

# FULL RESERVE STUDY

## Brickyard at Wellington Homeowners Association



**Grand Junction, Colorado**  
**February 4, 2022**



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Brickyard at Wellington Homeowners Association  
Grand Junction, Colorado

Dear Board of Directors of Brickyard at Wellington Homeowners Association:

At the direction of the Board that recognizes the need for proper reserve planning, we have conducted a *Full Reserve Study* of Brickyard at Wellington Homeowners Association in Grand Junction, Colorado and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, February 4, 2022.

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 Brickyard at Wellington Homeowners Association plan for a successful future.

As part of our long-term thinking and everyday commitment to our clients, we are available to answer any questions you may have regarding this study.

Respectfully submitted on February 25, 2022 by

*Reserve Advisors, LLC*

Visual Inspection and Report by: Nicholas M. Johannig, RS<sup>1</sup>

Review by: Nicole L. Lowery, RS, PRA<sup>2</sup>, Associate Director of Quality Assurance



<sup>1</sup> 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.

<sup>2</sup> 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>.



Long-term thinking. Everyday commitment.



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# 1. RESERVE STUDY EXECUTIVE SUMMARY

**Client:** Brickyard at Wellington Homeowners Association (Brickyard at Wellington)

**Location:** Grand Junction, Colorado

**Reference:** 210970

**Property Basics:** Brickyard at Wellington Homeowners Association is a condominium style development which currently consists of 39 units in 15 buildings and at completion of construction will consist of 48 units in 18 buildings. Construction of the buildings began in 2017 and is scheduled for completion in 2024.

**Reserve Components Identified:** Nine Replacement Reserve Components and two Paint Finishes Reserve Components.

**Inspection Date:** February 4, 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 Plans recognize the following critical years:

- **Replacement** – 2043 due to replacement of the asphalt shingle roofs. In addition, the Reserve Funding Plan recommends 2052 year end accumulated reserves of approximately \$770,600. We judge this amount of accumulated reserves in 2052 necessary to fund the likely replacement of the irrigation system and fiber cement siding after 2052. Future replacement costs beyond the next 30 years for the replacement of the irrigation system and fiber cement siding are likely to more than double the current cost of replacement. These future needs, although beyond the limit of the Cash Flow Analysis of this Reserve Study, are reflected in the amount accumulated year end reserves.
- **Paint Finishes** – 2024, 2029 and 2049 due to ongoing paint finish applications to the wood trim and fiber cement siding.

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

- Current and future local costs of replacement
- 0.7% anticipated annual rate of return on invested reserves
- 3.5% 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.

**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 Finishes** – Ongoing paint finish applications and partial replacement to limit water infiltration into the units, and to maintain a uniformly clean and consistent appearance of the buildings



**Replacement**

**Unaudited Cash Status of Reserve Fund:**

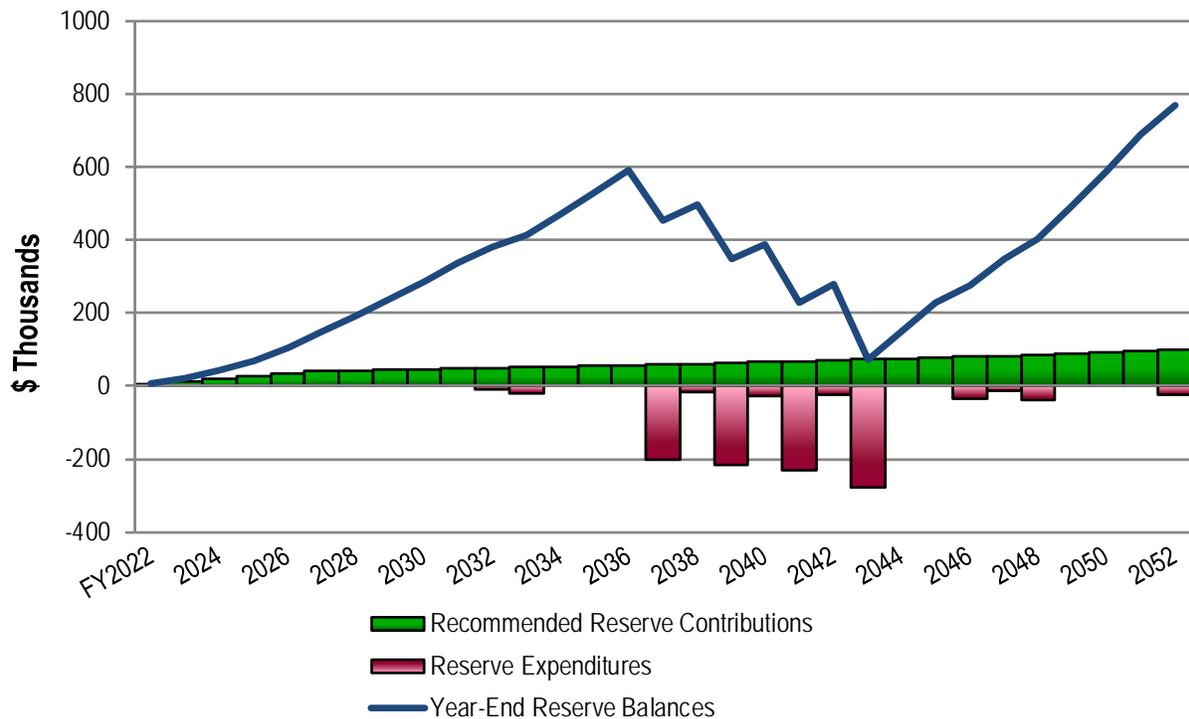
- \$4,320 as of February 21, 2022
- 2022 budgeted Reserve Contributions of \$5,412
- A potential deficit in reserves might occur by 2037 based upon continuation of the most recent annual reserve contribution of \$5,412 and the identified Reserve Expenditures.

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

- Phased increases of approximately \$7,300 from 2023 through 2027
- Inflationary increases through 2052, the limit of this study's Cash Flow Analysis
- Initial adjustment in Reserve Contributions of \$7,288 represents an average monthly increase of \$12.65 per unit owner and about a thirteen percent (13.2%) adjustment in the 2022 total Operating Budget of \$55,170.

