

# Legends at Grove City Condominium Association

Inspected: April 25, 2024 • Revised on: June 27, 2024  
Grove City, PA

FULL RESERVE STUDY



*The*  
**Legends**  
*at Grove City*

Legends at Grove City Condominium Association  
Grove City, Pennsylvania

Dear Board of Directors of Legends at Grove City Condominium Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Legends at Grove City Condominium Association in Grove City, Pennsylvania and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, April 25, 2024.

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 Legends at Grove City Condominium 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 June 27, 2024 by

*Reserve Advisors, LLC*

Visual Inspection and Report by: Joseph Coffee, RS<sup>1</sup>

Review by: Stephen E. Breski, RS, Director of Engineering Training and Development  
Alan M. Ebert, RS, PRA<sup>2</sup>, Director of Quality Assurance



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

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



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# 1. RESERVE STUDY EXECUTIVE SUMMARY

**Client:** Legends at Grove City Condominium Association (Legends at Grove City)

**Location:** Grove City, Pennsylvania

**Reference:** 234178

**Property Basics:** Legends at Grove City Condominium Association is a homeowners association which is responsible for the common elements shared by 55 single family homes. The community was built from 2005 to 2008.

**Reserve Components Identified:** Legends at Grove City uses multiple cost centers. We identify the following number of Reserve Components per cost center

- **Multifamily Expenditures:** Eight Reserve Components
- **Common Expenditures:** 25 Reserve Components

**Inspection Date:** April 25, 2024.

**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.

- **Multifamily:** Our recommended Cash Flow Funding Plan recognizes multiple threshold funding years
- **Common:** Our recommended Cash Flow Funding Plan recognizes this threshold funding year in 2041 due to the replacement of the asphalt shingle roofs. In addition, the Reserve Funding Plan recommends 2054 year end accumulated reserves of approximately \$434,900. We judge this amount of accumulated reserves in 2054 necessary to fund the likely repaving of the of the streets after 2054. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount of accumulated 2054 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
- 2.0% anticipated annual rate of return on invested reserves
- 3.0% future Inflation Rate for estimating Future Replacement Costs

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

- **Multifamily Priority Projects:**
  - Phased roof replacements
  - Replacement of sealants as needed
  - Repaving of the asphalt pavement driveways
- **Common Priority Projects:**
  - Clubhouse roof replacement
  - Replacement of grinder pumps as needed
  - Replacement of sealants as needed
  - Repairs and gravel replenishment at the gravel access drive



**Multifamily Cost Center**

**Unaudited Cash Status of Reserve Fund:**

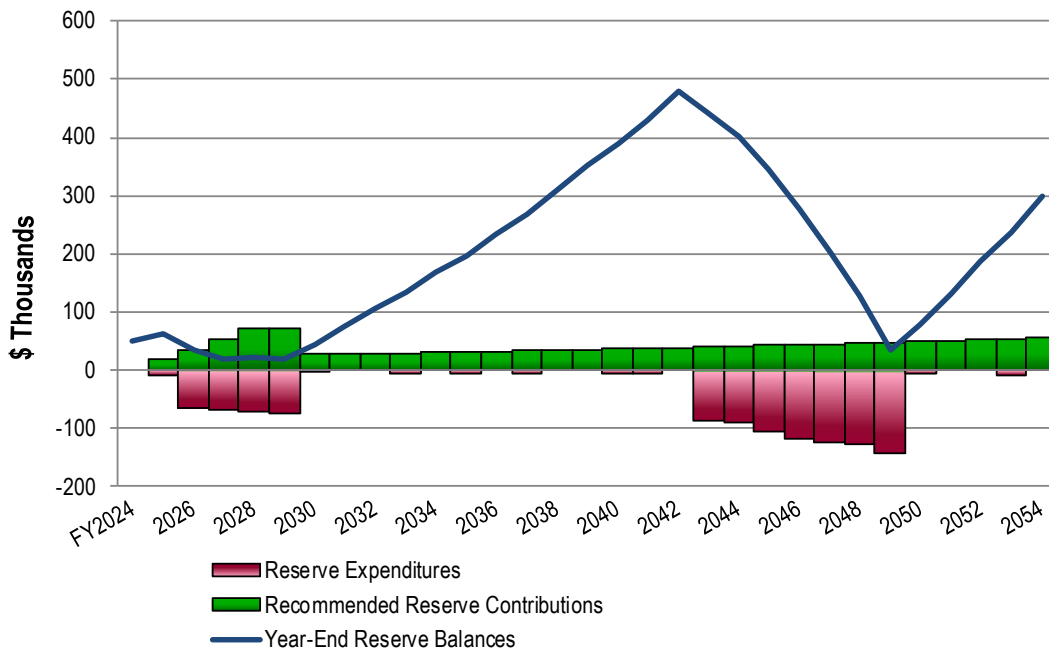
- \$50,000 as of June 12, 2024
- The Association did not budget Reserve Contributions in 2024.
- A potential deficit in reserves might occur by 2026 based upon the most recent annual reserve contribution of \$0 and the identified Reserve Expenditures.

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

- Phased increases of \$18,000 from 2025 through 2028
- Stable contributions of \$72,000 in 2029
- Decrease to \$27,500 by 2030 due to fully funding for repaving of the driveways
- Inflationary increases thereafter through 2054, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$18,000 represents an average monthly increase of \$27.27 per owner and about a thirteen percent (12.9%) adjustment in the 2024 total Operating Budget of \$139,296.

**Recommended Reserve Funding Table and Graph**

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2025	18,000	62,351	2035	31,800	197,108	2045	42,700	345,026
2026	36,000	33,487	2036	32,800	234,178	2046	44,000	276,313
2027	54,000	20,231	2037	33,800	267,957	2047	45,300	203,936
2028	72,000	22,836	2038	34,800	308,464	2048	46,700	127,816
2029	72,000	20,375	2039	35,800	350,791	2049	48,100	35,153
2030	27,500	44,940	2040	36,900	390,214	2050	49,500	79,316
2031	28,300	74,422	2041	38,000	430,722	2051	51,000	132,412
2032	29,100	105,301	2042	39,100	478,827	2052	52,500	188,085
2033	30,000	133,227	2043	40,300	441,026	2053	54,100	238,396
2034	30,900	167,101	2044	41,500	401,039	2054	55,700	299,421





**Common Cost Center**

**Unaudited Cash Status of Reserve Fund:**

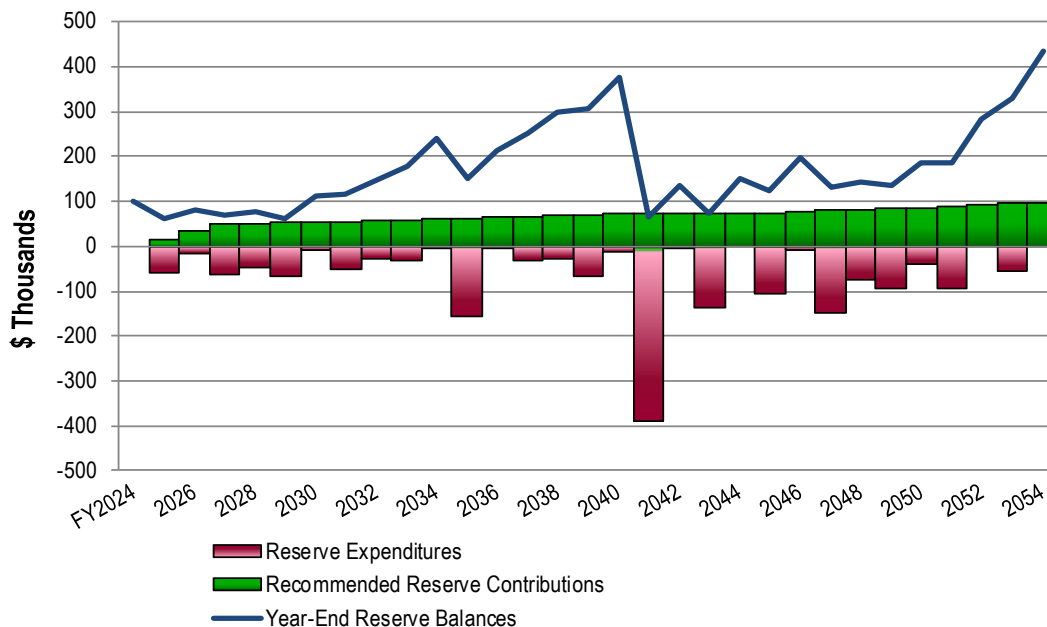
- \$100,000 as of June 12, 2024
- The Association did not budget Reserve Contributions in 2024.
- A potential deficit in reserves might occur by 2027 based upon the most recent annual reserve contribution of \$0 and the identified Reserve Expenditures.

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

- Phased increases of \$16,500 from 2025 through 2027
- Inflationary increases from 2028 through 2041
- Stable contributions of \$74,900 from 2042 through 2045
- Inflationary increases thereafter through 2054, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$16,500 represents an average monthly increase of \$25.00 per owner and about a twelve percent (11.8%) adjustment in the 2024 total Operating Budget of \$139,296.

