SCHWINDT & CO.
RESERVE STUDY SERVICES

Revised 11/8/2023

Members of the Association of Professional Reserve Analysts / Reserve Specialist designation from CAI

October 12, 2023

Sahhali South Owners Association
c/o Patti Lundeen
Sycan B Corp
840 Beltline Rd Ste 202
Springfield, OR 97477

Dear Directors,

We have been engaged to create a reserve study for the Sahhali South Owners Association. Based on the Declaration and Bylaws for the Association, the reserve study has been divided into two parts, General Common Elements and STEP Septic System. The assessment for 2024 is as follows:

General Common Elements	$58,000
STEP Septic System	12,000
Total	$70,000

If you have any questions concerning this reserve study, please do not hesitate to call.

Sincerely,

David T. Schwindt, CPA RS PRA

12300 SE MALLARD WAY, SUITE 275
MILWAUKIE, OR 97222

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rss@schwindtco.com

SAHHALI SOUTH OWNERS ASSOCIATION

MAINTENANCE PLAN UPDATE

RESERVE STUDY

LEVEL II: UPDATE WITH VISUAL SITE INSPECTION

BUDGET YEAR

January 1, 2024 to December 31, 2024

SCHWINDT & CO.
RESERVE STUDY SERVICES

https://www.schwindtco.com/
(503) 227-1165

SAHHALI SOUTH OWNERS ASSOCIATION - COMMON

Executive Summary

Year of Report:

January 1, 2024 to December 31, 2024

Number of Units:

63 Units

Parameters:

Beginning Balance: $156,335

Year 2024 Suggested Contribution: $58,000

Year 2024 Projected Interest Earned: $3,662

Inflation: 4.00%

Annual Increase to Suggested Contribution: 4.00%

Lowest Cash Balance Over 30 Years (Threshold): $50,003

Average Reserve Assessment per Unit: $71.84

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SCHWINDT &CO.
RESERVE STUDY SERVICES

Members of the Association of Professional Reserve Analysts / Reserve Specialist designation from CAI

Sahhali South Owners Association
Maintenance Plan Update
Reserve Study Update – Onsite
Disclosure Information
2024

We have conducted an onsite reserve study update for the Sahhali South Owners Association for the year beginning January 1, 2024 in accordance with guidelines established by the Community Associations Institute and the American Institute of Certified Public Accountants.

This reserve study and maintenance plan complies with the legislative changes made in 2007 to ORS Chapters 94 and 100.

We have no other involvement with the Association other than providing the Reserve Study and Maintenance Plan.

Assumptions used for inflation, interest, and other factors are detailed on page 13. Income tax factors were not considered due to the uncertainty of factors affecting net taxable income and the election of tax forms to be filed.

David T. Schwindt, the representative in charge of this report, is a designated Reserve Study Specialist, Professional Reserve Analyst, and Certified Public Accountant licensed in the states of Oregon, Washington, California, and Arizona.

All information regarding the useful life and cost of reserve components was derived from the Association, local vendors, and/or from various construction pricing and scheduling manuals.

The terms *RS Means*, *National Construction Estimator*, and *Fannie Mae Expected Useful Life Tables and Forms* refer to construction industry estimating databases that are used throughout the industry to establish cost estimates and useful life estimates for common building components and products. We suggest that the Association obtain firm bids for these services.

Increases in Roofing and Painting Costs.

Over the last several years, roofing, painting, and other costs have increased at a dramatic pace. Schwindt & Company has noted this in our reserve studies. We were not sure if this was a temporary price increase or the new normal in pricing. We are now of the opinion that these increased prices will most likely continue. Roofing costs have nearly doubled and painting costs have increased 50%. It is still possible to keep the increases to a minimum if Associations can find a vendor that will perform the work at a reduced price, however, these vendors are becoming rare.

The main reason for increased prices aside from normal cost increases appears to be the availability of labor. Many workers left the industry during the downturn and have not reentered the job market thus driving up wage costs to attract qualified workers. Roofers and painters are also seeing increased demand for their services due to aging association property. These factors have created the perfect storm for increased prices.

These increases are being built into cost estimates and required contributions. Associations have seen an increase in the suggested reserve contributions beginning with the 2018/2019 budget years and depending on the year the roofing and painting projects occur, the increases may be substantial. As of 2020, we are seeing the prices remain at the elevated rate.

In December 2022, the average annual inflation rate was 6.45%. Experts are not sure if this increase is temporary due to supply chain issues or if this will be a long-term increase. At this time, Schwindt and Company is recommending an inflation rate of 4% in reserve studies. We will continue to monitor the inflation rate throughout this period. More information can be found at https://inflationdata.com/Inflation/Inflation_Rate/HistoricalInflation.aspx.

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The Association believes, as does the FED, that inflation will moderate from the 4% + in April and will approach the Fed's target rate of 2.0% over the life of the study. The elected Board of Directors should monitor inflation rate expectations and can responsibly set a range of increases between 2 & 4%.

Currently, the price of oil has fluctuated greatly, and there are ongoing issues with the supply chain. As of now, it is unknown when these factors will be resolved, making it difficult to predict prices. We recommend the Association begin the replacement process several years out, including inspection, creation of a scope of work, and a competitive bidding process. For large projects, associations may choose to sign contracts a year before the work is to occur so that they can get scheduled during the spring and summer.

According to Article 6.12.2 of the Association's Bylaws, the Association shall repair and maintain the Common Area and the Commonly Maintained Property.

According to Article 9.4.1 of the Association's Declaration, the Association has no obligation to perform any maintenance, repair, or replacement of the exterior of Living Units, or any maintenance of any landscaping on the Lots.

An insurance deductible is not included in the reserve study.

Many reserve studies do not include components such as the structural building envelope, plumbing (including water supply and piping), electrical systems, and water/sewer systems because they are deemed to be beyond the usual 30-year threshold and reserve study providers are generally not experts in determining the estimated useful lives and replacement costs of such assets. Associations that are 20+ years in age should consider adding funding for these components because the eventual cost may be one of the largest expenditures in the study. Because the eventual replacement costs and determination of the estimated useful life of such components depend on several factors, it is advisable to hire experts to advise the Association on such matters. Schwindt and Company believes the best way to determine costs and lives associated with these components is to perform an inspection of the applicable components which should include information about the component, steps to take to lengthen the estimated useful life, projected estimated useful life, and estimated replacement costs. This inspection should be conducted by experts and should include a written report. This information will allow the reserve study provider and the Association to include appropriate costs, lives, and projected expenditures in the study. Schwindt & Co believes that the cost of these inspections should be included in the reserve study as a funded component.

We are not aware of any material issues which, if not disclosed, would cause a material distortion of this report.

Certain information, such as the beginning balance of reserve funds and other information as detailed on the component detail reports, was provided by Association representatives and is deemed to be reliable by us. This reserve study is a reflection of the information provided to us and cannot be used for the purpose of performing an audit, a quality/forensic analysis, or background checks of historical records.

Site visits should not be considered a project audit or quality inspection of the Association's property.

Certain costs outlined in the reserve study are subjective and, as a result, are for planning purposes only. The Association should obtain firm bids at the time of work. Actual costs will depend upon the scope of work as defined at the time the repair, replacement, or restoration is performed. All estimates relating to future work are good faith estimates and projections are based on the estimated inflation rate, which may or may not prove accurate. All future costs and life expectancies should be reviewed and adjusted annually.

This reserve study, unless specifically stated in the report, assumes no fungi, mold, asbestos, lead paint, urea-formaldehyde foam insulation, termite control substances, other chemicals, toxic wastes, radon gas, electro-magnetic radiation, other potentially hazardous materials (on the surface or sub-surface), or termites on the property. The existence of any of these substances may adversely affect the accuracy of this reserve study. Schwindt and Company assumes no responsibility regarding such conditions, as we are not qualified to detect substances, determine the impact, or develop remediation plans/costs.

Since destructive testing was not performed, this reserve study does not attempt to address latent and/or patent defects. Neither does it address useful life expectancies that are abnormally short due either to improper design, installation nor to subsequent improper maintenance. This reserve study assumes all components will be reasonably maintained for the remainder of their life expectancy.

Physical Analysis:

New projects generally include information provided by developers and/or refer to drawings.

Full onsite reserve studies generally include field measurements and do not include destructive testing. Drawings are usually not available for existing projects.

Onsite updates generally include observations of physical characteristics but do not include field measurements.

The client is considered to have deemed previously developed component quantities as accurate and reliable. The current work is reliant on the validity of prior reserve studies.

This reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair, or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require the Association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.

SAHHALI SOUTH OWNERS ASSOCIATION

MAINTENANCE PLAN UPDATE

BUDGET YEAR

January 1, 2024 to December 31, 2024

Maintenance Plan Executive Summary

Regular maintenance of common elements is necessary to insure the maximum useful life and optimum performance of components. Of particular concern are items that may present a safety hazard to residents or guests if they are not maintained in a timely manner as well as components that perform a waterproofing function.

This maintenance plan is a cyclical plan that calls for maintenance at regular intervals. The frequency of the maintenance activity and the cost of the activity at the first instance follow a short descriptive narrative. This maintenance plan should be reviewed on an annual basis when preparing the annual operating budget for the Association.

