The Lakes at Polaris Condominium Association

August 1, 2024 • Columbus, OH

RESERVE STUDY

RESERVE™ ADVISORS

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Long-term thinking. Everyday commitment.

Corporate Office
Reserve Advisors, LLC
735 N. Water Street, Suite 175
Milwaukee, WI 53202

The Lakes at Polaris Condominium Association
Columbus, Ohio

Dear Board of Directors of The Lakes at Polaris Condominium Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of The Lakes at Polaris Condominium Association in Columbus, Ohio and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 1, 2024.

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

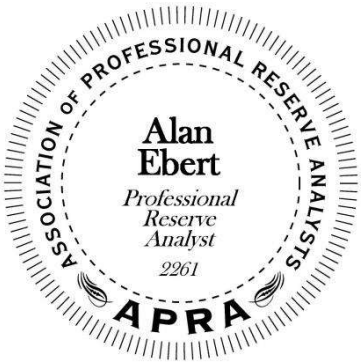
An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help The Lakes at Polaris 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 August 22, 2024 by

Reserve Advisors, LLC

Visual Inspection and Report by: Patrick R. Older, RS[1]
Review by: Justin B. Klein, RS, Great Lakes Quality Assurance Engineer
Alan M. Ebert, RS, PRA[2], 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: The Lakes at Polaris Condominium Association (The Lakes at Polaris)
Location: Columbus, Ohio
Reference: 190515

Property Basics: The Lakes at Polaris Condominium Association is a townhome style development which consists of 90 units in 15 buildings. The community was built from 2008 to 2011.

Reserve Components Identified: 34 Reserve Components.

Inspection Date: August 1, 2024. We conducted the original inspection on June 27, 2019.

Funding Goal: The Funding Goal of this Reserve Study is to maintain reserves above an adequate, not excessive threshold during one or more years of significant expenditures. Our recommended Funding Plan recognizes this threshold funding year in 2051 due to the replacement of the roofing assemblies.

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
- 2.7% anticipated annual rate of return on invested reserves
- 3.0% future Inflation Rate for estimating Future Replacement Costs

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

Unaudited Cash Status of Reserve Fund:

- $296,705 as of June 30, 2024
- 2024 budgeted Reserve Contributions of $127,957

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:

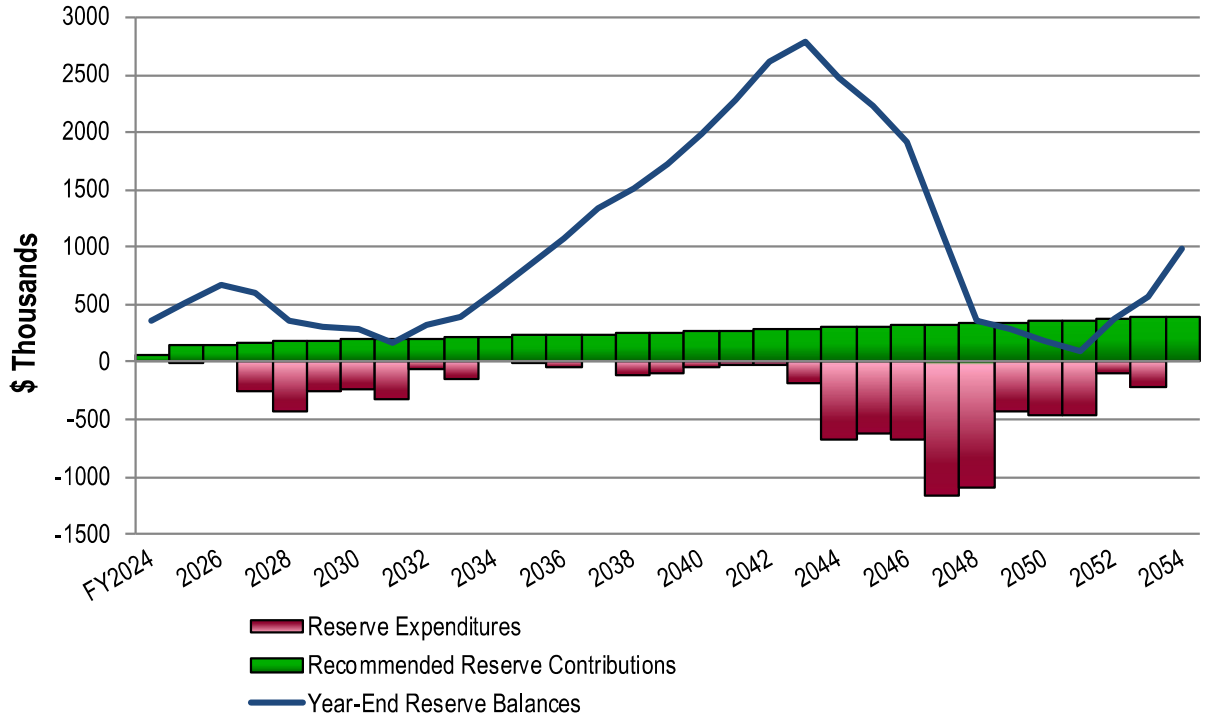
- Repaving as deferral will result in dangerous road conditions and vehicle damage
- Replacement of the roofs as deferral may result in increased water infiltration and cost
- Replacement of the remaining clubhouse split systems

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

- Phased increases of $12,500 from 2025 through 2029
- Inflationary increases thereafter through 2054, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of $12,543 represents an average monthly increase of $11.61 per owner and about a four percent (3.8%) adjustment in the 2024 total Operating Budget of $327,300.

The Lakes at Polaris
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)	Year	Reserve Contributions ($)	Reserve Balances ($)
2025	140,500	505,893	2035	227,400	852,111	2045	305,500	2,224,433
2026	153,000	674,618	2036	234,200	1,072,236	2046	314,700	1,910,430
2027	165,500	599,984	2037	241,200	1,345,643	2047	324,100	1,101,320
2028	178,000	361,337	2038	248,400	1,517,258	2048	333,800	360,460
2029	190,500	313,055	2039	255,900	1,718,607	2049	343,800	285,259
2030	196,200	280,470	2040	263,600	1,986,874	2050	354,100	187,325
2031	202,100	169,130	2041	271,500	2,289,720	2051	364,700	98,457
2032	208,200	316,951	2042	279,600	2,613,780	2052	375,600	382,309
2033	214,400	388,114	2043	288,000	2,783,434	2053	386,900	566,827
2034	220,800	622,374	2044	296,600	2,478,888	2054	398,500	986,011



2.RESERVE STUDY REPORT

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

The Lakes at Polaris Condominium Association

Columbus, Ohio

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 1, 2024. We conducted the original inspection on June 27, 2019.

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 Management and 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:

- The Lakes at Polaris 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
The Lakes at Polaris
Condominium Association
Columbus, Ohio

Operating Budget Components

Repairs normally funded through the Operating Budget and Expenditures less than $5,000 (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
- Irrigation System, Controller
- Landscape
- Light Fixtures, Garage (The Association currently replaces these light fixtures on an as needed basis.)
- Mailbox Shelter, Repairs
- Paint Finishes, Touch Up
- Polaris Lakes Drive, From Carylake Circle to Property Entrance, Crack Repair and Patching[1]
- Ponds, Erosion Control
- Pool, Cover
- Pool, Paint Finishes and Liner Repairs
- Walls, Masonry, Inspections and Capital Repairs[2]
- Walls, Siding, Fiber Cement, Clubhouse, Paint Finishes
- Walls, Trim, Paint Finishes
- Water Heater, Clubhouse

[1] Shared Cost with Separate Entities

[2] We include this component as an operating expense at the request of the Board. The Association has reportedly historically addressed any masonry damage promptly and funds these activities through the operating budget.

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	to 70+	N/A
• Foundations	Indeterminate	N/A
• Pipes, Interior Building, Domestic Water, Sanitary Waste, Vent, Clubhouse	Indeterminate	N/A
• Pipes, Subsurface Utilities	to 80+	N/A
• Pool Structure (Including Fiberglass Liner)	to 55	$160,600
• Structural Frames	Indeterminate	N/A
• Walls, Siding, Fiber Cement, Replacement, Clubhouse	to 50	$12,880

Excluded Components

for

The Lakes at Polaris

Condominium Association

Columbus, Ohio

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.
• Balconies
• Electrical Systems (Including Circuit Protection Panels)
• Garage Doors
• Heating, Ventilating and Air Conditioning (HVAC) Units
• Interiors
• Light Fixtures, Front and Rear Entrances
• Patios
• Pipes (Within Units)
• Screens
• Windows and Doors

Others Responsibility Components
Certain items have been designated as the responsibility of Others to repair or replace.
• Polaris Lakes Drive, From Carylake Circle to Property Entrance[1]
• Pond, Eastern[1]
• Signage at Polaris Lake Drive and Carylake Circle[1]
[1] Shared Cost with Separate Entities

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

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***.

