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“Do-It-Yourself” Reserve Study Kit

Pender Building Condo Association Norfolk, VA

Report #: 20479-0
For Period Beginning: January 1, 2017
Expires: December 31, 2017

Date Prepared: December 14, 2016

Hello, and welcome to your Reserve Study!

This Report is a valuable budget planning tool, for with it you control the future of your association. It contains all the fundamental information needed to understand your current and future Reserve obligations, the most significant expenditures your association will face.

With Respect to Reserves, this Report will tell you “where you are”, and “where to go from here”.

In this Report, you will find...

- 1) A List of What you are Reserving For**
- 2) An Evaluation of your Reserve Fund Size and Strength**
- 3) A Recommended Multi-Year Reserve Funding Plan**

More Questions?

Visit our website at www.ReserveStudy.com



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Executive Summary

Association: Pender Building Condo Association Assoc. #: 20479-0
Location: Norfolk, VA
of Units: 10
Report Period: January 1, 2017 through December 31, 2017

Results as-of 1/1/2017:

Projected Starting Reserve Balance:	\$40,808
Fully Funded Reserve Balance:	\$130,321
Reserve Deficit (Surplus) Per Unit:.....	\$8,951
Percent Funded:	31.3%
Recommended 2017 Annual Reserve Contribution:.....	\$15,000
Recommended 2017 Special Assessment for Reserves:	\$10,000
Most Recent Reserve Contribution Rate:.....	\$15,000

Economic Assumptions:

Net Annual "After Tax" Interest Earnings Accruing to Reserves..... 1.00%
Annual Inflation Rate..... 2.50%

- This Reserve Study is based on the information provided to our firm, shown in the attached appendix, without oversight or review by Association Reserves, Inc. personnel.
- Because your Reserve Fund is 31.3% Funded (the ratio of actual Reserve cash to the calculated *deteriorated fraction* of your Reserve assets), this represents a high risk position for a special assessment.
- Based on this starting point, your anticipated future expenses, and your historical Reserve contribution rate, our recommendation is to maintain your Reserve contributions at \$15,000 per year. We are recommending a \$1,000/unit special assessment to offset 2017 reserve project expenses.
- Your multi-year Funding Plan is designed to gradually bring you to the 100% level, or "Fully Funded".

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Cost	Future Cost
1	EIFS & alt siding - Caulk/Repaint	10	5	\$2,000	\$2,263
2	Granby Side Brick Repair/Repaint	30	0	\$32,550	\$68,276
3	Granby Side Brick Repaint	15	15	\$10,000	\$14,483
4	Brooke Side Repair	30	2	\$48,000	\$50,430
5	Brooke Side Repaint	15	4	\$12,700	\$14,018
6	Skywell Repointing	10	7	\$5,000	\$5,943
7	Unpainted Rear Wall Repointing	10	10	\$5,000	\$6,400
8	Stone window sill replacement	50	6	\$17,200	\$19,947
9	Common area window repair	25	3	\$13,000	\$14,000
10	Common area window repaint	10	8	\$4,800	\$5,848
11	Entry windows/door, rear doors	25	10	\$6,000	\$7,681
12	Fire Escape Repaint & Repair	5	5	\$3,700	\$4,186
13	Fire Alarm Panel	30	20	\$3,485	\$5,711
14	Fire Water Supply System	10	10	\$1,500	\$1,920
15	Emergency Exit Lighting	20	19	\$3,000	\$4,796
16	Main Roof & Parapet Membrane	25	24	\$62,000	\$112,141
17	Roof Access Hatch & Chimney Caps	20	10	\$2,560	\$3,277
18	Hallway Light Fixtures	25	15	\$1,255	\$1,818
19	Interior Doors	19	30	\$3,195	\$6,702
20	Wood Stairs Painting	30	20	\$2,860	\$4,686
21	Intercom System	20	15	\$2,028	\$2,937
22	Interior Common Area Painting	10	5	\$2,200	\$2,489
23	Heat Pump	15	13	\$3,135	\$4,322
24	Electric Heater	15	9	\$1,160	\$1,449
25	Electric Meter Covers	20	11	\$2,235	\$2,933
25	Total Funded Components				

Introduction

It is all very simple, really. A Reserve Study is the art and science of anticipating and preparing for major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a process of research and analysis along well defined methodologies.

A Reserve Study consists of two parts: the Physical Analysis and the Financial Analysis. The Physical Analysis contains the information about the current condition and repair or replacement cost of the major common area components the association is obligated to maintain. In this Do-It-Yourself Reserve Study Kit, the Physical Analysis information has been assembled by the client. The Financial Analysis contains an evaluation of the association's Reserve balance (measured by Percent Funded) and a recommended Funding Plan to offset the anticipated Reserve expenses.

Reserve Study

- Physical Analysis
- Financial Analysis

The primary responsibility of the Board of Directors is to maintain, protect, and enhance the assets of the association. As the physical assets age and deteriorate, it is important to accumulate financial assets, keeping the two “in balance”. The Reserve Study is the document that helps keep the physical and financial assets of the association in balance. This Reserve Study is a budget-planning document. The primary information you will get from this document is a list of your major Reserve components, a finding of the current status (strength) of your Reserve Fund, and a recommended Funding Plan. The basic objective of the Reserve Study is to provide a plan to collect funds at a stable rate to offset the predicted irregular Reserve expenses. Setting a stable Reserve contribution rate will ensure that each owner pays their own “fair share” of the ongoing, gradual deterioration of the common areas.

Methodology

Association Reserves and the Board of Directors share a common goal: to point your association responsibly in the direction of proper Reserve planning. In this Do-It-Yourself Kit, the client has elected Reserve balance, and the interest rate earned on your Reserve funds. The Reserve Component List you provided is shown in Table 1 and Table 2. With this information and an assumed inflation rate (as shown on the Executive Summary), we are able to project the array of future major expenses facing the association.

Reserve Study Types

- Full
- Update With-Site-Visit
- Update No-Site-Visit
- ➔ • Do-It-Yourself Kit

Which Physical Assets are Covered by Reserves?

Reserve expenses are the larger, infrequent expenses that require significant advance planning. Operating expenses, on the other hand, are those ongoing daily, weekly, or monthly expenses that occur and recur throughout the year. Small surprises are typically handled as maintenance contingencies, while the larger ones may be covered by insurance or require special assessments.

There is a national-standard four-part test to determine which expense items should be funded through Reserves. This four-part test was provided to the client in the workbook used to help compile the Reserve Component List. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the limited life must be predictable (not a “surprise” which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost. This limits Reserve Components to major, predictable expenses.

