

Springhurst Community Association, Inc.

November 3, 2023 • Louisville, KY

RESERVE STUDY

The Villages of
SPRINGHURST



Springhurst Community Association, Inc.
Louisville, Kentucky

Dear Board of Directors of Springhurst Community Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of Springhurst Community Association, Inc. in Louisville, Kentucky and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, November 3, 2023.

This *Reserve Study* exceeds the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a "Level II Reserve Study Update."

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Springhurst Community Association, Inc. plan for a successful future.

As part of our long-term thinking and everyday commitment to our clients, we are available to answer any questions you may have regarding this study.

Respectfully submitted on January 24, 2024 by

Reserve Advisors, LLC

Visual Inspection and Report by: Matthew D. Neike

Review by: Andrew K. McGowan, RS¹, Regional Engineering Manager

Alan M. Ebert, RS, PRA², Director of Quality Assurance



¹ RS (Reserve Specialist) is the reserve provider professional designation of the Community Associations Institute (CAI) representing America's more than 300,000 condominium, cooperative and homeowners associations.

² PRA (Professional Reserve Analyst) is the professional designation of the Association of Professional Reserve Analysts. Learn more about APRA at <http://www.apra-usa.com>.



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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: Springhurst Community Association, Inc. (Springhurst)

Location: Louisville, Kentucky

Reference: 071490

Property Basics: Springhurst Community Association, Inc. is a master association which is responsible for the common elements shared by 1,114 units. The clubhouse and pool elements are shared by 640 homes; the street system at the Village of Ivybridge is maintained by 37 homes and the street system at the Village of Springhurst Gardens is maintained by 46 homes. The community was built from 1992 to 1994.

Reserve Components Identified: Springhurst uses multiple cost centers. We identify the following number of Reserve Components per cost center

- **Common Area Expenditures:** 26 Reserve Components
- **Clubhouse and Pool Expenditures:** 23 Reserve Components
- **Village of Ivybridge Expenditures:** Three Reserve Components
- **Village of Springhurst Gardens Expenditures:** Three Reserve Components

Inspection Date: November 3, 2023. We conducted previous inspections in 2008 and 2016.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures.

- **Common Area:** Our recommended Cash Flow Funding Plan recognizes these threshold funding years in 2030 due to the sediment removal of the ponds and in 2048 due to the replacement of the wood fences. In addition, the Reserve Funding Plan recommends 2053 year end accumulated reserves of approximately \$956,700. We judge this amount of accumulated reserves in 2053 necessary to fund the likely replacement of the wood fences after 2053. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2053 year end reserves.
- **Clubhouse and Pool:** Our recommended Cash Flow Funding Plan recognizes these threshold funding years in 2052 due to the replacement of the pool structure and deck and in 2053 due to the repaving of the clubhouse and pool parking areas.
- **Village of Ivybridge:** Our recommended Cash Flow Funding Plan recognizes this threshold funding year in 2042 due to the repaving of the streets.
- **Village of Springhurst Gardens:** Our recommended Cash Flow Funding Plan recognizes this threshold funding year in 2042 due to the repaving of the streets.

Methodology:

We use the Cash Flow Method to compute the Reserve Funding Plan. This method offsets future variable Reserve Expenditures with existing and future stable levels of reserve funding. Our application of this method also considers:

- Current and future local costs of replacement
- 2.0% anticipated annual rate of return on invested reserves
- 3.5% future Inflation Rate for estimating Future Replacement Costs



Project Prioritization: We note anticipated Reserve Expenditures for the next 30 years in the *Reserve Expenditures* tables and include a *Five-Year Outlook* table following the *Reserve Funding Plan* in section 3. We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

- ***Common Area Priority Projects:***
 - Replacement of the remaining original fences due to age and noted deterioration
 - Replacement of the irrigation system
 - Color coat application to the tennis courts due to noted deterioration
 - Replacement of the playground equipment due to age and noted deterioration
 - Backfill the sinkhole to prevent potential safety hazards
- ***Clubhouse and Pool Priority Projects:***
 - Replacement of the clubhouse roof as deferral may result in increased water infiltration and cost
 - Replacement of the covers at the pools
- ***Village of Ivybridge Priority Projects:***
 - Partial crack repair and patching at the pavement to forestall deterioration
- ***Village of Springhurst Gardens Priority Projects:***
 - Partial crack repair and patching at the pavement to forestall deterioration



Common Area Cost Center

Unaudited Cash Status of Reserve Fund:

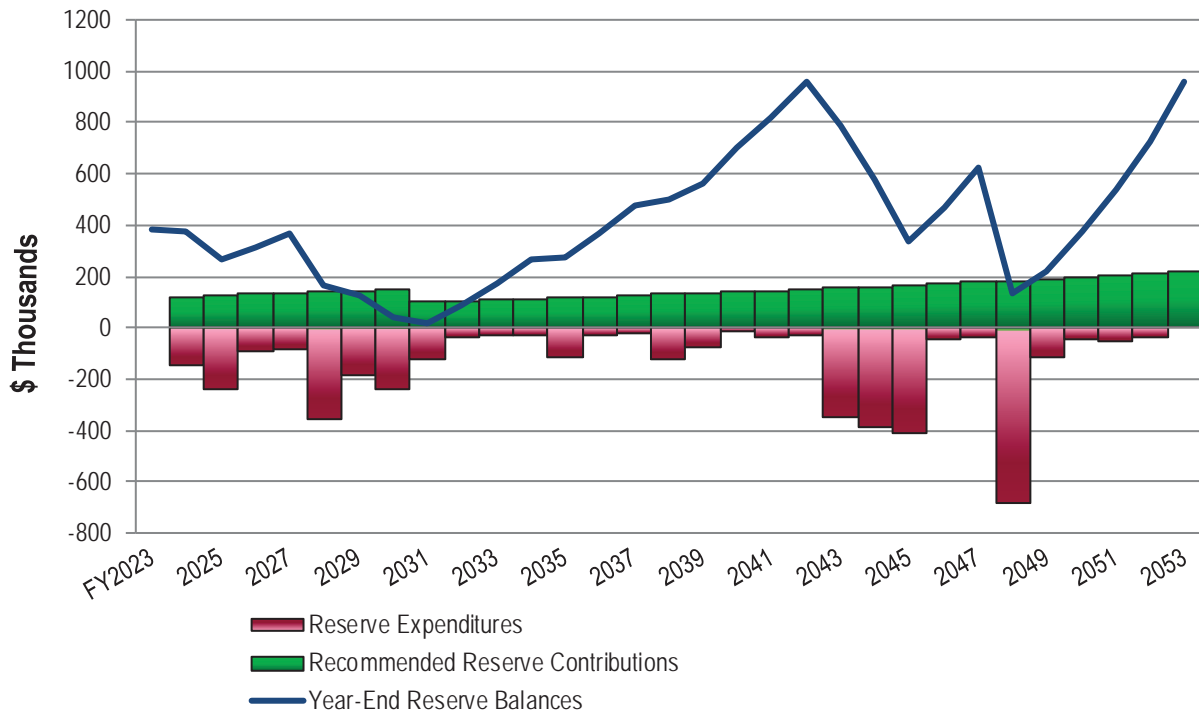
- \$384,598 as of October 31, 2023
- 2023 budgeted Reserve Contributions of \$100,000

Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Increase to \$122,500 in 2024
- Inflationary increases from 2025 through 2030
- Decrease to \$102,500 by 2031 due to fully funding for sediment removal of the ponds
- Inflationary increases thereafter through 2053, the limit of this study's Cash Flow Analysis

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2024	122,500	371,915	2034	113,600	264,905	2044	160,300	573,645
2025	126,800	266,148	2035	117,600	271,540	2045	165,900	334,599
2026	131,200	311,936	2036	121,700	368,296	2046	171,700	470,145
2027	135,800	370,146	2037	126,000	478,399	2047	177,700	624,432
2028	140,600	162,385	2038	130,400	497,840	2048	183,900	135,836
2029	145,500	125,052	2039	135,000	564,724	2049	190,300	218,722
2030	150,600	38,464	2040	139,700	699,896	2050	197,000	378,344
2031	102,500	18,406	2041	144,600	822,418	2051	203,900	538,923
2032	106,100	88,494	2042	149,700	960,937	2052	211,000	721,727
2033	109,800	172,668	2043	154,900	783,905	2053	218,400	956,746





Clubhouse and Pool Cost Center

Unaudited Cash Status of Reserve Fund:

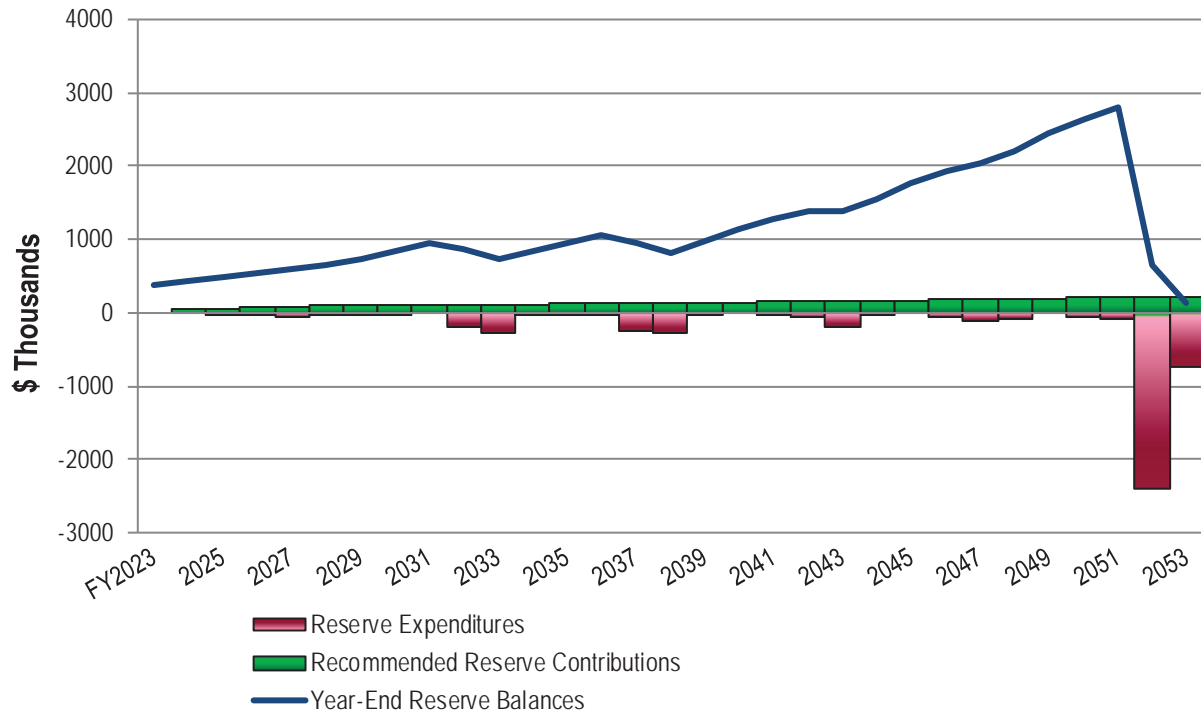
- \$365,545 as of October 31, 2023
- 2023 budgeted Reserve Contributions of \$40,000

Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Phased increases of \$11,000 from 2024 through 2028
- Inflationary increases thereafter through 2053, the limit of this study's Cash Flow Analysis

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2024	51,000	425,608	2034	116,700	838,946	2044	164,700	1,558,461
2025	62,000	486,461	2035	120,800	939,579	2045	170,500	1,761,835
2026	73,000	542,709	2036	125,000	1,053,029	2046	176,500	1,925,649
2027	84,000	588,068	2037	129,400	957,283	2047	182,700	2,045,074
2028	95,000	653,987	2038	133,900	826,887	2048	189,100	2,193,808
2029	98,300	731,639	2039	138,600	966,773	2049	195,700	2,435,341
2030	101,700	832,541	2040	143,500	1,131,043	2050	202,500	2,626,441
2031	105,300	955,545	2041	148,500	1,282,074	2051	209,600	2,798,043
2032	109,000	879,493	2042	153,700	1,394,545	2052	216,900	650,128
2033	112,800	725,445	2043	159,100	1,388,268	2053	224,500	142,379





Village of Ivybridge Cost Center

Unaudited Cash Status of Reserve Fund:

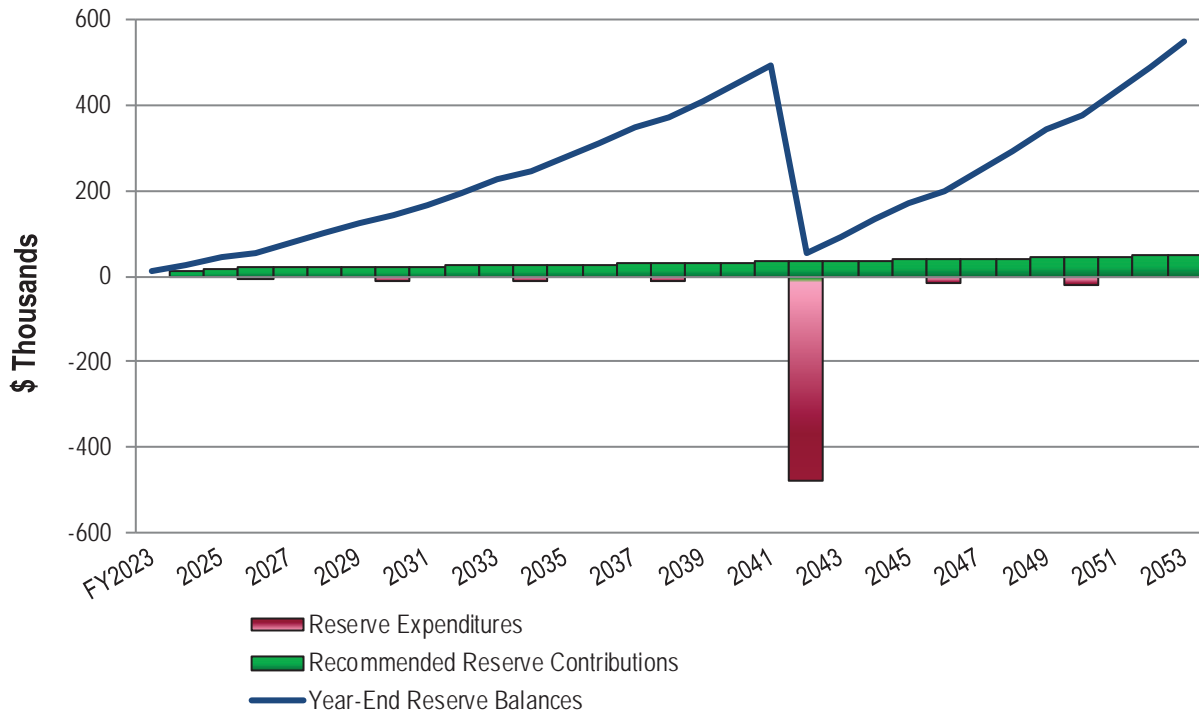
- \$12,308 as of October 31, 2023
- 2023 budgeted Reserve Contributions of \$10,175

Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Phased increases of \$3,200 from 2024 through 2026
- Inflationary increases thereafter through 2053, the limit of this study's Cash Flow Analysis

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2024	13,400	26,130	2034	26,100	244,504	2044	36,700	131,682
2025	16,600	43,419	2035	27,000	276,664	2045	38,000	172,696
2026	19,800	55,976	2036	27,900	310,376	2046	39,300	199,310
2027	20,500	77,801	2037	28,900	345,773	2047	40,700	244,403
2028	21,200	100,769	2038	29,900	370,332	2048	42,100	291,812
2029	21,900	124,903	2039	30,900	408,948	2049	43,600	341,684
2030	22,700	140,794	2040	32,000	449,447	2050	45,100	375,097
2031	23,500	167,345	2041	33,100	491,867	2051	46,700	429,766
2032	24,300	195,235	2042	34,300	55,789	2052	48,300	487,144
2033	25,200	224,592	2043	35,500	92,760	2053	50,000	547,387





Village of Springhurst Gardens Cost Center

Unaudited Cash Status of Reserve Fund:

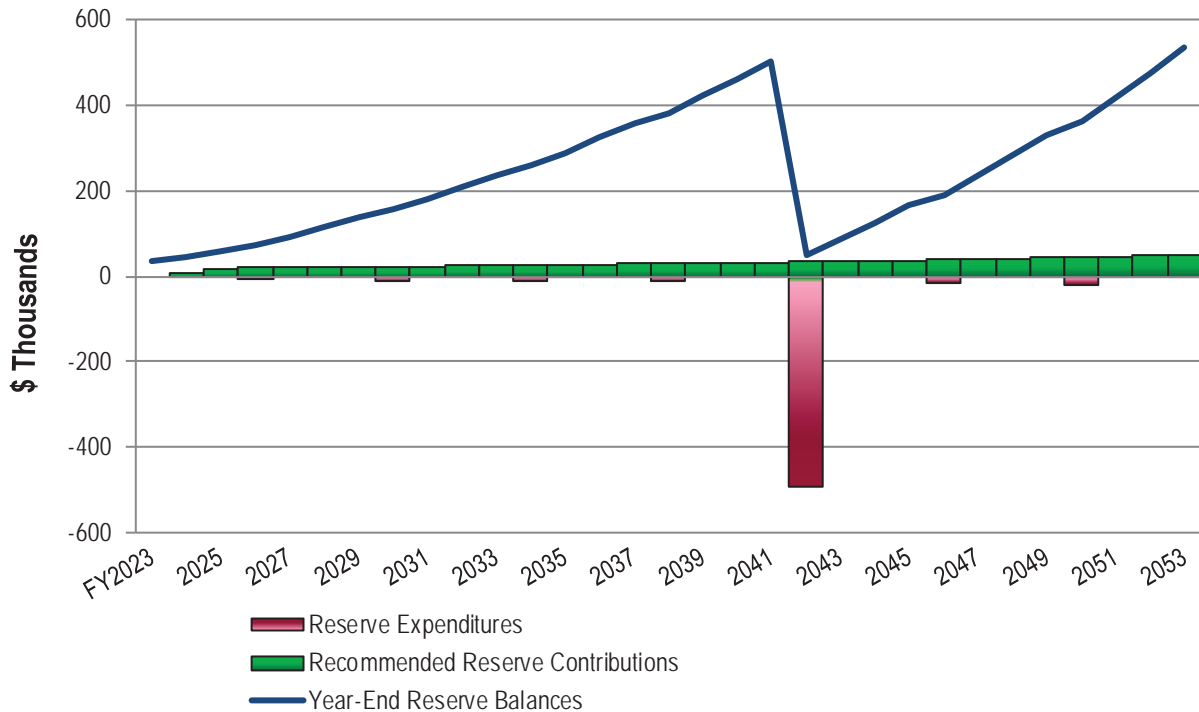
- \$33,018 as of October 31, 2023
- 2023 budgeted Reserve Contributions of \$4,140

Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Phased increases of \$5,100 from 2024 through 2026
- Inflationary increases thereafter through 2053, the limit of this study's Cash Flow Analysis

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2024	9,200	43,083	2034	25,600	257,369	2044	36,100	125,156
2025	14,300	58,388	2035	26,500	289,281	2045	37,400	165,433
2026	19,400	70,605	2036	27,400	322,741	2046	38,700	190,827
2027	20,100	92,318	2037	28,400	357,880	2047	40,100	235,145
2028	20,800	115,172	2038	29,400	381,821	2048	41,500	281,763
2029	21,500	139,190	2039	30,400	420,161	2049	43,000	330,828
2030	22,300	154,693	2040	31,500	460,379	2050	44,500	362,880
2031	23,100	181,118	2041	32,600	502,513	2051	46,100	416,699
2032	23,900	208,879	2042	33,700	50,693	2052	47,700	473,210
2033	24,700	238,004	2043	34,900	86,956	2053	49,400	532,568





2. RESERVE STUDY REPORT

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of

Springhurst Community Association, Inc.

Louisville, Kentucky

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, November 3, 2023. We conducted previous inspections in 2008 and 2016.

We present our findings and recommendations in the following report sections and spreadsheets:

- **Identification of Property** - Segregates all property into several areas of responsibility for repair or replacement
- **Reserve Expenditures** - Identifies reserve components and related quantities, useful lives, remaining useful lives and future reserve expenditures during the next 30 years
- **Reserve Funding Plan** - Presents the recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- **Five-Year Outlook** - Identifies reserve components and anticipated reserve expenditures during the first five years
- **Reserve Component Detail** - Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology** - Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions** - Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions** - Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY



Our investigation includes Reserve Components or property elements as set forth in your Declaration. The Expenditure tables in Section 3 list the elements contained in this study. Our analysis begins by segregating the property elements into several areas of responsibility for repair and replacement.

Our process of identification helps assure that future boards and the management team understand whether reserves, the operating budget or Homeowners fund certain replacements and assists in preparation of the annual budget. We derive these segregated classes of property from our review of the information provided by the Association and through conversations with Management and the Board. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Homeowners
- Property Maintained by Others

We advise the Board conduct an annual review of these classes of property to confirm its policy concerning the manner of funding, i.e., from reserves or the operating budget. The Reserve Study identifies Reserve Components as set forth in your Declaration or which were identified as part of your request for proposed services. Reserve Components are defined by CAI as property elements with:

- Springhurst responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

Long-Lived Property Elements – These elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the 30-year scope of the study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Periodic updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan. We identify the following Long-Lived Property Elements as excluded from the 30-year Reserve Expenditures at this time:

- Electrical Systems, Common
- Foundations, Common
- Inlet/Outlet Structures, Concrete, Storm Water Management System, Replacement
- Pipes, Interior Building, Domestic Water, Sanitary Waste, Vent, Clubhouse
- Pipes, Subsurface Utilities, Clubhouse Parking Area
- Structural Frames, Clubhouse
- Windows and Doors, Clubhouse (Replaced in 2015)



Concrete storm water inlet



Common electrical systems

Operating Budget - Provides money for the repair and replacement of certain Reserve Components. The Association may develop independent criteria for use of operating and reserve funds. For purposes of calculating appropriate Reserve Contributions, we identify the following list of Operating Budget Funded Repairs and Replacements:

- General Maintenance to the Common Elements
- Expenditures less than \$5,000 (Excluding Concrete Sidewalks) (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Catch Basins, Landscape
- Detention Basin
- Diving Board Stand, Interim Board Replacements
- Filter Cartridges, Pool
- Fire Detection System, Clubhouse
- Fountain, Gate House

- Inlet/Outlet Structures, Concrete, Storm Water Management System, Partial Repairs
- Irrigation System, Controls, Pumps and Maintenance
- Landscape, Maintenance
- Light Fixtures, Clubhouse Exterior
- Paint Finishes, Clubhouse Exterior
- Paint Finishes, Fences
- Paint Finishes, Touch Up
- Ponds, Maintenance
- Pool Lane Lines
- Security System, Clubhouse
- Shade Structures, Interim Canvas Replacements
- Signage, Entrance Monuments, Interim Repairs
- Site Furniture
- Statues
- Walls, Masonry, Clubhouse
- Other Repairs normally funded through the Operating Budget



Masonry spalls



Statues

Homeowners' Responsibility - Items designated as the responsibility of the homeowners to repair or replace at their cost. Property Maintained by Homeowners, including items billed back to Homeowners, relates to unit:

- Homes and Lots

Others' Responsibility - Items designated as the responsibility of others to repair or replace. Property Maintained by Others relates to:

- Light Poles and Fixtures, Along Streets, Excluding Clubhouse and Pool (Louisville Gas and Electric)
- Street Systems (Municipality or Sub-Association)
- Sub-Association, Excluding the Street and Traffic Signage, Villages of Ivybridge and Springhurst Gardens (Individual Associations)

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
 - useful life
 - remaining useful life
- 2023 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end

Five-Year Outlook

- Line item numbers
- Reserve component inventory of only the expenditures anticipated to occur within the first five years
- Schedule of estimated future costs for each reserve component anticipated to occur within the first five years

The purpose of a Reserve Study is to provide an opinion of reasonable annual Reserve Contributions. Prediction of exact timing and costs of minor Reserve Expenditures typically will not significantly affect the 30-year cash flow analysis. Adjustments to the times and/or costs of expenditures may not always result in an adjustment in the recommended Reserve Contributions.

Financial statements prepared by your association, by you or others might rely in part on information contained in this section. For your convenience, we have provided an electronic data file containing the tables of *Reserve Expenditures* and *Reserve Funding Plan*.

Common Area

RESERVE EXPENDITURES

Springhurst
Community Association, Inc.
Louisville, Kentucky

Explanatory Notes:
1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.
2) FY2023 is Fiscal Year beginning January 1, 2023 and ending December 31, 2023.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$		Percentage of Future Expenditures	RUL = 0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
						Useful	Remaining	Unit (2023)	Per Phase (2023)		Total (2023)	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
4.285	1,900	1,900	Linear Feet	Fences, Wood, Whitebrooke and Westport Rd	2024	15 to 20	1	45.00	85,500	6.4%	88,492																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				