Years 2024 to 2039

RESERVE EXPENDITURES

The Lakes at Polaris
Condominium Association
Columbus, Ohio

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.
3) 2055+ indicates a component which is considered long-lived

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Years Remaining	Unit Costs, $ (2024)	Per Phase Costs, $ (2024)	Total Costs, $ (2024)	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
				Exterior Building Elements																							
1.240	12,450	3,113	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2028	15 to 20	4 to 7	12.00	37,350	149,400	6.0%					42,038	43,299	44,598	45,936								
1.241	0	1	Allowance	Gutters and Downspouts, Drainage Installation (2027 is Planned)	2027	N/A	3	75,000.00	75,000	0	0.9%				75,000												
1.260	150	150	Each	Light Fixtures	2044	to 20	20	60.00	9,000	9,000	0.2%																
1.280	1,430	358	Squares	Roofs, Asphalt Shingles, Phased	2028	15 to 20	4 to 7	450.00	160,875	643,500	26.0%					181,066	186,498	192,093	197,856								
1.860	130,800	32,700	Square Feet	Walls, Siding, Vinyl, Phased	2044	to 40	20 to 23	10.00	327,000	1,308,000	30.2%																
1.905	1	1	Allowance	Walls, Trim, Paint Finishes	2031	6 to 8	7	55,000.00	55,000	55,000	3.2%								67,643								85,688
				Property Site Elements																							
4.020	11,230	11,230	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2032	3 to 5	8	2.00	22,460	22,460	2.3%									28,452				32,023			
4.040	4,550	2,275	Square Yards	Asphalt Pavement, Driveways and Parking Areas, Total Replacement, Phased	2027	15 to 20	3 to 4	38.50	87,588	175,175	6.7%				95,709	98,581											
4.041	4,350	4,350	Square Yards	Asphalt Pavement, Polaris Lakes Dr, Shared, Mill and Overlay	2033	15 to 20	9	18.00	26,097	26,097	0.4%										34,051						
4.042	4,350	4,350	Square Yards	Asphalt Pavement, Polaris Lakes Dr, Shared, Total Replacement	2053	15 to 20	29	35.00	50,745	50,745	1.5%																
4.043	5,950	2,975	Square Yards	Asphalt Pavement, Streets, Mill and Overlay, Phased	2027	15 to 20	3 to 4	20.00	59,500	119,000	1.6%				65,017	66,968											
4.045	5,950	2,975	Square Yards	Asphalt Pavement, Streets, Total Replacement, Phased	2047	15 to 20	23 to 24	38.50	114,538	229,075	5.6%																
4.080	730	730	Square Yards	Asphalt Pavement, Walking Paths, Total Replacement	2028	15 to 20	4	32.00	23,360	23,360	0.9%					26,292											
4.100	10	5	Each	Catch Basins, Inspections and Capital Repairs, Phased	2047	15 to 20	23 to 24	1,000.00	5,000	10,000	0.2%																
4.110	4,000	140	Linear Feet	Concrete Curbs, Partial	2027	to 65	3 to 30+	38.50	5,390	154,000	1.0%				5,890	6,066				6,828				7,685			
4.140	9,150	640	Square Feet	Concrete Sidewalks, Partial	2027	to 65	3 to 30+	12.00	7,680	109,800	0.8%				8,392						10,021						11,965
4.170	90	6	Each	Concrete Stoops, Partial	2032	to 65	8 to 30+	1,300.00	7,800	117,000	0.6%									9,881						11,798	
4.420	1	1	Allowance	Irrigation System	2048	to 40+	24	120,000.00	120,000	120,000	3.0%																
4.560	18	18	Each	Light Poles and Fixtures	2033	to 25	9	2,500.00	45,000	45,000	0.7%										58,715						
4.600	6	6	Each	Mailbox Stations	2033	to 25	9	2,200.00	13,200	13,200	0.2%										17,223						
4.700	1	1	Each	Pond, Aerator	2038	10 to 15	14	3,300.00	3,300	3,300	0.2%															4,992	
4.730	1,230	1,230	Square Yards	Pond, Central, Sediment Removal	2038	to 30	14	25.00	30,750	30,750	0.6%															46,512	
4.731	2,250	2,250	Square Yards	Pond, Eastern, Shared, Sediment Removal	2038	to 30	14	25.00	28,125	28,125	0.5%															42,542	
4.810	1	1	Allowance	Signage, Monument, Replacement (Incl. Wood Fence)	2028	15 to 20	4	7,500.00	7,500	7,500	0.3%					8,441											
				Clubhouse Elements																							
5.070	1	1	Allowance	Air Handling and Condensing Units, Split Systems, Remaining	2025	15 to 20	1	11,000.00	11,000	11,000	0.1%		11,330														
5.071	2	2	Each	Air Handling and Condensing Units, Split Systems, Subsequent	2043	15 to 20	19	7,000.00	14,000	14,000	0.3%																
5.160	3	1	Allowance	Exercise Equipment, Phased	2027	5 to 15	3 to 11	6,500.00	6,500	19,500	0.8%				7,103				7,994				8,998				
5.500	1	1	Allowance	Interior, Renovation, Complete	2043	to 25	19	66,000.00	66,000	66,000	1.4%																
5.510	1	1	Allowance	Interior, Renovation, Partial	2033	8 to 12	9	25,000.00	25,000	25,000	1.1%										32,619						
5.600	920	920	Square Feet	Walls, Siding, Fiber Cement, Replacement	2058	to 50	34	14.00	12,880	12,880	0.0%																
5.800	370	370	Square Feet	Windows and Doors	2043	to 40	19	77.00	28,490	28,490	0.6%																
				Pool Elements																							
6.200	2,300	2,300	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2032	8 to 12	8	2.50	5,750	5,750	0.4%									7,284							
6.400	175	175	Linear Feet	Fence, Aluminum	2032	to 25	8	65.00	11,375	11,375	0.2%									14,410							
6.500	1	1	Allowance	Furniture	2029	to 12	5	15,500.00	15,500	15,500	1.0%						17,969										
6.600	2	1	Allowance	Mechanical Equipment, Phased	2035	to 15	11 to 14	6,000.00	6,000	12,000	0.5%												8,305			9,076	
6.900	730	730	Square Feet	Structure, Total Replacement	2063	to 55	39	220.00	160,600	160,600	0.0%																