Most Reserve Studies do not typically Reserve for building foundations and major infrastructure elements since they do not have limited life expectancies. Light bulbs or other small items are usually not listed as Reserve Components since their individual costs are insignificant. Finally, it is usually inappropriate to include unpredictable expenses such as damage due to fire, flood, or earthquake since these typically cannot be considered “reasonably predictable”.

Reserve Components

- **Common Area**
- **Limited Useful Life**
- **Predictable Life Limit**
- **Cost must be Significant**

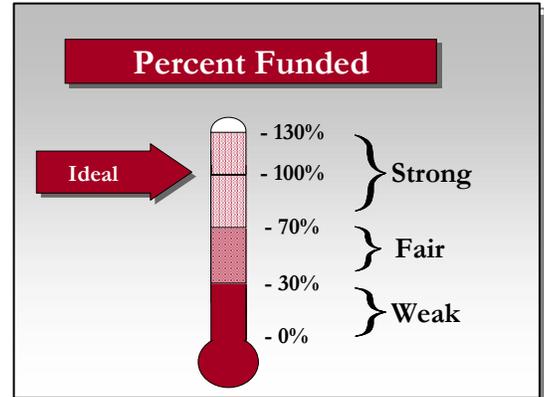
The Financial Analysis

We have used the Reserve Component List provided by the client to compute the association’s current Percent Funded and an appropriate Reserve Contribution rate. These two pieces of information are considered the Financial Analysis.

So... How much Reserves are enough? Computing your Percent Funded.

Your Reserve cash Balance can measure reserves, but the true measure is whether the funds are adequate for the needs of the association. Reserve Fund size is therefore measured by Percent Funded. Percent Funded is the actual (or projected) Reserve Balance, divided by the association’s calculated Fully Funded Balance (FFB), expressed as a percentage. The Fully Funded Balance is the sum of the value of the deterioration fraction of each individual Reserve components, not the total replacement value of those components. The Fully Funded Balance for each individual component is shown in Table 3. of all the Reserve Components. To show how this works with one component, in the case of a \$10,000 component with a 10 year Useful Life, in the third year the Fully Funded Balance is three tenths of \$10,000, or \$3,000. The FFB grows as assets age, but shrinks as components are replaced. Deteriorated associations have a higher FFB than association with assets in good condition. The Fully Funded Balance changes each year, and is a predictable, but moving target.

Special assessments and deferred maintenance are common when the Percent Funded is weak (below 30%). While the 100% point is Ideal, a Reserve Fund above the 70% level should be considered “strong” because cash flow problems are rare. Measuring your Reserves by Percent Funded tells how well prepared your association is for upcoming Reserve expenses. An association with a strong Reserve Fund should experience smooth sailing financially, while an association with a weak Reserve Fund should expect cash flow problems. New buyers should be very aware of this important disclosure!



How much should we contribute?

There are four Funding Principles that we balance in developing your Reserve Funding Plan. First and foremost, our objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. A stable contribution rate is desirable because it indicates the association is being run on a stable financial platform, not being driven by the winds of change from year to year. For fairness, it is important to evenly distribute the contributions over the years so each owner pays their fair share of the deterioration in direct proportion to the amount of time they are owners. And finally, any Funding Plan must be based on fiscally responsible principles. Your Funding Plan was created by a process where different solutions were tested until one was found that most successfully met all four of these principles and achieved your Funding Goal.

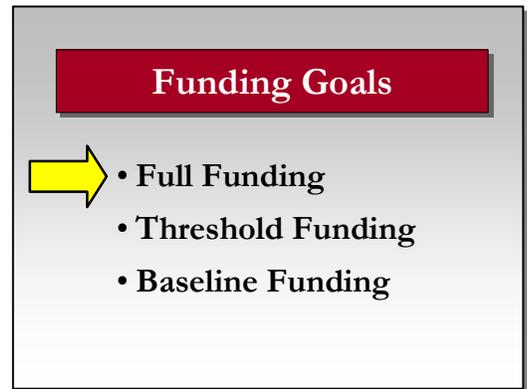
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- The figure is a rectangular box with a dark red header containing the text "Funding Principles" in white. Below the header, there is a bulleted list of four items:
- Sufficient Cash
 - Stable Contribution Rate
 - Evenly Distributed
 - Fiscally Responsible

What is our Funding Goal?

There are different Funding Goals to strive for, ranging from conservative to risky. Establishing a goal of simply having sufficient cash for all future years is called “Baseline Funding”. The drawback is that there is little or no “margin for error”, and expenses that are higher than budgeted or projects that occur earlier than planned will often cause special assessments.

“Full Funding” is when the association has the goal of becoming Fully Funded (Reserve Cash equals the FFB). Such an objective means the association is following the simple and responsible principle that you “replace what you use up”. Believing this to be the responsible choice, our Funding Plan will direct you to Full Funding. Members of Fully Funded associations enjoy low exposure to the risk of special assessments or deferred maintenance. Strong interest earnings will minimize their Reserve contributions. Board members enjoy peace of mind that the association’s physical and financial assets are in balance, and therefore a degree of insulation from claims of fiscal irresponsibility.

“Threshold Funding” option is different in that the association selects a target other than 0% or 100%. This objective may be between 0% and 100% Funded, higher than 100% Funded, or a particular Reserve cash balance. Associations choosing Threshold Funding select this option to customize their risk exposure.



Projected Expenses

The figure below shows the array of the projected future expenses at your association. As with all computations in this Report, the estimates in this figure are based on the average of Best and Worst Case expense projections. As you can see, expenses are projected 30 years into the future, using the Inflation rate shown in the Executive Summary. This figure clearly shows the near term and future expenses that your association will face.

