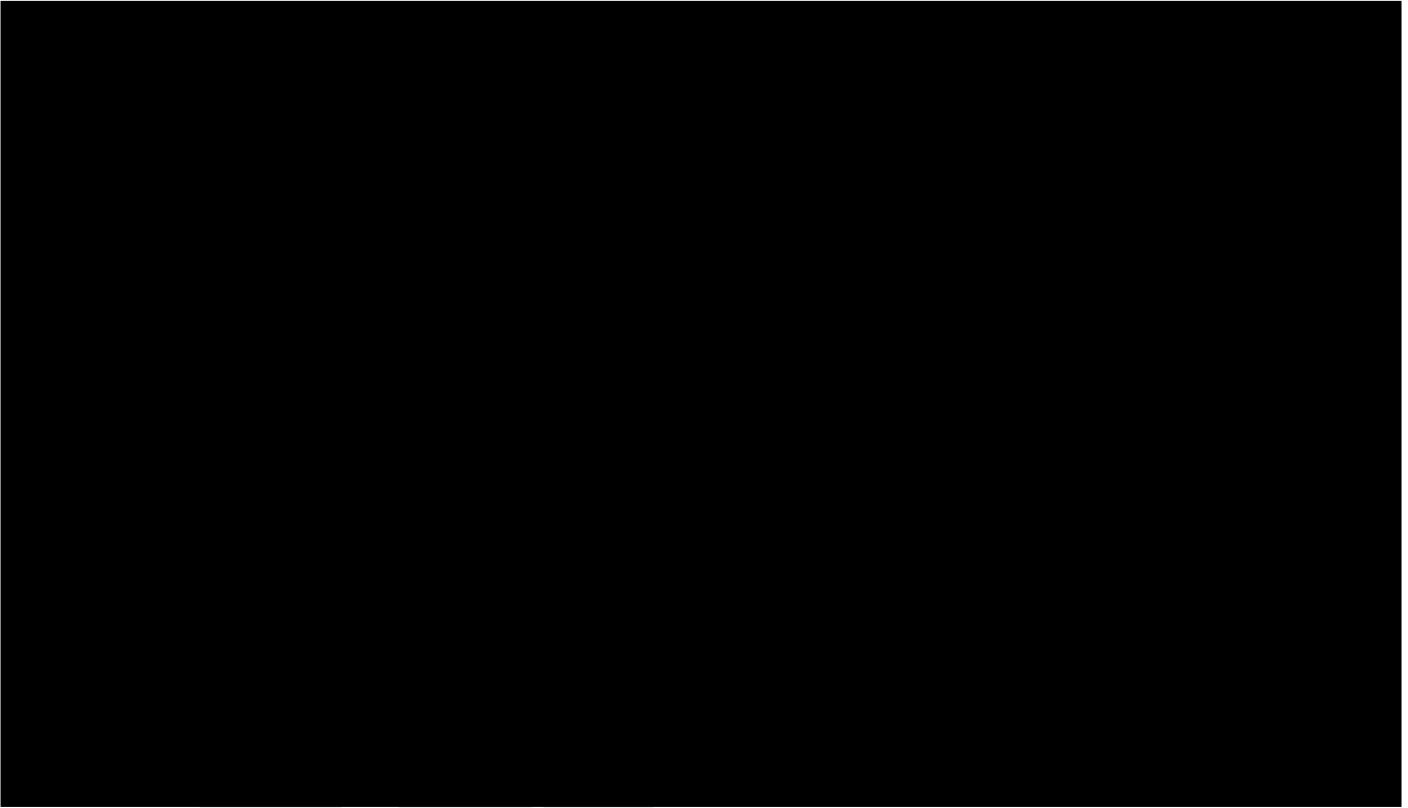




October 18, 2022



Thank you.

Criterium-Hardy Engineers

Ross Hardy, RS
Project Manager

700 Spirit of St Louis Blvd, Ste A / Chesterfield, MO 63005
314-878-0806 / info@criterium-hardy.com / <https://criterium-hardy.com/>



Prepared By:



**700 Spirit of St Louis Blvd, Ste A
Chesterfield, MO 63005
314-878-0806**



Site Inspection performed June 27, 2022
Submitted October 18, 2022



Table of Contents

1. INTRODUCTION.....	5
2. EXECUTIVE SUMMARY	6
3. PURPOSE & SCOPE.....	7
4. PHYSICAL ANALYSIS.....	9
5. FINANCIAL ANALYSIS.....	14
6. LIMITATIONS.....	16
7. CONCLUSION.....	17
8. APPENDICES.....	18
9. APPENDIX A - FINANCIAL EXHIBITS.....	19
10. INFORMATION, ASSUMPTIONS, & DATA.....	20
11. 30-YEAR CASH-FLOW PROJECTIONS - SUMMARY GRAPH	21
12. CASH-FLOW PROJECTION AT THE CURRENT FUNDING LEVEL	23
13. ALTERNATIVE 1 FUNDING PLAN	25
14. ALTERNATIVE 2 FUNDING PLAN.....	27
15. CURRENT RESERVE ITEMS & EXPENDITURE PLANNING	29
16. ANNUAL RESERVE EXPENDITURE BUDGET PROJECTION.....	31
17. RESERVE EXPENDITURE BUDGET PROJECTION SUMMARY.....	36
18. APPENDIX B - GRAPHIC EXHIBITS.....	37
19. APPENDIX C - PHOTOGRAPHS	38

20. COMPONENT PHOTOS & NOTES.....	39
21. COMPONENT DETAILS	54
22. APPENDIX D - REFERENCE DOCUMENTS	67
23. NATIONAL RESERVE STUDY STANDARDS.....	68
24. TERMS OF REFERENCE RESERVE STUDY	74
25. CONTENTS AND DISCLOSURES.....	78
26. APPENDIX E - PROJECT TEAM QUALIFICATIONS	79

DRAFT

1.0 INTRODUCTION

Following authorization by the [REDACTED] Board of Directors, Criterium-Hardy Engineers has conducted a Full Reserve Study of your 31 unit residential community located at [REDACTED]. Our work is consistent with our proposal dated 1/26/2022.

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.

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 standard.

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 E for the qualifications of the project team.

Ross Hardy of Criterium-Hardy Engineers performed this study. This report is principally based on our visual site inspection on June 27, 2022.

Ross Hardy, RS prepared this report and the attached financial analysis. Kyle Hardy, PE^(MO) of Criterium-Hardy Engineers reviewed their findings.

Criterium-Hardy Engineers presents this confidential report for the Board's review and use.

In reviewing the engineering assumptions, cost estimates and projected fund values herein, please understand that their accuracy diminishes as time passes. Long range facility maintenance projections are intended only to indicate the likely pattern of reserve expenditures and to guide financial planning.

Criterium-Hardy Engineers agrees with CAI's recommendation that reserve studies should be updated regularly to allow periodic adjustment of facility plans and funding strategies.

2.0 EXECUTIVE SUMMARY

In summary, as a result of our on-site inspections and other investigations, we find the common components of the property to be in good general condition and well-maintained.

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

We have formed an opinion of the remaining useful life of each component. We have estimated the current cost of required reserve expenditures for their repair or replacement. We have projected annual reserve budgets over a 30-year planning period.

In summary, the 30-year total of projected reserve expenditures, (current dollar cost estimates inflated at 4.00 % annually), is \$1,965,223.

The Board has provided us with information on the Association's Reserve Fund and the current funding plan. Our initial financial analysis was based on the data supplied.

Our projections indicate that the current reserve fund contributions will be adequate.

	Current Funding Plan	\$ Funding Plan	% Funding Plan
ASSOCIATION			
Starting Balance	\$103,410	\$103,410	\$103,410
Contributions	\$2,520,000	\$2,175,000	\$2,082,206
Additional Capital	\$0	\$0	\$0
Interest / Returns	\$350,098	\$255,280	\$207,618
Expenditures	\$1,965,223	\$1,965,223	\$1,965,223
Ending Balance	\$1,008,286	\$568,468	\$428,011
OWNER			
Avg Contributions (/unit/year)	\$2,710	\$2,339	\$2,239
Avg Contributions (/unit/month)	\$226	\$195	\$187

3.0 PURPOSE & SCOPE

3.1. OBJECTIVES

The purpose of this reserve study is to determine a reserve needs 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 to be used as a tool by the Association's Board for considering and managing its future financial obligations, for determining appropriate reserve fund allocations, and for informing the individual Owners of the Association's required reserve expenditures and the resulting financial plan.

For purposes of financial planning, Association-responsible 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 and other service
- Reserve expenditures for major periodic repairs or replacement of commonly-held elements.

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

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 the Community Association Institute guidelines and recommend that this reserve study be updated every three to five years.

3.2. LEVEL OF SERVICE

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

1. Full Reserve Study
2. Reserve Study Update, With Site Visit/On-Site Review
3. Reserve Study Update, No-Site-Visit/Off Site Review
4. 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 a Level I - Reserve Study with On-Site Analysis.

Criterion's actual scope of service is enhanced and exceeds the CAI standard in the Amount principal ways:

- Our investigation and evaluation of the property is performed by experienced professional engineers
- After preparing and submitting our initial analysis, we engage in collaborative review process with the Board, toward developing a financial plan more responsive to the needs of the [REDACTED].

3.3. SOURCES OF INFORMATION

- The following people were interviewed during our study:

- [REDACTED]
- [REDACTED]

The following unit interiors were inspected and/or their Owners were interviewed

- n/a

The following documents were provided to us and reviewed:

- Your Property Representative's explanation of the Association's maintenance responsibilities, and the Board's current facility plans.
- Provided Association information, including the current Reserve Fund balance and rate of contribution.
- Condominium Declarations and Bylaws

PROPERTY DESCRIPTION

The land surrounding the community is generally flat. Building roofs drain to the ground via downspouts and extended/buried piping. Stormwater on the site drains via surface flow, armored swales, catch basins, or buried piping toward detention basins and a retention pond located throughout the community.

The building envelopes are comprised of relatively low-maintenance materials. The exterior surfaces of the buildings are primarily comprised of brick and stone veneer with limited elements of painted trim. Predominately sloped roofing on the condominium buildings is surfaced with asphalt shingles.