Common Area
RESERVE EXPENDITURES

Springhurst Community Association, Inc. Louisville, Kentucky																															
Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$		Percentage of Future Expenditures																					
						Useful	Remaining	Unit (2023)	Per Phase (2023)		Total (2023)	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053					
4.285	1900	1900	Linear Feet	Fences, Wood, Whitebrooke and Westport Rd	2024	15 to 20	1	45.00	85,500	85,500	6.4%	176,081																			
4.286	1950	1950	Linear Feet	Fences, Wood, Hermitck and Abbeywood	2025	15 to 20	2	45.00	87,750	87,750	6.8%	187,040																			
4.287	1900	1900	Linear Feet	Fences, Wood, Goose Creek and Springhurst Blvd, Remaining	2028	15 to 20	5	45.00	85,500	85,500	7.3%	202,057										202,057									
4.288	4050	4050	Linear Feet	Fences, Wood, Tudor, Hydroge and Springhurst Gardens	2028	15 to 20	5	45.00	182,250	182,250	15.6%	430,701										430,701									
4.289	1330	1330	Linear Feet	Fences, Wood, Springmont and Felsene	2035	15 to 20	12	45.00	59,850	59,850	2.2%																				
4.290	1600	1600	Linear Feet	Fences, Wood, Springmont and Blossom Ln	2038	15 to 20	15	45.00	72,000	72,000	2.9%																				
4.291	2290	2290	Linear Feet	Fences, Wood, Goose Creek and Springhurst Blvd (Replaced in 2023)	2043	15 to 20	20	45.00	103,050	103,050	4.9%	205,048																			
4.421	90	30	Zones	Irrigation System, Common, Pressed (Excluding North Hurstboun Parkway)	2027	to 40+	4 to 8	2,450.00	73,500	220,500	6.5%																				
4.422	50	25	Zones	Irrigation System, North Hurstbourne Parkway, Partial	2025	to 40+	2 to 7	2,450.00	61,250	122,500	1.6%																				
4.499	1	1	Allowance	Landscape, Tree Replacements and Removal, Common, Initial	2024	to 2	1	30,000.00	30,000	30,000	2.4%																				
4.500	1	1	Allowance	Landscape, Tree Replacements and Removal, Common, Subsequent	2022	to 5	9	15,000.00	15,000	15,000	3.6%	28,838										34,250									
4.660	1	1	Allowance	Playground Equipment	2025	15 to 20	2	74,000.00	74,000	74,000	5.7%	157,732																			
4.661	1	1	Allowance	Playground Equipment, Much Replenishment	2020	to 5	7	9,500.00	9,500	9,500	2.1%	17,049										24,050									
4.700	1	1	Each	Pond, Aerator, White Blossom	2033	10 to 15	10	20,000.00	20,000	20,000	1.8%											47,265									
4.701	1	1	Each	Pond, Aerator, Springbrooke	2035	10 to 15	12	7,600.00	7,600	7,600	0.7%											19,240									
4.710	3400	510	Linear Feet	Ponds, Erosion Control, Partial	2030	to 15	7	45.00	22,950	153,000	1.9%	48,918																			
4.730	27000	6750	Square Yards	Ponds, Sediment Removal, Partial	2030	to 30	7	23.00	155,250	621,000	4.8%																				
4.800	600	200	Linear Feet	Signage, Entrance Monuments, Fences, Pressed	2026	to 35	3 to 9	61.00	12,200	36,600	1.1%																				
4.801	3	1	Allowance	Signage, Entrance Monuments, Signs and Letters, Partial	2026	to 35	3 to 30+	20,000.00	20,000	60,000	1.1%																				
4.802	18500	18500	Square Feet	Signage, Entrance Monuments, Stone Masonry, Inspections and Capital Repairs	2029	8 to 12	6	1.50	27,750	27,750	3.6%	48,118										67,895									
4.809	1	1	Allowance	Signage, Street and Traffic, Remaining	2024	15 to 20	1	6,000.00	6,000	6,000	0.1%											144,160									
4.810	63	63	Each	Signage, Street and Traffic, Subsequent	2043	15 to 20	20	1,150.00	72,450	72,450	3.5%																				
4.819	1	1	Allowance	Signhole, Buckfill	2026	to 5	3	20,000.00	20,000	20,000	5.1%	37,150										44,122									
4.830	1600	1600	Square Yards	Sport Courts, Tennis, Color Coat	2024	4 to 6	1	11.00	17,600	17,600	3.3%	30,518										43,049									
4.840	480	480	Linear Feet	Sport Courts, Tennis, Fence	2044	to 25	21	47.00	22,560	22,560	1.1%	46,461																			
4.860	1600	1600	Square Yards	Sport Courts, Tennis, Surface Replacement	2044	to 25	21	49.00	78,400	78,400	3.9%	161,459																			
Anticipated Expenditures, By Year (\$4,157,520 over 30 years)												78,636	17,049	37,150	28,838	349,208	384,001	413,939	44,122	34,250	680,023	110,924	43,290	52,403	40,678	0					

RESERVE FUNDING PLAN**Common Area****CASH FLOW ANALYSIS****Springhurst****Community Association, Inc.****Individual Reserve Budgets & Cash Flows for the Next 30 Years**

	FY2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Reserves at Beginning of Year	384,598	385,880	371,915	266,148	311,936	370,146	162,385	125,052	38,464	18,406	88,494	172,668	264,905	271,540	368,296	478,399
Total Recommended Reserve Contributions	(Note 1)	0	122,500	126,800	131,200	135,800	140,600	145,500	102,500	106,100	109,800	113,600	117,600	121,700	126,000	130,400
Estimated Interest Earned, During Year	(Note 2)	1,282	7,503	6,317	5,724	6,753	5,273	2,846	563	1,058	2,586	4,332	5,311	6,335	8,383	9,666
Anticipated Expenditures, By Year	(Note 3)	0	(143,968)	(238,884)	(91,136)	(84,343)	(353,634)	(185,679)	(123,121)	(37,070)	(28,212)	(25,695)	(116,276)	(31,279)	(24,280)	(120,625)
Anticipated Reserves at Year End		\$385,880	\$371,915	\$266,148	\$311,936	\$370,146	\$162,385	\$125,052	\$18,406	\$88,494	\$172,668	\$264,905	\$271,540	\$368,296	\$478,399	\$497,840

(NOTE 5)

(continued)**Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued**

	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Reserves at Beginning of Year	497,840	564,724	699,896	822,418	960,937	783,905	573,645	334,599	470,145	624,432	135,836	218,722	378,344	538,923	721,727
Total Recommended Reserve Contributions	135,000	139,700	144,600	149,700	154,900	160,300	165,900	171,700	177,700	183,900	190,300	197,000	203,900	211,000	218,400
Estimated Interest Earned, During Year	10,520	12,521	15,072	17,657	17,276	13,441	8,993	7,968	10,837	7,527	3,510	5,912	9,082	12,482	16,619
Anticipated Expenditures, By Year	(78,636)	(17,049)	(37,150)	(28,838)	(349,208)	(384,001)	(413,939)	(44,122)	(34,250)	(680,023)	(110,924)	(43,290)	(52,403)	(40,678)	0
Anticipated Reserves at Year End	\$564,724	\$699,896	\$822,418	\$960,937	\$783,905	\$573,645	\$334,599	\$470,145	\$624,432	\$135,836	\$218,722	\$378,344	\$538,923	\$721,727	\$956,746

(NOTE 4)

(NOTE 5)

Explanatory Notes:

- 1) Year 2023 ending reserves are as of October 31, 2023; FY2023 starts January 1, 2023 and ends December 31, 2023.
- 2) 2024 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2023 is a partial year of interest earned.
- 4) Accumulated year 2053 ending reserves consider the need to fund for replacement of the wood fences shortly after 2053, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

Common Area
FIVE-YEAR OUTLOOK

Springhurst
Community Association, Inc.
Louisville, Kentucky

Line Item	Reserve Component Inventory	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028
4.285	Fences, Wood, Wynbrooke and Westport Rd		88,492				
4.286	Fences, Wood, Hartwick and Abbeywood			94,000			
4.287	Fences, Wood, Goose Creek and Springhurst Blvd, Remaining						101,547
4.288	Fences, Wood, Tuxford, Ivybridge and Springhurst Gardens						216,456
4.421	Irrigation System, Common, Phased (Excluding North Hurstbourn Parkway)					84,343	
4.422	Irrigation System, North Hurstbourne Parkway, Partial			65,613			
4.499	Landscape, Tree Replacements and Removal, Common, Initial		31,050		33,262		35,631
4.660	Playground Equipment			79,271			
4.800	Signage, Entrance Monuments, Fences, Phased				13,526		
4.801	Signage, Entrance Monuments, Signs and Letters, Partial				22,174		
4.809	Signage, Street and Traffic, Remaining		6,210				
4.819	Sinkhole, Backfill				22,174		
4.830	Sport Courts, Tennis, Color Coat		18,216				
Anticipated Expenditures, By Year (\$4,157,520 over 30 years)		0	143,968	238,884	91,136	84,343	353,634

Clubhouse and Pool
RESERVE EXPENDITURES
Springhurst
Community Association, Inc.
Louisville, Kentucky

Explanatory Notes:
1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.
2) FY2023 is Fiscal Year beginning January 1, 2023 and ending December 31, 2023.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Useful Remaining	Unit (2023)	Costs, \$ Per Phase (2023)	Total (2023)	Percentage of Future Expenditures	RUL = 0 FY 2023																					
											1 2024	2 2025	3 2026	4 2027	5 2028	6 2029	7 2030	8 2031	9 2032	10 2033	11 2034	12 2035	13 2036	14 2037	15 2038							
Property Site Elements																																
4.020	6,400	6,400	6,400	Square Yards	Asphalt Pavement, Crack Repair, Patch, Seal Coat, and Striping, Clubhouse and Pool	2026	3 to 5	3	2.00	12,800	12,800	3.0%						16,285			18,688							21,444				
4.040	6,400	6,400	6,400	Square Yards	Asphalt Pavement, Mill and Overlay, Parking Areas, Clubhouse and Pool	2033	15 to 20	10	18.00	115,200	115,200	3.2%									162,501											
4.045	6,400	6,400	6,400	Square Yards	Asphalt Pavement, Total Replacement, Parking Areas, Clubhouse and Pool	2053	15 to 20	30	35.50	227,200	227,200	12.4%																				
4.110	2,400	360	Linear Feet	Concrete Curb and Gutters, Clubhouse and Pool, Partial	2033	10 to 30+	43.00	15,480	103,200	1.3%											21,836											
4.140	3,600	180	Square Feet	Concrete Sidewalks, Partial	2027	10 to 65	13.50	2,430	48,600	0.5%											3,312							3,933				
4.420	30	30	Zones	Irrigation System, Clubhouse and Pool	2032	10 to 40+	2,450.00	73,500	73,500	2.0%											100,173											
4.560	19	6	Each	Light Poles and Fixtures, Clubhouse and Pool, Phased	2029	10 to 25	2,600.00	16,458	49,400	1.4%											23,216							26,640				
Clubhouse Elements																																
5.070	4	1	Each	Air Handling and Condensing Units, Split Systems, Clubhouse and Pool, Phased	2027	15 to 20	4 to 19	6,000.00	6,000	24,000	1.3%										8,177							9,712				
5.500	1	1	Allowance	Interior Renovations, Complete	2037	10 to 25	14	83,000.00	83,000	83,000	2.6%																	134,352				
5.510	1	1	Allowance	Interior Renovations, Partial	2027	10 to 15	4	21,500.00	21,500	21,500	1.6%										24,672											
5.580	1	1	Allowance	Rest Rooms, Renovation	2037	10 to 25	14	43,500.00	43,500	43,500	1.4%																	70,413				
5.600	67	67	Squares	Roof Assembly, Asphalt Shingles, Clubhouse and Pool	2028	15 to 20	5	520.00	34,840	34,840	2.4%										41,379											
5.940	2	2	Each	Water Heaters, Clubhouse and Pool	2042	15 to 20	19	7,000.00	14,000	14,000	0.5%																					
Pool Elements																																
6.200	8,200	8,200	Square Feet	Concrete Decks, Textured Coating, Partial Replacements and Repairs	2033	8 to 12	10	6.50	53,300	53,300	3.5%																					
6.300	4,500	4,500	Square Feet	Covers, Vinyl	2027	6 to 8	4	3.00	13,500	13,500	1.9%										15,492					20,399		75,185				
6.350	1	1	Allowance	Diving Board	2036	10 to 20	13	20,000.00	20,000	20,000	0.6%																	31,279				
6.400	520	520	Linear Feet	Fence, Aluminum	2043	10 to 25	20	58.00	30,160	30,160	1.2%																					
6.500	4	1	Allowance	Furniture, Phased	2026	10 to 12	3 to 12	11,500.00	11,500	46,000	4.1%										12,750					17,377		19,267				
6.599	1	1	Allowance	Mechanical Equipment, Heater	2032	10 to 15	9	25,000.00	25,000	25,000	1.8%																					
6.600	3	1	Allowance	Mechanical Equipment, Phased	2025	10 to 15	2 to 16	9,500.00	9,500	28,500	1.7%										10,177							34,072				
6.800	4,500	4,500	Square Feet	Pool Finishes, Aggregate Finish and Tile Replacement	2038	10 to 25	15	32.00	144,000	144,000	4.7%																	12,948				
6.870	3	3	Each	Shade Structures, Canes and Frames	2032	20 to 25	9	7,060.00	21,180	21,180	1.7%																	28,866				
6.900	4,500	4,500	Square Feet	Structures and Decks, Total Replacement	2052	10 to 60	29	190.00	855,000	855,000	45.2%																	241,250				
Anticipated Expenditures, By Year (\$5,128,271 over 30 years)																	0	0	10,177	26,942	49,837	41,379	34,367	16,285	0	203,221	282,738	18,688	37,776	31,279	245,050	281,961

