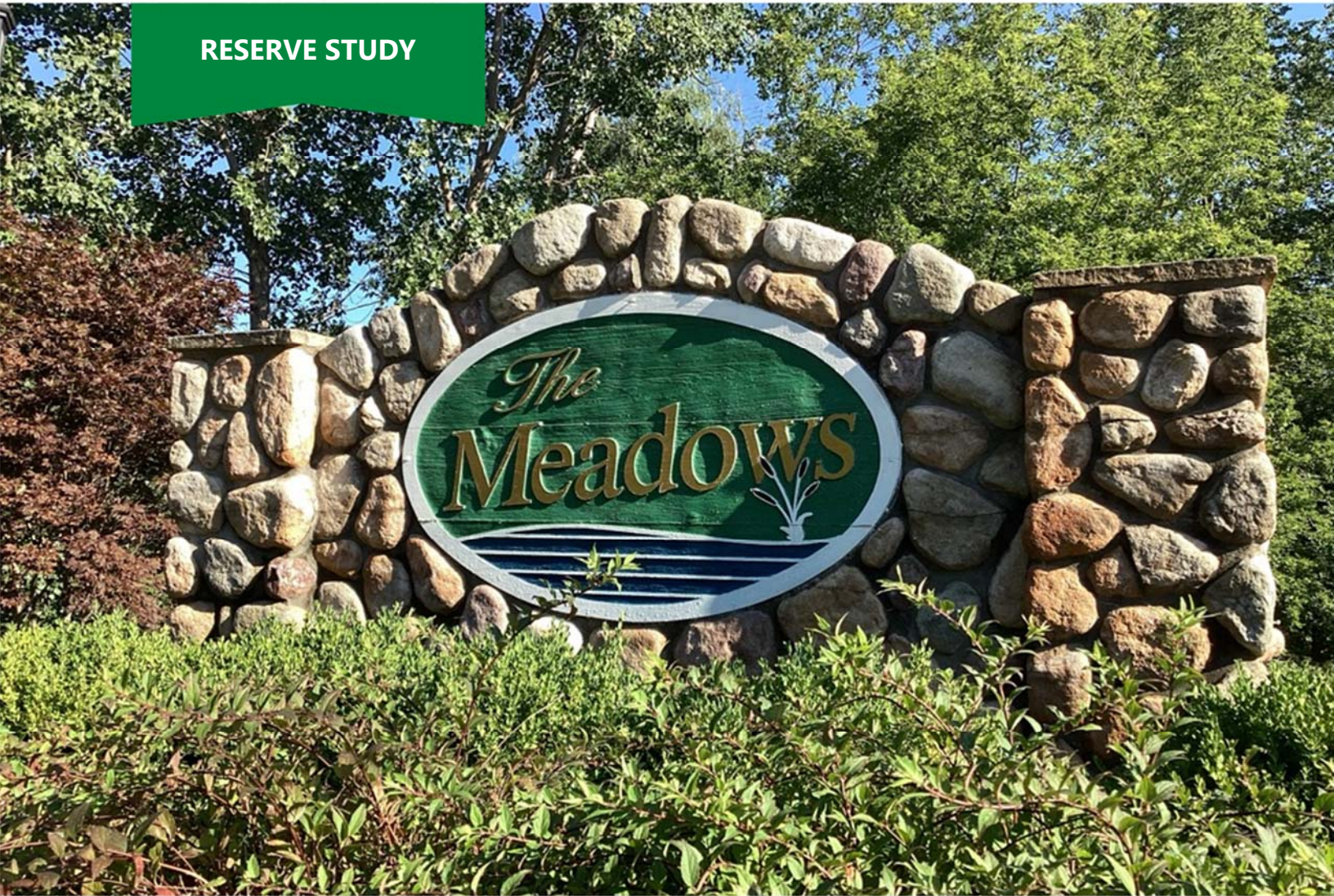


The Meadows Condominium Association

August 7, 2024 • Howell, MI

RESERVE STUDY



Long-term thinking. Everyday commitment.

The Meadows Condominium Association
Howell, Michigan

Dear Board of Directors of The Meadows Condominium Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Reserve Study* of The Meadows Condominium Association in Howell, Michigan and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 7, 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 Meadows 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 September 18, 2024 by

Reserve Advisors, LLC

Visual Inspection and Report by: Matthew D. Neike, RS¹

Review by: Justin B. Klein, RS, Great Lakes Quality Assurance Engineer

Review by: Alan M. Ebert, RS, PRA², Director of Quality Assurance



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

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



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1. RESERVE STUDY EXECUTIVE SUMMARY

Client: The Meadows Condominium Association (The Meadows)

Location: Howell, Michigan

Reference: 100614

Property Basics: The Meadows Condominium Association is a townhome style development which consists of 147 units in 44 buildings. The community was built from 2002 to 2015.

Reserve Components Identified: 16 Reserve Components.

Inspection Date: August 7, 2024. We conducted previous inspections in 2012 and 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 2054 due to the replacement of the asphalt shingle roofs and balconies subsequent the repaving of the streets.

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

- Current and future local costs of replacement
- 2.7% anticipated annual rate of return on invested reserves
- 3.3% 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:

- \$557,138 as of August 31, 2024
- 2024 budgeted Reserve Contributions of \$129,664
- A potential deficit in reserves might occur by 2033 based upon continuation of the most recent annual reserve contribution of \$129,664 and the identified Reserve Expenditures.

