

FULL RESERVE STUDY

Riverwood Owners Association, Inc.



Suffolk, Virginia

August 14, 2018



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Riverwood Owners Association, Inc.
Suffolk, Virginia

Dear Board of Directors of Riverwood Owners Association, Inc.:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Riverwood Owners Association, Inc. in Suffolk, Virginia and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 14, 2018.

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

An ongoing review by the Board and an Update of this Reserve Study are necessary to ensure an equitable funding plan since a Reserve Study is a snapshot in time. We recommend the Board budget for an Update to this Reserve Study in two- to three-years. We look forward to continuing to help Riverwood Owners Association, Inc. 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 25, 2018 by

Reserve Advisors, Inc.

Visual Inspection and Report by: Dixon P. Drumheller, RS¹

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: Riverwood Owners Association, Inc. (Riverwood)

Location: Suffolk, Virginia

Reference: 030343

Property Basics: Riverwood Owners Association, Inc. is a homeowners association which is responsible for the common elements shared by 140 single family homes. The common elements of the Association were built from 1998 to 2002.

Reserve Components Identified: Seven Reserve Components.

Inspection Date: August 14, 2018. We conducted previous inspections in 2008 and 2013.

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 these threshold funding years in 2020 and 2040 due to replacement of the playground equipment.

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
- 1.4% average current annual rate of return on invested reserves
- 2.6% 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.

Cash Status of Reserve Fund:

- \$78,963 as of August 31, 2018
- 2018 budgeted Reserve Contributions of \$4,152

Project Prioritization: We recommend the Association prioritize the following projects in the next five years based on the conditions identified:

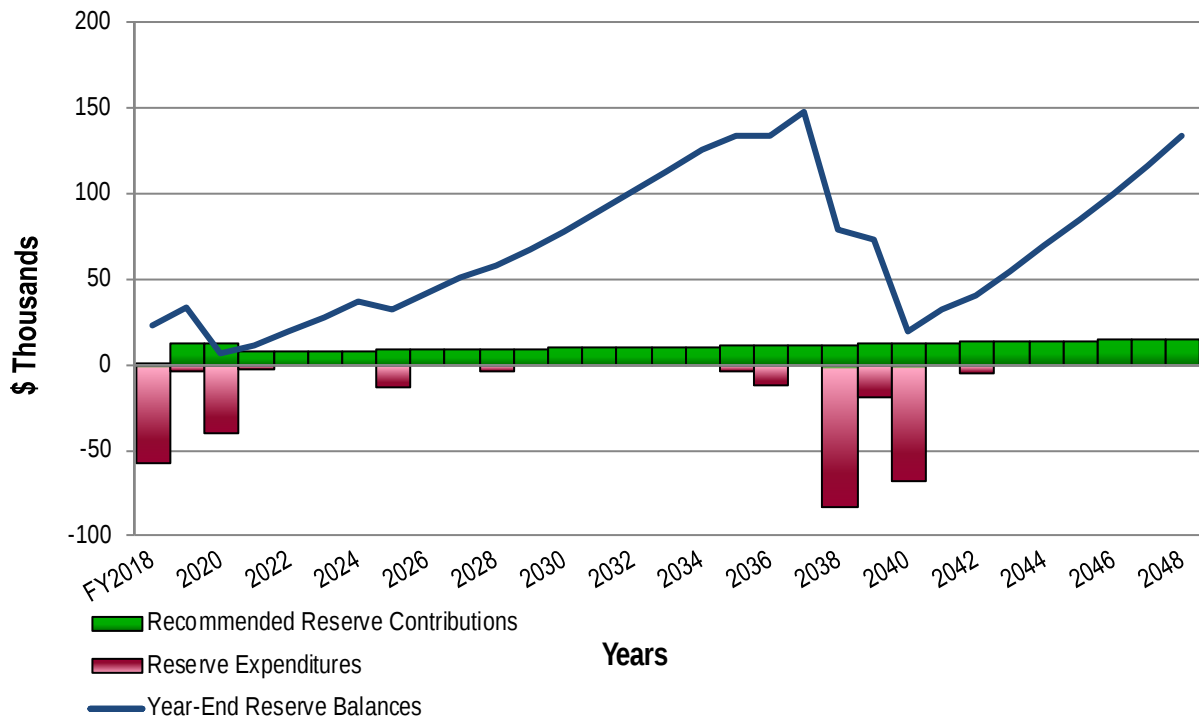
- Replacement of the playground equipment
- Renovation of the entrance monuments
- Paving of the gravel walking path