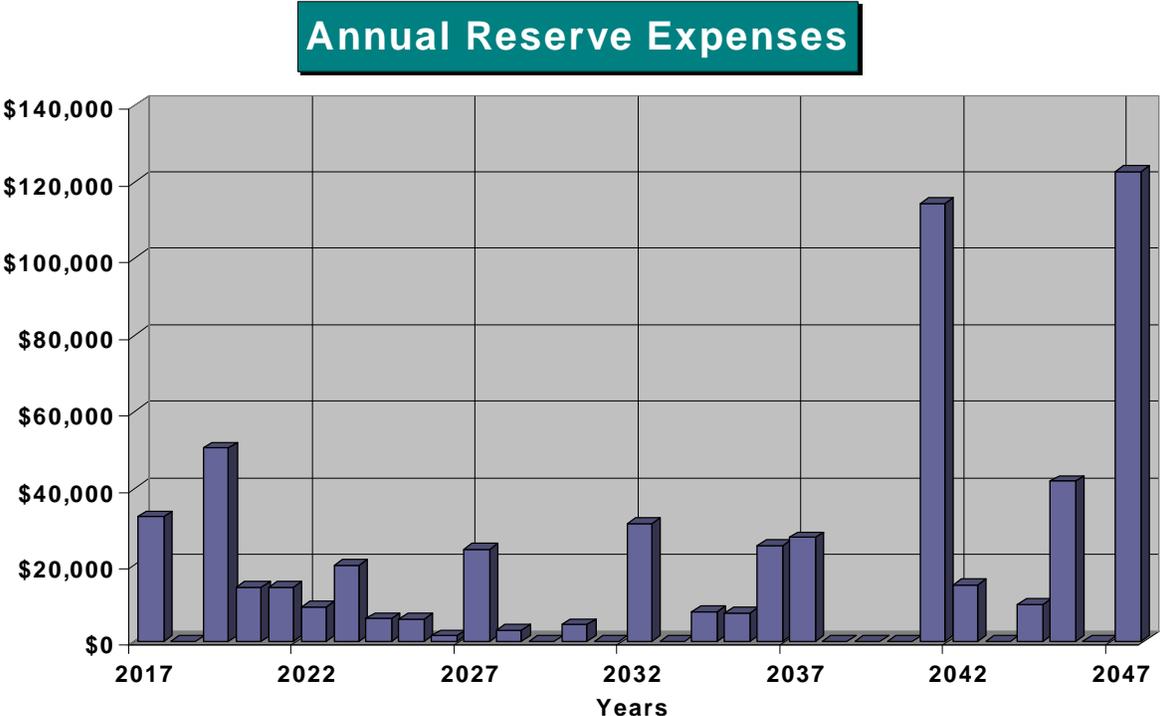


Figure 1

A summary of this information is shown in Table 4, while details of the projects that make up this information are shown in Table 5. Since this is a projection about future events that may or may not take place as anticipated, we feel more certain about “near-term” projects than those many years away. While this Reserve Study is a one-year document, it is based on 30 years worth of looking forward into the future.

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$40,808 as-of the start of your Fiscal Year on January 1, 2017. As of January 1, 2017, your Fully Funded Balance is computed to be \$130,321 (see Table 3). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 31% Funded. As indicated earlier in the Executive Summary, this represents a high risk for special assessments.

Recommended Funding Plan

Based on your current Percent Funded and your projected cash flow requirements, we are recommending Reserve contributions of \$15,000/year this Fiscal Year. This represents the first year of a 30-year Funding Plan. This same information is shown numerically in both Table 4 and Table 5

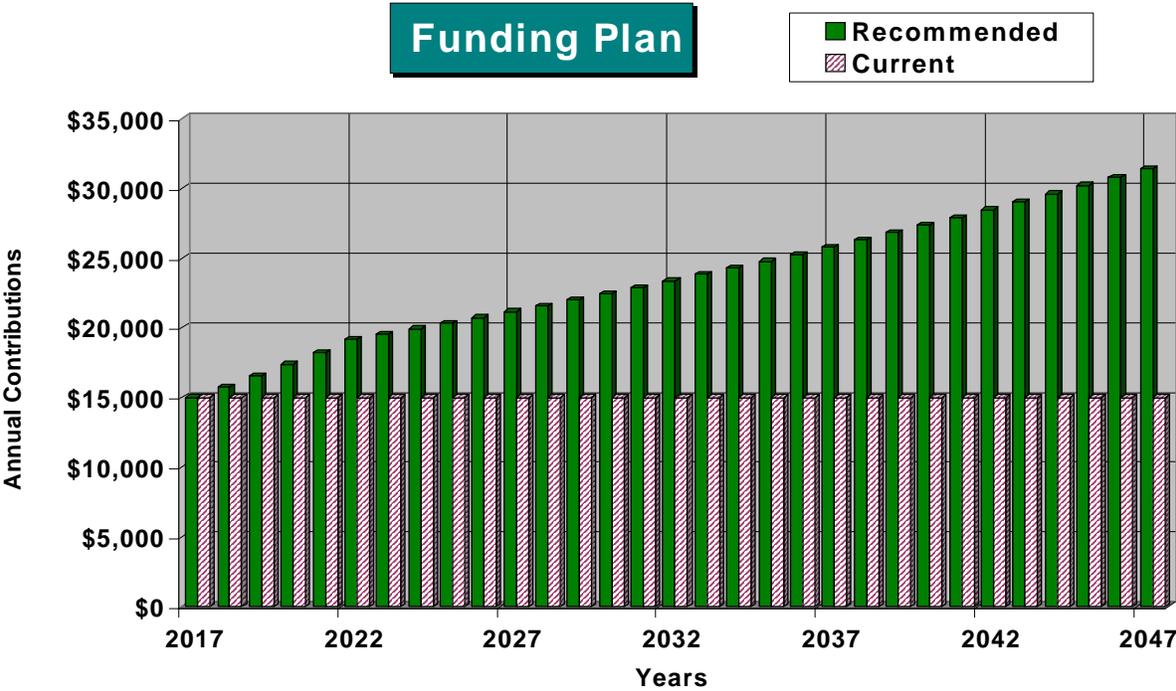


Figure 2

Your projected Reserve Balance as a result of following this Recommended multi-year Funding Plan and your Current Funding Plan is shown below, compared to your Fully Funded Balance target.