Checklists, developed by Reed Construction Data, Inc., can be photocopied or accessed from the RS Means website:

http://www.rsmeans.com/supplement/67346.asp

They can be used to assess and document the existing condition of an association's common elements and to track the implementation of planned maintenance activities.

Sahhali South Owners Association
Maintenance Plan
2024

Pursuant to Oregon State Statutes sections 94 and 100 requiring a maintenance plan as an integral part of the reserve study, the maintenance procedures are as follows:

The Board of Directors should refer to this maintenance plan each year when preparing the annual operating budget for the Association to ensure that annual maintenance costs are included in the budget for the years that they are scheduled.

Landscape Maintenance

The Association will be responsible for maintenance and upkeep of common area landscape throughout the property. This may include mowing and removal/management of weeds. Landscape techniques vary depending on the foliage and season.

Frequency: Annually

Bridge Maintenance

Regular maintenance of the wooden foot bridge should include regular inspections, and repairs and replacements of boards, fasteners and railings. Fasteners and railings should be kept secure to insure safety.

Frequency: Annually

Annual Property Inspection

Schwindt & Co. recommends that a provision for the annual inspection of common area components be included in the maintenance plan for all Associations. This valuable management tool will help to insure that all components achieve a maximum useful life expectancy and that they are functioning as intended throughout their lifespan.

This inspection process should include an examination of the six fire hydrants throughout the property.

The inspection should be performed by a qualified professional and should include a written summary of conclusions with specific recommendations for any needed repairs or maintenance. This expense should be included in the annual operating budget for the association.

Frequency: Annually

Step System Maintenance

Maintenance of the private septic system includes testing, pumping and minor repairs. The full cost of this component will not be realized until Sahhali South is at full capacity.

Frequency: Annually

Asphalt Maintenance – Seal Coating

Maintenance of asphalt paving includes the periodic application of an asphalt emulsion sealer or "seal coat" as it is commonly known. This procedure is typically performed every 4 to 7 years depending on a variety of factors that can affect the useful life of the sealer.

Vehicle traffic is one such factor and Association's that have asphalt paving that carries considerable vehicle traffic should consider a maintenance program that calls for seal coating of asphalt driving surfaces as frequently as every 4 years.

This maintenance procedure involves thoroughly cleaning all pavement, filling of any surface cracks and patching of any locally damaged pavement surfaces. The emulsion sealer is then applied, typically with a vehicle mounted spraying system or for small areas a roller application is sometimes used. Asphalt contractors recommend seal coating immediately after performing an overlay (skim coat). This will help insure the prevention of water penetration which can lead to damage and deterioration.

This work should be performed by a licensed paving contractor.

Frequency: Once every 5 years.

Asphalt Renewal – Overlay

Renewal of asphalt paving refers to the periodic application of a bituminous asphalt overlay that is typically applied in 1" to 2" thicknesses, depending on the individual project specifications. This overlay is known as a "wearing course" and is designed to renew the life of the pavement for another lifecycle of equal duration to the initial life expectancy of the pavement. The new surface will subsequently be maintained in the same manner as the original asphalt surface. Asphalt contractors recommend seal coating immediately after performing an overlay (skim coat). This will help insure the prevention of water penetration which can lead to damage and deterioration.

This work should be performed by a licensed paving contractor.

Frequency: Once every 25 years.

This maintenance plan is designed to preserve and extend the useful life of assets and is dependent upon proper inspection and follow up procedures.

Sahhali South Owners Association
Property Description

Sahhali South Owners Association - Common consists of Sahhali South Owners Association units located in Neskowin, OR. At the date of the reserve study the development consists of 50 townhouse units and 13 single family homes. The Declarant has indicated that Declarant is actively pursuing land use actions which have the potential to change the number of units in the development. If such actions are successful, unit assessments should be adjusted by the board to reflect the actual number of units in the Association. The Declarant or the Association shall provide maintenance on roads, sidewalks, street signs, landscape, the foot bridge and the septic system.

Subsequent to the original declaration, Declarant incorporated five (5) new single-family lots (formerly referred to as Sahhali North) into the association, bringing the total to 63 lots. These five (5) lots will not be serviced by the Septech Sewer System.

Every owner must promptly perform all maintenance and repair work to such owner's lot and the exterior of the improvements thereon and keep the same in good repair and sanitary and neat condition.

This study uses information supplied by the Association, and various construction pricing and scheduling manuals to determine useful lives and replacement costs.

A site visit was performed by Schwindt and Company in 2023. Schwindt and Company did not investigate components for defects, materials, design or workmanship. This investigation would ordinarily be considered in a complete building envelope inspection. Our condition assessment considers if the component is wearing as intended. All components are considered to be in fair condition and appear to be wearing as intended unless noted otherwise in the component detail.

Two studies have been prepared to allow proper reserve contribution allocations. A reserve study incorporates all components shared by the units. A separate study has been prepared for the Septic Tank Effluent Pumping (STEP) system.

Funds are being accumulated in the replacement fund based on estimates of future need for repairs and replacement of common property components. Actual expenditures, investment income and provisions for income taxes however, may vary from estimated amounts and the variations may be material. Therefore, amounts accumulated in the replacement fund may not be adequate to meet future funding needs.

If additional funds are needed, the Declarant or the Association as stated in the By-laws has the right, subject to approval, to increase regular assessments, and/or levy special assessments. Otherwise the Declarant or the Association may delay repairs or replacements until funds are available.

SAHHALI SOUTH OWNERS ASSOCIATION - COMMON

RESERVE STUDY

LEVEL II: UPDATE WITH VISUAL SITE INSPECTION

BUDGET YEAR

January 1, 2024 to December 31, 2024

Sahhali South Owners Association - Common
Cash Flow Method - Threshold Funding Model Summary

Report Date	October 12, 2023
Account Number	2sahha
Budget Year Beginning	January 1, 2024
Budget Year Ending	December 31, 2024
Total Units	63

Report Parameters

Inflation	4.00%
Interest Rate on Reserve Deposit	2.00%
2024 Beginning Balance	$156,335

Threshold Funding

Fully Reserved Model Summary

- This study utilizes the cash flow method and the threshold funding model, which establishes a reserve funding goal that keeps the reserve balance above a specified dollar or percent funded amount. The threshold method assumes that the threshold method is funded with a positive threshold balance, therefore, "fully reserved".
- The following items were not included in the analysis because they have useful lives greater than 30 years: grading/drainage; foundation/footings; storm drains; telephone, cable, and internet lines.
- This funding scenario begins with a contribution of **$58,000** in **2024** and increases **4.00%** each year until 2034. In 2034 the contribution is $85,854 and remains constant for the remaining years of the study. A minimum balance of **$50,003** is maintained.
- The Association believes, as does the FED, that inflation will moderate from the 4% + in April and will approach the Fed's target rate of 2.0% over the life of the study. The elected Board of Directors should monitor inflation rate expectations and can responsibly set a range of increases between 2 & 4%.
- The purpose of this study is to insure that adequate replacement funds are available when components reach the end of their useful life. Components will be replaced as required, not necessarily in their expected replacement year. This analysis should be updated annually.

Fully Funded Threshold Funding Method Summary of Calculations

Required Monthly Contribution	$4,833.33
$76.72 per unit monthly	
Average Net Monthly Interest Earned	$305.20
Total Monthly Allocation to Reserves	$5,138.53
$81.56 per unit monthly	

Sahhali South Owners Association - Common
Cash Flow Method - Threshold Funding Model Projection

Beginning Balance: $156,335

Year	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2024	58,000	3,662	6,211	211,786	554,695	38%
2025	60,320	4,769	8,083	268,792	622,042	43%
2026	62,733	5,563	27,040	310,048	660,449	47%
2027	65,242	5,826	56,643	324,474	671,626	48%
2028	67,852	7,289		399,614	743,905	54%
2029	70,566	8,707	6,340	472,547	800,565	59%
2030	73,389	10,338		556,273	876,947	63%
2031	76,324	11,391	33,145	610,844	923,687	66%
2032	79,377	4,188	446,233	248,175	544,280	46%
2033	82,552	5,909		336,636	615,688	55%
2034	85,854	208	372,695	50,003	305,962	16%
2035	85,854	1,749	9,691	127,916	363,501	35%
2036	85,854	3,518		217,288	435,635	50%
2037	85,854	3,666	82,039	224,769	435,702	52%
2038	85,854	5,473		316,096	523,810	60%
2039	85,854	7,127	9,385	399,692	608,509	66%
2040	85,854	9,003		494,549	709,297	70%
2041	85,854	10,918		591,321	817,174	72%
2042	85,854	10,967	94,333	593,810	834,441	71%
2043	85,854	12,921		692,586	953,811	73%
2044	85,854	14,685	11,418	781,706	1,069,522	73%
2045	85,854	16,357	17,711	866,206	1,186,893	73%
2046	85,854	13,487	244,398	721,149	1,076,926	67%
2047	85,854	12,987	124,112	695,878	1,091,526	64%
2048	85,854	14,982		796,714	1,239,811	64%
2049	85,854	16,737	13,892	885,412	1,383,764	64%
2050	85,854	18,521	14,171	975,617	1,537,538	63%
2051	85,854	20,628		1,082,099	1,716,727	63%
2052	85,854	19,959	139,635	1,048,277	1,762,571	59%
2053	85,854	18,554	175,424	977,261	1,777,923	55%