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

- Stable contributions of \$13,000 from 2019 through 2020
- Decrease to \$7,800 by 2021 due to fully funding for replacement of the playground equipment
- Inflationary increases through 2048, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$8,848 represents an average monthly increase of \$5.27 per homeowner and about a twenty-two percent (22.3%) adjustment in the 2018 total Operating Budget of \$39,600.

Riverwood
Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2019	13,000	33,255	2029	9,400	67,739	2039	12,200	73,483
2020	13,000	6,113	2030	9,600	78,384	2040	12,500	19,103
2021	7,800	11,011	2031	9,800	89,383	2041	12,800	32,270
2022	8,000	19,227	2032	10,100	100,843	2042	13,100	40,708
2023	8,200	27,763	2033	10,400	112,770	2043	13,400	54,791
2024	8,400	36,623	2034	10,700	125,171	2044	13,700	69,379
2025	8,600	32,100	2035	11,000	133,689	2045	14,100	84,580
2026	8,800	41,426	2036	11,300	134,369	2046	14,500	100,402
2027	9,000	51,087	2037	11,600	147,987	2047	14,900	116,855
2028	9,200	57,444	2038	11,900	78,709	2048	15,300	133,948





2.RESERVE STUDY REPORT

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

Riverwood Owners Association, Inc.

Suffolk, Virginia

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, August 14, 2018. We conducted previous inspections in 2008 and 2013.

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
- **Reserve Component Detail** - Describes the reserve components, includes photographic documentation of the condition of various property elements, describes our recommendations for repairs or replacement, and includes detailed solutions and procedures for replacements for the benefit of current and future board members
- **Methodology** - Lists the national standards, methods and procedures used to develop the Reserve Study
- **Definitions** - Contains definitions of terms used in the Reserve Study, consistent with national standards
- **Professional Service Conditions** - Describes Assumptions and Professional Service Conditions
- **Credentials and Resources**

IDENTIFICATION OF PROPERTY



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

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

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

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

- Riverwood responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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

- Electrical Systems, Common

The operating budget provides money for the repair and replacement of certain Reserve Components. The Association may develop independent criteria for use of operating and reserve funds. For purposes of calculating appropriate Reserve Contributions, we identify the following list of Operating Budget Funded Repairs and Replacements:

- General Maintenance to the Common Elements
- Expenditures less than \$3,000 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Basketball Court, Asphalt Pavement, Crack Repairs and Patching
- Basketball Goals and Poles
- Landscape
- Paint Finishes
- Playground, Mulch Replenishment
- Signage, Park
- Other Repairs normally funded through the Operating Budget

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

- Homes and Lots

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

- Asphalt Pavement Street System
- Concrete Sidewalks, Adjacent to Streets
- Light Poles and Fixtures

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
- 2018 local cost of replacement
 - Per unit
 - Per phase
 - Replacement of total quantity
- 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

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

Riverwood
Owners Association, Inc.
Suffolk, Virginia

Explanatory Notes:

- 1) 2.6% is the estimated future Inflation Rate for estimating Future Replacement Costs.
2) FY2018 is Fiscal Year beginning January 1, 2018 and ending December 31, 2018.