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

- Replacement of a portion of the decks
- Replacement of the 2002-2006 construction garage doors
- Replacement of the 2010-2015 roofs as deferral may result in increased water infiltration and cost
- Systematic coordinated repairs to the concrete to minimize the potential for trip hazards and forestall further deterioration

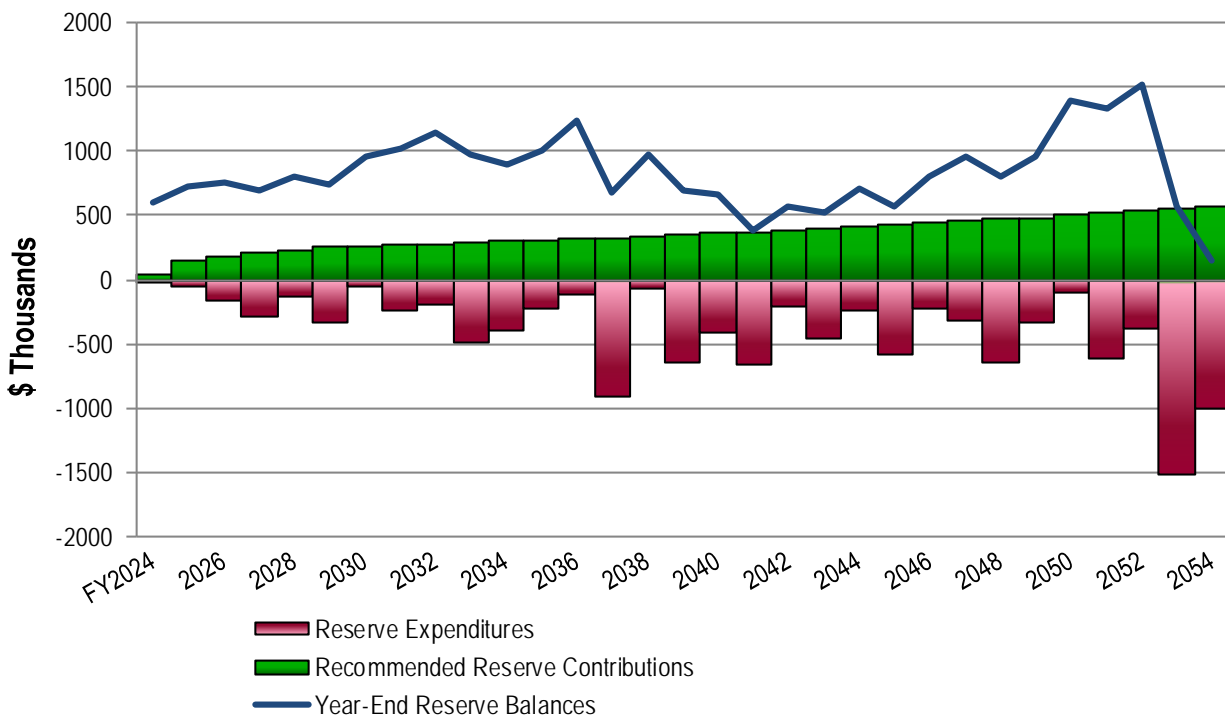


Recommended Reserve Funding: We recommend the following in order to achieve a stable and equitable Cash Flow Methodology Funding Plan:

- Phased increases of \$24,500 from 2025 through 2029
- Inflationary increases thereafter through 2054, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$24,536 represents an average monthly increase of \$13.91 per owner and about a four percent (4.3%) adjustment in the 2024 total Operating Budget of \$565,020.

The Meadows
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2025	154,200	717,677	2035	306,500	1,007,194	2045	423,900	568,698
2026	178,700	759,836	2036	316,600	1,232,712	2046	437,900	796,665
2027	203,200	688,362	2037	327,000	676,605	2047	452,400	952,469
2028	227,700	797,505	2038	337,800	965,381	2048	467,300	795,171
2029	252,200	732,500	2039	348,900	690,543	2049	482,700	959,893
2030	260,500	960,877	2040	360,400	658,887	2050	498,600	1,385,058
2031	269,100	1,023,450	2041	372,300	377,873	2051	515,100	1,328,406
2032	278,000	1,140,453	2042	384,600	561,736	2052	532,100	1,512,389
2033	287,200	969,471	2043	397,300	521,486	2053	549,700	574,491
2034	296,700	902,598	2044	410,400	715,442	2054	567,800	147,306





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 Meadows Condominium Association

Howell, Michigan

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 7, 2024. We conducted previous inspections in 2012 and 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 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. 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 Meadows 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 Meadows
Condominium Association
Howell, Michigan

Operating Budget Components
<p>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.)</p> <p>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.</p>
<ul style="list-style-type: none"> • Asphalt Pavement, Crack Repair and Patch • Catch Basins, Landscape • Irrigation System, Controls and Maintenance • Landscape • Light Fixtures¹ • Paint Finishes, Wood Columns, Trim and Touch Up • Railings, Stoops • Retaining Walls, Stone • Retaining Walls, Timber • Signage • Signage, Street Identification and Traffic Management • Stormwater Detention Basins • Walls, Masonry Veneer • Window Wells, Metal
<p>¹ Replacement as-needed in lieu of an aggregate replacement</p>

Long-Lived Components		
<p>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.</p>	Useful Life	Estimated Cost
• Electrical Systems, Common	Indeterminate	N/A
• Foundations	Indeterminate	N/A
• Pipes, Subsurface Utilities	Indeterminate	N/A
• Storm Water Management System	Indeterminate	N/A
• Structural Frames	Indeterminate	N/A

Excluded Components

for
The Meadows
Condominium Association
Howell, Michigan

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.

- Decks, Modified
- Decks, Stain and Seal Applications
- Electrical Systems (Including Circuit Protection Panels)
- Garage Doors, Operators
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Pipes (Within Units)
- Windows and Doors (Excluding Garage Doors)

Others Responsibility Components

Certain items have been designated as the responsibility of Others to repair or replace.

- Asphalt Pavement, Streets, Shared (32%)¹
- Elements Associated with the Meadows West¹
- Mailbox Stations²
- Ponds³

¹ Meadows West Condominium Association

² United States Postal Service

³ City of Howell

3. RESERVE EXPENDITURES and FUNDING PLAN

The tables following this introduction present:

Reserve Expenditures

- Line item numbers
- Total quantities
- Quantities replaced per phase (in a single year)
- Reserve component inventory
- Estimated first year of event (i.e., replacement, application, etc.)
- Life analysis showing
 - useful life
 - remaining useful life
- 2024 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end
- Predicted reserves based on current funding level

Five-Year Outlook

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

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

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

RESERVE EXPENDITURES

The Meadows
Condominium Association
Howell, Michigan

Explanatory Notes:

- 1) 3.3% is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2024 is Fiscal Year beginning January 1, 2024 and ending December 31, 2024.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029	6 2030	7 2031	8 2032	9 2033	10 2034	11 2035	12 2036	13 2037	14 2038	15 2039
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)																	
Exterior Building Elements																											
1.157	7,800	1,950	Square Feet	Decks, Wood, Replacement, Remaining, Phased (Replace with Composite)	2026	15 to 25	2 to 11	52.00	101,400	405,600	8.4%		108,203			119,272		131,474				144,924					
1.200	85	43	Each	Doors, Garage, 2002-2006 Construction, Phased	2027	to 25	3 to 4	1,800.00	76,500	153,000	4.6%			84,326	87,109												
1.201	41	21	Each	Doors, Garage, 2010-2015 Construction, Phased	2034	to 25	10 to 12	1,800.00	36,900	73,800	0.9%										51,054		54,479				
1.240	10,200	3,400	Linear Feet	Gutters and Downspouts, Aluminum, 2002-2006 Construction, Phased	2027	15 to 25	3 to 7	10.00	34,000	102,000	2.4%			37,478		39,993		42,676									
1.241	3,800	1,267	Linear Feet	Gutters and Downspouts, Aluminum, 2010-2015 Construction, Phased	2035	15 to 25	11 to 15	10.00	12,667	38,000	0.5%											18,104		19,318		20,614	
1.280	1,530	383	Squares	Roofs, Asphalt Shingles, 2002-2006 Construction, Phased	2034	15 to 20	10 to 19	520.00	198,900	795,600	15.0%											275,193		303,346			
1.281	820	205	Squares	Roofs, Asphalt Shingles, 2010-2015 Construction, Phased	2027	15 to 20	3 to 9	520.00	106,600	426,400	12.6%			117,505		125,389		133,801		142,778							
1.560	40	40	Pairs	Shutters, Vinyl, 2002-2006 Construction	2042	to 20	18	180.00	7,200	7,200	0.1%																
1.860	107,100	35,700	Square Feet	Walls, Siding, Vinyl, 2002-2006 Construction, Phased	2037	to 40	13 to 17	9.50	339,150	1,017,450	13.8%													517,245		551,946	
1.861	53,100	26,550	Square Feet	Walls, Siding, Vinyl, 2010-2015 Construction, Phased	2045	to 40	21 to 24	9.50	252,225	504,450	8.7%																
Property Site Elements																											
4.040	13,500	13,500	Square Yards	Asphalt Pavement, Mill and Overlay, Streets	2033	15 to 20	9	19.00	174,420	174,420	1.9%											233,614					
4.045	13,500	13,500	Square Yards	Asphalt Pavement, Total Replacement, Streets	2053	15 to 20	29	35.50	325,890	325,890	6.9%																
4.100	39	39	Each	Catch Basins, Inspections and Capital Repairs	2033	15 to 20	9	950.00	37,050	37,050	1.2%											49,624					
4.125	1	1	Allowance	Concrete Flatwork, Partial	2025	to 65	1 to 30+	45,000.00	45,000	45,000	19.3%	46,485	48,019	49,604	51,241	52,931	54,678	56,483	58,347	60,272	62,261	64,316	66,438	68,630	70,895	73,235	
4.420	80	27	Zones	Irrigation System, Phased	2042	to 40+	18 to 22	2,500.00	66,675	200,000	3.2%																
4.800	1	1	Allowance	Signage, Renovation	2044	15 to 20	20	10,000.00	10,000	10,000	0.2%																
	1	1	Allowance	2024 Reserve Expenditures	2024	N/A	0	13,000.00	13,000	13,000	0.1%	13,000															
	1	1	Allowance	Reserve Study Update with Site Visit	2027	to 3	3	5,050.00	5,050	5,050	0.0%			5,050													
Anticipated Expenditures, By Year (\$12,030,173 over 30 years)												13,000	46,485	156,222	293,964	138,349	337,585	54,678	232,959	189,821	486,288	388,508	227,344	120,917	908,540	70,895	645,795

RESERVE EXPENDITURES

**The Meadows
Condominium Association
Howell, Michigan**

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	Years 2040 to 2054														
						Useful	Remaining	Unit (2024)	Per Phase (2024)	Total (2024)		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																										
1.157	7,800	1,950	Square Feet	Decks, Wood, Replacement, Remaining, Phased (Replace with Composite)	2026	15 to 25	2 to 11	52.00	101,400	405,600	8.4%											243,639		268,564		
1.200	85	43	Each	Doors, Garage, 2002-2006 Construction, Phased	2027	to 25	3 to 4	1,800.00	76,500	153,000	4.6%												189,876	196,142		
1.201	41	21	Each	Doors, Garage, 2010-2015 Construction, Phased	2034	to 25	10 to 12	1,800.00	36,900	73,800	0.9%															
1.240	10,200	3,400	Linear Feet	Gutters and Downspouts, Aluminum, 2002-2006 Construction, Phased	2027	15 to 25	3 to 7	10.00	34,000	102,000	2.4%											84,389		90,051		
1.241	3,800	1,267	Linear Feet	Gutters and Downspouts, Aluminum, 2010-2015 Construction, Phased	2035	15 to 25	11 to 15	10.00	12,667	38,000	0.5%															
1.280	1,530	383	Squares	Roofs, Asphalt Shingles, 2002-2006 Construction, Phased	2034	15 to 20	10 to 19	520.00	198,900	795,600	15.0%	334,380			368,588									526,798		
1.281	820	205	Squares	Roofs, Asphalt Shingles, 2010-2015 Construction, Phased	2027	15 to 20	3 to 9	520.00	106,600	426,400	12.6%						224,939		240,030		256,133		273,317			
1.560	40	40	Pairs	Shutters, Vinyl, 2002-2006 Construction	2042	to 20	18	180.00	7,200	7,200	0.1%			12,916												
1.860	107,100	35,700	Square Feet	Walls, Siding, Vinyl, 2002-2006 Construction, Phased	2037	to 40	13 to 17	9.50	339,150	1,017,450	13.8%	588,976														
1.861	53,100	26,550	Square Feet	Walls, Siding, Vinyl, 2010-2015 Construction, Phased	2045	to 40	21 to 24	9.50	252,225	504,450	8.7%					498,764		549,789								
Property Site Elements																										
4.040	13,500	13,500	Square Yards	Asphalt Pavement, Mill and Overlay, Streets	2033	15 to 20	9	19.00	174,420	174,420	1.9%															
4.045	13,500	13,500	Square Yards	Asphalt Pavement, Total Replacement, Streets	2053	15 to 20	29	35.50	325,890	325,890	6.9%												835,565			
4.100	39	39	Each	Catch Basins, Inspections and Capital Repairs	2033	15 to 20	9	950.00	37,050	37,050	1.2%												94,994			
4.125	1	1	Allowance	Concrete Flatwork, Partial	2025	to 65	1 to 30+	45,000.00	45,000	45,000	19.3%	75,652	78,148	80,727	83,391	86,143	88,986	91,922	94,955	98,089	101,326	104,670	108,124	111,692	115,378	119,185
4.420	80	27	Zones	Irrigation System, Phased	2042	to 40+	18 to 22	2,500.00	66,675	200,000	3.2%			119,610		127,635		136,198								
4.800	1	1	Allowance	Signage, Renovation	2044	15 to 20	20	10,000.00	10,000	10,000	0.2%					19,143										
	1	1	Allowance	2024 Reserve Expenditures	2024	N/A	0	13,000.00	13,000	13,000	0.1%															
	1	1	Allowance	Reserve Study Update with Site Visit	2027	to 3	3	5,050.00	5,050	5,050	0.0%															
Anticipated Expenditures, By Year (\$12,030,173 over 30 years)												410,031	667,124	213,254	451,979	232,921	587,749	228,120	319,894	647,878	341,356	104,670	607,896	385,957	1,515,396	1,004,598