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2023	12,700	21,675	2033	51,500	414,085	2043	72,700	73,509
2024	20,000	41,897	2034	53,300	470,470	2044	75,200	149,487
2025	27,300	69,586	2035	55,200	529,156	2045	77,800	228,606
2026	34,600	104,794	2036	57,100	590,160	2046	80,500	276,618
2027	41,900	147,574	2037	59,100	451,706	2047	83,300	349,102
2028	43,400	192,159	2038	61,200	498,272	2048	86,200	401,210
2029	44,900	238,561	2039	63,300	349,009	2049	89,200	493,531
2030	46,500	286,894	2040	65,500	389,222	2050	92,300	589,609
2031	48,100	337,171	2041	67,800	228,307	2051	95,500	689,571
2032	49,800	381,720	2042	70,200	277,787	2052	98,800	770,617





**Paint Finishes**

**Unaudited Cash Status of Reserve Fund:**

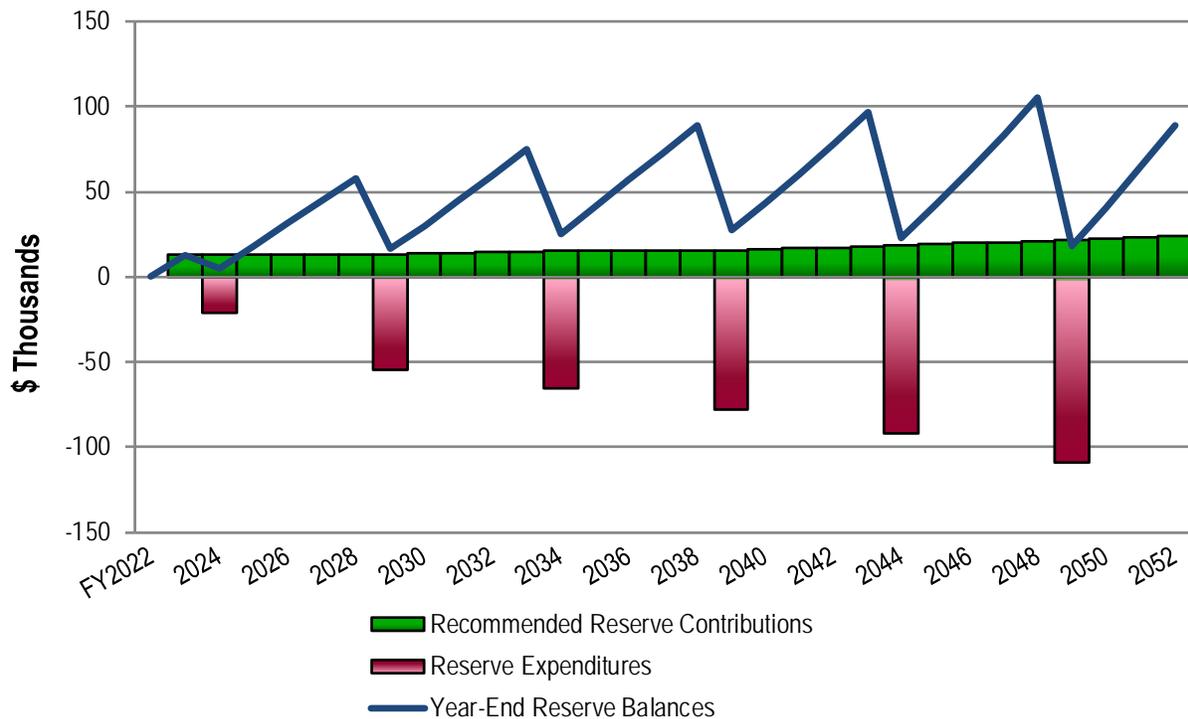
- Zero dollars (\$0) as of February 21, 2022
- The Association did not budget Reserve Contributions in 2022.

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

- Increase to \$13,000 in 2023
- Stable contributions of \$13,000 from 2024 through 2029
- Inflationary increases from 2030 through 2034, and stable contributions of \$15,500 from 2035 through 2039
- Inflationary increases through 2052, the limit of this study's Cash Flow Analysis
- 2023 Reserve Contribution of \$13,000 is equivalent to an average monthly contribution of \$22.57 per unit owner.

Recommended Reserve Funding Table and Graph

Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)	Year	Reserve Contributions (\$)	Reserve Balances (\$)
2023	13,000	13,046	2033	15,000	74,629	2043	17,800	96,406
2024	13,000	5,221	2034	15,500	25,176	2044	18,400	23,110
2025	13,000	18,303	2035	15,500	40,906	2045	19,000	42,338
2026	13,000	31,477	2036	15,500	56,747	2046	19,700	62,403
2027	13,000	44,743	2037	15,500	72,698	2047	20,400	83,311
2028	13,000	58,102	2038	15,500	88,761	2048	21,100	105,068
2029	13,000	16,380	2039	15,500	27,108	2049	21,800	17,895
2030	13,500	30,042	2040	16,000	43,354	2050	22,600	40,699
2031	14,000	44,301	2041	16,600	60,316	2051	23,400	64,466
2032	14,500	59,162	2042	17,200	77,998	2052	24,200	89,202