Clubhouse and Pool

RESERVE EXPENDITURES

Springhurst
Community Association, Inc.
Louisville, Kentucky

Years 2039 to 2053

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	1st Year of Event	Life Analysis Years Useful Remaining		Unit (2023)	Per Phase (2023)	Total (2023)	Percentage of Future Expenditures	Anticipated Expenditures, By Year (\$5,128,271 over 30 years)														
						16	17					18	19	20	21	22	23	24	25	26	27	28	29	30		
Property Site Elements																										
4.020	6,400	6,400	Square Yards	Asphalt Pavement, Crack Repair, Patch, Seal Coat, and Striping, Clubhouse and Pool	2026	3 to 5	3	2.00	12,800	12,800	3.0%															
4.040	6,400	6,400	Square Yards	Asphalt Pavement, Mill and Overlay, Parking Areas, Clubhouse and Pool	2033	15 to 20	10	18.00	115,200	115,200	3.2%															
4.045	6,400	6,400	Square Yards	Asphalt Pavement, Total Replacement, Parking Areas, Clubhouse and Pool	2053	15 to 20	30	35.50	227,200	227,200	12.4%															637,704
4.110	2,400	360	Linear Feet	Concrete Curbis and Gutters, Clubhouse and Pool, Partial	2033	10 to 30+	30+	43.00	15,480	103,200	1.3%															43,449
4.140	3,600	180	Square Feet	Concrete Sidewalks, Partial	2027	10 to 30+	30+	13.50	2,430	48,600	0.5%									5,548						6,590
4.420	30	30	Zones	Irrigation System, Clubhouse and Pool	2032	10 to 40+	9	2,450.00	73,500	73,500	2.0%															
4.560	19	6	Each	Light Poles and Fixtures, Clubhouse and Pool, Phased	2029	10 to 25	6 to 14	2,600.00	16,458	49,400	1.4%															
Clubhouse Elements																										
5.070	4	1	Each	Air Handling and Condensing Units, Split Systems, Clubhouse and Pool, Phased	2027	15 to 20	4 to 19	6,000.00	6,000	24,000	1.3%								13,700							16,271
5.500	1	1	Allowance	Interior Renovations, Complete	2037	10 to 25	14	83,000.00	83,000	83,000	2.6%															
5.510	1	1	Allowance	Interior Renovations, Partial	2027	10 to 15	4	21,500.00	21,500	21,500	1.6%													56,334		
5.580	1	1	Allowance	Rest Rooms, Renovation	2037	10 to 25	14	43,500.00	43,500	43,500	1.4%															
5.600	67	67	Squares	Roof Assembly, Asphalt Shingles, Clubhouse and Pool	2028	15 to 20	5	520.00	34,840	34,840	2.4%									82,335						
5.940	2	2	Each	Water Heaters, Clubhouse and Pool	2042	15 to 20	19	7,000.00	14,000	14,000	0.5%								26,915							
Pool Elements																										
6.200	8,200	8,200	Square Feet	Concrete Decks, Textured Coating, Partial Replacements and Repairs	2033	8 to 12	10	6.50	53,300	53,300	3.5%								106,056							
6.300	4,500	4,500	Square Feet	Covers, Vinyl	2027	6 to 8	4	3.00	13,500	13,500	1.9%								26,862							35,372
6.350	1	1	Allowance	Diving Board	2036	10 to 20	13	20,000.00	20,000	20,000	0.6%															
6.400	520	520	Linear Feet	Fence, Aluminum	2043	10 to 25	20	58.00	30,160	30,160	1.2%								60,012							
6.500	4	1	Allowance	Furniture, Phased	2026	10 to 12	3 to 12	11,500.00	11,500	46,000	4.1%									26,258						32,278
6.599	1	1	Allowance	Mechanical Equipment, Heater	2032	10 to 15	9	25,000.00	25,000	25,000	1.8%															
6.600	3	1	Allowance	Mechanical Equipment, Phased	2025	10 to 15	2 to 16	9,500.00	9,500	28,500	1.7%								20,958							26,665
6.800	4,500	4,500	Square Feet	Pool Finishes, Aggregate Finish and Tile Replacement	2038	10 to 25	15	32.00	144,000	144,000	4.7%															
6.870	3	3	Each	Shade Structures, Canes and Frames	2032	20 to 25	9	7,060.00	21,180	21,180	1.7%														57,438	
6.900	4,500	4,500	Square Feet	Structures and Decks, Total Replacement	2052	10 to 60	29	190.00	855,000	855,000	45.2%															2,318,656
Anticipated Expenditures, By Year (\$5,128,271 over 30 years)												16,473	0	21,361	67,730	192,930	23,683	0	49,196	102,589	82,335	0	61,517	91,706	2,398,955	740,096

RESERVE FUNDING PLAN

Clubhouse and Pool

CASH FLOW ANALYSIS

Springhurst

Community Association, Inc.

Individual Reserve Budgets & Cash Flows for the Next 30 Years

	FY2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Reserves at Beginning of Year		365,545	366,763	425,608	486,461	542,709	588,068	653,987	731,639	832,541	955,545	879,493	838,946	939,579	1,053,029	957,283
Total Recommended Reserve Contributions	(Note 1)	0	51,000	62,000	73,000	84,000	95,000	98,300	101,700	105,300	109,000	112,800	120,800	125,000	129,400	133,900
Estimated Interest Earned, During Year	(Note 2)	1,218	7,845	9,030	10,190	11,196	12,298	13,719	15,487	17,704	18,169	15,890	17,609	19,729	19,904	17,665
Anticipated Expenditures, By Year	(Note 3)	0	0	(10,177)	(26,942)	(49,837)	(41,379)	(34,367)	(16,285)	0	(203,221)	(282,738)	(18,688)	(31,279)	(245,050)	(281,961)
Anticipated Reserves at Year End		\$366,763	\$425,608	\$486,461	\$542,709	\$588,068	\$653,987	\$731,639	\$832,541	\$955,545	\$879,493	\$838,946	\$939,579	\$1,053,029	\$957,283	\$826,887

(continued)

Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Reserves at Beginning of Year	826,887	966,773	1,131,043	1,282,074	1,394,545	1,388,268	1,558,461	1,761,835	1,925,649	2,045,074	2,193,808	2,435,341	2,626,441	2,798,043	650,128
Total Recommended Reserve Contributions	138,600	143,500	148,500	153,700	159,100	164,700	170,500	176,500	182,700	189,100	195,700	202,500	209,600	216,900	224,500
Estimated Interest Earned, During Year	17,759	20,770	23,892	26,501	27,553	29,176	32,874	36,510	39,314	41,969	45,833	50,117	53,708	34,140	7,847
Anticipated Expenditures, By Year	(16,473)	0	(21,361)	(67,730)	(192,930)	(23,683)	0	(49,196)	(102,589)	(82,335)	0	(61,517)	(91,706)	(2,398,955)	(740,096)
Anticipated Reserves at Year End	\$966,773	\$1,131,043	\$1,282,074	\$1,394,545	\$1,388,268	\$1,558,461	\$1,761,835	\$1,925,649	\$2,045,074	\$2,193,808	\$2,435,341	\$2,626,441	\$2,798,043	\$650,128	\$142,379
														(NOTE 5)	(NOTES 4&5)

Explanatory Notes:

- 1) Year 2023 ending reserves are as of October 31, 2023; FY2023 starts January 1, 2023 and ends December 31, 2023.
- 2) 2024 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2023 is a partial year of interest earned.
- 4) Accumulated year 2053 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

Clubhouse and Pool
FIVE-YEAR OUTLOOK

Springhurst
Community Association, Inc.
Louisville, Kentucky

Line Item	Reserve Component Inventory	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028
<u>Property Site Elements</u>							
4.020	Asphalt Pavement, Crack Repair, Patch, Seal Coat, and Striping, Clubhouse and Pool				14,192		
4.140	Concrete Sidewalks, Partial					2,788	
<u>Clubhouse Elements</u>							
5.070	Air Handling and Condensing Units, Split Systems, Clubhouse and Pool, Phased					6,885	
5.510	Interior Renovations, Partial					24,672	
5.600	Roof Assembly, Asphalt Shingles, Clubhouse and Pool						41,379
<u>Pool Elements</u>							
6.300	Covers, Vinyl					15,492	
6.500	Furniture, Phased				12,750		
6.600	Mechanical Equipment, Phased			10,177			
Anticipated Expenditures, By Year (\$5,128,271 over 30 years)		0	0	10,177	26,942	49,837	41,379

Village of Ivybridge

RESERVE EXPENDITURES

Springhurst
Community Association, Inc.
Louisville, Kentucky

Years 2023 to 2038

Explanatory Notes:
1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.
2) FY2023 is Fiscal Year beginning January 1, 2023 and ending December 31, 2023.

Line Item	Total Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis		Costs, \$		Percentage of Future Expenditures	RUL = 0																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
					Useful Years Remaining	Unit (2023)	Per Phase (2023)	Total (2023)		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
4.021	5,300	5,300	Square Yards	Asphalt Pavement, Crack Repair and Patch, Ivybridge	2026	3 to 5	3	1.40	7,420	7,420	13.8%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

Village of Ivybridge
RESERVE EXPENDITURES

Years 2039 to 2053

Springhurst Community Association, Inc. Louisville, Kentucky																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis		Unit Per Phase (2023)	Costs, \$ Total (2023)	Percentage of Future Expenditures																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
						Useful Years	Remaining				2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
4.021	5,300	5,300	Square Yards	Asphalt Pavement, Crack Repair and Patch, Ivybridge	2026	3 to 5	3	1.40	7,420	7,420	13.8%																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

RESERVE FUNDING PLAN

Ivybridge

CASH FLOW ANALYSIS

Springhurst

Community Association, Inc.

Individual Reserve Budgets & Cash Flows for the Next 30 Years

	FY2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Reserves at Beginning of Year	12,308	12,349	26,130	43,419	55,976	77,801	100,769	124,903	140,794	167,345	195,235	224,592	244,504	276,664	310,376	345,773
Total Recommended Reserve Contributions	0	13,400	16,600	19,800	20,500	21,200	21,900	22,700	23,500	24,300	25,200	26,100	27,000	27,900	28,900	29,900
Estimated Interest Earned, During Year	41	381	689	984	1,325	1,768	2,234	2,631	3,051	3,590	4,157	4,645	5,160	5,812	6,497	7,090
Anticipated Expenditures, By Year	0	0	0	0	0	0	0	(9,440)	0	0	0	(10,833)	0	0	0	(12,431)
Anticipated Reserves at Year End	\$12,349	\$26,130	\$43,419	\$55,976	\$77,801	\$100,769	\$124,903	\$140,794	\$167,345	\$195,235	\$224,592	\$244,504	\$276,664	\$310,376	\$345,773	\$370,332

(continued)

Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued

	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Reserves at Beginning of Year	370,332	408,948	449,447	491,867	55,789	92,760	131,682	172,696	199,310	244,403	291,812	341,684	375,097	429,766	487,144
Total Recommended Reserve Contributions	30,900	32,000	33,100	34,300	35,500	36,700	38,000	39,300	40,700	42,100	43,600	45,100	46,700	48,300	50,000
Estimated Interest Earned, During Year	7,716	8,499	9,320	5,422	1,471	2,222	3,014	3,683	4,393	5,309	6,272	7,097	7,969	9,078	10,243
Anticipated Expenditures, By Year	0	0	0	(475,800)	0	0	0	(16,369)	0	0	0	(18,784)	0	0	0
Anticipated Reserves at Year End	\$408,948	\$449,447	\$491,867	\$55,789	\$92,760	\$131,682	\$172,696	\$199,310	\$244,403	\$291,812	\$341,684	\$375,097	\$429,766	\$487,144	\$547,387

(NOTE 4)

(NOTE 5)

Explanatory Notes:

- 1) Year 2023 ending reserves are as of October 31, 2023; FY2023 starts January 1, 2023 and ends December 31, 2023.
- 2) 2024 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2023 is a partial year of interest earned.
- 4) Accumulated year 2053 ending reserves consider the need to fund for repaving of the asphalt pavement streets shortly after 2053, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

Village of Ivybridge
FIVE-YEAR OUTLOOK

Springhurst
Community Association, Inc.
Louisville, Kentucky

Line Item	Reserve Component Inventory	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028
4.021	Asphalt Pavement, Crack Repair and Patch, Ivybridge				8,227		
	Anticipated Expenditures, By Year (\$551,884 over 30 years)	0	0	0	8,227	0	0

Village of Springhurst Gardens
RESERVE EXPENDITURES

Explanatory Notes:
1) 3.5% is the estimated Inflation Rate for estimating Future Replacement Costs.
2) FY2023 is Fiscal Year beginning January 1, 2023 and ending December 31, 2023.

Springhurst
Community Association, Inc.
Louisville, Kentucky

Line Item	Total Quantity	Per Phase Quantity	Units	Estimated 1st Year of Event	Life Analysis Useful Years Remaining	Unit (2023)	Costs \$ Per Phase (2023)	Total (2023)	Percentage of Future Expenditures FY2023	RUL = 0														
										1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
4.022	5,450	5,450	5,450 Square Yards	Asphalt Pavement, Crack Repair and Patch, Springhurst Gardens	3 to 5	3	1.40	7,630	7,630															
4.047	5,450	5,450	5,450 Square Yards	Asphalt Pavement, Total Replacement, Streets, Springhurst Gardens	15 to 20	19	35.50	193,475	193,475															
4.112	4,800	1,440	Linear Feet	Concrete Curbis and Gulliers, Springhurst Gardens, Partial	10 to 65	19 to 30+	43.00	61,920	206,400															
Anticipated Expenditures, By Year (\$549,237 over 30 years)										0	0	0	0	0	0	9,707	0	0	0	0	0	0	0	12,783

RESERVE FUNDING PLAN**Springhurst Garden****CASH FLOW ANALYSIS****Springhurst****Community Association, Inc.****Individual Reserve Budgets & Cash Flows for the Next 30 Years**

	FY2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Reserves at Beginning of Year	33,018	33,128	43,083	58,388	70,605	92,318	115,172	139,190	154,693	181,118	208,879	238,004	257,369	289,281	322,741	357,880
Total Recommended Reserve Contributions	0	9,200	14,300	19,400	20,100	20,800	21,500	22,300	23,100	23,900	24,700	25,600	26,500	27,400	28,400	29,400
Estimated Interest Earned, During Year	110	755	1,005	1,277	1,613	2,054	2,518	2,910	3,325	3,861	4,425	4,905	5,412	6,060	6,739	7,324
Anticipated Expenditures, By Year	0	0	0	0	0	0	0	(9,707)	0	0	0	(11,140)	0	0	0	(12,783)
Anticipated Reserves at Year End	\$33,128	\$43,083	\$58,388	\$70,605	\$92,318	\$115,172	\$139,190	\$154,693	\$181,118	\$208,879	\$238,004	\$257,369	\$289,281	\$322,741	\$357,880	\$381,821

(continued)**Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued**

	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053
Reserves at Beginning of Year	381,821	420,161	460,379	502,513	50,693	86,956	125,156	165,433	190,827	235,145	281,763	330,828	362,880	416,699	473,210
Total Recommended Reserve Contributions	30,400	31,500	32,600	33,700	34,900	36,100	37,400	38,700	40,100	41,500	43,000	44,500	46,100	47,700	49,400
Estimated Interest Earned, During Year	7,940	8,718	9,534	5,477	1,363	2,100	2,877	3,527	4,218	5,118	6,065	6,868	7,719	8,811	9,958
Anticipated Expenditures, By Year	0	0	0	(490,998)	0	0	0	(16,833)	0	0	0	(19,316)	0	0	0
Anticipated Reserves at Year End	\$420,161	\$460,379	\$502,513	\$50,693	\$86,956	\$125,156	\$165,433	\$190,827	\$235,145	\$281,763	\$330,828	\$362,880	\$416,699	\$473,210	\$532,568

(NOTE 4)**(NOTE 5)****Explanatory Notes:**

- 1) Year 2023 ending reserves are as of October 31, 2023; FY2023 starts January 1, 2023 and ends December 31, 2023.
- 2) 2024 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2023 is a partial year of interest earned.
- 4) Accumulated year 2053 ending reserves consider the need to fund for replacement of the asphalt pavement streets shortly after 2053, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

Village of Springhurst Gardens
FIVE-YEAR OUTLOOK

Springhurst
Community Association, Inc.
Louisville, Kentucky

Line Item	Reserve Component Inventory	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028
4.022	Asphalt Pavement, Crack Repair and Patch, Springhurst Gardens				8,460		
	Anticipated Expenditures, By Year (\$569,237 over 30 years)	0	0	0	8,460	0	0

4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *Full Reserve Study* includes enhanced solutions and procedures for select significant components. This section describes the Reserve Components, documents specific problems and condition assessments, and may include detailed solutions and procedures for necessary capital repairs and replacements for the benefit of current and future board members. We advise the Board use this information to help define the scope and procedures for repair or replacement when soliciting bids or proposals from contractors. *However, the Report in whole or part is not and should not be used as a design specification or design engineering service.*

Property Site Elements

Asphalt Pavement, Crack Repair, Patch, Seal Coat, and Striping

Line Items: 4.020 through 4.022

Quantity and History: The following table depicts the location, quantity and year of last repair event for the pavement. The Association repaved Ivybridge and Springhurst Gardens in 2022.

