

RESERVE STUDY

The Woods at Ethan's Green Homeowners Association



Twinsburg, Ohio
March 9, 2021



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The Woods at Ethan's Green Homeowners Association
Twinsburg, Ohio

Dear Board of Directors of The Woods at Ethan's Green Homeowners Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of The Woods at Ethan's Green Homeowners Association in Twinsburg, Ohio and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, March 9, 2021.

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 Woods at Ethan's Green Homeowners 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 April 5, 2021 by

Reserve Advisors, LLC

Visual Inspection and Report by: Reid M. Nelson

Review by: Nicole L. Lowery, RS¹, PRA², Associate 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 Woods at Ethan's Green Homeowners Association (The Woods at Ethan's Green)

Location: Twinsburg, Ohio

Reference: 150626

Property Basics: The Woods at Ethan's Green Homeowners Association is responsible for the common elements shared by 44 single family homes. The community was built from 1998 to 2000.

Reserve Components Identified: 12 Reserve Components.

Inspection Date: March 9, 2021. We conducted the original inspection on October 1, 2015.

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 2044 due to replacement of the mailboxes.

Cash Flow Method: 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
- 0.3% average current annual rate of return on invested reserves
- 2.0% 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:

- \$155,028 as of January 31, 2021
- The Association did not budget Reserve Contributions in 2021.

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:

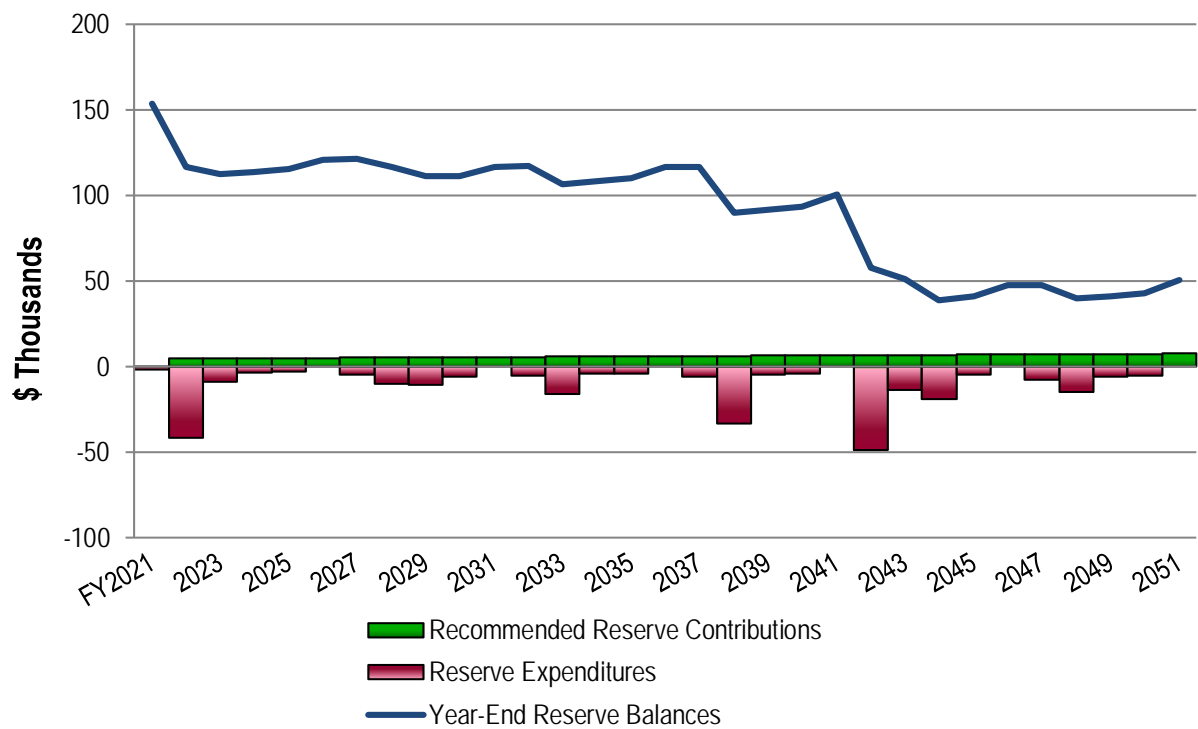
- Replacement of the wood fence due to noted deterioration
- Erosion control and drainage remediation at the landscape catch basins based on conversations with the Board

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

- Increase to \$4,500 in 2022
- Inflationary increases through 2051, the limit of this study's Cash Flow Analysis
- Initial adjustment of \$4,500 is equivalent to an increase of \$8.52 in the monthly contributions per homeowner.
- The Association may ascribe the actual contributions and assessments per owner based upon percent ownership, as defined by the Association's governing documents.