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$				RUL = 0 FY2018	1 2019	2 2020	3 2021	4 2022	5 2023	6 2024	7 2025	8 2026	9 2027	10 2028	11 2029	12 2030	13 2031	14 2032	15 2033
						Useful	Remaining	Unit (2018)	Per Phase (2018)	Total (2018)	30-Year Total (Inflated)																
4.041	350	350	Square Yards	Basketball Court, Surface Replacement	2025	to 25	7	32.50	11,375	11,375	13,614							13,614									
4.360	1	1	Each	Pavilion, Renovation	2039	to 25	21	7,500.00	7,500	7,500	12,857																
4.659	1	1	Allowance	Playground Equipment, Adult Exercise Equipment, Installation (2018 is Budgeted)	2018	15 to 20	0	49,554.00	49,554	49,554	132,353	49,554															
4.660	1	1	Allowance	Playground Equipment, Existing	2020	15 to 20	2	38,400.00	38,400	38,400	107,965			40,423													
4.800	1	1	Allowance	Signage, Entrance Monuments, Renovation	2019	15 to 20	1	3,300.00	3,300	3,300	9,043	3,386															
4.820	3	1	Allowance	Site Furniture, Phased	2021	15 to 25	3 to 17	2,800.00	2,800	8,400	16,159				3,024						3,619						
4.831	5,850	5,850	Square Feet	Walking Path, Gravel, Paving (2018 is Budgeted)	2018	12 to 18	0	1.35	7,898	7,898	20,336	7,800															
Anticipated Expenditures, By Year											\$312,327	57,354	3,386	40,423	3,024	0	0	0	13,614	0	0	3,619	0	0	0	0	0

RESERVE EXPENDITURES

Riverwood Owners Association, Inc. Suffolk, Virginia				Estimated	Life Analysis,		Costs, \$				16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	1st Year of Event	Useful Years	Remaining	Unit (2018)	Per Phase (2018)	Total (2018)	30-Year Total (Inflated)	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
4.041	350	350	Square Yards	Basketball Court, Surface Replacement	2025	to 25	7	32.50	11,375	11,375	13,614															
4.360	1	1	Each	Pavilion, Renovation	2039	to 25	21	7,500.00	7,500	7,500	12,857						12,857									
4.659	1	1	Allowance	Playground Equipment, Adult Exercise Equipment, Installation (2018 is Budgeted)	2018	15 to 20	0	49,554.00	49,554	49,554	132,353					82,799										
4.660	1	1	Allowance	Playground Equipment, Existing	2020	15 to 20	2	38,400.00	38,400	38,400	107,965							67,542								
4.800	1	1	Allowance	Signage, Entrance Monuments, Renovation	2019	15 to 20	1	3,300.00	3,300	3,300	9,043						5,657									
4.820	3	1	Allowance	Site Furniture, Phased	2021	15 to 25	3 to 17	2,800.00	2,800	8,400	16,159		4,332							5,184						
4.831	5,850	5,850	Square Feet	Walking Path, Gravel, Paving (2018 is Budgeted)	2018	12 to 18	0	1.35	7,898	7,898	20,336			12,536												
Anticipated Expenditures, By Year											\$312,327	0	4,332	12,536	0	82,799	18,514	67,542	0	5,184	0	0	0	0	0	0

RESERVE FUNDING PLAN

CASH FLOW ANALYSIS
Riverwood
Owners Association, Inc.
Suffolk, Virginia

Owners Association, Inc.		Individual Reserve Budgets & Cash Flows for the Next 30 Years															
Suffolk, Virginia		FY2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Reserves at Beginning of Year (Note 1)		78,963	23,237	33,255	6,113	11,011	19,227	27,763	36,623	32,100	41,426	51,087	57,444	67,739	78,384	89,383	100,843
Total Recommended Reserve Contributions (Note 2)		1,384	13,000	13,000	7,800	8,000	8,200	8,400	8,600	8,800	9,000	9,200	9,400	9,600	9,800	10,100	10,400
Plus	Estimated Interest Earned, During Year (Note 3)	245	404	281	122	216	336	460	491	526	661	776	895	1,045	1,199	1,360	1,527
Less	Anticipated Expenditures, By Year	(57,354)	(3,386)	(40,423)	(3,024)	0	0	0	(13,614)	0	0	(3,619)	0	0	0	0	0
Anticipated Reserves at Year End		<u>\$23,237</u>	<u>\$33,255</u>	<u>\$6,113</u>	<u>\$11,011</u>	<u>\$19,227</u>	<u>\$27,763</u>	<u>\$36,623</u>	<u>\$32,100</u>	<u>\$41,426</u>	<u>\$51,087</u>	<u>\$57,444</u>	<u>\$67,739</u>	<u>\$78,384</u>	<u>\$89,383</u>	<u>\$100,843</u>	<u>\$112,770</u>
				(NOTE 5)													