Location	Quantity (Square Yards)	Year of Last Repair Event
Clubhouse and Pool	6,400	2021
Ivybridge	5,300	2022
Springhurst Gardens	5,450	2022

Condition: The asphalt pavement at the Clubhouse and Pool is in good to fair overall condition with cracks and spalls evident. The asphalt pavement at Ivybridge and Springhurst Gardens is in good overall condition.

Useful Life: Three- to five-years

Component Detail Notes: Proposals should include mechanically routing and filling all cracks with hot emulsion. Repairs should also include patching at areas exhibiting settlement, potholes, or excessive cracking. The contractor should only apply seal coat applications after repairs are completed. A seal coat does not bridge or close cracks; therefore, unrepaired cracks render the seal coat applications useless. These activities minimize the damaging effects of vehicle fluids, maintain a uniform and positive appearance, and maximize the useful life of the pavement.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost includes an allowance for crack repairs and patching of up to two percent (2%) of the pavement.

Asphalt Pavement, Repaving

Line Items: 4.040 through 4.047

Quantity and History: The following table depicts the location, quantity and year of replacement for the pavement. The Association overlaid the pavement at the Clubhouse and Pool in 2013 and Ivybridge and Springhurst Gardens in 2022.

Location	Quantity (Square Yards)	Year of Replacement
Clubhouse and Pool	6,400	2013
Ivybridge	5,300	2022
Springhurst Gardens	5,450	2022

Condition: The asphalt pavement at the Clubhouse and Pool is in good to fair overall condition with cracks and spalls evident. The asphalt pavement at Ivybridge and Springhurst Gardens is in good overall condition.



Pavement overview (Clubhouse and Pool)



Pavement cracks and spalls



Pavement cracks



Pavement overview (Ivybridge)



Pavement overview (Ivybridge)



Pavement overview (Springhurst Gardens)

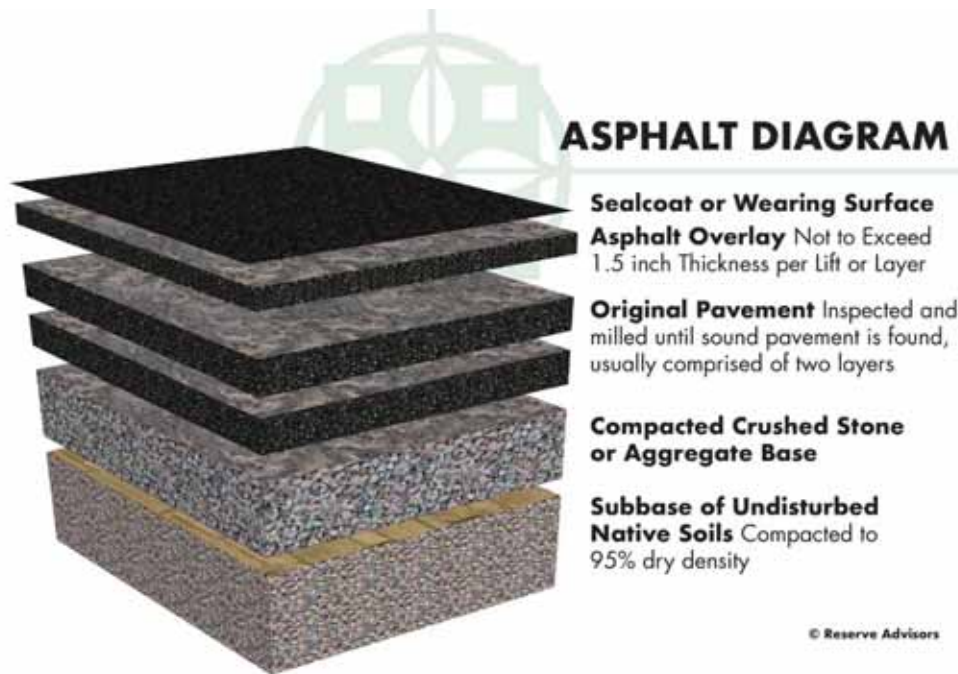


Pavement overview (Springhurst Gardens)

Useful Life: 15- to 20-years with the benefit of timely crack repairs and patching

Component Detail Notes: The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish.

The following diagram depicts the typical components although it may not reflect the actual configuration at Springhurst:



The manner of repaving is either a mill and overlay or total replacement. A mill and overlay is a method of repaving where cracked, worn and failed pavement is mechanically removed or milled until sound pavement is found. A new layer of asphalt is overlaid atop the remaining base course of pavement. Total replacement includes the removal of all existing asphalt down to the base course of aggregate and native soil followed by the application of two or more new lifts of asphalt. We recommend mill and overlayment on asphalt pavement that exhibits normal deterioration and wear. We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlay method for the initial repaving followed by the total replacement method for the Clubhouse and Pool parking areas and the total replacement method of repaving for the initial repaving at Ivybridge and Springhurst Gardens followed by the mill and overlay method for subsequent repaving.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
 - o Repair areas which could cause vehicular damage such as potholes
- As needed:
 - o Perform crack repairs and patching

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3. Our cost for milling and overlayment at the Clubhouse and Pool parking areas includes area patching of up to twenty percent (20%).

Concrete Curbs and Gutters

Line Items: 4.110 through 4.112

Quantity: The following table depicts the location and quantity of the concrete curbs and gutters

Location	Quantity (Linear Feet)
Clubhouse and Pool	2,400
Ivybridge	4,600
Springhurst Gardens	4,800

Condition: Fair overall with periodic cracks, settlement and spalled concrete evident.



Concrete spalls



Concrete curb and gutter



Concrete cracks



Curb settlement



Concrete spalls



Concrete spalls



Concrete spalls



Concrete cracks



Concrete spalls (10108 Springhurst shown)

Useful Life: Up to 65 years although interim deterioration of areas is common

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and repair major cracks, spalls and trip hazards
 - o Mark with orange safety paint prior to replacement or repair
 - o Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The following table depicts our estimated quantity of curbs and gutters that will need replaced during the next 30 years.

Location	30 Year Quantity (Linear Feet)	% of Total
Clubhouse and Pool	720	30.0%
Ivybridge	1,380	30.0%
Springhurst Gardens	1,440	30.0%

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 3,600 square feet located at the clubhouse and pool

History and Condition: Good to fair overall with cracks and spalled concrete evident. The Association most recently replaced portions of the sidewalk at the clubhouse and playground in 2022 for the total cost of approximately \$26,625.



Concrete sidewalk



Sidewalk spalls



Previously repaired Sidewalk cracks



Sidewalk cracks



Sidewalk spalls

Useful Life: Up to 65 years although interim deterioration of areas is common

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and repair major cracks, spalls and trip hazards
 - o Mark with orange safety paint prior to replacement or repair
 - o Repair or perform concrete leveling in areas in immediate need of repair or possible safety hazard

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost is based on information provided by the Association. We estimate that up to 1,080 square feet of concrete sidewalks, or thirty percent (30%) of the total, will require replacement during the next 30 years.

Fences, Wood

Line Items: 4.285 through 4.291

Quantity, History and Condition: The following table depicts the location, quantity, year of replacement and condition of the wood fences.

Location	Quantity (LF)	Year of (Estimated) Replacement	Condition
Wynbrooke / Westport Rd	1,900	(2024)	Poor
Hartwick to Abbeywood	620	(2025)	Poor
Hartwick / Simcoe Lane	870	(2025)	Fair to Poor
Hartwick / Shopping Center	460	(2025)	Fair to Poor
Goose Creek and Springhurst Blvd, Remaining	1,900	(2028)	Fair
Tuxford / Barister Offices	1,450	(2028)	Fair
Tuxford / Ivybridge	1,700	(2028)	Fair
White Blossom / Ivybridge	400	(2028)	Fair
Springhurst Gardens	500	(2028)	Fair
Springmont / Felsmere	1,330	2015	Good to Fair
Springmont / Blossom Ln	1,600	2018	Good to Fair
Goose Creek and Springhurst Blvd (Replaced in 2023)	2,290	2023	Good



New wood fence (Springhurst Blvd and Ivybridge)



Fence leaning section



Fence picket damage (Abbeywood shown)



Fence leaning section (Hartwick/shopping center shown)



Tree growth



Tree growth (Wynbrooke and Westport shown)



Fence leaning section (Wynbrooke and Westport shown)



Fence picket damage (Wynbrooke and Westport shown)



Wood fence (Springmont and Felsmere)



Wood fence (new Goose Creek)



Useful Life: 15- to 20-years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and repair loose sections, finish deterioration and damage
 - o Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The Association should anticipate periodic partial replacements due to the non-uniform nature of wood deterioration. Along with these partial replacements, the Association should apply periodic paint applications as needed and fund these activities through the operating budget.

Irrigation System

Line Items: 4.420 through 4.422

Quantity: The Association maintains the irrigation system located at the clubhouse, pool and common areas. We estimate the following number of zones for each respective area:

- Clubhouse and Pool: 30 Zones
- Common Areas (Excluding North Hurstbourne Parkway): 90 Zones
- Common Areas, North Hurstbourne Parkway: 50 Zones

History: The irrigation systems are primarily original with the exception of isolated replacements and the replacement of approximately half of the irrigation system along North Hurstbourne Parkway in 2020. We consider subsequent replacement of the approximately 25 zones replaced in 2020 along North Hurstbourne Parkway to be long-lived. Future updates of this Reserve Study will consider possible changes in the scope and time of component replacements.

Condition: Unsatisfactory operational condition. Management and the Board report elevated maintenance.



Irrigation system controller



Irrigation system head

Useful Life: Up to and sometimes beyond 40 years

Component Detail Notes: Irrigation systems typically include the following components:

- Electronic controls (timer)
- Impact rotors
- Network of supply pipes
- Pop-up heads
- Valves

Springhurst should anticipate interim and partial replacements of the system network supply pipes and other components as normal maintenance to maximize the useful life of the irrigation system. The Association should fund these ongoing seasonal repairs through the operating budget.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - o Conduct seasonal repairs which includes valve repairs, controller repairs, partial head replacements and pipe repairs
 - o Blow out irrigation water lines and drain building exterior faucets each fall if applicable

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Landscape

Line Items: 4.499 and 4.500

Component Detail Notes: The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements is an ongoing need. Many associations budget for these replacements as normal maintenance. Other associations fund ongoing replacements from reserves. Large amounts of landscape may need replacement due to disease, drought or other forces of nature. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape.



Tree removal



Large trees (Wynbrooke and Westport)

Useful Life: At the request of Management and the Board, we include an initial increased landscape allowance every other year for tree removal and tree replacement and subsequent landscape allowances every five years.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Light Poles and Fixtures

Line Item: 4.560

Quantity: 19 fiberglass poles with LED light fixtures

History: Varied ages.

Condition: Fair overall with leaning poles and finish deterioration evident.



Light poles and fixtures



Light pole and fixtures



Finish deterioration

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- As-needed:
 - o Inspect and repair broken or dislodged fixtures, and leaning or damaged poles
 - o Replaced burned out bulbs as needed

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Playground Equipment

Line Items: 4.660 and 4.661

Quantity: Playground equipment includes the following elements:

- Playsets and swings
- Wood surface with a plastic border
- Site furniture including picnic tables and benches

History: The age was unavailable at the time of our inspection.

Condition: Fair to poor overall with finish deterioration, rust, safety border damage and displacement evident.



Playground equipment



Playground equipment



Fastener rust



Displaced safety border



Equipment finish deterioration

Useful Life: 15- to 20-years for the replacement of the playground equipment and at the request of Management and the Board we include an allowance for mulch replenishment every five years.

Component Detail Notes: Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We suggest the Association learn more about the specific requirements of playground equipment at PlaygroundSafety.org. We recommend the use of a specialist for the design or replacement of the playground equipment environment.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and repair loose connections and fasteners or damaged elements
 - o Inspect for safety hazards and adequate coverage of ground surface cover

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We include an allowance in the unit cost for replacement of the safety surface and border.

Ponds, Aerator

Line Items: 4.700 and 4.701

Quantity: Two aerators

History: The aerator at White Blossom was replaced in 2018 and the aerator at Springbrooke was replaced in 2020.

Condition: Reported satisfactory



Pond fountain aerator



Aerator controls

Useful Life: 10- to 15-years

Component Detail Notes: The use of small pumps, motors and aerators circulates pond water and increases the amount of entrained oxygen in the water, increasing water quality and reducing algae growths.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost is based on information provided by the Association.

Ponds, Sediment Removal and Erosion Control

Line Items: 4.710 and 4.730

Quantity: Approximately 27,000 square yards of water surface area and approximately 3,400 linear feet of natural vegetation and stone rip rap shorelines

History: The Association last conducted an erosion control event in 2015.