**Recommended Reserve Funding Table and Graph**

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2025	16,500	61,783	2035	62,700	150,219	2045	74,900	125,018
2026	33,000	80,276	2036	64,600	213,429	2046	77,100	198,616
2027	49,500	70,293	2037	66,500	251,045	2047	79,400	133,193
2028	51,000	75,920	2038	68,500	297,753	2048	81,800	143,126
2029	52,500	62,775	2039	70,600	306,093	2049	84,300	136,921
2030	54,100	110,772	2040	72,700	375,026	2050	86,800	188,011
2031	55,700	115,893	2041	74,900	65,121	2051	89,400	185,707
2032	57,400	146,937	2042	74,900	136,055	2052	92,100	282,442
2033	59,100	179,520	2043	74,900	74,690	2053	94,900	329,673
2034	60,900	239,868	2044	74,900	151,833	2054	97,700	434,943







## 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

### **Legends at Grove City Condominium Association**

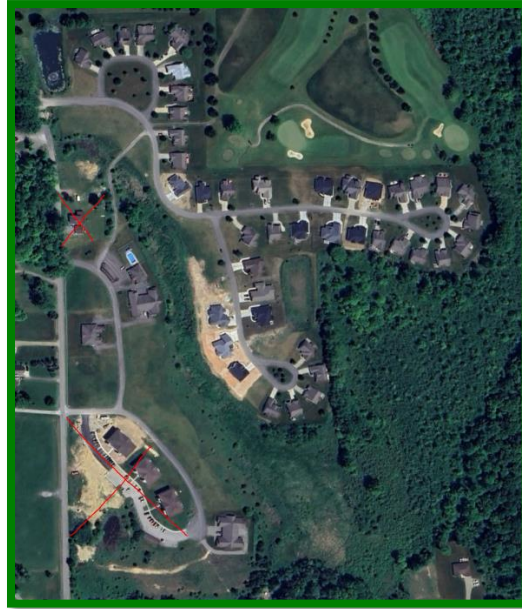
#### **Grove City, Pennsylvania**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, April 25, 2024.

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 or which were identified as part of your request for proposed services. 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 Owners 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 the Board. These classes of property include:

- Reserve Components
- Long-Lived Property Elements
- Operating Budget Funded Repairs and Replacements
- Property Maintained by Owners
- 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. Reserve Components are defined by CAI as property elements with:

- Legends at Grove City responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

The following tables depict the items excluded from the Reserve Expenditure plan:

## Excluded Components

for  
**Legends at Grove City  
 Condominium Association**  
Grove City, Pennsylvania

### Operating Budget Components

Repairs normally funded through the Operating Budget and Expenditures less than \$2,500 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)

The 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.

- Catch Basins, Landscape
- Concrete Sidewalks, Concrete Sidewalks
- Detention Pond, Maintenance
- Irrigation System, Controls and Maintenance
- Landscape
- Light Poles and Fixtures, Unit Fronts (Per the Board)
- Mailbox Stations
- Paint Finishes, Touch Up
- Signage, Street and Traffic
- Walls, Facade, Masonry

### Long-Lived Components

These elements may not have predictable Remaining Useful Lives or their replacement may occur beyond the scope of this 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.

	Useful Life	Estimated Cost
• Electrical Systems, Common	Indeterminate	N/A
• Foundations, Common	Indeterminate	N/A
• Pipes, Subsurface Utilities, Laterals	Indeterminate	N/A
• Pool Deck and Structure	to 60	N/A
• Structural Frames, Common	Indeterminate	N/A

### Owners Responsibility Components

Certain items have been designated as the responsibility of the Owners to repair or replace at their cost, including items billed back.

- Light Fixtures, Building Exteriors (Multi Family Buildings)
- Shutters, Vinyl (Multi Family Buildings)
- Single Family Homes and Lots

## **Excluded Components**

for  
**Legends at Grove City  
Condominium Association**  
Grove City, Pennsylvania

<b>Owners Responsibility Components (Continued)</b>

<b>Others Responsibility Components</b>
Certain items have been designated as the responsibility of Others to repair or replace.
<ul style="list-style-type: none"><li>• Apartment Buildings and Associated Elements<sup>1</sup></li><li>• Single Family Home and Lot, Northwest of Clubhouse<sup>1</sup></li></ul>
<sup>1</sup> Separate Entity

### **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
- 2024 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***.



**Multifamily**  
**RESERVE EXPENDITURES**

**Legends at Grove City  
Condominium Association**  
Grove City, Pennsylvania

**Explanatory Notes:**

- 1) **3.0%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) **FY2024** is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.

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 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039	
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																		
<b>Exterior Building Elements</b>																												
1.240	1,600	533	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2026	15 to 20	2 to 4	13.00	6,933	20,800	5.7%			7,356	7,576	7,803												
1.280	290	97	Squares	Roofs, Asphalt Shingles, Phased	2026	15 to 20	2 to 4	570.00	55,102	165,300	45.2%			58,458	60,211	62,018												
1.540	1,200	600	Linear Feet	Sealants, Windows and Doors, Phased	2025	to 20	1 to 11	6.50	3,900	7,800	1.5%	4,017											5,399					
1.860	7,500	2,500	Square Feet	Walls, Siding, Vinyl, Phased	2043	to 40	19 to 21	12.00	30,000	90,000	14.5%																	
1.980	740	247	Square Feet	Windows and Doors, Phased	2043	to 40	19 to 21	80.00	19,734	59,200	9.5%																	
<b>Property Site Elements</b>																												
4.020	1,700	1,700	Square Yards	Asphalt Pavement, Crack Repair and Patch, Driveways	2025	3 to 5	1	2.00	3,400	3,400	3.6%	3,502								4,436					4,993			
4.045	1,700	1,700	Square Yards	Asphalt Pavement, Total Replacement, Driveways	2029	15 to 20	5	38.00	64,600	64,600	18.7%						74,889											
4.130	10	1	Each	Concrete Patios, Partial	2030	to 65	6 to 30+	3,000.00	3,000	30,000	1.3%							3,582										
<b>Anticipated Expenditures, By Year (\$1,122,067 over 30 years)</b>												0	7,519	65,813	67,788	69,821	74,889	3,582	0	0	4,436	0	5,399	0	4,993	0	0	

**Multifamily**  
**RESERVE EXPENDITURES**

**Legends at Grove City  
Condominium Association**  
Grove City, Pennsylvania

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 2040	17 2041	18 2042	19 2043	20 2044	21 2045	22 2046	23 2047	24 2048	25 2049	26 2050	27 2051	28 2052	29 2053	30 2054
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																
<b>Exterior Building Elements</b>																										
1.240	1,600	533	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2026	15 to 20	2 to 4	13.00	6,933	20,800	5.7%							13,285	13,683	14,094						
1.280	290	97	Squares	Roofs, Asphalt Shingles, Phased	2026	15 to 20	2 to 4	570.00	55,102	165,300	45.2%							105,581	108,748	112,011						
1.540	1,200	600	Linear Feet	Sealants, Windows and Doors, Phased	2025	to 20	1 to 11	6.50	3,900	7,800	1.5%							7,255								
1.860	7,500	2,500	Square Feet	Walls, Siding, Vinyl, Phased	2043	to 40	19 to 21	12.00	30,000	90,000	14.5%			52,605	54,183	55,809										
1.980	740	247	Square Feet	Windows and Doors, Phased	2043	to 40	19 to 21	80.00	19,734	59,200	9.5%			34,603	35,641	36,710										
<b>Property Site Elements</b>																										
4.020	1,700	1,700	Square Yards	Asphalt Pavement, Crack Repair and Patch, Driveways	2025	3 to 5	1	2.00	3,400	3,400	3.6%		5,620			6,325				7,119				8,012		
4.045	1,700	1,700	Square Yards	Asphalt Pavement, Total Replacement, Driveways	2029	15 to 20	5	38.00	64,600	64,600	18.7%									135,258						
4.130	10	1	Each	Concrete Patios, Partial	2030	to 65	6 to 30+	3,000.00	3,000	30,000	1.3%	4,814													6,470	
<b>Anticipated Expenditures, By Year (\$1,122,067 over 30 years)</b>												4,814	5,620	0	87,208	89,824	106,099	118,866	122,432	126,105	142,377	6,470	0	0	8,012	0