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
The Meadows
Condominium Association

		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Howell, Michigan		FY2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Reserves at Beginning of Year	(Note 1)	557,138	592,510	717,677	759,836	688,362	797,505	732,500	960,877	1,023,450	1,140,453	969,471	902,598	1,007,194	1,232,712	676,605	965,381
Total Recommended Reserve Contributions	(Note 2)	43,221	154,200	178,700	203,200	227,700	252,200	260,500	269,100	278,000	287,200	296,700	306,500	316,600	327,000	337,800	348,900
Estimated Interest Earned, During Year	(Note 3)	5,150	17,452	19,681	19,290	19,792	20,380	22,556	26,432	28,824	28,105	24,936	25,439	29,836	25,432	21,872	22,057
Anticipated Expenditures, By Year		(13,000)	(46,485)	(156,222)	(293,964)	(138,349)	(337,585)	(54,678)	(232,959)	(189,821)	(486,288)	(388,508)	(227,344)	(120,917)	(908,540)	(70,895)	(645,795)
Anticipated Reserves at Year End		<u>\$592,510</u>	<u>\$717,677</u>	<u>\$759,836</u>	<u>\$688,362</u>	<u>\$797,505</u>	<u>\$732,500</u>	<u>\$960,877</u>	<u>\$1,023,450</u>	<u>\$1,140,453</u>	<u>\$969,471</u>	<u>\$902,598</u>	<u>\$1,007,194</u>	<u>\$1,232,712</u>	<u>\$676,605</u>	<u>\$965,381</u>	<u>\$690,543</u>
Predicted Reserves based on 2024 funding level of:	\$129,664	592,510	692,810	684,599	536,565	542,250	346,163	431,507	338,468	286,638	(67,060)	(331,210)					

(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		690,543	658,887	377,873	561,736	521,486	715,442	568,698	796,665	952,469	795,171	959,893	1,385,058	1,328,406	1,512,389	574,491
Total Recommended Reserve Contributions		360,400	372,300	384,600	397,300	410,400	423,900	437,900	452,400	467,300	482,700	498,600	515,100	532,100	549,700	567,800
Estimated Interest Earned, During Year		17,975	13,810	12,516	14,429	16,476	17,105	18,187	23,299	23,279	23,378	31,235	36,144	37,840	27,798	9,614
Anticipated Expenditures, By Year		(410,031)	(667,124)	(213,254)	(451,979)	(232,921)	(587,749)	(228,120)	(319,894)	(647,878)	(341,356)	(104,670)	(607,896)	(385,957)	(1,515,396)	(1,004,598)
Anticipated Reserves at Year End		<u>\$658,887</u>	<u>\$377,873</u>	<u>\$561,736</u>	<u>\$521,486</u>	<u>\$715,442</u>	<u>\$568,698</u>	<u>\$796,665</u>	<u>\$952,469</u>	<u>\$795,171</u>	<u>\$959,893</u>	<u>\$1,385,058</u>	<u>\$1,328,406</u>	<u>\$1,512,389</u>	<u>\$574,491</u>	<u>\$147,306</u>

(NOTES 4&5)

Explanatory Notes:

- 1) Year 2024 starting reserves are as of August 31, 2024; FY2024 starts January 1, 2024 and ends December 31, 2024.
- 2) Reserve Contributions for 2024 are the remaining budgeted 4 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).

FIVE-YEAR OUTLOOK

**The Meadows
Condominium Association**
Howell, Michigan

Line Item	Reserve Component Inventory	Percentage Ownership	RUL = 0 FY2024	1 2025	2 2026	3 2027	4 2028	5 2029
<u>Exterior Building Elements</u>								
1.157	Decks, Wood, Replacement, Remaining, Phased (Replace with Composite)	100%			108,203			119,272
1.200	Doors, Garage, 2002-2006 Construction, Phased	100%				84,326	87,109	
1.240	Gutters and Downspouts, Aluminum, 2002-2006 Construction, Phased	100%				37,478		39,993
1.281	Roofs, Asphalt Shingles, 2010-2015 Construction, Phased	100%				117,505		125,389
<u>Property Site Elements</u>								
4.125	Concrete Flatwork, Partial	100%		46,485	48,019	49,604	51,241	52,931
	2024 Reserve Expenditures	100%	13,000					
	Reserve Study Update with Site Visit	100%				5,050		
Anticipated Expenditures, By Year (\$12,030,173 over 30 years)			13,000	46,485	156,222	293,964	138,349	337,585

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



Front elevation



Rear elevation

Decks, Wood

Line Item: 1.157

Quantity and History: The Association originally maintained 116 wood decks comprised of a total of 11,900 square feet. At the time of our inspection, we note approximately 40 of the original wood decks have been replaced with composite decking and railings. The Association informs us that these composite decks were installed by the unit owners and are considered the unit owners' responsibility to maintain. At the time of replacement, the Association may elect to replace the wood deck boards with composite. Composite decking has a higher initial installation cost due to the increase in material pricing and additional framing members needed. Although the initial installation cost of the composite decking is higher, due to the associated maintenance cost with wood decking, the total cost of ownership is higher for wood decking than composite. Please see the table below depicting the total cost of ownership for wood deck boards compared to composite.

