

# Burke Station Citizens Association

Burke, VA • January 26, 2023

FULL RESERVE STUDY



**BURKE STATION SQUARE**



Long-term thinking. Everyday commitment.



Burke Station Citizens Association  
Burke, Virginia

Dear Board of Directors of Burke Station Citizens Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Burke Station Citizens Association in Burke, Virginia and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, January 26, 2023.

This *Full Reserve Study* exceeds the Association of Professional Reserve Analysts (APRA) standards fulfilling the requirements of a “Level I Full Reserve Study.”

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 Burke Station Citizens Association 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 September 6, 2023 by

*Reserve Advisors, LLC*

Visual Inspection and Report by: Gene J. Kim

Review by: Alan M. Ebert, RS<sup>1</sup>, PRA<sup>2</sup>, Director of Quality Assurance



<sup>1</sup> 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.

<sup>2</sup> 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:** Burke Station Citizens Association (Burke Station)

**Location:** Burke, Virginia

**Reference:** 222087

**Property Basics:** Burke Station Citizens Association is a planned unit development which is responsible for the common elements shared by 505 units. The community was built in 1975. The community contains common property including a clubhouse, pools, trails and bridges.

**Reserve Components Identified:** 28 Reserve Components.

**Inspection Date:** January 26, 2023.

**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. Our recommended Funding Plan recognizes these threshold funding years in 2024 due to partial replacement of the asphalt trails, bridges and concrete stairs, in 2026 due to replacement of the pool plaster and in 2036 due to replacement of the pool structure and deck. In addition, the Reserve Funding Plan recommends 2053 year end accumulated reserves of approximately \$558,800. We judge this amount of accumulated reserves in 2053 necessary to fund the likely replacement of the plaster and complete interior renovation of the Community Center after 2053. Future replacement costs beyond the next 30 years for the replacement of the plaster and complete interior renovation of the Community Center are likely to more than double the current cost of replacement. 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.

**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
- 1.3% anticipated annual rate of return on invested reserves
- 3.0% future Inflation Rate for estimating Future Replacement Costs

**Sources for Local Costs of Replacement:** Our proprietary database, historical costs and published sources, i.e., R.S. Means, Incorporated.

**Unaudited Cash Status of Reserve Fund:**

- \$18,470 as of December 31, 2022
- 2023 budgeted Reserve Contributions of \$29,921
- A potential deficit in reserves might occur by 2024 based upon continuation of the most recent annual reserve contribution of \$29,921 and the identified Reserve Expenditures.

**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:

- Installation and replacement of the wood bridges
- Installation of the underwater pool light fixtures
- Replacement of the asphalt pavement walking paths
- Replacement of the pool plaster



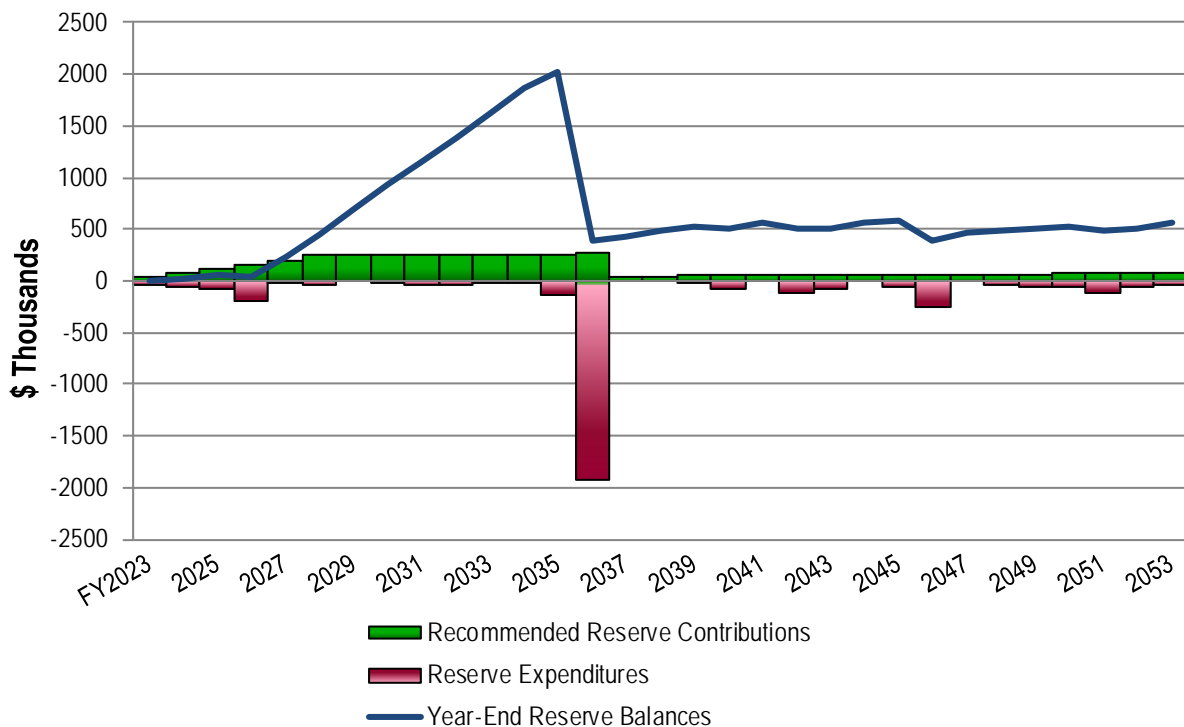
- Replacement of the wood fences at the property entrance perimeters

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

- Phased increases of approximately \$43,000 from 2024 through 2028
- Stable contributions of \$244,900 from 2029 through 2033
- Inflationary increases from 2034 through 2036
- Decrease to \$47,000 by 2037 due to fully funding for replacement of the pool structure and deck
- Inflationary increases thereafter through 2053, the limit of this study’s Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$42,979 represents an average biannual increase of \$42.55 per homeowner and about an eighteen percent (17.6%) adjustment in the 2023 total Operating Budget of \$244,774.

**Burke Station**  
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2024	72,900	23,471	2034	252,200	1,869,365	2044	57,800	573,887
2025	115,900	66,228	2035	259,800	2,025,860	2045	59,500	579,521
2026	158,900	37,218	2036	267,600	382,740	2046	61,300	395,872
2027	201,900	225,055	2037	47,000	435,021	2047	63,100	464,528
2028	244,900	441,685	2038	48,400	489,391	2048	65,000	494,895
2029	244,900	693,919	2039	49,900	523,365	2049	67,000	506,142
2030	244,900	925,913	2040	51,400	504,512	2050	69,000	525,182
2031	244,900	1,154,415	2041	52,900	564,315	2051	71,100	489,399
2032	244,900	1,384,856	2042	54,500	515,352	2052	73,200	513,342
2033	244,900	1,622,974	2043	56,100	509,093	2053	75,400	558,771