# RESERVE FUNDING PLAN

## Multifamily

### CASH FLOW ANALYSIS

#### Legends at Grove City

#### Condominium Association

#### Grove City, Pennsylvania

Individual Reserve Budgets & Cash Flows for the Next 30 Years

	FY2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
<b>Reserves at Beginning of Year</b>	(Note 1) 50,000	50,750	62,351	33,487	20,231	22,836	20,375	44,940	74,422	105,301	133,227	167,101	197,108	234,178	267,957	308,464
<b>Total Recommended Reserve Contributions</b>	(Note 2) 0	18,000	36,000	54,000	72,000	72,000	27,500	28,300	29,100	30,000	30,900	31,800	32,800	33,800	34,800	35,800
<b>Estimated Interest Earned, During Year</b>	(Note 3) 750	1,120	949	532	426	428	647	1,182	1,779	2,362	2,974	3,606	4,270	4,972	5,707	6,527
<b>Anticipated Expenditures, By Year</b>	0	(7,519)	(65,813)	(67,788)	(69,821)	(74,889)	(3,582)	0	0	(4,436)	0	(5,399)	0	(4,993)	0	0
<b>Anticipated Reserves at Year End</b>	<u>\$50,750</u>	<u>\$62,351</u>	<u>\$33,487</u>	<u>\$20,231</u>	<u>\$22,836</u>	<u>\$20,375</u>	<u>\$44,940</u>	<u>\$74,422</u>	<u>\$105,301</u>	<u>\$133,227</u>	<u>\$167,101</u>	<u>\$197,108</u>	<u>\$234,178</u>	<u>\$267,957</u>	<u>\$308,464</u>	<u>\$350,791</u>
Predicted Reserves based on 2024 funding level of:	\$0	50,750	44,171	(21,417)	(90,311)	(NOTE 5)	(NOTE 5)	(NOTE 5)								

(continued)

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

	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
<b>Reserves at Beginning of Year</b>	350,791	390,214	430,722	478,827	441,026	401,039	345,026	276,313	203,936	127,816	35,153	79,316	132,412	188,085	238,396
<b>Total Recommended Reserve Contributions</b>	36,900	38,000	39,100	40,300	41,500	42,700	44,000	45,300	46,700	48,100	49,500	51,000	52,500	54,100	55,700
<b>Estimated Interest Earned, During Year</b>	7,337	8,128	9,005	9,107	8,337	7,387	6,152	4,755	3,285	1,614	1,133	2,096	3,173	4,223	5,325
<b>Anticipated Expenditures, By Year</b>	(4,814)	(5,620)	0	(87,208)	(89,824)	(106,099)	(118,866)	(122,432)	(126,105)	(142,377)	(6,470)	0	0	(8,012)	0
<b>Anticipated Reserves at Year End</b>	<u>\$390,214</u>	<u>\$430,722</u>	<u>\$478,827</u>	<u>\$441,026</u>	<u>\$401,039</u>	<u>\$345,026</u>	<u>\$276,313</u>	<u>\$203,936</u>	<u>\$127,816</u>	<u>\$35,153</u>	<u>\$79,316</u>	<u>\$132,412</u>	<u>\$188,085</u>	<u>\$238,396</u>	<u>\$299,421</u>
										(NOTE 5)					(NOTE 4)

**Explanatory Notes:**

- 1) Year 2024 starting reserves are as of June 12, 2024; FY2024 starts January 1, 2024 and ends December 31, 2024.
- 2) Reserve Contributions for 2024 are the remaining budgeted 9 months; 2025 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2024 is a partial year of interest earned.
- 4) Accumulated year 2054 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

**Multifamily**  
**FIVE-YEAR OUTLOOK**

**Legends at Grove City  
Condominium Association**

Grove City, Pennsylvania

Line Item	Reserve Component Inventory	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029
<b><u>Exterior Building Elements</u></b>							
1.240	Gutters and Downspouts, Aluminum, Phased			7,356	7,576	7,803	
1.280	Roofs, Asphalt Shingles, Phased			58,458	60,211	62,018	
1.540	Sealants, Windows and Doors, Phased		4,017				
<b><u>Property Site Elements</u></b>							
4.020	Asphalt Pavement, Crack Repair and Patch, Driveways		3,502				
4.045	Asphalt Pavement, Total Replacement, Driveways						74,889
<b>Anticipated Expenditures, By Year (\$1,122,067 over 30 years)</b>		0	7,519	65,813	67,788	69,821	74,889

**Common**  
**RESERVE EXPENDITURES**

**Legends at Grove City  
Condominium Association**  
Grove City, Pennsylvania

**Explanatory Notes:**

- 1) **3.0%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) **FY2024** is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.

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 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																	
<b>Exterior Clubhouse Elements</b>																											
1.242	300	300	Linear Feet	Gutters and Downspouts, Material, Phased	2028	15 to 20	4	13.00	3,900	3,900	0.7%					4,389											
1.282	40	40	Squares	Roofs, Asphalt Shingles, Phased	2028	15 to 20	4	570.00	22,800	22,800	4.0%				25,662												
1.542	200	200	Linear Feet	Sealants, Windows and Doors, Phased	2025	to 20	1	6.50	1,300	1,300	0.2%	1,339															
1.862	500	500	Square Feet	Walls, Siding, Vinyl	2043	to 40	19	12.00	6,000	6,000	0.6%																
1.982	240	240	Square Feet	Windows and Doors, Phased	2043	varies	19	80.00	19,200	19,200	1.8%																
<b>Building Services Elements</b>																											
3.700	57	6	Each	Grinder Pumps, Phased	2025	15 to 25	1 to 19	4,000.00	22,800	228,000	30.2%	23,484		24,914		26,431		28,041		29,749		31,561		33,483		35,522	
<b>Property Site Elements</b>																											
4.010	450	450	Square Yards	Access Drive, Gravel	2025	4 to 6	1	9.00	4,050	4,050	2.1%	4,172					4,836					5,606					
4.022	11,000	11,000	Square Yards	Asphalt Pavement, Crack Repair and Patch	2027	3 to 5	3	1.00	11,000	11,000	6.8%			12,020				13,529				15,227				17,138	
4.040	11,000	11,000	Square Yards	Asphalt Pavement, Mill and Overlay, Streets	2041	15 to 20	17	18.50	203,500	203,500	18.5%																
4.260	780	780	Linear Feet	Fence, Vinyl	2029	15 to 20	5	17.00	13,260	13,260	2.3%						15,372										
4.500	1	1	Allowance	Landscape, Partial Replacements	2029	to 10	5	10,000.00	10,000	10,000	2.6%						11,593									15,580	
4.700	1	1	Each	Pond, Aerator	2028	10 to 15	4	4,900.00	4,900	4,900	0.8%				5,515												
4.710	700	105	Linear Feet	Pond, Erosion Control, Partial	2032	to 15	8	57.00	5,985	39,900	1.1%								7,582								
4.730	2,700	675	Square Yards	Pond, Sediment Removal, Partial	2032	to 30	8	25.00	16,875	67,500	1.2%								21,377								
4.800	1	1	Allowance	Signage, Renovation	2043	15 to 20	19	15,000.00	15,000	15,000	1.4%																
<b>Interior Clubhouse Elements</b>																											
5.070	2	2	Each	Air Handling and Condensing Units, Split Systems	2027	15 to 20	3	11,000.00	22,000	22,000	3.7%			24,040													
5.160	1	1	Allowance	Exercise Equipment	2028	5 to 15	4	10,000.00	10,000	10,000	2.6%				11,255											15,126	
5.500	1	1	Allowance	Interior Renovations, Complete	2035	to 20	11	75,000.00	75,000	75,000	5.7%											103,818					
5.510	1	1	Allowance	Interior Renovations, Partial	2025	to 10	1	28,000.00	28,000	28,000	4.4%	28,840															
<b>Pool Elements</b>																											
6.200	1,000	1,000	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2030	8 to 12	6	2.50	2,500	2,500	0.7%						2,985										
6.300	700	700	Square Feet	Cover, Vinyl	2026	6 to 8	2	5.00	3,500	3,500	1.2%			3,713								4,704					
6.400	250	250	Linear Feet	Fence	2029	15 to 20	5	47.00	11,750	11,750	2.1%						13,621										
6.500	1	1	Allowance	Furniture	2026	to 12	2	8,000.00	8,000	8,000	2.1%			8,487												12,101	
6.600	2	1	Allowance	Mechanical Equipment, Phased	2026	to 15	2	3,500.00	3,500	7,000	0.8%			3,713								4,990					
6.800	610	610	Square Feet	Pool Finish, Vinyl	2031	8 to 12	7	15.00	9,150	9,150	2.6%						11,253										
<b>Anticipated Expenditures, By Year (\$1,821,961 over 30 years)</b>												0	57,835	15,914	60,974	46,821	67,018	7,821	52,823	28,958	29,749	4,704	156,211	4,990	33,483	27,227	68,239



