

RESERVE STUDY **OVERVIEW**



Condominiums

Townhomes

Homeowner Associations



DEDICATION, EXPERIENCE, SUPPORT

At Reserve Advisors, we're dedicated to providing an exceptional reserve study experience and delivering a professional, easy-to-use report that your board can depend on with complete confidence. Thousands of clients have come to rely on our long-term thinking and everyday commitment since 1991.

Our dedication to your community is exemplified by a team of multidisciplined engineers who:

- Listen to your concerns and keep your objectives in mind
- Create a truly customized reserve study
- Are always available to speak with you for free after your study is complete

Our comprehensive reserve study presents:

- Executive Summary including key findings and prioritization of near-term major projects
- Condition assessments with property-specific advice to solve problems before they escalate
- Best practices and technical illustrations designed to save your community money and communicate the most cost effective use of association funds
- Exclusive one-page spreadsheets/graphs to view all of your expenditures and funding at a glance
- Recommended preventative maintenance activities to help extend the useful life of property components

With unmatched local experience, we know local costs and conditions that affect your community. Our reports include valuable information not found in other studies - realistic component remaining lives, replacement alternatives and unbiased replacement costs. Our database of actual local client project costs determines your specific budget needs rather than standardized information.

Industry leading support and guidance you can trust. We're invested in your ability to plan for the future.

From our initial consultation to the delivery and presentation of our completed report, your reserve study experience is tailored to meet your specific needs and to address your community's priorities.

We provide current and future boards with additional insight, availability to answer questions and guidance well beyond report delivery. Our team of trusted professionals is always available to support you and your community.



FULL RESERVE STUDY

Scenic Ridge Association



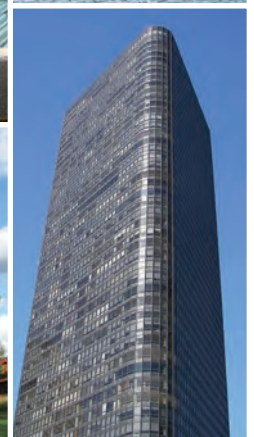
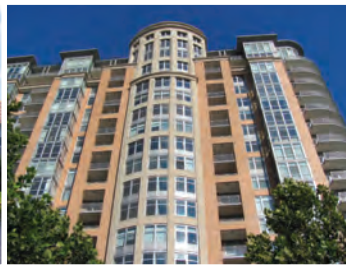
Madison, USA
July 1, 2022

Representative client photograph.



This Report contains intellectual property developed by Reserve Advisors, LLC. and Reserve Advisors Engineering, PLLC and cannot be reproduced or distributed to those who conduct reserve studies without their written consent.

© Reserve Advisors, LLC, 2022
© Reserve Advisors Engineering, PLLC, 2022



REPRESENTATIVE **CLIENT PROPERTIES**

Reserve Study Overview

TABLE OF CONTENTS

EXECUTIVE SUMMARY	6-7
RESERVE STUDY REPORT	8-11
RESERVE EXPENDITURES	12-13
FUNDING PLAN	14-15
FIVE-YEAR OUTLOOK	16
CONDITION ASSESSMENT	17-23



We're dedicated to enhancing your experience of using your reserve study. You'll receive easy online access to your study and the expenditure & funding plan spreadsheets in Excel format.

EXECUTIVE SUMMARY

(Sample Information)

Client: Scenic Ridge Association (Scenic Ridge)
Location: Madison, USA
Reference: 123456

Your Executive Summary makes it easy to share key findings and recommendations with homeowners, prospective buyers and lenders.

Property Basics: Scenic Ridge Association is a condominium style development of 75 units in 37 buildings. The buildings were built from 2005 to 2007.

Reserve Components Identified: 27 Reserve Components

Inspection Date: July 1, 2022

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 2029 due to replacement of the asphalt pavement.

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

- Current and future *local* costs of replacement
- 1.2% annual rate of return on invested reserves
- 2.5% 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 and Marshall & Swift, “the Building Cost People.”