Decking Material	Wood	Composite
Cost in 2024 Dollars	\$405,600	\$468,000
Divided by its Useful Life (Years)	25	25
Equals Cost of Ownership ¹ Relating to Eventual Replacement, in 2024 Dollars	\$16,224	\$18,720
Total Life-Cycle Maintenance Costs, in 2024 Dollars	\$15,600	\$0
Divided by Life-Cycle of Each Maintenance Event (Years)	5	25
Cost of Ownership for Maintenance During Remaining Useful Life, in 2024 Dollars	\$3,120	\$0
Total Annual Cost of Ownership (2024 dollars)	\$19,344	\$18,720

¹ Cost of Ownership is a method to describe the direct and indirect costs to purchase and maintain an element through its entire useful life.

For purposes of this study, our cost includes replacement of the remaining approximate 76 original wood decks that comprise a total of 7,800 square feet with composite deck boards. Future updates of this Reserve Study will consider possible changes in the scope and time of component replacements.

Condition: Fair to poor overall with periodic wood rot, fastener rust, warped components and weathered wood evident.



Composite balcony (unit owners' responsibility)



Balcony overview



Deck board rot (99 Sedum Road shown)



Weathered wood



Beam crack (86 Sedum Road shown)



Warped baluster



Deck settlement (886 Spirea shown)

Useful Life: 15- to 25- years with proper maintenance. The rates and types of deterioration are not uniform due to the nature of wood. Replacement is normally an ongoing process which eventually leads to a complete replacement for economic or aesthetic reasons.

Component Detail Notes: Deck construction includes the following:

- Deck boards fastened with nails. Nail fasteners have a tendency to pull out as the wood warps.
- Wood railings with vertical pickets
- Wood column supported frames
- Columns in contact with ground (This condition results in accelerated deterioration at the column bases.)
- Metal joist hanger fasteners
- Cross bracing exists to stabilize the frames
- No toe-nailed connections

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

- Annually:
 - Inspect to identify and correct any unsafe conditions
 - Secure loose fasteners and replace deteriorated fasteners
 - Replace deteriorated wood components
 - Check railing stability and fasteners
- Every three years:
 - Power wash with algaecide and application of sealer/stain if applicable

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for interim repairs funded through operating.

Doors, Garage

Line Items: 1.200 and 1.201

Quantity: 85 metal double uninsulated garage doors at the buildings built from 2002 through 2006 and 41 metal double uninsulated garage doors at the buildings built from 2010 through 2015

History: Original to construction

Condition: Varies with age from good to poor overall with rust, dents and damage evident.



Garage door



Panel dents (138 Sedum Road shown)



Base panel rust

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 any vehicle damage, base panel corrosion or alignment issues
 - Replace loose weather stripping 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. Homeowners maintain the electric operators.

Gutters and Downspouts, Aluminum

Line Items: 1.240 and 1.241

Quantity: Approximately 10,200 linear feet at the 2002-2006 construction and 3,800 linear feet at the 2010-2015 construction of aluminum five-inch gutters and two-inch by three-inch downspouts

History: Original to construction; The Association informs us of isolated overflow issues.

Condition: Fair overall with periodic deflection, leakage at seams and dented sections evident.



Aluminum gutters and downspouts



Gutter deflection



Gap in seam (99 Sedum Road shown)



Gutter deflection (124 Sedum Road shown)

Useful Life: 15- to 25-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.

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

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

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

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

Roofs, Asphalt Shingles

Line Items: 1.280 and 1.281

Quantity: Approximately 1,530 *squares*¹ at the 2002-2006 construction and 820 squares at the 2010-2015.

History: 2010-2015 buildings are original to construction. The 2002-2006 roofs were replaced beginning in 2016 and finished the last building in 2024 at an average age of 17 years old. The following table depicts the building numbers and year of roof replacement.

Building Numbers	Year of Replacement
1 and 2	2016
3, 11, 12 and 27	2017
17 and 20	2018
38 and 43	2019
10, 14, 19 and 44	2020
15, 16, 21, 22 and 37	2021
4, 13, 18 and 36	2022
5 and 34	2023
26	2024
6-9, 23-25, 28-33 and 39-42	Original

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

We recommend the Association conduct inspections of the roofs semiannually and fund these inspections through the operating budget.

Condition: The previously replaced roofs are good to fair overall and the remaining original roofs are fair to poor overall with shingle lift, sheathing deflection, loose shingles, missing shingles and weathering evident from our visual inspection from the ground. Management and the Board do not report a history of leaks.



Roof overview (previously replaced)



Roof overview (original)



Sheathing deflection



Weathering



Nail pop (1044 Yarrow shown)



Loose shingles (1044 Yarrow shown)



Nail pops (122 Sedum Road shown)



Nail pops (103 Sedum Road shown)



Sheathing deflection (112 Sedum Road shown)



Shingle lift (112 Sedum Road shown)



Loose shingles



Missing shingles (160 Sedum Road shown)



Nail pop (856 Spirea shown)



Shingle lift (852 Spirea shown)



Nail pop (485 Hostra shown)

Useful Life: 15- to 20-years

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

- Laminate architectural and three tab shingles
- Boston style ridge caps

- Rubber seal with plastic base boot flashing at waste pipes
- Soffit, gable, square hood box and ridge vents
- Metal drip edge
- Enclosed half weaved valleys

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

In addition to moisture control and energy conservation, proper attic insulation and ventilation are essential components to prevent the formation of ice dams. Ice dams occur when warm air accumulates at the peak of an attic while the roof eaves remain cold. Warm air from the attic melts the snow at the ridge of the roof and the water runs down the slope of the roof. At the cold roof eaves, the water refreezes and forms a buildup of snow and ice. This buildup often traps water that can prematurely deteriorate asphalt shingles and ultimately seep under the shingles and cause water damage to the roof deck and building interiors. Proper insulation minimizes the amount of heat that enters attic spaces in the winter and adequate ventilation helps to remove any heat that enters the attic spaces. Together, these components prevent ice dams with a cold roof deck that melts snow and ice evenly.