(continued)

		Individual Reserve Budgets & Cash Flows for the Next 30 Years, Continued														
		2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Reserves at Beginning of Year		112,770	125,171	133,689	134,369	147,987	78,709	73,483	19,103	32,270	40,708	54,791	69,379	84,580	100,402	116,855
Total Recommended Reserve Contributions		10,700	11,000	11,300	11,600	11,900	12,200	12,500	12,800	13,100	13,400	13,700	14,100	14,500	14,900	15,300
Plus	Estimated Interest Earned, During Year	1,701	1,850	1,916	2,018	1,621	1,088	662	367	522	683	888	1,101	1,322	1,553	1,793
Less	Anticipated Expenditures, By Year	0	(4,332)	(12,536)	0	(82,799)	(18,514)	(67,542)	0	(5,184)	0	0	0	0	0	0
Anticipated Reserves at Year End		<u>\$125,171</u>	<u>\$133,689</u>	<u>\$134,369</u>	<u>\$147,987</u>	<u>\$78,709</u>	<u>\$73,483</u>	<u>\$19,103</u>	<u>\$32,270</u>	<u>\$40,708</u>	<u>\$54,791</u>	<u>\$69,379</u>	<u>\$84,580</u>	<u>\$100,402</u>	<u>\$116,855</u>	<u>\$133,948</u>
								(NOTE 5)								(NOTE 4)

Explanatory Notes:

- 1) Year 2018 starting reserves are as of August 31, 2018; FY2018 starts January 1, 2018 and ends December 31, 2018.
- 2) Reserve Contributions for 2018 are the remaining budgeted 4 months; 2019 is the first year of recommended contributions.
- 3) 1.4% is the average current rate of return on invested reserves; 2018 is a partial year of interest earned.
- 4) Accumulated year 2048 ending reserves consider the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Years (reserve balance at critical point).

4. RESERVE COMPONENT DETAIL

The Reserve Component Detail of this *Full Reserve Study* includes enhanced solutions and procedures for select significant components. This section describes the Reserve Components, documents specific problems and condition assessments, and may include detailed solutions and procedures for necessary capital repairs and replacements for the benefit of current and future board members. We advise the Board use this information to help define the scope and procedures for repair or replacement when soliciting bids or proposals from contractors. *However, the Report in whole or part is not and should not be used as a design specification or design engineering service.*

Basketball Court, Surface

Line Item: 4.041

Quantity: 350 square yards of asphalt comprising one basketball court at the park adjacent to Waterwood Way

History: Mostly original. The Board informs us the Association recently conducted repairs at the court.

Condition: Good to fair overall with edge deterioration and previous repairs evident



Basketball court overview



Basketball court overview



Edge deterioration

Useful Life: Up to 25 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.

Pavilion

Line Item: 4.360

Quantity: One pavilion at the park

History: Constructed in 2014

Condition: Good overall with minor soffit displacement evident



Pavilion overview



Metal roof



Soffit displacement

Useful Life: Up to 25 years with periodic maintenance

Priority/Criticality: Per Board discretion

Expenditure Detail Notes: Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. We recommend the Association budget for paint applications and repairs through the operating budget. Our cost for renovation includes:

- Replacement of the metal roof
- Replacement of the light fixtures
- Replacement of the wood siding and soffit
- Partial replacement of deteriorated wood components

Playground Equipment

Line Items: 4.659 and 4.660

History: The existing playground equipment is original. The Board informs us the Association plans to install adult exercise equipment adjacent to the playground in 2018.