RESERVE EXPENDITURES

The Lakes at Polaris
Condominium Association
Columbus, Ohio

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Years Remaining	Unit Cost (2024)	Per Phase Cost (2024)	Total Cost (2024)	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
				Exterior Building Elements																						
1.240	12,450	3,113	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2028	15 to 20	4 to 7	12.00	37,350	149,400	6.0%									75,925	78,203	80,549	82,965			
1.241	0	1	Allowance	Gutters and Downspouts, Drainage Installation (2027 is Planned)	2027	N/A	3	75,000.00	75,000	0	0.9%															
1.260	150	150	Each	Light Fixtures	2044	to 20	20	60.00	9,000	9,000	0.2%					16,255										
1.280	1,430	358	Squares	Roofs, Asphalt Shingles, Phased	2028	15 to 20	4 to 7	450.00	160,875	643,500	26.0%									327,026	336,837	346,942	357,350			
1.860	130,800	32,700	Square Feet	Walls, Siding, Vinyl, Phased	2044	to 40	20 to 23	10.00	327,000	1,308,000	30.2%					590,598	608,316	626,566	645,363							
1.905	1	1	Allowance	Walls, Trim, Paint Finishes	2031	6 to 8	7	55,000.00	55,000	55,000	3.2%								108,547							
				Property Site Elements																						
4.020	11,230	11,230	Square Yards	Asphalt Pavement, Crack Repair, Patch and Seal Coat	2032	3 to 5	8	2.00	22,460	22,460	2.3%	36,042				40,565								51,387		
4.040	4,550	2,275	Square Yards	Asphalt Pavement, Driveways and Parking Areas, Total Replacement, Phased	2027	15 to 20	3 to 4	38.50	87,588	175,175	6.7%								172,862	178,047						
4.041	4,350	4,350	Square Yards	Asphalt Pavement, Polaris Lakes Dr, Shared, Mill and Overlay	2033	15 to 20	9	18.00	26,097	26,097	0.4%															
4.042	4,350	4,350	Square Yards	Asphalt Pavement, Polaris Lakes Dr, Shared, Total Replacement	2053	15 to 20	29	35.00	50,745	50,745	1.5%														119,584	
4.043	5,950	2,975	Square Yards	Asphalt Pavement, Streets, Mill and Overlay, Phased	2027	15 to 20	3 to 4	20.00	59,500	119,000	1.6%															
4.045	5,950	2,975	Square Yards	Asphalt Pavement, Streets, Total Replacement, Phased	2047	15 to 20	23 to 24	38.50	114,538	229,075	5.6%								226,050	232,831						
4.080	730	730	Square Yards	Asphalt Pavement, Walking Paths, Total Replacement	2028	15 to 20	4	32.00	23,360	23,360	0.9%							44,760								
4.100	10	5	Each	Catch Basins, Inspections and Capital Repairs, Phased	2047	15 to 20	23 to 24	1,000.00	5,000	10,000	0.2%								9,868	10,164						
4.110	4,000	140	Linear Feet	Concrete Curbs, Partial	2027	to 65	3 to 30+	38.50	5,390	154,000	1.0%	8,649				9,735			10,638	10,957				12,332		
4.140	9,150	640	Square Feet	Concrete Sidewalks, Partial	2027	to 65	3 to 30+	12.00	7,680	109,800	0.8%						14,287						17,060			
4.170	90	6	Each	Concrete Stoops, Partial	2032	to 65	8 to 30+	1,300.00	7,800	117,000	0.6%					14,088						16,821				
4.420	1	1	Allowance	Irrigation System	2048	to 40+	24	120,000.00	120,000	120,000	3.0%									243,935						
4.560	18	18	Each	Light Poles and Fixtures	2033	to 25	9	2,500.00	45,000	45,000	0.7%															
4.600	6	6	Each	Mailbox Stations	2033	to 25	9	2,200.00	13,200	13,200	0.2%															
4.700	1	1	Each	Pond, Aerator	2038	10 to 15	14	3,300.00	3,300	3,300	0.2%													7,550		
4.730	1,230	1,230	Square Yards	Pond, Central, Sediment Removal	2038	to 30	14	25.00	30,750	30,750	0.6%															
4.731	2,250	2,250	Square Yards	Pond, Eastern, Shared, Sediment Removal	2038	to 30	14	25.00	28,125	28,125	0.5%															
4.810	1	1	Allowance	Signage, Monument, Replacement (Incl. Wood Fence)	2028	15 to 20	4	7,500.00	7,500	7,500	0.3%									15,246						
				Clubhouse Elements																						
5.070	1	1	Allowance	Air Handling and Condensing Units, Split Systems, Remaining	2025	15 to 20	1	11,000.00	11,000	11,000	0.1%															
5.071	2	2	Each	Air Handling and Condensing Units, Split Systems, Subsequent	2043	15 to 20	19	7,000.00	14,000	14,000	0.3%				24,549											
5.160	3	1	Allowance	Exercise Equipment, Phased	2027	5 to 15	3 to 11	6,500.00	6,500	19,500	0.8%			11,066				12,455				14,018				
5.500	1	1	Allowance	Interior, Renovation, Complete	2043	to 25	19	66,000.00	66,000	66,000	1.4%				115,731											
5.510	1	1	Allowance	Interior, Renovation, Partial	2033	8 to 12	9	25,000.00	25,000	25,000	1.1%														58,914	
5.600	920	920	Square Feet	Walls, Siding, Fiber Cement, Replacement	2058	to 50	34	14.00	12,880	12,880	0.0%															
5.800	370	370	Square Feet	Windows and Doors	2043	to 40	19	77.00	28,490	28,490	0.6%				49,957											
				Pool Elements																						
6.200	2,300	2,300	Square Feet	Concrete Deck, Inspections, Partial Replacements and Repairs	2032	8 to 12	8	2.50	5,750	5,750	0.4%			9,789									13,156		
6.400	175	175	Linear Feet	Fence, Aluminum	2032	to 25	8	65.00	11,375	11,375	0.2%															
6.500	1	1	Allowance	Furniture	2029	to 12	5	15,500.00	15,500	15,500	1.0%		25,619												36,527	
6.600	2	1	Allowance	Mechanical Equipment, Phased	2035	to 15	11 to 14	6,000.00	6,000	12,000	0.5%										12,563			13,728		
6.900	730	730	Square Feet	Structure, Total Replacement	2063	to 55	39	220.00	160,600	160,600	0.0%															

Years 2024 to 2039

RESERVE EXPENDITURES

The Lakes at Polaris
Condominium Association
Columbus, Ohio

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.
3) **2055+** indicates a component which is considered long-lived

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Years Remaining	Costs, $ Unit (2024)	Per Phase (2024)	Total (2024)	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
				Anticipated Expenditures, By Year ($8,173,813 over 30 years)								0	11,330	0	257,111	429,452	247,766	236,691	319,429	66,854	152,629	0	17,303	39,707	0	114,919	97,653

Years 2040 to 2054

RESERVE EXPENDITURES

The Lakes at Polaris
Condominium Association
Columbus, Ohio

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years Useful	Remaining	Unit (2024)	Costs, $ Per Phase (2024)	Total (2024)	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
				Anticipated Expenditures, By Year ($8,173,813 over 30 years)								44,691	25,619	20,855	190,238	671,241	622,603	683,781	1,173,327	1,094,131	427,602	458,330	457,375	98,152	215,025	0

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
The Lakes at Polaris
Condominium Association
Columbus, Ohio

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
Reserves at Beginning of Year	*(Note 1)*	296,705	365,121	505,893	674,618	599,984	361,337	313,055	280,470	169,130	316,951	388,114	622,374	852,111	1,072,236	1,345,643	1,517,258
Total Recommended Reserve Contributions	*(Note 2)*	**63,979**	**140,500**	**153,000**	**165,500**	**178,000**	**190,500**	**196,200**	**202,100**	**208,200**	**214,400**	**220,800**	**227,400**	**234,200**	**241,200**	**248,400**	**255,900**
Estimated Interest Earned, During Year	*(Note 3)*	4,437	11,602	15,725	16,978	12,805	8,983	7,906	5,989	6,475	9,392	13,460	19,640	25,633	32,207	38,134	43,102
Anticipated Expenditures, By Year		0	(11,330)	0	(257,111)	(429,452)	(247,766)	(236,691)	(319,429)	(66,854)	(152,629)	0	(17,303)	(39,707)	0	(114,919)	(97,653)
Anticipated Reserves at Year End		$365,121	$505,893	$674,618	$599,984	$361,337	$313,055	$280,470	$169,130	$316,951	$388,114	$622,374	$852,111	$1,072,236	$1,345,643	$1,517,258	$1,718,607

(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
Reserves at Beginning of Year	1,718,607	1,986,874	2,289,720	2,613,780	2,783,434	2,478,888	2,224,433	1,910,430	1,101,320	360,460	285,259	187,325	98,457	382,309	566,827
Total Recommended Reserve Contributions	**263,600**	**271,500**	**279,600**	**288,000**	**296,600**	**305,500**	**314,700**	**324,100**	**333,800**	**343,800**	**354,100**	**364,700**	**375,600**	**386,900**	**398,500**
Estimated Interest Earned, During Year	49,358	56,965	65,315	71,892	70,095	62,649	55,077	40,117	19,471	8,601	6,295	3,807	6,404	12,643	20,684
Anticipated Expenditures, By Year	(44,691)	(25,619)	(20,855)	(190,238)	(671,241)	(622,603)	(683,781)	(1,173,327)	(1,094,131)	(427,602)	(458,330)	(457,375)	(98,152)	(215,025)	0
Anticipated Reserves at Year End	$1,986,874	$2,289,720	$2,613,780	$2,783,434	$2,478,888	$2,224,433	$1,910,430	$1,101,320	$360,460	$285,259	$187,325	$98,457 *(NOTE 5)*	$382,309	$566,827	$986,011 *(NOTE 4)*

Explanatory Notes:

1) Year 2024 starting reserves are as of June 30, 2024; FY2024 starts January 1, 2024 and ends December 31, 2024.
2) Reserve Contributions for 2024 are the remaining budgeted 6 months; 2025 is the first year of recommended contributions.
3) **2.7%** 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 Year (reserve balance at critical point).

