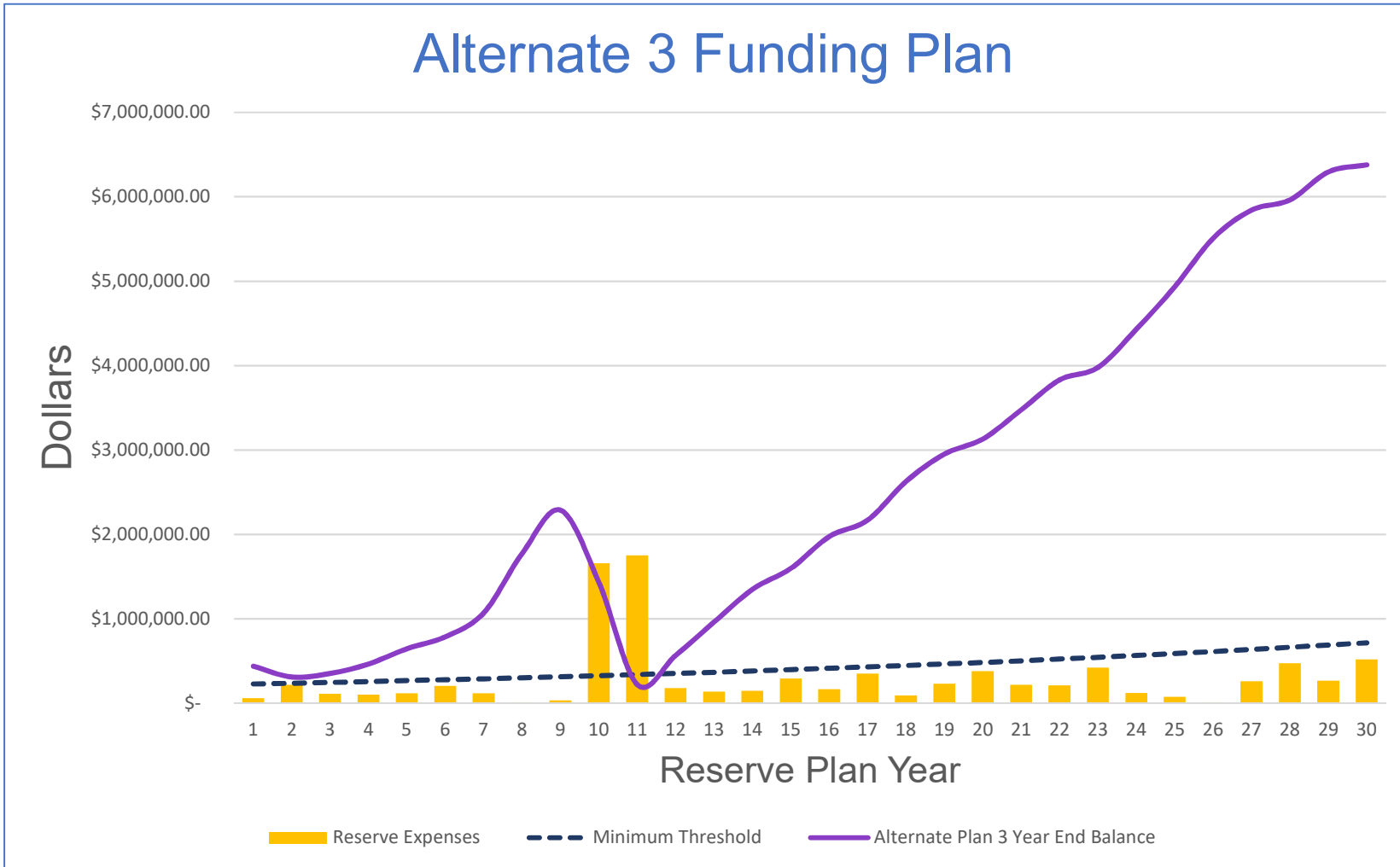


Year	Plan Year	Beginning Reserve Balance	Scheduled Increase	Annual Contribution	Plan Per Month Per Unit	Special Assessment	Investment Earnings	Reserve Expenditure	Ending Reserve Balance	Minimum Threshold
2024	1	445,754	40.00%	48,974	19.91	-	5,572	60,650	439,650	230,000
2025	2	439,650	55.00%	75,909	30.86	-	5,496	218,303	302,752	239,200
2026	3	302,752	50.00%	113,864	46.29	-	3,784	112,218	308,182	248,768
2027	4	308,182	50.00%	170,796	69.43	-	3,852	102,196	380,633	258,719
2028	5	380,633	46.00%	249,362	101.37	-	4,758	118,556	516,197	269,067
2029	6	516,197	46.00%	364,068	148.00	-	6,452	206,373	680,345	279,830
2030	7	680,345	19.00%	433,241	176.11	-	8,504	118,993	1,003,097	291,023
2031	8	1,003,097	19.00%	515,557	209.58	-	12,539	12,896	1,518,297	302,664
2032	9	1,518,297	19.00%	613,513	249.40	-	18,979	32,640	2,118,148	314,771
2033	10	2,118,148	19.00%	730,080	296.78	-	26,477	1,658,415	1,216,290	327,362
2034	11	1,216,290	0.00%	730,080	296.78	-	15,204	1,751,066	210,508	340,456
2035	12	210,508	0.00%	730,080	296.78	-	2,631	178,123	765,096	354,074
2036	13	765,096	0.00%	730,080	296.78	-	9,564	135,995	1,368,744	368,237
2037	14	1,368,744	0.00%	730,080	296.78	-	17,109	148,095	1,967,839	382,967
2038	15	1,967,839	0.00%	730,080	296.78	-	24,598	291,252	2,431,265	398,286
2039	16	2,431,265	0.00%	730,080	296.78	-	30,391	166,799	3,024,936	414,217
2040	17	3,024,936	0.00%	730,080	296.78	-	37,812	352,111	3,440,717	430,786
2041	18	3,440,717	0.00%	730,080	296.78	-	43,009	93,100	4,120,706	448,017
2042	19	4,120,706	0.00%	730,080	296.78	-	51,509	232,333	4,669,962	465,938
2043	20	4,669,962	0.00%	730,080	296.78	-	58,375	380,826	5,077,591	484,575
2044	21	5,077,591	0.00%	730,080	296.78	-	63,470	217,013	5,654,128	503,958
2045	22	5,654,128	0.00%	730,080	296.78	-	70,677	211,907	6,242,977	524,117
2046	23	6,242,977	0.00%	730,080	296.78	-	78,037	422,514	6,628,581	545,081
2047	24	6,628,581	0.00%	730,080	296.78	-	82,857	119,923	7,321,595	566,885
2048	25	7,321,595	0.00%	730,080	296.78	-	91,520	76,002	8,067,193	589,560
2049	26	8,067,193	0.00%	730,080	296.78	-	100,840	10,663	8,887,450	613,142
2050	27	8,887,450	0.00%	730,080	296.78	-	111,093	259,335	9,469,288	637,668
2051	28	9,469,288	0.00%	730,080	296.78	-	118,366	475,051	9,842,683	663,175
2052	29	9,842,683	0.00%	730,080	296.78	-	123,034	266,711	10,429,086	689,702
2053	30	10,429,086	0.00%	730,080	296.78	-	130,364	518,139	10,771,391	717,290

### CONTRIBUTION DETAILS

	Total/Month	Total Annual	Per Unit/Month	Per Unit/Year
<b>First Year</b>	\$4,081.14	\$48,973.68	\$19.91	\$238.90
<b>Last Year</b>	\$43,595.49	\$523,145.92	\$212.66	\$2,551.93

<b>Number of Units:</b>	205	<b>SUMMARY</b>  40% Increase - Year 1 75% Increase - Years 2 - 3 40% Increase - Years 4 - 5 15.5% Increase - Years 6 - 9 No Increases - Years 10 - 30  Special Assessments - Years 8 and 9
<b>Fiscal Year starts:</b>	01/01/24	
<b>Reserve Funds at start:</b>	\$445,754.00	
<b>Rate of Return (%):</b>	1.25%	
<b>Inflation Rate (%):</b>	4.00%	
<b>Initial Minimum Threshold:</b>	\$230,000.00	
<b>Impact Fees / Special Assessments</b>		
Year	Total/Year	Per Unit
2031	\$ 250,000	\$1,219.51
2033	\$ 250,000	\$1,219.51