## 2. RESERVE STUDY REPORT

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

### **Burke Station Citizens Association**

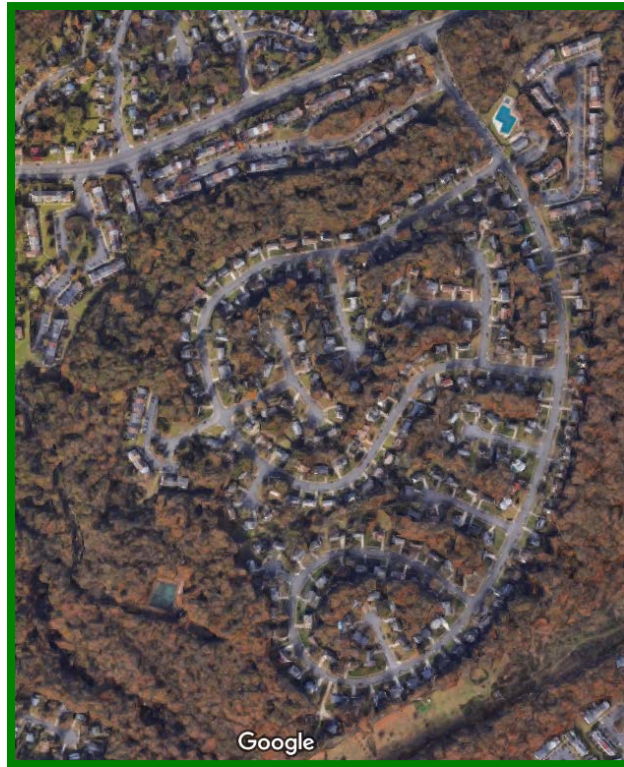
### **Burke, Virginia**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, January 26, 2023.

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 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:

- Burke Station 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
- Foundation, Community Center
- Pipes, Interior Building, Domestic Water, Sanitary Waste, Common
- Pipes, Subsurface Utilities, Community Center Parking Area and Trails
- Structural Frames, Community Center and Sheds



**Pipe underneath trails**

**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 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Asphalt Pavement, Parking Areas, Crack Repair, Patch, Striping and Seal Coat
- Asphalt Pavement, Trails, Crack Repair and Patch
- Bicycle Racks
- Bridges, Wood, Inspections and Capital Repairs
- Concrete Sidewalk, Community Center, Partial Replacement
- Concrete Stairs, Partial Replacement



- Chlorinator, Main Pool
- Fence, Vinyl, Pool Area
- Landscape, General Maintenance
- Light Fixtures, Community Center
- Light Poles and Fixtures, Interim Replacement of Fixtures
- Paint Finishes, Touch Up and Maintenance
- Shutters
- Signage, Information Sign
- Steps, Composite, Pool Area
- Timber Retaining Walls, Pool Area
- Walls, Masonry, Community Center, Inspections and Capital Repairs
- Other Repairs normally funded through the Operating Budget



**Vinyl fence overview**



**Signage overview**



**Timber retaining walls overview**



**Composite steps overview**

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

- Concrete Steps and Metal Railings, Leading to Burke Station Park (Fairfax County Park Authority)



- Light Poles and Fixtures (*Dominion Electric*)
- Storm Water Drains (Fairfax County)

### **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
- Predicted reserves based on current funding level

#### **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***.



## RESERVE EXPENDITURES

Burke Station  
Citizens Association  
Burke, Virginia

**Explanatory Notes:**

- 1) **3.0%** 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 FY2023	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	
						Useful	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																		
<b>Property Site Elements</b>																												
4.040	1,780	1,780	Square Yards	Asphalt Pavement, Community Center Parking Area, Mill and Overlay	2040	15 to 20	17	18.00	32,040	32,040	1.5%																	
4.080	1,320	660	Square Yards	Asphalt Pavement, Walking Paths, Total Replacement, Phased	2024	15 to 20	1 to 2	26.50	17,490	34,980	2.8%	18,015	18,555															
4.101	2	1	Each	Bridges, Wood, Phased	2024	20 to 25	1 to 2	23,000.00	23,000	46,000	1.4%	23,690	24,401															
4.110	700	210	Linear Feet	Concrete Curbs and Gutters, Partial	2040	to 65	17 to 30+	38.00	7,980	26,600	0.4%																	
4.160	4	2	Each	Concrete Stairs, Phased	2024	to 65	1 to 2	5,500.00	11,000	22,000	0.6%	11,330	11,670															
4.285	550	550	Linear Feet	Fences, Wood, Shadowbox, Community Center Perimeter	2032	15 to 20	9	43.00	23,650	23,650	2.4%										30,858							
4.800	1	1	Allowance	Signage, Entrance Monument, Renovation	2031	15 to 20	8	5,700.00	5,700	5,700	0.6%									7,221								
<b>Community Center Elements</b>																												
5.070	1	1	Each	Air Handling and Condensing Units, Split System	2040	15 to 20	17	6,500.00	6,500	6,500	0.3%																	
5.300	13	13	Each	Doors	2043	to 30	20	1,200.00	15,600	15,600	0.8%																	
5.400	2	1	Allowance	Furnishings, Phased	2025	to 20	2 to 12	6,000.00	6,000	12,000	0.7%		6,365											8,555				
5.500	1	1	Allowance	Interior, Renovation, Complete	2035	to 20	12	44,500.00	44,500	44,500	1.8%													63,446				
5.510	1	1	Allowance	Interior, Renovation, Partial	2025	to 10	2	12,000.00	12,000	12,000	1.0%		12,731															
5.580	1	1	Allowance	Rest Rooms, Renovation	2035	20 to 25	12	23,500.00	23,500	23,500	0.9%													33,505				
5.600	35	35	Squares	Roof Assembly, Asphalt Shingles	2031	15 to 20	8	510.00	17,850	17,850	1.7%								22,612									
5.720	1	1	Allowance	Security System, Surveillance	2033	10 to 15	10	5,500.00	5,500	5,500	0.5%											7,392						
5.790	1,200	1,200	Square Feet	Walls, Siding, Vinyl	2053	to 40	30	8.00	9,600	9,600	0.7%																	
5.795	1	1	Each	Water Heater	2030	15 to 20	7	5,000.00	5,000	5,000	0.5%							6,149										
5.800	80	80	Square Feet	Windows	2053	to 40	30	70.00	5,600	5,600	0.4%																	
<b>Pool Elements</b>																												
6.200	11,700	11,700	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2026	8 to 12	3	3.00	35,100	35,100	3.0%				38,355													
6.300	6,830	6,830	Square Feet	Covers, Vinyl	2026	6 to 8	3	3.00	20,490	20,490	3.7%				22,390								28,363					
6.400	1,180	1,180	Linear Feet	Fences, Chain Link	2026	to 25	3	21.00	24,780	24,780	2.4%				27,078													
6.500	4	1	Allowance	Furniture, Phased (2023 is Budgeted)	2023	to 12	0 to 9	14,000.00	14,000	56,000	6.1%	8,400			15,757				17,218			18,815			20,559			
6.600	2	1	Allowance	Mechanical Equipment, Phased (2023 is Budgeted Pump Replacement)	2023	to 15	0 to 7	11,000.00	11,000	22,000	2.3%	8,700					12,752							15,683				
6.800	6,830	6,830	Square Feet	Pool Finishes, Plaster	2026	8 to 12	3	13.50	92,205	92,205	7.9%				100,755													
6.865	3	3	Each	Shade Structures, Canvas	2035	6 to 8	12	1,700.00	5,100	5,100	0.8%													7,271				
6.870	3	3	Each	Shade Structures, Canvas and Frame	2028	to 30	5	5,700.00	17,100	17,100	0.6%						19,824											
6.900	6,830	6,830	Square Feet	Structures and Deck, Total Replacement	2036	to 60	13	190.00	1,297,700	1,297,700	53.5%														1,905,716			
6.970	1	1	Allowance	Underwater Light Fixtures, Main Pool (2023 is Planned)	2023	N/A	0	28,000.00	28,000	28,000	0.8%	28,000																
<b>Anticipated Expenditures, By Year (\$3,559,192 over 30 years)</b>												45,100	53,035	73,722	188,578	15,757	32,576	0	23,367	29,833	30,858	26,207	28,363	128,460	1,926,275	0	0	