Sahhali South Owners Association - Common
Component Summary By Group

Description	Date in Service	Next Occurrence	Useful	Adjustment	Remaining	Units		Unit Cost	Current Cost
Capital									
Asphalt - Overlay	2006	2034	25	3	10	95,200	SF	2.59	246,568
Asphalt - Replacement	2006	2032	25	1	8	95,200	SF	9.33@ 25%	222,054
Bear Proof Trash Cans	2007	2027	10	10	3	2	Units	1,352.67	2,705
Blue Heron Trail Gate - Replacement	2020	2050	30	0	26	1	Total	5,111.16	5,111
Concrete Under Benches	2007	2027	20	0	3	2	Units	542.39	1,085
Emergency Entrance Gate - Replacement	2007	2032	25	0	8	1	Total	3,002.26	3,002
Park Benches - Replacement	2007	2025	10	8	1	2	Units	923.77	1,848
Shared Road Asphalt - Overlay	2006	2032	30	-4	8	27,340	SF	2.59	70,811
Shared Road Asphalt - Replacement	2006	2032	30	-4	8	27,340	SF	9.33@ 10%	25,508
Shared Road Curb - Replacement	2006	2032	30	-4	8	1,367	LF	17.13@ 20%	4,683
Street Signs - Replacement	2006	2025	20	-1	1	1	TOTAL	1,477.31	1,477
Trail Bridge: Beach - Replacement	2006	2046	40	0	22	1,375	SF	75.00	103,125
Trail Bridge: Pelican Point - Replacement	2023	2053	30	0	29	750	SF	75.00	56,250
Trail Signs - Replacement	2007	2025	10	8	1	10	Units	444.73	4,447
Capital - Total									$748,675
Non-Capital									
Asphalt - Repair 2026	2026	2026	1	0	2	1	Total	25,000.00	25,000
Asphalt - Sealcoat	2021	2027	5	1	3	95,200	SF	0.38	36,176
Concrete Curbing	2006	2031	25	0	7	7,621	SF	13.22@ 25%	25,187
Emergency Entrance Gate - Maintenance	2007	2024	5	0	0	16	L.F.	13.20	211
Insurance Deductible	2021	2024	1	0	0	1	Total	1,000.00	1,000
Shared Road Asphalt - Seal Coat	2022	2027	5	0	3	27,340	LF	0.38	10,389
Trail Bridge: Beach - Repair	2006	2024	5	0	0	1	Total	5,000.00	5,000
Non-Capital - Total									$102,964
Total Asset Summary									$851,639

Sahhali South Owners Association - Common
Component Summary By Category

Description	Date in Service	Next Occurrence	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Streets/Asphalt								
Asphalt - Overlay	2006	2034	25	3	10	95,200 SF	2.59	246,568
Asphalt - Repair 2026	2026	2026	1	0	2	1 Total	25,000.00	25,000
Asphalt - Replacement	2006	2032	25	1	8	95,200 SF	9.33@ 25%	222,054
Asphalt - Sealcoat	2021	2027	5	1	3	95,200 SF	0.38	36,176
Shared Road Asphalt - Overlay	2006	2032	30	-4	8	27,340 SF	2.59	70,811
Shared Road Asphalt - Replacement	2006	2032	30	-4	8	27,340 SF	9.33@ 10%	25,508
Shared Road Asphalt - Seal Coat	2022	2027	5	0	3	27,340 LF	0.38	10,389
Shared Road Curb - Replacement	2006	2032	30	-4	8	1,367 LF	17.13@ 20%	4,683
Streets/Asphalt - Total								$641,189
Fencing/Security								
Emergency Entrance Gate - Maintenance	2007	2024	5	0	0	16 L.F.	13.20	211
Emergency Entrance Gate - Replacement	2007	2032	25	0	8	1 Total	3,002.26	3,002
Fencing/Security - Total								$3,213
Equipment								
Bear Proof Trash Cans	2007	2027	10	10	3	2 Units	1,352.67	2,705
Equipment - Total								$2,705
Grounds Components								
Blue Heron Trail Gate - Replacement	2020	2050	30	0	26	1 Total	5,111.16	5,111
Park Benches - Replacement	2007	2025	10	8	1	2 Units	923.77	1,848
Trail Bridge: Beach - Repair	2006	2024	5	0	0	1 Total	5,000.00	5,000
Trail Bridge: Beach - Replacement	2006	2046	40	0	22	1,375 SF	75.00	103,125
Trail Bridge: Pelican Point - Replacement	2023	2053	30	0	29	750 SF	75.00	56,250
Grounds Components - Total								$171,334
Signs								
Street Signs - Replacement	2006	2025	20	-1	1	1 TOTAL	1,477.31	1,477
Trail Signs - Replacement	2007	2025	10	8	1	10 Units	444.73	4,447
Signs - Total								$5,925
Contingency								
Insurance Deductible	2021	2024	1	0	0	1 Total	1,000.00	1,000
Contingency - Total								$1,000
Concrete								
Concrete Curbing	2006	2031	25	0	7	7,621 SF	13.22@ 25%	25,187
Concrete Under Benches	2007	2027	20	0	3	2 Units	542.39	1,085
Concrete - Total								$26,272
Total Asset Summary								$851,639

Sahhali South Owners Association - Common
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2024	
Emergency Entrance Gate - Maintenance	211
Insurance Deductible - 1 of 1X	1,000
Trail Bridge: Beach - Repair	5,000
Total for 2024	**$6,211**
Replacement Year 2025	
Park Benches - Replacement	1,921
Street Signs - Replacement	1,536
Trail Signs - Replacement	4,625
Total for 2025	**$8,083**
Replacement Year 2026	
Asphalt - Repair 2026 - 1 of 1X	27,040
Total for 2026	**$27,040**
Replacement Year 2027	
Asphalt - Sealcoat	40,693
Bear Proof Trash Cans	3,043
Concrete Under Benches	1,220
Shared Road Asphalt - Seal Coat	11,686
Total for 2027	**$56,643**
No Replacement in 2028	
Replacement Year 2029	
Emergency Entrance Gate - Maintenance	257
Trail Bridge: Beach - Repair	6,083
Total for 2029	**$6,340**
No Replacement in 2030	
Replacement Year 2031	
Concrete Curbing	33,145
Total for 2031	**$33,145**

Sahhali South Owners Association - Common
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2032	
Asphalt - Replacement	303,896
Emergency Entrance Gate - Replacement	4,109
Shared Road Asphalt - Overlay	96,909
Shared Road Asphalt - Replacement	34,910
Shared Road Curb - Replacement	6,409
Total for 2032	**$446,233**
No Replacement in 2033	
Replacement Year 2034	
Asphalt - Overlay	364,981
Emergency Entrance Gate - Maintenance	313
Trail Bridge: Beach - Repair	7,401
Total for 2034	**$372,695**
Replacement Year 2035	
Park Benches - Replacement	2,844
Trail Signs - Replacement	6,846
Total for 2035	**$9,691**
No Replacement in 2036	
Replacement Year 2037	
Asphalt - Sealcoat	60,236
Bear Proof Trash Cans	4,505
Shared Road Asphalt - Seal Coat	17,299
Total for 2037	**$82,039**
No Replacement in 2038	
Replacement Year 2039	
Emergency Entrance Gate - Maintenance	380
Trail Bridge: Beach - Repair	9,005
Total for 2039	**$9,385**

Sahhali South Owners Association - Common
Annual Expenditure Detail

Description	Expenditures
No Replacement in 2040	
No Replacement in 2041	
Replacement Year 2042	
Asphalt - Sealcoat	73,286
Shared Road Asphalt - Seal Coat	21,047
Total for 2042	**$94,333**
No Replacement in 2043	
Replacement Year 2044	
Emergency Entrance Gate - Maintenance	463
Trail Bridge: Beach - Repair	10,956
Total for 2044	**$11,418**
Replacement Year 2045	
Park Benches - Replacement	4,210
Street Signs - Replacement	3,366
Trail Signs - Replacement	10,134
Total for 2045	**$17,711**
Replacement Year 2046	
Trail Bridge: Beach - Replacement	244,398
Total for 2046	**$244,398**
Replacement Year 2047	
Asphalt - Sealcoat	89,164
Bear Proof Trash Cans	6,668
Concrete Under Benches	2,674
Shared Road Asphalt - Seal Coat	25,606
Total for 2047	**$124,112**
No Replacement in 2048	
Replacement Year 2049	
Emergency Entrance Gate - Maintenance	563

Sahhali South Owners Association - Common
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2049 continued...	
Trail Bridge: Beach - Repair	13,329
Total for 2049	**$13,892**
Replacement Year 2050	
Blue Heron Trail Gate - Replacement	14,171
Total for 2050	**$14,171**
No Replacement in 2051	
Replacement Year 2052	
Asphalt - Sealcoat	108,481
Shared Road Asphalt - Seal Coat	31,154
Total for 2052	**$139,635**
Replacement Year 2053	
Trail Bridge: Pelican Point - Replacement	175,424
Total for 2053	**$175,424**

Sahhali South Owners Association - Common
Detail Report by Category

Asphalt - Overlay

		95,200 SF	@ $2.59
Asset ID	1003	Asset Actual Cost	$246,568.00
	Capital	Percent Replacement	100%
Category	Streets/Asphalt	Future Cost	$364,980.87
Placed in Service	July 2006		
Useful Life	25		
Adjustment	3		
Replacement Year	2034		
Remaining Life	10		

This component is a provision for the renewal of the asphalt driving surfaces. Renewal of asphalt involves the application of a 1" to 2" overlay that is placed on top of the existing surface after it has been cleaned, repaired, and has been treated with an asphalt emulsion tack coat. This new "wearing course" will then be maintained in the same manner as new asphalt with the periodic application of an emulsion sealer.