*Refer to the Reserve Expenditures pages for the full list of reserve elements

FIVE-YEAR OUTLOOK

The Lakes at Polaris
Condominium Association
Columbus, Ohio

Line Item	Reserve Component Inventory	Percentage Ownership	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029
	Exterior Building Elements							
1.240	Gutters and Downspouts, Aluminum, Phased	100%					42,038	43,299
1.241	Gutters and Downspouts, Drainage Installation (2027 is Planned)	100%				75,000		
1.280	Roofs, Asphalt Shingles, Phased	100%					181,066	186,498
	Property Site Elements							
4.040	Asphalt Pavement, Driveways and Parking Areas, Total Replacement, Phased	100%				95,709	98,581	
4.043	Asphalt Pavement, Streets, Mill and Overlay, Phased	100%				65,017	66,968	
4.080	Asphalt Pavement, Walking Paths, Total Replacement	100%					26,292	
4.110	Concrete Curbs, Partial	100%				5,890	6,066	
4.140	Concrete Sidewalks, Partial	100%				8,392		
4.810	Signage, Monument, Replacement (Incl. Wood Fence)	100%					8,441	
	Clubhouse Elements							
5.070	Air Handling and Condensing Units, Split Systems, Remaining	100%		11,330				
5.160	Exercise Equipment, Phased	100%				7,103		
	Pool Elements							
6.500	Furniture	100%						17,969
	Anticipated Expenditures, By Year ($8,173,813 over 30 years)		0	11,330	0	257,111	429,452	247,766

4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *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

Front elevation

Side elevation

Rear elevation

Gutters and Downspouts, Aluminum

Line Items: 1.240 and 1.241

Quantity: Approximately 12,450 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts. This quantity includes the clubhouse and mailbox station.

History: Original with a history of repairs. The Association plans to expend $75,000 to install subsurface drain tile to alleviate overflow at pipe adapters and to extend drainage swales behind Buildings 5 and 6 in 2027. We are informed of the interest in increasing the gutter and downspout capacity with the upcoming replacement to alleviate reported overflow issues.

Condition: Fair overall with periodic evidence of overflow, fastener rust, leakage at the seams, damage and isolated deflection evident

Gutter and downspout overview

Periodic fastener rust

Periodic evidence of overflow at pipe adapters

Periodic evidence of overflow

Downspouts discharge onto lower roofs

Periodic evidence of leakage at the seams

Isolated downspouts routed to lower gutters

Misaligned drainage pipe, shown by Unit 9065

Gutter deflection, shown at Unit 1424

Partially crushed downspout extension

Area to install subsurface drainage behind Buildings 5 and 6

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. Downspouts that discharge directly onto roofs cause premature deterioration of the roofs due to the high concentration of storm water. We recommend either routing these downspouts directly to the ground, connecting the downspouts to the gutters of the lower roof or distributing the storm water discharge over a large area. 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. Our cost assumes replacement with large capacity gutters and downspouts.

Light Fixtures

Line Item: 1.260

Quantity: Approximately 150 exterior metal light fixtures accent the garages and front entries

History: Replaced in 2024

Condition: Good overall

Exterior light fixture at garages

Useful Life: Up to 20 years

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

- As-needed:
  - Replace burned out bulbs at common fixtures as needed
  - Inspect and repair broken or dislodged fixtures
  - Ensure a waterproof seal between the fixture and building exists

Priority/Criticality: Per Board discretion

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

Roofs, Asphalt Shingles

Line Item: 1.280

Quantity: Approximately 1,430 *squares*[1] at the residential buildings, clubhouse and mailbox shelter

History: Original with a history of repairs

Condition: Fair overall with periodic shingle lift, sheathing deflection and weathered shingles evident from our visual inspection from the ground. Management and the Board do not report any active or recent leaks.

Residential building roof overview

Clubhouse roof overview

Periodic shingle lift

Shingle lift, shown at Unit 9128

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

Shingle lift, shown at Unit 9178

Shingle lift, shown at Unit 9157

Shingle lift, shown at the mailbox station shelter

Minor shingle lift, shown at Unit 1439

Sheathing deflection, shown at Unit 9020

Sheathing deflection, shown at Unit 1450

Shingle lift and sheathing deflection, shown at Unit 1420

Useful Life: 15- to 20-years

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

- Three tab shingles
- Boston style ridge caps
- Soffit, square hood box and ridge vents
- Metal drip edge
- Open valleys with metal W flashing

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.

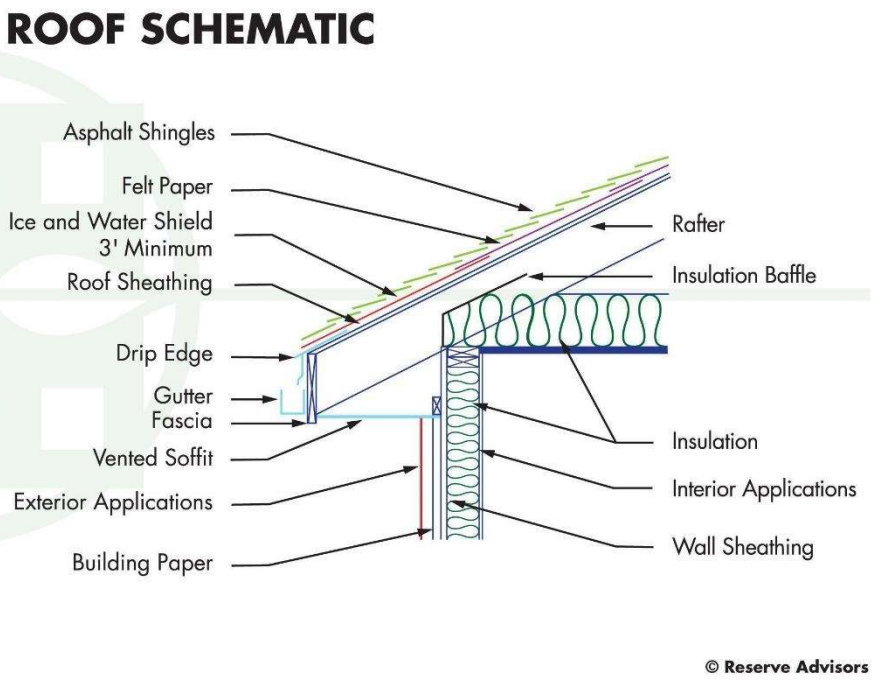
The vents should be clear of debris and not blocked from above by attic insulation. If the soffit vents are blocked from above, installation of polystyrene vent spaces or baffles between the roof joists at these locations can ensure proper ventilation.

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, hailstorms, 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 the 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 The Lakes at Polaris:



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
  - Inspect for ice dams and 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.

Walls, Siding, Vinyl

Line Item: 1.860

Quantity: Approximately 130,800 square feet of vinyl siding comprises the exterior walls. This quantity includes the aluminum soffit and fascia.

History: Original and regularly power washed through the operating budget

Condition: Good to fair overall with isolated minor damage, loose siding and non-uniform partial replacements evident