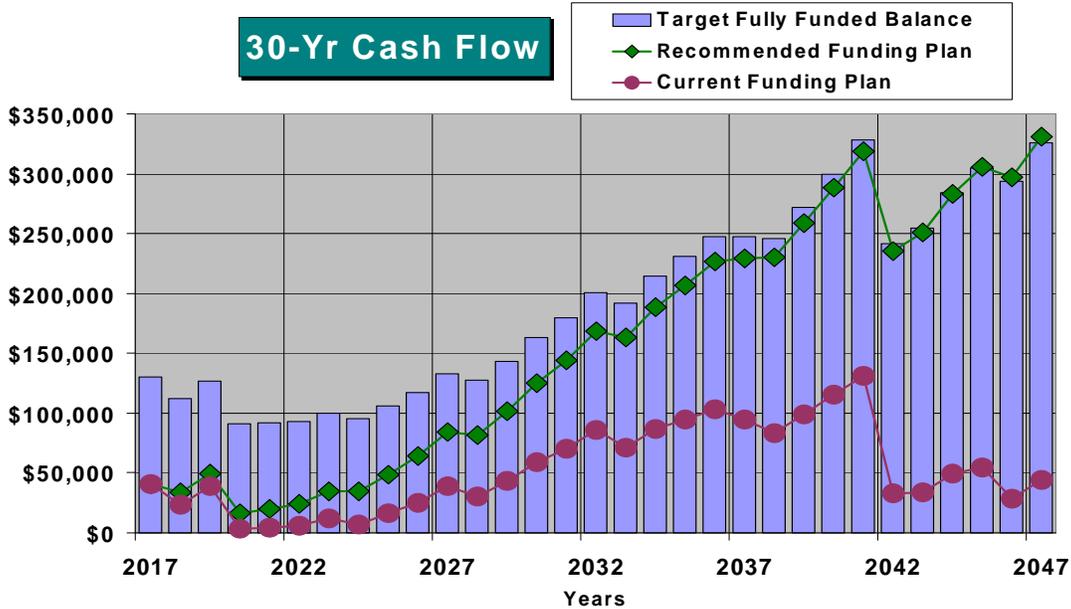


Figure 3

A simple comparison (a percentage comparison) of your Actual Reserve Balance to the moving Fully Funded Balance target is shown below. In this figure it is easy to see how your Reserve Fund gradually draws closer to the Fully Funded (100%) level.

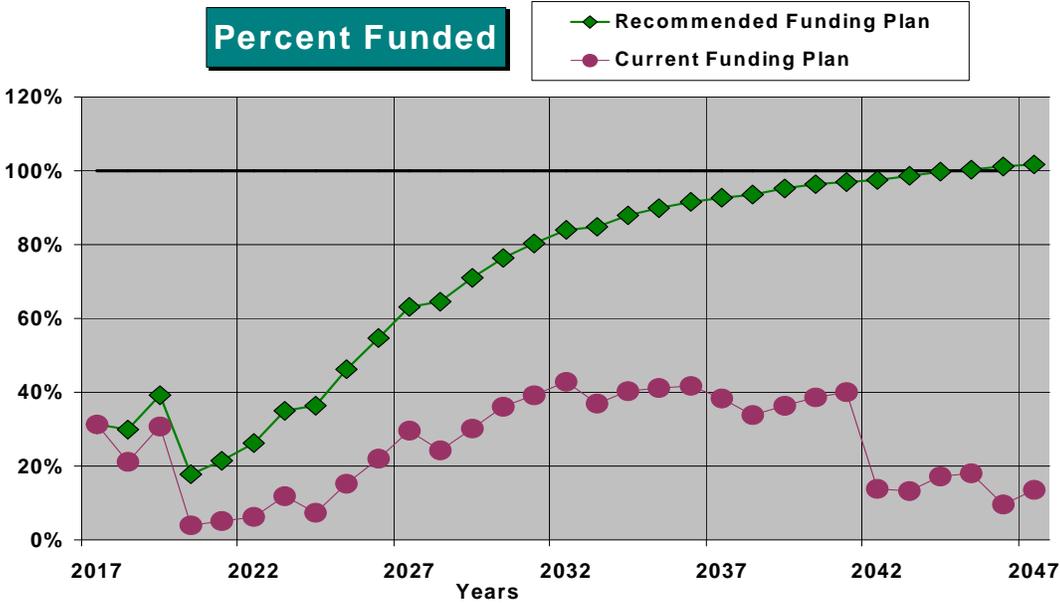


Figure 4

Table Descriptions

The tabular information in this Report is broken down into five tables.

Table 1 summarizes your funded Reserve Components, and is part of the Executive Report summary that appeared earlier in this Report.

Table 2 provides the main component description, life, and cost factors for all components determined to be appropriate for Reserve designation. This table represents the core information from which all other tables are derived.

Table 3 is presented primarily as an accounting summary page. The results of the individual line item Fully Funded Balance computations are shown. These individual quantities are summed to arrive at the Fully Funded Balance for the association as of the start date of the Report. The figures in the Current Fund Balance column and the Monthly Reserve Contribution column show our distribution throughout the line items. If the association is underfunded, Reserve Funds are distributed first to components with a short Remaining Useful Life. If the association's Reserve Balance is above 100% Funded, funds are distributed evenly for all components. Contribution rates for each component are a proportionate distribution of the total contribution on the basis of the component's significance to the association (current cost divided by useful life). This presentation is not meant to cause clients to redistribute association funds, it simply presents one way to evenly distribute the total among all the different line items.

Table 4: This table provides a one-page 30-year summary of the cash flowing into and out of the association, compared to the Fully Funded Balance for each year.

Table 5: This table shows the cash flow detail for the next 30 years. This table makes it possible to see what components are projected to require repair or replacement each year, and the size of those individual expenses.

Table 2: Reserve Component List Detail**20479-0**

#	Component	Quantity	Useful Life	Rem. Useful Life	Current Replacement Cost
1	EIFS & alt siding - Caulk/Repaint	10 ft. x 20 ft	10	5	\$2,000
2	Granby Side Brick Repair/Repaint	?? ft x 3 floors high	30	0	\$32,550
3	Granby Side Brick Repaint	?? ft x 3 floors high	15	15	\$10,000
4	Brooke Side Repair	?? ft x 3 floors high	30	2	\$48,000
5	Brooke Side Repaint	?? ft x 3 floors high	15	4	\$12,700
6	Skywell Repointing	10X8X10 24 ft high	10	7	\$5,000
7	Unpainted Rear Wall Repointing	30 ft x 3 floors high	10	10	\$5,000
8	Stone window sill replacement	8 windows @ \$17,200 + Scaffold @ \$4,500	50	6	\$17,200
9	Common area window repair	20 windows	25	3	\$13,000
10	Common area window repaint	24 windows	10	8	\$4,800
11	Entry windows/door, rear doors	1 entry w side lite, 3 steel at rear	25	10	\$6,000
12	Fire Escape Repair & Repair	2nd, 3rd flr ladders, swing to grd	5	5	\$3,700
13	Fire Alarm Panel	Simplex and White Knight panels	30	20	\$3,485
14	Fire Water Supply System	Back-pressure valve repair	10	10	\$1,500
15	Emergency Exit Lighting	11 rechargeable emergency lights	20	19	\$3,000
16	Main Roof & Parapet Membrane	Roof: 120 x 52 ft; parapet:172 x 3 ft	25	24	\$62,000
17	Roof Access Hatch & Chimney Caps	1 Hatch, 4 caps & brick repair	20	10	\$2,560
18	Hallway Light Fixtures	19 ceiling, 9 sconces	25	15	\$1,255
19	Interior Doors	3 fire retardant doors	19	30	\$3,195
20	Wood Stairs Painting	50 steps & 4 landings, rails	30	20	\$2,860
21	Intercom System	1 Linear electronic entry system	20	15	\$2,028
22	Interior Common Area Painting	2 hallways, stairwell & foyer	10	5	\$2,200
23	Heat Pump	1 HVAC unit in foyer	15	13	\$3,135
24	Electric Heater	Utility & sprinkler rooms	15	9	\$1,160
25	Electric Meter Covers	10 meters in utility room	20	11	\$2,235
25	Total Funded Components				