## 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

### **Brickyard at Wellington Homeowners Association**

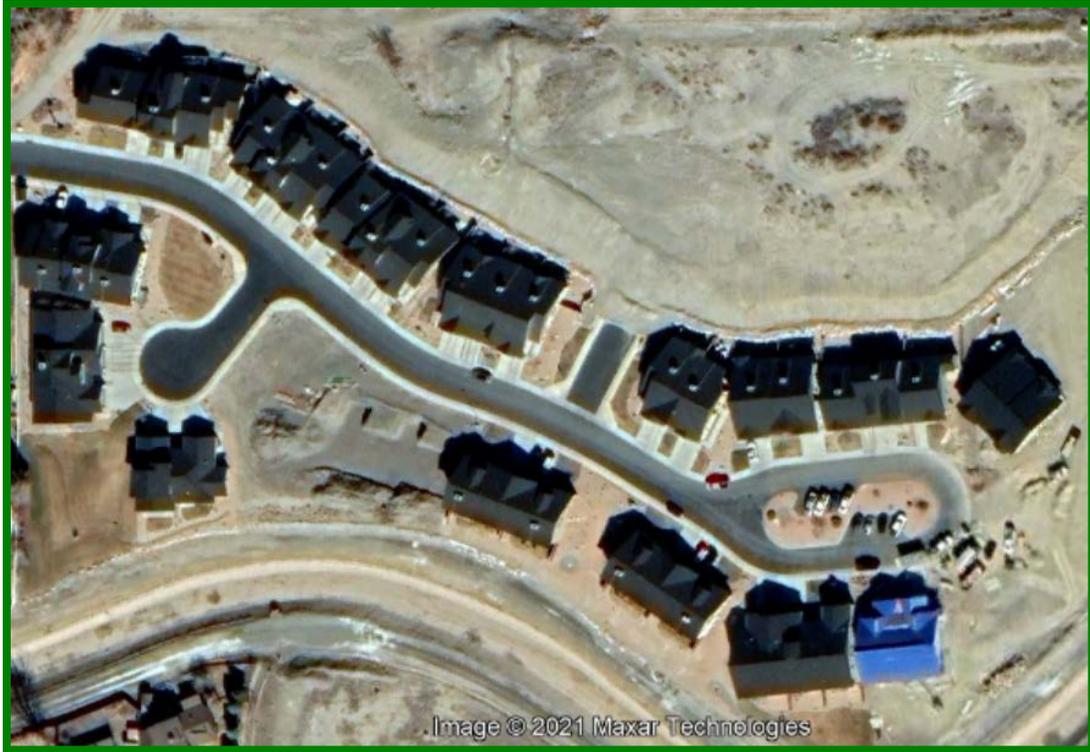
### **Grand Junction, Colorado**

and submit our findings in this report. The effective date of this study is the date of our visual, noninvasive inspection, February 4, 2022.

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

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

## IDENTIFICATION OF PROPERTY



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

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

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

We advise the Board conduct an annual review of these classes of property to confirm its policy concerning the manner of funding, i.e., from reserves or the operating budget. 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:

- Brickyard at Wellington responsibility
- Limited useful life expectancies
- Predictable remaining useful life expectancies
- Replacement cost above a minimum threshold

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

- Electrical Systems, Common
- Foundations
- Irrigation System, Total Replacement
- Pipes, Subsurface Utilities
- Structural Frames
- Retaining Walls, Masonry, Total Replacement, Building 1845-1865
- Retaining Walls, Stone, Total Replacement
- Walls, Siding, Fiber Cement, Total Replacement



**Fiber cement siding overview**



**Masonry retaining walls located near Building 1845-1865**

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 \$4,500 (These relatively minor expenditures have a limited effect on the recommended Reserve Contributions.)
- Asphalt Pavement, Parking Areas, Crack Repair, Patch and Seal Coat

- Irrigation System, Controls and Maintenance
- Irrigation System, Pump House, Interior
- Landscape, Drainage Remediation (Management informs us of a history of drainage and mud runoff issues, primarily at the stone retaining walls located near the north perimeter of the community. The Association plans to either have the developer remediate these drainage issues or fund a remediation project through a special assessment. Future updates to this study will consider changes or additions of drainage remediation expenditures to the study as needed.)
- Landscape, Maintenance
- Paint Finishes, Touch Up
- Signage, Entrance Monument
- Signage, Traffic and Property Identification
- Walls, Masonry, Inspections and Repairs
- Other Repairs normally funded through the Operating Budget



**Entrance monument signage**



**Masonry walls overview**

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

- Balconies
- Driveways
- Electrical Systems (Including Circuit Protection Panels)
- Fences, Privacy, Additions
- Garage Doors
- Heating, Ventilating and Air Conditioning (HVAC) Units
- Interiors
- Lead Sidewalks
- Light Fixtures
- Patios, Stoops and Decks
- Pipes (Within Units)
- Windows and Doors



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

- Concrete Sidewalks, Along Streets (City of Grand Junction)
- Fence, Vinyl, West Perimeter (Neighboring Association)
- Light Poles and Fixtures, Streets (City of Grand Junction)
- Street Systems (City of Grand Junction)

### **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
- 2022 local cost of replacement
  - Per unit
  - Per phase
  - Replacement of total quantity
- Percentage of future expenditures anticipated during the next 30 years
- Schedule of estimated future costs for each reserve component including inflation

#### **Reserve Funding Plan**

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

#### **Five-Year Outlook**

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

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

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



**Replacement**  
**RESERVE EXPENDITURES**

**Brickyard at Wellington**  
**Homeowners Association**  
Grand Junction, Colorado

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16 2038	17 2039	18 2040	19 2041	20 2042	21 2043	22 2044	23 2045	24 2046	25 2047	26 2048	27 2049	28 2050	29 2051	30 2052
						Useful	Remaining	Unit (2022)	Per Phase (2022)	Total (2022)																
<b>Exterior Building Elements</b>																										
1.240	3,900	975	Linear Feet	Gutters and Downspouts, Aluminum, Phased	2037	15 to 20	15 to 21	8.50	8,288	33,150	5.5%		14,873		15,933		17,068									
1.280	1,040	260	Squares	Roofs, Asphalt Shingles, Phased	2037	15 to 20	15 to 21	430.00	111,800	447,200	73.7%		200,645		214,936		230,244									
<b>Property Site Elements</b>																										
4.045	230	230	Square Yards	Asphalt Pavement, Total Replacement, Parking Areas	2038	15 to 20	16	45.00	10,350	10,350	1.6%	17,947														
4.245	1,000	333	Linear Feet	Fences, Wood Frame with Steel, Phased	2040	20 to 25	18 to 24	45.00	15,000	45,000	8.2%			27,862		30,891				34,250						
4.410	1	1	Each	Irrigation System, Pump	2032	to 15	10	5,500.00	5,500	5,500	1.8%									12,998						
4.600	3	3	Each	Mailbox Stations	2042	to 25	20	2,100.00	6,300	6,300	1.1%					12,536										
4.605	1	1	Each	Pavilion, Mailbox Stations	2042	to 25	20	5,000.00	5,000	5,000	0.9%					9,949										
4.745	220	220	Square Feet	Retaining Wall, Masonry, Masonry Way	2052	to 35	30	37.00	8,140	8,140	2.0%														22,847	
4.750	5,360	5,360	Square Feet	Retaining Wall, Stone, Inspection and Capital Repairs	2033	10 to 15	11	2.80	15,008	15,008	5.2%											36,709				
<b>Anticipated Expenditures, By Year (\$1,130,545 over 30 years)</b>												17,947	215,518	27,862	230,869	22,485	278,203	0	0	34,250	12,998	36,709	0	0	0	22,847