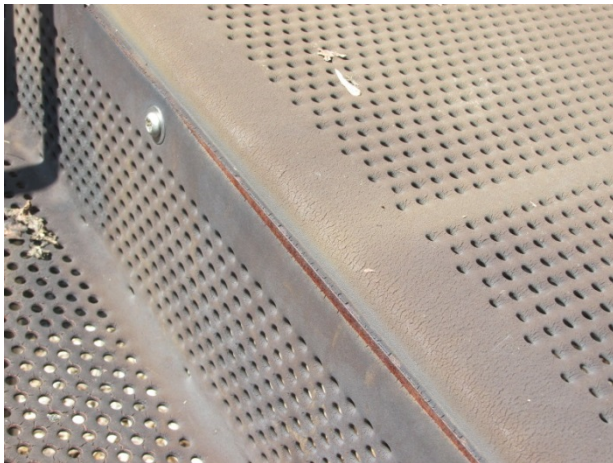
Condition: Fair overall with rust and finish deterioration evident. The Board informs us the Association plans to replace the playground equipment in the near term.



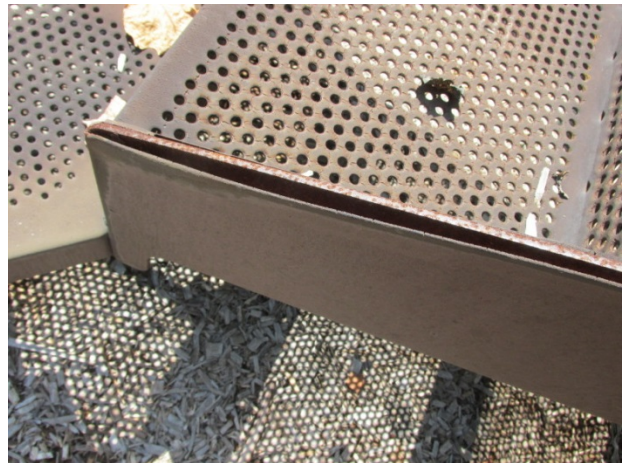
Playground overview



Playground overview



Rust and finish deterioration



Rust and finish deterioration

Useful Life: 15- to 20-years

Component Detail Notes: Safety is the major purpose for maintaining playground equipment. We recommend an annual inspection of the playground equipment to identify and repair as normal maintenance loose connections and fasteners or damaged elements. We suggest the Association learn more about the specific requirements of playground equipment at PlaygroundSafety.org. We recommend the use of a specialist for the design or replacement of the playground equipment environment.

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 estimate of cost for installation of the adult exercise equipment on bids provided to us by Management. We include an allowance in the unit cost for replacement of the safety surface.

Signage, Entrance Monuments

Line Item: 4.800

Quantity: One property identification sign and one masonry foundation at the entrance to the community

History: Original

Condition: Fair overall with paint finish deterioration and flashing displacement evident. The Board informs us the Association plans to renovate the signage in the near term.



Entrance monument



Paint finish deterioration



Masonry foundation without sign

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. The signage includes the following elements:

- Wood sign and letters
- Flashing
- Masonry, brick

Priority/Criticality: Per Board discretion

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

Site Furniture

Line Item: 4.820

Quantity:

- Benches (5)
- Picnic tables (3)
- Trash receptacles (3)
- Pet waste stations (2)

History: Varying ages. The Board informs us the Association installed two additional picnic tables in 2014 when the pavilion was constructed.

Condition: Varying from good to fair overall with rust and damage evident



Picnic tables



Bench



Trash receptacle

Useful Life: 15- to 25-years

Priority/Criticality: Per Board discretion

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

Walking Path, Gravel

Line Item: 4.831

Quantity: 5,850 square feet of gravel comprising a walking path at the park

History: The Board informs us the Association plans to pave the walking path in 2018

Condition: Good to fair overall with gravel displacement evident



Walking path



Walking path



Gravel displacement

Useful Life: 12- to 18-years for subsequent repaving

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 estimate of cost for paving on contracts provided to us by the Board.

Reserve Study Update

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

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

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

5.METHODOLOGY

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

Riverwood can fund capital repairs and replacements in any combination of the following:

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

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

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

- The Cash Flow Method to compute, project and illustrate the 30-year Reserve Funding Plan
- 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 Suffolk, Virginia at an annual inflation rate. Isolated or regional markets of greater

¹ Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

² See Credentials for additional information on our use of published sources of cost data.