Cash Status of Reserve Fund:

- \$467,289 as of January 1, 2022
- 2022 Reserve Contributions of \$92,000

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:

- Paint finish applications to the stucco, trim, soffits and fascia, including repairs and partial replacements to maintain a uniformly clean and consistent appearance of the buildings
- Partial sealant replacement to limit water infiltration
- Replacement of the roofs as deferral may lead to further water infiltration and cost

Recommended Reserve Funding:

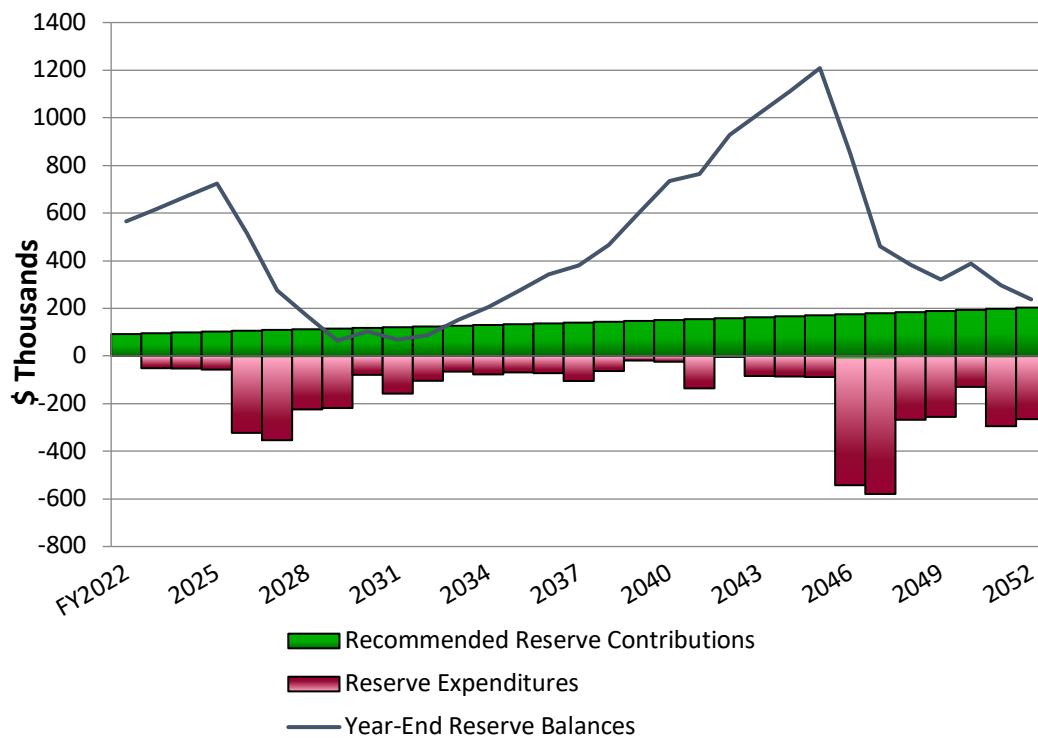
- Phased increases in Reserve Contributions of approximately \$3,500 from 2023 through 2027
- Inflationary increases through 2052, the limit of this study’s Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$3,500 represents about a one percent (1.4%) adjustment in the 2022 total Operating Budget of \$248,600 and is equivalent to an average monthly increase of \$3.89 per unit owner.

All in one place - the reader quickly understands the key findings of the reserve study.

The Executive Summary shows the “funding goal,” existing reserves, interest rates, prioritized near-term major replacement projects and recommended funding.

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2023	95,500	616,749	2033	126,900	151,156	2043	162,600	1,018,771
2024	99,000	670,898	2034	130,100	206,055	2044	166,700	1,112,101
2025	102,500	724,646	2035	133,400	273,390	2045	170,900	1,208,611
2026	106,000	515,245	2036	136,700	341,698	2046	175,200	853,607
2027	109,500	275,912	2037	140,100	381,143	2047	179,600	461,718
2028	112,200	166,436	2038	143,600	466,709	2048	184,100	383,057
2029	115,000	64,302	2039	147,200	601,259	2049	188,700	320,156
2030	117,900	104,010	2040	150,900	735,959	2050	193,400	388,008
2031	120,800	67,853	2041	154,700	763,718	2051	198,200	295,603
2032	123,800	88,431	2042	158,600	928,536	2052	203,200	236,920



At a glance, the Executive Summary indicates the association's financial health with a funding table and chart showing our recommended plan to fund the community's future expenditures.