# ALTERNATE FUNDING PLAN #3

## Cash Flow Reserve Funding

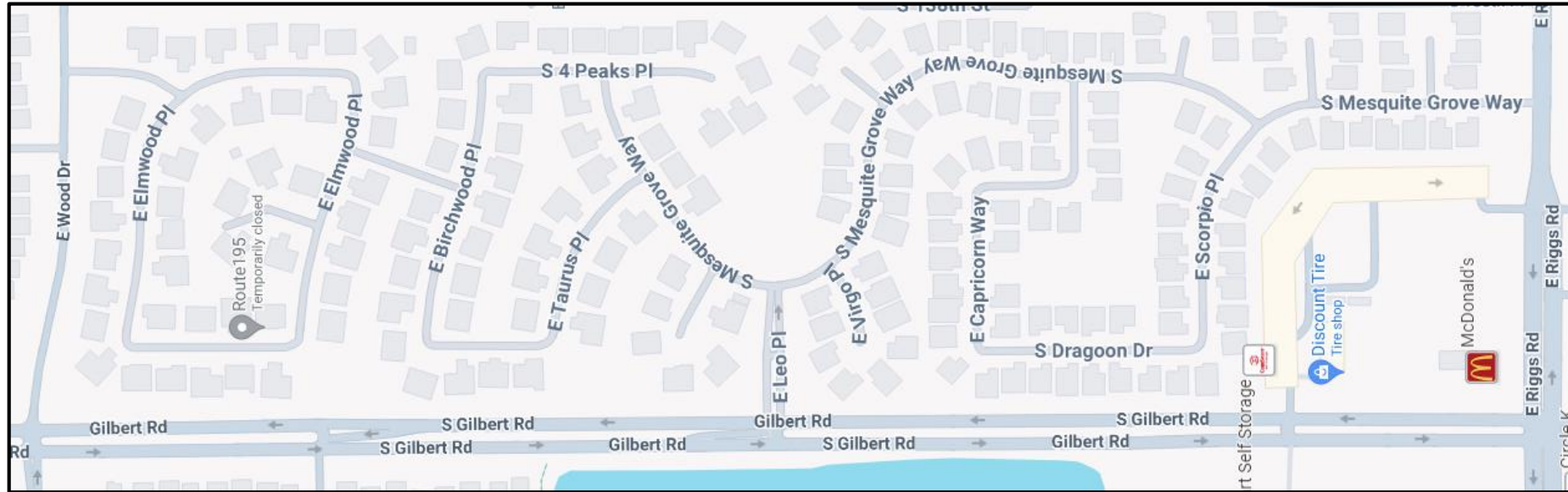


Year	Plan Year	Beginning Reserve Balance	Scheduled Increase	Annual Contribution	Plan Per Month Per Unit	Special Assessment	Investment Earnings	Reserve Expenditure	Ending Reserve Balance	Minimum Threshold
2024	1	445,754	40.00%	48,974	19.91	-	5,572	60,650	439,650	230,000
2025	2	439,650	75.00%	85,704	34.84	-	5,496	218,303	312,546	239,200
2026	3	312,546	75.00%	149,982	60.97	-	3,907	112,218	354,217	248,768
2027	4	354,217	40.00%	209,975	85.36	-	4,428	102,196	466,423	258,719
2028	5	466,423	40.00%	293,965	119.50	-	5,830	118,556	647,662	269,067
2029	6	647,662	15.50%	339,529	138.02	-	8,096	206,373	788,914	279,830
2030	7	788,914	15.50%	392,156	159.41	-	9,861	118,993	1,071,938	291,023
2031	8	1,071,938	15.50%	452,940	184.12	250,000	13,399	12,896	1,775,382	302,664
2032	9	1,775,382	15.50%	523,146	212.66	-	22,192	32,640	2,288,079	314,771
2033	10	2,288,079	0.00%	523,146	212.66	250,000	28,601	1,658,415	1,431,412	327,362
2034	11	1,431,412	0.00%	523,146	212.66	-	17,893	1,751,066	221,384	340,456
2035	12	221,384	0.00%	523,146	212.66	-	2,767	178,123	569,174	354,074
2036	13	569,174	0.00%	523,146	212.66	-	7,115	135,995	963,439	368,237
2037	14	963,439	0.00%	523,146	212.66	-	12,043	148,095	1,350,533	382,967
2038	15	1,350,533	0.00%	523,146	212.66	-	16,882	291,252	1,599,309	398,286
2039	16	1,599,309	0.00%	523,146	212.66	-	19,991	166,799	1,975,647	414,217
2040	17	1,975,647	0.00%	523,146	212.66	-	24,696	352,111	2,171,377	430,786
2041	18	2,171,377	0.00%	523,146	212.66	-	27,142	93,100	2,628,566	448,017
2042	19	2,628,566	0.00%	523,146	212.66	-	32,857	232,333	2,952,236	465,938
2043	20	2,952,236	0.00%	523,146	212.66	-	36,903	380,826	3,131,459	484,575
2044	21	3,131,459	0.00%	523,146	212.66	-	39,143	217,013	3,476,735	503,958
2045	22	3,476,735	0.00%	523,146	212.66	-	43,459	211,907	3,831,433	524,117
2046	23	3,831,433	0.00%	523,146	212.66	-	47,893	422,514	3,979,957	545,081
2047	24	3,979,957	0.00%	523,146	212.66	-	49,749	119,923	4,432,930	566,885
2048	25	4,432,930	0.00%	523,146	212.66	-	55,412	76,002	4,935,486	589,560
2049	26	4,935,486	0.00%	523,146	212.66	-	61,694	10,663	5,509,662	613,142
2050	27	5,509,662	0.00%	523,146	212.66	-	68,871	259,335	5,842,343	637,668
2051	28	5,842,343	0.00%	523,146	212.66	-	73,029	475,051	5,963,467	663,175
2052	29	5,963,467	0.00%	523,146	212.66	-	74,543	266,711	6,294,445	689,702
2053	30	6,294,445	0.00%	523,146	212.66	-	78,681	518,139	6,378,133	717,290

## **APPENDIX B**

### **GRAPHIC EXHIBITS**

# Mesquite Grove Estates



## **APPENDIX C**

### **PHOTOGRAPHS**



**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Entrance Monument  
Sign - Gilbert Road

1

PHOTO NUMBER



**Description:**

Stamped asphalt -  
Gilbert Road entrance

2

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Gilbert Road entrance

3

PHOTO NUMBER



**Description:**

Decorative elements / landscaping at entrance

4

PHOTO NUMBER

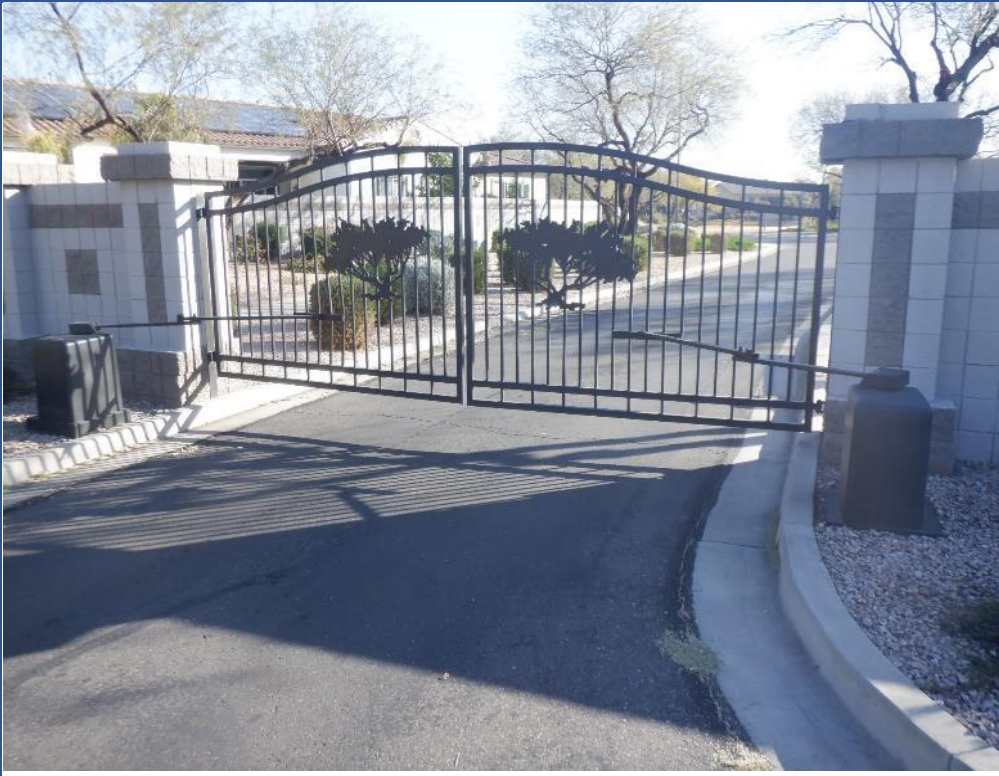


**Description:**

Landscape lighting

5

PHOTO NUMBER



**Description:**

Wrought iron entrance gates at Gilbert Road entrance

6

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

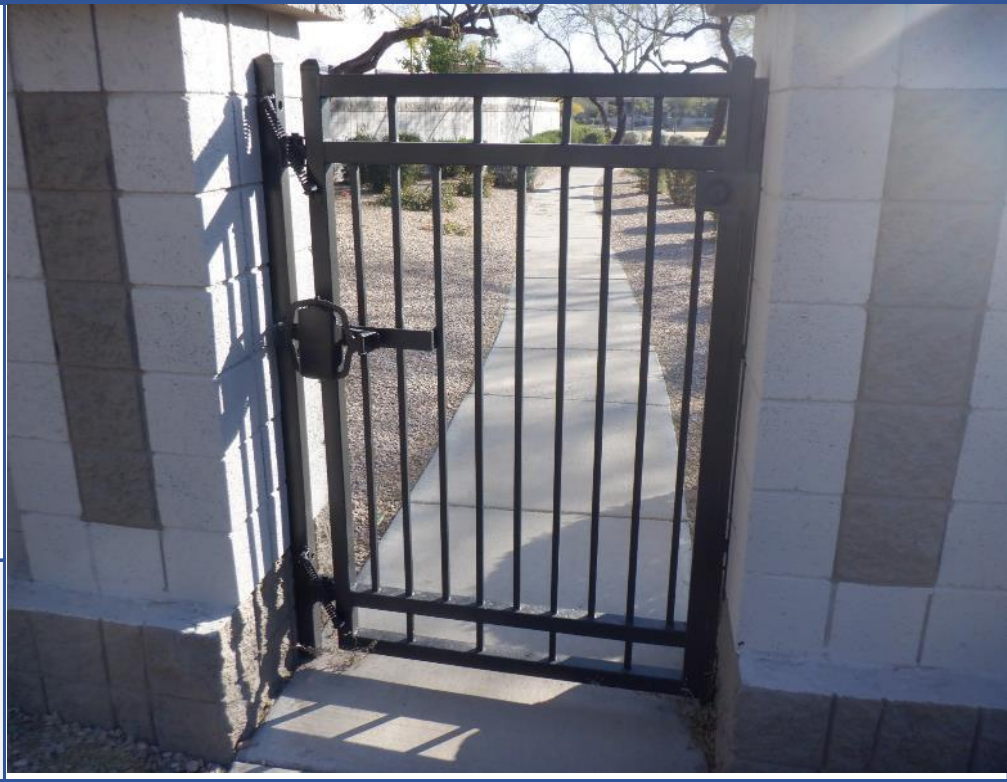
**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER  
  
7



**Description:**  
  
Gate operator at Gilbert Road entrance

PHOTO NUMBER  
  
8



**Description:**  
  
Wrought iron pedestrian gate at Gilbert Road entrance

PHOTO NUMBER



**Description:**

Access control system  
Gilbert Road entrance

9

PHOTO NUMBER



**Description:**

Overview of Gilbert  
Road entrance

10

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Overview of Gilbert Road entrance

11

PHOTO NUMBER



**Description:**

Concrete landscape curbing

12

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Gate operator at Gilbert Road entrance

13

PHOTO NUMBER



**Description:**

Weathermatic irrigation controller at Gilbert Road entrance

14

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

15



**Description:**

Electric control meter at  
Gilbert Road entrance

PHOTO NUMBER

16



**Description:**

Mailbox kiosks at  
Scorpio and Dragoon



PHOTO NUMBER



**Description:**

Drainage culvert for  
Tract I

17

PHOTO NUMBER



**Description:**

Park equipment in Tract  
I

18

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

BBQ grill in Tract I

19

PHOTO NUMBER



**Description:**

Park equipment in Tract I

20

PHOTO NUMBER

21



**Description:**

Pet station in Tract I

PHOTO NUMBER

22



**Description:**

Playground equipment  
in Tract I

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

23



**Description:**

Playground equipment  
in Tract I

PHOTO NUMBER

24



**Description:**

Playground equipment  
in Tract I

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

25



**Description:**

Playground equipment  
in Tract I

PHOTO NUMBER

26



**Description:**

Park bench in Tract I

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

27



**Description:**

Sand in playground area  
in Tract I

PHOTO NUMBER

28



**Description:**

Swings in Tract I  
playground

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Park equipment in Tract  
I

29

PHOTO NUMBER



**Description:**

BBQ in Tract I (new)