## RESERVE EXPENDITURES

**Burke Station  
Citizens Association  
Burke, Virginia**

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2039	17 2040	18 2041	19 2042	20 2043	21 2044	22 2045	23 2046	24 2047	25 2048	26 2049	27 2050	28 2051	29 2052	30 2053	
						Useful	Remaining	Unit (2023)	Per Phase (2023)	Total (2023)																	
<u>Property Site Elements</u>																											
4.040	1,780	1,780	Square Yards	Asphalt Pavement, Community Center Parking Area, Mill and Overlay	2040	15 to 20	17	18.00	32,040	32,040	1.5%		52,957														
4.080	1,320	660	Square Yards	Asphalt Pavement, Walking Paths, Total Replacement, Phased	2024	15 to 20	1 to 2	26.50	17,490	34,980	2.8%				30,669	31,589											
4.101	2	1	Each	Bridges, Wood, Phased	2024	20 to 25	1 to 2	23,000.00	23,000	46,000	1.4%																
4.110	700	210	Linear Feet	Concrete Curbs and Gutters, Partial	2040	to 65	17 to 30+	38.00	7,980	26,600	0.4%		13,190														
4.160	4	2	Each	Concrete Stairs, Phased	2024	to 65	1 to 2	5,500.00	11,000	22,000	0.6%																
4.285	550	550	Linear Feet	Fences, Wood, Shadowbox, Community Center Perimeter	2032	15 to 20	9	43.00	23,650	23,650	2.4%													55,733			
4.800	1	1	Allowance	Signage, Entrance Monument, Renovation	2031	15 to 20	8	5,700.00	5,700	5,700	0.6%													13,041			
<u>Community Center Elements</u>																											
5.070	1	1	Each	Air Handling and Condensing Units, Split System	2040	15 to 20	17	6,500.00	6,500	6,500	0.3%		10,744														
5.300	13	13	Each	Doors	2043	to 30	20	1,200.00	15,600	15,600	0.8%					28,175											
5.400	2	1	Allowance	Furnishings, Phased	2025	to 20	2 to 12	6,000.00	6,000	12,000	0.7%							11,497									
5.500	1	1	Allowance	Interior, Renovation, Complete	2035	to 20	12	44,500.00	44,500	44,500	1.8%																
5.510	1	1	Allowance	Interior, Renovation, Partial	2025	to 10	2	12,000.00	12,000	12,000	1.0%							22,993									
5.580	1	1	Allowance	Rest Rooms, Renovation	2035	20 to 25	12	23,500.00	23,500	23,500	0.9%																
5.600	35	35	Squares	Roof Assembly, Asphalt Shingles	2031	15 to 20	8	510.00	17,850	17,850	1.7%													38,495			
5.720	1	1	Allowance	Security System, Surveillance	2033	10 to 15	10	5,500.00	5,500	5,500	0.5%														11,516		
5.790	1,200	1,200	Square Feet	Walls, Siding, Vinyl	2053	to 40	30	8.00	9,600	9,600	0.7%															23,302	
5.795	1	1	Each	Water Heater	2030	15 to 20	7	5,000.00	5,000	5,000	0.5%													11,106			
5.800	80	80	Square Feet	Windows	2053	to 40	30	70.00	5,600	5,600	0.4%															13,593	
<u>Pool Elements</u>																											
6.200	11,700	11,700	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2026	8 to 12	3	3.00	35,100	35,100	3.0%								69,273								
6.300	6,830	6,830	Square Feet	Covers, Vinyl	2026	6 to 8	3	3.00	20,490	20,490	3.7%				35,929									45,514			
6.400	1,180	1,180	Linear Feet	Fences, Chain Link	2026	to 25	3	21.00	24,780	24,780	2.4%														56,695		
6.500	4	1	Allowance	Furniture, Phased (2023 is Budgeted)	2023	to 12	0 to 9	14,000.00	14,000	56,000	6.1%	22,466			24,549			26,825			29,313				32,031		
6.600	2	1	Allowance	Mechanical Equipment, Phased (2023 is Budgeted Pump Replacement)	2023	to 15	0 to 7	11,000.00	11,000	22,000	2.3%				19,289									23,723			
6.800	6,830	6,830	Square Feet	Pool Finishes, Plaster	2026	8 to 12	3	13.50	92,205	92,205	7.9%								181,975								
6.865	3	3	Each	Shade Structures, Canvas	2035	6 to 8	12	1,700.00	5,100	5,100	0.8%				9,211										11,668		
6.870	3	3	Each	Shade Structures, Canvas and Frame	2028	to 30	5	5,700.00	17,100	17,100	0.6%																
6.900	6,830	6,830	Square Feet	Structures and Deck, Total Replacement	2036	to 60	13	190.00	1,297,700	1,297,700	53.5%																
6.970	1	1	Allowance	Underwater Light Fixtures, Main Pool (2023 is Planned)	2023	N/A	0	28,000.00	28,000	28,000	0.8%																
<b>Anticipated Expenditures, By Year (\$3,559,192 over 30 years)</b>												22,466	76,891	0	110,436	68,975	0	61,315	251,248	0	40,829	62,218	56,620	113,435	55,733	36,895	