RESERVE STUDY REPORT

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

Scenic Ridge Association Madison, USA

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

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 recommended Reserve Contributions and year-end Reserve Balances for the next 30 years
- **Five-Year Outlook** – Identifies reserve components with 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**

Ten important features underpin our findings and recommendations to help secure your community's financial future.

Comprehensive – We place special emphasis on assessing the condition of each common element to determine accurate timing of your replacements and realistic reserve funding.

Options – We take the time to evaluate your best options for repair v. replacement. You'll find valuable, detailed information to evaluate bids for replacements and negotiate more favorable contracts.



Our investigation includes Reserve Components or property elements as set forth in your Declaration. The Reserve Expenditures table on Page 12 lists the elements contained in this study. Our analysis begins by segregating the property elements into several areas of responsibility for repair and replacement.

We listen – We review your governing documents and listen to your concerns. Responsibilities for replacement are clearly defined to maintain/replace the community's property.

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

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

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 STUDY REPORT

Reserve Components

The reserve study identifies Reserve Components as set forth in your Declaration or which were identified as part of your request for proposed services. Reserve Components are defined by Community Associations Institute (CAI) as common elements with:

- Association responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold (*varies by association*)

Long-Lived Property Elements (*varies by association*)

Long-Lived Property Elements may not have predictable remaining useful lives or their replacement occurs beyond the 30-year scope of the study. The operating budget should fund infrequent repairs. Funding untimely or unexpected replacements from reserves will necessitate increases to Reserve Contributions. Updates of this Reserve Study will help determine the merits of adjusting the Reserve Funding Plan. We identify the following Long-Lived Property Elements as excluded from reserve funding at this time:

- Foundations
- Structural Frames

Operating Budget Funded Repairs and Replacements (*varies by association*)

The operating budget provides money for the repair and replacement of certain reserve components. Operating Budget Funded Repairs and Replacements relate to:

- General Maintenance to the Common Elements
- Expenditures less than a minimum threshold replacement cost (*varies by association*)
- Landscape
- Other repairs normally funded through the Operating Budget

Property Maintained by Homeowners (*varies by association*)

This relates to unit:

- Decks
- Driveways
- Electrical Systems
- Heating, Ventilating and Air Conditioning (HVAC) in the homes
- Interiors
- Patios
- Pipes (Within Units)
- Sidewalks and Stoops
- Windows and Doors

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
- 2022 local cost of replacement
 - Per unit
 - Per phase
- Total future costs of replacement anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

Reserve Funding Plan

- Reserves at the beginning of each year
- Total recommended reserve contributions
- Estimated interest earned from invested reserves
- Anticipated expenditures by year
- Anticipated reserves at year end

Five-Year Outlook

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

What's behind the expenditures and funding plan tables? Experienced engineers who listen and create a custom reserve study with your objectives in mind. We help you prioritize major projects and identify early signs of problems before they escalate.

RESERVE EXPENDITURES

The following is a sample of our Reserve Expenditures Table.
Items and costs in your study will vary.

Spreadsheets printed on
11x17 for easy viewing.