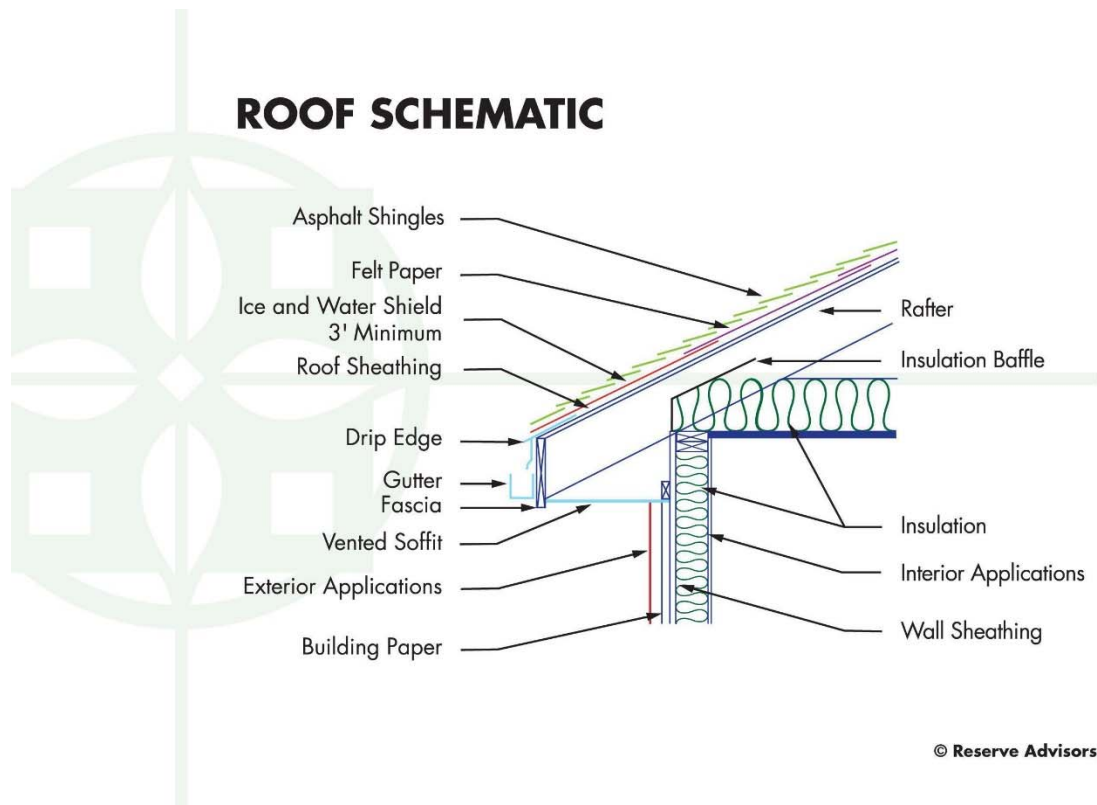
The vents should be clear of debris and not blocked from above by attic insulation. If the soffit vents are blocked from above, installation of polystyrene vent spaces or baffles between the roof joists at these locations can ensure proper ventilation.

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

Warranties are an indication of product quality and are not a product guarantee. Asphalt shingle product warranties vary from 20- to 50-years and beyond. However, the scope is usually limited to only the material cost of the shingles as caused by manufacturing

defects. Warranties may cover defects such as thermal splitting, granule loss, cupping, and curling. Labor cost is rarely included in the remedy so if roof materials fail, the labor to tear off and install new shingles is extra. Other limitations of warranties are exclusions for "incidental and consequential" damages resulting from age, hurricanes, hail storms, ice dams, severe winds, tornadoes, earthquakes, etc. There are some warranties which offer no dollar limit for replacement at an additional cost (effectively an insurance policy) but again these warranties also have limits and may not cover all damages other than a product defect. We recommend a review of the manufacturers' warranties as part of the evaluation of competing proposals to replace a roof system. This evaluation should identify the current costs of remedy if the roof were to fail in the near future. A comparison of the costs of remedy to the total replacement cost will assist in judging the merits of the warranties.

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



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

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

- Annually:
 - Record any areas of water infiltration, flashing deterioration, damage or loose shingles
 - 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. Our cost is based on information provided by the Association.

Shutters, Vinyl

Line Item: 1.560

Quantity: Approximately 40 pairs of decorative raised panel profile vinyl shutters at the 2002 through 2006 construction.

History: Original to construction

Condition: Good overall with no significant deterioration evident.



Vinyl shutters

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:
 - Inspect and repair loose fasteners and damaged shutters

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Based on satisfactory condition we defer these expenditures.

Walls, Siding, Vinyl

Line Items: 1.860 and 1.861

Quantity: Approximately 107,100 square feet of clapboard, double 4", board and batten and shake vinyl siding comprises the exterior walls of the 2002 through 2006 construction and approximately 53,100 square feet at the 2010 through 2015 construction. These quantities include the soffit and fascia.

History: Original to construction.

Condition: Fair overall with warps, loose sections and damage evident.



Vinyl siding overview



Loose siding (1038 Yarrow shown)



Loose siding (95 Sedum shown)



Siding damage



Siding damage (48 Sedum shown)



Siding damage (470 Hostra shown)