COMMON COMPONENTS

Please refer to Appendix A for the Common Component Inventory.

Association-responsible common components include:

- Concrete streets and parking areas
- All parts of the site storm water drainage systems
- Detention and retention basins including motorized fountains
- Signage, fencing, and entrance monuments
- General landscaping and grounds-keeping including block retaining walls
- Building structure - wood framing, stairwells, wall sheathing, and roof decking
- Building exterior envelope – roofing and brick/stone veneer
- Irrigation systems

Individual Unit Owners are responsible for maintenance & repairs of their own:

- Interior fit-out, finishes and equipment
- Internal mechanical, electrical, and plumbing systems
- Exterior windows and doors
- Decks and balconies
- Concrete surfaces including driveways, walkways, entry stoops, and patios
- Building foundations

Utility owned and maintained components include:

- Pole mounted streetlights
- Transformers, electric meters, and electric panels
- Buried sanitary piping

CONDITION ASSESSMENT

The following key observations were made about the current condition of the more significant and costly common elements of the property:

SITE IMPROVEMENTS

Concrete Streets: The streets and parking areas are concrete paved and maintained by the Association. The concrete surfaces were generally found to be in good condition and well maintained. Limited areas of cracking, settling, and slab edge deterioration was observed. Areas of severe deterioration and subsurface failure are likely to occur over time. Repairs would include saw-cutting and removing sections of the paving, repairing the subgrade/base course, and installing a new 7" thick concrete slab. We have allocated funding for on-going sectional replacement of approximately 5% of the concrete streets on a 5-year cycle beginning in 2028.

Concrete Flatwork: Concrete flatwork including driveways, walkways between the driveways and entrance stoops, entrance stoops, and patios are reported to be the responsibility of the individual unit owners.

Retaining Walls: There are approximately 1.8K square feet of concrete block retaining walls along the western perimeter of the community. The retaining walls were observed to be in good condition. Block retaining walls typically have a useful life of 30+ years with the benefit of inspections and capital repairs every 8- to 10-years. We recommend the Association plan for a complete inspection and partial replacement or other stabilizing components for up to 10% of the retaining walls every 10 years beginning in 2030.

Drainage: The land in the surrounding neighborhood is generally flat. Storm water on the site drains via surface flow or landscaped and armored swales toward catch basins and curb inlets in the paved and landscaped areas, which directs water to stormwater detention and retention basins throughout the community. Detention basins are located at the entrance to the community as well as along the northern perimeter of the property. A stormwater retention pond with fountain is installed east of the community entrance.

The swales throughout the community tend to accumulate sediment that settles out during storm events and will need to be periodically removed and re-graded. In addition, over time, landscape drainage systems will likely need to be installed in flat areas of the community to address drainage concerns. Heavy rainfalls are likely to cause soil erosion, which may require augmentation to combat future erosion concerns.

Overall, the drainage systems generally appeared to be in good condition. We noted areas of standing

water in the common ground at the rear of the buildings. Catch basins, concrete and rip rap lined swales, and stormwater piping have been installed to help control and direct the rate of stormwater runoff. A majority of the downspouts observed directed stormwater to grade and were not buried.

We recommend having a portion of the private drainage infrastructure periodically inspected with a video borescope system, flushed, and repaired as necessary. We also recommend maintaining adequate soil stabilizing ground cover to reduce erosion concerns. We have allocated funds for ongoing repairs to the drainage systems on an 8-year cycle beginning in 2029. Repairs will likely include retrenching of swales to improve flow, adding or augmenting rip rap or vegetation to stabilize exposed or steep areas, repairing erosion concerns, extending gutter downspouts to underground systems, installing french drains or other types of minor drainage systems.

Fencing: Approximately 615 linear feet of vinyl “faux stone” privacy fencing is installed along the north and west perimeter of the community. The vinyl fencing is in good condition. We have allocated funding to replace the vinyl fencing on a 20-year cycle beginning in 2039.

Approximately 445 linear feet of aluminum fencing is installed about the block retaining wall installed along the western perimeter of the property. The aluminum fencing was observed to be in good condition. We have allocated funding to replace the aluminum fencing on a 25-year cycle beginning in 2044.

Entrance Monument: There is a landscaped stone entrance monument with a cast concrete identifier and accent lighting installed at the community entrance along Claytong Road. The entrance monument is in good condition. Over time, small repairs such as tuckpointing the block mortar joints and replacing accent lighting may be required and should be funded as part of an annual operating budget. We have allocated funding to refurbish the entrance monument on a 30-year cycle beginning in 2049.

Stormwater Retention Pond: The pond contains fountains and reinforced concrete pipe (RCP) inlets. We recommend the association maintain a contract for annual maintenance items for the pond including inspections of the pond embankments, nuisance control, debris and litter removal, inlet and outlet maintenance and inspections. The HOA should ensure that the pond conforms to all applicable regulations at all times. We anticipate the future need to improve drainage and erosion control in the area of the ponds and dredge the ponds. We have allocated funds for dredging the stormwater pond on a 25-year cycle beginning in 2044.

BUILDING STRUCTURE & EXTERIOR

All buildings are wood frame construction over concrete basement foundation configuration. Exterior surfaces are maintained by the Association with the exception of doors, windows, and foundations. Exterior surfaces are primarily comprised of brick and stone veneer. Entry doors and limited wood trim components are painted.

Roofs and Gutters: The predominantly pitched roof surfaces over the buildings are covered in asphaltic

fiberglass shingles. Roof surfacing is applied over roof sheathing, and generally appears to be in good condition.

Assuming repairs are completed in the interim, this type of shingled roofing has an expected useful life of approximately 20 years. We strongly recommend that any re-roofing project closely follow procedures outlined by the National Roofing Contractors Association's Roofing and Waterproofing Manual. A re-roofing sequence should include removal of the existing roofing material, replacement of any inadequate roof sheathing, replacement of any damaged flashing, and replacement of drip edge components. We strongly recommend the installation of hail-resistant roofing materials. We have allocated funding to replace the roofs on the residential buildings on a 20-year cycle beginning in 2039.

Gutters and downspouts are in generally good condition and should not require replacement until the time of roof replacement, as this component typically provides 20-30 years of relatively trouble-free service. Gutter replacement has been included in the cost to replace the roofs. Minor gutter and downspout repairs required between replacement cycles should be funded through an annual maintenance budget.

Brick & Stone Veneer: Exterior surfaces are maintained by the Association with the exception of unit doors and windows. Exterior surfaces on the condominium buildings are primarily comprised of stone and brick veneer. Mortar joints and brick integrity on the condominium buildings appeared to be in good condition. It is likely that cracking and deterioration of the mortar joints will occur over time and will require tuckpointing repairs. Tuckpointing is the process of raking and cutting out defective mortar and replacing it with new mortar. Tuckpoint repairs are recommended to retard moisture penetration. We have allocated funding to repair approximately 2% of the brick and stone surfaces throughout the community every 5-years beginning in 2028.

Brick Chimneys: The brick chimneys throughout the community were observed to be in good condition. Over time, exposure of brick surfaces, particularly above the roofline, is likely to experience deterioration of the brick and mortar joints. If not properly addressed, areas of deterioration will increase the risk of water intrusion and further deterioration of the chimneys. We have allocated funding for major repairs and tuckpointing of the chimneys on a 30-year cycle beginning in 2049.

Chimney Caps: Chimneys include metal chimney caps that were observed to be in good condition. We have allocated funding to replace all of the chimney caps throughout the community on a 20-year cycle beginning in 2040.

Exterior Light Fixtures: It was reported that maintenance and replacement of the exterior mounted light fixtures are the responsibility of the individual unit owners.

Decks: Exterior decks at the rear of the residential buildings are reported to be the responsibility of the individual unit owners.

Building Foundations: It was reported that maintenance and repairs to the building foundations are the responsibility of the individual unit owners.

MECHANICAL, ELECTRICAL, & PLUMBING SYSTEMS

Irrigation: The landscaped common areas throughout the community are served by landscape irrigation systems. Water pressure activates pop-up spray heads. Controllers operate the main water pressure valves. The systems will likely require significant repairs to the piping and replacement of the control systems on a 7-10-year cycle. We have allocated funds to replace the controllers and repair the irrigation piping and mechanical systems on a 7-year cycle beginning in 2027. The systems will likely require minor repairs and sprinkler head replacement in the interim. We have assumed these would be funded as part of an annual maintenance budget.

Fountain: The stormwater retention basin includes a fountain that was in operation at the time of our visit. Typically the motors supporting lake fountains have a useful life of 20-years. We have allocated funding to replace the fountain motor on a 20-year cycle beginning in 2038.

5.0 FINANCIAL ANALYSIS

Please refer to Appendix A which contains tables illustrating the findings following below.

5.1 RESERVE EXPENDITURE PROJECTION

Based on our investigations and estimates described in Section 4 of this report, we have identified likely reserve expenditures throughout the study period.

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

Please note that we have assumed that the cost of minor repair & replacement work valued at less than \$2,000 will be covered by normal Operations & Maintenance budgets.

Our projections also include a suggested minimum annual balance threshold for your funding, which is referred to as the Threshold Level. This is equal to two times the average annual expenditures over the 30-year study period.

We have not included any reserve budget allowances 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.

5.2 CURRENT FUNDING

5.2.1 Board-Provided Information

At the time we were retained to provide this study, provided us with initial information on the Trust's Reserve Fund and its funding plan.

Our initial financial analysis was based on the information supplied.

Fiscal Year Starting Date:	Jan 1, 2023
For Designated Year:	2023
Starting Fund Balance:	\$103,410
On Date:	Jan 1, 2023
Current Rate of Contribution:	\$84,000
Planned Increases:	3.85 %
Planned Special Assessments:	\$0
Projected Average Return on Investment:	1.50 %
Projected Rate of Annual Inflation:	4.00 %

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

Our initial analysis was a projection of the Association's current rate of contribution forward over 30 years with no increases. For detailed data, please refer to the Appendix A tables and graphs titled "Reserve Fund - 30-Year Cash flow Projection - Current Funding Plan"

Given the reported \$103,410 starting balance of the Reserve Fund on Jan 1, 2023, the current ongoing rate of contribution of \$84,000, and an anticipated average rate of return on investment of 1.50 % per year, our financial analysis indicates that the Association's current funding will prove sufficient to meet future needs.