Condition: Good overall



Pond overview



Pond shoreline

Useful Life: Based on the visual condition, construction, adjacent deciduous trees and visibly apparent erosion, we recommend the Association anticipate the need to remove pond sediment up to every 30 years.

Shorelines are subject to fluctuations in water levels, increased plant growth and migrating storm and ground water resulting in the need for erosion control measures up to every 15 years.

Component Detail Notes: The gradual build-up of natural debris, including tree leaves, branches and silt, may eventually change the topography of areas of the pond. Silt typically accumulates at inlets, outlets and areas of shoreline erosion. Sediment removal of ponds becomes necessary if this accumulation alters the quality of pond water or the functionality of the ponds as storm water management structures. Sediment removal is the optimal but also the most capital intensive method of pond management. Excavation equipment used for sediment removal includes clamshells, draglines and suction pipe lines. Sediment removal can also include shoreline regrading. Regrading includes removal of collapsed and eroded soil, and redefining the shoreline.

The steep shoreline embankments are likely to exacerbate soil movement and erosion. The use and maintenance of landscape, natural vegetation and/or stone rip rap along the pond shoreline will help maintain an attractive appearance and prevent soil erosion.

Shoreline plantings are referred to as buffer zones. Buffer zones provide the following advantages:

- Control insects naturally
- Create an aesthetically pleasing shoreline
- Enhance water infiltration and storage
- Filter nutrients and pollutants
- Increase fish and wildlife habitat
- Reduce lawn maintenance
- Stabilize shoreline and reduce erosion
- Trap sediments



Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and remediate shoreline erosion and areas of sediment accumulation
 - o Clear and remove debris and vegetation overgrowth at pond edges, and inlet and outlet structures
 - o Inspect for algae blooms and remedy as needed through a chemical treatment program or aeration

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association plan to install a combination of plantings and rip rap around the pond along 510 linear feet, or approximately fifteen percent (15%), of the shoreline per event.

For reserve budgeting purposes, we estimate the need to remove an average depth of one yard from approximately twenty-five percent (25%) of the surface area. However, the actual volume of material to remove may vary dependent upon an invasive analysis at the time of removal. A visual inspection of a body of water cannot reveal the amount of accumulated silt. This is especially true on larger bodies of water. It is therefore inaccurate to assume an entire body of water will require sediment removal. It is more cost effective to spot remove in areas of intense silt accumulation as noted through bathymetric surveys. The amount or depth of silt is determined through prodding into the silt until a relatively solid base is found or through bathymetric surveys. A bathymetric survey establishes a base of data about the depth of the body of water over many locations against which the data of future surveys is compared. These invasive procedures are beyond the scope of a Reserve Study and require multiple visits to the site. We recommend Springhurst contract with a local engineer for periodic bathymetric surveys. Future updates of the Reserve Study can incorporate future anticipated expenditures based on the results of the bathymetric surveys.

Unit costs per cubic yard to remove can vary significantly based on the type of equipment used, quantity of removed material and disposal of removed material. Sediment removal costs must also include mobilization, or getting the equipment to and from the site. Also, the portion of the overall cost to remove associated with mobilization varies based on the volume removed. Costs for sediment disposal also vary depending on the site. Compact sites will require hauling and in some cases disposal fees.

Signage, Entrance Monuments

Line Items: 4.800 through 4.802

Quantity: The property identification signage includes the following elements:

- Approximately 600 Linear Feet of Metal Fences
- 15 Signs with Metal Letters
- 18,500 Square Feet of Stone Masonry

History: Varied ages. The Association has conducted partial repairs and replacements on the various property identification signage throughout the community. Most recently the Association replaced the property identification signs for Hartwick, Abbeywood, Ivybridge and Springbrooke in 2023.

Condition: The property identification signage is in good to fair overall condition and the metal fences are in fair to poor overall condition with periodic masonry spalls, fence rust and damage evident.



Entrance monument



Entrance monument



Masonry spalls



Entrance monument



Fence base rust



Fence rust



Fence rust



Missing fence cap and rust



Masonry spall



Masonry spalls

Useful Life: Up to 35 years for the metal fences and property identification signage. We recommend the Association budget for inspections and repairs to the stone masonry every 8- to 12- years.

Component Detail Notes: Community signage contributes to the overall aesthetic appearance of the property to owners and potential buyers. Renovation or replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific times for replacement or renovation are discretionary.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and repair damage, vandalism and loose components
 - o Verify lighting is working properly
 - o Touch-up paint finish applications if applicable

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Signage, Street and Traffic

Line Items: 4.809 and 4.810

Quantity: 63 signs in total. We include an allowance for the replacement of the remaining street and traffic signs at Tuxford and Hartwick in "**Line Item 4.809**".

History: The Association replaced the street and traffic signs in 2023 with the exception of Tuxford and Hartwick.

Condition: Good overall



Traffic management signage



Useful Life: 15- to 20-years

Component Detail Notes: The community signs contribute to the overall aesthetic appearance of the property to owners and potential buyers. Replacement of community signs is often predicated upon the desire to "update" the perceived identity of the community rather than for utilitarian concerns. Therefore, the specific time for replacement of the signs is discretionary.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and repair damage, vandalism and loose components
 - o Touch-up paint finish applications if applicable

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Sinkhole

Line Item: 4.819

History: The Association informs us of sinkhole located in the Village of Felsmere behind the homes on Springstead Circle. The sinkhole the result of an underlying karst.

Useful Life: At the request of Management and the Board, we include an allowance every five years to backfill and lay sod at the sinkhole.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost and timing is based on information provided by the Association.

Sport Courts, Tennis, Fence

Line Item: 4.840

Quantity: 480 linear feet

History: Replaced in 2019.

Condition: Fair overall with rust and warped webbing evident.



Chain link fence



Fence warped webbing



Fence post rust

Useful Life: Up to 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Sport Courts, Tennis

Line Items: 4.830 and 4.860

Quantity: 1,600 square yards of asphalt comprising two tennis courts

History:

- Color Coat: Applied a color coat in 2019. The Association informs us of widespread pinholes due to poor surface preparation at the time of the color coat application.

- Surface: Replaced in 2019.

Condition: Fair overall with pinholes, surface spalls, cracks and damage evident.



Tennis courts overview



Surface cracks



Surface spalls



Surface cracks

Useful Life: Up to 25 years for replacement of the surface with the benefit of color coat applications and repairs every four- to six-years

Preventative Maintenance Notes: Prior to the application of the color coat, the Association should require the contractor to rout and fill all cracks with hot emulsion. This deters water infiltration and further deterioration of the asphalt playing surface. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and repair large cracks, trip hazards and possibly safety hazards
 - o Verify gate and fencing is secure
 - o Verify lighting is working properly if applicable
 - o Inspect and repair standards and windscreens as needed

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.

Clubhouse Elements



Clubhouse front elevation



Clubhouse rear elevation

Air Handling and Condensing Units, Split Systems

Line Item: 5.070

Quantity: Four split systems

History: Installed from 2001 through 2023.

Condition: Reported satisfactory without operational deficiencies



Split system air handling unit



Split system condensing units

Useful Life: 15- to 20-years

Component Detail Notes: A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior air handling unit. The condensing units have cooling capacities that range from two- to four-tons.

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - Lubricate motors and bearings
 - Change or clean air filters as needed
 - Inspect condenser base and piping insulation
 - Inspect base pan, coil, cabinet and clear obstructions as necessary
- Annually:
 - Clean coils and drain pans, clean fan assembly, check refrigerant charge, inspect fan drive system and controls
 - Inspect and clean accessible ductwork as needed
 - Clean debris from inside cabinet, inspect condenser compressor and associated tubing for damage

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The condensing unit may require replacement prior to replacement of the related interior forced air unit. For purposes of this Reserve Study, we assume coordination of replacement of the interior forced air unit, evaporator coil, refrigerant lines and exterior condensing unit.

Interior Renovations

Line Items: 5.500 and 5.510

Quantity: The clubhouse interior components include:

- Vinyl, tile and carpet floor coverings
- Paint finishes at the walls
- Paint finishes at the ceilings
- Plumbing fixtures
- Light fixtures including exit and emergency lights
- Furnishings
- Kitchen cabinets, countertops, and appliances

History: Renovated in 2012.

Condition: Good to fair overall



Clubhouse interior



Clubhouse interior



Kitchen overview

Useful Life: Complete renovation up to every 25 years and partial renovation up to every 15 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. The complete renovation should include replacement of all components listed above and the partial renovations should include the following:

- Application of paint finishes and carpet replacement
- Replacement of up to twenty-five percent (25%) of the furnishings

Rest Rooms

Line Item: 5.580

Quantity: The rest room components include:

- Tile floor coverings
- Paint finishes at the walls
- Paint finishes at the ceilings
- Light fixtures
- Plumbing fixtures

History: Renovated in 2012.

Condition: Good overall



Rest room overview



Rest room overview

Useful Life: Renovation up to every 25 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the *Reserve Expenditures* table in Section 3.

Roof Assembly, Asphalt Shingles

Line Item: 5.600

Quantity: Approximately 67 squares¹

History: Replaced in 2005. The Association informs us that large sections of the roof were replaced in 2012 due to storm damage.

Condition: Fair overall with shingle lift and sheathing deflection evident from our visual inspection from the ground. Management and the Board do not report a history of leaks.



Roof overview



Sheathing deflection



Weathering



Gutters and downspouts

¹ We quantify the roof area in squares where one square is equal to 100 square feet of surface area.



Downspout damage

Useful Life: 15- to 20-years

Component Detail Notes: Contractors use one of two methods for replacement of sloped roofs, either an overlayment or a tear-off. Overlayment is the application of new shingles over an existing roof. However, there are many disadvantages to overlayment including hidden defects of the underlying roof system, absorption of more heat resulting in accelerated deterioration of the new and old shingles, and an uneven visual appearance. Therefore, we recommend only the tear-off method of replacement. The tear-off method of replacement includes removal of the existing shingles, flashings if required and underlayments.

Preventative Maintenance Notes: We recommend the Association maintain a service and inspection contract with a qualified professional and record all documentation of repairs conducted. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Record any areas of water infiltration, flashing deterioration, damage or loose shingles
 - Implement repairs as needed if issues are reoccurring
 - Trim tree branches that are near or in contact with roof
- As-needed:
 - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost includes an allowance for the replacements of the gutters and downspouts.

Water Heaters

Line Item: 5.940

Quantity: Two *Bradford-White* and *A.O. Smith* gas-fired heaters

History: Replaced in 2016 and 2022.

Condition: Reported satisfactory without operational deficiencies



Water heater



Water heater (kitchen)

Useful Life: 15- to 20- years

Preventative Maintenance Notes: We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. We also recommend the Association maintain a maintenance contract with a qualified professional. The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Weekly:
 - Inspect for leaking water around boilers
 - Check temperature readings
 - Verify vent is unobstructed
 - Conduct boiler blowdown to minimize corrosion and remove suspended solids in system
 - Clean pilot and burner assemblies
- Monthly:
 - Check water and pressure levels
 - Check controls and switches for proper operating
 - Check and inspect condensate drain
 - Check all gaskets for tight sealing
- Annually:
 - Conduct full inspection of burners and flues
 - Clean and inspect tubes to reduce scaling
 - Inspect any pressure relief valves
 - Inspect electrical terminals and controls

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost includes an allowance for replacement of controls.

Pool Elements



Pool overview

Concrete Decks

Line Item: 6.200

Quantity: 8,200 square feet

History: Inspected and repaired in 2023.

Condition: Good to fair overall with isolated cracks and spalls evident.



Concrete pool deck overview



Concrete pool deck overview



Concrete spalls



Concrete cracks

Useful Life: The useful life of a concrete pool deck is up to 60 years or more with timely repairs. We recommend the Association conduct inspections, partial replacements and repairs to the decks every 8- to 12-years in conjunction with coating replacements.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - o Inspect and repair large cracks, trip hazards, and possible safety hazards
 - o Inspect and repair pool coping for cracks, settlement, heaves or sealant deterioration
 - o Repair concrete spalling and conduct coating repairs in areas with delamination
 - o Schedule periodic pressure cleanings as needed

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for the following per event:

- Selective cut out and replacements of up to ten percent (10%) of concrete
- Crack repairs as needed
- Mortar joint repairs
- Caulk replacement
- Coating replacement

Covers, Vinyl

Line Item: 6.300

Quantity: 4,500 square feet

History: The Association replaced the wading pool cover in 2015 and main pool cover in 2019

Condition: Fair overall with loose connections evident.



Pool cover



Pool cover



Missing pool cover connections

Useful Life: Six- to eight-years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Diving Board Stand

Line Item: 6.350

Quantity: One diving board stand at the main pool.

History: Replaced in 2016

Condition: Good to fair overall



Diving board

Useful Life: Up to 20 years with the benefit of periodic paint finish applications and interim diving board replacements funded through operating.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Fence, Aluminum

Line Item: 6.400

Quantity: 520 linear feet

History: Replaced in 2018.

Condition: Good overall



Aluminum pool fence



Aluminum pool fence

Useful Life: Up to 25 years

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - o Inspect and repair loose fasteners or sections, and damage
 - o Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Not recommended to defer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Furniture

Line Item: 6.500

Quantity: The pool furniture includes the following:

- Chairs
- Lounges
- Tables
- Ladders and life safety equipment

History: Replacements were conducted in 2023.

Condition: Good to fair overall



Pool furniture

Useful Life: Up to 12 years

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost is based on information provided by the Association. We recommend interim re-strapping, refinishing, reupholstering and other repairs to the furniture as normal maintenance to maximize its useful life.