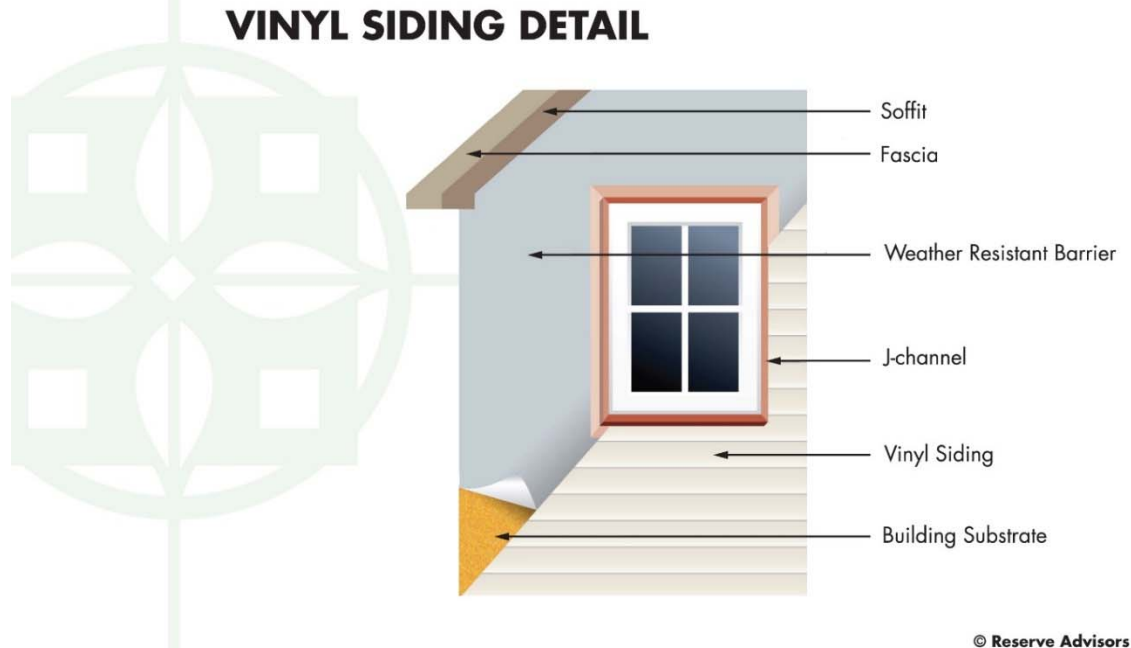
Loose soffit

Useful Life: Up to 40 years

Component Detail Notes: The siding at The Meadows consists of the following:

- Clapboard, double 4", Board and batten and Shake
- J-channel trim at window and door perimeters, and other penetrations
- Water-vapor permeable building paper protects the buildings

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



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

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

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

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

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

Property Site Elements

Asphalt Pavement, Repaving

Line Items: 4.040 and 4.045

Quantity: Approximately 13,500 square yards at the streets

History: The Developer installed a wear course in approximately 2016. The binder course is original to construction. The Association informs us that Sedum Road and a portion of Yarrow are shared responsibility with The Meadows West Condominium Association. The Meadows West Condominium Association is responsible for thirty-two percent (32%) of the total asphalt pavement at the streets of the Meadows Condominium Association. The Association has also historically conducted repairs through operating.

Condition: Good to fair overall with isolated cracks, settlement and previous repairs evident.



Pavement overview (Yarrow shown)



Pavement overview (Sedum Road shown)



Crack repairs



Pavement cracks



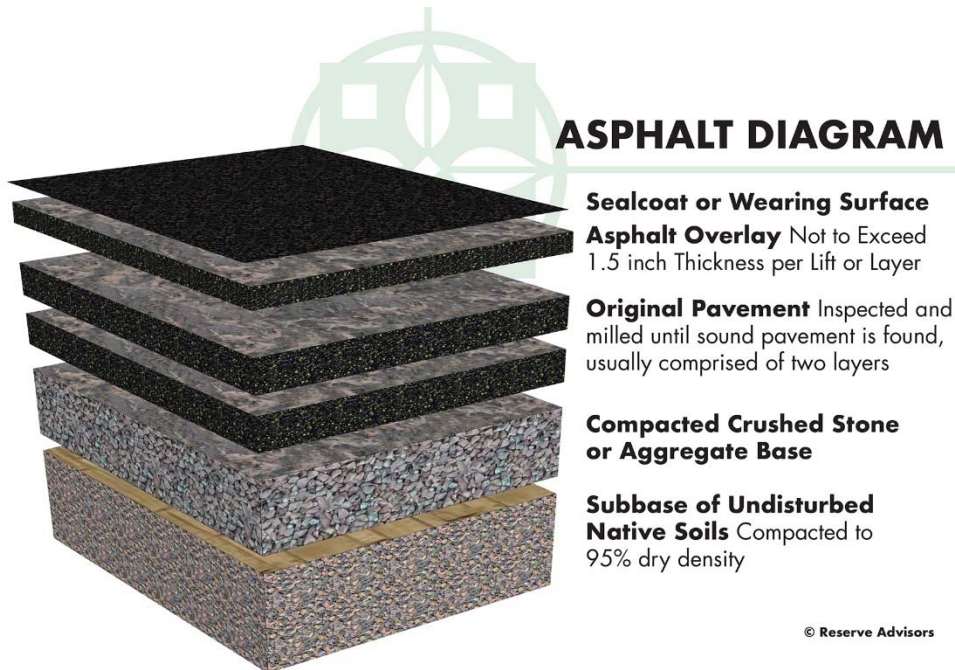
Pavement settlement at catch basin



Pavement overview

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

Component Detail Notes: The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish. The following diagram depicts the typical components although it may not reflect the actual configuration at The Meadows:



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 followed by the total replacement method for subsequent repaving at The Meadows.

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

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

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

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

Catch Basins

Line Item: 4.100

Quantity: 39 catch basins²

History: Original

Condition: Good to fair overall with settlement evident.

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



Catch basin



Catch basin repair



Catch basin settlement

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 Flatwork

Line Item: 4.125

Quantity: We include the following approximate quantities of concrete at The Meadows:

- Curbs and Gutters: 10,100 linear feet
- Driveways: 71,500 square feet
- Patios: 91 comprise a total of 4,550 square feet
- Sidewalks: 25,400 square feet
- Stoops: 126 comprise a total of 6,050 square feet

Condition: Condition varies greatly from good to poor overall with periodic cracks, settlement, spalled concrete, heaves, damage and previous repairs evident.