The Woods at Ethan's Green
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2022	4,500	116,537	2032	5,500	117,033	2042	6,500	57,816
2023	4,600	112,407	2033	5,600	106,551	2043	6,600	51,098
2024	4,700	113,732	2034	5,700	108,044	2044	6,700	38,536
2025	4,800	115,629	2035	5,800	110,213	2045	6,800	40,630
2026	4,900	120,883	2036	5,900	116,452	2046	6,900	47,662
2027	5,000	121,178	2037	6,000	116,623	2047	7,000	47,274
2028	5,100	116,617	2038	6,100	89,818	2048	7,100	39,620
2029	5,200	111,379	2039	6,200	91,290	2049	7,200	40,847
2030	5,300	111,037	2040	6,300	93,497	2050	7,300	42,944
2031	5,400	116,778	2041	6,400	100,187	2051	7,400	50,484





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 Woods at Ethan's Green Homeowners Association

Twinsburg, Ohio

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, March 9, 2021. We conducted the original inspection on October 1, 2015.

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

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

IDENTIFICATION OF PROPERTY



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

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

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

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

- The Woods at Ethan's Green responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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

- Electrical Systems, Common
- Foundations, Entrance Monuments and Gate House
- Structural Frames, Entrance Monuments and Gate House

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. For purposes of calculating appropriate Reserve Contributions, we identify the following list of Operating Budget Funded Repairs and Replacements:

- General Maintenance to the Common Elements
- Expenditures less than \$2,000 (Excludes sidewalks) (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Catch Basin, Access Drive



Access drive catch basin

- Concrete Flatwork, Joint Sealants
- Fences, Steel, Paint Finishes
- Irrigation System, Controls and Maintenance
- Landscape, Maintenance

- Paint Finishes, Touch Up
- Other Repairs normally funded through the Operating Budget

Certain items have been designated as the responsibility of the homeowners to repair or replace at their cost. Property Maintained by Homeowners, including items billed back to Homeowners, relates to unit:

- Driveways
- Homes
- Unit Walks

Certain items have been designated as the responsibility of others to repair or replace. Property Maintained by Others relates to:

- Light Poles and Fixtures (Utility Company)
- Pipes, Subsurface Utilities (City of Twinsburg)
- Sidewalks (City of Twinsburg) (We include associated costs at the request of the Board)
- Street Systems (City of Twinsburg)

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
- 2021 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***.

RESERVE EXPENDITURES

The Woods at Ethan's Green
Homeowners Association
Twinsburg, Ohio

Explanatory Notes:

- 1) 2.0% is the estimated Inflation Rate for estimating Future Replacement Costs.
2) FY2021 is Fiscal Year beginning January 1, 2021 and ending December 31, 2021.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026	6 2027	7 2028	8 2029	9 2030	10 2031	11 2032	12 2033	13 2034	14 2035	15 2036
						Useful	Remaining	Unit (2021)	Per Phase (2021)	Total (2021)																	
4.100	1	1	Allowance	Catch Basins, Landscape, Erosion Control and Drainage Remediation	2022	N/A	1	8,500.00	8,500	8,500	3.0%		8,670														
4.120	8,770	585	Square Feet	Concrete Access Drive and Parking Areas, Partial	2023	to 65	2 to 30+	12.00	7,020	105,240	19.5%			7,304				8,064						8,903			
4.140	5,100	170	Square Feet	Concrete Sidewalks, Partial	2023	to 65	2 to 30+	10.00	1,700	51,000	4.7%			1,769				1,953						2,156			
4.245	65	65	Linear Feet	Fences, Steel, Entrance Monument and Gate House	2033	to 35	12	65.00	4,225	4,225	1.8%													5,358			
4.280	900	900	Linear Feet	Fence, Wood, Paint Finishes	2027	4 to 6	6	5.00	4,500	4,500	8.4%						5,068						5,595				
4.285	900	900	Linear Feet	Fence, Wood, Replacement	2022	15 to 20	1	36.00	32,400	32,400	28.2%		33,048														
4.291	1	1	Each	Flag Pole	2030	to 35	9	2,000.00	2,000	2,000	0.8%									2,390							
4.420	1	1	Allowance	Irrigation System	2038	to 40+	17	15,000.00	15,000	15,000	7.2%																
4.500	1	1	Allowance	Landscape, Partial Replacements	2025	to 5	4	3,000.00	3,000	3,000	8.7%					3,247				3,585						3,958	
4.600	44	44	Each	Mailboxes	2044	to 25	23	200.00	8,800	8,800	4.8%																
4.800	1	1	Allowance	Signage, Entrance Monuments and Gate House, Paint Finishes and Masonry Coating	2024	4 to 6	3	3,500.00	3,500	3,500	8.5%				3,714									4,528			
4.801	1	1	Allowance	Signage, Entrance Monuments and Gate House, Renovation	2029	to 25	8	9,200.00	9,200	9,200	3.7%								10,779								
		1	Allowance	2021 Reserve Study	2021	N/A	0	2,100	2,100	2,100	0.7%	2,100															
Anticipated Expenditures, By Year (\$291,596 over 30 years)												2,100	41,718	9,073	3,714	3,247	0	5,068	10,017	10,779	5,975	0	5,595	16,417	4,528	3,958	0

RESERVE EXPENDITURES

The Woods at Ethan's Green
Homeowners Association
Twinsburg, Ohio

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2037	17 2038	18 2039	19 2040	20 2041	21 2042	22 2043	23 2044	24 2045	25 2046	26 2047	27 2048	28 2049	29 2050	30 2051
						Useful	Remaining	Unit (2021)	Per Phase (2021)	Total (2021)																
4.100	1	1	Allowance	Catch Basins, Landscape, Erosion Control and Drainage Remediation	2022	N/A	1	8,500.00	8,500	8,500	3.0%															
4.120	8,770	585	Square Feet	Concrete Access Drive and Parking Areas, Partial	2023	to 65	2 to 30+	12.00	7,020	105,240	19.5%		9,830				10,853						11,982			
4.140	5,100	170	Square Feet	Concrete Sidewalks, Partial	2023	to 65	2 to 30+	10.00	1,700	51,000	4.7%		2,380				2,628						2,902			
4.245	65	65	Linear Feet	Fences, Steel, Entrance Monument and Gate House	2033	to 35	12	65.00	4,225	4,225	1.8%															
4.280	900	900	Linear Feet	Fence, Wood, Paint Finishes	2027	4 to 6	6	5.00	4,500	4,500	8.4%	6,178									7,530					
4.285	900	900	Linear Feet	Fence, Wood, Replacement	2022	15 to 20	1	36.00	32,400	32,400	28.2%						49,108									
4.291	1	1	Each	Flag Pole	2030	to 35	9	2,000.00	2,000	2,000	0.8%															
4.420	1	1	Allowance	Irrigation System	2038	to 40+	17	15,000.00	15,000	15,000	7.2%		21,004													
4.500	1	1	Allowance	Landscape, Partial Replacements	2025	to 5	4	3,000.00	3,000	3,000	8.7%				4,370				4,825						5,328	
4.600	44	44	Each	Mailboxes	2044	to 25	23	200.00	8,800	8,800	4.8%						13,877									
4.800	1	1	Allowance	Signage, Entrance Monuments and Gate House, Paint Finishes and Masonry Coating	2024	4 to 6	3	3,500.00	3,500	3,500	8.5%			4,999				5,519					6,094			
4.801	1	1	Allowance	Signage, Entrance Monuments and Gate House, Renovation	2029	to 25	8	9,200.00	9,200	9,200	3.7%															
		1	Allowance	2021 Reserve Study	2021	N/A	0	2,100	2,100	2,100	0.7%															
Anticipated Expenditures, By Year (\$291,596 over 30 years)												6,178	33,214	4,999	4,370	0	49,108	13,481	19,396	4,825	0	7,530	14,884	6,094	5,328	0