Scenic Ridge Association Madison, USA											Explanatory Notes: 1) 2.5% is the estimated Inflation Rate for estimating Future Replacement Costs. 2) FY2022 is Fiscal Year beginning January 1, 2022 and ending December 31, 2022.															(note actual study is 30 years)				
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 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027	6 2028	7 2029	8 2030	9 2031	10 2032	11 2033	12 2034	13 2035	14 2036	15 2037			
Exterior Building Elements																														
1.040	4,500	1,500 Square Feet	Balconies, Composite, Phased		2028	20 to 25	6 to 8	35.00	52,500	157,500	10.5%							60,884	62,406	63,966										
1.260	75	75 Each	Light Fixtures		2034	to 20	12	100.00	7,500	7,500	0.2%												10,087							
1.280	975	488 Squares	Roofs, Asphalt Shingles, Phased		2026	15 to 20	4 to 5	425.00	207,188	414,375	25.2%					228,696	234,414													
1.400	130	65 Squares	Roofs, Flat, Phased		2026	15 to 20	4 to 5	1,000.00	65,000	130,000	7.9%					71,748	73,542													
1.540	9,000	4,500 Linear Feet	Sealants, Windows and Doors, Phased		2026	to 20	4 to 14	2.50	11,250	22,500	1.0%					12,418										15,896				
1.820	37,500	37,500 Square Feet	Walls, Masonry, Inspections and Repairs		2028	8 to 12	6	0.80	30,000	30,000	2.8%							34,791												
1.860	75,000	25,000 Square Feet	Walls, Stucco, Paint Finishes and Capital Repairs, Phased		2023	8 to 10	1 to 3	1.50	37,500	112,500	9.6%		38,438	39,398	40,383								49,203	50,433	51,694					
1.910	75	25 Units	Walls, Trim, Soffits and Fascia, Paint Finishes, Phased		2023	4 to 6	1 to 3	500.00	12,500	37,500	6.8%		12,812	13,133	13,461			14,496	14,859	15,230			16,401	16,811	17,231					
Interior Building Elements																														
2.060	3,600	3,600 Square Feet	Ceilings, Acoustical Tiles and Grid, Hallways		2037	to 30	15	5.00	18,000	18,000	0.5%																26,069			
2.100	1	1 Each	Elevator Cab Finishes		2031	to 25	9	15,000.00	15,000	15,000	0.4%										18,733									
2.200	400	400 Square Yards	Floor Coverings, Carpet, Hallways		2027	8 to 12	5	55.00	22,000	22,000	2.0%						24,891										31,863			
2.560	37	37 Each	Light Fixtures, Hallways		2037	to 20	15	150.00	5,550	5,550	0.2%																8,038			
2.700	75	75 Each	Mailboxes		2037	to 35	15	115.00	8,625	8,625	0.3%																12,492			
2.800	18,300	18,300 Square Feet	Paint Finishes, Hallways		2027	8 to 12	5	1.00	18,300	18,300	1.7%						20,705										26,504			
Building Services Elements																														
3.060	1	1 Each	Air Handling Unit, Rooftop Heating and Cooling Unit		2026	15 to 20	4	9,000.00	9,000	9,000	0.5%					9,934														
3.320	1	1 Each	Elevator, Hydraulic, Pump and Controls		2041	to 35	19	85,000.00	85,000	85,000	2.8%																			
3.560	1	1 Allowance	Life Safety System, Control Panel and Emergency Devices		2031	to 25	9	40,000.00	40,000	40,000	1.0%										49,955									
3.700	2	2 Each	Pumps, Domestic Water		2036	to 20	14	10,000.00	20,000	20,000	1.4%															28,259				
3.820	2	1 Allowance	Security System		2032	10 to 15	10	7,500.00	7,500	15,000	0.5%											9,601								
Property Site Elements																														
4.040	12,700	6,350 Square Yards	Asphalt Pavement, Mill and Overlay, Phased		2028	15 to 20	6 to 7	15.50	98,425	196,850	12.6%							114,143	116,996											
4.620	1,200	1,200 Square Feet	Pavers, Masonry		2029	15 to 20	7	17.00	20,400	20,400	1.3%								24,249											
4.760	2,600	1,300 Square Feet	Retaining Walls, Timber, Phased (Replace with Masonry)		2031	15 to 20	9 to 10	55.00	71,500	143,000	9.8%										89,294	91,526								
Garage Elements																														
7.360	6,500	215 Square Feet	Concrete, On-grade, Partial		2032	to 90	10 to 30+	11.00	2,365	71,500	0.2%											3,027								
7.400	1	1 Each	Door and Operator		2025	8 to 15	3	3,000.00	3,000	3,000	0.2%					3,231														
7.460	1	1 Allowance	Exhaust System (Fans and CO Detection System)		2036	to 35	14	6,500.00	6,500	6,500	0.2%															9,184				
7.600	25	25 Each	Light Fixtures		2036	to 30	14	250.00	6,250	6,250	0.2%															8,831				
7.900	2	2 Each	Unit Heaters		2036	to 35	14	3,500.00	7,000	7,000	0.2%															9,891				
Anticipated Expenditures, By Year (\$4,849,527 over 30 years)												0	51,250	52,531	57,075	322,796	353,552	224,314	218,510	79,196	157,982	104,154	65,604	77,331	68,925	72,061	104,966			

Your Custom Comprehensive Reserve Study includes Excel spreadsheets with formulas for future planning and alternative “what-if” scenarios.