Estimated useful life assumptions are based on accepted industry estimates as established by RS Means (RSM) and/or The National Construction Estimator. Costs are based on a per square foot estimate from Kodiak Construction. The association should firm up the cost with a bid.

This work should be performed by a licensed paving contractor.

Estimated area: 95,200 square feet. This was reviewed during the 2023 site visit and was found to be reasonable.

Asphalt - Repair 2026

		1 Total	@ $25,000.00
Asset ID	1029	Asset Actual Cost	$25,000.00
	Non-Capital	Percent Replacement	100%
Category	Streets/Asphalt	Future Cost	$27,040.00
Placed in Service	July 2026		
Useful Life	1		
Replacement Year	2026		
Remaining Life	2		

This component provides funding for the repair of the asphalt in 2026. This is for the damaged edging on Thalassa Drive. The Association plans to budget $25,000 for repairs in 2026. A total replacement/repair cost for the area compromised was provided in 2023 ($90,000)

In 2023, the Association spent 20,000 on repairs to Pelican Point Drive.

Note: The south side of Thalassa Dr. will need to be reconstructed

Sahhali South Owners Association - Common
Detail Report by Category

Asphalt - Replacement

		95,200 SF	@ $9.33
Asset ID	1004	Asset Actual Cost	$222,054.00
	Capital	Percent Replacement	25%
Category	Streets/Asphalt	Future Cost	$303,896.23
Placed in Service	July 2006		
Useful Life	25		
Adjustment	1		
Replacement Year	2032		
Remaining Life	8		

This component provides contingency for the partial replacement of 25% of the asphalt pavement in 2031.

Schwindt & Company's useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

In future years the pavement condition will be reviewed during the annual inspections that are detailed in the maintenance plan. This review should help determine the extent to which complete replacement of the paving can be anticipated. If the Association finds that this expense is likely to be higher than expected, this component expense should be updated accordingly.

This cost has been adjusted for inflation.

Asphalt - Sealcoat

		95,200 SF	@ $0.38
Asset ID	1002	Asset Actual Cost	$36,176.00
	Non-Capital	Percent Replacement	100%
Category	Streets/Asphalt	Future Cost	$40,693.08
Placed in Service	July 2021		
Useful Life	5		
Adjustment	1		
Replacement Year	2027		
Remaining Life	3		

This component provides funding for the application of an asphalt seal coat every 4 years, beginning in 2010. The seal coating scheduled for 2026 will take place after the application of a 1" overlay has been completed. There are approximately 95,200 square feet of asphalt that will need to be maintained.

The useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. According to the Association, this was done in 2021 for $21,900.

Sahhali South Owners Association - Common
Detail Report by Category

Asphalt - Sealcoat continued...

This work should be performed by a licensed paving contractor.

Shared Road Asphalt - Overlay

		27,340 SF	@ $2.59
Asset ID	1007	Asset Actual Cost	$70,810.60
	Capital	Percent Replacement	100%
Category	Streets/Asphalt	Future Cost	$96,909.20
Placed in Service	January 2006		
Useful Life	30		
Adjustment	-4		
Replacement Year	2032		
Remaining Life	8		

Sahhali Drive and Tyee Loop are private roads that serve Sahhali Shores Association and Sahhali South Homeowners Association. The two associations agreed to share the cost of maintenance, repairs, and replacements of the roads in the Access Easement Maintenance Agreement effective on May 1, 2005. Sahhali South is responsible for 38.1% of expenses related to the maintenance, repair, and replacement of these roads.

This component is a provision for the renewal of the asphalt driving and parking surfaces. Renewal of asphalt involves the application of a 1" to 2" overlay that is placed on top of the existing surface after it has been cleaned, repaired, and has been treated with an asphalt emulsion tack coat. This new "wearing course" will then be maintained in the same manner as new asphalt with the periodic application of an emulsion sealer.

This work should be performed by a licensed paving contractor.

Estimated area: 27,340 square feet. Tyee Loop is 177 ft x 20 ft and Sahhali Drive is 1,190 ft x 20 ft. This was reviewed during the 2023 site visit and was found to be reasonable.

Estimated useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. Costs are based on a per square foot estimate from Kodiak Construction. The association should firm up the cost with a bid.

This work should be performed by a licensed paving contractor.

Sahhali South Owners Association - Common
Detail Report by Category

Shared Road Asphalt - Replacement

		27,340 SF	@ $9.33
Asset ID	1009	Asset Actual Cost	$25,508.22
	Capital	Percent Replacement	10%
Category	Streets/Asphalt	Future Cost	$34,909.76
Placed in Service	January 2006		
Useful Life	30		
Adjustment	-4		
Replacement Year	2032		
Remaining Life	8		

Sahhali Drive and Tyee Loop are private roads that serve Sahhali Shores Association and Sahhali South Homeowners Association. The two associations agreed to share the cost of maintenance, repairs, and replacements of the roads in the Access Easement Maintenance Agreement effective on May 1, 2005. Sahhali South is responsible for 38.1% of expenses related to the maintenance, repair and replacement of these roads.

This component provides funding for the partial replacement of the asphalt pavement.

This renewal is scheduled to occur in the same year as the overlay which will involve the application of a new 1" wearing course over the entire asphalt surface.

In future years the pavement condition will be reviewed during the annual inspections that are detailed in this study. This review should help determine the extent to which complete replacement of the paving can be anticipated. If the Association finds that this expense is likely to be higher than expected, this component expense should be updated accordingly.

Estimated total area: 27,340 square feet. Tyee Loop is 177 ft x 20 ft and Sahhali Drive is 1,190 ft x 20 ft. This was reviewed during the 2023 site visit and was found to be reasonable.

This cost has been adjusted for inflation.

Shared Road Asphalt - Seal Coat

		27,340 LF	@ $0.38
Asset ID	1008	Asset Actual Cost	$10,389.20
	Non-Capital	Percent Replacement	100%
Category	Streets/Asphalt	Future Cost	$11,686.44
Placed in Service	January 2022		
Useful Life	5		
Replacement Year	2027		
Remaining Life	3		

Sahhali Drive and Tyee Loop are private roads that serve Sahhali Shores Association and Sahhali South Homeowners Association. The two associations agreed to share the cost of maintenance, repairs, and replacements of the roads in the Access Easement Maintenance Agreement effective on May 1, 2005. Sahhali South is responsible for 38.1% of expenses

Shared Road Asphalt - Seal Coat continued...

related to the maintenance, repair, and replacement of these roads.

This component provides funding for the application of an asphalt seal coat every 5 years, beginning in 2011. The seal coating scheduled for 2026 will take place after the application of a 1" overlay has been completed.

This work should be performed by a licensed paving contractor.

Tyee Loop is 177 lf and Sahhali Drive is 1,190 lf. This was reviewed during the 2023 site visit and was found to be reasonable.

Sahhali Drive is currently in poor shape caused by excessive wear and tear due to construction taking place in S Shores.

Estimated useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. Costs are based on a per square foot estimate from Kodiak construction. The association should firm up this cost with a bid.

This work should be performed by a licensed paving contractor.

Shared Road Curb - Replacement

		1,367 LF	@ $17.13
Asset ID	1010	Asset Actual Cost	$4,683.34
	Capital	Percent Replacement	20%
Category	Streets/Asphalt	Future Cost	$6,409.48
Placed in Service	January 2006		
Useful Life	30		
Adjustment	-4		
Replacement Year	2032		
Remaining Life	8		

Sahhali Drive and Tyee Loop are private roads that serve Sahhali Shores Association and Sahhali South Homeowners Association. The two associations agreed to share the cost of maintenance, repairs, and replacements of the roads in the Access Easement Maintenance Agreement effective on May 1, 2005. Sahhali South is responsible for 38.1% of expenses related to the maintenance, repair, and replacement of these roads.

This component provides funding for the partial replacement of concrete curbing in the year 2031. Since the expected useful life of a typical concrete curb installation is greater than 30 years, this component only provides funding for the replacement of a percentage of the total amount of curbing.