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

- The past and current maintenance practices of Riverwood 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, Inc. 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 principals are founders of Community Associations Institute's (CAI) Reserve Committee that developed national standards for reserve study providers. One of our principals 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 the 2,600,000-square foot 98-story Trump International Hotel and Tower in Chicago. 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.

QUALIFICATIONS

THEODORE J. SALGADO

Principal Owner

CURRENT CLIENT SERVICES

Theodore J. Salgado is a co-founder of Reserve Advisors, Inc., which is dedicated to serving community associations, city and country clubs, religious organizations, educational facilities, and public and private entities throughout the United States. He is responsible for the production, management, review, and quality assurance of all reserve studies, property inspection services and consulting services for a nationwide portfolio of more than 6,000 clients. Under his direction, the firm conducts reserve study services for community associations, apartment complexes, churches, hotels, resorts, office towers and vintage architecturally ornate buildings.



PRIOR RELEVANT EXPERIENCE

Before founding Reserve Advisors, Inc. with John P. Poehlmann in 1991, Mr. Salgado, a professional engineer registered in the State of Wisconsin, served clients for over 15 years through American Appraisal Associates, the world's largest full service valuation firm. Mr. Salgado conducted facilities analyses of hospitals, steel mills and various other large manufacturing and petrochemical facilities and casinos.

He has served clients throughout the United States and in foreign countries, and frequently acted as project manager on complex valuation, and federal and state tax planning assignments. His valuation studies led to negotiated settlements on property tax disputes between municipalities and property owners.

Mr. Salgado has authored articles on the topic of reserve studies and facilities maintenance. He also co-authored *Reserves*, an educational videotape produced by Reserve Advisors on the subject of Reserve Studies and maintaining appropriate reserves. Mr. Salgado has also written in-house computer applications manuals and taught techniques relating to valuation studies.

EXPERT WITNESS

Mr. Salgado has testified successfully before the Butler County Board of Tax Revisions in Ohio. His depositions in pretrial discovery proceedings relating to reserve studies of Crestview Estates Condominium Association in Wauconda, Illinois, Rivers Point Row Property Owners Association, Inc. in Charleston, South Carolina and the North Shore Club Associations in South Bend, Indiana have successfully assisted the parties in arriving at out of court settlements.

EDUCATION - Milwaukee School of Engineering - B.S. Architectural Engineering

PROFESSIONAL AFFILIATIONS/DESIGNATIONS

American Association of Cost Engineers - Past President, Wisconsin Section

Association of Construction Inspectors - Certified Construction Inspector

Association of Professional Reserve Analysts - Past President & Professional Reserve Analyst (PRA)

Community Associations Institute - Member and Volunteer Leader of multiple chapters

Concordia Seminary, St. Louis - Member, National Steering Committee

Milwaukee School of Engineering - Member, Corporation Board

Professional Engineer, Wisconsin (1982) and North Carolina (2014)

Ted continually maintains his professional skills through American Society of Civil Engineers, ASHRAE, Association of Construction Inspectors, and continuing education to maintain his professional engineer licenses.

JOHN P. POEHLMANN, RS
Principal

John P. Poehlmann is a co-founder of Reserve Advisors, Inc. He is responsible for the finance, accounting, marketing, and overall administration of Reserve Advisors, Inc. He also regularly participates in internal Quality Control Team Reviews of Reserve Study reports.



Mr. Poehlmann directs corporate marketing, including business development, advertising, press releases, conference and trade show exhibiting, and electronic marketing campaigns. He frequently speaks throughout the country at seminars and workshops on the benefits of future planning and budgeting for capital repairs and replacements of building components and other assets.

PRIOR RELEVANT EXPERIENCE

Mr. Poehlmann served on the national Board of Trustees of Community Associations Institute. An international organization, Community Associations Institute (CAI) is a nonprofit 501(c)(3) trade association created in 1973 to provide education and resources to America's 335,000 residential condominium, cooperative and homeowner associations and related professionals and service providers.