Our database of actual local client project costs determines your specific budget needs rather than standardized information.

FUNDING PLAN

The following is a sample of our Reserve Funding Plan.

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS

Scenic Ridge
Association
Madison, USA

Individual Reserve Budgets & Cash Flows for the Next 30 Years

		FY2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
Reserves at Beginning of Year	(Note 1)	467,289	565,448	616,749	670,898	724,646	515,245	275,912	166,436	64,302	104,010	67,853	88,431	151,156	206,055	273,390	341,698
Total Recommended Reserve Contributions	(Note 2)	92,000	95,500	99,000	102,500	106,000	109,500	112,200	115,000	117,900	120,800	123,800	126,900	130,100	133,400	136,700	140,100
Estimated Interest Earned, During Year	(Note 3)	6,159	7,051	7,680	8,323	7,395	4,719	2,638	1,376	1,004	1,025	932	1,429	2,130	2,860	3,669	4,311
Anticipated Expenditures, By Year		0	(51,250)	(52,531)	(57,075)	(322,796)	(353,552)	(224,314)	(218,510)	(79,196)	(157,982)	(104,154)	(65,604)	(77,331)	(68,925)	(72,061)	(104,966)
Anticipated Reserves at Year End		<u>\$565,448</u>	<u>\$616,749</u>	<u>\$670,898</u>	<u>\$724,646</u>	<u>\$515,245</u>	<u>\$275,912</u>	<u>\$166,436</u>	<u>\$64,302</u>	<u>\$104,010</u>	<u>\$67,853</u>	<u>\$88,431</u>	<u>\$151,156</u>	<u>\$206,055</u>	<u>\$273,390</u>	<u>\$341,698</u>	<u>\$381,143</u>
Predicted Reserves based on 2022 funding level of:	\$92,000	565,448	613,228	660,293	703,351	479,610	222,244	91,803	(34,364)	(21,896)							

Do more with your custom reserve study from Reserve Advisors!

- The Report is easy to access online, one-click anytime from anywhere
- Excel spreadsheets with formulas make “what-if” alternative scenarios easy
- ForeSite, an online solution, allows for easy collaboration among board members

(continued)

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

		2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052
Reserves at Beginning of Year		381,143	466,709	601,259	735,959	763,718	928,536	1,018,771	1,112,101	1,208,611	853,607	461,718	383,057	320,156	388,008	295,603
Total Recommended Reserve Contributions		143,600	147,200	150,900	154,700	158,600	162,600	166,700	170,900	175,200	179,600	184,100	188,700	193,400	198,200	203,200
Estimated Interest Earned, During Year		5,057	6,370	7,975	8,944	10,093	11,614	12,709	13,841	12,300	7,845	5,038	4,194	4,224	4,077	3,176
Anticipated Expenditures, By Year		(63,091)	(19,020)	(24,175)	(135,885)	(3,875)	(83,979)	(86,079)	(88,231)	(542,504)	(579,334)	(267,799)	(255,795)	(129,772)	(294,682)	(265,059)
Anticipated Reserves at Year End		<u>\$466,709</u>	<u>\$601,259</u>	<u>\$735,959</u>	<u>\$763,718</u>	<u>\$928,536</u>	<u>\$1,018,771</u>	<u>\$1,112,101</u>	<u>\$1,208,611</u>	<u>\$853,607</u>	<u>\$461,718</u>	<u>\$383,057</u>	<u>\$320,156</u>	<u>\$388,008</u>	<u>\$295,603</u>	<u>\$236,920</u>

Explanatory Notes:

- 1) Year 2022 starting reserves are as of January 1, 2022; FY2022 starts January 1, 2022 and ends December 31, 2022.
- 2) Reserve Contributions for 2022 are budgeted; 2023 is the first year of recommended contributions.
- 3) 1.2% is the estimated annual rate of return on invested reserves.
- 4) Accumulated year 2052 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

With ForeSite, access your original study with one-click and then create/explore unlimited alternate models/scenarios of replacements & funding.

- Change quantities, replacement times, costs, interest rates, and funding levels
- Record comments and historical costs
- Store your bid documents, photos and more
- Add a reserve component line item

ForeSite brings everything together as you plan for the future in one place from anywhere, for the board and management to see.