Mechanical Equipment

Line Items: 6.599 and 6.600

Quantity: The mechanical equipment includes the following:

- Controls
- Electrical panel
- Interconnected pipe, fittings and valves
- Pumps, filters, and heater

History: Varied ages. The Association installed the pool heater in 2017.

Condition: Reported satisfactory without operational deficiencies



Pool mechanical equipment



Chemical controllers

Useful Life: Up to 15 years

Preventative Maintenance Notes: We recommend the Association maintain a maintenance contract with a qualified professional and follow the manufacturer's specific recommended maintenance and local, state and/or federal inspection guidelines.

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for the replacement of the pool heater is based on information provided by the Association. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to thirty-three percent (33%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

Pool Finish, Aggregate Finish

Line Item: 6.800

Quantity: 4,500 square feet of aggregate finish based on the horizontal surface area and 315 linear feet of tile.

History: The Association resurfaced the pool in 2016 with a high-grade aggregate finish. The Association informs us that the pool finish has a useful life of 25 years.

Condition: Good overall as reported to us by the Association. We were unable to inspect the pools due to the covers.



Pool overview

Useful Life: Up to 25 years for replacement of the aggregate finish and complete tile replacement.

Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Semi-annually:
 - o Inspect and repair significant finish deterioration, coping damage and structure cracks
 - o Inspect main drain connection and anti-entrapment covers, pressure test circulation piping and valves
 - o Test handrails and safety features for proper operation

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost is based on information provided by the Association. Removal and replacement provides the opportunity to inspect the pool structures and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structures, we recommend the Association budget for the following:

- Removal and replacement of the aggregate finishes
- Partial replacements of the scuppers and coping as needed
- Replacement of the tile as needed
- Replacement of joint sealants as needed
- Concrete structure repairs as needed

Shade Structure

Line Item: 6.870

Quantity: Three each

History: Replaced in 2009. Awnings vary in age.

Condition: Good overall



Shade structure frame



Shade structure frames

Useful Life: 20- to 25-years for the replacement of the frames with interim canvas replacements funded through operating.

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Structures and Decks

Line Item: 6.900

Quantity: 4,500 square feet of horizontal surface area

History: Original

Conditions: Good overall as reported to us by the Association. We were unable to inspect the pools due to the covers.

Useful Life: Up to 60 years

Component Detail Notes: The need to replace a pool structure depends on the condition of the concrete structure, the condition of the embedded or concealed water

circulation piping, possible long term uneven settlement of the structure, and the increasing cost of repair and maintenance. Deterioration of any one of these component systems could result in complete replacement of the pool. For example, deferral of a deteriorated piping system could result in settlement and cracks in the pool structure. This mode of failure is more common as the system ages and deterioration of the piping system goes undetected. For reserve budgeting purposes, we recommend Springhurst plan to replace the following components:

- Concrete decks
- Pool structures
- Subsurface piping

Priority/Criticality: Defer only upon opinion of independent professional or engineer

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3.

Reserve Study Update

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. Many variables change after the study is conducted that may result in significant overfunding or underfunding the reserve account. Variables that may affect the Reserve Funding Plan include, but are not limited to:

- Deferred or accelerated capital projects based on Board discretion
- Changes in the interest rates on reserve investments
- Changes in the *local* construction inflation rate
- Additions and deletions to the Reserve Component Inventory
- The presence or absence of maintenance programs
- Unusually mild or extreme weather conditions
- Technological advancements

Periodic updates incorporate these variable changes since the last Reserve Study or Update. We recommend the Board budget for an Update to this Reserve Study in two-to three-years. Budgeting for an Update demonstrates the Board's objective to continue fulfilling its fiduciary responsibility to maintain the commonly owned property and to fund reserves appropriately.

5.METHODOLOGY

Reserves for replacement are the amounts of money required for future expenditures to repair or replace Reserve Components that wear out before the entire facility or project wears out. Reserving funds for future repair or replacement of the Reserve Components is also one of the most reliable ways of protecting the value of the property's infrastructure and marketability.

Springhurst can fund capital repairs and replacements in any combination of the following:

1. Increases in the operating budget during years when the shortages occur
2. Loans using borrowed capital for major replacement projects
3. Level monthly reserve assessments annually adjusted upward for inflation to increase reserves to fund the expected major future expenditures
4. Special assessments

We do not advocate special assessments or loans unless near term circumstances dictate otherwise. Although loans provide a gradual method of funding a replacement, the costs are higher than if the Association were to accumulate reserves ahead of the actual replacement. Interest earnings on reserves also accumulate in this process of saving or reserving for future replacements, thereby defraying the amount of gradual reserve collections. We advocate the third method of *Level Monthly Reserve Assessments* with relatively minor annual adjustments. The method ensures that Homeowners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

This Reserve Study is in compliance with and exceeds the National standards¹ set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level II Reserve Study Update." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local² costs of material, equipment and labor
- Current and future costs of replacement for the Reserve Components
- Costs of demolition as part of the cost of replacement
- Local economic conditions and a historical perspective to arrive at our estimate of long-term future inflation for construction costs in Louisville, Kentucky at an annual inflation rate³. Isolated or regional markets of

¹ Identified in the APRA "Standards - Terms and Definitions" .

² See Credentials for additional information on our use of published sources of cost data.

³ Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

greater construction (development) activity may experience slightly greater rates of inflation for both construction materials and labor.

- The past and current maintenance practices of Springhurst and their effects on remaining useful lives
- Financial information provided by the Association pertaining to the cash status of the reserve fund and budgeted reserve contribution
- The anticipated effects of appreciation of the reserves over time in accord with a return or yield on investment of your cash equivalent assets. (We did not consider the costs, if any, of Federal and State Taxes on income derived from interest and/or dividend income).
- The Funding Plan excludes necessary operating budget expenditures. It is our understanding that future operating budgets will provide for the ongoing normal maintenance of Reserve Components.

Updates to this Reserve Study will continue to monitor historical facts and trends concerning the external market conditions.



6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

Founded in 1991, Reserve Advisors is the leading provider of reserve studies, insurance appraisals, developer turnover transition studies, expert witness services, and other engineering consulting services. Clients include community associations, resort properties, hotels, clubs, non-profit organizations, apartment building owners, religious and educational institutions, and office/commercial building owners in 48 states, Canada and throughout the world.

The **architectural engineering consulting firm** was formed to take a leadership role in helping fiduciaries, boards, and property managers manage their property like a business with a long-range master plan known as a Reserve Study.

Reserve Advisors employs the **largest staff of Reserve Specialists** with bachelor's degrees in engineering dedicated to Reserve Study services. Our founders are also founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our founders is a Past President of the Association of Professional Reserve Analysts (APRA). Our vast experience with a variety of building types and ages, on-site examination and historical analyses are keys to determining accurate remaining useful life estimates of building components.

No Conflict of Interest - As consulting specialists, our **independent opinion** eliminates any real or perceived conflict of interest because we do not conduct or manage capital projects.

TOTAL STAFF INVOLVEMENT

Several staff members participate in each assignment. The responsible advisor involves the staff through a Team Review, exclusive to Reserve Advisors, and by utilizing the experience of other staff members, each of whom has served hundreds of clients. We conduct Team Reviews, an internal quality assurance review of each assignment, including: the inspection; building component costing; lifing; and technical report phases of the assignment. Due to our extensive experience with building components, we do not have a need to utilize subcontractors.

OUR GOAL

To help our clients fulfill their fiduciary responsibilities to maintain property in good condition.

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

Reserve Advisors has conducted reserve studies for a multitude of different communities and building types. We've analyzed thousands of buildings, from as small as a 3,500-square foot day care center to a 2,600,000-square foot 98-story highrise. We also routinely inspect buildings with various types of mechanical systems such as simple electric heat, to complex systems with air handlers, chillers, boilers, elevators, and life safety and security systems.

We're familiar with all types of building exteriors as well. Our well-versed staff regularly identifies optimal repair and replacement solutions for such building exterior surfaces such as adobe, brick, stone, concrete, stucco, EIFS, wood products, stained glass and aluminum siding, and window wall systems.

OLD TO NEW

Reserve Advisors' experience includes ornate and vintage buildings as well as modern structures. Our specialists are no strangers to older buildings. We're accustomed to addressing the unique challenges posed by buildings that date to the 1800's. We recognize and consider the methods of construction employed into our analysis. We recommend appropriate replacement programs that apply cost effective technologies while maintaining a building's character and appeal.

MATTHEW D. NEIKE
Responsible Advisor

CURRENT CLIENT SERVICES

Matthew D. Neike, a mechanical engineer, is an Advisor for Reserve Advisors, LLC. Mr. Neike is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for apartments, high rises, condominiums, townhomes, and homeowners associations.



The following is a partial list of clients served by Matthew Neike demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Gay and Sixth Condominium Association - Built from 2015 to 2020 this association comprises 67 units in seven unique buildings located in the heart of downtown Columbus, Ohio. The community is a mix of modern units with metal siding and rooftop terraces as well as traditional brownstones, row homes and garden units. The buildings include asphalt shingle and EDPM roofs atop units with EIFS, painted brick and a variety of balcony systems.

Pirate's Cove at Indian Lake Condominium Association, Inc. – This townhome style development consists of 92 units in 17 buildings and is located on Indian Lake in Russells Point, Ohio. The property has lake direct lake access via a canal type marina with individual boat docks for each unit. The community also includes three lift stations, two pools, a large shelter building/pool house and 15 well pumps.

White Eagle Club Property Owners Association – A homeowners' association with 1,100 single family homes surrounding a golf course in Naperville, Illinois. This property contains a large pool, water slide, clubhouse, eight tennis courts, and several fences around the property perimeter.

Bridge Point Condominium Association – 274 units in 25 three story buildings situated atop a hill in northwestern Cincinnati, Ohio. This association was built from 2006 to 2017 with the building exteriors comprising masonry, plywood and vinyl siding.

Fox Run 1 Condominium Association – This property was constructed in approximately 1973 and contains 36 unique units in six buildings as well as a pool. Each unit is completely unique with a variety of elevations, painted and unpainted brick, vinyl siding, and mansard asphalt shingle roofs.

Central Park Condominium Association – This community comprises 100 units in 50 buildings in Carol Stream, Illinois. The association also maintains a clubhouse, pool, detention and retention pond.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, LLC, Mr. Neike was a Project Engineer for a general contractor specializing in water and wastewater treatment plants. He was part of the project management team responsible for facilitating and managing the construction of large-scale, multi-year, wastewater treatment plant renovations and improvements. Those projects involved the planning, purchasing and execution of industrial controls, electrical systems, piping/plumbing systems and extremely large concrete structures.

EDUCATION

Wright State University - B.S. Mechanical Engineering

ALAN M. EBERT, P.E., PRA, RS
Director of Quality Assurance

CURRENT CLIENT SERVICES

Alan M. Ebert, a Professional Engineer, is the Director of Quality Assurance for Reserve Advisors. Mr. Ebert is responsible for the management, review and quality assurance of reserve studies. In this role, he assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Mr. Ebert has been involved with thousands of Reserve Study assignments. The following is a partial list of clients served by Alan Ebert demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.



Brownsville Winter Haven Located in Brownsville, Texas, this unique homeowners association contains 525 units. The Association maintains three pools and pool houses, a community and management office, landscape and maintenance equipment, and nine irrigation canals with associated infrastructure.

Rosemont Condominiums This unique condominium is located in Alexandria, Virginia and dates to the 1940's. The two mid-rise buildings utilize decorative stone and brick masonry. The development features common interior spaces, multi-level wood balconies and common asphalt parking areas.

Stillwater Homeowners Association Located in Naperville, Illinois, Stillwater Homeowners Association maintains four tennis courts, an Olympic sized pool and an upscale ballroom with commercial-grade kitchen. The community also maintains three storm water retention ponds and a detention basin.

Birchfield Community Services Association This extensive Association comprises seven separate parcels which include 505 townhome and single family homes. This Community Services Association is located in Mt. Laurel, New Jersey. Three lakes, a pool, a clubhouse and management office, wood carports, aluminum siding, and asphalt shingle roofs are a few of the elements maintained by the Association.

Oakridge Manor Condominium Association Located in Londonderry, New Hampshire, this Association includes 104 units at 13 buildings. In addition to extensive roads and parking areas, the Association maintains a large septic system and significant concrete retaining walls.

Memorial Lofts Homeowners Association This upscale high rise is located in Houston, Texas. The 20 luxury units include large balconies and decorative interior hallways. The 10-story building utilizes a painted stucco facade and TPO roof, while an on-grade garage serves residents and guests.

PRIOR RELEVANT EXPERIENCE

Mr. Ebert earned his Bachelor of Science degree in Geological Engineering from the University of Wisconsin-Madison. His relevant course work includes foundations, retaining walls, and slope stability. Before joining Reserve Advisors, Mr. Ebert was an oilfield engineer and tested and evaluated hundreds of oil and gas wells throughout North America.

EDUCATION

University of Wisconsin-Madison - B.S. Geological Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

Professional Engineering License – Wisconsin, North Carolina, Illinois, Colorado

Reserve Specialist (RS) - Community Associations Institute

Professional Reserve Analyst (PRA) - Association of Professional Reserve Analysts



ANDREW K. MCGOWAN, P.E., RS
Great Lakes Regional Engineering Manager

CURRENT CLIENT SERVICES

Andrew K. McGowan is a Mechanical Engineer and Advisor for *Reserve Advisors, LLC*. Mr. McGowan is responsible for the inspection and analysis of the condition of clients' property, recommending engineering solutions to prolong the lives of the components, forecasting capital expenditures for the repair and/or replacement of the property components, and preparation of technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for various buildings and communities.



The following is a partial list of clients served by Andrew McGowan demonstrating his breadth of experiential knowledge of community associations in construction and related buildings systems.

Lake Summerset Association, Inc. is an expansive lake getaway of 2,219 units surrounding Lake Summerset in Davis, Illinois. The community is constantly evolving and includes a campground, maintenance compound, dam, docks and various outdoor activity centers.