Vinyl siding overview

Vinyl siding overview

Soffits overview

Minor damage, shown at Building 6 rear

Damaged corner guard

Non-uniform previous partial replacement, shown at Unit 1414

Isolated minor loose siding

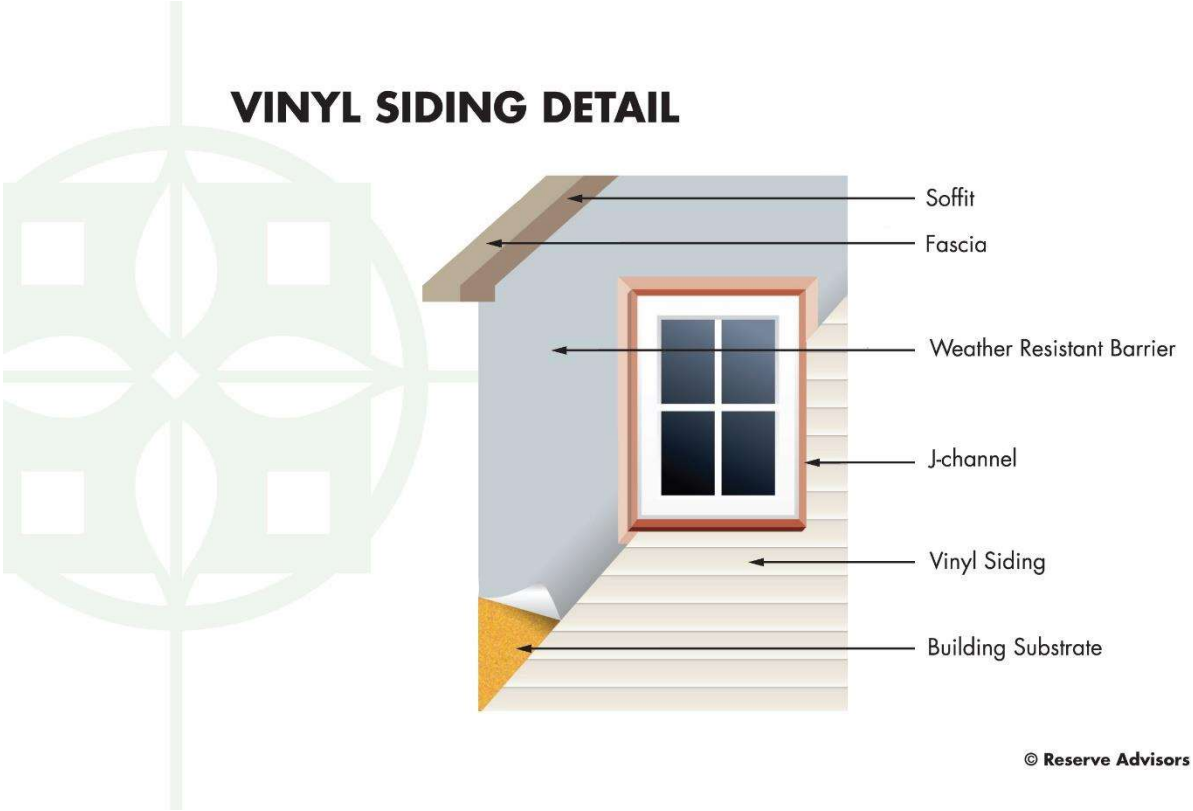
J channel detail

Useful Life: Up to 40 years

Component Detail Notes: The siding at The Lakes at Polaris consists of the following:

- Clapboard double four-inch profile
- Shake profile
- J-channel trim at window and door perimeters, and other penetrations
- Water-vapor permeable building paper does not exist

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



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.

The lack of water-vapor permeable building paper underneath the siding can result in premature loosening of the siding fasteners from water damage to the substrate sheathing. Therefore, the Association should anticipate a decreased useful life due to the lack of water proofing beneath the siding.

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.

Walls, Trim, Paint Finishes

Line Item: 1.905

Quantity: We include paint finishes at the various trim elements

History: The Association painted all the trim elements with two coats in 2023 at a cost of approximately $55,000.

Condition: Good overall with isolated minor finish deterioration evident

Trim elements

Minor finish deterioration

Useful Life: Six- to eight-years

Component Detail Notes: Correct and complete preparation of the surface before application of the paint finish maximizes the useful life of the paint finish and surface. The contractor should remove all loose, peeled or blistered paint before application of the new paint finish. The contractor should then power wash the surface to remove all dirt or chalking of the prior paint finish.

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 assume the following activities per event:

- Paint finish applications
- Replacement of up to five percent (5%) of the trim (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.)
- Replacement of sealants as needed

Property Site Elements

Asphalt Pavement, Repaving and Repairs

Line Items: 4.020 through 4.045

Quantity, History and Condition:

- **Driveways and Parking Areas:** Approximately 4,550 square yards; original to construction; fair to poor overall condition with periodic cracks, settlement and deterioration evident

- **Polaris Lakes Drive (Shared):** The Association is responsible for thirty-three percent (33%) of the costs associated with maintaining the approximately 4,350 square yards that comprise Polaris Lakes Drive from Carylake Circle to the community entrance; the wear course was likely installed in 2014; good to fair overall condition with cracks evident
- **Streets:** Approximately 5,950 square yards comprise the street pavement within the property; primarily original to construction. The Association conducted centerline drainage repairs that concluded in 2021 and repaved a section of the street centerline at this time, fair to poor overall condition with alligator cracks, evidence of previous repairs and surface deterioration evident.

Additionally, the Association conducted seal coat applications in 2023. The Board informs us of their interest in repaving the entirety of the pavement in the near term over a two-year phase.

Our quantity for crack repair, patching and seal coat applications includes the 730 square yards of walking path pavement. We include replacement of the walking path pavement in Line Item **4.080 "Asphalt Pavement, Walking Paths, Total Replacement"**. We recommend repairs to the shared pavement at Polaris Lakes Drive be funded through the operating budget.

Driveway pavement overview

Driveway pavement overview – note deterioration

Cracks and deterioration, shown at shared driveway at Units 9109 and 9113

Alligator cracks, shown at Unit 9148

Periodic edge deterioration

Parking area overview

Polaris Lakes Dr pavement overview (Shared)

Polaris Lakes Dr pavement overview (Shared)

Polaris Lakes Dr pavement cracks (Shared)

Polaris Lakes Dr settlement cracks (Shared)

Street pavement overview

Street pavement overview

Street pavement overview

Street pavement overview – note centerline patching and deterioration

Previous centerline patching

Alligator cracks

Alligator cracks

Alligator cracks and previous repairs

Alligator cracks and surface deterioration

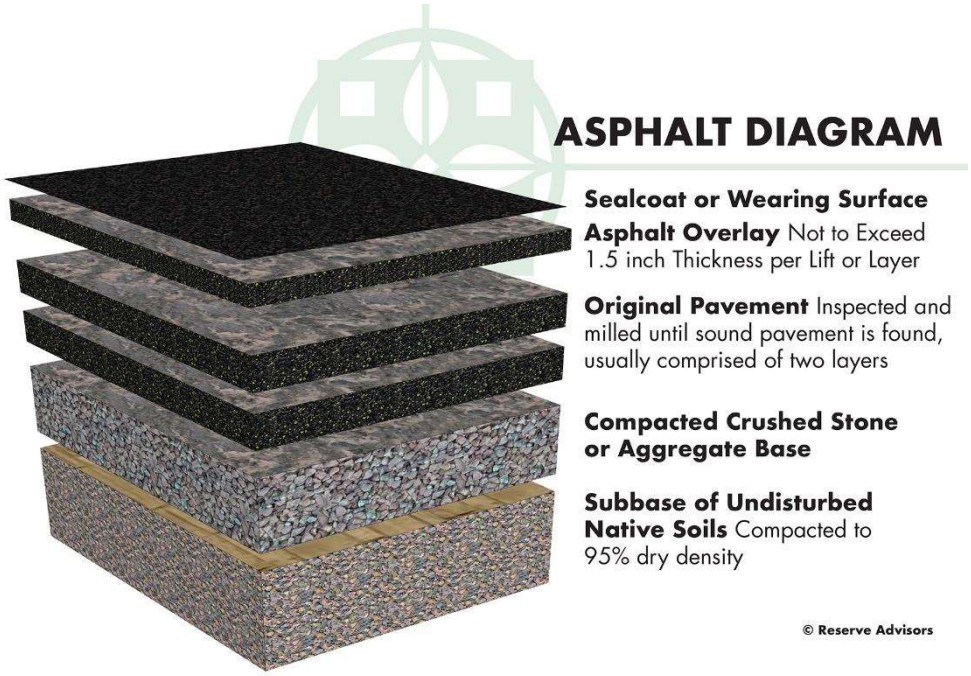
Alligator cracks

Alligator cracks and surface deterioration

Useful Life: 15- to 20-years with the benefit of crack repair and patch events every three- to five-years

Component Detail Notes: Proposals for seal coat applications should include crack repairs and patching. The contractor should only apply seal coat applications after repairs are completed. A seal coat does not bridge or close cracks, therefore, unrepaired cracks render the seal coat applications useless.

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 The Lakes at Polaris:



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

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 includes an allowance for patching of up to two percent (2%) of the pavement. Our cost for milling and overlayment includes area patching of up to ten percent (10%).