30

PHOTO NUMBER



**Description:**

Weathermatic irrigation controller

31

PHOTO NUMBER



**Description:**

Electric control meter in Tract I

32



**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

33



**Description:**

Mailbox Kiosk at  
Mesquite Grove Way  
and Scorpio Court

PHOTO NUMBER

34



**Description:**

Tract I park overview

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Mailbox kiosk at  
Aquarius and Rincon

35

PHOTO NUMBER



**Description:**

Concrete landscape  
curbing

36

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**

**37**



**Description:**

Tract I drainage

**PHOTO NUMBER**

**38**



**Description:**

Tract I drainage culvert

**PHOTO NUMBER**

**39**



**Description:**

Mailbox Kiosk on  
Capricorn

**PHOTO NUMBER**

**40**



**Description:**

Block wall in Tract I

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

<p>PHOTO NUMBER</p>		<p><b>Description:</b></p> <p>Block wall and wrought iron fencing</p>
<p>41</p>		

<p>PHOTO NUMBER</p>		<p><b>Description:</b></p> <p>Block wall</p>
<p>42</p>		

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

43

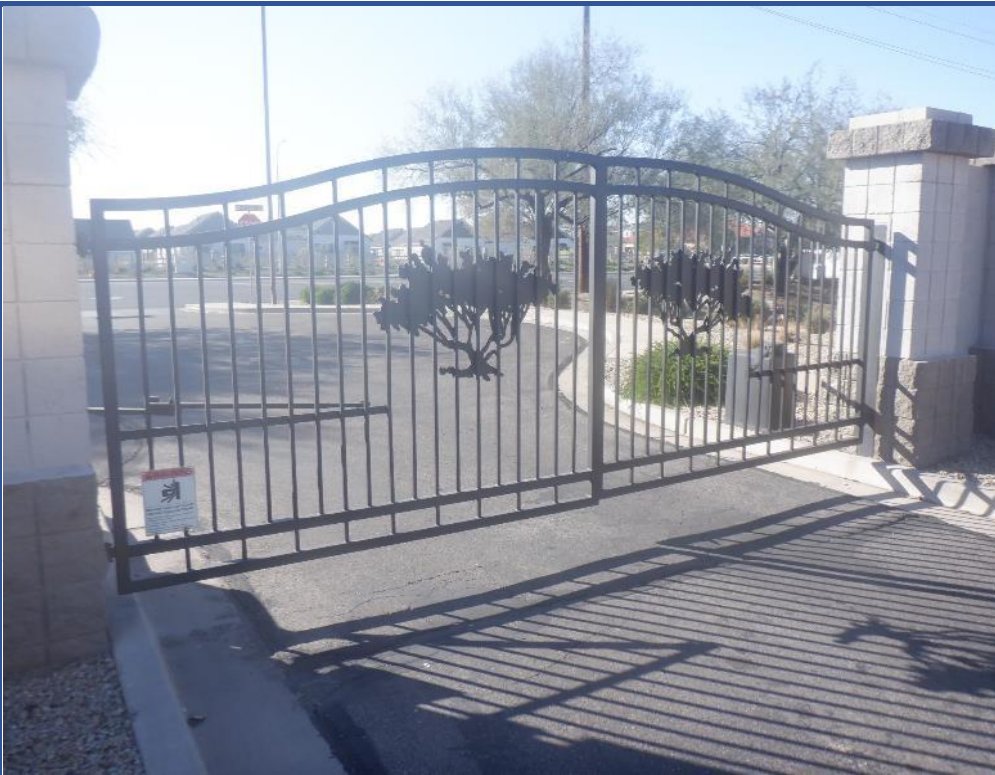


**Description:**

Mailbox kiosks at  
Mesquite Grove Way  
and Sagittarius Court

PHOTO NUMBER

44



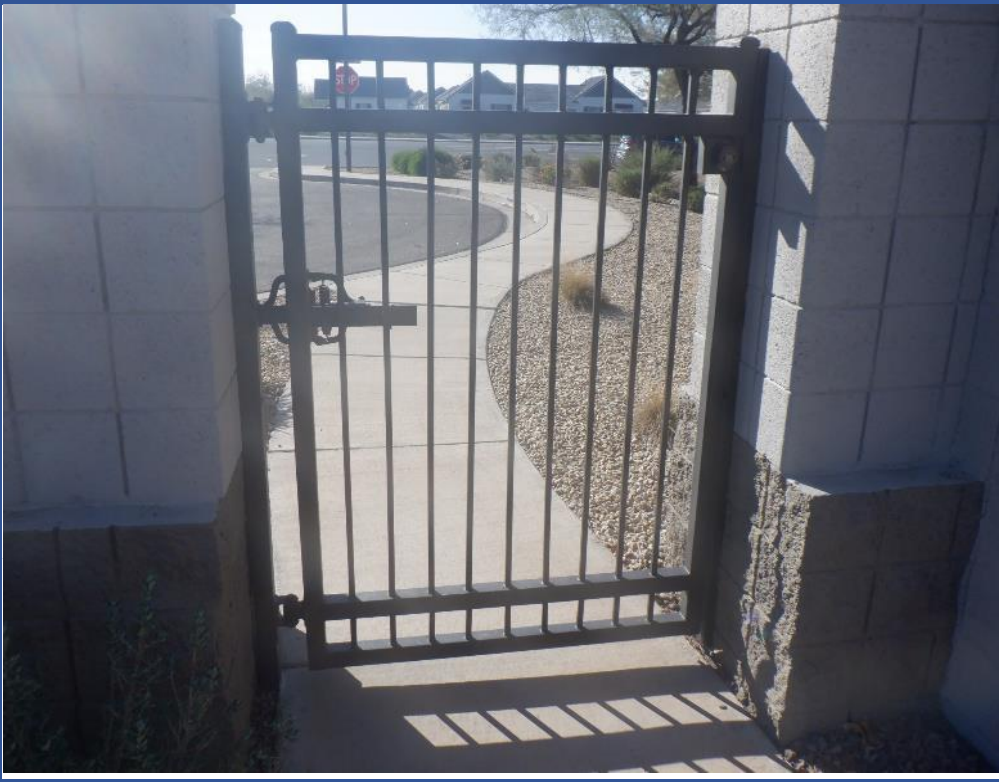
**Description:**

Wrought iron entrance  
gates at Riggs Road

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER  
  
45



**Description:**

Wrought iron pedestrian gate at Riggs Road

PHOTO NUMBER  
  
46



**Description:**

Gate operator at Riggs Road

PHOTO NUMBER



**Description:**

Entrance monument sign - Riggs Road

47

PHOTO NUMBER



**Description:**

Access control system - Riggs Road

48



**PHOTO NUMBER**



**Description:**

Mailbox kiosk at  
Mesquite Grove Way  
and Four Peaks Place

**49**

**PHOTO NUMBER**



**Description:**

Mailbox kiosk at  
Mesquite Grove Way  
and Virgo Place

**50**

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Mailbox kiosk at  
Mesquite Grove Way  
and Libra Place

51

PHOTO NUMBER



**Description:**

Mailbox kiosk at Four  
Peaks Place and  
Mesquite Grove Way

52

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

53



**Description:**

Mailbox kiosk at  
Dragoon and Taurus

PHOTO NUMBER

54



**Description:**

Tract B drainage wash  
and park overview

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Tract B drainage wash  
and park overview

**55**

**PHOTO NUMBER**



**Description:**

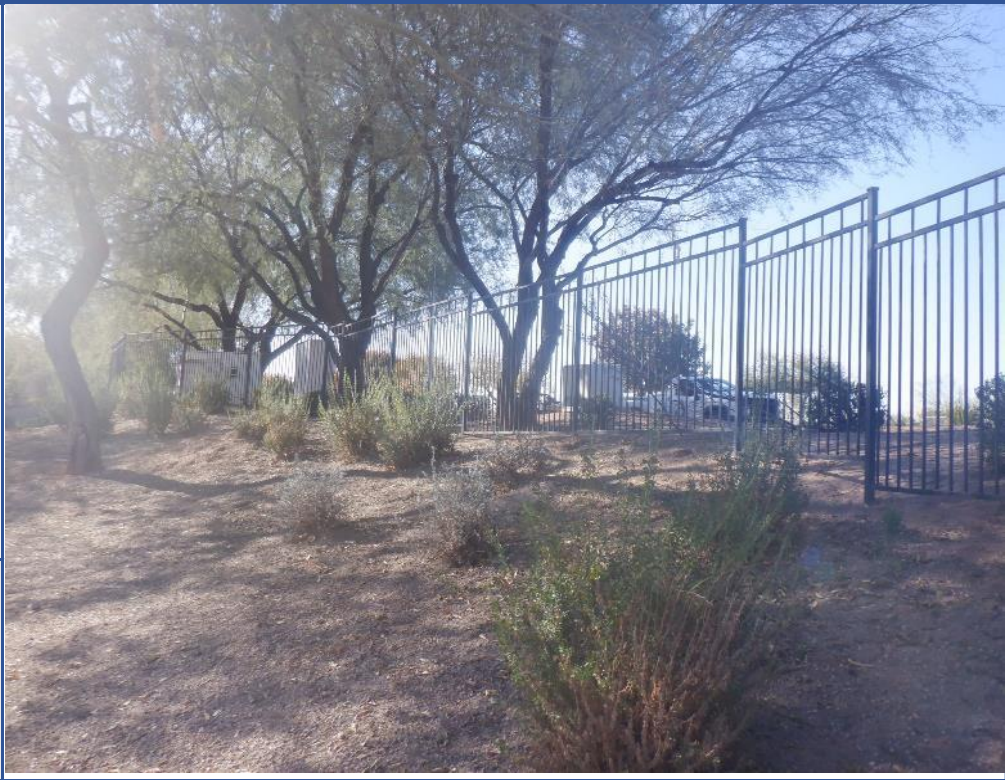
Wrought iron fencing on  
the exterior perimeter in  
Tract B

**56**

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Wrought iron fencing on the exterior perimeter in Tract B

**57**

**PHOTO NUMBER**



**Description:**

Backflow preventer

**58**

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Drainage culvert from  
Four Peaks Place to  
Tract E common area

59

PHOTO NUMBER



**Description:**

Mailbox kiosks on  
Elmwood and Rincon

60

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

61



**Description:**

Mailbox kiosks on Cedar  
and Dragoon

PHOTO NUMBER

62



**Description:**

Tract B drainage culvert  
and common area  
overview

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Tract B drainage culvert  
and common area  
overview

63

PHOTO NUMBER



**Description:**

Tract B drainage culvert  
and common area  
overview

64



**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Community  
announcement  
monument in Tract E  
common area park

65

PHOTO NUMBER



**Description:**

Pet station in Tract E  
park

66

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Park equipment in Tract E park

67

PHOTO NUMBER



**Description:**

Ramada and park equipment in Tract E park

68

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Park equipment in Tract  
E park