## **RESERVE FUNDING PLAN**

### Replacement

#### CASH FLOW ANALYSIS

#### Brickyard at Wellington

#### Homeowners Association

#### Grand Junction, Colorado

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)	4,320	8,868	21,675	41,897	69,586	104,794	147,574	192,159	238,561	286,894	337,171	381,720	414,085	470,470	529,156	590,160
Total Recommended Reserve Contributions	(Note 2)	4,510	12,700	20,000	27,300	34,600	41,900	43,400	44,900	46,500	48,100	49,800	51,500	53,300	55,200	57,100	59,100
Estimated Interest Earned, During Year	(Note 3)	38	107	222	389	608	880	1,185	1,502	1,833	2,177	2,507	2,776	3,085	3,486	3,904	3,634
Anticipated Expenditures, By Year		0	0	0	0	0	0	0	0	0	0	(7,758)	(21,911)	0	0	0	(201,188)
<b>Anticipated Reserves at Year End</b>		<u>\$8,868</u>	<u>\$21,675</u>	<u>\$41,897</u>	<u>\$69,586</u>	<u>\$104,794</u>	<u>\$147,574</u>	<u>\$192,159</u>	<u>\$238,561</u>	<u>\$286,894</u>	<u>\$337,171</u>	<u>\$381,720</u>	<u>\$414,085</u>	<u>\$470,470</u>	<u>\$529,156</u>	<u>\$590,160</u>	<u>\$451,706</u>
Predicted Reserves based on 2022 funding level of:	\$5,412	8,868	14,361	19,892	25,462	31,071	36,719	42,407	48,135	53,903	59,711	57,775	41,623	47,345	53,107	58,910	(137,139)

(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		451,706	498,272	349,009	389,222	228,307	277,787	73,509	149,487	228,606	276,618	349,102	401,210	493,531	589,609	689,571
Total Recommended Reserve Contributions		61,200	63,300	65,500	67,800	70,200	72,700	75,200	77,800	80,500	83,300	86,200	89,200	92,300	95,500	98,800
Estimated Interest Earned, During Year		3,313	2,955	2,575	2,154	1,765	1,225	778	1,319	1,762	2,182	2,617	3,121	3,778	4,462	5,093
Anticipated Expenditures, By Year		(17,947)	(215,518)	(27,862)	(230,869)	(22,485)	(278,203)	0	0	(34,250)	(12,998)	(36,709)	0	0	0	(22,847)
<b>Anticipated Reserves at Year End</b>		<u>\$498,272</u>	<u>\$349,009</u>	<u>\$389,222</u>	<u>\$228,307</u>	<u>\$277,787</u>	<u>\$73,509</u>	<u>\$149,487</u>	<u>\$228,606</u>	<u>\$276,618</u>	<u>\$349,102</u>	<u>\$401,210</u>	<u>\$493,531</u>	<u>\$589,609</u>	<u>\$689,571</u>	<u>\$770,617</u>
							(NOTE 5)									(NOTE 4)

#### Explanatory Notes:

- 1) Year 2022 starting reserves are as of February 21, 2022; FY2022 starts January 1, 2022 and ends December 31, 2022.
- 2) Reserve Contributions for 2022 are the remaining budgeted 10 months; 2023 is the first year of recommended contributions.
- 3) 0.7% is the estimated annual rate of return on invested reserves; 2022 is a partial year of interest earned.
- 4) Accumulated year 2052 ending reserves consider the need to fund for replacement of the irrigation system and fiber cement siding shortly after 2052, and the age, size, overall condition and complexity of the property.
- 5) Threshold Funding Year (reserve balance at critical point).

**Paint Finishes**  
**RESERVE EXPENDITURES**

**Brickyard at Wellington**  
**Homeowners Association**  
Grand Junction, Colorado

**Explanatory Notes:**

- 1) **3.5%** is the estimated Inflation Rate for estimating Future Replacement Costs.
- 2) FY2022 is Fiscal Year beginning January 1, 2022 and ending December 31, 2022.

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								
						Useful	Remaining	Unit (2022)	Per Phase (2022)	Total (2022)																									
<b>Exterior Building Elements</b>																																			
1.840	27,450	13,725	Square Feet	Walls, Siding, Fiber Cement, Paint Finishes, Phased	2029	8 to 10	7 to 12	1.40	19,215	38,430	42.3%								24,447								29,035								
1.905	1	1	Allowance	Walls, Trim, Paint Finishes, Phased (2024 is Partial)	2024	4 to 6	2	24,000.00	24,000	24,000	57.7%		20,889						30,535								36,266								
<b>Anticipated Expenditures, By Year (\$420,244 over 30 years)</b>												0	0	20,889	0	0	0	0	0	54,982	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Paint Finishes**  
**RESERVE EXPENDITURES**

**Brickyard at Wellington**  
**Homeowners Association**  
Grand Junction, Colorado

Line Item	Total Quantity	Per Phase Quantity	Units	Reserve Component Inventory	Estimated 1st Year of Event	Life Analysis, Years		Costs, \$			Percentage of Future Expenditures	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
						Useful	Remaining	Unit (2022)	Per Phase (2022)	Total (2022)		2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052		
<b>Exterior Building Elements</b>																												
1.840	27,450	13,725	Square Feet	Walls, Siding, Fiber Cement, Paint Finishes, Phased	2029	8 to 10	7 to 12	1.40	19,215	38,430	42.3%		34,485					40,957								48,644		
1.905	1	1	Allowance	Walls, Trim, Paint Finishes, Phased (2024 is Partial)	2024	4 to 6	2	24,000.00	24,000	24,000	57.7%		43,072					51,156								60,758		
<b>Anticipated Expenditures, By Year (\$420,244 over 30 years)</b>												0	77,557	0	0	0	0	0	92,113	0	0	0	0	0	109,402	0	0	0