FIVE-YEAR OUTLOOK

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

FIVE-YEAR OUTLOOK

Scenic Ridge
Association
Madison, USA

At a glance, management
and the board can focus on the
schedule of each near-term
capital project.

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
<u>Exterior Building Elements</u>							
1.280	Roofs, Asphalt Shingles, Phased					228,696	234,414
1.400	Roofs, Flat, Phased					71,748	73,542
1.540	Sealants, Windows and Doors, Phased					12,418	
1.860	Walls, Stucco, Paint Finishes and Capital Repairs, Phased		38,438	39,398	40,383		
1.910	Walls, Trim, Soffits and Fascia, Paint Finishes, Phased		12,812	13,133	13,461		
<u>Interior Building Elements</u>							
2.200	Floor Coverings, Carpet, Hallways						24,891
2.800	Paint Finishes, Hallways						20,705
<u>Building Services Elements</u>							
3.060	Air Handling Unit, Rooftop Heating and Cooling Unit					9,934	
<u>Garage Elements</u>							
7.400	Door and Operator				3,231		
Anticipated Expenditures, By Year (\$4,849,527 over 30 years)		0	51,250	52,531	57,075	322,796	353,552

CONDITION ASSESSMENT

The Condition Assessment* of the *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.*

* Please note: The following is a sample of our Condition Assessment, but does not represent the report in its entirety. Items vary by association.

Roofs, Asphalt Shingles

Line Item: 1.280

Quantity: 975 squares (100 square feet of surface area per square)

History: Original

Condition: Good to fair overall with periodic shingle lift, shingle deflection and sheathing deflection evident from our visual inspection from the ground. We also note downspout discharge directly onto the shingles. This configuration may lead to granular loss and accelerated deterioration of the shingles.



Sheathing deflection



Shingle deflection



Shingle lift



Downspout discharge directly onto shingles

Useful Life: 15- to 20-years

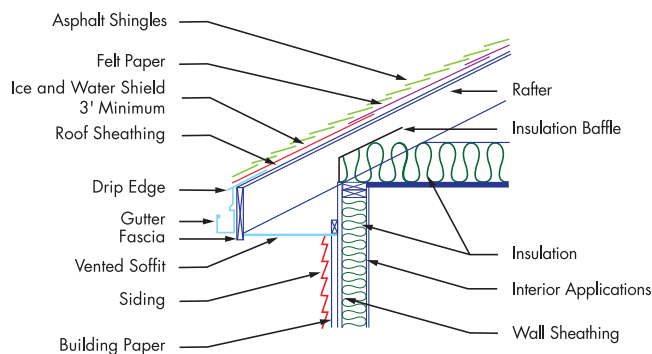
Component Detail Notes: The existing roof assembly comprises the following:

- Laminate and three-tab shingles
- Boston style ridge caps
- Lead boot flashing at the waste pipes
- Soffit, square hood box and ridge vents
- Metal drip edge
- Enclosed half weaved valleys

CONDITION ASSESSMENT

The following cross-sectional schematic illustrates an asphalt shingle roof system:

Roof Schematic



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

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

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.

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. We base our cost on replacement with architectural dimensional shingles.

Walls, Stucco

Line Item: 1.860

Quantity: Approximately 75,000 square feet of the building exteriors

History: Original

Condition: Good overall with isolated cracks, finish deterioration, damage and sealant deterioration evident



Finish deterioration



Damage near garage



Crack at side elevation

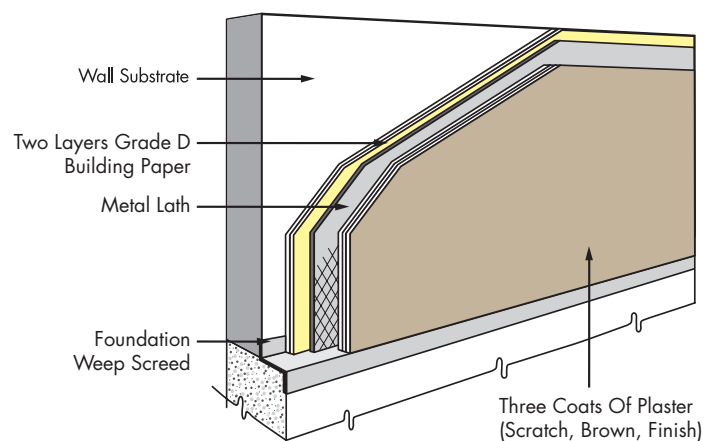


Sealant adhesion failure

Useful Life: We recommend inspections, repairs and paint finish applications every 8- to 10-years.