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
The Woods at Ethan's Green		FY2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
Homeowners Association																	
Twinsburg, Ohio																	
Reserves at Beginning of Year	(Note 1)	155,028	153,351	116,537	112,407	113,732	115,629	120,883	121,178	116,617	111,379	111,037	116,778	117,033	106,551	108,044	110,213
Total Recommended Reserve Contributions	(Note 2)	0	4,500	4,600	4,700	4,800	4,900	5,000	5,100	5,200	5,300	5,400	5,500	5,600	5,700	5,800	5,900
Estimated Interest Earned, During Year	(Note 3)	423	404	343	339	344	354	363	356	341	333	341	350	335	321	327	339
Anticipated Expenditures, By Year		(2,100)	(41,718)	(9,073)	(3,714)	(3,247)	0	(5,068)	(10,017)	(10,779)	(5,975)	0	(5,595)	(16,417)	(4,528)	(3,958)	0
Anticipated Reserves at Year End		<u>\$153,351</u>	<u>\$116,537</u>	<u>\$112,407</u>	<u>\$113,732</u>	<u>\$115,629</u>	<u>\$120,883</u>	<u>\$121,178</u>	<u>\$116,617</u>	<u>\$111,379</u>	<u>\$111,037</u>	<u>\$116,778</u>	<u>\$117,033</u>	<u>\$106,551</u>	<u>\$108,044</u>	<u>\$110,213</u>	<u>\$116,452</u>

(continued)	Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051
Reserves at Beginning of Year	116,452	116,623	89,818	91,290	93,497	100,187	57,816	51,098	38,536	40,630	47,662	47,274	39,620	40,847	42,944
Total Recommended Reserve Contributions	6,000	6,100	6,200	6,300	6,400	6,500	6,600	6,700	6,800	6,900	7,000	7,100	7,200	7,300	7,400
Estimated Interest Earned, During Year	349	309	271	277	290	237	163	134	119	132	142	130	121	125	140
Anticipated Expenditures, By Year	(6,178)	(33,214)	(4,999)	(4,370)	0	(49,108)	(13,481)	(19,396)	(4,825)	0	(7,530)	(14,884)	(6,094)	(5,328)	0
Anticipated Reserves at Year End	<u>\$116.623</u>	<u>\$89.818</u>	<u>\$91.290</u>	<u>\$93.497</u>	<u>\$100.187</u>	<u>\$57.816</u>	<u>\$51.098</u>	<u>\$38.536</u>	<u>\$40.630</u>	<u>\$47.662</u>	<u>\$47.274</u>	<u>\$39.620</u>	<u>\$40.847</u>	<u>\$42.944</u>	<u>\$50.484</u>
								(NOTE 5)							(NOTE 4)

Explanatory Notes:

- 1) Year 2021 starting reserves are as of January 31, 2021; FY2021 starts January 1, 2021 and ends December 31, 2021.
- 2) Reserve Contributions for 2021 are the remaining budgeted 11 months; 2022 is the first year of recommended contributions.
- 3) 0.3% is the estimated annual rate of return on invested reserves; 2021 is a partial year of interest earned.
- 4) Accumulated year 2051 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

FIVE-YEAR OUTLOOK**The Woods at Ethan's Green
Homeowners Association
Twinsburg, Ohio**

Line Item	Reserve Component Inventory	RUL = 0 FY2021	1 2022	2 2023	3 2024	4 2025	5 2026
4.100	Catch Basins, Landscape, Erosion Control and Drainage Remediation		8,670				
4.120	Concrete Access Drive and Parking Areas, Partial			7,304			
4.140	Concrete Sidewalks, Partial			1,769			
4.285	Fence, Wood, Replacement		33,048				
4.500	Landscape, Partial Replacements					3,247	
4.800	Signage, Entrance Monuments and Gate House, Paint Finishes and Masonry Coating				3,714		
	2021 Reserve Study	2,100					
	Anticipated Expenditures, By Year (\$291,596 over 30 years)	2,100	41,718	9,073	3,714	3,247	0

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.*

Catch Basins, Landscape

Line Item: 4.100

History: Original

Condition: Fair overall with isolated erosion around the catch basins visually apparent. The Board informs us of improper drainage and water pooling along the south side of the property and near the fence that borders the west side of the property.