**Common**  
**RESERVE EXPENDITURES**

**Legends at Grove City  
Condominium Association**  
Grove City, Pennsylvania

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 2040	17 2041	18 2042	19 2043	20 2044	21 2045	22 2046	23 2047	24 2048	25 2049	26 2050	27 2051	28 2052	29 2053	30 2054	
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																	
<b>Exterior Clubhouse Elements</b>																											
1.242	300	300	Linear Feet	Gutters and Downspouts, Material, Phased	2028	15 to 20	4	13.00	3,900	3,900	0.7%															7,928	
1.282	40	40	Squares	Roofs, Asphalt Shingles, Phased	2028	15 to 20	4	570.00	22,800	22,800	4.0%																46,348
1.542	200	200	Linear Feet	Sealants, Windows and Doors, Phased	2025	to 20	1	6.50	1,300	1,300	0.2%						2,418										
1.862	500	500	Square Feet	Walls, Siding, Vinyl	2043	to 40	19	12.00	6,000	6,000	0.6%				10,521												
1.982	240	240	Square Feet	Windows and Doors, Phased	2043	varies	19	80.00	19,200	19,200	1.8%				33,667												
<b>Building Services Elements</b>																											
3.700	57	6	Each	Grinder Pumps, Phased	2025	15 to 25	1 to 19	4,000.00	22,800	228,000	30.2%		37,685		39,980		42,415		44,998		47,738		50,645		53,730		
<b>Property Site Elements</b>																											
4.010	450	450	Square Yards	Access Drive, Gravel	2025	4 to 6	1	9.00	4,050	4,050	2.1%	6,499					7,534									8,734	
4.022	11,000	11,000	Square Yards	Asphalt Pavement, Crack Repair and Patch	2027	3 to 5	3	1.00	11,000	11,000	6.8%				19,289				21,709							24,434	
4.040	11,000	11,000	Square Yards	Asphalt Pavement, Mill and Overlay, Streets	2041	15 to 20	17	18.50	203,500	203,500	18.5%		336,354														
4.260	780	780	Linear Feet	Fence, Vinyl	2029	15 to 20	5	17.00	13,260	13,260	2.3%								26,170								
4.500	1	1	Allowance	Landscape, Partial Replacements	2029	to 10	5	10,000.00	10,000	10,000	2.6%															20,938	
4.700	1	1	Each	Pond, Aerator	2028	10 to 15	4	4,900.00	4,900	4,900	0.8%				8,592												
4.710	700	105	Linear Feet	Pond, Erosion Control, Partial	2032	to 15	8	57.00	5,985	39,900	1.1%								11,812								
4.730	2,700	675	Square Yards	Pond, Sediment Removal, Partial	2032	to 30	8	25.00	16,875	67,500	1.2%																
4.800	1	1	Allowance	Signage, Renovation	2043	15 to 20	19	15,000.00	15,000	15,000	1.4%				26,303												
<b>Interior Clubhouse Elements</b>																											
5.070	2	2	Each	Air Handling and Condensing Units, Split Systems	2027	15 to 20	3	11,000.00	22,000	22,000	3.7%								43,419								
5.160	1	1	Allowance	Exercise Equipment	2028	5 to 15	4	10,000.00	10,000	10,000	2.6%															20,328	
5.500	1	1	Allowance	Interior Renovations, Complete	2035	to 20	11	75,000.00	75,000	75,000	5.7%																
5.510	1	1	Allowance	Interior Renovations, Partial	2025	to 10	1	28,000.00	28,000	28,000	4.4%						52,088										
<b>Pool Elements</b>																											
6.200	1,000	1,000	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2030	8 to 12	6	2.50	2,500	2,500	0.7%	4,012															5,391
6.300	700	700	Square Feet	Cover, Vinyl	2026	6 to 8	2	5.00	3,500	3,500	1.2%				5,959												7,548
6.400	250	250	Linear Feet	Fence	2029	15 to 20	5	47.00	11,750	11,750	2.1%															24,602	
6.500	1	1	Allowance	Furniture	2026	to 12	2	8,000.00	8,000	8,000	2.1%															17,253	
6.600	2	1	Allowance	Mechanical Equipment, Phased	2026	to 15	2	3,500.00	3,500	7,000	0.8%							6,706									
6.800	610	610	Square Feet	Pool Finish, Vinyl	2031	8 to 12	7	15.00	9,150	9,150	2.6%		15,124													20,325	
<b>Anticipated Expenditures, By Year (\$1,821,961 over 30 years)</b>												10,511	389,163	5,959	138,352	0	104,456	6,706	148,108	74,604	93,278	38,926	95,404	0	53,730	0	

## RESERVE FUNDING PLAN

### Common

#### CASH FLOW ANALYSIS

#### Legends at Grove City

#### Condominium Association

#### Grove City, Pennsylvania

#### Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
<b>Reserves at Beginning of Year</b>	(Note 1)	100,000	101,500	61,783	80,276	70,293	75,920	62,775	110,772	115,893	146,937	179,520	239,868	150,219	213,429	251,045	297,753
<b>Total Recommended Reserve Contributions</b>	(Note 2)	0	16,500	33,000	49,500	51,000	52,500	54,100	55,700	57,400	59,100	60,900	62,700	64,600	66,500	68,500	70,600
<b>Estimated Interest Earned, During Year</b>	(Note 3)	1,500	1,617	1,407	1,491	1,448	1,373	1,718	2,244	2,602	3,232	4,152	3,862	3,600	4,599	5,434	5,979
<b>Anticipated Expenditures, By Year</b>		0	(57,835)	(15,914)	(60,974)	(46,821)	(67,018)	(7,821)	(52,823)	(28,958)	(29,749)	(4,704)	(156,211)	(4,990)	(33,483)	(27,227)	(68,239)
<b>Anticipated Reserves at Year End</b>		<u>\$101,500</u>	<u>\$61,783</u>	<u>\$80,276</u>	<u>\$70,293</u>	<u>\$75,920</u>	<u>\$62,775</u>	<u>\$110,772</u>	<u>\$115,893</u>	<u>\$146,937</u>	<u>\$179,520</u>	<u>\$239,868</u>	<u>\$150,219</u>	<u>\$213,429</u>	<u>\$251,045</u>	<u>\$297,753</u>	<u>\$306,093</u>
Predicted Reserves based on 2024 funding level of:		\$0	101,500	45,118	29,947	(31,038)	(78,948)										

(continued)

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

		2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054
<b>Reserves at Beginning of Year</b>		306,093	375,026	65,121	136,055	74,690	151,833	125,018	198,616	133,193	143,126	136,921	188,011	185,707	282,442	329,673
<b>Total Recommended Reserve Contributions</b>		72,700	74,900	74,900	74,900	74,900	74,900	77,100	79,400	81,800	84,300	86,800	89,400	92,100	94,900	97,700
<b>Estimated Interest Earned, During Year</b>		6,744	4,358	1,992	2,087	2,243	2,741	3,204	3,285	2,736	2,773	3,217	3,700	4,635	6,061	7,570
<b>Anticipated Expenditures, By Year</b>		(10,511)	(389,163)	(5,959)	(138,352)	0	(104,456)	(6,706)	(148,108)	(74,604)	(93,278)	(38,926)	(95,404)	0	(53,730)	0
<b>Anticipated Reserves at Year End</b>		<u>\$375,026</u>	<u>\$65,121</u>	<u>\$136,055</u>	<u>\$74,690</u>	<u>\$151,833</u>	<u>\$125,018</u>	<u>\$198,616</u>	<u>\$133,193</u>	<u>\$143,126</u>	<u>\$136,921</u>	<u>\$188,011</u>	<u>\$185,707</u>	<u>\$282,442</u>	<u>\$329,673</u>	<u>\$434,943</u>
			(NOTE 5)													(NOTE 4)

#### Explanatory Notes:

- 1) Year 2024 starting reserves are as of June 12, 2024; FY2024 starts January 1, 2024 and ends December 31, 2024.
- 2) Reserve Contributions for 2024 are the remaining budgeted 9 months; 2025 is the first year of recommended contributions.
- 3) 2.0% is the estimated annual rate of return on invested reserves; 2024 is a partial year of interest earned.
- 4) Accumulated year 2054 ending reserves consider the need to fund for repaving of the of the streets shortly after 2054, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

Common  
**FIVE-YEAR OUTLOOK**

**Legends at Grove City  
Condominium Association**

Grove City, Pennsylvania

Line Item	Reserve Component Inventory	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029
<b><u>Exterior Clubhouse Elements</u></b>							
1.242	Gutters and Downspouts, Material, Phased					4,389	
1.282	Roofs, Asphalt Shingles, Phased					25,662	
1.542	Sealants, Windows and Doors, Phased		1,339				
<b><u>Building Services Elements</u></b>							
3.700	Grinder Pumps, Phased		23,484		24,914		26,431
<b><u>Property Site Elements</u></b>							
4.010	Access Drive, Gravel		4,172				
4.022	Asphalt Pavement, Crack Repair and Patch				12,020		
4.260	Fence, Vinyl						15,372
4.500	Landscape, Partial Replacements						11,593
4.700	Pond, Aerator					5,515	
<b><u>Interior Clubhouse Elements</u></b>							
5.070	Air Handling and Condensing Units, Split Systems				24,040		
5.160	Exercise Equipment						11,255
5.510	Interior Renovations, Partial		28,840				
<b><u>Pool Elements</u></b>							
6.300	Cover, Vinyl			3,713			
6.400	Fence						13,621
6.500	Furniture			8,487			
6.600	Mechanical Equipment, Phased			3,713			
<b>Anticipated Expenditures, By Year (\$1,821,961 over 30 years)</b>		0	57,835	15,914	60,974	46,821	67,018

## 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.*

### Exterior Building Elements



Duplex front elevation



Duplex rear elevation



Quadraplex exterior overview



Quadraplex exterior overview

## Gutters and Downspouts, Aluminum

---

**Line Items:** 1.240 and 1.242

**Quantity:** Approximately 1,600 linear feet of aluminum six-inch seamless gutters and three-inch by four-inch downspouts at the multifamily buildings and 300 linear feet at the clubhouse

**History:** Original

**Condition:** Good to fair overall



Aluminum gutters and downspouts



Aluminum gutters and downspouts

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

**Component Detail Notes:** The size of the gutter is determined by the roof's watershed area, a roof pitch factor and the rainfall intensity number of the Association's region. We recommend sloping gutters 1/16 inch per linear foot and providing fasteners a maximum of every three feet.