Curb and gutter cracks



Concrete driveways



Concrete patio



Concrete sidewalk



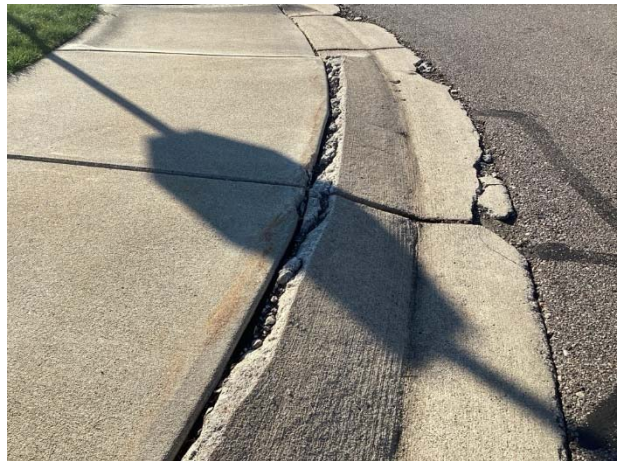
Concrete stoop



Driveway cracks



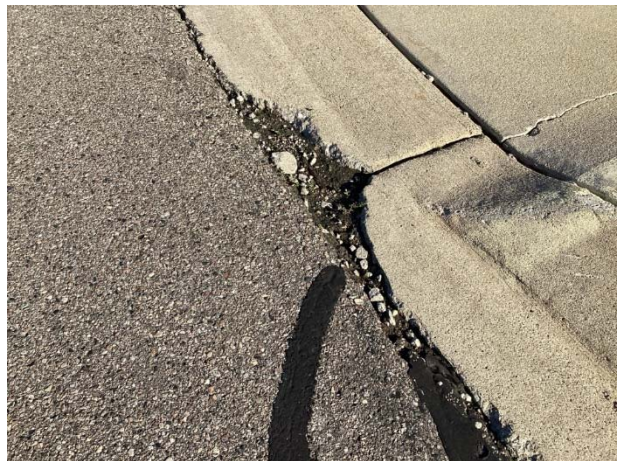
Sidewalk cracks



Curb and gutter spalls



Step spalls



Curb and gutter spalls



Sidewalk cracks



Patio settlement



Replaced section of driveway



Patio settlement



Sidewalk upheaval (152 Sedum Road shown)



Curb and gutter settlement



Driveway cracks (1038 Yarrow shown)



Sidewalk spalls and settlement at curb



Patio settlement (1012 Spirea shown)



Curb and gutter cracks



Driveway cracks



Curb and gutter settlement and spalls



Sidewalk cracks (16 Sedum Road shown)



Concrete spalls

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

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

- Annually:
 - 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. Management request an annual allowance of \$75,000, plus inflation, for repairs and replacement to the concrete flatwork. We opine this cost to be high based on the age of the community, apparent repair history. We recommend the Association plan to budget approximately \$45,000, plus inflation for annual concrete repairs and replacements. Our reserve expense assumes the exclusive funding of concrete through reserves. Future updates of this Reserve Study will consider possible changes in the scope and time of component replacements.

Irrigation System

Line Item: 4.420

Quantity: 80 zones located at the common areas.

History: Original; The Association has replaced the controllers

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



Irrigation system controller

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 Meadows 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.

Signage

Line Item: 4.800

Quantity: The property identification signage includes the following elements:

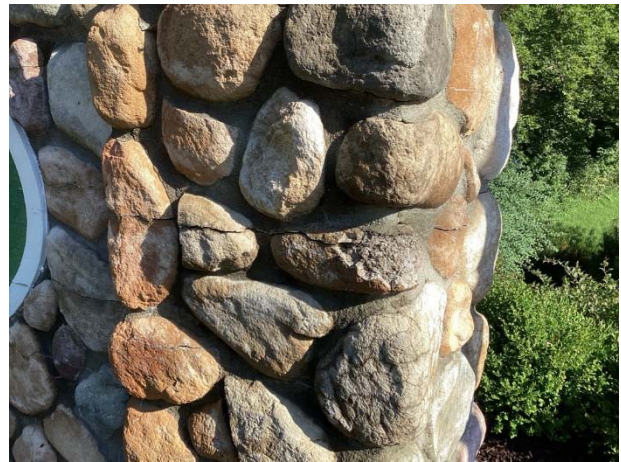
- Light Fixtures
- Masonry
- Wooden Signage

History: The Association plans to renovate the property identification signage in 2024 due to vehicular damage for approximately \$10,000. The Association is currently determining cost responsibility with the at fault party. For the purposes of this study and based on conversations with representatives of the Association, we exclude a cost in 2024 for replacement as an Association expense. Future renovations will be the responsibility of the Association.

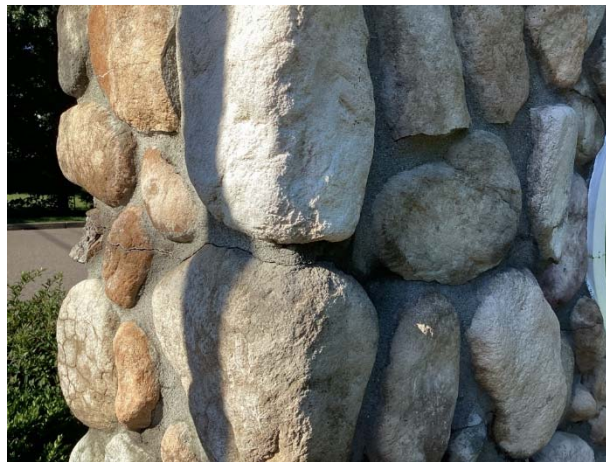
Condition: Poor overall due to vehicular damage



Entrance monument



Masonry spalls and cracks



Masonry cracks

Useful Life: 15- to 20-years

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



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

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

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our cost is based on information provided by the Association. Our cost for renovation includes repairs to the masonry and replacement of the remaining components listed above.

2024 Reserve Expenditures

Line Item: Second to last

Component Detail Notes: The Meadows will expend \$13,000 in reserve expenditures in 2024. These expenditures relate to the following:

- \$6,000: Bylaws Revision
- \$5,000: Garage Door Replacement
- \$2,000: Electrical Repairs

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 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 Meadows 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 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 Howell, Michigan at an annual inflation rate³. Isolated or regional markets of

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.

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

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

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



6. CREDENTIALS

HISTORY AND DEPTH OF SERVICE

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

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

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

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

TOTAL STAFF INVOLVEMENT

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

OUR GOAL

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

VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

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

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

OLD TO NEW

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

Matthew D. Neike, RS
Responsible Advisor

CURRENT CLIENT SERVICES

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



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

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

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

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

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

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

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

PRIOR RELEVANT EXPERIENCE

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

EDUCATION

Wright State University - B.S. Mechanical Engineering

PROFESSIONAL AFFILIATIONS

Reserve Specialist (RS) - Community Associations Institute

JUSTIN B. KLEIN, RS
Responsible Advisor

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

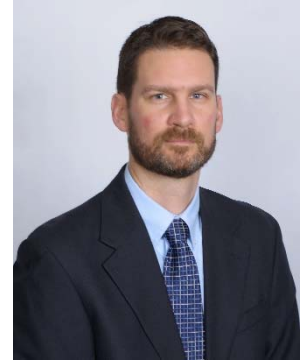
Reserve Specialist (RS) – Community Association Institute
Engineer in Training (E.I.T) – State of Virginia



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 Meadows 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 Meadows 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.