69

PHOTO NUMBER



**Description:**

Park equipment in Tract  
E park

70

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

71



**Description:**

Electric control meter in  
Tract E

PHOTO NUMBER

72



**Description:**

Concrete sidewalk in  
Tract E

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Tract E park overview

73

PHOTO NUMBER



**Description:**

Tract E park overview

74

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Park equipment in Tract E

75

PHOTO NUMBER



**Description:**

Concrete drainage culvert in Tract E

76

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

77



**Description:**

Overview of riprap and  
concrete sidewalk in  
Tract E

PHOTO NUMBER

78



**Description:**

Solar panel in Tract E  
park

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Landscape Granite,  
landscaping, and  
landscape curbing in  
Tract E

79

PHOTO NUMBER



**Description:**

Wrought iron entrance  
gates at Wood Drive  
entrance

80



**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

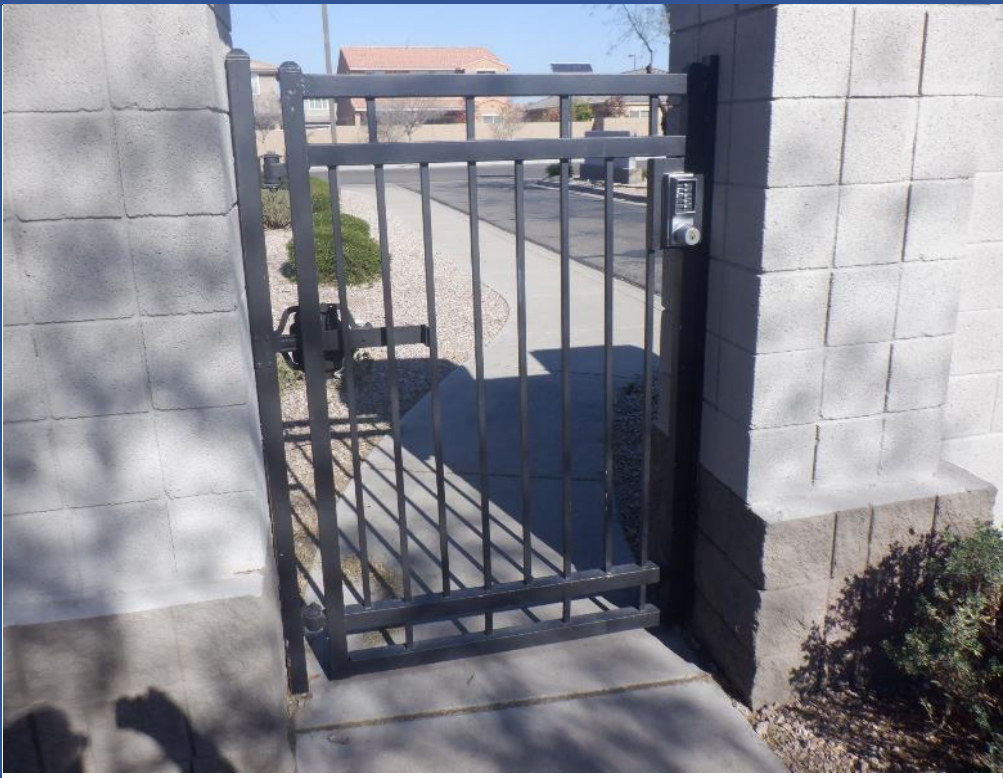


**Description:**

Gate operator at Wood Drive entrance

81

PHOTO NUMBER



**Description:**

Wrought iron pedestrian gate at Wood Drive entrance

82

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



Description:

Weathermatic irrigation controller near Wood Drive entrance

83

PHOTO NUMBER



Description:

Electric control meter near Wood Drive entrance

84

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Asphalt near Cedar and Four Peaks

**85**

**PHOTO NUMBER**



**Description:**

Asphalt near Cedar and Dragoon

**86**

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

<p>PHOTO NUMBER</p>		<p><b>Description:</b></p> <p>Asphalt near Dragon</p>
<p>87</p>		

<p>PHOTO NUMBER</p>		<p><b>Description:</b></p> <p>Asphalt near Dragon</p>
<p>88</p>		

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER  
  
89



**Description:**  
  
Asphalt near Libra and  
Mesquite Grove Way

PHOTO NUMBER  
  
90



**Description:**  
  
Asphalt near Four Peaks  
and Mesquite Grove  
Way

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

91



**Description:**

Asphalt near Aquarius and Rincon (standing water deteriorating asphalt)

PHOTO NUMBER

92



**Description:**

Street signs in community

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PHOTO NUMBER</b></p>		<p><b>Description:</b></p> <p>Asphalt near Dragoon and Scorpio</p>
<p><b>93</b></p>		

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PHOTO NUMBER</b></p>		<p><b>Description:</b></p> <p>Asphalt near Dragoon and Scorpio</p>
<p><b>94</b></p>		

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER  
  
95



**Description:**  
  
Tract J park overview ,  
including concrete  
sidewalk and pet station

PHOTO NUMBER  
  
96



**Description:**  
  
Tract J concrete sidewalk  
leading to exit from  
community and a  
wrought iron / wood slat  
pedestrian gate



**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Deficiency - Cracks in stamped asphalt at Gilbert Road entrance

**D1**

**PHOTO NUMBER**



**Description:**

Deficiency - Cracks in stamped asphalt at Gilbert Road entrance

**D2**

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Deficiency - Corroded and damaged landscape lighting

D3

PHOTO NUMBER



**Description:**

Deficiency - Corroded picnic table in Tract I

D4

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Deficiency - Cracked and depressed concreted sidewalk in Tract I

**D5**

**PHOTO NUMBER**



**Description:**

Deficiency - Corroded BBQ in Tract I

**D6**

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

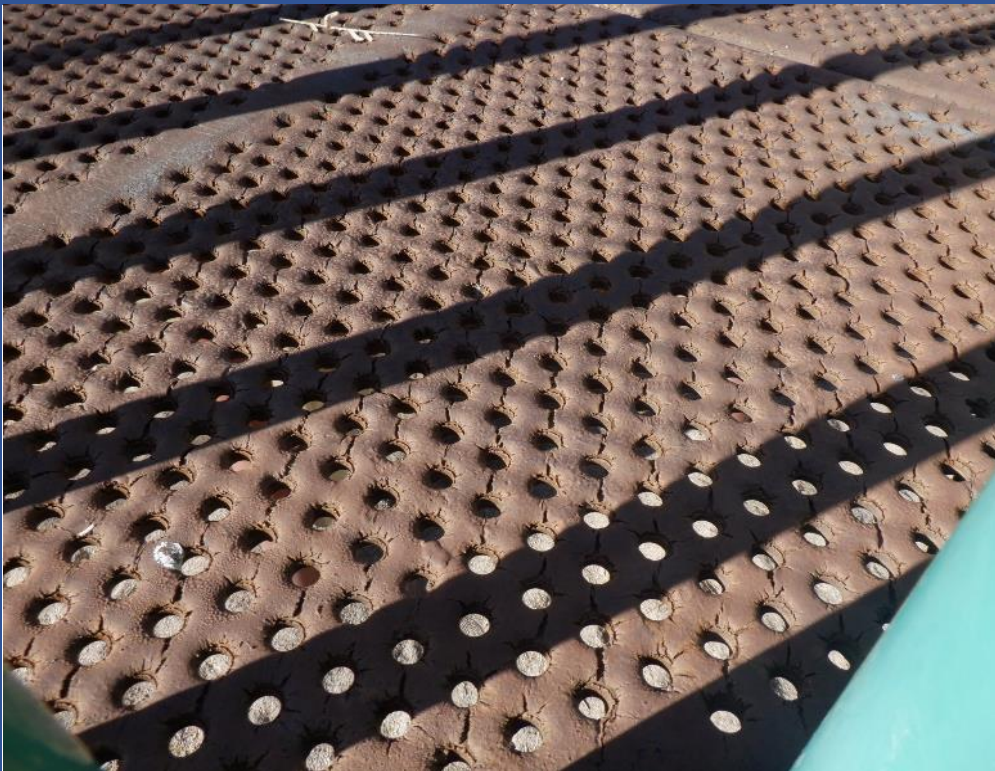


**Description:**

Deficiency - Aging  
playground set

D7

PHOTO NUMBER



**Description:**

Deficiency - Corroded  
platform on playground  
set

D8

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Deficiency - Block wall exposed footing due to erosion

D9

PHOTO NUMBER



**Description:**

Deficiency - Block wall exposed footing due to erosion

D10

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

**D11**



**Description:**

Deficiency -  
Deteriorating block wall  
(top)

PHOTO NUMBER

**D12**



**Description:**

Deficiency -  
Deteriorating block wall  
(top)

PHOTO NUMBER

**D13**



**Description:**

Deficiency -  
Deteriorating block wall  
(top)

PHOTO NUMBER

**D14**



**Description:**

Deficiency - Block wall  
exposed footing due to  
erosion

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Deficiency - Block wall exposed footing due to erosion

**D15**

**PHOTO NUMBER**



**Description:**

Deficiency - Block wall exposed footing due to erosion

**D16**



**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Deficiency - Block wall exposed footing due to erosion

**D17**

**PHOTO NUMBER**



**Description:**

Deficiency - Significant erosion adjacent to block walls

**D18**

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

**D19**



**Description:**

Deficiency - Damaged landscape curbing

PHOTO NUMBER

**D20**



**Description:**

Deficiency - Drainage culvert not draining

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Deficiency - Damaged sidewalk and concrete drainage culvert - potential safety issue

**D21**

**PHOTO NUMBER**



**Description:**

Deficiency - Damaged landscape curbing and erosion

**D22**

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER

**D23**



**Description:**

Deficiency - Leaning block wall

PHOTO NUMBER

**D24**



**Description:**

Deficiency - Leaning block wall

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PHOTO NUMBER</b></p>		<p><b>Description:</b></p> <p>Deficiency - Leaning block wall</p>
<p><b>D25</b></p>		

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PHOTO NUMBER</b></p>		<p><b>Description:</b></p> <p>Deficiency - Leaning block wall</p>
<p><b>D26</b></p>		

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Deficiency - Leaning  
block wall

D27

PHOTO NUMBER



**Description:**

Deficiency - Pole light  
leaning (this actually  
belongs to SRP)

D28

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PHOTO NUMBER</b></p>		<p><b>Description:</b></p> <p>Deficiency - Leaning block wall</p>
<p><b>D29</b></p>		

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PHOTO NUMBER</b></p>		<p><b>Description:</b></p> <p>Deficiency - Leaning block wall</p>
<p><b>D30</b></p>		