Table 3: Contribution and Fund Breakdown**20479-0**

#	Component	Useful Life	Rem. Useful Life	Current Cost	Fully Funded Balance	Current Fund Balance	Reserve Contributions
1	EIFS & alt siding - Caulk/Repaint	10	5	\$2,000	\$1,000	\$0.00	\$313.98
2	Granby Side Brick Repair/Repaint	30	0	\$32,550	\$32,550	\$32,550.00	\$1,703.32
3	Granby Side Brick Repaint	15	15	\$10,000	\$0	\$0.00	\$0.00
4	Brooke Side Repair	30	2	\$48,000	\$44,800	\$8,258.00	\$2,511.81
5	Brooke Side Repaint	15	4	\$12,700	\$9,313	\$0.00	\$1,329.17
6	Skywell Repointing	10	7	\$5,000	\$1,500	\$0.00	\$784.94
7	Unpainted Rear Wall Repointing	10	10	\$5,000	\$0	\$0.00	\$0.00
8	Stone window sill replacement	50	6	\$17,200	\$15,136	\$0.00	\$540.04
9	Common area window repair	25	3	\$13,000	\$11,440	\$0.00	\$816.34
10	Common area window repaint	10	8	\$4,800	\$960	\$0.00	\$753.54
11	Entry windows/door, rear doors	25	10	\$6,000	\$3,600	\$0.00	\$376.77
12	Fire Escape Repaint & Repair	5	5	\$3,700	\$0	\$0.00	\$0.00
13	Fire Alarm Panel	30	20	\$3,485	\$1,162	\$0.00	\$182.37
14	Fire Water Supply System	10	10	\$1,500	\$0	\$0.00	\$0.00
15	Emergency Exit Lighting	20	19	\$3,000	\$150	\$0.00	\$235.48
16	Main Roof & Parapet Membrane	25	24	\$62,000	\$2,480	\$0.00	\$3,893.31
17	Roof Access Hatch & Chimney Caps	20	10	\$2,560	\$1,280	\$0.00	\$200.95
18	Hallway Light Fixtures	25	15	\$1,255	\$502	\$0.00	\$78.81
19	Interior Doors	19	30	\$3,195	\$0	\$0.00	\$0.00
20	Wood Stairs Painting	30	20	\$2,860	\$953	\$0.00	\$149.66
21	Intercom System	20	15	\$2,028	\$507	\$0.00	\$159.19
22	Interior Common Area Painting	10	5	\$2,200	\$1,100	\$0.00	\$345.37
23	Heat Pump	15	13	\$3,135	\$418	\$0.00	\$328.11
24	Electric Heater	15	9	\$1,160	\$464	\$0.00	\$121.40
25	Electric Meter Covers	20	11	\$2,235	\$1,006	\$0.00	\$175.43
25	Total Funded Components				\$130,321	\$40,808	\$15,000

Table 4: 30-Year Reserve Plan Summary

20479-0

Fiscal Year Beginning: 01/01/17

Interest: 1.0%

Inflation: 2.5%

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Rating	Annual Reserve Contribs.	Loans or Special Assmts	Interest Income	Projected Reserve Expenses
2017	\$40,808	\$130,321	31.3%	Fair	\$15,000	\$10,000	\$372	\$32,550
2018	\$33,630	\$112,117	30.0%	Weak	\$15,750	\$0	\$417	\$0
2019	\$49,797	\$127,119	39.2%	Fair	\$16,538	\$0	\$330	\$50,430
2020	\$16,235	\$91,111	17.8%	Weak	\$17,364	\$0	\$180	\$14,000
2021	\$19,779	\$91,856	21.5%	Weak	\$18,233	\$0	\$220	\$14,018
2022	\$24,213	\$92,921	26.1%	Weak	\$19,144	\$0	\$295	\$8,938
2023	\$34,714	\$99,548	34.9%	Fair	\$19,527	\$0	\$347	\$19,947
2024	\$34,641	\$95,394	36.3%	Fair	\$19,918	\$0	\$418	\$5,943
2025	\$49,033	\$105,834	46.3%	Fair	\$20,316	\$0	\$565	\$5,848
2026	\$64,066	\$116,987	54.8%	Fair	\$20,722	\$0	\$740	\$1,449
2027	\$84,080	\$133,290	63.1%	Fair	\$21,137	\$0	\$830	\$24,014
2028	\$82,033	\$127,243	64.5%	Fair	\$21,560	\$0	\$918	\$2,933
2029	\$101,578	\$143,261	70.9%	Strong	\$21,991	\$0	\$1,131	\$0
2030	\$124,699	\$163,081	76.5%	Strong	\$22,431	\$0	\$1,344	\$4,322
2031	\$144,152	\$179,372	80.4%	Strong	\$22,879	\$0	\$1,563	\$0
2032	\$168,594	\$200,917	83.9%	Strong	\$23,337	\$0	\$1,657	\$30,679
2033	\$162,908	\$191,981	84.9%	Strong	\$23,803	\$0	\$1,756	\$0
2034	\$188,468	\$214,705	87.8%	Strong	\$24,280	\$0	\$1,977	\$7,608
2035	\$207,116	\$230,646	89.8%	Strong	\$24,765	\$0	\$2,167	\$7,486
2036	\$226,562	\$247,570	91.5%	Strong	\$25,260	\$0	\$2,277	\$25,099
2037	\$229,001	\$247,336	92.6%	Strong	\$25,766	\$0	\$2,294	\$27,111
2038	\$229,949	\$245,515	93.7%	Strong	\$26,281	\$0	\$2,442	\$0
2039	\$258,672	\$271,933	95.1%	Strong	\$26,807	\$0	\$2,733	\$0
2040	\$288,212	\$299,518	96.2%	Strong	\$27,343	\$0	\$3,033	\$0
2041	\$318,587	\$328,312	97.0%	Strong	\$27,890	\$0	\$2,767	\$114,239
2042	\$235,005	\$241,263	97.4%	Strong	\$28,447	\$0	\$2,430	\$14,646
2043	\$251,236	\$254,668	98.7%	Strong	\$29,016	\$0	\$2,670	\$0
2044	\$282,922	\$283,979	99.6%	Strong	\$29,597	\$0	\$2,942	\$9,739
2045	\$305,721	\$304,614	100.4%	Strong	\$30,189	\$0	\$3,013	\$41,797
2046	\$297,126	\$293,494	101.2%	Strong	\$30,792	\$0	\$3,140	\$0