The current funding rate is projected to maintain a positive balance through the end of this study. The projected year-end balance at the end of the 30-year planning period in 2052 will be approximately \$1,008,286.

5.3 ALTERNATIVE FUNDING PLANS

For your association, we suggest an initial threshold equal to two times the average annual reserve expenditure in current dollars. This equals \$124,193 contributions in Year One. This current value is then adjusted for inflation over the study period leading to a future dollar threshold value of approximately \$131,015 in Year 30.

The alternate funding plans we have developed should maintain positive reserve balances throughout the study which will not fall far below this suggested range of minimum threshold values.

We have prepared **2** alternate funding plan(s) for the Board's consideration:

- **Dollar Funding Plan:** Beginning in Jan 1, 2023, annual contributions to the Reserve Fund should be \$70,000. Going forward, annual contributions should increase \$1,000 every 5 years beginning in 2028.
- **Percentage Funding Plan:** Beginning in Jan 1, 2023, annual contributions to the Reserve Fund should be \$55,000. Going forward, annual contributions should increase 2% annually until 2040.

We look forward to working with the Board to develop a satisfactory plan for their adoption.

5.4. FUNDING METHODOLOGIES (Background Information)

The Community Association Institute (CAI) recognizes several reserve 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

For the planning needs of your association, we have recommended a cash-flow projection approach. The projection considers anticipated annual expenditures and contributions to compute approximate year-end reserve fund balances throughout the study period. This methodology is consistent with standards suggested by CAI.

There are other methods of determining appropriate reserve funding levels. If you are interested, these are set forth in CAI's National Reserve Study Standard attached in Appendix D.

6.0 LIMITATIONS

STANDARDS AND LIMITATIONS

Criterium-Hardy 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.

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 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.

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

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.

Criterium-Hardy 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 activity. Depending on issues which may arise, an appropriate team of consultants to aid decision-making might include their property manager, accountant, financial counselor and attorney.

Criterium-Hardy 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 Criterium-Hardy Engineers, its subsidiaries, affiliates, officers, directors, members, shareholders, partners, agents, employees and such other parties in interest specified by Criterium-Hardy 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 constitute acceptance of these terms and conditions.

7.0 CONCLUSION

Criterium-Hardy Engineers appreciates this opportunity to assist and the [REDACTED] in support of the [REDACTED] 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 [REDACTED] and to aid the Board toward fulfillment of their fiduciary responsibilities and obligations to the individual Unit Owners 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.

All of Criterium's work for this study has been carried out in strict accordance with the CAI Code of Ethics. We consider our report confidential and will not share its content with anyone but the Board without its knowledge and release.

We are unaware of any other involvement or business relationship between Criterium-Hardy Engineers and the Developer, or individual Unit Owners, or members of the Board, or any other entities which constitute any conflict of interest.

If you have any further questions or would like to direct additional, follow-on services, please contact Ross Hardy at 3145177030.

Criterium-Hardy Engineers appreciates this opportunity to assist the Board in support of the association's facility and financial planning. Thank you.

Thank you.

Respectfully submitted,

Criterium-Hardy Engineers



Ross Hardy
Project Engineer - *(Investigating & Reporting)*



Kyle Hardy
Reviewing Engineer - *(Reviewing)*

APPENDICES

DRAFT

APPENDIX A

FINANCIAL EXHIBITS

Reserve Study for Client:**Board of Directors****Property Manager:****[name]****Association Information, Agreed Planning Assumptions and Current Reserve Funding Data****Association Information:**

Number of units	<i>1 total buildings</i>	31
Is this property mixed-use?	<i>Residential property</i>	Yes or No
Are all Units assessed at equal rates?		Yes or No
Fiscal year starts		January 1, 2023
Fiscal year is designated as		2023

Construction History:

Initial building construction or first Unit occupancy		2018
If building(s) had a prior use, the year of condo conversion	Not Applicable	---
If phased construction, the year the last Unit was completed	Not Applicable	---
Significant renovation	Not Applicable	---

Study Information & Planning Assumptions:

Study period, duration in years	30
Study period starts	January 1, 2023
Rate of return on investment % (ROI) applied to reserve fund balances	1.50 %
Annual inflation rate (%) applied to future expenditure annual budgets	4.00 %

Current Funding Levels:

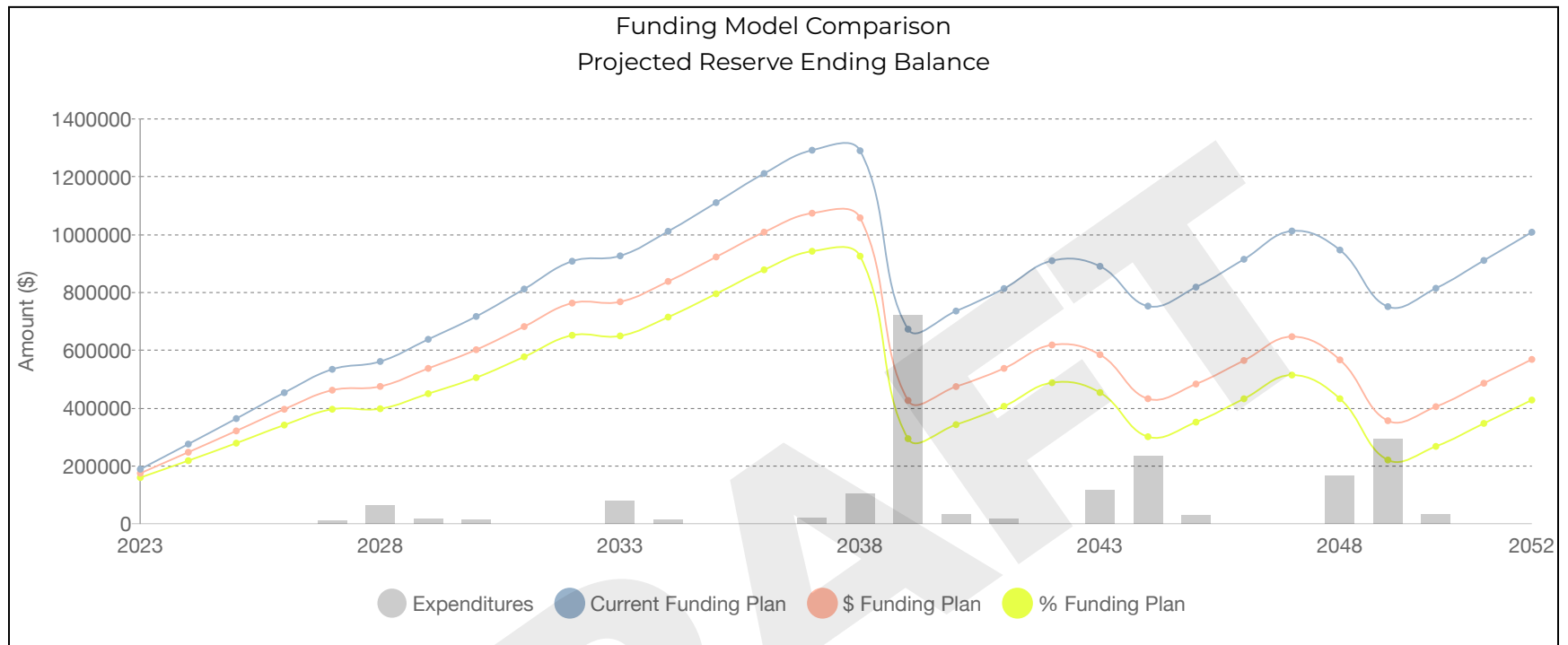
Estimated starting reserve fund balance	\$103,410
Current monthly reserve contribution	\$7,000
Current overall annual reserve contribution	\$84,000
Monthly average reserve contribution per unit	\$226
Annual average reserve contribution per unit	\$2,710

Current Planned Special Assessments:

Dollars	Year

30-Year Cash-Flow Projections - Summary Graph

Year No.	Fiscal Year	Projected Capital Expenditures	Year-End Reserve Fund Balances		
			Current Funding Plan	\$ Funding Plan	% Funding Plan
1	2023	\$0	\$188,961	\$174,961	\$159,961
2	2024	\$0	\$275,796	\$247,586	\$218,461
3	2025	\$0	\$363,932	\$321,299	\$278,959
4	2026	\$0	\$453,391	\$396,119	\$341,510
5	2027	\$9,944	\$534,249	\$462,117	\$396,223
6	2028	\$64,933	\$561,329	\$475,116	\$397,958
7	2029	\$15,816	\$637,933	\$537,426	\$450,050
8	2030	\$14,523	\$716,979	\$601,965	\$505,455
9	2031	\$0	\$811,734	\$681,994	\$577,479
10	2032	\$0	\$907,910	\$763,224	\$651,871
11	2033	\$79,000	\$926,528	\$767,672	\$649,693
12	2034	\$13,085	\$1,011,341	\$838,102	\$714,739
13	2035	\$0	\$1,110,511	\$922,673	\$795,213
14	2036	\$0	\$1,211,169	\$1,008,514	\$878,290
15	2037	\$21,646	\$1,291,690	\$1,073,995	\$942,390
16	2038	\$105,121	\$1,289,945	\$1,057,984	\$925,427
17	2039	\$720,386	\$672,908	\$426,468	\$294,426
18	2040	\$31,314	\$735,687	\$474,550	\$343,031
19	2041	\$17,219	\$813,502	\$537,449	\$406,460
20	2042	\$0	\$909,705	\$618,511	\$488,060
21	2043	\$116,940	\$890,411	\$584,848	\$453,944
22	2044	\$235,032	\$752,735	\$432,589	\$301,224
23	2045	\$29,624	\$818,402	\$483,454	\$351,622
24	2046	\$0	\$914,678	\$564,706	\$432,400
25	2047	\$0	\$1,012,398	\$647,176	\$514,389
26	2048	\$164,935	\$946,649	\$566,949	\$432,673
27	2049	\$293,882	\$750,967	\$356,571	\$220,784
28	2050	\$31,821	\$814,410	\$405,099	\$267,778
29	2051	\$0	\$910,626	\$486,175	\$347,298
30	2052	\$0	\$1,008,286	\$568,468	\$428,011



The chart above compares the projected annual reserve fund ending balances for the two funding plans.