Erosion around catch basin (note partially covered by foliage)



Improperly sloped area (behind Units 2684 and 2692)



Erosion at catch basin (behind Unit 2700 shown)



Typical catch basin

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

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. At the request of the Board, we include an allowance for erosion control and drainage remediation measures near the catch basins at the wood fence and behind Unit 2700. This cost may vary based on the scope of work that is developed to remediate these areas. We recommend the Association fund future repairs to landscape catch basins through the operating budget as needed.

Concrete Access Drive and Parking Areas

Line Item: 4.120

Quantity: Approximately 8,770 square feet

Condition: Fair overall with isolated spall and cracks evident



Typical parking area



Parking area (note spall)



Parking area overview



Access drive crack

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

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We estimate that up to 3,510 square feet of concrete driveways, or forty percent (40%) of the total, will require replacement during the next 30 years.

Concrete Sidewalks

Line Item: 4.140

Quantity: Approximately 5,100 square feet of sidewalks

Condition: Fair overall with isolated cracks, settlement, and trip hazards evident



Crack



Settlement



Trip hazard



Typical sidewalk

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 1,020 square feet of concrete sidewalks, or twenty percent (20%) of the total, will require replacement by the Association contingent upon partial replacements by the Municipality during the next 30 years. We note that the sidewalks are the responsibility of the City of Twinsburg. We include partial replacements as funded by the Association at the request of the Board.

Fences, Steel, Entrance Monuments and Gate House

Line Item: 4.245

Quantity: Approximately 65 linear feet at the entrance monuments and the gate house

History: The fences are reportedly original

Condition: The fences are in fair overall condition with no significant deterioration evident.



Monument fence overview



Gatehouse fence overview

Useful Life: Up to 35 years for replacement

Component Detail Notes: Steel components at grade and key structural connections are especially prone to failure if not thoroughly maintained. Secure and rust free fasteners and connections will prevent premature deterioration. Preparation of the steel before application of the paint finish is critical to maximize the useful life of the finish.

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, finish deterioration, and damage

- Repair leaning sections and clear vegetation from fence areas which could cause damage

Priority/Criticality: Per Board discretion

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

Fence, Wood

Line Items: 4.280 and 4.285

Quantity: 900 linear feet

History: Original

Condition: Fair to poor overall condition with systematic lean, organic growth, and wood damage evident



Overview (note lean)



Wood split



Organic growth



Damaged picket

Useful Life: 15- to 20-years for replacement and four- to six-years for paint finish applications

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

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

Priority/Criticality: Per Board discretion

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

Flag Pole

Line Item: 4.291

Quantity: One flag pole

History: Original

Condition: Fair overall with no significant deterioration evident



Overview

Useful Life: Up to 35 years

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

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

Irrigation System

Line Item: 4.420

Quantity: Approximately 80 heads at the entrance monuments and gate house

History: Original

Condition: Reported satisfactory and Management and the Board do not report any deficiencies

Useful Life: Up to 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 Woods at Ethan's Green 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

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

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

Landscape

Line Item: 4.500

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

Useful Life: At the request of Management and the Board, we include a landscape allowance for partial replacements every five years.

Priority/Criticality: Per Board discretion

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

Mailboxes

Line Item: 4.600

Quantity: 44 each

History: Replaced in 2019 and 2020

Condition: Good overall with no visible deterioration at the time of inspection



Single mailbox



Double mailbox

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. Our cost is based on information provided by the Association.

Signage

Line Items: 4.800 and 4.801

Quantity: Two property identification signs and one gate house. The signage includes the following elements:

- Light fixtures
- Letters
- Masonry, Veneer
- Stucco
- Roof, Asphalt Shingles
- Soffit and Fascia, Aluminum

History: The gate house and monuments were painted and the masonry was repaired and sealed in approximately 2019.

Condition: Fair overall with isolated finish deterioration



Typical entrance sign



Gate house overview



Typical shingles



Signage crack (painted over)



Finish deterioration at signage



Masonry crack

Useful Life: Up to 25 years for renovation and four- to six-years for paint finish and sealer applications

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

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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost for paint finishes and masonry coating is based on information provided by the Association. Our cost for renovation includes repointing and repairs to the masonry, paint finish applications and partial replacement of the stucco, and replacement of the remaining components.