Asphalt Pavement, Repaving, Walking Paths

Line Item: 4.080

Quantity: 730 square yards

History: Original and seal coated in 2020

Condition: Fair overall with periodic cracks, settlement, discoloration and previous repairs evident

Asphalt pavement walking path

Asphalt pavement walking path

Asphalt pavement walking path

Walking path cracks

Walking path cracks

Walking path cracks at previous crack repair

Systemic discoloration

Separation and organic growth

Walking path separation

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

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

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

Catch Basins

Line Item: 4.100

Quantity: 10 catch basins[2]

[2] We utilize the terminology catch basin to refer to all storm water collection structures including curb inlets.

History: The Association conducted drainage repairs that concluded in 2021 with a number of catch basins being replaced at this time. One concrete collar was installed in 2021; the remaining catch basins do not possess concrete collars.

Condition: Good overall

Based on the recent catch basin work conducted, we do not include inspections and capital repairs to the catch basins in conjunction with the near term repaving event, though we do recommend coordinating with subsequent repaving.

Catch basin

Catch basin

Useful Life: The useful life of catch basins is up to 65 years. However, achieving this useful life usually requires interim capital repairs or partial replacements every 15- to 20-years.

Component Detail Notes: Erosion causes settlement around the collar of catch basins. Left unrepaired, the entire catch basin will shift and need replacement.

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

- Annually:
    - Inspect and repair any settlement and collar cracks
    - Ensure proper drainage and inlets are free of debris
    - If property drainage is not adequate in heavy rainfall events, typically bi-annual cleaning of the catch basins is recommended

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 for inspections and capital repairs to the catch basins in conjunction with repaving.

Concrete Curbs

Line Item: 4.110

Quantity: Approximately 4,000 linear feet

Condition: Good to fair overall with isolated cracks and damage evident

Concrete curb

Concrete curb

Minor damage

Cracks and separation

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

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

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

Priority/Criticality: Per Board discretion

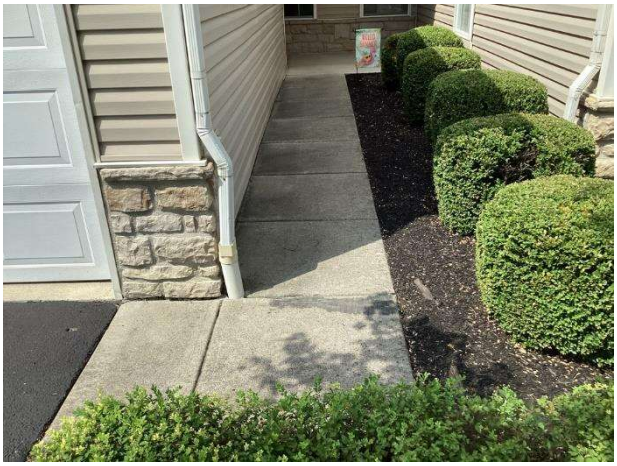
Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 1,260 linear feet of curbs, or thirty-two percent (31.5%) of the total, will require replacement during the next 30 years.

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 9,150 square feet

Condition: Fair overall with periodic cracks, damage, spall and previous repairs evident.



Concrete sidewalk

Spall and cracks by clubhouse

Concrete damage, shown at Unit 9153

Concrete damage, shown at Unit 9148

Spall, shown at Unit 9069

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

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

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

Priority/Criticality: Per Board discretion

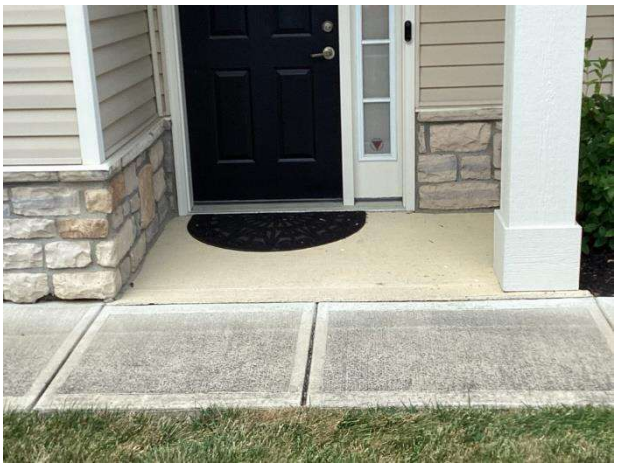
Expenditure Detail Notes: Expenditure timing and costs are depicted in the ***Reserve Expenditures*** table in Section 3. We estimate that up to 3,200 square feet of concrete sidewalks, or thirty-five percent (35%) of the total, will require replacement during the next 30 years.

Concrete Stoops

Line Item: 4.170

Quantity: 90 stoops comprising a total of approximately 3,570 square feet.

Condition: Good overall



Concrete stoop

Concrete stoop

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 24 stoops, or approximately twenty-seven percent (26.7%) of the total, during the next 30 years.

Irrigation System, Replacement

Line Item: 4.420

Quantity: The irrigation system waters the entire property.

History: Original

Condition: Satisfactory operational condition and Management and the Board does not report any deficiencies

Useful Life: Up to and sometimes beyond 40 years

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

- Electronic controls (timer)
- Impact rotors

- Network of supply pipes
- Pop-up heads
- Valves

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

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

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

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

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

Light Poles and Fixtures

Line Item: 4.560

Quantity: 18 metal poles with light fixtures. This quantity includes seven light poles and fixtures around the pond and pool.

History: Original

Condition: Good to fair overall

Light pole and fixture

Useful Life: Up to 25 years

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

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

Priority/Criticality: Per Board discretion

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

Mailbox Stations

Line Item: 4.600

Quantity: Six stations

History: Original

Condition: Good to fair overall with finish deterioration evident

Mailbox stations and enclosure

Finish deterioration

Useful Life: Up to 25 years

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

- As-needed:
  - Inspect and repair damage, vandalism, and finish deterioration
  - Verify posts are anchored properly

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: Replaced in 2023; the control box and nozzle were replaced in 2024

Condition: Reported satisfactory

Pond aerator

Useful Life: 10- to 15-years

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

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

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

Ponds, Sediment Removal

Line Item: 4.730

Quantity: Approximately 1,230 square yards of water surface area at the central pond. The Association also shares fifty percent (50%) of the cost responsibility of the 2,250 square yards that comprise the eastern pond with the neighboring Association.

History: Original; we are informed the Association conducts regular maintenance and erosion control as needed through the operating budget.

Condition: Good overall

Pond overview

Shared pond overview

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

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 pipelines. Sediment removal can also include shoreline regrading. Regrading includes removal of collapsed and eroded soil, and redefining the shoreline.

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. For reserve budgeting purposes, we estimate the need to remove an average depth of one yard from approximately one hundred percent (100%)

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 The Lakes at Polaris 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.

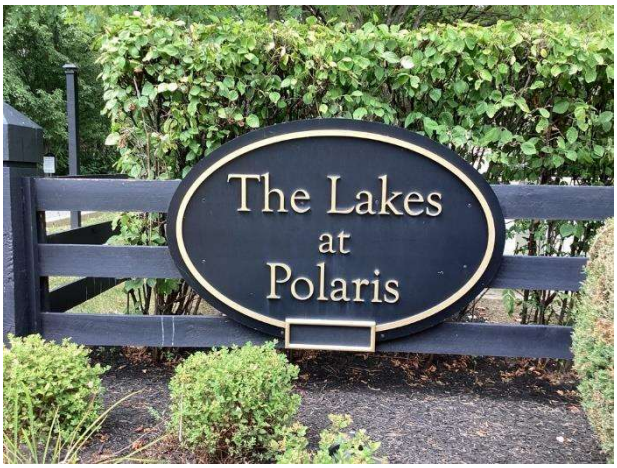
Signage, Monument

Line Item: 4.810

Quantity: Two property identification signs and 125 linear feet of wood fence

History: Original with a history of paint finishes

Condition: Good to fair overall



Monument signage

Wood fence by signage

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.

Clubhouse Elements

Clubhouse front elevation

Clubhouse rear elevation

Air Handling and Condensing Units, Split System

Line Items: 5.070 and 5.071

Quantity: Two *Bryant* condensing units, one *Bryant* furnace and one *HEIL* furnace. We consider one furnace and one condensing unit to comprise a split system.

History: The Association replaced one furnace in 2023; the other furnace and two condensing units are original. We include a budgetary allowance to replace the remaining furnace and condensing units in 2025. We recommend coordinating replacement of the condensing units and furnaces in subsequent events.