Table 5: 30-Year Income/Expense Detail (yrs 0 through 4)

20479-0

Fiscal Year	2017	2018	2019	2020	2021
Starting Reserve Balance	\$40,808	\$33,630	\$49,797	\$16,235	\$19,779
Annual Reserve Contribution	\$15,000	\$15,750	\$16,538	\$17,364	\$18,233
Planned Special Assessments	\$10,000	\$0	\$0	\$0	\$0
Interest Earnings	\$372	\$417	\$330	\$180	\$220
Total Income	\$66,180	\$49,797	\$66,665	\$33,779	\$38,232
# Component					
1 EIFS & alt siding - Caulk/Repaint	\$0	\$0	\$0	\$0	\$0
2 Granby Side Brick Repair/Repaint	\$32,550	\$0	\$0	\$0	\$0
3 Granby Side Brick Repair	\$0	\$0	\$0	\$0	\$0
4 Brooke Side Repair	\$0	\$0	\$50,430	\$0	\$0
5 Brooke Side Repaint	\$0	\$0	\$0	\$0	\$14,018
6 Skywell Repointing	\$0	\$0	\$0	\$0	\$0
7 Unpainted Rear Wall Repointing	\$0	\$0	\$0	\$0	\$0
8 Stone window sill replacement	\$0	\$0	\$0	\$0	\$0
9 Common area window repair	\$0	\$0	\$0	\$14,000	\$0
10 Common area window repaint	\$0	\$0	\$0	\$0	\$0
11 Entry windows/door, rear doors	\$0	\$0	\$0	\$0	\$0
12 Fire Escape Repaint & Repair	\$0	\$0	\$0	\$0	\$0
13 Fire Alarm Panel	\$0	\$0	\$0	\$0	\$0
14 Fire Water Supply System	\$0	\$0	\$0	\$0	\$0
15 Emergency Exit Lighting	\$0	\$0	\$0	\$0	\$0
16 Main Roof & Parapet Membrane	\$0	\$0	\$0	\$0	\$0
17 Roof Access Hatch & Chimney Caps	\$0	\$0	\$0	\$0	\$0
18 Hallway Light Fixtures	\$0	\$0	\$0	\$0	\$0
19 Interior Doors	\$0	\$0	\$0	\$0	\$0
20 Wood Stairs Painting	\$0	\$0	\$0	\$0	\$0
21 Intercom System	\$0	\$0	\$0	\$0	\$0
22 Interior Common Area Painting	\$0	\$0	\$0	\$0	\$0
23 Heat Pump	\$0	\$0	\$0	\$0	\$0
24 Electric Heater	\$0	\$0	\$0	\$0	\$0
25 Electric Meter Covers	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$32,550	\$0	\$50,430	\$14,000	\$14,018
Ending Reserve Balance:	\$33,630	\$49,797	\$16,235	\$19,779	\$24,213

Table 5: 30-Year Income/Expense Detail (yrs 5 through 9)

20479-0

Fiscal Year	2022	2023	2024	2025	2026
Starting Reserve Balance	\$24,213	\$34,714	\$34,641	\$49,033	\$64,066
Annual Reserve Contribution	\$19,144	\$19,527	\$19,918	\$20,316	\$20,722
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$295	\$347	\$418	\$565	\$740
Total Income	\$43,652	\$54,588	\$54,977	\$69,915	\$85,529
# Component					
1 EIFS & alt siding - Caulk/Repaint	\$2,263	\$0	\$0	\$0	\$0
2 Granby Side Brick Repair/Repaint	\$0	\$0	\$0	\$0	\$0
3 Granby Side Brick Repair	\$0	\$0	\$0	\$0	\$0
4 Brooke Side Repair	\$0	\$0	\$0	\$0	\$0
5 Brooke Side Repair	\$0	\$0	\$0	\$0	\$0
6 Skywell Repointing	\$0	\$0	\$5,943	\$0	\$0
7 Unpainted Rear Wall Repointing	\$0	\$0	\$0	\$0	\$0
8 Stone window sill replacement	\$0	\$19,947	\$0	\$0	\$0
9 Common area window repair	\$0	\$0	\$0	\$0	\$0
10 Common area window repaint	\$0	\$0	\$0	\$5,848	\$0
11 Entry windows/door, rear doors	\$0	\$0	\$0	\$0	\$0
12 Fire Escape Repaint & Repair	\$4,186	\$0	\$0	\$0	\$0
13 Fire Alarm Panel	\$0	\$0	\$0	\$0	\$0
14 Fire Water Supply System	\$0	\$0	\$0	\$0	\$0
15 Emergency Exit Lighting	\$0	\$0	\$0	\$0	\$0
16 Main Roof & Parapet Membrane	\$0	\$0	\$0	\$0	\$0
17 Roof Access Hatch & Chimney Caps	\$0	\$0	\$0	\$0	\$0
18 Hallway Light Fixtures	\$0	\$0	\$0	\$0	\$0
19 Interior Doors	\$0	\$0	\$0	\$0	\$0
20 Wood Stairs Painting	\$0	\$0	\$0	\$0	\$0
21 Intercom System	\$0	\$0	\$0	\$0	\$0
22 Interior Common Area Painting	\$2,489	\$0	\$0	\$0	\$0
23 Heat Pump	\$0	\$0	\$0	\$0	\$0
24 Electric Heater	\$0	\$0	\$0	\$0	\$1,449
25 Electric Meter Covers	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$8,938	\$19,947	\$5,943	\$5,848	\$1,449
Ending Reserve Balance:	\$34,714	\$34,641	\$49,033	\$64,066	\$84,080

Table 5: 30-Year Income/Expense Detail (yrs 10 through 14)