Cash-Flow Projection at the Current Funding Plan Funding Level

Inflation: 4.00 % | **Investment:** 1.50 % | **Calc:** Inflation-Adjusted

YEAR	STARTING BALANCE	CONTRIBUTIONS	PERCENT CHANGE	INTEREST	SPECIAL ASSMNT	ADDITIONAL CAPITAL	EXPENDITURE FUTURE COST	ENDING BALANCE
2023	\$103,410	\$84,000	0.00 %	\$1,551	\$0	\$0	\$0	\$188,961
2024	\$188,961	\$84,000	0.00 %	\$2,834	\$0	\$0	\$0	\$275,796
2025	\$275,796	\$84,000	0.00 %	\$4,137	\$0	\$0	\$0	\$363,932
2026	\$363,932	\$84,000	0.00 %	\$5,459	\$0	\$0	\$0	\$453,391
2027	\$453,391	\$84,000	0.00 %	\$6,801	\$0	\$0	\$9,944	\$534,249
2028	\$534,249	\$84,000	0.00 %	\$8,014	\$0	\$0	\$64,933	\$561,329
2029	\$561,329	\$84,000	0.00 %	\$8,420	\$0	\$0	\$15,816	\$637,933
2030	\$637,933	\$84,000	0.00 %	\$9,569	\$0	\$0	\$14,523	\$716,979
2031	\$716,979	\$84,000	0.00 %	\$10,755	\$0	\$0	\$0	\$811,734
2032	\$811,734	\$84,000	0.00 %	\$12,176	\$0	\$0	\$0	\$907,910
2033	\$907,910	\$84,000	0.00 %	\$13,619	\$0	\$0	\$79,000	\$926,528
2034	\$926,528	\$84,000	0.00 %	\$13,898	\$0	\$0	\$13,085	\$1,011,341
2035	\$1,011,341	\$84,000	0.00 %	\$15,170	\$0	\$0	\$0	\$1,110,511
2036	\$1,110,511	\$84,000	0.00 %	\$16,658	\$0	\$0	\$0	\$1,211,169
2037	\$1,211,169	\$84,000	0.00 %	\$18,168	\$0	\$0	\$21,646	\$1,291,690
2038	\$1,291,690	\$84,000	0.00 %	\$19,375	\$0	\$0	\$105,121	\$1,289,945
2039	\$1,289,945	\$84,000	0.00 %	\$19,349	\$0	\$0	\$720,386	\$672,908
2040	\$672,908	\$84,000	0.00 %	\$10,094	\$0	\$0	\$31,314	\$735,687
2041	\$735,687	\$84,000	0.00 %	\$11,035	\$0	\$0	\$17,219	\$813,502

YEAR	STARTING BALANCE	CONTRIBUTIONS	PERCENT CHANGE	INTEREST	SPECIAL ASSMNT	ADDITIONAL CAPITAL	EXPENDITURE FUTURE COST	ENDING BALANCE
2042	\$813,502	\$84,000	0.00 %	\$12,203	\$0	\$0	\$0	\$909,705
2043	\$909,705	\$84,000	0.00 %	\$13,646	\$0	\$0	\$116,940	\$890,411
2044	\$890,411	\$84,000	0.00 %	\$13,356	\$0	\$0	\$235,032	\$752,735
2045	\$752,735	\$84,000	0.00 %	\$11,291	\$0	\$0	\$29,624	\$818,402
2046	\$818,402	\$84,000	0.00 %	\$12,276	\$0	\$0	\$0	\$914,678
2047	\$914,678	\$84,000	0.00 %	\$13,720	\$0	\$0	\$0	\$1,012,398
2048	\$1,012,398	\$84,000	0.00 %	\$15,186	\$0	\$0	\$164,935	\$946,649
2049	\$946,649	\$84,000	0.00 %	\$14,200	\$0	\$0	\$293,882	\$750,967
2050	\$750,967	\$84,000	0.00 %	\$11,264	\$0	\$0	\$31,821	\$814,410
2051	\$814,410	\$84,000	0.00 %	\$12,216	\$0	\$0	\$0	\$910,626
2052	\$910,626	\$84,000	0.00 %	\$13,659	\$0	\$0	\$0	\$1,008,286

Alternative Funding 1 - \$ Funding Plan

Inflation: 4.00 % | Investment: 1.50 % | Calc: Inflation-Adjusted

YEAR	STARTING BALANCE	CONTRIBUTIONS	PERCENT CHANGE	INTEREST	SPECIAL ASSMNT	ADDITIONAL CAPITAL	EXPENDITURE FUTURE COST	ENDING BALANCE
2023	\$103,410	\$70,000	-16.67 %	\$1,551	\$0	\$0	\$0	\$174,961
2024	\$174,961	\$70,000	0.00 %	\$2,624	\$0	\$0	\$0	\$247,586
2025	\$247,586	\$70,000	0.00 %	\$3,714	\$0	\$0	\$0	\$321,299
2026	\$321,299	\$70,000	0.00 %	\$4,819	\$0	\$0	\$0	\$396,119
2027	\$396,119	\$70,000	0.00 %	\$5,942	\$0	\$0	\$9,944	\$462,117
2028	\$462,117	\$71,000	1.43 %	\$6,932	\$0	\$0	\$64,933	\$475,116
2029	\$475,116	\$71,000	0.00 %	\$7,127	\$0	\$0	\$15,816	\$537,426
2030	\$537,426	\$71,000	0.00 %	\$8,061	\$0	\$0	\$14,523	\$601,965
2031	\$601,965	\$71,000	0.00 %	\$9,029	\$0	\$0	\$0	\$681,994
2032	\$681,994	\$71,000	0.00 %	\$10,230	\$0	\$0	\$0	\$763,224
2033	\$763,224	\$72,000	1.41 %	\$11,448	\$0	\$0	\$79,000	\$767,672
2034	\$767,672	\$72,000	0.00 %	\$11,515	\$0	\$0	\$13,085	\$838,102
2035	\$838,102	\$72,000	0.00 %	\$12,572	\$0	\$0	\$0	\$922,673
2036	\$922,673	\$72,000	0.00 %	\$13,840	\$0	\$0	\$0	\$1,008,514
2037	\$1,008,514	\$72,000	0.00 %	\$15,128	\$0	\$0	\$21,646	\$1,073,995
2038	\$1,073,995	\$73,000	1.39 %	\$16,110	\$0	\$0	\$105,121	\$1,057,984
2039	\$1,057,984	\$73,000	0.00 %	\$15,870	\$0	\$0	\$720,386	\$426,468
2040	\$426,468	\$73,000	0.00 %	\$6,397	\$0	\$0	\$31,314	\$474,550
2041	\$474,550	\$73,000	0.00 %	\$7,118	\$0	\$0	\$17,219	\$537,449

YEAR	STARTING BALANCE	CONTRIBUTIONS	PERCENT CHANGE	INTEREST	SPECIAL ASSMNT	ADDITIONAL CAPITAL	EXPENDITURE FUTURE COST	ENDING BALANCE
2042	\$537,449	\$73,000	0.00 %	\$8,062	\$0	\$0	\$0	\$618,511
2043	\$618,511	\$74,000	1.37 %	\$9,278	\$0	\$0	\$116,940	\$584,848
2044	\$584,848	\$74,000	0.00 %	\$8,773	\$0	\$0	\$235,032	\$432,589
2045	\$432,589	\$74,000	0.00 %	\$6,489	\$0	\$0	\$29,624	\$483,454
2046	\$483,454	\$74,000	0.00 %	\$7,252	\$0	\$0	\$0	\$564,706
2047	\$564,706	\$74,000	0.00 %	\$8,471	\$0	\$0	\$0	\$647,176
2048	\$647,176	\$75,000	1.35 %	\$9,708	\$0	\$0	\$164,935	\$566,949
2049	\$566,949	\$75,000	0.00 %	\$8,504	\$0	\$0	\$293,882	\$356,571
2050	\$356,571	\$75,000	0.00 %	\$5,349	\$0	\$0	\$31,821	\$405,099
2051	\$405,099	\$75,000	0.00 %	\$6,076	\$0	\$0	\$0	\$486,175
2052	\$486,175	\$75,000	0.00 %	\$7,293	\$0	\$0	\$0	\$568,468

Alternative Funding 2 - % Funding Plan

Inflation: 4.00 % | Investment: 1.50 % | Calc: Inflation-Adjusted

YEAR	STARTING BALANCE	CONTRIBUTIONS	PERCENT CHANGE	INTEREST	SPECIAL ASSMNT	ADDITIONAL CAPITAL	EXPENDITURE FUTURE COST	ENDING BALANCE
2023	\$103,410	\$55,000	-34.52 %	\$1,551	\$0	\$0	\$0	\$159,961
2024	\$159,961	\$56,100	2.00 %	\$2,399	\$0	\$0	\$0	\$218,461
2025	\$218,461	\$57,222	2.00 %	\$3,277	\$0	\$0	\$0	\$278,959
2026	\$278,959	\$58,366	2.00 %	\$4,184	\$0	\$0	\$0	\$341,510
2027	\$341,510	\$59,534	2.00 %	\$5,123	\$0	\$0	\$9,944	\$396,223
2028	\$396,223	\$60,724	2.00 %	\$5,943	\$0	\$0	\$64,933	\$397,958
2029	\$397,958	\$61,939	2.00 %	\$5,969	\$0	\$0	\$15,816	\$450,050
2030	\$450,050	\$63,178	2.00 %	\$6,751	\$0	\$0	\$14,523	\$505,455
2031	\$505,455	\$64,441	2.00 %	\$7,582	\$0	\$0	\$0	\$577,479
2032	\$577,479	\$65,730	2.00 %	\$8,662	\$0	\$0	\$0	\$651,871
2033	\$651,871	\$67,045	2.00 %	\$9,778	\$0	\$0	\$79,000	\$649,693
2034	\$649,693	\$68,386	2.00 %	\$9,745	\$0	\$0	\$13,085	\$714,739
2035	\$714,739	\$69,753	2.00 %	\$10,721	\$0	\$0	\$0	\$795,213
2036	\$795,213	\$71,148	2.00 %	\$11,928	\$0	\$0	\$0	\$878,290
2037	\$878,290	\$72,571	2.00 %	\$13,174	\$0	\$0	\$21,646	\$942,390
2038	\$942,390	\$74,023	2.00 %	\$14,136	\$0	\$0	\$105,121	\$925,427
2039	\$925,427	\$75,503	2.00 %	\$13,881	\$0	\$0	\$720,386	\$294,426
2040	\$294,426	\$75,503	0.00 %	\$4,416	\$0	\$0	\$31,314	\$343,031
2041	\$343,031	\$75,503	0.00 %	\$5,145	\$0	\$0	\$17,219	\$406,460