# RESERVE FUNDING PLAN

## Paint Finishes

### CASH FLOW ANALYSIS

#### Brickyard at Wellington

#### Homeowners Association

Grand Junction, Colorado

		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)	0	0	13,046	5,221	18,303	31,477	44,743	58,102	16,380	30,042	44,301	59,162	74,629	25,176	40,906	56,747
Total Recommended Reserve Contributions	(Note 2)	0	13,000	13,000	13,000	13,000	13,000	13,000	13,000	13,500	14,000	14,500	15,000	15,500	15,500	15,500	15,500
Estimated Interest Earned, During Year	(Note 3)	0	46	64	82	174	266	359	260	162	259	361	467	348	230	341	451
Anticipated Expenditures, By Year		0	0	(20,889)	0	0	0	0	(54,982)	0	0	0	0	(65,301)	0	0	0
Anticipated Reserves at Year End		<u>Zero dollars (\$0)</u>	<u>\$13,046</u>	<u>\$5,221</u>	<u>\$18,303</u>	<u>\$31,477</u>	<u>\$44,743</u>	<u>\$58,102</u>	<u>\$16,380</u>	<u>\$30,042</u>	<u>\$44,301</u>	<u>\$59,162</u>	<u>\$74,629</u>	<u>\$25,176</u>	<u>\$40,906</u>	<u>\$56,747</u>	<u>\$72,698</u>

(NOTE 5)

(NOTE 5)

(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		72,698	88,761	27,108	43,354	60,316	77,998	96,406	23,110	42,338	62,403	83,311	105,068	17,895	40,699	64,466
Total Recommended Reserve Contributions		15,500	15,500	16,000	16,600	17,200	17,800	18,400	19,000	19,700	20,400	21,100	21,800	22,600	23,400	24,200
Estimated Interest Earned, During Year		563	404	246	362	482	608	417	228	365	508	657	429	204	367	536
Anticipated Expenditures, By Year		0	(77,557)	0	0	0	0	(92,113)	0	0	0	0	(109,402)	0	0	0
Anticipated Reserves at Year End		<u>\$88,761</u>	<u>\$27,108</u>	<u>\$43,354</u>	<u>\$60,316</u>	<u>\$77,998</u>	<u>\$96,406</u>	<u>\$23,110</u>	<u>\$42,338</u>	<u>\$62,403</u>	<u>\$83,311</u>	<u>\$105,068</u>	<u>\$17,895</u>	<u>\$40,699</u>	<u>\$64,466</u>	<u>\$89,202</u>

(NOTE 5)

(NOTE 4)

#### Explanatory Notes:

- 1) Year 2022 starting reserves are as of February 21, 2022; FY2022 starts January 1, 2022 and ends December 31, 2022.
- 2) Reserve Contributions for 2022 are the remaining budgeted 10 months; 2023 is the first year of recommended contributions.
- 3) 0.7% 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 Years (reserve balance at critical point).

Paint Finishes  
**FIVE-YEAR OUTLOOK**

**Brickyard at Wellington  
Homeowners Association**  
Grand Junction, Colorado

Line Item	Reserve Component Inventory	RUL = 0 FY2022	1 2023	2 2024	3 2025	4 2026	5 2027
<u>Exterior Building Elements</u>							
1.905	Walls, Trim, Paint Finishes, Phased (2024 is Partial)			20,889			
<b>Anticipated Expenditures, By Year (\$420,244 over 30 years)</b>		0	0	20,889	0	0	0

## 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.*

### *Replacement*

#### Exterior Building Elements



Front elevation



Alternate front elevation



Side elevation



Alternate side elevation



**Rear elevation**



**Alternate rear elevation**

## **Gutters and Downspouts, Aluminum**

---

**Line Item:** 1.240

**Quantity:** Approximately 3,900 linear feet of aluminum five-inch seamless gutters and two-inch by three-inch downspouts. At the request of Management, we include an estimate of quantity for all 48 units and future updates to this study will consider an adjustment to the total quantity as needed.

**History:** Original

**Condition:** Good overall



**Aluminum gutters and downspouts**



**Aluminum gutters and downspouts**

**Useful Life:** 15- to 20-years

**Component Detail Notes:** The size of the gutter is determined by the roof's watershed area, a roof pitch factor and the rainfall intensity number of the Association's region. We

recommend sloping gutters 1/16 inch per linear foot and providing fasteners a maximum of every three feet.

Downspouts can drain 100 square feet of roof area per one square inch of downspout cross sectional area. We recommend the use of downspout extensions and splash blocks at the downspout discharge to direct storm water away from the foundations. Downspouts that discharge directly onto roofs cause premature deterioration of the roofs due to the high concentration of storm water. We recommend either routing these downspouts directly to the ground, connecting the downspouts to the gutters of the lower roof or distributing the storm water discharge over a large area. The useful life of gutters and downspouts coincides with that of the asphalt shingle roofs. Coordinated replacement will result in the most economical unit price and minimize the possibility of damage to other roof components as compared to separate replacements.

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

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

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

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

## Roofs, Asphalt Shingles

---

**Line Item:** 1.280

**Quantity:** Approximately 1,040 *squares*<sup>1</sup>. This quantity includes the irrigation pump house building roof. At the request of Management, we include an estimate of quantity for all 48 units and future updates to this study will consider an adjustment to the total quantity as needed.

**History:** Original

**Condition:** Good overall with isolated shingle lift evident from our visual inspection from the ground. Management does not report a history of leaks.

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



**Asphalt shingle roof overview**



**Asphalt shingle roof overview**



**Asphalt shingle roof valley detail**



**Shingle lift**



**Shingle lift**



**Shingle lift**

***Useful Life:*** 15- to 20-years

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

- Laminate architectural shingles
- Boston style ridge caps
- Rubber seal with plastic base boot flashing at waste pipes
- Soffit, gable and ridge vents
- Metal drip edge
- Enclosed half weaved valleys