There are approximately 1,367 total lineal feet of curbing. Schwindt & Co. includes this provision to fund the replacement of 20% of the curbing in 25 years. Tyee Loop is 177 lf and Sahhali Drive is 1,190 lf. This was reviewed during the 2023 site visit and was found to be

Shared Road Curb - Replacement continued...

reasonable.

Sahhali Drive is currently in poor shape caused by excessive wear and tear due to construction.

Estimated useful life and cost assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

NOTE:

This is a provision for an anticipated expense. Should the Association find that the cost of this item is greater than or less than the amount provided for herein, this study should be updated to reflect the actual component cost.

This cost has been adjusted for inflation.

Streets/Asphalt - Total Current Cost **$641,189**

Sahhali South Owners Association - Common
Detail Report by Category

Emergency Entrance Gate - Maintenance

		16 L.F.	@ $13.20
Asset ID	1022	Asset Actual Cost	$211.20
	Non-Capital	Percent Replacement	100%
Category	Fencing/Security	Future Cost	$211.20
Placed in Service	January 2007		
Useful Life	5		
Replacement Year	2024		
Remaining Life	0		

This provision is for the maintenance of the emergency entrance gate. The gate is made of wrought iron and will need to be power washed every 5 years.

The estimated length of the fence is 16 ft x 4 ft.

The cost projection is based on an estimated cost per linear foot to power wash the gate surface as provided by a local vendor. The Association should firm up the cost with an actual bid.

Emergency Entrance Gate - Replacement

		1 Total	@ $3,002.26
Asset ID	1021	Asset Actual Cost	$3,002.26
	Capital	Percent Replacement	100%
Category	Fencing/Security	Future Cost	$4,108.80
Placed in Service	January 2007		
Useful Life	25		
Replacement Year	2032		
Remaining Life	8		

This provision is for the replacement of the entrance gate located on the site. The gate will need to be replaced every 25 years.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Fencing/Security - Total Current Cost **$3,213**

Sahhali South Owners Association - Common
Detail Report by Category

Bear Proof Trash Cans

		2 Units	@ $1,352.67
Asset ID	1011	Asset Actual Cost	$2,705.34
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$3,043.14
Placed in Service	January 2007		
Useful Life	10		
Adjustment	10		
Replacement Year	2027		
Remaining Life	3		

This provision is for the replacement of two bear proof trash cans located on the trail within the Association's grounds. The trash cans will need to be replaced every ten years.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Equipment - Total Current Cost **$2,705**

Sahhali South Owners Association - Common
Detail Report by Category

Blue Heron Trail Gate - Replacement

		1 Total	@ $5,111.16
Asset ID	1030	Asset Actual Cost	$5,111.16
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$14,170.53
Placed in Service	January 2020		
Useful Life	30		
Replacement Year	2050		
Remaining Life	26		

This provision is for the replacement of the galvanized date at the head of the Blue Heron Trail that parallels Hwy 101.

The gate was installed in 2020 for $4,382 by Pape Construction.

Park Benches - Replacement

		2 Units	@ $923.77
Asset ID	1013	Asset Actual Cost	$1,847.54
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$1,921.44
Placed in Service	January 2007		
Useful Life	10		
Adjustment	8		
Replacement Year	2025		
Remaining Life	1		

This provision is for the replacement of two park benches located within the park of the association. The benches will need to be replaced every 10 years.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Trail Bridge: Beach - Repair

		1 Total	@ $5,000.00
Asset ID	1032	Asset Actual Cost	$5,000.00
	Non-Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$5,000.00
Placed in Service	January 2006		
Useful Life	5		
Replacement Year	2024		
Remaining Life	0		

This provision is to repair the trail bridge down to the beach.

Trail Bridge: Beach - Repair continued...

Schwindt and Company estimated the bridge to measure 1,375 square feet.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Trail Bridge: Beach - Replacement

		1,375 SF	@ $75.00
Asset ID	1031	Asset Actual Cost	$103,125.00
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$244,397.87
Placed in Service	January 2006		
Useful Life	40		
Replacement Year	2046		
Remaining Life	22		

This provision is to replace the trail bridge down to the beach. The Association plans to inspect and repair the bridge annually. We have added a component in the reserve study for major repairs every 5 years.

Schwindt and Company estimated the bridge to measure 1,375 square feet.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Trail Bridge: Pelican Point - Replacement

		750 SF	@ $75.00
Asset ID	1033	Asset Actual Cost	$56,250.00
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$175,424.14
Placed in Service	January 2023		
Useful Life	30		
Replacement Year	2053		
Remaining Life	29		

This provision is to replace the trail bridge to Pelican Point Cul-de-sac.

Schwindt and Company estimated the bridge to measure 750 square feet.

According to the Association, the bridge was installed in 2023 for $52,539.

Sahhali South Owners Association - Common
Detail Report by Category

Trail Bridge: Pelican Point - Replacement continued...

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Grounds Components - Total Current Cost	**$171,334**

Sahhali South Owners Association - Common
Detail Report by Category

Street Signs - Replacement

		1 TOTAL	@ $1,477.31
Asset ID	1005	Asset Actual Cost	$1,477.31
	Capital	Percent Replacement	100%
Category	Signs	Future Cost	$1,536.40
Placed in Service	January 2006		
Useful Life	20		
Adjustment	-1		
Replacement Year	2025		
Remaining Life	1		

This component provides funding for the replacement of the street signs throughout the Association's private roads. Given the Association's close proximity to the ocean, the metal street signs will have a shortened useful life due to wear and tear from salt and other elements of the oceanic environment.

Estimated useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator.

Estimated cost is calculated as follows:

$ 345 - Street Signs (3 x $115)
690 - Stop Signs (2 x $345)
1,035 - 2007 Total Cost to Replace
This cost has been adjusted for inflation.

Trail Signs - Replacement

		10 Units	@ $444.73
Asset ID	1015	Asset Actual Cost	$4,447.30
	Capital	Percent Replacement	100%
Category	Signs	Future Cost	$4,625.19
Placed in Service	January 2007		
Useful Life	10		
Adjustment	8		
Replacement Year	2025		
Remaining Life	1		

This provision is for the replacement of 10 signs located throughout the site for the Association. The signs will need to be replaced every 10 years.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Sahhali South Owners Association - Common
Detail Report by Category

Signs - Total Current Cost	**$5,925**

Sahhali South Owners Association - Common
Detail Report by Category

Insurance Deductible

		1 Total	@ $1,000.00
Asset ID	1028	Asset Actual Cost	$1,000.00
	Non-Capital	Percent Replacement	100%
Category	Contingency	Future Cost	$1,000.00
Placed in Service	January 2021		
Useful Life	1		
Replacement Year	2024		
Remaining Life	0		

Many Associations include the insurance deductible in the reserve study as a component. Generally, this amount is $10,000 but can vary based on insurance coverages.

The insurance deductible component is only included as an expenditure in the first year of the study. This expenditure is not listed again during the 30 year cash flow projection.
Boards have asked if the inclusion of an insurance deductible in the study as a component can increase the suggested annual reserve contribution. As long as the Association has a threshold amount of greater than $10,000 in the reserve study as a contingency in the first year of the study, the inclusion of the insurance deductible should not affect the suggested reserve contribution. In other words, if the cash flow projection shows an amount greater than $10,000 as a contingency balance in the reserve cash flow model without the insurance deductible, the inclusion of the insurance component should not affect the suggested reserve contribution.

Contingency - Total Current Cost **$1,000**

Sahhali South Owners Association - Common
Detail Report by Category

Concrete Curbing

		7,621 SF	@ $13.22
Asset ID	1001	Asset Actual Cost	$25,187.40
	Non-Capital	Percent Replacement	25%
Category	Concrete	Future Cost	$33,144.91
Placed in Service	July 2006		
Useful Life	25		
Replacement Year	2031		
Remaining Life	7		

This component provides funding for the partial replacement of concrete curbing in the year 2031.

Since the expected useful life of a typical concrete curb installation is greater than 30 years, this component only provides funding for the replacement of a percentage of the total amount of curbing after 25 years. There is approximately 7,621 square feet of curbing. Schwindt and Company includes this provision to fund the replacement of 25% of the curbing in 25 years.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

NOTE:

This is a provision for an anticipated expense. Should the association find that the cost of this item is greater than or less than the amount provided for herein, this study should be updated to reflect the actual component cost.

This cost has been updated for inflation.