20479-0

Fiscal Year	2027	2028	2029	2030	2031
Starting Reserve Balance	\$84,080	\$82,033	\$101,578	\$124,699	\$144,152
Annual Reserve Contribution	\$21,137	\$21,560	\$21,991	\$22,431	\$22,879
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$830	\$918	\$1,131	\$1,344	\$1,563
Total Income	\$106,047	\$104,510	\$124,699	\$148,473	\$168,594
# Component					
1 EIFS & alt siding - Caulk/Repaint	\$0	\$0	\$0	\$0	\$0
2 Granby Side Brick Repair/Repaint	\$0	\$0	\$0	\$0	\$0
3 Granby Side Brick Repair	\$0	\$0	\$0	\$0	\$0
4 Brooke Side Repair	\$0	\$0	\$0	\$0	\$0
5 Brooke Side Repair	\$0	\$0	\$0	\$0	\$0
6 Skywell Repointing	\$0	\$0	\$0	\$0	\$0
7 Unpainted Rear Wall Repointing	\$6,400	\$0	\$0	\$0	\$0
8 Stone window sill replacement	\$0	\$0	\$0	\$0	\$0
9 Common area window repair	\$0	\$0	\$0	\$0	\$0
10 Common area window repaint	\$0	\$0	\$0	\$0	\$0
11 Entry windows/door, rear doors	\$7,681	\$0	\$0	\$0	\$0
12 Fire Escape Repaint & Repair	\$4,736	\$0	\$0	\$0	\$0
13 Fire Alarm Panel	\$0	\$0	\$0	\$0	\$0
14 Fire Water Supply System	\$1,920	\$0	\$0	\$0	\$0
15 Emergency Exit Lighting	\$0	\$0	\$0	\$0	\$0
16 Main Roof & Parapet Membrane	\$0	\$0	\$0	\$0	\$0
17 Roof Access Hatch & Chimney Caps	\$3,277	\$0	\$0	\$0	\$0
18 Hallway Light Fixtures	\$0	\$0	\$0	\$0	\$0
19 Interior Doors	\$0	\$0	\$0	\$0	\$0
20 Wood Stairs Painting	\$0	\$0	\$0	\$0	\$0
21 Intercom System	\$0	\$0	\$0	\$0	\$0
22 Interior Common Area Painting	\$0	\$0	\$0	\$0	\$0
23 Heat Pump	\$0	\$0	\$0	\$4,322	\$0
24 Electric Heater	\$0	\$0	\$0	\$0	\$0
25 Electric Meter Covers	\$0	\$2,933	\$0	\$0	\$0
Total Expenses	\$24,014	\$2,933	\$0	\$4,322	\$0
Ending Reserve Balance:	\$82,033	\$101,578	\$124,699	\$144,152	\$168,594

Table 5: 30-Year Income/Expense Detail (yrs 15 through 19)

20479-0

Fiscal Year	2032	2033	2034	2035	2036
Starting Reserve Balance	\$168,594	\$162,908	\$188,468	\$207,116	\$226,562
Annual Reserve Contribution	\$23,337	\$23,803	\$24,280	\$24,765	\$25,260
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,657	\$1,756	\$1,977	\$2,167	\$2,277
Total Income	\$193,587	\$188,468	\$214,724	\$234,049	\$254,100
# Component					
1 EIFS & alt siding - Caulk/Repaint	\$2,897	\$0	\$0	\$0	\$0
2 Granby Side Brick Repair/Repaint	\$0	\$0	\$0	\$0	\$0
3 Granby Side Brick Repair	\$14,483	\$0	\$0	\$0	\$0
4 Brooke Side Repair	\$0	\$0	\$0	\$0	\$0
5 Brooke Side Repair	\$0	\$0	\$0	\$0	\$20,303
6 Skywell Repointing	\$0	\$0	\$7,608	\$0	\$0
7 Unpainted Rear Wall Repointing	\$0	\$0	\$0	\$0	\$0
8 Stone window sill replacement	\$0	\$0	\$0	\$0	\$0
9 Common area window repair	\$0	\$0	\$0	\$0	\$0
10 Common area window repaint	\$0	\$0	\$0	\$7,486	\$0
11 Entry windows/door, rear doors	\$0	\$0	\$0	\$0	\$0
12 Fire Escape Repaint & Repair	\$5,359	\$0	\$0	\$0	\$0
13 Fire Alarm Panel	\$0	\$0	\$0	\$0	\$0
14 Fire Water Supply System	\$0	\$0	\$0	\$0	\$0
15 Emergency Exit Lighting	\$0	\$0	\$0	\$0	\$4,796
16 Main Roof & Parapet Membrane	\$0	\$0	\$0	\$0	\$0
17 Roof Access Hatch & Chimney Caps	\$0	\$0	\$0	\$0	\$0
18 Hallway Light Fixtures	\$1,818	\$0	\$0	\$0	\$0
19 Interior Doors	\$0	\$0	\$0	\$0	\$0
20 Wood Stairs Painting	\$0	\$0	\$0	\$0	\$0
21 Intercom System	\$2,937	\$0	\$0	\$0	\$0
22 Interior Common Area Painting	\$3,186	\$0	\$0	\$0	\$0
23 Heat Pump	\$0	\$0	\$0	\$0	\$0
24 Electric Heater	\$0	\$0	\$0	\$0	\$0
25 Electric Meter Covers	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$30,679	\$0	\$7,608	\$7,486	\$25,099
Ending Reserve Balance:	\$162,908	\$188,468	\$207,116	\$226,562	\$229,001

Table 5: 30-Year Income/Expense Detail (yrs 20 through 24)

20479-0

Fiscal Year	2037	2038	2039	2040	2041
Starting Reserve Balance	\$229,001	\$229,949	\$258,672	\$288,212	\$318,587
Annual Reserve Contribution	\$25,766	\$26,281	\$26,807	\$27,343	\$27,890
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,294	\$2,442	\$2,733	\$3,033	\$2,767
Total Income	\$257,060	\$258,672	\$288,212	\$318,587	\$349,244
# Component					
1 EIFS & alt siding - Caulk/Repaint	\$0	\$0	\$0	\$0	\$0
2 Granby Side Brick Repair/Repaint	\$0	\$0	\$0	\$0	\$0
3 Granby Side Brick Repair	\$0	\$0	\$0	\$0	\$0
4 Brooke Side Repair	\$0	\$0	\$0	\$0	\$0
5 Brooke Side Repaint	\$0	\$0	\$0	\$0	\$0
6 Skywell Repointing	\$0	\$0	\$0	\$0	\$0
7 Unpainted Rear Wall Repointing	\$8,193	\$0	\$0	\$0	\$0
8 Stone window sill replacement	\$0	\$0	\$0	\$0	\$0
9 Common area window repair	\$0	\$0	\$0	\$0	\$0
10 Common area window repaint	\$0	\$0	\$0	\$0	\$0
11 Entry windows/door, rear doors	\$0	\$0	\$0	\$0	\$0
12 Fire Escape Repaint & Repair	\$6,063	\$0	\$0	\$0	\$0
13 Fire Alarm Panel	\$5,711	\$0	\$0	\$0	\$0
14 Fire Water Supply System	\$2,458	\$0	\$0	\$0	\$0
15 Emergency Exit Lighting	\$0	\$0	\$0	\$0	\$0
16 Main Roof & Parapet Membrane	\$0	\$0	\$0	\$0	\$112,141
17 Roof Access Hatch & Chimney Caps	\$0	\$0	\$0	\$0	\$0
18 Hallway Light Fixtures	\$0	\$0	\$0	\$0	\$0
19 Interior Doors	\$0	\$0	\$0	\$0	\$0
20 Wood Stairs Painting	\$4,686	\$0	\$0	\$0	\$0
21 Intercom System	\$0	\$0	\$0	\$0	\$0
22 Interior Common Area Painting	\$0	\$0	\$0	\$0	\$0
23 Heat Pump	\$0	\$0	\$0	\$0	\$0
24 Electric Heater	\$0	\$0	\$0	\$0	\$2,098
25 Electric Meter Covers	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$27,111	\$0	\$0	\$0	\$114,239
Ending Reserve Balance:	\$229,949	\$258,672	\$288,212	\$318,587	\$235,005