He is a founding member of the Institute's Reserve Committee. The Reserve Committee developed national standards and the Reserve Specialist (RS) Designation Program for Reserve Study providers. Mr. Poehlmann has authored numerous articles on the topic of Reserve Studies, including Reserve Studies for the First Time Buyer, Minimizing Board Liability, Sound Association Planning Parallels Business Concepts, and Why Have a Professional Reserve Study. He is also a contributing author in Condo/HOA Primer, a book published for the purpose of sharing a wide background of industry knowledge to help boards in making informed decisions about their communities.

INDUSTRY SERVICE AWARDS

CAI Wisconsin Chapter Award
CAI National Rising Star Award
CAI Michigan Chapter Award

EDUCATION

University of Wisconsin-Milwaukee - Master of Science Management
University of Wisconsin - Bachelor of Business Administration

PROFESSIONAL AFFILIATIONS

Community Associations Institute (CAI) - Founding member of Reserve Committee;
former member of National Board of Trustees; Reserve Specialist (RS) designation;
Member of multiple chapters
Association of Condominium, Townhouse, & Homeowners Associations (ACTHA) –
member



DIXON P. DRUMHELLER, RS
Responsible Advisor

CURRENT CLIENT SERVICES

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

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

GrandView at Annapolis Towne Centre Condominium is a 13 story condominium building in Annapolis, Maryland built in 2009. The building includes 150 units and amenities such as a rooftop pool and Sky Lounge, exercise rooms and social rooms.

Red Hawk Lodge This upscale ski lodge located in Keystone, Colorado was built in 2000. The five-story condominium building includes 100 units and amenities such as a pool, fitness center and parking garage. The building is comprised of asphalt shingle roofs, and wood and fiber cement siding.

Shields Self Storage is a self-storage facility comprising eight different locations in Waynesboro, Virginia that was built between 1957 and 2016. Shields maintains 1,545 storage units as well as offices and a storage facility for tractor trailers and recreational vehicles.

The Henry Condominium A luxury residential property located in downtown Alexandria, Virginia, these five and six-story condominium buildings were built in 2007 and contain 168 units. The buildings include fitness and party rooms as well as rooftop terraces overlooking Washington D.C. The property also includes a controlled access, two level parking garage.

Bulle Rock Community Association This master association in Havre de Grace, Maryland comprises 1,900 single family homes and condominium units. The Association maintains various common elements including a 30,000 square foot clubhouse, indoor and outdoor pools, tennis courts, and extensive nature trails and walking paths.

The Country Club of Rochester One of the oldest golf clubs in America, the Country Club of Rochester was founded in 1895 in Rochester, New York. The current clubhouse was built in 1970 and amenities include 18 holes of golf, paddle tennis courts, a skating rink and tennis courts.

Mary Marshall Assisted Living Facility This property in Arlington, Virginia was built in the 1940's and converted to an assisted living facility in 2011. Mary Marshall comprises 52 units in one building. The facility includes kitchens, dining and community areas, offices and a library.

PRIOR RELEVANT EXPERIENCE

Before joining Reserve Advisors, Mr. Drumheller attended James Madison University in Harrisonburg, Virginia where he attained his Bachelor of Science degree in Engineering with minors in Math and Business. His studies focused on environmental engineering and engineering design. Mr. Drumheller also worked as an intern for Property Capital Inc. where he advised on renewable energy projects and obtained real estate financing for clients.

EDUCATION

James Madison University - B.S. 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, Inc. 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. Several advisors and a Principal of Reserve Advisors, Inc. hold Senior Memberships with ACI.

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

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

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

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

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

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

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

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

Payment Terms, Due Dates and Interest Charges - Retainer payment is due upon authorization and prior to inspection. The balance is due net 30 days from the report shipment date. Any balance remaining 30 days after delivery of the Report shall accrue an interest charge of 1.5% per month. Any litigation necessary to collect an unpaid balance shall be venued in Milwaukee County Circuit Court for the State of Wisconsin.