Component Detail Notes: The following graphic details the typical components of a stucco wall system on frame construction:

Stucco Schematic



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

CONDITION ASSESSMENT

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost anticipates the following in coordination with each paint finish application:

- Crack repairs as needed (Each paint product has the limited ability to cover and seal cracks but we recommend repair of all cracks which exceed the ability of the paint product to bridge.)
- Replacement of up to one percent (1%), of the stucco walls (The exact amount of area in need of replacement will be discretionary based on the actual future conditions and the desired appearance.)
- Replacement of up to twenty-five percent (25%) of the sealants in coordination with each paint finish application.

Walls, Trim, Soffits and Fascia, Paint Finishes

Line Item: 1.910

Quantity: Approximately 19,000 square feet of wood trim, soffits and fascia

History: The buildings were last painted approximately six years ago.

Condition: Fair overall with consistent paint finish deterioration, periodic wood rot and sealant deterioration evident



Trim rot



Trim rot



Paint finish deterioration



Sealant deterioration

Useful Life: Four- to six-years

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

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We assume the following activities per event:

- Paint finish applications to the trim, soffit and fascia
- Replacement of up to five percent (5%), of the wood (The exact amount of wood in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever holes, cracks and deterioration impair the ability of the material to prevent water infiltration.)
- Replacement of up to twenty-five percent (25%) of the sealants

Asphalt Pavement, Repaving

Line Item: 4.040

Quantity: Approximately 12,700 square yards

History: Original

Condition: Fair overall condition with periodic settlement, deterioration and cracks.



Tire ruts, deterioration and cracks at unit driveway



Alligator cracks and settlement at edge of access drive



Settlement at garage threshold

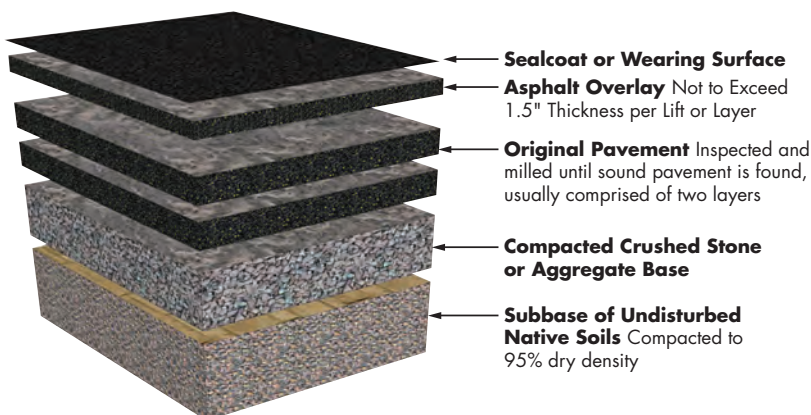


Cracks and potholes

Useful Life: 15- to 20-years

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 these components:

Asphalt Diagram



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 overlay on asphalt pavement that exhibits normal deterioration and wear.

CONDITION ASSESSMENT

We recommend total replacement of asphalt pavement that exhibits severe deterioration, inadequate drainage, pavement that has been overlaid multiple times in the past or where the configuration makes overlayment not possible. Based on the apparent visual condition and configuration of the asphalt pavement, we recommend the mill and overlay method for initial repaving of the access drives and the total replacement method for subsequent repaving. We recommend the total replacement method for repaving of the driveways.

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 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. Our cost for milling and overlayment of the access drives includes area patching of up to ten percent (10%).

Pavers, Masonry

Line Item: 4.620

Quantity: 1,200 square feet

History: Original

Condition: Good overall with isolated deterioration and settlement evident



Settlement



Paver damage

Useful Life: 15- to 20-years

Component Detail Notes:

The diagram at the right depicts the components of a masonry paver system.