Concrete Under Benches

		2 Units	@ $542.39
Asset ID	1026	Asset Actual Cost	$1,084.78
	Capital	Percent Replacement	100%
Category	Concrete	Future Cost	$1,220.23
Placed in Service	January 2007		
Useful Life	20		
Replacement Year	2027		
Remaining Life	3		

This provision is for the replacement of concrete that is located under 2 park benches. The concrete should be replaced every 20 years.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

Sahhali South Owners Association - Common
Detail Report by Category

Concrete - Total Current Cost	**$26,272**

SAHHALI SOUTH OWNERS ASSOCIATION - STEP SYSTEM

RESERVE STUDY

LEVEL II: UPDATE WITH VISUAL SITE INSPECTION

BUDGET YEAR

January 1, 2024 to December 31, 2024

SAHHALI SOUTH OWNERS ASSOCIATION - STEP SYSTEM

Executive Summary

Year of Report:

January 1, 2024 to December 31, 2024

Number of Units:

58 Units

Parameters:

Beginning Balance: $108,414

Year 2024 Suggested Contribution: $12,000

Year 2024 Projected Interest Earned: $1,069

Inflation: 4.00%

Annual Increase to Suggested Contribution: 0.00%

Lowest Cash Balance Over 30 Years (Threshold): $96,806

Average Reserve Assessment per Unit: $30.17

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Sahhali South Owners Association - STEP System

RESERVE STUDY - STEP SYSTEM

Sahhali South Owners Association - STEP System
Category Detail Index

Sahhali South Owners Association - STEP System
Cash Flow Method - Threshold Funding Model Summary

Report Date	October 12, 2023
Account Number	2sahha
Budget Year Beginning	January 1, 2024
Budget Year Ending	December 31, 2024
Total Units	58

Report Parameters

Inflation	4.00%
Annual Assessment Increase	0.00%
Interest Rate on Reserve Deposit	1.00%
2024 Beginning Balance	$108,414

Threshold Funding
Fully Reserved Model Summary

- This study utilizes the cash flow method and the threshold funding model, which establishes a reserve funding goal that keeps the reserve balance above a specified dollar or percent funded amount. The threshold method assumes that the threshold method is funded with a positive threshold balance, therefore, "fully reserved".
- The following items were not included in the analysis because they have useful lives greater than 30 years: grading/drainage; foundation/footings; storm drains; telephone, cable, and internet lines.
- This funding scenario begins with a contribution of **$12,000** in **2024** and increases **0.00%** each year for the remaining years of the study. A minimum balance of **$96,806** is maintained.
- The Association believes, as does the FED, that inflation will moderate from the 4% + in April and will approach the Fed's target rate of 2.0% over the life of the study. The elected Board of Directors should monitor inflation rate expectations and can responsibly set a range of increases between 2 & 4%.
- The purpose of this study is to ensure that adequate replacement funds are available when components reach the end of their useful life. Components will be replaced as required, not necessarily in their expected replacement year. This analysis should be updated annually.

Cash Flow Method - Threshold Funding Model Summary of Calculations

Required Monthly Contribution	$1,000.00
$17.24 per unit monthly	
Average Net Monthly Interest Earned	$89.04
Total Monthly Allocation to Reserves	$1,089.04
$18.78 per unit monthly	

Sahhali South Owners Association - STEP System
Cash Flow Method - Threshold Funding Model Projection

Beginning Balance: $108,414

Year	Annual Contribution	Annual Interest	Annual Expenditures	Projected Ending Reserves	Fully Funded Reserves	Percent Funded
2024	12,000	1,069	8,542	112,941	80,462	140%
2025	12,000	1,200		126,140	90,860	139%
2026	12,000	1,320	1,278	138,182	100,632	137%
2027	12,000	1,453		151,635	112,422	135%
2028	12,000	1,575	1,382	163,828	123,557	133%
2029	12,000	1,513	19,691	157,650	116,707	135%
2030	12,000	1,634	1,495	169,789	128,854	132%
2031	12,000	1,771		183,560	143,402	128%
2032	12,000	1,893	1,617	195,836	157,227	125%
2033	12,000	2,033		209,869	173,677	121%
2034	12,000	2,061	11,228	212,701	179,514	118%
2035	12,000	2,202		226,903	197,685	115%
2036	12,000	908	143,005	96,806	68,297	142%
2037	12,000	949	8,872	100,883	73,690	137%
2038	12,000	1,058	2,046	111,895	86,872	129%
2039	12,000	1,056	13,256	111,696	89,418	125%
2040	12,000	1,165	2,213	122,648	104,065	118%
2041	12,000	1,297		135,945	122,134	111%
2042	12,000	1,373	5,795	143,522	135,455	106%
2043	12,000	1,507		157,030	155,914	101%
2044	12,000	1,260	38,051	132,239	138,220	96%
2045	12,000	1,394		145,633	160,017	91%
2046	12,000	1,043	48,305	110,371	133,100	83%
2047	12,000	1,174		123,545	156,019	79%
2048	12,000	1,276	3,029	133,792	177,410	75%
2049	12,000	1,238	17,072	129,958	185,783	70%
2050	12,000	1,338	3,276	140,020	209,601	67%
2051	12,000	1,472		153,492	238,569	64%
2052	12,000	1,182	42,310	124,364	225,517	55%
2053	12,000	1,158	15,593	121,928	240,585	51%

Sahhali South Owners Association - STEP System
Component Summary By Group

Description	Date in Service	Next Occurrence	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Capital								
2" Magnetic Flow Meter - Renewal	2006	2029	15	8	5	1 Unit	4,374.00	4,374
2" Sch 40 PVC to Drainfield - Labor	2006	2046	40	0	22	1 Total	10,380.96	10,381
2" Sch 40 PVC to Drainfield - Replacement	2006	2046	40	0	22	3,500 LF	2.52	8,820
Above Ground Vent Fan Assembly - Renewal	2006	2029	15	8	5	1 Unit	3,426.88	3,427
AdvanTex Pressure Gauge Assembly - Rene..	2006	2029	15	8	5	4 Unit	494.88	1,980
Building: Blue Heron Trail - Reside & Paint ..	2023	2053	30	0	29	1 Total	5,000.00	5,000
Building: Blue Heron Trail - Roof	2022	2042	20	0	18	144 SF	11.66	1,679
Building: Scherzinger - Complete Rebuild	2022	2052	30	0	28	1 Total	7,600.00	7,600
Control Panel at Drain Field & Treatment Fa..	2022	2037	15	0	13	1 Unit	5,328.00	5,328
DEQ Parts - Replacement	2007	2024	5	0	0	1 Total	4,180.73	4,181
Drainfield - Labor	2006	2036	30	0	12	1 Total	45,372.96	45,373
Drainfield - Renewal	2006	2036	30	0	12	1 Total	42,766.06	42,766
Effluent Pump - 1/2 HP 20' Lead - Renewal	2006	2024	2	0	0	1 Each	1,181.56	1,182
Effluent Pump - 3 HP 30' Lead - Renewal	2006	2024	5	0	0	1 Unit	2,223.16	2,223
Effluent Pump - 3/4 HP 20' Lead - Renewal	2006	2024	15	0	0	1 Unit	956.45	956
STEP System - Renewal	2006	2056	50	0	32	1 Total	1,219,451.20@ 0%	0
Capital - Total								$145,269
Total Asset Summary								$145,269

Sahhali South Owners Association - STEP System
Component Summary By Category

Description	Date in Service	Next Occurrence	Useful	Adjustment	Remaining	Units	Unit Cost	Current Cost
Equipment								
2" Magnetic Flow Meter - Renewal	2006	2029	15	8	5	1 Unit	4,374.00	4,374
Above Ground Vent Fan Assembly - Renewal	2006	2029	15	8	5	1 Unit	3,426.88	3,427
AdvanTex Pressure Gauge Assembly - Rene..	2006	2029	15	8	5	4 Unit	494.88	1,980
Control Panel at Drain Field & Treatment Fa..	2022	2037	15	0	13	1 Unit	5,328.00	5,328
Drainfield - Labor	2006	2036	30	0	12	1 Total	45,372.96	45,373
Drainfield - Renewal	2006	2036	30	0	12	1 Total	42,766.06	42,766
Effluent Pump - 1/2 HP 20' Lead - Renewal	2006	2024	2	0	0	1 Each	1,181.56	1,182
Effluent Pump - 3 HP 30' Lead - Renewal	2006	2024	5	0	0	1 Unit	2,223.16	2,223
Effluent Pump - 3/4 HP 20' Lead - Renewal	2006	2024	15	0	0	1 Unit	956.45	956
Equipment - Total								$107,609
Grounds Components								
2" Sch 40 PVC to Drainfield - Labor	2006	2046	40	0	22	1 Total	10,380.96	10,381
2" Sch 40 PVC to Drainfield - Replacement	2006	2046	40	0	22	3,500 LF	2.52	8,820
Building: Blue Heron Trail - Reside & Paint ..	2023	2053	30	0	29	1 Total	5,000.00	5,000
Building: Blue Heron Trail - Roof	2022	2042	20	0	18	144 SF	11.66	1,679
Building: Scherzinger - Complete Rebuild	2022	2052	30	0	28	1 Total	7,600.00	7,600
DEQ Parts - Replacement	2007	2024	5	0	0	1 Total	4,180.73	4,181
STEP System - Renewal	2006	2056	50	0	32	1 Total	1,219,451.20@ 0%	0
Grounds Components - Total								$37,661
Total Asset Summary								$145,269