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

**PHOTO NUMBER**



**Description:**

Deficiency - Cracked sidewalk

**D31**

**PHOTO NUMBER**



**Description:**

Deficiency - Water management issues; requires repair

**D32**



**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER



**Description:**

Deficiency - Water management issues; requires repair

D33

PHOTO NUMBER



**Description:**

Deficiency - Corroded BBQ

D34

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

PHOTO NUMBER  
**D35**



**Description:**  
  
Deficiency - Trip hazard on concrete sidewalk in Tract E

PHOTO NUMBER  
**D36**




**Description:**  
  
Deficiency - Standing water on asphalt; Aquarius and Rincon

**Location:**  
Mesquite Grove Estates  
Chandler, Arizona

**Photo Taken By:**  
D. Kessler  
**Photo Date:**  
Jan 16, 2024

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PHOTO NUMBER</b></p>		<p><b>Description:</b></p> <p>Deficiency - Wall deterioration and leaning</p>
<p><b>D37</b></p>		

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>PHOTO NUMBER</b></p>		<p><b>Description:</b></p> <p>Deficiency - Wall deterioration and leaning</p>
<p><b>D38</b></p>		

## **APPENDIX D**

### **REFERENCE DOCUMENTS**

## TERMS OF REFERENCE RESERVE STUDY

<b>Association</b>	The unit owners' association. May be referred to with different terminology in legal covenants of incorporation.
<b>Board</b>	Elected officers of the Association with fiduciary responsibility for the community's common holdings. May be referred to with different terminology in legal covenants of incorporation.
<b>Owner</b>	Individual unit owner, a Member, or the Association.
<b>Community Manager</b>	Professional organization through which the Board delegates responsibilities for operations and maintenance of the community (also known as a property manager, portfolio manager, managing agent, etc.).
<b>Excellent</b>	Component or system is in "as new" condition, requiring no rehabilitation and should perform in accordance with expected performance.
<b>Good</b>	Component or system is sound and performing its function, although it may show signs of normal wear and tear. Some minor rehabilitation work may be required.
<b>Fair</b>	Component or system falls into one or more of the following categories: a) Workmanship not in compliance with commonly accepted standards, b) Evidence of previous repairs not in compliance with commonly accepted practice, c) Component or system is obsolete, d) Component or system approaching end of expected performance. Repair or replacement is required to prevent further deterioration, or to prolong expected life.
<b>Poor</b>	Component or system has either failed, or cannot be relied upon to continue performing its original function as a result of having exceeded its expected performance, excessive deferred maintenance, or state of disrepair. Present condition could contribute to, or cause, the deterioration of other adjoining elements or systems. Repair or replacement is required.
<b>Adequate</b>	A component or system is stable, has capacity to function as required, is sufficient for its services, is suitable for operation, and/or conforms to standard construction practices.
<b>Basis of Comparison</b>	Ratings are determined by comparison to other buildings of similar age and construction type.
<b>Left, Right, Front, Rear</b>	Directions are taken from the viewpoint of an observer standing at the property frontage and facing it. Or, for a building within a campus setting, the viewpoint of an observer standing in front of the principal entrance and facing it.
<b>Current deficiency immediate expense</b>	We will note any observed or reported physical condition that requires immediate action to correct an existing or potential safety hazard, an enforceable building code violation, or the poor or deteriorated condition of a critical element or system. Also, to address any conditions which, if left "as is," would likely result in the failure of a critical element or system. Such items will be noted in our report even if they do not require a capital expenditure.
<b>Short-term capital expenditures</b>	Correction of physical deficiencies including deferred maintenance, which may not warrant immediate attention, but required repairs or replacements that should be undertaken on a priority basis, taking precedence over preventative maintenance work within a one-year time frame. Included are physical deficiencies resulting from improper design, faulty installation, and/or substandard quality of original systems or materials. Components or systems that have exceeded their expected useful life and require repair or replacement within a one-year timeframe are also included. Observed minor issues that would typically be addressed as normal operations & maintenance work may not be noted in the report.
<b>Long-term capital expenditures</b>	Non-routine repairs, replacements or planned improvements that will require significant expenditure during the study period. Included are items that will reach the end of their estimated useful life or which, in the opinion of the engineer, will require such expense during that time. If saving for longer-term expenditures is desired, then allowances or contingencies for such items may also be included. Observed minor issues that would typically be addressed as normal operations & maintenance work may not be noted in the report.
<b>Expected Useful Life (EUL)</b>	As components age, they wear and deteriorate at varying rates, depending on their service and exposure. Although it is an inexact science, various financial underwriters, data services, and trade organizations publish guidance regarding the EULs of typical building materials and operating systems. For short-lived components, their EUL is used as the frequency between periodic repairs or replacements. Some systems' economic life may be shortened because improved equipment or materials has become available that is less costly to operate or maintain.
<b>Remaining Useful Life (RUL)</b>	The simple equation for determining remaining useful life before repair or replacement is: $EUL - Age = RUL$ However, based on our evaluation of a component, and our professional judgment, we may assign a shorter or longer RUL to actual items being considered.

# Reserve Study Standards<sup>®</sup>™

RSS - RS052023

## Scope and Intent of Standards

The intent of these standards is to provide guidance and methodology in the preparation of reserve studies for all varieties of community association ownership types and physical configurations. These standards establish the procedures from conceptual development through report preparation. Consistent application of these standards will minimize the difference in component selection and funding recommendations by different reserve study providers, with the result that association leaders will receive consistent, credible, and defensible reserve studies.

*Note: Since studies involve practitioner judgment and contain factors that cannot be readily defined and standardized, guidance for reserve study preparation is included throughout and is shown as **italicized**.*

## Purpose and Background

The purpose of the *Reserve Study Standards* is to inform and guide the reserve study provider, such as a Reserve Specialist® (RS), with the minimum requirements necessary for the preparation of a reserve study. A reserve study can be prepared for several reasons throughout the life cycle of a community, beginning prior to construction and initial sales through community maturity. At each stage, the reserve study recommends the funding necessary to sustain the community.

Originally published in 1998, these *Reserve Study Standards* provide a consistent set of terminology, calculations, and expectations so reserve study providers and those they serve together can build a safe and successful future for millions of community association homeowners.

It is recognized that, in addition to the reserve study, a proactive preventive maintenance plan and ongoing periodic structural inspections should be incorporated into the community's long-term planning to properly evaluate and budget for the ongoing care of the common area components as well as the structural safety of the community. To keep the reserve study current and reflect the ongoing changes to the components and the financial needs of the community, the reserve study should be updated on a regular basis.

## Reserve Study

A reserve study is a budget planning tool that identifies the components a community association is responsible for maintaining or replacing, the status of the reserve fund, and a stable and equitable funding plan to offset the anticipated future major common area expenditures.

This limited evaluation is conducted for budget and cash flow purposes. Tasks outside the scope of a reserve study include, but are not limited to, design review, construction evaluation, intrusive or destructive testing, preventive maintenance plans, and structural or safety evaluations.

## Reserve Study Levels of Service

The following four levels of service describe the various types of reserve studies. In each case, minimum requirements are provided; definitions for each term are included within the “Terms and Definitions” section below.

### Level I, Full

A reserve study in which the following five tasks are performed. This type of study includes the preparation of all five portions of the study based on both the reserve study provider’s on-site evaluation and on information provided by the client and other subject matter experts, as applicable:

- Component inventory
- Condition assessment
- Life and valuation estimates
- Fund status
- Funding plan

### Level II, Update, With Site Visit/On-Site Review

A reserve study update in which the following five tasks are performed, based on both the reserve study provider’s on-site evaluation and on information provided by the client and other subject matter experts, as applicable:

- Component inventory
  - *This does not require quantities to be re-established, but it does require a review for a general conformance of the quantities in the study being updated to match the as-built conditions observed as part of the site visit.*
  - *Components are to be added that were not previously included within the study being updated and which now are anticipated to occur within 30 years.*
  - *Long-life components are to be recognized as described within the definition of long-life components provided within this document.*
- Condition assessment
- Life and valuation estimates
- Fund status
- Funding plan

### Level III, Update, No-Site-Visit/Off Site Review

A reserve study update with no on-site visual observations, in which the following three tasks are performed based on both the reserve study provider’s experience, as well as information provided by the client and other subject matter experts as applicable:

- Life and valuation estimates
- Fund status
- Funding plan

### Level IV, Preliminary, Community Not Yet Constructed

A reserve study prepared before construction that is generally used for budget estimates. It is based on design documents such as architectural and engineering plans. The following three tasks are performed to prepare this type of study:



- Component inventory
- Life and valuation estimates
- Funding plan

## Supplemental Reports

In addition to the four levels of service for the preparation of the reserve study, two supplemental reports are recommended in recognition that the life cycle costs of a community association are not only limited to reserve components, and that incorporating these supplemental items will minimize the life cycle costs of the community, improving safety of the structural system(s) in the community. The reserve study provider should ask the client for a copy of the most current preventive maintenance manual to confirm that no overlap exists. The study also should be prepared to confirm that preventive maintenance is being performed. If preventive maintenance is not being performed, this should be disclosed within the report and be reflected, if necessary, in the remaining useful lives of the components included.

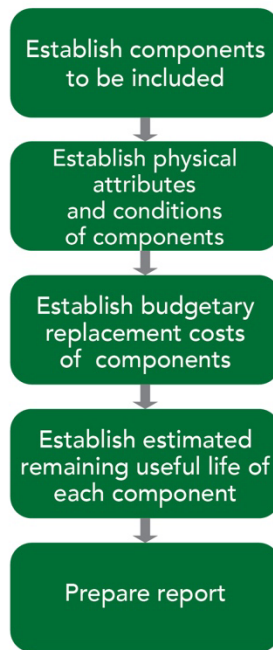
1. **A Preventive Maintenance Manual** is recommended for all associations. Although not a requirement for inclusion in the reserve study, disclosures are required regarding whether a preventive maintenance schedule is in place and being used.

Note: Some preventive maintenance projects may meet the definition of a reserve component and thus should be funded through reserves.

2. **Periodic Structural Inspections** are recommended as outlined in the CAI Building Inspection and Maintenance Public Policy (reference [www.condosafety.com](http://www.condosafety.com)). Specifically, CAI supports policy that requires both initial and recurring inspections for buildings and other major structural elements owned or maintained by the association. It is a critical part of monitoring the condition of the building's structural system on an ongoing basis. The reserve study should include the estimated cost and frequency of these inspections and any others that are required by law or ordinance. If these inspections require that corrective maintenance be performed, the cost and timing for this work should be included within the reserve study.

## Reserve Study Preparation Procedure

The process for preparing a reserve study consists of assembling and systematically analyzing information and data regarding the components comprising the physical assets of the community association which are to be included. A general procedure for conducting a reserve study is included in the figure below. The precise procedure for the preparation of the study shall be determined by the qualified reserve study provider and based on one of the levels of services described within this standard. This standard does not preclude the use of other procedures.



## Establish Components Included in the Reserve Study Component Inventory

The task of selecting and quantifying reserve components.

### Components

The individually listed projects within the physical analysis which are determined for inclusion using the process described within the component inventory. These components form the building blocks for the reserve study. **Components are selected to be included in the reserve study based on the following three-part test:**

1. The association has the obligation to maintain or replace the existing element.
2. The need and schedule for this project can be reasonably anticipated.
3. The total cost for the project is material to the association, can be reasonably estimated, and includes all direct and related costs.