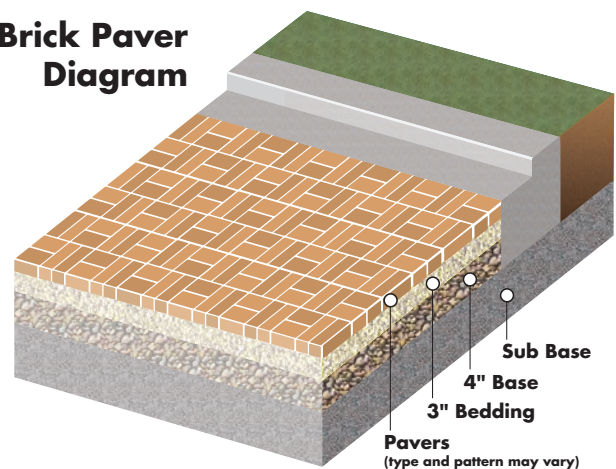
Preventative Maintenance Notes: We note the following select recommended preventative maintenance activities to maximize the remaining useful life:

- Annually:
 - Inspect and repair settlement, trip hazards and paver spalls at heavy traffic areas
 - Re-set and/or reseal damaged pavers as necessary
 - Periodically clean and remove overgrown vegetation as needed

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We suggest the Association conduct interim resetting and replacement of minor areas of pavers as normal maintenance, funded from the operating budget.

Brick Paver Diagram



Retaining Walls, Timber

Line Item: 4.760

Quantity: 2,600 square feet

History: Original

Condition: Fair to poor overall with wood and tieback rot evident



Wood rot and wall deflection

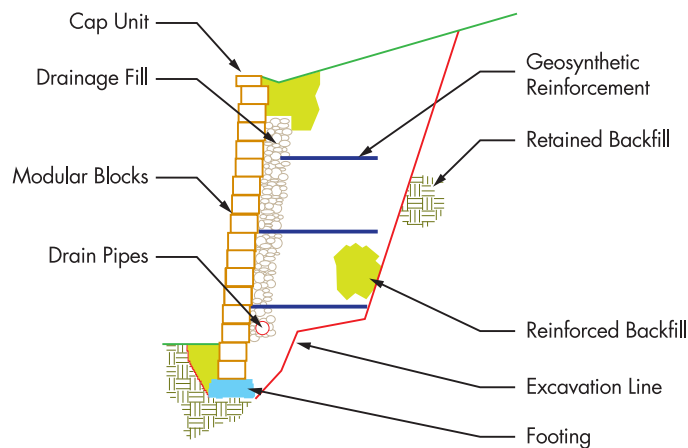


Wood rot

Useful Life: 15- to 20-years

Component Detail Notes: We advise the Association replace with a modular, interlocking dry-set masonry retaining wall system. The cost of dry-set masonry retaining walls is similar to the cost of timber walls. However, dry-set masonry retaining walls offer a longer useful life of up to 35 years and lower total maintenance costs. The following schematic depicts this type of retaining wall:

Retaining Wall Schematic



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

- Annually:
 - Inspect and repair leaning sections or damaged areas
 - Inspect and repair erosion at the wall base and backside

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.

Guidance You Can Trust

At Reserve Advisors, we understand that the quality of your reserve study has a direct impact on your ability to meet your fiduciary obligations. We approach every reserve study with the firm understanding that each of our clients' needs and priorities are truly unique. That's why we guarantee:



Full Engagement

It's our job to understand your specific concerns and to discuss your priorities in order to ensure your reserve study experience exceeds your expectations.



Detailed Understanding

We will do whatever it takes to ensure you have complete confidence in interpreting and putting into practice our findings and recommendations.



Ongoing Support

The reserve study is not a one-and-done report. We provide your current and future boards with additional insight, availability to answer questions and guidance well beyond report delivery.



CORPORATE HEADQUARTERS

735 N. Water Street, Suite 175
Milwaukee, WI 53202
(800) 221-9882



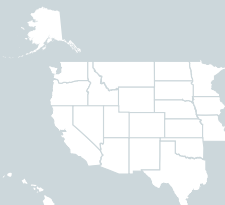
GREAT LAKES

(312) 625-4958
(800) 221-9882



NORTHEAST

(844) 701-9884



WEST

(800) 221-9882



SOUTHEAST

(800) 980-9881