Nichols Tower is a 14-story historic commercial office building converted from the *Sears Roebuck and Co.* Merchandise Building in Chicago, Illinois. The tower stands as a beacon in the community maintained by *The Foundation for Homan Square*. The building combines historic elements such as decorative masonry and terrazzo floors with new renovations to appeal to tenants.

Park Millennium Condominium Association is a 54-story high-rise condominium building in downtown Chicago consisting of 480 residential and three commercial units. The Association faces various maintenance needs to their plaza deck, indoor pool, waterproof membranes, expansion joints and shared Pedway. Residents may enjoy amenities such as the business center, fitness center and club rooms.

Shoreline Towers Condominium Association stands 25-stories adjacent to Lake Michigan. The building automation system optimizes energy efficiency for high efficiency boilers and various other systems. Automatic doors meeting ADA accessibility requirements ensure everyone has access to the hospitality room, laundry room and sun deck.

Vista Homes Building Corporation is a cooperative of 120 units in a 17-story building overlooking the Museum of Science and Industry in Chicago, Illinois. Originally built in 1925, the building has an extensive history. Upgraded electrical and piping systems help ensure the building is positioned to stand for many more years to come.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. McGowan attended The Ohio State University where he attained his Bachelor of Science degree in Mechanical Engineering. After graduation, he worked for one of the top cabinet manufacturers where he performed field visits with home construction contractors, such as *NVR, Inc.*, to determine reliable solutions to common quality issues.

EDUCATION

Ohio State University – B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Professional Engineer (P.E.) - Illinois

Reserve Specialist (RS) - Community Associations Institute

Homeowner Leader Education Committee Member - Community Associations Institute



RESOURCES

Reserve Advisors utilizes numerous resources of national and local data to conduct its Professional Services. A concise list of several of these resources follows:

Association of Construction Inspectors, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at www.iami.org.

American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., (ASHRAE) the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., devoted to the arts and sciences of heating, ventilation, air conditioning and refrigeration; recognized as the foremost, authoritative, timely and responsive source of technical and educational information, standards and guidelines, found on the web at www.ashrae.org. Reserve Advisors actively participates in its local chapter and holds individual memberships.

Community Associations Institute, (CAI) America's leading advocate for responsible communities noted as the only national organization dedicated to fostering vibrant, responsive, competent community associations. Their mission is to assist community associations in promoting harmony, community, and responsible leadership.

Marshall & Swift / Boeckh, (MS/B) the worldwide provider of building cost data, co-sourcing solutions, and estimating technology for the property and casualty insurance industry found on the web at www.marshallswift.com.

R.S. Means CostWorks, North America's leading supplier of construction cost information. As a member of the Construction Market Data Group, Means provides accurate and up-to-date cost information that helps owners, developers, architects, engineers, contractors and others to carefully and precisely project and control the cost of both new building construction and renovation projects found on the web at www.rsmeans.com.

Reserve Advisors' library of numerous periodicals relating to reserve studies, condition analyses, chapter community associations, and historical costs from thousands of capital repair and replacement projects, and product literature from manufacturers of building products and building systems.

7. DEFINITIONS

Definitions are derived from the standards set forth by the Community Associations Institute (CAI) representing America's 305,000 condominium and homeowners associations and cooperatives, and the Association of Professional Reserve Analysts, setting the standards of care for reserve study practitioners.

Cash Flow Method - A method of calculating Reserve Contributions 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 Method - A method of developing a Reserve Funding Plan with the total contribution is based on the sum of the contributions for individual components.

Current Cost of Replacement - That amount required today derived from the quantity of a *Reserve Component* and its unit cost to replace or repair a Reserve Component using the most current technology and construction materials, duplicating the productive utility of the existing property at current *local*/market prices for *materials*, *labor* and manufactured equipment, contractors' overhead, profit and fees, but without provisions for building permits, overtime, bonuses for labor or premiums for material and equipment. We include removal and disposal costs where applicable.

Fully Funded Balance - The Reserve balance that is in direct proportion to the fraction of life "used up" of the current Repair or Replacement cost similar to Total Accrued Depreciation.

Funding Goal (Threshold) - The stated purpose of this Reserve Study is to determine the adequate, not excessive, minimal threshold reserve balances.

Future Cost of Replacement - *Reserve Expenditure* derived from the inflated current cost of replacement or current cost of replacement as defined above, with consideration given to the effects of inflation on local market rates for materials, labor and equipment.

Long-Lived Property Component - Property component of Springhurst responsibility not likely to require capital repair or replacement during the next 30 years with an unpredictable remaining Useful Life beyond the next 30 years.

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.

Remaining Useful Life - The estimated remaining functional or useful time in years of a *Reserve Component* based on its age, condition and maintenance.

Reserve Component - Property elements with: 1) Springhurst responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

Reserve Component Inventory - Line Items in *Reserve Expenditures* that identify a *Reserve Component*.

Reserve Contribution - An amount of money set aside or *Reserve Assessment* contributed to a *Reserve Fund* for future *Reserve Expenditures* to repair or replace *Reserve Components*.

Reserve Expenditure - Future Cost of Replacement of a Reserve Component.

Reserve Fund Status - The accumulated amount of reserves in dollars at a given point in time, i.e., at year end.

Reserve Funding Plan - The portion of the Reserve Study identifying the *Cash Flow Analysis* and containing the recommended Reserve Contributions and projected annual expenditures, interest earned and reserve balances.

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.

Useful Life - The anticipated total time in years that a *Reserve Component* is expected to serve its intended function in its present application or installation.

8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, LLC ("RA") performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan, to create reserves for anticipated future replacement expenditures of the subject property. The purpose of our energy benchmarking services is to track, collect and summarize the subject property's energy consumption over time for your use in comparison with other buildings of similar size and establishing a performance baseline for your planning of long-term energy efficiency goals.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. Our energy benchmarking services with respect to the subject property is limited to collecting energy and utility data and summarizing such data in the form of an Energy Star Portfolio Manager Report or any other similar report, and hereby expressly excludes any recommendations with respect to the results of such energy benchmarking services or the accuracy of the energy information obtained from utility companies and other third-party sources with respect to the subject property. The reserve report and any energy benchmarking report (i.e., any Energy Star Portfolio Manager Report) (including any subsequent revisions thereto pursuant to the terms hereof, collectively, the "Report") are based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in the Report. The inspection is made by employees generally familiar with real estate and building construction. Except to the extent readily apparent to RA, RA cannot and shall not opine on the structural integrity of or other physical defects in the property under any circumstances. Without limitation to the foregoing, RA cannot and shall not opine on, nor is RA responsible for, the property's conformity to specific governmental code requirements for fire, building, earthquake, occupancy or otherwise.

RA is not responsible for conditions that have changed between the time of inspection and the issuance of the Report. RA does not provide invasive testing on any mechanical systems that provide energy to the property, nor can RA opine on any system components that are not easily accessible during the inspection. RA does not investigate, nor assume any responsibility for any existence or impact of any hazardous materials, such as asbestos, urea-formaldehyde foam insulation, other chemicals, toxic wastes, environmental mold or other potentially hazardous materials or structural defects that are latent or hidden defects which may or may not be present on or within the property. RA does not make any soil analysis or geological study as part of its services, nor does RA investigate vapor, water, oil, gas, coal, or other subsurface mineral and use rights or such hidden conditions, and RA assumes no responsibility for any such conditions. The Report contains opinions of estimated replacement costs or deferred maintenance expenses and remaining useful lives, which are neither a guarantee of the actual costs or expenses of replacement or deferred maintenance nor a guarantee of remaining useful lives of any property element.

RA assumes, without independent verification, the accuracy of all data provided to it. Except to the extent resulting from RA's willful misconduct in connection with the performance of its obligations under this agreement, you agree to indemnify, defend, and hold RA and its affiliates, officers, managers, employees, agents, successors and assigns (each, an "RA Party") harmless from and against (and promptly reimburse each RA Party for) any and all losses, claims, actions, demands, judgments, orders, damages, expenses or liabilities, including, without limitation, reasonable attorneys' fees, asserted against or to which any RA Party may become subject in connection with this engagement, including, without limitation, as a result of any false, misleading or incomplete information which RA relied upon that was supplied by you or others under your direction, or which may result from any improper use or reliance on the Report by you or third parties under your control or direction or to whom you provided the Report. NOTWITHSTANDING ANY OTHER PROVISION HEREIN TO THE CONTRARY, THE AGGREGATE LIABILITY (IF ANY) OF RA WITH RESPECT TO THIS AGREEMENT AND RA'S OBLIGATIONS HEREUNDER IS LIMITED TO THE AMOUNT OF THE FEES ACTUALLY RECEIVED BY RA FROM YOU FOR THE SERVICES AND REPORT PERFORMED BY RA UNDER THIS AGREEMENT, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY OR OTHERWISE. YOUR REMEDIES SET FORTH HEREIN ARE EXCLUSIVE AND ARE YOUR SOLE REMEDIES FOR ANY FAILURE OF RA TO COMPLY WITH ITS OBLIGATIONS HEREUNDER OR OTHERWISE. RA SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES OF ANY KIND, INCLUDING, BUT NOT LIMITED TO, ANY LOST PROFITS AND LOST SAVINGS, LOSS OF USE OR INTERRUPTION OF BUSINESS, HOWEVER CAUSED, WHETHER ARISING IN CONTRACT, TORT (INCLUDING NEGLIGENCE), BREACH OF WARRANTY, STRICT LIABILITY OR OTHERWISE, EVEN IF RA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT WILL RA BE LIABLE FOR THE COST OF PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES. RA DISCLAIMS ALL REPRESENTATIONS AND WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED OR OF ANY NATURE, WITH REGARD TO THE SERVICES AND THE REPORT, INCLUDING, WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Report - RA will complete the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations with respect to the reserve study and is deemed complete. RA will consider any additional information made available to RA within 6 months of issuing the Report and issue a revised Report based on such additional information if a timely request for a revised Report is made by you. RA retains the right to withhold a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of



RA and may be used for whatever purpose it sees fit. RA reserves the right to, and you acknowledge and agree that RA may, use any data provided by you in connection with the services, or gathered as a result of providing such services, including in connection with creating and issuing any Report, in a de-identified and aggregated form for RA's business purposes.

Your Obligations - You agree to provide us access to the subject property for an inspection. You agree to provide RA all available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete the Report. Additionally, you agree to provide historical replacement schedules, utility bills and historical energy usage files that RA requests and deems necessary to complete the energy benchmarking services, and you agree to provide any utility release(s) reasonably requested by RA permitting RA to obtain any such data and/or information from any utility representative or other third party. You agree to pay actual attorneys' fees and any other costs incurred to collect on any unpaid balance for RA's services.

Use of Our Report and Your Name - Use of the Report is limited to only the purpose stated herein. You acknowledge that RA is the exclusive owner of all intellectual property rights in and relating to the Report. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and that you will be liable for the consequences of any unauthorized use or distribution of the Report. Use or possession of the Report by any unauthorized third party is prohibited. The Report in whole or in part ***is not and cannot be used as a design specification for design engineering purposes or as an appraisal.*** You may show the Report in its entirety to the following third parties: members of your organization (including your directors, officers, tenants and prospective purchasers), your accountants, attorneys, financial institutions and property managers who need to review the information contained herein, and any other third party who has a right to inspect the Report under applicable law including, but not limited to, any government entity or agency, or any utility companies. Without the written consent of RA, you shall not disclose the Report to any other third party. By engaging our services, you agree that the Report contains intellectual property developed (and owned solely) by RA and agree that you will not reproduce or distribute the Report ***to any party that conducts reserve studies without the written consent of RA.***

RA will include (and you hereby agree that RA may include) your name in our client lists. RA reserves the right to use (and you hereby agree that RA may use) property information to obtain estimates of replacement costs, useful life of property elements or otherwise as RA, in its sole discretion, deems appropriate.

Payment Terms, Due Dates and Interest Charges - If reserve study and energy benchmarking services are performed by RA, then the retainer payment is due upon execution of this agreement and prior to the inspection by RA, and any balance is due net 30 days from the Report shipment date. If only energy benchmarking services are performed by RA, then the retainer payment is due upon execution of this agreement and any balance is due net 30 days from the Report shipment date. In any case, any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Unless this agreement is earlier terminated by RA in the event you breach or otherwise fail to comply with your obligations under this agreement, RA's obligations under this agreement shall commence on the date you execute and deliver this agreement and terminate on the date that is 6 months from the date of delivery of the Report by RA. Notwithstanding anything herein to the contrary, each provision that by its context and nature should survive the expiration or early termination of this agreement shall so survive, including, without limitation, any provisions with respect to payment, intellectual property rights, limitations of liability and governing law.

Miscellaneous – Neither party shall be liable for any failures or delays in performance due to fire, flood, strike or other labor difficulty, act of God, act of any governmental authority, riot, embargo, fuel or energy shortage, pandemic, wrecks or delays in transportation, or due to any other cause beyond such party's reasonable control; provided, however, that you shall not be relieved from your obligations to make any payment(s) to RA as and when due hereunder. In the event of a delay in performance due to any such cause, the time for completion or date of delivery will be extended by a period of time reasonably necessary to overcome the effect of such delay. You may not assign or otherwise transfer this agreement, in whole or in part, without the prior written consent of RA. RA may freely assign or otherwise transfer this agreement, in whole or in part, without your prior consent. This agreement shall be governed by the laws of the State of Wisconsin without regard to any principles of conflicts of law that would apply the laws of another jurisdiction. Any dispute with respect to this agreement shall be exclusively venued in Milwaukee County Circuit Court or in the United States District Court for the Eastern District of Wisconsin. Each party hereto agrees and hereby waives the right to a trial by jury in any action, proceeding or claim brought by or on behalf of the parties hereto with respect to any matter related to this agreement.