Sahhali South Owners Association - STEP System
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2024	
DEQ Parts - Replacement	4,181
Effluent Pump - 1/2 HP 20' Lead - Renewal	1,182
Effluent Pump - 3 HP 30' Lead - Renewal	2,223
Effluent Pump - 3/4 HP 20' Lead - Renewal	956
Total for 2024	**$8,542**
No Replacement in 2025	
Replacement Year 2026	
Effluent Pump - 1/2 HP 20' Lead - Renewal	1,278
Total for 2026	**$1,278**
No Replacement in 2027	
Replacement Year 2028	
Effluent Pump - 1/2 HP 20' Lead - Renewal	1,382
Total for 2028	**$1,382**
Replacement Year 2029	
2" Magnetic Flow Meter - Renewal	5,322
Above Ground Vent Fan Assembly - Renewal	4,169
AdvanTex Pressure Gauge Assembly - Renewal	2,408
DEQ Parts - Replacement	5,086
Effluent Pump - 3 HP 30' Lead - Renewal	2,705
Total for 2029	**$19,691**
Replacement Year 2030	
Effluent Pump - 1/2 HP 20' Lead - Renewal	1,495
Total for 2030	**$1,495**
No Replacement in 2031	
Replacement Year 2032	
Effluent Pump - 1/2 HP 20' Lead - Renewal	1,617
Total for 2032	**$1,617**

Sahhali South Owners Association - STEP System
Annual Expenditure Detail

Description	Expenditures
No Replacement in 2033	
Replacement Year 2034	
DEQ Parts - Replacement	6,189
Effluent Pump - 1/2 HP 20' Lead - Renewal	1,749
Effluent Pump - 3 HP 30' Lead - Renewal	3,291
Total for 2034	**$11,228**
No Replacement in 2035	
Replacement Year 2036	
Drainfield - Labor	72,644
Drainfield - Renewal	68,470
Effluent Pump - 1/2 HP 20' Lead - Renewal	1,892
Total for 2036	**$143,005**
Replacement Year 2037	
Control Panel at Drain Field & Treatment Facility	8,872
Total for 2037	**$8,872**
Replacement Year 2038	
Effluent Pump - 1/2 HP 20' Lead - Renewal	2,046
Total for 2038	**$2,046**
Replacement Year 2039	
DEQ Parts - Replacement	7,529
Effluent Pump - 3 HP 30' Lead - Renewal	4,004
Effluent Pump - 3/4 HP 20' Lead - Renewal	1,723
Total for 2039	**$13,256**
Replacement Year 2040	
Effluent Pump - 1/2 HP 20' Lead - Renewal	2,213
Total for 2040	**$2,213**
No Replacement in 2041	

Sahhali South Owners Association - STEP System
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2042	
Building: Blue Heron Trail - Roof	3,401
Effluent Pump - 1/2 HP 20' Lead - Renewal	2,394
Total for 2042	**$5,795**
No Replacement in 2043	
Replacement Year 2044	
2" Magnetic Flow Meter - Renewal	9,584
Above Ground Vent Fan Assembly - Renewal	7,509
AdvanTex Pressure Gauge Assembly - Renewal	4,337
DEQ Parts - Replacement	9,160
Effluent Pump - 1/2 HP 20' Lead - Renewal	2,589
Effluent Pump - 3 HP 30' Lead - Renewal	4,871
Total for 2044	**$38,051**
No Replacement in 2045	
Replacement Year 2046	
2" Sch 40 PVC to Drainfield - Labor	24,602
2" Sch 40 PVC to Drainfield - Replacement	20,903
Effluent Pump - 1/2 HP 20' Lead - Renewal	2,800
Total for 2046	**$48,305**
No Replacement in 2047	
Replacement Year 2048	
Effluent Pump - 1/2 HP 20' Lead - Renewal	3,029
Total for 2048	**$3,029**
Replacement Year 2049	
DEQ Parts - Replacement	11,145
Effluent Pump - 3 HP 30' Lead - Renewal	5,927
Total for 2049	**$17,072**

Sahhali South Owners Association - STEP System
Annual Expenditure Detail

Description	Expenditures
Replacement Year 2050	
Effluent Pump - 1/2 HP 20' Lead - Renewal	3,276
Total for 2050	**$3,276**
No Replacement in 2051	
Replacement Year 2052	
Building: Scherzinger - Complete Rebuild	22,790
Control Panel at Drain Field & Treatment Facility	15,977
Effluent Pump - 1/2 HP 20' Lead - Renewal	3,543
Total for 2052	**$42,310**
Replacement Year 2053	
Building: Blue Heron Trail - Reside & Paint Building	15,593
Total for 2053	**$15,593**

Sahhali South Owners Association - STEP System
Detail Report by Category

2" Magnetic Flow Meter - Renewal

		1 Unit	@ $4,374.00
Asset ID	1005	Asset Actual Cost	$4,374.00
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$5,321.64
Placed in Service	January 2006		
Useful Life	15		
Adjustment	8		
Replacement Year	2029		
Remaining Life	5		

This provision is for the replacement of the 2" magnetic flow meter with converter mounted in the control panel.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider.

This cost includes installation, parts, and labor.

The Association should firm up cost with an actual bid.

According to the Association, in 2021 there were only 17 homes using the system, and as a result of the low usage, no repairs or replacements have been required.

Above Ground Vent Fan Assembly - Renewal

		1 Unit	@ $3,426.88
Asset ID	1007	Asset Actual Cost	$3,426.88
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$4,169.32
Placed in Service	January 2006		
Useful Life	15		
Adjustment	8		
Replacement Year	2029		
Remaining Life	5		

This provision is for the replacement of the above ground vent fan assembly.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider.

This cost includes installation, parts, and labor.

The Association should firm up cost with an actual bid.

According to the Association, in 2021 there were only 17 homes using the system, and as a result of the low usage, no repairs or replacements have been required.

Sahhali South Owners Association - STEP System
Detail Report by Category

AdvanTex Pressure Gauge Assembly - Renewal

		4 Unit	@ $494.88
Asset ID	1010	Asset Actual Cost	$1,979.52
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$2,408.39
Placed in Service	January 2006		
Useful Life	15		
Adjustment	8		
Replacement Year	2029		
Remaining Life	5		

This provision is for the replacement of the Advantex pressure gauge assembly.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider.

In 2021 it was indicated that there are 6 psi gauges. They are part of the Advantex units.

This cost includes installation, parts, and labor.

The Association should firm up cost with an actual bid.

According to the Association, in 2021 there were only 17 homes using the system, and as a result of the low usage, no repairs or replacements have been required.

Control Panel at Drain Field & Treatment Facility

		1 Unit	@ $5,328.00
Asset ID	1014	Asset Actual Cost	$5,328.00
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$8,871.51
Placed in Service	May 2022		
Useful Life	15		
Replacement Year	2037		
Remaining Life	13		

This provision is for the labor for the replacement of the control panel at the drain field.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider. The Association should firm up cost with an actual bid.

Sahhali South Owners Association - STEP System
Detail Report by Category

Drainfield - Labor

		1 Total	@ $45,372.96
Asset ID	1017	Asset Actual Cost	$45,372.96
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$72,643.57
Placed in Service	January 2006		
Useful Life	30		
Replacement Year	2036		
Remaining Life	12		

This provision is for the labor for the renewal of the drainfield.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider.

Drainfield - Renewal

		1 Total	@ $42,766.06
Asset ID	1016	Asset Actual Cost	$42,766.06
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$68,469.84
Placed in Service	January 2006		
Useful Life	30		
Replacement Year	2036		
Remaining Life	12		

This provision is for the renewal of the drainfield.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider.

Effluent Pump - 1/2 HP 20' Lead - Renewal

		1 Each	@ $1,181.56
Asset ID	1004	Asset Actual Cost	$1,181.56
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$1,181.56
Placed in Service	January 2006		
Useful Life	2		
Replacement Year	2024		
Remaining Life	0		

This provision is for the replacement of the 6 effluent pumps 3 HP 30' lead.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance

Effluent Pump - 1/2 HP 20' Lead - Renewal continued...

provider.

This cost includes installation, parts, and labor.

The Association should firm up cost with an actual bid.

According to the Association, in 2021 there were only 17 homes using the system, and as a result of the low usage, no repairs or replacements have been required.

The Association plans to replace 1 pump every 2 years.

Effluent Pump - 3 HP 30' Lead - Renewal

		1 Unit	@ $2,223.16
Asset ID	1003	Asset Actual Cost	$2,223.16
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$2,223.16
Placed in Service	January 2006		
Useful Life	5		
Replacement Year	2024		
Remaining Life	0		

This provision is for the replacement of the effluent pump 3 HP 30' lead.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider.

This cost includes installation, parts, and labor.

The Association should firm up cost with an actual bid.

According to the Association, in 2021 there were only 17 homes using the system, and as a result of the low usage, no repairs or replacements have been required.

The Association plans to replace 1 every 5 years.

Sahhali South Owners Association - STEP System
Detail Report by Category

Effluent Pump - 3/4 HP 20' Lead - Renewal

		1 Unit	@ $956.45
Asset ID	1002	Asset Actual Cost	$956.45
	Capital	Percent Replacement	100%
Category	Equipment	Future Cost	$956.45
Placed in Service	January 2006		
Useful Life	15		
Replacement Year	2024		
Remaining Life	0		

This provision is for the replacement of the effluent pump 3/4 HP 20' lead.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider.

This cost includes installation, parts, and labor.

The Association should firm up cost with an actual bid.