### *Component Selection Guidelines*

*In selecting the components to be included within the reserve study, the following guidelines, although not exclusive of the reserve study provider's expertise, are provided:*

1. *Association maintenance/replacement responsibility is generally established by a review of governing documents as well as established association precedent.*

2. *When a project becomes “reasonably anticipated” will vary based on building age, construction type, and the judgment of the reserve study provider. This test means that component definitions should be based on some degree of certainty.*
3. *The community’s budget should be reviewed, to establish the amount of maintenance planned and which projects are being funded from the operating account.*
4. *The amount and types of maintenance occurring at the community.*
5. *The community’s historical pattern of expenses, helping to determine which projects in the past have been funded from the operating account, as well as to establish their inclusion within the reserve study.*
6. *Any work performed on the reserve components since the prior study was performed.*
7. *All available reports and information regarding the physical components within the community.*
8. *All maintenance contracts in place for the physical components within the community*
9. *Component definitions are not constrained by capital or non-capital state or Internal Revenue Service definitions. If desired at reserve study provider’s discretion, all non-capital (per IRS or other tax authority definitions) items may be categorized separately.*
10. *Components are not restricted to physical items. Components may be projects that do not particularly involve the repair or replacement of a physical asset. In many cases, “components” may not be tangible objects or visually observable yet but should still be considered for inclusion in the study based on the expertise of the reserve study provider, a review of any available design drawings, or other subject matter experts.*
11. *Professional inspections, evaluations, or related building services qualify as reserve components if they otherwise meet the definition of “component.”*
12. *Common area preventive or corrective maintenance projects qualify as reserve components if they otherwise meet the definition of “component.” In other words, a “component” does not need to be a cyclical repair or replacement of a tangible physical item.*
13. *A reserve component is not required to be a cyclical replacement. An example may be corrective maintenance required per a periodic structural inspection.*
14. *In certain jurisdictions, there may be statutory requirements for or limitations to including components or groups of components in the reserve study. Those statutory requirements are to be respected with this standard, representing the minimum requirements in all cases.*
15. *A component replacement is not required to be with a similar component. Logical upgrades to an existing asset or system that is obsolete, inefficient, or no longer effectively serves the needs of the association can be accomplished as a reserve project. These upgrades also can be based on ongoing preventive maintenance costs and an evaluation of energy costs based on higher efficiency equipment.*
16. *There is no minimum or maximum limit to useful life or remaining useful life estimates used in a reserve study.*
17. *Selection of components, or selection of useful life and remaining useful life, may consider energy usage and ongoing maintenance costs which have an impact on total budgetary expenses and total life cycle costs.*
18. *No destructive testing is included in the scope of a reserve study.*

### Long-Life Component

Those components with an estimated remaining life of more than 30 years from the date of the study being prepared.

*The reserve study provider, in coordination with the client, will determine the methodology for including these components in the study. Typical evaluation techniques for consideration include:*

- *Inclusion of long-life components with funding in the study.*
- *Addition of long-life components with funding at the time when they fall within the 30-year period from the date of study preparation.*
- *Identification of long-life components in the component inventory, even when they are not yet being funded in the 30-year funding plan.*

### Key Terms Related to Components

#### **Establish Physical Attributes and Condition of Components/Condition Assessment**

The task of evaluating the current condition of the component based on observed or reported characteristics. The assessment is limited to a visual, non-invasive evaluation.

#### **Establish Budgetary Replacement Costs of Components/Valuation Estimates**

The task of estimating the current repair or replacement costs for the reserve components.

#### **Establish Estimated Remaining Useful Life of Each Component /Life Estimates**

The task of estimating useful life and remaining useful life of the reserve components.

### Develop a Funding Plan

#### Funding Goals

Reserve studies shall be developed based on one of the following funding goals. The funding goal shall be determined by the reserve study provider in consultation with their client to reflect the community's risk tolerance, as well as other variables explained by the reserve study provider.

Adequate funding (or adequate reserves) is defined as a replacement reserve fund and stable and equitable multiyear funding plan that together provide for the reliable and timely execution of the association's major repair and replacement projects as defined herein without reliance on additional supplemental funding.

The three funding goals listed below range from the most aggressive to the most conservative.

#### Baseline Funding

Establishing a reserve funding goal of allowing the reserve cash balance to approach but never fall below zero during the cash flow projection. This is the funding goal with the greatest risk of being prepared to fund future repair and replacement of major components, **and it is not recommended** as a long-term solution/plan. Baseline funding may lead to project delays, the need for a special assessment, and/or a line of credit for the community to fund needed repairs and replacement of major components.

### Threshold Funding

Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than “fully funded” with respective higher risk or less risk of cash problems. In determining the threshold, many variables should be considered, including things such as investment risk tolerance, community age, building type, components that are not readily inspected, and components with a remaining useful life of more than 30 years.

### Full Funding

Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. Fully funded is when the actual or projected reserve balance is equal to the fully funded balance.

*It should be noted that, in certain jurisdictions, there may be statutory funding requirements that would dictate the funding requirements. In all cases, these standards are considered the minimum to be referenced.*

## Reserve Study Report and Content

The following is a list of the minimum content to be included in the reserve study:

1. A summary of the association’s separate interests (number of units/lots), physical description, and current (or projected) reserve fund balance.
2. A tabular listing of the component inventory, including for each component, quantities or identifying descriptions, sources utilized, useful life, remaining useful life, and current replacement cost.

*The component and useful life shall reflect all identified “Long Life Components,” though the funding for components beyond a 30-year useful life does not need to occur until the remaining useful life drops to 30 years.*

3. A description of methods and objectives utilized in computing the fund status and development of the funding plan:
  - a) Methodology used in developing the funding plan.
  - b) Funding goal(s) used in developing the funding plan, and if threshold, the threshold goal (cash or percent funded) chosen.
  - c) Fiscal year for which the reserve study is prepared.

4. Summary of any discussion of preventive maintenance with association representatives including a description of the extent of preventive maintenance being employed.

*If preventive maintenance is not being performed, the remaining useful life of components should be reduced, if applicable.*

5. Summary of any discussion about periodic structural inspection reports or the lack thereof.

*If a periodic structural inspection and report has been performed, a copy should be requested to include any corrective maintenance or repair and associated timing and costs into the reserve study.*

6. A description of the level of service by which the reserve study was prepared.

## Disclosures

The following are the minimum disclosures to be included in the reserve study:

1. General: Description of the other involvement(s) with the association, which could result in actual or perceived conflicts of interest.
2. Physical analysis: Description of how thorough the on-site observations were performed: representative samplings versus all common areas, field measurements versus drawing take-offs, etc.
3. Recommended subject matter experts to be consulted to evaluate issues outside the scope of the reserve study provider's expertise or business model.
4. Financial analysis: Description of assumptions utilized for interest and inflation, tax, and other outside factors.
5. Personnel credentials: State or organizational licenses or credentials carried by the individual responsible for reserve study preparation or oversight.
6. Update reports: Disclosure of how the current work is reliant on the validity of prior reserve studies.
7. Completeness: Material issues which, if not disclosed, would cause a distortion of the association's situation.
8. Reliance on client data: Information provided by the official representative of the association regarding financial, physical, quantity, or historical issues will be deemed reliable by the consultant and assembled for the association's use, not for the purpose of performing an audit, quality/forensic analysis, or background checks of historical records.
9. Reserve balance: The actual or projected total presented in the reserve study is based upon information provided and was not audited.
10. Component quantities: For update with site visit and update with no site visit levels of service, the client is considered to have deemed previously developed component quantities as accurate and reliable.
11. Reserve projects: Information provided about reserve projects will be considered reliable. Any on-site inspection should not be considered a project audit or quality inspection.
12. Periodic building inspections: Structural integrity evaluations are not included in the reserve study unless otherwise noted.
13. Maintenance:
  - A. Preventive maintenance is a critical aspect affecting a community's life cycle costs and structural safety. It is encouraged that every association have a preventive maintenance plan prepared in conjunction with the reserve study (if required). The reserve study shall include a disclosure regarding the community's preventive maintenance planning. The

preventive maintenance plan should incorporate all applicable common elements, not just those components included within the reserve study.

- B. Any information provided by the client regarding ongoing maintenance or repair being performed with any component shall be included within the notes for that component in every full or with site-visit reserve study.
- C. The reserve study provider can only be aware of preventive maintenance plans or programs that have been disclosed by the client.

*Note that an audit or evaluation of any maintenance plans or maintenance contract is outside the scope of services performed by a Reserve Specialist.*

- D. The reserve study provider lacks information to incorporate necessary corrective maintenance costs and timing unless they have been provided with a copy of the most recent periodic structural inspection report. A disclosure to this effect shall be included.
- 14. Disclosure of dollar value below which projects are handled through the operational budget. Exceptions may be made for projects falling below this threshold which materially extend the useful life or remaining useful life of a component.
  - 15. Disclosure of long-life but unfunded components.  
*Unless specifically noted, the components included within this study have an anticipated remaining useful life within 30 years from the time the field observations used in preparing the study was performed.*
  - 16. Liability disclosure: The Reserve Specialist shall incur no civil liability for performing the physical or financial portions of a reserve study performed in accordance with these standards.
  - 17. Scope limitation disclosures: Clear recommendations appear within the reserve study where the association has been advised to retain outside expertise to supplement the evaluation of the Reserve Specialist.
  - 18. Independence disclosure: The Reserve Specialist or other reserve study provider for this project has no familial or marital relationship with the client, no ownership interest in the client, and no ongoing business relationship with the client.
  - 19. The study should include the dates that field observations were performed for use in preparing the study.
  - 20. The study should include the source of all information provided to the reserve study provider of the study, including their name and relationship to the client.

## Updating the Reserve Study

To keep the reserve study current and reflect the ongoing changes to the components and the financial needs of the community, the reserve study should be updated on a regular basis. Best practice is for a site inspection-based reserve study update at least every third year.

*Note: The preventive maintenance evaluations should be updated prior to the reserve study so it may be incorporated into the reserve study update.*

## Reserve Study Provider

Reserve studies should be prepared by a qualified professional.

- Reserve Specialist® (RS) designation. An individual with a RS designation **is the most qualified** individual to conduct reserve studies. They have prepared at least 30 reserve studies within the past three years, have the appropriate level of education and experience, and have committed to a high level of ethical and professional standards.

Other qualifications may include:

- A professional who carries nationally recognized professional credentials for reserve study providers.
- A professional with construction, accounting, architecture, engineering, community association management, or specific subject matter expertise with direct experience preparing reserve studies for community associations.

## Agreements

The scope of services for the reserve study shall be defined by the qualified reserve study provider and all conditions, applicable standards, and services shall be mutually agreed upon by the client and the reserve study provider.

## Standard of Care

In providing a reserve study based on these standards, the Reserve Specialist shall perform in a manner consistent with that degree of care and skill ordinarily exercised by members of the same profession practicing under similar circumstances at the same time and the same or similar locality. The Reserve Specialist further agrees that the work performed shall conform to the requirements of these standards.