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

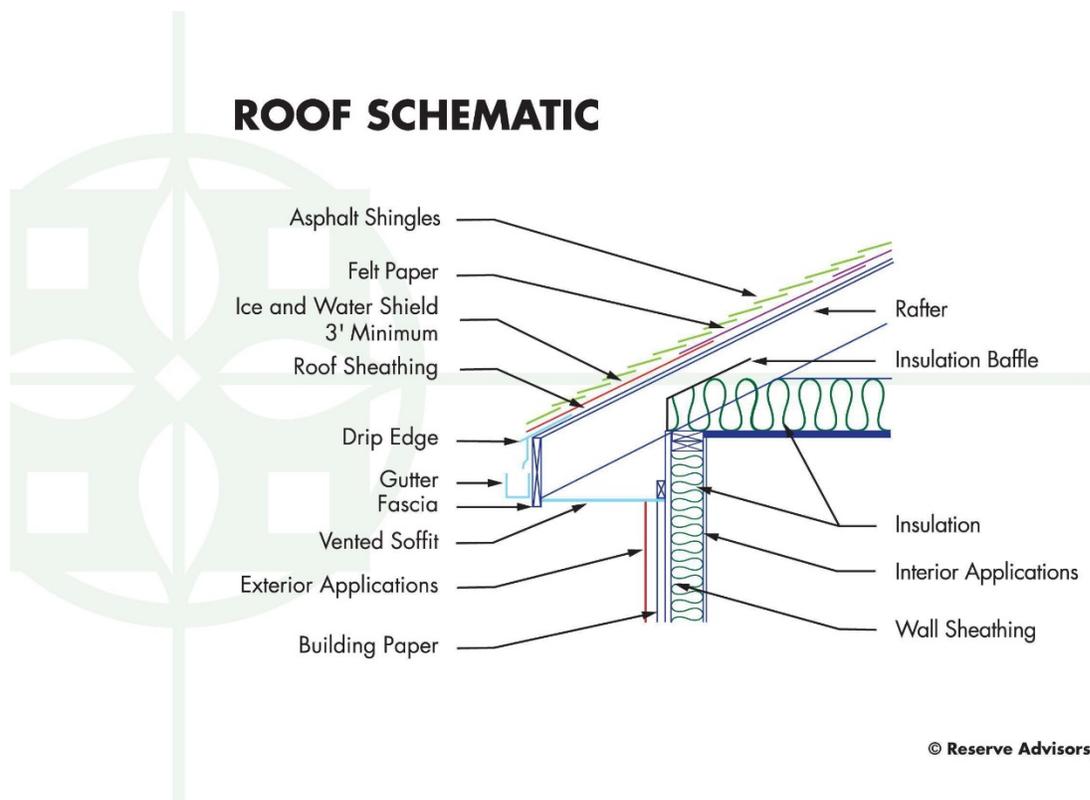
In addition to moisture control and energy conservation, proper attic insulation and ventilation are essential components to prevent the formation of ice dams. Ice dams occur when warm air accumulates at the peak of an attic while the roof eaves remain cold. Warm air from the attic melts the snow at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

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

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

Warranties are an indication of product quality and are not a product guarantee. Asphalt shingle product warranties vary from 20- to 50-years and beyond. However, the scope is usually limited to only the material cost of the shingles as caused by manufacturing defects. Warranties may cover defects such as thermal splitting, granule loss, cupping, and curling. Labor cost is rarely included in the remedy so if roof materials fail, the labor to tear off and install new shingles is extra. Other limitations of warranties are exclusions for "incidental and consequential" damages resulting from age, hurricanes, hail storms, ice dams, severe winds, tornadoes, earthquakes, etc. There are some warranties which offer no dollar limit for replacement at an additional cost (effectively an insurance policy) but again these warranties also have limits and may not cover all damages other than a product defect. We recommend a review of the manufacturers' warranties as part of the evaluation of competing proposals to replace a roof system. This evaluation should identify the current costs of remedy if the roof were to fail in the near future. A comparison of the costs of remedy to the total replacement cost will assist in judging the merits of the warranties.

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



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



replacement includes removal of the existing shingles, flashings if required and underlayments.

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

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

- Annually:
  - Record any areas of water infiltration, flashing deterioration, damage or loose shingles
  - Inspect for ice dams and implement repairs as needed if issues are reoccurring
  - Trim tree branches that are near or in contact with roof
- As-needed:
  - Ensure proper ventilation and verify vents are clear of debris and not blocked from attic insulation

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

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

## Property Site Elements

### Asphalt Pavement, Repaving

---

**Line Item:** 4.045

**Quantity:** Approximately 230 square yards of asphalt pavement parking areas

**History:** Original

**Condition:** Good overall with pavement and concrete curb and gutter cracks evident



**Asphalt pavement parking lot overview**



**Pavement cracks**



**Pavement cracks**

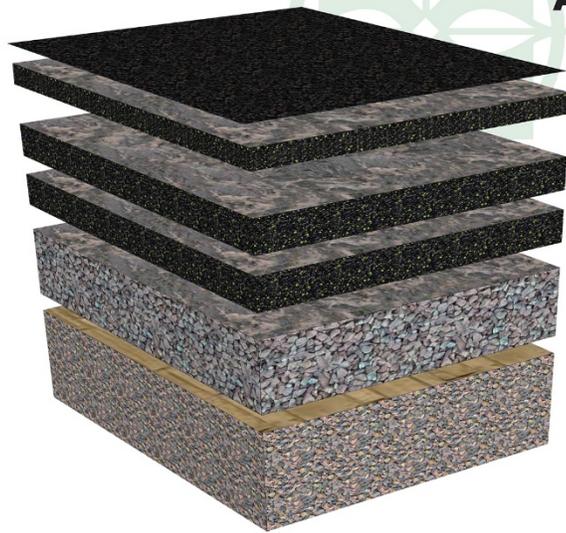


**Concrete curb and gutter crack**

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

**Component Detail Notes:** The initial installation of asphalt uses at least two lifts, or two separate applications of asphalt, over the base course. The first lift is the binder course. The second lift is the wearing course. The wearing course comprises a finer aggregate for a smoother more watertight finish.

The following diagram depicts the typical components although it may not reflect the actual configuration at Brickyard at Wellington:



## ASPHALT DIAGRAM

**Sealcoat or Wearing Surface**

**Asphalt Overlay** Not to Exceed 1.5 inch Thickness per Lift or Layer

**Original Pavement** Inspected and milled until sound pavement is found, usually comprised of two layers

**Compacted Crushed Stone or Aggregate Base**

**Subbase of Undisturbed Native Soils** Compacted to 95% dry density

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

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

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

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

**Expenditure Detail Notes:** Expenditure timing and costs are depicted in the **Reserve Expenditures** table in Section 3. Our estimate of cost includes an allowance for partial replacements of up to five percent (5%) of the concrete curbs and gutters.