## RESERVE FUNDING PLAN

### CASH FLOW ANALYSIS

Burke Station  
Citizens Association  
Burke, Virginia

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	<i>(Note 1)</i>	18,470	3,432	23,471	66,228	37,218	225,055	441,685	693,919	925,913	1,154,415	1,384,856	1,622,974	1,869,365	2,025,860	382,740	435,021
Total Recommended Reserve Contributions	<i>(Note 2)</i>	29,921	72,900	115,900	158,900	201,900	244,900	244,900	244,900	244,900	244,900	244,900	252,200	259,800	267,600	47,000	48,400
Estimated Interest Earned, During Year	<i>(Note 3)</i>	141	174	579	668	1,694	4,306	7,334	10,461	13,435	16,399	19,425	22,554	25,155	15,555	5,281	5,970
Anticipated Expenditures, By Year		(45,100)	(53,035)	(73,722)	(188,578)	(15,757)	(32,576)	0	(23,367)	(29,833)	(30,858)	(26,207)	(28,363)	(128,460)	(1,926,275)	0	0
Anticipated Reserves at Year End		<u>\$3,432</u>	<u>\$23,471</u>	<u>\$66,228</u>	<u>\$37,218</u>	<u>\$225,055</u>	<u>\$441,685</u>	<u>\$693,919</u>	<u>\$925,913</u>	<u>\$1,154,415</u>	<u>\$1,384,856</u>	<u>\$1,622,974</u>	<u>\$1,869,365</u>	<u>\$2,025,860</u>	<u>\$382,740</u>	<u>\$435,021</u>	<u>\$489,391</u>
			<i>(NOTE 5)</i>		<i>(NOTE 5)</i>										<i>(NOTE 5)</i>		
Predicted Reserves based on 2023 funding level of:	\$29,921	3,432	(19,788)														

(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		489,391	523,365	504,512	564,315	515,352	509,093	573,887	579,521	395,872	464,528	494,895	506,142	525,182	489,399	513,342
Total Recommended Reserve Contributions		49,900	51,400	52,900	54,500	56,100	57,800	59,500	61,300	63,100	65,000	67,000	69,000	71,100	73,200	75,400
Estimated Interest Earned, During Year		6,540	6,638	6,903	6,973	6,616	6,994	7,449	6,299	5,556	6,196	6,465	6,660	6,552	6,476	6,924
Anticipated Expenditures, By Year		(22,466)	(76,891)	0	(110,436)	(68,975)	0	(61,315)	(251,248)	0	(40,829)	(62,218)	(56,620)	(113,435)	(55,733)	(36,895)
Anticipated Reserves at Year End		<u>\$523,365</u>	<u>\$504,512</u>	<u>\$564,315</u>	<u>\$515,352</u>	<u>\$509,093</u>	<u>\$573,887</u>	<u>\$579,521</u>	<u>\$395,872</u>	<u>\$464,528</u>	<u>\$494,895</u>	<u>\$506,142</u>	<u>\$525,182</u>	<u>\$489,399</u>	<u>\$513,342</u>	<u>\$558,771</u>
																<i>(NOTE 4)</i>

Explanatory Notes:

- 1) Year 2023 starting reserves are as of December 31, 2022; FY2023 starts January 1, 2023 and ends December 31, 2023.
- 2) Reserve Contributions for 2023 are budgeted; 2024 is the first year of recommended contributions.
- 3) 1.3% is the estimated annual rate of return on invested reserves.
- 4) Accumulated year 2053 ending reserves consider the need to fund for replacement of the plaster and complete interior renovation of the Community Center shortly after 2053, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

**FIVE-YEAR OUTLOOK****Burke Station  
Citizens Association  
Burke, Virginia**

Line Item	Reserve Component Inventory	RUL = 0 FY2023	1 2024	2 2025	3 2026	4 2027	5 2028
<b><u>Property Site Elements</u></b>							
4.080	Asphalt Pavement, Walking Paths, Total Replacement, Phased		18,015	18,555			
4.101	Bridges, Wood, Phased		23,690	24,401			
4.160	Concrete Stairs, Phased		11,330	11,670			
<b><u>Community Center Elements</u></b>							
5.400	Furnishings, Phased			6,365			
5.510	Interior, Renovation, Partial			12,731			
<b><u>Pool Elements</u></b>							
6.200	Concrete Deck, Inspections, Partial Replacements and Repairs				38,355		
6.300	Covers, Vinyl				22,390		
6.400	Fences, Chain Link				27,078		
6.500	Furniture, Phased (2023 is Budgeted)	8,400				15,757	
6.600	Mechanical Equipment, Phased (2023 is Budgeted Pump Replacement)	8,700					12,752
6.800	Pool Finishes, Plaster				100,755		
6.870	Shade Structures, Canvas and Frame						19,824
6.970	Underwater Light Fixtures, Main Pool (2023 is Planned)	28,000					
<b>Anticipated Expenditures, By Year (\$3,559,192 over 30 years)</b>		<b>45,100</b>	<b>53,035</b>	<b>73,722</b>	<b>188,578</b>	<b>15,757</b>	<b>32,576</b>



## 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, Repaving

---

**Line Item:** 4.040

**Quantity:** Approximately 1,780 square yards at the Community Center parking area

**History:** Management informs us the Community Center parking area was repaved using the total replacement method of repaving in 2019 for \$68,818.

**Condition:** Good overall



Asphalt pavement parking area overview



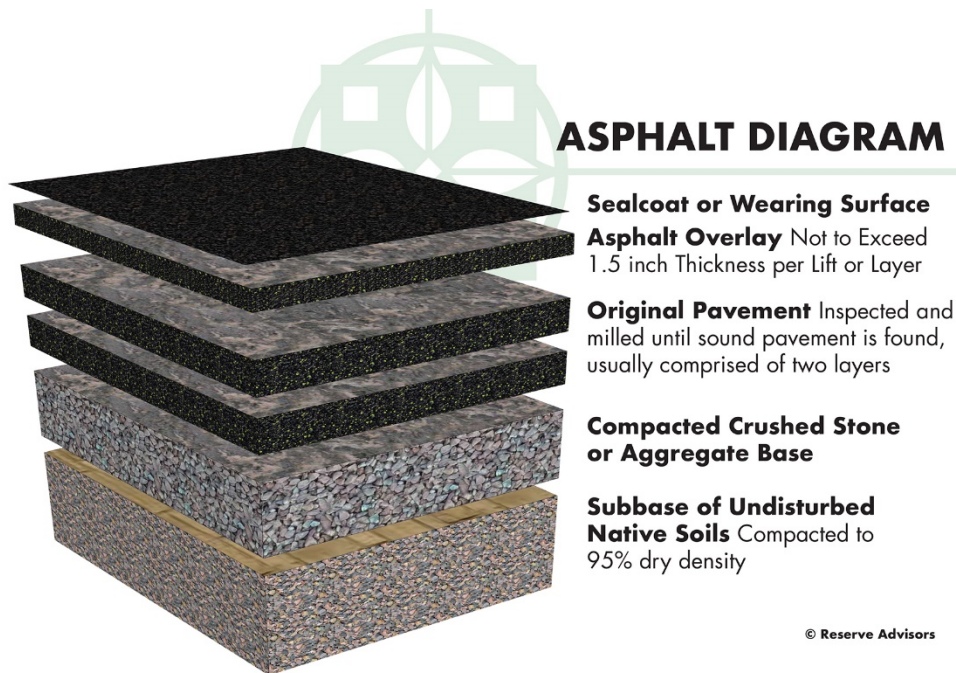
Asphalt pavement parking area overview



**Catch basin overview**

**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 Burke Station:



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 of repaving at Burke Station.

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

- Annually:
  - Inspect for settlement, large cracks and trip hazards, and ensure proper drainage
  - Repair areas which could cause vehicular damage such as potholes
- As needed:
  - 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 includes area patching of up to ten percent (10%). Our cost also includes an allowance for inspections and repairs to the catch basin.