Condition: Reported satisfactory without operational deficiencies

Furnace

Recently replaced furnace

Condensing units

Useful Life: 15- to 20-years

Component Detail Notes: A split system air conditioner consists of an outside condensing unit, an interior evaporator coil, refrigerant lines and an interior gas-fired air handling unit. The condensing units have cooling capacities of four-tons. The split systems use R-410A refrigerant.

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:

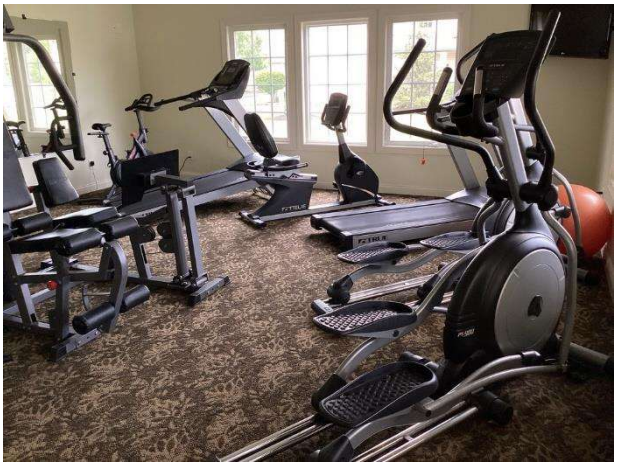
- Stationary cycle
- Steppers
- Treadmills

The exercise room contains the following types of strength training equipment:

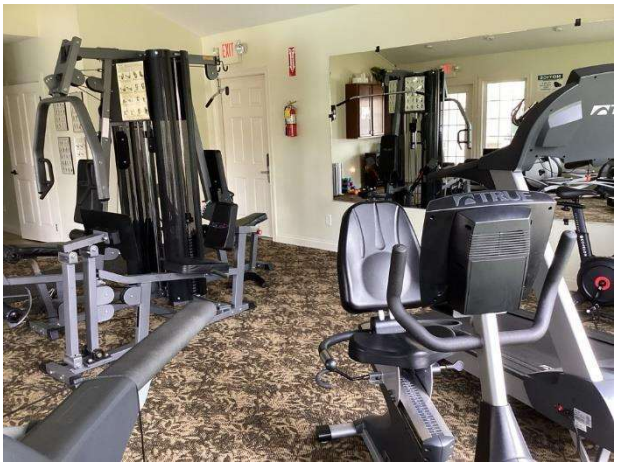
- Weight training machines

History: Varied ages; the Association has a regular preventative maintenance contract with the exercise equipment.

Conditions: Reported satisfactory



Exercise equipment



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 flooring
- Paint finishes at the walls and ceilings
- Plumbing fixtures
- Light fixtures including exit and emergency lights
- Furnishings
- Kitchen cabinets, countertops, and appliances

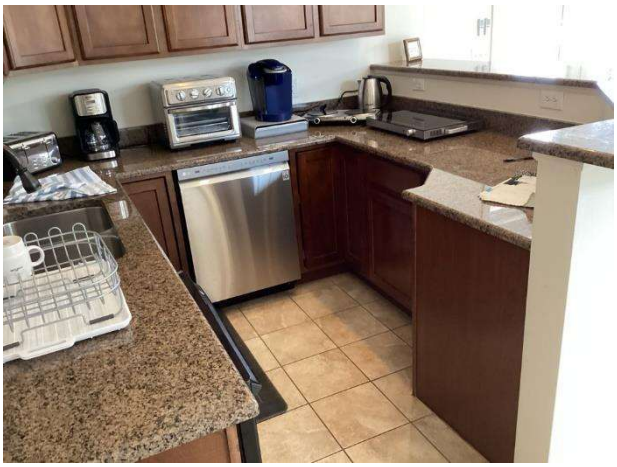
History: The Association renovated the clubhouse in 2021, replacing the appliances and flooring. The rest rooms were updated in 2023.

Condition: Good overall with isolated stains and finish cracks evident

Clubhouse interior

Clubhouse interior

Clubhouse interior



Kitchen overview

Visible carpet seam

Rest room overview

Luxury vinyl flooring

Finish crack

Furniture stains

Finish crack at ceiling

Furniture stains

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 finish to all surfaces
- Replacement of the carpet
- Replacement of the appliances and up to fifty percent (50%) of the furnishings

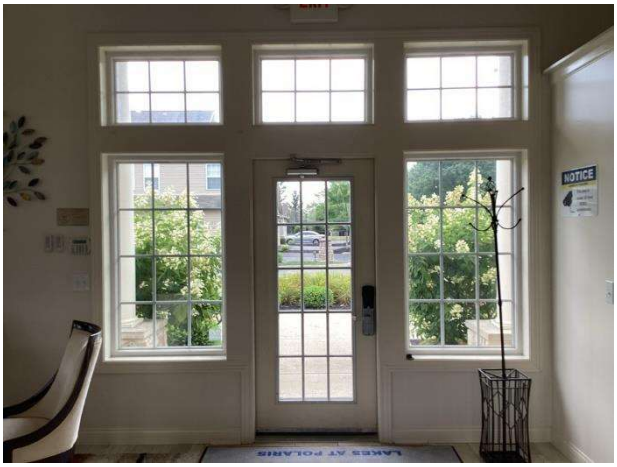
Windows and Doors

Line Item: 5.800

Quantity: Approximately 370 square feet

History: Original

Condition: Good overall



Windows and door overview

Frame detail

Useful Life: Up to 40 years

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

- Vinyl frames
- Dual pane glass
- Casement windows with screens
- Fixed windows
- Hinged doors