## Fences, Wood Frame with Steel

---

**Line Item:** 4.245

**Quantity:** 1,000 linear feet located at the rear elevations and east perimeter

**History:** Original

**Condition:** Good overall with isolated leaning sections evident



Wood frame with steel fence overview



Wood frame with steel fence overview: Note fence leaning sections

**Useful Life:** 20- to 25-years

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

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

**Priority/Criticality:** Per Board discretion

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

## **Irrigation System, Pump**

---

**Line Item:** 4.410

**Quantity:** One 5-HP pump

**History:** Original

**Condition:** Reported satisfactory without operational deficiencies



**Irrigation pump**

**Useful Life:** Up to 15 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.

## **Mailbox Stations**

---

**Line Item:** 4.600

**Quantity:** Three stations

**History:** Original

**Condition:** Good overall



**Mailbox stations**

**Useful Life:** Up to 25 years

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

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

**Priority/Criticality:** Per Board discretion

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

## **Pavilion, Mailbox Stations**

---

**Line Item:** 4.605

**Quantity:** One each

**History:** Original

**Condition:** Good overall



**Mailbox station pavilion**

**Useful Life:** Up 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.

## **Retaining Walls, Masonry**

---

**Line Item:** 4.745

**Quantity:** Approximately 220 square feet at the end of Masonry Way. The Association also maintains approximately 250 square feet of masonry retaining walls near Building 1845-1865.

**History:** The retaining wall near Masonry Way is original to 2016 or 2017 and the retaining walls near Building 1845-1865 were constructed around 2021.

**Condition:** Good overall

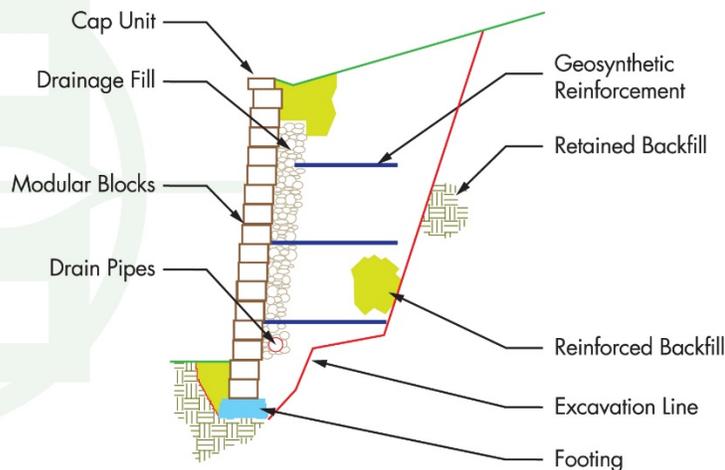


**Masonry retaining wall**

**Useful Life:** Up to 35 years

**Component Detail Notes:** Properly constructed interlocking masonry retaining walls utilize geosynthetic reinforcement and a drainage system to stabilize the wall and prevent the buildup of hydrostatic pressure behind the wall. Water stains may indicate inadequate drainage or blocked drainage from behind the walls. The following schematic depicts the typical components of a retaining wall system although it may not reflect the actual configuration at Brickyard at Wellington:

### MASONRY RETAINING WALL DETAIL



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**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
  - Water stains which may indicate possible blocked drainage should be investigated further
  - 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. Based on the age and condition of the retaining walls near Building 1845-1865 we do not anticipate replacement of these walls over the next 30 years.

## Retaining Walls, Stone

---

**Line Item:** 4.750

**Quantity:** 5,360 square feet

**History:** Original

**Condition:** Good overall



**Stone retaining wall**



**Stone retaining wall**

**Useful Life:** Stone retaining walls have indeterminate useful lives. However, we recommend the Association plan for inspections and capital repairs every 10- to 15-years to forestall deterioration.

**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. Management informs us the Association may add additional stone retaining walls once construction of the community is complete. Our current quantity only includes constructed stone retaining walls at the time of the inspection and future updates to this study will consider changes to the quantity as needed.

## **Paint Finishes**

### **Exterior Elements**

#### **Walls, Siding, Fiber Cement**

---

**Line Item:** 1.840

**Quantity:** Approximately 27,450 square feet of fiber cement siding comprises the exterior walls. This quantity includes the soffit, fascia and trim, and the siding at the irrigation system pump house. At the request of Management, we include an estimate of quantity for all 48 units and future updates to this study will consider an adjustment to the total quantity as needed.

**History:** Original

**Condition:** The paint finishes are in good overall condition with isolated finish deterioration and siding damage evident.



**Finish deterioration**



**Siding damage**

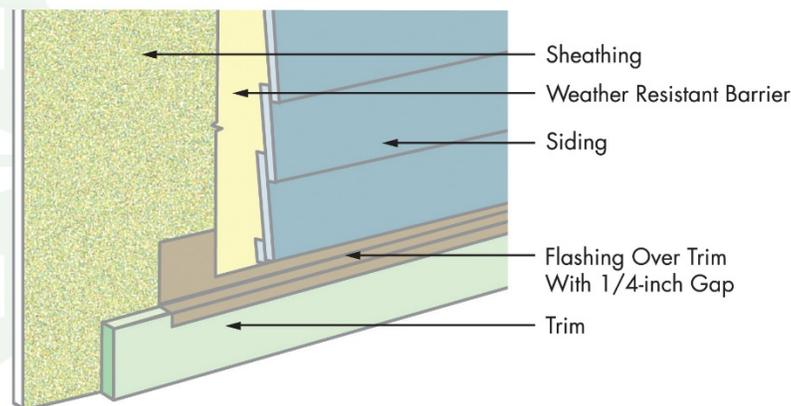
**Useful Life:** With the benefit of periodic maintenance, applications of this type of material can have a useful life of up to 50 years. This useful life is based on a high grade pre-finish applied in the factory. This useful life is also dependent upon paint applications and partial replacements up to every 8- to 10-years.

**Component Detail Notes:** Fiber cement siding is made from a combination of cement, sand and cellulose fiber. Manufacturing of the siding utilizes a steam curing process to increase strength and dimensional stability. The siding is also manufactured in layers forming a sheet of desired thickness. A wood grain imprint is typically applied to the exposed surface. Fiber cement siding offers many advantages over other types of siding. These advantages include:

- Capable of withstanding salt spray and ultraviolet rays
- Dimensional stability (will not buckle or warp as easily as other materials)
- Paint applications last longer compared to wood siding
- Resistant to insects, birds and fire

The following diagram details a typical fiber cement siding system at the interface with other building components although it may not reflect the actual configuration at Brickyard at Wellington:

### FIBER CEMENT SIDING DETAIL



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

- Annually:
  - Inspect and repair damage, loose boards and finish stains
  - Periodic pressure cleaning at areas with organic growth
  - Touch-up paint finish applications as needed and sealing of butt joints and field cut end joints

**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 anticipate the following during each paint application cycle:

- Paint finish application
- Replacement of 275 square feet, or up to one percent (1%), of the siding and trim (The exact amount of material in need of replacement will depend on the actual future conditions and desired appearance. We recommend replacement wherever cracks, delamination and deterioration impair the ability of the material to prevent water infiltration.)
- Replacement of sealants as needed

## Walls, Trim, Paint Finishes

---

**Line Item:** 1.905

**Quantity:** We include paint finishes at the various trim elements at the buildings and the wood framing of the fences. At the request of Management, we include an estimate of quantity for all 48 units and future updates to this study will consider an adjustment to the total quantity as needed.