## **Asphalt Pavement, Repaving, Walking Paths**

---

**Line Item:** 4.080

**Quantity:** Approximately 1,320 square yards

**History:** Original to the 1970's; the Association conducted limited repairs in 2018

**Condition:** Poor overall with previous overlays, cracks, organic growth and damage caused by tree roots evident throughout a majority of the walking paths.





**Asphalt pavement walking path overview**



**Asphalt pavement walking path repaired section**



**Asphalt cracks and organic growth**



**Asphalt deterioration**



**Asphalt crack and tree root damage**



**Asphalt crack and tree root damage**

**Useful Life:** 15- to 20-years with the benefit of timely crack repairs and patching, and the need to maintain a safe pedestrian surface

**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.

## Bridges, Wood

---

**Line Item:** 4.101

**Quantity:** Two bridges; the bridge at the North trail comprises approximately 90 square feet of wood decking and 45 linear feet of wood railings and the bridge at the South trail is missing.

**History:** Unknown ages; Management and the Board inform us the missing bridge connecting the South trail and Kara trail has been replaced multiple times in the past.

**Condition:** The wood bridge at the North trail is fair overall with general wood deterioration evident.



Wood bridge, North trail



Damaged bridge connecting South trail and Kara trail

**Useful Life:** 20- to 25-years. The rates and types of deterioration are not uniform due to the nature of wood.

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

- Annually:
  - Inspect to identify and correct any unsafe conditions
  - Secure loose fasteners and replace deteriorated fasteners
  - Replace deteriorated wood components
  - Check railing stability and fasteners
- Every three years:
  - Power wash with algaecide and application of sealer/stain 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. Our unit cost is based on a historic bids and contracts provided by the Association.

## Concrete Curbs and Gutters

---

**Line Item:** 4.110

**Quantity:** Approximately 700 linear feet at the Community Center parking area

**History:** Replaced in 2019 as part of the Community Center parking area renovation project for \$38,373.

**Condition:** Good overall with isolated cracks evident



Concrete curb and gutter overview



Concrete curb and gutter crack

**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:
  - Inspect and repair major cracks, spalls and trip hazards
  - Mark with orange safety paint prior to replacement or repair
  - 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. We estimate that up to 210 linear feet of curbs and



gutters, or thirty percent (30%) of the total, will require replacement during the next 30 years.

## Concrete Stairs

---

**Line Item:** 4.160

**Quantity:** Four concrete stairs are located at the entrances to the walking paths.

**History:** Primarily original; the (#2) stairs on the South trail were replaced in 1994.

**Condition:** Fair to poor overall with uneven stairs and landings, cracks and spalling evident



**Concrete stairs overview, North trail  
(Note: Uneven steps and landings.)**



**Concrete stairs overview, South trail, #1  
(Note: General concrete deterioration and staining.)**



**Concrete stairs overview, South trail, #2**



**Concrete stairs overview, Steps leading from  
Ridge Ford Drive to Burke Station Park  
(Note: This staircase is the responsibility of  
Fairfax County Park Authority.)**

**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:
  - Inspect and repair major cracks, spalls and trip hazards
  - Mark with orange safety paint prior to replacement or repair
  - 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 includes replacement of the existing metal railing at the stairs by the South trail. We do not include costs for installation of additional railings.

## **Fences, Wood, Shadowbox**

---

**Line Item:** 4.285

**Quantity:** Approximately 550 linear feet along the perimeter of the Community Center

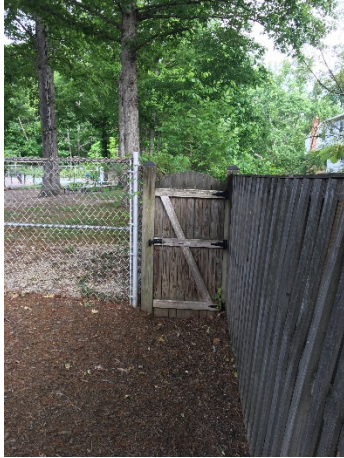
**History:** Installed in approximately 2012

**Condition:** Fair overall with general wood deterioration and wood rot evident. Management informs us rotted, wood posts by the Community Center perimeter have been replaced on an as needed basis through the operating budget.



**Wood perimeter fence overview  
(Note: Previously repaired post.)**





**Wood perimeter fence and gate overview**  
(Note: this image was provided by the Association)



**Overgrown section**  
(Note: this image was provided by the Association)

**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:
  - Inspect and repair loose sections, finish deterioration and damage
  - 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. We recommend funding these partial replacements through the operating budget.

## **Signage, Entrance Monument, Renovation**

---

**Line Item:** 4.800

**Quantity:** The property identification signage includes the following elements:

- Light Fixtures
- Letters
- Landscape
- Approximately 100 square feet of brick masonry

**History:** Primarily original to the 1970's; the Association conducted minor brick repairs and replaced the metal letters in 2016 for \$3,895.

**Condition:** Good to fair overall with efflorescence and general deterioration evident at the brick masonry.



**Entrance monument overview**



**Entrance monument overview**



**Brick masonry efflorescence and deterioration**

**Useful Life:** 15- to 20-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:
  - Inspect and repair damage, vandalism and loose components
  - Verify lighting is working properly
  - 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. Our cost for renovation includes repointing of up to five percent (5.0%) and replacement of up to one percent (1.0%) of the brick masonry and replacement of the remaining components listed above. We recommend funding replacement of the rear entrance sign through the operating budget.

## Community Center Elements



**Community Center overview**



**Storage shed overview**  
*(Note: this image was provided by the Association)*



**Wading pool shed overview**

## Air Handling and Condensing Units, Split System

**Line Item:** 5.070

**Quantity:** One split system services the community center

**History:** Replaced in December of 2020

**Condition:** Reported satisfactory



**Air handling unit overview**



**Condensing unit overview**

**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.

**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.



## Doors

---

**Line Item:** 5.300

**Quantity:** Thirteen doors located at the Community Center and sheds

**History:** Replaced in 2013; the main entrance doors were replaced in 2020

**Condition:** Good to fair overall



**Side entrance doors overview**



**Main entrance doors overview**

**Useful Life:** Up to 30 years

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

- Annually:
  - Inspect and repair any damage, base corrosion or alignment issues
  - Replace deteriorated hardware and loose weather stripping
  - Periodic touch-up paint finish applications 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

## Furnishings

---

**Line Item:** 5.400

**Quantity:** Furnishings and components in the clubhouse include but are not limited to the following elements:

- Ceiling fans (4)
- Chairs
- Folding chairs
- Folding tables
- Refrigerator (1)
- Freezers (2)

**History:** Varied ages

**Condition:** Good to fair overall



**Folding tables overview**

**Useful Life:** Varies significantly up to 20 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Due to varied uses, ages and useful lives, we recommend the Association budget \$6,000 plus inflation for phased replacements of up to fifty percent (50%) of the furnishings per event.