According to the Association, in 2021 there were only 17 homes using the system, and as a result of the low usage, no repairs or replacements have been required.

The Association plans to replace 1 every 3 years.

Equipment - Total Current Cost **$107,609**

Sahhali South Owners Association - STEP System
Detail Report by Category

2" Sch 40 PVC to Drainfield - Labor

		1 Total	@ $10,380.96
Asset ID	1019	Asset Actual Cost	$10,380.96
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$24,602.03
Placed in Service	January 2006		
Useful Life	40		
Replacement Year	2046		
Remaining Life	22		

This provision is for the labor to replace of the 2" Sch 40 PVC pipe to the drain field.

According to information provided by SepTech, there is 3,500 feet of pipe.

The estimated life of the pipe is 25-40 years.

2" Sch 40 PVC to Drainfield - Replacement

		3,500 LF	@ $2.52
Asset ID	1018	Asset Actual Cost	$8,820.00
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$20,902.68
Placed in Service	January 2006		
Useful Life	40		
Replacement Year	2046		
Remaining Life	22		

This provision is for the replacement of the 2" Sch 40 PVC pipe to the drain field.

According to information provided by SepTech, there is 3,500 feet of pipe. This cost does not include labor.

The estimated life of the pipe is 25-40 years.

Building: Blue Heron Trail - Reside & Paint Building

		1 Total	@ $5,000.00
Asset ID	1021	Asset Actual Cost	$5,000.00
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$15,593.26
Placed in Service	January 2023		
Useful Life	30		
Replacement Year	2053		
Remaining Life	29		

This provision is to reside and paint the building on Blue Heron Trail.

Building: Blue Heron Trail - Reside & Paint Building continued...

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

According to the Association, this was done in 2023 for $5,000.

Building: Blue Heron Trail - Roof

		144 SF	@ $11.66
Asset ID	1022	Asset Actual Cost	$1,679.04
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$3,401.43
Placed in Service	January 2022		
Useful Life	20		
Replacement Year	2042		
Remaining Life	18		

This provision is for the replacement of the roof of the building on Blue Heron Trail.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

According to the Association, this was done in 2022 for $1,160.

Building: Scherzinger - Complete Rebuild

		1 Total	@ $7,600.00
Asset ID	1020	Asset Actual Cost	$7,600.00
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$22,790.14
Placed in Service	January 2022		
Useful Life	30		
Replacement Year	2052		
Remaining Life	28		

This provision is for the rebuilding of the building on Scherzinger Road.

The cost and useful life assumptions are based on accepted industry estimates as established by RS Means and/or The National Construction Estimator. The Association should obtain a bid to confirm this estimate.

According to the Association, this was done in 2022 for $7,558.

Sahhali South Owners Association - STEP System
Detail Report by Category

DEQ Parts - Replacement

		1 Total	@ $4,180.73
Asset ID	1023	Asset Actual Cost	$4,180.73
	Capital	Percent Replacement	100%
Category	Grounds Components	Future Cost	$4,180.73
Placed in Service	January 2007		
Useful Life	5		
Replacement Year	2024		
Remaining Life	0		

This provision is for the replacement of parts that are required to be in inventory by the DEQ.

The cost projection is based on an estimate provided by the Association. The Association should firm up the cost with an actual bid.

STEP System - Renewal

1 Total @ $1,219,451.20

Asset ID	1001	Asset Actual Cost	
	Capital		
Category	Grounds Components	Future Cost	
Placed in Service	January 2006		
Useful Life	50		
Replacement Year	2056		
Remaining Life	32		

The private septic tank effluent pumping (STEP) system will undergo maintenance, testing and pumping on an annual basis. As the number of homes that are built and sold increases, so will the frequency of maintenance.

The total installation cost of the system, including labor and materials, is $683,500. The system has an expected useful life of 50 years. The Association should conduct a though inspection at the 25 year mark. This includes reviewing the PVC pipes which may have an estimated life of 20-40 years.

Cost and useful life assumptions are based on estimates provided by SepTech, the maintenance provider.

All routine maintenance expenses are assumed to be included in the annual operating budget for the association.

This cost has been updated for inflation.

Disclosure note: Much of the initial cost of the STEP system was due to the overall complexity of the project and to the installation of components of the system that will likely have a useful life significantly in excess of the 30 year reserve study requirement.

Sahhali South Owners Association - STEP System
Detail Report by Category

STEP System - Renewal continued...

Accordingly, requesting the reserve study be prepared for the STEP system to include only the components that have been identified by the company that designs and sells these components to have a useful life less than the 30 year threshold. The cost of each component should include the estimated labor to install that respective component.

In 2022, there was a major leak that cost $34,220 to repair.

Grounds Components - Total Current Cost	**$37,661**

Additional Disclosures

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 on 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*. *Components* typically are: 1) association responsibility; 2) with

limited *Useful Life* expectancies; 3) predictable *Remaining Useful Life* expectancies; 4) above a minimum threshold cost, and 5) as required by local codes.

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, a review of established association precedents, and discussion with appropriate association representative(s) of the Association or cooperative.

COMPONENT METHOD: A method of developing a reserve *Funding Plan* where the total contribution is based on the sum of contributions for individual *Components*. See *Cash Flow Method*.

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

CURRENT REPLACEMENT COST: See *Replacement Cost*.

DEFICIT: An actual or projected *Reserve Balance* that is less than the *Fully Funded Balance*. The opposite would be a *Surplus*.

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 (reserve *Funding Plan*) are derived, and the projected reserve income and expense over time is presented. The *Financial Analysis* is one of the two parts of a *Reserve Study*.

FULLY FUNDED: 100% Funded. When the actual or projected *Reserve Balance* is equal to the *Fully Funded Balance*.

FULLY FUNDED BALANCE (FFB): Total accrued depreciation, an indicator against which 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*, then added together for an association total. Two formulas can be utilized, depending on the provider's sensitivity to interest and inflation effects. Note: Both yield identical results when interest and inflation are equivalent.

FFB = Current Cost X *Effective Age* / *Useful Life*

or

FFB = (Current Cost X *Effective Age* / *Useful Life*) + [(Current Cost X *Effective Age* / *Useful Life*) / (1 + Interest Rate) ^ Remaining Life] - [(Current Cost X *Effective Age* / *Useful Life*) / (1 + Inflation Rate) ^ Remaining Life]

FUND STATUS: The status of the reserve fund as compared to an established benchmark such as percent funding. The Association appears to be adequately funded as the threshold method, reducing the potential risk of a special assessment.

FUNDING GOALS: Independent of the methodology utilized, the following represent the basic categories of *Funding Plan* goals:

- Baseline Funding: Establishing a reserve funding goal of keeping the reserve cash balance above zero.
- Full Funding: Setting a reserve funding goal of attaining and maintaining reserves at or near 100% funded.

■ Statutory Funding: Establishing a reserve funding goal of setting aside the specific minimum amount of reserves required by local statutes.

■ Threshold Funding: Establishing a reserve funding goal of keeping the *Reserve Balance* above a specified dollar or *Percent Funded* amount. Depending on the threshold, this may be more or less conservative than fully funding.

FUNDING PLAN: An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund.

FUNDING PRINCIPLES:

■ Sufficient Funds When Required

■ Stable Contribution Rate over the Years

■ Evenly Distributed Contributions over the Years

■ Fiscally Responsible

LIFE AND VALUATION ESTIMATES: The task of estimating *Useful Life*, *Remaining Useful Life*, and repair or *Replacement Costs* for the reserve *Components*.

PERCENT FUNDED: The ratio at a particular point of time (typically the beginning of the Fiscal Year) of the actual or projected *Reserve Balance* to the *Fully Funded Balance*, expressed as a percentage.

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 continue to serve its intended function. Projects anticipated to occur in the initial year have "zero" *Remaining Useful Life*.

REPLACEMENT COST: The cost of replacing, repairing, or restoring a reserve *Component* to its original functional condition. The *Current Replacement Cost* would be the cost to replace, repair, or restore the *Component* during that particular year.

RESERVE BALANCE: Actual or projected funds as of a particular point in time that the Association has identified for use to defray the future repair or replacement of those major *Components* which the Association is obligated to maintain. Also known as reserves, reserve accounts, or cash reserves. Based upon information provided and not audited.

RESERVE PROVIDER: An individual that prepares *Reserve Studies*.

RESERVE STUDY: A budget planning tool that identifies 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 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 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 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:

■ The regular and continuous absence from principal office premises from which professional services are

rendered, except for the performance of fieldwork or presence in a field office maintained exclusively for a specific project;

■ The failure to personally inspect or review the work of subordinates where necessary and appropriate;

■ The rendering of a limited, cursory, or perfunctory review of plans or projects in lieu of an appropriate, detailed review;

■ 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: An assessment levied on the members of an association in addition to regular assessments. *Special Assessments* are often regulated by governing documents or local statutes.

SURPLUS: An actual or projected *Reserve Balance* greater than the *Fully Funded Balance*.

The opposite would be a *Deficit*.

USEFUL LIFE (UL): Total *Useful Life* or depreciable life. The estimated time, in years, that a R*eserve Component* can be expected to serve its intended function if properly constructed in its present application or installation.