**History:** Original

**Condition:** Good overall with isolated split wood trim evident



**Wood trim overview**



**Split wood trim**

**Useful Life:** Four- to six-years

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

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

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

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

## 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.

Brickyard at Wellington 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 Unit Owners pay their "fair share" of the weathering and aging of the commonly owned property each year. Level reserve assessments preserve the property and enhance the resale value of the homes.

This Reserve Study is in compliance with and exceeds the National standards<sup>1</sup> set forth by the Association of Professional Reserve Analysts (APRA) fulfilling the requirements of a "Level I 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
- Local<sup>2</sup> 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 Grand Junction, Colorado at an annual inflation rate<sup>3</sup>. Isolated or regional

<sup>1</sup> Identified in the APRA "Standards - Terms and Definitions" and the CAI "Terms and Definitions".

<sup>2</sup> See Credentials for additional information on our use of published sources of cost data.

<sup>3</sup> Derived from Marshall & Swift, historical costs and the Bureau of Labor Statistics.

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

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

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



## 6. CREDENTIALS

### HISTORY AND DEPTH OF SERVICE

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

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

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

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

### TOTAL STAFF INVOLVEMENT

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

### OUR GOAL

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

### VAST EXPERIENCE WITH A VARIETY OF BUILDINGS

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

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

### OLD TO NEW

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

**NICHOLAS M. JOHANNING, E.I.T., RS**  
Responsible Advisor

**CURRENT CLIENT SERVICES**

Nicholas M. Johannning, a Civil Engineer, is an Advisor for Reserve Advisors. Mr. Johannning is responsible for the inspection and analysis of the condition of clients' properties, 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 on townhomes, homeowners associations, planned unit developments and recreational associations.



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

**Ranch at Roaring Fork Homeowners Association, Inc.** Situated in Carbondale, Colorado, this community features 162 single family homes and 60 units in 14 condominium buildings. The Association features a golf course, water treatment facility and asphalt pavement streets.

**Hampden Terrace Homeowners Association** Built in 2002, this community of 50 units in seven buildings is located in Aurora, CO. These uniquely shaped buildings feature masonry veneer walls, balconies, patios and asphalt shingle roofs. The property includes concrete access streets and sidewalks, masonry retaining walls and an inviting entrance monument.

**Lorian at Prospect Creek Owners Association, Inc.** Located in picturesque Mountain Village, Colorado, this condominium style development of 20 units features an outdoor pool, concrete plaza deck and two common underground garages.

**The Town Homes at Coal Creek Homeowners Association** This townhome style development of 112 units in 29 buildings and is located in Louisville, Colorado. Exterior features of the buildings include stucco wall finishes and asphalt shingle roofs and the site contains a pool, concrete flatwork and asphalt pavement streets.

**Cornerstone Lake Condominium Association, Inc.** This townhome style development of 122 units in 16 buildings is located in Farmington, Minnesota. Exterior features of the buildings include vinyl siding, brick masonry and asphalt shingle roofs. The site consists of a pond, asphalt pavement, concrete flatwork, vinyl fences and an irrigation system.

**Blue Water Keyes Horizontal Property Regime** Built in 2006, this 14-story mid-rise in Myrtle Beach, South Carolina includes stucco exterior finishes, a modified bitumen roof, indoor and outdoor poles, and concrete breezeways and balconies. The building also utilizes two elevators, and various pool mechanical equipment, including a dehumidifier.

**PRIOR RELEVANT EXPERIENCE**

Before joining Reserve Advisors, Mr. Johannning attended the University of Toledo in Toledo, Ohio where he attained his Bachelor of Science degree in Civil Engineering. During his time at the University of Toledo, Mr. Johannning helped his senior design group develop a water reduction plan for the buildings on the University of Toledo's campus. This project included designs for improving fixture efficiencies within selected buildings and estimations of water reduction and financial savings. Mr. Johannning also interned for The Douglas Company and R.A. Plumbing and Heating as an estimating engineer.

**EDUCATION**

University of Toledo - B.S. Civil Engineering

**PROFESSIONAL AFFILIATIONS / DESIGNATIONS**

*Engineer In Training (E.I.T.) Registration*

*Reserve Specialist (RS) - Community Associations Institute*

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

**CURRENT CLIENT SERVICES**

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

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



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

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

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

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

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

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

**PRIOR RELEVANT EXPERIENCE**

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

**EDUCATION**

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

**PROFESSIONAL AFFILIATIONS/DESIGNATIONS**

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

*Reserve Specialist (RS)* - Community Associations Institute

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

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

**CURRENT CLIENT SERVICES**

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

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



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

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

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

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

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

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

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

**PRIOR RELEVANT EXPERIENCE**

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

**EDUCATION**

West Virginia University - B.S. Civil Engineering

**PROFESSIONAL AFFILIATIONS / DESIGNATIONS**

*Reserve Specialist (RS)* - Community Associations Institute

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



## RESOURCES

Reserve Advisors utilizes numerous resources of national and local data to conduct its Professional Services. A concise list of several of these resources follows:

**Association of Construction Inspectors**, (ACI) the largest professional organization for those involved in construction inspection and construction project management. ACI is also the leading association providing standards, guidelines, regulations, education, training, and professional recognition in a field that has quickly become important procedure for both residential and commercial construction, found on the web at [www.iami.org](http://www.iami.org).

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

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

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

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

## 7. DEFINITIONS

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

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

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

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

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

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

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

**Long-Lived Property Component** - Property component of Brickyard at Wellington 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) Brickyard at Wellington responsibility; 2) limited Useful Life expectancies; 3) predictable Remaining Useful Life expectancies; and 4) a replacement cost above a minimum threshold.

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

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

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

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

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

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

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



## 8. PROFESSIONAL SERVICE CONDITIONS

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

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

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

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

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

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

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

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

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