## Interior Renovations

---

**Line Items:** 5.500 and 5.510

**Quantity:** The Community Center interior components include:

- Rubber floor mats
- Tile floor coverings
- Wood laminate floor coverings
- Paint finishes at the walls
- Paint finishes at the ceilings
- Plumbing fixtures
- Light fixtures including exit and emergency lights

- Kitchen cabinets, countertops, and appliances
- Window dressing

**History:** Renovated in 2013

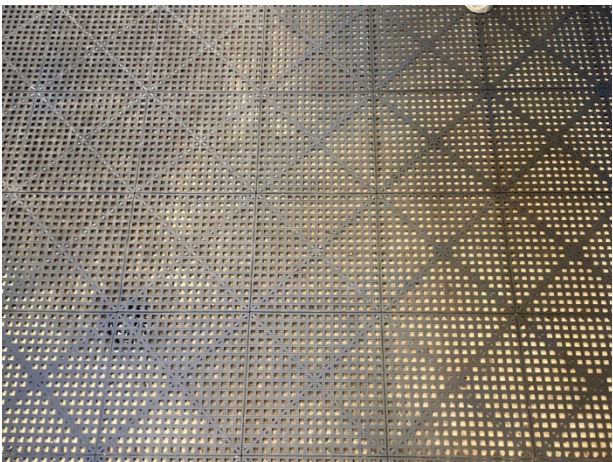
**Condition:** Good to fair overall with general deterioration underneath the rubber mats and isolated scuff marks at the walls evident.



**Community Center interior overview**



**Kitchen interior overview**



**Tile floor covering with rubber mat overview**



**Finish deterioration at the walls**

**Useful Life:** Complete renovation up to every 20 years and partial renovation up to every 10 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
- Replacement of the rubber floor mats



## Rest Rooms

---

**Line Item:** 5.580

**Quantity:** The rest room components include:

- Tile floor coverings
- Light fixtures
- Plumbing fixtures

**History:** Renovated in 2013

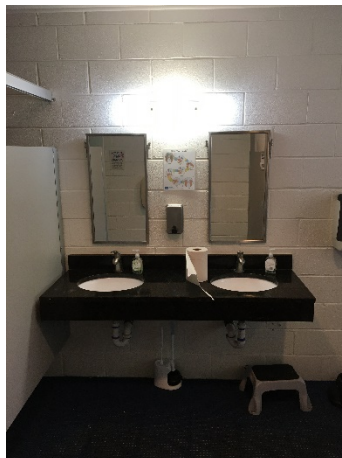
**Condition:** Good to fair overall



**Men's rest room overview**  
*(Note: this image was provided by the Association)*



**Women's rest room overview**  
*(Note: this image was provided by the Association)*



**Women's restroom vanity and mirrors**  
*(Note: this image was provided by the Association)*

**Useful Life:** Renovation every 20- 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. We include allowances for paint finish applications to the walls and ceilings as well as replacement of the rubber floor mats at the restrooms in Line Items 5.500 and 5.510.

## **Roof Assembly, Asphalt Shingles**

---

**Line Item:** 5.600

**Quantity:** Approximately 35 *squares*<sup>1</sup> of asphalt shingles and approximately 230 linear feet of aluminum gutters and downspouts (note this quantity includes the two sheds)

**History:** Replaced in 2013; the Association conducted minor repairs in 2015

**Condition:** Good to fair overall with general asphalt deterioration, staining and isolated shingle lift evident



**Asphalt shingle roof overview**



**Square box vent overview**

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





**Asphalt shingle roof**



**Asphalt shingle lift**



**Asphalt shingle deterioration and staining,  
wading pool shed**



**Asphalt shingle deterioration and staining,  
storage shed**



**Gutter and downspout overview**

**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 replacement of the gutters and downspouts.

## **Security System, Surveillance**

---

**Line Item:** 5.720

**Quantity:** Burke Station utilizes the following security system components:

- Cameras (4)
- Multiplexer (1)
- Recorder (1)

**History:** Management and the Board inform us the security cameras were installed in 2022.

**Condition:** Reported satisfactory without operational deficiencies



**Security camera overview**

**Useful Life:** Up to 15 years

**Preventative Maintenance Notes:** We recommend the Association obtain and adhere to the manufacturer's recommended maintenance plan. 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:

- Monthly:
  - Check cameras for proper focus, fields of view are unobstructed and camera and lenses are clean and dust-free
  - Check recording equipment for proper operation
  - Verify monitors are free from distortion with correct brightness and contrast
- Annually:
  - Check exposed wiring and cables for wear, proper connections and signal transmission
  - Check power connections, and if applicable, functionality of battery power supply systems

**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 replacement of all of the security system components per event.

## **Walls, Siding, Vinyl**

---

**Line Item:** 5.790

**Quantity:** Approximately 1,200 square feet of clapboard double four-inch profile vinyl siding comprises the exterior walls of the Community Center and sheds (note this quantity includes the wood soffit and fascia)

**History:** Replaced in 2013

**Condition:** Good to fair overall with staining evident



**Vinyl siding overview**



**Staining at the sheds**



**Soffit finish deterioration overview**

**Useful Life:** Up to 40 years

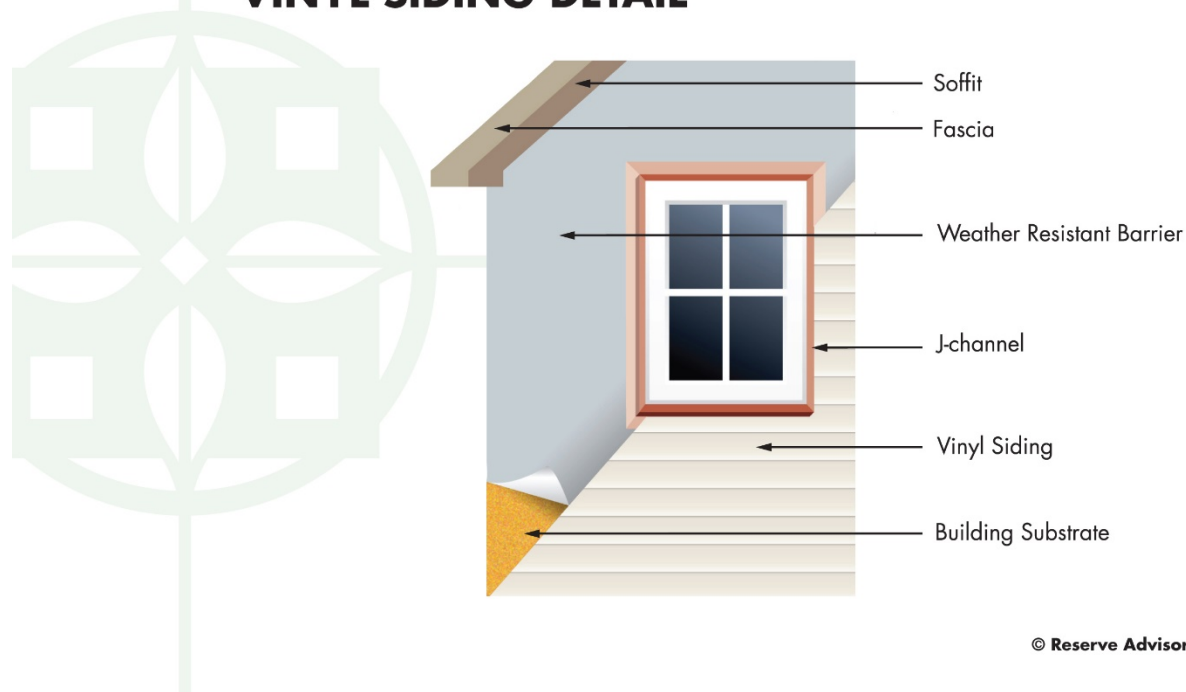
**Component Detail Notes:** The siding at Burke Station consists of the following:

- Clapboard double four-inch profile
- J-channel trim at window and door perimeters, and other penetrations
- Water-vapor permeable building paper protects the buildings

The following diagram details the use of building wrap in a vinyl siding system:



## VINYL SIDING DETAIL



The Association should install new vinyl siding as recommended by the *Vinyl Institute, Inc.* The vinyl siding should be installed over a continuous weather resistant barrier and properly integrated flashing around all penetrations. Fasteners used should include aluminum, galvanized steel or other corrosion-resistant fasteners. Siding panels should overlap by approximately one inch. Joints should be staggered so that no two courses are aligned vertically, unless separated by at least three courses. The siding should not be caulked where the siding meets trim accessories, such as J-channel, or at overlap joints. J-channel should be installed a minimum of ½ inch off of roof lines.

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

- Annually:
  - Inspect and repair loose siding, warping or damage from wind driven objects or lawn care equipment
  - Periodically clean siding as necessary at areas of organic growth. A non-abrasive household cleaner or manufacturer specified vinyl siding cleaner will remove more intense stains. We do not recommend pressure cleaning at vinyl siding due to the siding's brittle nature.

**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.

## Water Heater

---

**Line Item:** 5.795

**Quantity:** One AO Smith DRE-52-12KW-208V 50 Gallon commercial electric water heater services the Community Center

**History:** Replaced in approximately 2014

**Condition:** Reported satisfactory without operational deficiencies



**Water heater overview**

**Useful Life:** 15- to 20-years

**Component Detail Notes:** The heater has an input capacity of 41-MBH (thousand British Thermal Units per hour) to generate domestic hot water.

**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.

## Windows

---

**Line Item:** 5.800

**Quantity:** The eight windows at the Community Center comprise approximately 80 square feet

**History:** Replaced in 2013

**Condition:** Good overall



**Window overview**

**Useful Life:** Up to 35 years

**Component Detail Notes:** Construction of the windows and doors at the clubhouse includes the following:

- Vinyl frames
- Sliding windows with screens

**Priority/Criticality:** Not recommended to defer



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

## Pool Elements

### Concrete Deck

---

**Line Item:** 6.200

**Quantity:** 11,700 square feet

**History:** Approximately fifty percent (50%) of the deck is original to the 1970's and the remaining fifty percent (50%) has been replaced on a case by case basis in the past.

**Condition:** Fair overall with previous repairs, staining and general deterioration evident



Concrete deck overview



Concrete deck previous repairs



Concrete deck previous repairs and staining



Concrete deck previous repairs and staining

**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 deck every 8- to 12-years.

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

- Semi-annually:
  - Inspect and repair large cracks, trip hazards, and possible safety hazards
  - Inspect and repair pool coping for cracks, settlement, heaves or sealant deterioration
  - Repair concrete spalling and conduct coating repairs in areas with delamination
  - 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 twenty percent (20%) of concrete
- Crack repairs as needed
- Mortar joint repairs
- Caulk replacement
- Coating replacement

## Covers, Vinyl

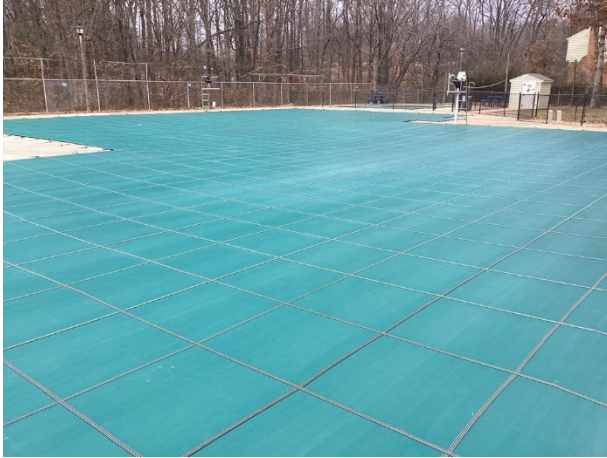
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**Line Item:** 6.300

**Quantity:** The main pool cover is approximately 6,390 square feet and the wading pool cover is approximately 440 square feet, totaling approximately 6,830 square feet of vinyl pool covers

**History:** The main and wading pool covers were installed in 2012

**Condition:** Good to fair overall



**Main pool cover overview**



**Wading pool cover overview**

**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.

## **Fences, Chain Link**

---

**Line Item:** 6.400

**Quantity:** The pool area comprises approximately 730 linear feet of six feet high, security chain link fences surrounding the deck perimeter and approximately 450 linear feet of four feet high, safety chain link fences surrounding the main pool and wading pool with five pedestrian gates.

**History:** Original to the 1970's; Management and the Board inform us paint finishes to the four feet high, chain link fences have been historically funded through the operating budget

**Condition:** Fair overall with rust evident at the larger chain link fences and finish deterioration evident at the smaller chain link fences





**Security chain link fence overview**



**Security chain link gates overview**



**Rust at security chain link fence**



**Safety chain link fence overview**



**Finish deterioration at wading pool fence**



**Main pool chain link gate**

**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:
  - Inspect and repair loose sections, and damage
  - 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. We recommend the Association fund paint finishes through the operating budget.

## Furniture

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**Line Item:** 6.500

**Quantity:** The pool furniture includes the following:

- Diving board (1); replaced in 2022
- Life guard stand (3); one replaced in 2016 and one replaced in 2012
- Lounges (50)
- Side tables (30)
- Slide (1); replaced in 2018
- Tables (Two metal tables and four plastic tables)
- Umbrellas and bases (2)
- Ladders (4) and life safety equipment; the ladders were replaced in 2019 and 2022

**History:** Varying ages; the Association budgeted \$8,400 for partial replacements in 2023

**Condition:** Good to fair overall



**Vinyl lounges overview**  
 (Note: this image was provided by the Association)



**Metal table and umbrella base overview**



**Plastic tables overview**



**Life guard stand overview**



**Diving board overview,**  
*(Note: this image was provided by the Association)*



**Slide overview**

**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. We recommend interim re-strapping, refinishing, cushion replacements, reupholstering and other repairs to the furniture as normal maintenance to maximize its useful life. We recommend the Association budget \$12,500 plus inflation for phased replacements of up to twenty five percent (25%) of the pool furniture per event.