2021 Reserve Study

Line Item: Last

Component Detail Notes: The Woods at Ethan's Green will expend \$2,100 for the payment of this reserve study in 2021.

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

Reserve Study Update

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

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



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

5.METHODOLOGY

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

The Woods at Ethan's Green can fund capital repairs and replacements in any combination of the following:

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

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

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

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

REID M. NELSON
Engineer

CURRENT CLIENT SERVICES

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



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

The Georgetown Square Condominium Association is a 42 building and 172 unit community in Vernon Hills, Illinois that dates to 1998. The property consists of eight distinct unit styles comprised of brick, vinyl siding, and wood balconies accented with spiral metal staircases.

Hillcrest Community Association, Inc. is a homeowners association located in Prospect, Kentucky consisting of 488 homes. The sprawling property features a pool, playground, and tennis courts near the clubhouse to provide residents various amenities for their leisure.

Park Place of Geneva Townhome Owners Association, Inc. is a small community comprised of six buildings and 30 units. The three-story buildings are adorned with brick and fiber cement siding and balconies with waterproof membranes to create a variety of maintenance and replacement needs. Residents enjoy a central courtyard lined with brick pavers and a fire pit.

Stonelake at River's Bend Homeowners Association, Inc. is a development in South Lebanon, Ohio constructed from 2007 to 2013. The Association maintains a clubhouse and various site elements including a pond, asphalt walking paths, and a playground.

Weston Place Homeowners Association, Inc. is located in Carmel, Indiana. The Association maintains three ponds, several fences, and brick entrance monuments. The property includes multiple sport courts and a pool for the community to enjoy.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Nelson attended Montana Technological where he attained his Bachelor of Science degree in Mechanical Engineering with Minors in Business Administration and Mathematics.

EDUCATION

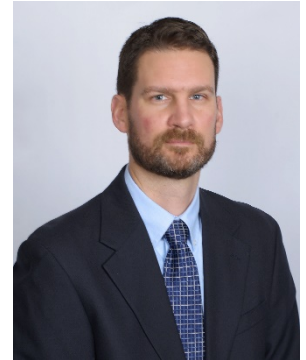
Montana Technological University– B.S. Mechanical Engineering

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

CURRENT CLIENT SERVICES

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

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



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

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

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

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

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

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

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

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

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

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

Reserve Specialist (RS) - Community Associations Institute

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

NICOLE L. LOWERY, PRA, RS
Associate Director of Quality Assurance

CURRENT CLIENT SERVICES

Nicole L. Lowery, a Civil Engineer, is an Associate Director of Quality Assurance for Reserve Advisors. Ms. Lowery is responsible for the management, review and quality assurance of reserve studies. In this role, she assumes the responsibility of stringent report review analysis to assure report accuracy and the best solution for Reserve Advisors' clients.

Ms. Lowery has been involved with hundreds of Reserve Study assignments. The following is a partial list of clients served by Nicole Lowery demonstrating her breadth of experiential knowledge of community associations in construction and related buildings systems.



Amelia Surf & Racquet Club This oceanfront condominium community comprises 156 units in three mid rise buildings. This Fernandina Beach, Florida development contains amenities such as clay tennis courts, two pools and boardwalks.

Ten Museum Park This boutique, luxury 50-story high rise building in downtown Miami, Florida consists of 200 condominium units. The amenities comprise six pools including resistance and plunge pools, a full-service spa and a state-of-the-art fitness center. The property also contains a multi-level parking garage.

3 Chisolm Street Homeowners Association This historic Charleston, South Carolina community was constructed in 1929 and 1960 and comprises brick and stucco construction with asphalt shingle and modified bitumen roofs. The unique buildings were originally the Murray Vocational School. The buildings were transformed in 2002 to 27 high-end condominiums. The property includes a courtyard and covered parking garage.

Lakes of Pine Run Condominium Association This condominium community comprises 112 units in 41 buildings of stucco construction with asphalt shingle roofs. Located in Ormond Beach, Florida, it has a domestic water treatment plant and wastewater treatment plant for the residents of the property.

Rivertowne on the Wando Homeowners Association This exclusive river front community is located on the Wando River in Mount Pleasant, South Carolina. This unique Association includes several private docks along the Wando River, a pool and tennis courts for use by its residents.