As different community types present different challenges and levels of complexity, a Reserve Specialist should only accept engagements where they are qualified to prepare the reserve study within their experience and expertise, unless assisted by one or more subject matter experts or more qualified Reserve Specialists, as necessary.

## Terms and Definitions

**Adequate Reserves:** A replacement reserve fund and stable and equitable multiyear funding plan that together provide for the reliable and timely execution of the association's major repair and replacement projects as defined herein without reliance on additional supplemental funding.

**Capital Improvements:** Additions to the association's common area that previously did not exist. While these components should be added to the reserve study for future replacement, the cost of construction or installation cannot be taken from the reserve fund.

**Cash Flow Method (also known as pooling):** A method of developing a reserve funding plan where funding of reserves is designed to offset the annual expenditures from the reserve fund.

*To determine the selected funding plan, different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.*



**Common Area:** The areas identified in the community association’s master deed or declarations of covenant easements and restrictions that the association is obligated to maintain and replace or based on a well-established association precedent.

**Community Association:** A nonprofit entity that exists to preserve the nature of the community and protect the value of the property owned by members. Membership in the community association is mandatory and automatic for all owners. All owners pay mandatory lien-based assessments that fund the operation of the association and maintain the common area or elements, as defined in the governing documents. The community association is served and lead by an elected board of trustees or directors.

**Component Inventory:** The task of selecting and quantifying reserve components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of association precedents, and discussion with appropriate representative(s) of the association.

The Reserve Specialist, in coordination with the client, will determine the methodology for including these components in the study. Typical evaluation techniques for consideration include:

- Inclusion of long-life components with funding in the study.
- Addition of long-life components with funding at the time when they fall within the 30-year period from the date of study preparation.
- Identification of long-life components in the component inventory even when they are not yet being funded in the 30-year funding plan.

**Component Method** (also known as Straight Line): A method of developing a reserve funding plan where the total funding is based on the sum of funding for the individual components.

**Condition Assessment:** The task of evaluating the current condition of the component based on observed or reported characteristics. The assessment is limited to a visual, non-invasive evaluation.

**Effective Age:** The difference between useful life and estimated remaining useful life. Not always equivalent to chronological age since some components age irregularly. Used primarily in computations.

**Financial Analysis:** The portion of a reserve study in which the current status of the reserves (measured as cash or percent funded) and a recommended reserve funding plan are derived, and the projected reserve income and expense over a period of time are presented. The financial analysis is one of the two parts of a reserve study. A minimum of 30 years of income and expense are to be considered.

**Fully Funded:** 100 percent funded. When the actual (or projected) reserve balance is equal to the fully funded balance.

**Fully Funded Balance (FFB):** An indicator against which the actual (or projected) reserve balance can be compared. The reserve balance that is in direct proportion to the fraction of life “used up” of the current repair or replacement cost. This number is calculated for each component, and then summed for an association total.

$FFB = \text{Current Cost} \times \text{Effective Age} / \text{Useful Life}$

*Example: For a component with a \$10,000 current replacement cost, a 10-year useful life, and effective age of 4 years, the fully funded balance would be \$4,000.*

**Fund Status:** The status of the reserve fund reported in terms of cash or percent funded.

### Funding Goals:

The three funding goals listed below range from the most aggressive to most conservative:

#### Baseline Funding

Establishing a reserve funding goal of allowing the reserve cash balance to approach but never fall below zero during the cash flow projection. This is the funding goal with the greatest risk of being prepared to fund future repair and replacement of major components, **and it is not recommended** as a long-term solution/plan. Baseline funding may lead to project delays, the need for a special assessment, and/or a line of credit for the community to fund needed repairs and replacement of major components.

#### Threshold Funding

Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. Depending on the threshold selected, this funding goal may be weaker or stronger than “fully funded” with respective higher risk or less risk of cash problems. In determining the threshold, many variables should be considered, including things such as investment risk tolerance, community age, building type, components that are not readily inspected, and components with a remaining useful life of more than 30 years.

#### Full Funding

Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. Fully funded is when the actual or projected reserve balance is equal to the fully funded balance.

*It should be noted that, in certain jurisdictions, there may be statutory funding requirements that would dictate the funding requirements. In all cases, these standards are considered the minimum to be referenced.*

**Funding Plan:** An association’s plan to provide income to a reserve fund to offset anticipated expenditures from that fund. The plan must be a minimum of 30 years of projected income and expenses.

**Funding Principles:** A funding plan addressing these principles. These funding principles are the basis for the recommendations included within the reserve study:

- Sufficient funds when required.
- Stable funding rate over the years.
- Equitable funding rate over the years.
- Fiscally responsible.

**Initial Year:** The first fiscal year in the financial analysis or funding plan.

**Life Estimates:** The task of estimating useful life and remaining useful life of the reserve components.

**Life Cycle Cost:** The ongoing cost of deterioration which must be offset in order to maintain and replace common area components at the end of their useful life. Note that the cost of preventive maintenance and corrective maintenance determined through periodic structural inspections (if required) are included in the calculation of life cycle costs and often result in overall net lower life cycle costs.

**Maintenance:** Maintenance is the process of maintaining or preserving something, or the state of being maintained. Maintenance is often defined in three ways: preventive maintenance, corrective maintenance, and deferred maintenance. Maintenance projects commonly fall short of “replacement” but may pass the defining test of a reserve component and be appropriate for reserve funding. Maintenance types are categorized below:

**Preventive Maintenance:** Planned maintenance carried out proactively at predetermined intervals, aimed at reducing the performance degradation of the component such that it can attain, at minimum, its estimated useful life.

**Deferred Maintenance:** Maintenance which is not performed and leads to premature deterioration to the common areas due to lack of preventive maintenance.

*This results in a reduction in the remaining useful life of the reserve components and the potential of inadequate funding. Typically, deferred maintenance creates a need for corrective maintenance.*

**Corrective Maintenance:** Maintenance performed following the detection of a problem, with the goal of remediating the condition such that the intended function and life of the component or system is restored, preserved, or enhanced.

*Many corrective maintenance projects could be prevented with a proactive, preventive maintenance program. Note that when the scope is minor, these projects may fall below the threshold of cost significance and thus are handled through the operational budget. In other cases, the cost and timing should be included within the reserve study.*

**Percent Funded:** The ratio, at a particular point in time clearly identified as either the beginning or end of the association’s fiscal year, of the actual (or projected) reserve balance to the fully funded balance, expressed as a percentage.

*While percent funded is an indicator of an association’s reserve fund size, it should be viewed in the context of how it is changing due to the association’s reserve funding plan, in light of the association’s risk tolerance and is not by itself a measure of “adequacy.”*

**Periodic Structural Inspection:** Structural system inspections aimed at identifying issues when they become evident.

*Additional information and recommendations are included within the Condominium Safety Public Policy Report. [www.condosafety.com](http://www.condosafety.com)*

**Physical Evaluation:** The portion of the reserve study where the component inventory, condition assessment, and life and valuation estimate tasks are performed. This represents one of the two parts of the reserve study.

**Preventive Maintenance Schedule:** A summary of the preventive maintenance tasks included within a maintenance manual which should be performed such that the useful lives of the components are attained or exceeded. This schedule should include both the timing and the estimated cost of the task(s).

**Remaining Useful Life (RUL):** Also referred to as “remaining life” (RL). The estimated time, in years, that a component can be expected to serve its intended function, presuming timely preventive maintenance. Projects expected to occur in the initial year have zero remaining useful life.

**Replacement Cost:** The cost to replace, repair, or restore the component to its original functional condition during that particular year, including all related expenses (including but not limited to shipping, engineering, design, permits, installation, disposal, etc.).

**Reserve Balance:** Actual or projected funds, clearly identified as existing either at the beginning or end of the association’s fiscal year, which will be used to fund reserve component expenditures. The source of this information should be disclosed within the reserve study.

*Also known as beginning balance, reserves, reserve accounts, or cash reserves. This balance is based on information provided and not audited.*

**Reserve Study:** A reserve study is a budget planning tool which identifies the components that a community association is responsible to maintain or replace, the current status of the reserve fund, and a stable and equitable funding plan to offset the anticipated future major common area expenditures.

This limited evaluation is conducted for budget and cash flow purposes. Tasks outside the scope of a reserve study include, but are not limited to, design review, construction evaluation, intrusive or destructive testing, preventive maintenance plans, and structural or safety evaluations.

**Reserve study provider:** An individual who prepares reserve studies. In many instances, the reserve study provider will possess a specialized designation such as the Reserve Specialist® (RS) designation administered by Community Associations Institute (CAI). This designation indicates that the provider has shown the necessary skills to perform a reserve study that conforms to these standards. In some instances, qualifications in excess of the RS designation will be required if supplemental subject matter expertise is required.

**Reserve Study Provider Firm:** A company that prepares reserve studies as one of its primary business activities.

**Site Visit:** A visual assessment of the accessible areas of the components included within the reserve study.

*The site visit includes tasks such as, but not limited to, on-site visual observations, a review of the association’s design and governing documents, review of association precedents, and discussion with appropriate representative(s) of the association.*

**Special Assessment:** A temporary assessment levied on the members of an association in addition to regular assessments. Note that special assessments are often regulated by governing documents or local statutes.

*Special assessments, when used to make up for unplanned reserve fund shortfalls, may be an indicator of deferred maintenance, improper reserve project planning, and unforeseen catastrophes and accidents, as well as other surprises.*

**Structural System:** The structural components within a building that, by contiguous interconnection, form a path by which external and internal forces, applied to the building, are delivered to the ground. This is generally a combination of structural beams, columns, and bracing and is not included within the reserve study, although it is reviewed as part of the recommended periodic structural inspections.

*It is important to recognize that individual structural components which are not a part of the structural system, such as decks, balconies, and podium deck components may be included for reserve funding if they otherwise satisfy the three-part test.*

**Useful Life (UL):** The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed presuming proactive, planned, preventive maintenance.

*Best practice is to note the preventive maintenance that will be necessary to achieve the useful life estimate appearing in the reserve study.*

**Valuation Estimates:** The task of estimating the current repair or replacement costs for the reserve components.

## **APPENDIX E**

### **FUNDING METHODOLOGIES (DISCUSSION POINTS)**

## **FUNDING METHODOLOGIES**

The approach to funding methodologies continues to be a subject of much discussion and can create confusion for those responsible for long-term strategic planning for a community.

This is written to be applicable to for communities that utilize reserve studies including Homeowners Associations and Condominium Associations—both residential and commercial.

This Appendix provides general information related to Funding Methodologies and is not specific to your Association or Community. This has been included to provide a framework for consideration of the study, and to explain our approach to the funding analysis.

We also recommend that the Board review the Community Association Institute (CAI) National Reserve Study Standards attached in the “Reference Documents” Appendix of this report.