Downspouts can drain 100 square feet of roof area per one square inch of downspout cross sectional area. We recommend the use of downspout extensions and splash blocks at the downspout discharge to direct storm water away from the foundations.

The useful life of gutters and downspouts coincides with that of the asphalt shingle roofs. Coordinated replacement will result in the most economical unit price and minimize the possibility of damage to other roof components as compared to separate replacements.

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

- Semi-annually:
  - Clean out debris and leaves that collect in the gutters
  - Repair and refasten any loose gutter fasteners
  - Repair and seal any leaking seams or end caps



- Verify downspouts discharge away from foundations

**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.

## Roofs, Asphalt Shingles

---

**Line Items:** 1.280 and 1.282

**Quantity:** Approximately 290 *squares*<sup>1</sup> at the multifamily buildings and 40 squares at the clubhouse

**History:** Original

**Condition:** Fair overall with granular loss and weathering to the shingles evident from our visual inspection from the ground



**Stains and weathering**



**Stains and weathering**

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



**Stains and weathering**



**Roof overview**



**Granular loss**



**Roof overview**



**Granular loss**



**Roof overview**



**Roof overview**



**Roof overview**



**Stains and weathering**



**Roof overview**



**Roof overview**

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

**Component Detail Notes:** The existing roof assembly comprises the following:



- Laminate architectural shingles
- Boston style ridge caps
- Rubber seal with plastic base boot flashing at waste pipes
- Soffit and ridge vents
- Metal drip edge
- Enclosed half weaved valleys

Insulation and ventilation are two major components of a sloped roof system. Together, proper insulation and ventilation help to control attic moisture and maintain an energy efficient building. Both insulation and ventilation prevent moisture buildup which can cause wood rot, mold and mildew growth, warp sheathing, deteriorate shingles, and eventually damage building interiors. Sufficient insulation helps to minimize the quantity of moisture that enters the attic spaces and adequate ventilation helps to remove any moisture that enters the attic spaces. These two roof system components also help to reduce the amount of energy that is required to heat and cool a building. Proper attic insulation minimizes heat gain and heat loss between the residential living spaces and attic spaces. This reduces energy consumption year-round. Proper attic ventilation removes excessive heat from attic spaces that can radiate into residential living spaces and cause air conditioners to work harder. Properly installed attic insulation and ventilation work together to maximize the useful life of sloped roof systems.

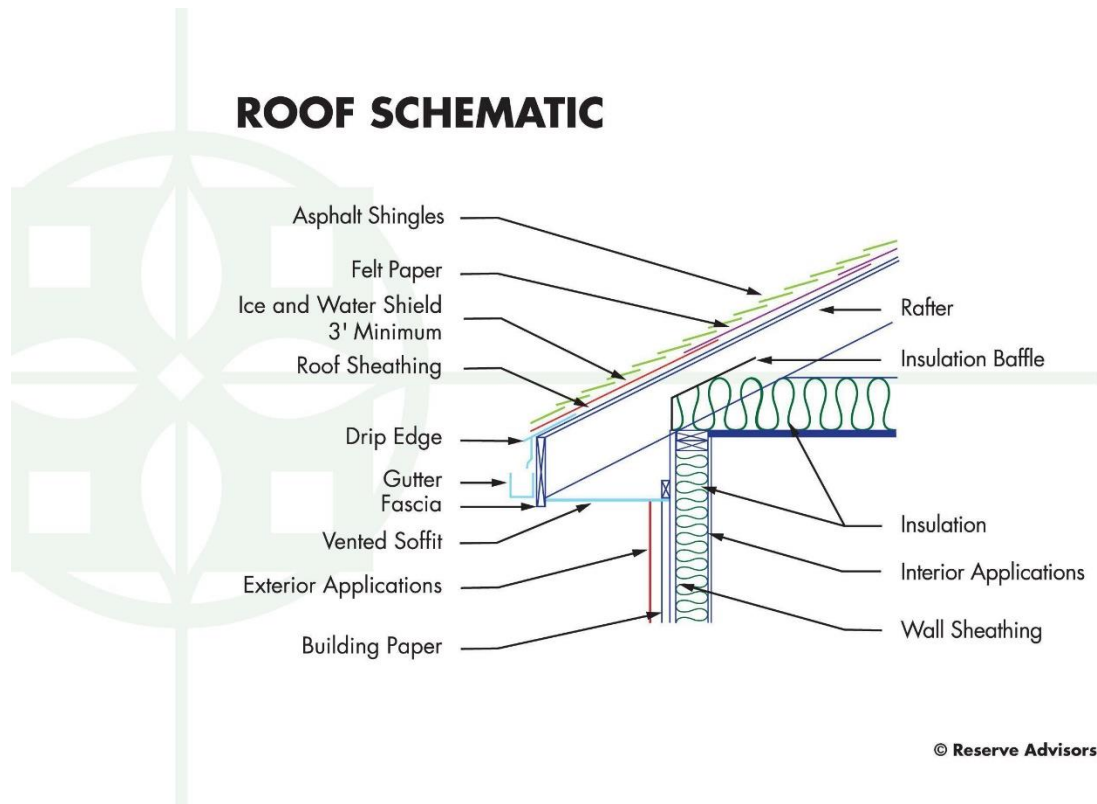
The vents should be clear of debris and not blocked from above by attic insulation. If the soffit vents are blocked from above, installation of polystyrene vent spaces or baffles between the roof joists at these locations can ensure proper ventilation.

Certain characteristics of condition govern the times of replacement. Replacement of an asphalt shingle roof becomes necessary when there are multiple or recurring leaks and when the shingles begin to cup, curl and lift. These conditions are indications that the asphalt shingle roof is near the end of its useful life. Even if the shingles are largely watertight, the infiltration of water in one area can lead to permanent damage to the underlying roof sheathing. This type of deterioration requires replacement of saturated sections of sheathing and greatly increases the cost of roof replacement. Roof leaks may occur from interrelated roof system components, i.e., flashings. Therefore, the warranty period, if any, on the asphalt shingles, may exceed the useful life of the roof system.

Warranties are an indication of product quality and are not a product guarantee. Asphalt shingle product warranties vary from 20- to 50-years and beyond. However, the scope is usually limited to only the material cost of the shingles as caused by manufacturing defects. Warranties may cover defects such as thermal splitting, granule loss, cupping, and curling. Labor cost is rarely included in the remedy so if roof materials fail, the labor to tear off and install new shingles is extra. Other limitations of warranties are exclusions for "incidental and consequential" damages resulting from age, hurricanes, hail storms, ice dams, severe winds, tornadoes, earthquakes, etc. There are some warranties which offer no dollar limit for replacement at an additional cost (effectively an insurance policy) but again these warranties also have limits and may not cover all damages other than a product defect. We recommend a review of the manufacturers' warranties as part of the

evaluation of competing proposals to replace a roof system. This evaluation should identify the current costs of remedy if the roof were to fail in the near future. A comparison of the costs of remedy to the total replacement cost will assist in judging the merits of the warranties.

The following cross-sectional schematic illustrates a typical asphalt shingle roof system although it may not reflect the actual configuration at Legends at Grove City:



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.

The Association should plan to coordinate the replacement of gutters and downspouts with the adjacent roofs. This will result in the most economical unit price and minimize the possibility of damage to other roof components as compared to separate replacements.

**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.

## Sealants, Windows and Doors

---

**Line Item:** 1.540

**Quantity:** Approximately 1,200 linear feet of exterior sealants or *caulk*<sup>2</sup> at the multifamily buildings and 200 linear feet at the clubhouse

**History:** Replacement of sealants has been conducted periodically on an as-needed basis.

**Condition:** Reported satisfactory

**Useful Life:** Up to 20 years

**Component Detail Notes:** The rate of deterioration of the sealants is not uniform due to the different exposures to sunlight and weather. The Association should anticipate gradual dispersed deterioration as the sealants age.