YEAR	STARTING BALANCE	CONTRIBUTIONS	PERCENT CHANGE	INTEREST	SPECIAL ASSMNT	ADDITIONAL CAPITAL	EXPENDITURE FUTURE COST	ENDING BALANCE
2042	\$406,460	\$75,503	0.00 %	\$6,097	\$0	\$0	\$0	\$488,060
2043	\$488,060	\$75,503	0.00 %	\$7,321	\$0	\$0	\$116,940	\$453,944
2044	\$453,944	\$75,503	0.00 %	\$6,809	\$0	\$0	\$235,032	\$301,224
2045	\$301,224	\$75,503	0.00 %	\$4,518	\$0	\$0	\$29,624	\$351,622
2046	\$351,622	\$75,503	0.00 %	\$5,274	\$0	\$0	\$0	\$432,400
2047	\$432,400	\$75,503	0.00 %	\$6,486	\$0	\$0	\$0	\$514,389
2048	\$514,389	\$75,503	0.00 %	\$7,716	\$0	\$0	\$164,935	\$432,673
2049	\$432,673	\$75,503	0.00 %	\$6,490	\$0	\$0	\$293,882	\$220,784
2050	\$220,784	\$75,503	0.00 %	\$3,312	\$0	\$0	\$31,821	\$267,778
2051	\$267,778	\$75,503	0.00 %	\$4,017	\$0	\$0	\$0	\$347,298
2052	\$347,298	\$75,503	0.00 %	\$5,209	\$0	\$0	\$0	\$428,011

Current Reserve Items and Expenditure Planning

Grouped by Category

LOCATION ASSET NO.	NAME	NEXT REPL	EST LIFE	ADJ LIFE	REM USEFUL LIFE	COST PER MEASURE	QTY	CURRENT COST
Building								
Exterior								
8	Tuckpoint repairs to brick and stone façade: Tuckpoint repairs to exterior surfaces	1/1/2028	5y 0m	5y 0m	5y 0m	\$18.00	1045.00	\$18,810
9	Tuckpoint repairs to brick chimneys: Tuckpoint repairs from the roofline up	1/1/2049	30y 0m	30y 0m	26y 0m	\$3,500.00	28 Ea	\$98,000
10	Replace chimney caps	1/1/2040	20y 0m	20y 0m	17y 0m	\$180.00	28 Ea	\$5,040
11	Replace roofs and gutters	1/1/2039	20y 0m	20y 0m	16y 0m	\$335.00	1060	\$355,100
								\$476,950
Mechanical								
12	Replace controllers and major repairs to irrigation systems	1/1/2027	7y 0m	7y 0m	4y 0m	\$8,500.00	1 LS	\$8,500
13	Replace fountain motor	1/1/2038	20y 0m	20y 0m	15y 0m	\$5,000.00	1 Ea	\$5,000
								\$13,500
Site								
1	Sectional repairs to concrete streets: Sectional repairs to concrete surfaces	1/1/2028	5y 0m	5y 0m	5y 0m	\$120.00	288.00	\$34,560
2	Allocation for major repairs to block retaining walls: Sectional repairs to concrete block retaining walls as needed	1/1/2030	10y 0m	10y 0m	7y 0m	\$62.00	178.0	\$11,036
3	Replace vinyl fence around north and west perimeter: Replace vinyl fencing	1/1/2039	20y 0m	20y 0m	16y 0m	\$48.00	615	\$29,520
4	Replace metal fencing above western retaining wall: Replace aluminum fencing	1/1/2044	25y 0m	25y 0m	21y 0m	\$52.00	445	\$23,140
5	Refurbish entrance monuments: Refurbish entrance monument	1/1/2049	30y 0m	30y 0m	26y 0m	\$8,000.00	1 LS	\$8,000
6	Ongoing common area drainage repairs/improvements: Maintain drainage systems	1/1/2029	8y 0m	8y 0m	6y 0m	\$12,500.00	1 LS	\$12,500

LOCATION										
ASSET NO.	NAME	NEXT REPL	EST LIFE	ADJ LIFE	REM USEFUL LIFE	COST PER MEASURE	QTY	CURRENT COST		
7	Dredge stormwater retention pond: Dredge pond	1/1/2044	25y 0m	N/A	21y 0m	\$80,000.00	1 LS	\$80,000		
										\$198,756

DRAFT

Annual Reserve Expenditure Budget Projection

Annual Expenditure Table 2023 to 2032

LOCATION RESERVE ITEM	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Building Exterior										
Tuckpoint repairs to brick and stone façade: Tuckpoint repairs to exterior surfaces						\$22,886				
Total Building Exterior						\$22,886				
Mechanical										
Replace controllers and major repairs to irrigation systems					\$9,944					
Total Mechanical					\$9,944					
Site										
Allocation for major repairs to block retaining walls: Sectional repairs to concrete block retaining walls as needed								\$14,523		
Ongoing common area drainage repairs/improvements: Maintain drainage systems							\$15,816			
Sectional repairs to concrete streets: Sectional repairs to concrete surfaces						\$42,047				
Total Site						\$42,047	\$15,816	\$14,523		
Total					\$9,944	\$64,933	\$15,816	\$14,523		

Annual Reserve Expenditure Budget Projection

Annual Expenditure Table 2033 to 2042

LOCATION RESERVE ITEM	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Building Exterior										
Replace chimney caps								\$9,817		
Replace roofs and gutters							\$665,096			
Tuckpoint repairs to brick and stone façade: Tuckpoint repairs to exterior surfaces	\$27,843					\$33,876				
Total Building Exterior	\$27,843					\$33,876	\$665,096	\$9,817		
Mechanical										
Replace controllers and major repairs to irrigation systems		\$13,085							\$17,219	
Replace fountain motor						\$9,005				
Total Mechanical		\$13,085				\$9,005			\$17,219	
Site										
Allocation for major repairs to block retaining walls: Sectional repairs to concrete block retaining walls as needed								\$21,497		
Ongoing common area drainage repairs/improvements: Maintain drainage systems					\$21,646					
Replace vinyl fence around north and west perimeter: Replace vinyl fencing							\$55,290			

LOCATION RESERVE ITEM	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042
Sectional repairs to concrete streets: Sectional repairs to concrete surfaces	\$51,157					\$62,241				
Total Site	\$51,157				\$21,646	\$62,241	\$55,290	\$21,497		
Total	\$79,000	\$13,085			\$21,646	\$105,121	\$720,386	\$31,314	\$17,219	

Annual Reserve Expenditure Budget Projection

Annual Expenditure Table 2043 to 2052

LOCATION RESERVE ITEM	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Building Exterior										
Tuckpoint repairs to brick and stone façade: Tuckpoint repairs to exterior surfaces	\$41,215					\$50,144				
Tuckpoint repairs to brick chimneys: Tuckpoint repairs from the roofline up							\$271,702			
Total Building Exterior	\$41,215					\$50,144	\$271,702			
Mechanical										
Replace controllers and major repairs to irrigation systems						\$22,660				
Total Mechanical						\$22,660				
Site										
Allocation for major repairs to block retaining walls: Sectional repairs to concrete block retaining walls as needed								\$31,821		
Dredge stormwater retention pond: Dredge pond		\$182,301								
Ongoing common area drainage repairs/improvements: Maintain drainage systems			\$29,624							

LOCATION RESERVE ITEM	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Refurbish entrance monuments: Refurbish entrance monument							\$22,180			
Replace metal fencing above western retaining wall: Replace aluminum fencing		\$52,731								
Sectional repairs to concrete streets: Sectional repairs to concrete surfaces	\$75,725					\$92,131				
Total Site	\$75,725	\$235,032	\$29,624			\$92,131	\$22,180	\$31,821		
Total	\$116,940	\$235,032	\$29,624			\$164,935	\$293,882	\$31,821		

Reserve Expenditure Budget Projection Summary

YEAR	FUTURE DOLLARS
2023	\$0
2024	\$0
2025	\$0
2026	\$0
2027	\$9,944
2028	\$64,933
2029	\$15,816
2030	\$14,523
2031	\$0
2032	\$0
2033	\$79,000
2034	\$13,085
2035	\$0
2036	\$0
2037	\$21,646
2038	\$105,121
2039	\$720,386
2040	\$31,314
2041	\$17,219
2042	\$0
2043	\$116,940
2044	\$235,032
2045	\$29,624
2046	\$0
2047	\$0
2048	\$164,935
2049	\$293,882
2050	\$31,821
2051	\$0
2052	\$0
Total Future Cost - With Inflation	\$1,965,223
Total Current Cost - No Inflation	\$1,862,888

APPENDIX B

GRAPHIC EXHIBITS

Component Photos & Notes

Location:



Photos Taken By:

Ross Hardy

Date:

June 27, 2022



	Description
	 PHOTO NUMBER 1

	Description
	Typical view of the concrete streets PHOTO NUMBER 2

Location:



Photos Taken By:
Ross Hardy

Date:
June 27, 2022



Description

Cracking and settling
observed in the
concrete streets

PHOTO NUMBER
3



Description

Cracking and settling
observed in the
concrete streets

PHOTO NUMBER
4

Location:



Photos Taken By:

Ross Hardy

Date:

June 27, 2022



Description

Surface deterioration

PHOTO NUMBER
5



Description

View of the concrete
block retaining wall

PHOTO NUMBER
6

Location:



Photos Taken By:
Ross Hardy

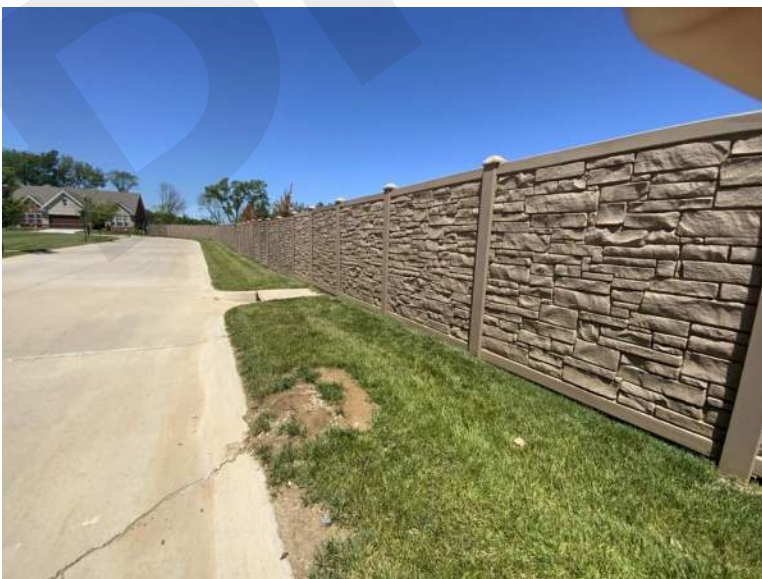
Date:
June 27, 2022



Description

View of the concrete
block retaining wall

PHOTO NUMBER
7



Description

View of the vinyl fence

PHOTO NUMBER
8

Location:



Photos Taken By:
Ross Hardy

Date:
June 27, 2022



Description

Metal fencing at the top of the block retaining wall

PHOTO NUMBER
9



Description

Accent lighting at the entrance monument

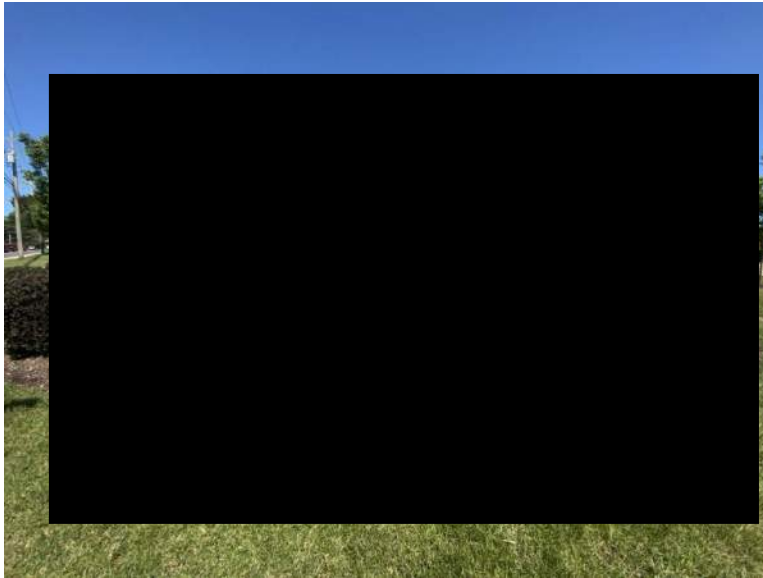
PHOTO NUMBER
10

Location:



Photos Taken By:
Ross Hardy

Date:
June 27, 2022



Description

View of the entrance monument

PHOTO NUMBER
11



Description

Stormwater detention basin located near the entrance to the community

PHOTO NUMBER
12

Location:



Photos Taken By:

Ross Hardy

Date:

June 27, 2022



Description

Typical stormwater catch basin and inlet piping

PHOTO NUMBER
13



Description

Downspout and sump pump outlets discharging directly to grade

PHOTO NUMBER
14

Location:



Photos Taken By:

Ross Hardy

Date:

June 27, 2022



Description

Buried downspout

PHOTO NUMBER
15



Description

Missing cap on
landscaped drainage
piping

PHOTO NUMBER
16

Location:



Photos Taken By:

Ross Hardy

Date:

June 27, 2022



Description

Typical standing water observed at the rear of the residential units

PHOTO NUMBER
17



Description

Standing water and exceptionally moist soil observed at the rear of the residential units

PHOTO NUMBER
18

Location:



Photos Taken By:
Ross Hardy

Date:
June 27, 2022



Description

Aerial view of the detention basin at the rear of the community

PHOTO NUMBER
19



Description

Downspout and sump pump outlets discharging to grade

PHOTO NUMBER
20

Location:



Photos Taken By:

Ross Hardy

Date:

June 27, 2022



Description

Aerial view of the retention pond

PHOTO NUMBER
21



Description

View of the pond shoreline

PHOTO NUMBER
22

Location:



Photos Taken By:
Ross Hardy

Date:
June 27, 2022



Description

Typical front elevation of the residential villa units

PHOTO NUMBER
23



Description

Typical side elevation of the residential villa units

PHOTO NUMBER
24

Location:



Photos Taken By:

Ross Hardy

Date:

June 27, 2022



Description

Typical side elevation of the residential villa units

PHOTO NUMBER
25



Description

Aerial view of the roofs

PHOTO NUMBER
26

Location:



Photos Taken By:
Ross Hardy

Date:
June 27, 2022



Description

View of the roof
shingles

PHOTO NUMBER
27



Description

Typical irrigation
sprinkler head

PHOTO NUMBER
28

Location:



Photos Taken By:
Ross Hardy

Date:
June 27, 2022



Description

Typical backflow
system

PHOTO NUMBER
29



Description

View of the pond
fountain

PHOTO NUMBER
30

Component Details

1 - Sectional repairs to concrete streets

Basic Info		Useful Life	
Type of Cost:	Repairs & Maintenance	Last Activity Date:	N/A
Location:	Site	Est. Useful Life:	5yr
Condition:	Good	Remaining Useful Life:	5yr
Comments/Notes		Next Activity Date:	1/1/2028
5% every 5 years		Financial Data	
		Estimate Date:	1/1/2023
		Cost Per :	\$120.00
		Total Quantity:	5760
		Percent of Total to Maintain:	5%
		Quantity to Maintain:	288.00
		Total Current Cost:	\$34,560
		Inflation Rate:	4.00 %
		Total Expenditures:	\$323,302
			
Typical cracking in the concrete streets at the community entrance		Typical cracking in the concrete streets at the community entrance	

2 - Allocation for major repairs to block retaining walls

Basic Info

Type of Cost:	Repairs & Maintenance
Location:	Site
Condition:	Good

Useful Life

Last Activity Date:	N/A
Est. Useful Life:	10yr
Remaining Useful Life:	7yr
Next Activity Date:	1/1/2030

Financial Data

Estimate Date:	1/1/2023
Cost Per :	\$62.00
Total Quantity:	1780
Percent of Total to Maintain:	10%
Quantity to Maintain:	178.0
Total Current Cost:	\$11,036
Inflation Rate:	4.00 %
Total Expenditures:	\$67,841



Typical view of the concrete block retaining wall



Typical view of the concrete block retaining wall

3 - Replace vinyl fence around north and west perimeter

Basic Info

Type of Cost:	Replacement
Location:	Site
Condition:	Good

Useful Life

Last Activity Date:	N/A
Est. Useful Life:	20yr
Remaining Useful Life:	16yr
Next Activity Date:	1/1/2039

Financial Data

Estimate Date:	1/1/2023
Cost Per :	\$48.00
Total Quantity:	615
Total Current Cost:	\$29,520
Inflation Rate:	4.00 %
Total Expenditures:	\$55,290



Vinyl fencing



Vinyl fencing and gate

4 - Replace metal fencing above western retaining wall

Basic Info

Type of Cost:	Replacement
Location:	Site
Condition:	Good

Comments/Notes

Stone, concrete insert, accent lighting

Useful Life

Last Activity Date:	N/A
Est. Useful Life:	25yr
Remaining Useful Life:	21yr
Next Activity Date:	1/1/2044

Financial Data

Estimate Date:	1/1/2023
Cost Per :	\$52.00
Total Quantity:	445
Total Current Cost:	\$23,140
Inflation Rate:	4.00 %
Total Expenditures:	\$52,731



Fencing installed above the block retaining wall



Fencing installed above the block retaining wall

5 - Refurbish entrance monuments

Basic Info

Type of Cost: Repairs & Maintenance

Location: Site

Condition: Good

Useful Life

Last Activity Date: N/A

Est. Useful Life: 30yr

Remaining Useful Life: 26yr

Next Activity Date: 1/1/2049

Financial Data

Estimate Date: 1/1/2023

Cost Per LS: \$8,000.00

Total Quantity: 1 LS

Total Current Cost: \$8,000

Inflation Rate: 4.00 %

Total Expenditures: \$22,180



Entrance monument



Entrance monument accent light

6 - Ongoing common area drainage repairs/improvements

Basic Info

Type of Cost:	Repairs & Maintenance
Location:	Site
Condition:	Good

Useful Life

Last Activity Date:	N/A
Est. Useful Life:	8yr
Remaining Useful Life:	6yr
Next Activity Date:	1/1/2029

Financial Data

Estimate Date:	1/1/2023
Cost Per LS:	\$12,500.00
Total Quantity:	1 LS
Total Current Cost:	\$12,500
Inflation Rate:	4.00 %
Total Expenditures:	\$67,086



View of the stormwater detention basin



Detention basin

7 - Dredge stormwater retention pond

Basic Info

Type of Cost:	Repairs & Maintenance
Location:	Site
Condition:	Good

Useful Life

Last Activity Date:	N/A
Est. Useful Life:	25yr
Remaining Useful Life:	21yr
Next Activity Date:	1/1/2044

Financial Data

Estimate Date:	1/1/2023
Cost Per LS:	\$80,000.00
Total Quantity:	1 LS
Total Current Cost:	\$80,000
Inflation Rate:	4.00 %
Total Expenditures:	\$182,301