## **Mechanical Equipment**

---

**Line Item:** 6.600

**Quantity:** The mechanical equipment includes the following:



- Automatic chlorinators and controls
- Electrical panels
- Interconnected pipe, fittings and valves
- Pumps and filters

**History:** Varied ages; the filters, pumps and piping at the main pool date to 2010. The filter and pipes at the wading pool were moved to its current location in 2012 and the pumps were replaced in 2022. The Association plans to replace the main pool pumps in 2023 for \$8,700. Management and the Board inform us the main pool chlorinator is replaced on an annual basis through the operating budget.

**Condition:** Reported satisfactory overall



**Pump and filter overview, wading pool**



**Main pool filters overview**

**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. Failure of the pool mechanical equipment as a single event is unlikely. Therefore, we include replacement of up to fifty percent (50%) of the equipment per event. We consider interim replacement of motors and minor repairs as normal maintenance.

## **Pool Finishes, Plaster**

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**Line Item:** 6.800

**Quantity:** Approximately 6,830 square feet of plaster based on the horizontal surface area.

**History:** The plaster at the shallow end of the main pool was replaced in 2022 and the plaster at the deep end was replaced in 2016. The plaster at the wading pool was replaced in 2016.

**Condition:** Fair overall with deterioration and peeling as informed by Management and the Board.

**Useful Life:** 8- to 12-years

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

- Semi-annually:
  - Inspect and patch areas of significant plaster delamination, coping damage and structure cracks
  - Inspect main drain connection and anti-entrapment covers, pressure test circulation piping and valves
  - 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. To maintain the integrity of the pool structures, we recommend the Association budget for the following:

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

The near-term event includes plastering of up to one hundred percent (100%) of the pool surfaces at the recommendation of *Titan Pool Service*.

## **Shade Structure**

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**Line Items:** 6.865 and 6.870

**Quantity:** Three each

**History:**

- Canvas: Installed in 2014
- Frame: Installed in 2014

**Condition:** The frames are in good to fair overall condition.



**Shade structure frame overview**



**Shade structure frame overview**

**Useful Life:** Up to 30 years with interim replacement of the canvas every 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.

## **Structures and Deck**

---

**Line Item:** 6.900

**Quantity:** 6,830 square feet of horizontal surface area

**History:** The pool structure is original; approximately fifty percent (50%) of the deck has been replaced in the past

**Conditions:** Good to fair overall condition as reported by Management and the Board. The concrete floor and walls have a plaster finish. This finish makes it difficult to thoroughly inspect the concrete structure during a noninvasive visual inspection.

**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 Burke Station plan to replace the following components:



- Concrete decks
- Pool structure
- Skimmers
- 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. Our cost for replacement of the pool structure includes an allowance for tile and plaster.

## Underwater Light Fixtures, Main Pool

---

**Line Item:** 6.970

**History:** Management and the Board inform us the Association plans to install up to nine LED light fixtures at the main pool in 2023 for approximately \$28,000.

**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 fund future, interim replacement of the light fixtures through the operating budget.

## 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.

Burke Station 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 annual 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 standards<sup>1</sup> set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level I Full Reserve Study." 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
- Local<sup>2</sup> 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 Burke, Virginia at an annual inflation rate<sup>3</sup>. Isolated or regional markets of greater

<sup>1</sup> Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

<sup>2</sup> See Credentials for additional information on our use of published sources of cost data.

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

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

- The past and current maintenance practices of Burke Station 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.

**GENE J. KIM**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Gene J. Kim, a Mechanical Engineer, is an Advisor for Reserve Advisors. Mr. Kim 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 condominiums, townhomes and homeowner associations.



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

**Harbour House Condominium** Located along the Ludlam Bay in Sea Isle City, New Jersey, this four-story midrise building, comprising 15 residential units, was built in 1991 and includes floating docks and bulkheads as well as an open garage.

**Westwood Village Condominium Association** This community in Danbury, Connecticut was built in the 1980's and contains five condominium style buildings comprising 100 residential units as well as 194 townhome style units in 29 buildings. The property includes two pools and pool houses.

**Strawberry Fields Condominium Association** A condominium style development in South Windsor, Connecticut, this community includes 38 units in 12 three story buildings built from 2001 to 2007. Residents have access to a barn style clubhouse which includes a kitchen, exercise room and large wood deck. The site contains asphalt pavement streets, driveways and parking areas as well as a lift station.

**The Enclave at Arundel Preserve** Located in Hanover, Maryland, this community was built in 2007 and consists of 448 townhomes. This large community contains multiple wet and dry ponds, municipal and private streets as well as a clubhouse, dog park, tennis court, pool and playgrounds.

**Council of Unit Owners of Stonecreek Condominium at Russett, Inc.** This condominium style development with five buildings and 126 units showcases various wall facades including vinyl, ashlar stone veneer and cedar shake siding. Located in Laurel, Maryland, the buildings contain common split systems, elevators and intercom panels as well as life safety elements.

**Valley View Homeowners Association** This townhome style development in West Chester, Pennsylvania was built between 1999 and 2003. The community comprises 131 units in 21 buildings and the property contains detention basins and numerous trees.

**Ulmstead Gardens Community Association, Inc.** Located in Arnold, Maryland, 237 townhome community was built in 1984 and contain timber, stone gabion and masonry retaining walls.

**PRIOR RELEVANT EXPERIENCE**

Before joining Reserve Advisors, Mr. Kim attended Rensselaer Polytechnic Institute in Troy, New York where he attained his Bachelor of Science degree in Mechanical Engineering. His studies focused on mechanical systems engineering and design engineering. Mr. Kim also worked as a mechanical product design intern for Matter Concept LLC, where he took part in designing and developing survival, military and law enforcement products in Brooklyn, New York.

**EDUCATION**

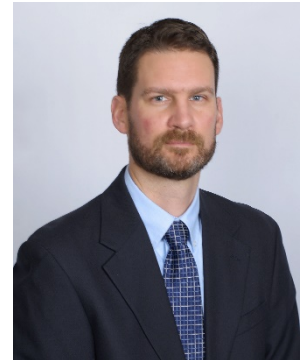
Rensselaer Polytechnic Institute - B.S. Mechanical Engineering

**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





## 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](http://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](http://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](http://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](http://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 Burke Station 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) Burke Station 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 property.

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. The report is 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, and/or occupancy.

RA is not responsible for conditions that have changed between the time of inspection and the issuance of the Report. 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. You agree to indemnify and hold RA harmless against and from any and all losses, claims, actions, damages, expenses or liabilities, including reasonable attorneys' fees, to which we may become subject in connection with this engagement, because of any false, misleading or incomplete information which we have relied upon 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. Your obligation for indemnification and reimbursement shall extend to any director, officer, employee, affiliate, or agent of RA. Liability of RA and its employees, affiliates, and agents for errors and omissions, if any, in this work is limited to the amount of its compensation for the work performed in this engagement.

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. 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 completes the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations 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.

**Your Obligations** - You agree to provide us access to the subject property for an on-site visual 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. 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. 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** - The retainer payment is due upon authorization and prior to inspection. The balance is due net 30 days from the report shipment date. 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.