Correct preparation of the joint surfaces before re-application of a sealant is important to ensure proper adhesion. The surfaces must be removed of all contaminants, including the previous sealant material, paint, rust and other corrosion, water, grease, etc. The surfaces should also be dry and free from dust and grit, which can be removed using dry compressed air or brushes. The Association should ensure the manufacturer's instructions are followed in determining if the substrate is compatible with the sealant and that the chemical cleaners and solvents used to prepare the surfaces are also compatible with the sealant.

Several types of caulk are available with significantly different weathering and elongation properties. We recommend a silicone-based or polyurethane-based caulk. The major advantage of polyurethane-based caulks is their ability to bond to most construction surfaces without special preparation, such as primer application, as is required for alternate materials like silicone caulk. With proper surface preparation, i.e., removing

<sup>2</sup> The terms sealant and caulk are used interchangeably throughout this text and throughout the industry.

surface contaminants, silicone-based caulks perform better than most other caulk materials. The weathering and elongation properties of silicone-based caulk give it a much longer useful life than other caulk materials.

**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 Legends at Grove City replace up to fifty percent (50%), or 700 linear feet of joint sealant per event.

## **Walls, Siding, Vinyl**

---

**Line Items:** 1.860 and 1.862

**Quantity:** Approximately 7,500 square feet of vinyl siding comprises the exterior walls at the multifamily buildings and approximately 500 square feet at the clubhouse

**History:** Original with a history of repairs through the operating budget.

**Condition:** Good to fair overall



**Vinyl siding overview**



**Vinyl siding overview**



**Vinyl siding overview**



**Vinyl siding overview**



**Vinyl siding overview**



**Vinyl siding overview**



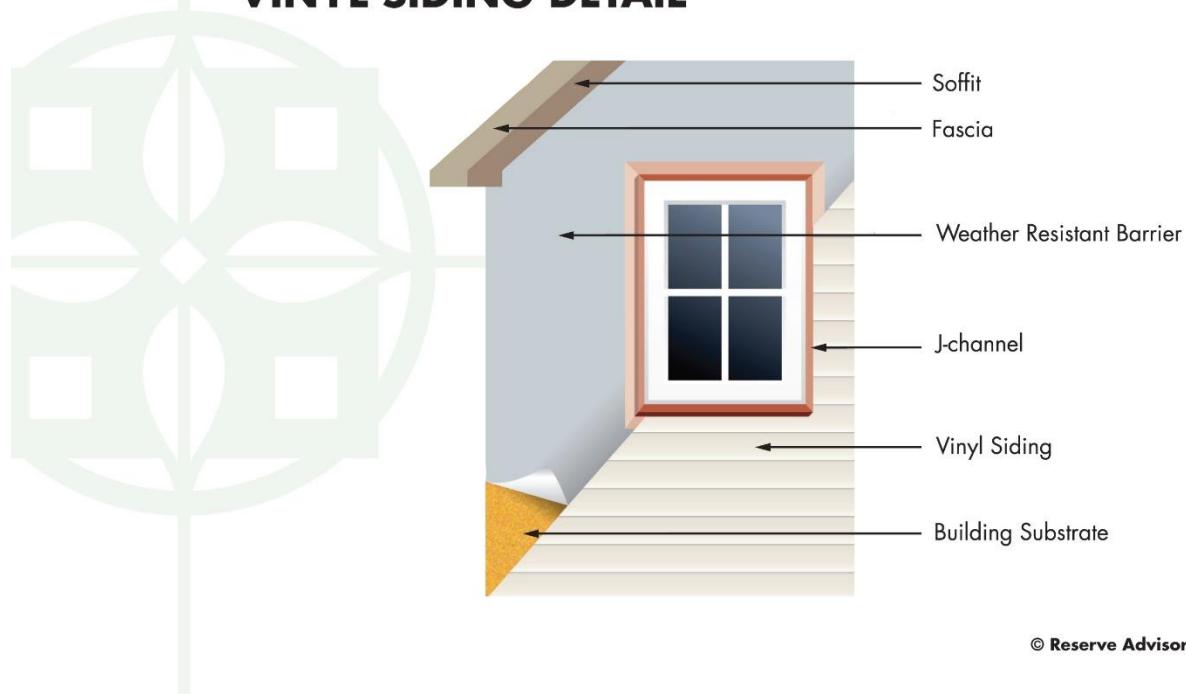
**Vinyl siding overview**

**Useful Life:** Up to 40 years

**Component Detail Notes:** 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.

## Windows and Doors

---

**Line Items:** 1.980 and 1.982

**Quantity:** 1,000 square feet at the multifamily buildings and clubhouse

**History:** Original

**Condition:** Good to fair overall with no significant deterioration evident.



**Clubhouse doors**



**Clubhouse windows**

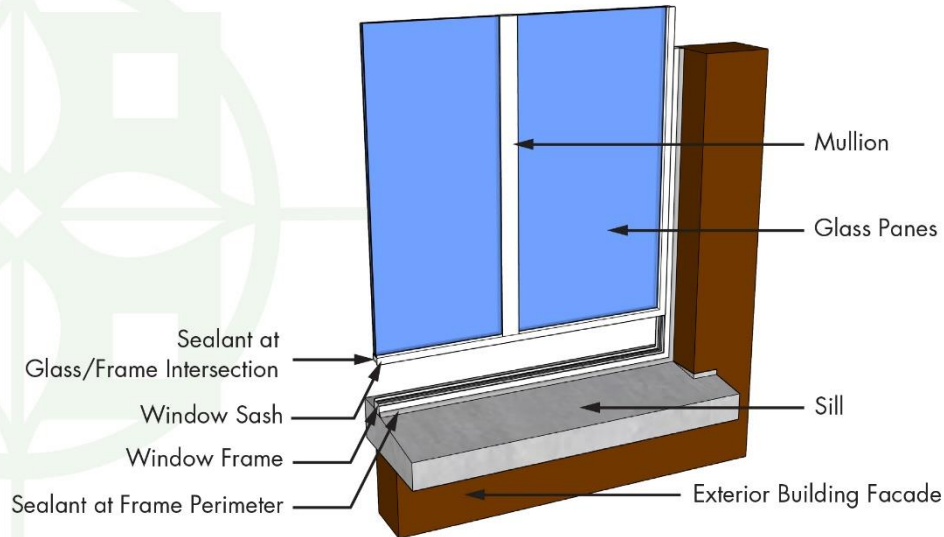


**Unit windows and door**

**Useful Life:** Up to 40 years

**Component Detail Notes:** The following schematic depicts the typical components of a window system although it may not reflect the actual configuration at Legends at Grove City:

## WINDOW DETAIL



© Reserve Advisors

Properly designed window and door assemblies anticipate the penetration of some storm water beyond the gaskets. This infiltrated storm water collects in an internal drainage system and drains, or exits, the frames through weep holes. These weep holes can become clogged with dirt or if a sealant is applied, resulting in trapped storm water. However, as window frames, gaskets and sealants deteriorate, leaks into the interior can result. The windows and doors will eventually need replacement or major capital repairs to prevent water infiltration and damage from wind driven rain.

The thermal efficiencies of the window and door assemblies are affected by their design and construction components. These components include glazings, thickness of air space between glazings, low-conductivity gas, tinted coatings, low-e coatings and thermal barriers. The Association should thoroughly investigate these component options at the time of replacement. Some manufacturers may include these components as part of the standard product and other manufacturers may consider these components as options for an additional cost. Legends at Grove City should review the specifications provided by the manufacturers to understand the thermal design and construction components of the proposed assemblies.

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

- Annually:
  - Inspect and repair loose weather stripping and/or lock damage
  - Inspect for broken glass and damaged screens
  - Record instances of water infiltration, trapped moisture or leaks



- As-needed:
  - Verify weep holes are unobstructed and not blocked with dirt or sealant, if applicable
  - Replace damaged or deteriorated sliding glass rollers, 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.

## Building Services Elements

### Grinder Pumps

---

**Line Item:** 3.700

**Quantity:** 57 each

**History:** Varied. The Association has maintained and replaced grinder pumps in an ongoing, phased manner.

**Condition:** Reported satisfactory without operational deficiencies

**Useful Life:** 15- to 25-years

**Preventative Maintenance Notes:** The required preventative maintenance may vary in frequency and scope based on the unit's age, operational condition, or changes in technology. Valuable motor information to note in a preventative maintenance plan or schedule includes age of unit and last time of repair, horsepower and rpm (revolutions per minute), bearing type and conditions surrounding motor/pump. We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Quarterly:
  - Inspect/clean motors
  - Inspect mountings and connections for proper alignment, torque and condition
  - Inspect/replace pump packing as needed, consider replacement with mechanical seals
  - Check for appropriate oil levels
- Semi-annually:
  - Lubricate pumps, motors and motor bearings
- Annually:
  - Clean filters if present
  - Assess proper internal component performance and replace damaged or malfunction components as necessary, and tighten fittings

- Access temperature and vibration performance of motors in accordance with the intended design

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

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

## Property Site Elements

### Access Drive, Gravel

---

**Line Item:** 4.010

**Quantity:** Approximately 450 square yards of gravel at the access drive connecting the clubhouse and the single-family homes.