Biltmore Estates Homeowners Association This private gated community is located in Miramar, Florida, just northwest of Miami, Florida and consists of 128 single family homes. The lake front property maintains a pool, a pool house and private streets.

Bellavista at Miromar Lakes Condominium Association Located in the residential waterfront resort community of Miromar Lakes Beach & Golf Club in Fort Myers, Florida, this property comprises 60 units in 15 buildings. Amenities include a clubhouse and a pool.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Ms. Lowery was a project manager with Kipcon in New Brunswick, New Jersey and the Washington, D.C. Metro area for eight years, where she was responsible for preparing reserve studies and transition studies for community associations. Ms. Lowery successfully completed the bachelors program in Civil Engineering from West Virginia University in Morgantown, West Virginia.

EDUCATION

West Virginia University - B.S. Civil Engineering

PROFESSIONAL AFFILIATIONS / DESIGNATIONS

Reserve Specialist (RS) - Community Associations Institute

Professional Reserves 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 Woods at Ethan's Green 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 Woods at Ethan's Green responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

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

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

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

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

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

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

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

8. PROFESSIONAL SERVICE CONDITIONS

Our Services - Reserve Advisors, LLC (RA) performs its services as an independent contractor in accordance with our professional practice standards and its compensation is not contingent upon our conclusions. The purpose of our reserve study is to provide a budget planning tool that identifies the current status of the reserve fund, and an opinion recommending an annual funding plan to create reserves for anticipated future replacement expenditures of the property.

Our inspection and analysis of the subject property is limited to visual observations, is noninvasive and is not meant to nor does it include investigation into statutory, regulatory or code compliance. RA inspects sloped roofs from the ground and inspects flat roofs where safe access (stairs or ladder permanently attached to the structure) is available. The report is based upon a "snapshot in time" at the moment of inspection. RA may note visible physical defects in our report. The inspection is made by employees generally familiar with real estate and building construction but in the absence of invasive testing RA cannot opine on, nor is RA responsible for, the structural integrity of the property including its conformity to specific governmental code requirements for fire, building, earthquake, and occupancy, or any physical defects that were not readily apparent during the inspection.

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

RA assumes, without independent verification, the accuracy of all data provided to it. You agree to indemnify and hold RA harmless against and from any and all losses, claims, actions, damages, expenses or liabilities, including reasonable attorneys' fees, to which we may become subject in connection with this engagement, because of any false, misleading or incomplete information which we have relied upon supplied by you or others under your direction, or which may result from any improper use or reliance on the Report by you or third parties under your control or direction. Your obligation for indemnification and reimbursement shall extend to any director, officer, employee, affiliate, or agent of RA. Liability of RA and its employees, affiliates, and agents for errors and omissions, if any, in this work is limited to the amount of its compensation for the work performed in this engagement.

Report - RA completes the services in accordance with the Proposal. The Report represents a valid opinion of RA's findings and recommendations and is deemed complete. RA, however, considers any additional information made available to us within 6 months of issuing the Report if a timely request for a revised Report is made. RA retains the right to withhold a revised Report if payment for services was not tendered in a timely manner. All information received by RA and all files, work papers or documents developed by RA during the course of the engagement shall remain the property of RA and may be used for whatever purpose it sees fit.

Your Obligations - You agree to provide us access to the subject property for an on-site visual inspection. You agree to provide RA all available, historical and budgetary information, the governing documents, and other information that we request and deem necessary to complete the Report. You agree to pay actual attorneys' fees and any other costs incurred to collect on any unpaid balance for RA's services.

Use of Our Report and Your Name - Use of this Report is limited to only the purpose stated herein. You hereby acknowledge that any use or reliance by you on the Report for any unauthorized purpose is at your own risk and you shall hold RA harmless from any consequences of such use. Use by any unauthorized third party is unlawful. 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 our Report in its entirety to the following third parties: members of your organization, your accountant, attorney, financial institution and property manager who need to review the information contained herein. Without the written consent of RA, you shall not disclose the Report to any other third party. The Report contains intellectual property developed by RA and **shall not be reproduced or distributed to any party that conducts reserve studies without the written consent of RA**.

RA will include your name in our client lists. RA reserves the right to 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 - Retainer payment is due upon authorization and prior to inspection. The balance is due net 30 days from the report shipment date. Any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court for the State of Wisconsin.