Table 5: 30-Year Income/Expense Detail (yrs 25 through 29)

20479-0

Fiscal Year	2042	2043	2044	2045	2046
Starting Reserve Balance	\$235,005	\$251,236	\$282,922	\$305,721	\$297,126
Annual Reserve Contribution	\$28,447	\$29,016	\$29,597	\$30,189	\$30,792
Planned Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,430	\$2,670	\$2,942	\$3,013	\$3,140
Total Income	\$265,882	\$282,922	\$315,460	\$338,923	\$331,058
# Component					
1 EIFS & alt siding - Caulk/Repaint	\$3,708	\$0	\$0	\$0	\$0
2 Granby Side Brick Repair/Repaint	\$0	\$0	\$0	\$0	\$0
3 Granby Side Brick Repair	\$0	\$0	\$0	\$0	\$0
4 Brooke Side Repair	\$0	\$0	\$0	\$0	\$0
5 Brooke Side Repair	\$0	\$0	\$0	\$0	\$0
6 Skywell Repointing	\$0	\$0	\$9,739	\$0	\$0
7 Unpainted Rear Wall Repointing	\$0	\$0	\$0	\$0	\$0
8 Stone window sill replacement	\$0	\$0	\$0	\$0	\$0
9 Common area window repair	\$0	\$0	\$0	\$25,954	\$0
10 Common area window repaint	\$0	\$0	\$0	\$9,583	\$0
11 Entry windows/door, rear doors	\$0	\$0	\$0	\$0	\$0
12 Fire Escape Repaint & Repair	\$6,860	\$0	\$0	\$0	\$0
13 Fire Alarm Panel	\$0	\$0	\$0	\$0	\$0
14 Fire Water Supply System	\$0	\$0	\$0	\$0	\$0
15 Emergency Exit Lighting	\$0	\$0	\$0	\$0	\$0
16 Main Roof & Parapet Membrane	\$0	\$0	\$0	\$0	\$0
17 Roof Access Hatch & Chimney Caps	\$0	\$0	\$0	\$0	\$0
18 Hallway Light Fixtures	\$0	\$0	\$0	\$0	\$0
19 Interior Doors	\$0	\$0	\$0	\$0	\$0
20 Wood Stairs Painting	\$0	\$0	\$0	\$0	\$0
21 Intercom System	\$0	\$0	\$0	\$0	\$0
22 Interior Common Area Painting	\$4,079	\$0	\$0	\$0	\$0
23 Heat Pump	\$0	\$0	\$0	\$6,259	\$0
24 Electric Heater	\$0	\$0	\$0	\$0	\$0
25 Electric Meter Covers	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$14,646	\$0	\$9,739	\$41,797	\$0
Ending Reserve Balance:	\$251,236	\$282,922	\$305,721	\$297,126	\$331,058

Accuracy, Limitations, and Disclosures

Because we have no control over future events, we cannot claim that all the events we anticipate will occur as planned. We expect that inflationary trends will continue, and we expect that financial institutions will provide interest earnings on funds on-deposit. We believe that reasonable estimates for these figures are much more accurate than ignoring these economic realities. The things that can be controlled are measurements, starting Reserve Balance, and interest rate. For this Report these figures have been provided to us, and were not confirmed by our independent research. Our projections assume a stable economic environment and lack of natural disasters.

Because both the physical status and financial status of the association change each year, this Reserve Study is by nature a “one-year” document. This information can and should be adjusted annually as part of the Reserve Study Update process so that more accurate estimates can be reflected in the Reserve plan. Reality often differs from even the best assumptions due to changing economic factors, physical factors, or ownership expectations. Because many years of financial preparation help the preparation for large expenses, this Report shows expenses for the next 30 years. We fully expect a number of adjustments will be necessary through the interim years to both the cost and timing of distant expense projections. It is our recommendation and that of the American Institute of Certified Public Accountants (AICPA) that your Reserve Study be updated annually.

Association Reserves, Inc., and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. Robert M. Nordlund, P.E., R.S., company president, is a California licensed Professional Engineer (Mechanical, #22322), and credentialed Reserve Specialist (#5). All work done by Association Reserves is performed under his Responsible Charge. There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the association’s situation.

The Board of Directors has agreed to accept full responsibility for the accuracy of the information provided to us. They have been told that Association Reserves, Inc. will not verify the accuracy of the information submitted. As a result, Association Reserves will not be responsible for updates or revisions to this Report required as a result of errors, omissions, or changes in the information that was provided to us.

Terms and Definitions

BTU	British Thermal Unit (a standard unit of energy)
DIA	Diameter
GSF	Gross Square Feet (area)
GSY	Gross Square Yards (area)
HP	Horsepower
LF	Linear Feet (length)

Effective Age: The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.

Fully Funded Balance (FFB): The Reserve Balance that is in direct proportion to the fraction of life “used up” of the current Repair or Replacement cost. This benchmark balance represents the value of the deterioration of the Reserve Components. This number is calculated for each component, then summed together for an association total.

$$\text{FFB} = (\text{Current Cost} \times \text{Effective Age}) / \text{Useful Life}$$

Inflation: Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on Table 5.

Interest: Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary, page ii.

Percent Funded: The ratio, at a particular point in 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 time, in years, that a common area component can be expected to continue to serve its intended function.

Useful Life: The estimated time, in years, that a common area component can be expected to serve its intended function.

Do-It-Yourself Worksheets

Note: Any questions relating to the information contained in this Appendix should be directed to the contact person indicated on the following page.