View of the stormwater retention pond



Pond shoreline

8 - Tuckpoint repairs to brick and stone façade

Basic Info

Type of Cost: Repairs & Maintenance
Location: Building Exterior
Condition: Good

Comments/Notes

2% every 5 years

Useful Life

Last Activity Date: N/A
Est. Useful Life: 5yr
Remaining Useful Life: 5yr
Next Activity Date: 1/1/2028

Financial Data

Estimate Date: 1/1/2023
Cost Per : \$18.00
Total Quantity: 52250
Percent of Total to Maintain: 2%
Quantity to Maintain: 1045.00
Total Current Cost: \$18,810
Inflation Rate: 4.00 %
Total Expenditures: \$175,963



Stone facade of the entrance guard shack



Brick and stone facade

9 - Tuckpoint repairs to brick chimneys

Basic Info

Type of Cost:	Repairs & Maintenance
Location:	Building Exterior
Condition:	Good

Useful Life

Last Activity Date:	N/A
Est. Useful Life:	30yr
Remaining Useful Life:	26yr
Next Activity Date:	1/1/2049

Financial Data

Estimate Date:	1/1/2023
Cost Per Ea:	\$3,500.00
Total Quantity:	28 Ea
Total Current Cost:	\$98,000
Inflation Rate:	4.00 %
Total Expenditures:	\$271,702



Typical chimney

10 - Replace chimney caps

Basic Info

Type of Cost:	Replacement
Location:	Building Exterior
Condition:	Good

Useful Life

Last Activity Date:	N/A
Est. Useful Life:	20yr
Remaining Useful Life:	17yr
Next Activity Date:	1/1/2040

Financial Data

Estimate Date:	1/1/2023
Cost Per Ea:	\$180.00
Total Quantity:	28 Ea
Total Current Cost:	\$5,040
Inflation Rate:	4.00 %
Total Expenditures:	\$9,817

11 - Replace roofs and gutters

Basic Info

Type of Cost: Replacement

Location: Building Exterior

Condition: Good

Comments/Notes

4 years old

Useful Life

Last Activity Date: N/A

Est. Useful Life: 20yr

Remaining Useful Life: 16yr

Next Activity Date: 1/1/2039

Financial Data

Estimate Date: 1/1/2023

Cost Per : \$335.00

Total Quantity: 1060

Total Current Cost: \$355,100

Inflation Rate: 4.00 %

Total Expenditures: \$665,096



Typical view of the roofs



Typical view of the roofs

12 - Replace controllers and major repairs to irrigation systems

Basic Info

Type of Cost: Repairs & Maintenance

Location: Mechanical

Condition: Good

Comments/Notes

Valves, controllers, backflow, piping

Useful Life

Last Activity Date: N/A

Est. Useful Life: 7yr

Remaining Useful Life: 4yr

Next Activity Date: 1/1/2027

Financial Data

Estimate Date: 1/1/2023

Cost Per LS: \$8,500.00

Total Quantity: 1 LS

Total Current Cost: \$8,500

Inflation Rate: 4.00 %

Total Expenditures: \$62,908



Typical irrigation backflow



Typical irrigation control box

13 - Replace fountain motor

Basic Info

Type of Cost:	Repairs & Maintenance
Location:	Mechanical
Condition:	Good

Useful Life

Last Activity Date:	N/A
Est. Useful Life:	20yr
Remaining Useful Life:	15yr
Next Activity Date:	1/1/2038

Financial Data

Estimate Date:	1/1/2023
Cost Per Ea:	\$5,000.00
Total Quantity:	1 Ea
Total Current Cost:	\$5,000
Inflation Rate:	4.00 %
Total Expenditures:	\$9,005



Pond fountain

APPENDIX D

REFERENCE DOCUMENTS

Reserve Specialist® (RS®)

Designation

NATIONAL RESERVE STUDY STANDARDS

General Information About Reserve Studies

One of the primary responsibilities of the board of directors of a community association is to protect, maintain, and enhance the assets of the association. To accomplish this objective, associations must develop multi-year plans to help them anticipate and responsibly prepare for the timely repair and replacement of common area components such as roofs, roads, mechanical equipment, and other portions of the community's common elements.

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

A reserve study is made up of two parts, the **physical analysis** and the **financial analysis**. The physical analysis includes the component inventory, condition assessment, and life and valuation estimates. The component inventory should be relatively stable from year to year, while the condition assessment and life and valuation estimate change from year to year.

The financial analysis is made up of an analysis of the client's current reserve fund status (measured in cash or as percent funded) and a recommendation for an appropriate reserve contribution rate (a funding plan).

Physical analysis

- Component inventory
- Condition assessment
- Life and valuation estimates

Financial analysis

- Fund Status
- Funding Plan

Levels of Service

The following three categories describe the various types of reserve studies, from exhaustive to minimal.

I. Full.

A reserve study in which the following five reserve study tasks are performed:

- Component inventory
- Condition assessment (based upon on-site visual observations)
- Life and valuation estimates
- Fund Status
- Funding Plan

II. Update, With Site Visit/On-Site Review.

A reserve study update in which the following five reserve study tasks are performed:

- Component inventory (verification only, not quantification)
- Condition assessment (based upon on-site visual observations)
- Life and valuation estimates
- Fund Status
- Funding Plan

III. Update, No-Site-Visit/Off Site Review.

A reserve study update with no on-site visual observations in which the following three reserve study tasks are performed:

- Life and valuation estimates
- Fund Status
- Funding Plan

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 the architectural and engineering plans. The following three tasks are performed to prepare this type of study.

- Component inventory
- Life and valuation estimates
- Funding Plan

Terms and Definitions

CAPITAL IMPROVEMENTS: Additions to the association's common elements that previously did not exist. While these components should be added to the reserve study for future replacement, the cost of construction should not be taken from the reserve fund. **CASH FLOW METHOD:** A method of developing a reserve funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

COMPONENT: The individual line items in the reserve study developed or updated in the physical analysis. These elements form the building blocks for the reserve study. These components comprise the common elements of the community and typically are: 1. association responsibility, 2. with limited useful life expectancies, 3. predictable remaining useful life expectancies, and 4. above a minimum threshold cost. It should be noted that in certain jurisdictions there may be statutory requirements for including components or groups of components in the reserve study.

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.

COMPONENT METHOD: A method of developing a reserve funding plan where the total contribution is based on the sum of contributions for the individual components.

CONDITION ASSESSMENT: The task of evaluating the current condition of the component based on observed or reported characteristics.

EFFECTIVE AGE: The difference between useful life and 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 where the current status of the reserves (measured as cash or percent funded) and a recommended reserve contribution rate (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.

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.

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

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: Independent of methodology used, the following represent the basic categories of funding plan goals. They are presented in order of greatest risk to least risk. Risk includes, but is not

limited to, cash problems, special assessments, and deferred maintenance.

Baseline Funding: Establishing a reserve funding goal of allowing the reserve cash balance to never be below zero during the cash flow projection. This is the funding goal with the greatest risk due to the variabilities encountered in the timing of component replacements and repair and replacement costs.

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.

Full Funding: Setting a reserve funding goal to attain and maintain reserves at or near 100 percent funded. This is the most conservative funding goal.

It should be noted that in certain jurisdictions there may be statutory funding requirements that would dictate the minimum requirements for funding.

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 twenty (20) years.

FUNDING PRINCIPLES: The reserve provider must provide a funding plan addressing these principles.

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

LIFE AND VALUATION ESTIMATES: The task of estimating useful life, remaining useful life, and current repair or replacement costs for the reserve components.

PERCENT FUNDED: The ratio, at a particular point in time related to the fiscal year end, 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.

PHYSICAL ANALYSIS: 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.

REMAINING USEFUL LIFE (RUL): Also referred to as “remaining life” (RL). The estimated time, in years, that a reserve component can be expected to serve its intended function. 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 and design, permits, installation, disposal, etc.).

RESERVE BALANCE: Actual or projected funds, as of a particular point in time that the association has identified, to defray the future repair or replacement cost of those major components that the association is obligated to maintain or replace. Also known as reserves, reserve accounts, cash reserves. Based on information provided and not audited.

RESERVE PROVIDER: An individual who prepares reserve studies. In many instances the reserve provider will possess a specialized designation such as the Reserve Specialist (RS) designation provided 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.

RESERVE PROVIDER FIRM: A company that prepares reserve studies as one of its primary business activities.

RESERVE STUDY: A budget planning tool which identifies the components that the 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. The reserve study consists of two parts: the physical analysis and the financial analysis.

RESPONSIBLE CHARGE: A Reserve Specialist (RS) in responsible charge of a reserve study shall render regular and effective supervision to those individuals performing services that directly and materially affect the quality and competence of services rendered by the Reserve Specialist. A Reserve Specialist shall maintain such records as are reasonably necessary to establish that the Reserve Specialist exercised regular and effective supervision of a reserve study of which he or she was in responsible charge. A Reserve Specialist engaged in any of the following acts or practices shall be deemed not to have rendered the regular and effective supervision required herein:

1. The regular and continuous absence from principal office premises from which professional services are rendered; except for performance of field work or presence in a field office maintained exclusively for a specific project;
2. The failure to personally inspect or review the work of subordinates where necessary and appropriate;
3. The rendering of a limited, cursory or perfunctory review of plans or projects in lieu of an appropriate detailed review; and
4. The failure to personally be available on a reasonable basis or with adequate advance notice for consultation and inspection where circumstances require personal availability.

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.

USEFUL LIFE (UL): The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed in its present application or installation.

Reserve Study Contents

The following is a list of the minimum contents to be included in the Reserve Study.