Priority/Criticality: Not recommended to defer

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

Pool Elements

Pool overview

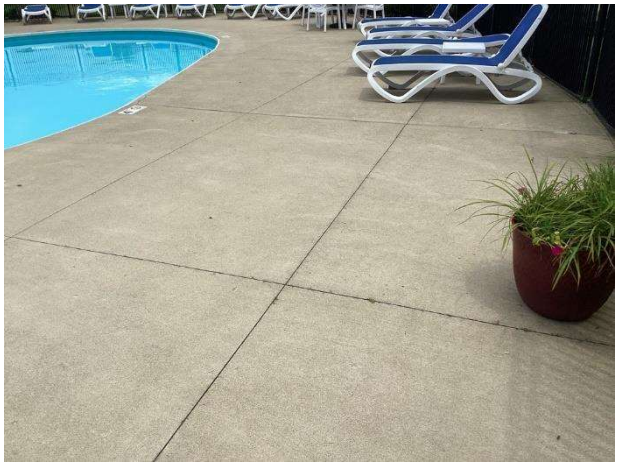
Concrete Deck

Line Item: 6.200

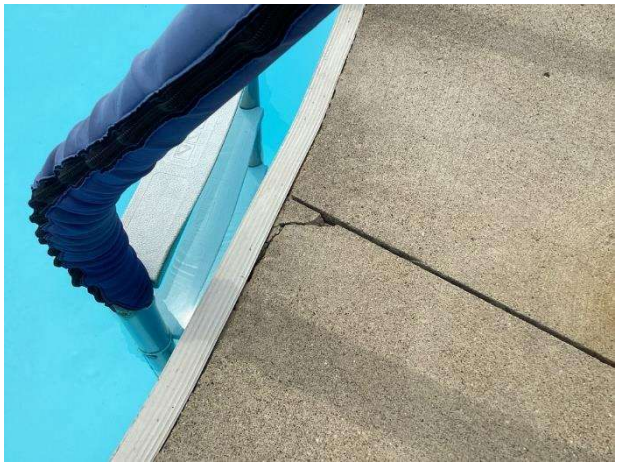
Quantity: 2,300 square feet

History: Original

Condition: Good to fair with isolated cracks evident



Concrete deck overview



Minor damage

Concrete crack

Concrete cracks

Concrete cracks

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

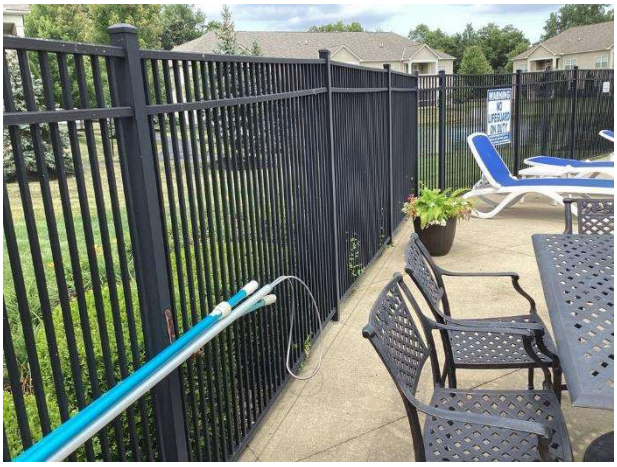
Fence, Aluminum

Line Item: 6.400

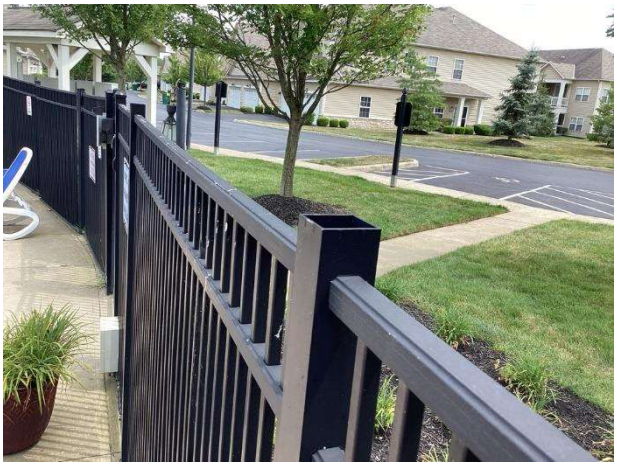
Quantity: 175 linear feet

History: Original with repairs conducted in 2021

Condition: Good to fair with isolated picket deflection, footing displacement, fastener rust and faded finishes evident



Fence overview – note footing displacement



Missing cap

Finish fade

Fastener rust

Picket deflection

Useful Life: Up to 25 years

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

- Annually:
    - Inspect and repair loose 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: The patio furniture was replaced in 2018, and the remaining pieces were replaced in a phased manner. The Association recently added umbrellas, funded through the operating budget.

Condition: Good to fair overall

Pool furniture

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 chlorinator and controls
- Electrical panel
- Interconnected pipe, fittings and valves
- Pumps, filters, and heaters

History: The heater was installed in 2021 and the pool filter was replaced in 2024.

Condition: Reported satisfactory overall

Pool filter

Pool heater

Useful Life: Up to 15 years

Preventative Maintenance Notes: The informs us preventative maintenance is conducted on a regular basis. 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.

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.

The Lakes at Polaris can fund capital repairs and replacements in any combination of the following:

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

We do not advocate special assessments or loans unless near term circumstances dictate otherwise. Although loans provide a gradual method of funding a replacement, the costs are higher than if the Association were to accumulate reserves ahead of the actual replacement. Interest earnings on reserves also accumulate in this process of saving or reserving for future replacements, thereby defraying the amount of gradual reserve collections. We advocate the third method of *Level Monthly Reserve Assessments* with relatively minor annual adjustments. The method ensures that 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[1] set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level II Reserve Study Update." These standards require a Reserve Component to have a "predictable remaining Useful Life." Estimating Remaining Useful Lives and Reserve Expenditures beyond 30 years is often indeterminate. Long-Lived Property Elements are necessarily excluded from this analysis. We considered the following factors in our analysis:

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- Local[2] 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 Columbus, Ohio at an annual inflation rate[3]. Isolated or regional markets of greater

[1] Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".
[2] See Credentials for additional information on our use of published sources of cost data.
[3] Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

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

- The past and current maintenance practices of The Lakes at Polaris 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.

PATRICK R. OLDER, RS
Responsible Advisor

CURRENT CLIENT SERVICES

Patrick R. Older, a Mechanical Engineer, is an Advisor for ***Reserve Advisors, LLC***. Mr. Older is responsible for the inspection and analysis of the condition of clients' property, and recommending engineering solutions to prolong the lives of the components. He also forecasts capital expenditures for the repair and/or replacement of the property components and prepares technical reports on assignments. He is responsible for conducting Life Cycle Cost Analysis and Capital Replacement Forecast services and the preparation of Reserve Study Reports for condominiums, townhomes and homeowner associations.

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

Twelve Oaks at Schaumburg Condominium Association – This condominium style development in Schaumburg, Illinois, comprising 156 units in a six-story midrise and 304 units in 32 townhome buildings, was built in 1986 and converted to condominiums in 2007.

Fox Point Homeowners Association, Inc. – Located in Barrington, Illinois, this planned unit development is responsible for the common elements shared by 411 single family homes. The property contains a lake, tennis courts, a pool house and two pools.

Cottages on Hill Condominiums – A townhome style development in Pickerington, Ohio, this community consists of 52 quad-style units in 13 buildings. The buildings comprise vinyl siding and asphalt shingle roofs, and the property contains asphalt pavement streets, driveways and masonry retaining walls.

The Regency at the Woods of South Barrington Association – This homeowners association is responsible for the common elements shared by 156 single family homes. Located in South Barrington, Illinois, residents have access to a well-appointed clubhouse containing an exercise center, several themed rooms and a pool.

Villas at Timber Ridge Condominium Association, Inc. – This townhome style development, situated in Waukesha, Wisconsin, consists of 40 units in 16 buildings. The buildings were constructed in phases from 2006 through 2022 and comprise vinyl siding and asphalt shingle roofs.

Graystone Manor Condominium Association – Developed in 1988 and located in Dublin, Ohio, this townhome style development consists of 68 units in 17 buildings and contains a clubhouse and pool. Plywood siding and masonry comprise the building facades.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Older attended New York City College of Technology in Brooklyn, New York where he attained his Bachelor of Science degree in Mechanical Engineering. His studies focused on material sciences and design engineering. Mr. Older also worked as a project manager and design engineer for La Boit Specialty Vehicles, Inc., where he worked with medical professionals to design custom medical and veterinary mobile clinics in Columbus, Ohio.

EDUCATION

New York City College of Technology, Brooklyn - B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Reserve Specialist (RS) – Community Association Institute

JUSTIN B. KLEIN, RS
Great Lakes Quality Assurance Engineer

CURRENT CLIENT SERVICES

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

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

Springfield Golf and Country Club – This private club, established in 1960, is located in Springfield, Virginia. Home to an 18-hole golf course, multiple practice putting greens, a driving range, outdoor pool facility, a fitness center and studio, a golf simulator, four indoor tennis courts, and six outdoor tennis courts including two clay courts, members of this Club can enjoy an extensive array of amenities.

Glenmore Community Association – Located in Keswick, Virginia, this master community association features 980 single family homes and counting. The community maintains a private equestrian center located on a 61-acre parcel of land. The equestrian center is equipped with two outdoor riding rings and 13 fenced paddocks in addition to the 27 stalls at the Main Barn. The Association also maintains over 10 miles of roads, three earthen dams, eight ponds, a dog park, and playground.

California House – Built in 1900 and converted to condominiums in 1978, this six story building is located in the historic Kalorama neighborhood in Washington D.C. Sharing its footprint with a sister building, the Association's 27 residents can enjoy the decorative cornice, ornate marble tiled lobby and welcoming courtyard.

Villages of Five Points – Conveniently nestled east of Route 1 in Lewes, Delaware, this master association of over 580 units comprising condos, townhouses and single-family homes is a short drive to the shores of the Atlantic Ocean. The Association maintains a clubhouse, two pool houses and pools, eight tennis courts and over 1.5 miles of pavement walking paths.

Windsor Park Residences – Located within the Windsor Club in Vero Beach, Florida, this condominium Association features 12 residences within five connected three-story buildings with a private reflecting pool centerpiece at the courtyard. Owners can take advantage of direct access elevators and garages for their vehicles and golf carts.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, LLC, Mr. Klein attended Rose-Hulman Institute of Technology in Terre Haute, Indiana where he attained his Bachelor of Science degree in Mechanical Engineering. His rigorous coursework focused on using problem solving to understand mechanical systems and principles. During his undergraduate education, Mr. Klein worked to develop a debris displacement apparatus to be mounted inside a D-155 bulldozer for Komatsu America Corporation.

EDUCATION

Rose-Hulman Institute of Technology - B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Reserve Specialist (RS) – Community Association Institute
Engineer in Training (E.I.T) – State of Virginia

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.

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

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

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

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

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

7. DEFINITIONS

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

Cash Flow Method - A method of calculating Reserve Contributions where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different Reserve Funding Plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.

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

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

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

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

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

Long-Lived Property Component - Property component of The Lakes at Polaris 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) The Lakes at Polaris 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.