The Community Association Institute (CAI) recognizes several funding methodologies, all of which may be used to satisfy these principles:

- ✓ Sufficient Funds When Required
- ✓ Stable Contribution Rate over the Years
- ✓ Evenly Distributed Contributions over the Years
- ✓ Fiscally Responsible Some of the more common methods are outlined below.

Within the context of the report, “Section 5.4 – Funding Methodologies,” provides a brief overview that we used for this report since we recognize that some Associations prefer a different methodology. The text in included in Section 5.4 is replicated below.

### **STATUTORY FUNDING**

Some states regulate the management of homeowner associations, including the fiduciary responsibility of its Officers or Board regarding reserve funding. At this time, Arizona and Nevada do not require any funding criteria.

### **COVENANTAL FUNDING**

The legal documents, which originally establish a homeowner’s association, may set forth guidelines for its reserve funding.

You should review the Master Deed and/or CC&Rs for your Association to determine if there are stipulations for long-term funding criteria since each community is set up with unique requirements.

## CASH FLOW BASED FUNDING

*Criterion-Kessler Engineer's recommended approach to reserve planning utilizes a cash flow model implementing either Baseline or Threshold Based Funding methodology.*

A cash flow based funding plan is prepared so that contributions to reserves are selected to be sufficient to offset future variable annual reserve expenditures.

Our engineering evaluation and planning yields a projected annual reserve budget schedule over the planning period. This reserve expenditure plan and the Association's current rate of contribution to reserves is entered into our computer model.

The model allows us to determine whether the Association's current rate of contribution will prove sufficient to meet reserve obligations over the planning period.

If the Association's current rate of contribution is not sufficient, our computer model allows us to develop alternate contribution strategies for the Association's consideration.

### Baseline Cash Flow Based Funding

The goal of baseline funding is to maintain positive year-end balances throughout the planning period.

### Threshold Cash Flow Based Funding

One strategy to ensure there will be sufficient funds available to cover unplanned emergencies is to maintain prudent minimum threshold reserve balances. In the face of unusual and uninsured expenses, this may eliminate the need for either making a special assessment or borrowing money.

Often, the initial threshold is established as some multiple of the average annual reserve expense budget, and then inflated ahead at the selected rate of inflation.

In any event, the goal of threshold funding is to ensure that year-end reserve fund balances will not fall below some minimum value.

This threshold value is typically determined by one of the following methods:

- ✓ An arbitrary, prudent dollar amount based on our experience
- ✓ It may be calculated as some multiple of the annual average reserve amount over the study period
- ✓ A collaborative effort with the Board or Community Manager to determine a threshold amount that works for the community

Consideration should be given to increasing the threshold balance value over the study period to reflect historic rates of inflation.



## COMPONENT BASED (PERCENT FUNDED)

*In our experience, a component-based funding plan based on a comprehensive common component inventory will produce a very conservative funding strategy for an Association.*

A component-based funding plan is based on calculated incremental savings toward the eventual repair or replacement of each individual common component.

The accounting concept underlying component-based funding is that an Association should save for repair or replacement of each of their common assets at an annual incremental amount equal to the annual straight-line depreciation of the item. In this way, they will accumulate its full value in reserves at the time it is fully depreciated, and funds may be required for a reserve expenditure.

### Full Funding

For each fiscal year, a component-based funding plan calculates an ideal reserve balance that should be on-hand at the beginning of the year. This recommended balance is based on saving money at the rate of depreciation of each common component as explained in the previous section.

If the Association's projected cash flow projection indicates that their reserve fund balance will be equal to or greater than that ideal value at the beginning of any given year, then, by Community Association Institute (CAI) definition, the Association is said to be "fully funded" in that year.

**In our opinion, when an Association is "fully funded" per the CAI definition set forth below, then, very often, this will mean that the Association is holding more cash reserves than absolutely necessary for prudent management of their financial obligations.**

### Percent Fully Funded

In component-based fund planning, the percentage ratio between the projected actual reserve balance and the calculated ideal amount of accumulated savings at any point of time is the "percent fully funded".

This metric is used to indicate whether an Association is:

- ✓ "Under-funded" – percent fully funded less than 100%
- ✓ "Over funded" - percent fully funded greater than 100%

Often, statutory and covenantal funding requirements may obligate an Association to maintain their reserve balance above some minimum percent fully funded value.

Such rules were originally promulgated to ensure conservative funding practices, which would protect the membership from unsound financial policies, which some developers and associations have practiced in the past.

### SPECIAL ASSESSMENTS

The goal of nearly all reserve studies is to establish a regular, periodic rate of contribution to reserves, which ensures there will be sufficient funds when required.

However, sometimes it is necessary to boost the reserve balance quickly, before there is adequate time to accumulate funds through regular savings. In those cases, assuming the Unit Owners' personal finances can support it, it is expeditious to assess a lump sum special payment.

Special assessments are often tied to, or earmarked for, some particular reserve expenditure. This may be a periodic but unusually high expense such as re-paving or re-roofing. Or, it may be to collect funds to pay for some desired new amenity, such as a new building, new tennis court or an elevator.

### BORROWING

The goal of nearly all reserve studies is to establish a regular, periodic rate of contribution to reserves, which ensures there will be sufficient funds when required.

However, sometimes it is necessary to boost the reserve balance quickly, before there is adequate time to accumulate funds through regular savings. In those cases, if the Unit Owners' personal finances cannot support an adequate special assessment, then the Association may need to borrow the funds.

Borrowing is often justified to obtain funds for some particular reserve expenditure. This may be a periodic but unusually high expense such as re-paving or re-roofing. Or, a loan may be taken to obtain funds to pay for some desired new feature, such as a new building, tennis court, or to enhanced interior furnishings.

When funds are borrowed, then part of the regular, periodic contributions of the membership in the following years will be earmarked for repaying the loan.

## APPENDIX F

### PROJECT TEAM QUALIFICATIONS

## DAN KESSLER, *PRESIDENT & OWNER*



Dan is the President and Owner of Criterium-Kessler Engineers, with offices located in Phoenix, Arizona and Las Vegas, Nevada. Criterium-Kessler Engineers began operating in 2016 and serves a diverse client base that includes the entire Phoenix metro area, all of Arizona, Southern Nevada, and the Southwestern portion of the United States.

With a strong focus on understanding and meeting client requirements, Dan has grown Criterium-Kessler Engineers into one of the three largest Criterium Affiliate offices in the United States in less than five years. This was accomplished by developing a strong and technically diverse team that works effectively with a broad range of clients on everything from structural evaluation and design to building deficiency diagnostics; block wall evaluations, design, and QA oversight, to property conditions assessments; and cost segregation studies to complex reserve studies for both HOA's and commercial entities.

Dan is a proven, customer and employee-centric executive leader with over 30 years of engineering, program and project management, senior leadership, military, and Intelligence Community experience.

Prior to becoming an affiliate owner with Criterium Engineers, Dan was an executive with Lockheed Martin where he held numerous positions of increasing responsibility in engineering development, engineering operations, program management, and executive leadership—culminating in his role as Executive Director of Engineering for a nationwide team of 5,500+ technically diverse engineers that included data systems, space systems, intelligence operations, and software development. Dan is also a US Air Force veteran.

### EDUCATION & PROFESSIONAL AFFILIATIONS

- ✓ National Louis University, Evanston, Illinois
  - Bachelors of Business Management
- ✓ Community College of the Air Force, Birmingham, Alabama
  - AAS, Remote Sensing
- ✓ Arizona Association of Community Managers
  - Education Committee
- ✓ Community Associations Institute
  - Reserve Study Specialist (RS)

### PRIMARY SKILLS & COMPETENCIES

- ✓ Business Development / Client Engagement
- ✓ Reserve Studies – Standard & Enhanced
- ✓ Cost Segregation Studies
- ✓ Due Diligence Building Inspections and Property Condition Assessments
- ✓ Block Wall Evaluations
- ✓ Capital Needs Assessments
- ✓ Budgeting & Cost Control

Independently Owned and Operated

SERVING ARIZONA AND SOUTHERN NEVADA  
AZ: 480.218.1969 | NV: 702.294.3160 | Criterium-Kessler.com | DKessler@criterium-kessler.com

## WHY I DO WHAT I DO

*"We live in an exciting age when seemingly nothing is beyond our ability to create through proper engineering—and that means constant change, even to some of the most common elements of our society. Whether we realize it or not, we have a symbiotic relationship with buildings and structures, and it's fascinating to understand how all of the different elements work together to form the landscape we interact with each day. Most important though, is the opportunity to develop strong relationships and partner with clients to help them understand their structures in a way that can alleviate concerns, instill confidence, and ultimately succeed in their endeavors."*

## WHY CRITERIUM-KESSLER ENGINEERS

*"Although buildings and other infrastructure elements may appear simplistic in nature, the facts are that every segment of our society has been engineered to perform as an element of an integrated system—whether that's buildings, roads, bridges, or even the topography around one's home or place of work. When an issue surfaces, the ability to partner with a company such as Criterium Engineers, with over 65 years of extremely diverse experience, and the combined nationwide expertise of 110+ engineers, is critical to understanding and solving problems."*

*Criterium-Kessler Engineers is comprised of people who genuinely care about developing and nurturing relationships with other people and creating collaborative partnerships to fully investigate and understand their buildings and their associated challenges."*

## PROJECT HIGHLIGHTS

- ✓ **Standard/Enhanced Reserve Studies** – Anthem Master Association (Anthem, AZ), Fountain of the Sun (Mesa, AZ), Scottsdale Waterfront (Scottsdale), The Ridges (Las Vegas, NV), Pebble Creek Community Association (Goodyear, AZ), Quail Creek Association (Green Valley, AZ), Biltmore Terrace (Phoenix), Winfield Master Association (Scottsdale, AZ), and more.
- ✓ **Property Condition Assessments** – All AZ La-Z-Boy showrooms and warehouses, 500k and 330k SF retail shopping plazas, office buildings, manufacturing buildings, condominiums, etc.
- ✓ **Capital Needs Assessment, Sierra Vista, Arizona** – Thorough inspection and 20-year capital replacement study for purchaser; done to USDA RA requirements.
- ✓ **Block Wall Structural Evaluations** – Inspections / reports and bid specifications for Estrella Mountain Ranch, Providence HOA (Las Vegas), Superstition Foothills, Sonoran Foothills, Trailside Point, Palm Valley Phases I, II, V & VIII, Canyon Trails, Ocotillo, and many others.
- ✓ **Estrella Community Association, Goodyear, AZ** -- Wall and fence structural defect evaluation across twelve communities, detailed reports and analysis, expert witness support
- ✓ **Cost Segregation Studies** – Commercial, manufacturing, office buildings; recently segregated nearly \$10,000,000 that allowed for accelerated depreciation on a recent purchase. Have segregated over \$40,000,000 for various clients.
- ✓ **Insurance, Home Warranty, and Commercial Clients** – Stucco inspections, building inspections, structural distress inventory

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