1. A summary of the association's number of units, physical description and reserve fund financial condition.
2. A projection of reserve starting balance, recommended reserve contributions, projected reserve expenses, and projected ending reserve fund balance for a minimum of 20 years.
3. A tabular listing of the component inventory, component quantity or identifying descriptions, useful life, remaining useful life and current replacement cost.
4. A description of methods and objectives utilized in computing the Fund Status and development of the Funding Plan.
5. Source(s) utilized to obtain component repair or replacement cost estimates.
6. A description of the level of service by which the Reserve Study was prepared.
7. Fiscal year for which the Reserve Study is 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 vs, all common areas, destructive testing or not, field measurements vs. drawing take-offs, etc.
3. **Financial Analysis:** Description of assumptions utilized for interest and inflation, tax and other outside factors.
4. **Personnel Credentials:** State or organizational licenses or credentials carried by the individual responsible for Reserve Study preparation or oversight.
5. **Update Reports:** Disclosure of how the current work is reliant on the validity of prior Reserve Studies.
6. **Completeness:** Material issues which, if not disclosed, would cause a distortion of the association's situation.
7. **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.
8. **Reserve Balance:** The actual or projected total presented in the Reserve Study is based upon information provided and was not audited.
9. **Component Quantities:** For update with site visit and update no site visit levels of service, the client is considered to have deemed previously developed component quantities as accurate and reliable.
10. **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.

TERMS OF REFERENCE RESERVE STUDY	
Association	The unit owners' association. May be referred to with different terminology in legal covenants of incorporation.
Board	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.
Owner	Individual Unit owner, a Member or the Association
Property Manager	Professional organization through which the Board delegates responsibilities for operations and maintenance of the community.
Excellent	Component or system is in "as new" condition, requiring no rehabilitation and should perform in accordance with expected performance.
Good	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.
Fair	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.
Poor	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.
Basis of Comparison	Ratings are determined by comparison to other buildings of similar age and construction type.
Left, Right, Front, Rear	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.
Current Deficiency Immediate Expense	We will note any observed or reported physical condition which 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 reserve expenditure.
Short-Term Reserve Expenditures	Correction of physical deficiencies including deferred maintenance, which may not warrant immediate attention, but require repairs or replacements which should be undertaken on a priority basis, taking precedence over preventive 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 time frame are also included. Observed minor issues which would typically be addressed as normal operations & maintenance work may not be noted in the report.
Long-term Reserve expenditures	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 which would typically be addressed as normal operations & maintenance work may not be noted in the report.

Expected Useful Life (EUL)	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 which is less costly to operate or maintain.
Remaining Useful Life (RUL)	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.

DRAFT

BUILDING SYSTEMS AND COMPONENTS COMMON ABBREVIATIONS AND ACRONYMS			
ACM	Asbestos Containing Material	HW	Hot Water
ACT	Acoustic Ceiling Tile	HWH	Hot Water Heater (<i>domestic</i>)
ADA	Americans with Disabilities Act	IBC	International Building Code
AHU	Air Handling Unit	IRC	International Residential Code
ASHRAE	American Society of Heating, Refrigeration and Air-Conditioning Engineers	KVA	Kilovolt-Ampere
ASTM	American Society for Testing and Materials	LF	Lineal Foot
BOCA	Building Officials Code Administrators International	MSL	Mean Sea Level
BTU	British Thermal Unit	NEC	National Electric Code
BTUH	British Thermal Unit / Hour	NFPA	National Fire Protection Association
CFM	Cubic Foot / Minute	MBH	Thousand British Thermal Units / Hour
CI	Cast Iron (<i>piping</i>)	MDP	Main Distribution Panel (<i>electric power</i>)
CIP	Cast In Place (<i>concrete</i>)	O&M	Operations & Maintenance
CMU	Concrete Masonry Unit (<i>block</i>)	OSB	Oriented Strand Board (<i>sheathing or decking</i>)
CPVC	Chlorinated Poly Vinyl Chloride (<i>piping</i>)	PCA	Property Condition Assessment
CW	Cold Water	PCR	Property Condition Report
DI	Ductile Iron (<i>piping</i>)	PE	Licensed Professional Engineer
EIFS	Exterior Insulating and Finishing System	PVC	Poly Vinyl Chloride (<i>piping and siding</i>)
EPDM	Ethylene Propylene Diene Monomer	PTAC	Packaged Terminal Air Conditioning Unit
EUL	Expected Useful Life	ROM	Rough Order of Magnitude
FCU	Fan Coil Unit	RUL	Remaining Useful Life
FEMA	Federal Emergency Management Agency	RTU	Roof Top Unit
FFE	Furniture, Fixtures and Equipment	SF	Square Foot
FHA	Forced Hot Air	SOG	Slab on Grade (<i>concrete basement or ground floor</i>)
FHAA	Fair Housing Act and Amendments	SQ	100 Square Feet
FHW	Forced Hot Water	SY	Square Yard
FIRM	Flood Insurance Rate Map	UBC	Uniform Building Code
FOIA	Freedom of Information Act	UL	Underwriters Laboratories
GFI	Ground Fault Interruption (<i>circuit breaker</i>)	VAC	Volts Alternating Current
GWB	Gypsum Wall Board (<i>drywall or sheetrock</i>)	VAV	Variable Air Volume box

HID	High Intensity Discharge (<i>lamp, lighting fixture</i>)	VCT	Vinyl Composition Tile
HVAC	Heating Ventilation and Air Conditioning	VWC	Vinyl Wall Covering

DRAFT

Reserve Study Contents

The following is a list of the minimum contents to be included in the Reserve Study.

1. A summary of the association's number of units, physical description and reserve fund financial condition.
2. A projection of reserve starting balance, recommended reserve contributions, projected reserve expenses, and projected ending reserve fund balance for a minimum of 20 years.
3. A tabular listing of the component inventory, component quantity or identifying descriptions, useful life, remaining useful life and current replacement cost.
4. A description of methods and objectives utilized in computing the Fund Status and development of the Funding Plan.
5. Source(s) utilized to obtain component repair or replacement cost estimates.
6. A description of the level of service by which the Reserve Study was prepared.
7. Fiscal year for which the Reserve Study is 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 vs, all common areas, destructive testing or not, field measurements drawing take-offs, etc.
3. **Financial Analysis:** Description of assumptions utilized for interest and inflation, tax and other outside factors.
4. **Personnel Credentials:** State or organizational licenses or credentials carried by the individual responsible for Reserve Study preparation or oversight.
5. **Update Reports:** Disclosure of how the current work is reliant on the validity of prior Reserve Studies.
6. **Completeness:** Material issues which, if not disclosed, would cause a distortion of the association's situation.
7. **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.
8. **Reserve Balance:** The actual or projected total presented in the Reserve Study is based upon information provided and was not audited.
9. **Component Quantities:** For update with site visit and update no site visit levels of service, the client is considered to have deemed previously developed component quantities as accurate and reliable.
10. **Reserve Projects:** Information provided about reserve projects will be considered Any on-site inspection should not be considered a project audit or quality inspection.

APPENDIX E

APPENDIX E - PROJECT TEAM QUALIFICATIONS

KYLE D. HARDY, P.E., LEED AP, RS



Area of Expertise

Kyle Hardy is President of Criterium-Hardy Engineers, a real estate consulting engineering firm in St. Louis, Missouri. Mr. Hardy performs reserve studies, cost segregation studies, commercial due diligence including Property Condition Assessments (PCA) and Phase 1 Environmental Site Assessments (ESA), residential structural inspections, forensic engineering, design, and construction monitoring. His clients include owners, buyers, lending institutions, investors, insurance companies, community associations, construction contractors, and developers.

Qualifications

Mr. Hardy has over 20 years of facility experience in project management, engineering design, property condition assessments, construction administration, and technical report writing. He has performed thousands of commercial and residential inspections. Prior to joining Criterium-Hardy Engineers his experiences include:

- Technical review of commercial and residential facilities for owners, lenders, buyers, and investors to provide information required to make an informed decision concerning the physical condition of property and the cost associated with those conditions.
- Engineering assessments of site improvements, structural, pavements, building envelope, roof, mechanical, electrical, and plumbing systems.
- Mechanical design including sizing and selection of heating and air conditioning systems, laboratory, and ventilation exhaust systems, piping systems for hydronic heating and cooling systems, energy analysis, fire protection, and plumbing systems.
- Project management responsible for onsite activities including project meetings, field surveying, design, and construction administration activities.

Education and Affiliations

Registered Professional Engineer: Missouri (2006019662), Kansas (28210) and Illinois (062.061394)

Bachelor of Science, Mechanical Engineering, University of Missouri - Columbia

Master of Arts, Business Management, Webster University, Webster Groves, MO

CAI Reserve Specialist (RS) designation

LEED Accredited Professional

CSI Construction Documents Technologist (CDT) Certified 2010

American Society of Home Inspectors (ASHI) Certified Member



ROSS A. HARDY, RS



Area of Expertise

Ross Hardy is Vice President of Criterium-Hardy Engineers, a real estate consulting engineering firm in St. Louis, Missouri. Mr. Hardy is responsible for overall production management, business development, operations, marketing, financial controls, and strategic oversight. Mr. Hardy is also responsible for the management, inspection, and financial analysis of reserve studies. In addition to working with many community associations, Mr. Hardy has a strong background as an executive leader in corporate finance and has extensive building components, construction, and renovation experience. He frequently speaks at seminars and workshops on the benefits of future planning and budgeting for capital repairs and replacement of building components and other assets.

Qualifications

Mr. Hardy has over 15 years in corporate finance leadership roles before joining Criterium-Hardy Engineers in 2018 in his current role. Prior to joining Criterium-Hardy Engineers, Mr. Hardy was the Chief Financial Officer for Shop 'n Save Grocers in Olathe, Kansas and Hornbacher's Grocers in Fargo, ND. In that role, he directed and managed all financial aspects of two large publicly held companies, consisting of annual operating planning, forecasting, capital management, P&L management, variance analysis, and financial insights and recommendations.

Since joining Criterium-Hardy Engineers, Mr. Hardy has become an expert in:

- Capital Reserve and Transitions Studies for over 100 Homeowner Associations throughout the Midwest.
- Commercial and Residential Property Condition Assessments.
- Project management responsible for onsite activities including project meetings, field surveying, and construction administration activities.
- Cost Segregation Studies aiding in identifying and classifying commercial property assets in support of tax reporting purposes.

Education and Affiliations

Bachelor of Science, Business Administration, University of Missouri - Columbia

Master of Business Administration, Finance, University of Missouri – St. Louis

CAI Reserve Specialist (RS) designation

Executive Board Member with the Community Associations Institute (CAI) Heartland Chapter

CAI Educated Business Partner