**History:** Original with a history of periodic repairs

**Condition:** Fair overall with areas of depleted gravel.



**Pot holes**



**Gravel access road**

**Useful Life:** Gravel replenishment and repairs every four- to six-years.

**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.



## **Asphalt Pavement, Crack Repair and Patch**

---

**Line Items:** 4.020 and 4.022

**Quantity:** Approximately 11,000 square yards at the streets and clubhouse parking area, and 1,700 square yards the multifamily home driveways

**History:** The streets and clubhouse parking area were repaved in 2021 and the driveways at the multifamily homes are original

**Condition:** The streets and clubhouse parking area are in good overall condition and the driveways are in fair overall condition with cracks.

**Useful Life:** Three- to five-years

**Component Detail Notes:** Patch repairs are conducted at areas exhibiting settlement, potholes, or excessive cracking. These conditions typically occur near high traffic areas, catch basins, and pavement edges.

**Priority/Criticality:** Per Board discretion

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

## **Asphalt Pavement, Repaving**

---

**Line Items:** 4.040 and 4.045

**Quantity:** Approximately 11,000 square yards at the streets and clubhouse parking area, and 1,700 square yards the multifamily home driveways

**History:** The streets and clubhouse parking area were repaved in 2021 and the driveways at the multifamily homes are original

**Condition:** The streets and clubhouse parking area are in good overall condition with an isolated pothole and the driveways are in fair overall condition with cracks.





**Streets overview**



**Isolated pothole**



**Streets overview**



**Streets overview**



**Pavement overview**



**Driveway cracks**





**Driveway cracks**



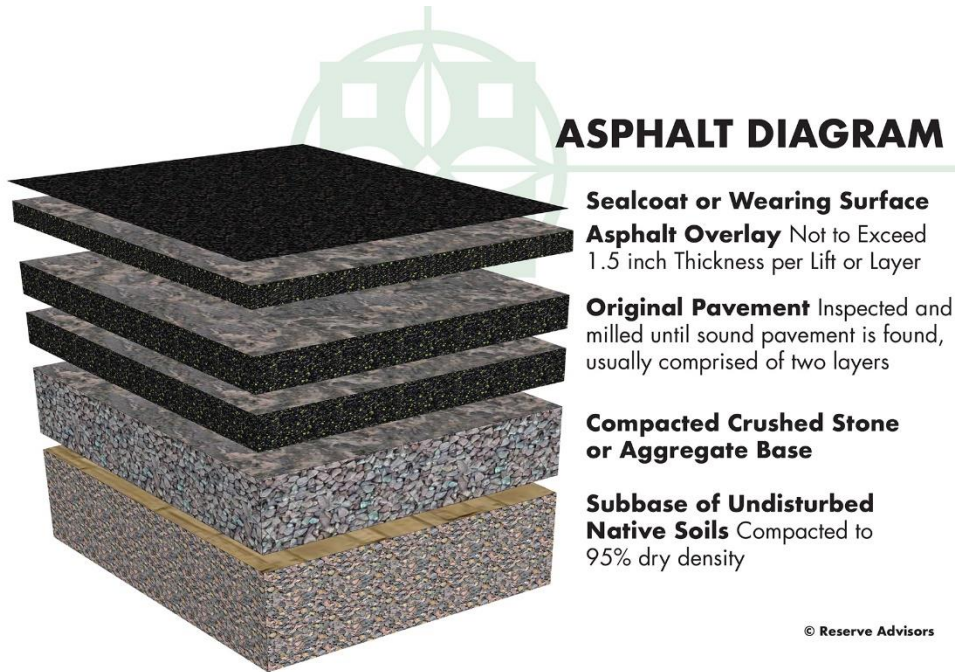
**Driveway cracks**



**Clubhouse parking area 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 Legends at Grove City:



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 overlayment method of repaving at the streets and the total replacement method at the driveways at Legends at Grove City.

**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%).

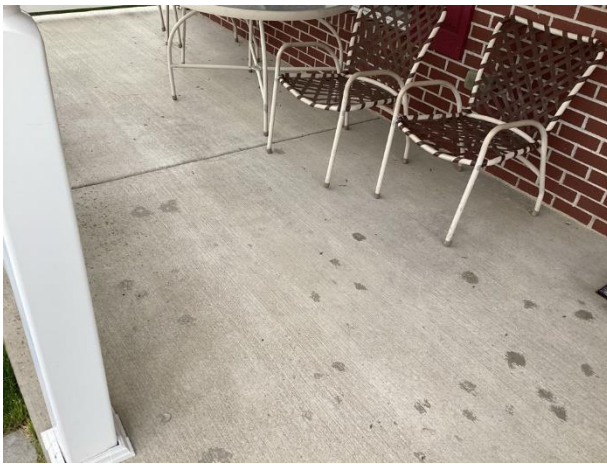
## Concrete Patios

---

**Line Item:** 4.130

**Quantity:** 10 total comprising a total of approximately 960 square feet at the multifamily homes

**History and Condition:** Good overall with a limited history of repairs



Patio in good condition



Patio in good condition

**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 recommend the Association plan for replacement of up to three patios, or approximately thirty percent (30%) of the total, during the next 30 years.

## Fence, Vinyl

---

**Line Item:** 4.260

**Quantity:** 780 linear feet located at the west perimeter

**History:** Original

**Condition:** Good to fair overall with stains evident at the north section



**Vinyl fence**



**Vinyl fence**

**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 panels, and damage
  - Repair leaning sections and clear vegetation from fence areas which could cause damage
  - Periodically clean vinyl fence as needed

**Priority/Criticality:** Per Board discretion

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

## Landscape

---

**Line Item:** 4.500

**Component Detail Notes:** The Association contains a large quantity of trees, shrubbery and other landscape elements. Replacement of these elements is an ongoing need. Many associations budget for these replacements as normal maintenance. Other



associations fund ongoing replacements from reserves. Large amounts of landscape may need replacement due to disease, drought or other forces of nature. If the cost of removal and replacement is substantial, funding from reserves is logical. The Association may also desire to periodically update the appearance of the community through major improvements to the landscape.

**Useful Life:** At the request of the Board, we include a landscape allowance for partial replacements 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.

## **Pond, Aerator**

---

**Line Item:** 4.700

**Quantity:** One aerator

**History:** Age unavailable at the time of inspection

**Condition:** Reported satisfactory without operational deficiencies

**Useful Life:** 10- to 15-years

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

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

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

## **Pond, Sediment Removal and Erosion Control**

---

**Line Items:** 4.710 and 4.730

**Quantity:** Approximately 2,700 square yards of water surface area and approximately 700 linear feet of shorelines at the retention pond at the north of the community.

**History:** Original with a history of periodic maintenance

**Condition:** Good to fair overall





**Pond overview**



**Pond overview**

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

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

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

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

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

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

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

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

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association plan to install a combination of plantings and rip rap around the pond along 105 linear feet, or approximately fifteen percent (15%), of the shoreline per event.

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

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

## Signage

---

**Line Item:** 4.800

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

- Masonry

- Sign
- Landscape
- Light Fixtures

**History:** Replaced in 2023

**Condition:** Good overall



**Entrance monument**



**Entrance monument**

**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 is based on information provided by the Board.



## Clubhouse Elements



Clubhouse overview

### Air Handling and Condensing Units, Split Systems

---

**Line Item:** 5.070

**Quantity:** Two split systems

**History:** Original with a history of repairs to the air handling units

**Condition:** Reported satisfactory without operational deficiencies



Split system condensing units



Split system air handling unit

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

**Component Detail Notes:** A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior air handling unit. The condensing units have cooling capacities of five-tons.

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

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

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

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

## **Exercise Equipment**

---

**Line Item:** 5.160

**Quantity:** The exercise room contains the following types of cardiovascular aerobic training equipment:

- Ellipticals (2)
- Stationary cycles (2)
- Treadmills (2)

**History:** Varied

**Conditions:** Reported satisfactory overall



**Exercise equipment**

**Useful Life:** The useful life of equipment is 5- to 15-years

**Priority/Criticality:** Per Board discretion

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

## **Interior Renovations**

---

**Line Items:** 5.500 and 5.510

**Quantity:** The clubhouse interior components include:

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

**History:** Original

**Condition:** Satisfactory overall with the desire for partial renovations in the near-term.





**Carpet floor coverings**



**Carpet floor coverings**



**Light fixtures and paint finishes**



**Damage to the vinyl floor coverings**



**Restroom fixtures and finishes**



**Restroom fixtures and finishes**



**Furnishings and finishes**



**Furnishings and finishes**



**Kitchen fixtures and finishes**



**Kitchen fixtures and finishes**

**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 and carpet replacement
- Replacement of up to fifty percent (50%) of the furnishings



## Pool Elements

### Concrete Deck

---

**Line Item:** 6.200

**Quantity:** 1,000 square feet

**History:** Original

**Condition:** Good overall



**Concrete pool deck overview**

**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
  - Schedule periodic pressure cleanings as needed

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

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

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

## Cover, Vinyl

---

**Line Item:** 6.300

**Quantity:** 700 square feet

**History:** Age unavailable at the time of inspection

**Condition:** Fair overall



**Pool cover**

**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.

## Fence

---

**Line Item:** 6.400

**Quantity:** 20 linear feet

**History:** Original

**Condition:** Good to fair overall



**Vinyl pool fence**



**Vinyl pool fence**

**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 fasteners or 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.

## **Furniture**

---

**Line Item:** 6.500

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

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

**History:** Age unavailable at the time of inspection

**Condition:** Fair overall



**Pool furniture**



**Pool furniture**

**Useful Life:** Up to 12 years

**Priority/Criticality:** Per Board discretion

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend interim re-strapping, refinishing, cushion replacements, reupholstering and other repairs to the furniture as normal maintenance to maximize its useful life.

## **Mechanical Equipment**

---

**Line Item:** 6.600

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

- Automatic chlorinators and controls
- Interconnected pipe, fittings and valves
- Pumps and filter

**History:** Reported original

**Condition:** Reported unsatisfactory with operational deficiencies. We note corrosion at the copper piping adjacent to the pool chemicals. We recommend storing pool chemicals covered outdoors or in a shed to avoid corrosion to interior building components.





**Pool mechanical equipment**



**Corroded copper piping**

**Useful Life:** Up to 15 years

**Preventative Maintenance Notes:** The status of preventative maintenance was unavailable to us during our inspection. 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 Finish, Vinyl**

---

**Line Item:** 6.800

**Quantity:** 610 square feet of vinyl finish based on the horizontal surface area

**History:** Replaced in 2021

**Condition:** Good to fair overall as reported to us by the Association. We were unable to inspect the pool due to the cover.

**Useful Life:** 8- to 12-years for replacement of the vinyl finish and tile repairs

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

- Semi-annually:



- Inspect and repair significant finish deterioration, 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. Removal and replacement provides the opportunity to inspect the pool structure and to allow for partial repairs of the underlying concrete surfaces as needed. To maintain the integrity of the pool structure, we recommend the Association budget for the following:

- Removal and replacement of the vinyl finish
- Partial replacements of the scuppers and coping as needed
- Replacement of joint sealants as needed

## 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 every 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.

Legends at Grove City 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 Owners 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 Grove City, Pennsylvania at an annual inflation rate<sup>3</sup>. Isolated or regional markets of

<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.

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

- The past and current maintenance practices of Legends at Grove City 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.



**JOSEPH W. COFFEE, RS**  
**Responsible Advisor**

**CURRENT CLIENT SERVICES**

Joseph Coffee is an Engineer for Reserve Advisors. Mr. Coffee 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 Studies for condominiums, townhomes and homeowners associations.



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

**The Winchester** – Located in Pittsburgh, Pennsylvania, this condominium building contains 47 units. The building exterior is clad in eight-inch gloss-green ceramic tiles giving the building a unique appearance. Amenities include an indoor pool, private parking garage with elevated asphalt drive lane, and a rooftop deck.

**Hickory Hill Estates Condominium** – This condominium association is located in Williamsville, New York and contains 179 units in 22 buildings. The buildings comprise various configurations including townhomes and several styles of garden condominiums with both flat and sloped roofs. The community contains a clubhouse with wrap-around pond and pedestrian bridges, a swimming pool, and a system of garages and carports.

**Stoneybrook Master Association of Orlando, Inc.** - This master association is located in Orlando, Florida, and services the common elements shared by 1,357 homes. The property contains numerous amenities including a swimming pool, clubhouse, playgrounds, tennis courts, ponds and guard houses. The extensive asphalt pavement street system includes approximately 340,000 square yards of asphalt pavement and five vehicular bridges.

**Prestige Condominiums at Will O' The Wisp** – This unique condominium structure is located in Oakland, Maryland and contains 47 units. The structure is built into a steep hill and ground level can be accessed from both the first and sixth floors, while the subsurface parking garage is accessed from the fifth floor. Amenities include an expansive atrium with indoor pool, a dock, and an arcade.

**Marbella Owners Association, Inc.** – This high-end condominium building is located in Jacksonville, Florida and contains 24 units, each comprising one half story, or half of the building footprint. The expansive units contain an average of 1,125 square feet of association-maintained balconies each, and the building contains various amenities including beach access, a swimming pool, and a private parking garage.

**Tudor Plaza, Inc.** - Located in Buffalo, New York, this property is comprised of 64 units in two conjoined, eight-story buildings. The condominium buildings feature inverted roof systems, natural-gas-converted coal building heat boilers, traction elevators, and a backup generator. The property includes a large detached garage with a separate EPDM roof system and boiler.

**EDUCATION**

Embry-Riddle Aeronautical University - B.S. Civil Engineering

**PROFESSIONAL AFFILIATIONS / DESIGNATIONS**

*Reserve Specialist (RS)* - Community Associations Institute



**STEPHEN E. BRESKI, P.E., RS**  
**Director of Engineering Training and Development**  
**Northeast Quality Assurance Engineer**

**CURRENT CLIENT SERVICES**

Stephen E. Breski, a Senior Civil Engineer, is a Director for Reserve Advisors. Mr. Breski is responsible for the inspection and analysis of the condition of clients' properties, 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 Analyses and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes, planned unit developments and homeowner associations.



The following is a partial list of clients served by Stephen Breski demonstrating the breadth of experiential knowledge of community associations in construction and related systems.

**30 Park Place** - Located in downtown Manhattan in New York City, this 82-story luxury tower offers 157 private residences and 189 hotel guest suites. The building was designed by renowned architect Robert A.M. Stern and is operated by the Four Seasons staff. On the 37<sup>th</sup> floor the residences enjoy their private amenity area complete with a fitness center and film screening room. The hotel includes a spa and indoor swimming pool.

**Merion Golf Club** - Located in the suburbs of Philadelphia, PA, this club was founded in 1865 as the Merion Cricket Club. Later, the Merion Cricket Club founded the Merion Golf Club in 1896 and has been an iconic golf club since. Merion Golf Club's East Course is consistently ranked as one of the top golf courses and has hosted five U.S. Opens featuring champions Ben Hogan (1950), Lee Trevino and his playoff victory over Jack Nicklaus (1971) and, most recently, Justin Rose (2013).

**Saint Sophia Greek Orthodox Cathedral** - Located in Northwest Washington, D.C., the cornerstone of this cathedral was laid by President Dwight D. Eisenhower in 1956. A second building was constructed in addition to the cathedral in 2004. This building, known as the Education and Activities Center, includes classrooms and a library.

**Big Bass Lake Community Association, Inc.** - Located in Gouldsboro, Pennsylvania, this community features three dams which provide the 1,655 single family homes with over 850,000 square yards of surface area for boating and recreation. Residents enjoy a clubhouse, a recreational center, a ski hill, docks, recreational courts, beaches and playgrounds. The Association also maintains an administration building, maintenance shop, sales office and library.

**Woodmont Country Club** - This exclusive club was established more than 100 years ago. The elegant design of Woodmont's 125,000 square foot clubhouse, incorporates several dining venues, a grand ballroom and an expansive fitness and wellness center. The clubhouse overlooks Woodmont's two premiere golf courses, swimming complex and 22 tennis courts comprising *Har-Tru*, Italian Red-Clay and Asphalt surfaces.

**PRIOR RELEVANT EXPERIENCE**

Before joining Reserve Advisors, Mr. Breski worked for a private construction management company in Pittsburgh, Pennsylvania, where he was working as a cost estimator. Prior to working as an estimator, Mr. Breski also worked for the nation's largest provider of wireless infrastructure, where he assisted in the structural analysis of cell phone towers. Mr. Breski attended the Swanson School of Engineering at the University of Pittsburgh where he attained his Bachelor of Science degree in Civil and Environmental Engineering. His studies focused on Structural Engineering.

**EDUCATION**

University of Pittsburgh - B.S. Civil and Environmental Engineering

**PROFESSIONAL AFFILIATIONS**

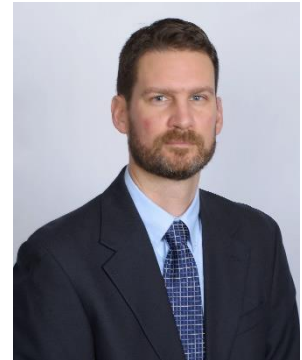
*Professional Engineer (P.E.) – District of Columbia*  
*Reserve Specialist (RS) – Community Association Institute*

**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 Legends at Grove City 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) Legends at Grove City responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

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

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

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

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

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

**Reserve Study** - A budget planning tool that identifies the current status of the reserve fund and a stable and equitable Funding Plan to offset the anticipated future major common area expenditures.

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



## 8. PROFESSIONAL SERVICE CONDITIONS

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

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

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

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

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



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

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

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

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

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

**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.